



Покупайте оригинальные и аналоговые
запчасти Джон Дир в компании "Аврора Агро Партс"

www.aa-p.ru



+7-800-550-3170 | +7-920-595-9888

ПН-ПТ с 8:00 до 17:00, СБ-ВС – Выходной

zakaz@aa-p.ru

W540, W550, W650, W660, T550, T560, T660, T670, and HillMaster™ Combines

(Serial No. 102000 -)

OPERATOR'S MANUAL

**W540, W550, W650, W660, T550,
T560, T660, T670, and HillMaster™
Combines from SN102000**

OMZ93009 ISSUE B6 (ENGLISH)

**John Deere GmbH & Co. KG
John Deere Werk Zweibrücken**

**European Edition
PRINTED IN U.S.A.**

Introduction

Foreword



INTENDED USE: This combine is designed solely for use in customary agriculture or similar operations. Use in any other way is considered as contrary to the intended use. The manufacturer accepts no liability for damage or injury resulting from misuse, and these risks must be borne solely by the user. Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements for the intended use.

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage. This manual and the safety signs on your machine may also be available in other languages (see your John Deere dealer to order).

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS IN THIS MANUAL are given both in metric units and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction of forward travel.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Specification or Identification Numbers section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. File the identification numbers in a secure place off the machine.

SETTING FUEL DELIVERY BEYOND PUBLISHED factory specifications or otherwise overpowering will result in loss of warranty protection for this machine.

BEFORE DELIVERING THIS MACHINE, your dealer performed a predelivery inspection. After operating for the first 20 to 50 hours, schedule an after-sale inspection with your dealer to ensure best performance.

THIS COMBINE SHOULD BE OPERATED, serviced and repaired only by persons familiar with all its particular characteristics and acquainted with the relevant safety rules (accident prevention). The accident prevention regulations, all other generally recognized regulations on safety and occupational medicine and the road traffic regulations must be observed at all times. Any arbitrary modifications carried out on this combine will relieve the manufacturer of all liability for any resulting damage or injury.

OUC002,000471E -19-01NOV15-1/1

Trademarks

List of trademarks used throughout this Operator's Manual.

Trademarks	
AutoTrac™	Trademark of Deere & Company
AdBlue™	Trademark of VDA, the German Association of the Automotive Industry
Bluetooth®	Registered trademark of Bluetooth SIG
Break-In™	Trademark of Deere & Company
Break-In Plus™	Trademark of Deere & Company
ClimaTrak™	Trademark of Deere & Company
CommandARM™	Trademark of Deere & Company
CommandTouch™	Trademark of Deere & Company
CommandCenter™	Trademark of Deere & Company
Cool-Gard™	Trademark of Deere & Company
Cool-Gard™ II	Trademark of Deere & Company
CoolScan™	Trademark of Deere & Company
CoolScan™ PLUS	Trademark of Deere & Company
Deere™	Trademark of Deere & Company
Dial-A-Speed™	Trademark of Deere & Company
DieselScan™	Trademark of Deere & Company
Extreme-Gard™	Trademark of Deere & Company
FarmSight™	Trademark of Deere & Company
GreenStar™	Trademark of Deere & Company
GreenStar™ 3 2630 Display	Trademark of Deere & Company
HarvestDoc™	Trademark of Deere & Company
Harvest Smart™	Trademark of Deere & Company
HillMaster™	Trademark of Deere & Company
HydraFlex™	Trademark of Deere & Company
Hy-Gard™	Trademark of Deere & Company
JDLink™	Trademark of Deere & Company
John Deere™	Trademark of Deere & Company
Oilscan™	Trademark of Deere & Company
Plus-50™	Trademark of Deere & Company
Plus-50™ II	Trademark of Deere & Company
PowerTech™	Trademark of Deere & Company
ProDrive™	Trademark of Deere & Company
Service ADVISOR™	Trademark of Deere & Company
SERVICEGARD™	Trademark of Deere & Company
StalkMaster™	Trademark of Deere & Company
StarFire™	Trademark of Deere & Company
VisionTrak™	Trademark of Deere & Company

OUC002,000471D -19-23SEP15-1/1

Contents

Page	Page
Safety	
Recognize Safety Information	01-1
Understand Signal Words.....	01-1
Follow Safety Instructions.....	01-1
Driving the Machine.....	01-2
Emergency Exit	01-2
Observe Road Traffic Regulations.....	01-2
Check Machine Safety.....	01-2
Keep Riders and Children Off Machine	01-3
Ballasting for Safe Ground Contact.....	01-3
Roadway Transport with Header Attached	01-3
Avoid Electrical Power Lines	01-3
Parking and Leaving the Machine	01-4
Use Safety Lights and Devices.....	01-4
Instructional Seat.....	01-4
Use Seat Belts.....	01-5
Road Safety Mode Button	01-5
Transport Combine With Header Safely	01-5
Speed Limit.....	01-6
Prevent Machine Runaway or Unexpected Movement	01-6
Avoid Backover Accidents	01-7
Work In Ventilated Area.....	01-7
Handle Fuel Safely—Avoid Fires.....	01-7
Prepare for Emergencies.....	01-8
Handle Starting Fluid Safely	01-8
Avoid Static Electricity Risk When Refueling.....	01-8
Wear Protective Clothing	01-9
Stay Clear of Harvesting Units	01-9
Keep Hands Away From Knives.....	01-9
Practice Safe Maintenance.....	01-10
Remove Paint Before Welding or Heating.....	01-10
Avoid Contact With Moving Parts	01-11
Cleaning Grain Tank and Removal of Blockages Safely.....	01-11
Cleaning Engine Compartment	01-12
Engine Platform and Grain Tank Access	01-13
Stay Clear of Rotating Drivelines.....	01-16
Install All Shields and Guards.....	01-16
Avoid High-Pressure Fluids	01-16
Do Not Open High-Pressure Fuel System.....	01-17
Service Accumulator Systems Safely.....	01-17
Protect Against High Pressure Spray	01-17
Retorque Wheel Bolts and Nuts	01-18
Follow Tire Recommendations	01-18
Service Tires Safely.....	01-19
Decommissioning — Proper Recycling and Disposal of Fluids and Components	01-19
Avoid High-Pressure Jet on Safety Decals.....	01-20
Service Cooling System Safely	01-20
Support Machine Properly	01-20
Store Attachments Safely	01-21
Service Drive Belts Safely	01-21
Use Steps and Handholds Correctly	01-21
Handle Electronic Components and Brackets Safely	01-22
Use Electronic Display Properly	01-22
Operate Guidance Systems Safely	01-22
Read The Guidance Manual.....	01-23
Handling Batteries Safely	01-23
Avoid Hot Exhaust	01-24
Clean Exhaust Filter Safely	01-25
Safety Features	01-26
Safety Decals	01-26
Recommended Fire Preventions	01-43
Fire Extinguisher Location	01-43
Fire Extinguisher Operation.....	01-44
Remove Accumulated Crop Debris	01-44
In Case of Fire	01-45
Operating the Controls and Displays	
Images Collected From Camera Devices.....	02-1
Cab	02-2
Machine Lighting	02-26
CommandTouch™ Armrest Console	02-33
CommandARM™ Controls	02-46
Multi-Function Lever	02-59
CommandCenter™ Displays	02-65
Primary Display Unit (PDU)	02-67
CommandCenter™ Main Menu.....	02-70
Active Header Control Display.....	02-80
Description of Automatic Header Height Control System	02-80
Activation Button Mode Combinations.....	02-81
Header Height Sensing	02-82
Header Height Sensing (HydraFlex™ Platforms).....	02-84
Header Height Resume	02-86
Active Header Float	02-88
Dial-A-Speed™ System.....	02-90
Reel Position Resume	02-91
Deck Plate Position Resume	02-93

Continued on next page

Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

COPYRIGHT © 2016
DEERE & COMPANY
Moline, Illinois
All rights reserved.
A John Deere ILLUSTRATION™ Manual

Page	Page
Lateral Tilt System (If Equipped).....02-95	Regional Settings, Languages, Time/Date Settings, Units of Measurement.....02-167
Cutterbar Fore/Aft Position (600X Cutting Platforms).....02-97	Diagnostic Readings, About, Display Tests....02-170
Setpoint Modes (Manual or Automatic).....02-99	Connecting Multiple Displays and Auxiliary Controls.....02-173
Manual Recording ON/OFF.....02-100	Message Center Application.....02-174
Reconfigure Detail Machine Settings.....02-101	Performance Monitor.....02-176
Reconfigure Performance Monitor Settings....02-101	Layout Manager Application.....02-179
Harvesting Information Screen.....02-102	Video Interface Capability.....02-180
Select Yield Wet or Dry and Cut Width Change.....02-104	Video Safety.....02-180
Clear Field Totals.....02-105	Video Application (If Equipped).....02-180
Clear Crop Totals.....02-106	Access Manager Application.....02-183
Combine Setup Screen.....02-106	VisionTrak™ Display.....02-185
Grain Tank Level and Unloading Rate Offset Setup.....02-110	VisionTrak™ Performance Monitor (General Information).....02-187
Folding Functions Setup.....02-111	VisionTrak™ Performance Monitor—Operating.....02-188
Change Moisture Settings and Yield Units Settings.....02-112	VisionTrak™—Preliminary Adjustments on Machine.....02-190
Yield Calibration.....02-113	VisionTrak™ Operational Checks.....02-191
Manual Adjust Yield Calibration Factor.....02-116	GreenStar™ Display and Harvest Monitor/Harvest Doc™ Systems.....02-191
Change Tire Radius Code.....02-117	Calibration Procedures - When to Calibrate...02-192
Moisture Sensor Temperature Calibration.....02-118	Calibration Procedures.....02-193
Payable Moisture and Density Chart.....02-119	Access Diagnostic Trouble Code Menu.....02-193
Standard Weights Chart.....02-119	Diagnostic Trouble Code Priorities.....02-196
Change Crop and Grain Loss Settings.....02-120	
Change Machine Settings.....02-122	
Name Customized Crops.....02-123	
Interactive Combine Adjustment (If Equipped) (In Cab Recommendations).....02-124	
Interactive Combine Adjustment (If Equipped) (Outside Cab Recommendations).....02-132	
Header Setup Screen.....02-137	
Change Header Settings.....02-140	
Automatic Header Control (AHC) Settings.....02-144	
Multi-function Lever Setup.....02-145	
Engine Information Screen.....02-145	
Exhaust Filter Cleaning (Final Tier 4/Stage IV).....02-146	
Engine Speed Management (ProDrive™ Machines).....02-147	
Engine Cool Down Progress (Final Tier 4/Stage IV).....02-148	
Diagnostic and Calibrations Screen.....02-148	
Radio Source Select.....02-150	
MW/LW Home Page.....02-151	
CD/MP3 Home Page.....02-153	
USB Home Page (Premium Radio).....02-155	
Auxiliary (AUX) Home Page.....02-157	
Bluetooth® Audio.....02-157	
Radio Settings.....02-158	
Operating the Phone (Premium Radio).....02-159	
Phone Book (Premium Radio).....02-160	
Phone Directories (Premium Radio).....02-161	
Phone Settings (Premium Radio).....02-162	
Brightness Level and Boundary Box Color....02-164	
	Field Operation
	Rotational Alarm System.....03-1
	Operator Presence System.....03-1
	Back-Up Alarm.....03-2
	Prestarting Check.....03-2
	Cleaning Engine Compartment.....03-7
	Breaking-In Engine.....03-8
	Break-In Check First 100 Hours.....03-11
	Break-In Service After 100 Hours (Tier 2/Stage II Engine Only).....03-12
	Break-In Service After 400 Hours (Final Tier 4/Stage IV Engine Only).....03-13
	Operate the Engine.....03-14
	Disconnect the Battery on Engines with Diesel Exhaust Fluid (DEF).....03-16
	Battery Disconnect Switch.....03-17
	Selective Catalyst Reduction (SCR) System (Final Tier 4/Stage IV Engine Only) ..03-18
	Operate the Exhaust Cleaning System (Final Tier 4/Stage IV Engine Only).....03-19
	Engine Cool Down Warning Screens (Final Tier 4/Stage IV Engine Only).....03-22
	Operate HillMaster™ Machine.....03-24
	Drive the Machine on Roads.....03-26
	Transport Information.....03-30
	Tow the Machine (3-Speed Transmission Machines).....03-31
	Tow the Machine (Push-Button Shift and ProDrive™ Transmission Machines).....03-32

Continued on next page

Page	Page
Tow Hooks.....03-33	Adjust Rear Beater Grate Position (T Series)...03-99
Machine Tie-Down Locations.....03-35	Straw Warning Device.....03-100
Automatic Trailer Hitch (If Equipped).....03-36	Straw Walker Rubber Flaps (Bundle).....03-100
Machine-to-Cutting Platform Adaptation.....03-36	Straw Walker Grids (Bundle).....03-101
Attach and Detach Header.....03-38	Straw Walker Fishbacks (Bundle).....03-101
Adjust Single Point Latching.....03-42	Straw Walker Curtain.....03-102
Unlatch Feeder House Manually.....03-44	Adjust Cleaning Fan Drive
Shear Screw Location.....03-45	Speed—Dual Drive Range (If Equipped) ...03-103
Basic Machine Settings—Harvesting Tips.....03-46	Precleaner.....03-104
Crop Settings—Automatic Combine	Chaffer and Sieve Elements.....03-105
Adjust (ACA) Crop Settings.....03-48	Replace Chaffer and Sieve Element.....03-106
Crop Settings—Manual Settings	Side Hill Adaptation For Level Land
Range (W Series).....03-49	Machine (Bundle).....03-109
Machine-to-Crop Conversion Chart (W	Chaffer Fingers.....03-110
Series).....03-50	Tailings Cover (Bundle).....03-110
Crop Settings—Manual Settings	Check Tailings.....03-111
Range (T Series).....03-52	Tailings and Clean Grain Elevator
Machine-to-Crop Conversion Chart (T	Perforated Door and Trough (Bundle).....03-112
Series).....03-53	Clean Grain Elevator Lower Access Cover ...03-112
Operate Harvest Smart™ Feed Rate	Grain Tank Access.....03-113
(If Equipped).....03-55	Open Grain Tank Covers (One-Touch
Harvest Smart™ Feed Rate—System	Button).....03-115
and Field Symptoms.....03-65	Open the Grain Tank Manually (10000
Harvest Smart™ Feed Rate—Trou-	and 11 000 L Grain Tank).....03-115
bleshooting.....03-66	Open the Grain Tank Manually (8000
Harvest Smart™ Feed Rate—Limp	and 9000 L Grain Tank).....03-116
Mode and Emergency Modes.....03-68	Grain Tank Drain Holes.....03-117
Operate De-Awning Plates.....03-69	Reduced Speed Unloading System
Operate Quick-Engage Booster Bar (If	(Optional).....03-117
Equipped).....03-70	Grain Tank Fill Sensors.....03-118
Operate the Straw Chopper (If Equipped).....03-71	Grain Tank Cross Auger Adjustable
Operate the Chaff Spreader (If Equipped).....03-79	Covers (If Equipped).....03-119
Operate the Air Compressor System (If	Cross Auger Drive Shear Bolt.....03-120
Equipped).....03-81	Straw Chopper Corn Adaptation (Bundle).....03-120
Operate the Video Camera (If Equipped).....03-85	Standard and Adjustable Windrow Rake.....03-121
Stone Trap.....03-87	
Feeder House Conveyor Top Shaft	
Scraper (Bundle).....03-87	
Adjust Feeder House Drum Height.....03-88	
Adjust Feeder House Conveyor Chain Speed ..03-89	
Adjust Feeder House Fore/Aft Tilt	
Frame (Level Land Machine).....03-91	
Adjust Feeder House Fore/Aft Tilt	
Frame (HillMaster™ Machine).....03-92	
Cylinder Filler Plates (Bundle).....03-93	
Cylinder Drive—Single Drive Range.....03-93	
Cylinder Drive—Dual Drive Range (If	
Equipped).....03-94	
Cylinder Drive Shear Bolt—Dual Drive	
Range Only.....03-94	
Power Unplugging of Cylinder.....03-95	
Unplug Cylinder With Breaker Bar.....03-95	
Concave Inserts—W Series (Bundle).....03-96	
Adjust Beater Grate Position (W Series).....03-96	
Adjust Separator Grate Position (T Series).....03-97	
Adjust Separator Rotor Drive Speed (T	
Series).....03-98	

Lubrication and Maintenance

Required Emission-Related Information.....04-1
Machine Shielding.....04-1
Engine Platform and Grain Tank Access.....04-6
Hydraulic Cylinder Safety Stop.....04-9
Battery Disconnect Switch.....04-9
General Cleaning Guidelines.....04-10
Cleaning Out Machine (Periodic Cleanout).....04-11
Cleaning Out Machine (Annual
Cleanout and Specialty Crops).....04-18
Break-in Service.....04-26
After the First 10 Operating Hours.....04-26
During the First 50 Operating Hours.....04-26
After the First 100 Operating Hours.....04-26
After the First 1000 Operating Hours.....04-27
Service Intervals—Clearing or Delaying.....04-27
Maintenance Interval Charts.....04-29
Lubrication Decal Locations.....04-32
Lubricated at Factory.....04-32
As Required.....04-33
Every 10 Operating Hours or Daily.....04-34

Continued on next page

Page	Page
Every 10 Operating Hours or Daily (HillMaster™ Only).....	04-36
Every 50 Operating Hours or Weekly (HillMaster™ Only).....	04-37
Every 50 Operating Hours or Weekly.....	04-38
Every 50 Operating Hours or Weekly.....	04-39
Every 50 Operating Hours or Weekly.....	04-40
Every 250 Operating Hours or Every Year.....	04-41
Every 250 Operating Hours or Every Year.....	04-42
Every 250 Operating Hours or Every Year.....	04-43
Every 400 Operating Hours or Every Year.....	04-44
Every 400 Operating Hours or Every Year.....	04-45
Every 400 Operating Hours or Every Year (T Series).....	04-46
Every 400 Operating Hours or Every Year (T Series).....	04-47
Every 400 Operating Hours or Every Year (3-Speed Mechanical and Push-Button Shift Transmission).....	04-48
Every 400 Operating Hours or Every Year.....	04-49
Every 400 Operating Hours or Every Year.....	04-50
Every 400 Operating Hours or Every Year (9.0 L Engine Final Tier 4/Stage IV).....	04-51
Every 400 Operating Hours or Every Year (Push-Button Shift Transmission).....	04-52
Every 400 Hours or Every Year.....	04-53
Every 1000 Operating Hours.....	04-55
Every 1000 Operating Hours (ProDrive™ Transmission Only).....	04-56
Every 1500 Operating Hours (6.8 L Engine Final Tier 4/Stage IV Only).....	04-57
Every 2000 Operating Hours.....	04-58
Every 2000 Operating Hours.....	04-59
Every 2000 Operating Hours.....	04-61
Every 2000 Operating Hours (T Series).....	04-62
Every 4500 Operating Hours or Three Years (Final Tier 4/Stage IV).....	04-63
Every 4500 Operating Hours or Five Years.....	04-64
Every 6000 Operating Hours or Six Years.....	04-65
Handle Fuel Safely—Avoid Fires.....	04-66
Avoid Static Electricity Risk When Refueling.....	04-66
Fill the Fuel Tank.....	04-67
Handling and Storing Diesel Fuel.....	04-67
Diesel Fuel.....	04-68
BioDiesel Fuel.....	04-69
Lubricity of Diesel Fuel.....	04-70
Supplemental Diesel Fuel Additives.....	04-70
Minimizing the Effect of Cold Weather on Diesel Engines.....	04-71
Diesel Exhaust Fluid (DEF) (Final Tier 4/Stage IV).....	04-72
Testing Diesel Exhaust Fluid (DEF) (Final Tier 4/Stage IV).....	04-72
Storing Diesel Exhaust Fluid (DEF) (Final Tier 4/Stage IV).....	04-73
Disposal of Diesel Exhaust Fluid (DEF) (Final Tier 4/Stage IV).....	04-73
Fill Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage IV).....	04-74
Diesel Engine Coolant (engine with wet sleeve cylinder liners).....	04-75
John Deere COOL-GARD™ II Coolant Extender.....	04-76
Operating in Warm Temperature Climates.....	04-76
Water Quality for Mixing with Coolant Concentrate.....	04-77
Testing Coolant Freeze Point.....	04-78
Diesel Engine Break-In Oil (Tier 2/Stage II).....	04-79
John Deere Break-In Plus™ Engine Oil (Final Tier 4/Stage IV).....	04-79
Diesel Engine Oil (Tier 2/Stage II).....	04-80
Diesel Engine Oil (Final Tier 4/Stage IV).....	04-81
Engine Oil and Filter Service Intervals (Tier 2/Stage II).....	04-82
Engine Oil and Filter Service Intervals (Final Tier 4/Stage IV).....	04-82
Oilscan™ and CoolScan™.....	04-83
Transmission Oil.....	04-84
Hydraulic Oil.....	04-84
Straw Walker Gearcase.....	04-85
Grease.....	04-85
Brake Fluid (3-Speed Mechanical and Push-Button Shift Transmission).....	04-85
Lubricant Storage.....	04-85
Alternative and Synthetic Lubricants.....	04-86
Oil Filters.....	04-86
Fuel Filters.....	04-86
Capacities.....	04-87
Fuel System.....	04-88
Do Not Modify Fuel System.....	04-88
Access Engine Platform.....	04-89
Engine Compartment Covers.....	04-90
Cleaning Engine Compartment.....	04-90
Belt Shield.....	04-91
Engine Oil Level.....	04-91
Drain Engine Oil.....	04-92
Drain Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage IV).....	04-93
Clean Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage IV).....	04-94
Replace Diesel Exhaust Fluid (DEF) Dosing Filter (Final Tier 4/Stage IV).....	04-95
Diesel Exhaust Fluid (DEF) Tank Header Filter.....	04-95
Fuel Tank Cap.....	04-96
Fuel Tank Breather.....	04-96
Drain Fuel Tank.....	04-96
Fuel Tank Shut-Off Valve.....	04-97
Replace Fuel Filter (6.8 L Engine—Tier 2/Stage II).....	04-97
Replace Fuel Filter Elements (6.8 L Engine—Final Tier 4/Stage IV).....	04-98

Continued on next page

	Page
Replace Fuel Filter Elements (9.0 L Engine—Tier 2/Stage II).....	04-100
Replace Fuel Filter Elements (9.0 L Engine—Final Tier 4/Stage IV).....	04-101
Flush Heavy Duty Fuel Precleaner Filter (Optional).....	04-102
Clean/Replace Heavy Duty Fuel Precleaner Filter (Optional).....	04-103
Clean Fuel Precleaner Filter.....	04-104
Bleed Fuel System.....	04-105
Drain Cooling System.....	04-105
Refill Cooling System.....	04-108
Winterize Cooling System.....	04-109
Clean Rotary Screen, Oil Cooler, Condenser, Radiator and Charge Air Cooler.....	04-109
Replace Air Cleaner Filters (Final Tier 4/Stage IV Engine).....	04-110
Replace Air Cleaner Filters (Tier 2/Stage II Engine).....	04-111
Diesel Particulate Filter Maintenance and Service (Final Tier 4/Stage IV).....	04-112
Exhaust Filter / Diesel Particulate Filter Ash Handling and Disposal (Final Tier 4/Stage IV).....	04-112
Exhaust Filter Disposal (Final Tier 4/Stage IV).....	04-112
Engine Belt Layouts.....	04-113
Drive Belts (W Series).....	04-115
Drive Belts (T Series).....	04-117
Feeder House Access Doors.....	04-118
Adjust Feeder House Drive Chain.....	04-119
Feeder House Slip Clutch.....	04-119
Check Feeder House Top Shaft Sprockets.....	04-120
Adjust Feeder House Conveyor Chain Tension.....	04-121
Feeder House Conveyor Chain Links.....	04-121
Adjust Feeder House Reverser Belt Tension.....	04-122
Replace Feeder House Reverser Belt.....	04-123
Adjust Feeder House Belt Tension.....	04-123
Replace Feeder House Belt (W Series).....	04-124
Replace Feeder House Belt (T Series).....	04-125
Replace Threshing Cylinder Rasp Bars.....	04-126
Replace Threshing Cylinder Filler Plates (If Equipped).....	04-127
Check Cylinder Drive Reduction Gear Oil Level.....	04-128
Adjust Concave Initial Position.....	04-129
Adjust Cylinder Drive Gap.....	04-135
Replace Cylinder Intermediate Belt.....	04-136
Align Cylinder Drive.....	04-137
Adjust Cylinder Drive Belt Tension.....	04-139
Replace Cylinder Drive Belt.....	04-140
Adjust Beater Belt Tension (W Series).....	04-141
Replace Beater Belt (W Series).....	04-141
Adjust Power Separator Belt Tension (W Series—If Equipped).....	04-142

	Page
Replace Power Separator Belt (W Series—If Equipped).....	04-142
Adjust Belt Tension of Stripper Roller (T Series).....	04-143
Replace Stripper Roller Belt (T Series).....	04-143
Adjust Overshot Beater Belt Tension (T Series).....	04-144
Replace Overshot Beater Belt (T Series).....	04-145
Adjust Separator Belt Tension (T Series).....	04-146
Replace Separator Belt (T Series).....	04-147
Adjust Rear Beater Belt Tension (T Series).....	04-148
Replace Rear Beater Belt (T Series).....	04-148
Adjust Secondary Countershaft Belt Tension.....	04-149
Replace Secondary Countershaft Belt.....	04-150
Adjust Cleaning Fan Belt Tension.....	04-153
Replace Cleaning Fan Belt.....	04-154
Adjust Straw Walker Belt Tension (W Series).....	04-155
Replace Straw Walker Belt (W Series).....	04-156
Adjust Straw Walker Belt Tension (T Series).....	04-157
Replace Straw Walker Belt (T Series).....	04-158
Cleaning Shoe Auger Bevel Gears.....	04-159
Adjust Cleaning Shoe Auger Bevel Gear Belt Tension.....	04-159
Replace Cleaning Shoe Auger Bevel Gear Belt.....	04-160
Adjust Cleaning Shoe Belt Tension.....	04-161
Replace Cleaning Shoe Belt.....	04-162
Clean Grain Elevator Drives—Top Access.....	04-164
Adjust Clean Grain Elevator Belt Tension.....	04-165
Replace Clean Grain Elevator Belt.....	04-166
Adjust Clean Grain Elevator Paddle Chain Tension.....	04-168
Adjust Tailings Auger And Elevator Belt Tension.....	04-169
Replace Tailings Auger And Elevator Belt.....	04-170
Tailings Auger And Elevator Slip Clutch.....	04-171
Adjust Tailings Elevator Paddle Chain Tension.....	04-171
Adjust Upper Tailings Auger Drive Chain Tension.....	04-172
Adjust Grain Tank Cross Auger Drive Chain Tension.....	04-173
Adjust Unloading Auger Support Stud.....	04-173
Replace Unloading Auger Drive Belt.....	04-174
Align Unloading Auger Drive.....	04-176
Adjust Exhaust Debris Management Belt Tension.....	04-177
Replace Exhaust Debris Management Drive Belt.....	04-177
Adjust Reel and Chaff Spreader Pump Belt Tension (Machine With Straw Chopper).....	04-178
Replace Reel and Chaff Spreader Pump Drive Belt (Machine With Straw Chopper).....	04-179
Replace Straw Chopper Rotating Knives.....	04-181

Continued on next page

Page	Page
Replace Straw Chopper Counterknives 04-182	Brake System 04-205
Adjust Chaff Spreader Frame	ClimaTrak™ Air Conditioner—Servicing 04-205
Operating Position..... 04-183	Clean ClimaTrak™ Fresh Air Filter and
Electrical System (General Information)..... 04-183	Recirculation Air Filter 04-206
Weld Near Electronic Control Units 04-184	Replace Fresh Air Filter 04-206
Keep Electronic Control Unit	Replace Recirculation Air Filter 04-207
Connectors Clean 04-184	Check Refrigerant Level 04-207
Observe Electrical Precautions 04-184	Fill Windshield Washer Reservoir..... 04-208
Basic Electrical Component Handling -	Jacking Points (Jack Pocket Locations
Precautions for Machines Equipped	Decal)..... 04-208
with Computer Controlled Systems..... 04-185	Service Tires Safely..... 04-209
Handling Batteries Safely 04-186	Care and Service of Tires 04-209
Battery Charging..... 04-186	Wheel Bolts and Nuts..... 04-210
Alternator 04-187	Mounting Tires 04-211
Battery Cable Connection..... 04-187	Changing Tires 04-211
Fuse Center Cover 04-188	Tire Pressures 04-212
Fuse Center..... 04-189	Use Genuine John Deere Parts..... 04-212
Cab Fuse (Diode Module Fuse) 04-190	Engine Storage Guidelines for Long
Inline Fuses 04-190	Term Storage..... 04-213
Starter Relay..... 04-191	Prepare Machine for Storage 04-214
Safety Rules When Replacing Halogen	Remove Machine from Storage..... 04-215
Bulbs 04-192	
Replace Cab Headlight Bulb (Non	Specifications
Light Emitting Diode (LED) Lights)..... 04-192	W540 Combine..... 05-1
Adjust Cab Headlights 04-193	W550 Combine..... 05-2
Replace Cab Halogen Light Bulb 04-193	W650 Combine..... 05-3
Adjust Cab Halogen Lights 04-194	W660 Combine..... 05-4
Replace Fascia Light Bulb (If Equipped) 04-194	T550 Combine 05-5
Replace Lower Driving Light Bulb (If	T560 Combine 05-6
Equipped)..... 04-195	T660 Combine 05-7
Adjust Lower Driving Lights (If Equipped) 04-195	T670 Combine 05-8
Replace Beacon Light Bulb (Non Light	Operating Speeds..... 05-9
Emitting Diode (LED) Lights)..... 04-196	Dimensions..... 05-10
Replace Beacon Light (Light Emitting	Vibrations at Operator's Position 05-11
Diode (LED) Lights)..... 04-196	Sound Level..... 05-11
Replace Discharge Lights, Auxiliary	Type Plates..... 05-12
Field Lights, Access Door Work	Combine (Product Identification) Type Plate 05-12
Lights, Stubble Lights, Grain Tank	Product Identification Number 05-12
and Unloading Auger Light..... 04-197	Machine Component Serial Numbers..... 05-12
Replace Side Finder Lights and	Metric Bolt and Screw Torque Values 05-21
Cleaning Shoe Lights 04-197	Unified Inch Bolt and Screw Torque Values..... 05-22
Replace Hazard/Marker Lights,	EC Declaration of Conformity 05-23
Marker/Brake Lights and Rear	Customs Union—EAC..... 05-24
Hazard Lights 04-198	Safety Note Regarding the Subsequent
Replace Cab Interior Light..... 04-198	Installation of Electrical and
Replace Map Light..... 04-199	Electronic Appliances and/or Components .. 05-25
Hydraulic System (General Information) 04-199	
Hydraulic System Cleanliness 04-200	
Hydraulic Hose Replacement..... 04-200	
Header Lift Accumulator (General	
Information)..... 04-201	
Adjust Header Lift Accumulator 04-202	
Adjust Shift Linkage (3-Speed	
Transmission With Gearshift Lever) 04-203	
Hydrostatic Drive — Adjusting	
Cable (3-Speed Mechanical and	
Push-Button Shift Transmission)..... 04-204	
Brake Fluid (3-Speed Mechanical and	
Push-Button Shift Transmission)..... 04-204	

Safety

Recognize Safety Information

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



DX,ALERT -19-29SEP98-1/1

T81389 —UN—28JUN13

Understand Signal Words

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.



DX,SIGNAL -19-03MAR93-1/1

TS187 —19—30SEP88

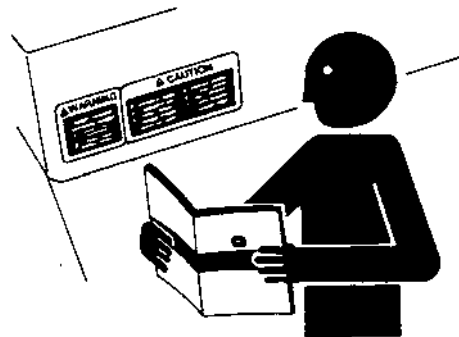
Follow Safety Instructions

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.



If you do not understand any part of this manual and need assistance, contact your John Deere dealer.

DX,READ -19-16JUN09-1/1

TS201 —UN—15APR13

Driving the Machine

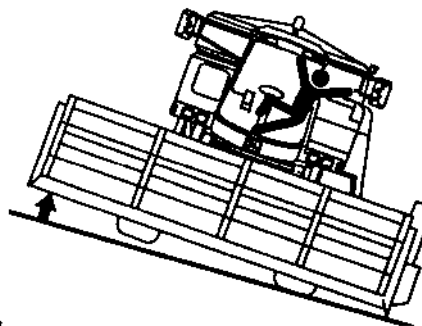
Operate machine only when all guards are correctly installed.

Before moving away, always check immediate vicinity of machine (e.g. for children). Ensure adequate visibility. Use the horn as a warning immediately before moving away.

Always adapt ground speed to road or field conditions. Avoid making sharp turns when driving up or down slopes or when driving across a slope. Be especially careful when turning on slopes with full grain tank.

Follow instructions in header Operator's Manual when attaching or detaching the header.

When making turns, always take into consideration the width of the attachment and the fact that the rear end of the machine swings out. Attachments and ground conditions affect the driving characteristics of the combine.



ZX002461

ZX002461—UN—16JUN95

Reduce ground speed when driving on slopes or over uneven ground and before making sharp turns. Before descending a steep hill, shift to a lower gear.

Avoid holes, ditches and obstructions which may cause the combine to tip, particularly on hillsides.

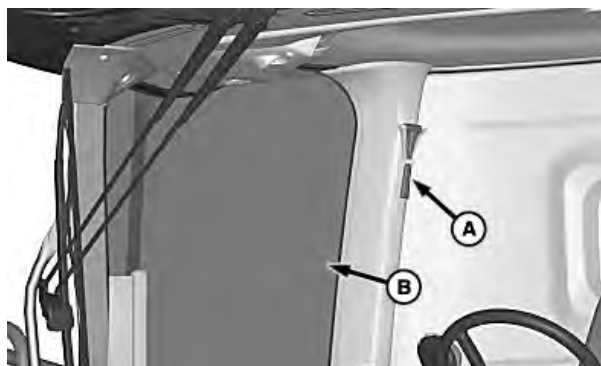
OUC06075,0000AB7 -19-21FEB07-1/1

Emergency Exit

Remove hammer (A) and hit window (B) to break glass to exit cab. See your John Deere dealer for window replacement.

A—Hammer

B—Window



H95176—UN—22JAN10

ZX08994,000063F -19-26JAN11-1/1

Observe Road Traffic Regulations

Always observe local road traffic regulations when using public roads.

OUC06075,0000032 -19-22JAN01-1/1

Check Machine Safety

Always check the road and general operating safety of the machine before using.

FX,READY -19-28FEB91-1/1

Keep Riders and Children Off Machine

Only allow operator on machine. Keep riders off machine except for periods of training or short periods of observation.

Riders are subject to injury such as being thrown off machine. Riders also obstruct operator's view resulting in machine being operated in an unsafe manner.

Children should never be allowed on machine or in machine cab when engine is running.

Instructional seat should only be used for instruction or short periods of machine observation, and not for accommodation of children.



T5253 —UN—23AUG88

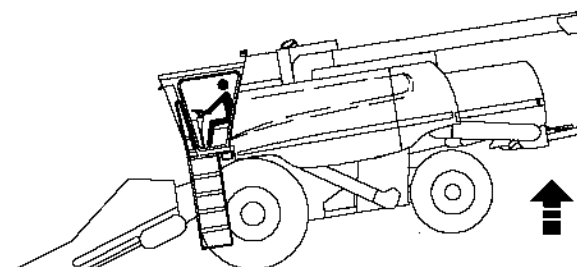
OUC002,00042EC -19-31JAN15-1/1

Ballasting for Safe Ground Contact

Operating, steering and braking performance of combine can be considerably affected by heavy front end attachments which alter the center of gravity of the combine.

To maintain the necessary ground contact, ballast the combine at the rear end as necessary.

Observe the maximum permissible axle loads and total weights.



H51907 —UN—10FEB89

HX,AG,SF6782 -19-05FEB99-1/1

Roadway Transport with Header Attached

Observe national and local laws regarding operation of the combine on public roadways.

This combine has been approved for roadway transport in Germany with a Geringhoff 8 row folding header and

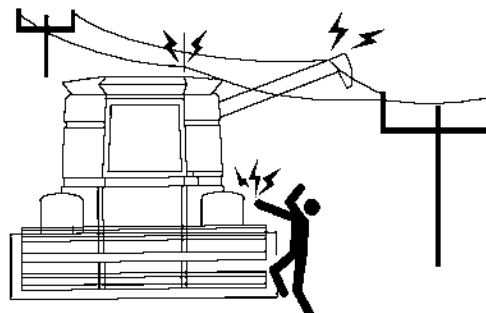
a Kemper 8 row folding header. Roadway transport in Germany with other heads must be approved by your local TUEV to achieve a road permission.

OUC0675,0003B9B -19-03NOV04-1/1

Avoid Electrical Power Lines

Put the grain tank unloading auger in transport position and lower the grain tank access handrail before driving on public roads.

Secure radio aerial in its transport position before driving on public roads, it may come into contact with low-hanging electrical cables. This would result in the operator suffering a severe electrical shock.



H52022 —UN—14APR99

HX,STSSA,D -19-22JUL99-1/1

Parking and Leaving the Machine

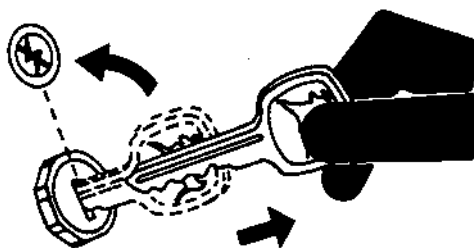
Lower header to the ground.

Before leaving the machine, disengage main clutch and shut off engine. Apply park brake, remove key and lock the operator's cab. Position chock blocks.

NOTE: Use only chock blocks provided with the machine.

Never leave machine unattended as long as engine is still running.

Never leave the operator's cab when driving.



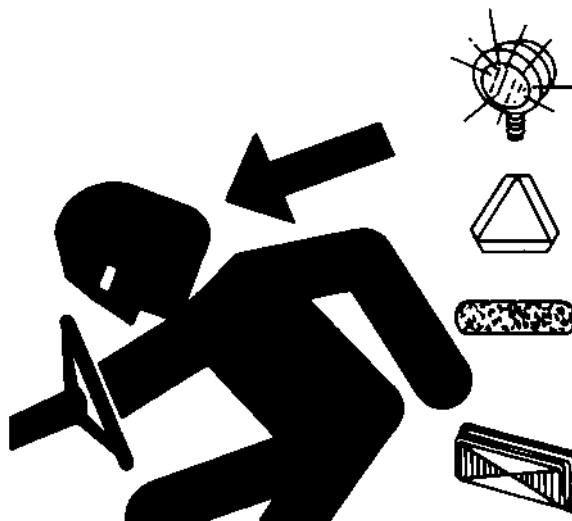
TS230 —UN—24MAY89

OUC002,0004221 -19-15DEC14-1/1

Use Safety Lights and Devices

Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns and use turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible, clean and in good working order. Replace or repair lighting and marking that has been damaged or lost.



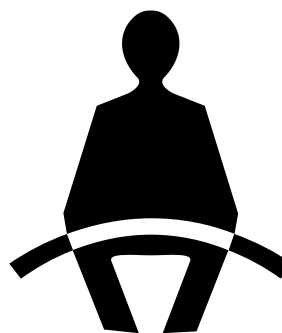
TS951 —UN—12APR90

HX,STSSA,O -19-22JUL99-1/1

Instructional Seat

The instructional seat is intended only for transport of a passenger riding as an observer/instructor in on-road operations (that is, transport from farm to field).

If it is necessary to transport a passenger, the instructional seat is the only means of transport of a passenger condoned by John Deere.



TS1730 —UN—24MAY13

OUC002,0004223 -19-15DEC14-1/1

Use Seat Belts

Use seat belt whenever you operate machine or ride as an observer.



H47137

H47137 —UN—25OCT95

PP98408,0000059 -19-26AUG13-1/1

Road Safety Mode Button

IMPORTANT: Before driving combine on public roads, make sure that the road safety mode button is in the road mode (see Road Safety Mode Button in Operating the Controls and Displays section).

This ensures that all the hydraulic functions with the exception of the steering and the brakes are switched off.



ZX262156

ZX262156 —UN—17NOV15

OUCC002,000481E -19-03NOV15-1/1

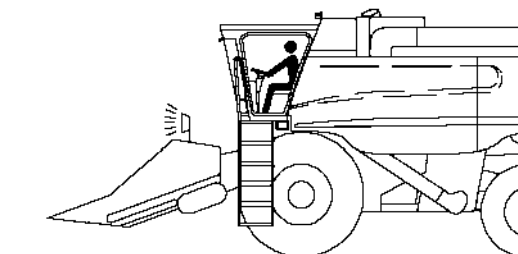
Transport Combine With Header Safely

Whenever possible avoid transporting on public roadways with the header attached.

If the combine must be transported with the header attached, make sure that the flashing warning lights on the header are operating and the reflective material is clean and visible.

The use of a spotter or pilot vehicle is recommended on busy, narrow or hilly roads and when crossing bridges.

Drive at a speed that is safe for conditions.



H51909 —UN—07MAY99

OUO6075,0000034 -19-22JAN01-1/1

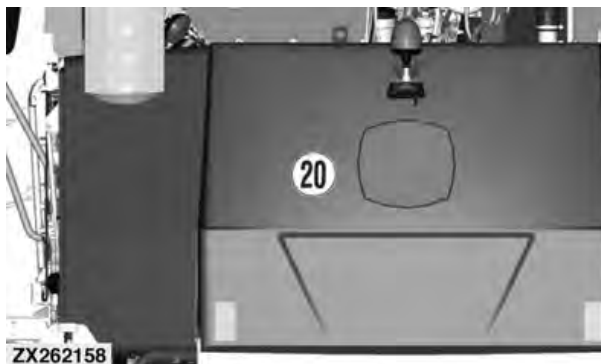
Speed Limit

In accordance with national speed regulations, the machine must have a plate showing its top speed limit.

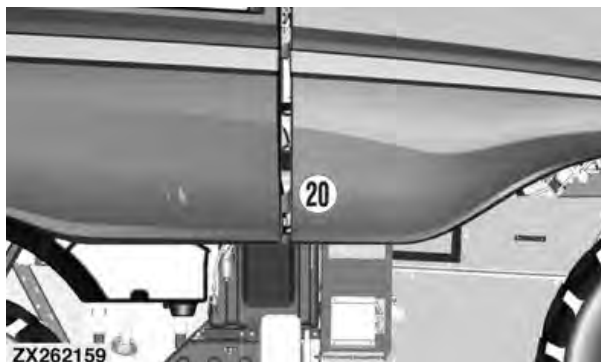
NOTE: Depending on country the location and the amount of plate differ.



ZX262157 —UN—17NOV15



ZX262158 —UN—17NOV15



ZX262159 —UN—17NOV15

OUC002,0004820 -19-03NOV15-1/1

Prevent Machine Runaway or Unexpected Movement

Avoid injury or death from unexpected movement of machine or components.

Do not start engine by shorting across starter or solenoid terminals. Machine or components may move if the normal circuitry is bypassed.



H58737 —UN—08JUL99

AG,OUO1035,792 -19-08JUL99-1/1

Safety

Avoid Backover Accidents

Before moving machine, be sure that all persons are clear of machine path. Turn around and look directly for best visibility. Use a signal person when backing if view is obstructed or when in close quarters.

Do not rely on a camera to determine if personnel or obstacles are behind the machine. The system can be limited by many factors including maintenance practices, environmental conditions, and operating range.



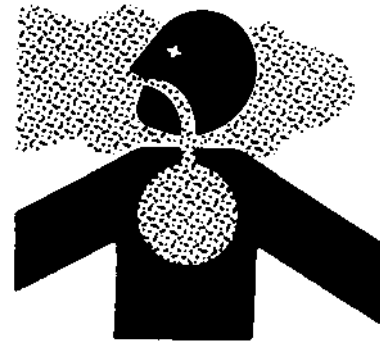
DX,AVOID,BACKOVER,ACCIDENTS -19-30AUG10-1/1

PC10857XW —UN—15APR13

Work In Ventilated Area

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open the doors and get outside air into the area.



DX,AIR -19-17FEB99-1/1

TS220 —UN—15APR13

Handle Fuel Safely—Avoid Fires

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

Use only an approved fuel container for transporting flammable liquids.

Never fill fuel container in pickup truck with plastic bed liner. Always place fuel container on ground before refueling. Touch fuel container with fuel dispenser nozzle before removing can lid. Keep fuel dispenser nozzle in contact with fuel container inlet when filling.



Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.

DX,FIRE1 -19-12OCT11-1/1

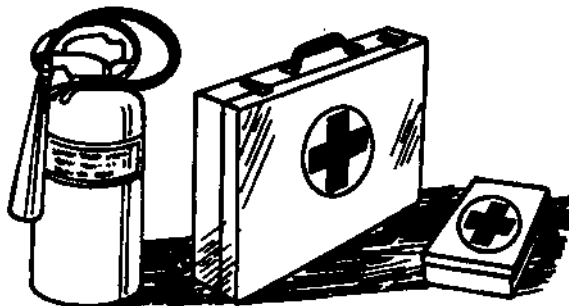
TS202 —UN—23AUG88

Prepare for Emergencies

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



TS291 —UN—15APR13

DX,FIRE2 -19-03MAR93-1/1

Handle Starting Fluid Safely

Starting fluid is highly flammable.

Keep all sparks and flame away when using it. Keep starting fluid away from batteries and cables.

To prevent accidental discharge when storing the pressurized can, keep the cap on the container, and store in a cool, protected location.

Do not incinerate or puncture a starting fluid container.

Do not use starting fluid on an engine equipped with glow plugs or an air intake heater.



TS1356 —UN—18MAR92

DX,FIRE3 -19-14MAR14-1/1

Avoid Static Electricity Risk When Refueling

The removal of sulfur and other compounds in Ultra-Low Sulfur Diesel (ULSD) fuel decreases its conductivity and increases its ability to store a static charge.

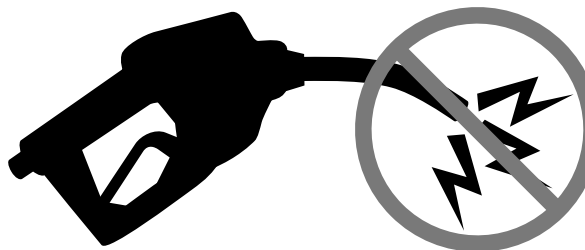
Refineries may have treated the fuel with a static dissipating additive. However, there are many factors that can reduce the effectiveness of the additive over time.

Static charges can build up in ULSD fuel while it is flowing through fuel delivery systems. Static electricity discharge when combustible vapors are present could result in a fire or explosion.

Therefore, it is important to ensure that the entire system used to refuel your machine (fuel supply tank, transfer pump, transfer hose, nozzle, and others) is properly grounded and bonded. Consult with your fuel or fuel system supplier to ensure that the delivery system is in compliance with fueling standards for proper grounding and bonding practices.



RG22142 —UN—17MAR14



RG21992 —UN—21AUG13

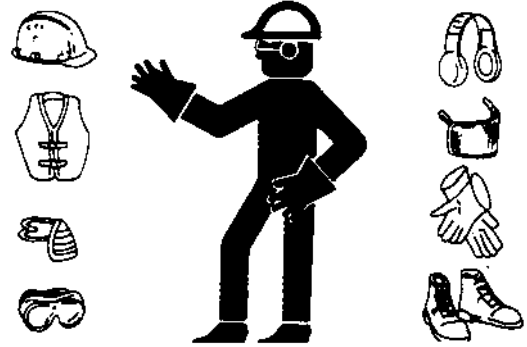
DX,FUEL,STATIC,ELEC -19-12JUL13-1/1

Safety

Wear Protective Clothing

Wear close fitting clothing and safety equipment appropriate to the job.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



DX,WEAR2 -19-03MAR93-1/1

TS206 —UN—15APR13

Stay Clear of Harvesting Units

Cutterbar, auger, reel and feed rolls cannot be completely shielded due to their function. Stay clear of these moving elements during operation. Always disengage main clutch, shut off engine, set parking brake and remove key before servicing or unclogging machine.



OUO6075,00009E5 -19-28SEP10-1/1

ES118704 —UN—21MAR95

Keep Hands Away From Knives

Never attempt to clear obstructions in front of or on header unless separator is disengaged, parking brake is set, engine is shut off and key is removed.

Everyone must be clear of machine before starting engine.



OUO6075,00009E6 -19-28SEP10-1/1

TS254 —UN—23AUG88

Practice Safe Maintenance

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

On towed implements, disconnect wiring harnesses from tractor before servicing electrical system components or welding on machine.



TS218 —UN—23AUG88

DX,SERV -19-17FEB99-1/1

Remove Paint Before Welding or Heating

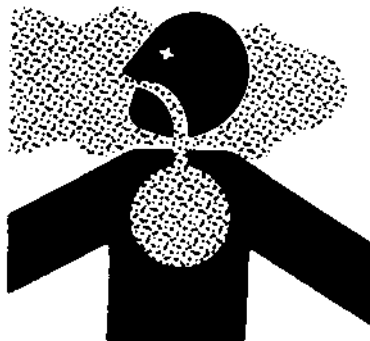
Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Remove paint before heating:

- Remove paint a minimum of 100 mm (4 in.) from area to be affected by heating. If paint cannot be removed, wear an approved respirator before heating or welding.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

Do not use a chlorinated solvent in areas where welding will take place.



Do all work in an area that is well ventilated to carry toxic fumes and dust away.

Dispose of paint and solvent properly.

TS220 —UN—15APR13

DX,PAINT -19-24JUL02-1/1

Avoid Contact With Moving Parts

Keep hands, feet and clothing away from power driven parts. Never clean, lubricate or adjust machine when it is running.



TS256 —UN—23AUG88

H01,9000SA,E -19-15JUN90-1/1

Cleaning Grain Tank and Removal of Blockages Safely

Avoid serious injury or death from entanglement in the grain tank cross augers. For functional purposes the cross augers cannot be completely covered. Do not enter the grain tank when the engine is running. Before entering the tank to clean out residual grain, always shut off the engine, set parking brake and remove the key

If grain bridges and fails to flow into the cross augers, shut off the engine, remove the key and from a position on the engine compartment door use a rod, broom or shovel to break the bridge and restore grain flow.

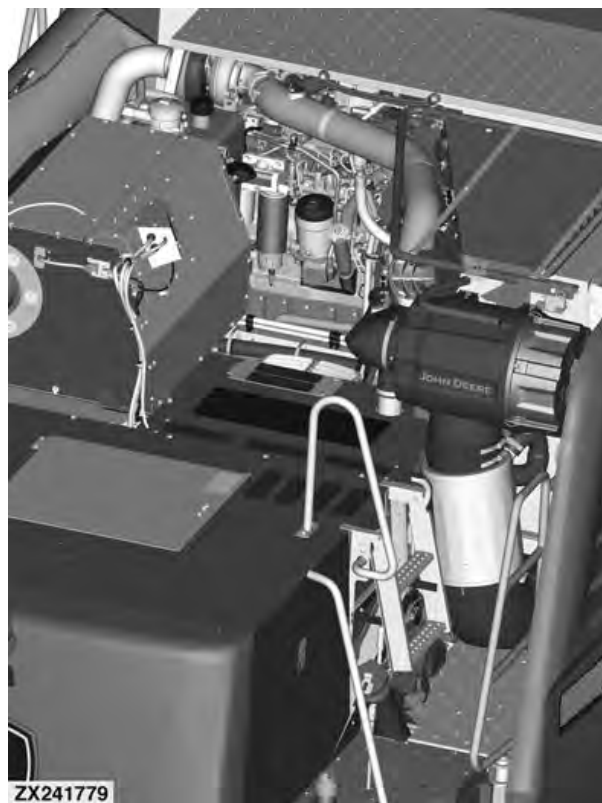


TS256 —UN—23AUG88

OOU6043,00015E2 -19-24MAY04-1/1

Cleaning Engine Compartment

⚠ CAUTION: Do not clean engine or engine compartment with engine running. Dirt, oil, chaff, and crop debris in engine compartment and on engine is a fire hazard. Direction of wind, type of crop and its moisture content can all have an effect on where and how much chaff and debris accumulate. Check and clean this area frequently.



ZX241779 —UN—19APR15

OUC002,0004824 -19-03NOV15-1/1

Engine Platform and Grain Tank Access

CAUTION: Prevent falls by facing the machine when getting on and off. Maintain 3-point contact with steps, handholds, and handrails.

Use extra care when mud, snow, or moisture present slippery conditions. Keep steps clean and free of grease or oil. Never jump when exiting machine. Never mount or dismount a moving machine.

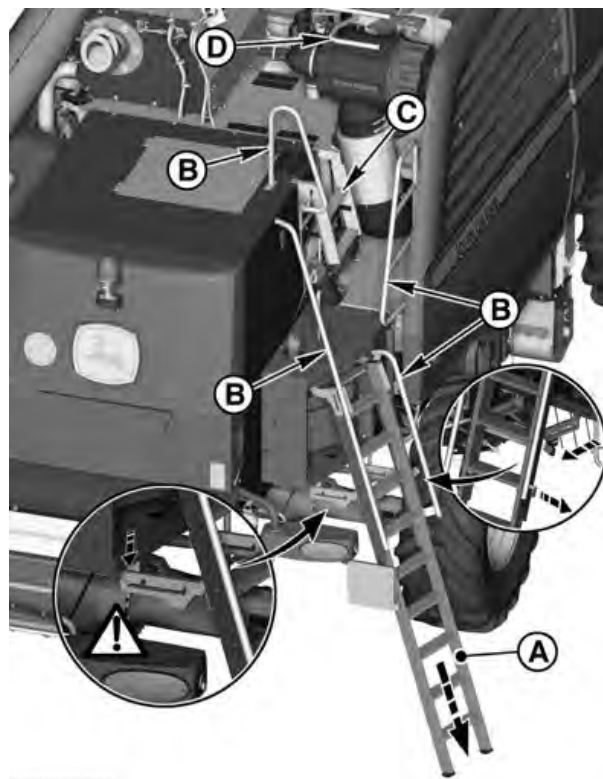
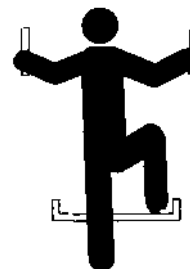
CAUTION: Shut off the engine and set the park brake.

To access engine platform or grain tank, fold out and lower rear access ladder (A) to the ground.

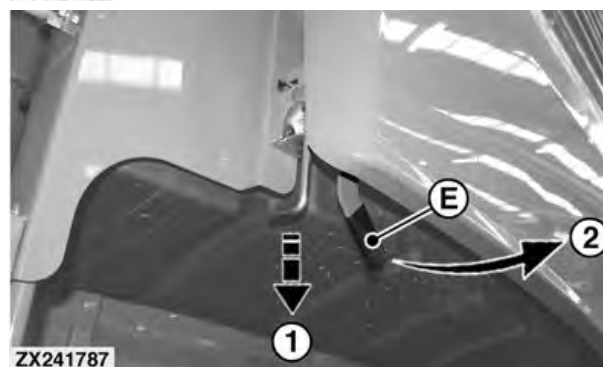
To access cooling system, unlock then push up on lever (E) and swing landing assembly out until it latches.

A—Ladder
B—Handrail
C—Foot Steps

D—Handhold
E—Lever



ZX240896



ZX241787

T133468 —UN—15APR13

ZX240896 —UN—16APR15

ZX241787 —UN—22JAN16

Continued on next page

OUC002,0004827 -19-23NOV15-1/3

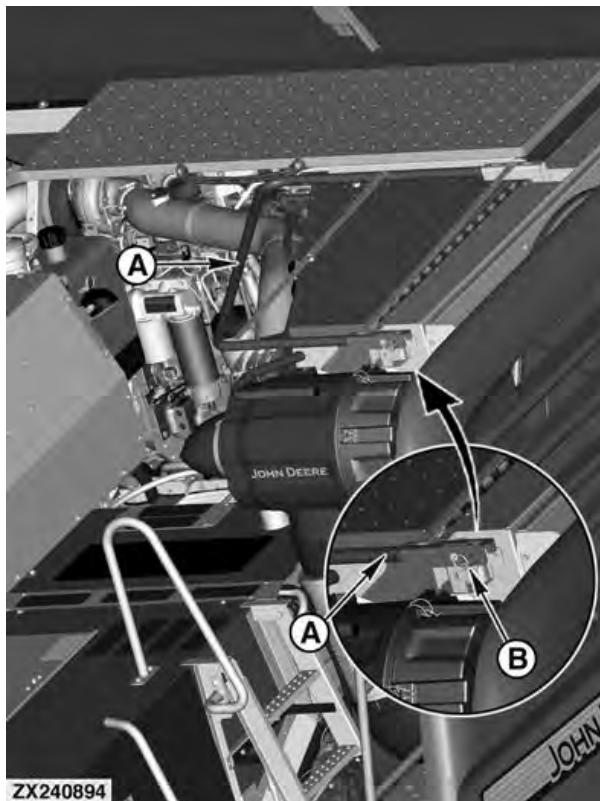
Rotate handrail (A) up until lock-out pin (B) locks handrail into place.

Use foot steps (C) then step on covers (D) to reach the grain tank.

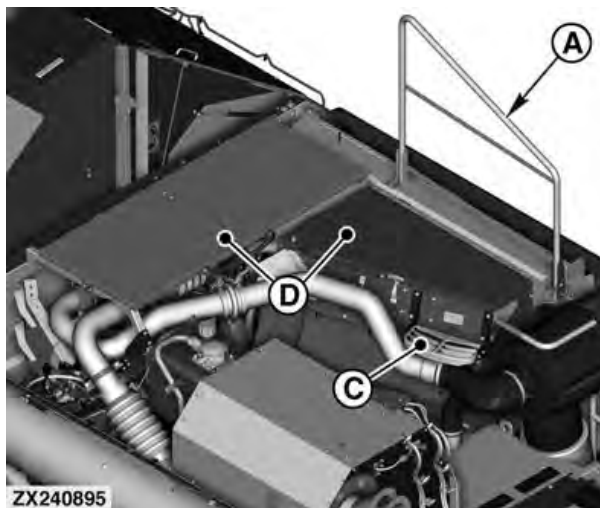
NOTE: To lower the handrail (A), first pull out lock-out pin (B) then rotate handrail.

A—Handrail
B—Lock-out Pin

C—Foot Steps
D—Covers



ZX240894 —UN—16APR15



ZX240895 —UN—16APR15

Continued on next page

OUC002,0004827 -19-23NOV15-2/3

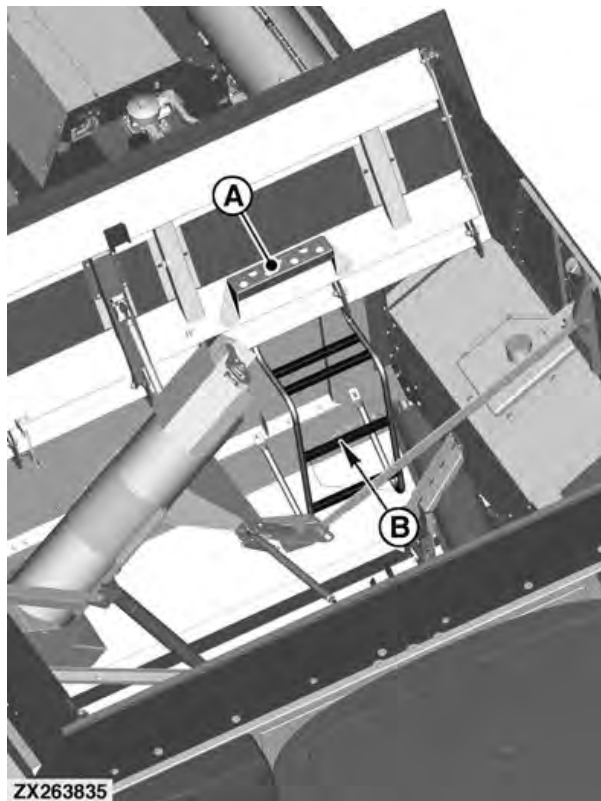
CAUTION: Maintain 3-point contact while accessing inside of grain tank.

NOTE: Left-hand part of 8000/9000 L grain tank removed for illustration purpose only.

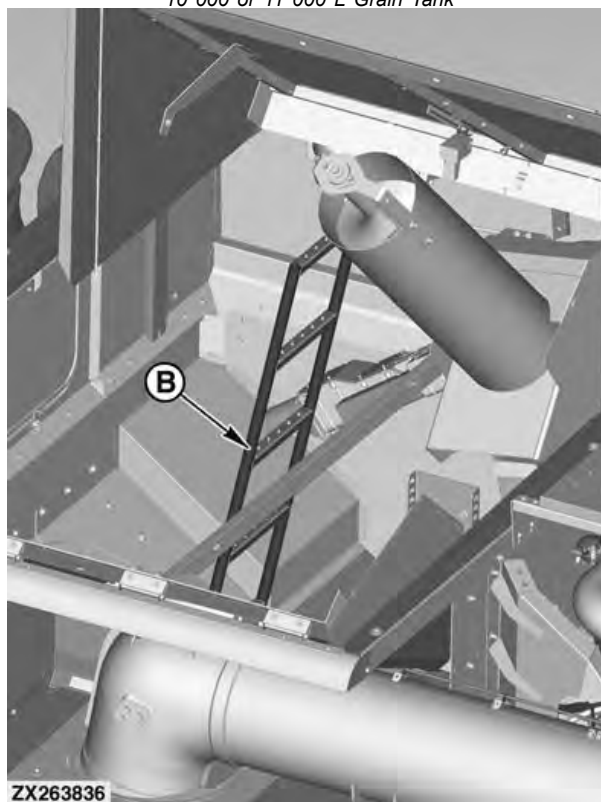
To access inside of grain tank, always use foot steps (A) and ladder (B).

A—Foot Steps

B—Ladder



10 000 or 11 000 L Grain Tank



8000 or 9000 L Grain Tank

ZX263835 —UN—27NOV15

ZX263836 —UN—27NOV15

OUCC002,0004827 -19-23NOV15-3/3

Stay Clear of Rotating Drivelines

Entanglement in rotating driveline can cause serious injury or death.

Keep all shields in place at all times. Make sure rotating shields turn freely.

Wear close-fitting clothing. Stop the engine and be sure that all rotating parts and drivelines are stopped before making adjustments, connections, or performing any type of service on engine or machine driven equipment.



TS1644 —UN—22AUG95

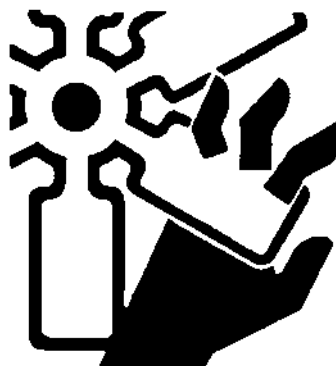
DX,ROTATING -19-18AUG09-1/1

Install All Shields and Guards

Rotating fans, belts, pulleys, and drives can cause serious injury.

Keep all shields and guards in place at all times during operation.

Wear close-fitting clothes. Stop the engine and be sure fans, belts, pulleys, and drives are stopped before making adjustments, connections, or cleaning near fans and their drive components.



TS677 —UN—21SEP89

OUC6075,0000C23 -19-03MAY11-1/1

Avoid High-Pressure Fluids

Inspect hydraulic hoses periodically – at least once per year – for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

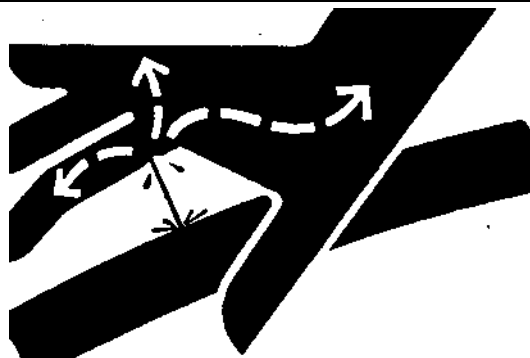
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar



X9811 —UN—23AUG88

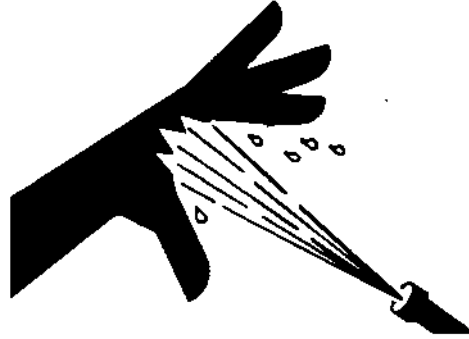
with this type of injury should reference a knowledgeable medical source. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

DX,FLUID -19-12OCT11-1/1

Do Not Open High-Pressure Fuel System

High-pressure fluid remaining in fuel lines can cause serious injury. Do not disconnect or attempt repair of fuel lines, sensors, or any other components between the high-pressure fuel pump and nozzles on engines with High Pressure Common Rail (HPCR) fuel system.

Only technicians familiar with this type of system can perform repairs. (See your John Deere dealer.)



TS1343 —UN—18MAR92

DX,WW,HPCR1 -19-07JAN03-1/1

Service Accumulator Systems Safely

Escaping fluid or gas from systems with pressurized accumulators that are used in air conditioning, hydraulic, and air brake systems can cause serious injury. Extreme heat can cause the accumulator to burst, and pressurized lines can be accidentally cut. Do not weld or use a torch near a pressurized accumulator or pressurized line.

Relieve pressure from the pressurized system before removing accumulator.

Relieve pressure from the hydraulic system before removing accumulator. Never attempt to relieve hydraulic system or accumulator pressure by loosening a fitting.

Accumulators cannot be repaired.



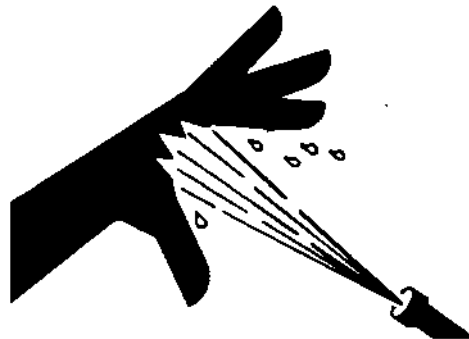
TS281 —UN—15APR13

DX,WW,ACCLA2 -19-22AUG03-1/1

Protect Against High Pressure Spray

Spray from high pressure nozzles can penetrate the skin and cause serious injury. Keep spray from contacting hands or body.

If an accident occurs, see a doctor immediately. Any high pressure spray injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.



TS1343 —UN—18MAR92

DX,SPRAY -19-16APR92-1/1

Retorque Wheel Bolts and Nuts

Retorque wheel bolts and nuts as specified under **Wheel Bolts and Nuts** in Lubrication and Maintenance section. Failure to do this could result in a wheel falling off during operation, causing the machine to tip over with serious injury to the operator and extensive damage to the machine.

Front Axle Wheel Bolts (Lubricated):

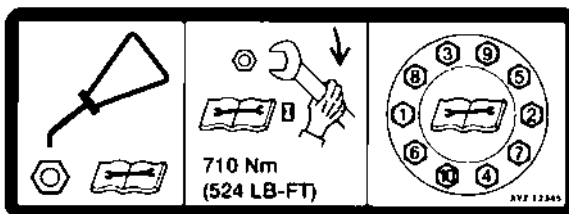
- 710 N·m (524 lb-ft)

Rear Axle Wheel Nuts (Dry):

- 550 N·m (405 lb-ft)



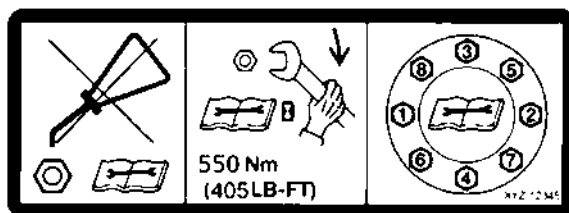
H96809—UN—09JUN10



ZX224019

Front Wheel Bolts Torque

ZX224019—UN—08NOV14



ZX224020

Rear Wheel Nuts Torque

ZX224020—UN—08NOV14

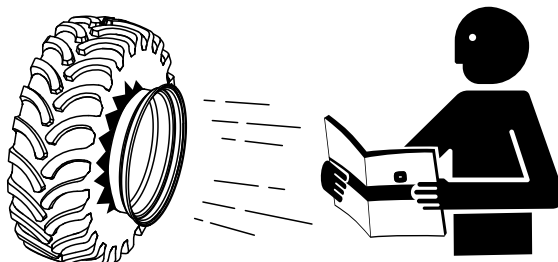
OUC002,000481F -19-03NOV15-1/1

Follow Tire Recommendations

Keep your machine in proper working order.

Use only prescribed tire sizes with correct ratings and inflate to the pressure specified in this manual.

Use of other than prescribed tires may decrease stability, affect steering, result in premature tire failure, or cause other durability or safety issues.



H111235—UN—13MAY14

DX,TIRE,INFO -19-19MAY14-1/1

Service Tires Safely

Explosive separation of a tire and rim parts can cause serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check wheels for low pressure, cuts, bubbles, damaged rims, or missing lug bolts and nuts.



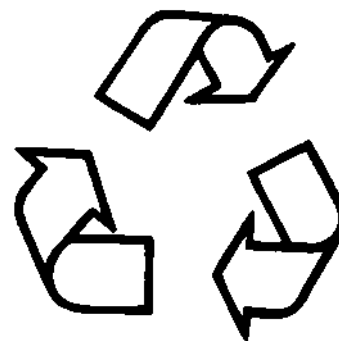
RXA0103438 —UN—11JUN09

DX,WW,RIMS -19-19AUG09-1/1

Decommissioning — Proper Recycling and Disposal of Fluids and Components

Safety and environmental stewardship measures must be taken into account when decommissioning a machine and/or component. These measures include the following:

- Use appropriate tools and personal protective equipment such as clothing, gloves, face shields or glasses, during the removal or handling of objects and materials.
- Follow instructions for specialized components.
- Release stored energy by lowering suspended machine elements, relaxing springs, disconnecting the battery or other electrical power, and releasing pressure in hydraulic components, accumulators, and other similar systems.
- Minimize exposure to components which may have residue from agricultural chemicals, such as fertilizers and pesticides. Handle and dispose of these components appropriately.
- Carefully drain engines, fuel tanks, radiators, hydraulic cylinders, reservoirs, and lines before recycling components. Use leak-proof containers when draining fluids. Do not use food or beverage containers.
- Do not pour waste fluids onto the ground, down a drain, or into any water source.
- Observe all national, state, and local laws, regulations, or ordinances governing the handling or disposal of waste fluids (example: oil, fuel, coolant, brake fluid);



TS1133 —UN—15APR13

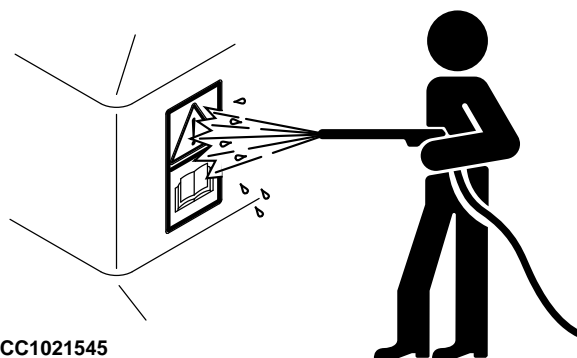
- filters; batteries; and, other substances or parts. Burning of flammable fluids or components in other than specially designed incinerators may be prohibited by law and could result in exposure to harmful fumes or ashes.
- Service and dispose of air conditioning systems appropriately. Government regulations may require a certified service center to recover and recycle air conditioning refrigerants which could damage the atmosphere if allowed to escape.
 - Evaluate recycling options for tires, metal, plastic, glass, rubber, and electronic components which may be recyclable, in part or completely.
 - Contact your local environmental or recycling center, or your John Deere dealer for information on the proper way to recycle or dispose of waste.

DX,DRAIN -19-01JUN15-1/1

Avoid High-Pressure Jet on Safety Decals

Pressurized water can remove or damage safety decals. Do not direct high-pressure jet on safety decals.

Immediately replace missing or damaged safety decals. Replacement safety decals are available from your John Deere dealer.



CC1021545

CC1021545 —UN—23APR02

OUC002,0003AEA -19-10SEP12-1/1

Service Cooling System Safely

Explosive release of fluids from pressurized cooling system can cause serious burns.

Shut off engine, set parking brake and remove key. Allow system to cool before opening cap. Slowly loosen cap to relieve pressure before removing completely.



TS281 —UN—15APR13

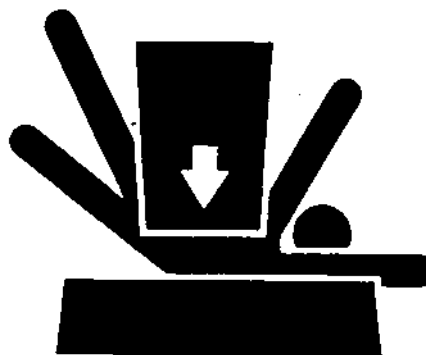
OUC0075,0000ABC -19-21FEB07-1/1

Support Machine Properly

Always lower the attachment or implement to the ground before you work on the machine. If the work requires that the machine or attachment be lifted, provide secure support for them. If left in a raised position, hydraulically supported devices can settle or leak down.

Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load. Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.

When implements or attachments are used with a machine, always follow safety precautions listed in the implement or attachment operator's manual.



TS229 —UN—23AUG88

DX,LOWER -19-24FEB00-1/1

Store Attachments Safely

Stored attachments such as dual wheels, cage wheels, and loaders can fall and cause serious injury or death.

Securely store attachments and implements to prevent falling. Keep playing children and bystanders away from storage area.



DX,STORE -19-03MAR93-1/1

TS219 —UN—23AUG88

Service Drive Belts Safely

When servicing drive belts always observe these precautions:

- Avoid serious injury from hand or arm entanglement. Never attempt to clean, check or adjust belts while the machine is running. Always shut off the engine, set the parking brake and remove the key.
- Do not attempt to clean belts with flammable cleaning solvents.



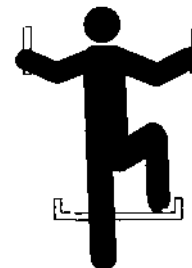
OUC6075,00026A4 -19-06FEB03-1/1

TS285 —UN—23AUG88

Use Steps and Handholds Correctly

Prevent falls by facing the machine when getting on and off. Maintain 3-point contact with steps, handholds, and handrails.

Use extra care when mud, snow, or moisture present slippery conditions. Keep steps clean and free of grease or oil. Never jump when exiting machine. Never mount or dismount a moving machine.



DX,WW,MOUNT -19-12OCT11-1/1

T133468 —UN—15APR13

Handle Electronic Components and Brackets Safely

Falling while installing or removing electronic components mounted on equipment can cause serious injury. Use a ladder or platform to easily reach each mounting location. Use sturdy and secure footholds and handholds. Do not install or remove components in wet or icy conditions.

If installing or servicing a RTK base station on a tower or other tall structure, use a certified climber.

If installing or servicing a global positioning receiver mast used on an implement, use proper lifting techniques and wear proper protective equipment. The mast is heavy and can be awkward to handle. Two people are required when mounting locations are not accessible from the ground or from a service platform.



TS249 —UN—23AUG88

DX,WW,RECEIVER -19-24AUG10-1/1

Use Electronic Display Properly

Electronic Displays are secondary devices intended to aid the operator in performing field operations, increase comfort and provide entertainment. Displays can offer a wide range of functionality, are used in many different machine system applications and can be used with other secondary devices such as handheld electronic devices.

A secondary device is any device that is not required to operate your machine for its primary use. The operator is always responsible for safe operation and control of the machine.

To prevent injury while operating the machine:

- Position the display according to the installation instructions. Ensure the device is secured and does not obstruct the driver's view or interfere with the machine operating controls.
- Do not become distracted by the display. Stay alert. Pay attention to the machine and surrounding environment.

- Do not change settings or access any functions that require prolonged use of the display controls while machine is moving. Stop the machine in a safe location and place in park position before attempting such operations.
- Never set the volume so high that you cannot hear outside traffic and emergency vehicles.

To promote safe operation, certain functions of displays may be disabled unless the machine movement is restricted and/or has been placed in the park position. Overriding this safety feature may violate applicable law and can result in damage, serious injury or death.

Only use available display functionality when conditions permit you to do so safely and in accordance with instructions provided. Always observe safe driving rules, state or local laws and traffic regulations when using any secondary device.

RR94114,0001FFA -19-18DEC14-1/1

Operate Guidance Systems Safely

Do not use AutoTrac system on roadways.

- Always turn off (Deactivate and Disable) AutoTrac™ system before entering a roadway.
- Do not attempt to turn on (Activate) AutoTrac™ system while transporting on a roadway.

The AutoTrac™ system is intended to aid operator in performing field operations more efficiently. Operator is always responsible for machine path. To prevent injury to operator and bystanders:

- Remain alert and pay attention to surrounding environment.
- Take control of steering wheel when necessary to avoid field hazards, bystanders, equipment, or other obstacles.
- Stop operation if poor visibility conditions impair your ability to operate the machine or identify people or obstacles in machine path.

OUC002,0004252 -19-07JAN15-1/1

Read The Guidance Manual

Before attempting to operate AutoTrac™, fully read the Guidance manual to understand components and procedures required for safe and proper operation.

The Guidance manual is for AutoTrac™ guidance systems applications.

OUC002.0004251 -19-07JAN15-1/1

Handling Batteries Safely

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (-) battery clamp first and replace grounded clamp last.

Sulfuric acid in battery electrolyte is poisonous and strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid hazards by:

- Filling batteries in a well-ventilated area
- Wearing eye protection and rubber gloves
- Avoiding use of air pressure to clean batteries
- Avoiding breathing fumes when electrolyte is added
- Avoiding spilling or dripping electrolyte
- Using correct battery booster or charger procedure.

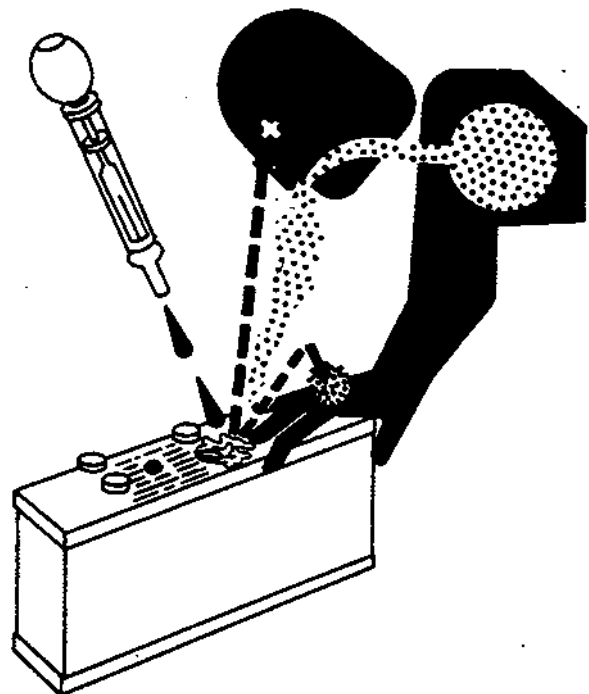
If acid is spilled on skin or in eyes:

1. Flush skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush eyes with water for 15—30 minutes. Get medical attention immediately.

If acid is swallowed:

1. Do not induce vomiting.
2. Drink large amounts of water or milk, but do not exceed 2 L (2 qt.).
3. Get medical attention immediately.

WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.**



TS204 —UN—15APR13

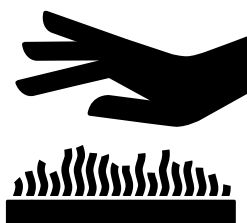
TS203 —UN—23AUG88

DX,WW,BATTERIES -19-02DEC10-1/1

Avoid Hot Exhaust

Servicing machine or attachments with engine running can result in serious personal injury. Avoid exposure and skin contact with hot exhaust gases and components.

Exhaust parts and streams become very hot during operation. Exhaust gases and components reach temperatures hot enough to burn people, ignite, or melt common materials.



RG17488 —UN—21AUG09

DX,EXHAUST -19-20AUG09-1/1

Clean Exhaust Filter Safely

During exhaust filter cleaning operations, the engine may run at elevated idle and hot temperatures for an extended period of time. Exhaust gases and exhaust filter components reach temperatures hot enough to burn people, or ignite or melt common materials.

Keep machine away from people, animals, or structures which may be susceptible to harm or damage from hot exhaust gases or components. Avoid potential fire or explosion hazards from flammable materials and vapors near the exhaust. Keep exhaust outlet away from people and anything that can melt, burn, or explode.

Closely monitor machine and surrounding area for smoldering debris during and after exhaust filter cleaning.

Adding fuel while an engine is running can create a fire or explosion hazard. Always stop engine before refueling machine and clean up any spilled fuel.

Always make sure that engine is stopped while hauling machine on a truck or trailer.

Contact with exhaust components while still hot can result in serious personal injury.

Avoid contact with these components until cooled to safe temperatures.

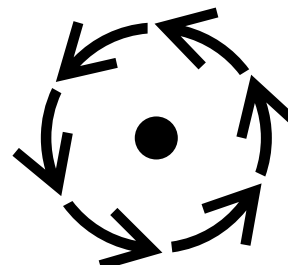
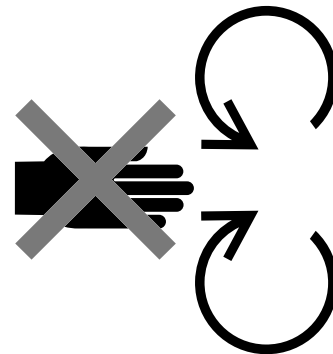
If service procedure requires engine to be running:

- Only engage power-driven parts required by service procedure
- Ensure that other people are clear of operator station and machine

Keep hands, feet, and clothing away from power-driven parts.

Always disable movement (neutral), set the parking brake or mechanism and disconnect power to attachments or tools before leaving the operator's station.

Shut off engine and remove key (if equipped) before leaving the machine unattended.



STOP

TS227 —UN—15APR13

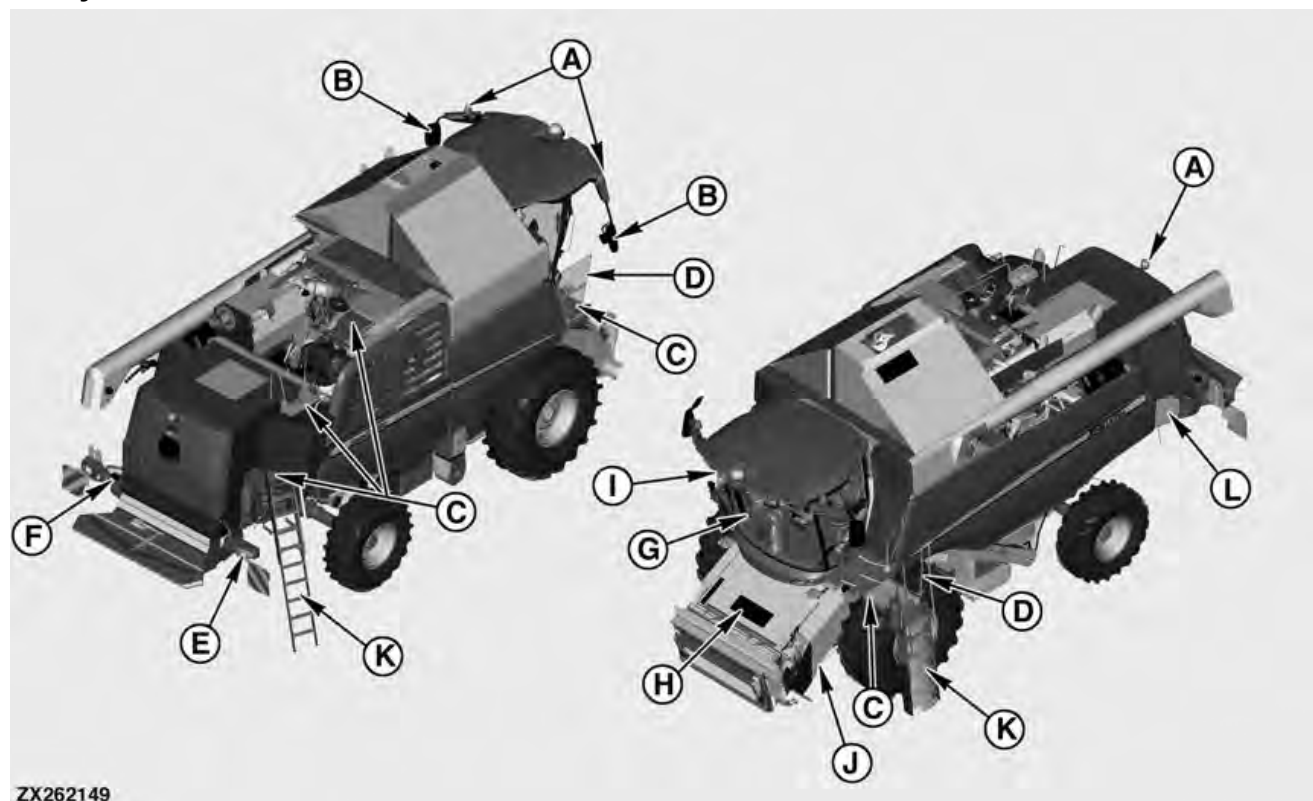
TS271 —UN—23AUG88

TS1693 —UN—09DEC09

TS1695 —UN—07DEC09

DX,EXHAUST,FILTER -19-12JAN11-1/1

Safety Features



ZX262149

ZX262149 —UN—17NOV15

- A—Beacon Lights
- B—Rear View Mirrors
- C—Slip-Resistant Service Platform with Handrail
- D—Hand Hold Railing
- E—Brake Lights and Warning Flashers
- F—Backup Alarm
- G—Cab Safety Features¹

- H—Slip-Resistant Surfaces
- I—Headlights
- J—Safety Lock on Feeder House
- K—Slip-Resistant Access Ladder with Handrail
- L—Guards

In addition to the safety features shown here, other components and systems, safety signs on the machine and safety messages and instructions in the Operator's

Manual contribute to the safe operation of the machine when combined with the care and concern of a capable operator.

¹Include: Operator presence switch, electronic engine start lock-out, horn, emergency exit, park brake and turn signals.

OUC002,0004828 -19-18NOV15-1/1

Safety Decals

Pictorial Safety Signs

At several important places of this machine safety signs are affixed intended to signify potential danger. The hazard is identified by a pictorial in a warning triangle. An adjacent pictorial provides information how to avoid personal injury. These safety signs, their placement on the machine and a brief explanatory text are shown below.



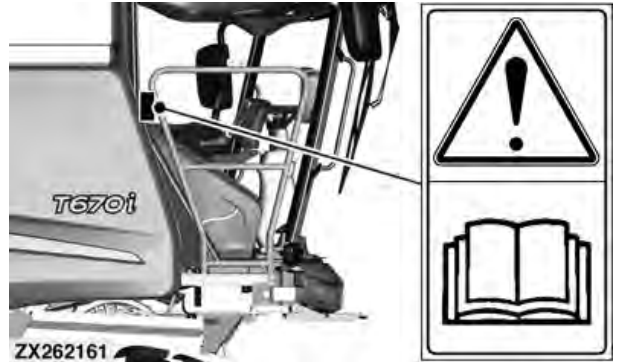
TS231 —19—07OCT88

Continued on next page

OUC002,0004829 -19-23NOV15-1/36

Operator's Manual

This operator's manual contains all important information necessary for safe machine operation. Carefully observe all safety rules to avoid accidents.



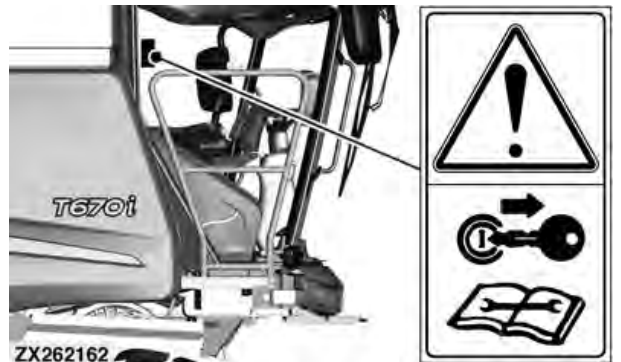
ZX262161 —UN—17NOV15

ZX262165 —UN—17NOV15

OUC002,0004829 -19-23NOV15-2/36

Repair and Maintenance

Before carrying out repair and maintenance work, shut off engine, engage park brake and remove key.



ZX262162 —UN—17NOV15

ZX262166 —UN—17NOV15

Continued on next page

OUC002,0004829 -19-23NOV15-3/36

Emergency Exit

Remove hammer and hit window to break glass to exit cab. See your John Deere dealer for window replacement.



OUC002,0004829 -19-23NOV15-4/36

Seat Belt

Use the seat belt whenever operating the machine or riding as an observer.



OUC002,0004829 -19-23NOV15-5/36

Steering

Steering is operative only when the engine is running.



For Germany Only

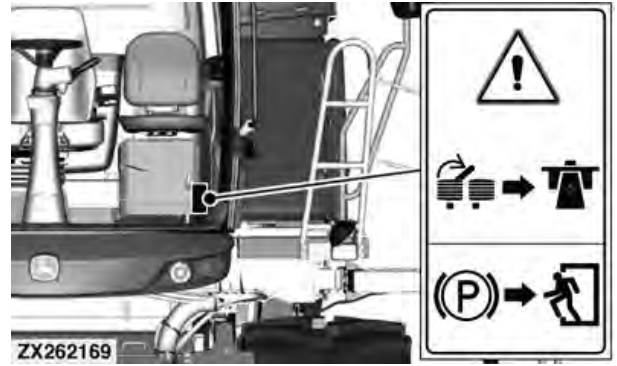
Continued on next page

OUC002,0004829 -19-23NOV15-6/36

Service Brakes and Park Brake

Set park brake before leaving machine.

Lock service brakes together before driving on roadway.



ZX262169 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-7/36

Cab/Platform Access Ladder

Do not allow riders on ladder or platform area while machine is moving.



ZX262171 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-8/36

Avoid Motor Vehicle Collisions

Avoid personal injury or death resulting from collision with a vehicle. Always swing ladder forward to locked position before driving on roadways.



ZX262172 —UN—17NOV15

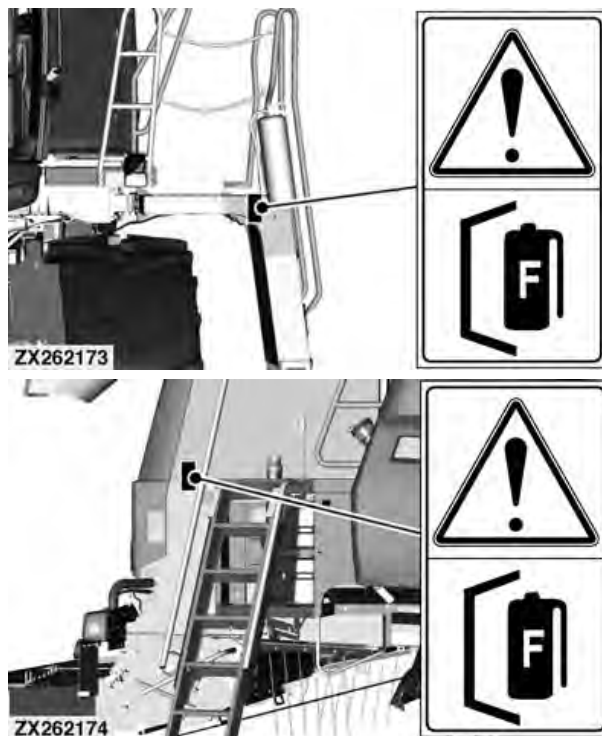
Continued on next page

OUCC002,0004829 -19-23NOV15-9/36

Fire Extinguisher

The machine must not be operated unless a fully-operational fire extinguisher is installed at these points (depending on country regulation).

A minimum of 6 kg (15 lb.) general purpose fire extinguisher must be installed at these locations.



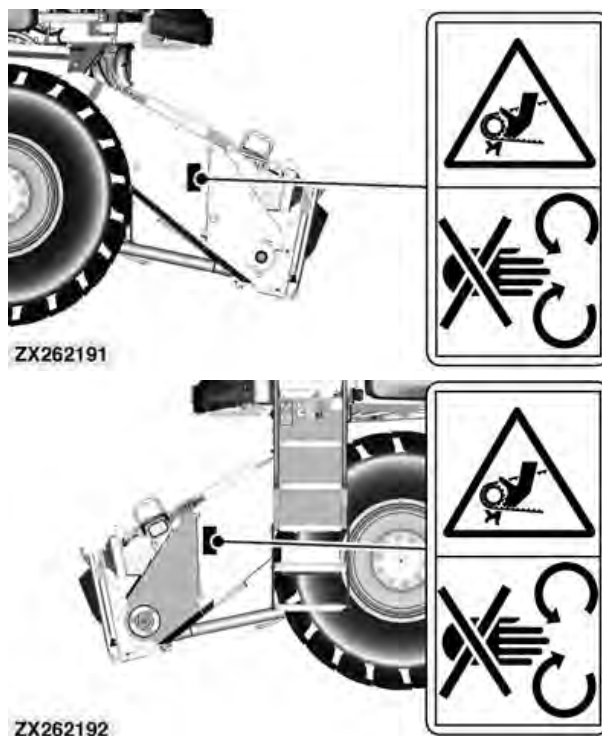
ZX262173 —UN—17NOV15

ZX262174 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-10/36

Feeder House Drive

Do not open or remove guard when the engine is running.



ZX262191 —UN—17NOV15

ZX262192 —UN—17NOV15

Continued on next page

OUCC002,0004829 -19-23NOV15-11/36

Safety Lock for Feeder House Lift Cylinder

Before entering area of potential hazard, engage lift cylinder safety lock.



ZX262193



ZX262193 —UN—17NOV15



ZX262194



ZX262194 —UN—17NOV15

OUC002,0004829 -19-23NOV15-12/36

Feeder House Conveyor Chain

Risk of injury caused by rotating machine parts.



ZX262199



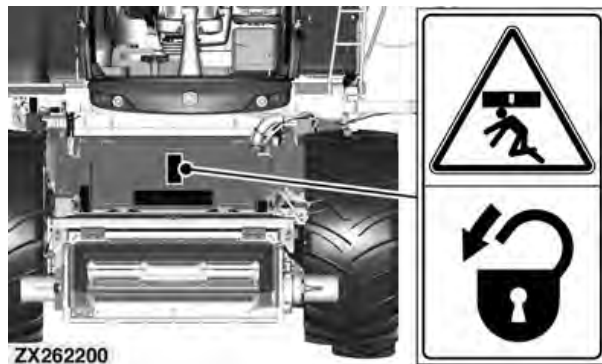
ZX262199 —UN—17NOV15

Continued on next page

OUC002,0004829 -19-23NOV15-13/36

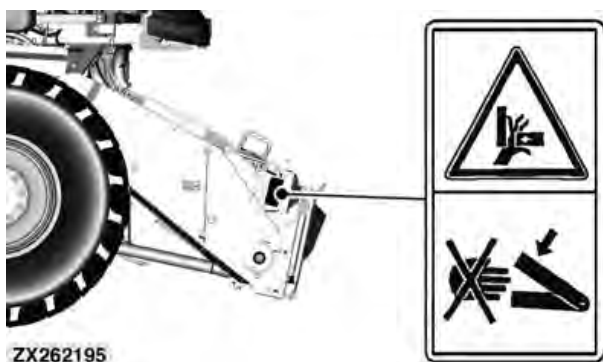
Feeder House Cylinder Safety Lock

Before entering area of potential hazard, engage safety lock.

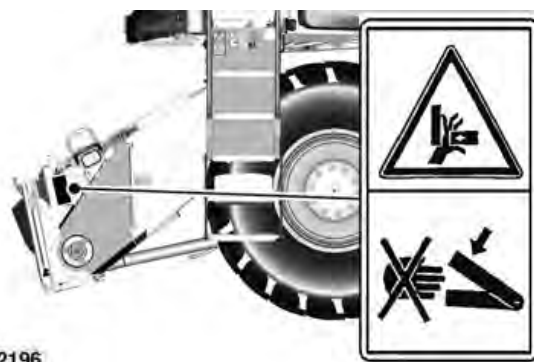


ZX262200 —UN—17NOV15

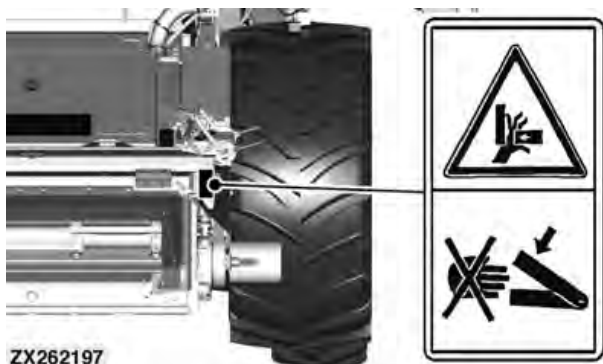
OUC002,0004829 -19-23NOV15-14/36



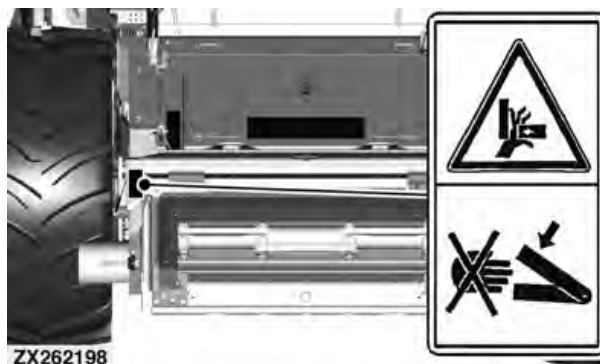
ZX262195 —UN—17NOV15



ZX262196 —UN—17NOV15



ZX262197 —UN—17NOV15



ZX262198 —UN—17NOV15

Feeder House Tilt Frame

Never reach into the crushing danger area as long as parts may move.

Continued on next page

OUC002,0004829 -19-23NOV15-15/36

Safety

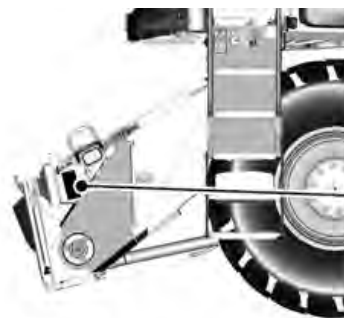
Apply the specified torque to feeder house tilt frame attaching bolts.



ZX262202



ZX262202 —UN—17NOV15



ZX262203

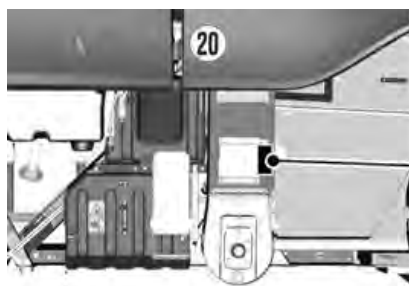


ZX262203 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-16/36

Elevators

Do not open or remove access door when the engine is running.



ZX263156



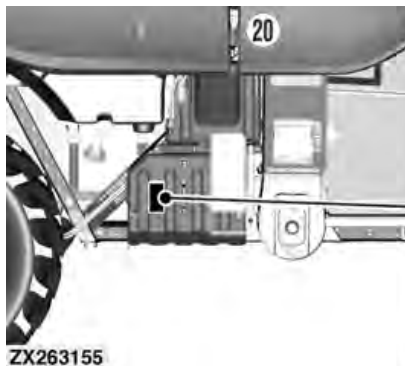
ZX263156 —UN—17NOV15

Continued on next page

OUCC002,0004829 -19-23NOV15-17/36

Tailings Elevator Drive

Risk of injury caused by rotating machine parts.



ZX263155

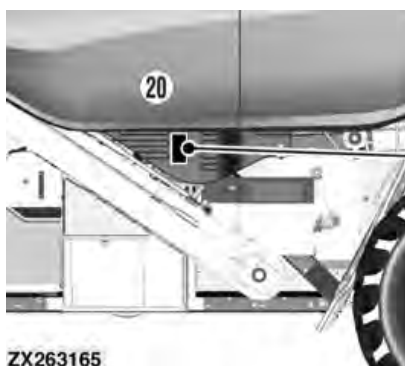


ZX263155 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-18/36

Fan Drive

Risk of injury caused by rotating machine parts.



ZX263165



ZX263165 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-19/36

Chopper Drive

Before opening cover, set park brake, shut off engine and remove key.



ZX263157



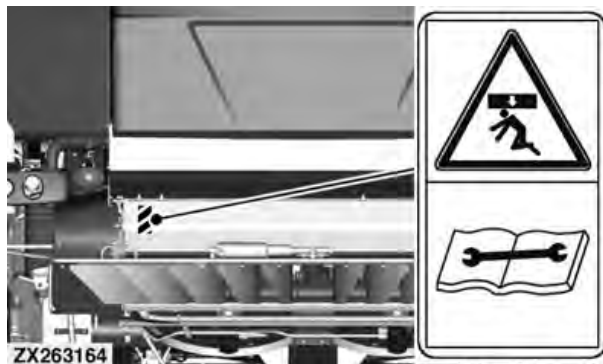
ZX263157 —UN—17NOV15

Continued on next page

OUCC002,0004829 -19-23NOV15-20/36

Chop-to-Drop Door

Avoid injury when changing chop-to-drop door position.



ZX263164

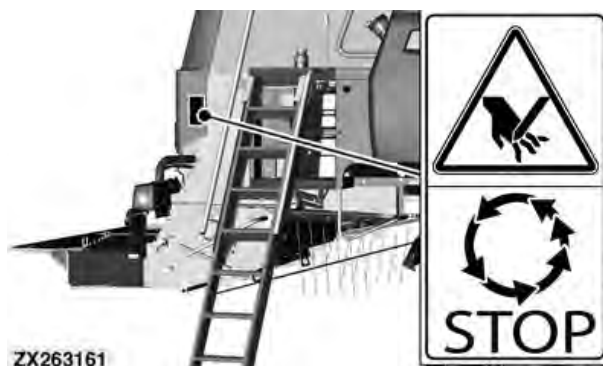
ZX263164 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-21/36

Straw Chopper, Right Side

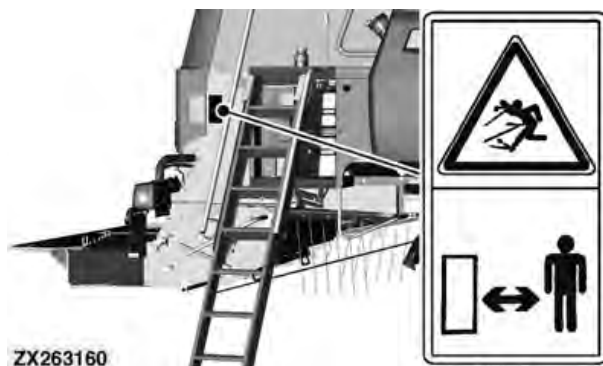
Do not touch any moving machine parts. Wait until all moving parts have stopped.

Stay clear of these components when the engine is running.



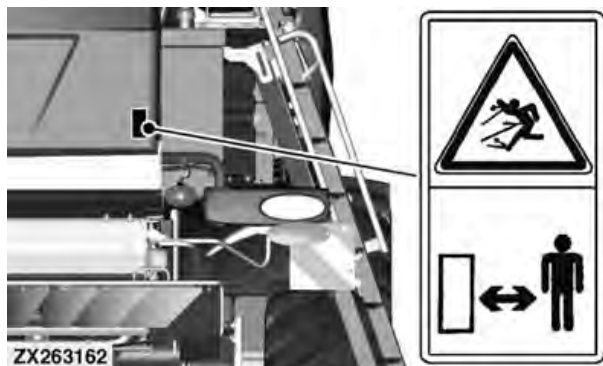
ZX263161

ZX263161 —UN—17NOV15



ZX263160

ZX263160 —UN—17NOV15



ZX263162

ZX263162 —UN—17NOV15

Continued on next page

OUCC002,0004829 -19-23NOV15-22/36

Straw Chopper, Left Side

Do not touch any moving machine parts. Wait until all moving parts have stopped.

Stay clear of these components when the engine is running.

Do not touch any moving machine parts. Wait until all moving parts have stopped.



ZX263158



ZX263158 —UN—17NOV15



ZX263159



ZX263159 —UN—17NOV15



ZX263163



ZX263163 —UN—17NOV15

Continued on next page

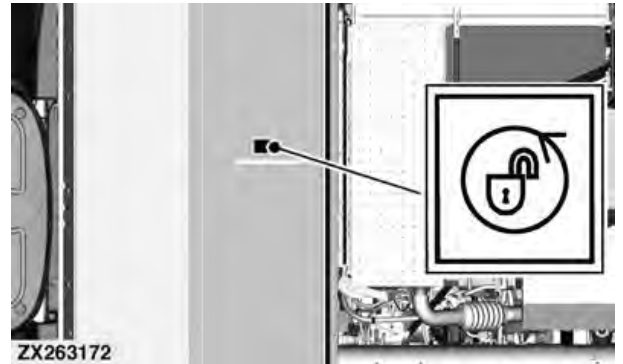
OUCC002,0004829 -19-23NOV15-23/36

Grain Tank

Avoid serious injury or death from entanglement. Never reach into grain tank or enter tank when the engine is running.



ZX263173 —UN—17NOV15

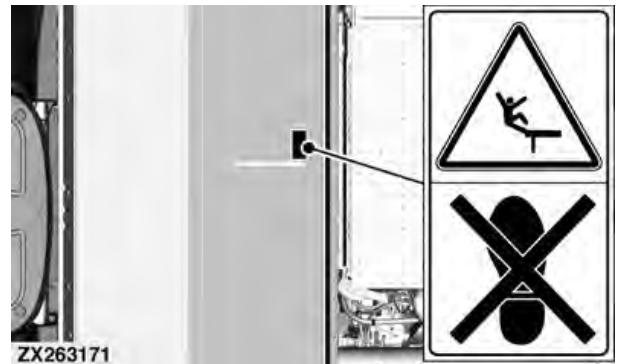


ZX263172 —UN—17NOV15

OUC002,0004829 -19-23NOV15-24/36

Avoid Falling from Grain Tank

Avoid serious injury from falling. Do not stand or walk on grain tank covers.



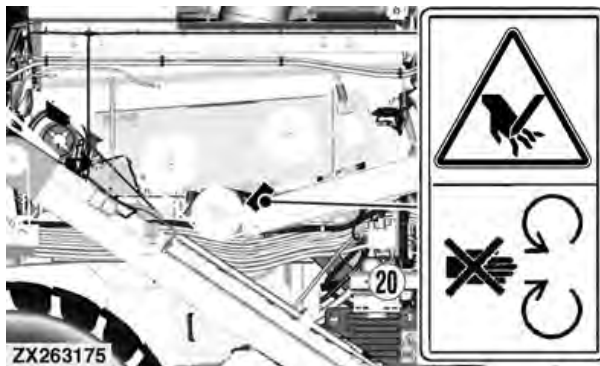
ZX263171 —UN—17NOV15

Continued on next page

OUC002,0004829 -19-23NOV15-25/36

Grain Tank Unloading Auger

Do not touch any moving machine parts. Wait until all moving parts have stopped.

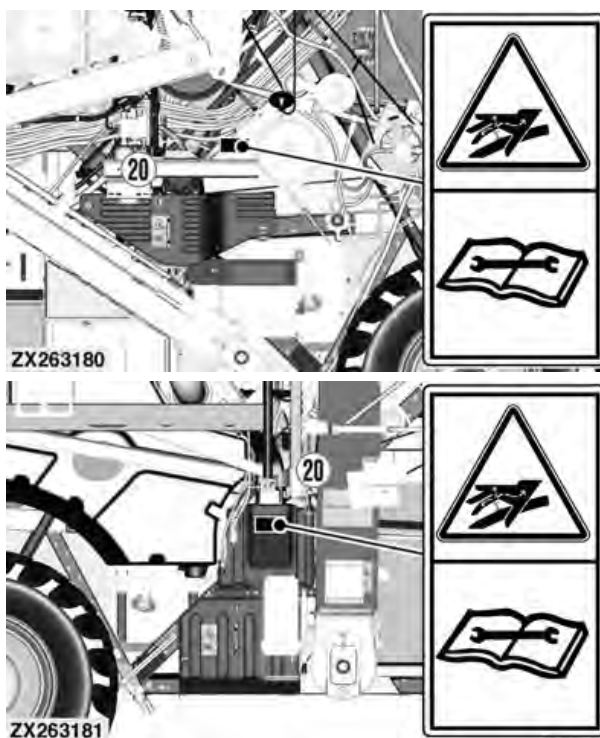


ZX263175 —UN—17NOV15

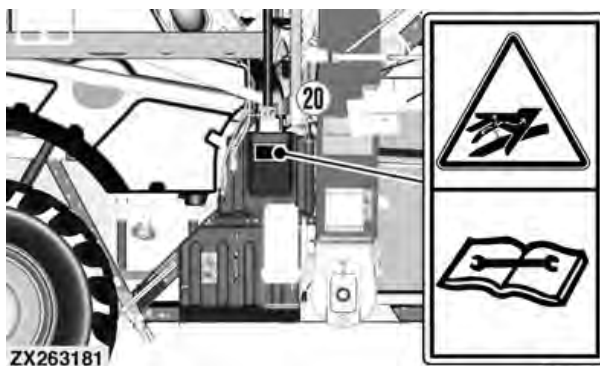
OUCC002,0004829 -19-23NOV15-26/36

Hydraulic System

Avoid fluid escaping under pressure.



ZX263180 —UN—17NOV15



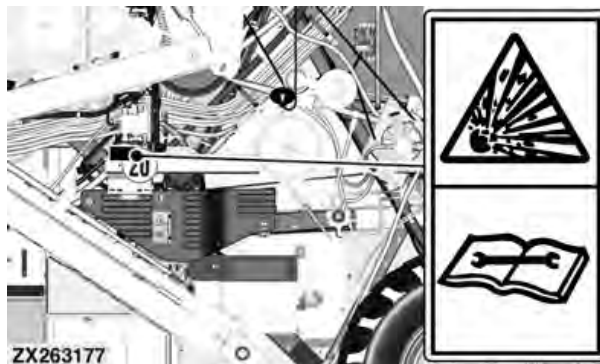
ZX263181 —UN—17NOV15

Continued on next page

OUCC002,0004829 -19-23NOV15-27/36

Accumulator - Header Floating System

Avoid bodily injuries from hydraulic oil and gas under pressure.



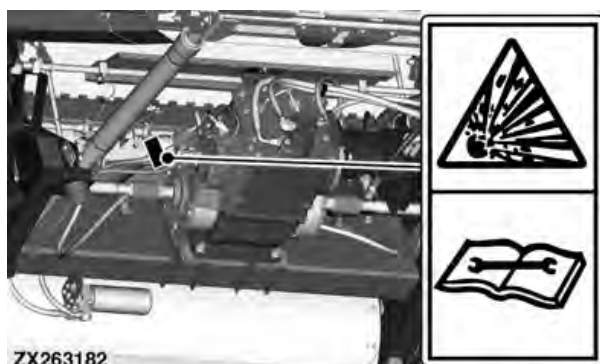
ZX263177

ZX263177 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-28/36

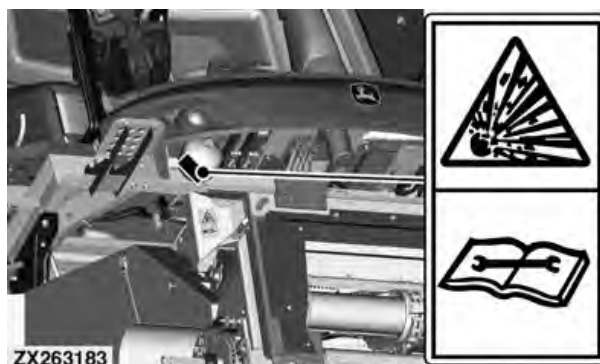
Accumulator - ProDrive™ Transmission

Avoid bodily injuries from hydraulic oil and gas under pressure.



ZX263182

ZX263182 —UN—17NOV15



ZX263183

ZX263183 —UN—17NOV15

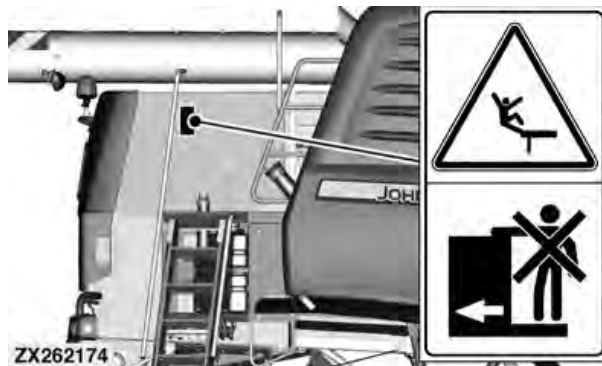
Continued on next page

OUCC002,0004829 -19-23NOV15-29/36

Rear Access Ladder and Service Platform

Avoid serious injury from falling.

Do not ride access ladder or engine platform while machine is moving.

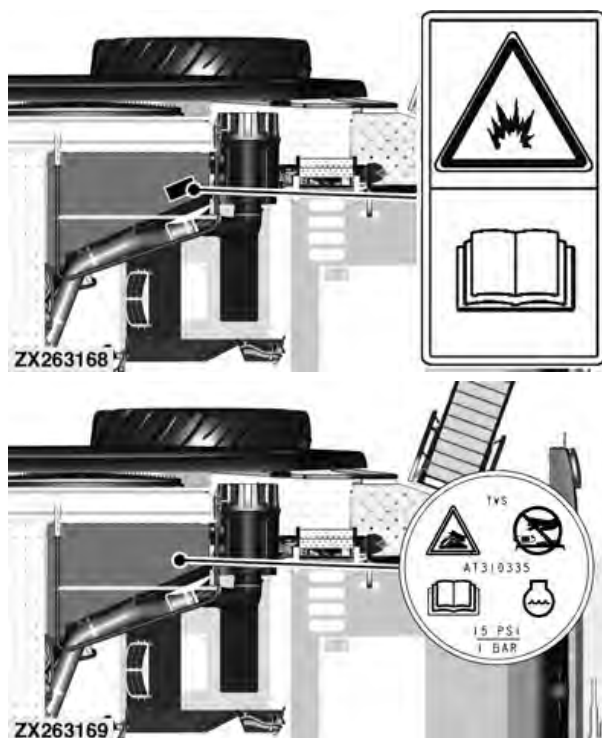


ZX263174 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-30/36

Cooling System

Avoid being scalded when opening expansion tank cap. Open cap 1,5 turns to relieve pressure. Never open when engine is hot.



ZX263168 —UN—17NOV15

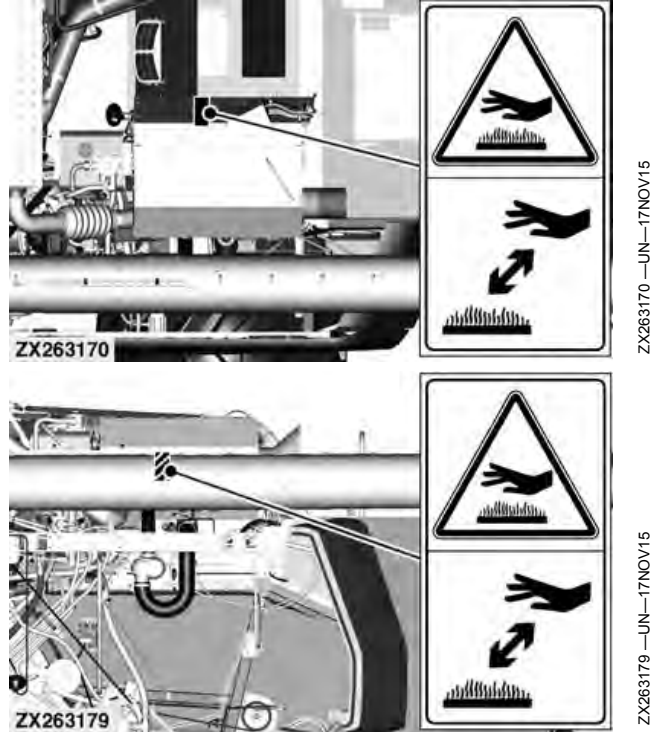
ZX263169 —UN—17NOV15

Continued on next page

OUCC002,0004829 -19-23NOV15-31/36

Muffler

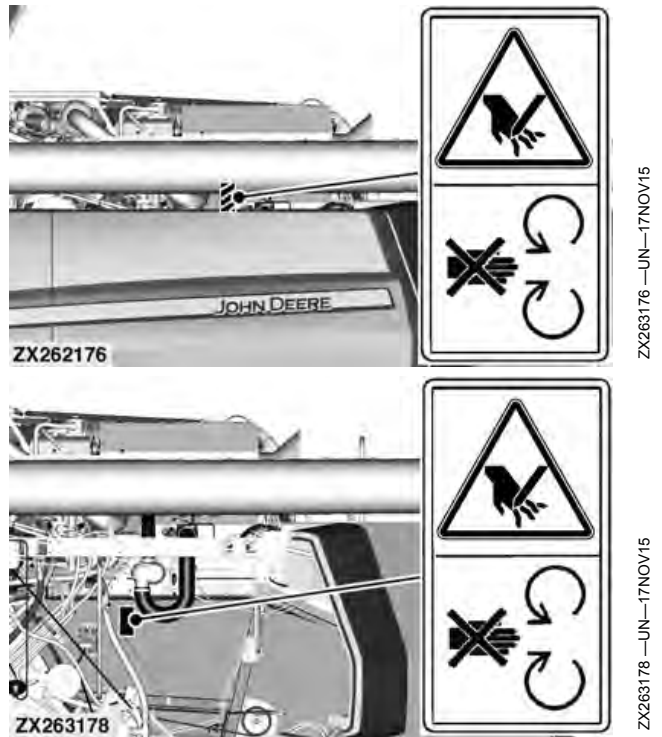
Do not touch the muffler while it is hot. Keep well away from the danger area.



OUCC002,0004829 -19-23NOV15-32/36

Exhaust Debris Management System Blower

Do not touch any moving machine parts. Wait until all moving parts have stopped.



Continued on next page

OUCC002,0004829 -19-23NOV15-33/36

Electrical Power Lines

To avoid serious injury or death, keep sufficient distance from electrical power lines.

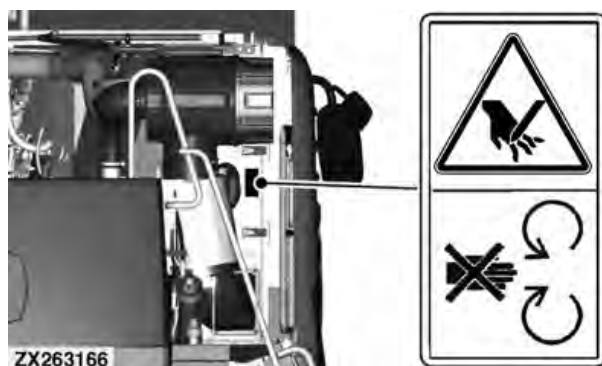


ZX262201 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-34/36

Rotary Screen

Keep hands away from rotary screen when engine is running.

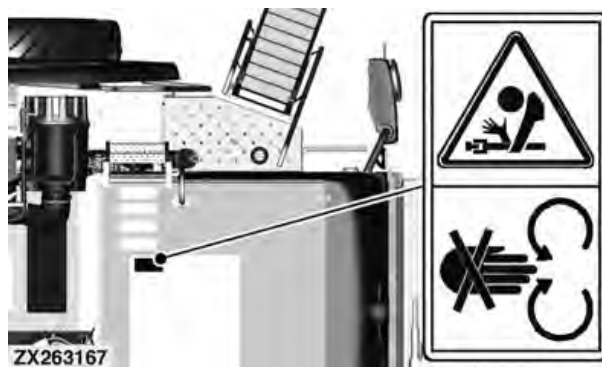


ZX263166 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-35/36

Rear Hood

Do not open hood when combine is running.



ZX263167 —UN—17NOV15

OUCC002,0004829 -19-23NOV15-36/36

Recommended Fire Preventions

The machine must be inspected periodically throughout the harvest day. Buildup of crop material and other debris must be removed to ensure proper machine function and to reduce the risk of fire.

Regular and thorough cleaning of machine combined with other routine maintenance procedures listed in the Operator's Manual greatly reduces the risk of fire, chance of costly downtime, and improve machine performance.

Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always shut OFF engine, set parking brake, and remove key.

Your machine is equipped with one or two general-purpose fire extinguishers. Extinguishers must be checked daily when entering or exiting the cab and when working around machine to ensure that they are in working condition. Fire extinguishers must be replaced or professionally serviced after any usage.

For further information, refer to **Cleaning Out Machine (Periodic Cleanout)** or **Cleaning Out Machine (Annual Cleanout and Specialty Crops)** sections.

OUC002.0004823 -19-03NOV15-1/1

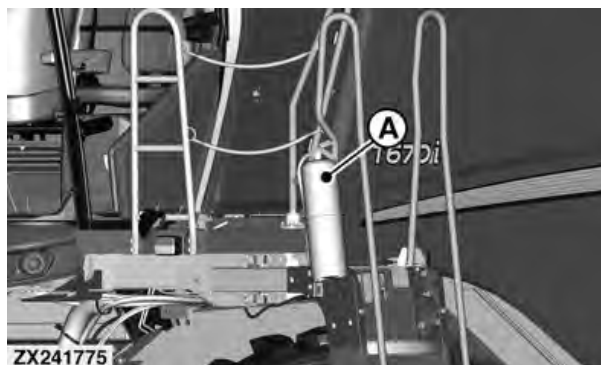
Fire Extinguisher Location

Depending on country requirement, a 6 kg (15 lb) general-purpose fire extinguisher (A) meeting national certification requirements can be installed on left side of operator's platform and/or at rear of the machine.

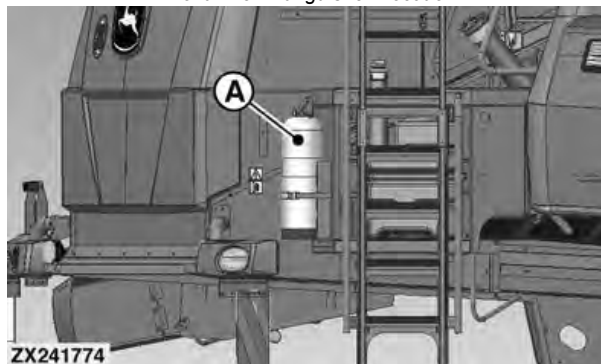
Maintain fire extinguisher to keep it in operating condition.

Make sure that the fire extinguisher is always ready for use. Refer to the fire extinguisher's manual for instructions on how to operate it. Once extinguisher is operated — no matter how long — it must be recharged.

A—Fire Extinguisher



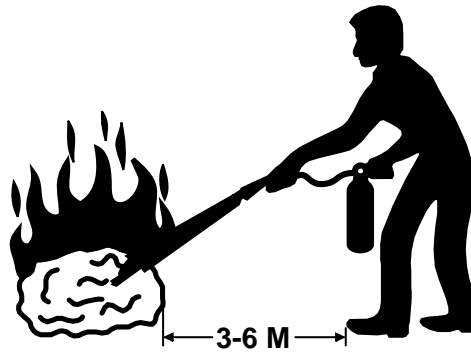
Front Fire Extinguisher Location



Rear Fire Extinguisher Location

OUC002.0004821 -19-03NOV15-1/1

Fire Extinguisher Operation



H90363 —UN—05DEC07

Your machine is equipped with general-purpose fire extinguisher and a pressurized water fire extinguisher. Extinguishers must be checked daily when entering or exiting the cab and when working around machine to ensure that they are in working condition. Fire extinguishers must be replaced or professionally serviced after any usage.

Fire Extinguisher Recommendations:

General-Purpose Fire Extinguisher:

- Use extinguisher for grease, oil, electrical, and chemical fires.

Pressurized Water Fire Extinguisher:

- Use extinguisher on crop material buildup or crop debris fires.

Use of a Fire Extinguisher:

The diagram shows the recommended method to extinguish a fire. Always aim towards base of fire.

The following are basic steps for the use of a fire extinguisher:

1. Remove fire extinguisher from bracket and carry to area of fire.

2. Approach area of fire with wind to your back.
3. Pull safety pin from top of extinguisher.
4. Hold extinguisher upright by handles and aim hose at **base** of flames.
5. Squeeze handles to discharge fire extinguisher.
6. Move nozzle back and forth, covering flames with a cloud of powder.

Inspection Checklist:

At least once per month, inspect fire extinguishers and ensure the following:

1. Are fire extinguishers positioned in designated location on cab ladder landing and at rear of machine?
2. Are there any obstructions to proper access or visibility?
3. Are operating instructions on nameplate legible and facing outward?
4. Are safety seals broken or missing?
5. Is extinguisher full? (Determines by weighing or "hefting")
6. Is there any physical damage, corrosion, leakage, or a clogged nozzle?

When inspection of fire extinguisher reveals a deficiency, extinguisher must be serviced or replaced.

OUC002,00045C8 -19-14APR15-1/1

Remove Accumulated Crop Debris

The build up of chaff and crop debris in the engine compartment, on the engine, and near moving parts is a fire hazard. Check and clean these areas frequently. Before performing any inspection or service, shut off the engine, set the parking brake and remove the key.



TS227 —UN—15APR13

HX,9010SA,B -19-23AUG97-1/1

In Case of Fire

CAUTION: Avoid personal injury.

Stop machine immediately at the first sign of fire. Fire may be identified by the smell of smoke or sight of flames. Because fire grows and spreads rapidly, get off the machine immediately and move safely away from the fire. Do not return to the machine! The number one priority is safety.

Call the fire department. A portable fire extinguisher can put out a small fire or contain it until the fire department arrives; but portable extinguishers have limitations. Always put the safety of the operator and bystanders first. If attempting to extinguish a fire, keep your back to the wind with an unobstructed escape path so you can move away quickly if the fire cannot be extinguished.

Read the fire extinguisher instructions and become familiar with their location, parts, and operation before a fire starts. Local fire departments or fire equipment distributors may offer fire extinguisher training and recommendations.

If your extinguisher does not have instructions, follow these general guidelines:



1. Pull the pin. Hold the extinguisher with the nozzle pointing away from you, and release the locking mechanism.
2. Aim low. Point the extinguisher at the base of the fire.
3. Squeeze the lever slowly and evenly.
4. Sweep the nozzle from side-to-side.

DX,FIRE4 -19-22AUG13-1/1

TS227 —UN—15APR13

Operating the Controls and Displays

Images Collected From Camera Devices

To enhance operation and functionality some systems can be installed on the machine that use images from camera devices.

The images from the camera device are directed at the field, crop, machine, and ancillary machines during the system's use.

These camera devices can also capture images of the operator or bystanders during system operation.

Be aware that images captured by these cameras can be:

- Shown to the operator in the cab.
- Recorded within the system for troubleshooting.
- Recorded within the system for improving system performance.

To prevent images from being captured by cameras used in these systems, refer to the operator manual for instruction on how to turn off the system.



ZX256135—UN—09SEP15

OUEC002,0004701 -19-08SEP15-1/1

Cab

CAUTION: Do not ride or attempt to climb front or rear ladders while machine is moving.

Cab Access

Swing ladder (A) forward or rearward and lock into these different positions:

- **Position (1):** is for transporting machine on public roadways.
- **Position (2):** is for normal operating field conditions.

CAUTION: Always swing ladder (A) to position (1) before transporting on public roadways in order to reduce machine width and position marker/hazard light towards oncoming motorists.

A—Ladder



Road Transport Position



Cab Access/Field Position

Continued on next page

OUCC002,0004AA3 -19-05FEB16-1/33

ZX234342 —UN—16APR15

ZX234343 —UN—16APR15

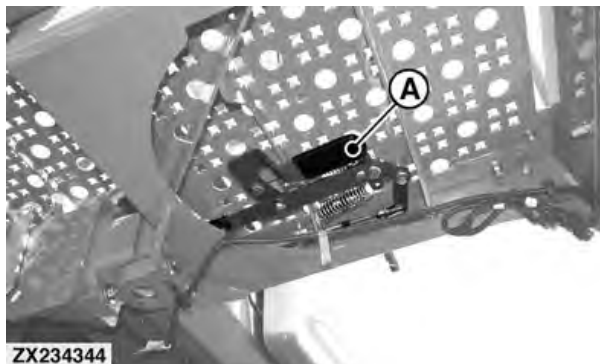
Swing the Access Ladder

Ladder can be positioned from ground or on ladder landing with lever(A) or pedal (B).

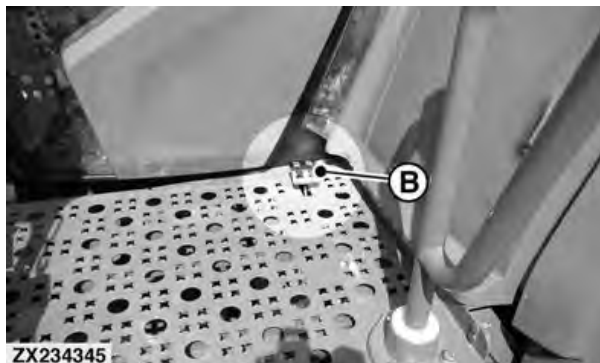
IMPORTANT: If ladder latch appears loose, clean out latch pin area. Do not use oil or grease in this area.

A—Lever

B—Pedal



ZX234344 —UN—16APR15



ZX234345 —UN—16APR15

OUC002,0004AA3 -19-05FEB16-2/33

Handrails and Right-Hand Landing Access

CAUTION: Raise feeder house completely and lower safety stop on feeder house lift cylinder.

IMPORTANT: Close cab door before using handrail.

Do not manually move wiper arm, this could cause damage to wiper mechanism.

Use ladder and landing to clean left side of cab.

Access feeder house by using step on left-hand side.

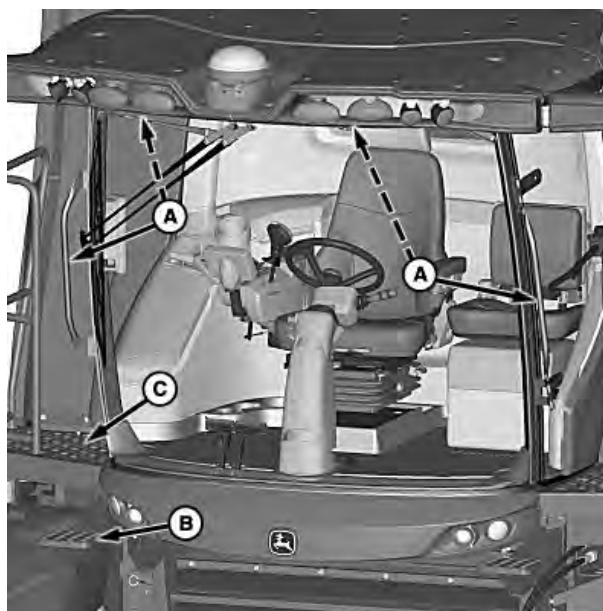
Use handrails (A) located on either side of cab and at top of cab.

Stand on raised feeder house to clean windshield and service headlights or wiper.

Use step (B) and landing (C) to clean right side of cab.

A—Handrails
B—Step

C—Landing



H94810 —UN—15JUL10

Continued on next page

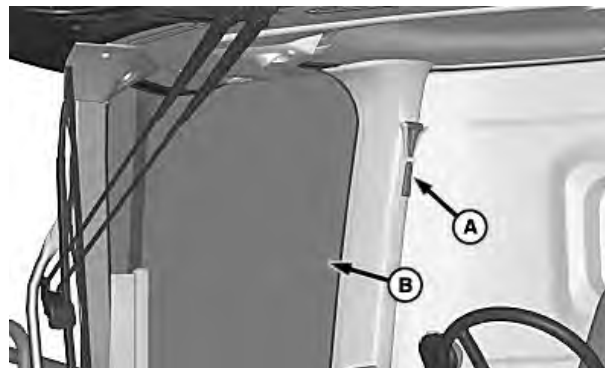
OUC002,0004AA3 -19-05FEB16-3/33

Emergency Exit

Remove hammer (A) and hit window (B) to break glass to exit cab. See your John Deere dealer for window replacement.

A—Hammer

B—Window



H95176—UN—22JAN10

Continued on next page

OUCC002,0004AA3 -19-05FEB16-4/33

Steering Column

CAUTION: For safety reasons, sound horn before starting the engine or operating the machine.

Horn (A) allows operator to warn bystanders to stay clear.

Turn Signal Switch (B) allows operator to indicate left or right-hand turns.

When operating machine on road or highway, use turn signals.

Two indicator lights on the primary display unit (PDU) show that the turn signals on the machine and on the cutting platform trailer (if equipped) are flashing correctly.

If the front work lights are switched on, actuating the turn signal switch will not select the flashing turn signals; instead, it selects the right or left work light.

If the front work lights are switched on together with the headlights (road lights), the turn signal switch selects flashing turn signals AND side work light simultaneously on one side or the other.

NOTE: The turn signal switch (B) is not self-cancelling; it must be moved back to neutral by hand.

NOTE: Switch (B) is also used for machine lighting, windshield wiper, and windshield washer controls (see Machine Lighting and Windshield Wiper/Washer Selector Switch in this section).

CAUTION: Adjust steering wheel only when machine is stopped.

Steering Column Vertical Adjustment (C) allows operator to adjust steering column up or down.

Loosen hub and push or pull wheel to position. Slightly tighten hub to hold steering wheel in position.

Key Switch (D) has the following switch positions:

First Position	Accessories
Second Position	OFF
Third Position	Run
Fourth Position	Start

CAUTION: Adjust column only when machine is stopped. Do not step on pedal without holding steering wheel.

Steering Column Horizontal Adjustment (E) allows operator to move steering column with pedal to desired position.



- A—Horn
- B—Turn Signal Switch
- C—Steering Column Vertical Adjustment
- D—Key Switch
- E—Steering Column Horizontal Adjustment
- F—Steering Wheel Tilt Adjustment (If Equipped)

Press pedal to release lock on steering column and move column to desired position. Column locks when pedal is released.

CAUTION: Adjust steering wheel only when machine is stopped.

Steering Wheel Tilt Adjustment (F) (If Equipped) allows operator to move steering column with handle to desired position.

Pull up on handle to release lock and move steering wheel to desired position. Release handle to lock into desired position.

Continued on next page

OUCC002,0004AA3 -19-05FEB16-5/33

Windshield Wiper/Washer Selector Switch

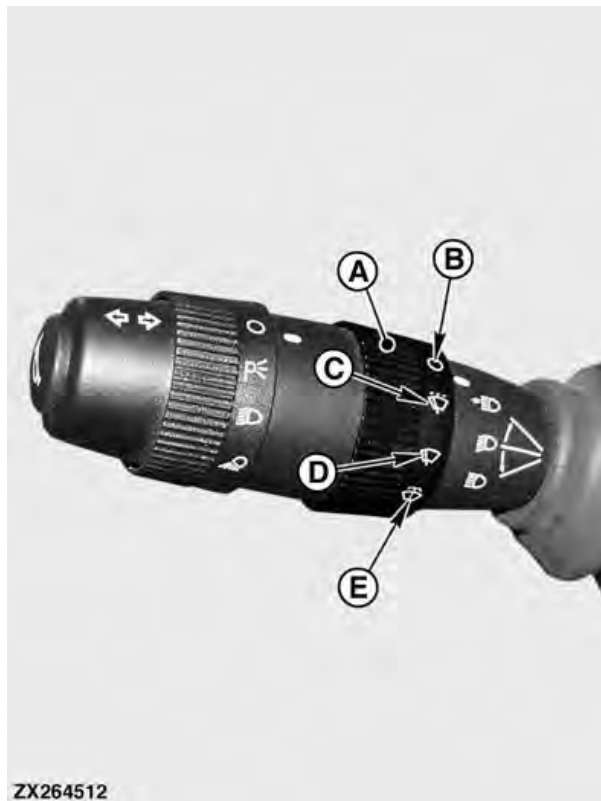
NOTE: Key switch must be ON or machine running for windshield wiper and windshield washer to operate.

Windshield wiper/washer selector switch (A) on steering column is used to control the following:

- OFF Position (B).
- Wiper Intermittent Operation (C).
- Wiper ON Position (D).
- Windshield Washer (E).

To access windshield washer reservoir (F), open door (G).

- | | |
|---|-------------------------------|
| A—Windshield Wiper/Washer Selector Switch | E—Windshield Washer |
| B—OFF Position | F—Windshield Washer Reservoir |
| C—Wiper Intermittent Position | G—Door |
| D—Wiper ON Position | |



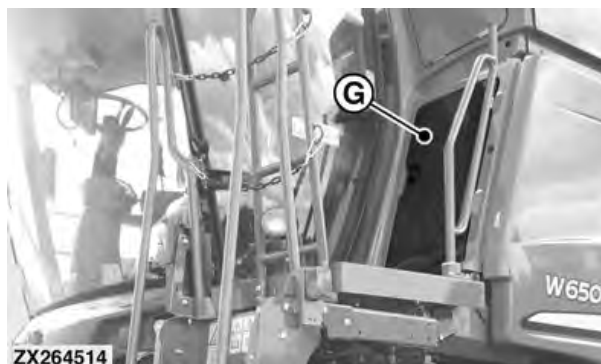
ZX264512

ZX264512 —UN—27NOV15



ZX264513

ZX264513 —UN—27NOV15



ZX264514

ZX264514 —UN—27NOV15

Continued on next page

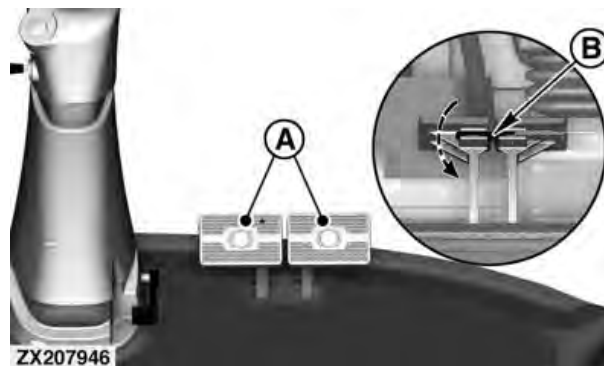
OUC002,0004AA3 -19-05FEB16-6/33

Brake Pedals

Leave brake pedals (A) unlocked for field use and lock (B) brake pedals together when transporting.

A—Brake Pedals

B—Lock (Transport)



ZX207946

ZX207946 —UN—27NOV13

OUC002,0004AA3 -19-05FEB16-7/33

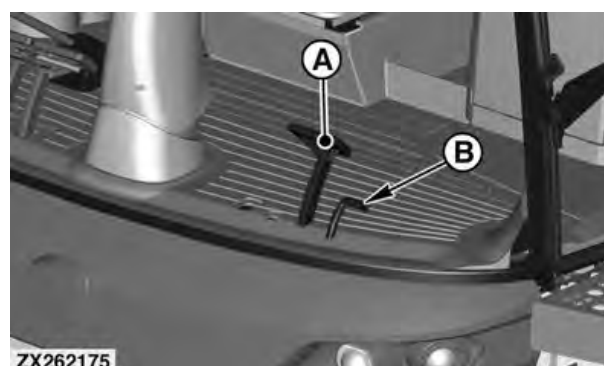
Manual Park Brake (if Equipped)

IMPORTANT: Machine is equipped with manual engage and disengage park brake pedals. Be certain to engage park brake when engine is running and machine is parked or before leaving machine with engine turned OFF.

Press pedal (A) to engage park brake and pedal (B) to disengage park brake.

A—Pedal (Engage)

B—Pedal (Disengage)



ZX262175

ZX262175 —UN—17NOV15

OUC002,0004AA3 -19-05FEB16-8/33

Gearshift Lever (If Equipped)

IMPORTANT: Stop machine and move multi-function lever to neutral before shifting gears.

When shifting gearshift lever (A) the shift pattern is a straight line with detents for 1, 2 and 3. Less resistance is felt for neutral between 1st and 2nd gears.

A—Gearshift Lever

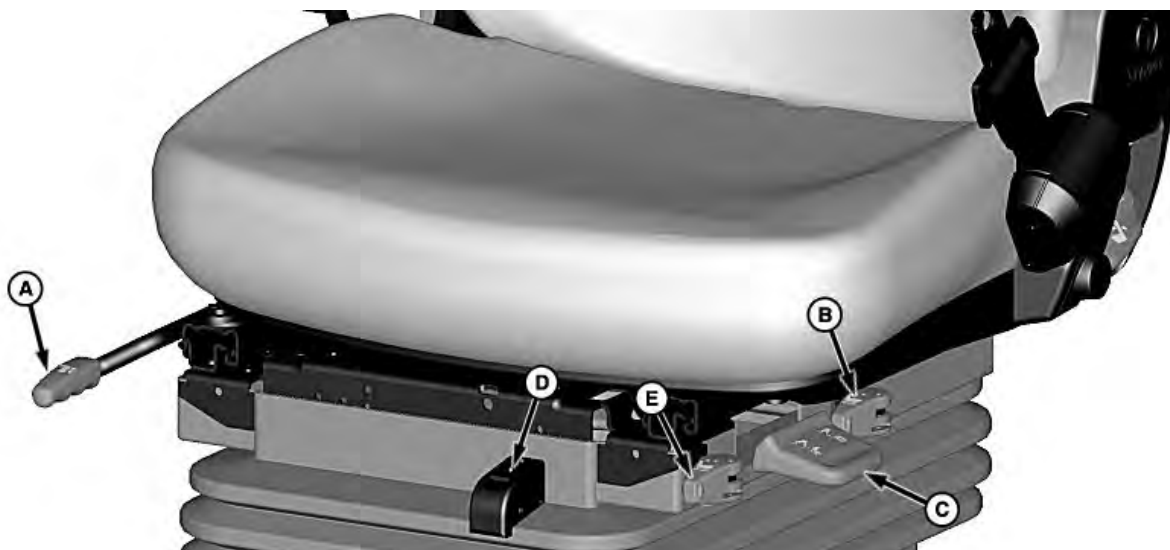


ZX262176

ZX262176 —UN—17NOV15

Continued on next page

OUC002,0004AA3 -19-05FEB16-9/33



A—Fore-Aft Adjustment Handle
B—Vertical Shock Dampener Control

C—Weight/Height Adjustment Handle
D—Weight/Height Indicator

E—Fore-Aft Isolation Adjustment Handle

ComfortCommand™ Operator's Seat (Basic Seat)

NOTE: Seat is equipped with an operator's presence system. If operator leaves seat after header and separator engagement, header and separator will disengage. Separator rotational alarm sounds and outside lights flash to alert operator of leaving seat with separator still rotating. Alarms sounds and lights flash until separator has come to a complete stop.

- **Fore-Aft Adjustment Handle (A)** slides seat forward or rearward for the best working position.
- **Vertical Shock Dampener Control (B)** limits amount of "upward motion" the seat suspension provides.

NOTE: Push control forward for soft ride or move handle back for firm ride. Between these two positions is medium firmness.

- **Weight/Height Adjustment Handle (C)** raises or lowers the seat. Pull up on handle to raise seat or push down on handle to lower seat. Adjust seat until green marking is visible in weight/height indicator.

NOTE: Suspension can be adjusted to reach limits in minimum and maximum heights, which in effect

locks out the suspension system making it rigid. Suspension height control will also hit limits if adjusted too close to the extremes.

Do not operate compressor for more than one minute when adjusting seat.

If seat does not float or "pump" up, see your John Deere dealer.

- **Weight/Height Indicator (D)** provides a visual indicator to operator on current weight and height. Use weight/height adjustment handle to adjust seat until green marking is visible in indicator.

NOTE: Adjust seat to operator weight and height. This allows the operator to get the most ride zone protection. Seat has a built-in buffer at the high and low end of vertical seat travel, resulting in a much smoother ride.

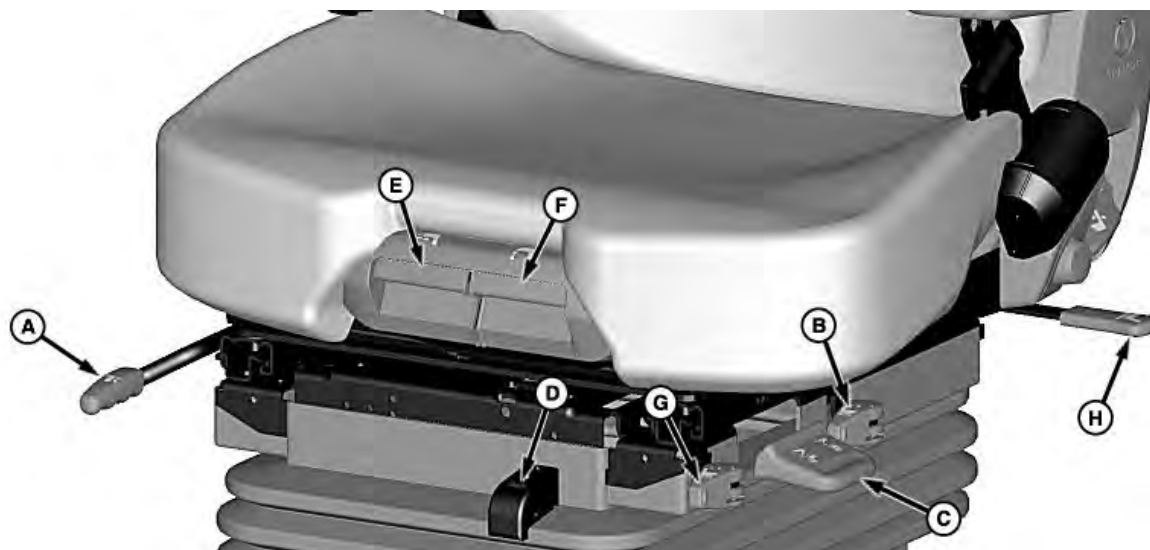
- **Fore-Aft Isolation Adjustment Handle (E)** locks out or releases forward or rearward movements. Pull up on handle to lock or push down on handle to release.

NOTE: Fore-Aft isolator allows shock impacts to be absorbed.

Continued on next page

OUC002,0004AA3 -19-05FEB16-10/33

H97561 —UN—02JUN11



H96739 — UN — 02JUN11

A—Fore-Aft Adjustment Handle
B—Vertical Shock Dampener Control
C—Weight/Height Adjustment Handle

D—Weight/Height Indicator
E—Seat Bottom Depth Adjustment Handle
F—Seat Bottom Angle Adjustment Handle

G—Fore-Aft Isolation Adjustment Handle
H—Side Isolation Adjustment Handle

ComfortCommand™ Operator's Seat (Premium Cloth Seat)

NOTE: Seat is equipped with an operator's presence system. If operator leaves seat after header and separator engagement, header and separator will disengage. Separator rotational alarm sounds and outside lights flash to alert operator of leaving seat with separator still rotating. Alarms sounds and lights flash until separator has come to a complete stop.

- **Fore-Aft Adjustment Handle (A)** slides seat forward or rearward for the best working position.

- **Vertical Shock Dampener Control (B)** limits amount of "upward motion" the seat suspension provides.

NOTE: Push control forward for soft ride or move handle back for firm ride. Between these two positions is medium firmness.

- **Weight/Height Adjustment Handle (C)** raises or lowers the seat. Pull up on handle to raise seat or push down on handle to lower seat. Adjust seat until green marking is visible in weight/height indicator.

NOTE: Suspension can be adjusted to reach limits in minimum and maximum heights, which in effect locks out the suspension system making it rigid. Suspension height control will also hit limits if adjusted too close to the extremes.

Do not operate compressor for more than one minute when adjusting seat.

If seat does not float or "pump" up, see your John Deere dealer.

- **Weight/Height Indicator (D)** provides a visual indicator to operator on current weight and height. Use weight/height adjustment handle to adjust seat until green marking is visible in indicator.

NOTE: Adjust seat to operator weight and height. This allows the operator to get the most ride zone protection. Seat has a built-in buffer at the high and low end of vertical seat travel, resulting in a much smoother ride.

- **Seat Bottom Depth Adjustment Handle (E)** moves seat bottom forward or rearward for the best working position.

- **Seat Bottom Angle Adjustment Handle (F)** tilts seat cushion for the best working position.

- **Fore-Aft Isolation Adjustment Handle (G)** locks out or releases forward or rearward movements. Pull up on handle to lock or push down on handle to release.

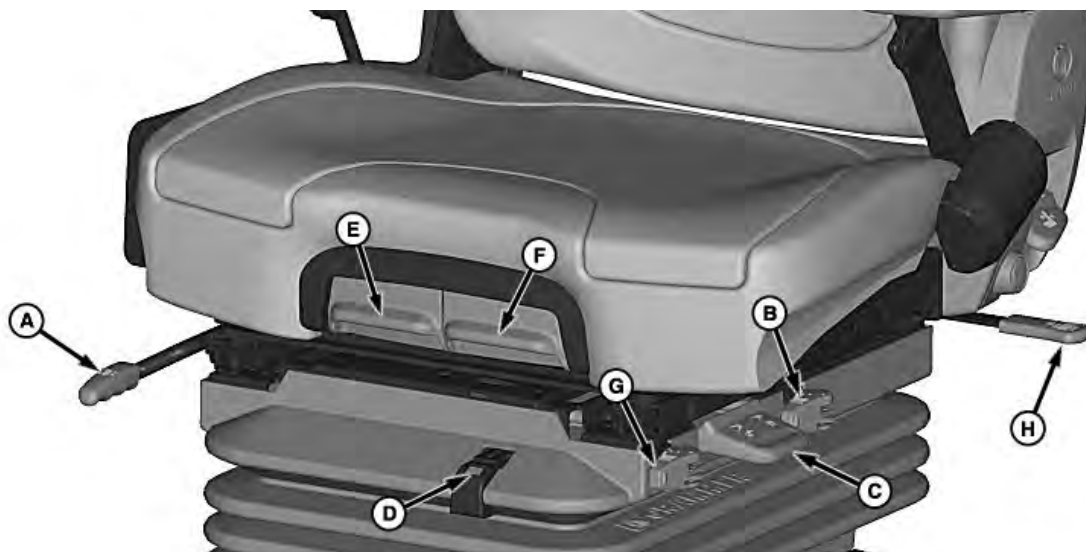
NOTE: Fore-Aft isolator allows shock impacts to be absorbed.

- **Side Isolation Adjustment Handle (H)** locks out or releases side-to-side movements. Push handle forward to release and pull handle rearward to lock.

NOTE: Side isolation allows shock impacts to be absorbed.

Continued on next page

OUC0002,0004AA3 -19-05FEB16-11/33



A—Fore-Aft Adjustment Handle
B—Vertical Shock Dampener Control
C—Weight/Height Adjustment Handle

D—Weight/Height Indicator
E—Seat Bottom Depth Adjustment Handle
F—Seat Bottom Angle Adjustment Handle

G—Fore-Aft Isolation Adjustment Handle
H—Side Isolation Adjustment Handle

ComfortCommand™ Operator's Seat (Premium Leather Seat)

NOTE: Seat is equipped with an operator's presence system. If operator leaves seat after header and separator engagement, header and separator will disengage. Separator rotational alarm sounds and outside lights flash to alert operator of leaving seat with separator still rotating. Alarms sounds and lights flash until separator has come to a complete stop.

- **Fore-Aft Adjustment Handle (A)** slides seat forward or rearward for the best working position.

- **Vertical Shock Dampener Control (B)** limits amount of "upward motion" the seat suspension provides.

NOTE: Push control forward for soft ride or move handle back for firm ride. Between these two positions is medium firmness.

- **Weight/Height Adjustment Handle (C)** raises or lowers the seat. Pull up on handle to raise seat or push down on handle to lower seat. Adjust seat until green marking is visible in weight/height indicator.

NOTE: Suspension can be adjusted to reach limits in minimum and maximum heights, which in effect locks out the suspension system making it rigid. Suspension height control will also hit limits if adjusted too close to the extremes.

Do not operate compressor for more than one minute when adjusting seat.

If seat does not float or "pump" up, see your John Deere dealer.

- **Weight/Height Indicator (D)** provides a visual indicator to operator on current weight and height. Use weight/height adjustment handle to adjust seat until green marking is visible in indicator.

NOTE: Adjust seat to operator weight and height. This allows the operator to get the most ride zone protection. Seat has a built-in buffer at the high and low end of vertical seat travel, resulting in a much smoother ride.

- **Seat Bottom Depth Adjustment Handle (E)** moves seat bottom forward or rearward for the best working position.

- **Seat Bottom Angle Adjustment Handle (F)** tilts seat cushion for the best working position.

- **Fore-Aft Isolation Adjustment Handle (G)** locks out or releases forward or rearward movements. Pull up on handle to lock or push down on handle to release.

NOTE: Fore-Aft isolator allows shock impacts to be absorbed.

- **Side Isolation Adjustment Handle (H)** locks out or releases side-to-side movements. Push handle forward to release and pull handle rearward to lock.

NOTE: Side isolation allows shock impacts to be absorbed.

Continued on next page

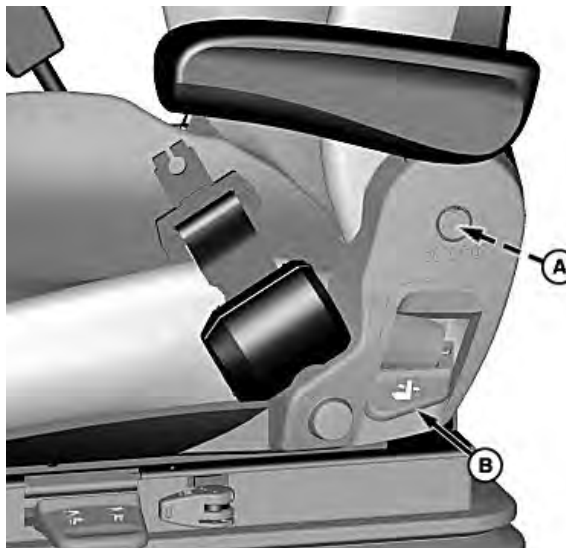
OUC002,0004AA3 -19-05FEB16-12/33

H106058 —UN—31OCT12

Left-Hand Armrest and Seat Back (Basic Seat)

- **Armrest Height Adjustment (A).** Remove cap from cover and loosen nut. Adjust armrest to desired position, then tighten nut to **25 N·m (221 lb·in)** and reinstall cap.
- **Backrest Angle Adjustment Handle (B)** adjusts seat back angle. Pull up on handle and adjust backrest to desired position and release handle.

A—Armrest Height Adjustment B—Backrest Angle Adjustment Handle



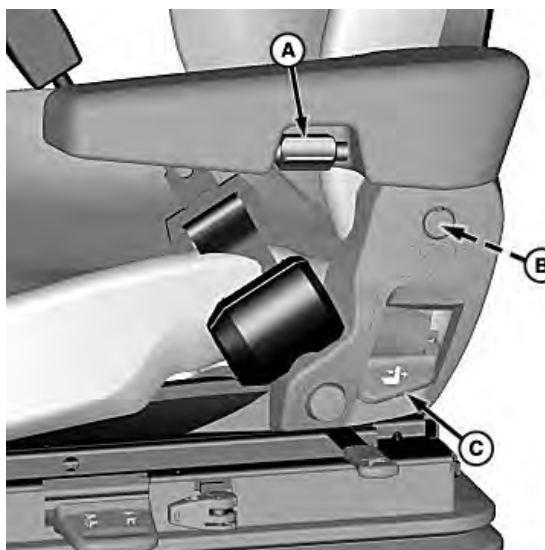
H97562—UN—02JUN11

OUC002,0004AA3 -19-05FEB16-13/33

Left-Hand Armrest and Seat Back (Premium Cloth/Leather Seat)

- **Armrest Angle Adjustment Knob (A)** tilts armrest up or down. Rotate knob clockwise to tilt down and counterclockwise to tilt up.
- **Armrest Height Adjustment (B).** Remove cap from cover and loosen nut. Adjust armrest to desired position, then tighten nut to **25 N·m (221 lb·in)** and reinstall cap.
- **Backrest Angle Adjustment Handle (C)** adjusts seat back angle. Pull up on handle and adjust backrest to desired position and release handle.

A—Armrest Angle Adjustment Knob C—Backrest Angle Adjustment Handle
B—Armrest Height Adjustment



H96740—UN—02JUN11

Continued on next page

OUC002,0004AA3 -19-05FEB16-14/33

Heated/Ventilated Seat Switch (Premium Cloth/Leather Seat)

NOTE: Key switch must be ON or machine must be running for heated/ventilated seat to operate.

Heated/ventilated seat switch (A) located on left-hand side of backrest turns seat heater or seat ventilation ON/OFF.

- Switch in top position turns seat heater ON (seat ventilation OFF).
- Switch in middle position turns seat heater and seat ventilation OFF.
- Switch in bottom position turns seat ventilation ON (seat heater OFF).

A—Heated/Ventilated Seat Switch



H106063 —UN—31OCT12

OUCC002,0004AA3 -19-05FEB16-15/33

Lumbar Support Switch (Premium Leather Seat)

NOTE: Key switch must be ON or machine must be running for lumbar support to operate.

Lumbar support provides operator with added comfort to the upper and lower backrest areas. Lumbar support switches (A and B) located on left-hand side of backrest increase or decrease lumbar support curvature.

- Top Lumbar Support Switch - press plus (+) or minus (-) symbol to adjust upper lumbar support curvature.
- Bottom Lumbar Support Switch - press plus (+) or minus (-) symbol to adjust lower lumbar support curvature.

A—Lumbar Support Switch B—Lumbar Support Switch



H106066 —UN—31OCT12

Continued on next page

OUCC002,0004AA3 -19-05FEB16-16/33

Instructional Seat

Seat back (A) and seat bottom (B) can be raised or lowered to desired operating position.

A—Seat Back

B—Seat Bottom



H96631 —UN—26MAY10

OUCC002,0004AA3 -19-05FEB16-17/33

Seat Belts

CAUTION: Inspect seat belts and mounting hardware on your machine at least once a year. If seat belt system, including mounting hardware, buckle, belt, or retractor, shows any sign of damage such as cuts, fraying, extreme or unusual wear, discoloration or abrasion, the entire seat belt system must be replaced immediately. For your safety, replace the belt system only with replacement parts approved for your machine, see your John Deere dealer.

Seat belts are standard equipment on both operator and instructional seats. Lap type seat belts have a push button quick release and automatic belt retraction to allow unrestricted exiting and entering.



H96657 —UN—01JUN10

OUCC002,0004AA3 -19-05FEB16-18/33

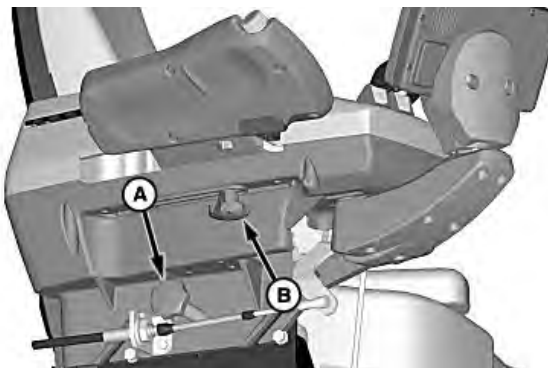
CommandTouch™ Armrest and CommandARM™ Control Consoles

Loosen knob (A) and slide CommandTouch™ armrest console up/forward or down/back in slots on outer plate. Tighten knob to lock armrest into position.

Loosen knob (B) and slide CommandARM™ control console forward-rearward. Tighten knob to lock control console into place.

A—Knob

B—Knob



H97713 —UN—20AUG10

Continued on next page

OUCC002,0004AA3 -19-05FEB16-19/33

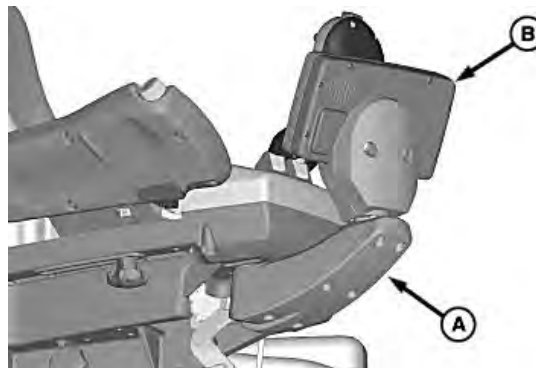
CommandCenter™/GreenStar™ 2630 Display

Rotate arm (A) left/right to desired operating position.

Rotate display (B) left/right or forward/rearward to desired operating position.

A—Arm

B—Display



Armrest Display—CommandCenter™ Shown

Continued on next page

OUCC002,0004AA3 -19-05FEB16-20/33

H97714—UN—20AUG10

Overhead Control Panel

• Microphone (Optional):

Use the microphone (A) to communicate hands-free using a Bluetooth® cell phone (Bluetooth® must be enabled). See **Phone Interface (Option)** in this section to set up Bluetooth® cell phone.

NOTE: Key switch must be ON or machine must be running for microphone to work.

• Mirror Heater Switch (Optional):

- Press bottom part of switch (B) to turn mirror heater off.
- Press top part of switch (B) to turn mirror heater on.

NOTE: Key switch must be ON or machine must be running to heat mirrors.

• Mirror Control Switch (Optional):

- Mirror control switch (C) selects the left-hand or right-hand mirror for further adjustment.
- Mirror adjust switch (D) moves selected mirror up or down and left or right.

NOTE: Key switch must be ON or machine must be running to adjust mirrors.

• Radio Types (Optional):

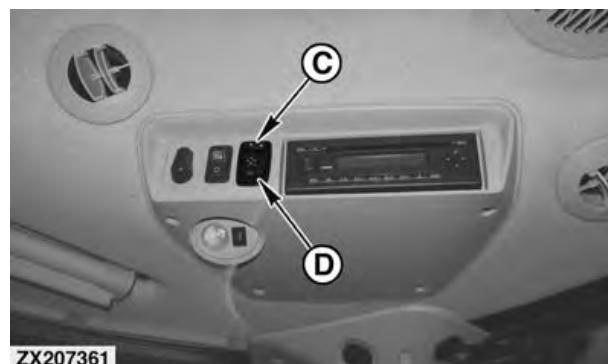
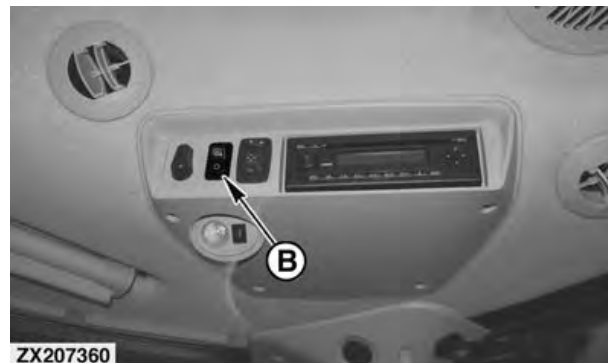
Different radios (E) are available from your John Deere dealer. See **Audio Interface (Option)** in this section to operate radio.

IMPORTANT: If installing or replacing an aftermarket radio, see your John Deere dealer for further information.

Main Features	Radio	Connection of external devices	CD	CD, MP3/WMA	USB	Bluetooth®
Deluxe Radio System with CD	X	X	X	X		
Premium Radio System	X	X	X	X	X	X

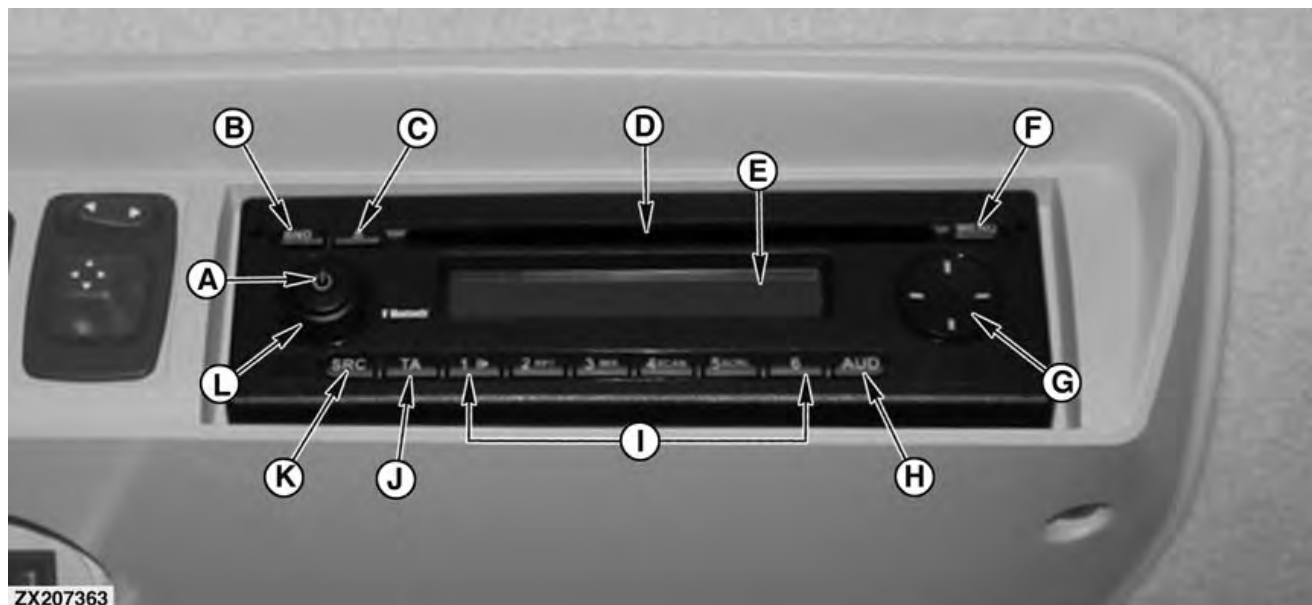
A—Microphone
B—Mirror Heater Switch
C—Mirror Control Switch

D—Mirror Adjust Switch
E—Radio Types



Continued on next page

OUC002,0004AA3 -19-05FEB16-21/33



A—Power/Mute Key
B—Band (BND) Key
C—CD Eject Key
D—CD Slot

E—Radio Display
F—Menu Key
G—Multi-Function Rocker Switch
H—Audio (AUD) Key
I—Key Block (1—6)
J—Traffic Announcements (TA) Key

K—SRC Key
L—Volume Control

Radio Controls:

CAUTION: Road safety has top priority. Operate the radio system only if traffic condition and driving situation allow you to do so. Familiarize yourself with the radio before driving the vehicle. Select an appropriate volume when driving.

CAUTION: Adjust the volume of the radio correctly to be able to hear acoustic warning signals of police, fire department and ambulance on time.

CAUTION: It may result in hearing damage if the radio volume is set too loud.

CAUTION: Do not become distracted by the radio when working. Turn the radio off when procedures require full attention.

Item	Designation	Function
A	Power/mute key	Press briefly to turn the radio on. Press briefly during operation to mute the radio. Press and hold to turn the radio off.
B	BND key	Press briefly to select memory level or wave band. Press and hold to start the Travelstore function.
C	CD eject key	
D	CD slot	
E	Display	Change the display.
F	Menu key	Access the menus for the basic settings.
G	Multi-function rocker switch	Navigate within the display and switch functions.
H	AUD key	Press briefly to access the audio menu for adjustment of bass, middle, treble, balance and loudness. Press and hold to restore factory sound settings (treble and bass for the currently used audio source only).
I	1 - 6 key block	Station keys
J	TA key	Switch back from user and audio menus to current source. Exit the radio scan functions. Turn the priority for traffic announcements on/off. Cancel a traffic announcement while in process (Europe only).

Continued on next page

OUC002,0004AA3 -19-05FEB16-22/33

Operating the Controls and Displays

Item	Designation	Function
K	SRC key	Source selection between radio and AUX (depending on model also CD, USB and XM) provided that a medium is inserted or connected and turned on.
L	Volume control	

OUCC002,0004AA3 -19-05FEB16-23/33

Antenna

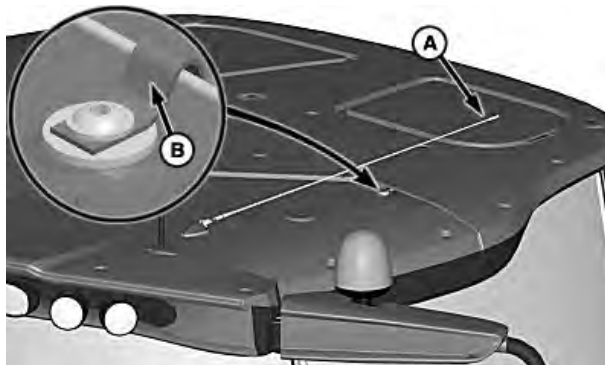
IMPORTANT: If radio is not used or machine is transported, lower antenna and retain with clip. If clip is not available, retain antenna to cab roof with tape.

Antenna has an adjustable range of 5—60 degrees. Exceeding maximum angle will damage antenna.

Remove radio antenna (A) from clip (B) when using radio.

A—Radio Antenna

B—Clip



H111433—UN—13JUN14

OUCC002,0004AA3 -19-05FEB16-24/33

Outside Mirrors

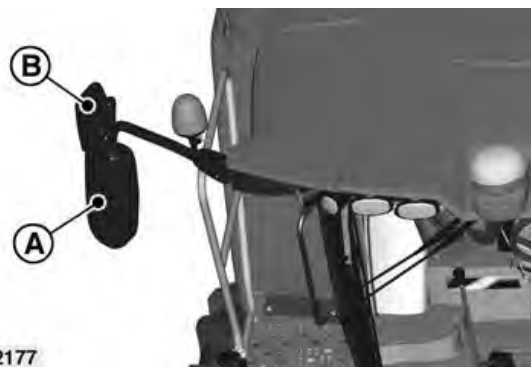
Machine is equipped with:

- Two outside mirrors (A) that can be either electrically or manually controlled (see **Overhead Control Panel** in this section).

NOTE: In certain countries, an additional outside mirror (B) is required on the right-hand side of the machine.

A—Outside Mirror

B—Additional Outside Mirror



ZX262177

ZX262177—UN—17NOV15

Continued on next page

OUCC002,0004AA3 -19-05FEB16-25/33

Cab Roof

Side louvers (A) can be oriented to direct air flow as desired.

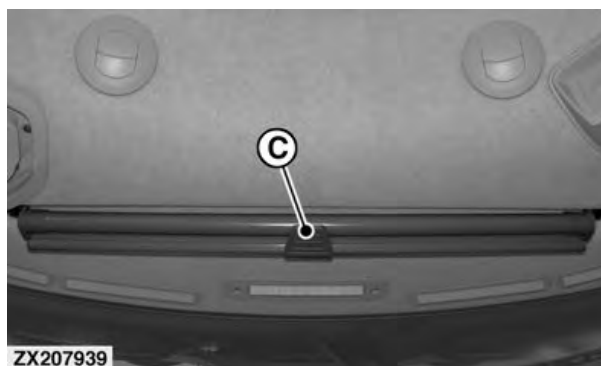
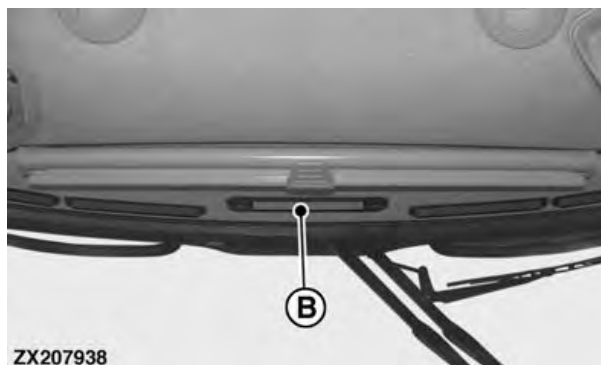
Louvers (B) direct air flow only onto the windshield to accelerate defogging.

The machine can be equipped with front pull-down sunshade (C).

A—Side Louver

B—Windshield Louver

C—Front Pull-Down Sunshade



ZX207937 —UN—27NOV13

ZX207938 —UN—27NOV13

ZX207939 —UN—27NOV13

Continued on next page

OUC002,0004AA3 -19-05FEB16-26/33

Cab Roof—Continued

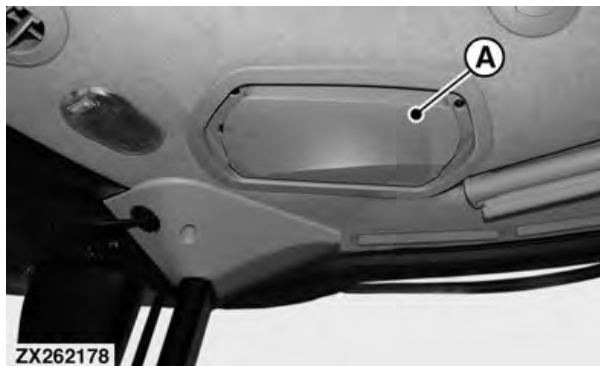
Recirculation air filter (A) can be replaced as required (see **Replace Recirculation Air Filter** in Lubrication and Maintenance section).

Cab is prepared for two loudspeakers (B).

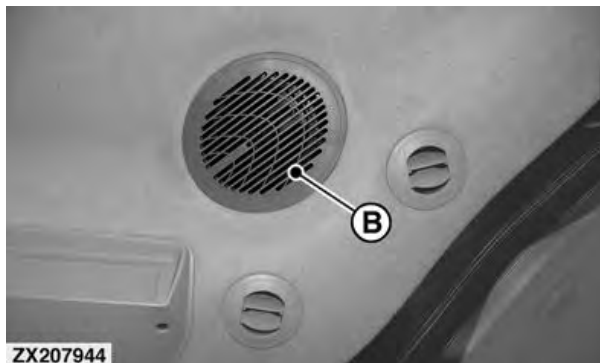
Use hook (C) to store personal wears.

A—Recirculation Air Filter
B—Loudspeaker

C—Hook



ZX262178 —UN—17NOV15



ZX207944 —UN—27NOV13



ZX207945 —UN—27NOV13

Continued on next page

OUCC002,0004AA3 -19-05FEB16-27/33

Cab Interior Lights

Dome light (A) provides overhead lighting for use at night or in low light conditions.

Dome light switch (B) is a three position switch:

- ON (left)
- OFF (center)
- Automatic (right) (open cab door)

Map light (C) provides overhead lighting for use at night or in low light conditions.

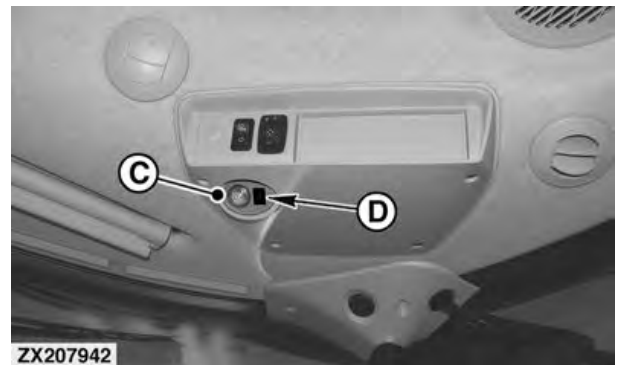
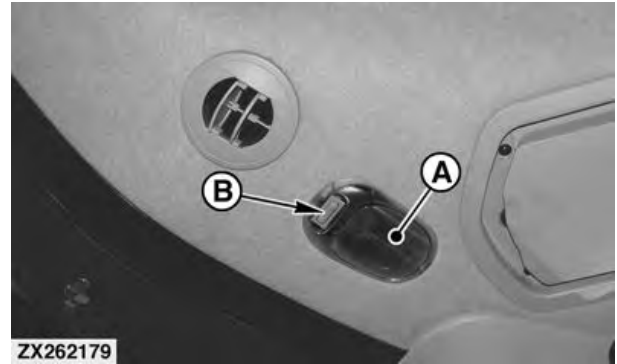
NOTE: Adjust map light (C) as needed.

Map light switch (D) is a two-position switch:

- ON
- OFF

A—Dome Light
B—Light Switch

C—Map Light
D—Light Switch



ZX262179 —UN—17NOV15

ZX207942 —UN—27NOV13

Continued on next page

OUCC002,0004AA3 -19-05FEB16-28/33

Power Outlet Sockets

• Power Outlet Socket Strip:

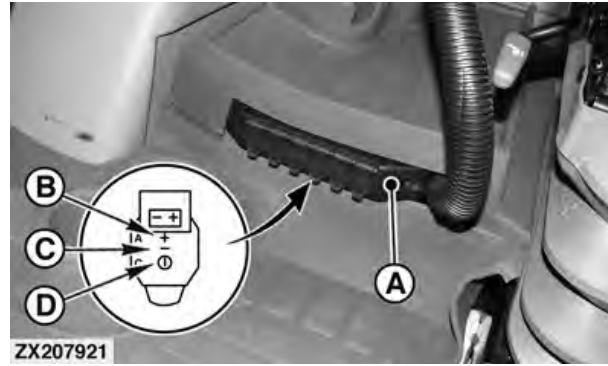
NOTE: Maximum combined current draw for switched power is 20 amps and unswitched power is 30 amps.

Power outlet socket strip (A) with six electrical outlets is located on the floor on the right-hand side of the operator's seat. These outlets provide switched or unswitched power.

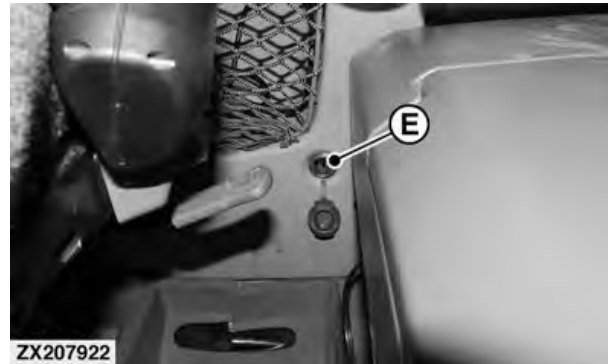
- Spade terminal (B) is unswitched positive power.
- Spade terminal (C) is ground.
- Spade terminal (D) is switched positive power (key switch ON).

- **12 V Sockets:** An electrical consumer with a requirement for MAX 120 W can be connected to the 12 V socket (E).

- | | |
|--|--|
| A—Power Outlet Socket Strip | D—Spade Terminal (Switched Positive Power) |
| B—Spade Terminal (Unswitched Positive Power) | E—12 V Power Outlet |
| C—Spade Terminal (Ground) | |



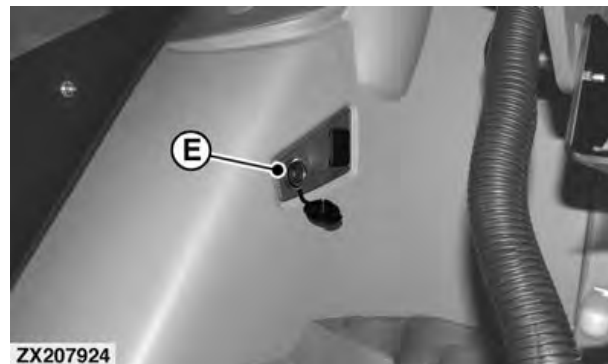
ZX207921 —UN—22NOV13



ZX207922 —UN—22NOV13



ZX262181 —UN—17NOV15



ZX207924 —UN—22NOV13

Continued on next page

OUCC002,0004AA3 -19-05FEB16-29/33

- **GreenStar™ 3 2630 Display and Video Signal Sockets:** For connection of display or video, refer to **GreenStar™ 3 2630 Display** in this section.

- **Service ADVISOR™ Diagnostic Socket:** This socket (C) is suitable only for service and diagnostic purposes. Do not connect any other equipment.

NOTE: Remove bottle holder to access socket (C).

For more information, contact your John Deere dealer.

- **USB Port:** USB port (D) can be used for data transfer.

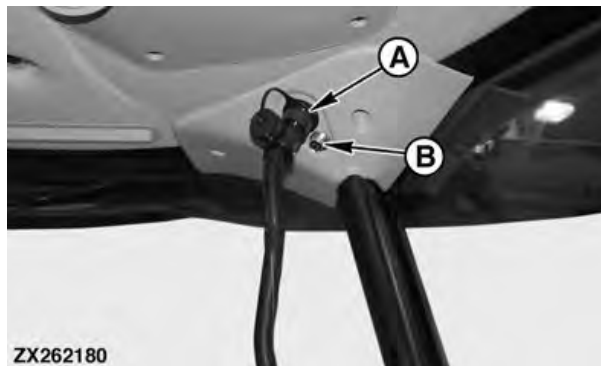
IMPORTANT: The USB port (E) is suitable only for service and diagnostic. Do not connect any other equipment.

A—GreenStar™ 3 2630 Display Socket D—USB Port

B—Video Signal Socket

E—USB Port

C—Service ADVISOR™ Diagnostic Socket



ZX262180 —UN—17NOV15



ZX262183 —UN—17NOV15



ZX207927 —UN—22NOV13



ZX262182 —UN—17NOV15

Continued on next page

OUCC002,0004AA3 -19-05FEB16-30/33

Refrigerator (If Equipped)

NOTE: Refrigerator operates only when key switch is ON and MUST remain plugged into the 12-volt socket (E) to keep food or beverages cold.

Raise seat bottom (A) to open refrigerator top cover (B).

Refrigerator front cover (C) can also be opened without raising seat bottom.

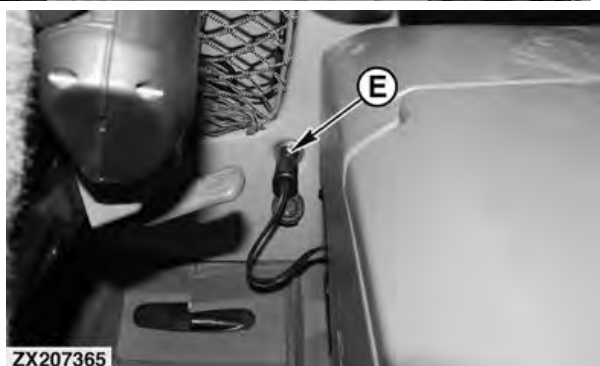
Turn temperature control dial (D) clockwise to decrease temperature or counterclockwise to increase temperature.

A—Seat Bottom
B—Top Cover
C—Front Cover

D—Temperature Control Dial
E—12 V Power Outlet



H96632—UN—02NOV10

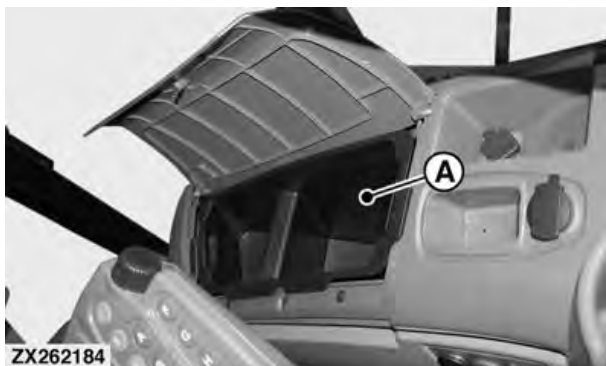


ZX207365

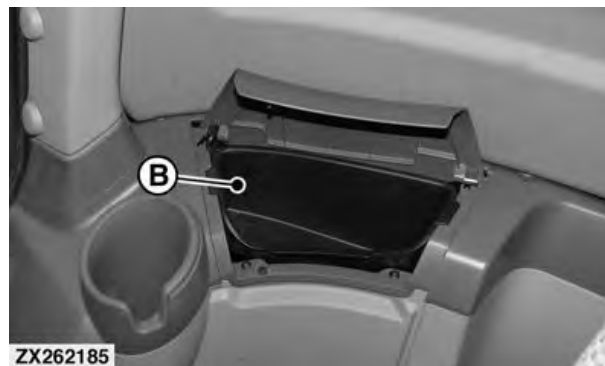
ZX207365—UN—22NOV13

Continued on next page

OUCC002,0004AA3 -19-05FEB16-31/33



ZX262184 —UN—17NOV15



ZX262185 —UN—17NOV15

Storage Locations

NOTE: The trays in storage locations (A) and (B) are removable and washable. Storage location (D) can be used for Ag Management Solutions (AMS) printer kit installation. Contact your John Deere dealer.

- A—Storage Location—Right-Hand Side (if equipped)
- B—Storage Location—Right-Hand Rear Side
- C—Storage Location—Behind Operator Seat

- D—Storage Location—Behind Instructional Seat
- E—Storage Location—Left-Hand Side Door



ZX262186 —UN—17NOV15



ZX262187 —UN—17NOV15



ZX262188 —UN—27NOV15

Continued on next page

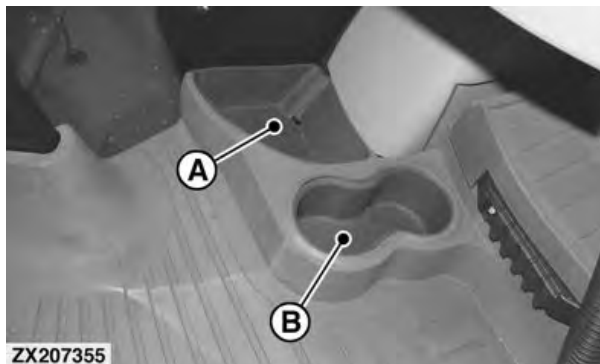
OUC002,0004AA3 -19-05FEB16-32/33

Storage Locations—Continued

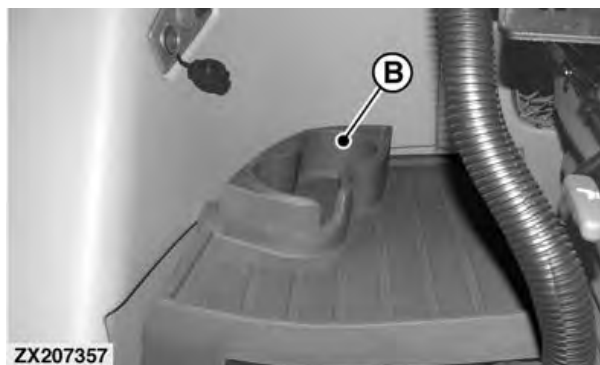
A—Storage Location—Right-
Hand Side

B—Storage Location—Bottle
Holders

C—Storage Location—Beneath
Armrest Lid



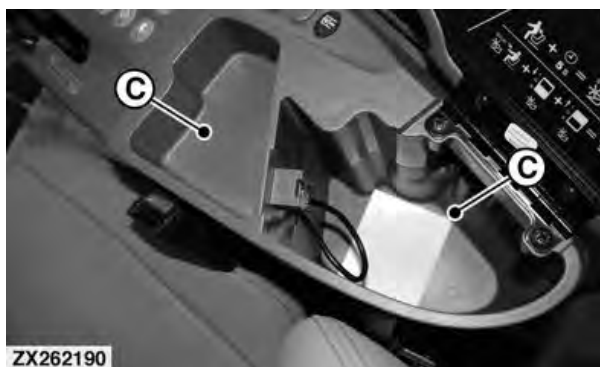
ZX207355 —UN—22NOV13



ZX207357 —UN—22NOV13



ZX262189 —UN—17NOV15



ZX262190 —UN—17NOV15

OUCC002,0004AA3 -19-05FEB16-33/33

Machine Lighting

NOTE: Exit lights remain ON for a 180 seconds after key switch is turned OFF (if road or field lights were used within the previous five minutes). Operator chooses to light left or right side of machine with turn signal lever.

When all lights are first turned to the ON position with key switch OFF, there will be a slight delay before lights turn ON.

Light selection switch (A) on steering column is used to control the following:

- OFF Position (B)
- Park light position (C) controls:
 - Marker lights
- Road light position (D) controls:
 - Hazard (flashing) lights
 - Four headlights (Two Low Beam Lights and Two High Beam Lights)
 - Beacon lights
 - Lower driving lights (if equipped)
- Field light position (E) controls:
 - Grain tank and all eight headlights
 - Row finder lights with turn signal lever
 - Unloading auger light when extended
 - Marker lights and hazard lights

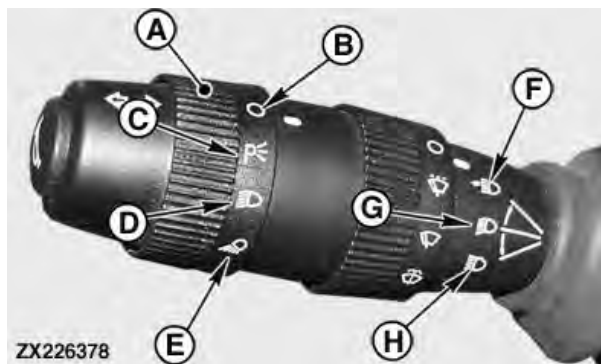
Light selection lever on steering column is used to control the High/Low beam headlights:

NOTE: High beam indicator illuminates on cornerpost when lever is in the momentary high beam and high beam positions.

- Momentary High Beam (F):
 - Pull lever to upper position momentarily activates high beams.
- Low Beam Position (G):
 - Pull lever to middle position to operate low beams.
- High Beam Position (H):
 - Push lever to lower position to activate high beam headlights.

Armrest light buttons are used to control the following:

- Front Stubble light button (I) controls:
 - Stubble lights in front of machine
 - Cab fascia lights (if equipped)
- Rear Discharge light button (J) controls:
 - Rear residue lights at rear of machine
- Auto Beacon light button (K) controls:
 - Auto beacon lights
- Beacon light button (L) controls:
 - Beacon lights
- Hazard light button (M) controls:



Light Selection Lever



Armrest Light Buttons

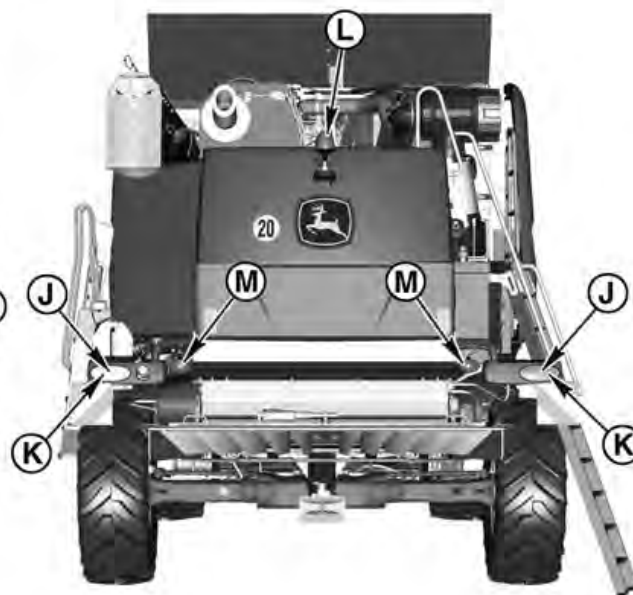
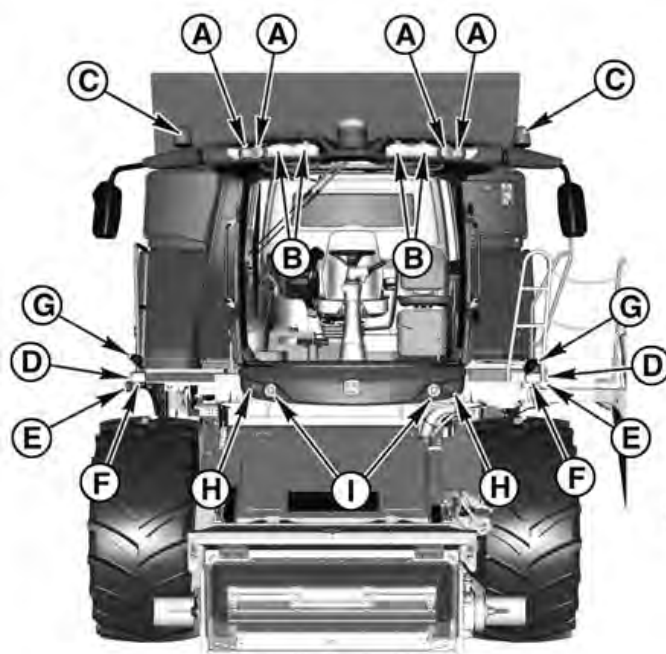
A—Light Selection Switch
B—OFF Position
C—Park Light Position
D—Road Light Position
E—Field Light Position
F—Momentary High Beam
G—Low Beam Position

H—High Beam Position
I— Front Stubble Light Button
J— Rear Discharge Light Button
K—Auto Beacon Light Button
L—Beacon Light Button
M—Hazard Light Button

- Hazard (flashing) lights

Continued on next page

OUC002,0004AA2 -19-05FEB16-1/7



ZX237468 —UN—16APR15

ZX237468

A—Halogen Cab Headlights or Light Emitting Diode (LED) (Optional) Cab Headlights
B—Cab Headlights (High/Low Beam)

C—Beacon Lights
D—Hazard Lights (Amber)
E—Hazard Lights (Amber)
F—Marker Lights (White)
G—Stubble Lights

H—Fascia Lights (If Equipped)
I—Lower Driving Lights (If Equipped)
J—Marker/Brake Lights (Red)
K—Rear Hazard Lights (Amber)

L—Beacon Light
M—Rear Discharge Lights

Lighting Locations—Front and Rear View Lights

Beacon Light Button:

CAUTION: Lights must be turned ON when transporting. Swing cab ladder forward to orient marker/hazard light towards oncoming motorists.

- Button controls beacon lights (C, L).
- Two beacon lights are located at the front (left and right) and one at the rear of the machine. These lights give warning to other drivers when transporting on roadways.

Hazard Light Button:

CAUTION: Lights must be turned ON when transporting. Swing cab ladder forward to orient marker/hazard light towards oncoming motorists.

- Button controls beacon lights (C, L), hazard lights (D, E), and rear hazard lights (K).
- Hazard lights are located on both sides of machine at front and rear. These lights are used to indicate an inoperable machine.

Road Light Switch:

CAUTION: Lights must be turned ON when transporting. Swing cab ladder forward to orient marker/hazard light towards oncoming motorists.

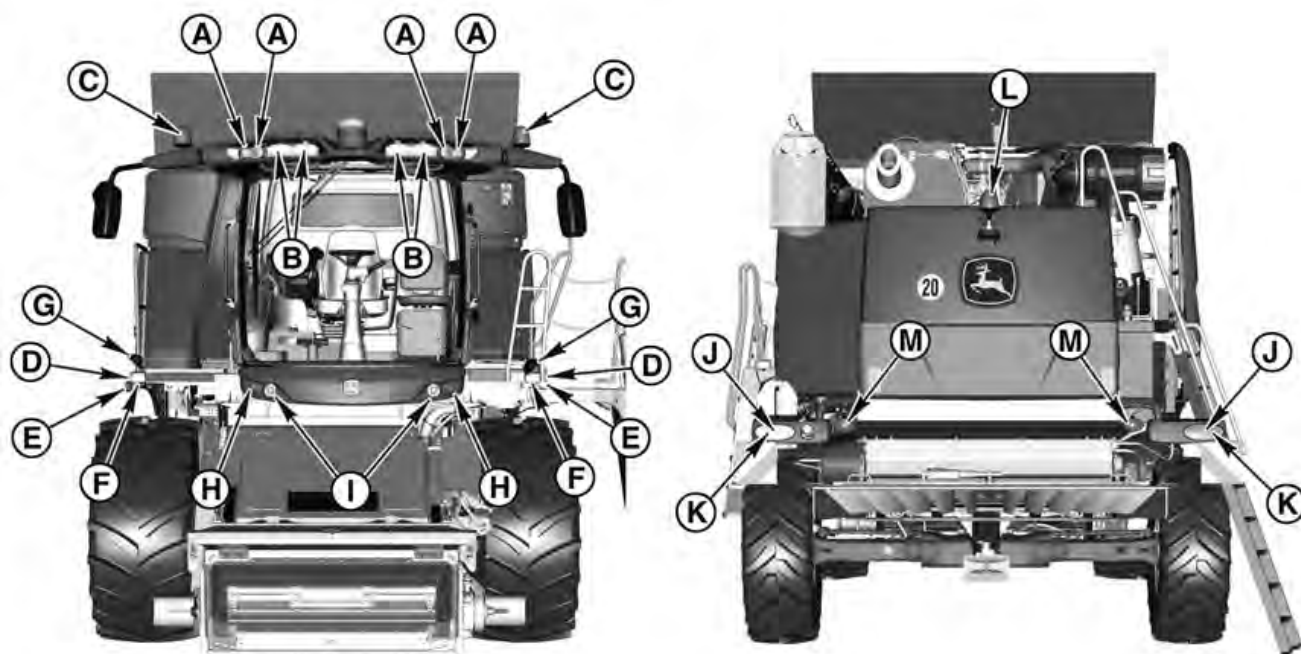
NOTE: When road lights are ON and no header is connected, lower driving lights turn ON and cab headlights turn OFF. When a header is connected, lower driving lights turn OFF and cab headlights turn ON.

Hazard lights turn ON if turn signals are OFF. If turn signals are ON, hazard lights function as turn signal lights.

- Switch controls beacon lights (C, L), cab headlights (B), marker lights (F), lower driving lights (I), and marker/brake lights (J).
- Beacon lights give warning to other drivers when transporting on roadways.

Continued on next page

OUC002,0004AA2 -19-05FEB16-2/7



ZX237468

A—Halogen Cab Headlights or Light Emitting Diode (LED) (Optional) Cab Headlights
B—Cab Headlights (High/Low Beam)

C—Beacon Lights
D—Hazard Lights (Amber)
E—Hazard Lights (Amber)
F—Marker Lights (White)
G—Stubble Lights

H—Fascia Lights (If Equipped)
I—Lower Driving Lights (If Equipped)
J—Marker/Brake Lights (Red)
K—Rear Hazard Lights (Amber)

L—Beacon Light
M—Rear Discharge Lights

Auto Beacon Light Button:

NOTE: When auto beacon lights are activated and grain reaches the 3/4 full sensor, the beacon lights start to flash (3 seconds ON and 6 seconds OFF). When grain reaches the grain tank full sensor, the beacon lights turn ON steady and will not flash.

- Beacon lights (C, L) illuminate when grain tank is 3/4 full. Beacons provide a signal to the grain cart operator that grain tank is full and is ready to be unloaded.

Field Light Switch:

- Switch controls marker lights (F), marker/brake lights (J), and cab headlights (A, B).
- Field lights provide operator with area lighting for operation at night and during low light conditions.

¹If road lights are ON and machine is in Road Mode, stubble lights, fascia lights and rear discharge lights will not be able to be turned ON.

Front Stubble Light Button:

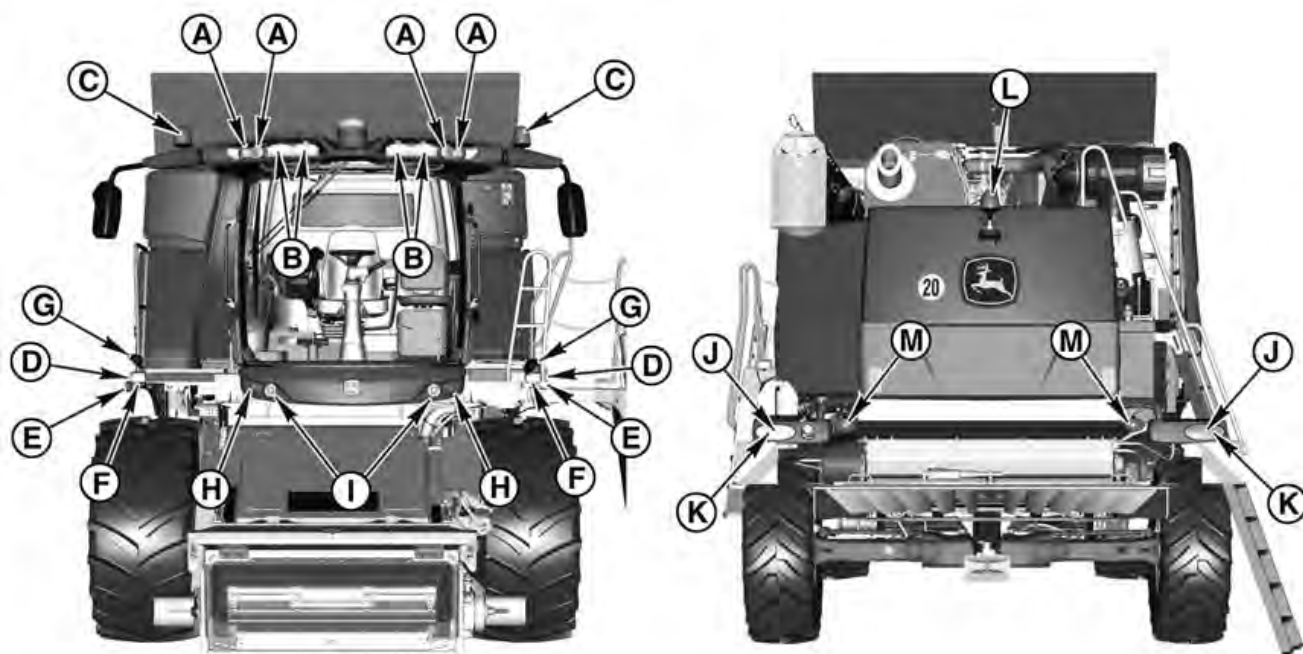
CAUTION: To avoid motorist confusion, do not operate work lights when transporting on public roadways.

- Button controls stubble lights (G) and fascia lights (H).
- Stubble lights provide operator with additional lighting behind header for night operation and low light conditions¹.
- Fascia lights provide operator with additional lighting at front of machine during harvest.

Continued on next page

OUC002,0004AA2 -19-05FEB16-3/7

ZX237468 —UN—16APR15



ZX237468

ZX237468 —UN—16APR15

A—Halogen Cab Headlights or Light Emitting Diode (LED) (Optional) Cab Headlights
B—Cab Headlights (High/Low Beam)

C—Beacon Lights
D—Hazard Lights (Amber)
E—Hazard Lights (Amber)
F—Marker Lights (White)
G—Stubble Lights

H—Fascia Lights (If Equipped)
I—Lower Driving Lights (If Equipped)
J—Marker/Brake Lights (Red)
K—Rear Hazard Lights (Amber)

L—Beacon Light
M—Rear Discharge Lights

Rear Discharge Light Button:

CAUTION: To avoid motorist confusion, do not operate work lights when transporting on public roadways.

- Button controls rear discharge lights (M).
- Rear discharge lights provide operator with rear area lighting for night operation and low light conditions^{1 2}.

Marker/Brake Lights:

- Marker/Brake lights (J) come ON when machine senses a deceleration. Lights stay on for a minimum of two seconds.³

¹If road lights are ON and machine is in Road Mode, stubble lights, fascia lights and rear discharge lights will not be able to be turned ON.

²France Only: If machine is in Road Mode, rear discharge lights will not turn ON.

³France Only: Brake lights will come ON when brake pedal is pressed.

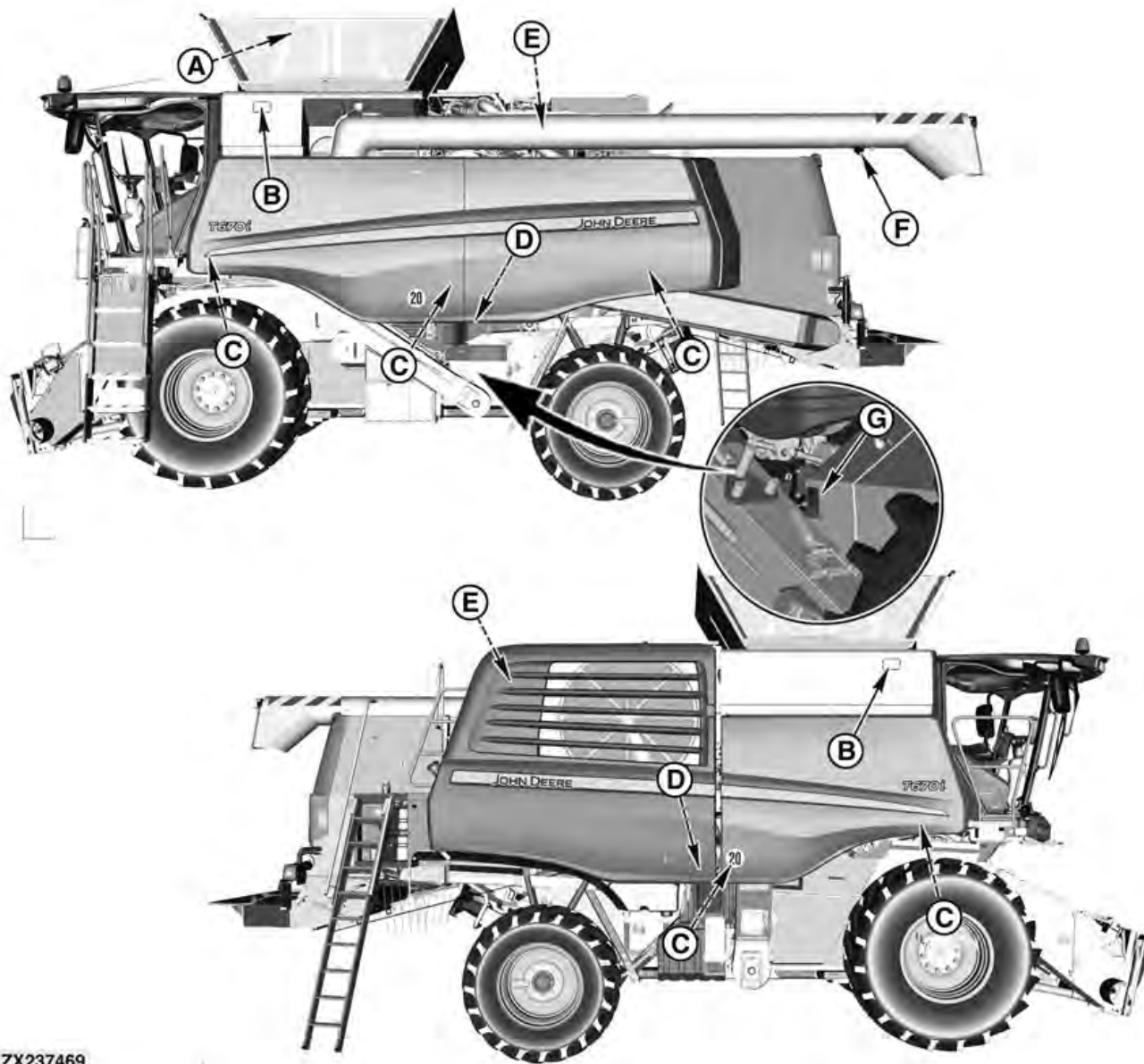
- Once speed is less than 1.6 km/h (1 mph), brake lights stay on for two minutes or until forward acceleration is sensed and speed is greater than 1.6 km/h (1 mph).
- Marker lights also act as turn indicators, and illuminate when a turn is signaled. Light in direction of turn flashes.

Exit Lighting:

- Two outermost cab headlights (B) remain on for a maximum of 180 seconds after key switch and light switch are turned OFF (if road or field lights were in use within the previous five minutes).

Continued on next page

OUC002,0004AA2 -19-05FEB16-4/7



ZX237469

ZX237469 —UN—08FEB16

A—Grain Tank Light
B—Row Finder Lights
C—Gull Wing Service Lights

D—Shoe Service Lights
E—Engine Compartment Service Lights

F—Unloading Auger Light
G—Shoe Service Light/Gull Wing Service/Engine Compartment Service Lights Switch

Lighting Locations—Left and Right Side View Lights

Field Light Switch:

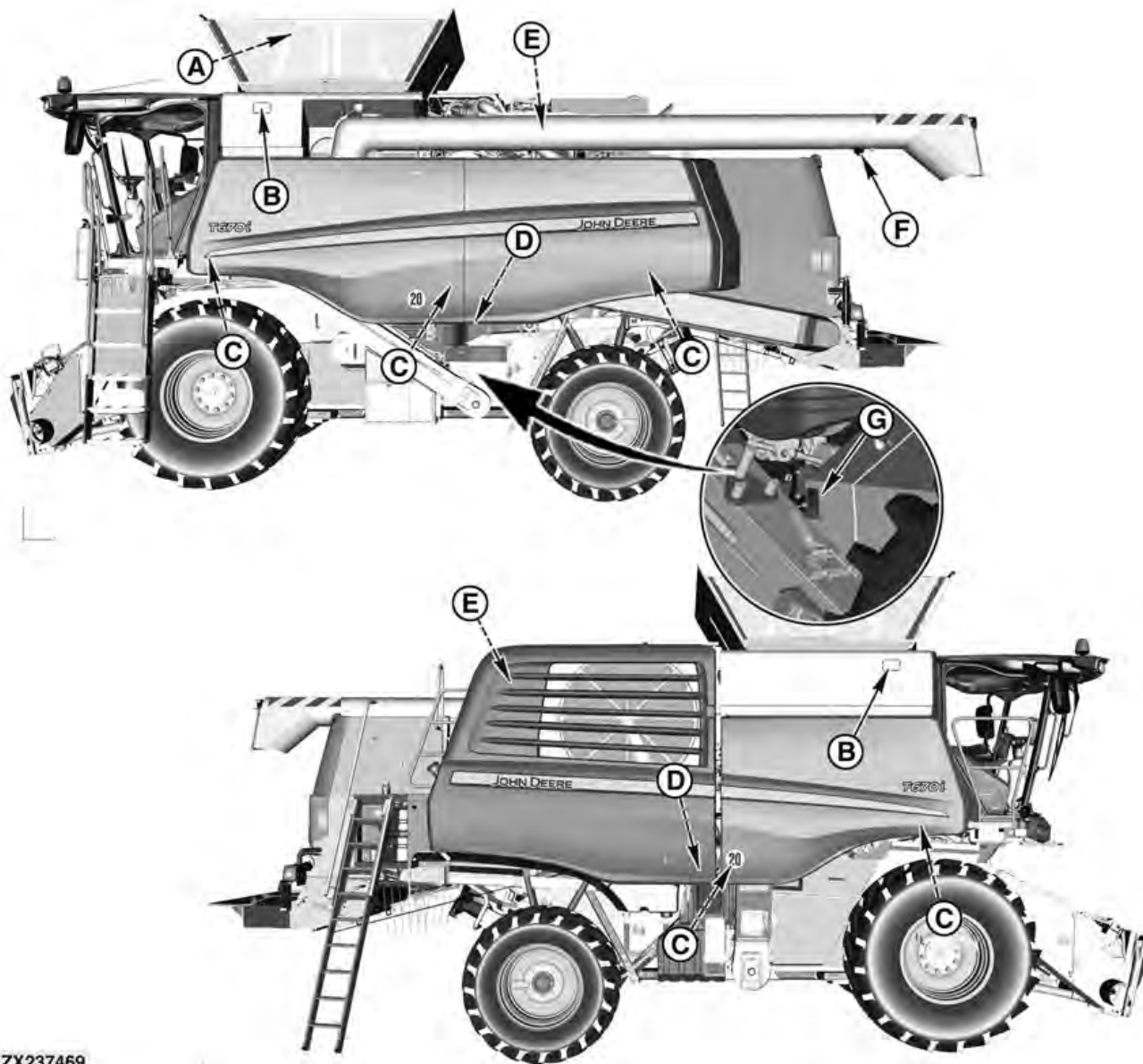
- Switch controls grain tank light (A), row finder lights (B) (with turn signal lever), unloading auger light (F) and marker/hazard lights.
- Row finder lights provide operator with area lighting on each side of machine for night operation and low light conditions.

NOTE: When Field Light switch is ON, use turn signal lever to actuate either right or left side row finder light.

- Grain tank light provides operator with lighting in grain tank for night operation and low light conditions.
- Grain tank light turns OFF when grain reaches the 3/4 full sensor.
- Unloading auger light comes ON when auger is extended more than 50% with field light switch ON.
- Unloading auger light provides lighting for unloading grain tank at night or low light conditions.

Continued on next page

OUC002,0004AA2 -19-05FEB16-5/7



ZX237469

ZX237469 —UN—08FEB16

A—Grain Tank Light
B—Row Finder Lights
C—Gull Wing Service Lights

D—Shoe Service Lights
E—Engine Compartment Service Lights

F—Unloading Auger Light
G—Shoe Service Light/Gull Wing Service/Engine Compartment Service Lights Switch

Shoe Service Lights:

- Shoe service lights (D) provide operator with lighting for cleaning shoe adjustment at night or low light conditions.
- Shoe service lights ON/OFF switch (G) is located on the battery box.
- Illuminates during maintenance and service operations (not during harvest).

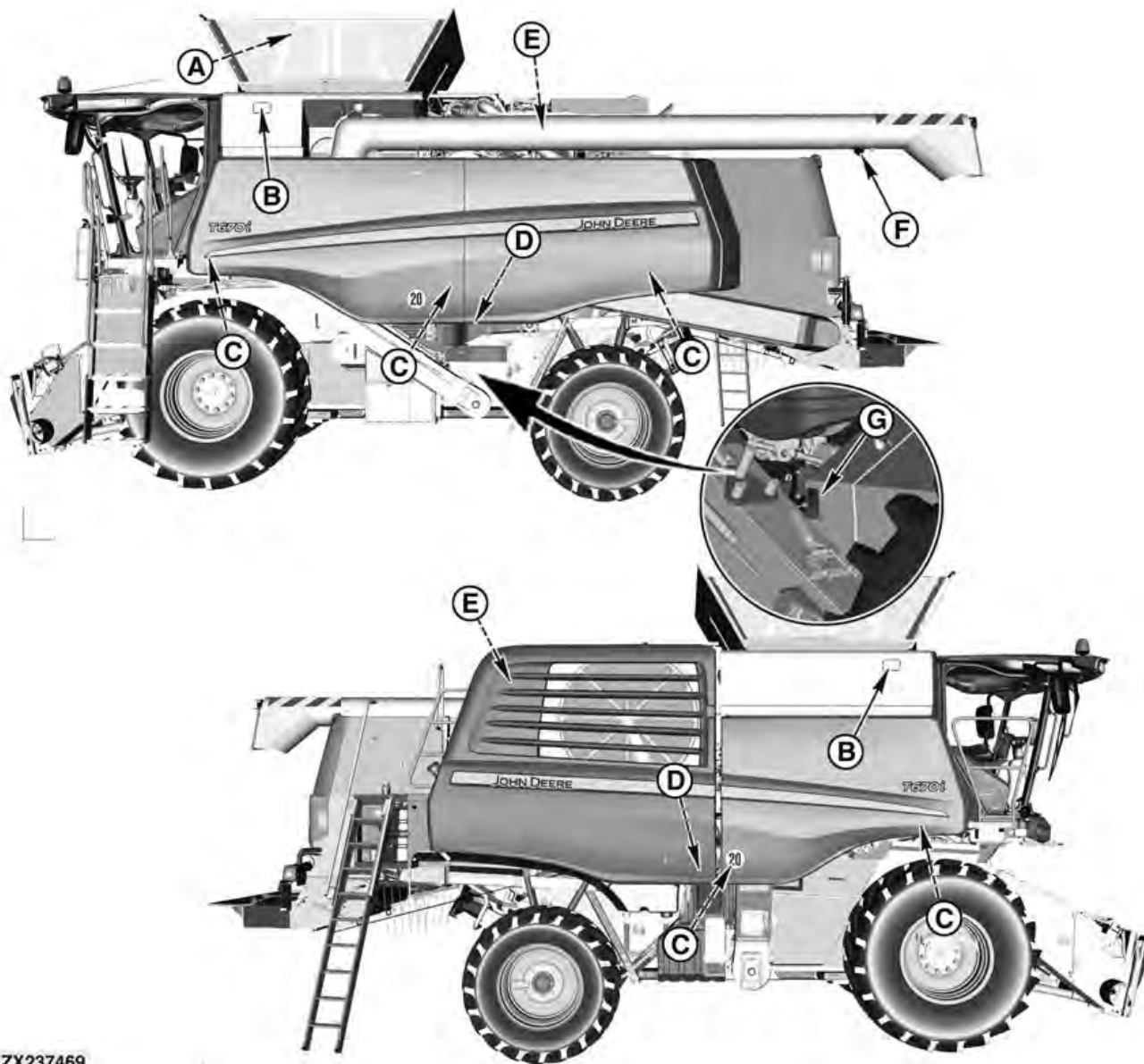
Gull Wing Service Lights (Optional):

CAUTION: Avoid motorist confusion.
Do not operate gull wing service lights when transporting.

- Gull wing service lights (C) are provided on both sides of machine under gull wing doors and provide better visibility of separator area.
- Gull wing service lights ON/OFF switch (G) is located on the battery box.

Continued on next page

OUCC002,0004AA2 -19-05FEB16-6/7



ZX237469

ZX237469 —UN—08FEB16

A—Grain Tank Light
B—Row Finder Lights
C—Gull Wing Service Lights

D—Shoe Service Lights
E—Engine Compartment Service Lights

F—Unloading Auger Light
G—Shoe Service Light/Gull Wing Service/Engine Compartment Service Lights Switch

Engine Compartment Service Lights (Optional):

CAUTION: Avoid motorist confusion. Do not operate engine compartment service lights when transporting.

- Engine compartment service lights (E) provide lighting for engine deck area at night or low light conditions.
- Engine compartment service lights ON/OFF switch (G) is located on the battery box.

- Switch controls engine compartment door light, rear engine deck light, and engine compartment front light.
- Illuminates during maintenance and service operations (not during harvest).

Exit Lighting:

- Row finder lights (B) remain on for a maximum of 180 seconds after key switch and light switch are turned OFF (if road or field lights were in use within the previous five minutes). Operator chooses to light left or right side of machine using turn signal lever.

OUC002,0004AA2 -19-05FEB16-7/7

CommandTouch™ Armrest Console



ZX234295

ZX234295 —UN—19APR15

Continued on next page

OUC002,0004A94 -19-02FEB16-1/19

Operating the Controls and Displays

- 1— Header Engage and Feeder House Reverser Switch
- 2— Separator Engage Switch
- 3— Harvest Smart™ Feed Rate Enable Button (If Equipped)
- 4— Engine Speed Button (High)
- 5— Engine Speed Button (Medium)
- 6— Engine Speed Button (Low)

- 7— Gear 3 Button (If Equipped)¹
- 8— Gear 2/ProDrive™ Mode 2 Button (If Equipped)²
- 9— Gear 1/ProDrive™ Mode 1 Button (If Equipped)²

- 10— Park Brake Button (If Equipped)
- 11— Four-Wheel Drive Button (High Speed) (If Equipped)
- 12— Four-Wheel Drive Button (Slow Speed) (If Equipped)
- 13— Differential Lock Button (ProDrive™ Transmission Only)
- 14— Header Height/HydraFlex™ Pressure Control Dial

- 15— Dial-A-Speed™ Dial
- 16— Road Safety Mode Button
- 17— Folding Functions Shortcut Button
- 18— Air Compressor Button (If Equipped)

NOTE: Not every button is available for every machine model.

¹PBST Transmission Only

²PBST and ProDrive™ Transmissions Only

Before operating machine, become familiar with switches, buttons, and controls.

OUC002,0004A94 -19-02FEB16-2/19

Road Safety Mode Button:

IMPORTANT: For road travel, road safety mode button must be in road mode position.

NOTE: If separator is engaged, machine will not enter road mode. Warning alarm message appears indicating separator is engaged. Shut OFF separator to engage road safety mode button.

Road safety mode button (A) must be in road position when transporting machine on roadway.

When road safety mode button is pressed, indicator light (B) turns ON indicating button is in road position. Road safety mode button prevents the following functions:

- Separator Engage
- Header Engage
- Header Raise/Lower
- Header Height Resume
- Header Height Sensing
- Lateral Tilt
- Reel Raise/Lower and Reel Fore/Aft
- Unloading Auger Engage
- Auger Swing
- Power Folding Auger (If Equipped)
- Grain Tank Covers (If Equipped)

NOTE: Engine speed management system (ProDrive™ Machines) engages when road safety mode



A—Road Safety Mode Button B—Indicator Light

button is ON. Refer to Engine Speed Management (ProDrive™ Machines) in CommandCenter™ Display Screens section for further information.

After transporting machine on roadway and field operation is desired, press road safety mode button for **two seconds** allowing indicator light to turn OFF and desired button functions to operate again.

Continued on next page

OUC002,0004A94 -19-02FEB16-3/19

ZX264515 —UN—03FEB16

Header Engage and Feeder House Reverser Switch

Header engage switch (A) allows header drive to be turned ON or OFF. Push down and forward to lock switch in ON position or pull back on switch to turn OFF.

NOTE: Engage separator before engaging header.

NOTE: When feeder house reverser is engaged, reel moves in reverse direction helping pull crop material away from feeder house.

If operating high engine speed and feeder house reverser switch is engaged, engine automatically derates and goes to low idle.

Feeder house reverser switch (A) is used to shift the feeder house gearcase into reverse mode to clear a plugged feeder house or header.

System Requirements:

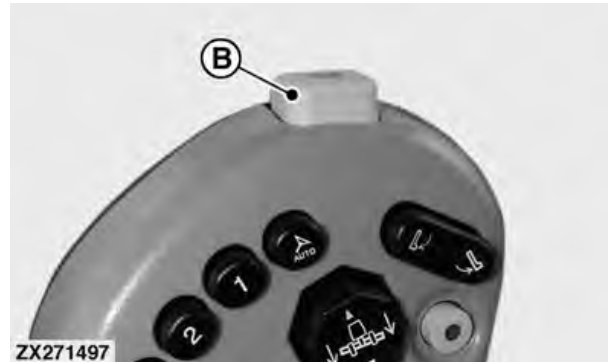
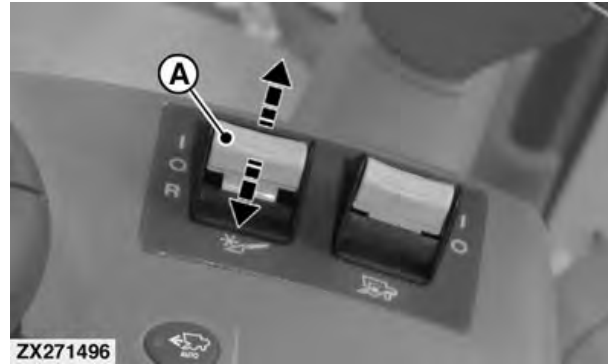
- Header engage switch and feeder house reverser switch must be OFF to start machine.
- Separator engage switch must be ON.
- Road safety mode button must be in field position.
- Operator must be seated for header to operate.

Header drive can be shut OFF with quick stop button (B) on multi-function lever.

To engage header drive or unloading auger if quick stop button was used, turn switch OFF and back ON.

If operator leaves seat after engagement, header continues to operate for five seconds before disengaging.

To engage, sit squarely on operator's seat and turn switch OFF and back ON.



A—Header Engage/Feeder House Reverser Switch

B—Quick Stop Button

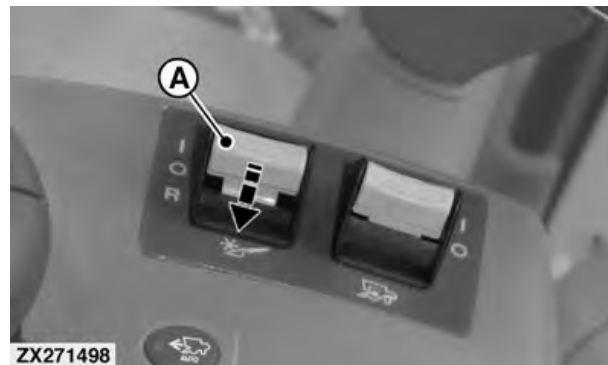
OUC002,0004A94 -19-02FEB16-4/19

To shift feeder house reverser, proceed as follows:

NOTE: If operating high engine speed and feeder house reverser switch is engaged, engine will automatically go to low idle.

1. Turn header engage/feeder house reverser switch (A) OFF and throttle engine to low idle.
2. Push down, pull back, and hold feeder house reverser switch until feeder house is clear of plug.
3. Release switch once feeder house is clear.
4. Throttle engine to high idle and resume harvesting.

A—Header Engage/Feeder House Reverser Switch



Continued on next page

OUC002,0004A94 -19-02FEB16-5/19

Separator Engage Switch

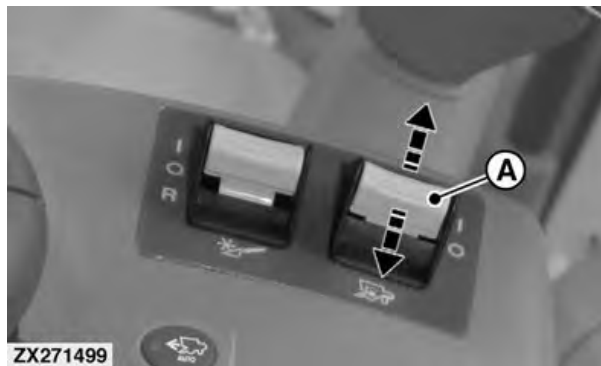
NOTE: Engage separator before engaging header.

Separator engage switch (A) allows separator to be turned ON or OFF. Push down and forward to lock switch in ON position or pull back on switch to turn OFF.

System Requirements:

- Engine is running at low idle.
- Separator engage switch must be OFF to start machine.
- Road safety mode button must be in field position.

Separator drive speed adjust and cleaning fan speed adjust systems only work when separator is running.



A—Separator Engage Switch

OUCC002,0004A94 -19-02FEB16-6/19

Harvest Smart™ Feed Rate Enable Button (If Equipped)

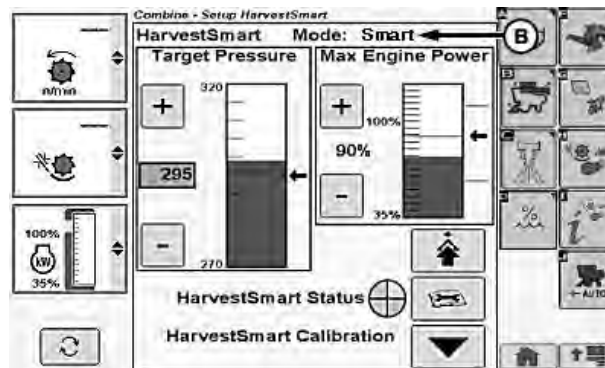
Harvest Smart™ feed rate enable button (A) allows machine to enable Harvest Smart™ system and select two operating modes.

Pressing Harvest Smart™ feed rate enable button once causes screen to appear on display. Press button again to toggle between the different operating modes (B):

- OFF
- Smart
- Capacity

Indicator light (C) turns ON indicating system is active.

A—Harvest Smart™ Feed Rate Enable Button
B—Operating Modes
C—Indicator Light

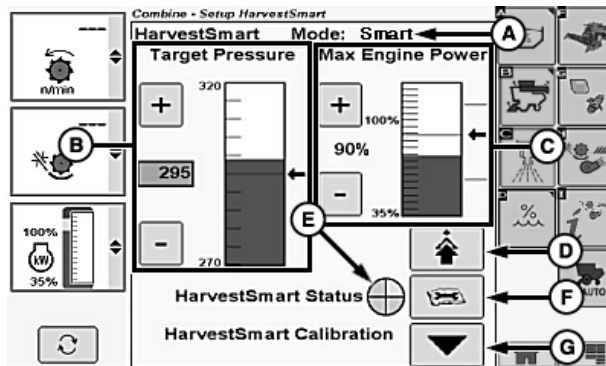


Continued on next page

OUCC002,0004A94 -19-02FEB16-7/19

Refer to **Operate Harvest Smart™ Feed Rate (If Equipped)** in **Field Operation** section for further information on operating the following:

- Operating Mode (A)
 - OFF
 - Smart
 - Capacity
- Target Pressure (B)
- Max Engine Power (C)
- Advanced Setup Icon (D)
 - Max Harvest Speed
 - Sensitivity
- Harvest Smart™ Status Indicator (E)
- Diagnostic Readings Icon (F)
- Harvest Smart™ Calibration Icon (G)



- | | |
|-----------------------|-----------------------------------|
| A—Operating Mode | E—Harvest Smart™ Status Indicator |
| B—Target Pressure | F—Diagnostic Readings Icon |
| C—Max Engine Power | G—Harvest Smart™ Calibration Icon |
| D—Advanced Setup Icon | |

OUC002,0004A94 -19-02FEB16-8/19

H106500 —UN—08JAN13

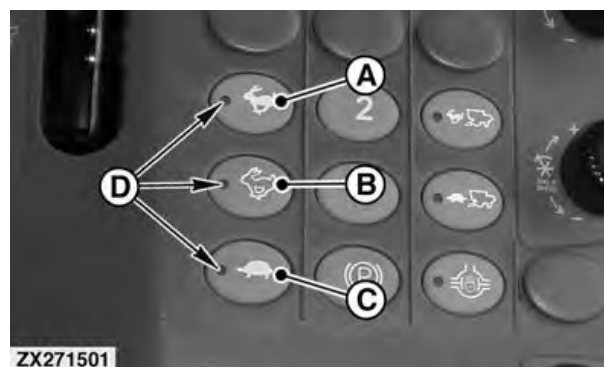
Engine Speed Buttons

Engine speed buttons are used to increase or decrease engine speed.

- Button (A) is for high speed.
- Button (B) is for medium speed.
- Button (C) is for low speed.

Indicator lights (D) indicate which button is selected.

- | | |
|-----------------------|--------------------|
| A—High Engine Speed | C—Low Engine Speed |
| B—Medium Engine Speed | D—Indicator Lights |



Continued on next page

OUC002,0004A94 -19-02FEB16-9/19

ZX271501 —UN—03FEB16

Park Brake Button (If Equipped)

IMPORTANT: System is in manual mode when machine is first started. Park brake indicator (B) illuminates indicating park brake is engaged. Press park brake button once to enter automatic mode. Park brake indicator (B) turns OFF when system is in automatic mode.

The park brake prevents machine movement. Use park brake button (A) to change between manual and automatic modes and to engage/disengage park brake in manual mode.

Automatic Mode:

- If multi-function lever is in neutral position (C) and speed is less than 1.5 km/h (1 mph), park brake is applied. If multi-function lever is moved out of neutral position, park brake is released.

NOTE: Park brake engages each time multi-function lever is set to neutral position (C) or if engine is shut OFF.

Manual Engagement (Default Mode):

- Park Brake Applied: Press park brake button (A) to activate park brake. Park brake indicator (B) illuminates indicating park brake is engaged.
- Park Brake Released: Press park brake button (A) to disengage park brake when multi-function lever is in neutral position. Park brake indicator (B) turns OFF. Park brake is still engaged until multi-function lever is moved out of neutral position returning to automatic mode.



A—Park Brake Button
B—Park Brake Indicator

C—Neutral Indicator

Continued on next page

OUC002,0004A94 -19-02FEB16-10/19

ZX271502 —UN—03FEB16

ZX271503 —UN—03FEB16

Gear Buttons (PBST Machines Only):

IMPORTANT: Machine must be stopped and multi-function lever moved to neutral position before selecting desired gear.

NOTE: Tire sizes and country code regulations limit maximum ground speed.

Gear buttons (A, B, or C) are used to control transmission ground speed electronically. Press desired button to increase or decrease machine ground speed. Transmission gear indicator (D) shows which button is pressed and flashes until transmission electronically shifts (see **Primary Display Unit (PDU)** in this section).

A—First Gear Button C—Third Gear Button
B—Second Gear Button D—Gear Indicator



OUCC002,0004A94 -19-02FEB16-11/19

ProDrive™ Mode 1 and 2 Buttons (ProDrive™ Machines Only):

NOTE: Tire sizes and country code regulations limit maximum ground speed. Speed can be programmed from zero to maximum allowable ground speed.

Maximum reverse ground speed is 10 km/h (6.2 mph) and does not change when in either mode.

ProDrive™ mode 1 or 2 buttons can be selected while machine is moving.

ProDrive™ mode 1 button (A) and ProDrive™ mode 2 button (B) are used to control transmission ground speed electronically. Buttons are used to set a comfortable harvest or transport speed. When desired ground speed is set and multi-function lever is moved fully forward, machine operates no faster than the setpoint for the selected mode.

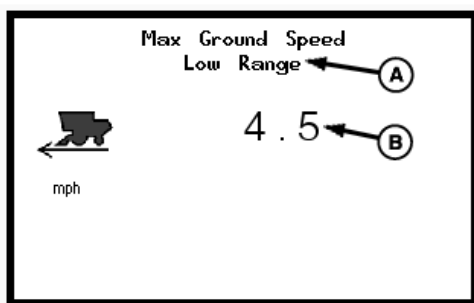
1. Press ProDrive™ mode 1 or 2 button. Indicator (C) shows which mode is selected.
2. Touch plus symbol (+) or minus symbol (-) or rotate selection dial until desired machine speed settings are reached.

A—ProDrive™ Mode 1 Button C—Mode Indicator
B—ProDrive™ Mode 2 Button

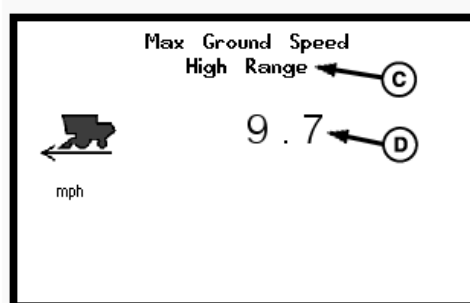


Continued on next page

OUCC002,0004A94 -19-02FEB16-12/19



H101553 —UN—16MAY11



H101554 —UN—16MAY11

3. CommandCenter™ display shows operator adjustment settings for:

NOTE: Mode 1 maximum speed cannot be set higher than current maximum speed set in mode 2.

Machine has a speed range of 0—7.2 km/h (0—4.5 mph) or 0—15.6 km/h (0—9.7 mph) as shown and will not operate faster than setpoint speed.

Speed change occurs between mode 1 and mode 2. (Example: Mode 1 set at 8 km/h (5 mph) with multi-function lever in mid range (4 km/h; 2.5 mph). Mode 2 set at 20 km/h (12.4 mph) with multi-function lever in mid range (10 km/h; 6.2 mph). Current ground speed increases between modes).

Max Ground Speed Low Range (Mode 1):

- Max Ground Speed Low Range (A) displays when ProDrive™ mode 1 button is selected.
 - Display shows current setpoint speed (B).
 - When selection dial is rotated, machine slowly increases or decreases ground speed no matter where multi-function lever is positioned.

Max Ground Speed High Range (Mode 2):

- Max Ground Speed High Range (C) displays when ProDrive™ mode 2 button is selected.
 - Display shows current setpoint speed (D).
 - When selection dial is rotated, machine slowly increases or decreases ground speed no matter where multi-function lever is positioned.

NOTE: Greater maximum setpoints mean more aggressive machines movements. It is always best to use low range with a low maximum setpoint when doing precision movements (hooking up header).



H101555 —UN—16MAY11

A—Max Ground Speed Low Range
B—Current Setpoint Speed
C—Max Ground Speed High Range

D—Current Setpoint Speed
E—Higher Acceleration Range
F—Lower Acceleration Range

- **Example 1:** Attaching header to machine and harvesting desired crop. Mode 1 set to 1.6 km/h (1 mph). Mode 2 set to 11.3 km/h (7 mph).
- **Example 2:** Waterway approaches and harvesting desired crop. Mode 1 set to 4.8 km/h (3 mph). Mode 2 set to 11.3 km/h (7 mph).

Continued on next page

OUC002,0004A94 -19-02FEB16-13/19

Four-Wheel Drive Buttons (If Equipped)

IMPORTANT: Do not switch four-wheel drive ON or OFF while driving machine at maximum travel speed. Decrease speed or bring machine to a stop.

Turn four-wheel drive OFF before going down steep grades.

Non-ProDrive™ Machines: In conditions that cause high pressure in hydrostatic system and machine slows or stops, move multi-function lever to neutral and shift transmission to a lower gear.

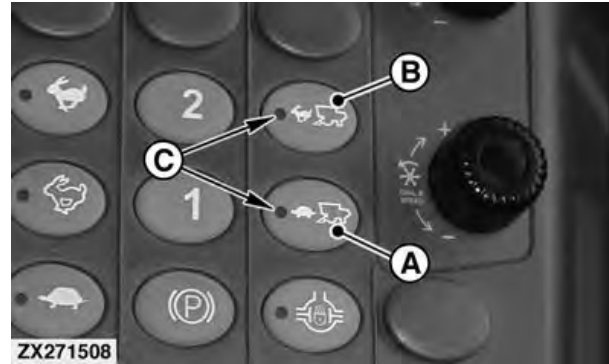
It is OK to switch between low (turtle) and high (rabbit) settings on the "GO" while harvesting.

Four-wheel drive buttons (A) and (B) are used to control the speed of the four-wheel drive system.

Press either four-wheel drive button once to turn ON or once to turn OFF. Indicator light (C) above either button turns ON indicating which button was selected.

Press button (A—Turtle) when more traction is needed or button (B—Rabbit) when higher speeds are required.

NOTE: It is normal for front wheels to spin out (lose traction) before rear wheels in most conditions. In muddy conditions, it may be necessary to apply both brakes momentarily to increase hydrostatic pressure to four-wheel drive motors. Non-ProDrive™ Machines: If rear wheels spin excessively, shift transmission to a lower gear.



A—Four-Wheel Drive Button—Low Speed
B—Four-Wheel Drive Button—High Speed

C—Indicator Lights

It is recommended that four-wheel drive be left in low (turtle) speed (A) allowing machine to operate at maximum torque capacity. Use high (rabbit) speed (B) only to allow rear wheels to spin out faster than ground speed when required.

CAUTION: Non-ProDrive™ Machines: Ground speed increases when turned OFF and decreases when turned ON.

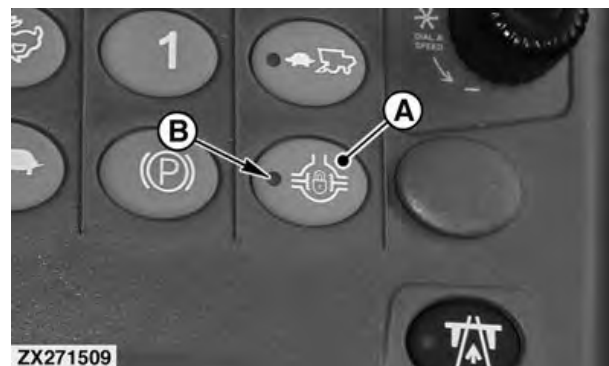
OUC002,0004A94 -19-02FEB16-14/19

Differential Lock Button (ProDrive™ Machines Only):

NOTE: Differential lock does not engage when road safety mode button is in road mode. Differential lock disengages when brake pedals are pressed.

Engagement is only possible if ground speed is below 10 km/h (6.2 mph) and automatically disengages when ground speed is above 12 km/h (7.5 mph).

Differential lock button (A) manually engages/disengages the differential lock to resolve traction problems in the field. Indicator light (B) turns ON when system is active.



A—Differential Lock Button B—Indicator Light

Continued on next page

OUC002,0004A94 -19-02FEB16-15/19

Header Height/HydraFlex™ Pressure Control Dial

Header height control dial (A) allows the operator to select the position of the header relative to the ground and return to that position automatically (see **Header Height Resume** and **Header Height Sensing** sections).

Depending on the activated header height control mode (B, C, or D), use control dial (A) to adjust the desired header height/ground pressure set point (E).

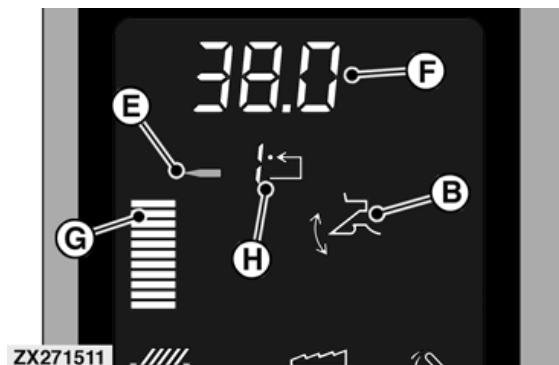
- Header height setpoint (E), current header height (F) and (G), and activation button (H) on multi-function lever are displayed for quick reference (see **Active Header Control Display** section).
- HydraFlex™ pressure setpoint (E), current HydraFlex™ pressure (F) and (G), and activation button (H) on multi-function lever are displayed for quick reference (see **Active Header Control Display** section).

Turn dial towards plus (+) symbol to raise header and setpoint (if equipped with HydraFlex™, increase pressure) or towards minus (-) symbol to lower header and setpoint (if equipped with HydraFlex™, decrease pressure).

NOTE: Refer to **Multi-Function Lever** section to activate the desired control mode and to **Automatic Header Control (AHC)** section to learn about the header height control system.

NOTE: The stored header height/HydraFlex™ pressure (F) is displayed while adjusting value and for 3 seconds after header height control mode activation.

- | | |
|--|---|
| A—Header Height/HydraFlex™ Pressure Control Dial | E—Header Height/HydraFlex™ Pressure Set Point |
| B—Header Height Resume Icon | F—Header Height/HydraFlex™ Pressure Display |
| C—Header Height Sensing Icon | G—Current Header Height/HydraFlex™ Pressure Display |
| D—Active Header Float Icon | H—Activation Button Display |



Header Height Resume



Header Height Sensing



Active Header Float

Continued on next page

OUCC002,0004A94 -19-02FEB16-16/19

ZX271510 —UN—03FEB16

ZX271511 —UN—03FEB16

ZX271513 —UN—03FEB16

ZX271512 —UN—03FEB16

Dial-A-Speed™ Dial**Reel Speed/Belt Pickup Speed Automatic Adjust:**

Dial-A-Speed™ dial (A) changes speed of reel or belt pickup as determined by operator. Operating speed is a ratio of machine ground speed to reel or belt speed (see **Dial-A-Speed™ System** section).

Turn dial towards plus (+) symbol to increase reel or belt pickup speed and setpoint or towards minus (-) symbol to decrease reel and belt pickup speed and setpoint.

Reel Speed/Belt Pickup Speed Manual Adjust:

Touch or press confirm button when Dial-A-Speed™ icon (B) is highlighted to disable automatic adjust system and to allow manual control.

Turn Dial-A-Speed™ dial to manually change speed of reel or belt pickup.

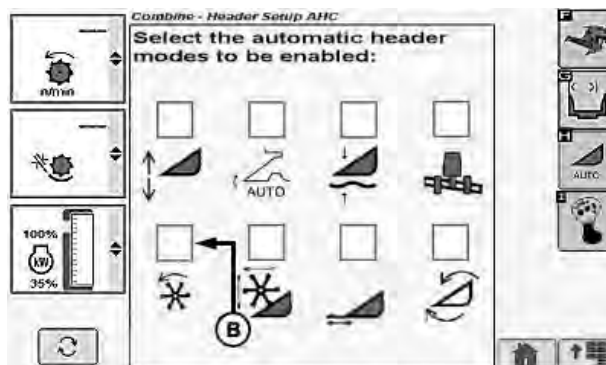
Turn dial towards plus (+) symbol to increase reel or belt pickup speed or towards minus (-) symbol to decrease reel and belt pickup speed.

System is in manual mode when:

- Properly equipped header is connected to machine.
- Engine is running.
- Road safety mode button is in field position.
- Header and separator are engaged.
- Dial-A-Speed™ is disabled or when machine speed is below 0.25 km/h (0.16 mph).

NOTE: Corn heads with reel attached for down corn only run in manual mode.

*Reel must be enabled, see **Change Header Settings** section for further information.*



A—Dial-A-Speed™ Dial

B—Dial-A-Speed™ Icon

Continued on next page

OUCC002,0004A94 -19-02FEB16-17/19

ZX271514 —UN—03FEB16

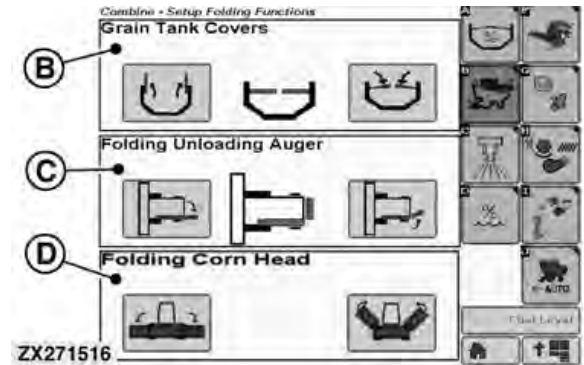
H109799 —UN—12FEB14

Folding Functions Button

NOTE: Screen shows all optional folding features (B, C, or D). Folding feature always defaults to top portion of screen depending on options.

Folding functions button (A) allows direct navigation to the setup screen of folding functions (B, C, or D). See **Folding Functions Setup** section for further folding functions.

- | | |
|---|--|
| A —Folding Functions Button | C —Unloading Auger Folding Function |
| B —Grain Tank Cover Folding Function | D —Corn Head Folding Function |



Continued on next page

OUC002,0004A94 -19-02FEB16-18/19

ZX271515 —UN—03FEB16

ZX271516 —UN—03FEB16

Air Compressor Button (If Equipped)

System Requirements:

Activating air compressor control valve is only possible if the following conditions are met:

- Switch key to RUN position or engine running at low idle (if continuous pressure is required)
- Road safety mode button in road mode
- Park brake engaged
- Multi-function lever in neutral position
- Separator not engaged
- Header not engaged
- Unloading auger not engaged
- Unloading auger swing or fold functions are not moving
- Feeder house raise or lower and lateral tilt functions are not moving
- Header reel raise or lower functions are not moving
- Folding grain tank covers not moving
- Chopper vane angle system (if equipped) not moving
- Chassis tilt functions are not moving (HillMaster™ machine)

Press the air compressor button (A) once to activate the air compressor control valve (B). Indicator light (C) turns ON when air compressor is ready to use. Refer to **Operate the Air Compressor System (If Equipped)** in Field Operation section.

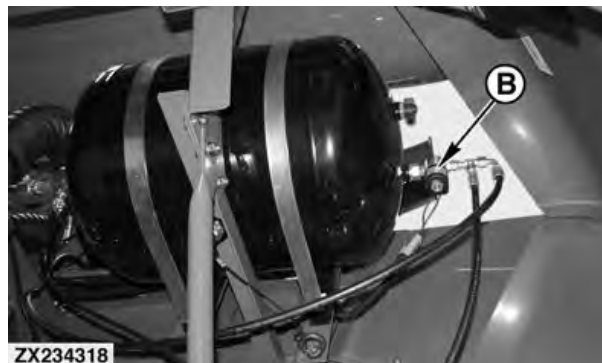
A—Air Compressor Button
B—Control Valve

C—Indicator Light



ZX234317

ZX234317 —UN—19APR15

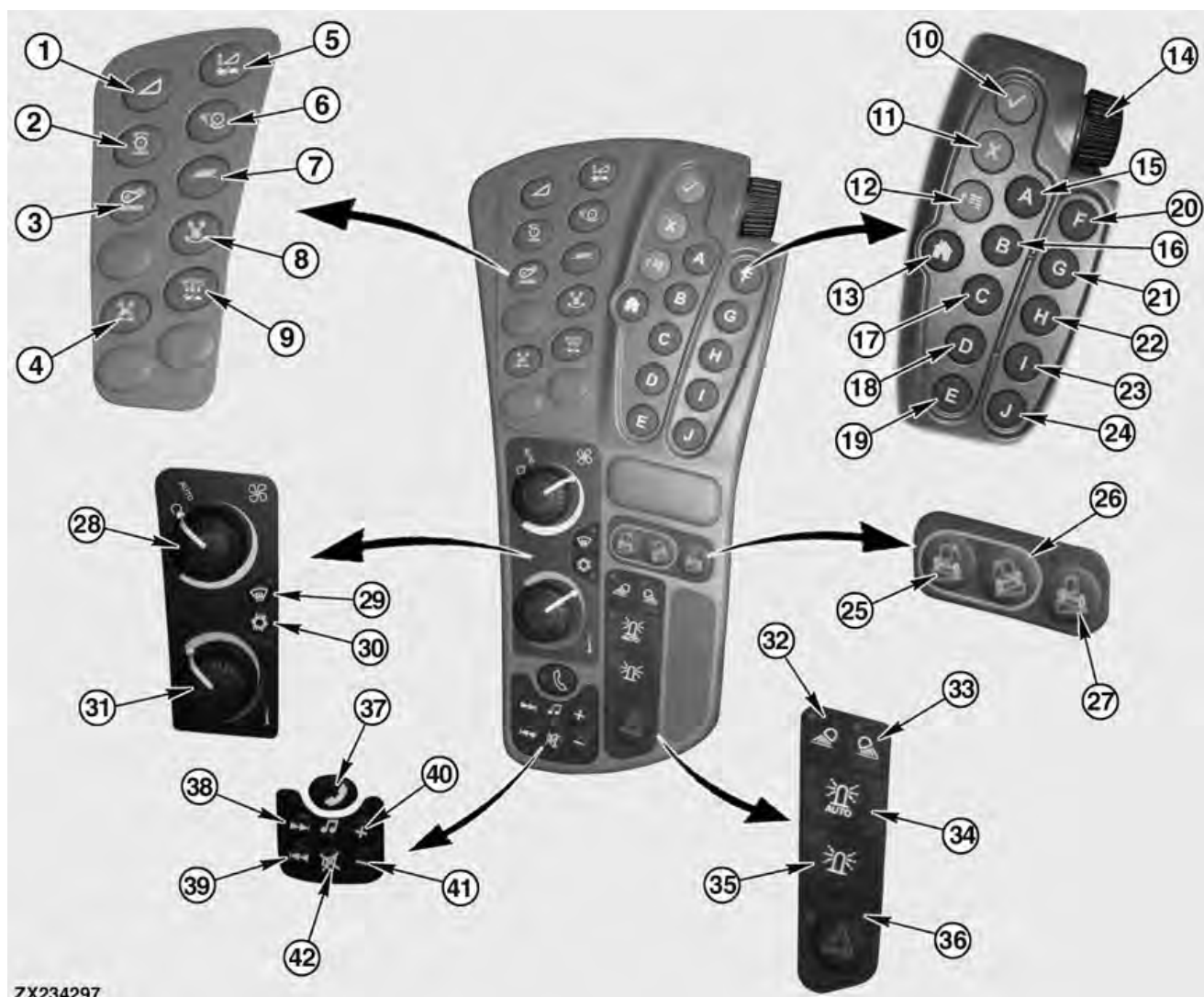


ZX234318

ZX234318 —UN—03FEB16

OUECC002,0004A94 -19-02FEB16-19/19

CommandARM™ Controls



ZX234297

ZX234297 —UN—19APR15

- | | | | |
|---|--|---|--|
| 1— Header Adjust Button | 9— Side Belt Speed Reduction Button (If Equipped) | 28— Fan Speed Control Dial | 38— Seek Forward Button (If Equipped) |
| 2— Threshing Speed Adjust Button | 10— Confirm Button | 29— Defog Button | 39— Seek Reverse Button (If Equipped) |
| 3— Cleaning Fan Speed Adjust Button | 11— Cancel Button | 30— Air Conditioner Button | 40— Volume Increase Button (If Equipped) |
| 4— Discharge Swap Button (If Equipped) | 12— Main Menu Button | 31— Temperature Control Dial | 41— Volume Decrease Button (If Equipped) |
| 5— Feeder House Rate/Sensitivity Adjust Button | 13— Home Button | 32— Work Lights 1 (Front Stubble) Button | 42— Mute Button (If Equipped) |
| 6— Threshing Clearance Adjust Button | 14— Selection Dial | 33— Work Lights 2 (Rear Discharge) Button | |
| 7— Chaffer/Sieve Adjust Button | 15 - 24— A—J Shortcut Buttons | 34— Auto Beacon Lights Button | |
| 8— Tailboard Vane Angle Adjust Button (If Equipped) | 25— Manual Tilt Left Switch (HiilMaster™ Machine Only) | 35— Beacon Lights Button | |
| | 26— Manual Tilt Right Switch (HiilMaster™ Machine Only) | 36— Hazard Warning Lights Button | |
| | 27— Automatic Leveling Control Switch (HiilMaster™ Machine Only) | 37— Push-To-Talk Button (If Equipped) | |

NOTE: Not every switch or button on CommandARM™ is available for every machine model.

Before operating machine, become familiar with switches, buttons and controls.

Continued on next page

OUCC002,0004AA1 -19-05FEB16-1/16

Header Adjust Button

Successively press header adjust button (A) until desired adjustment is shown on display and adjust the following:

NOTE: Depending on machine options and header types, number of button presses will vary.

Cutterbar Pressure Adjust (HydraFlex™ Cutting Platforms Only)

Cutterbar pressure adjust allows operator to increase or decrease the amount of pressure in the cutterbar.

1. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease pressure and setpoint.
2. Display shows operator adjustment settings.

Float Position Adjust (600 Series Drapers Only)

NOTE: Header Height Sensing (off the ground) must be enabled to adjust float position. This is not available with Header Height Sensing (on the ground).

Header Height Sensing must not be enabled to adjust float pressure.

Float position adjust allows operator to increase or decrease the amount of pressure in the gauge wheel and float frame cylinders.

1. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease gauge wheel and float frame cylinders pressure and setpoint.
 - Values are adjustable from 1 to 10 with a default of 5.
 - Level land machines should have a setting of 3 or lower.
 - Lateral tilt machines should start with a setting of 5.

NOTE: Value should be set lower for issues where cut height is not remaining level (left to right). Steeper slopes should have a lower value.

2. Display shows operator adjustment settings.

Belt Speed Adjust (Drapers And Belt Pickups Only)

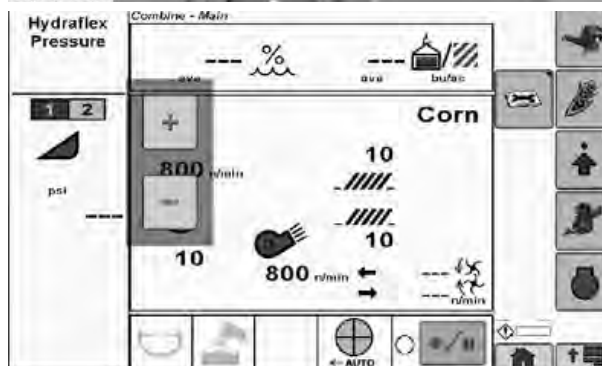
Draper belt speed adjust allows operator to increase or decrease belt speed.

1. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease belt speed.
2. Display shows operator adjustment settings.

Draper Cutterbar Tilt Adjust (600 Series Drapers Only)

Draper cutterbar tilt adjust allows operator to increase or decrease cutterbar angle.

1. Touch plus (+) or minus (-) symbol or rotate selection dial to adjust cutterbar angle.
 - Increase tilts cutterbar down.



Cutterbar Pressure Adjust Shown

A—Header Adjust Button

- Decrease tilts cutterbar up.
2. Display shows operator adjustment settings.

Cutterbar Fore/Aft Position Adjust (600X Series Cutting Platform Only)

Cutterbar position adjust allows operator to control the position of the cutterbar.

1. Touch plus (+) or minus (-) symbol or rotate selection dial to adjust position of cutterbar.
 - Increase extends cutterbar position forward.
 - Decrease retracts cutterbar position rearward.
2. Display shows operator adjustment settings.

Continued on next page

OUC002,0004AA1 -19-05FEB16-2/16

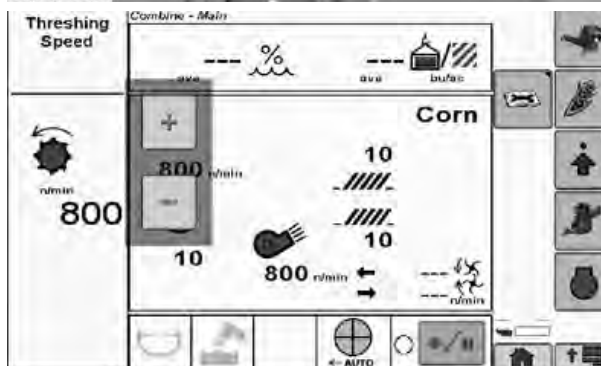
Threshing Speed Adjust Button

Threshing speed adjust button (A) increases or decreases threshing speed.

1. Engage separator.
2. Press threshing speed adjust button.
3. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease threshing speed.
4. Display shows operator adjustment settings.

NOTE: Threshing speed button resets tachometer for low speed alarm. Whenever threshing speed is changed the alarm is also reset. Threshing speed may increase about 30 rpm over four hours as oil temperature increases. Adjust threshing speed as needed.

A—Threshing Speed Adjust Button



Continued on next page

OUC002,0004AA1 -19-05FEB16-3/16

ZX271518 —UN—03FEB16

ZX271526 —UN—03FEB16

ZX271520 —UN—04FEB16

Cleaning Fan Speed Adjust Button

Cleaning fan speed adjust button (A) increases or decreases cleaning fan speed.

1. Engage separator.
2. Press cleaning fan speed adjust button.
3. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease cleaning fan speed.
4. Display shows operator adjustment settings.

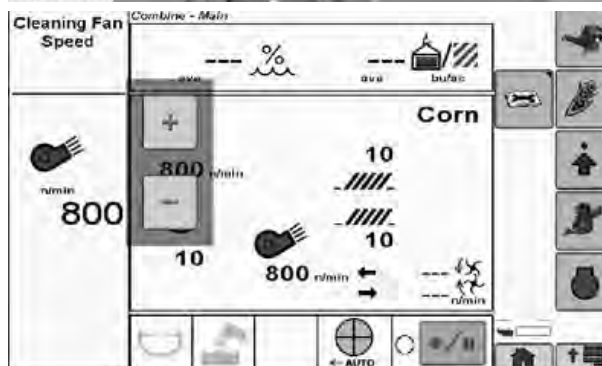
Fan speed motor has a thermal (heat) shut off that stops the motor from working if any of the following happen:

- Button is used continuously for more than two or three minutes.
- Adjustment system is against stop while motor is still trying to change speed.
- Excessive binding or dragging in linkage.

If any of the above causes are suspected, clean and adjust as necessary.

NOTE: Allow motor to cool 10 to 15 minutes before trying button again.

A—Cleaning Fan Speed Adjust Button



OUC002,0004AA1 -19-05FEB16-4/16

Discharge Swap Button (If Equipped)

Discharge swap button (A) automatically moves chopper vanes from right to left or left to right.

NOTE: Example: If wind is blowing chaff or straw towards uncut crops or operator has reached end row and travels back the opposite direction, press button to move chopper vanes automatically to opposite side.

A—Discharge Swap Button



Continued on next page

OUC002,0004AA1 -19-05FEB16-5/16

Feeder House Rate/Sensitivity Adjust Button

Feeder house rate/sensitivity adjust button (A) allows operator to compensate for uneven ground and controls horizontal and vertical positions of header. System continuously compares preset positions and actual positions, thus keeping header in desired working position.

IMPORTANT: This adjustment must be done each time a different header is attached to the machine.

Successively press feeder house rate/sensitivity adjust button (A) until desired adjustment is shown on display and adjust the following:

NOTE: Depending on machine options, number of button presses will vary.

Manual Raise/Lower Speed:

Manual raise/lower speed controls response rate of header raise/lower functions for manual control or when in automatic height resume mode.

NOTE: Rate setting shown on display when adjusting. Settings are adjusted between 0 to 100.

In case of waves effect, it is recommended to reduce the value.

1. Press feeder house rate/sensitivity adjust button (A) **once** to select manual raise/lower speed.
2. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease response speed.
3. Display shows operator adjustment settings.

Header Height Sensitivity:

Height Sensing and Active Header Float Pressure Sensitivity (Automatic Functions) controls speed of response for header movements when in automatic sensing and automatic float modes.

NOTE: Sensitivity setting is shown on display when adjusting. Settings are adjusted between 0 to 100.

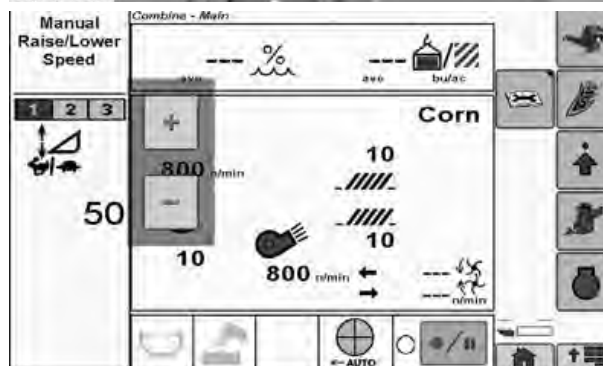
1. Press feeder house rate/sensitivity adjust button (A) **twice** to select header height sensitivity.
2. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease sensitivity.
3. Display shows operator adjustment settings.

Manual Tilt Speed (Machine With Lateral Tilt Option Only):

Manual tilt speed controls response for lateral tilt movements when in manual rate mode.

NOTE: Rate setting is shown on display when adjusting. Settings are adjusted between 0 to 100.

1. Press feeder house rate/sensitivity adjust button (A) **three times** to select manual tilt speed.



Manual Raise/Lower Speed Shown

A—Feeder House Rate/Sensitivity Adjust Button

2. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease tilt speed.
3. Display shows operator adjustment settings.

Automatic Tilt Sensitivity (Machine With Lateral Tilt Option Only):

Automatic tilt sensitivity controls speed of response for lateral tilt movements when in automatic sensing and automatic float modes.

Continued on next page

OUCC002,0004AA1 -19-05FEB16-6/16

NOTE: Sensitivity setting is shown on display when adjusting. Settings are adjusted between 0 to 100.

In case of header contact with ground, it is recommended to increase value.

1. Press feeder house rate/sensitivity adjust button (A) **four times** to select automatic tilt sensitivity.

2. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease tilt sensitivity.
3. Display shows operator adjustment settings.

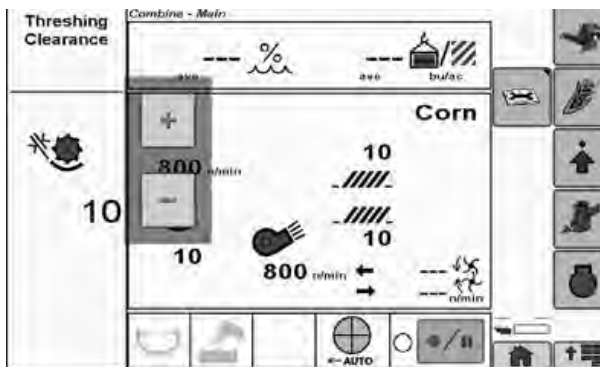
OUC002,0004AA1 -19-05FEB16-7/16

Threshing Clearance Adjust Button

Threshing clearance adjust button (A) increases or decreases threshing clearance.

1. Press threshing clearance adjust button.
2. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease threshing clearance.
3. Display shows operator adjustment settings.

**A—Threshing Clearance
Adjust Button**



Continued on next page

OUC002,0004AA1 -19-05FEB16-8/16

Chaffer/Sieve Adjust Button

Chaffer/Sieve adjust button increases or decreases the chaffer/sieve clearance.

Successively press chaffer/sieves adjust button (A) until desired adjustment is shown on display and adjust the following:

Chaffer Adjust

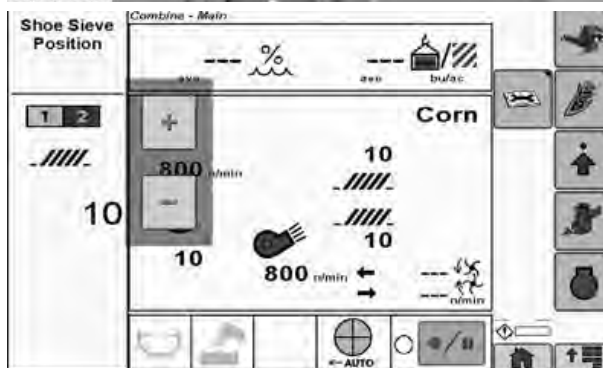
1. Press button **once** to adjust chaffer clearance.
2. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease chaffer clearance.
3. Display shows operator adjustment settings.

Sieve Adjust

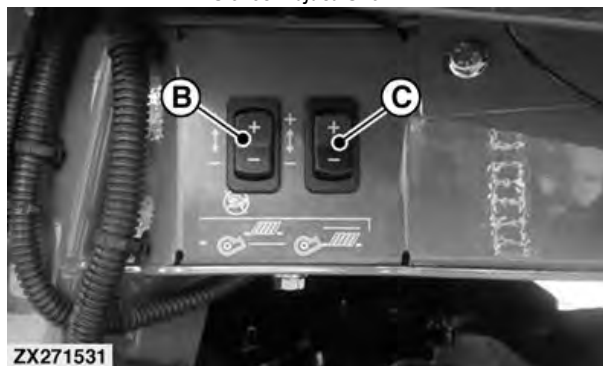
1. Press button **twice** to adjust sieve clearance.
2. Touch plus (+) or minus (-) symbol or rotate selection dial to increase or decrease sieve clearance.
3. Display shows operator adjustment settings.

Chaffer and sieves can also be manually adjusted using relevant switch (B) or (C) located on the rear left-hand side of the machine.

A—Chaffer/Sieve Adjust Button **C**—Sieves Adjust Switch
B—Chaffer Adjust Switch



Sieves Adjust Shown



Continued on next page

OUC002,0004AA1 -19-05FEB16-9/16

ZX271529 —UN—04FEB16

ZX271526 —UN—03FEB16

ZX271530 —UN—08FEB16

ZX271531 —UN—04FEB16

Tailboard Vane Angle Adjust Button (If Equipped)

Tailboard vane adjust button (A) allows operator to adjust direction of tailboard vanes from inside cab.

1. Press tailboard vane angle adjust button.
2. Touch plus (+) or minus (-) symbol or rotate selection dial to adjust tailboard vanes to the left or right.
3. Display shows operator adjustment settings.

A—Tailboard Vane Angle Adjust Button



ZX271532 —UN—04FEB16

ZX271526 —UN—03FEB16

OUCC002,0004AA1 -19-05FEB16-10/16

Side Belt Speed Reduction Button (If Equipped)

NOTE: Slowing side draper belt speed enhances feeding performance when crop is harvested on one side of platform, due to irregular shaped fields.

Side belt speed reduction button (A) allows speed of draper belt to automatically slow to a factory setpoint speed.

1. Press side belt speed reduction button.
2. Slow speed mode engaged appears on display and draper belt speed automatically slows to factory setpoint speed.
3. Pressing belt speed reduction button again or attempting to make manual belt speed adjustments while in slow speed mode automatically returns belt speed to original speed set by operator.

NOTE: If current draper belt speed is slower than factory setpoint speed, system does not engage and a diagnostic trouble code appears.

See your John Deere dealer if factory setpoint speed needs to be adjusted.

A—Side Belt Speed Reduction Button



ZX271534 —UN—05FEB16

ZX271526 —UN—03FEB16

Continued on next page

OUCC002,0004AA1 -19-05FEB16-11/16

Leveling Control Switches (HillMaster™ Machine Only)

Automatic Leveling

Automatic leveling control switch (A) allows machine separator to automatically level itself as machine moves over rolling ground.

System Requirements:

- Engine is running.
- Road safety mode button in field position.

1. Press automatic leveling control switch to activate automatic leveling system.
2. Indicator light (B) will turn ON indicating setting is in automatic mode.
3. Display shows position of machine chassis body graphically.

A pendulum is used to sense the slope of the machine as it moves across the field.

NOTE: With automatic leveling control system activated, manual tilt switches can be used to overcome automatic functions (machine may be tilted manually left or right).

Manual Leveling

Manual tilt switches allow the machine chassis to be tilted left or right manually as machine moves over rolling ground.

System Requirements:

- Engine is running.
- Road safety mode button in field position.

NOTE: Push-Button Shift Transmission Machines: Push manual tilt right switch (C) or manual tilt left switch (D) to enable HillMaster™ mode. Push park brake button to disengage park brake.

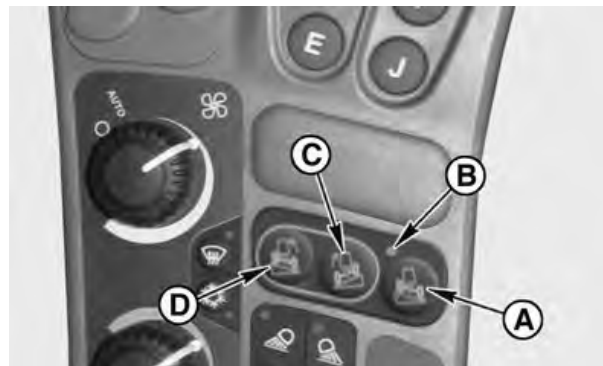
Push and hold manual tilt right switch (C) to tilt machine chassis to the right.

Push and hold manual tilt left switch (D) to tilt machine chassis to the left.

NOTE: When manual desired tilt switch is released, automatic mode takes over and levels machine chassis automatically.

Display shows position of machine chassis body graphically.

A pendulum is used to sense the slope of the machine as it moves across the field.



A—Automatic Leveling Control Switch
B—Indicator Light
C—Manual Tilt Right Switch
D—Manual Tilt Left Switch

NOTE: With automatic leveling control system activated, manual tilt switches can be used to overcome automatic functions (machine may be tilted manually left or right).

Road Transport Position

CAUTION: Avoid loss of control during road transport and serious injury or death. Never transport machine on roadway with HillMaster™ in automatic mode. Never attempt to manually tilt machine while transporting on a roadway.

The following lockouts the HillMaster™ leveling system and ensures that leveling system does not shift during road transport.

System Requirements:

- Engine is running.
- Road safety mode button in field position.

1. Move machine to level ground.
2. Press automatic leveling control switch for **five seconds** or until indicator light (B) flashes.
3. Push and hold manual tilt right switch (C) to tilt machine chassis to the right.
4. Push and hold manual tilt left switch (D) to tilt machine chassis to the left.

Machine is now in neutral position and can be driven on roadway.

Continued on next page

OUC002,0004AA1 -19-05FEB16-12/16

ZX234324—UN—19APR15

ClimaTrak™ Automatic Temperature Control

NOTE: When operating in cold environments it is best to point air vents towards cab floor and turn fan speed to automatic position. This helps circulate air flow throughout the cab.

Operate ClimaTrak™ automatic temperature control as follows:

- **Fan Speed Control (A)** adjusts fan speed and amount of air coming out of louvers. Fan speed indicator (B) arrow moves in relation to desired fan speed adjusted setting.
 - Off Position - all power to system is OFF.
 - Automatic Position - fan speed is determined by difference between selected temperature and actual cab temperature.

NOTE: As temperature approaches setpoint, fan speed decreases.

- **Defog Button (C)** opens defrost vents. Defog helps remove moisture from air even in heat mode. Defog indicator (D) toggles icon ON/OFF when defog button is pressed.

NOTE: Air-conditioning system turns ON when defog button (C) is first pressed. This allows moisture to be removed from the air and allows dry air to be blown on the windows. Press air conditioner button (E) to turn OFF.

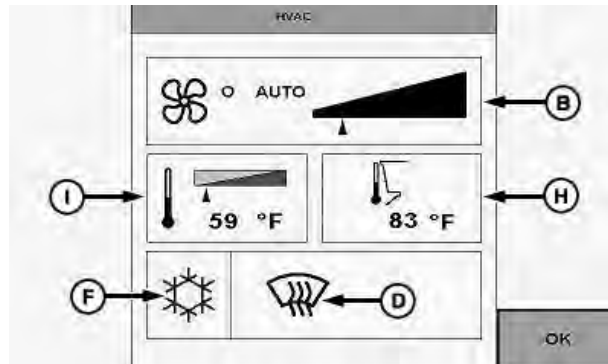
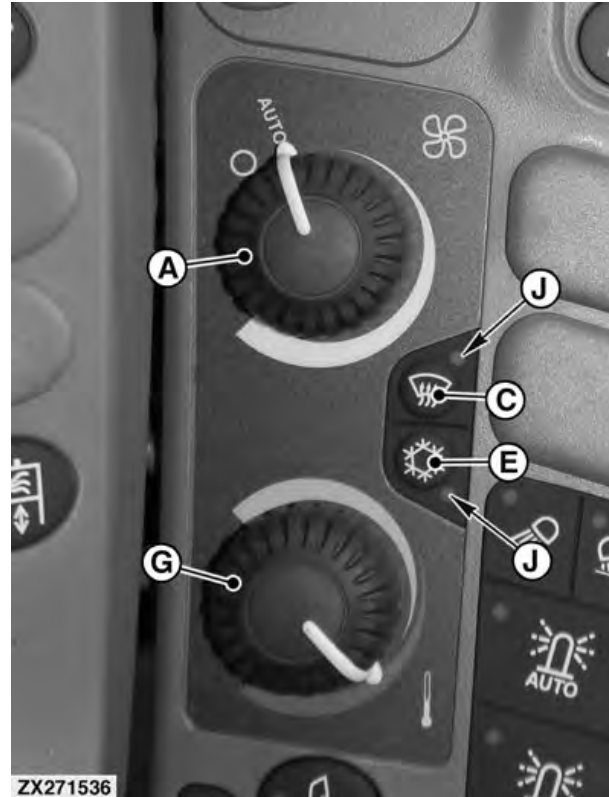
Indicator light (J) illuminates when defog is ON.

- **Air Conditioner Button (E)** activates air-conditioning system to cool cab. Air conditioner indicator (F) toggles icon ON/OFF when air conditioner button is pressed.

NOTE: Indicator light (J) illuminates when air-conditioning system is ON.

- **Temperature Control (G)** adjusts temperature inside cab. Turn dial to red zone to increase temperature and blue zone to decrease temperature. Temperature control indicator (I) arrow moves in relation to desired temperature adjusted setting.

NOTE: Outside ambient temperature (H) shows current air temperature.



A—Fan Speed Control
B—Fan Speed Indicator
C—Defog Button
D—Defog Indicator
E—Air Conditioner Button

F—Air Conditioner Indicator
G—Temperature Control
H—Outside Ambient Temperature
I—Temperature Control Indicator
J—Indicator Light

Continued on next page

OUC002,0004AA1 -19-05FEB16-13/16

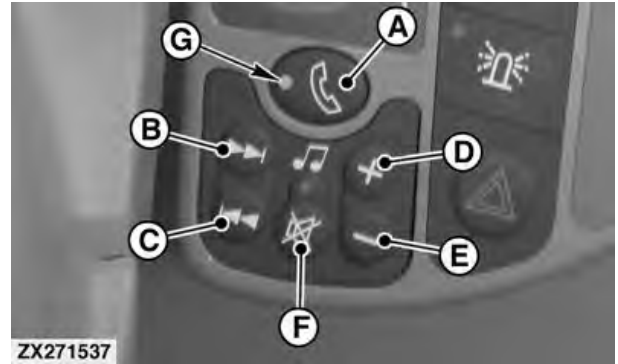
Radio Function Buttons (If Equipped)

Operate radio (if equipped) as follows:

- **Push-To-Talk Button (A):** Press button to answer incoming phone calls or end calls already in process.

NOTE: Indicator light (G) illuminates when button is pressed (function activated).

- **Seek Forward Button (B) and Seek Reverse Button (C):** Press button to change to next or previous preset radio station or to seek through all radio stations.
 - AM/FM/WX/MW/LW: Press button (**short press**) to change to next preset radio station.
 - AM/FM/WX/MW/LW: Press button (**long press**) to seek through all radio stations.
 - XM®: Press button to change to next station.
 - CD/MP3: Press button to advance to next available track.
- **Volume Increase Button (D):** Press button to increase audio volume.
- **Volume Decrease Button (E):** Press button to decrease audio volume.
- **Mute Button (F):** Press button to mute audio and press again to un-mute audio.



- | | |
|--------------------------|--------------------------|
| A—Push-To-Talk Button | E—Volume Decrease Button |
| B—Seek Forward Button | F—Mute Button |
| C—Seek Reverse Button | G—Indicator Light |
| D—Volume Increase Button | |

NOTE: Press button to mute microphone during a phone call.

Continued on next page

OUC002,0004AA1 -19-05FEB16-14/16

ZX271537 —UN—05FEB16

Light Buttons

Operate lights as follows:

NOTE: For more detailed information on lighting locations on the machine, see **Machine Lighting** section.

- **Front Stubble Light Button (A):** Press button to turn front stubble lights ON/OFF.

NOTE: If road lights are ON, stubble lights, fascia lights and rear discharge lights will not be able to be turned ON.

Stubble lights provide operator with area lighting behind header for night operation and low light conditions.

- **Rear Discharge Light Button (B):** Press button to turn rear discharge lights ON/OFF.

NOTE: If road lights are ON, stubble lights, fascia lights and rear discharge lights will not be able to be turned ON.

- **Auto Beacon Light Button (C):** Press button to turn auto beacon lights ON/OFF. Beacon lights illuminate and provide a signal to the grain cart operator that grain tank is 3/4 full or is full and is ready to be unloaded.

- **Beacon Lights Button (D):** Press button to turn beacon lights ON/OFF. Beacon lights on both sides of the machine at the front and rear give warning to other drivers when transporting on roadways.

- **Hazard Light Button (E):** Press button to turn hazard warning lights ON/OFF. Hazard warning lights on both sides of the machine at the front and rear give warning to other drivers when transporting on roadways.



A—Front Stubble Light Button D—Beacon Lights Button
B—Rear Discharge Light Button E—Hazard Light Button
C—Auto Beacon Light Button

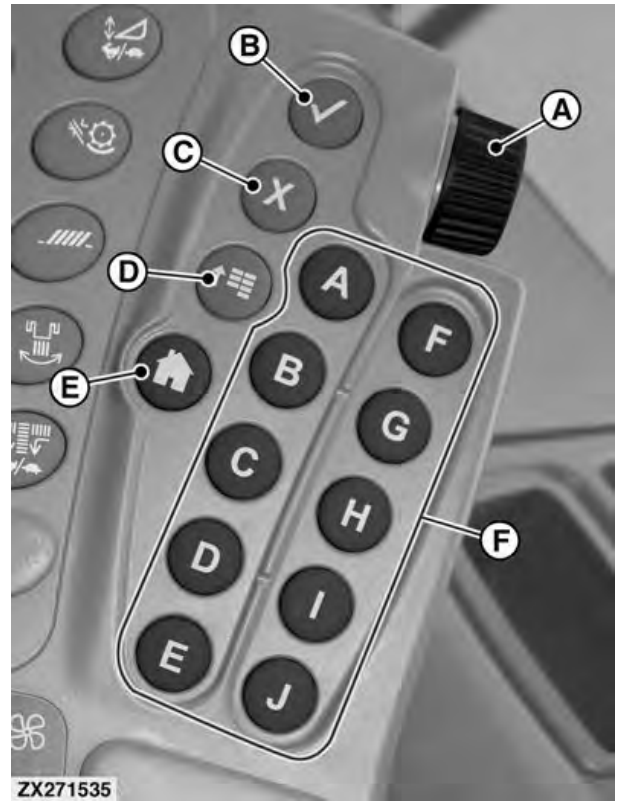
Continued on next page

OUC002,0004AA1 -19-05FEB16-15/16

ZX234325 —UN—19APR15

Operator Interface Controls

- **Selection Dial (A):** allows operator to move the "focus" from item to item on the CommandCenter™ display. As item is highlighted, a "tool tip" will appear describing what the highlighted object is. Selection dial is also used for data entry to increase/decrease numeric values.
 - Rotating selection dial forward raises input box values.
 - Rotating selection dial wheel rearward lowers input box values.
- **Confirm Button (B):** allows operator to select desired "focus" area on CommandCenter™ display or to confirm a highlighted action.
- **Cancel Button (C):** allows operator to cancel or deselect an action on the display at anytime.
- **Main Menu Button (D):** is used to change the active "application" that the CommandCenter™ display is running. Items or applications, in the menu included:
 - Message Center
 - Display Settings
 - Layout Manager
 - Combine
 - Performance Monitor
 - GreenStar™
 - Video
- **Home Button (E):** allows operator to return to home page.
- **Shortcut Buttons (F):** allows operator to select corresponding icon on secondary display unit or GreenStar™ display (if equipped).



A—Selection Dial
B—Confirm Button
C—Cancel Button

D—Main Menu Button
E—Home Button
F—Shortcut Buttons

OUCC002,0004AA1 -19-05FEB16-16/16

ZX271535 —UN—05FEB16

Multi-Function Lever

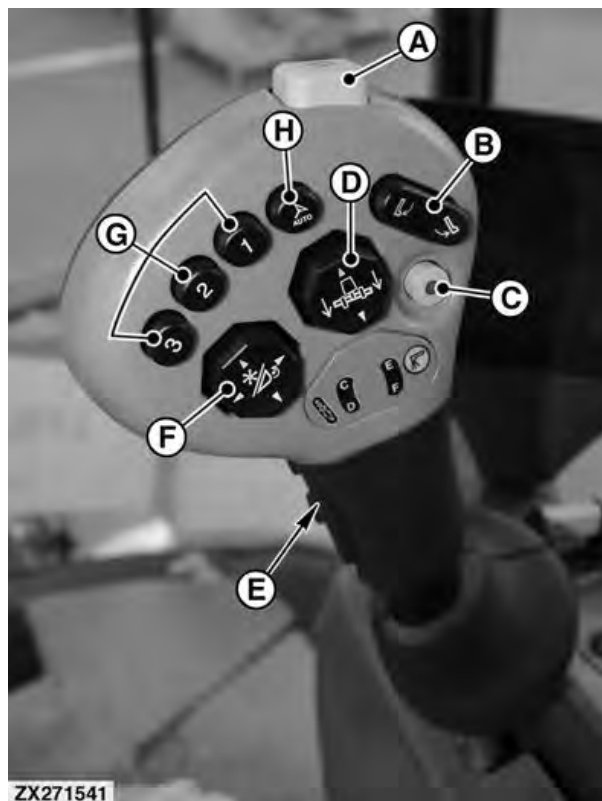
- Move lever forward to drive forward.
- Move lever to the right and rearward to drive rearward.

Palm rest (L) is adjustable to three detent positions:

1. Release lever (M).
2. Lift or lower palm rest (L) into the desired position.

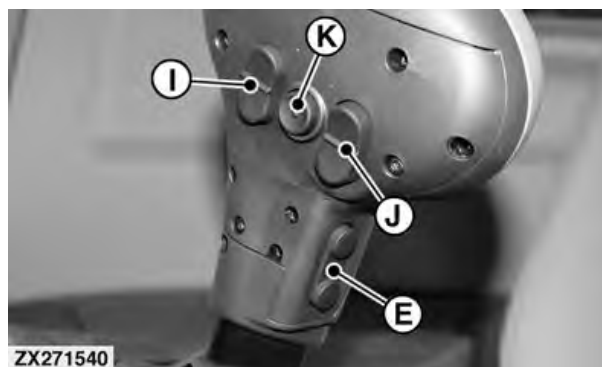
A—Quick Stop Button
B—Unloading Auger Swing Switch
C—Unloading Auger Drive Engage/Disengage Button and Indicator Light
D—Header Raise/Lower Switch and Lateral Tilt Switch (If Equipped)
E—Machine Sync Buttons (If Equipped)
F—Switch for Reel Raise/Lower, Reel Fore/Aft (Optional), Feeder House Backshaft Speed, Adjustable Corn Head Deck Plates (Optional)
G—Activation Buttons (1, 2, 3)

H—AutoTrac™ Resume Button (If Equipped)
I—Draper Cutterbar Tilt Switch, Cutterbar Fore/Aft Switch (If Equipped)
J—Draper Cutterbar Tilt Switch, Cutterbar Fore/Aft Switch (If Equipped)
K—Not Used
L—Palm Rest
M—Lever



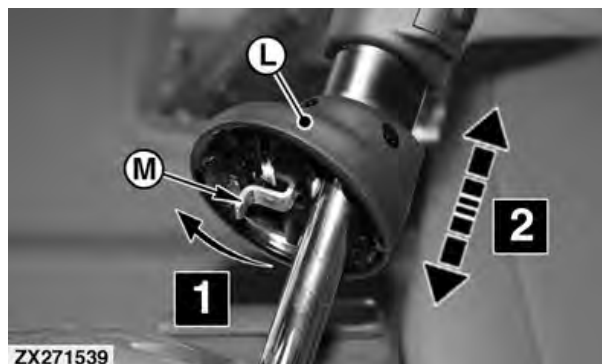
ZX271541

ZX271541 —UN—05FEB16



ZX271540

ZX271540 —UN—05FEB16



ZX271539

ZX271539 —UN—05FEB16

¹With Advanced Multi-Function Lever Option Only

Continued on next page

OUC002,0004A9E -19-05FEB16-1/12

Quick Stop Button

CAUTION: ProDrive™ Machines: Pressing quick stop button with separator engaged causes machine to slowly roll to a stop. Multi-function lever must be returned to neutral position to reset propulsion system.

Push-Button Shift Transmission or Mechanical Shift Machines: When pressing quick stop button with separator engaged, operator is responsible for pulling back on multi-function lever to stop machine.

It is always recommended to wear your seat belt to avoid serious injury.

IMPORTANT: Header drive can be disengaged by this button in case of malfunctions.

Quick stop button (A) allows operator to shut OFF the following at the same time in case of an emergency:

- Header Engage
- Unloading Auger Drive
- Unloading Auger Swing



ZX271542

A—Quick Stop Button

- Grain Tank Covers
- Power Folding Auger (If Equipped)
- ProDrive™ (propulsion movement slowly stops) (If Equipped)

Pushing unloading auger drive button on multi-function lever restarts the unloading auger drive. To engage header drive, turn header engage switch OFF and back ON.

OUCC002,0004A9E -19-05FEB16-2/12

ZX271542 —UN—05FEB16

Unloading Auger Swing Switch

Unloading auger swing switch (A) allows operator to swing unloading auger in or out manually or automatically.

System Requirements:

- Road safety mode button in field position.
- Engine is running.
- Operator must be seated.

Press top (I) of unloading auger swing switch to swing out auger or press bottom (II) of unloading auger swing switch to swing auger in.

Manual Control: Press and hold switch part way in until auger reaches desired position. Auger stops when switch is released.

Automatic Control: Press switch all the way in and release it. Auger swings fully outward or inward without holding switch.

NOTE: Automatic auger swing function does not operate when unloading auger drive is engaged. When unloading auger is not used, swing unloading auger back to transport position.



ZX271543

A—Unloading Auger Swing Switch
I— Swing Out Auger
II— Swing In Auger

Continued on next page

OUCC002,0004A9E -19-05FEB16-3/12

ZX271543 —UN—05FEB16

Unloading Auger Drive Button

Unloading auger drive button (A) allows operator to engage or disengage the unloading auger.

System Requirements:

- Road safety mode button in field position.
- Engine running.
- Operator must be seated.

Press unloading auger drive button once to turn ON or press unloading auger drive button again to turn OFF. Indicator light (B) comes ON when system is engaged.

NOTE: Unloading auger drive can also be turned OFF with quick stop button (C) in case of an emergency. To engage unloading auger if header and unloading auger are stopped with quick stop button, press unloading auger button again.

Unloading auger drive engages only when button is held while auger is in auto swing mode or when auger is manually swung out less than 50%.

If operator leaves seat after engagement, unloading auger drive continues to operate for five seconds before disengaging. To engage system, sit on operator's seat and press unloading auger button again.



A—Unloading Auger Drive Button
B—Indicator Light

C—Quick Stop Button

NOTE: If unloading system fails to engage or stops unexpectedly, sit squarely on seat and press unloading auger button once.

OUCC002,0004A9E -19-05FEB16-4/12

Header Raise/Lower Switch

Header raise/lower switch (A) allows operator to raise or lower the header.

NOTE: Header raise/lower switch has two detent positions. Pushing part way in on switch causes header to slowly raise or lower. Pushing all the way in causes header to raise or lower at a faster rate.

System Requirements:

- Road safety mode button in field position.
- Engine running.
- Operator must be seated.

Press and hold top of header raise/lower switch to raise header or press and hold bottom of header raise/lower switch to lower header.



A—Header Raise/Lower Switch

Continued on next page

OUCC002,0004A9E -19-05FEB16-5/12

Lateral Tilt Switch (If Equipped)

NOTE: On machines equipped with a level-land or lateral tilt feeder house operating in conjunction with a 600D Draper platform that is equipped with the Dual Zone Float attachment, the lateral tilt switch provides independent adjustment of the float pressure in the right and left float arm and gauge wheel (if equipped) cylinders.

Lateral tilt switch (A) allows operator to tilt feeder house left or right.

System Requirements:

- Road safety mode button in field position.
- Engine running.

Press right side of lateral tilt switch to tilt feeder house to the right or press left side of lateral tilt switch to tilt feeder house to the left.



ZX271546

A—Lateral Tilt Switch

ZX271546 —UN—05FEB16

OUCC002,0004A9E -19-05FEB16-6/12

Platform Reel Lift and Reel Fore/Aft Switch

NOTE: Switch is also used to control corn head adjustable deck plate spacing (if equipped). Refer to Corn Head Adjustable Deck Plate Spacing Switch section for further information.

Reel lift and reel fore/aft switch (A) allows operator to control the position of the reel.

System Requirements:

- Road safety mode button in field position.
- Engine running.

Push and hold top of switch to raise reel or press and hold bottom of switch to lower reel.

Push and hold left side of switch to move reel forward or press and hold right side of switch to move reel rearward.



ZX271547

A—Reel Lift and Reel Fore/Aft Switch

ZX271547 —UN—05FEB16

OUCC002,0004A9E -19-05FEB16-7/12

Corn Head Adjustable Deck Plate Spacing Switch

NOTE: Switch is also used to control platform reel lift and reel fore/aft. Refer to Platform Reel Lift and Reel Fore/Aft Switch section for further information.

Deck plate spacing switch (A) allows operator to adjust the corn head deck plate spacing (if equipped).

System Requirements:

- Road safety mode button in field position.
- Engine running.

Deck Plate Spacing (if equipped): Press left or right side of switch once to activate display. Press left side of switch again to increase spacing and press right side of switch to decrease spacing.



ZX271547

A—Deck Plate Spacing Switch

ZX271547 —UN—05FEB16

Continued on next page

OUCC002,0004A9E -19-05FEB16-8/12

Header Activation Buttons

When header activation buttons (A), (B) or (C) are pressed the following functions are performed:

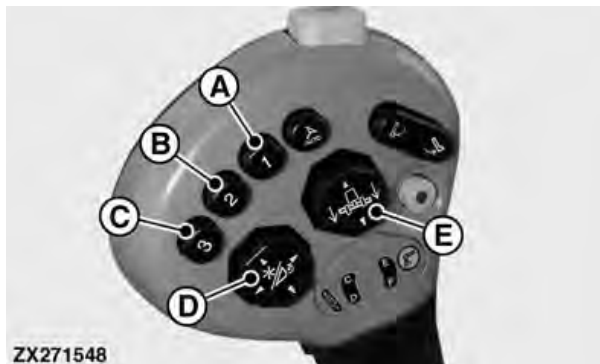
- Header Height Resume
- Header Height Sensing
- Lateral Tilt Control
- Reel Position Resume
- Deck Plate Position Resume
- Active Header Float
- Cutterbar Position (600X Cutting Platforms)

The electronic control system moves header back to preselected position chosen by operator.

NOTE: Header positions obtained by pressing activation buttons can be overcome by pressing reel raise/lower or reel fore/aft switch (D) or header raise/lower and lateral tilt switch (E). Once activation buttons are manually overcome, press desired activation button to reactivate.

System Requirements:

- Properly equipped header is connected.
- Engine is running.
- Road safety mode button in field position.
- Header Height Resume, Header Height Sensing or Active Header Float mode are enabled.



ZX271548

A—Activation Button 1
B—Activation Button 2
C—Activation Button 3

D—Reel Lift and Reel Fore/Aft Switch
E—Header Raise/Lower and Manual Lateral Tilt Switch

- Header is engaged.

Pressing header activation buttons activates system. Header control system takes control and moves header to operator selected position. Refer to **Description of Automatic Header Height Control System** section.

OUCC002,0004A9E -19-05FEB16-9/12

AutoTrac™ Resume Button (If Equipped)

AutoTrac™ resume button (A) activates or deactivates AutoTrac™ system.

AutoTrac™ resume button also activates or deactivates RowSense™ system.

IMPORTANT: Refer to AutoTrac™ Operator's Manual for further information.

System Requirements:

- Properly equipped header is connected.
- Engine is running.
- Road safety mode button in field position.
- Header is engaged.



ZX271549

A—AutoTrac™ Resume Button

Continued on next page

OUCC002,0004A9E -19-05FEB16-10/12

Machine Sync Buttons (If Equipped)

Machine Sync buttons allow the operator to use the nudge feature in Machine Sync without using the icons on the GreenStar™ 3 2630 display. Refer to **Machine Sync Operator's Manual** for further information.

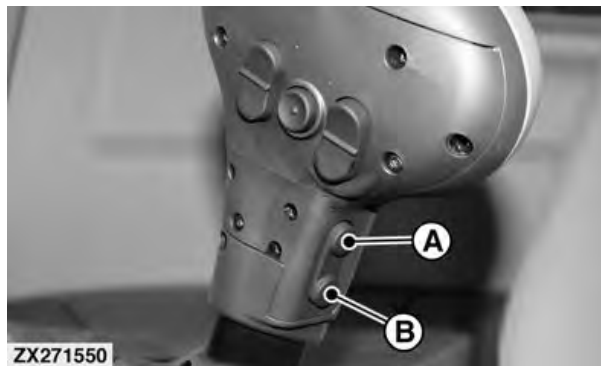
Press increase button (A) to move the tractor forward or press decrease button (B) to move the tractor rearward.

System Requirements:

- GreenStar™ 3 2630 Display is connected.
- Engine is running.
- Road safety mode button in field position.

A—Increase Button

B—Decrease Button



ZX271550 —UN—08FEB16

OUC002,0004A9E -19-05FEB16-11/12

Draper Cutterbar Tilt or Cutterbar Fore/Aft Switch (Advanced Multi-Function Lever Only)

NOTE: Depending on machine options and header types, switches are reprogrammable to control:

- Draper Cutterbar Tilt (600D Drapers)
- Cutterbar Fore/Aft (600X Cutting Platforms)

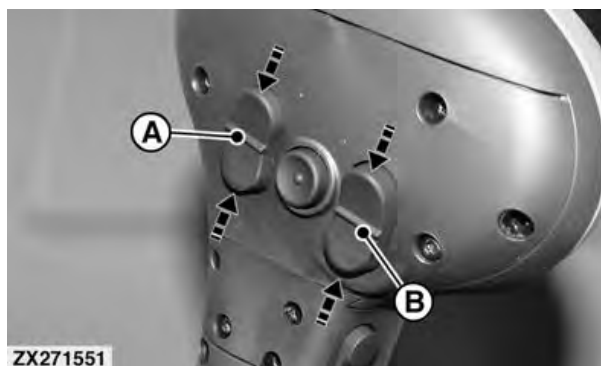
Refer to Multi-function Lever Setup section for further information on reprogramming.

Draper cutterbar tilt switch or cutterbar fore/aft switch (A or B) allows operator to increase or decrease cutterbar angle on 600D Drapers, or to control the position of the cutterbar on 600X Cutting Platforms.

System Requirements:

- Properly equipped header is connected.
- Engine is running.
- Road safety mode button in field position.
- Multi-function lever switches are functionally assigned.

Push and hold top of switch to increase cutterbar angle or to extend cutterbar position.



ZX271551 —UN—08FEB16

A—Draper Cutterbar Tilt Switch, Cutterbar Fore/Aft Switch

B—Draper Cutterbar Tilt Switch, Cutterbar Fore/Aft Switch

Push and hold bottom of switch to decrease cutterbar angle or to retract cutterbar position.

OUC002,0004A9E -19-05FEB16-12/12

CommandCenter™ Displays



ZX271552

ZX271552 —UN—08FEB16

As base equipment, the cab is equipped with:

- One CommandCenter™ display (A). This display is used to monitor the machine during field or road operation and setup machine functions or equipment.

NOTE: CommandCenter™ display (A) can be either touchscreen or non-touchscreen.

- One primary display unit (PDU) (B). This display provides information mainly on engine controls, header controls, and machine drive components/functions. For a complete description of this display, see **Primary Display Unit (PDU)** section.

Optionally, a GreenStar™ 3 2630 Display (C) can be installed on armrest or on rail when using specific Ag Management Solutions.

A—CommandCenter™ Display
B—Primary Display Unit (PDU)

C—GreenStar™ 3 2630 Display
on Rail
D—GreenStar™ 3 2630 Display
on Armrest



ZX271553

ZX271553 —UN—08FEB16

Continued on next page

OUC002,0004AA7 -19-06FEB16-1/2

To navigate through the icons and reach the relevant function page on CommandCenter™ display screen, use one of the following methods (also refer to **CommandARM™ Controls** section):

There are four methods of navigating around display screens:

1. **Selection Dial and Confirm Button Method:**

Use selection dial (A) to highlight desired icons A—J (B).

Once desired icon is highlighted, use the following dial and switches:

- **Selection Dial (A):** Rotate dial to scroll through available items on selected page or increase/decrease values in a selected item.
- **Confirm Button (C):** Once available item is selected, use selection dial and press button to select item, toggle between available selections within item or enter/save values.
- **Cancel Button (D):** Press button to cancel current selection.

2. **Shortcut Buttons Method:**

Shortcut buttons A—J (E) allow a one-touch selection of desired input field or corresponding item on display.

- **Shortcut Buttons A—J (E):** Press to select corresponding icon on CommandCenter™ display or GreenStar™ 3 2630 Display (if equipped).

3. **Touchscreen Method:**

IMPORTANT: Under no circumstance should touchscreen be contacted with an object harder or sharper than a fingertip (pen, pencil point, or any metal objects). Heavy pressure damages underlying components and voids warranty. Light amounts of pressure, if exerted continuously, can degrade touchscreen reliability.

- Select and touch desired icon A—J (B) on CommandCenter™ display screen.

4. **Navigational Buttons:**



A—Selection Dial
B—Icons A—J
C—Confirm Button
D—Cancel Button

E—Shortcut Buttons A—J
F—Menu Button
G—Home Button

- **Menu Button (F):** Press button to change active function that display is running.
- **Home Button (G):** Displays user-defined home page. If multiple pages are defined, pressing home button multiple times toggles through each defined home page (see **CommandCenter™ Main Menu** section).

OUC002,0004AA7 -19-06FEB16-2/2

Primary Display Unit (PDU)

(1)—Left Turn Signal Indicator: shows operator that left turn signal is activated.

(2)—Stop Engine Warning Indicator (Red): illuminates and requires machine be stopped at once and problem corrected. Diagnostic trouble code is shown on armrest display until problem is resolved.

(3)—Service Warning Indicator (Yellow): illuminates and flashes when a problem exists with machine. Requires machine is stopped at the earliest convenience. Diagnostic trouble code is shown on armrest display.

(4)—Information Warning Indicator (Blue): illuminates and flashes when diagnostic trouble code is active. Alerts operator to be aware of a condition. When warning is acknowledged, screen message disappears and warning indicator turns OFF.

(5)—Right Turn Signal Indicator: shows operator that right turn signal is activated.

(6)—Trailer Lights Indicator: illuminates when trailer harness is hooked up and turn signal is applied.

(7)—High Beam Indicator: shows operator that high beam lights are currently selected.

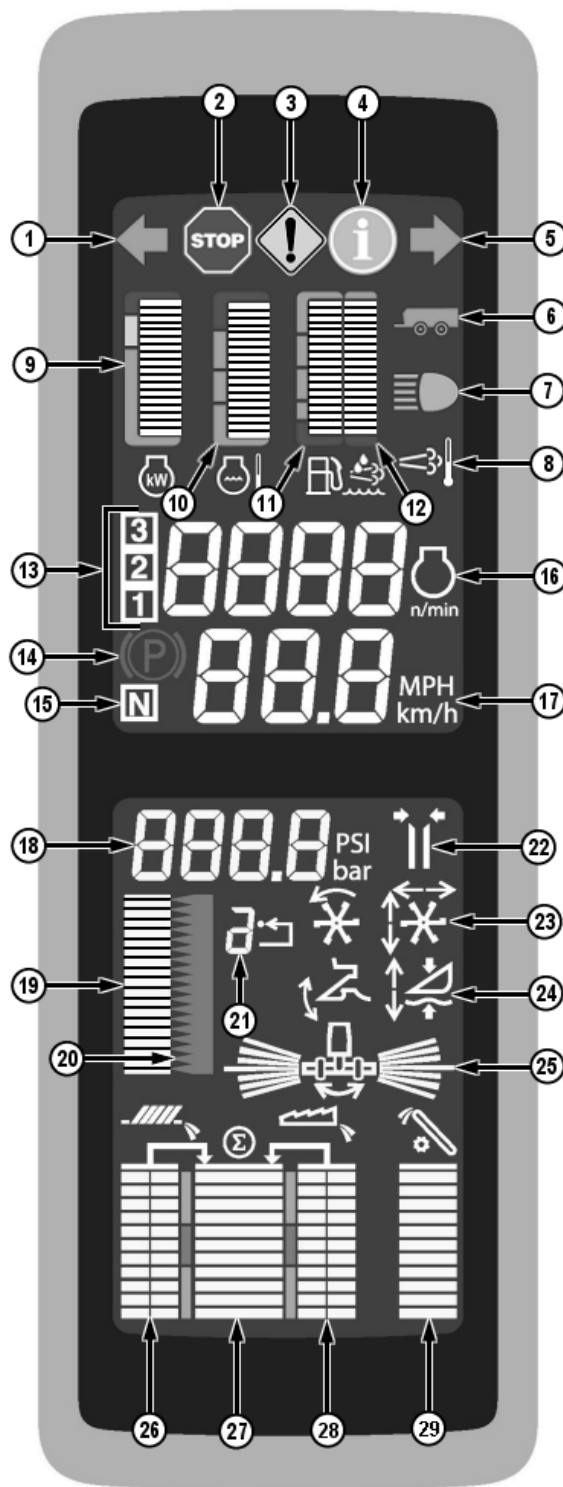
IMPORTANT: Final Tier 4/Stage IV: Damage to exhaust cleaning components may occur if engine is turned OFF while performing exhaust filter cleaning. Alarm sounds and a warning message appears on display. Start machine and follow messages on display to allow components to cool.

(8)—Exhaust Filter Cleaning Indicator (Final Tier 4/Stage IV): illuminates when exhaust filter system is actively performing exhaust filter cleaning.

(9)—Engine Power Meter Indicator: shows operator percentage of power that engine is using at any given time.

IMPORTANT: If indicator moves into red region, engine power is maximized and machine could potentially stall. Reduce load on machine until indicator moves back into green and yellow regions.

- Green Region (35 to 100%)
- Yellow Region (101 to 110%)
- Red Region (111 to 114%)



Continued on next page

OUC002,0004A9F -19-05FEB16-1/3

H105895—UN—01OCT12

(10)—Engine Temperature Indicator: seven to nine bars are displayed for normal operating temperature.

If alarm sounds and engine temperature message appears, stop engine and check problem immediately.

(11)—Fuel Gauge Indicator: shows how much fuel is left in the tank. When level reaches 10% (approximately one hour of operation) of remaining fuel, fuel indicator flashes, alarm sounds and low fuel message appears.

Indicator shows zero bars when fuel tank is empty.

(12)—Diesel Exhaust Fluid (DEF) Level Indicator (Final Tier 4/Stage IV): shows how much fluid is left in the tank.

- When level reaches 10%, level indicator flashes, alarm sounds and low fluid message appears.
- When level reaches 0%, level indicator illuminates and stops flashing, alarm sounds and empty fluid message and engine power limited message appears.
- When loss of prime is reached, level indicator illuminates and stops flashing, alarm sounds and empty fluid message, engine power limited message and speed limited message appears. Stop engine warning indicator (Red) illuminates, engine is derated and machine functions are restricted.

(13)—Transmission Gear or Range Indicator:

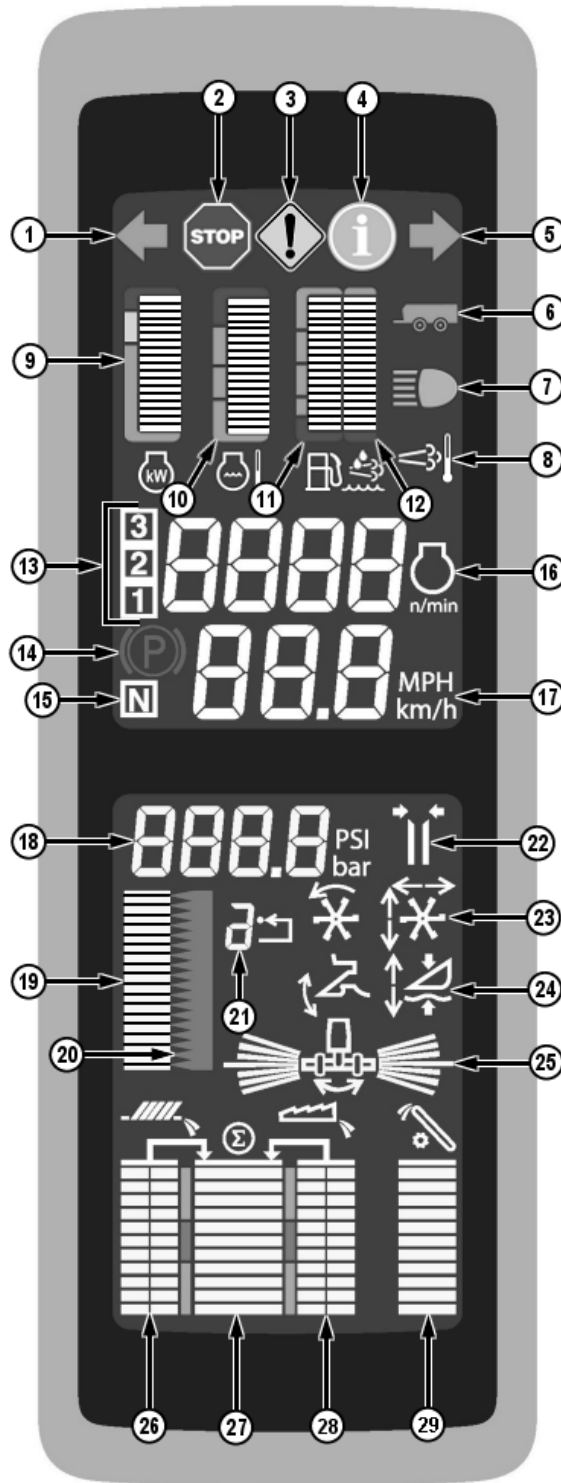
- **3-Speed Push-Button Shift Machines:** shows which gear is selected. 1, 2, 3 indicators illuminate depending on gear selection.
- **ProDrive™ Machines:** shows which range is selected. 1 and 2 indicators illuminate depending on range selection.

(14)—Park Brake Indicator: illuminates when park brake is selected.

(15)—Neutral Indicator: shows that machine is in neutral position.

(16)—Engine Speed Indicator: shows engine rpm speed.

(17)—Ground Speed Indicator: shows machine ground speed (km/h or mph).



Continued on next page

OUCC002.0004A9F -19-05FEB16-2/3

H105895—UN—01OCT12

(18)—Header Height Numeric Display: shows current header height.

(19)—Header Height Position Display: shows current header height position.

(20)—Header Height Setpoint Display: shows operator desired setpoint.

(21)—Header Activation Number: shows currently selected activation button.

(22)—Deck Plate Position Resume: shows that system is currently active.

(23)—Dial-A-Speed™/Reel Resume:

- **Dial-A-Speed™ (Left Icon):** shows that system is currently active.
- **Reel Resume (Right Icon):** shows that system is currently active.

(24)—Header Height Resume/Header Height Sensing/Active Header Float:

- **Header Height Resume (Left Icon):** shows that system is currently active.
- **Header Height Sensing (Right Icon):** shows that system is currently active.
- **Active Header Float (Right Icon):** shows that system is currently active.

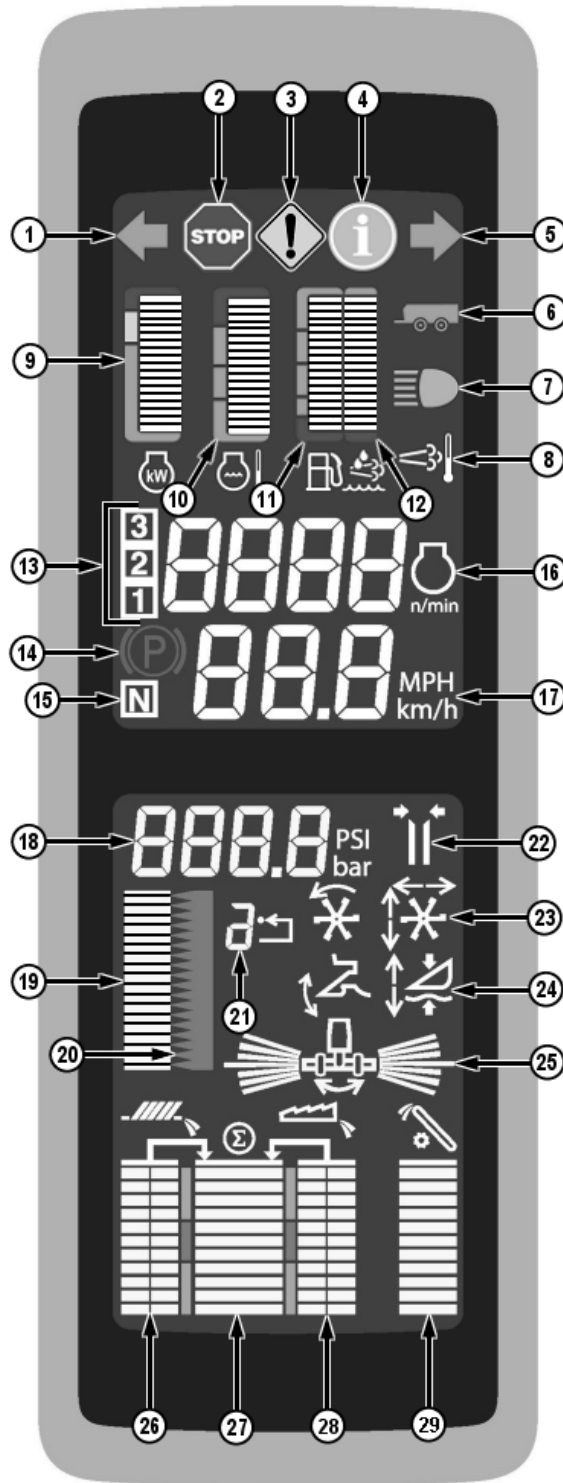
(25)—Lateral Tilt Display: shows position of feeder house frame.

(26)—Shoe Loss Indicator: shows grain loss from shoe.

(27)—Total Loss Indicator: shows averaged grain loss from shoe and separator area.

(28)—Separator Loss Indicator: shows grain loss from separator area.

(29)—Tailings Volume Indicator: shows volume of tailings return.



H105895 —UN—01OCT12

OUC002,0004A9F -19-05FEB16-3/3

CommandCenter™ Main Menu



NOTE: Displayed screen shown is reference only. Screens will appear differently due to machine options.

After turning on the ignition, the Combine Main Menu page appears after a few seconds.

NOTE: Crop and language settings may be changed in the relevant sub-menus.

When changing settings, these changes are saved when the ignition is turned off. When the system is turned on again, these changes will appear on the display.

The main menu is divided into three display regions:

- **Left Region (A):** allows operator to monitor and toggle between the following:
 - Detail Machine Settings
 - Guidance Information
 - Performance Monitor Settings
- **Center Region (B):** allows operator to view and change machine settings in a wide variety of applications.
- **Right Region (C):** displays icon options available to operator from current screen.
 - Selecting desired icon in right region displays a new screen, function, or allows changing of settings.

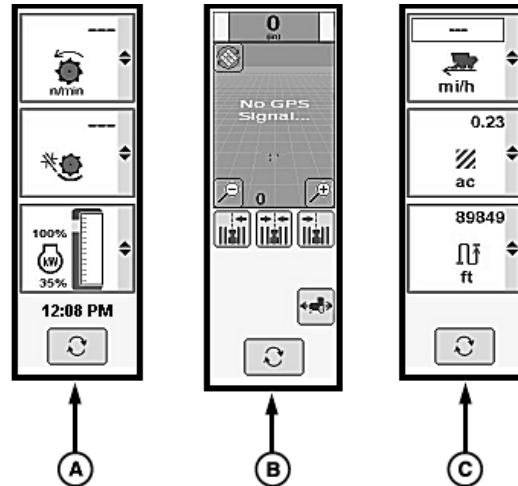
Continued on next page

OUC002,0004AA6 -19-06FEB16-1/19

Display Left Region Layouts

NOTE: Displayed screen shown is reference only. Screens will appear differently due to machine options.

- **Detail Machine Settings (A):** allows operator to choose and monitor three left region boxes at one time. Each box displays an ongoing function or specific machine status.
- **Guidance Information (B):** allows operator to view and change guidance settings.
- **Performance Monitor Settings (C):** allows operator the ability to choose and monitor three left region boxes at one time. Each box displays an ongoing function or specific machine status.



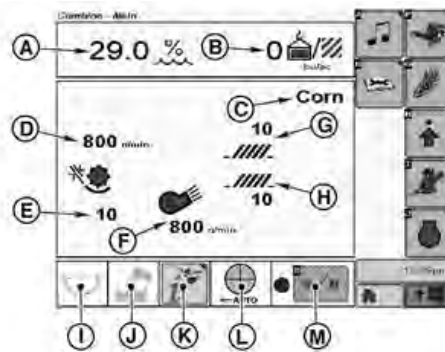
H105837—UN—19SEP12

OUC002,0004AA6 -19-06FEB16-2/19

Display Center Region Layout

NOTE: Viewable machine readings only.

- Moisture (If Equipped) (A)
- Yield (If Equipped) (B)
- Crop (C)
- Machine Settings
 - Threshing Speed (D)
 - Threshing Clearance (E)
 - Fan Speed (F)
 - Chaffer Clearance (G)
 - Sieve Clearance (H)
- Side Belt Speed Reduction and Grain Tank 3/4 or Full Status (I)
- Unloading Auger Out/Engage Status (J)
- Interactive Combine Adjustment Indicator (K)
- Harvest Smart™ Feed Rate Status (OFF, Smart, or Capacity) (If Equipped) (L)



- Manual Recording (ON/OFF) (M)

ZX234314—UN—19APR15

Continued on next page

OUC002,0004AA6 -19-06FEB16-3/19

Display Right Region Layouts

Infotainment (A)
Diagnostic and Calibrations (B)
Combine Main (F)
Harvesting Information (G) ^a
Combine Setup (H)
Header Setup (I) ^b
Engine Information (J)

^aIcon switches between corn and wheat based on type of header connected to machine.

^bIcon changes based on type of header connected to machine.

Touch or press confirm button when desired icon is highlighted to advance to next display screen. See following information for further screen navigation.



OUCC002,0004AA6 -19-06FEB16-4/19

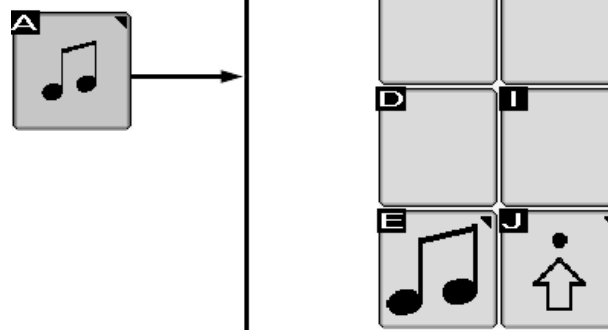
HS5608 —UN—30APR10

Infotainment

NOTE: Icons within Infotainment will vary depending on what audio source was selected.

Infotainment (A)

Touch or press confirm button when desired icon is highlighted to advance to next display screen. See following information for further screen navigation.



Continued on next page

OUCC002,0004AA6 -19-06FEB16-5/19

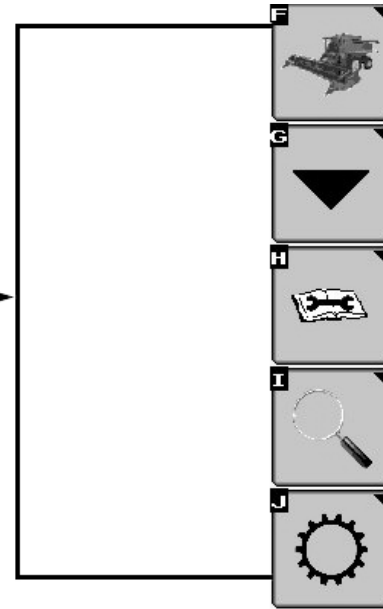
H105326 —UN—01MAY12

Dagnostic and Calibrations

Diagnostic and Calibrations (B)		
Icon (F)	Icon (G)	Icon (H)
Combine main page	Calibrations	Diagnostic Readings
Icon (I)	Icon (J) ^a	
Special Tests	Tow mode setup	

^aProDrive™ and push-button shift transmission machines only.

Touch or press confirm button when desired icon is highlighted to advance to next display screen. See following information for further screen navigation.



H95605 —UN—05MAR10

OUC002,0004AA6 -19-06FEB16-6/19

Combine main page

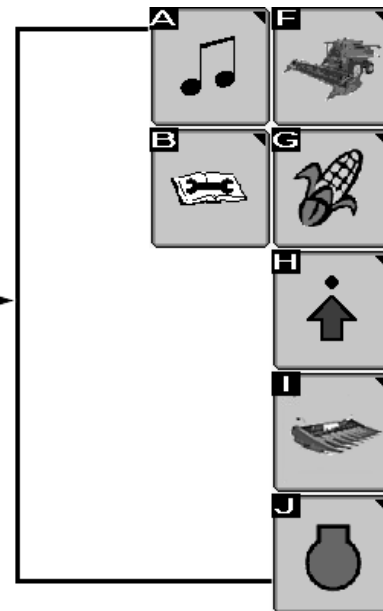
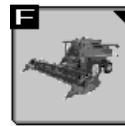
NOTE: Combine main icon appears on all display screens. Allows operator to navigate back to combine main screen.

Combine Main (F)	
Icon (A)	Infotainment
Icon (B)	Diagnostic and Calibrations
Icon (F)	Combine main page
Icon (G)	Harvesting Information ^a
Icon (H)	Combine setup
Icon (I)	Header Setup ^b
Icon (J)	Engine Information

^aIcon switches between corn and wheat based on type of header connected to machine.

^bIcon changes based on type of header connected to machine.

Touch or press confirm button when desired icon is highlighted to advance to next display screen. See following information for further screen navigation.



H95612 —UN—30APR10

Continued on next page

OUC002,0004AA6 -19-06FEB16-7/19

Harvesting Information

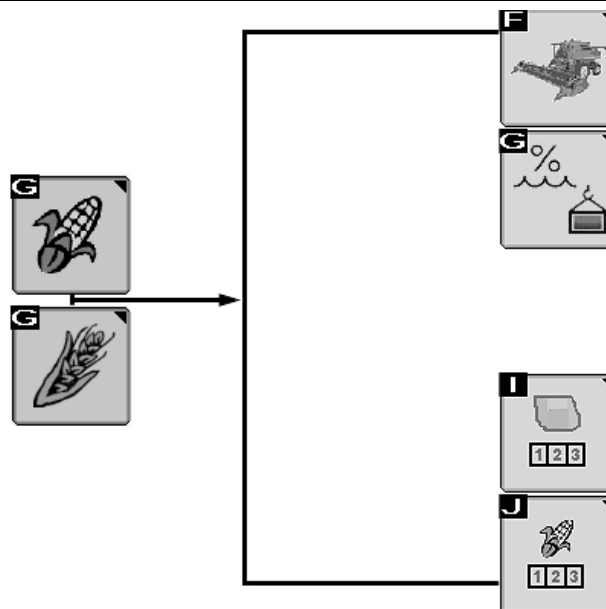
Harvesting Information (G) ^a	
Icon (F)	Icon (G)
Combine main page	Yield Information
	Moisture Information
	Change Cut Width/Rows ^b
Icon (I) ^c	Icon (J) ^c
Field Totals	Crop Totals

^aIcon switches between corn and wheat based on type of header connected to machine.

^bIf GreenStar™ display is installed, cut width/rows are adjusted through GreenStar™ display and only shown on armrest display.

^cIf GreenStar™ display is installed, Field Totals page and Crop Totals Page will not be available. Totals will be displayed on GreenStar™ display.

Touch or press confirm button when desired icon is highlighted to advance to next display screen. See following information for further screen navigation.



H85601 —UN—04OCT10

OUC002,0004AA6 -19-06FEB16-8/19

Combine setup

Combine Setup (H)		
Icon (A)	Icon (B)	
Grain Tank Level Setup	Folding Functions Setup ^a	
Icon (D)	Icon (F)	Icon (G)
Moisture Alarm	Combine main page	Crop Setup ^b
Moisture Correction (Offset)		Grain Loss Calibration
Yield Units		Advanced Grain Loss Setup
Icon (H)	Icon (I)	Icon (J)
Automatic Combine Adjust Setup	Interactive Combine Adjust ^c	Harvest Smart™ Feed Rate Setup ^d

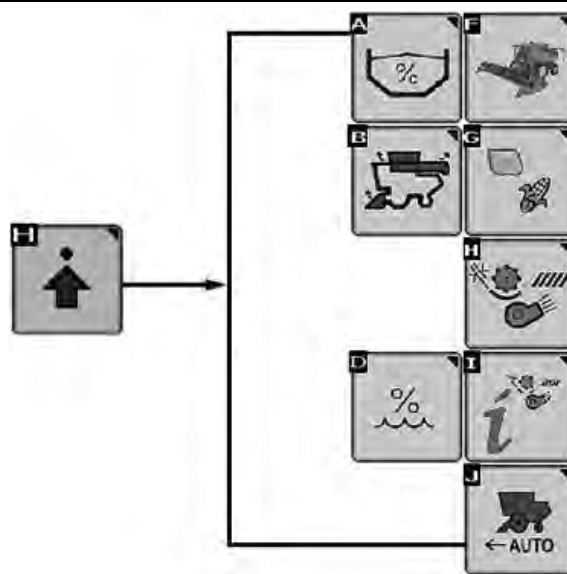
^aIf equipped with folding grain tank covers.

^bIf GreenStar™ display is installed, crop will be set up in GreenStar™ display.

^cIf equipped with Interactive Combine Adjust.

^dIf equipped with Harvest Smart™ Feed Rate.

Touch or press confirm button when desired icon is highlighted to advance to next display screen. See following information for further screen navigation.



ZX271555 —UN—08FEB16

Continued on next page

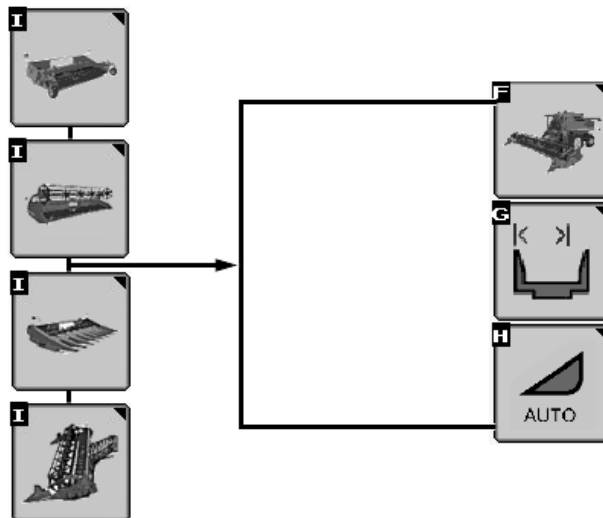
OUC002,0004AA6 -19-06FEB16-9/19

Header Setup

Header Setup (I) ^a	
Icon (F)	Icon (G) ^a
Combine main page	Header Width Setup
	Header Hours
	Record Stop Height
Icon (H)	
Automatic Header Height Modes	

^aIcon changes based on type of header connected to machine.

Touch or press confirm button when desired icon is highlighted to advance to next display screen. See following information for further screen navigation.



H95603 —UN—30APR10

OUC002,0004AA6 -19-06FEB16-10/19

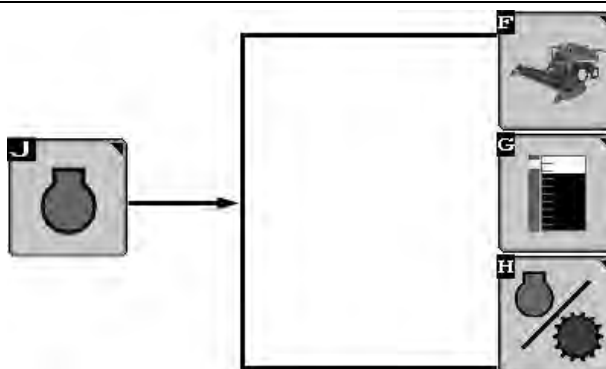
Engine Information

Engine Information (J)	
Icon (F)	Icon (G)
Combine main page	Engine and Separator Hours
	Power Meter
	Exhaust Filter Cleaning ^a
Icon (H)	
Engine Speed Management ^b	

^aFinal Tier 4/Stage IV engines only

^bMachine with ProDrive™ transmission only

Touch or press confirm button when desired icon is highlighted to advance to next display screen. See following information for further screen navigation.



H106326 —UN—12DEC12

Continued on next page

OUC002,0004AA6 -19-06FEB16-11/19

Display Icon Identification

Home (1): displays current machine settings previously set by operator.

Harvesting Information (2): displays current harvest monitor information, performance/productivity, totals, and allows operator to make desired settings.

Setup (3): displays current machine settings, grain loss sensitivity (seed size), current header width, moisture setup, and Harvest Smart™ setup (if equipped).

Diagnostics and Calibration (4): displays machine calibrations, diagnostic readings templates, and special tests (templates).

Area Harvested (5): displays amount of area harvested.

Distance Harvested (6): displays total distance traveled for current active load.

Generic Cleaning Shoe Element (7): displays a generic icon for both chaffer/sieve elements settings on home page.

Chaffer (8): displays current chaffer position.

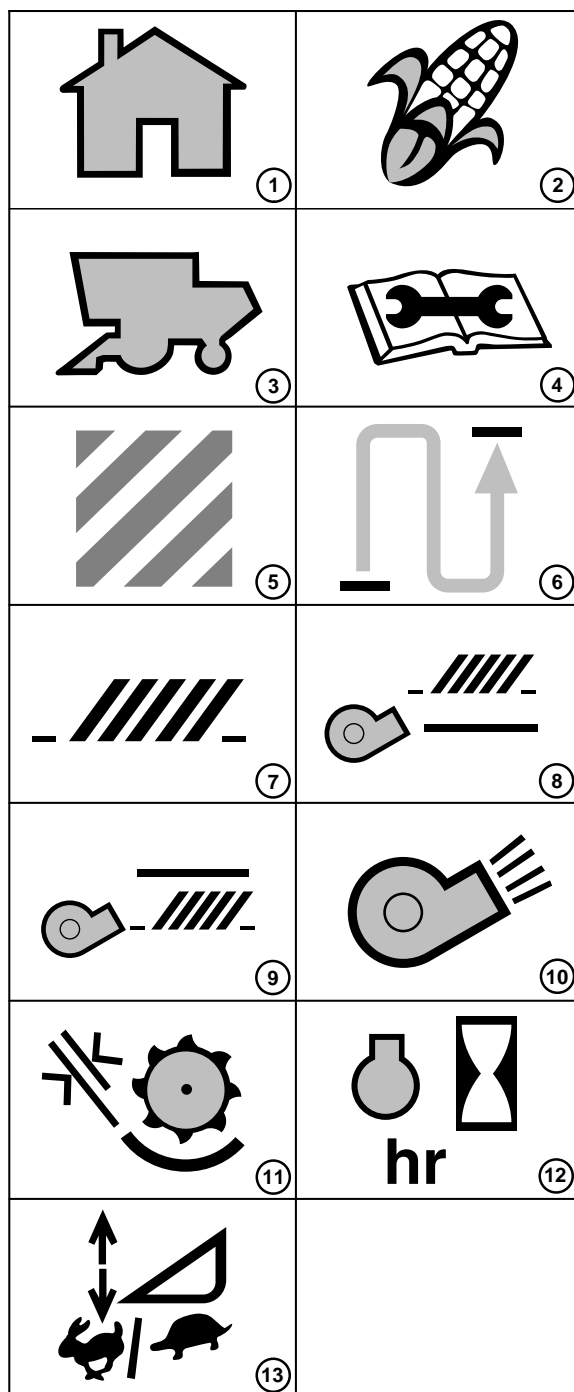
Sieve (9): displays current sieve position.

Cleaning Fan (10): displays current fan speed.

Threshing Speed/Clearance (11): displays current speed and clearance.

Engine Hours (12): displays accumulated engine operating hours.

Header Height Rate and Sensitivity (13): displays current rate and sensitivity settings.



Continued on next page

OUC002,0004AA6 -19-06FEB16-12/19

ZX234263 —UN—16APR15

Recording ON/OFF (15): displays if recording is ON/OFF.

Vane Angle (if Equipped) (16): displays current vane angle position.

Enter/Accept (17): allows operator to enter/accept desired information or settings.

Calibrate (18): allows operator to calibrate certain features.

Next Step (19): allows operator to view next page of information.

Yield (20): displays average or instantaneous crop yield.

Moisture (21): displays average or instantaneous moisture.

Threshing Speed (22): displays current threshing speed.

Backshaft Speed (23): displays current feeder house speed.

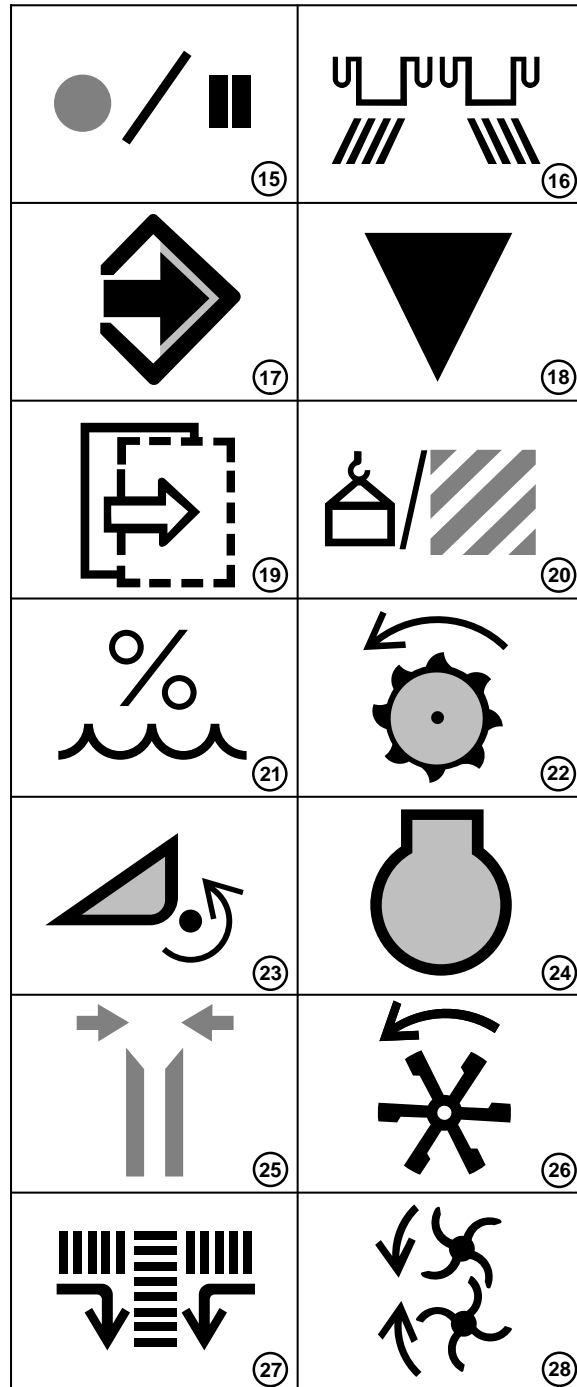
Engine Speed (24): displays current engine speed.

Deck Plate Spacing (25): displays current deck spacing position.

Reel Speed (26): displays current reel speed.

Draper Speed (27): displays current draper speed (if equipped).

Spreader Speed (28): displays current spreader speed (if equipped).



Continued on next page

OUC002,0004AA6 -19-06FEB16-13/19

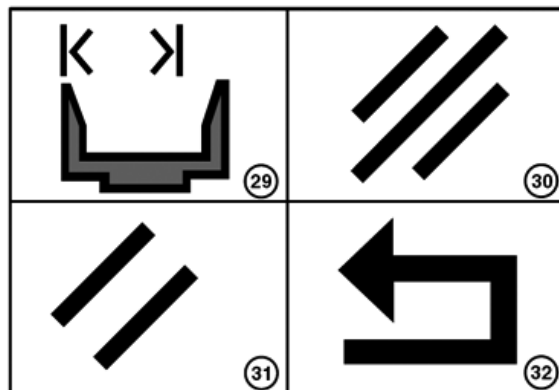
H90888 —UN—28FEB08

Cut Width (29): displays current cut width position.

Cancel (30): allows operator to cancel desired information or settings.

Clear (31): allows operator to clear desired information or settings.

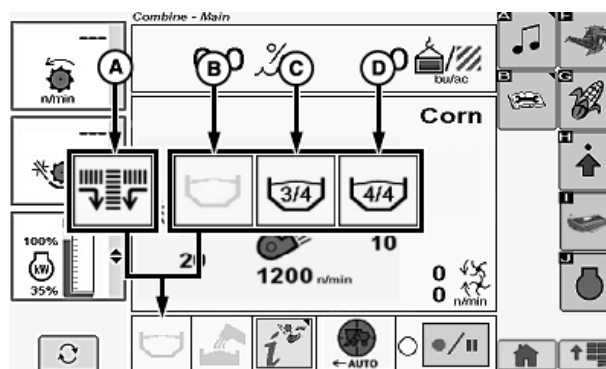
Return/Back (32): allows operator view previous page.



OUC002,0004AA6 -19-06FEB16-14/19

ZX1039152 —UN—03AUG11

System Monitoring Icons



OUC002,0004AA6 -19-06FEB16-15/19

H110015 —UN—24MAR14

Side Belt Speed Reduction Icon:

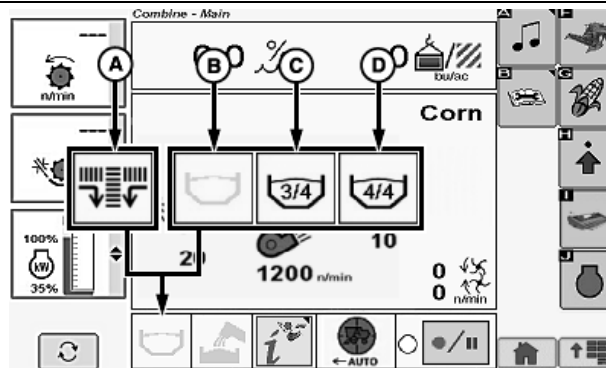
- (A) Icon - indicates that draper belt speed is reduced to a factory setpoint speed

NOTE: If 3/4 full grain tank level is reached, icon toggles between side belt speed reduction icon and 3/4 full icon.

Grain Tank Fill Sensor Icons:

- (B) Icon - indicates that grain tank level has not reached the 3/4 full or 4/4 full sensor
- (C) Icon - indicates that grain tank level has reached the 3/4 full sensor

NOTE: Every 30 seconds 4/4 full icon flashes for 8 seconds indicating grain tank is full and **MUST** be unloaded.



- (D) Icon - indicates that grain tank level has reached the 4/4 full sensor

Continued on next page

OUC002,0004AA6 -19-06FEB16-16/19

H110015 —UN—24MAR14

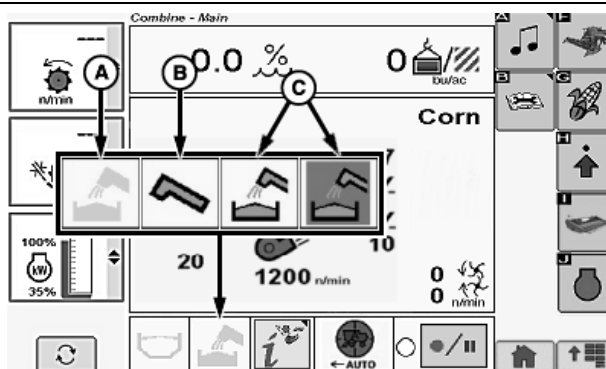
Unloading Auger

Unloading Auger Icons:

- (A) Icon - indicates that unloading auger is not swung out and unload system is not engaged
- (B) Icon - indicates that unloading auger is swung out

NOTE: Every 3 minutes icon changes to a blue background and flashes for 8 seconds indicating unloading auger is engaged.

- (C) Icons - indicate that unloading auger is swung out and unload system is engaged



OUC002,0004AA6 -19-06FEB16-17/19

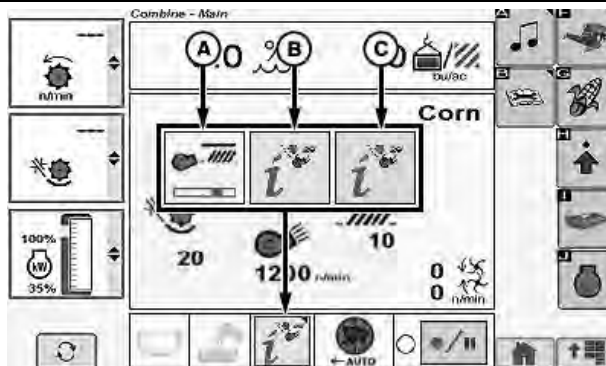
H109855—UN—14FEB14

Interactive Combine Adjustment (If Equipped)

NOTE: It takes 30 seconds for Interactive Combine Adjustment icon to appear on display.

Interactive Combine Adjustment Indicators:

- (A) Indicator (System Busy) - indicates that system adjustments are being performed. Green segment underneath icon moves back and forth indicating that machine is applying settings and waiting for system to stabilize.
- (B) Indicator (Yellow Indicator) - indicates that system is ready for verification of improvement settings. Icon with a yellow background flashes or turns solid (flashes for 30 seconds and turns solid) indicating that system made adjustments and is waiting for operator feedback (rating of performance parameters).
- (C) Indicator (Red Indicator) - indicates that system has detected a condition shift. Icon with a red background



indicates to operator that system has detected a change in machine performance. System believes that operator should evaluate performance of machine and consider optimizing the machine settings.

OUC002,0004AA6 -19-06FEB16-18/19

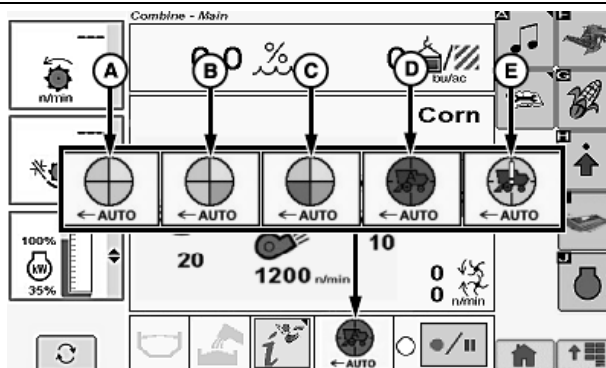
H109856—UN—14FEB14

Harvest Smart™ Feed Rate (If Equipped)

Harvest Smart™ Feed Rate Icons:

- (A) Icon - system is installed on machine, but currently OFF
- (B) Icon - system has been placed in a valid operating mode (Smart or Capacity)
- (C) Icon - system is ready to be activated by the operator
- (D) Icon - system is active and working normally
- (E) Icon - system is limited by ground speed setting of multi-function lever

Refer to **Harvest Smart™ Feed Rate—Status Identifications** in the Field Operation section for further information.



OUC002,0004AA6 -19-06FEB16-19/19

H106523—UN—14JAN13

Active Header Control Display

Dial-A-Speed™ (A): allows operator automatic control of operating speed for reel or belt pickup headers. Operating speed is a ratio of machine ground speed to reel or belt speed.

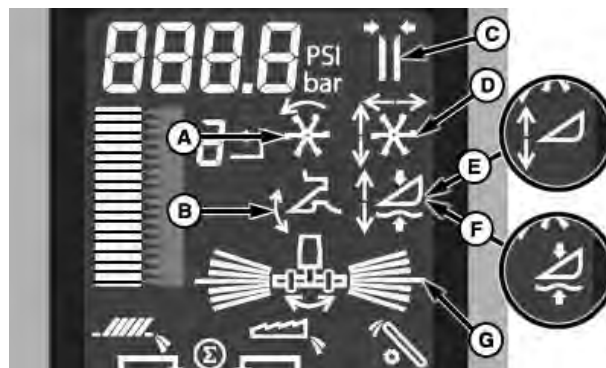
Header Height Resume (B): allows operator to select position of header relative to machine chassis and return to that position automatically.

Deck Plate Position Resume (C): allows operator to select position of deck plates (if equipped) and return to that position automatically.

Reel Position Resume (D): allows operator to select reel height and reel fore/aft position and return to that position automatically.

Header Height Sensing (E): allows operator to select position of header relative to ground and return to that position automatically.

Header Height Sensing (HydraFlex™) (E): allows operator to adjust cutterbar ground pressure, or cutterbar weight, and return to that setting automatically. HydraFlex™ works with Header Height Sensing to maintain a header position relative to the ground, follow ground contour, and return to that position automatically.



H98580 —UN—01DEC10

Active Header Float (F): allows a rigid header to be operated in contact with ground and maintain a set contact pressure. Operator selects how firmly header contacts ground and returns to that pressure automatically.

Lateral Tilt (G): allows operator to maintain header position relative to ground. Sensors at each end of header measure the distance to the ground. Header tilts to equalize distances to ground at each end of header. If equipped with left and right Header Height Sensors and Lateral Tilt is active, systems work together to maintain the closest position of the cutterbar relative to the ground.

OUECC002,0004ABC -19-08FEB16-1/1

Description of Automatic Header Height Control System

Automatic Header Height Control system compensates for uneven ground and controls horizontal and vertical positions of header. The system continuously compares the preset position and the actual position, thus keeping the header in the desired working position.

System Requirements:

- Road safety mode button in field position.
- Engine is running.
- Header is engaged.
- Desired header control mode activated.

Lateral Tilt Adjustment (A)

- Parallel adjustments of the header in relation to the ground are carried out by sensors on each end of header. This ensures that the distance between the header and the ground is equal on both the left-hand and right-hand sides.

Platform Height Adjustment (B and C)

- Header Height Resume — platform can be set to any position within the feeder house range.
- Header Height Sensing — height of the platform is maintained with height sensors attached to the platform.



H98581 —UN—14OCT10

A—Lateral Tilt
B—Header Height Sensing/Active Header Float

C—Header Height Resume

This ensures that header height is always constant over rough terrain.

- Active Header Float — machine maintains a constant header pressure with ground contact.

OUECC002,0004ABD -19-08FEB16-1/1

Activation Button Mode Combinations

A few common modes are shown below, but many combinations exist.

NOTE: Press and hold activation buttons 1, 2, or 3 on multi-function lever for two seconds to enter desired modes into memory.

Control Modes Enabled	Activation Button 1	Activation Button 2	Activation Button 3
Height Resume	Height Resume		
Height Resume, Height Sensing	Height Resume	Height Sensing	
Height Resume, HydraFlex™ Height Sensing	Height Resume	HydraFlex™ Height Sensing	
Height Resume, Height Sensing, HydraFlex™ Height Sensing ^a	Height Resume	Height Sensing	HydraFlex™ Height Sensing
Height Resume, Height Sensing, HydraFlex™ Height Sensing ^b	Height Resume	Height Sensing	HydraFlex™ Height Sensing
Height Resume, Height Sensing, Active Header Float	Height Resume	Height Sensing	Active Header Float
Height Resume, HydraFlex™ Height Sensing, Active Header Float	Height Resume	HydraFlex™ Height Sensing	Active Header Float
Height Resume, Active Header Float	Height Resume		Active Header Float
Height Sensing	Height Sensing		
HydraFlex™ Height Sensing	HydraFlex™ Height Sensing		
Height Sensing, HydraFlex™ Height Sensing ^a	Height Sensing		HydraFlex™ Height Sensing
Height Sensing, HydraFlex™ Height Sensing ^b	Height Sensing		HydraFlex™ Height Sensing
Height Sensing, HydraFlex™ Height Sensing, Active Header Float ^a	Height Sensing, HydraFlex™ Height Sensing		Active Header Float
Height Sensing, Active Header Float	Height Sensing		Active Header Float
HydraFlex™ Height Sensing, Active Header Float	HydraFlex™ Height Sensing		Active Header Float
Active Header Float	Active Header Float		
Reel Position Resume	Reel Position Resume		
Deck Plate Position Resume	Deck Plate Position Resume		
Cutterbar Fore/Aft Position ^c	Cutterbar Fore/Aft Position		

^aSee your John Deere dealer to enable Height Sensing and HydraFlex Height Sensing, requires 600F with auxiliary height sensors or 600D with gauge wheels.

^bDefault mode with 600D platform if gauge wheels are unpinned during calibration, requires 600D with gauge wheels.

^c600X Cutting Platforms.

OUC002,0004ABE -19-08FEB16-1/1

Header Height Sensing

H96245 —UN—03MAY10

NOTE: Header setup icon changes based on type of header connected to machine.

Allows the operator to select the position of the header relative to the ground and return to that position automatically.

System must be calibrated with each header that is used (see Calibration Procedures section).

Activation buttons 1, 2 or 3 located on the multi-function lever are used to select one of the three different programmable header heights.

NOTE: If multiple modes are enabled, refer to Activation Button Mode Combinations in this section for further information.

Enable/Disable System:

Touch or press confirm button when header setup icon is highlighted.

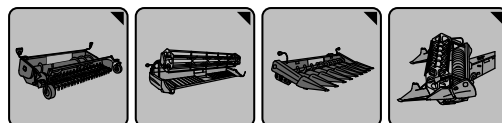
Touch or press confirm button when automatic header height modes icon (A) is highlighted.

Touch or press confirm button when Header Height Sensing icon (B) is highlighted.

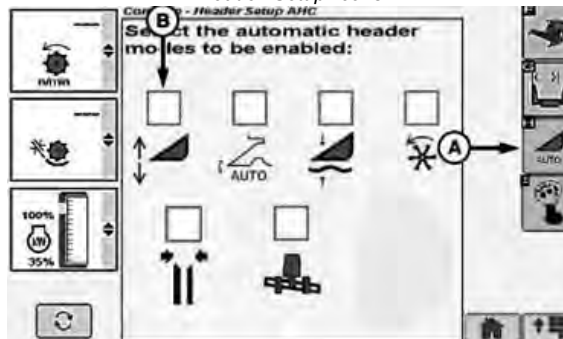
NOTE: Checkmark appears indicating system is enabled or disappears indicating system is disabled.

A—Automatic Header Height Modes Icon

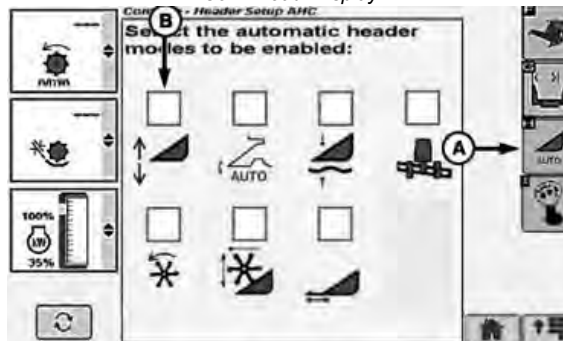
B—Header Height Sensing Icon



Header Setup Icons



Corn Head Display



Draper/Platform/Belt Pickup Display

Continued on next page

OUC002,0004AAC -19-08FEB16-1/2

ZX271556 —UN—08FEB16

ZX271557 —UN—08FEB16

Operation:

System is active when:

- Properly equipped header is connected to machine.
- Engine is running.
- Road safety mode button is in field position.
- Header Height Sensing system enabled.
- Header is engaged.

Activate Header Height Sensing by pressing activation buttons 1, 2 or 3 on multi-function lever.

Activation button number (B) on display indicates which activation button was selected.

Header Height Sensing icon (A) appears on display indicating system is active.

To change height setpoint (C) of activation buttons, press desired activation button and adjust height using active header height control dial (D).

Turn active header height control dial towards plus (+) symbol to raise header and setpoint or towards minus (-) symbol to lower header and setpoint.

Bar graph (E) and numeric display (F) show the header's relative position based on the Header Height sensor linked to the header.

Manually adjusting header height with header lower switch (G) temporarily overrides system until released. Once switch is released, system returns to automatic mode.

Using header raise switch (G) temporarily deactivates system until header lower switch is pressed. Once switch is pressed, system reactivates.

Press activation buttons 1, 2 or 3 to reactivate system. Header automatically moves to preselected height.

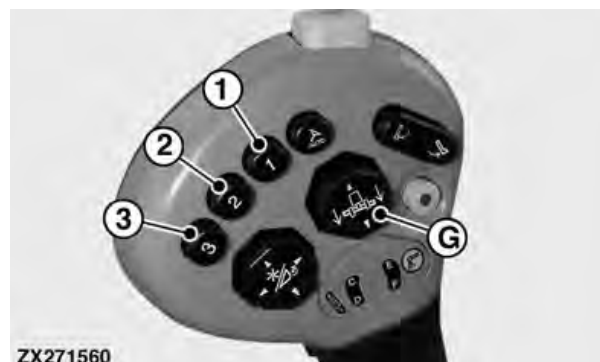
- | | |
|------------------------------|-----------------------------|
| A—Header Height Sensing Icon | E—Bar Graph |
| B—Activation Button Number | F—Numeric Display |
| C—Height Setpoint | G—Header Raise/Lower Switch |
| D—Header Height Control Dial | |



ZX271558 —UN—08FEB16



ZX271559 —UN—08FEB16



ZX271560 —UN—08FEB16

OUCC002,0004AAC -19-08FEB16-2/2

Header Height Sensing (HydraFlex™ Platforms)

H96245 —UN—03MAY10

NOTE: Header setup icon changes based on type of header connected to machine.

Allows operator to adjust cutterbar ground pressure, or cutterbar weight, and return to that setting automatically. HydraFlex™ works in conjunction with Header Height Sensing to maintain a header position relative to the ground, follow ground contour, and return to that position automatically. HydraFlex™ heads use a sensor located on the right side of the header to measure the hydraulic pressure used to support the cutterbar.

NOTE: HydraFlex™ does not control cutting height relative to ground. This is automatically controlled by the height sensing system and is not adjustable through the active header control dial when HydraFlex™ is present.

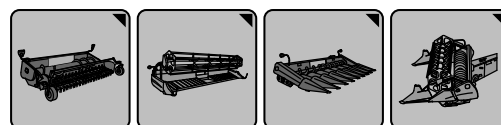
System must be calibrated with each header that is used (see Calibration Procedures section).

Activation buttons 1, 2 or 3 located on the multi-function lever are used to select one of the three different programmable HydraFlex™ pressures.

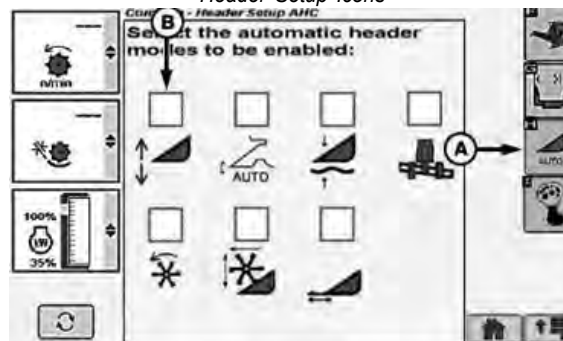
NOTE: If multiple modes are enabled, refer to Activation Button Mode Combinations in this section for further information.

Enable/Disable System:

Touch or press confirm button when header setup icon is highlighted.



Header Setup Icons



Draper/Platform/Belt Pickup Display

A—Automatic Header Height Modes Icon

B—Header Height Sensing Icon

Touch or press confirm button when automatic header height modes icon (A) is highlighted.

Touch or press confirm button when Header Height Sensing icon (B) is highlighted.

NOTE: Checkmark appears indicating system is enabled or disappears indicating system is disabled.

Continued on next page

OUC002,0004AAD -19-08FEB16-1/2

ZX271561 —UN—08FEB16

Operation:

System is active when:

- Properly equipped header is connected to machine.
- Engine is running.
- Road safety mode button is in field position.
- Header Height Sensing system enabled.
- Header is engaged.

Activate Header Height Sensing (HydraFlex™) by pressing activation buttons 1, 2 or 3 on multi-function lever.

Activation button number (B) on display indicates which activation button was selected.

Header Height Sensing icon (A) appears on display indicating system is active.

To change pressure setpoint (C) of activation buttons, press desired activation button and adjust pressure using active header height control dial (D).

Bar graph (E) and numeric display (F) show the pressure setpoint based on the pressure in the cutterbar on the platform.

NOTE: HydraFlex™ cannot operate independent of Header Height Sensing in an automatic mode. These systems work together to control cutterbar weight and header movement.

Turn active header height control dial towards plus (+) symbol to increase HydraFlex™ pressure and setpoint or towards minus (-) symbol to lower HydraFlex™ pressure and setpoint.

NOTE: Header lower switch can be set to immediately disable system until activation button is pressed, see your John Deere dealer for further information.

Manually adjusting header height with header lower switch (G) temporarily overrides system until released. Once switch is released, system returns to automatic mode.

NOTE: Header lower switch can be set to not reactivate system when header lower switch is pressed, see your John Deere dealer for further information.

Using header raise switch (G) temporarily deactivates system until header lower switch is pressed. Once switch is pressed, system reactivates.

Press activation buttons 1, 2 or 3 to reactivate system or manually lowering header height with header lower switch



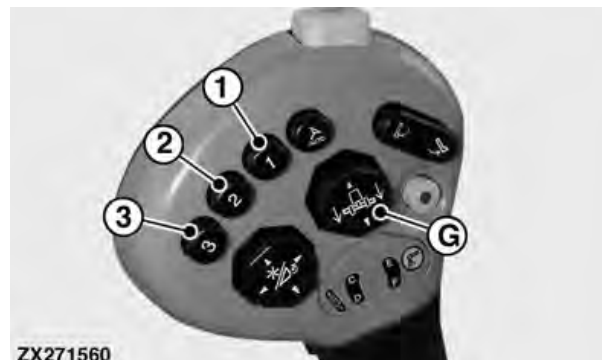
ZX271558

ZX271558 —UN—08FEB16



ZX271559

ZX271559 —UN—08FEB16



ZX271560

ZX271560 —UN—08FEB16

- A—Header Height Sensing Icon
B—Activation Button Number
C—Pressure Setpoint
D—Header Height Control Dial
E—Bar Graph
F—Numeric Display
G—Header Raise/Lower Switch

(G) reactivates system. Header automatically moves to preselected pressure.

OUC002.0004AAD -19-08FEB16-2/2

Header Height Resume

H96245 —UN—03MAY10

NOTE: Header setup icon changes based on type of header connected to machine.

Allows operator to select position of feeder house relative to machine and return to that position automatically.

System must be calibrated with each header that is used (see Calibration Procedures section).

Activation buttons 1, 2 or 3 located on the multi-function lever are used to select one of the three different programmable header heights.

NOTE: If multiple modes are enabled, refer to Activation Button Mode Combinations in this section for further information.

Enable/Disable System:

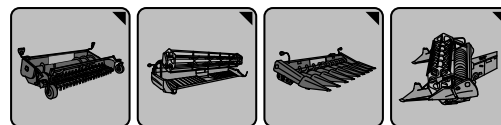
Touch or press confirm button when header setup icon is highlighted.

Touch or press confirm button when automatic header height modes icon (A) is highlighted.

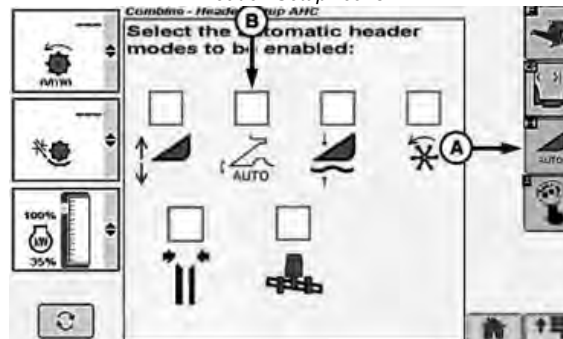
Touch or press confirm button when Header Height Resume icon (B) is highlighted.

NOTE: Checkmark appears indicating system is enabled or disappears indicating system is disabled.

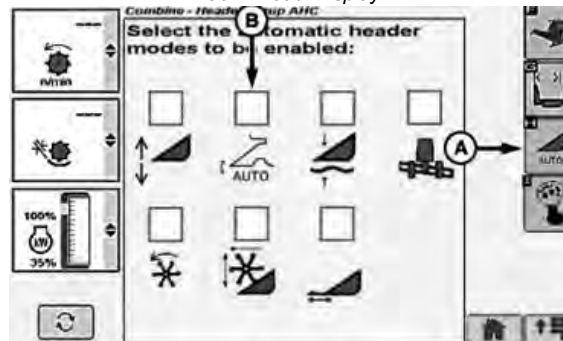
A—Automatic Header Height Modes Icon **B**—Header Height Resume Icon



Header Setup Icons



Corn Head Display



Draper/Platform/Belt Pickup Display

Continued on next page

OUC002,0004AAE -19-08FEB16-1/2

ZX271562 —UN—08FEB16

ZX271563 —UN—08FEB16

Operation:

System is active when:

- Properly equipped header is connected to machine.
- Engine is running.
- Road safety mode button is in field position.
- Header Height Resume system enabled.
- Header is engaged.

Activate Header Height Resume by pressing activation buttons 1, 2 or 3 on multi-function lever.

Activation button number (B) on display indicates which activation button was selected.

Header Height Resume icon (A) appears on display indicating system is active.

To change height setpoint (C) of activation buttons, press desired activation button and adjust height using active header height control dial (D).

Turn active header height control dial towards plus (+) symbol to raise header and setpoint or towards minus (-) symbol to lower header and setpoint.

Bar graph (E) and numeric display (F) show the header's relative position to the ground based on the Header Height Resume sensor linked to the feeder house.

Manually adjusting header height using header raise/lower switch (G) deactivates system.

Press activation buttons 1, 2 or 3 to reactivate system. Header automatically moves to preselected height.

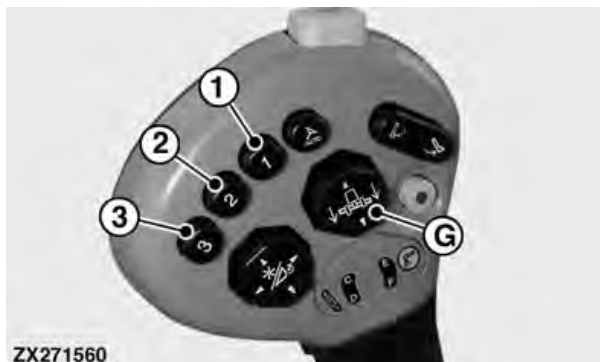
- | | |
|------------------------------|-----------------------------|
| A—Header Height Resume Icon | E—Bar Graph |
| B—Activation Button Number | F—Numeric Display |
| C—Height Setpoint | G—Header Raise/Lower Switch |
| D—Header Height Control Dial | |



ZX271564



ZX271559



ZX271560

OUC002,0004AAE -19-08FEB16-2/2

ZX271564 —UN—08FEB16

ZX271559 —UN—08FEB16

ZX271560 —UN—08FEB16

Active Header Float

H96245 —UN—03MAY10

NOTE: System only works with rigid platforms, extendable platforms, flex platforms, and draper platforms.

Header setup icon changes based on type of header connected to machine.

Allows a rigid header to be operated in contact with the ground and maintain a set contact pressure. Operator selects how firmly the header contacts ground and returns to that pressure automatically. A sensor measures the oil pressure within the feeder house lift cylinders and maintains that pressure as the header moves across the ground. Accuracy is greatly affected by accumulator precharge settings.

NOTE: While moving through the field, a sensor measures pressure in the lift cylinders. The system actuates the header raise/lower solenoid valve based on oil pressure within the lift cylinders. This maintains a constant ground contact pressure for the header as the terrain changes.

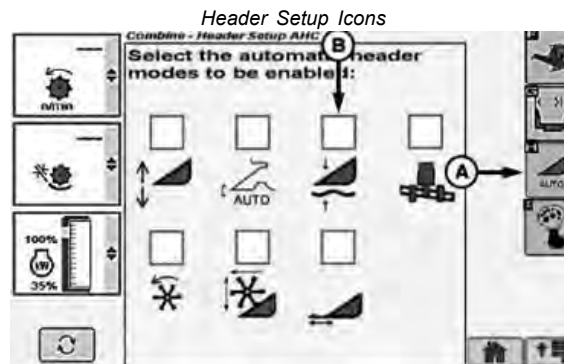
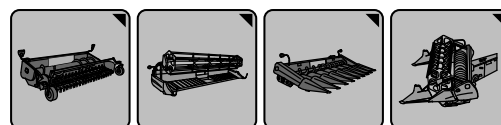
System must be calibrated with each header that is used (see Calibration Procedures section).

Activation buttons 1, 2 or 3 located on the multi-function lever are used to select one of the three different programmable header pressures.

Enable/Disable System:

Touch or press confirm button when header setup icon is highlighted.

Touch or press confirm button when automatic header height modes icon (A) is highlighted.



Draper/Platform/Belt Pickup Display

A—Automatic Header Height Modes Icon

B—Active Header Float Icon

Touch or press confirm button when Active Header Float icon (B) is highlighted.

NOTE: Checkmark appears indicating system is enabled or disappears indicating system is disabled.

Continued on next page

OUC002,0004AAF -19-08FEB16-1/2

ZX271565 —UN—08FEB16

Operation:

System is active when:

- Properly equipped header is connected to machine.
- Engine is running.
- Road safety mode button is in field position.
- Active Header Float mode enabled.
- Header is engaged.

Activate Header Float by pressing activation buttons 1, 2 or 3 on multi-function lever.

Activation button number (B) on display indicates which activation button was selected.

Active Header Float icon (A) appears on display indicating system is active.

To change pressure setpoint (C) of activation buttons, press desired activation button and adjust pressure using active header height control dial (D).

Turn dial towards plus (+) symbol to increase cylinder lift pressure setpoint (raise header) or towards minus (-) symbol to decrease cylinder lift pressure setpoint (lower header).

Bar graph (E) and numeric display (F) show the actual header float pressure. Units: bar for metric system and psi for English system.

Manually raising Active Header Float using header raise/lower switch (G) deactivates system.

NOTE: Pressing header raise/lower switch disables system within five seconds.

Press activation buttons 1, 2 or 3 to reactivate system. Header automatically moves to preselected pressure.

- | | |
|------------------------------|-----------------------------|
| A—Active Header Float Icon | E—Bar Graph |
| B—Activation Button Number | F—Numeric Display |
| C—Pressure Setpoint | G—Header Raise/Lower Switch |
| D—Header Height Control Dial | |



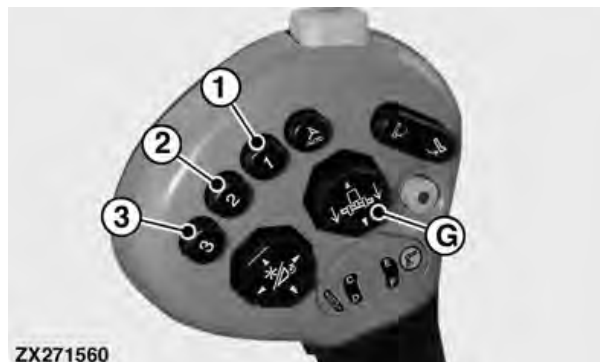
ZX271566

ZX271566 —UN—08FEB16



ZX271559

ZX271559 —UN—08FEB16



ZX271560

ZX271560 —UN—08FEB16

OUC002,0004AAF -19-08FEB16-2/2

Dial-A-Speed™ System

H96245 —UN—03MAY10

NOTE: Header setup icon changes based on type of header connected to machine.

Allows operator automatic control of operating speed for reel or belt pickup headers. Operating speed is a ratio of machine ground speed to reel or belt speed.

System operates with any header equipped with the appropriate reel or belt pickup speed sensors.

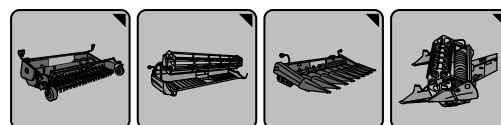
Enable/Disable System:

Touch or press confirm button when header setup icon is highlighted.

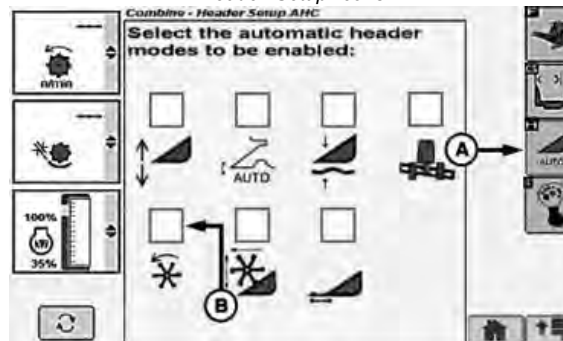
Touch or press confirm button when automatic header height modes icon (A) is highlighted.

Touch or press confirm button when Dial-A-Speed™ icon (B) is highlighted.

NOTE: Checkmark appears indicating system is enabled or disappears indicating system is disabled.



Header Setup Icons



Draper/Platform/Belt Pickup Display

A—Automatic Header Height Modes Icon

B—Dial-A-Speed™ Icon

OUC002,0004AB0 -19-08FEB16-1/3

Operation:

System is active when:

- Properly equipped header is connected to machine.
- Engine is running.
- Road safety mode button is in field position.
- Header and separator are engaged.
- Dial-A-Speed™ system enabled.
- Ground speed greater than 0.25 km/h (0.16 mph).

NOTE: Dial-A-Speed™ system will not operate if ground speed is less than 0.25 km/h (0.16 mph).

When header is above recording stop height, reel speed will not increase while in auto mode. This prevents reel from increasing speed when turning at end of field.

Dial-A-Speed™ icon (A) appears on display indicating system is active.

Ratio of ground speed to reel or belt pickup speed is adjusted using Dial-A-Speed™ dial (B). Turn dial towards plus (+) symbol to increase reel or belt pickup speed or towards minus (-) symbol to decrease reel or belt pickup speed.

Display shows current speed ratio setting. The larger the ratio number selected, the faster the reel or belt pickup operates with respect to machine ground speed.



A—Dial-A-Speed™ Icon

B—Dial-A-Speed™ Dial

Continued on next page

OUC002,0004AB0 -19-08FEB16-2/3

Change Minimum Reel or Belt Pickup Speed

H96245 —UN—03MAY10

Touch or press confirm button when header setup icon is highlighted.

Touch or press confirm button when header width setup icon (A) is highlighted.

Touch or press confirm button when minimum reel speed or belt pickup speed box (B) is highlighted.

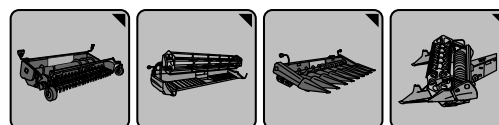
Non-Touchscreen or Touchscreen: Rotate selection dial until desired header value is shown. Press confirm button to save value.

Touchscreen Only: Enter desired header value on numeric display. Touch enter/accept icon to save value.

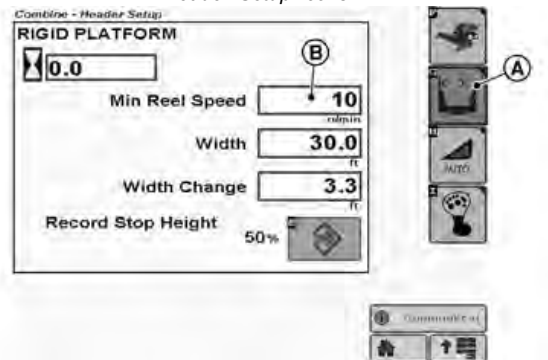
NOTE: Minimum reel or belt pickup speed has a low range of 1 rpm.

A—Header Width Setup Icon

B—Minimum Reel or Belt Pickup Speed Box



Header Setup Icons



ZX234331 —UN—19APR15

OUC002,0004AB0 -19-08FEB16-3/3

Reel Position Resume

H96245 —UN—03MAY10

NOTE: Header setup icon changes based on type of header connected to machine.

Allows operator to select position of reel relative to cutterbar and return to that position automatically.

System must be calibrated with each header that is used (see Calibration Procedures section).

Activation buttons 1, 2 or 3 located on the multi-function lever are used to select one of the three different programmable reel positions/deck plate positions.

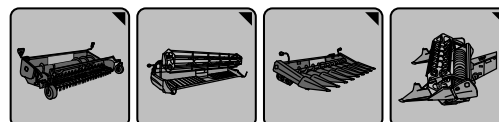
Enable/Disable System:

Touch or press confirm button when header setup icon is highlighted.

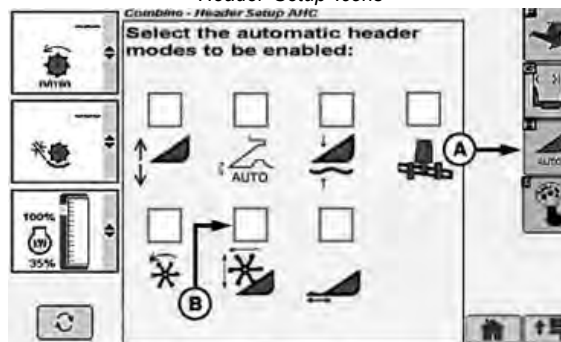
Touch or press confirm button when automatic header height modes icon (A) is highlighted.

Touch or press confirm button when Reel Position Resume icon (B) is highlighted.

NOTE: Checkmark appears indicating system is enabled or disappears indicating system is disabled.



Header Setup Icons



A—Automatic Header Height Modes Icon

B—Reel Position Resume Icon

ZX271570 —UN—08FEB16

Continued on next page

OUC002,0004AB1 -19-08FEB16-1/2

Operation:

System is active when:

- Properly equipped header (with reel position sensors) is connected to machine and is calibrated.
- Engine is running.
- Road safety mode button is in field position.

NOTE: When harvesting conditions are such that more than one reel position is required (down crop position and standing crop position) the operator can store a reel position for each resume button and move from one reel position to another by selecting desired resume button.

Save Reel Position Resume setpoint by pressing and holding currently selected activation buttons 1, 2, or 3 on multi-function lever for two seconds. Icon (A) flashes indicating setpoint is saved.

Activate Reel Position Resume by pressing activation buttons 1, 2 or 3 on multi-function lever.

Activation button number (C) on display indicates which activation button was selected.

Active Reel Position Resume icon (A) appears on display indicating system is active.

Use reel lift and reel fore/aft switch (B) to obtain desired fore/aft position and to obtain reel height position.

Manually moving reel lift and reel fore/aft switch (B) on multi-function lever deactivates reel position.

Press activation buttons 1, 2 or 3 to reactivate system. Reel automatically moves to preselected position.



A—Reel Position Resume Icon
B—Reel Lift and Reel Fore/Aft Switch
C—Activation Button Number

ZX271571 —UN—08FEB16

ZX271572 —UN—08FEB16

OUC002,0004AB1 -19-08FEB16-2/2

Deck Plate Position Resume

H96245 —UN—03MAY10

NOTE: Header setup icon changes based on type of header connected to machine.

Allows operator to select spacing of hydraulically adjustable deck plates and return to that position automatically.

System must be calibrated with each header that is used (see Calibration Procedures section).

Activation buttons 1, 2 or 3 located on the multi-function lever are used to select one of the three different programmable reel positions/deck plate positions.

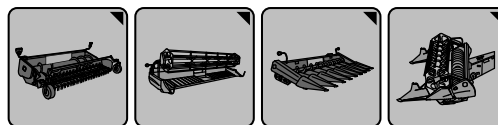
Enable/Disable System:

Touch or press confirm button when header setup icon is highlighted.

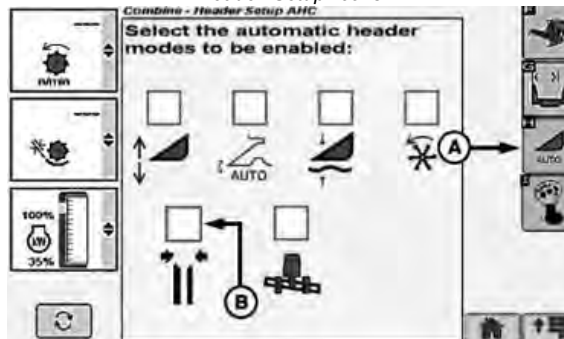
Touch or press confirm button when automatic header height modes icon (A) is highlighted.

Touch or press confirm button when Deck Plate Position Resume icon (B) is highlighted.

NOTE: Checkmark appears indicating system is enabled or disappears indicating system is disabled.



Header Setup Icons



Corn Head Display

A—Automatic Header Height Modes Icon

B—Deck Plate Position Resume Icon

Continued on next page

OUCC002,0004AB2 -19-08FEB16-1/2

ZX271573 —UN—08FEB16

Operation:

System is active when:

- Engine is running.
- Road safety mode button is in field position.
- Properly equipped header (with deck plate sensors) is connected to machine and is calibrated.

NOTE: *Save Deck Plate Position Resume setpoint by pressing and holding currently selected activation buttons 1, 2, or 3 on multi-function lever for two seconds. Icon (A) flashes indicating setpoint is saved.*

Activate Deck Plate Position Resume by pressing activation buttons 1, 2 or 3 on multi-function lever.

Activation button number (C) on display indicates which activation button was selected.

Active Deck Plate Position Resume icon (A) appears on display indicating system is active.

Use reel lift and reel fore/aft switch (B) to obtain desired hydraulic deck plate spacing. Left side of switch increases spacing and right side of switch decreases spacing.

Display indicates current deck plate opening. Deck plates have a range of 0 (minimum position) to 9 (maximum position).

Manually moving reel lift and reel fore/aft switch (B) on multi-function lever deactivates deck plate spacing.

Press activation buttons 1, 2 or 3 to reactivate system. Deck plates automatically move to preselected position.



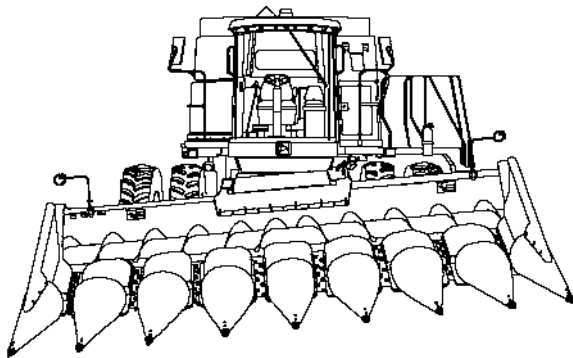
A—Deck Plate Position Resume Icon
B—Reel Lift and Reel Fore/Aft Switch
C—Activation Button Number

OUC002,0004AB2 -19-08FEB16-2/2

ZX271574 —UN—08FEB16

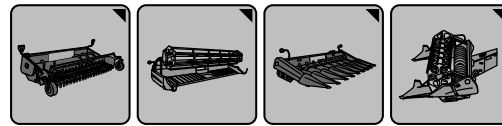
ZX271572 —UN—08FEB16

Lateral Tilt System (If Equipped)



H96245 —UN—03MAY10

H52277 —UN—04MAR99



Header Setup Icons

NOTE: Header setup icon changes based on type of header connected to machine.

Allows operator to maintain header position relative to ground. Sensors are used to determine the height at each end of the header. The lateral tilt system tilts the header to equalize the distances to the ground at each end of the header. The lateral tilt system uses a special feeder house that allows the header to tilt left and right.

If equipped with left and right Header Height Sensors and Lateral Tilt is active, systems work together to maintain the closest position of the cutterbar relative to the ground.

System must be calibrated with each header that is used (see Calibration Procedures section).

Activation buttons 1, 2 or 3 located on the multi-function lever are used to activate the system.

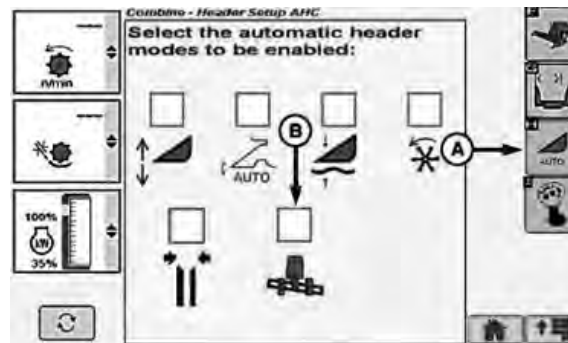
Enable/Disable System:

Touch or press confirm button when header setup icon is highlighted.

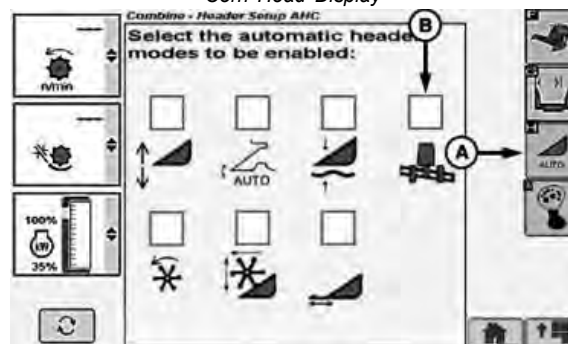
Touch or press confirm button when automatic header height modes icon (A) is highlighted.

Touch or press confirm button when lateral tilt icon (B) is highlighted.

NOTE: Checkmark appears indicating system is enabled or disappears indicating system is disabled.



Corn Head Display



Draper/Platform/Belt Pickup Display

A—Automatic Header Height Modes Icon

B—Lateral Tilt Icon

Continued on next page

OUC002,0004AB3 -19-08FEB16-1/3

ZX271575 —UN—08FEB16

ZX271576 —UN—08FEB16

Operation:

System is active when:

- Properly equipped header is connected to machine.
- Engine is running.
- Road safety mode button is in field position.
- Header was calibrated.
- Header is engaged.
- Lateral tilt system enabled.

Activate lateral tilt by pressing activation buttons 1, 2 or 3 on multi-function lever.

Activation button number (C) on display indicates which activation button was selected.

Lateral tilt icon (A) appears on display indicating system is active.

NOTE: Pressing lateral tilt switch (B) overrides system. When switch is released within five seconds, system returns to automatic mode.

Press right side of switch to tilt header to the right or press left side of switch to tilt the header to the left.

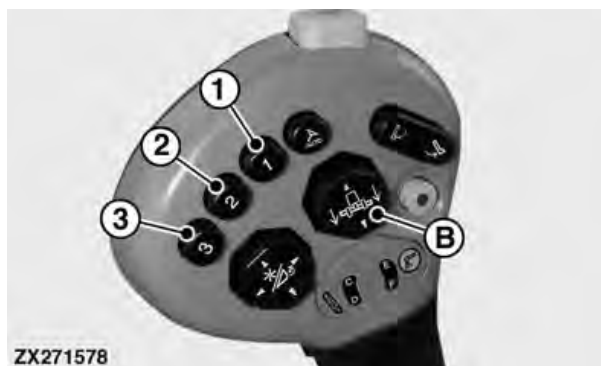
Press activation buttons 1, 2 or 3 to reactivate system. Header automatically returns to automatic mode.

A—Lateral Tilt Icon
B—Lateral Tilt Switch

C—Activation Button Number



ZX271577



ZX271578

ZX271577 —UN—08FEB16

ZX271578 —UN—08FEB16

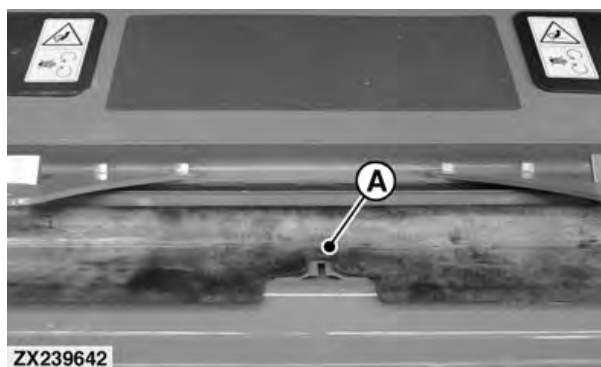
OUC002,0004AB3 -19-08FEB16-2/3

Manual Tilt Indicator

For a quick visual indication of whether header is level with machine chassis, the lateral tilt system is equipped with a manual tilt indicator.

When notch (A) is in center of rubber seal, the header is approximately level with the machine body. Indicator may also be useful as a reference during operation.

A—Notch



ZX239642

ZX239642 —UN—08FEB16

OUC002,0004AB3 -19-08FEB16-3/3

Cutterbar Fore/Aft Position (600X Cutting Platforms)

NOTE: Header setup icon changes based on type of header connected to machine.

System only works with the 600X Cutting Platforms.

Allows cutterbar to be adjusted forward and rearward for various plant heights and stubble heights. Changing cutterbar position compensates for various harvesting conditions such as down crop and feeding of crop into the feeder house. A sensor measures the position of the cutterbar and maintains that position as the header moves across the ground.

System must be calibrated with each header that is used (see Calibration Procedures section).

Activation buttons 1, 2 or 3 located on the multi-function lever are used to select one of the three different programmable feeder house fore/aft tilt positions.

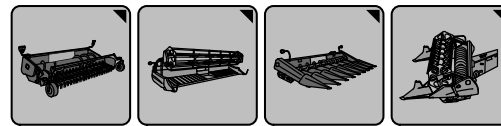
Enable/Disable System:

Touch or press confirm button when header setup icon is highlighted.

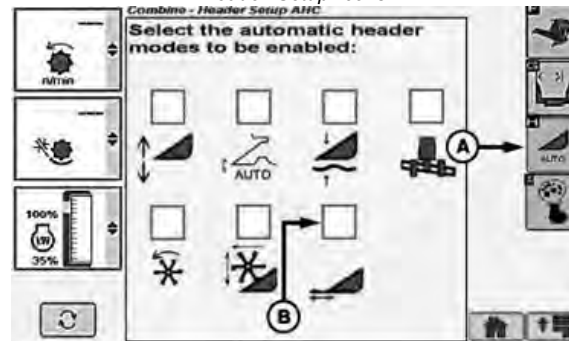
Touch or press confirm button when automatic header height modes icon (A) is highlighted.

Touch or press confirm button when Cutterbar Fore/Aft Position icon (B) is highlighted.

H96245 —UN—03MAY10



Header Setup Icons



Extendable Platform Display

A—Automatic Header Height Modes Icon

B—Cutterbar Fore/Aft Position Icon

NOTE: Checkmark appears indicating system is enabled or disappears indicating system is disabled.

Continued on next page

OUCC002,0004AB4 -19-08FEB16-1/2

ZX271579 —UN—08FEB16

Operation:

System is active when:

- Properly equipped header is connected to machine.
- Engine is running.
- Road safety mode button is in field position.
- Header is engaged.
- Multi-function lever switches are functionally assigned.

NOTE: Switches on rear of multi-function lever are reprogrammable.

Refer to Multi-function Lever Setup in CommandCenter™ Display Screens section for further information on reprogramming.

Activate Cutterbar Fore/Aft Position by pressing activation buttons 1, 2 or 3 on multi-function lever.

Activation button number (A) on display indicates which activation button was selected.

To change cutterbar fore/aft setpoint of activation buttons, press desired activation button and adjust fore/aft using cutterbar fore/aft switches (B or C).

Push and hold top of switch to extend cutterbar position or push and hold bottom of switch to retract cutterbar position.

Armrest display shows the cutterbar fore/aft position relative to the header based on a sensor linked to the header.

Manually moving cutterbar fore/aft switches (B or C) on multi-function lever deactivates system.

Press activation buttons 1, 2 or 3 to reactivate system. Cutterbar fore/aft position automatically moves to preselected position.

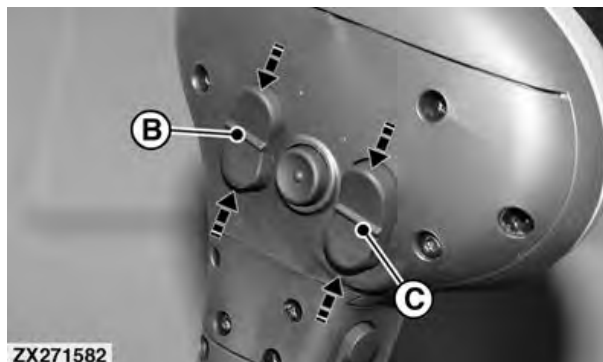
A—Activation Button Number **C—Cutterbar Fore/Aft Switch**
B—Cutterbar Fore/Aft Switch



ZX271580



ZX271581



ZX271582

ZX271580 —UN—08FEB16

ZX271581 —UN—08FEB16

ZX271582 —UN—08FEB16

OUCC002.0004AB4 -19-08FEB16-2/2

Setpoint Modes (Manual or Automatic)

Pressing confirm button (A) or cancel button (B) while a setpoint screen is displayed causes setpoint screen to disappear and return to home page.

Pressing confirm button or cancel button has the following effects while adjusting:

- Press confirm button while adjusting:
 - Manual mode – system deactivates.
 - Automatic mode – system continues adjusting in background.
- Press cancel button while adjusting:
 - Manual mode – system deactivates.
 - Automatic mode – system deactivates.

Turning selection dial (C) in both modes either increases (forward) or decreases (rearward) setpoint.



A—Confirm Button
B—Cancel Button

C—Selection Dial

OUEC002,0004A9A -19-04FEB16-1/3

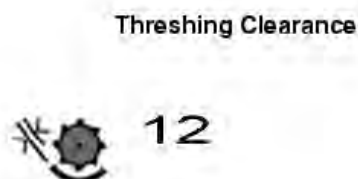
Manual Mode

Provides basic increase/decrease function control. Used when in Road Mode or when automatic mode requirements are not met.

With key switch ON and separator and header disengaged the following setpoints can be adjusted:

- HydraFlex™ Pressure
- Draper Speed
- Reel Speed
- Chaffer Opening
- Sieve Opening
- Threshing Clearance
- Cleaning Fan Speed
- Threshing Speed
- Chopper Vane Angle
- Belt Speed

Press desired CommandARM™ button.



Touch plus (+) or minus (-) symbol or rotate selection dial to setpoint.

Continued on next page

OUEC002,0004A9A -19-04FEB16-2/3

Automatic Mode

NOTE: Black value (A) indicates current setpoint. Blue value (B) indicates setpoint value increase or decrease when plus (+) or minus (-) symbol is touched or selection dial is turned.

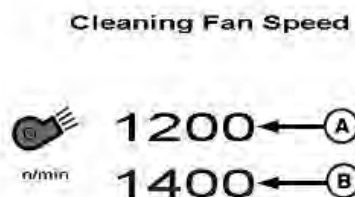
Provides advanced "dial-in" function control.

With engine at high idle and separator engaged the following setpoints can be adjusted:

- Threshing Speed
- Cleaning Fan Speed

With engine running, the following setpoints can be adjusted:

- Chaffer Opening
- Sieve Opening
- Threshing Clearance
- Chopper Vane Angle
- ProDrive™ Transmission Max Speed Range 1
- ProDrive™ Transmission Max Speed Range 2
- Header Height Sensing Float Position



A—Black Value

B—Blue Value

Press desired CommandARM™ button.

Touch plus (+) or minus (-) symbol or rotate selection dial to setpoint.

OUC002,0004A9A -19-04FEB16-3/3

H95966—UN—07APR10

Manual Recording ON/OFF

Recording screen shows data recording status (ON/OFF).

To start recording data, all the following must occur or be turned ON manually:

- Separator engaged
- Header engaged
- Engine at fast idle
- Header lowered to recording position
- Client, Farm, and Field must be named

To stop recording, one of the following must occur:

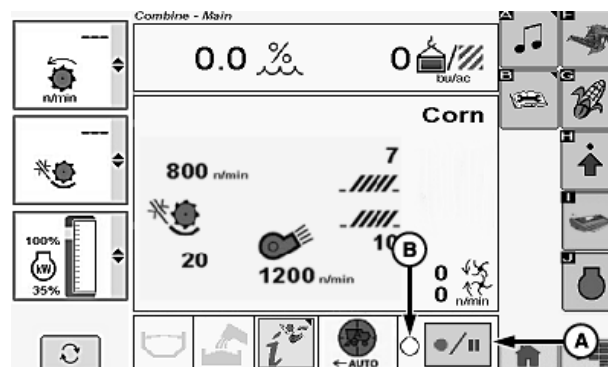
- Header raised past record stop height setpoint
- Header is disengaged
- Recording is manually turned OFF

Recording can be manually stopped and restarted without raising header or disengaging separator (example; when approaching headlands or end rows already harvested, waterways for which recording data is not desired).

Touch or press confirm switch when recording ON/OFF icon (A) is highlighted.

Recording ON/OFF indicator (B) toggles between an open or filled circle.

- Open circle - Recording OFF



A—Recording ON/OFF Icon

B—ON/OFF Indicator

- Filled flashing circle - Recording ON

Touch or press confirm switch again to turn recording ON and manually resume recording. Push header lower button on multi-function lever (slight touch of header lower button starts recording).

OUC002,0004337 -19-19FEB15-1/1

H109857—UN—14FEB14

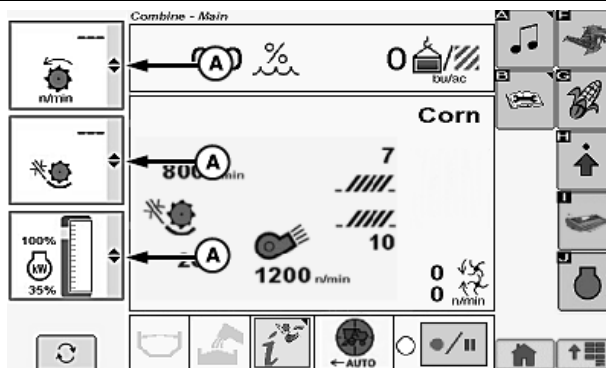
Reconfigure Detail Machine Settings

NOTE: Shows detailed machine settings. Allows operator to reconfigure screen and provides the ability to monitor three items at once. Items vary depending upon machine configuration.

Touch or press confirm switch when desired machine setting icon (A) is highlighted.

Machine settings menu displays the following:

- Moisture
- Yield
- Cleaning Fan Speed
- Threshing Speed
- Threshing Clearance
- Chaffer Clearance
- Sieve Clearance
- Deck Plate Spacing
- Reel Speed
- Draper Speed
- Spreader Speed
- Harvested Weight Counter
- Productivity (Yield per hour)
- Grain Tank Level (%)



A—Machine Setting Icons

- Machine/Separator Hours
- Power Meter
- Cutterbar Fore/Aft (600X Cutting Platforms)

Touch or press confirm switch when desired machine setting is highlighted.

Repeat procedure on remaining menus as desired.

OUC002,00043E8 -19-01MAR15-1/1

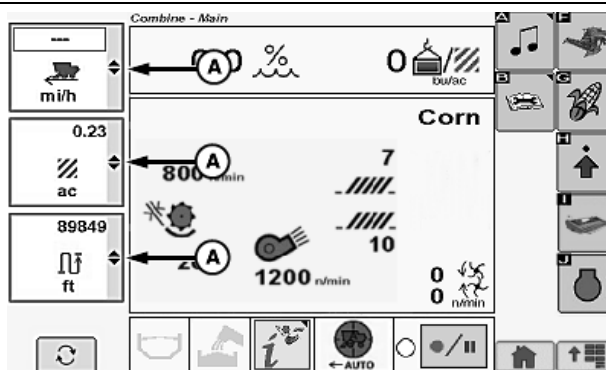
Reconfigure Performance Monitor Settings

NOTE: Shows detailed performance monitor settings. Allows operator to reconfigure screen and provides the ability to monitor three items at once. Items vary depending upon machine configuration.

Touch or press confirm switch when desired performance monitor setting icon (A) is highlighted.

Performance monitor setting menu displays the following:

- Vehicle Ground Speed
- Global Position Satellite (GPS) Speed
- Engine Speed
- Fuel Per Hour
- Fuel Per Area
- Area Per Hour
- Area Counter
- Battery Voltage
- Distance Counter
- Crop Weight Counter
- Crop Moisture Counter
- Total Machine Area Counter



A—Performance Monitor Setting Icons

Touch or press confirm switch when desired performance monitor setting is highlighted.

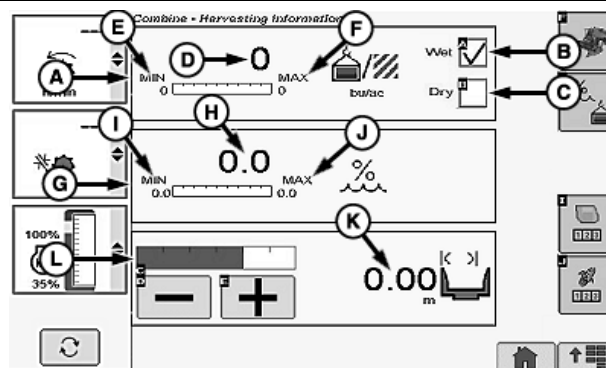
Repeat procedure on remaining menus as desired.

OUC002,000433A -19-19FEB15-1/1

Harvesting Information Screen

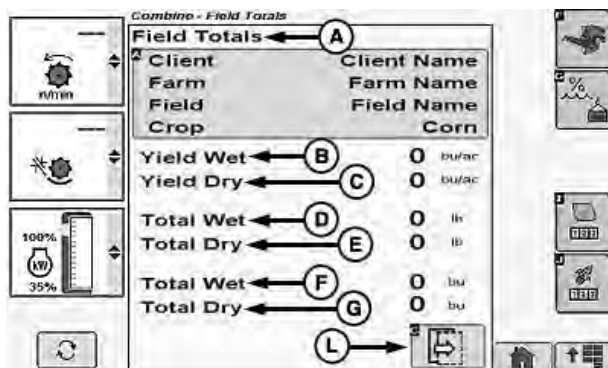
Harvesting Information:

- Yield (A)
 - Wet (B)
 - Dry (C)
 - Instantaneous (Recording ON) (D)
 - Average (Recording OFF) (D)
 - Minimum (E)
 - Maximum (F)
- Moisture (G)
 - Instantaneous (Recording ON) (H)
 - Average (Recording OFF) (H)
 - Minimum (I)
 - Maximum (J)
- Cut Width (K)

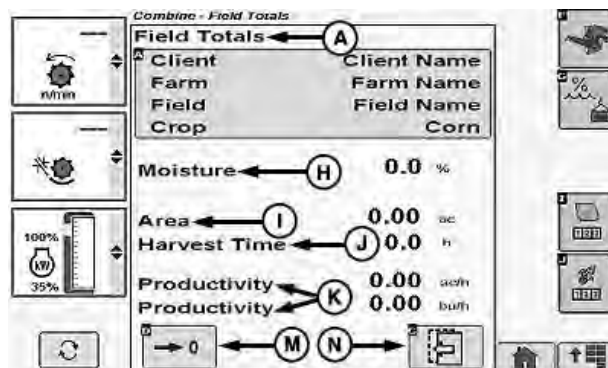


- Increase/Decrease (L)

OUC002,000433B -19-19FEB15-1/3



H94542—UN—07OCT10



H94543—UN—06OCT10

Field Totals:

NOTE: Farm/Field naming is setup in the GreenStar™ application. Refer to GreenStar™ manual for further information.

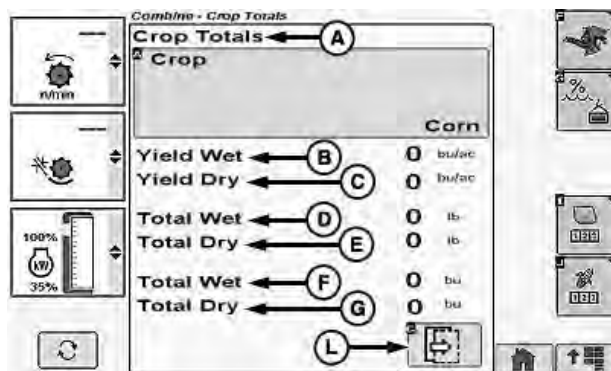
The following appears on GreenStar™ display (if equipped) instead of on armrest display.

If machine is not equipped with moisture sensor, only the following Field Totals information appears:

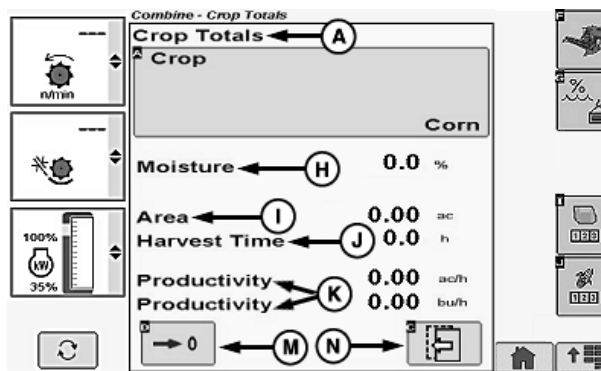
- Area
- Harvest Time
- Productivity
- Field Totals (A)
- Yield Wet (B)
- Yield Dry (C)
- Total Wet (Weight lb. or kg) (D)
- Total Dry (Weight lb. or kg) (E)
- Total Wet (Yield Units) (F)
- Total Dry (Yield Units) (G)
- Moisture (H)
- Area (I)
- Harvest Time (J)
- Productivity (K)
- Items to select
 - Next Page Icon (L)
 - Clear Totals Icon (M)
 - Previous Page Icon (N)

Continued on next page

OUC002,000433B -19-19FEB15-2/3



H94544 —UN—05OCT10



H94545 —UN—05OCT10

Crop Totals:

NOTE: Farm/Field naming is setup in the GreenStar™ application. Refer to GreenStar™ manual for further information.

The following appears on GreenStar™ display (if equipped) instead of on armrest display.

If machine is not equipped with moisture sensor, only the following Field Totals information appears:

- Area
- Harvest Time
- Productivity
- Crop Totals (A)
- Yield Wet (B)
- Yield Dry (C)
- Total Wet (Weight lb. or kg) (D)
- Total Dry (Weight lb. or kg) (E)
- Total Wet (Yield Units) (F)
- Total Dry (Yield Units) (G)
- Moisture (H)
- Area (I)
- Harvest Time (J)
- Productivity (K)
- Items to select
 - Next Page Icon (L)
 - Clear Totals Icon (M)
 - Previous Page Icon (N)

OUC002,000433B -19-19FEB15-3/3

Select Yield Wet or Dry and Cut Width Change

Yield Wet or Dry:

H96262 —UN—04MAY10

NOTE: Harvesting information icon switches between corn and wheat based on type of header connected to machine.

Touch or press confirm switch when harvesting information icon is highlighted.

Touch or press confirm switch when yield information icon (A) is highlighted.

Touch or press confirm switch when desired yield wet box (B) or yield dry box (C) is highlighted.

Box displays a checkmark indicating which was selected.

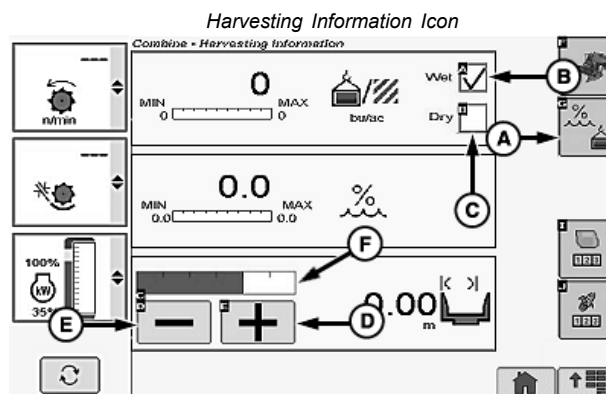
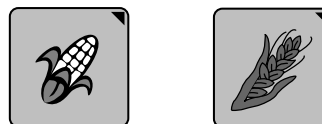
- Yield Wet - shows number of yield units per number of area units at current harvesting conditions.
- Yield Dry - shows number of yield units per number of area units after considering the removal of moisture.

Cut Width:

NOTE: If GreenStar™ display is installed, cut width/rows are adjusted through GreenStar™ display and only shown on armrest display.

Touch or press confirm switch when plus (+) icon (D) or minus (-) icon (E) is highlighted. Desired cut width is represented on bar graph (F).

NOTE: Cut width number updates depending on which icon was selected.



A—Yield Information Icon
B—Yield Wet Box
C—Yield Dry Box

D—Plus Icon
E—Minus Icon
F—Cut Width Adjust Bar Graph

H105591 —UN—27JUN12

OUC002,000433C -19-19FEB15-1/1

Clear Field Totals

NOTE: The following appears on GreenStar™ display (if equipped) instead of on armrest display.

If machine is not equipped with moisture sensor, only the following Field Totals information appears:

- Area
- Harvest Time
- Productivity

Harvesting information icon switches between corn and wheat based on type of header connected to machine.

Touch or press confirm switch when harvesting information icon is highlighted.

Touch or press confirm switch when field totals icon (A) is highlighted.

Touch or press confirm switch when next page icon (B) is highlighted to advance to next page.

Touch or press confirm switch when desired icon is highlighted:

- Field Totals Reset Icon (C) - deletes field totals for selected farm/field/crop.
- Previous Page Icon (D) - allows operator to view previous page.

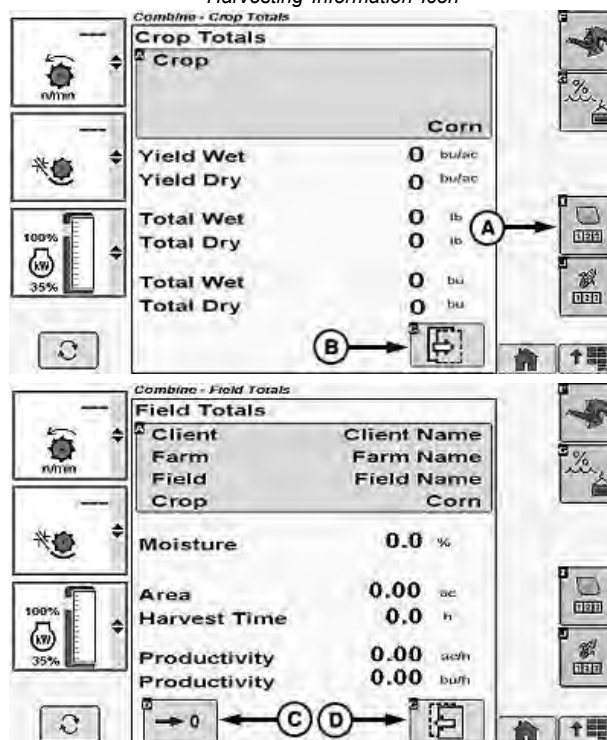
A—Field Totals Icon
B—Next Page Icon

C—Field Totals Reset Icon
D—Previous Page Icon

H96262 —UN—04MAY10



Harvesting Information Icon



H94548 —UN—05OCT10

H94549 —UN—05OCT10

OUC002.000433D -19-19FEB15-1/1

Clear Crop Totals

NOTE: The following appears on GreenStar™ display (if equipped) instead of on armrest display.

H96262 —UN—04MAY10

If machine is not equipped with moisture sensor, only the following Field Totals information appears:

- Area
- Harvest Time
- Productivity

Harvesting information icon switches between corn and wheat based on type of header connected to machine.

Touch or press confirm switch when harvesting information icon is highlighted.

Touch or press confirm switch when crop totals icon (A) is highlighted.

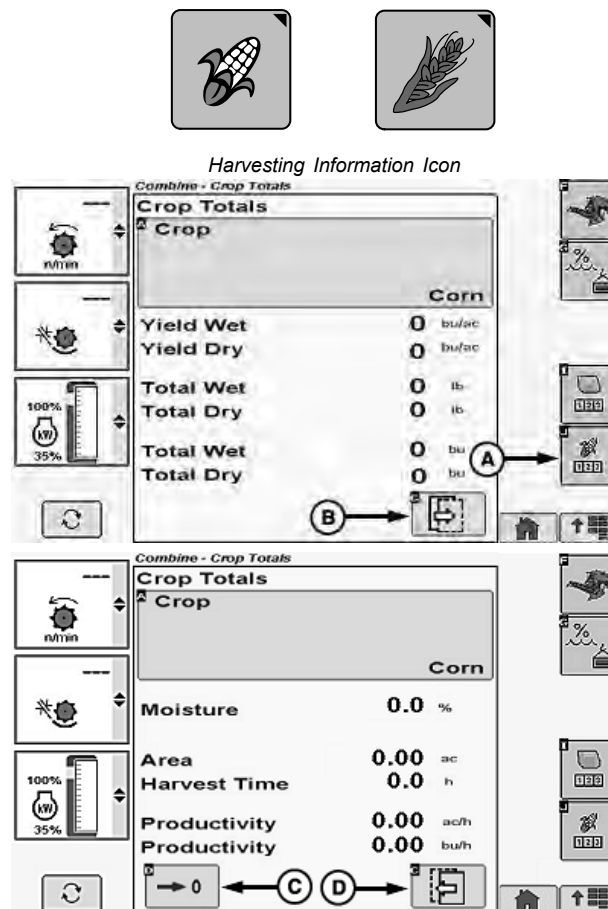
Touch or press confirm switch when next page icon (B) is highlighted to advance to next page.

Touch or press confirm switch when desired icon is highlighted:

- Crop Totals Reset Icon (C) - deletes crop totals for selected crop.
- Previous Page Icon (D) - allows operator to view previous page.

A—Crop Totals Icon
B—Next Page Icon

C—Crop Totals Reset Icon
D—Previous Page Icon



H94550 —UN—05OCT10

H94551 —UN—05OCT10

OUC002,000433E -19-19FEB15-1/1

Combine Setup Screen

Grain Tank Level Settings:

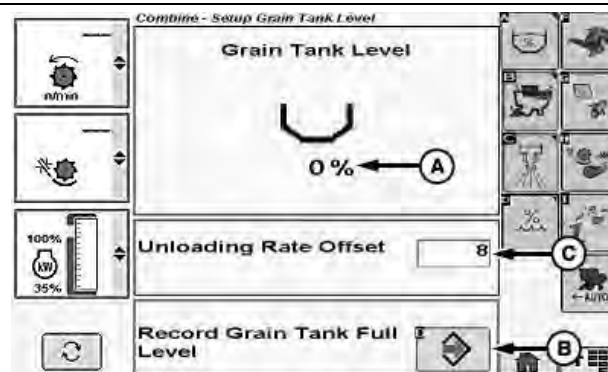
NOTE: Allows operator to calibrate desired grain tank fullness level.

- Grain Tank Level Percentage (A)
- Save Icon (B) - Allows operator to save grain tank full level
- Save Icon (C) - Allows operator to save grain tank empty level

Unloading Rate Offset Settings:

NOTE: Allows operator to change calculated unloading rate offset values.

- Unloading Rate Offset (D)



- Offset Rate (-15 to 15)

Continued on next page

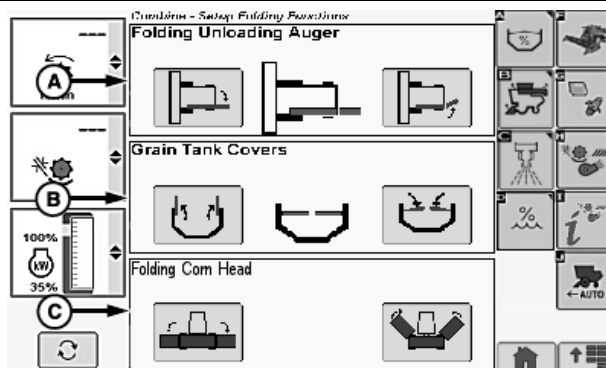
OUC002,0004340 -19-16APR15-1/7

H105793 —UN—05DEC12

Folding Function Settings:

NOTE: Shows all optional folding features if equipped.

- Folding Unloading Auger (A) (If Equipped)
 - Auger Position Indicator
 - Unfold Icon
 - Fold Icon
- Grain Tank Covers (B) (If Equipped)
 - Grain Tank Position Indicator
 - Unfold Icon
 - Fold Icon
- Folding Corn Head (C) (If Equipped)
 - Unfold Icon
 - Fold Icon



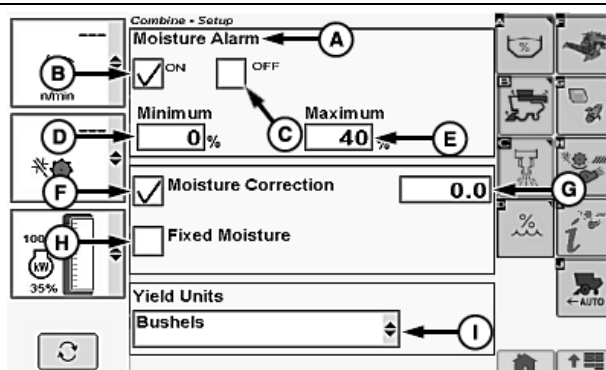
H105794 — UN — 05DEC12

OUCC002,0004340 -19-16APR15-2/7

Moisture Settings:

NOTE: Only appears if equipped with moisture sensor.

- Moisture Alarm (A)
 - ON (B)
 - OFF (C)
- Moisture Alarm (1—50%) (D)
 - Minimum Alarm (1—50%) (D)
 - Maximum Alarm (1—60%) (E)
- Moisture Correction (-25.0 to 25.0, increments of 0.1) (F)
 - Manual Offset Setting (G)
 - Fixed Moisture (H)



H105789 — UN — 05DEC12

Yield Units Settings:

- Harvesting Yield Units (I)

- Fixed List

Continued on next page

OUCC002,0004340 -19-16APR15-3/7

Crop Settings:

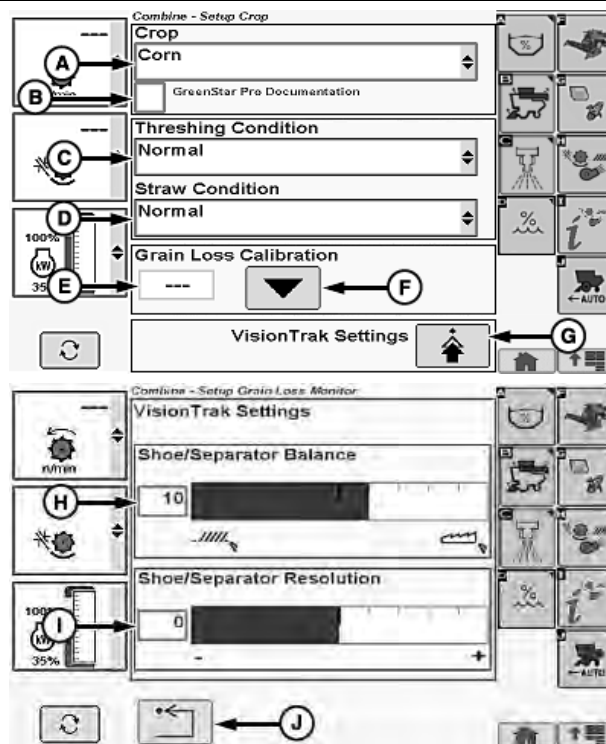
NOTE: Farm/Field naming is setup in the GreenStar™ application. Refer to GreenStar™ manual for further information.

- Crop (A)¹
 - Fixed List
- GreenStar™ Pro Documentation (B) - When checked it synchronizes selected crop from armrest display with display mounted on cornerpost (if equipped).
- Threshing Condition (C)
 - Fixed List
- Straw/Cob Condition (D)
 - Fixed List

Grain Loss Calibration:

- Grain Loss Calibration
 - Calibration Reference Number (E)
 - Calibration Icon (F)
- VisionTrak™ Settings Icon (G) - Allows operator to advance to next page to fine-tune shoe/separator losses for selected crop
 - Shoe/Separator Balance (-50, default is 0, 50) (H)
 - Shoe/Separator Resolution (-50, default is 0, 50) (I)
- Return/Back Icon (J) - Allows operator to return to previous page

¹Appears on GreenStar™ display (if equipped) instead of on armrest display.



H111417 —UN—12JUN14

H111418 —UN—12JUN14

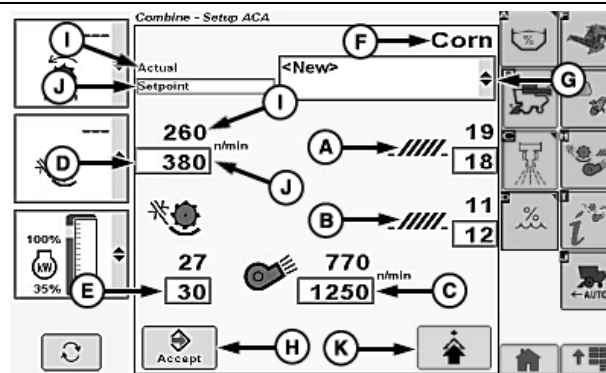
OUCC002.0004340 -19-16APR15-4/7

Machine Settings:

- Automatic Combine Adjust (ACA) (Numeric Entry)
 - Chaffer Position (A)
 - Sieve Position (B)
 - Fan Speed (C)
 - Threshing Speed (D)
 - Threshing Clearance (E)
 - Harvested Crop (Viewable Only) (F)
- Crop Modifiers (G)
 - Default
 - Dry (Default)
 - Wet (Default)
 - New
 - Cleanout
- Enter/Accept Icon (H) - allows modified machine settings chosen by operator to automatically adjust and allows operator to save personal machine settings

NOTE: Threshing speed and fan speed setpoint values flash until separator is engaged and engine speed is above 2000 rpm.

Personalized machine settings will also be saved (settings will not overwrite factory settings) if new was chosen from crop modifiers menu.



- Actual (setpoint value in black) (I) - indicates current setpoint value of machine
- Setpoint (setpoint value in blue) (J) - setpoint value automatically increases or decreases when plus (+) or minus (-) symbol is touched or selection dial is turned

NOTE: Machine automatically adjusts to operator setpoint value.

- Advanced Setup Icon (K) - allows operator to advance to next page to verify machine configuration settings for items outside of cab

Continued on next page

OUCC002.0004340 -19-16APR15-5/7

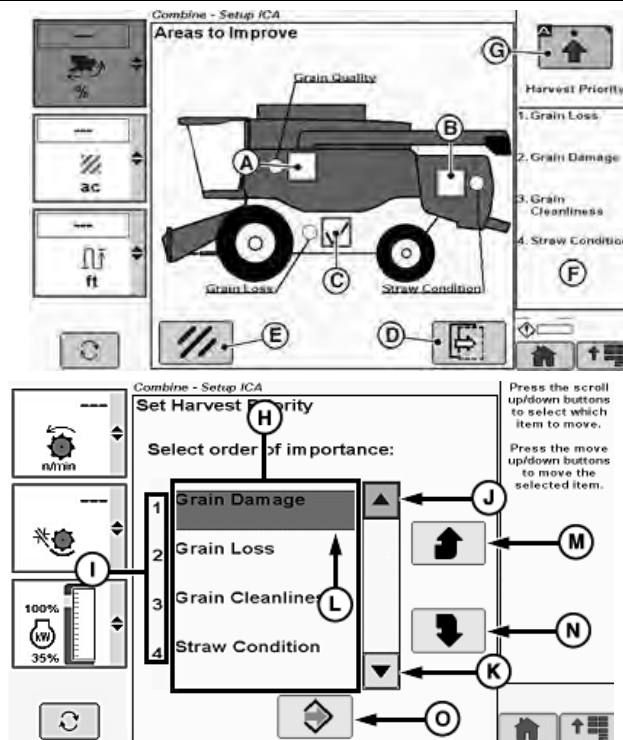
H109931 —UN—28FEB14

Interactive Combine Adjustment (If Equipped) (Improvement Targets):

- Areas to Improve - Allows operator to modify area of machine performance that is not satisfactory
 - Grain Quality (A)
 - Straw Condition (B)
 - Grain Loss (C)
- Next Page Icon (D) - Allows operator to advance to next page to fine-tune specific harvest issues
- Cancel Icon (E) - Allows operator to cancel interactive combine adjustment setup and return to combine main screen
- Harvest Priority Order (F) - Displays current order of harvest priority list
- Setup Harvest Priority Icon (G) - Allows operator to advance to next page to change order of harvest priority list

Interactive Combine Adjustment (If Equipped) (Harvest Priority Settings):

- Harvest Priority List (H) - Allows operator to change preferences of how machine is optimized
 - Grain Loss
 - Grain Damage
 - Grain Cleanliness
 - Straw Condition
- Harvest Priority Order (I)
 - 1. Highest Priority
 - 2. High Priority
 - 3. Low Priority
 - 4. Lowest Priority
- Up Arrow Icon (J) - Allows operator to move highlighted region upward
- Down Arrow Icon (K) - Allows operator to move highlighted region downward



ZX234286 —UN—19APR15

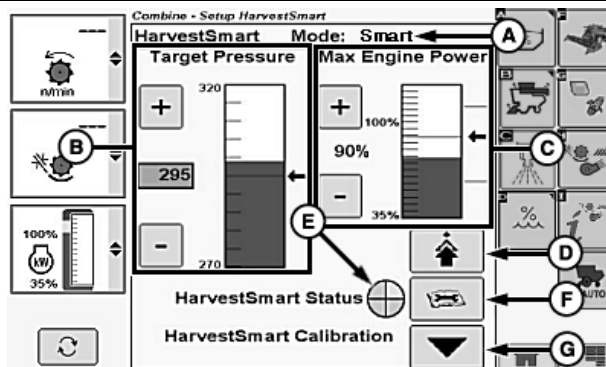
H108641 —UN—25JUL13

- Highlighted Region (L) - Allows highlighted item in list to be moved higher or lower
- Selection Up Icon (M) - Allows operator to move selected harvest priority upward within listing
- Selection Down Icon (N) - Allows operator to move selected harvest priority downward within listing
- Save Icon (O) - Allows operator to save harvest priority list changes

OUCC002,0004340 -19-16APR15-6/7

Harvest Smart™ Feed Rate Settings (If Equipped):

- Current Mode of Operation (A)
 - OFF
 - Smart
 - Capacity
- Target Pressure (30—420, increments of 1) (B)
- Max Engine Power (60—106 %, increments of 1) (C)
- Advanced Setup Icon (D) - allows operator to advance to next page to set maximum harvest speed and sensitivity
 - Max Harvest Speed 2.0—14.0 km/h (1.2—8.6 mph), increments of 0.1 km/h (0.1 mph)
 - Sensitivity (1—100, increments of 1)
- Harvest Smart™ Status Indicator (E) - allows operator to view what state Harvest Smart™ is currently in
- Diagnostic Readings Icon (F) - assists operator in providing more information about machine subsystem for troubleshooting



H106500 —UN—08JAN13

- Harvest Smart™ Calibration (G) - allows operator to enter current Harvest Smart™ operating characteristics into memory

OUCC002,0004340 -19-16APR15-7/7

Grain Tank Level and Unloading Rate Offset Setup

Grain Tank Level Setup:

H94473 —UN—31MAR10

NOTE: Allows operator to calibrate desired grain tank fullness level setting.

Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when grain tank level setup icon (A) is highlighted.

To set grain tank empty level, touch or press confirm button when enter/accept icon (B) is highlighted.

Operate machine until desired grain tank level is reached. Grain tank level percentage (C) is a visual guide as the grain tank fills.

Touch or press confirm button when enter/accept icon (D) is highlighted.

NOTE: Operator can save a lower grain tank setting to avoid spilling grain over the sides when operating in hilly conditions.

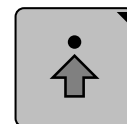
Unloading Rate Offset Setup:

NOTE: Different crops, weights, and moisture can affect grain tank level sensor readings. Unloading rate offset value has a range of -15 to 15.

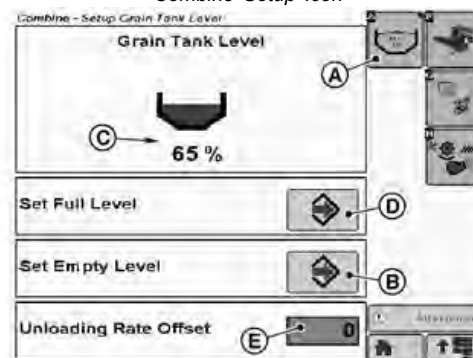
- Decrease offset value if grain remains in tank when grain tank level reads 0%.
- Increase offset value if grain tank is emptied before grain tank level reads 0%.

Touch or press confirm button when unloading rate offset menu (E) is highlighted.

Touch or press confirm button when desired digits are highlighted.



Combine Setup Icon



- | | |
|---------------------------------|--------------------------------|
| A—Grain Tank Level Setup Icon | D—Enter/Accept Icon—Full Level |
| B—Enter/Accept Icon—Empty Level | E—Unloading Rate Offset Menu |
| C—Grain Tank Level Percentage | |

NOTE: Repeat procedure until desired unloading rate offset value is shown.

Touch or press confirm button when enter/accept icon is highlighted.

ZX234264 —UN—19APR15

OUCC002,0004ABF -19-08FEB16-1/1

Folding Functions Setup

H94473 —UN—31MAR10

NOTE: Screen shows all optional folding features.
Folding feature always defaults to top portion of screen depending on options.

Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when folding functions setup icon (A) is highlighted.

Folding Unloading Auger

Touch or press confirm button when desired icon is highlighted.

- Unfold Icon (B)
- Fold Icon (C)
- Auger Position Indicator (D)

NOTE: Folding unloading auger is an automatic feature.
Auger begins to fold or unfold automatically when desired icon is selected.

Screen indicates if unloading auger has not reached the following:

- Complete unfolded (field) position. Unloading auger will not work unless fully unfolded.
- Complete folded (transport) position after operator folds unloading auger.

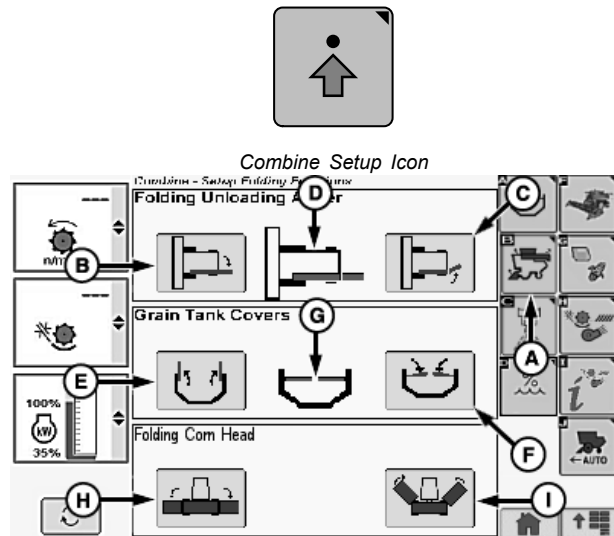
Grain Tank Covers (One-Touch Button):

CAUTION: Avoid power line entanglement.
Grain tank covers must be closed before transporting machine.

NOTE: Grain tank covers must be opened all the way in order to engage separator.

Touch or press confirm button when desired icon is highlighted.

- Unfold Icon (E)
- Fold Icon (F)
- Grain Tank Position Indicator (G)



- | | |
|--------------------------------|---------------------------------|
| A—Folding Functions Setup Icon | F—Fold Icon |
| B—Unfold Icon | G—Grain Tank Position Indicator |
| C—Fold Icon | H—Unfold Icon |
| D—Auger Position Indicator | I—Fold Icon |
| E—Unfold Icon | |

Covers unfold or fold depending on which icon was selected.

NOTE: Covers automatically fold or unfold when desired icon is touched or confirm button is pressed.

Folding Corn Head (If Equipped):

Touch or press confirm button when desired icon is highlighted.

- Unfold Icon (H)
- Fold Icon (I)

Corn head unfolds or folds depending on which icon was selected.

OUCC002,0004AA8 -19-06FEB16-1/1

Change Moisture Settings and Yield Units Settings

Moisture Sensor Settings:

H94473 —UN—31MAR10

NOTE: Page appears if equipped with moisture sensor.

Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when moisture setup icon (A) is highlighted.

Touch or press confirm button when ON box (B) or OFF box (C) is highlighted.

Box displays a checkmark indicating which was selected.

- Moisture Alarm ON Box - moisture alarm sounds when value drops below minimum setting or above maximum setting (operator presets).
- Moisture Alarm OFF Box - moisture alarm will not sound when value drops below minimum setting or above maximum setting (operator presets).

Touch or press confirm button when minimum box (D) or maximum box (E) is highlighted.

NOTE: This determines setpoint (minimum and maximum) for activation of moisture alarm.

- Minimum Moisture Alarm Box - operator selects moisture percentage for alarm to sound when value drops below preset value.
- Maximum Moisture Alarm Box - operator selects moisture percentage for alarm to sound when value is above preset value.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired value is shown. Press confirm button to save value.

Touchscreen Only: Enter desired value on numeric display. Touch enter/accept icon to save value.

Moisture Correction/Fixed Moisture Settings:

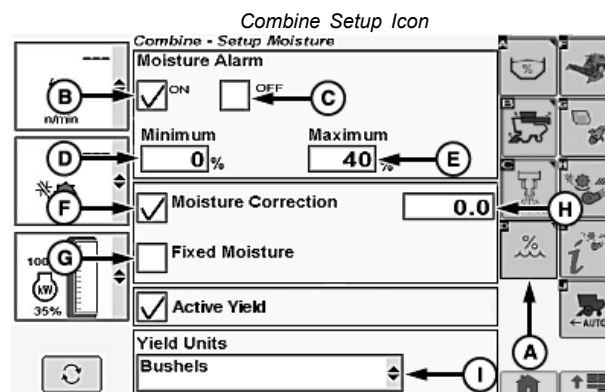
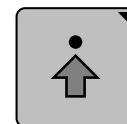
Touch or press confirm button when moisture correction box (F) or fixed moisture box (G) is highlighted.

Box displays a checkmark indicating which was selected.

IMPORTANT: Changing moisture correction will not change data already saved. After changes are made, all harvest information collected from that point will reflect the changes.

- Moisture Correction Box - set moisture correction to difference between combine moisture sensor and elevator certified moisture sensor (example: elevator moisture (13%) minus combine measured moisture (12%) = moisture difference (+1%))

NOTE: Moisture difference can be a positive or negative number.



A—Moisture Setup Icon
B—ON Box
C—OFF Box
D—Minimum Box
E—Maximum Box

F—Moisture Correction Box
G—Fixed Moisture Box
H—Value/Change Box
I—Yield Units Menu

- Fixed Moisture Box - moisture sensor reading is disabled and forces preset moisture values.

Touch or press confirm button when value/change box (H) is highlighted.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired value is shown. Press confirm button to save value.

Touchscreen Only: Enter desired value on numeric display. Touch enter/accept icon to save value.

Yield Units Settings:

Touch or press confirm button when yield units menu (I) is highlighted.

Yield units menu displays the following:

Bushels	Hundred Weight	Metric Tons
Barrels	Pounds	Tons
Sacks	Kilograms	

Once desired yield unit is chosen, touch or press confirm button.

H115577 —UN—24AUG15

OUCC002,0004AC1 -19-08FEB16-1/1

Yield Calibration

General information

1. Calibration mode for yield calibration is selected.
2. Grain tank is filled in calibration mode
3. Complete content of grain tank is emptied out onto an empty trailer.
4. A weighbridge is used to weigh how much grain has been harvested; this weight is compared to the value shown on the monitor on the combine harvester.
5. When the two values are known, a correction factor is calculated and keyed in.



ZX1046214 —UN—12AUG14

OUC002,0004AC2 -19-08FEB16-1/8

IMPORTANT: Annual calibration of the mass flow sensor is required in order to achieve accurate grain weight measurement.

The standard calibration must be performed for each crop to be harvested.

Low flow calibration must be performed to achieve a higher accuracy level when grain flow fluctuates strongly.

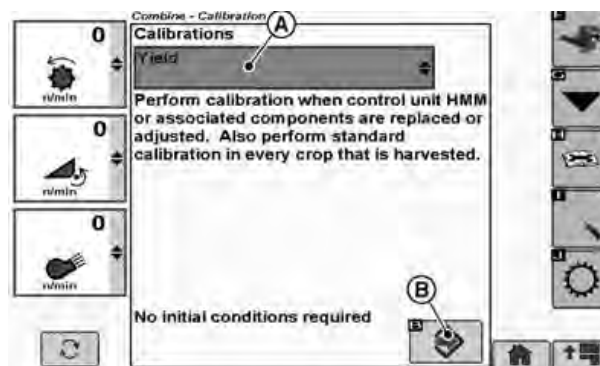
In calibration menu (A), select the **Yield** function.

Press confirm button and rotate knob until enter/accept icon (B) is highlighted.

Press confirm button to advance to next page.

NOTE: Operator must perform the standard calibration before the low flow calibration.

For the initial calibration, weight icon and compensation number rest box are not enabled.



A—Calibration Menu

B—Enter/Accept Icon

ZX271588 —UN—08FEB16

Continued on next page

OUC002,0004AC2 -19-08FEB16-2/8

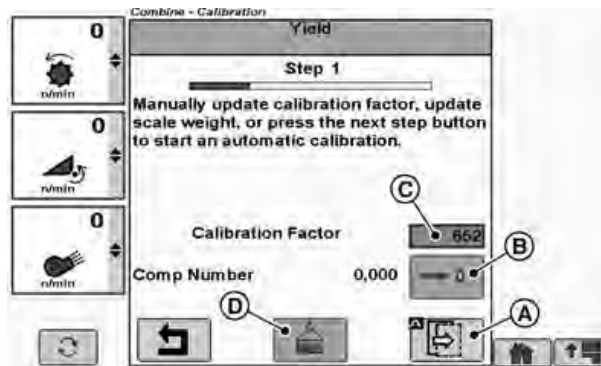
Rotate knob until one of the following icons is highlighted:

- Next Page icon (A) - Allows operator to advance to next page of calibration.
- Compensation Number Reset Box (B) - Allows operator to reset the low flow calibration.

NOTE: For information on Calibration Factor, refer to Manual Adjust Calibration Factor section.

- Calibration Factor (C) - Allows operator to input a calibration factor number that was figured using a formula.
- Weight icon (D) - Allows operator to enter scale weight in calibration factor once scale weight is known from elevator.

Press the confirm button once desired selection is highlighted.



A—Next Page Icon
B—Compensation Number Reset Box

C—Calibration Factor
D—Weight Icon

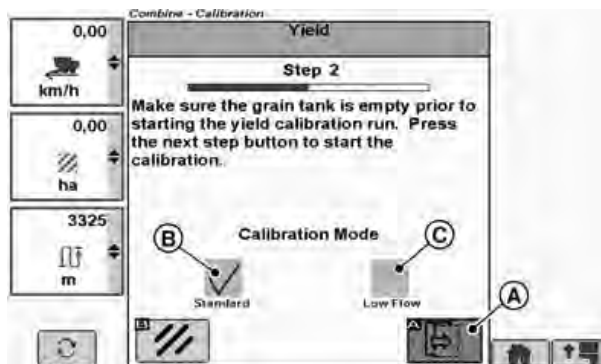
OUC002,0004AC2 -19-08FEB16-3/8

ZX271590 —UN—08FEB16

Rotate knob until one of the following icons is highlighted:

- Next Page icon (A) - Allows operator to advance to next page of calibration.
- Standard Calibration Mode Box (B) - Allows operator to perform a calibration in every crop that is harvested.
- Low Flow Calibration Mode Box (C) - Allows operator to perform a calibration to obtain an improved level of accuracy in situations where there are large variations in grain flow rate.

Press the confirm button once desired selection is highlighted.



A—Next Page Icon
B—Standard Calibration Mode Box
C—Low Flow Calibration Mode Box

OUC002,0004AC2 -19-08FEB16-4/8

ZX271591 —UN—08FEB16

Standard Calibration Mode

NOTE: Harvested Weight (B) is the approximate weight of grain that was calibrated during the calibration process.

Rotate knob until next page icon (A) is highlighted, and press the confirm button.

A—Next Page Icon
B—Harvested Weight



Continued on next page

OUC002,0004AC2 -19-08FEB16-5/8

ZX271592 —UN—08FEB16

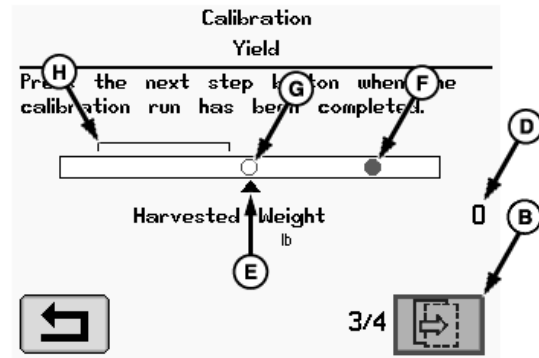
Low Flow Calibration Mode

NOTE: Harvested Weight (D) is the approximate weight of grain that was calibrated during the calibration process.

- Current Flow Rate (E) - arrow below bar graph indicates instantaneous flow rate.
- Standard Calibration Point (F) - green dot indicates standard calibration point (will be a red if a scale weight for standard calibration has not yet been entered).
- Average Flow Rate (G) - red circle indicates average flow rate during low flow calibration.

NOTE: When calibrated correctly, red circle should end up towards left side of bar graph within range area (H).

Rotate knob until next page icon (B) is highlighted, and press the confirm button.



H93312—UN—23JAN09

OUC002,0004AC2 -19-08FEB16-6/8

Scale Weight Not Known: Rotate knob until enter/accept icon (B) is highlighted and press the confirm button.

NOTE: Scale weight can be entered after a calibration is complete (during calibration this indicates approximate weight of grain that has been harvested).

Scale Weight Known:

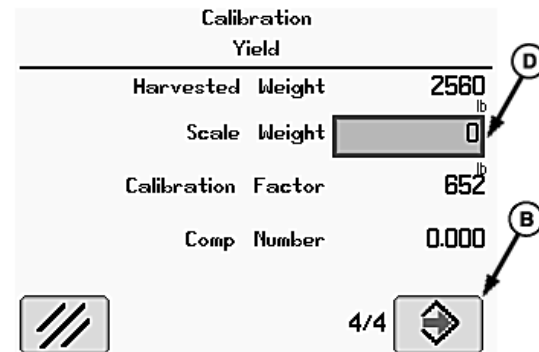
- Rotate knob until scale weight box (D) is highlighted and press confirm button.
- Using numeric display, rotate knob until desired digits are highlighted and press confirm button.

NOTE: Repeat procedure until scale weight value is shown.

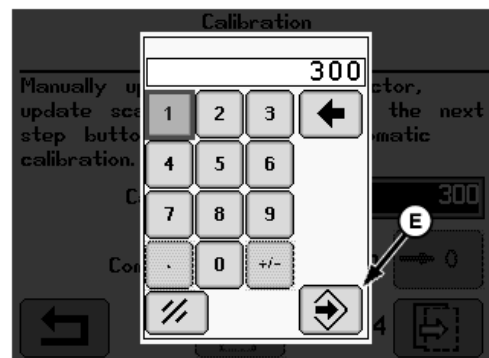
- Rotate knob until enter/accept icon (E) is highlighted and press confirm button to return to calibration menu.
- Rotate knob until enter/accept icon (B) is highlighted and press the confirm button.

B—Enter/Accept Icon
D—Scale Weight Box

E—Enter/Accept Icon



H92012—UN—05JUN08



H91903—UN—29MAY08

Continued on next page

OUC002,0004AC2 -19-08FEB16-7/8

Scale Weight Returns From Elevator

Rotate knob until weight icon (A) is highlighted and press confirm button.

Rotate knob until scale weight box (B) is highlighted and press confirm button.

Using numeric display, rotate knob until desired digits are highlighted and press confirm button.

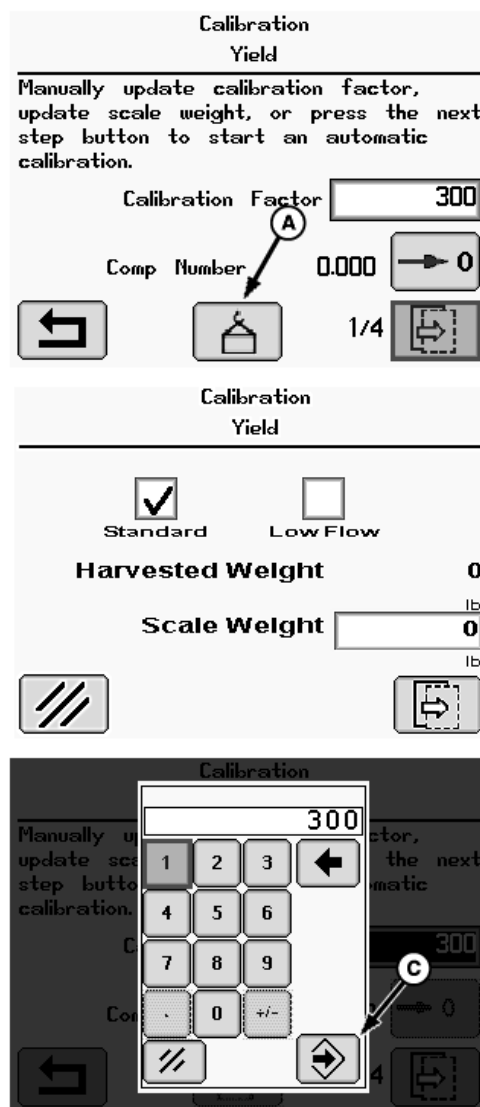
NOTE: Repeat procedure until scale weight value is shown.

Rotate knob until enter/accept icon (C) is highlighted and press confirm button to return to calibration menu.

Rotate knob until next page icon (D) is highlighted and press confirm button to follow instructions shown on remaining screens.

A—Weight Icon
B—Scale Weight Box

C—Enter/Accept Icon
D—Next Page Icon



OUC002,0004AC2 -19-08FEB16-8/8

Manual Adjust Yield Calibration Factor

NOTE: Do not perform a manual adjust Calibration Factor if you intend on using the Low Flow calibration.

Use the following example to figure a New Calibration Factor:

Displayed Calibration Factor = 650

Weight of grain shown on display = 12,539 kg (27,643 lb.)

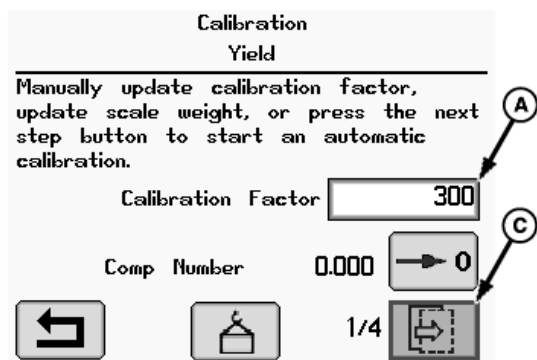
Net weight of grain from scale ticket = 12,257 kg (27,022 lb.)

New Calibration Factor = 665

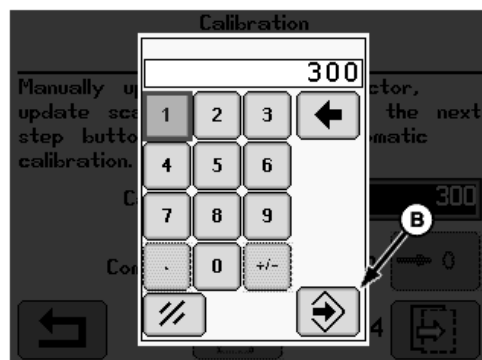
$$(650) \times \frac{12,539 \text{ kg (27 643 lb)}}{12,257 \text{ kg (27 022 lb)}} = (665)$$

Continued on next page

OUC002,0004344 -19-21FEB15-1/2



H91995—UN—30MAY08



H91996—UN—29MAY08

A—Calibration Factor Box

B—Enter/Accept Icon

C—Next Page Icon

Rotate selection dial until calibration factor box (A) is highlighted and press confirm switch.

Using numeric display, rotate selection dial until desired digits are highlighted and press confirm switch.

NOTE: Repeat procedure until calibration factor value is shown.

Rotate selection dial until enter icon (B) is highlighted and press confirm switch.

Rotate selection dial until next page icon (C) is highlighted and press confirm switch to follow instructions shown on remaining screens.

OUC002,0004344 -19-21FEB15-2/2

Change Tire Radius Code

It will be necessary to recalibrate system if tires or final drives are changed from what was originally shipped from the factory. Verify that correct tire code is entered into memory.

IMPORTANT: When changing drive wheels, tire radius may also change. CAB control unit **MUST** be

set to new tire radius. See your John Deere dealer for further information.

Failure to calibrate system will result in inaccurate Harvest Monitor Yields.

OUC002,0004345 -19-21FEB15-1/1

Moisture Sensor Temperature Calibration

Touch or press confirm switch when diagnostic icon is highlighted.

H94478 —UN—31MAR10

Touch or press confirm switch when calibration icon (A) is highlighted.

Touch or press confirm switch when calibrations menu (B) is highlighted.

Touch or press confirm switch when **Moisture Sensor Temperature** is highlighted.

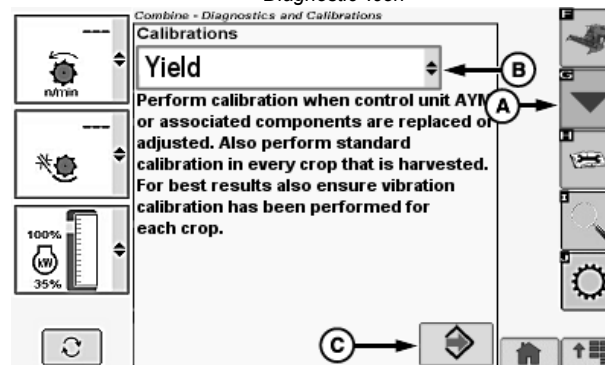
Touch or press confirm switch when enter/accept icon (C) is highlighted.

A—Calibration Icon
B—Calibrations Menu

C—Enter/Accept Icon



Diagnostic Icon



OUC002.0004346 -19-21FEB15-1/2

H94928 —UN—11OCT10

NOTE: Calibration must be done before harvesting begins and when moisture sensor is empty.

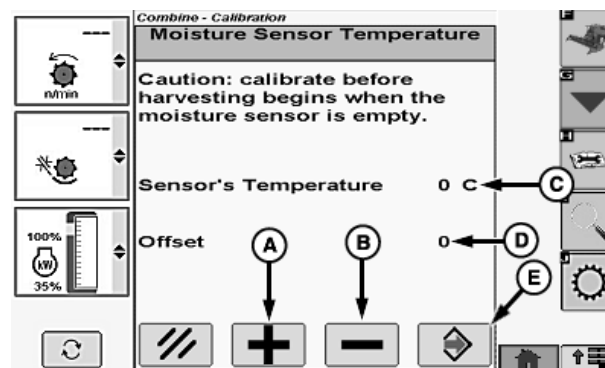
Touch or press confirm switch when plus (+) icon (A) or minus (-) icon (B) is highlighted.

NOTE: Sensor temperature must be set to the current ambient air temperature.

Increase or decrease until desired sensor temperature (C) is shown.

NOTE: Offset (D) automatically adjusts when ambient sensor temperature is set.

Touch or press confirm switch when enter/accept icon (E) is highlighted to save sensor temperature.



A—Plus (+) Icon
B—Minus (-) Icon
C—Sensor Temperature

D—Offset
E—Enter/Accept Icon

OUC002.0004346 -19-21FEB15-2/2

H96030 —UN—05OCT10

Payable Moisture and Density Chart

Crop	Standard Moisture (%)	Crop Density (lbs/bushel)	Crop Density (kg/liter)
Alfalfa	12.0	60	0,77
Barley (Winter)	14.5	48	0,63
Barley (Spring)	14.5	48	0,63
Canola	10.0	52	0,68
Chickpeas	12.0	61	0,77
Corn (Dry or Wet)	15.0	56	0,71
Edible Beans	14.5	60	0,77
Flax	7.0	56	0,71
Grass Seeds	12.0	22	0,28
Lentils	10.5	60	0,77
Lupins	12.0	53	0,68
Millet	11.0	50	0,66
Mustard	8.0	60	0,77
Navy Beans	14.5	62	0,80
Oats	15.0	32	0,43
Peas	12.0	60	0,77
Popcorn	15.5	60	0,77
Rape Seed (Dry or Wet)	10.0	52	0,68
Rice	14.0	45	0,57
Rye	14.0	56	0,71
Safflower	6.0	45	0,57
Sorghum	13.0	56	0,71
Soybeans	13.0	60	0,77
Sunflowers	9.0	20	0,31
Triticale	14.5	58	0,74
Wheat (Spring)	13.0	60	0,77
Wheat (Winter)	13.0	60	0,77
Wheat	14.5	60	0,77

OUCC002,0004349 -19-21FEB15-1/1

Standard Weights Chart

Unit	Weight (lb)	Weight (kg)
Barrels	162.0	73.5
Sacks	100.0	45.4
Hundred Weight	100.0	45.4
Pounds (lb)	1.0	0.454
Kilograms (kg)	2.204	1.0
Metric Tons	2204.0	1000.0
Tons	2000.0	907.0

OUCC002,000434A -19-21FEB15-1/1

Change Crop and Grain Loss Settings

H94473 —UN—31MAR10

Crop Menu:

Touch or press confirm switch when combine setup icon is highlighted.

Touch or press confirm switch when crop setup icon (A) is highlighted.

Touch or press confirm switch when crop menu (B) is highlighted.

Crop menu displays the following:

Alfalfa	Lentils	Rye
Barley	Lupins	Safflower
Barley - Spring ^a	Millet	Sorghum
Barley - Winter ^a	Mustard	Soybeans
Canola	Navy Beans	Sunflower
Chickpeas	Oats	Triticale ^a
Corn	Peas	Wheat ^a
Edible Beans	Popcorn	Wheat-Spring
Flax	Rape Seed ^a	Wheat-Winter
Grass Seeds	Rice	

^aEuropean crop listing.

Once desired crop is chosen, touch or press confirm switch.

GreenStar™ Pro Documentation:

Synchronizes selected crop from armrest display with display mounted on cornerpost (if equipped).

Touch or press confirm switch when GreenStar™ Pro Documentation box (C) is highlighted.

- Checked - synchronizes selected crop together on both displays.
- Unchecked - selected crop on both displays work independently from each other.

Threshing Condition:

Threshing condition menu (C) displays the following:

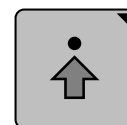
- Light
- Normal
- Difficult

Once desired threshing condition is chosen, touch or press confirm switch.

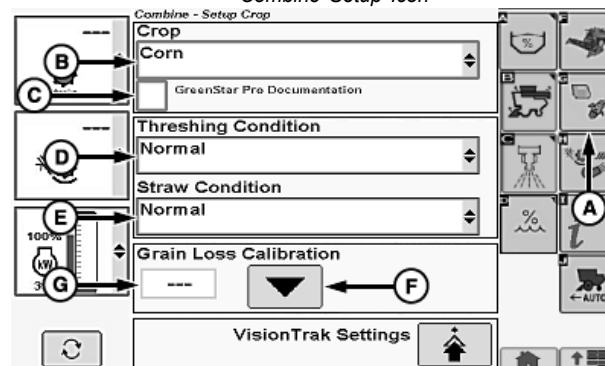
Straw/Cob Condition:

Straw/Cob condition menu (D) displays the following:

- Brittle
- Normal



Combine Setup Icon



A—Crop Setup Icon

B—Crop Menu

C—GreenStar™ Pro Documentation

D—Threshing Condition Menu

E—Straw/Cob Condition Menu

F—Grain Loss Calibration Icon

G—Grain Loss Calibration Value

- Difficult

Once desired straw/cob condition is chosen, touch or press confirm switch.

Grain Loss Calibration:

Adjust machine and header to acceptable loss levels for particular crop and condition.

Touch or press confirm switch when calibration icon (E) is highlighted.

NOTE: This saves the current working data and the total loss activity display is centered.

Calibration Reference Number:

Touch or press confirm switch when grain loss calibration value (F) is highlighted.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired calibration reference value is shown. Press confirm switch to save value.

Touchscreen Only: Enter desired calibration reference value on numeric display. Touch enter/accept icon to save value.

Continued on next page

OUCC002,0004348 -19-21FEB15-1/2

Shoe/Separator Balance

Adjusts balance of bars between shoe loss indicator and separator loss indicator on VisionTrak™ display. Adjustment can be used to fine-tune display if losses appear to come from one area of the machine, but more losses are displayed in other area of machine due to crop conditions.

Touch or press confirm switch when VisionTrak™ settings icon (A) is highlighted.

Touch or press confirm switch when shoe/separator balance box (B) or shoe/separator balance bar graph (C) is highlighted.

Shoe/Separator Balance Box Adjustment:

Non-Touchscreen or Touchscreen: Rotate selection dial until desired shoe/separator balance value is shown. Press confirm switch to save value.

Touchscreen Only: Touch or press confirm switch when plus (+) icon or minus (-) icon is highlighted until desired shoe/separator balance value is shown.

Shoe/Separator Balance Bar Graph Adjustment:

Non-Touchscreen or Touchscreen: Rotate selection dial to increase or decrease shoe/separator balance bar graph to desired value. Press confirm switch to save value.

Touchscreen Only: Touch or press confirm switch when plus (+) icon or minus (-) icon is highlighted until desired shoe/separator balance value is shown.

Touch or press confirm switch when return/back icon (F) is highlighted to return to previous page.

Shoe/Separator Resolution

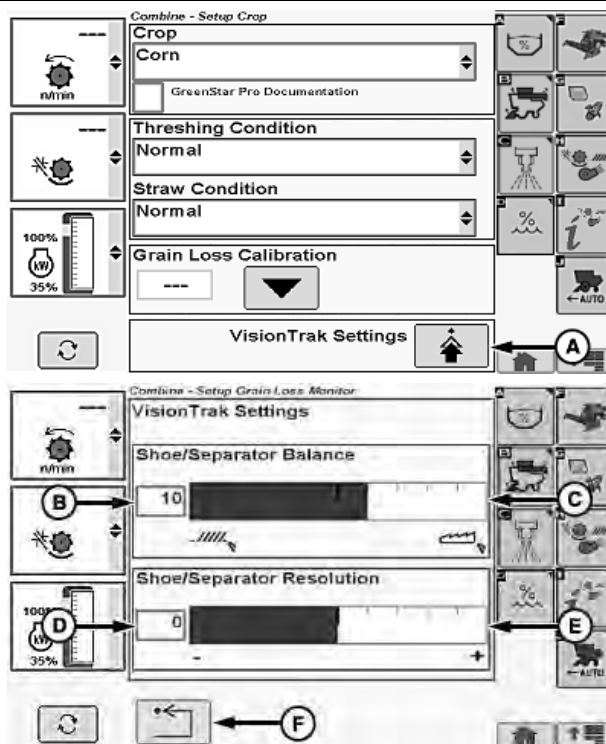
Allows operator to modify number of bars shown on VisionTrak™ display for shoe loss indicator and separator loss indicator (independent of number of center bars).

Touch or press confirm switch when VisionTrak™ settings icon (A) is highlighted.

Touch or press confirm switch when shoe/separator resolution box (D) or shoe/separator resolution bar graph (E) is highlighted.

Shoe/Separator Resolution Box Adjustment:

Non-Touchscreen or Touchscreen: Rotate selection dial until desired shoe/separator resolution value is shown. Press confirm switch to save value.



A—VisionTrak™ Settings Icon

B—Shoe/Separator Balance Box

C—Shoe/Separator Balance Bar Graph

D—Shoe/Separator Resolution Box

E—Shoe/Separator Resolution Bar Graph

F—Return/Back Icon

Touchscreen Only: Touch or press confirm switch when plus (+) icon or minus (-) icon is highlighted until desired shoe/separator resolution value is shown.

Shoe/Separator Resolution Bar Graph Adjustment:

Non-Touchscreen or Touchscreen: Rotate selection dial to increase or decrease shoe/separator resolution bar graph to desired value. Press confirm switch to save value.

Touchscreen Only: Touch or press confirm switch when plus (+) icon or minus (-) icon is highlighted until desired shoe/separator resolution value is shown.

Touch or press confirm switch when return/back icon (F) is highlighted to return to previous page.

OUC002,0004348 -19-21FEB15-2/2

Change Machine Settings

H94473 —UN—31MAR10

Actual or Setpoint Settings:

Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when machine settings icon (A) is highlighted.

- Actual Setting (B) (setpoint value in black) - indicates current setpoint value of machine.
- Setpoint Setting (C) (setpoint value in blue) - machine automatically adjusts to operator setpoint value.

Machine Settings:

NOTE: Threshing speed and fan speed setpoint values flash until separator is engaged and engine speed is above 2000 rpm.

Touch or press confirm button when one of the following is highlighted:

- Threshing Speed (D)
 - 250 - 950 rpm, increments of 10 rpm
- Threshing Clearance (E)
 - 0 - 40 mm¹, increments of 1 mm
- Fan Speed (F)
 - 550 - 1350 rpm, increments of 10 rpm
- Chaffer Clearance (G)
 - 0 - 22 mm¹, increments of 1 mm
- Sieve Clearance (H)
 - 0 - 20 mm¹, increments of 1 mm

Non-Touchscreen or Touchscreen: Rotate selection dial until desired machine value is shown. Press confirm button to save value.

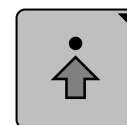
Touchscreen Only: Enter desired machine value on numeric display. Touch enter/accept icon to save value.

Touch or press confirm button when enter/accept icon (I) is highlighted to allow modified machine settings chosen by operator to automatically adjust and/or allow operator to save personal machine settings.

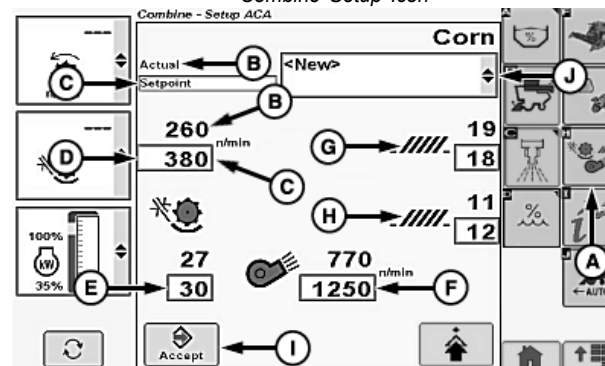
Change Crop Modifiers Menu:

NOTE: Operator is allowed to save 20 custom crop settings with a limit of 20 characters, each. Personalizing machine settings will not overwrite factory settings.

¹ Manual operation is allowed above actual setting value (shown in black) and setpoint setting value (shown in blue), which is indicated by the word MAX. MAX is displayed until a decrease is indicated by operator.



Combine Setup Icon



- | | |
|-------------------------|-----------------------|
| A—Machine Settings Icon | F—Fan Speed |
| B—Actual Setting | G—Chaffer Clearance |
| C—Setpoint Setting | H—Sieve Clearance |
| D—Threshing Speed | I—Enter/Accept Icon |
| E—Threshing Clearance | J—Crop Modifiers Menu |

Touch or press confirm button when crop modifiers menu (J) is highlighted.

Crop modifiers menu displays the following:

- Default - displays factory default settings for selected crops.
- Dry (Default) - displays factory default settings for corn.
- Wet (Default) - displays factory default settings for corn.
- New - select when a set of custom/personal crop settings will be entered.
- Clean Out - displays factory default settings allowing machine to be cleaned out.

Once desired crop modifier is chosen, touch or press confirm button.

Continued on next page

OUC002.0004AA9 -19-06FEB16-1/2

H109932 —UN—28FEB14

Advanced Setup (Outside Machine Configuration Settings):

Touch or press confirm button when advanced setup icon (A) is highlighted.

Display screen alerts operator to manually check areas around machine for recommended settings.

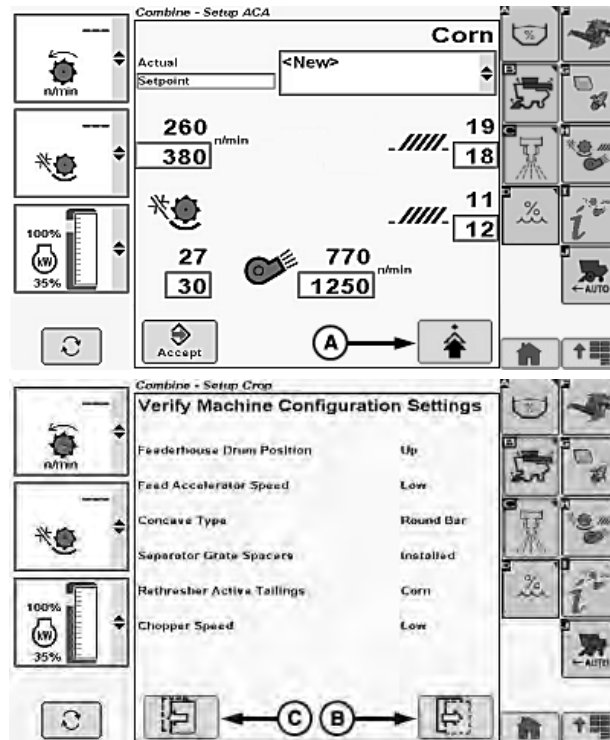
NOTE: Items shown on screen vary depending on machine options and selected crop.

Touch or press confirm button when next page icon (B) (if available) is highlighted to advance to next page.

NOTE: Touch or press confirm button when previous page icon (C) is highlighted to return to previous page.

A—Advanced Setup Icon
B—Next Page Icon

C—Previous Page Icon



OUC002,0004AA9 -19-06FEB16-2/2

Name Customized Crops

NOTE: Operator is allowed to save 20 custom crop settings with a limit of 20 characters, each. Personalizing machine settings will not overwrite factory settings.

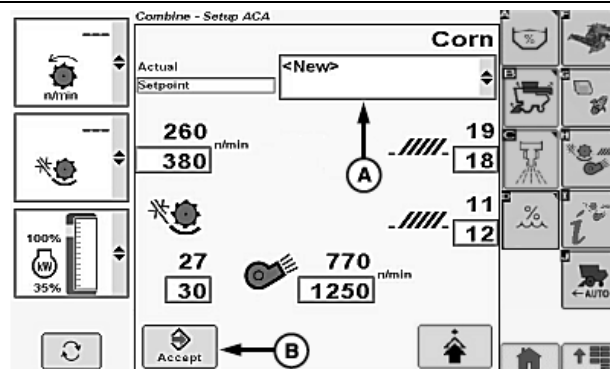
Touch or press confirm switch when crop modifiers menu (A) is highlighted.

Crop modifiers menu displays the following:

- Default - displays factory default settings for selected crops.
- Dry (Default) - displays factory default settings for corn.
- Wet (Default) - displays factory default settings for corn.
- New - select when a set of custom/personal crop settings will be entered.
- Clean Out - displays factory default settings allowing machine to be cleaned out.

Touch or press confirm switch when New is highlighted.

Modify machine settings as needed.



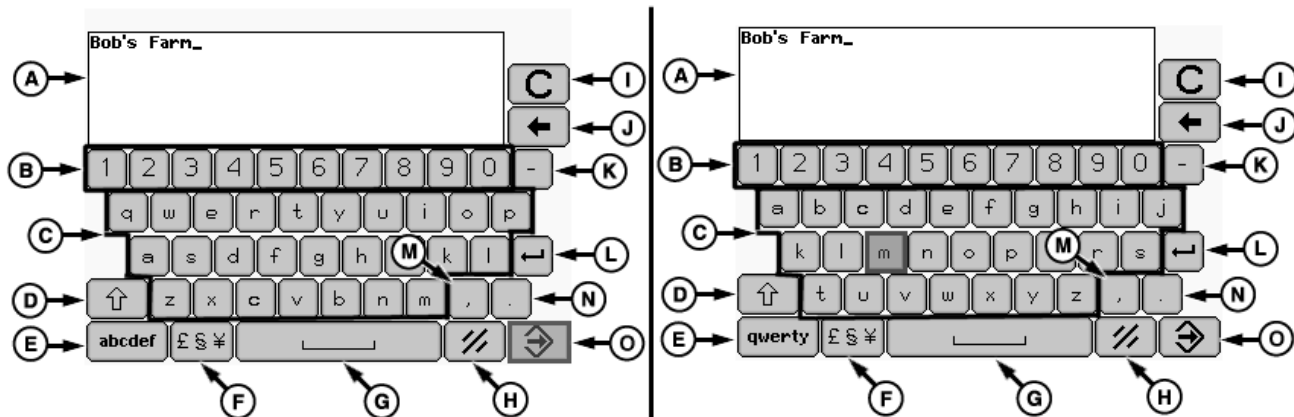
A—Crop Modifiers Menu

B—Enter/Accept Icon

Touch or press confirm switch when enter/accept icon (B) is highlighted.

Continued on next page

OUC002,000434C -19-23FEB15-1/2



QWERTY Keyboard Layout/ABC Keyboard Layout

A—Custom Name Display
B—Numeric Keys
C—Alpha Keys
D—Caps Lock/Shift Key

E—QWERTY (Standard Typewriter Keyboard Layout) or ABC Key
F—Symbols Key
G—Space Key

H—Cancel Key
I—Clear All Key
J—Backspace Key
K—Hyphen Key
L—Enter/Return Key

M—Comma Key
N—Period Key
O—Enter/Accept Icon

NOTE: Selecting symbols key (F) navigates to a another keyboard layout allowing you to select desired symbols.

Alphanumeric screen appears and allows you to custom name crops.

Touch or press confirm switch when desired icon is highlighted on display keyboard.

Repeat procedure as needed to name custom crop.

Once desired custom crop is named, touch or press confirm switch when enter/accept icon (O) is highlighted.

OUC002,000434C -19-23FEB15-2/2

Interactive Combine Adjustment (If Equipped) (In Cab Recommendations)

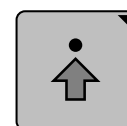
NOTE: Interactive Combine Adjustment system will be deactivated by an engine shut down (key OFF cycle), canceling system, or when Optimization Complete state is obtained. System does not retain past machine recommendations when Interactive Combine Adjustment is restarted.

H94473 —UN—31MAR10

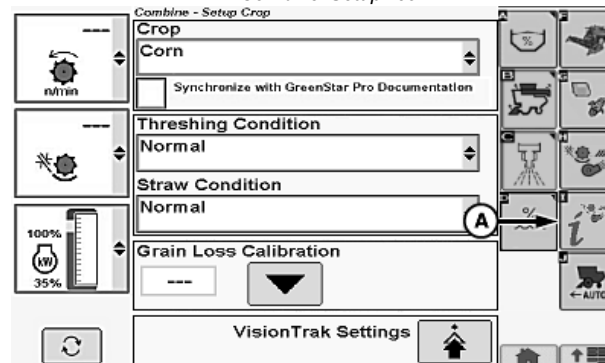
Touch or press confirm switch when combine setup icon is highlighted.

Touch or press confirm switch when Interactive Combine Adjustment icon (A) is highlighted.

A—Interactive Combine Adjustment Icon



Combine Setup Icon



Continued on next page

OUC002,0004351 -19-17APR15-1/12

Combine Improvement Targets:

NOTE: Operator can select one, two, or all three types of combine improvement target boxes.

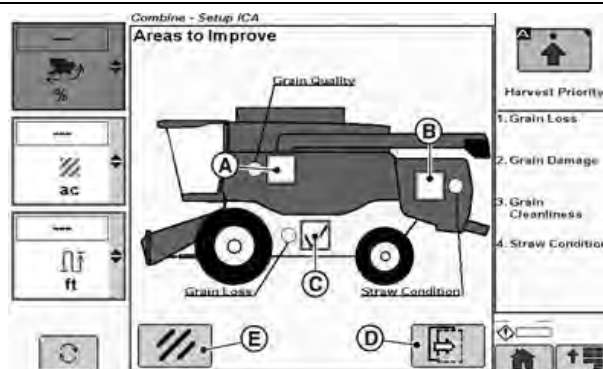
Selected area of combine changes from green to yellow.

Touch or press confirm switch when desired combine improvement target box or boxes are highlighted.

- Grain Quality (A)
 - Broken Grain
 - Chaff/Husks
 - Straw Pieces/Cobs
 - Unthreshed Material
 - Excess Tailings
- Straw Condition (B)
 - Straw Condition
- Grain Loss (C)
 - Separator Loss
 - Shoe Loss
 - Unthreshed Loss

Box displays a checkmark indicating which issue item or items were selected.

NOTE: Next page icon (D) is not selectable until a combine improvement target box is selected.



A—Grain Quality
B—Straw Condition
C—Grain Loss

D—Next Page Icon
E—Cancel Icon

Touch or press confirm switch when cancel icon (E) is highlighted to cancel interactive combine adjustment setup and return to combine setup screen.

Continued on next page

OUC002,0004351 -19-17APR15-2/12

ZX234268 —JUN—19APR15

Harvest Priority Settings:

NOTE: Setup harvest priority icon only needs to be pressed if harvest priorities have changed.

Touch or press confirm switch when setup harvest priority icon (A) is highlighted to rearrange harvest priority (B).

Touch or press confirm switch when up/down arrow icon (C) is highlighted to move highlighted region (D).

Move highlighted region to desired item within harvest priority list (E).

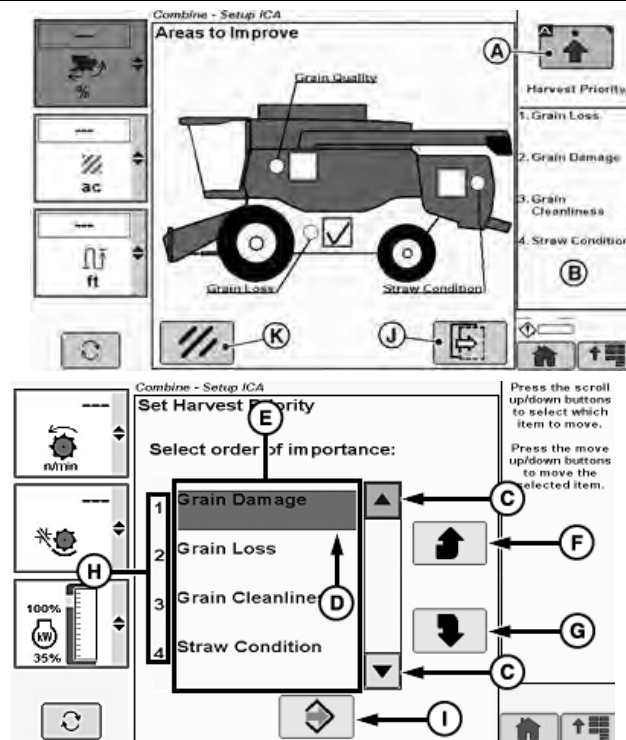
Touch or press confirm switch when selection up icon (F) or selection down icon (G) is highlighted to move selected highlighted item higher or lower in priority order (H).

1. Highest Priority
2. High Priority
3. Low Priority
4. Lowest Priority

Repeat until list is prioritized as needed.

Touch or press confirm switch when save icon (I) is highlighted to save priority list order and return to previous screen.

Touch or press confirm switch when next page icon (J) is highlighted to advance to next page or cancel icon (K) to cancel interactive combine adjustment setup and return to combine setup screen.



- | | |
|-------------------------------|-----------------------|
| A—Setup Harvest Priority Icon | G—Selection Down Icon |
| B—Harvest Priority List | H—Priority Order |
| C—Up/Down Arrow Icon | I—Save Icon |
| D—Highlighted Region | J—Next Page Icon |
| E—Harvest Priority List | K—Cancel Icon |
| F—Selection Up Icon | |

OUCC002,0004351 -19-17APR15-3/12

Grain Loss Improvement:

NOTE: Screen only appears if grain loss was previously checkmarked. Select any combination of grain loss improvement for recommended machine changes.

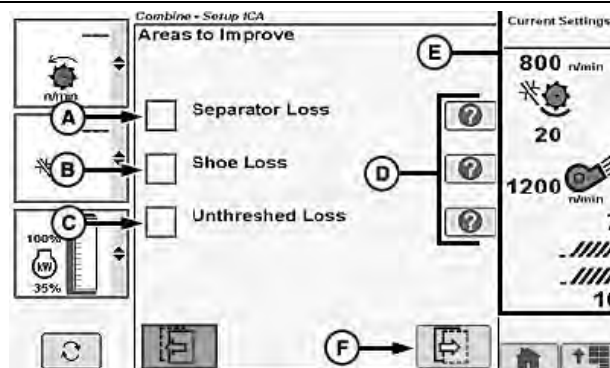
Touch or press confirm switch when desired grain loss improvement box or boxes are highlighted:

- Separator Loss (A)
- Shoe Loss (B)
- Unthreshed Loss (C)

NOTE: Touch or press confirm switch when desired help icon (D) is highlighted. Information area (E) switches from current machine settings to help information area which provides more details on improvements.

Touch or press confirm switch when next page icon (F) is highlighted to advance to next page.

NOTE: Touch or press confirm switch when previous page icon is highlighted to return to previous page if needed.



- | | |
|-------------------|----------------------|
| A—Separator Loss | D—Help Icons |
| B—Shoe Loss | E—Informational Area |
| C—Unthreshed Loss | F—Next Page Icon |

Continued on next page

OUCC002,0004351 -19-17APR15-4/12

Grain Quality Improvement:

NOTE: Screen only appears if grain quality was previously checkmarked. Select any combination of grain quality improvements for recommended machine changes.

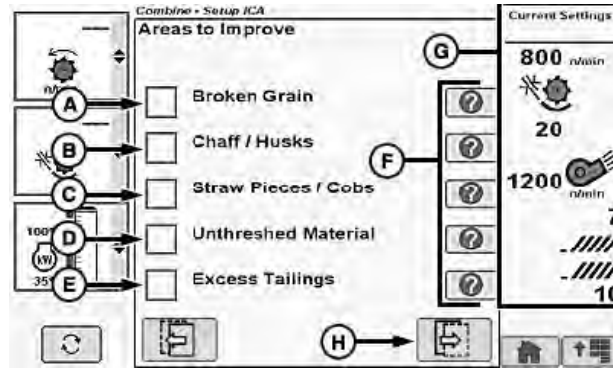
Touch or press confirm switch when desired grain quality improvement box or boxes are highlighted:

- Broken Grain (A)
- Chaff/Husks (B)
- Straw Pieces/Cobs (C)
- Unthreshed Material (D)
- Excess Tailings (E)

NOTE: Touch or press confirm switch when desired help icon (F) is highlighted. Information area (G) switches from current machine settings to help information area which provides more details on improvements.

Touch or press confirm switch when next page icon (H) is highlighted to advance to next page.

NOTE: Touch or press confirm switch when previous page icon is highlighted to return to previous page if needed.



A—Broken Grain
B—Chaff/Husks
C—Straw Pieces/Cobs
D—Unthreshed Material

E—Excess Tailings
F—Help Icons
G—Informational Area
H—Next Page Icon

OUC002,0004351 -19-17APR15-5/12

Recommended Machine Changes:

Current recommendation area (A) displays the recommended machine setting changes.

NOTE: Next recommendation icon or previous recommendation icon may be grayed out if there are no more recommendations.

Touch or press confirm switch when next recommendation icon (B) or previous recommendation icon (C) is highlighted to advance to next recommendation or return to previous recommendation.

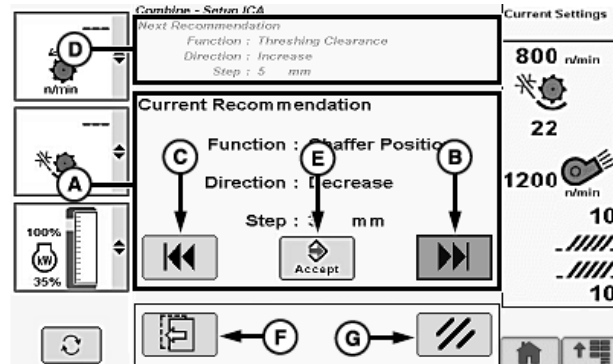
NOTE: Next recommendation area (D) displays upcoming adjustment proposed by the system.

Touch or press confirm switch when enter/accept icon (E) is highlighted to make proposed machine adjustment.

Touch or press confirm switch when previous page icon (F) is highlighted to return to previous page.

NOTE: Touch or press confirm switch when cancel icon (G) is highlighted to cancel recommendation. Previous machine adjustments will be retained.

Interactive Combine Adjustment system will be deactivated by an engine shut down (key OFF cycle), canceling system, or when Optimization



A—Current Recommendation Area
B—Next Recommendation Icon
C—Previous Recommendation Icon
D—Next Recommendation Area

E—Enter/Accept Icon
F—Previous Page Icon
G—Cancel Icon

Complete state is obtained. System does not retain past machine recommendations when Interactive Combine Adjustment is restarted.

Continued on next page

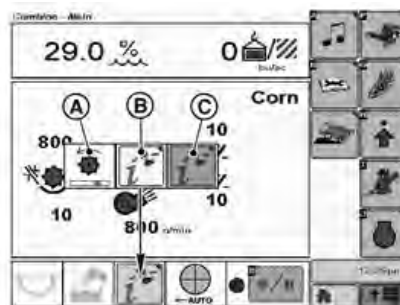
OUC002,0004351 -19-17APR15-6/12

Interactive Combine Adjustment (System Monitoring):

NOTE: It takes 30 seconds for Interactive Combine Adjustment icon to appear on display.

Touch or press confirm switch when Interactive Combine Adjustment indicator (A—C) is highlighted.

- (A) Indicator (System Busy) - indicates system adjustments are being performed. Green segment underneath icon moves back and forth indicating that machine is applying settings and waiting for system to stabilize.
- (B) Indicator (Yellow Indicator) - indicates system is ready for verification of improvement settings. Icon with a yellow background flashes or turns solid (flashes for 30 seconds and turns solid) indicating that system made adjustments and is waiting for operator feedback (rating of performance parameters).
- (C) Indicator (Red Indicator) - indicates system has detected a condition shift. Icon with a red background



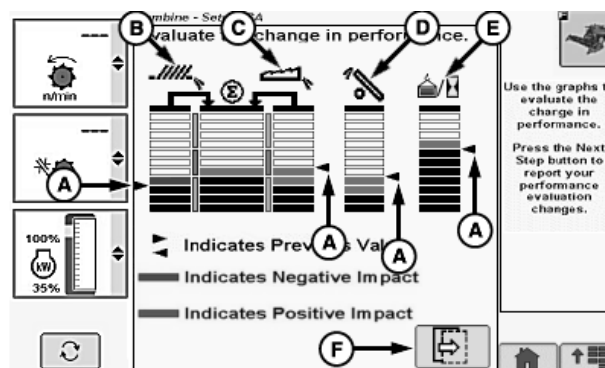
indicates to operator that system has detected a change in machine performance. System believes that operator should evaluate performance of machine and consider optimizing the machine settings.

OUC002,0004351 -19-17APR15-7/12

Arrow indicators (A) display previous values before Interactive Combine Adjustment system made recommended machine setting changes.

NOTE: Bar graphs are a visual guide to see if an increase or decrease occurs over a certain period of time.

- Shoe Loss Indicator (B)
 - Green bars indicate that loss levels are lower than they previously were and that performance has improved.
 - Red bars indicate that loss levels are higher than they previously were.
- Separator Loss Indicator (C)
 - Green bars indicate that loss levels are lower than they previously were and that performance has improved.
 - Red bars indicate that loss levels are higher than they previously were.
- Tailings Volume Indicator (D)
 - Green bars indicate that less tailings volume is being monitored.
 - Red bars indicate that more tailings volume is being monitored.
- Mass Flow Indicator (E)
 - Green bars indicate that feedrate has increased.



- | | |
|----------------------------|-----------------------------|
| A—Arrow Indicators | D—Tailings Volume Indicator |
| B—Shoe Loss Indicator | E—Mass Flow Indicator |
| C—Separator Loss Indicator | F—Next Page Icon |

- Red bars indicate that feedrate has decreased.

Touch or press confirm switch when next page icon (F) is highlighted to advance to next page.

Continued on next page

OUC002,0004351 -19-17APR15-8/12

Verify Improvement Settings:

NOTE: This is an example of a possible condition. Always follow information shown on display.

Allows operator to answer a series of questions on each parameter to help improve previous loss and quality conditions.

Touch or press confirm switch when desired parameter menu (A) is highlighted:

- Separator Loss
- Shoe Loss
- Unthreshed Loss
- Broken Grain
- Chaff/Husks
- Straw Pieces/Cobs
- Unthreshed Material
- Straw Condition
- Excess Tailings

Each parameter menu displays the following:

- Issue Resolved
- Better
- No Change
- Worse

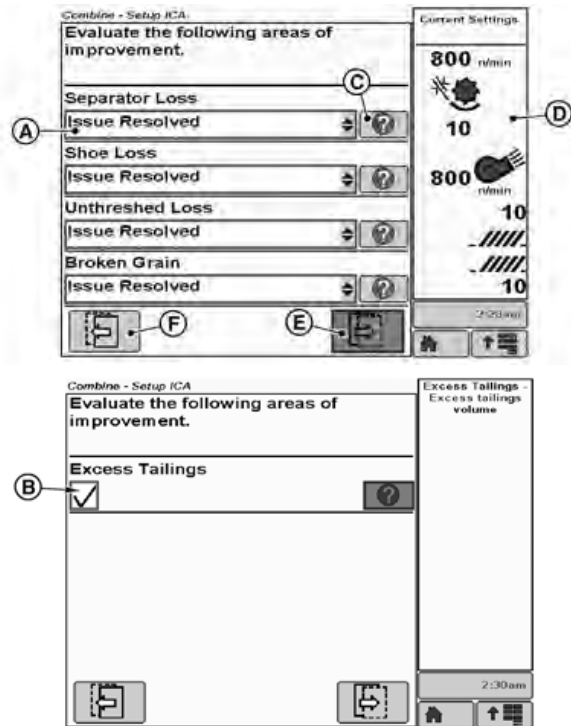
Once desired selection is chosen, touch or press confirm switch.

Repeat as needed on remaining parameter menus.

Touch or press confirm switch when excess tailings box (B) is highlighted.

- Checked - excess tailings continues to exist.
- Unchecked - excess tailings condition improved.

NOTE: Touch or press confirm switch when desired help icon (C) is highlighted. Information area (D) switches from current machine settings to help information area which provides more details on improvements.



A—Parameter Menus
B—Excess Tailings Box
C—Help Icons

D—Informational Area
E—Next Page Icon
F—Previous Page Icon

Touch or press confirm switch when next page icon (E) is highlighted to advance to next page.

NOTE: Touch or press confirm switch when previous page icon (F) is highlighted to return to previous page if needed.

Continued on next page

OUC002,0004351 -19-17APR15-9/12

ZX234275—UN—19APR15

ZX234270—UN—19APR15

Verify Previously Acceptable Parameter Settings:

NOTE: This is an example of a possible condition. Always follow information shown on display.

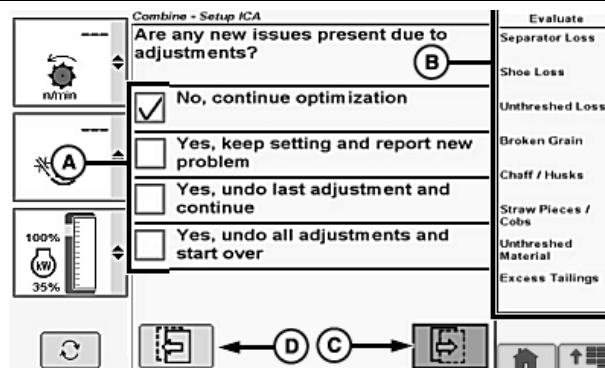
Allows operator to verify that parameters not previously selected are still acceptable or are now unacceptable.

Touch or press confirm switch when desired system evaluation box (A) is highlighted:

- No, continue optimization - allows operator to continue to optimize system. System continues to give recommended machine changes.
- Yes, keep setting and report new problem - allows operator incorporate a new issue with an existing issue(s). System continues to give recommended machine changes.
- Yes, undo last adjustment and continue - allows operator to undo previous recommended machine change and continue with other recommendations.
- Yes, undo all adjustments and start over - allows operator to undo all recommended machine changes performed by system and will exit Interactive Combine Adjustment.

Parameters not previously selected (B):

- Separator Loss
- Shoe Loss
- Unthreshed Loss
- Broken Grain
- Chaff/Husks



A—System Evaluation Box
B—Parameters Not Previously Selected
C—Next Page Icon
D—Previous Page Icon

- Straw Pieces/Cobs
- Unthreshed Material
- Straw Condition
- Excess Tailings

Touch or press confirm switch when next page icon (C) is highlighted to advance to next page.

NOTE: Touch or press confirm switch when previous page icon (D) is highlighted to return to previous page if needed.

Continued on next page

OUC002,0004351 -19-17APR15-10/12

H108680—UN—30JUL13

Recommended Machine Changes:

Current recommendation area (A) displays the recommended machine setting changes.

NOTE: Next recommendation icon or previous recommendation icon may be grayed out if there are no more recommendations.

Touch or press confirm switch when next recommendation icon (B) or previous recommendation icon (C) is highlighted to advance to next recommendation or return to previous recommendation.

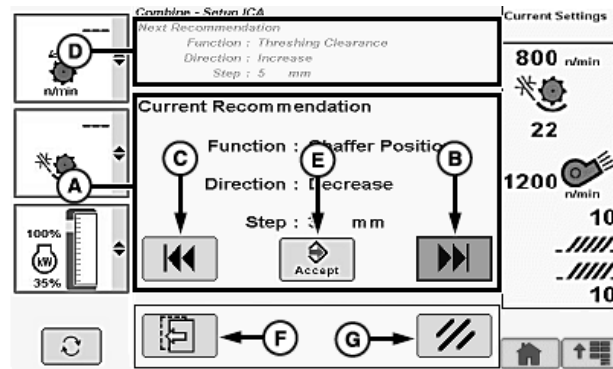
NOTE: Next recommendation area (D) displays upcoming adjustment proposed by the system.

Touch or press confirm switch when enter/accept icon (E) is highlighted to make proposed machine adjustment.

Touch or press confirm switch when previous page icon (F) is highlighted to return to previous page.

NOTE: Touch or press confirm switch when cancel icon (G) is highlighted to cancel recommendation. Previous machine adjustments will be retained.

Interactive Combine Adjustment system will be deactivated by an engine shut down (key OFF cycle), canceling system, or when Optimization



- A—Current Recommendation Area
- B—Next Recommendation Icon
- C—Previous Recommendation Icon
- D—Next Recommendation Area
- E—Enter/Accept Icon
- F—Previous Page Icon
- G—Cancel Icon

Complete state is obtained. System does not retain past machine recommendations when Interactive Combine Adjustment is restarted.

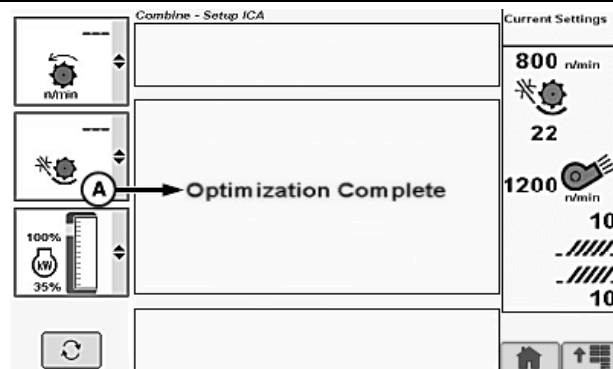
OUC002,0004351 -19-17APR15-11/12

Optimization Complete:

Optimization complete (A) appears on display when no further machine recommendations are needed.

NOTE: As yield and field conditions change throughout the day, Interactive Combine Adjustment parameters MUST be restarted and adjusted.

A—Optimization Complete



OUC002,0004351 -19-17APR15-12/12

Interactive Combine Adjustment (If Equipped) (Outside Cab Recommendations)

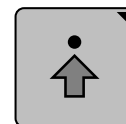
NOTE: System retains inside cab recommended settings when machine is shut OFF.

H94473 —UN—31MAR10

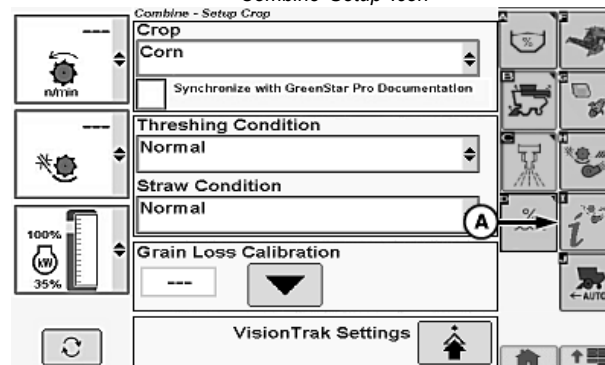
Touch or press confirm switch when combine setup icon is highlighted.

Touch or press confirm switch when Interactive Combine Adjustment icon (A) is highlighted.

A—Interactive Combine Adjustment Icon



Combine Setup Icon



OUC002.0004352 -19-17APR15-1/8

H112817 —UN—09FEB15

Recommended Machine Changes:

Current recommendation area (A) displays the recommended machine setting changes.

NOTE: Next recommendation icon or previous recommendation icon may be grayed out if there are no more recommendations.

Touch or press confirm switch when next recommendation icon (B) or previous recommendation icon (C) is highlighted to advance to next recommendation or return to previous recommendation.

NOTE: Next recommendation area (D) displays upcoming adjustment proposed by the system.

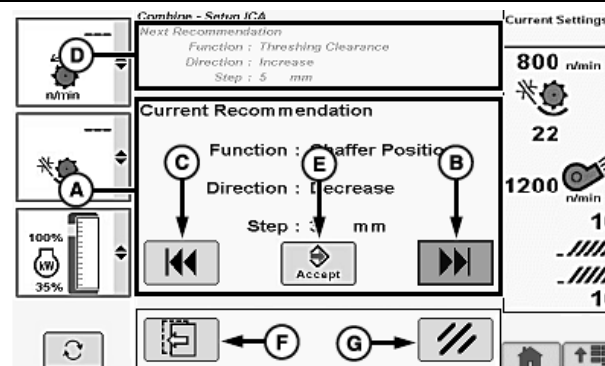
Touch or press confirm switch when enter/accept icon (E) is highlighted to make proposed machine adjustment.

NOTE: Shut down the machine prior to performing the recommended action appears on display when enter/accept icon is selected.

Shut OFF engine, set park brake and remove key.

Perform machine adjustment that was recommended on display.

Touch or press confirm switch when previous page icon (F) is highlighted to return to previous page.



A—Current Recommendation Area
B—Next Recommendation Icon
C—Previous Recommendation Icon
D—Next Recommendation Area
E—Enter/Accept Icon
F—Previous Page Icon
G—Cancel Icon

NOTE: Touch or press confirm switch when cancel icon (G) is highlighted to cancel recommendation. Previous machine adjustments will be retained.

System retains inside cab recommended settings when machine is shut OFF.

Continued on next page

OUC002.0004352 -19-17APR15-2/8

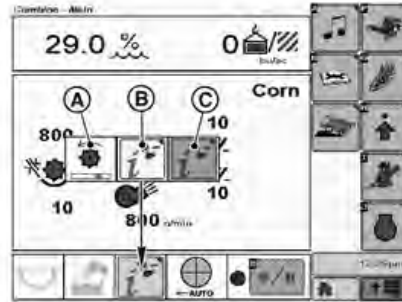
H108635 —UN—26JUL13

Interactive Combine Adjustment (System Monitoring):

NOTE: It takes 30 seconds for Interactive Combine Adjustment icon to appear on display.

Touch or press confirm switch when Interactive Combine Adjustment indicator (A—C) is highlighted.

- (A) Indicator (System Busy) - indicates system adjustments are being performed. Green segment underneath icon moves back and forth indicating that machine is applying settings and waiting for system to stabilize.
- (B) Indicator (Yellow Indicator) - indicates system is ready for verification of improvement settings. Icon with a yellow background flashes or turns solid (flashes for 30 seconds and turns solid) indicating that system made adjustments and is waiting for operator feedback (rating of performance parameters).
- (C) Indicator (Red Indicator) - indicates system has detected a condition shift. Icon with a red background



ZX234274—UN—19APR15

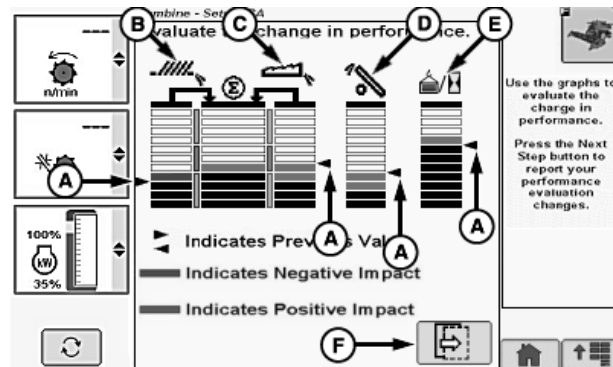
indicates to operator that system has detected a change in machine performance. System believes that operator should evaluate performance of machine and consider optimizing the machine settings.

OUC002,0004352 -19-17APR15-3/8

Arrow indicators (A) display previous values before Interactive Combine Adjustment system made recommended machine setting changes.

NOTE: Bar graphs are a visual guide to see if an increase or decrease occurs over a certain period of time.

- Shoe Loss Indicator (B)
 - Green bars indicate that loss levels are lower than they previously were and that performance has improved.
 - Red bars indicate that loss levels are higher than they previously were.
- Separator Loss Indicator (C)
 - Green bars indicate that loss levels are lower than they previously were and that performance has improved.
 - Red bars indicate that loss levels are higher than they previously were.
- Tailings Volume Indicator (D)
 - Green bars indicate that less tailings volume is being monitored.
 - Red bars indicate that more tailings volume is being monitored.
- Mass Flow Indicator (E)
 - Green bars indicate that feedrate has increased.



A—Arrow Indicators
B—Shoe Loss Indicator
C—Separator Loss Indicator
D—Tailings Volume Indicator
E—Mass Flow Indicator
F—Next Page Icon

- Red bars indicate that feedrate has decreased.

Touch or press confirm switch when next page icon (F) is highlighted to advance to next page.

Continued on next page

OUC002,0004352 -19-17APR15-4/8

H108636—UN—26JUL13

Verify Improvement Settings:

NOTE: This is an example of a possible condition. Always follow information shown on display.

Allows operator to answer a series of questions on each parameter to help improve previous loss and quality conditions.

Touch or press confirm switch when desired parameter menu (A) is highlighted:

- Separator Loss
- Shoe Loss
- Unthreshed Loss
- Broken Grain
- Chaff/Husks
- Straw Pieces/Cobs
- Unthreshed Material
- Straw Condition
- Excess Tailings

Each parameter menu displays the following:

- Issue Resolved
- Better
- No Change
- Worse

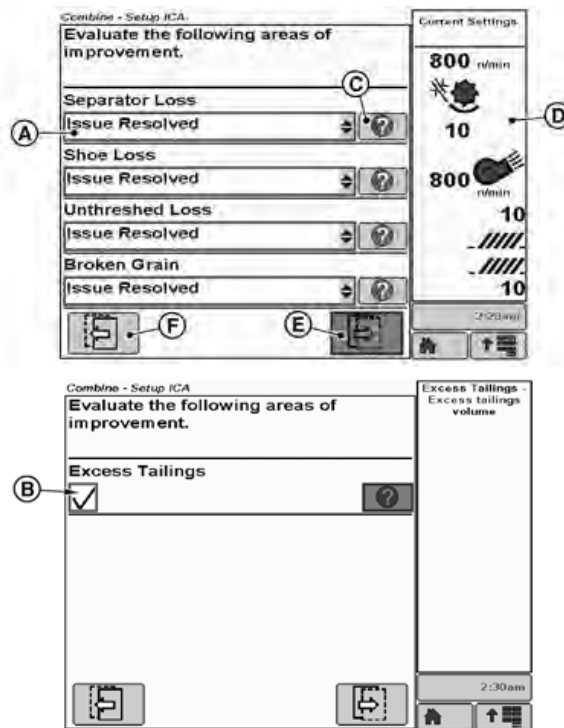
Once desired selection is chosen, touch or press confirm switch.

Repeat as needed on remaining parameter menus.

Touch or press confirm switch when excess tailings box (B) is highlighted.

- Checked - excess tailings continues to exist.
- Unchecked - excess tailings condition improved.

NOTE: Touch or press confirm switch when desired help icon (C) is highlighted. Information area (D) switches from current machine settings to help information area which provides more details on improvements.



A—Parameter Menus
B—Excess Tailings Box
C—Help Icons

D—Informational Area
E—Next Page Icon
F—Previous Page Icon

Touch or press confirm switch when next page icon (E) is highlighted to advance to next page.

NOTE: Touch or press confirm switch when previous page icon (F) is highlighted to return to previous page if needed.

Continued on next page

OUC002,0004352 -19-17APR15-5/8

ZX234275 —UN—19APR15

ZX234270 —UN—19APR15

Verify Previously Acceptable Parameter Settings:

NOTE: This is an example of a possible condition. Always follow information shown on display.

Allows operator to verify that parameters not previously selected are still acceptable or are now unacceptable.

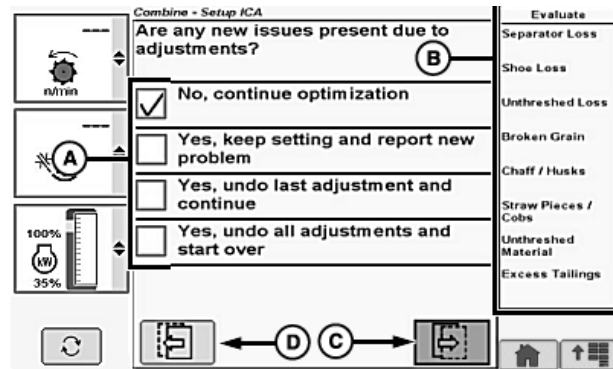
Touch or press confirm switch when desired system evaluation box (A) is highlighted:

NOTE: Boxes are grayed out if that evaluation feature is not available.

- No, continue optimization - allows operator to continue to optimize system. System continues to give recommended machine changes.
- Yes, keep setting and report new problem
- Yes, undo last adjustment and continue
- Yes, undo all adjustments and start over

Parameters not previously selected (B):

- Separator Loss
- Shoe Loss
- Unthreshed Loss
- Broken Grain
- Chaff/Husks
- Straw Pieces/Cobs
- Unthreshed Material
- Straw Condition



A—System Evaluation Box
B—Parameters Not Previously Selected
C—Next Page Icon
D—Previous Page Icon

- Excess Tailings

Touch or press confirm switch when next page icon (C) is highlighted to advance to next page.

NOTE: Touch or press confirm switch when previous page icon (D) is highlighted to return to previous page if needed.

Continued on next page

OUCC002,0004352 -19-17APR15-6/8

H108680—UN—30JUL13

Recommended Machine Changes:

NOTE: If performance has improved, software will continue with in cab recommendations. Refer to Interactive Combine Adjustments

If performance has decreased, software will continue with outside cab recommendations.

Current recommendation area (A) displays the recommended machine setting changes.

NOTE: Next recommendation icon or previous recommendation icon may be grayed out if there are no more recommendations.

Touch or press confirm switch when next recommendation icon (B) or previous recommendation icon (C) is highlighted to advance to next recommendation or return to previous recommendation.

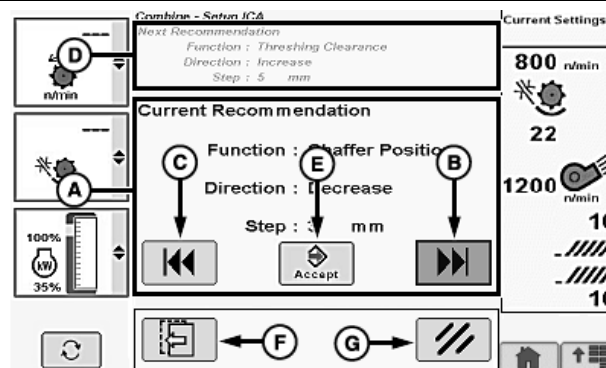
NOTE: Next recommendation area (D) displays upcoming adjustment proposed by the system.

Touch or press confirm switch when enter/accept icon (E) is highlighted to make proposed machine adjustment.

NOTE: Shut down the machine prior to performing the recommended action appears on display when enter/accept icon is selected.

Shut OFF engine, set park brake and remove key.

Perform machine adjustment that was recommended on display.



- A—Current Recommendation Area
- B—Next Recommendation Icon
- C—Previous Recommendation Icon
- D—Next Recommendation Area
- E—Enter/Accept Icon
- F—Previous Page Icon
- G—Cancel Icon

Touch or press confirm switch when previous page icon (F) is highlighted to return to previous page.

NOTE: Touch or press confirm switch when cancel icon (G) is highlighted to cancel recommendation. Previous machine adjustments will be retained.

System retains inside cab recommended settings when machine is shut OFF.

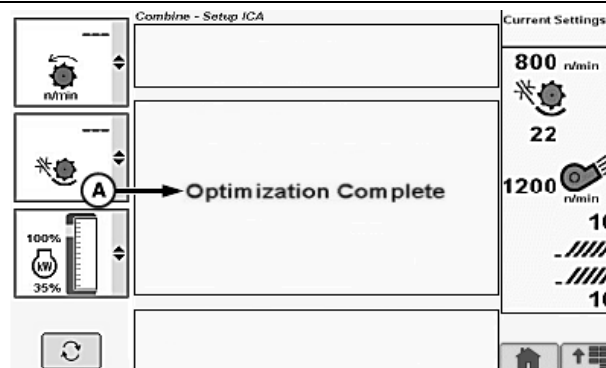
OUC002,0004352 -19-17APR15-7/8

Optimization Complete:

Optimization complete (A) appears on display when no further machine recommendations are needed.

NOTE: As yield and field conditions change throughout the day, Interactive Combine Adjustment parameters MUST be restarted and adjusted.

A—Optimization Complete

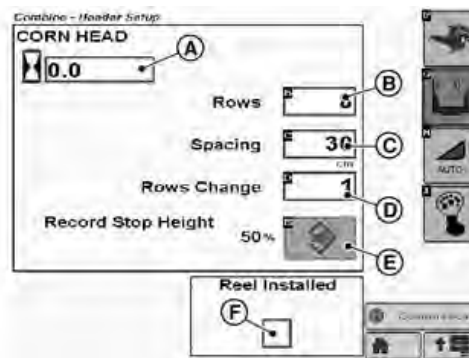


OUC002,0004352 -19-17APR15-8/8

Header Setup Screen

Header Settings (Corn Head):

- Corn Head and Hour Counter¹ (A)
 - Header Type (Auto Detection)
 - Total Rows (Rows, Based on Type, Numeric Entry) (B)
 - Row Spacing (C)
 - Row Change (Decrease Cut Rows)² (D)
 - Record Stop Height (Height Setup for Turning Recording ON/OFF) (E)
 - Reel Installed Box (F)



ZX234277—UN—19APR15

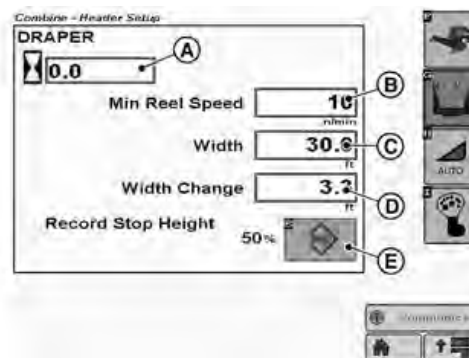
¹For information on resetting header hours, see your John Deere dealer.

²Appears on GreenStar™ display (if equipped) instead of on armrest display.

OUC002,0004AAB -19-06FEB16-1/5

Header Settings (Draper/Platform/Belt Pickup):

- Draper/Platform/Belt Pickup and Hour Counter¹ (A)
 - Header Type (Auto Detection)
 - Minimum Reel or Belt Pickup Speed (B)
 - Total Width (Total Width, Based on Type, Numeric Entry) (C)
 - Width Change (Decrease Cut Width)² (D)
 - Record Stop Height (Height Setup for Turning Recording ON/OFF) (E)



ZX234316—UN—19APR15

¹For information on resetting header hours, see your John Deere dealer.

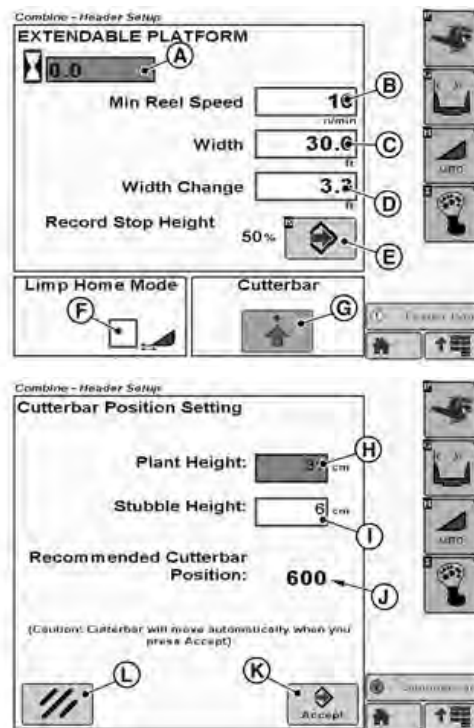
²Appears on GreenStar™ display (if equipped) instead of on armrest display.

Continued on next page

OUC002,0004AAB -19-06FEB16-2/5

Header Settings (Extendable Platform) (600X Cutting Platform):

- Extendable Platform and Hour Counter¹ (A)
 - Header Type (Auto Detection)
 - Minimum Reel Speed (B)
 - Total Width (Total Width, Based on Type, Numeric Entry) (C)
 - Width Change (Decrease Cut Width)² (D)
 - Record Stop Height (Height Setup for Turning Recording ON/OFF) (E)
 - Limp Home Mode (Cutterbar Position)³ (F)
 - Cutterbar Setup (G) (Modify Cutterbar Position)
 - Plant Height (H) (0—999 cm) (Default 80 cm)
 - Stubble Height (I) (0—999 cm) (Default 15 cm)
 - Recommended Cutterbar Position (J)
 - Enter/Accept Icon (K)
 - Cancel Icon (L)



¹For information on resetting header hours, see your John Deere dealer.

²Appears on GreenStar™ display (if equipped) instead of on armrest display.

³Only appears if a sensor fails or a DTC code exists.

Continued on next page

OUC002,0004AAB -19-06FEB16-3/5

ZX234278—UN—08FEB16

ZX234279—UN—19APR15

Automatic Header Control (AHC) Settings:

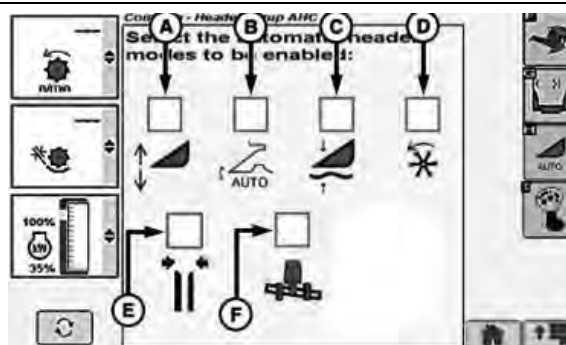
NOTE: Icons will vary depending on machine options and header types.

Corn Head

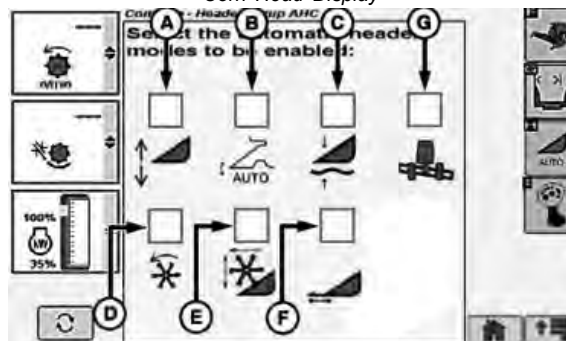
- Header Height Sensing Enable (A)
- Header Height Resume Enable (B)
- Active Header Float Enable (C)
- Dial-A-Speed™ Enable¹ (D)
- Deck Plate Position Resume Enable² (E)
- Lateral Tilt Enable³ (F)

Draper/Belt Pickup/Platform/Extendable Platform

- Header Height Sensing Enable (A)
- Header Height Resume Enable (B)
- Active Header Float Enable (C)
- Dial-A-Speed™ Enable¹ (D)
- Reel Position⁴ Enable (E)
- Resume/Cutterbar Position⁵ Enable (F)
- Lateral Tilt Enable³ (G)



Corn Head Display



Platform Display

¹If connected to a corn head with a reel.

²If connected to a corn head with adjustable deck plates.

³If equipped with Lateral Tilt.

⁴If connected to a platform machine with a reel.

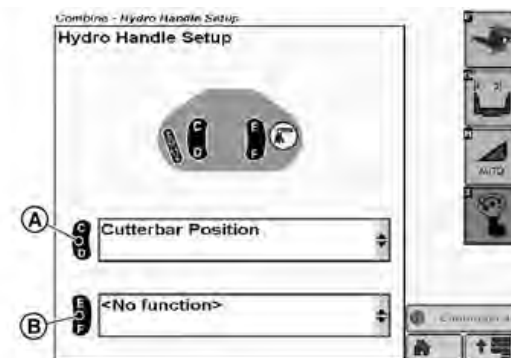
⁵600X Cutting Platforms only.

OUC002,0004AAB -19-06FEB16-4/5

Multi-Function Lever Setup:

NOTE: Depending on machine options and header types, switches (C-D) and (E-F) on rear of multi-function lever are programmable to control:

- Draper Cutterbar Tilt (600D Drapers)
- Cutterbar Fore/Aft (600X Cutting Platforms)
- Switch Menu (A and B)
 - Cutterbar Position (600X Cutting Platforms)
 - Draper Cutterbar Tilt (600D Drapers)
 - No function



OUC002,0004AAB -19-06FEB16-5/5

Change Header Settings

H96245 —UN—03MAY10

NOTE: Header setup icon changes based on type of header connected to machine.

Touch or press confirm switch when header setup icon is highlighted.

Touch or press confirm switch when header width setup icon (A) is highlighted.

Touch or press confirm switch when one of the following is highlighted:

Corn Head Display:

- Rows Box (B) - allows operator to set number of rows on corn head.
- Spacing Box (C) - allows operator to set row spacing on corn head.
- Rows Change Box (D) - allows operator to set row changes (not harvesting full width).

NOTE: Rows change box appears on GreenStar™ display (if equipped) instead of on armrest display.

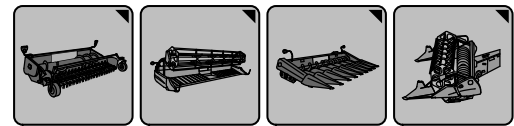
Non-Touchscreen or Touchscreen: Rotate selection dial until desired header value is shown. Press confirm switch to save value.

Touchscreen Only: Enter desired header value on numeric display. Touch enter/accept icon to save value.

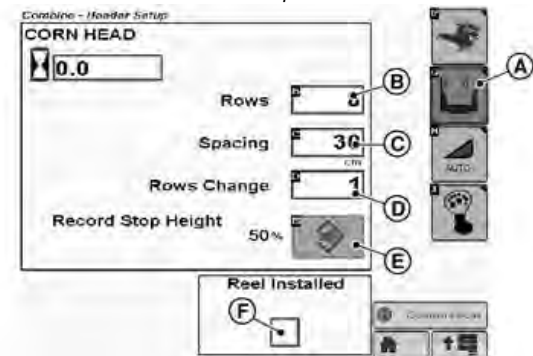
Recording Stop Height:

NOTE: Recording automatically turns OFF at and above preset height and turns ON below preset height, provided all other conditions are met (separator/header engaged, engine at high idle, farm/field is setup), see Manual Recording ON/OFF in this section for information on temporarily overriding.

If Header Height Sensing or Active Header Float are active, record stop height setting is irrelevant and recording turns ON, provided all other conditions are met (separator/header engaged, engine at high idle, farm/field is setup).



Header Setup Icons



A—Header Width Setup Icon
B—Rows Box
C—Spacing Box

D—Rows Change Box
E—Record Stop Height Enter/Accept Icon
F—Reel Installed Box

Raise or lower header to desired record stop height.

Touch or press confirm switch when record stop height enter/accept icon (E) is highlighted to save value.

Reel Installed:

Allows operator in down or tangled crop conditions to enable a corn head reel system.

Touch or press confirm switch when reel installed box (F) is highlighted.

Box displays a checkmark indicating it was selected.

Continued on next page

OUC002,00043CB -19-28FEB15-1/4

ZX234283 —UN—19APR15

Draper/Belt Pickup/Platform Display:

Touch or press confirm switch when header width setup icon (A) is highlighted.

Touch or press confirm switch when one of the following is highlighted:

- Minimum Reel Speed Box (B) - allows operator to set minimum reel.
- Width Box (C) - allows operator to set cut width on platforms.
- Width Change Box (D) - allows operator to set cut width changes (not harvesting full width).

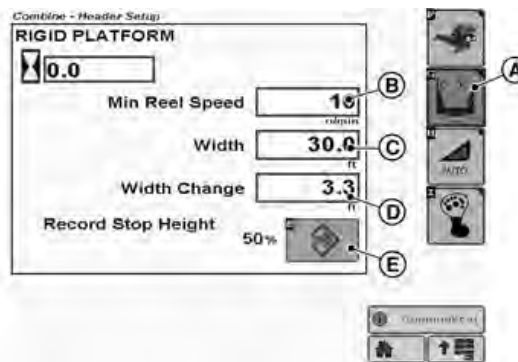
NOTE: Width change box appears on GreenStar™ display (if equipped) instead of on armrest display.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired header value is shown. Press confirm switch to save value.

Touchscreen Only: Enter desired header value on numeric display. Touch enter/accept icon to save value.

Recording Stop Height:

NOTE: Recording automatically turns OFF at and above preset height and turns ON below preset height, provided all other conditions are met (separator/header engaged, engine at high idle, farm/field is setup), see Manual Recording ON/OFF in this section for information on temporarily overriding.



ZX234284—JUN—19APR15

A—Header Width Setup Icon
B—Minimum Reel Speed Box
C—Width Box

D—Width Change Box
E—Record Stop Height Enter/Accept Icon

If Header Height Sensing or Active Header Float are active, record stop height setting is irrelevant and recording turns ON, provided all other conditions are met (separator/header engaged, engine at high idle, farm/field is setup).

Raise or lower header to desired record stop height.

Touch or press confirm switch when record stop height enter/accept icon (E) is highlighted to save value.

Continued on next page

OUC002,00043CB -19-28FEB15-2/4

Extendable Platform (600X Cutting Platform) Display:

Touch or press confirm switch when header width setup icon (A) is highlighted.

Touch or press confirm switch when one of the following is highlighted:

- Minimum Reel Speed Box (B) - allows operator to set minimum reel speed.
- Width Box (C) - allows operator to set cut width on platforms.
- Width Change Box (D) - allows operator to set cut width changes (not harvesting full width).

NOTE: Width change box appears on GreenStar™ display (if equipped) instead of on armrest display.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired header value is shown. Press confirm switch to save value.

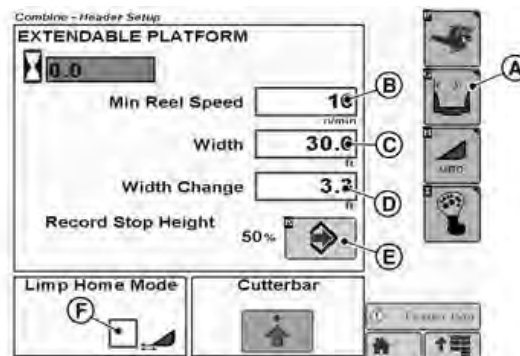
Touchscreen Only: Enter desired header value on numeric display. Touch enter/accept icon to save value.

Recording Stop Height:

NOTE: Recording automatically turns OFF at and above preset height and turns ON below preset height, provided all other conditions are met (separator/header engaged, engine at high idle, farm/field is setup), see Manual Recording ON/OFF in this section for information on temporarily overriding.

If Header Height Sensing or Active Header Float are active, record stop height setting is irrelevant and recording turns ON, provided all other conditions are met (separator/header engaged, engine at high idle, farm/field is setup).

Raise or lower header to desired record stop height.



A—Header Width Setup Icon
B—Minimum Reel Speed Box
C—Width Box

D—Width Change Box
E—Record Stop Height Enter/Accept Icon
F—Limp Home Mode Box

Touch or press confirm switch when record stop height enter/accept icon (E) is highlighted to save value.

Limp Home Mode (Cutterbar Position):

NOTE: Only appears if a sensor fails or fault code exists.

Allows operator to manually move extendable cutterbar temporarily if a sensor fails or fault code exists.

IMPORTANT: Distance between reel and cutterbar cannot be checked because a sensor or fault exists. Operator accepts the risk of collision of the reel and cutterbar.

Touch or press confirm switch when limp home mode box (F) is highlighted.

Box displays a checkmark indicating it was selected.

Continued on next page

OUC002,00043CB -19-28FEB15-3/4

ZX234285—UN—08FEB16

Cutterbar Setup:

Allows operator to adjust cutterbar position for various plant heights and stubble heights.

Touch or press confirm switch when cutterbar setup icon (A) is highlighted.

Plant Height or Stubble Height:

Touch or press confirm switch when one of the following is highlighted:

- Plant Height Box (B) - allows operator to make adjustments for different plant heights.
- Stubble Height Box (C) - allows operator to make adjustments for desired stubble heights.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired value is shown. Press confirm switch to save value.

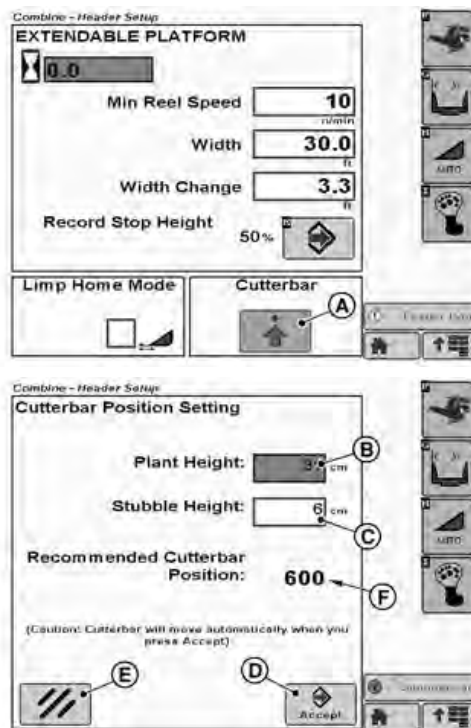
Touchscreen Only: Touch or press confirm switch when plus (+) icon or minus (-) icon is highlighted until desired value is shown.

Touch or press confirm switch when enter/accept icon (D) is highlighted to save value.

NOTE: Touch or press confirm switch when cancel icon (E) is highlighted to cancel values. Previous machine values will be retained.

Recommended Cutterbar Position:

Recommended cutterbar position (F) is setpoint value that is displayed to operator using plant height values and stubble height values which were chosen by operator.



A—Cutterbar Setup Icon
B—Plant Height Box
C—Stubble Height Box

D—Enter/Accept Icon
E—Cancel Icon
F—Recommended Cutterbar Position

ZX234286—UN—08FEB16

ZX234287—UN—19APR15

OUCC002,00043CB -19-28FEB15-4/4

Automatic Header Control (AHC) Settings

H96245 —UN—03MAY10

NOTE: Header setup icon changes based on type of header connected to machine.

Touch or press confirm button when header setup icon is highlighted.

Touch or press confirm button when automatic header height modes icon (A) is highlighted.

Touch or press confirm button when one of the following is highlighted:

Corn Head

- Header Height Sensing Enable (B)
- Header Height Resume Enable (C)
- Active Header Float Enable (D)
- Dial-A-Speed™ Enable¹ (E)
- Deck Plate Position Resume Enable² (F)
- Lateral Tilt Enable³ (G)

Draper/Belt Pickup/Platform/Extendable Platform

- Header Height Sensing Enable (B)
- Header Height Resume Enable (C)
- Active Header Float Enable (D)
- Dial-A-Speed™ Enable (E)
- Reel Position Resume Enable (F)
- Cutterbar Position Enable⁴ (G)
- Lateral Tilt Enable³ (H)

Box displays a checkmark indicating which icons are enabled or disabled displayed on cornerpost.

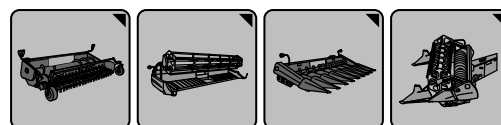
NOTE: If boxes are grayed out that option is not available on your machine.

¹If connected to a corn head with a reel.

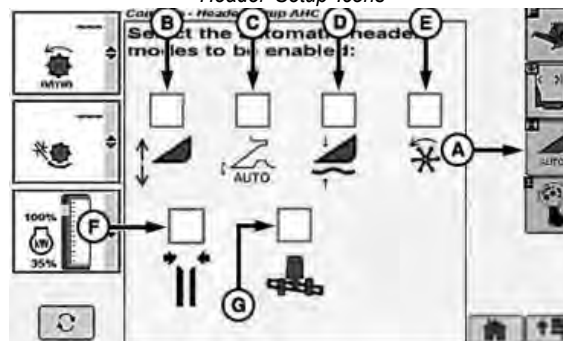
²If connected to a corn head with adjustable deck plates.

³If equipped with Lateral Tilt.

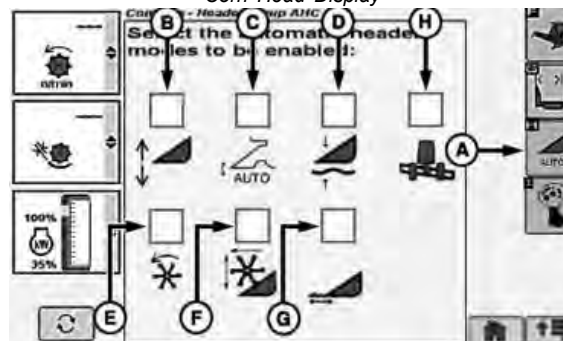
⁴600X Cutting Platforms only.



Header Setup Icons



Corn Head Display



Platform Display

ZX234288 —UN—08FEB16

ZX234289 —UN—08FEB16

OUC002,0004AB5 -19-08FEB16-1/1

Multi-function Lever Setup

H96245 —UN—03MAY10

NOTE: Header setup icon changes based on type of header connected to machine.

Depending on machine options and header types, switches (C-D) and (E,F) on rear of multi-function lever are programmable to control:

- Draper Cutterbar Tilt (600D Drapers)
- Cutterbar Fore/Aft (600X Cutting Platforms)

Touch or press confirm switch when header setup icon is highlighted.

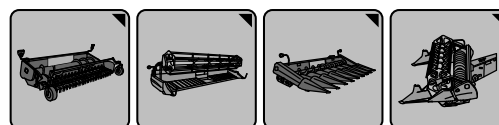
Touch or press confirm switch when multi-function lever setup icon (A) is highlighted.

Touch or press confirm switch when switch menu (B or C) is highlighted.

Switch menu displays the following:

- Draper Cutterbar Tilt (600D Drapers)
- Cutterbar Position (600X Cutting Platforms)
- No function

Once desired selection is chosen, touch or press confirm switch.



Header Setup Icons



A—Multi-function Lever Setup Icon B—Switch Menu

ZX234290 —UN—19APR15

OUC002,0004379 -19-17APR15-1/1

Engine Information Screen

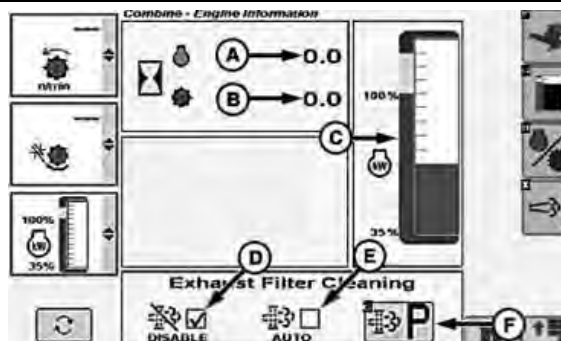
Engine Settings:

- Engine Hours (A)
- Separator Hours (B)
- Engine Power Meter (C)
 - Green Region (35 to 100%)
 - Yellow Region (101 to 110%)
 - Red Region (111 to 114%)

IMPORTANT: If indicator moves into red region, engine power is maximized and machine could potentially stall. Reduce load on machine until indicator moves back into green and yellow regions.

- Disable Exhaust Filter Cleaning Mode (D) ¹

¹Final Tier 4/Stage IV engines only.



- AUTO Exhaust Filter Cleaning Mode (E) ¹
- Parked Exhaust Filter Cleaning Icon (F) ¹

ZX271583 —UN—08FEB16

OUC002,0004AB6 -19-08FEB16-1/1

Exhaust Filter Cleaning (Final Tier 4/Stage IV)

Touch or press confirm button when engine information icon is highlighted.

H94480 —UN—31MAR10

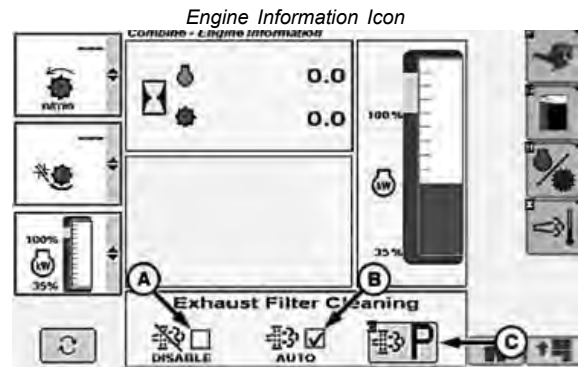
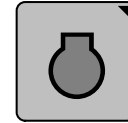
Touch or press confirm button when one of the following is highlighted:

NOTE: System defaults to AUTO mode every time key switch is cycled. Always verify that AUTO mode is selected, unless in conditions where it may be unsafe. See *When to Disable Exhaust Cleaning System in Operating the Engine* section.

- Disable Exhaust Filter Cleaning Mode (A) - allows exhaust filter cleaning system to be disabled. Disabling the system is not recommended. Only to be used in certain conditions or emergency situations. See *When to Disable Exhaust Cleaning System in Operating the Engine* section for more detailed information.
- AUTO Exhaust Filter Cleaning Mode (B) - allows exhaust filter cleaning system to intelligently perform a filter cleaning as required. Cornerpost display indicator and armrest display provide operator information related to exhaust filter system activity.

NOTE: Exhaust filter cleaning indicator on cornerpost display illuminates when exhaust filter system is actively performing a filter cleaning.

- Parked Exhaust Filter Cleaning Icon (C) - is an automated process which allows the system to clean the exhaust filter when required. During the process, engine speed is controlled by the system and the machine must remain parked to complete this procedure. Time required for the parked exhaust filter cleaning is dependent upon the level of exhaust filter restriction, ambient temperatures, and current exhaust gas temperature. Armrest display provides an estimated time to completion.



NOTE: Parked exhaust filter cleaning icon may be active or inactive (grayed out) depending on exhaust filter restriction level. See *Parked Exhaust Filter Cleaning in Field Operation* section.

System defaults to AUTO mode when parked exhaust filter cleaning is complete. Always verify that AUTO mode is selected, unless in conditions where it may be unsafe. See *When to Disable Exhaust Cleaning System in Field Operation* section.

OUCC002.0004AB7 -19-08FEB16-1/1

ZX271584 —UN—16FEB16

Engine Speed Management (ProDrive™ Machines)

H94480 —UN—31MAR10

NOTE: Engine speed management is software-controlled and activated with road transport disconnect switch.

Engine speed management reduces fuel consumption and increases fuel efficiency.

- Fuel consumption is reduced in low load conditions with a reduction in engine speed.
- Maintain high load capabilities by dynamically increasing engine speed when needed.
- Ground speed is maintained during engine speed changes through varying hydrostatic displacements.
- Engine speed stays at low idle when machine is not moving.
- Engine speed is approximately 1600 rpm when machine is on flat ground or with low ground speeds.
- Engine speed changes between approximately 1600 rpm and maximum high idle depending on the engine load.

NOTE: Engine speed indicator lights will turn OFF after a transition to field mode if the engine is not at low idle speed during the transition. Engine will remain at its current speed until one of the idle buttons is pressed.

Operator limits maximum engine speed through engine speed switches.

- Low Engine Speed - engine speed stays at 1250 rpm.
- Medium Engine Speed - engine speed will not exceed 1870 rpm.
- High Engine Speed - engine speed changes between approximately 1600 rpm and maximum high idle.

Touch or press confirm switch when engine information icon is highlighted.

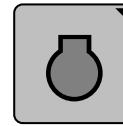
Touch or press confirm switch when engine speed management icon (A) is highlighted.

Check Headland Mode box (B) to activate the engine speed management function.

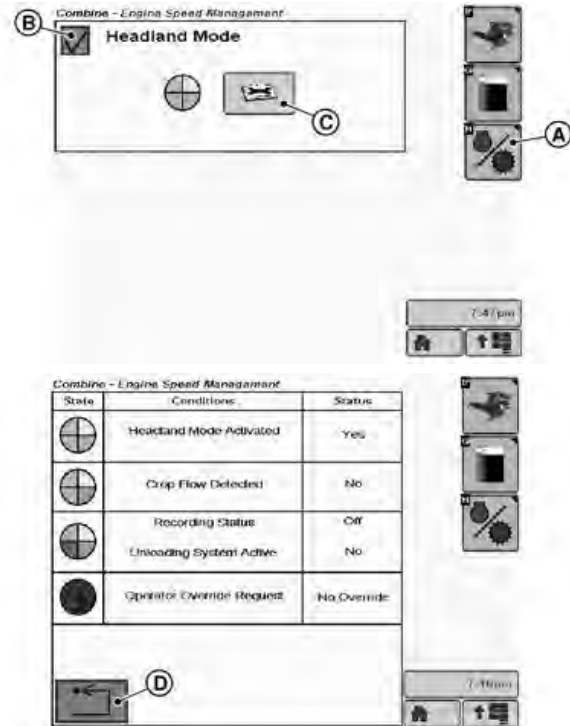
Touch or press confirm switch when diagnostic readings icon (C) is highlighted.

Engine speed management screen displays the following condition and status:

- Headland Mode Activated



Engine Information Icon



A—Engine Speed Management Icon
B—Headland Mode

C—Diagnostic Readings Icon
D—Return/Back Icon

- Crop Flow Detected
- Recording Status
- Unloading System Active
- Operator Override Request

Touch or press confirm switch when return/back icon (D) is highlighted to return to previous page.

ZX234291 —UN—19APR15

ZX234292 —UN—19APR15

OUCC002,000435B -19-17APR15-1/1

Engine Cool Down Progress (Final Tier 4/Stage IV)

H94480 —UN—31MAR10

IMPORTANT: If engine was turned OFF while performing an exhaust filter cleaning, refer to Engine Cool Down Warning Screens (Final Tier 4/Stage IV) in Operating the Engine section for further information.

NOTE: Screen can be referred to periodically while a cool down is in progress.

Touch or press confirm button when engine information icon is highlighted.

Touch or press confirm button when engine cool down progress icon (A) is highlighted.

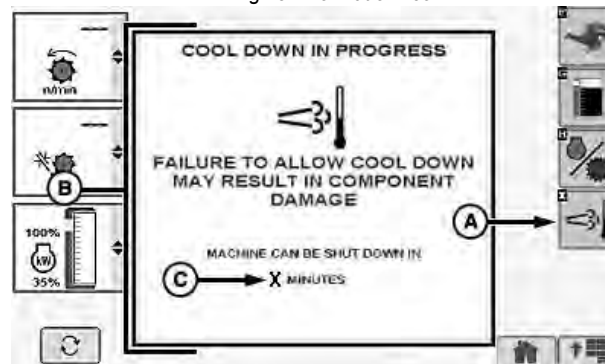
Message area (B) displays the following:

Cool Down In Progress
Failure To Allow Cool Down
May Result In Component
Damage
Machine Can Be Shut Down In
X Minutes

Countdown timer (C) appears indicating when it is safe to turn key switch OFF.



Engine Information Icon



A—Engine Cool Down Progress Icon
B—Message Area

C—Countdown Timer

H108685 —UN—02AUG13

OUC002,0004AC0 -19-08FEB16-1/1

Diagnostic and Calibrations Screen

Calibrations:

H94478 —UN—31MAR10

NOTE: Calibrations are done using instructions shown on screen. Operator selects which calibration and highlights calibrate icon, and is guided through procedure.

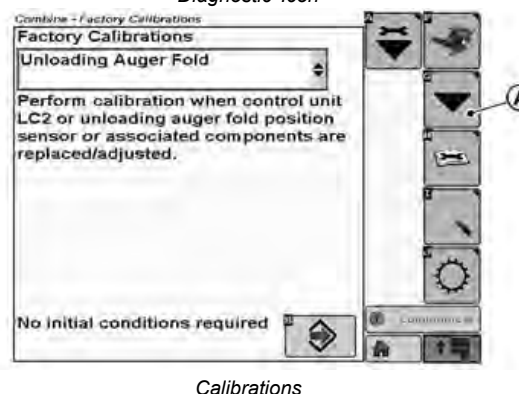
Touch or press confirm switch when diagnostic icon is highlighted.

Touch or press confirm switch when calibration icon (A) is highlighted.

- Refer to When to Calibrate in Calibration Procedures section for listing of calibrations.



Diagnostic Icon



Calibrations

ZX234293 —UN—19APR15

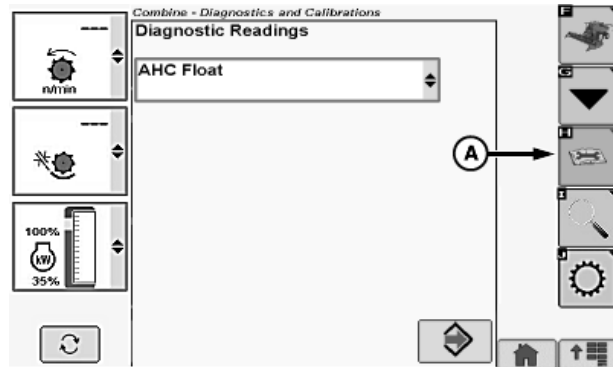
Continued on next page

OUC002,000435E -19-25FEB15-1/4

Diagnostic Readings:

Touch or press confirm switch when diagnostic readings icon (A) is highlighted.

- Diagnostic Readings - assists in providing more information about a machine subsystem for troubleshooting. Display gathers data from diagnostic addresses and displays collected information on one page.



H94639—UN—05OCT10

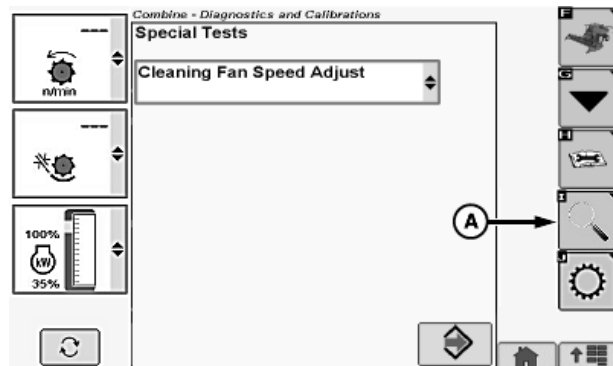
OUCC002,000435E -19-25FEB15-2/4

Special Tests:

NOTE: Cleaning Fan Speed Adjust special test may not perform correctly if cleaning fan speed slowdown kit was installed.

Touch or press confirm switch when diagnostic special tests icon (A) is highlighted.

- Diagnostic Special Tests - helps minimize amount of time required to diagnose an issue by leading operator or technician through a special set of instructions. Machine automatically checks as the operator is guided through the special tests.



H94640—UN—05OCT10

OUCC002,000435E -19-25FEB15-3/4

Tow Mode Setup:

IMPORTANT: Do not tow machine except in an emergency for a short distance at 8 km/h (5 mph). See Towing Machine in Transporting section for further information.

NOTE: Only appears with ProDrive™ and push-button shift transmission machines.

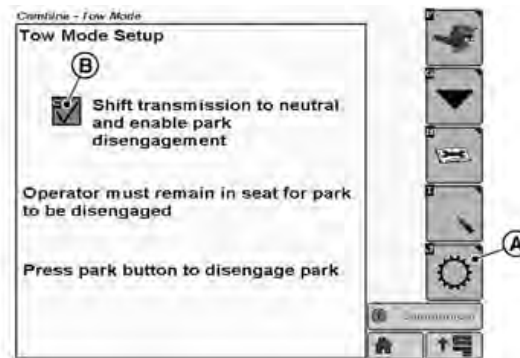
Tow Mode Setup allows operator in emergency modes to select the following.

Touch or press confirm switch when tow mode setup icon (A) is highlighted.

Touch or press confirm switch when box is highlighted.

- Shift transmission to neutral and enable park brake disengaged Box (B) - shifts machine to neutral position and enables park brake disengage.

NOTE: Operator must remain in seat for park brake to be disengaged.



ZY234294—UN—19APR15

Press park brake switch on armrest to release brakes before towing machine.

OUCC002,000435E -19-25FEB15-4/4

Radio Source Select

Touch or press confirm switch when infotainment icon or audio application icon is highlighted.

Touch or press confirm switch when source select icon (A) is highlighted.

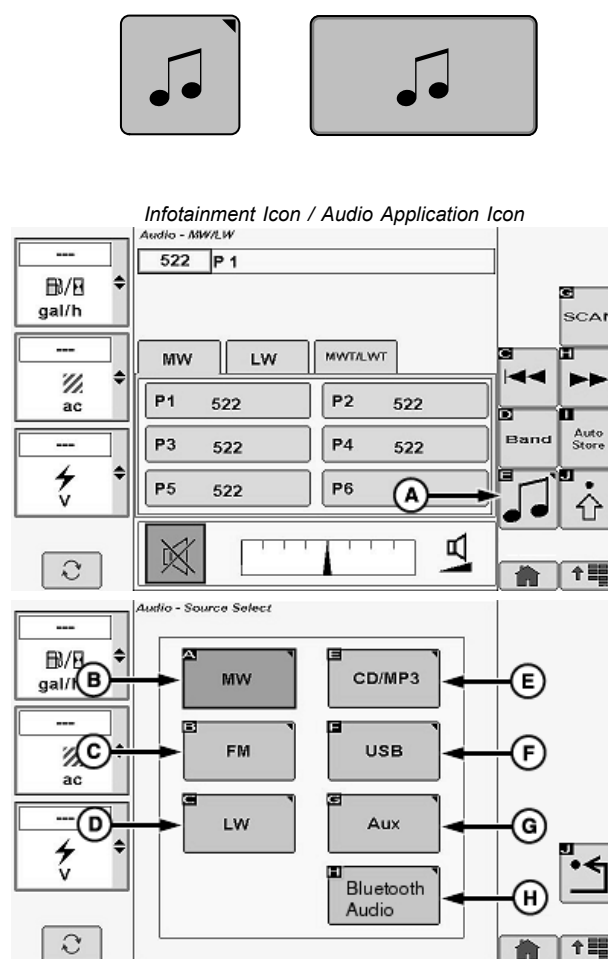
Touch or press confirm switch when desired source icon is highlighted:

- MW (B)
- FM (C)
- LW (D)
- CD/MP3 (E)
- Universal Serial Bus (USB) (Premium Radio Only) (F)
- Auxiliary (AUX) (G)
- Bluetooth® Audio (Premium Radio Only) (H)

Radio OFF; selecting Infotainment Icon or Audio Application Icon navigates to source select screen. Selecting a source from this screen turns radio ON to selected source.

Radio ON; selecting Infotainment Icon or Audio Application Icon navigates to currently selected source's home page.

Selecting source icon from a radio home page will navigate to source select screen. Selecting a source from this screen will change radio to selected source.



OUC002,000435F -19-25FEB15-1/1

H105093 —UN—28MAR12

H105097 —UN—28MAR12

H105095 —UN—28MAR12

MW/LW Home Page

NOTE: FM and LW home pages are similar to MW home page.

Touch or press confirm switch when the infotainment icon or the audio application symbol is highlighted.

Scan Icon (A)

NOTE: Scan is disabled by touching or pressing confirm switch when icon is highlighted.

Allows operator to scan through available stations on selected radio band. Current station plays four—eight seconds (depending on time to produce audio) before scanning again.

Touch or press confirm switch when scan icon is highlighted.

Channel Up/Down Icons (B)

NOTE: Scan is disabled by touching or pressing confirm switch when icons are highlighted while in scan mode.

The operator can use the up and down icons to call up the channel with the strongest signals.

Touch or press confirm switch when desired channel down icon or channel up icon is highlighted.

Band Icon (C)

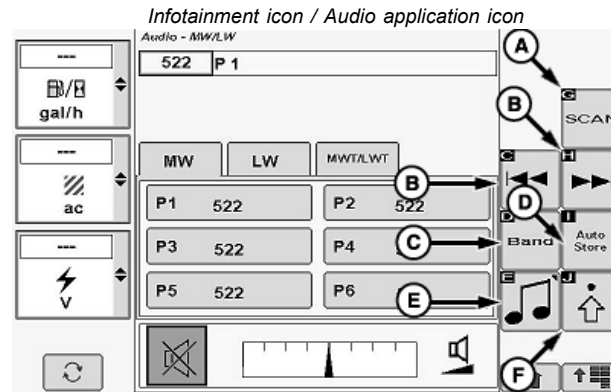
Allows operator to toggle through MW, LW, MWT, LWT.

Touch or press confirm switch when band icon is highlighted to toggle through available radio bands.

Auto Store Icon (D)

The operator can use this icon to store the strongest frequencies in the MWT and AWT waveband.

Touch or press confirm switch when the Auto Store icon is highlighted to store the six strongest frequencies.



NOTE: Press and hold Band (BND) key on radio for two seconds to start Auto Store.

Source Select Icon (E)

Allows operator the ability to cycle through radio tuner sources and external sources (see Radio Source Select in this section for additional information).

Touch or press confirm switch when source select icon is highlighted to cycle through available choices.

Audio Settings Icon (F)

Allows operator to change desired audio settings. Refer to Audio Settings later in this section for further information.

Continued on next page

OUC002,0004360 -19-25FEB15-1/2

H105093 —UN—28MAR12

H105271 —UN—26APR12

Mute Icon (A)

Allows operator to mute radio sound level.

Touch or press confirm switch when mute icon is highlighted.

Volume Bar Graph Area (B)

Allows operator to adjust current sound level.

Touch plus (+) symbol or minus (-) symbol or rotate selection dial to increase or decrease bar graph settings.

Channel Presets 1—6 (C)

Allows operator to select preset stations (lowest frequency available is default).

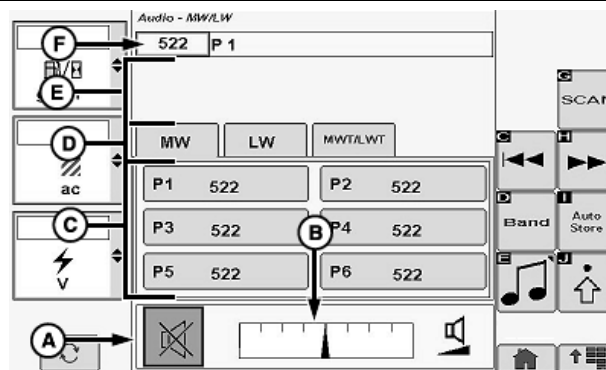
Touch or press confirm switch when desired preset station is highlighted.

Press and hold (screen icon or confirm button) for two seconds to store active station frequency to preset.

Radio and display buttons are synchronized.

Radio Band Tabs (MW/LW) (D)

Allows operator to cycle through additional preset stations on other tabs (if previously saved into memory).



Touch or press confirm switch when desired tab is highlighted to cycle through additional preset stations (if previously saved into memory).

Artist/Song Name Display Area (E)

Allows operator to view artist name and song name (if available) from current radio station.

Radio Station Frequency Display Area (F)

Allows operator to view radio station frequency and channel preset number (if previously saved into memory).

OUC002,0004360 -19-25FEB15-2/2

H105272 —UN—03MAY12

CD/MP3 Home Page

Touch or press confirm switch when infotainment icon or audio application icon is highlighted.

Folder Select Icon (A)

NOTE: Folder select icon and folder name icon are not available when playing a CD.

Allows operator to view the folder select page (if MP3 CD contains a folder structure).

Touch or press confirm switch when folder select icon is highlighted. Radio begins playing first song in each folder upon navigation.

Pause/Play Icon (B)

Allows operator to pause audio and resume playing audio.

Touch or press confirm switch when pause/play icon is highlighted.

Fast Reverse/Fast Forward Icon (C)

Allows operator to fast forward or fast reverse current playing audio.

Touch or press confirm switch when desired fast forward or fast reverse icon is highlighted. Press and hold available.

Previous Track/Next Track Icon (D)

Allows operator to select the previous song or advance to the next song.

Touch or press confirm switch when desired previous track or next track icon is highlighted.

Random Folder/Random All (E)

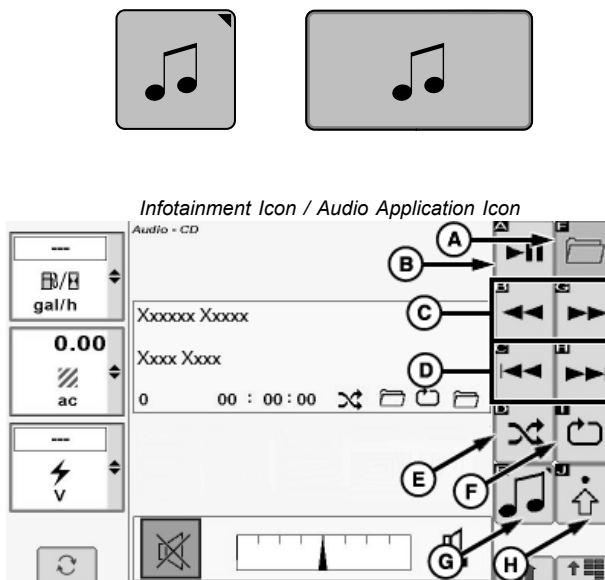
Allows operator to cycle through the following choices:

- Random Folder (MP3 CD only)
- Random All
- Random Off

Touch or press confirm switch when random icon is highlighted to cycle through choices.

Repeat Track/Repeat Folder/Repeat All Icon (F)

Allows operator to cycle through the following:



- Repeat Track
- Repeat Folder (MP3 CD only)
- Repeat Off

Touch or press confirm switch when repeat icon is highlighted to cycle through available choices.

Source Select Icon (G)

Allows operator the ability to cycle through radio tuner sources and external sources (see Radio Source Select in this section for additional information).

Touch or press confirm switch when source select icon is highlighted to cycle through available choices.

Audio Settings Icon (H)

Allows operator the ability to change audio settings (see Radio Settings in this section for additional information).

Touch or press confirm switch when select audio settings icon is highlighted.

Continued on next page

OUC002,0004361 -19-25FEB15-1/3

H105093—UN—28MAR12

H105275—UN—26APR12

Mute Icon (A)

Allows operator to mute radio and shows current sound level.

Touch or press confirm switch when mute icon is highlighted.

Volume Bar Graph Area (B)

Allows operator to adjust current sound level.

Touch plus (+) symbol or minus (-) symbol or rotate selection dial to increase or decrease bar graph settings.

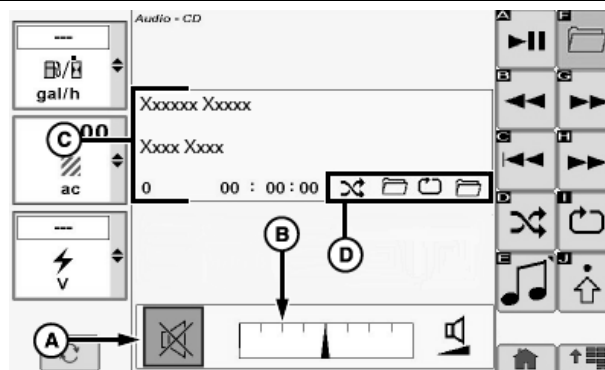
Display Area (C)

Allows operator to view the following:

- Artist Name
- Album Name
- Song Name
- Track Number
- Elapsed Time

Indicator Icon Area (D)

NOTE: Random folder icon and repeat folder icon only appear when playing a MP3 CD.



Allows operator to view which of the following icons were previously selected:

- Random Track
- Random Folder
- Repeat Track
- Repeat Folder

OUC002.0004361 -19-25FEB15-2/3

Folder Icon (A)

Allows operator to navigate to the previous folder (if available).

Touch or press confirm switch when folder icon is highlighted.

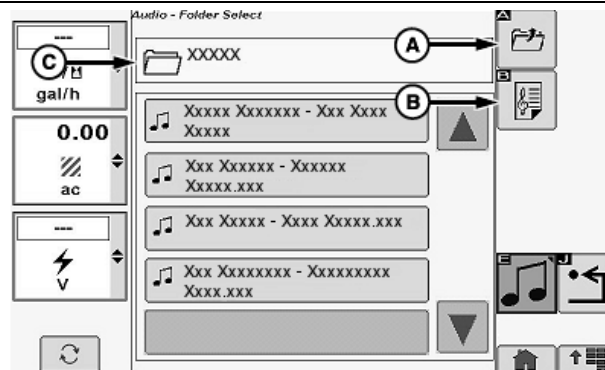
Playlist Enable/Disable Icon (B)

Allows operator to enable/disable playlist mode (if available).

Touch or press confirm switch when playlist enable/disable icon is highlighted.

Folder Name (C)

Allows operator to view folder name (if folder was previously named).



OUC002.0004361 -19-25FEB15-3/3

USB Home Page (Premium Radio)

Touch or press confirm switch when the infotainment icon or the audio application symbol is highlighted.

Pause/Play Icon (A)

Allows operator to pause audio and resume playing audio.

Touch or press confirm switch when pause/play icon is highlighted. Radio begins playing first song in each folder upon navigation.

Folder Select Icon (B)

Allows operator to view the folder select page.

Touch or press confirm switch when folder select icon is highlighted.

Fast Reverse/Fast Forward Icon (C)

Allows operator to fast forward or fast reverse current playing audio.

Touch or press confirm switch when desired fast forward or fast reverse icon is highlighted. Press and hold available.

Previous Track/Next Track Icon (D)

Allows operator to select the previous song or advance to the next song.

Touch or press confirm switch when desired previous track or next track icon is highlighted.

Random Folder/Random All (E)

Allows operator to cycle through the following:

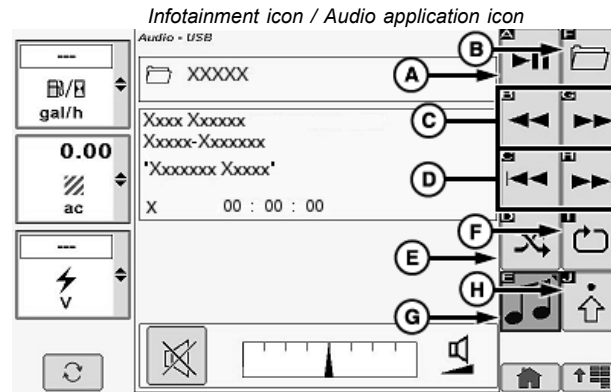
- Random Folder
- Random All
- Random Off

Touch or press confirm switch when random icon is highlighted to cycle through choices.

Repeat Track/Repeat Folder/Repeat All Icon (F)

Allows operator to cycle through the following:

- Repeat Track



- Repeat Folder
- Repeat Off

Touch or press confirm switch when repeat icon is highlighted to cycle through available choices.

Source Select Icon (G)

Allows operator the ability to cycle through radio tuner sources and external sources (see Radio Source Select in this section for additional information).

Touch or press confirm switch when source select icon is highlighted to cycle through available choices.

Audio Settings Icon (H)

Allows operator the ability to change audio settings (see Radio Settings in this section for additional information).

Touch or press confirm switch when select audio settings icon is highlighted.

H105093 —UN—28MAR12

H105277 —UN—26APR12

Continued on next page

OUC002,0004362 -19-25FEB15-1/3

Mute Icon (A)

Allows operator to mute radio and shows current sound level.

Touch or press confirm switch when mute icon is highlighted.

Volume Bar Graph Area (B)

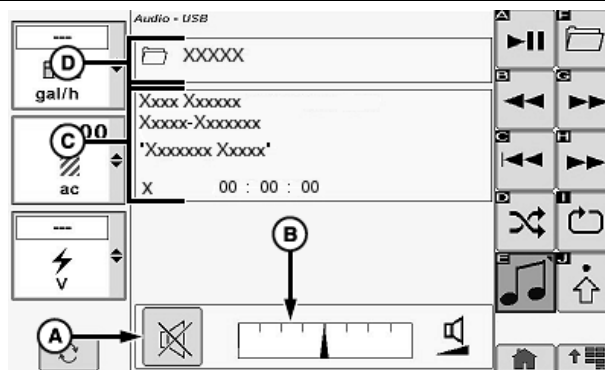
Allows operator to adjust current sound level.

Touch plus (+) symbol or minus (-) symbol or rotate selection dial to increase or decrease bar graph settings.

Display Area (C)

Allows operator to view the following:

- Artist Name
- Album Name
- Title
- Track number



- Elapsed Time

Folder Name (D)

Allows operator to view folder name (if folder was previously named).

OUC002,0004362 -19-25FEB15-2/3

Folder Icon (A)

Allows operator to navigate to the previous folder (if available).

Touch or press confirm switch when folder icon is highlighted.

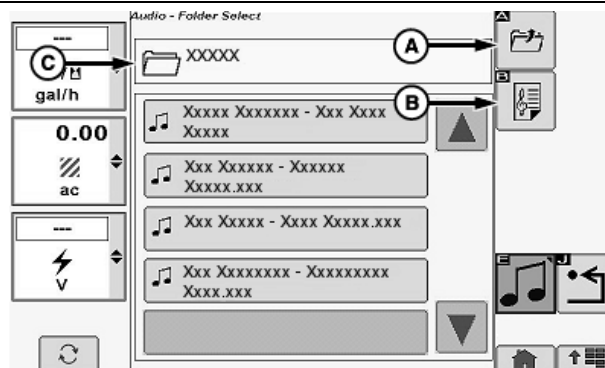
Playlist Enable/Disable Icon (B)

Allows operator to enable/disable playlist mode (if available).

Touch or press confirm switch when playlist enable/disable icon is highlighted.

Folder Name (C)

Allows operator to view folder name (if folder was previously named).



OUC002,0004362 -19-25FEB15-3/3

Auxiliary (AUX) Home Page

Touch or press confirm switch when infotainment icon or audio application icon is highlighted.

Remote Auxiliary (AUX) (A)

Indicates that an external device is connected to the stereo auxiliary port (3.5 mm) and is selected as the audio source (see Radio Source Select in this section for additional information).

Mute Icon (B)

Allows operator to mute radio sound level.

Touch or press confirm switch when mute icon is highlighted.

Volume Bar Graph Area (C)

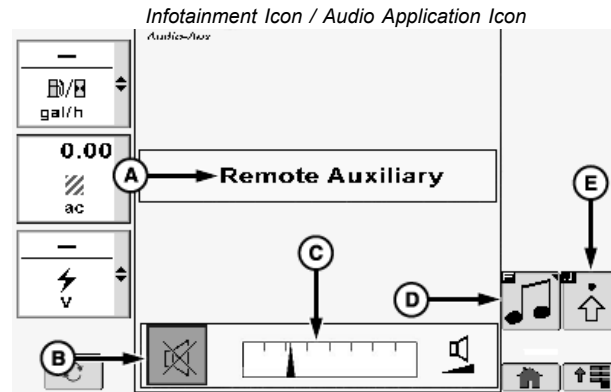
Allows operator to adjust current sound level.

Touch plus (+) symbol or minus (-) symbol or rotate selection dial to increase or decrease bar graph settings.

Source Select Icon (D)

Allows operator the ability to cycle through radio tuner sources and external sources (see Radio Source Select in this section for additional information).

Touch or press confirm switch when select source icon is highlighted to cycle through available choices.



Audio Settings Icon (E)

Allows operator to change desired audio settings. Refer to Audio Settings later in this section for further information.

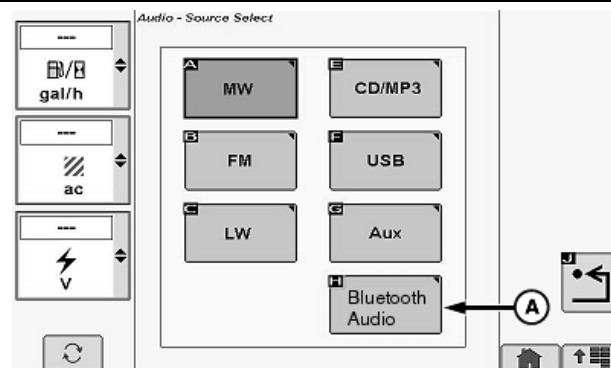
OUCC002,0004363 -19-25FEB15-1/1

Bluetooth® Audio

Touch or press confirm switch when Bluetooth® Audio icon (A) is highlighted.

Refer to Radio Operator's Manual for further information on pairing any Bluetooth® device with radio.

NOTE: Radio function switches located on CommandARM™ also control Bluetooth® device that was paired.



OUCC002,0004364 -19-25FEB15-1/1

Radio Settings

Touch or press confirm switch when infotainment icon or audio application icon is highlighted.

Touch or press confirm switch when advanced settings icon (A) is highlighted to access audio settings.

Audio Settings

Allows operator to change different sound settings.

Touch or press confirm switch when desired audio setting is highlighted:

- Bass (B)
- Treble (C)
- Middle (D)
- Balance (E)

Once desired audio setting is highlighted, touch plus (+) symbol or minus (-) symbol or rotate selection dial to increase or decrease bar graph settings.

Next Page Icon (F)

Allows operator to advance to the next page.

Touch or press confirm switch when next page icon is highlighted.

Alternative Frequency (AF) Icon (G)

Alternative frequency is a Radio Data System (RDS) function that allows operator to stay tuned to a program even if the radio frequency changes.

Touch or press confirm switch when alternative frequency (AF) icon is highlighted to enable this feature.

Alternative Frequency (AF) Box (H)

Box displays a checkmark indicating that alternative frequency (AF) is enabled.

Traffic Announcements (TA) Icon (I)

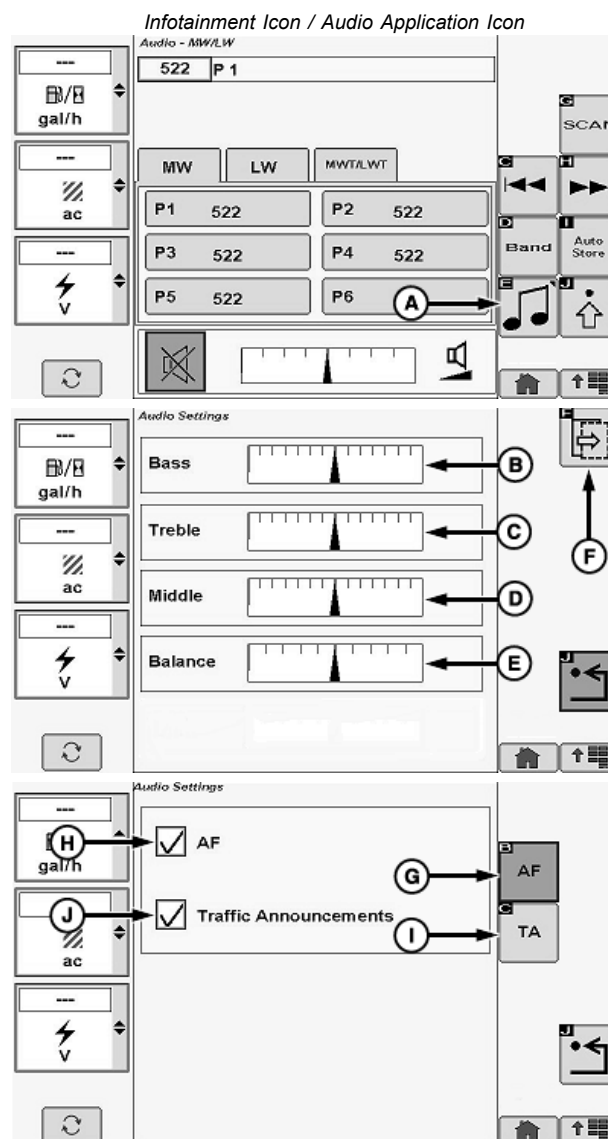
NOTE: Traffic announcement (TA) volume can be set by using the menu key and volume control on the radio.

Traffic announcements is a function that allows operator to hear various traffic reports.

Touch or press confirm switch when traffic announcements (TA) icon is highlighted to enable this feature.

Traffic Announcements Box (K)

Box displays a checkmark indicating that traffic announcements is enabled.



H105093 —UN—28MAR12

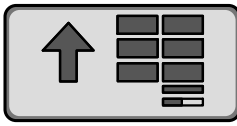
H105097 —UN—28MAR12

H105099 —UN—03MAY12

H105100 —UN—03MAY12

OUC002,0004365 -19-25FEB15-1/1

Operating the Phone (Premium Radio)



Main Menu Icon (Display) / Main Menu Switch (Armrest)

NOTE: Phone buttons on this page are disabled while the phone is syncing the phone book with the radio.

Press main menu icon or switch.

Touch or press confirm switch when phone application icon is highlighted.

Transfer Call Icon (A)

Allows operator to transfer a call to a connected phone for privacy.

Touch or press confirm switch when transfer call icon is highlighted.

Phone Book Icon (B)

Allows operator to view a synchronized phone book (see Phone Book in this section for further information).

Touch or press confirm switch when phone book icon is highlighted.

Call History Icon (C)

Allows operator to view missed calls, dialed call, and received call (see Call History in this section for further information).

Touch or press confirm switch when call history icon is highlighted.

Bluetooth® Settings Icon (D)

Allows operator the ability to change Bluetooth® settings (see Phone Settings (Premium Radio) in this section for additional information).

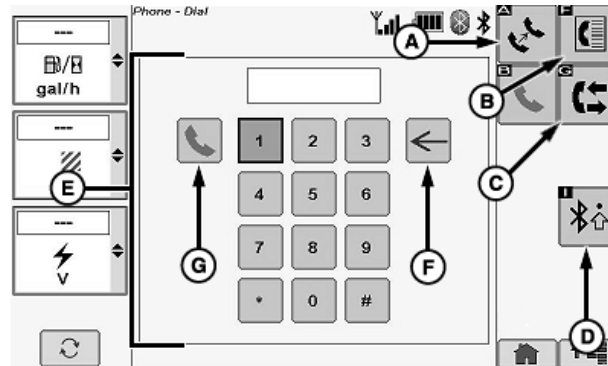
Touch or press confirm switch when Bluetooth® settings icon is highlighted.

Telephone Numeric Keypad (E)

Allows operator to dial a telephone number using the display screen.



Phone Application Icon



Touch or press confirm switch when desired numbers are highlighted. Repeat until desired telephone number is shown.

Delete Icon (F)

Allows operator to delete a number while dialing a telephone number.

Touch or press confirm switch when delete icon is highlighted.

Call Icon (G)

NOTE: Screen appears with contacts name and telephone number while call is being made.

Certain icons are not available while in a call. Use your cell phone if you need to use numbers while in a call.

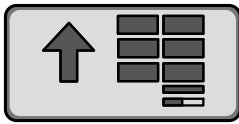
Allows operator to dial the telephone number previously entered using the telephone numeric keypad.

Touch or press confirm switch when call icon is highlighted.

OUCC002,0004366 -19-25FEB15-1/1

Phone Book (Premium Radio)

H105094 —UN—28MAR12



Main Menu Icon (Display) / Main Menu Switch (Armrest)



Phone Application Icon

H95878 —UN—29MAR10

NOTE: If a new contact is made in your cell phone, the phone must be re-synced with radio Bluetooth® (see Phone Settings in this section for further information).

A contact entry CANNOT be edited through armrest display. Contact must be edited through cell phone, and phone must be re-synced with radio Bluetooth® (see Phone Settings in this section for further information).

Press main menu icon or switch.

Touch or press confirm switch when phone application icon is highlighted.

Touch or press confirm switch when phone book icon (A) is highlighted.

Alphabetic Softkeys (B)

Allows operator to narrow the number of names in the contact list to those names beginning with selected letter icon.

Touch or press confirm switch when desired alphabetic icon is highlighted.

Return/Back Icon (C)

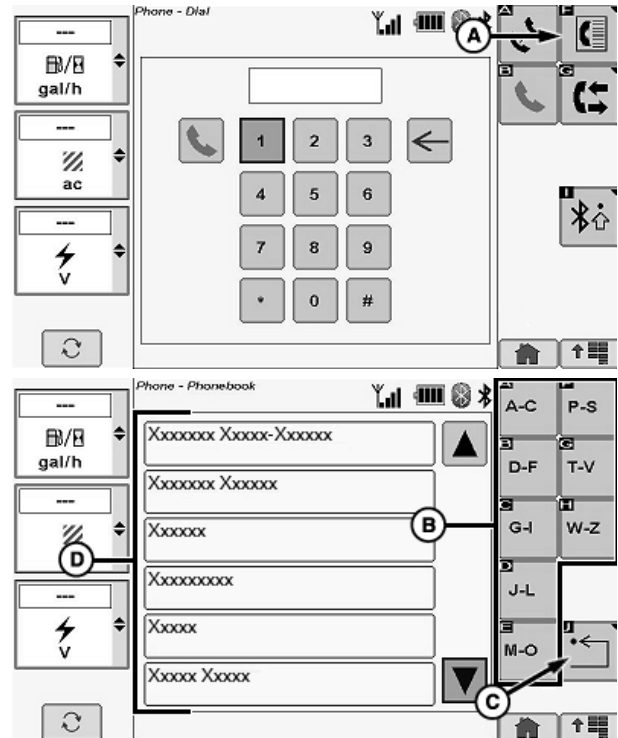
Allows operator to return to the previous page.

Touch or press confirm switch when return/back icon is highlighted.

Phone Book Contact List (D)

NOTE: Maximum number of phone book entries is 650. Maximum number of characters in a phone number is 20. Maximum number of characters in a phone book name is 20.

Selecting a number on the phone book entry page will directly call that number.



H104857 —UN—27MAR12

H104858 —UN—27MAR12

Some phones will not correctly sync with the radio Bluetooth®. When this happens a call cannot be made from the Phone Book page.

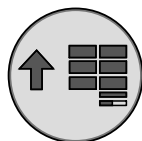
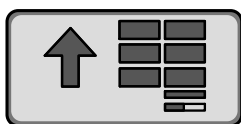
Allows operator to select a contact from the listing and will bring up a phone book entry page listing the contacts phone numbers (cell, work, home).

Touch or press confirm switch when desired contact is highlighted.

OUC002,0004367 -19-25FEB15-1/1

Phone Directories (Premium Radio)

H105094 —UN—28MAR12



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

Touch or press confirm switch when phone application icon is highlighted.

NOTE: Touch or press confirm switch when directories icon (A) is highlighted. An incoming call from a contact shows the contacts name and telephone number. An incoming call received from an unknown contact appears on display as **Unknown**.

A missed call screen appears with the callers name and phone number (if caller is listed in phone book). **Unknown** appears on screen if caller was not listed in phone book.

The directories page allows operator to review the following:

- Missed Calls (B)
- Dialed Calls (C)
- Received Calls (D)

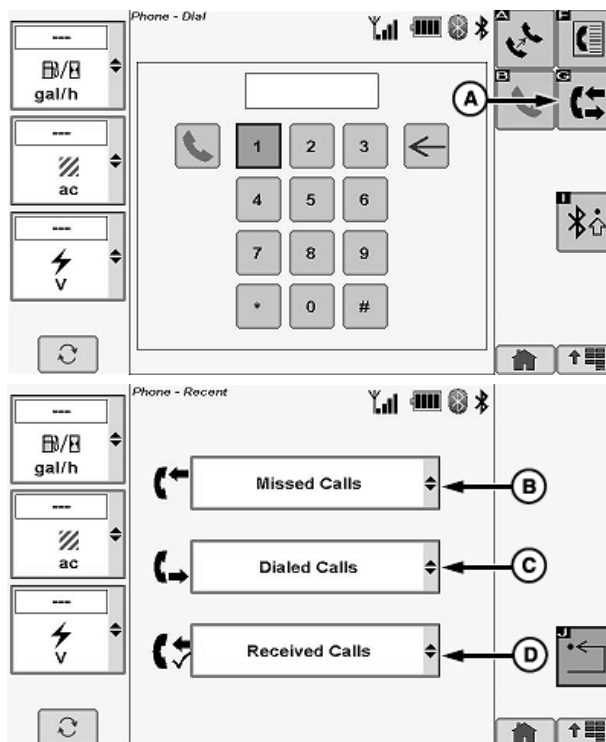
Touch or press confirm switch when desired calls menu is highlighted.

NOTE: A call list appears from the previously selected menu. The persons name and telephone number appears (if caller is listed in phone book) with an exact time. Operator can choose from the desired listing to call that person or number back.



Phone Application Icon

H95678 —UN—29MAR10



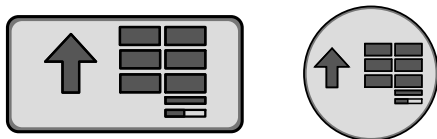
H104863 —UN—27MAR12

H104864 —UN—28MAR12

OUCC002,0004368 -19-25FEB15-1/1

Phone Settings (Premium Radio)

H105094 —UN—28MAR12



Main Menu Icon (Display)/Main Menu Switch (Armrest)

Press main menu icon or switch.

Touch or press confirm switch when phone application icon is highlighted.

Touch or press confirm switch when Bluetooth® settings icon (A) is highlighted.

Bluetooth® Enable/Disable Icon (B)

NOTE: When radio Bluetooth® feature is enabled, Bluetooth® enable indicator icon (C) flashes on display while phone and radio are synchronizing.

Allows operator to enable/disable Bluetooth® feature.

Touch or press confirm switch when Bluetooth® enable/disable icon is highlighted.

Add Phone Icon (D)

NOTE: Not ALL cell phones will be able to use the radio Bluetooth® feature.

Allows operator to add a different cell phone.

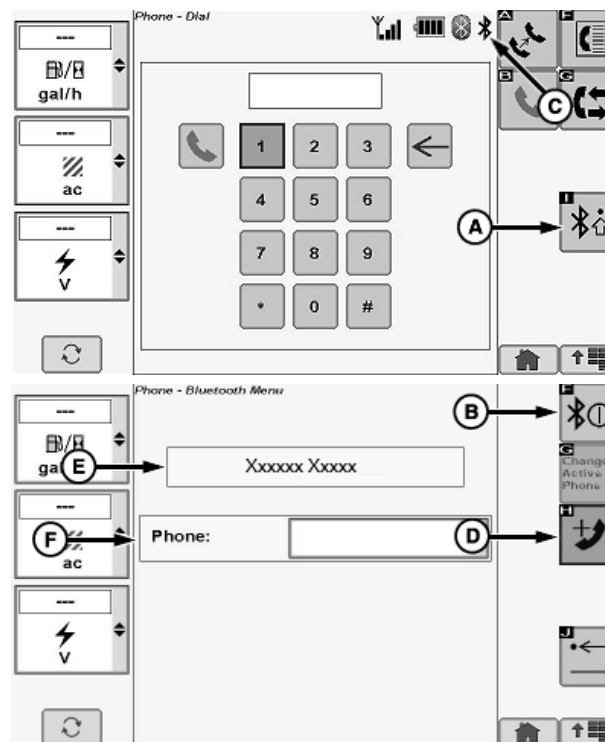
1. Select Add Phone icon.
2. **Adding Phone** is displayed in message box (E) followed by a pin number "PIN XXXX".
3. From your cell phone, select **Add New Device** in Bluetooth® menu.
4. Select **Bosch-BT** from list of available Bluetooth® devices on your cell phone.
5. Select **Bond With Device** on your cell phone.
6. Enter PIN shown in message box (E) (pin also displays on radio faceplate).
7. Paired Bluetooth® indicator is active when a cell phone is actively connecting to the radio.
8. **Phone Connected** is shown in message box when cell phone is connected successfully.

NOTE: The cells phone book automatically syncs with the radio phone book.



Phone Application Icon

H95878 —UN—29MAR10



H108313 —UN—17JUN13

H108314 —UN—17JUN13

Radio sends a "BT phonebook" request before sync starts. If that request is not accepted on your phone, the phone book feature will be disabled.

Phone Device List (F)

Allows operator to select a different cell phone from the list.

Touch or press confirm switch when phone device list is highlighted.

Touch or press confirm switch when desired phone device is highlighted in menu.

Continued on next page

OUC002.0004373 -19-25FEB15-1/3

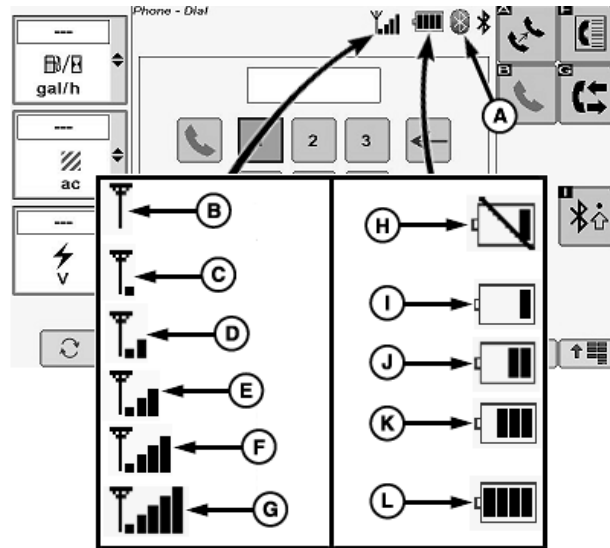
Bluetooth® Enabled Cell Phone Indicator (A)

Indicates that cell phone and radio are paired together.

Signal Strength and Battery Indicators

Phone displays the following:

Signal Strength		Battery Power	
B	No Signal	H	No Battery Power
C	5—20 %	I	5—25 %
D	25—40 %	J	30—50 %
E	45—70 %	K	55—80 %
F	75—90 %	L	85—100 %
G	100 %		



H108316—UN—17JUN13

OUC002,0004373 -19-25FEB15-2/3

Change Active Phone Icon (A)

NOTE: First phone in phone device list is the current active phone.

Up to 5 cell phone pairings can be stored

Allows operator to select a different cell phone from the phone device list. Once desired cell phone is selected from list, select change active phone icon.

Return/Back Icon (B)

Allows operator to return to the previous page.

Touch or press confirm switch when return/back icon is highlighted.

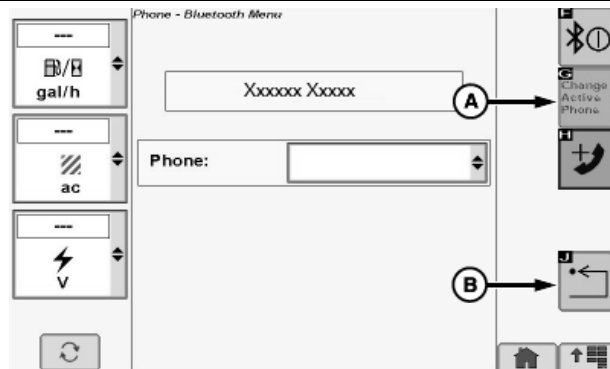
Re-sync Cell Phone

NOTE: Make sure that cell phone's Bluetooth® is enabled when trying to pair a cell phone to the radio Bluetooth®.

- Turn cell phone OFF and then back ON.

Disconnect From All Phones

Turn Bluetooth® OFF.



H108315—UN—17JUN13

Touch or press confirm switch when Bluetooth® enable/disable icon is highlighted to disable Bluetooth®.

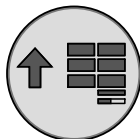
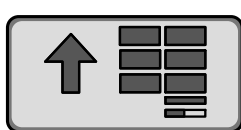
Disconnect A Single Phone

Within Bluetooth® setup menu, select unpair/disconnect from Bosch Radio.

OUC002,0004373 -19-25FEB15-3/3

Brightness Level and Boundary Box Color

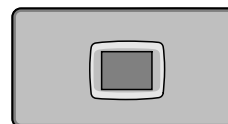
H95849 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

H95878 —UN—29MAR10



Display icon for settings

Touch or press confirm switch when display settings icon is highlighted.

OUC002.0004369 -19-25FEB15-1/6

Brightness Level:

Allows operator to control brightness level of screen.

Touch or press confirm switch when brightness icon (A) is highlighted.

With brightness bar graph (B) highlighted, touch plus (+) or minus (-) symbol or rotate selection dial to select brightness level of screen.

- Increase bar graph to brighten screen.
- Decrease bar graph to darken screen.

Day/Night Settings:

NOTE: Day/Night icon only appears in standalone mode.

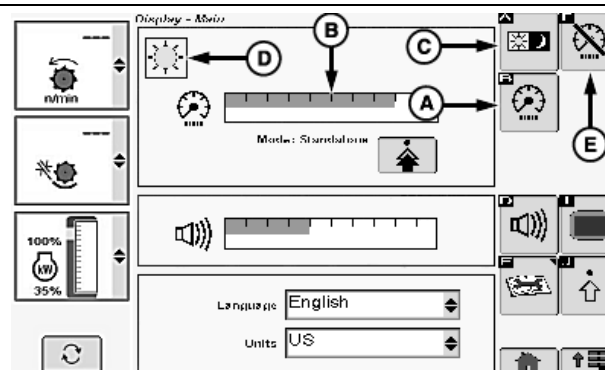
Allows operator to toggle between day or night settings.

Touch or press confirm when day/night icon (C) is highlighted to toggle between day or night settings (D).

Dim Mode:

Allows operator to quickly darken screen to reduce glare.

Touch or press confirm switch when dim mode icon (E) is highlighted to quickly darken screen.



A—Brightness Icon
B—Brightness Bar Graph
C—Day / Night Icon

D—Day/Night settings
E—Dim Mode Icon

NOTE: Dim mode temporarily darkens screen to reduce glare. Screen resumes normal brightness when an alarm exists or any armrest switch is selected.

Continued on next page

OUC002.0004369 -19-25FEB15-2/6

H108230 —UN—11JUN13

Sync With Cab/Standalone Modes:

Allows operator to synchronize screen with cab lighting or allows screen to work independently from cab lighting.

Touch or press confirm switch when advanced settings icon (A) is highlighted to advance to next screen.

Touch or press confirm switch when sync with cab box (B) is highlighted.

- Checked - synchronizes screen and cab backlighting together.
- Unchecked - screen and cab backlighting work independently from each other.

Touch or press confirm switch when balance bar graph (C) highlighted.

Touch plus (+) or minus (-) symbol or rotate selection dial to select balance level of screen.

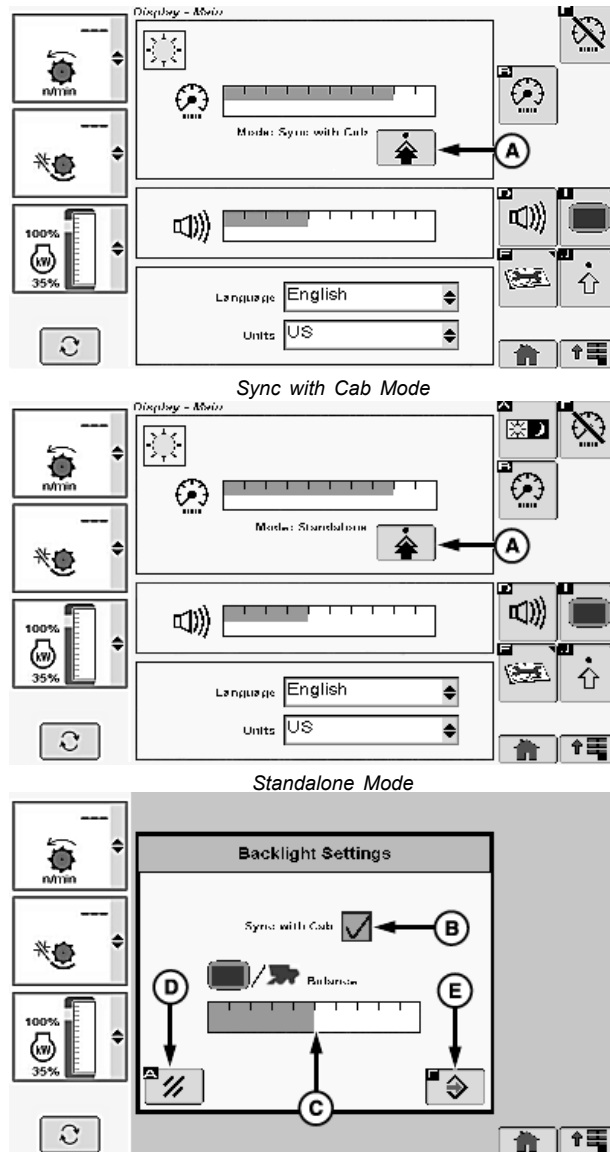
- Increase bar graph to brighten backlighting.
- Decrease bar graph to darken backlighting.

NOTE: Touch or press confirm switch when cancel icon (D) is highlighted to clear balance levels.

Touch or press confirm switch when enter/accept icon (E) is highlighted to return to previous screen.

A—Advanced Settings Icon
B—Sync With Cab Box
C—Balance Bar Graph

D—Cancel Icon
E—Enter/Accept Icon



Continued on next page

OUC002,0004369 -19-25FEB15-3/6

H108231 —UN—11JUN13

H108232 —UN—11JUN13

H108233 —UN—11JUN13

Alarm Volume Setting:

Allows operator to set a desired alarm volume.

Touch or press confirm switch when volume icon (A) is highlighted.

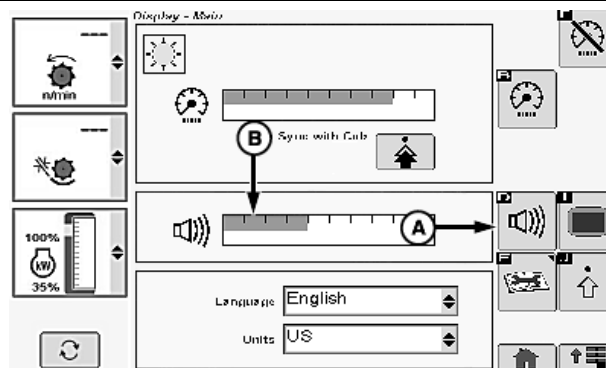
Touch or press confirm switch when alarm volume bar graph (B) is highlighted.

Touch plus (+) or minus (-) symbol or rotate selection dial to adjust alarm volume.

- Increase bar graph to increase alarm volume.
- Decrease bar graph to decrease alarm volume.

A—Volume Icon

B—Alarm Volume Bar Graph



H108234 —UN—11JUN13

OUC002.0004369 -19-25FEB15-4/6

Boundary Box Color Settings:

Allows operator to choose color of boundary box.

NOTE: Color defaults to red at initial power-up of screen.

Touch or press confirm switch when advanced setup icon (A) is highlighted.

Touch or press confirm switch when highlight icon (B) is highlighted.

Touch or press confirm switch when desired color box is highlighted.

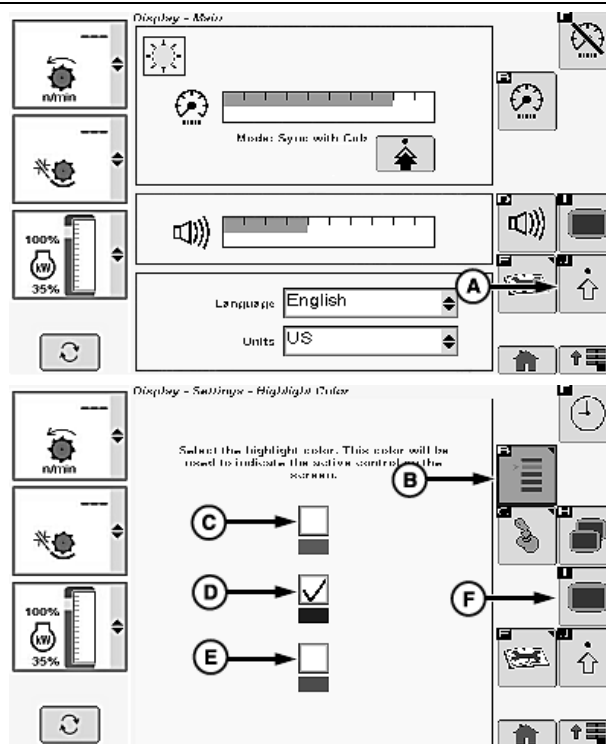
- Green (C)
- Blue (D)
- Red (E)

Box displays a checkmark indicating which color was selected.

Touch or press confirm switch when display icon (F) is highlighted to return to previous screen.

A—Advanced Settings Icon
B—Highlight Icon
C—Green Highlight

D—Blue Highlight
E—Red Highlight
F—Display icon



H108235 —UN—11JUN13

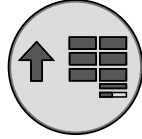
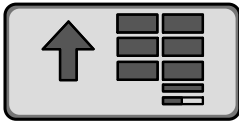
H95738 —UN—05OCT10

Continued on next page

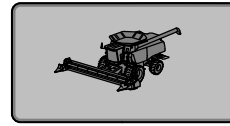
OUC002.0004369 -19-25FEB15-5/6

Operating the Controls and Displays

H95845 —UN—31MAR10



H95878 —UN—29MAR10



Combine Main Application Icon

Main Menu Icon (Display) / Main Menu Switch (Armrest)

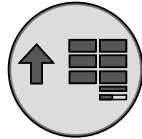
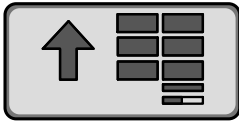
Press main menu icon or switch.

Touch or press confirm switch when combine main page icon is highlighted.

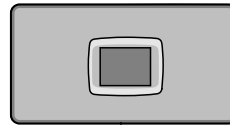
OUCC002,0004369 -19-25FEB15-6/6

Regional Settings, Languages, Time/Date Settings, Units of Measurement

H95849 —UN—31MAR10



H95878 —UN—29MAR10



Display Application Icon

Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

Touch or press confirm switch when display settings icon is highlighted.

OUCC002,000436A -19-25FEB15-1/5

Regional/Languages/Units Menu Settings:

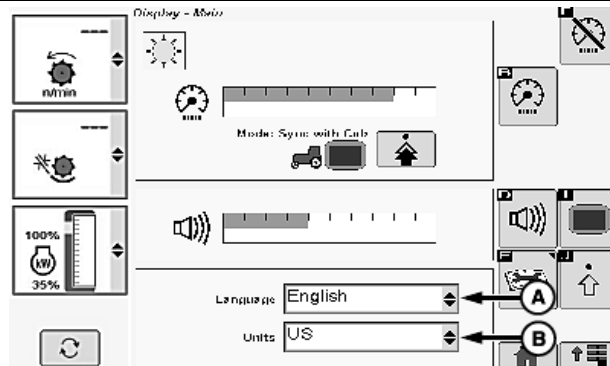
Touch or press confirm switch when desired menu is highlighted:

- Language Menu (A)
- Units Menu (B)

Once desired choice is made from menu, touch or press confirm switch.

A—Language Menu

B—Units Menu



H95740 —UN—05OCT10

Continued on next page

OUCC002,000436A -19-25FEB15-2/5

Advanced Settings:

Touch or press confirm switch when advanced settings icon (A) is highlighted.

Touch or press confirm switch when desired menu is highlighted:

- Country Menu (B)
- Language Menu (C)
- Numeric Format Menu (D)
- Units Menu (E)

Once desired choice is made from menu, touch or press confirm switch.

Touch or press confirm switch when advanced settings icon (F) is highlighted.

Touch or press confirm switch when desired menu is highlighted:

- Distance Menu (G)
- Area Menu (H)
- Volume Menu (I)
- Mass Menu (J)
- Temperature Menu (K)
- Pressure Menu (L)
- Force Menu (M)

Once desired choice is made from menu, touch or press confirm switch.

NOTE: Touch or press confirm switch when cancel icon (N) is highlighted to return to previous screen.

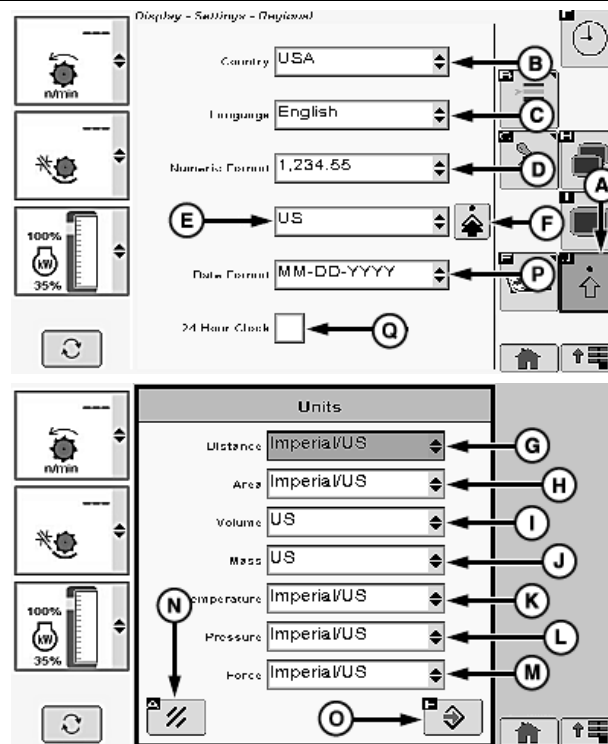
Touch or press confirm switch when enter/accept icon (O) is highlighted to return to previous screen.

Touch or press confirm switch when desired menu is highlighted:

- Date Format Menu (P)

Once desired choice is made from menu, touch or press confirm switch.

Touch or press confirm switch when 24 hour box (Q) is highlighted.



- A—Advanced Settings Icon
- B—Country Menu
- C—Language Menu
- D—Numeric Format Menu
- E—Units Menu
- F—Advanced Settings Icon
- G—Distance Menu
- H—Area Menu
- I—Volume Menu

- J—Mass Menu
- K—Temperature Menu
- L—Pressure Menu
- M—Force Menu
- N—Cancel Icon
- O—Enter/Accept Icon
- P—Date Format Menu
- Q—24 Hour Box

- Checked - time is displayed as military time (24 hour clock).
- Unchecked - time is displayed in standard time (12 hour clock).

Continued on next page

OUC002.000436A -19-25FEB15-3/5

H95741—UN—05OCT10

H95742—UN—05OCT10

Global Position Satellite (GPS) date/time settings

Touch or press confirm switch when clock icon (A) is highlighted.

NOTE: If a Global Position Satellite (GPS) position receiver is detected, checkbox appears and GPS date and time will be available automatically from the receiver.

If no position receiver is detected, date and time must be entered manually.

Touch or press confirm switch when GPS time and date box (B) is highlighted.

- Checked - date and time menus are not selectable. Date and time is set to GPS system.
- Unchecked - date and time menus are selectable. Date and time are not set to GPS system.

Touch or press confirm switch when time zone icon (C) is highlighted.

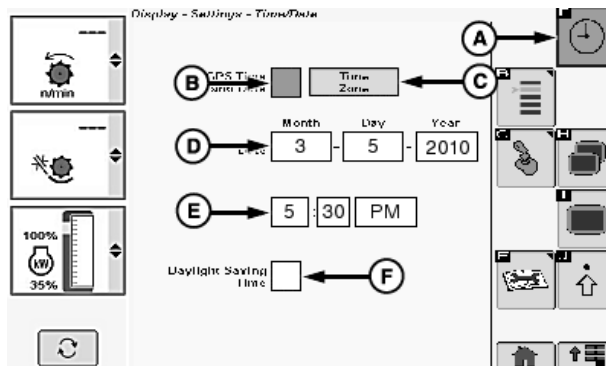
NOTE: Time zones are shown based on Greenwich Mean Time (GMT).

Argentina -2	Denmark +1	Moscow +3
Austria +1	Germany +1	Samara +4
Australia	Estonia +2	Orenburg +5
Brisbane +10	France 0	Omsk +6
Adelaide +10	Finland +2	Krasnoyarsk +7
Perth + 9	Greece +2	Switzerland +1
Melbourne +11	Iceland 0	Slovakia +1
Bulgaria +2	Italy +1	South Africa +2
Sao Paulo -3	Hungary +1	Sweden +1
Mato Grosso -4	Central America + 5	United Kingdom 0
Vancouver -7	Latvia +2	Ukraine +2
Calgary -6	Lithuania +2	Turkey +2
Winnipeg -5	Netherlands +1	Los Angeles - 7
Toronto -4	Norway +1	Denver - 6
Halifax -3	Poland +1	Chicago -5
Czech Republic +1	Portugal 0	Atlanta -4
Croatia +1	Romania +2	

Once appropriate time zone is chosen from menu, touch or press confirm switch.

Date Settings:

Touch or press confirm switch when desired date menu (D) is highlighted:



- A—Clock Icon
- B—GPS Time and Date Box
- C—Time Zone Icon
- D—Date Menu (Month, Day, Year)
- E—Time Menu (Hours, Minutes, A.M. or P.M.)
- F—Daylight Savings Time Box

- Month
- Day
- Year

Once desired choice is made from menu, touch or press confirm switch.

Time Settings:

Touch or press confirm switch when desired time menu (E) is highlighted:

- Hours
- Minutes
- A.M. or P.M.

Once desired choice is made from menu, touch or press confirm switch.

Touch or press confirm switch when daylight savings time box (F) is highlighted.

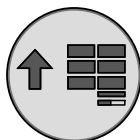
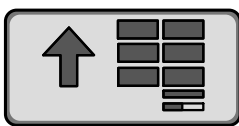
- Checked - time automatically updates if daylight savings time is used in your country/region.
- Unchecked - time must be updated manually when daylight savings time changes.

Continued on next page

OUECC002,000436A -19-25FEB15-4/5

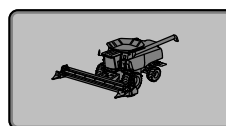
Operating the Controls and Displays

H95845 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.



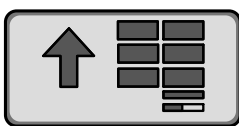
Combine Main Page Application Icon

Touch or press confirm switch when combine main page icon is highlighted.

OUC002,000436A -19-25FEB15-5/5

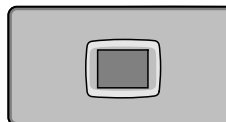
Diagnostic Readings, About, Display Tests

H95849 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.



Display Application Icon

Touch or press confirm switch when display settings icon is highlighted.

OUC002,000436B -19-25FEB15-1/5

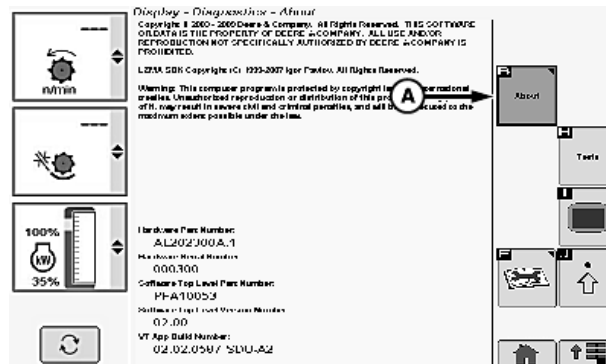
About Menu:

Touch or press confirm switch when about menu icon (A) is highlighted.

Screen displays the following:

- Copyright Information
- Software and Hardware Information
 - Hardware Part Number
 - Hardware Serial Number
 - Software Part Number
 - Software Version Number
 - Application Build Number

A—About Menu Icon



H95747 —UN—05OCT10

Continued on next page

OUC002,000436B -19-25FEB15-2/5

Display Tests:

Touch or press confirm switch when tests icon (A) is highlighted.

Display Color Test:

Touch or press confirm switch when display color test icon (B) is highlighted.

- Display tests color of screen (diagram appears with red, blue, and green).
- If you do not see test colors, see your John Deere dealer.

Touchscreen Test:

NOTE: Only works if equipped with a touchscreen display.

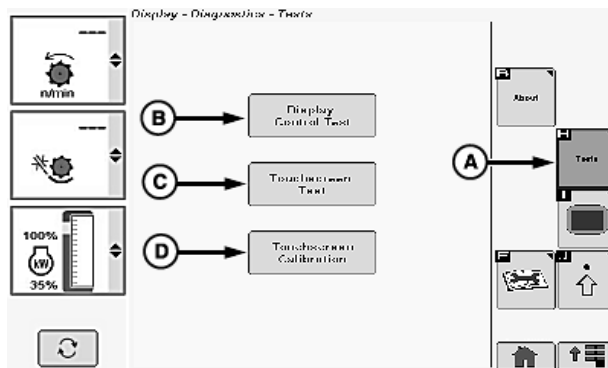
Touch or press confirm switch when touchscreen test icon (C) is highlighted.

- Test allows operator to identify pixel problems on screen.
 - a. When screen is touched a sighting target appears on area touched.
 - b. Continue to touch screen around area of suspected pixel malfunction and see if sighting target appears.
 - c. If sighting target does not appear, see your John Deere dealer.

Touchscreen Calibration:

NOTE: Only works if equipped with a touchscreen display.

Touch or press confirm switch when touchscreen calibration icon (D) is highlighted.



A—Tests Icon

B—Display Color Test Icon

C—Touchscreen Test Icon

D—Touchscreen Calibration Icon

1. Another screen appears with an X in upper right corner.
2. Press screen at X and continue to follow X's around screen. Always press screen directly at center of X.

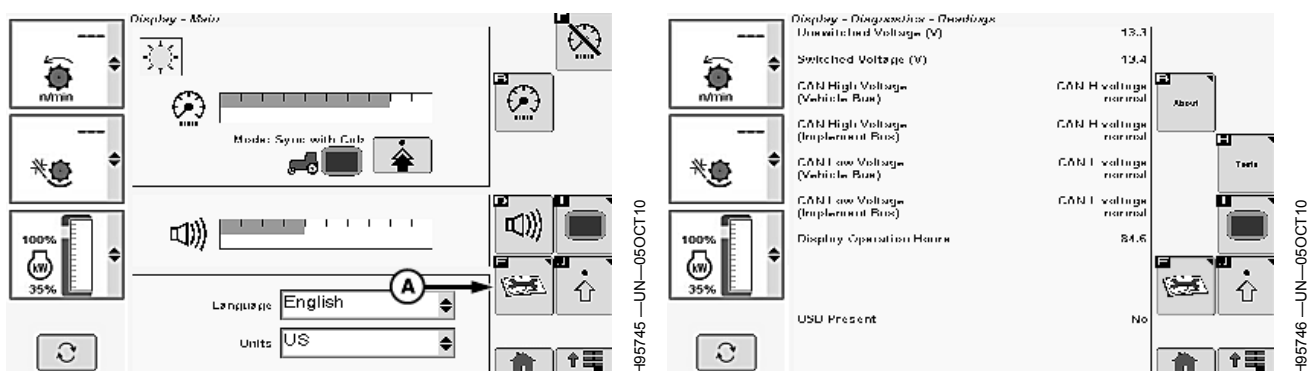
NOTE: Touchscreen calibration cancels any saved calibrations and allows operator to start over and perform a new calibration.

Continued on next page

OUC002,000436B -19-25FEB15-3/5

H95748—UN—05OCT10

Diagnostic Readings:



A—Diagnostic Icon

Touch or press confirm switch when diagnostic icon (A) is highlighted.

Screen displays the following:

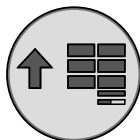
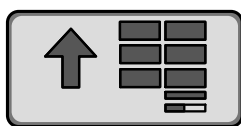
- Unswitched Voltage
- Switched Voltage
- CAN High Voltage (Vehicle Bus)
- CAN High Voltage (Implement Bus)
- CAN Low Voltage (Vehicle Bus)
- CAN Low Voltage (Implement Bus)

- Display Operation Hours
- USB Present

NOTE: Universal Serial Bus (USB) connector is located under armrest. Connector is used for basic diagnostic readings and to transfer data. Do not plug phone or audio devices into this connector. This connector is NOT for charging consumer devices.

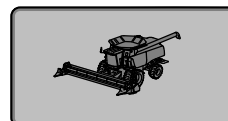
OUC002,000436B -19-25FEB15-4/5

H95845 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

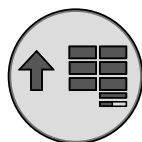
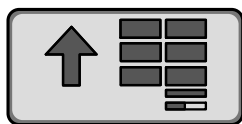


Combine Main Page Application Icon

Touch or press confirm switch when combine main page icon is highlighted.

OUC002,000436B -19-25FEB15-5/5

Connecting Multiple Displays and Auxiliary Controls

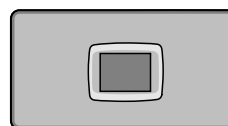


Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

H95849 —UN—31MAR10

H96878 —UN—29MAR10



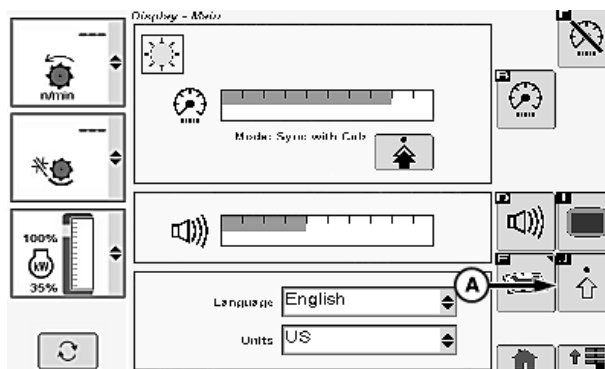
Display icon for settings

Touch or press confirm switch when display settings icon is highlighted.

OUC002,000436C -19-25FEB15-1/4

Touch or press confirm switch when advanced setup icon (A) is highlighted.

A—Advanced Setup Icon



H108235 —UN—11JUN13

OUC002,000436C -19-25FEB15-2/4

Connecting Multiple Displays:

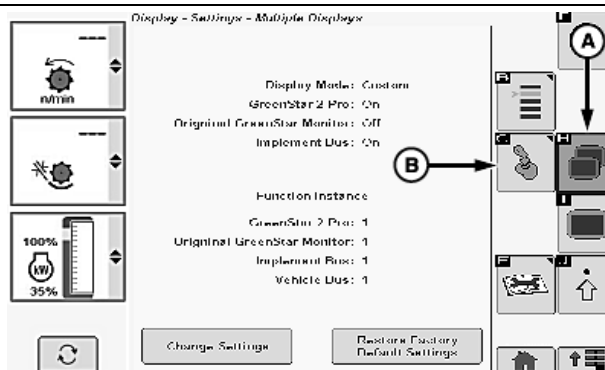
NOTE: Software automatically detects if another display is connected. See your John Deere dealer for further information before changing any settings or if system does not detect connected display.

Auxiliary Controls:

NOTE: Auxiliary controls feature is not available.

A—Multiple Displays Icon

B—Auxiliary Controls Icon



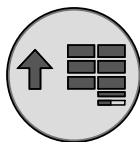
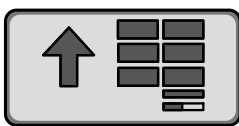
H96256 —UN—05OCT10

Continued on next page

OUC002,000436C -19-25FEB15-3/4

Operating the Controls and Displays

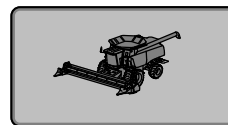
H95845 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

H95878 —UN—29MAR10



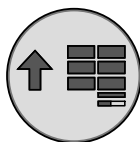
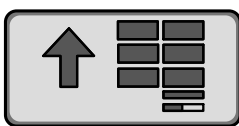
Combine Main Application Icon

Touch or press confirm switch when combine main page icon is highlighted.

OUC002,000436C -19-25FEB15-4/4

Message Center Application

H95846 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

H95878 —UN—29MAR10



Message Center Application Icon

Touch or press confirm switch when message center icon is highlighted.

Continued on next page

OUC002,000436D -19-25FEB15-1/3

Message Center Icon (A):

Touch or press confirm switch when message center icon is highlighted.

Displays messages to operator if any are available.

Diagnostic Address Icon (B):

NOTE: If equipped with optional GreenStar display, do not attempt to access diagnostic address information on both displays at the same time.

Touch or press confirm switch when diagnostic address icon is highlighted.

Allows operator to select desired control units and make address modifications/changes or view addresses (see your John Deere Dealer).

Diagnostic Trouble Codes Icon (C):

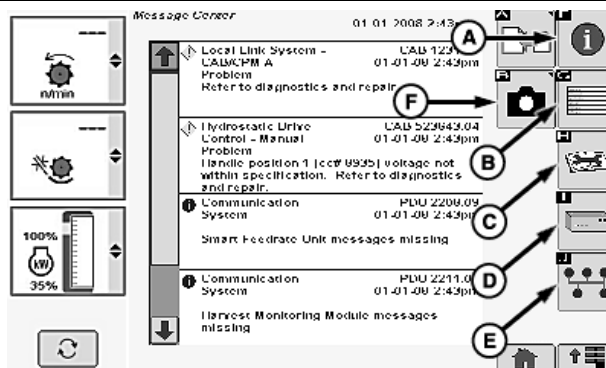
NOTE: If equipped with optional GreenStar display, do not attempt to access diagnostic trouble codes on both displays at the same time.

Touch or press confirm switch when diagnostic trouble codes icon is highlighted.

Screen allows operator to view control units, trouble code addresses, codes (active or not) and counts. The counts indicate how many times a code is displayed (refer to Accessing Diagnostic Trouble Codes Menu in Diagnostic Trouble Codes Section for further information).

Electronic Control Unit Information (ECU) Icon (D):

Touch or press confirm switch when electronic control unit information icon is highlighted.



H95965—UN—05OCT10

Allows operator to view control units, addresses, message counts, control unit part numbers and serial numbers, software part numbers and versions (see your John Deere Dealer).

CAN Bus Information Icon (E):

Touch or press confirm switch when CAN bus information icon is highlighted.

Allows operator to view if network status is active or not active, total message counts, and CAN high or low voltages (see your John Deere Dealer).

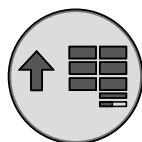
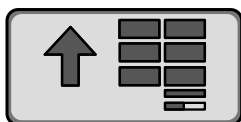
Transfer Debug Files Icon (F):

Touch or press confirm switch when transfer debug file icon is highlighted.

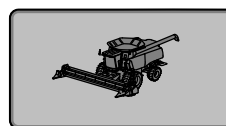
Almost any screen may be saved to internal memory and then copied to a Universal Serial Bus (USB) memory device (see your John Deere Dealer).

OUCC002,000436D -19-25FEB15-2/3

H95845—UN—31MAR10



H95878—UN—29MAR10



Combine Main Page
Application Icon

Main Menu Icon (Display) / Main Menu Switch (Armrest)

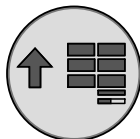
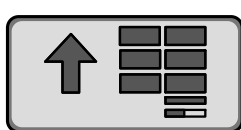
Press main menu icon or switch.

Touch or press confirm switch when combine main page icon is highlighted.

OUCC002,000436D -19-25FEB15-3/3

Performance Monitor

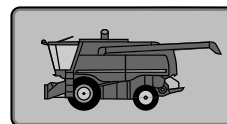
H95847 —UN—12OCT10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

H95878 —UN—29MAR10



Performance Monitor
Application Icon

Touch or press confirm switch when performance monitor icon is highlighted.

OUC002,000436E -19-25FEB15-1/5

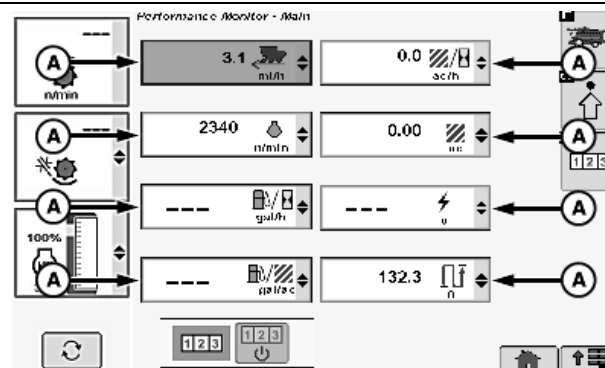
Performance Monitor Menu:

Touch or press confirm switch when desired performance monitor menu (A) is highlighted.

Reconfigured performance monitor menu appears with the following:

- Average Fuel Consumption Per Area (gal./acre, L/ha, gal./ha, L/acre)
- Instantaneous Area Per Hour
- Average Area Per Hour
- Area Harvested (Accumulates with recording ON)
- Distance (Accumulates at all times, not dependent on recording status)
- Instantaneous Fuel Consumption Per Hour (gal./hr., L/hr)
- Harvesting Productivity Per Hour (Volume or Weight)
- Weight Counter
- Moisture Counter

Touch or press confirm switch when desired menu option is highlighted.



A—Performance Monitor Menu

H95803 —UN—05OCT10

Continued on next page

OUC002,000436E -19-25FEB15-2/5

Performance Monitor Clearing:

Touch or press confirm switch when totals icon (A) is highlighted.

Touch or press confirm switch when desired counter reset icon is highlighted:

NOTE: Clearing area, distance, weight and moisture numbers from this screen will not clear Client, Farm, Field, and Crop Totals.

Only counters on this screen are cleared.

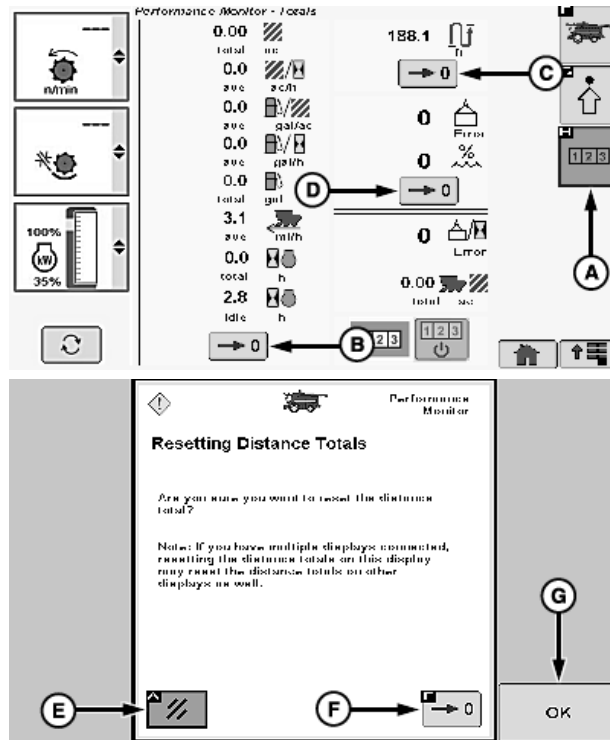
- Area Counter Reset Icon (B)
 - Shows total area traveled since being reset.
- Distance Counter Reset Icon (C)
 - Shows total distance traveled since being reset.
- Weight and Moisture Counter Reset Icon (D)
 - Shows weight and moisture numbers since being reset.

Warning screen appears asking if you want to reset desired total.

IMPORTANT: If multiple displays are connected, resetting totals on this screen may reset totals on other displays as well.

NOTE: Touch or press confirm switch when cancel icon (E) is highlighted to cancel and return to previous screen.

Touch or press confirm switch when reset icon (F) or OK icon (G) is highlighted to zero totals.



- | | |
|--|---------------|
| A—Totals Icon | E—Cancel Icon |
| B—Area Counter Reset Icon | F—Reset Icon |
| C—Distance Counter Reset Icon | G—OK Icon |
| D—Weight and Moisture Counter Reset Icon | |

Continued on next page

OUCC002,000436E -19-25FEB15-3/5

H95810—UN—05OCT10

H95811—UN—23MAR10

Performance Monitor Advanced Settings

Touch or press confirm switch when advanced settings icon (A) is highlighted.

• Auto Width Box (B)

NOTE: Should always be checked and disabled from operator.

• Manual Width Box (C)

NOTE: Should always be disabled from operator.

- Is automatically detected when operator setup desired header settings from Header Setup Screen.

• Recording ON/OFF Status (D)

NOTE: Should always be disabled from operator.

- Is automatically detected when operator setup desired header settings from Header Setup Screen.

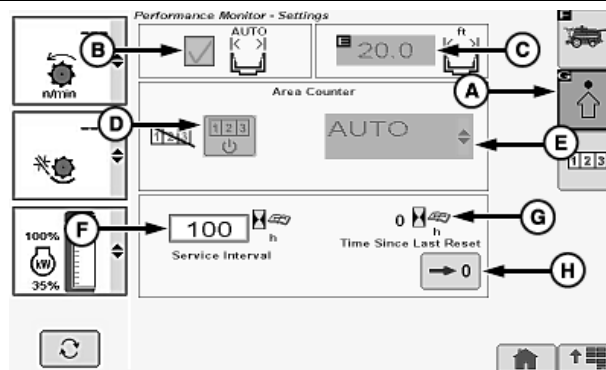
• Area Counter Menu (E)

NOTE: Should always be disabled from operator.

- Is automatically detected when operator setup desired header settings from Header Setup Screen.

• Service Interval (F)

NOTE: Alarm sounds and message appears on display within 20 hours of service interval setting.



A—Advanced Settings Icon
B—Auto Width Box
C—Manual Adjust Width
D—Recording ON/OFF Status

E—Area Counter Menu
F—Service Interval
G—Time Since Last Reset
H—Reset Icon

- Interval is adjustable between 0 - 999 hours. Service interval must be reset to zero after service is performed.

• Time Since Last Reset (G)

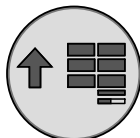
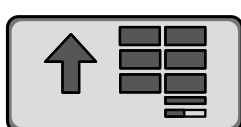
- Shows number of engine hours since service was last reset.

• Reset Icon (H)

- Clears hours since last service.

OUC002,000436E -19-25FEB15-4/5

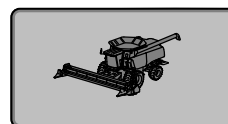
H95845 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

H95878 —UN—29MAR10



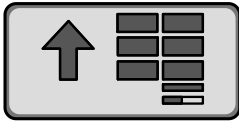
Combine Main Application Icon

Touch or press confirm switch when combine main page icon is highlighted.

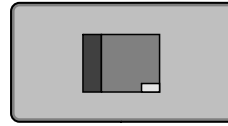
OUC002,000436E -19-25FEB15-5/5

Layout Manager Application

H95850 —UN—31MAR10



H95878 —UN—29MAR10



Layout Manager
Application Icon

Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

Touch or press confirm switch when performance monitor icon is highlighted.

OUC002,000436F -19-25FEB15-1/3

Home Page Region Setup:

Allows operator to show different home pages.

Touch or press confirm switch when region menu (A) is highlighted.

Screen displays the following:

- Home Page 1
- Home Page 2
- Home Page 3

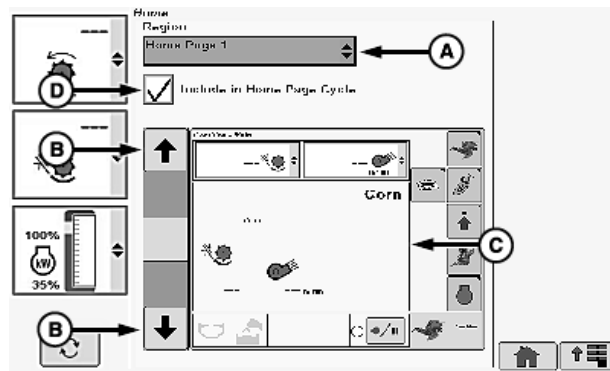
Once desired home page is chosen, touch or press confirm switch.

Touch or press confirm switch when up/down arrow icons (B) are highlighted to scroll through home pages (C).

Choose desired home page.

Touch or press confirm switch when include in home page cycle box (D) is highlighted.

- Checked - selected home page is included in home page cycle.
- Unchecked - selected home page will not be included in home page cycle.



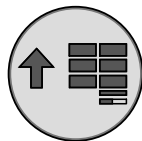
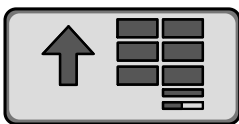
A—Region Menu
B—Up/Down Arrow Icons

C—Different Home Pages
D—Include in Home Page Cycle Box

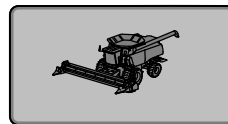
NOTE: Touch or press confirm switch when home icon on any screen is highlighted to cycle through selected home pages. Home page switch on armrest also cycles through selected home pages.

OUC002,000436F -19-25FEB15-2/3

H95845 —UN—31MAR10



H95878 —UN—29MAR10



Combine Main Page
Application Icon

Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

Touch or press confirm switch when combine main page icon is highlighted.

OUC002,000436F -19-25FEB15-3/3

Video Interface Capability

NOTE: GreenStar™ 2 2600 Display is not video capable.

Connectors labeled ADU 01, ADU 02, ADU 03 feed video signals to the display on the armrest.

Connector labeled CPDU 01 feeds a video signal for an optional display on the rail.

Machine is equipped with four camera video inputs which are located at the right-hand side of operator's station.

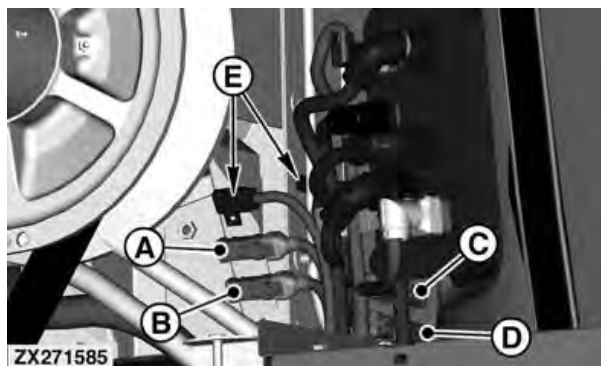
NOTE: GreenStar™ 3 CommandCenter™ display on armrest supports one video signal.

GreenStar™ 3 2630 display on armrest supports three video signals.

Video input (A—C) feeds video signals to the armrest display.

Video input (D) connects to the GreenStar™ 3 2630 Display (optional) mounted on the rail.

Video inputs are protected with two in-line fuses (E).



A—Video Input (Armrest)
B—Video Input (Armrest)
C—Video Input (Armrest)

D—Video Input (Cornerpost)
E—In-Line Fuse

See your John Deere dealer for further information on video compatible camera solutions.

OUC002,0004AB8 -19-08FEB16-1/1

Video Safety

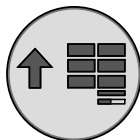
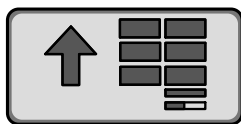
CAUTION: Do not rely on a camera for collision avoidance or bystander detection. To avoid possible injury or death to operator or others, always remain alert and aware of surroundings when operating machine. Read and understand Avoid Backover Accidents in Safety section.

IMPORTANT:

- Correctly understand whether camera or video application is "mirrored".
- Mount camera in a sturdy and secure location.
- Understand camera's field of view.
- Keep camera properly serviced.
- Keep camera lens clean.

OUC002,0004375 -19-25FEB15-1/1

Video Application (If Equipped)



Main Menu Icon (Display)/Main Menu Switch (Armrest)

Press main menu icon or switch.

H95851 —UN—31MAR10

H95878 —UN—29MAR10



Video Application Icon

Touch or press confirm switch when video icon is highlighted.

Continued on next page

OUC002,0004376 -19-25FEB15-1/4

Contrast Adjusting:

Allows operator to lighten or darken video display.

Touch or press confirm switch when desired icon is highlighted:

- Increase Icon (A) - brightens video display.
- Decrease Icon (B) - darkens video display.

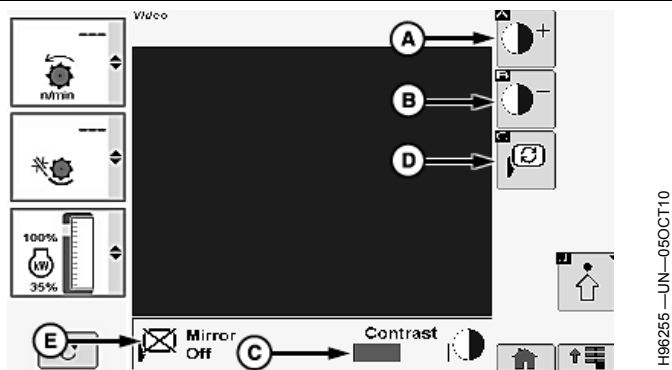
NOTE: Contrast bar graph (C) increases or decreases depending on which icon was selected.

Mirror Settings:

Allows operator to mirror image on screen.

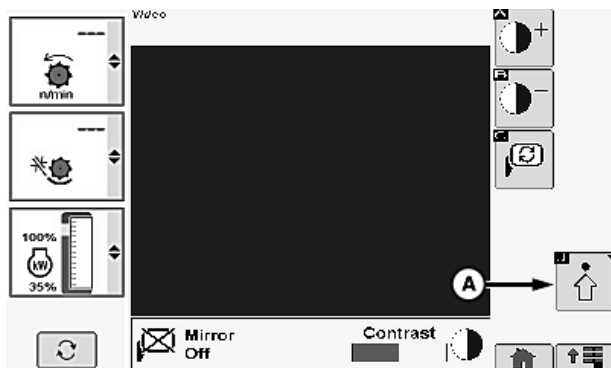
Touch or press confirm switch when mirror icon (D) is highlighted.

NOTE: Mirror ON/OFF (E) toggles to alert operator which angle is displayed.

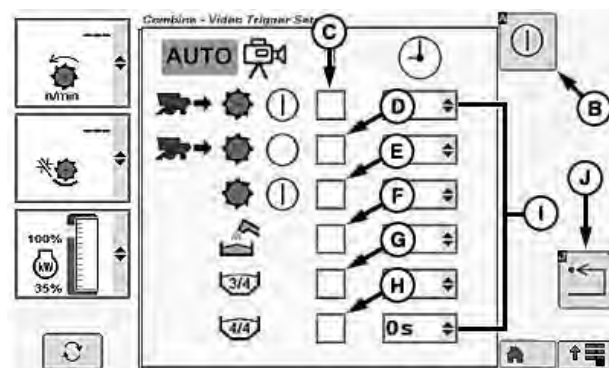


Continued on next page

OUCC002,0004376 -19-25FEB15-2/4



H96254 —UN—06OCT10



H112851 —UN—03FEB15

- A—Advanced Settings Icon
 B—Video Trigger ON/OFF Icon
 C—Reverse with Separator ON Video Trigger
 D—Reverse with Separator OFF Video Trigger
 E—Separator Video Trigger
 F—Unloading Auger Video Trigger

- G—3/4 Grain Tank Video Trigger
 H—4/4 Grain Tank Video Trigger
 I—Time Menu
 J—Return/Back Icon

Video Setup:

NOTE: Multiple video triggers are supported on the armrest display.

Allows operator to setup and view different areas around machine.

Touch or press confirm switch when advanced settings icon (A) is highlighted.

Touch or press video trigger ON/OFF icon (B) to enable triggers.

NOTE: When video triggers are off, AUTO icon is crossed out.

Screen displays the following:

- Reverse with Separator ON Video Trigger (C)
- Reverse with Separator OFF Video Trigger (D)
- Separator Video Trigger (E)
- Unloading Auger Video Trigger (F)
- 3/4 Grain Tank Video Trigger (G)
- 4/4 Grain Tank Video Trigger (H)

NOTE: Video automatically appears on display when a trigger condition is met (example: rear view video appears on display when machine is moved rearward).

Touch or press confirm switch when desired video trigger boxes are highlighted.

- Checked - displays video.
- Unchecked - will not display video.

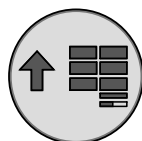
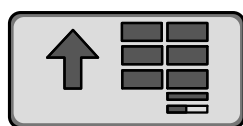
Touch or press confirm switch when time menu (I) for desired video box is highlighted.

Touch or press confirm switch when desired time is highlighted.

NOTE: Allows camera to remain viewable for an extended time after condition changes (example: rear video remains viewable an extended time even after multi-function lever is moved forward).

Touch or press confirm switch when return/back icon (J) is highlighted.

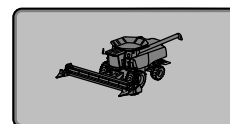
OUC002,0004376 -19-25FEB15-3/4



Main Menu Icon (Display)/Main Menu Switch (Armrest)

Press main menu icon or switch.

H95845 —UN—31MAR10



Combine Main Application Icon

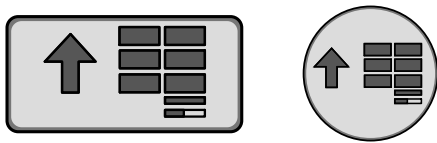
H95878 —UN—29MAR10

Touch or press confirm switch when combine main page icon is highlighted.

OUC002,0004376 -19-25FEB15-4/4

Access Manager Application

H95852 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

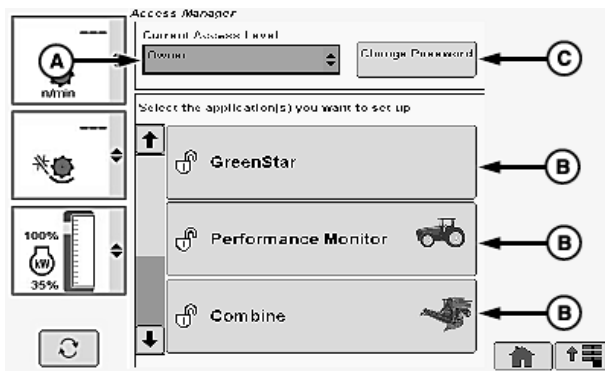
H95878 —UN—29MAR10



Access Manager Application Icon

Touch or press confirm switch when access manager icon is highlighted.

OUC002,0004377 -19-25FEB15-1/5



A—Access Level Menu
B—Application

C—Change Password Icon
D—Password Menu

Access Level Settings:

Allows owner of machine to lock/unlock certain features. If feature is locked, only the owner is able to make changes/adjustments. If feature is unlocked, both the owner and operator are able to make changes/adjustments.

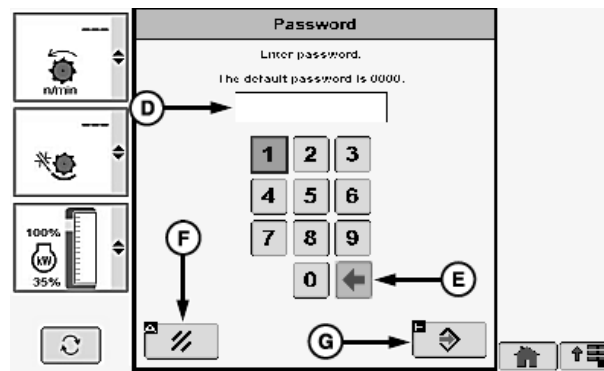
Touch or press confirm switch when access level menu (A) is highlighted.

Screen displays the following:

NOTE: Must be in owner mode to lock/unlock application (B). Password is required when changing from operator mode back to owner mode.

- Operator Mode - certain changes/adjustments are made available when set by owner.
- Owner Mode - determines which changes/adjustments are made available to operators.

Touch or press confirm switch when desired access level is highlighted.



E—Back Arrow Icon
F—Cancel Icon

G—Enter/Accept Icon

Change Password:

Allows owner of machine to set password preventing operator from making changes/adjustments previously set by owner.

NOTE: If password is lost or forgotten, see your John Deere dealer for further information.

Touch or press confirm switch when change password icon (C) is highlighted.

Touch or press confirm switch to enter digits from calculator into password menu (D).

NOTE: Touch or press confirm switch when back arrow icon (E) is highlighted to delete digits if a mistake is made.

Touch or press confirm switch when cancel icon (F) is highlighted to cancel and return to previous screen.

Touch or press confirm switch when enter/accept icon (G) is highlighted.

Continued on next page

OUC002,0004377 -19-25FEB15-2/5

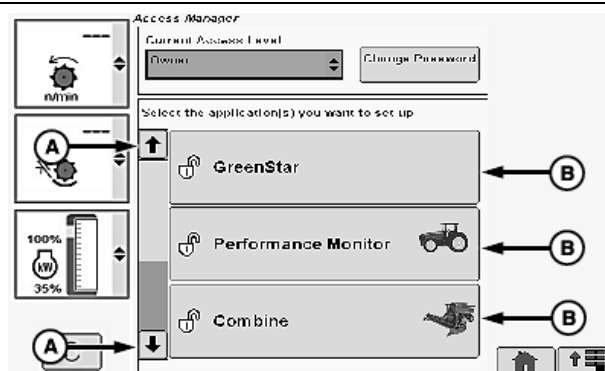
Lock/Unlock Applications:

Allows owner the ability to lock/unlock certain features. When locked only certain features are made visible to operator.

Touch or press confirm switch when up/down arrow icon (A) is highlighted to scroll through different applications.

Combine	Display
Message Center	Layout Manager
Performance Monitor	Video
GreenStar	Access Manager

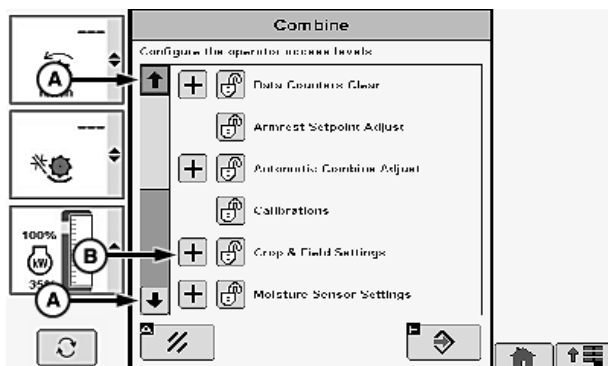
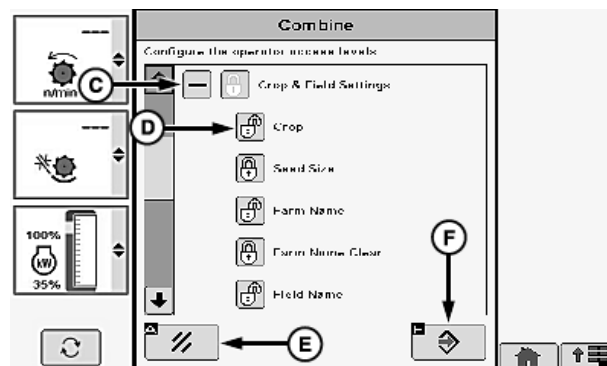
Touch or press confirm switch when desired application (B) is highlighted.



A—Up/Down Arrow Icons

B—Application

OUCC002,0004377 -19-25FEB15-3/5

A—Up/Down Arrow Icons
B—Plus IconC—Minus Icon
D—Lock/Unlock IconE—Cancel Icon
F—Enter/Accept Icon

Touch or press confirm switch when up/down arrow icons (A) are highlighted to scroll through application sub-functions.

Touch or press confirm switch when plus icon (B) (expands sub-function) or minus icon (C) (collapses sub-function) is highlighted.

Touch or press confirm switch when desired sub-function is highlighted.

NOTE: Sub-function toggles between lock/unlock icon (D).

Gray lock means that only some sub-functions are locked.

- **Lock Icon** - operator will not be able to make changes/adjustments. Owner is only able to make changes/adjustments.
- **Unlock Icon** - both owner and operator are able to make changes/adjustments.

Repeat as needed for remaining applications.

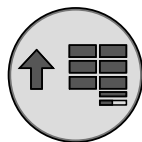
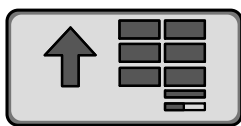
NOTE: Touch or press confirm switch when cancel icon (E) is highlighted to cancel changes and return to previous screen.

Touch or press confirm switch when enter/accept icon (F) is highlighted.

Continued on next page

OUCC002,0004377 -19-25FEB15-4/5

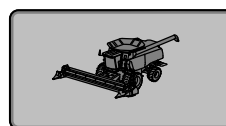
H95845 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

H95878 —UN—29MAR10



Combine Main Page Application Icon

Touch or press confirm switch when combine main page icon is highlighted.

OUC002,0004377 -19-25FEB15-5/5

VisionTrak™ Display

System Requirements:

- Header switch and separator switch engaged.

VisionTrak™ monitor checks grain loss by measuring a representative sample of losses over the cleaning shoe and through the separator. VisionTrak™ continuously monitors machine performance to enable operator to use maximum machine capacity. A change in loss rate is indicated by bar graphs.

Grain loss information is displayed by three vertical bar graphs.

Shoe Loss Indicator (A): shows grain loss from shoe.

- Averaged shoe loss is shown by two adjacent vertical bar graphs.

Normal Range (B) (Green Range): lines near center range indicate acceptable loss levels.

Summation Symbol (C): displays above bar graph.

Total Loss Indicator (D): shows an average of grain loss from shoe and separator area.

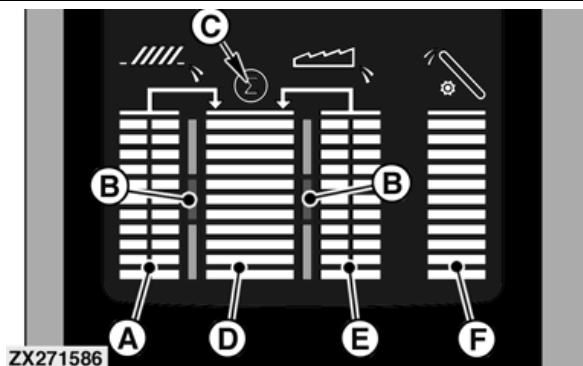
- Total loss is shown on vertical bar graph located in center of display.

Separator Loss Indicator (E): shows grain loss from separator area.

- Averaged separator loss is shown by two adjacent vertical bar graphs.

Tailings Volume Indicator (F): shows volume of tailings return.

- Tailings volume is displayed as a percentage of total full in vertical bar graph.



ZX271586

ZX271586 —UN—08FEB16

- Tailings volume is defined as total amount of material (grain and material other than grain) moving through the tailings elevator.

NOTE: If bar graph shows full or warning alarm screen appears, stop machine and adjust chaffer and sieve.

Bar graph is a visual guide which can be referred to periodically to see if an increase or decrease in tailings volume occurs.

If bar graph shows an increase in volume, slow ground speed and see if bar graph goes back into acceptable loss range.

If bar graph does not go back into acceptable loss range after slowing ground speed, disengage header switch. Bar graph should zero itself (nothing showing in bar graph). Engage header switch, bar graph should go back into acceptable loss range.

Continued on next page

OUC002,0004AB9 -19-08FEB16-1/2

If tailings sensor display consistently reads full (all bars lit) when not harvesting or empty (no bars lit) when harvesting, it may indicate that the sensor lens is coated with material or seal under lens has allowed dust to enter.

CAUTION: Tailings sensor is a Class 1 laser product and emits laser radiation when powered. When servicing or removing tailings sensors, use caution and do not view beam directly.

Key switch must be turned OFF and tailings sensor must be unplugged before servicing or removing sensors.

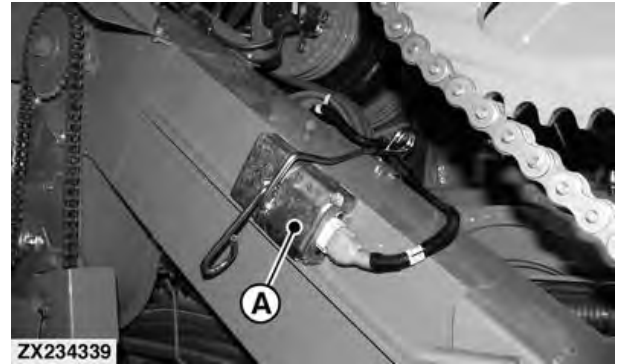
DO NOT operate sensor with lens removed. Accessible laser emission when lens is in place:

- 850 nm
- 500 nsec pulse width
- ≤ 500 Hz rep rate
- < 90 nJ per pulse
- 43 uW average power
- Class 1 levels (eye safe)

Accessible laser emission levels if sensor was operated with lens removed are:

- 850 nm
- 500 nsec pulse width
- ≤ 500 Hz rep rate
- < 380 nJ per pulse
- 188 uW average power
- Class 3R Levels (small potential for eye injury)

1. Remove tailings sensors (A) to inspect and clean lenses if needed.



Tailings Sensors

A—Tailings Sensors

2. If lenses are clean, remove and check for dust. If dust is found, completely clean area and reassemble lens onto unit making sure that gasket is sealing.
3. Verify that lens is retained with all previously removed screws prior to installation.

CAUTION: Failure to install plastic cover prior to replacement of sensors on elevator may cause malfunction, incorrect harvest readings, or sensor damage, and could allow for potentially hazardous eye exposure when sensor is removed.

4. Install sensor and test system.
5. If display continues to read full or empty, contact your John Deere dealer.

OUC002,0004AB9 -19-08FEB16-2/2

ZX234339 —UN—26JAN16

VisionTrak™ Performance Monitor (General Information)

NOTE: VisionTrak™ is active when header is engaged and in diagnostic mode.

VisionTrak™ monitor checks grain loss by measuring a representative sample of losses over the cleaning shoe and through the separator. VisionTrak™ continuously monitors machine performance to enable operator to use maximum machine capacity. A change in loss rate is indicated by bar graphs.

VisionTrak™ can be set into two modes:

Standard Mode (Factory Mode): averages shoe sensors together. These activity indicators will change sensitivity with a change in system calibration.

Shoe activity indicators (A and B) (shoe sensors averaged) and separator activity indicator (C) show the activity of each of the three sensors. Total loss activity indicator (D) shows the total hits from the three sensors. This total can be adjusted so that normal performance is shown mid scale.

Optional Mode: shows activity of each individual shoe sensor (see your John Deere dealer). These activity indicators will change sensitivity with a change in system calibration.

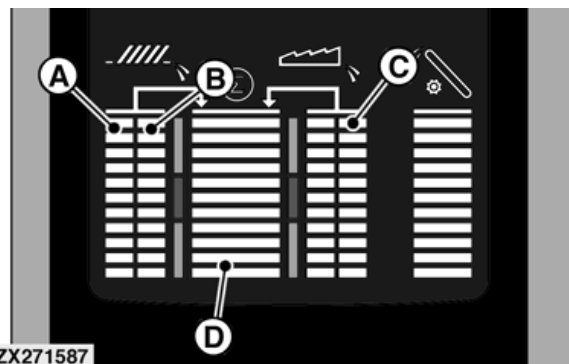
Shoe activity indicators (A and B) (shoe sensors indicated independently) and separator activity indicator (C) show the activity of the three sensors. Total loss activity indicator (D) shows the total hits from the three sensors. All of the bars can be adjusted so that the normal performance is shown mid scale when performing a calibration.

NOTE: Refer to VisionTrak™ Performance Monitor—Operating in this section for adjusting Shoe/Separator Loss (Balance) and Shoe/Separator Loss (Sensitivity).

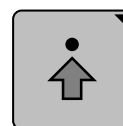
Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when crop setup icon (E) is highlighted.

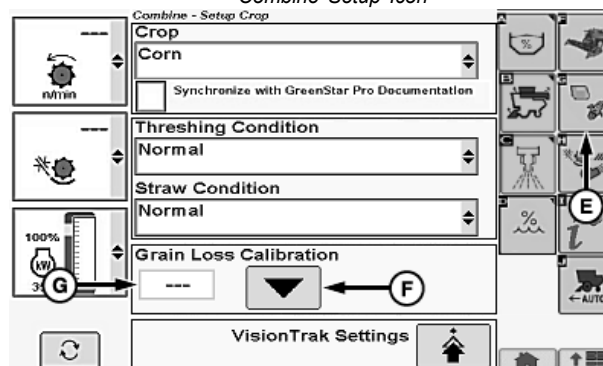
Adjust machine and header to acceptable loss levels for particular crop and condition. While operating at desired performance, touch or press confirm button when grain loss calibration icon (F) is highlighted. This enters current operating characteristics into memory and centers total loss activity indicator. Grain loss calibration value (G) will also be shown for future reference. VisionTrak™ is now set up to help the operator maintain the machine performance.



ZX271587 —UN—08FEB16



Combine Setup Icon



H112866 —UN—09FEB15

- | | |
|--|--------------------------------|
| A—Shoe Activity Indicator (Left Sensor) | E—Crop Setup Icon |
| B—Shoe Activity Indicator (Right Sensor) | F—Grain Loss Calibration Icon |
| C—Separator Activity Indicator | G—Grain Loss Calibration Value |
| D—Total Loss Activity Indicator | |

NOTE: Center bar graph is now a visual guide. Operator can refer to display periodically to know when an increase or decrease in total loss amount occurs.

A sudden upward movement of bar graphs when field conditions are unchanged can indicate chaffer or sieve is plugged or closed. When this happens, stop machine and correct problem.

OUC002,0004ABA -19-08FEB16-1/1

VisionTrak™ Performance Monitor—Operating

H94473 —UN—31MAR10

VisionTrak™ Performance Monitor is active when:

- Header is engaged.

Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when crop setup icon (A) is highlighted.

Touch or press confirm button when crop menu (B) is highlighted.

Crop menu displays the following:

Alfalfa	Lentils	Rye
Barley	Lupins	Safflower
Barley - Spring	Millet	Sorghum
Barley - Winter	Mustard	Soybeans
Canola	Navy Beans	Sunflower
Chickpeas	Oats	Triticale
Corn	Peas	Wheat-Spring
Edible Beans	Popcorn	Wheat-Winter
Flax	Rape Seed	
Grass Seeds	Rice	

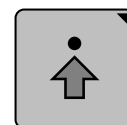
Once desired crop is chosen, touch or press confirm button.

Grain Loss Calibration:

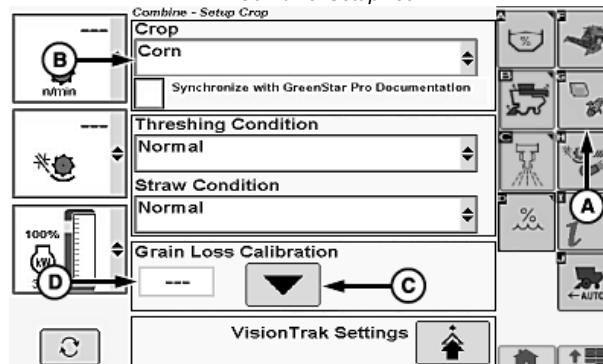
Adjust machine and header to acceptable loss levels for particular crop and condition.

Touch or press confirm button when calibration icon (C) is highlighted.

NOTE: This enters current operating characteristics into memory and centers total loss activity indicator on cornerpost.



Combine Setup Icon



A—Crop Setup Icon
B—Crop Menu

C—Calibration Icon
D—Grain Loss Calibration Value

Calibration Reference Number:

Touch or press confirm button when grain loss calibration value (D) is highlighted.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired calibration reference value is shown. Press confirm button to save value.

Touchscreen Only: Enter desired calibration reference value on numeric display. Touch enter/accept icon to save value.

Continued on next page

OUC002,0004ABB -19-08FEB16-1/4

H112868 —UN—09FEB15

Shoe/Separator Balance

Adjusts balance of bars between shoe loss indicator and separator loss indicator located on VisionTrak™ display. Adjustment can be used to fine-tune display if losses appear to come from one area of the machine, but more losses are displayed in other area of machine due to crop conditions.

Touch or press confirm button when VisionTrak™ settings icon (A) is highlighted.

Touch or press confirm button when shoe/separator balance box (B) or shoe/separator balance bar graph (C) is highlighted.

Shoe/Separator Balance Box Adjustment:

Non-Touchscreen or Touchscreen: Rotate selection dial until desired shoe/separator balance value is shown. Press confirm button to save value.

Touchscreen Only: Touch or press confirm button when plus (+) icon or minus (-) icon is highlighted until desired shoe/separator balance value is shown.

Shoe/Separator Balance Bar Graph Adjustment:

Non-Touchscreen or Touchscreen: Rotate selection dial to increase or decrease shoe/separator balance bar graph to desired value. Press confirm button to save value.

Touchscreen Only: Touch or press confirm button when plus (+) icon or minus (-) icon is highlighted until desired shoe/separator balance value is shown.

Touch or press confirm button when return/back icon (F) is highlighted to return to previous page.

Shoe/Separator Resolution

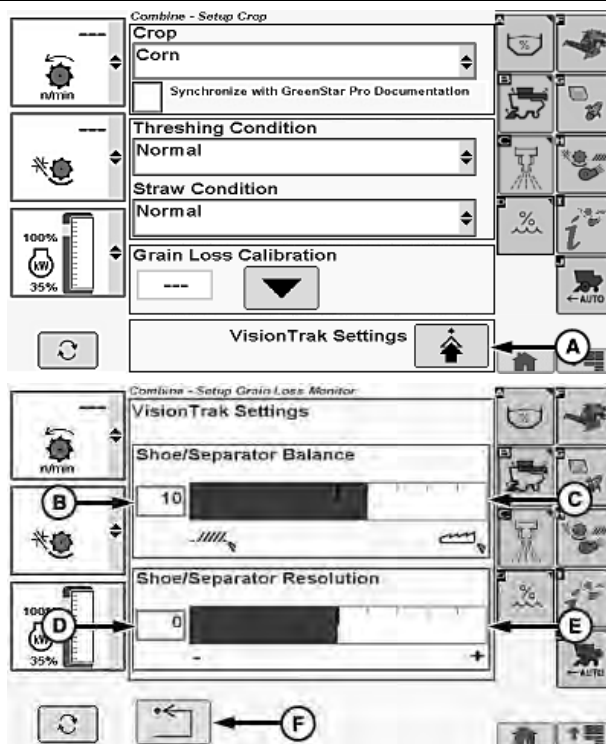
Allows operator to modify number of bars shown on VisionTrak™ display for shoe loss indicator and separator loss indicator (independent of number of center bars).

Touch or press confirm button when VisionTrak™ settings icon (A) is highlighted.

Touch or press confirm button when shoe/separator resolution box (D) or shoe/separator resolution bar graph (E) is highlighted.

Shoe/Separator Resolution Box Adjustment:

Non-Touchscreen or Touchscreen: Rotate selection dial until desired shoe/separator resolution value is shown. Press confirm button to save value.



A—VisionTrak™ Settings Icon

B—Shoe/Separator Balance Box

C—Shoe/Separator Balance Bar Graph

D—Shoe/Separator Resolution Box

E—Shoe/Separator Resolution Bar Graph

F—Return/Back Icon

Touchscreen Only: Touch or press confirm button when plus (+) icon or minus (-) icon is highlighted until desired shoe/separator resolution value is shown.

Shoe/Separator Resolution Bar Graph Adjustment:

Non-Touchscreen or Touchscreen: Rotate selection dial to increase or decrease shoe/separator resolution bar graph to desired value. Press confirm button to save value.

Touchscreen Only: Touch or press confirm button when plus (+) icon or minus (-) icon is highlighted until desired shoe/separator resolution value is shown.

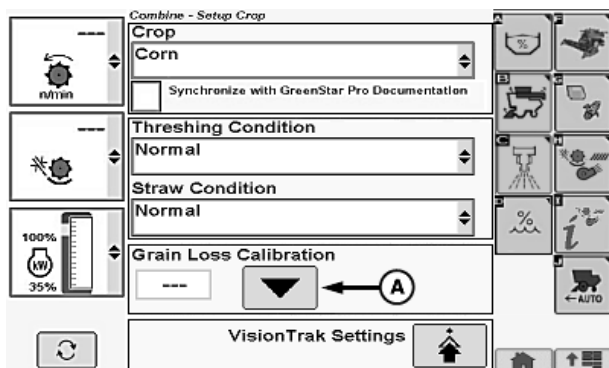
Touch or press confirm button when return/back icon (F) is highlighted to return to previous page.

Continued on next page

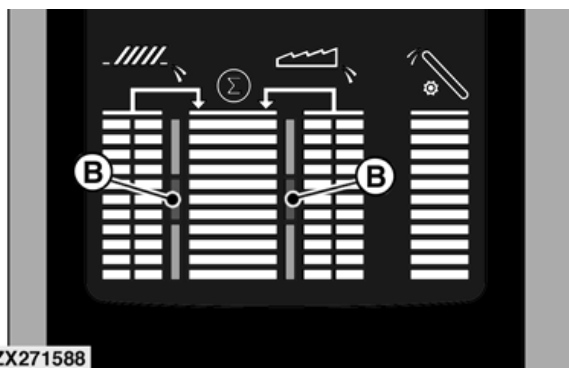
OUCC002,0004ABB -19-08FEB16-2/4

H112816—UN—09FEB15

H108629—UN—26JUL13



H112818 —UN—09FEB15



ZX271588 —UN—08FEB16

A—Calibration Icon

B—Normal Range

Set the following on display:

1. Select desired crop to be harvested from crop menu.
2. Adjust machine and header to acceptable loss levels for particular crop and condition.

NOTE: Ignore center bar graph on cornerpost at this time.

3. Operate machine at acceptable loss level.
4. Touch or press confirm button when calibration icon (A) is highlighted to center total loss in the normal range (B). Bar graph indicates machine is operating at total loss levels acceptable by operator in step 3.

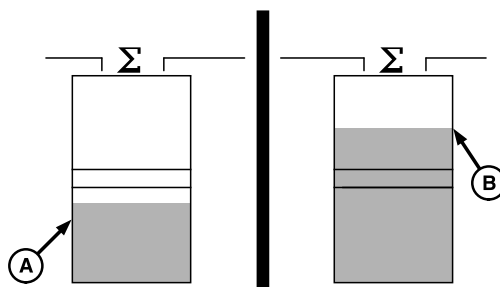
OUC002,0004ABB -19-08FEB16-3/4

NOTE: Bar graph is now a visual guide. Operator can refer to display periodically to know when a decrease (A) or increase (B) in total loss amount occurs. More detailed monitoring can be obtained by monitoring loss levels of the cleaning shoe and separator.

5. When crop conditions change during the day (straw moisture, dew, etc.), make occasional loss checks to determine if readjustment is necessary.

A—Decrease

B—Increase

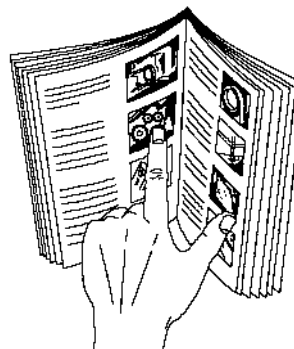


H87033 —UN—30NOV06

OUC002,0004ABB -19-08FEB16-4/4

VisionTrak™—Preliminary Adjustments on Machine

Before making adjustments to VisionTrak Performance Monitor, adjust machine so it is operating at peak efficiency. Adjustments must correspond to relevant field and crop conditions (see Crop Settings section).



H52739 —UN—05MAR99

OUC002,0004410 -19-02MAR15-1/1

VisionTrak™ Operational Checks

NOTE: Two people are required to perform this operational check. One person must remain seated in operator's seat, while another person taps on sensors.

1. Turn key switch to RUN position, but do not start machine.
2. Engage header switch.

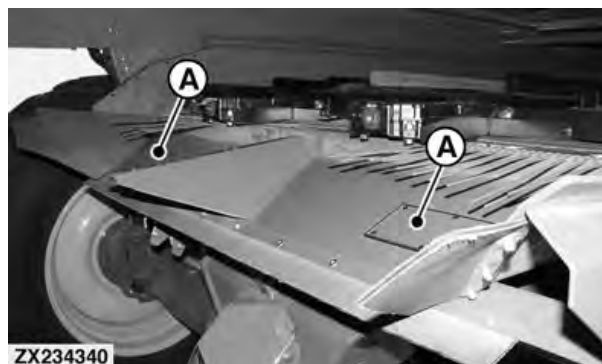
NOTE: MUST be in a crop that was previously calibrated. Grain loss calibration value MUST be less than 50.

3. Tap on desired sensor (A) several times. Person watching VisionTrak™ display should see movement of shoe loss indicator or separator loss indicator.

NOTE: Return grain loss calibration value to original value or perform another crop calibration.

4. Disengage header switch and turn key switch OFF.
5. If VisionTrak™ does not work after these checks, see your John Deere dealer.

A—Sensor



Left-Hand Shoe Sensor



Separator Sensor

OUC002,0004411 -19-03MAR15-1/1

GreenStar™ Display and Harvest Monitor/Harvest Doc™ Systems

GreenStar™ 3 CommandCenter™ displays are mounted on the armrest, which contain vehicle specific information and GreenStar™ applications (excluding Harvest Doc™).

GreenStar™ 3 2630 display (optional) is mounted on the armrest and contains vehicle specific information and GreenStar™ applications.

For information on Harvest Doc™ system, refer to Harvest Doc™ manual.

OUC002,000444B -19-04MAR15-1/1

Calibration Procedures - When to Calibrate

This list shows all possible calibrations. Depending on machine options and header types, listing shown might not match calibration menu shown on display.

NOTE: Error codes show on display if a problem exists during a calibration procedure. Conditions causing error must be corrected before continuing calibration.

- **Amber Flasher** - Perform calibration;
 - When control unit RC1, Amber Flasher bulbs, or associated components are replaced/adjusted.
- **Deck Plate Spacing Calibration**- Perform calibration;
 - When control unit LC1 or deck plate position sensor or associated components are replaced/adjusted.
- **Feeder House Raise Speed Calibration**- Perform calibration;
 - If control unit LC1 has been replaced.
 - First time each header is connected to combine.
 - If attachments of significant weight are added to or removed from header.
- **Feeder House Tilt Range Calibration (If Equipped)** - Perform calibration;
 - If control unit LC1 has been replaced.
 - If feeder house lateral tilt sensor or associated components are replaced/adjusted.
 - Before connecting header to combine.
- **Feeder House Tilt Speed Calibration (If Equipped)** - Perform calibration;
 - If feeder house lateral tilt sensor or associated components are replaced/adjusted.
 - Before connecting header or first time header is connected to combine.
- **Header Calibration**- Perform calibration;
 - If control unit LC1 has been replaced.
 - If a header height control sensor or associated components are replaced/adjusted.
 - First time each header is connected to combine.

NOTE: Mass Flow Vibration calibration must be performed when changing headers and in every crop that is harvested.

- **Mass Flow Calibration (If Equipped)** - Perform calibration;
 - When control unit HMM or associated components are replaced/adjusted.

- **Moisture Sensor Calibration (If Equipped)** - Perform calibration;
 - When control unit HMM or associated components are replaced/adjusted.
- **Threshing Clearance Calibration** - Perform calibration;
 - When control unit RC1, threshing clearance sensor, or associated components are replaced/adjusted.

NOTE: Yield calibration must be performed every year and in every crop that is harvested to achieve accurate grain weight measurements. Also verify that mass flow vibration calibration has been performed for each crop.

Refer to Yield Calibration in CommandCenter™ Display Screens section for more information.

- **Yield Calibration (If Equipped)** - Perform calibration when control unit HMM or associated components are replaced/adjusted.
 - Limited Accuracy - user calibration procedure has not been performed. System defaults to a fixed internal calibration value which is not adjustable.
 - Medium Accuracy - user has collected and selected one to three loads. System uses these values to adjust the internal calibration value.
 - Highest Accuracy - user has collected and selected a minimum of four calibration loads. System uses these values to adjust the internal calibration value.

NOTE: 13 load identification numbers can be saved before memory is full and a load identification number must be deleted.

- **Reel and Cutterbar Position Calibration (600X Cutting Platforms Only)** - Perform calibration;
 - When control unit LC1 or reel/cutterbar position sensors or associated components are replaced/adjusted.
- **Reel Position Calibration (All Header Equipped With a Reel)**- Perform calibration;
 - When control unit LC1 or reel position sensors or associated components are replaced/adjusted.

OUC002,0004412 -19-19APR15-1/1

Calibration Procedures

Touch or press confirm button when diagnostic icon is highlighted.

Touch or press confirm button when calibration icon (A) is highlighted.

Touch or press confirm button when calibrations menu (B) is highlighted.

Touch or press confirm button when **desired calibration** is highlighted.

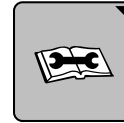
Touch or press confirm button when enter/accept icon (C) is highlighted.

Follow instructions shown on display to calibrate.

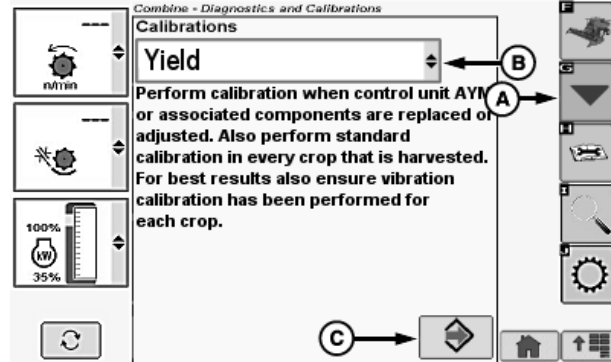
Repeat as needed for other calibrations.

NOTE: If error codes occur during calibration procedure, codes show on CommandCenter™ display. Conditions causing error must be corrected before continuing calibration.

H94478 —UN—31MAR10



Diagnostic Icon



H94928 —UN—11OCT10

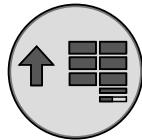
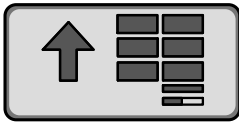
A—Calibration Icon
B—Calibrations Menu

C—Enter/Accept Icon

OUC002,0004413 -19-03MAR15-1/1

Access Diagnostic Trouble Code Menu

H95846 —UN—31MAR10



Main Menu Icon (Display) / Main Menu Button (Armrest)

Press main menu icon or button.

H95878 —UN—29MAR10



Message Center Application Icon

Touch or press confirm button when message center icon is highlighted.

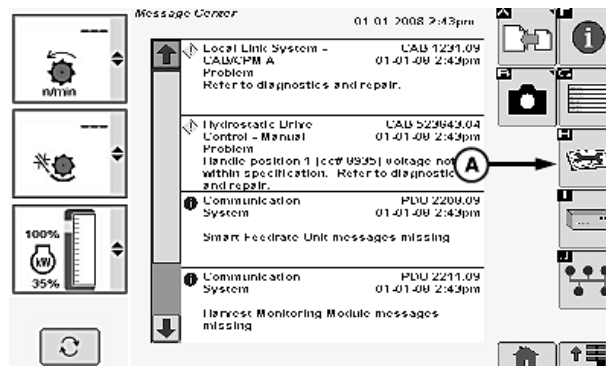
Continued on next page

OUC002,0004415 -19-03MAR15-1/5

Operating the Controls and Displays

Touch or press confirm button when trouble codes icon (A) is highlighted.

A—Trouble Codes Icon



H95508—UN—05OCT10

OUC002,0004415 -19-03MAR15-2/5

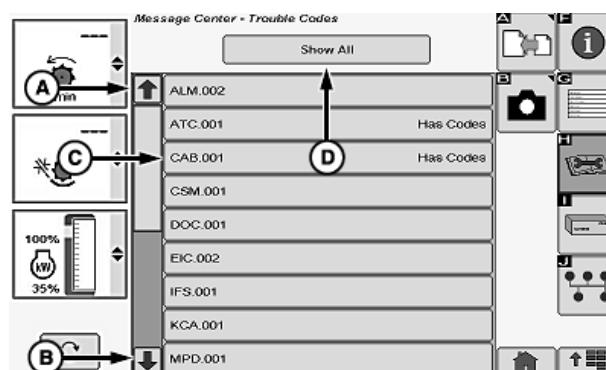
NOTE: Another way to display diagnostic trouble codes is with show all menu (D). Touch or press confirm button when show that all menu is highlighted. This displays all trouble codes for all control units.

Touch or press confirm button when up arrow (A) or down arrow (B) is highlighted to scroll through control unit list.

Touch or press confirm button when desired control unit (C) is highlighted.

A—Up Arrow
B—Down Arrow

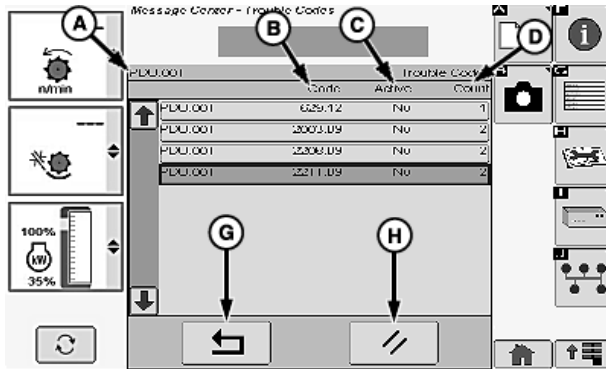
C—Control Unit
D—Show All Menu



H95509—UN—05OCT10

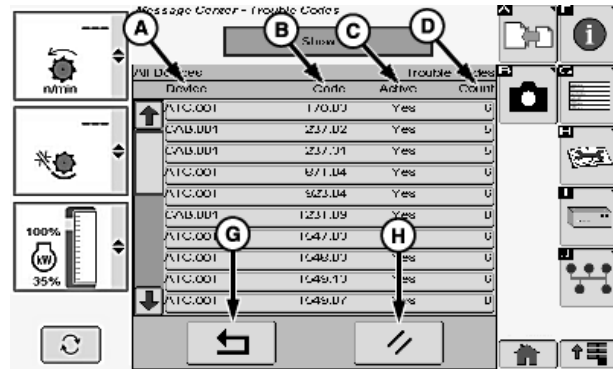
Continued on next page

OUC002,0004415 -19-03MAR15-3/5



Individual Control Unit Trouble Codes

H95511—UN—05OCT10



All Control Unit Trouble Codes

H95512—UN—05OCT10

NOTE: Touch or press confirm button when up arrow or down arrow is highlighted to scroll through trouble codes if multiple codes are displayed.

Screen displays the following:

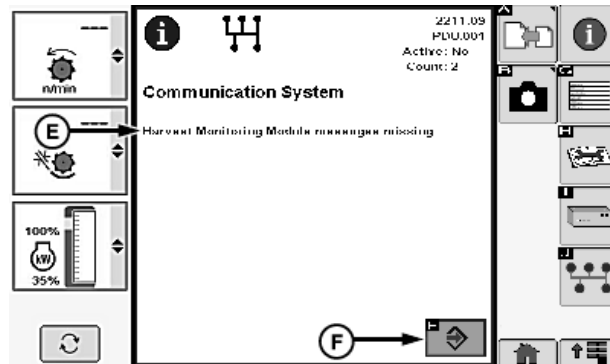
- Control Unit (A)
- Trouble Code (B)
- Active (Yes/No) (C)
- Count (D)

Touch or press confirm button when desired code is highlighted.

Code description (E) appears and gives more detail of trouble code.

Touch or press confirm button when enter/accept icon (F) is highlighted to return to previous screen.

Touch or press confirm button when return/back icon (G) is highlighted to return to previous screen or until clear icon (H) is highlighted.



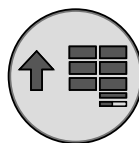
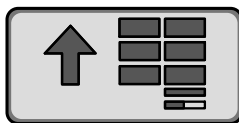
Detailed Code Description

H95533—UN—05OCT10

A—Control Unit/Device
B—Trouble Code
C—Active (Yes/No)
D—Count

E—Code Description
F—Enter/Accept Icon
G—Return/Back Arrow Icon
H—Clear Icon

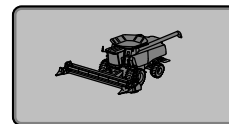
OUC002,0004415 -19-03MAR15-4/5



Main Menu Icon (Display) / Main Menu Button (Armrest)

Press main menu icon or button.

H95878—UN—29MAR10



Combine Main Application Icon

Touch or press confirm button when combine main page icon is highlighted.

OUC002,0004415 -19-03MAR15-5/5

Diagnostic Trouble Code Priorities

Each diagnostic trouble code (DTC) has a priority. The priority of the DTC is indicated in the way the DTC is displayed to the operator:

- **Stop Engine Warning Indicator (Red):** illuminates and requires machine be stopped at once and problem corrected. Diagnostic trouble code is shown on armrest display until problem is resolved.
- **Service Warning Indicator (Yellow):** illuminates and flashes when a problem exists with machine. Requires

machine be stopped at the earliest convenience.

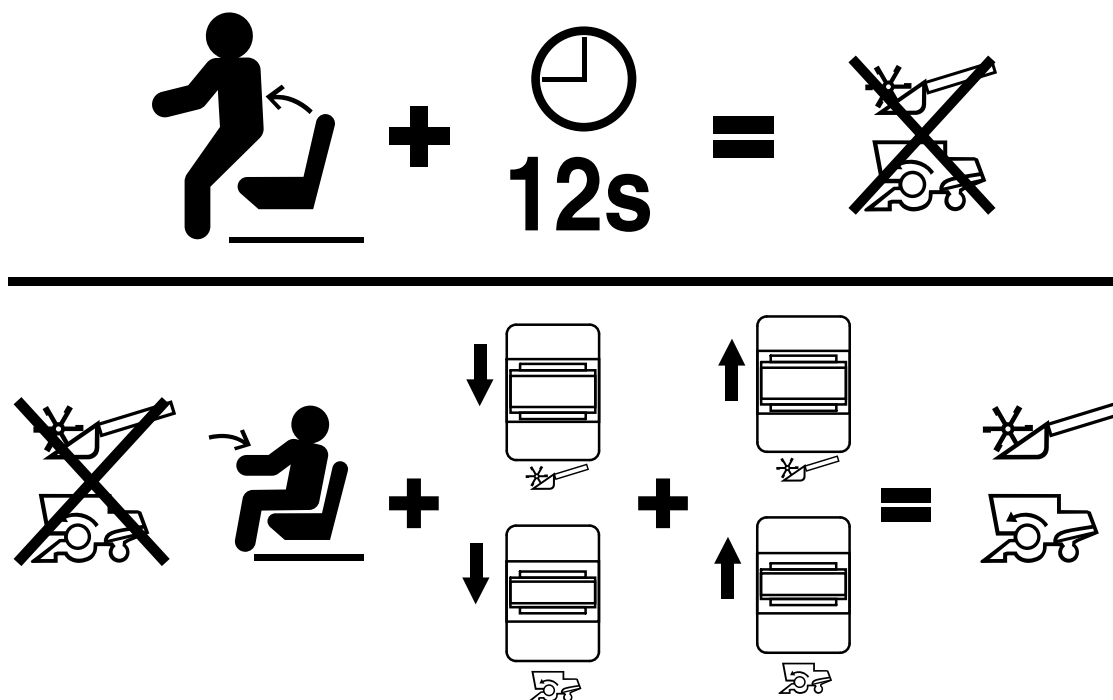
Diagnostic trouble code is shown on armrest display.

- **Information Warning Indicator (Blue):** illuminates and flashes when diagnostic trouble code is active. Alerts operator to be aware of a condition. When warning is acknowledged, screen message disappears and indicator warning light turns OFF.

OUC002,0004416 -19-03MAR15-1/1

Field Operation

Rotational Alarm System



If operator leaves seat with header and/or separator engaged, lights flash and an alarm sounds. If operator continues to be out of the seat, harvesting functions stop.

If harvesting functions are stopped, they need to be restarted before continuing to harvest.

To restart harvesting functions, operator must be in seated position and reset and engage separator and header switches on the armrest console.

H113906—UN—08MAY15

OUC002,00049EA -19-19JAN16-1/1

Operator Presence System

Operator presence system indicates the presence of the operator.

System prevents engagement of the following functions when operator is not present in seat.

- Separator Engage
- Header Engage
- Unloading Auger Engage
- AutoTrac™

- Propulsion
- Feedrate
- Header Height Control

If operator leaves seat with header and or separator engaged for more than 5—7 seconds, lights flash and an alarm sounds. If operator continues to be out of the seat, harvesting functions stop.

To restart functions, operator must return to seated position and re-engage each function.

OUC002,00049EB -19-19JAN16-1/1

Back-Up Alarm

If multi-function lever is moved rearward while engine is running, back-up alarm (A) sends an acoustical signal to warn others around the machine that the operator is backing up.

A—Back-Up Alarm



ZX270082

ZX270082 —UN—22JAN16

OUC002,00049EC -19-20JAN16-1/1

Prestarting Check

Before operating the machine perform the following daily checks:

- Engine Oil Level

Check engine oil level. Do not operate engine when oil level is below "ADD" mark on dipstick.

IMPORTANT: It is vital to maintain the engine oil at the correct level to ensure a long service life of the engine. Check oil level with machine parked on level ground.

Watch for leaks.

NOTE: Verify that dipstick is screwed or pushed completely into housing before removing to check oil level.

Remove dipstick (A) and check oil level.

Oil level should be between "ADD" and top of cross-hatch area on dipstick.

If needed, add oil as specified in the **Lubrication and Maintenance** section.

A—Oil Dipstick



ZX237470

Oil Dipstick 6.8 L Engine

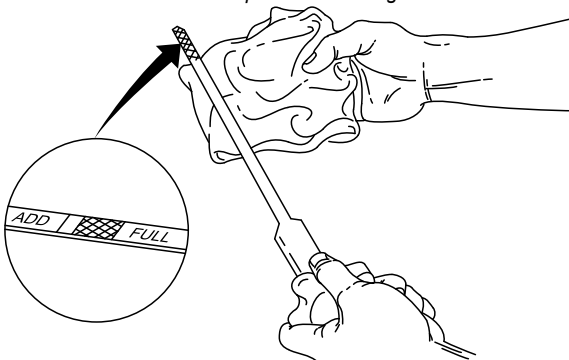
ZX237470 —UN—16APR15



ZX237471

Oil Dipstick 9.0 L Engine

ZX237471 —UN—16APR15



H86717 —UN—19OCT06

Continued on next page

OUC002,00049D4 -19-18JAN16-1/9

- Coolant Level

IMPORTANT: A special cap (A) is used on the surge tank. If cap is damaged or missing, it must be replaced by an equivalent cap.

Allow engine to cool. Coolant level in surge tank should be at "Max Cold" line (B).

NOTE: Coolant level must be between "Max Cold" and "Min Cold" lines. Add coolant as needed if coolant is below "Min Cold" line.

A—Cap

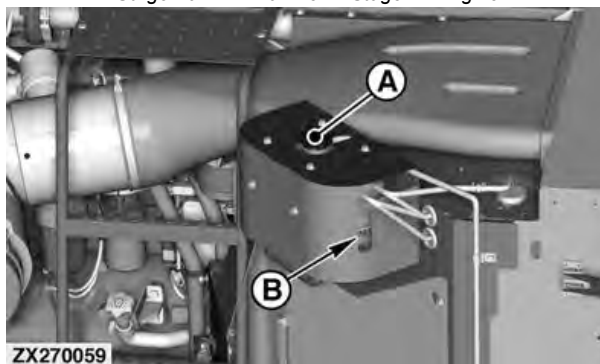
B—Max Cold Line



Surge Tank—Final Tier 4/Stage IV Engine



Surge Tank—Final Tier 4/Stage IV Engine



Surge Tank—Tier 2/Stage II Engine

OUC002,00049D4 -19-18JAN16-2/9

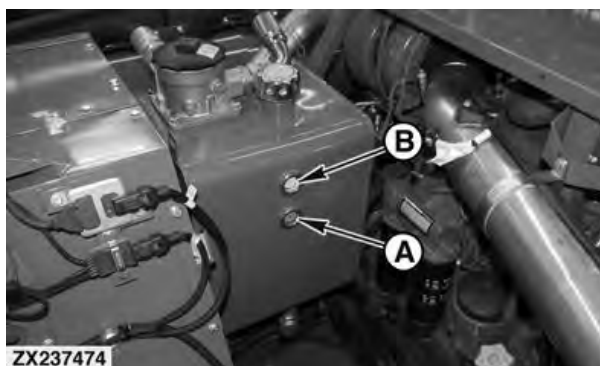
- Hydraulic Oil Level

Check hydraulic oil level with header on ground and all cylinders retracted. Depending on machine type, oil level must be at top of sight glass (A) or (B) with feeder house fully lowered. Add oil as needed, but do not overfill.

IMPORTANT: On machine with ProDrive™ transmission or HillMaster™, check the oil level at upper sight glass (B).

A—Sight Glass—Level Land Machine

B—Sight Glass—ProDrive™ or HillMaster™ Machine



Continued on next page

OUC002,00049D4 -19-18JAN16-3/9

- Engine Gearcase Oil Level

Shut OFF engine, set park brake and remove key before checking hydraulic oil at engine gearcase. Oil must not be below "ADD" mark on dipstick (A).

NOTE: On machines with ProDrive™ transmission, run the engine at slow idle for few minutes before checking the oil level.

A—Dipstick



ZX237475 —UN—16APR15

Continued on next page

OUCC002.00049D4 -19-18JAN16-4/9

- Fuel System

Shut OFF engine, set park brake and remove key before performing maintenance work on fuel filters.

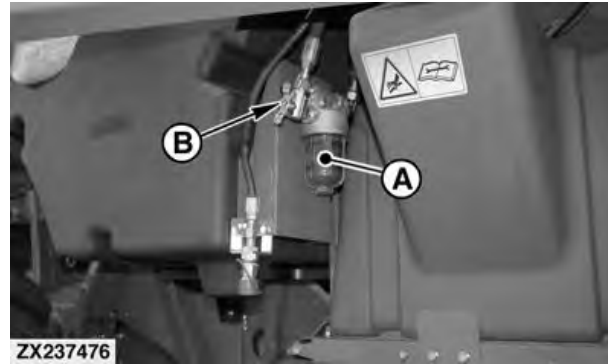
NOTE: Make sure that precleaner bowl (A) is fully seated to prevent air from entering the fuel system.

Fuel Precleaner: Close fuel shut-off valve (B) on fuel tank. Remove precleaner bowl (A) and clean screen if dirty fuel was used.

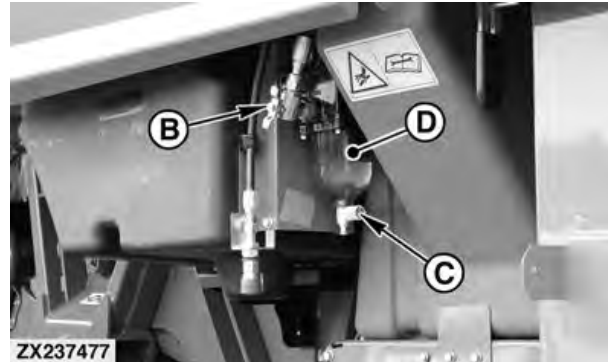
Open drain valve (C) to inspect fuel system for water in heavy-duty fuel precleaner (D).

A—Precleaner Bowl
B—Shut-Off Valve

C—Drain valve
D—Heavy-Duty Fuel Precleaner



Fuel Precleaner Bowl (All Machines)



Heavy-Duty Fuel Precleaner (Option)

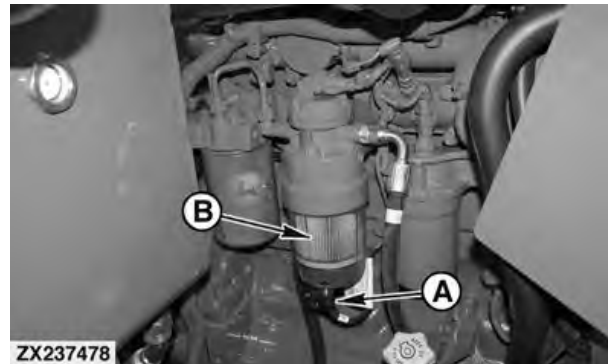
OUCC002,00049D4 -19-18JAN16-5/9

Fuel Filter: Open drain valve (A) to inspect fuel system for water in primary filter (B).

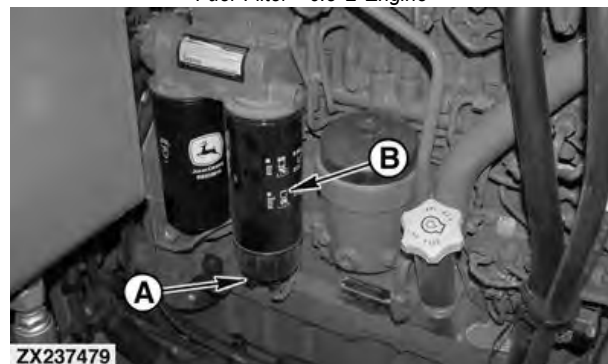
If problem persists, change fuel filters (see **Lubrication and Maintenance** section).

A—Drain valve

B—Primary Fuel Filter



Fuel Filter—6.8 L Engine



Fuel Filter—9.0 L Engine

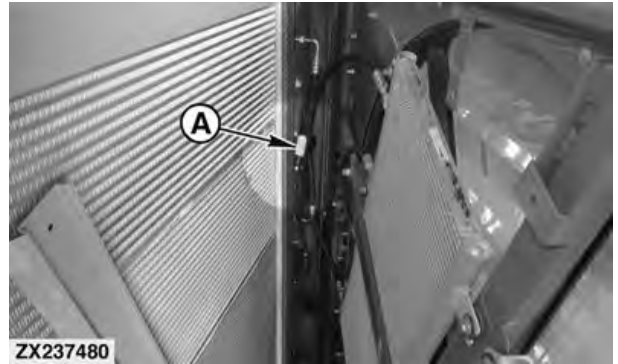
Continued on next page

OUCC002,00049D4 -19-18JAN16-6/9

- Fuel Tank Breather

Visually inspect fuel tank breather (A) weekly. Do not allow excessive amounts of chaff or debris to collect on breather. If breather is covered with debris, it does not allow fuel tank to breathe. Remove fuel tank breather from hose and clean.

A—Fuel Tank Breather



ZX237480 —UN—16APR15

OUC002,00049D4 -19-18JAN16-7/9

- Diesel Exhaust Fluid (DEF) Tank Breather (Final Tier 4/Stage IV)

Visually inspect Diesel Exhaust Fluid (DEF) tank breather (A) weekly. Do not allow excessive amounts of chaff or debris to collect on breather. If breather is covered with debris, it does not allow tank to breathe. Remove breather from hose and clean.

**A—Diesel Exhaust Fluid (DEF)
Tank Breather**



ZX237481 —UN—27 JAN16

Continued on next page

OUC002,00049D4 -19-18JAN16-8/9

- Fire Extinguisher

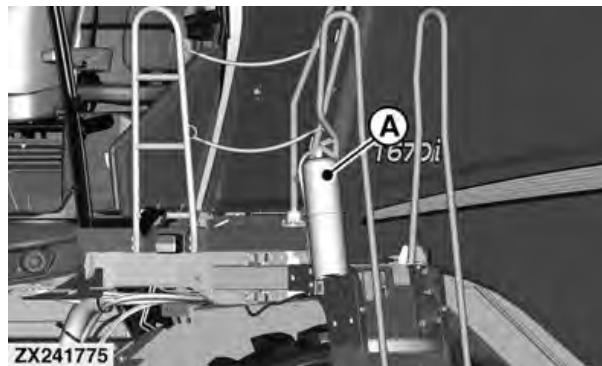
Depending on country requirement, a 6 kg (15 lb.) general-purpose fire extinguisher (A) meeting national certification requirements ("ABC") can be installed on left side of operator's platform and at rear of the machine.

Check every day that the fire extinguisher is in position.

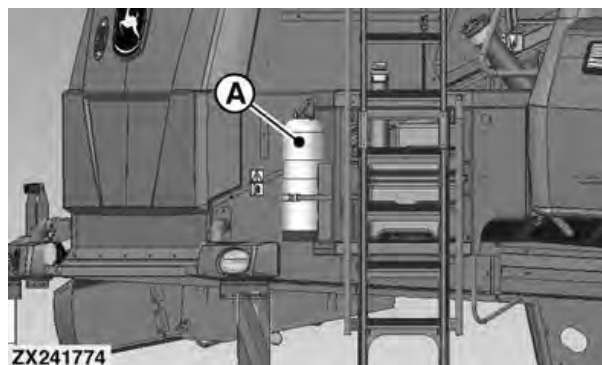
- Miscellaneous Checks

- Tires: Inspect tires for cuts, breaks, or obviously low pressure. Check tire pressure at least weekly with an accurate gauge.
- Lights
- Brakes and park brake

A—Fire Extinguisher



ZX241775—UN—16APR15

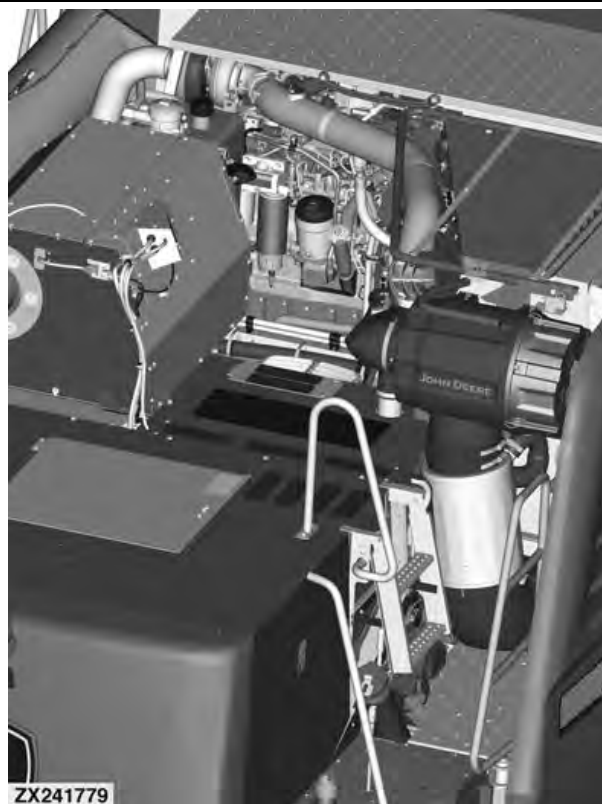


ZX241774—UN—16APR15

OUC002,00049D4 -19-18JAN16-9/9

Cleaning Engine Compartment

CAUTION: Do not clean engine or engine compartment with engine running. Dirt, oil, chaff, and crop debris in engine compartment and on engine is a fire hazard. Direction of wind, type of crop and its moisture content can all have an effect on where and how much chaff and debris accumulate. Check and clean this area frequently.



ZX241779—UN—19APR15

OUC002,0004474 -19-19APR15-1/1

Breaking-In Engine

Machine With Tier 2/Stage II Engine Only:

Engine is factory filled with John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In Plus™ Engine Oil as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help seat engine components properly.

If John Deere Break-In™ Engine Oil is used during the initial operation of a new or rebuilt engine, change the oil and filter at a maximum of 100 hours.

If John Deere Break-In Plus™ Engine Oil is used, change oil and filter at a minimum of 100 hours and a maximum equal to interval specified for John Deere Plus-50™ II or Plus-50™ oil (see **Lubrication and Maintenance** section for oil specification).

IMPORTANT: DO NOT add makeup oil until the oil level is **BELOW** the "ADD" mark on dipstick. John Deere Break-In Plus™ Oil should be used to make up any oil consumed during this period.

DO NOT use Plus-50™ or Plus-50™ II Engine Oil during break-in period of a new engine or engine that has had a major overhaul. These oils will not allow a new or overhauled engine to properly wear during this break-in period.

Check engine oil level frequently during break-in period. If oil must be added during this period, John Deere Break-In Plus™ Oil is preferred.

IMPORTANT: DO NOT fill above the **FULL** mark. Oil level anywhere within the cross-hatch marks are considered in the acceptable operating range.

NOTE: Some increase in oil consumption may be expected when low viscosity oils are used. Check oil levels more frequently.

Avoid prolonged periods of engine idling or sustained maximum load operation. If engine idles longer than 5 minutes, stop engine.

After break-in period, change engine oil and replace engine oil filter. Fill crankcase with John Deere Plus-50™ II, John Deere Plus-50™ or seasonal viscosity grade oil (see **Lubrication and Maintenance** section for oil specification).

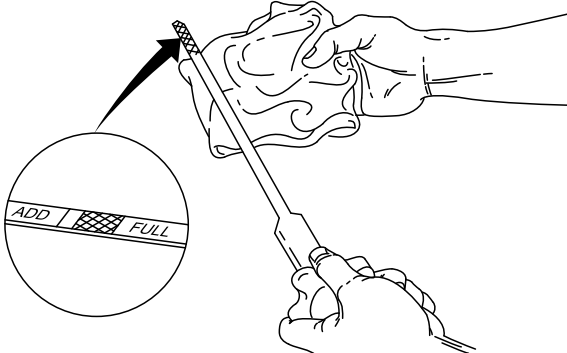
NOTE: Verify that dipstick is screwed or pushed completely into housing before removing to check oil level.



6.8 L Engine



9.0 L Engine



A—Dipstick

Remove dipstick (A) and check oil level daily. Oil level should be between "ADD" and top of cross-hatch area on dipstick. If oil level is below "ADD" mark, add oil as needed (see Fuel and Lubricants section for oil recommendations).

Watch for leaks. Do not operate engine when oil level is below "ADD" mark on dipstick.

Continued on next page

OUC002,0004A13 -19-22JAN16-1/4

ZX237470 —UN—16APR15

ZX237471 —UN—16APR15

H86717 —UN—19OCT06

Machine With Final Tier 4/Stage IV Engine Only:

Engine is factory filled with John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In Plus™ Engine Oil as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help seat engine components properly.

During the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and a maximum of 400 hours (see **Lubrication and Maintenance** section for oil specification).

IMPORTANT: DO NOT add makeup oil until the oil level is **BELOW** the "ADD" mark on dipstick. John Deere Break-In Plus™ Oil should be used to make up any oil consumed during this period.

DO NOT use Plus-50™ or Plus-50™ II Engine Oil during break-in period of a new engine or engine that has had a major overhaul. These oils will not allow a new or overhauled engine to properly wear during this break-in period.

Check engine oil level frequently during break-in period. If oil must be added during this period, John Deere Break-In Plus™ Oil is preferred.

IMPORTANT: DO NOT fill above the **FULL** mark. Oil level anywhere within the cross-hatch marks are considered in the acceptable operating range.

NOTE: Some increase in oil consumption may be expected when low viscosity oils are used. Check oil levels more frequently.

Avoid prolonged periods of engine idling or sustained maximum load operation. If engine idles longer than 5 minutes, stop engine.

After break-in period, change engine oil and replace engine oil filter. Fill crankcase with John Deere Plus-50™ II or other diesel engine oil (see **Lubrication and Maintenance** section for oil specification).

NOTE: Verify that dipstick is screwed completely into housing before removing to check oil level.

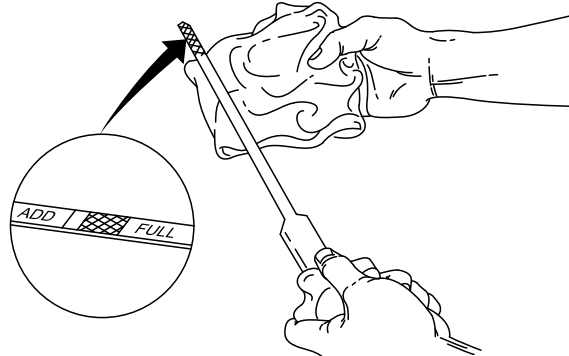
Remove dipstick (A) and check oil level daily. Oil level should be between "ADD" and top of cross-hatch area on dipstick. If oil level is below "ADD" mark, add oil as



6.8 L Engine



9.0 L Engine



A—Dipstick

needed (see **Lubrication and Maintenance** section for oil specification).

Watch for leaks. Do not operate engine when oil level is below "ADD" mark on dipstick.

Continued on next page

OUC002,0004A13 -19-22JAN16-2/4

ZX237470 —UN—16APR15

ZX237471 —UN—16APR15

H86717 —UN—19OCT06

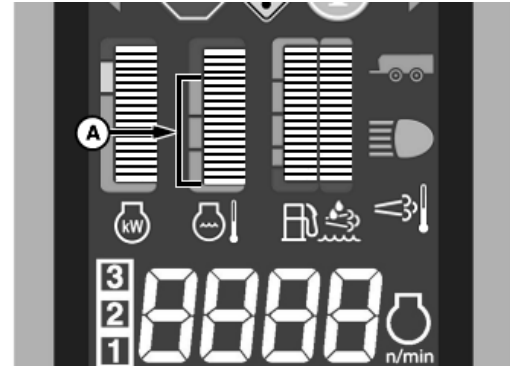
All Machines:

If air temperature is below -10 °C (14 °F) use an engine block heater.

Temperature indicator should read in green zone (A) during normal operation.

IMPORTANT: Prevent possible engine damage. Do not shut OFF engine if temperature warning light comes ON or bars enter red zone. Shutting OFF engine causes coolant temperature to rise even higher, resulting in machine damage. Reduce load and run engine at a slower speed to lower coolant temperature. Unless temperature drops quickly, stop engine and determine cause before resuming operation.

Watch temperature gauge closely. If gauge moves into red zone, reduce load on engine and determine cause before resuming operation.



A—Green Zone (Normal Operation)

Continued on next page

OUC002.0004A13 -19-22JAN16-3/4

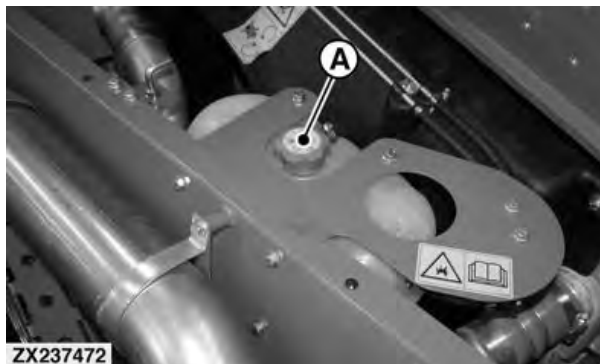
H105918 —UN—05OCT12

Check coolant level periodically and watch for signs of leaks. Remove surge tank cap (A) and pour coolant into surge tank and fill to "Max Cold" line (B).

NOTE: Coolant level must be between "Max Cold" and "Min Cold" lines. Add coolant as needed if coolant is below "Min Cold" line.

A—Surge Tank Cap

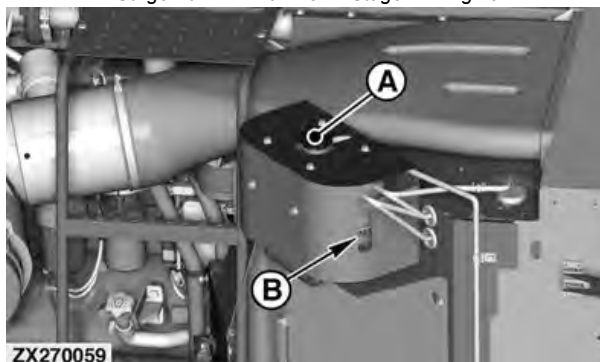
B—Max Cold Line



Surge Tank—Final Tier 4/Stage IV Engine



Surge Tank—Final Tier 4/Stage IV Engine



Surge Tank—Tier 2/Stage II Engine

OUCC002,0004A13 -19-22JAN16-4/4

Break-In Check First 100 Hours

Perform daily or 10 hour service, (see Lubrication and Maintenance section).

Watch CommandCenter display for engine temperature and engine oil pressure diagnostic trouble codes. If codes appear, refer to Diagnostic Trouble Codes section for further information.

Check engine oil level (if needed, add John Deere Break-In Oil) and coolant level frequently and watch for signs of leaks.

Check engine air intake system hoses and clamps for tightness.

OUCC002,000448C -19-08MAR15-1/1

Break-In Service After 100 Hours (Tier 2/Stage II Engine Only)

On left-hand side of machine place a suitable container underneath the drain hose (A).

Drain crankcase oil by opening drain valve (B) and close drain once oil is drained.

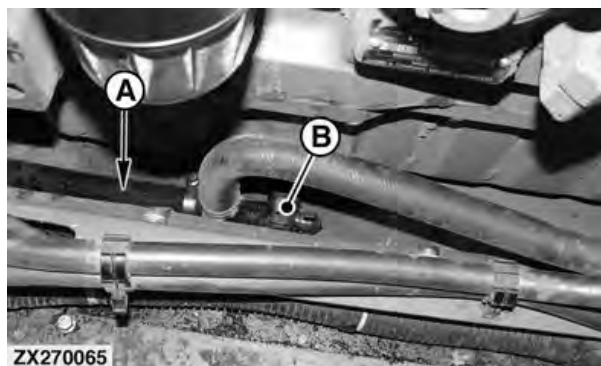
Remove and retain cap and dispose of oil filter (C) properly.

Install oil filter and retain with cap.

Fill crankcase with proper amount of engine oil (see **Lubrication and Maintenance** section for oil specification).

A—Drain Hose
B—Drain Valve

C—Oil Filter



9.0 L engine Shown

OUCC002,00049E8 -19-19JAN16-1/1

ZX270065 —UN—19JAN16

ZX270066 —UN—19JAN16

ZX270081 —UN—22JAN16

Break-In Service After 400 Hours (Final Tier 4/Stage IV Engine Only)

On left-hand side of machine place a suitable container underneath the drain hose (A).

Drain crankcase oil by opening drain valve (B) and close drain once oil is drained.

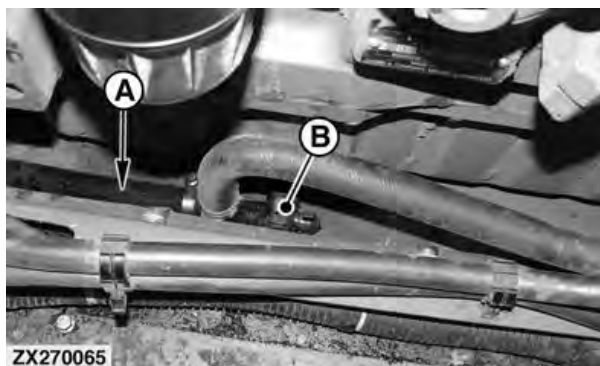
Remove and retain cap and dispose of oil filter (C) properly.

Install oil filter and retain with cap.

Fill crankcase with proper amount of engine oil (see **Lubrication and Maintenance** section for oil specification).

A—Drain Hose
B—Drain Valve

C—Oil Filter



ZX270065 —UN—19JAN16



ZX270066 —UN—19JAN16



ZX270080 —UN—22JAN16

9.0 L engine Shown

OUCC002,00049E9 -19-19JAN16-1/1

Operate the Engine

Starting the Engine

CAUTION: Before starting engine, make sure that everyone is clear of machine. Sound horn to warn others.

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove exhaust fumes from area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open doors and get outside air into area.

1. Move multi-function lever (A) to neutral position (see arrow).
2. Verify that header engage switch (B) and separator engage switch (C) are OFF.

CAUTION: Sound horn before starting engine to warn others to stay clear from machine.

To avoid the possibility of personal injury or death, start engine **ONLY** from operator seat. Do not start engine by shorting across starter terminals. Machine will start in gear if bypassed.

IMPORTANT: To prevent starter damage, do not operate starter for more than 30 seconds at a time. If engine does not start, wait at least two minutes before trying again.

NOTE: If temperature is below -5 °C (23 °F) it may be necessary to use a coolant heater (see Coolant Heater (If Equipped) in this section).

When key switch is turned to **START**, a delay of a couple of seconds will occur. This allows control units to power up, relays to close, and starter solenoid to energize.

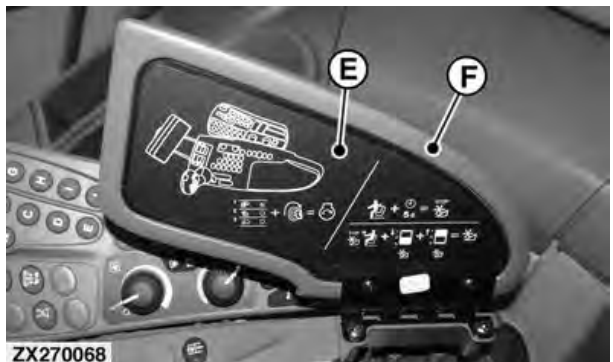
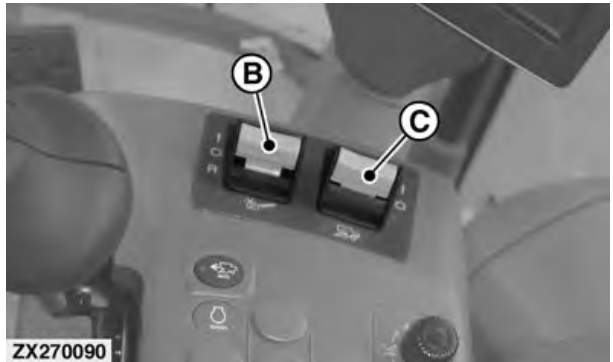
Decal (E) under storage box lid (F) on the armrest shows engine starting information.

3. Sound horn and turn key switch (D) to **START** position.

Key positions are:

First Position	Accessories
Second Position	OFF
Third Position	Run
Fourth Position	Start

NOTE: Diagnostic Trouble Codes (DTC) will display if Stop Engine Code appears on display. Display stops normal functions, indicating a problem that requires the machine be stopped and the problem corrected immediately. Codes are displayed until the problem is resolved. If problem cannot be resolved, see your John Deere dealer.



- A—Multi-Function Lever
B—Header Engage Switch
C—Separator Engage Switch
D—Key Switch
E—Decal
F—Storage Box Lid

4. Release key after engine starts and let engine run at low idle for five minutes to warm oil.

Continued on next page

OUC002,00049FA -19-21JAN16-1/4

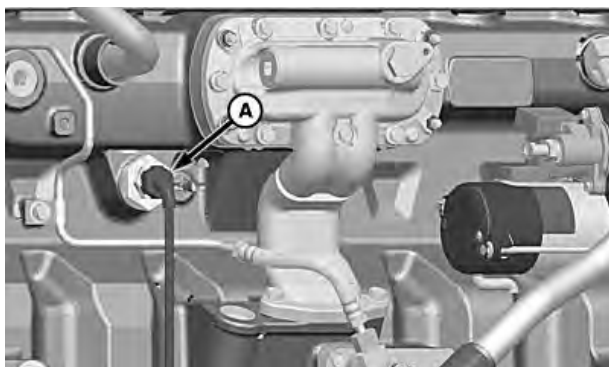
5. Adjust an engine speed of approx. 1200 rpm.

Run a cold engine for approx. 1—2 minutes at this speed. At ambient temperatures below freezing, extend this warming up period to 2—4 minutes.

IMPORTANT: Never run engine without load for more than 5 minutes.

All indicator lights except the park brake light must be out. If any other lights stay on, stop the engine and correct the fault.

OUC002,00049FA -19-21JAN16-2/4



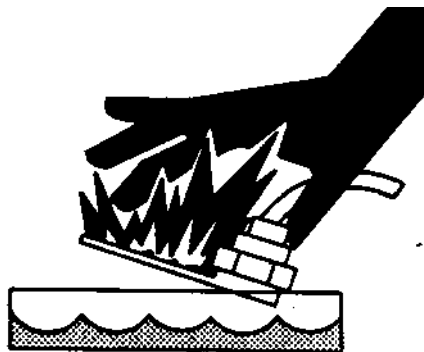
9.0 L Final Tier 4/Stage IV Engine (Front Side)

A—Coolant Heater

Coolant Heater (If Equipped)

CAUTION: To avoid electrical shock, always use a 3-wire, heavy duty electrical cord, and be sure that it is properly grounded.

Before connecting coolant heater to power source, be sure that element is immersed in coolant. **NEVER** energize heater in air. Doing so can cause element sheath to burst causing personal injury.



Coolant heater (A) mounts in freeze plug opening (front side or rear side of engine). By warming engine coolant, the heater reduces oil drag, eases starting, and shortens warm up time.

NOTE: In extremely cold weather, it may take 1—2 hours to heat engine. Coolant heater (A) has a 1000 watt heating element.

Continued on next page

OUC002,00049FA -19-21JAN16-3/4

Stopping the Engine

1. Lower header or reel completely to ground.
2. Move multi-function lever (A) to neutral position (B) and press low engine speed button (C).
3. Shut OFF header engage switch (D) and separator engage switch (E).

IMPORTANT: Cooling of turbocharger and some engine parts is provided by engine oil. Stopping a hot engine might cause damage to these parts.

If an Exhaust Filter Cleaning has just been performed, increase engine idle time to 4 minutes.

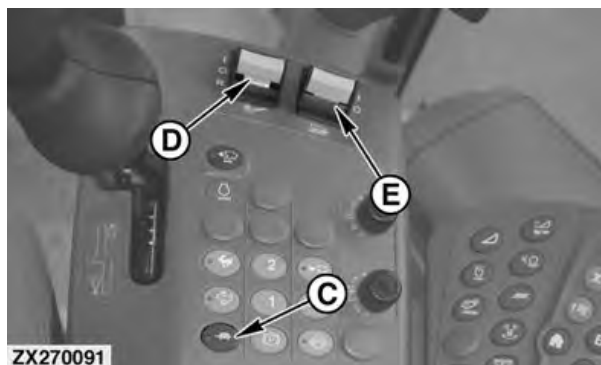
4. Before stopping an engine that was operating at working load, idle engine two—three minutes to allow turbocharger to cool.

CAUTION: Set park brake and remove key (F) before leaving machine.

5. Turn key switch OFF.

IMPORTANT: Final Tier 4/Stage IV: Do not disconnect battery for at least 4 minutes after machine is shut OFF. Selective Catalyst Reduction (SCR) system automatically purges lines of Diesel Exhaust Fluid (DEF) during this time, immediately after machine is shut OFF. If adequate time is not allowed for lines to be purged, any fluid remaining in lines can crystallize and plug lines. In freezing weather, fluid will freeze and possibly burst lines.

A—Multi-Function Lever	D—Header Engage Switch
B—Neutral Position	E—Separator Engage Switch
C—Low Engine Speed Button	F—Key Switch



OUC002,00049FA -19-21JAN16-4/4

Disconnect the Battery on Engines with Diesel Exhaust Fluid (DEF)

IMPORTANT: Do not disconnect battery for at least 4 minutes after engine stops. The exhaust cleaning system automatically purges lines of

Diesel Exhaust Fluid (DEF) during this time, immediately after engine is stopped. If adequate time is not allowed for lines to be purged, any DEF remaining in lines can crystallize and plug lines. In freezing weather, DEF will freeze and possibly burst lines.

OUC002,00049D9 -19-18JAN16-1/1

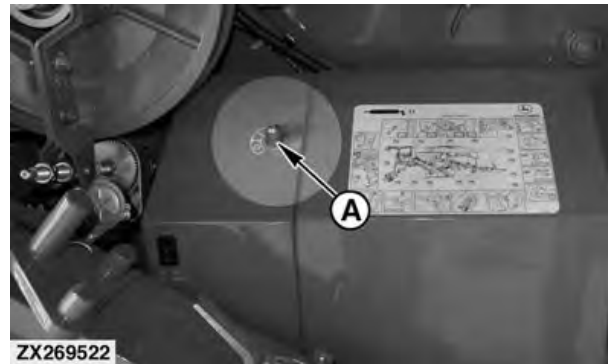
Battery Disconnect Switch

CAUTION: Never turn power off on the battery disconnect switch while the engine is running. This could result in serious damage to the machine's electrical components.

IMPORTANT: During a long storage period, always turn battery disconnect switch to OFF position. If the battery disconnect switch is left ON, the battery could lose power.

With battery disconnect switch lever (A) in "OFF" position, the battery is disconnected from the machine and the entire electrical and electronic system of the machine is disabled.

Turn battery disconnect switch lever (A) to "ON" position to activate the electrical and electronic system of the machine.



A—Battery Disconnect Switch

ZX269522 —JUN—15JAN16

OUC002,00049DA -19-18JAN16-1/1

Selective Catalyst Reduction (SCR) System (Final Tier 4/Stage IV Engine Only)

IMPORTANT: Do not remove battery leads for at least 4 minutes after engine stops. The SCR system automatically purges itself of Diesel Exhaust Fluid (DEF) immediately after the engine is stopped. If adequate time is not allowed for lines to be purged, residual DEF can freeze and possibly damage components of the SCR system during cold-weather exposure.

IMPORTANT: It is unlawful to tamper with or remove any component of the aftertreatment system. It is also unlawful to use Diesel Exhaust Fluid (DEF) that does not meet specifications provided or to operate vehicle with no Diesel Exhaust Fluid (DEF).

Using incorrect or unapproved aftertreatment components can cause damage to vehicle's aftertreatment system and reduce ability of aftertreatment system to function correctly.

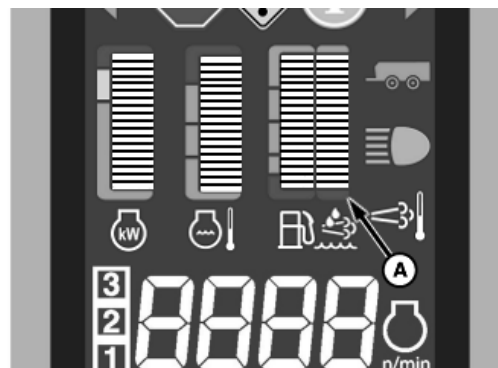
NOTE: Selective Catalyst Reduction (SCR) system monitors quality of Diesel Exhaust Fluid (DEF) flowing through it. If a fluid other than Diesel Exhaust Fluid (DEF) or incorrect urea concentration is detected, system will display a diagnostic trouble code.

In order to comply with national and local emission requirements, this engine series contains a Selective Catalytic Reduction (SCR) system. The main components of the SCR system include the SCR catalyst, DEF dosing injector, DEF dosing unit, DEF tank header assembly, and DEF tank. The SCR system is effective at reducing the nitrogen oxides (NOx) emissions. NOx is a major component of smog and acid rain.

During combustion, NOx molecules are formed in the exhaust. DEF is injected into the exhaust stream before the SCR catalyst. Through a chemical reaction in the SCR, NOx is converted into nitrogen and water.

Water vapor is a normal by-product of combustion. During cold-weather operation at low exhaust temperatures, this water vapor can condense and resemble white smoke from the exhaust. This will dissipate as operating temperature increases and the water is further vaporized. This situation is considered normal.

Selective Catalyst Reduction (SCR) system supplies Diesel Exhaust Fluid (DEF) to engine aftertreatment system. Diesel Exhaust Fluid (DEF) works in conjunction with aftertreatment components to reduce emissions. See



A—Diesel Exhaust Fluid (DEF)
Level Indicator

Lubrication and Maintenance section for specifications and information about Diesel Exhaust Fluid (DEF).

Machine electronic systems monitor Diesel Exhaust Fluid (DEF) level to assure proper performance. Primary display unit displays current Diesel Exhaust Fluid (DEF) level (A). When quantity of Diesel Exhaust Fluid (DEF) reaches certain levels, systems change machine operation. Refilling Diesel Exhaust Fluid (DEF) tank will cause system to return machine to normal operation. Refilling Diesel Exhaust Fluid (DEF) tank every time machine is refueled is recommended. See **Fill Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage IV)** and **Drain Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage IV)** in Lubrication and Maintenance Section for further information.

Diesel Exhaust Fluid (DEF) level and operation changes:

- When level reaches 10%, level indicator flashes, alarm sounds and low fluid message appears.
- When level reaches 0%, level indicator illuminates and stops flashing, alarm sounds and empty fluid message and engine power limited message appears.
- When loss of prime is reached, level indicator illuminates and stops flashing, alarm sounds and empty fluid message, engine power limited message and speed limited message appears. Stop engine warning indicator (Red) illuminates and machine function is disabled.

Diesel Exhaust Fluid (DEF) freezes at -11°C (12°F) and will not flow to Selective Catalyst Reduction (SCR) system. Systems sense low temperature and allow engine to start, even with no Diesel Exhaust Fluid (DEF) flow. Engine coolant is used to thaw fluid in Diesel Exhaust Fluid (DEF) tank when engine is running. Freezing and thawing of Diesel Exhaust Fluid (DEF) does not degrade it.

OUC002,00049D5 -19-18JAN16-1/1

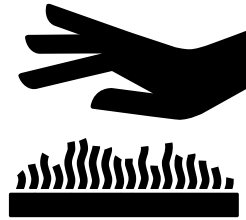
H106106—UN—06NOV12

Operate the Exhaust Cleaning System (Final Tier 4/Stage IV Engine Only)

Exhaust Filter Cleaning

Servicing machine or attachments during exhaust filter cleaning can result in serious personal injury. Avoid exposure and skin contact with hot exhaust gases and components.

During auto or manual/stationary exhaust filter cleaning operations, the engine will run at elevated idle and hot temperatures for an extended period of time. Exhaust gases and exhaust filter components reach temperatures hot enough to burn people, or ignite, or melt common materials.



RG17488 —UN—21AUG09

OUCC002,00049DB -19-18JAN16-1/5

Exhaust Filter System Overview

H94480 —UN—31MAR10

Your machine is equipped with an emission compliant engine which cleans and filters the exhaust. Under normal machine operation and with system in AUTO mode, the system requires minimal operator interaction.

To avoid unnecessary buildup of diesel particulates or soot in the exhaust filter system:

- Utilize AUTO Exhaust Filter Cleaning mode
- Avoid unnecessary idling
- Use proper engine oil. See **Lubrication and Maintenance** section for specifications.
- Use only ultra low sulfur fuel. See **Lubrication and Maintenance** section for specifications.

Touch or press confirm button when Engine Information button is highlighted.

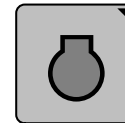
There are two exhaust filter system modes:

- Auto (A)
- Disable (B)

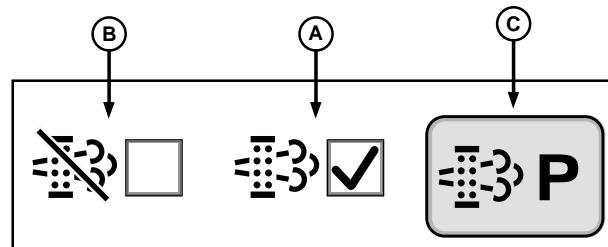
IMPORTANT: Disable mode should ONLY be used when temporarily connected to an indoor exhaust system for diagnostic and repair activities.

NOTE: Parked exhaust filter cleaning button (C) may be active or inactive (grayed out) depending on exhaust filter restriction level. See **Parked Exhaust Filter Cleaning** section.

System defaults to AUTO mode when parked exhaust filter cleaning is complete or key switch is



Engine Information Button



A—AUTO Exhaust Filter Cleaning Mode
B—Disable Exhaust Filter Cleaning Mode

C—Parked Exhaust Filter Cleaning Button

cycled. Always verify that AUTO mode is selected, unless in conditions where it may be unsafe. See **When to Disable Exhaust Cleaning System** section.

Continued on next page

OUCC002,00049DB -19-18JAN16-2/5

HT09998 —UN—18MAR14

Exhaust Filter AUTO Mode

NOTE: System defaults to AUTO mode when parked exhaust filter cleaning is complete or key switch is cycled. Always verify that AUTO mode is selected, unless in conditions where it may be unsafe. See *When to Disable Exhaust Cleaning System* section.

AUTO Mode (A) allows the Exhaust Filter System to intelligently perform exhaust filter cleaning as required. Primary display unit (PDU) indicator and armrest display provide operator information related to exhaust filter system activity.

Exhaust Filter Cleaning Indicator (B) illuminates when exhaust filter system is actively performing exhaust filter cleaning.

Exhaust Filter Restricted — depending on operating conditions, the Exhaust Filter System may request a change in operation. Armrest display will recommend operational changes.

IMPORTANT: Service cleaning is required when Diagnostic Trouble Code ECU 003719.13 is generated. Contact your John Deere dealer.

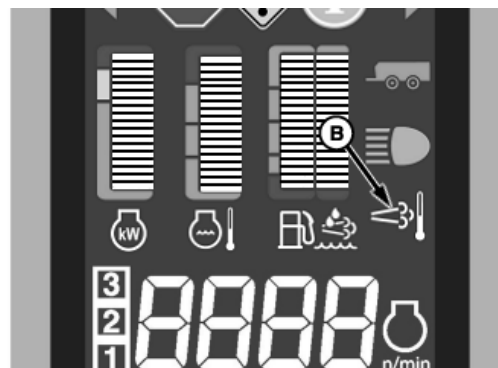
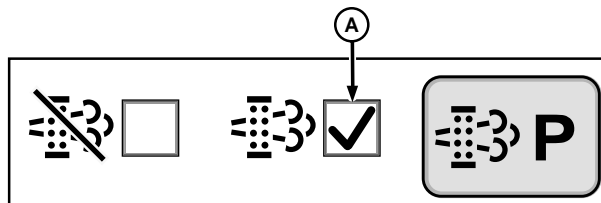
When to Disable Exhaust Cleaning System

IMPORTANT: Disable the automatic exhaust filter cleaning system only when necessary.

CAUTION: When AUTO or PARKED cleaning is enabled, the exhaust temperature may be high under no load or light load conditions at certain times during the exhaust filter cleaning cycle.

Disable exhaust filter cleaning system in conditions where it may be unsafe for elevated exhaust temperatures.

Such as:



A—AUTO Exhaust Filter Cleaning Mode

B—Exhaust Filter Cleaning Indicator

- Indoors or under a roof unless a high temperature externally vented exhaust system is connected.
- When there is not enough time available for the machine to complete a cleaning cycle before it is shut down.
- High crop dust or chaff conditions.
- Next to a fueling area.

Continued on next page

OUC002,00049DB -19-18JAN16-3/5

H109999 —UN—18MAR14

H105919 —UN—05OCT12

Parked Exhaust Filter Cleaning

H94480 —UN—31MAR10

Parked exhaust filter cleaning is an automated process which allows the system to clean the exhaust filter when required. During the process the engine speed will be controlled by the system and the machine must remain parked to complete the procedure. Time required for the Parked Exhaust Filter Cleaning process is dependent upon the level of exhaust filter restriction, ambient temperatures and current exhaust gas temperature. Display will provide estimated time to completion.

Follow instructions shown on display to complete the Parked Exhaust Filter Cleaning process.

NOTE: Parked Exhaust Filter Cleaning may exceed 40 minutes.

Prior to initiating the Parked Exhaust Filter Cleaning process:

- Position machine outdoors
- Engage park brake
- Turn OFF header and separator switches
- Set engine speed to low idle
- Object detection sensor on rear composite panel **MUST** be clear and far enough away from objects

Touch or press confirm button when Engine Information button is highlighted.

Touch or press confirm button when Parked Exhaust Filter Cleaning button(A) is highlighted.

Touch or press confirm button when desired button is highlighted:

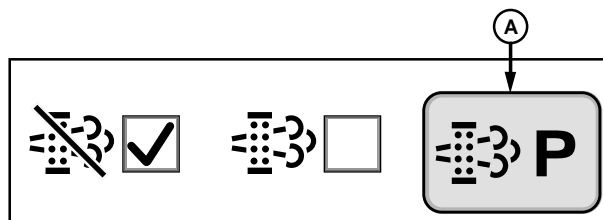
- Cancel Button (B) - allows operator to cancel procedure.
- Next Page Button (C) - allows operator to start procedure.

Follow instructions shown on remaining screens.

IMPORTANT: Engine speed will be controlled by the machine during filter cleaning.



Engine Information Button



A—Parked Exhaust Filter Cleaning Button
B—Cancel Button

C—Next Page Button

Continued on next page

OUCC002,00049DB -19-18JAN16-4/5

H110000 —UN—18MAR14

H106517 —UN—11JAN13

Once process is started a status screen appears.

There are two steps in the Parked Filter Cleaning process (Figure A), preparation and cleaning. During the preparation step, the Exhaust Filter System will control engine speed to increase exhaust temperature. During the cleaning step, diesel particulates or soot is cleaned from the Exhaust Filter System.

System informs (Figure B) operator when Parked Filter Cleaning is complete. If you are not returning the machine to service immediately after procedure, allow engine time to return to normal operating temperature before stopping engine.

NOTE: At any time during the parked procedure, the process can be canceled by advancing the throttle, engaging transmission, or stopping engine.

System defaults to AUTO mode when parked exhaust filter cleaning is complete. Always verify that AUTO mode is selected, unless in conditions where it may be unsafe. See **When to Disable Exhaust Cleaning System** section.



Figure A



Figure B

H106518 —UN—11JAN13

H106519 —UN—11JAN13

OUC002,00049DB -19-18JAN16-5/5

Engine Cool Down Warning Screens (Final Tier 4/Stage IV Engine Only)

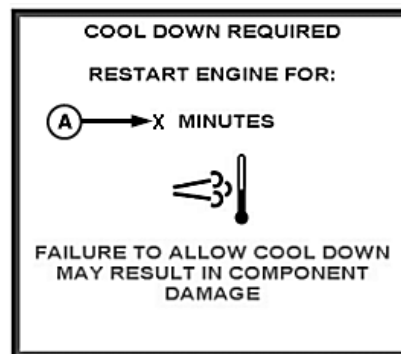
Cool Down Required Screen

IMPORTANT: Screen appears when engine is turned OFF during an exhaust filter cleaning.

Damage to exhaust cleaning components may occur if engine is turned OFF while performing exhaust filter cleaning or shortly after cleaning is complete. Alarm sounds and a warning message appears on display. Start machine and follow messages on display to allow components to cool.

When key switch is turned OFF during an exhaust filter cleaning, the following screen appears:

Cool Down Required
Restart Engine For:
X Minutes
Failure To Allow Cool Down
May Result In Component
Damage



A—Countdown Timer

Start machine immediately to prevent component damage.

Countdown timer (A) appears indicating when it is safe to turn key switch OFF.

H108673 —UN—30JUL13

Continued on next page

OUC002,00049DC -19-18JAN16-1/3

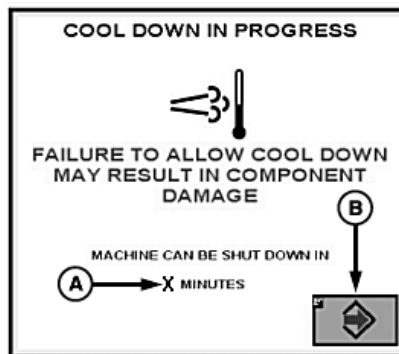
Cool Down In Progress Screen

When machine is restarted, the following screen appears:

Cool Down In Progress
Failure To Allow Cool Down
May Result In Component
Damage
Machine Can Be Shut Down In
X Minutes

Countdown timer (A) appears indicating when it is safe to turn key switch OFF.

Touch or press confirm button when enter/accept button (B) is highlighted to return to combine main screen.



A—Countdown Timer

B—Enter/Accept Button

OUC002,00049DC -19-18JAN16-2/3

H108674—UN—30JUL13

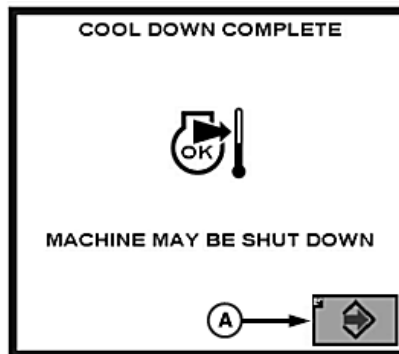
Cool Down Complete Screen

When cool down is complete, the following screen appears:

Cool Down Complete
Machine May Be Shut Down

Machine has cooled enough to prevent component damage.

Touch or press confirm button when enter/accept button (A) is highlighted to return to combine main screen.



A—Enter/Accept Button

OUC002,00049DC -19-18JAN16-3/3

H108675—UN—30JUL13

Operate HillMaster™ Machine

General Information

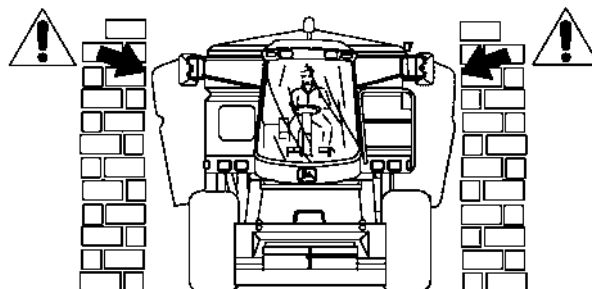
CAUTION: HillMaster™ system must only be used in field. Before driving on public roads, machine must be lowered to transport position, so maximum height is less than 4.0 m (13 ft).

Care must be taken when turning machine on slopes. Follow these precautions when turning machine on slopes in order to avoid loss of stability and potential rollover of machine:

- Never turn machine faster than leveling system can keep machine level.
- Always turn uphill and never downhill.
- Do not move onto steeper grades once maximum tilt limit indicator appears on display.

Avoid crushing injuries. Always lower leveling system before getting underneath machine for service or adjustments. Shut OFF engine, set park brake and remove key.

IMPORTANT: Before actuating manual leveling control switch, verify that park brake is released.



ZX 002438

Do not park machine too close to other machines or building walls. This is important as machine may tilt due to internal loss of oil pressure when parked for long periods of time. This may cause damage to machine and adjacent machines or walls.

OUC002,00049F8 -19-20JAN16-1/3

ZX002438 —UN—16JUN95

Daily Operation Preparations

CAUTION: Do not attempt to operate HillMaster™ machine unless all of the following operational checks are completed successfully. If one or more of the following checks fail (separator does not tilt or time to reach full tilt is excessive), contact your John Deere dealer for assistance.

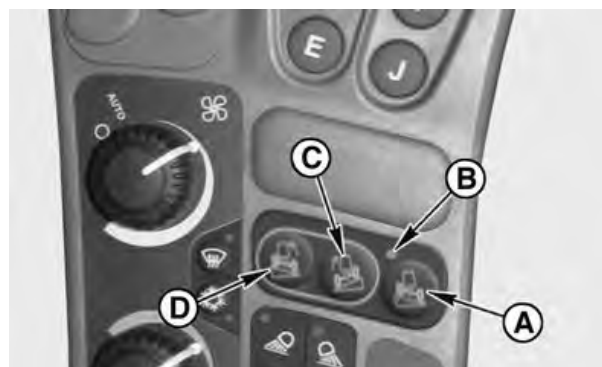
Before operating HillMaster™ machine the following three operational checks must be performed (daily).

System Requirements:

- Engine is running.
- Road safety mode button in field position.
- Press automatic leveling control switch (A) to activate automatic leveling system.
- Indicator light (B) turns ON indicating setting is in automatic mode.

Check One: Push and hold manual tilt right switch (C) for approximately 20 seconds to tilt machine chassis to the right.

Check Two: Push and hold manual tilt left switch (D) for approximately 20 seconds to tilt machine chassis to the left.



A—Automatic Leveling Control Switch
B—Indicator Light
C—Manual Tilt Right Switch
D—Manual Tilt Left Switch

NOTE: Time required to bring machine from maximum left tilt position to maximum right tilt position is approximately 5—7 seconds.

Check Three: Press and hold manual tilt left switch until machine is tilted fully to the left. Push and hold manual tilt right switch until machine chassis is tilted fully to the right.

Continued on next page

OUC002,00049F8 -19-20JAN16-2/3

ZX234324 —UN—19APR15

Leveling Control Switches

Automatic Leveling

Automatic leveling control switch (A) allows machine separator to automatically level itself as machine moves over rolling ground.

System Requirements:

- Engine is running.
- Road safety mode button in field position.

1. Press automatic leveling control switch to activate automatic leveling system.
2. Indicator light (B) will turn ON indicating setting is in automatic mode.
3. Display shows position of machine chassis body graphically.

A pendulum is used to sense the slope of the machine as it moves across the field.

NOTE: With automatic leveling control system activated, manual tilt switches can be used to overcome automatic functions (machine may be tilted manually left or right).

Manual Leveling

Manual tilt switches allow the machine chassis to be tilted left or right manually as machine moves over rolling ground.

System Requirements:

- Engine is running.
- Road safety mode button in field position.

NOTE: Push-Button Shift Transmission Machines: Push manual tilt right switch (C) or manual tilt left switch (D) to enable HillMaster™ mode. Push park brake button to disengage park brake.

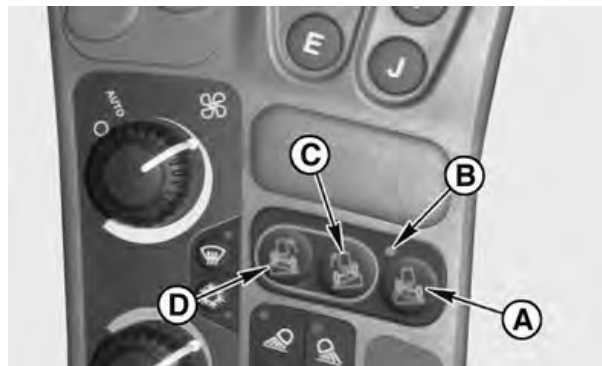
Push and hold manual tilt right switch (C) to tilt machine chassis to the right.

Push and hold manual tilt left switch (D) to tilt machine chassis to the left.

NOTE: When manual desired tilt switch is released, automatic mode takes over and levels machine chassis automatically.

Display shows position of machine chassis body graphically.

A pendulum is used to sense the slope of the machine as it moves across the field.



A—Automatic Leveling Control Switch
B—Indicator Light
C—Manual Tilt Right Switch
D—Manual Tilt Left Switch

NOTE: With automatic leveling control system activated, manual tilt switches can be used to overcome automatic functions (machine may be tilted manually left or right).

Road Transport Position

CAUTION: Avoid loss of control during road transport and serious injury or death. **Never transport machine on roadway with HillMaster™ in automatic mode. Never attempt to manually tilt machine while transporting on a roadway.**

The following lockouts the HillMaster™ leveling system and ensures that leveling system does not shift during road transport.

System Requirements:

- Engine is running.
- Road safety mode button in field position.

1. Move machine to level ground.
2. Press automatic leveling control switch for **five seconds** or until indicator light (B) flashes.
3. Push and hold manual tilt right switch (C) to tilt machine chassis to the right.
4. Push and hold manual tilt left switch (D) to tilt machine chassis to the left.

Machine is now in neutral position and can be driven on roadway.

ZX234324 —JUN—19APR15

OUCC002,00049F8 -19-20JAN16-3/3

Drive the Machine on Roads

1. Press folding functions shortcut button (A) for direct navigation to the folding functions screen.

IMPORTANT: Verify that grain tank is unloaded before transporting machine on road.

2. Touch or press and hold confirm button when folding unloading auger icon (B) is highlighted.

NOTE: Folding unloading auger is an automatic feature when icon is selected. Unloading auger begins to fold automatically when icon is selected.

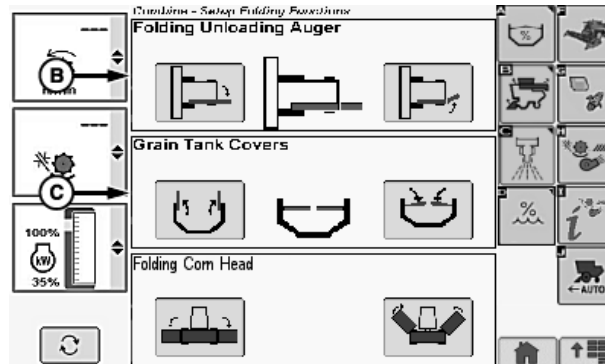
CAUTION: Avoid power line entanglement. Grain tank covers must be closed before transporting machine.

3. Grain Tank Covers:

Touch or press confirm button when folding grain tank covers one-touch button (C) is highlighted.

NOTE: Covers automatically fold when desired icon is touched or confirm button is pressed.

A—Folding Functions Shortcut Button
B—Folding Unloading Auger
C—Folding Grain Tank Covers



ZX270135 —UN—27JAN16

H109485 —UN—28NOV13

OUCC002,0004A53 -19-27JAN16-1/10

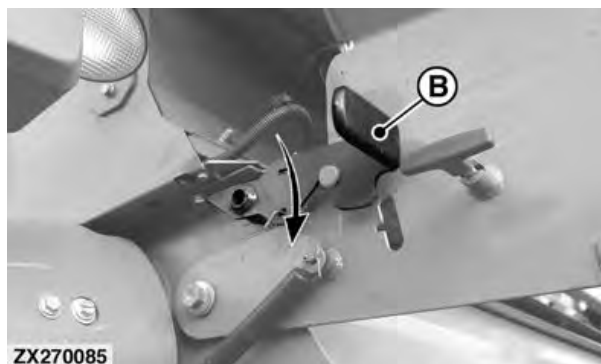
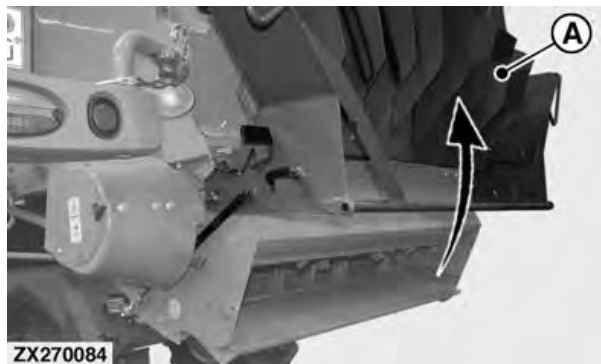
4. Straw Chopper Tailboard:

Raise tailboard (A) in storing position, and lock in position with the two latches (B) as shown.

NOTE: If no trailer is attached behind the machine, the tailboard (A) can stay in working position.

A—Tailboard

B—Latch



ZX270084 —UN—22JAN16

ZX270085 —UN—22JAN16

Continued on next page

OUCC002,0004A53 -19-27JAN16-2/10

CAUTION: To reduce machine width and to orient marker/hazard light toward oncoming motorists, swing cab access ladder (B) to the full forward position and store rear access ladder (C) in vertical and fully raised position (as shown).

IMPORTANT: Travel at a reasonable speed for road or field conditions. Never transport on the road with grain in the tank.

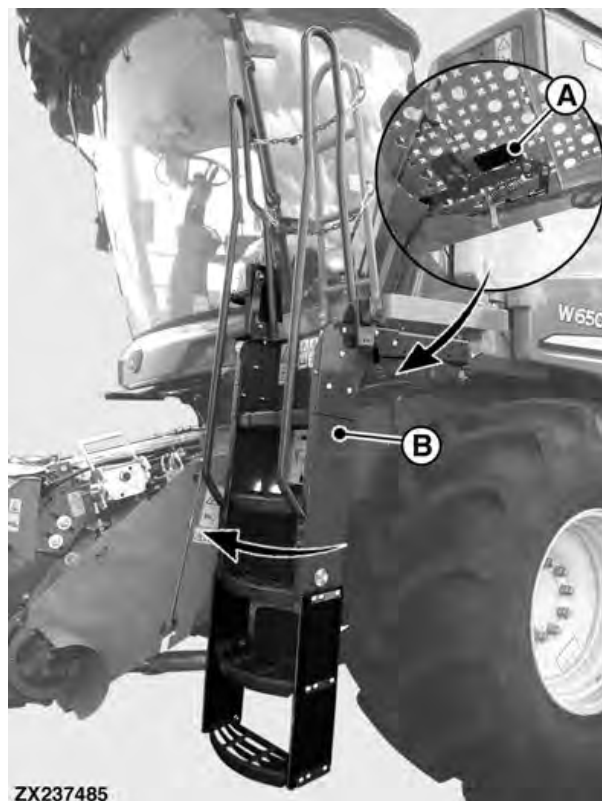
Follow local regulations for equipment size, lighting, and marking before driving on public roadways.

5. Use handle (A) to unlock ladder (B) and swing fully forward.
6. Fold radio antenna down and retain with hook (if equipped). If hook is not available, retain antenna to cab roof with tape.

A—Handle

B—Cab Access Ladder

C—Rear Access Ladder



ZX237485 —UN—27JAN16



ZX237483 —UN—22JAN16

Continued on next page

OUC002,0004A53 -19-27JAN16-3/10

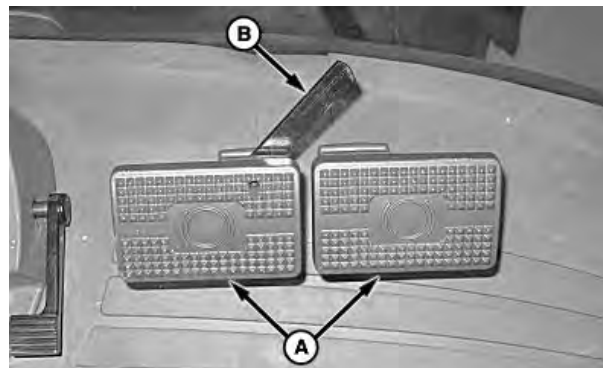
7. Lock brake pedals together with lock (B) when driving on roads. Leave pedals (A) unlocked for field operation.

CAUTION: Use seat belt whenever operating machine or riding as an observer.

8. Fasten seat belt.

CAUTION: Sound horn before starting engine to clear people away from machine.

9. Sound horn and start engine. Use coolant heater if needed.



A—Pedals

B—Lock

H96681—UN—01JUN10

OUCC002,0004A53 -19-27JAN16-4/10

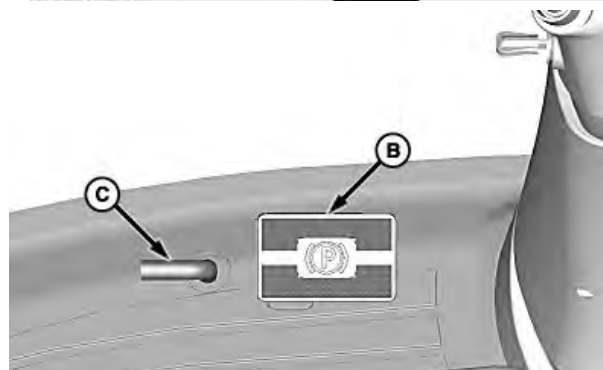
10. Raise header with header switch (A).
11. 3-Speed Transmission Machines: Disengage park brake (B) with pedal (C).

A—Header Raise/Lower Switch C—Pedal
B—Park Brake



ZX270086

ZX270086—UN—22JAN16



H105174—UN—13APR12

Continued on next page

OUCC002,0004A53 -19-27JAN16-5/10

12. HillMaster™ Machines:

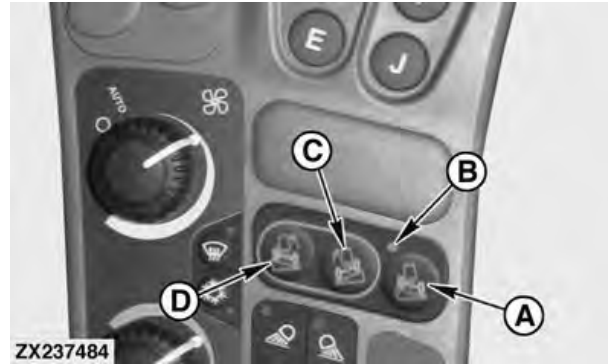
CAUTION: Avoid loss of control during road transport and serious injury or death. Never transport machine on a roadway with HillMaster™ leveling system in automatic mode. Never attempt to manually tilt machine while transporting on a roadway.

NOTE: See Operate HillMaster™ Machine section.

a. Move machine to level ground.

NOTE: Road safety mode button in field position.

- Press automatic leveling control switch (A) for **five seconds** or until indicator light (B) flashes.
- Push and hold manual tilt right switch (C) to tilt machine chassis to the right.
- Push and hold manual tilt left switch (D) to tilt machine chassis to the left.



A—Automatic Leveling Control Switch
B—Indicator Light
C—Manual Tilt Right Switch
D—Manual Tilt Left Switch

OUC002,0004A53 -19-27JAN16-6/10

NOTE: After transporting machine, press road safety mode button for two seconds allowing indicator light to turn OFF and allowing desired button functions to operate.

13. Press road safety mode button (A).

A—Road Safety Mode Button



OUC002,0004A53 -19-27JAN16-7/10

CAUTION: When transporting on a road, marker/hazard lights and taillights on both sides provide a warning to operators of vehicles approaching from the front and rear. These lights must be turned ON when driving machine on public roadways. Swing cab ladder fully forward to orient marker/hazard lights towards oncoming motorists. Do not operate marker/hazard lights if prohibited by law.

14. Turn hazard warning lights button (A) ON for both daytime and nighttime road travel. Warning lights automatically operate when hazard lights are ON.

A—Hazard Warning Lights Button



Continued on next page

OUC002,0004A53 -19-27JAN16-8/10

Field Operation

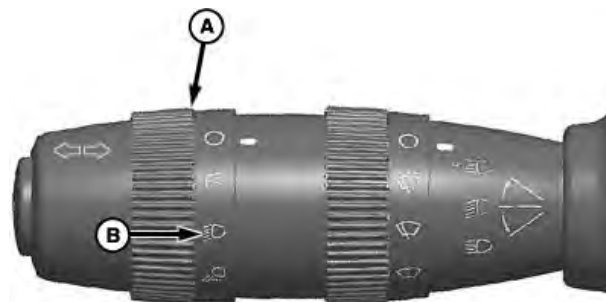
15. Use selection switch (A) to turn ON road lights (B) for nighttime travel.

NOTE: Turn signal indicators on cornerpost display illuminate to indicate a turn.

16. Use turn signals as needed. They are not self canceling.

A—Light Selection Switch

B—Road Lights Position



H96014—UN—22JUN11

OUCC002,0004A53 -19-27JAN16-9/10

17. Press engine speed button (A) for maximum engine speed.

NOTE: For field operation, select a gear according to working conditions.

18. Non ProDrive™ Machines: Engage 3rd gear for road travel.

CAUTION: If transporting machine with header attached, travel at a reasonable speed to ensure adequate braking performance and control of machine.

19. Slowly move multi-function lever forward or rearward. When coming to the top of a hill, pull back on multi-function lever before starting down the other side.



A—Engine Speed Button

H96015—UN—13APR10

OUCC002,0004A53 -19-27JAN16-10/10

Transport Information

CAUTION: To reduce risk of electrical shock by overhead cables, no portion of machine should exceed a height of 4 m (13 ft 1 in).

Check local governmental regulations regarding driving or towing equipment on public roads. Use auxiliary lights and devices available from your John Deere dealer to warn other vehicle operators.

Machine can be transported on a flat bed truck or by towing.

- When transported on a flat truck, refer to **Machine Tie-Down Locations** section.
- When towing, refer to **Tow the Machine (3-Speed Transmission Machines)** or **Tow the Machine (Push-Button Shift and ProDrive™ Transmission Machines)** section.

OUCC002,0004A54 -19-27JAN16-1/1

Tow the Machine (3-Speed Transmission Machines)

⚠ CAUTION: Do not tow machine with wire rope. If rope breaks, the whipping action could cause bodily injury.

Avoid electrical line entanglement. Grain extensions must be lowered and radio antenna lowered before transporting.

Check local governmental regulations regarding driving or towing equipment on public roads. Use auxiliary lights and devices available from your John Deere dealer to warn other roadway users.

Do not tow machine except in an emergency for a short distance at 8 km/h (5 mph). To tow machine, proceed as follows:

- Empty grain tank and remove header.
- Swing unloading auger back. Fold grain tank extensions.
- Swing ladder forward and fold down radio antenna.
- Disengage park brake.

⚠ CAUTION: Do not remove couplers. When couplers are removed, brakes are disabled.

- Place gearshift lever and multi-function lever in neutral position.
- Tow machine in a forward direction by attaching a chain around main axle (see **Tow Hooks** section). Be certain chain does not damage any hydraulic lines. Have driver in operator's seat to steer and brake the machine.
- Turn warning lights ON, unless prohibited by law.
- Travel at a safe and reasonable speed, not to exceed 8 km/h (5 mph).

⚠ CAUTION: Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use hand signals or turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible and in good working order. Replace or repair lighting and marking that are damaged or lost.

OUCC002,0004A0E -19-22JAN16-1/1

Tow the Machine (Push-Button Shift and ProDrive™ Transmission Machines)

H94478 —UN—31MAR10

CAUTION: Do not tow machine with wire rope. If rope breaks, the whipping action could cause bodily injury.

Do not remove couplers. When couplers are removed, brakes are disabled.

Avoid electrical line entanglement. Grain extensions or grain tank covers must be lowered and radio antenna lowered before transporting.

Check local governmental regulations regarding driving or towing equipment on public roads. Use auxiliary lights and devices available from your John Deere dealer to warn other roadway users.

Avoid crushing injuries from runaway machine. If machine is on a slope, do not disengage park brake until wheels are blocked.

Releasing park brake lock must be carried out **ONLY** for towing purposes. **NEVER** operate machine with park brake mechanically released. **ALWAYS** set park brake lock back to its initial status when towing is no longer required.

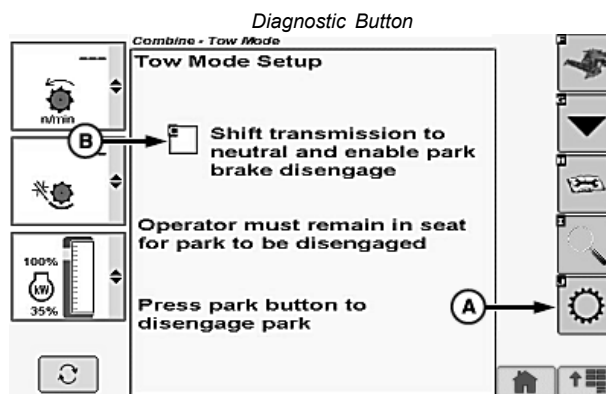
Machine can be towed for emergency situations up to 10 minutes at maximum speed of 10 km/h (6.2 mph).

NOTE: Engine must be running to tow machine. If engine is inoperable, see your John Deere dealer for further information.

To tow machine, proceed as follows:

- Start engine.
- Empty grain tank and remove header.
- Swing unloading auger back.
- Fold grain tank extensions or grain tank covers.
- Swing cab ladder forward, store rear access ladder in vertical position, and fold down radio antenna.
- Tow machine in a forward direction by attaching a chain around main axle (see **Tow Hooks** section). Be certain chain does not damage any hydraulic lines. Have driver in operator's seat to steer machine.
- Turn warning lights ON, unless prohibited by law.

CAUTION: Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use hand signals or turn signal lights.



A—Tow Mode Setup Button

B—Check Box

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible and in good working order. Replace or repair lighting and marking that are damaged or lost.

Touch or press confirm button when diagnostic icon is highlighted.

Touch or press confirm button when tow mode setup button (A) is highlighted.

Touch or press confirm button when box is highlighted.

- Shift transmission to neutral and enable park brake disengaged box (B) - shifts machine to neutral position and enables park brake disengage.

NOTE: Operator must remain in seat for park to be disengaged.

Press park brake button on armrest to release brakes before towing machine.

OUCC002,0004A0F -19-22JAN16-1/1

Tow Hooks

Front Tow Hook

Tow or pull machine out of mud in a forward direction if necessary by attaching a chain to hooks (A) on the front axle. Be certain chain will not damage any hydraulic lines.

A—Hook



ZX237486 —JUN—16APR15

Front Tow Hook—Level Land Machine



ZX241773 —JUN—16APR15

Front Tow Hook—HillMaster™ Machine

Continued on next page

OUCC002,0004A77 -19-28JAN16-1/2

Rear Tow Hook

CAUTION: Do not pull out machine by trailer hitch (B). Only use supplied tow hook (A). Always use a suitable chain or cable. Do not exceed the breaking strength. Do not mix chain with tow straps or ropes. Energy stored in towing device could cause serious bodily injury if it breaks.

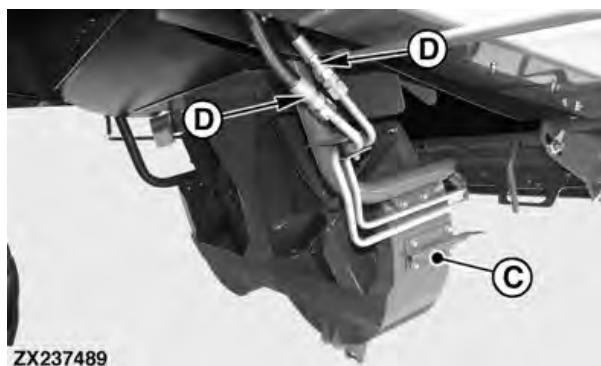
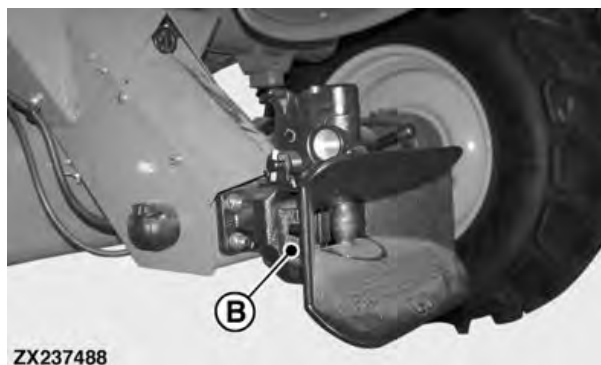
IMPORTANT: If a chaff spreader (C) is installed, remove complete assembly before attaching chain or cable on tow hook (B). Failure to do so causes chaff spreader damages.

IMPORTANT: When removing chaff spreader (C), connect hydraulic hoses (D) together to allow hydraulic system operation.

Pull out the combine in reverse direction by attaching a chain or steel cable to tow hook (A). Be certain the chain will not damage any hydraulic lines.

A—Rear Tow Hook
B—Trailer Hitch

C—Chaff Spreader
D—Hydraulic Hose Connection



ZX237487 —UN—22JAN16

ZX237488 —UN—22JAN16

ZX237489 —UN—28JAN16

OUC002,0004A77 -19-28JAN16-2/2

Machine Tie-Down Locations

CAUTION: Always empty grain tank before raising machine.

NOTE: Machine tie down locations are on both sides of machine at front and rear.

Machine tie down locations decal (A) is located on cab ladder. Decal shows correct locations for fastening machine with chains.

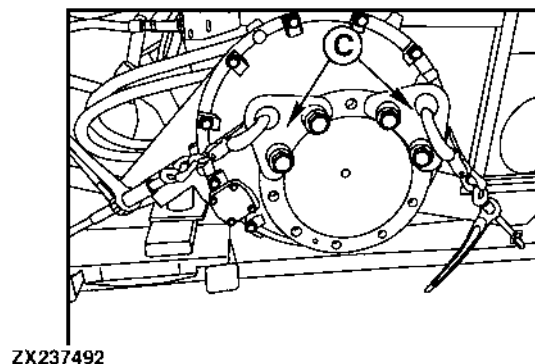
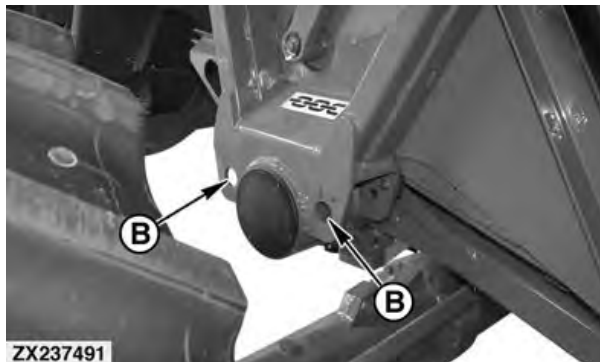
IMPORTANT: If the machine is to be transported by truck, engage the rear lashing chains only at tie-down points (B) and front lashing chains only at points (C).

Consult your John Deere dealer for more information.

A—Machine Tie-Down Locations Decal

C—Front Tie-Down Points

B—Rear Tie-Down Points



ZX269536 —UN—15JAN16

ZX237491 —UN—30JAN16

ZX237492 —UN—27JAN16

OUCC002,00049F3 -19-20JAN16-1/1

Automatic Trailer Hitch (If Equipped)

CAUTION: Do not pull out machine by trailer hitch (A). Only use supplied tow hook (see Rear Tow Hook section).

IMPORTANT: When driving without a trailer, the automatic trailer hitch (A) must always be closed.

Raise handle (B) to open lock pin and attach trailer to machine. When trailer hitch aligns with lock pin, handle lowers automatically locking trailer hitch in place.

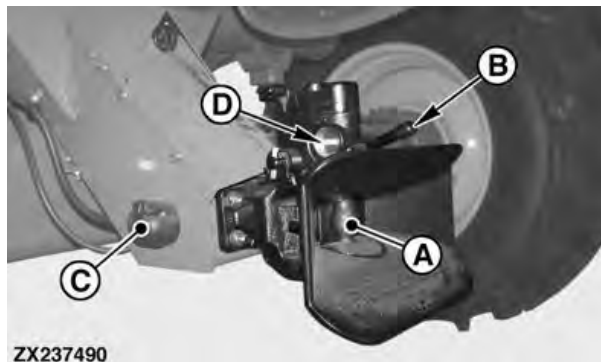
Connect trailer electrical harness to electrical connector (C).

IMPORTANT: The drawbar of the cutting platform trailer must engage in the center of the hitch jaw.

After the cutting platform trailer has been hitched, check that the trailer hitch is locked properly.

CAUTION: Indicator pin (D) must protrude out of its housing when the trailer is attached to the hitch.

If the trailer hitch is not locked properly, it must be cleaned thoroughly and then lubricated. Apply grease to the contact surface of the towing eye.



A—Automatic Trailer Hitch
B—Handle

C—Tail Light Connector
D—Indicator Pin

Check that the automatic trailer hitch is operating properly before attaching a cutting platform trailer. Lubricate grease fittings every 50 operating hours.

OUC002.00049FB -19-21JAN16-1/1

Machine-to-Cutting Platform Adaptation

IMPORTANT: To operate the 600X, 600R, 600F, or 600D Series cutting platform, the machine requires rework before attaching the cutting platform.

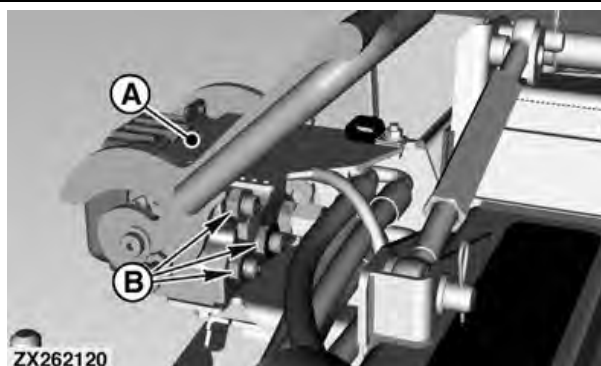
IMPORTANT: It is recommended to perform the following rework procedure at dealer shop location. Contact your John Deere dealer.

To ensure a good hydraulic system reactivity for the reel raise/lower speed and the table fore/aft speed control, the multicoupler on machine side and valve blocks MUST be reworked if a 600X Cutting Platform is attached to the machine. Proceed as follows:

1. On Multicoupler:

On back of multicoupler (A), locate, mark, and disconnect the hydraulic lines from the three fittings (B). Replace original fittings (B) with three new fittings 61H1171. Tighten new fittings to **50 N·m (37 lb·ft)** then install hydraulic lines back to their relevant location.

IMPORTANT: Do not discard removed fittings. It is necessary to re-install them in case a 600D, 600F, or 600R Series Cutting Platform is attached to the machine.



A—Multicoupler

B—Fitting—61H1171

Make sure that O-rings are in place when installing new fittings 61H1171.

NOTE: Order fittings 61H1171 through normal spare parts channel.

Continued on next page

OUC002.0004A55 -19-27JAN16-1/2

2. On Main Valve Block:

On left-hand side of the machine, rework the main valve block (A).

- a. Remove plug (B) then remove orifice plug (C).

IMPORTANT: Do not discard orifice plug (C). It must be re-installed in case a 600D, 600F, or 600R Series Cutting Platform is attached to the machine.

- b. Install plug (B) back in place and tighten to **18—20 N·m (13—15 lb·ft)**.
- c. Unplug reel raise solenoid valve **Y5** coil, remove plastic coil retainer nut then remove cartridge (D).
- d. Remove orifice plug (E).

IMPORTANT: Do not discard orifice plug (E). It must be re-installed in case a 600D, 600F, or 600R Series Cutting Platform is attached to the machine.

- e. Install cartridge (D) back in place and tighten to **14 N·m (10 lb·ft)**.

A—Main Valve Block

B—Plug

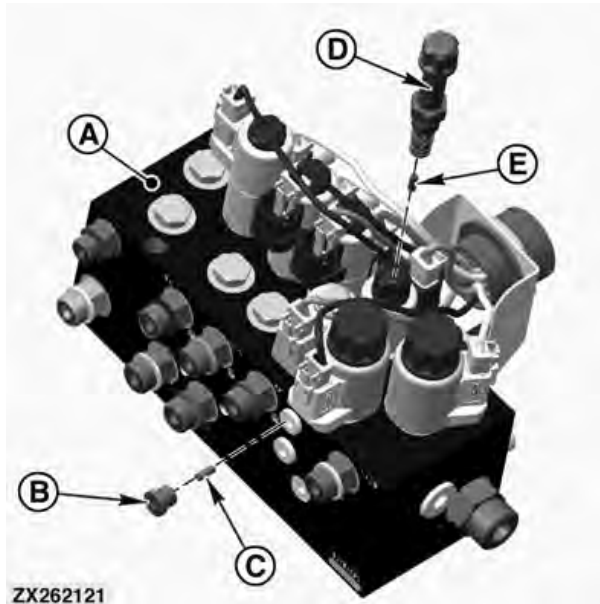
C—Orifice Plug

D—Cartridge—Solenoid Valve
Y5

E—Orifice Plug



ZX270137 —UN—27JAN16



ZX262121 —UN—28OCT15

OUCC002,0004A55 -19-27JAN16-2/2

Attach and Detach Header

NOTE: For complete attaching procedure refer to header Operator's Manual.

NOTE: Attaching and detaching procedures illustrated on 600X Series cutting platform for illustration purpose.

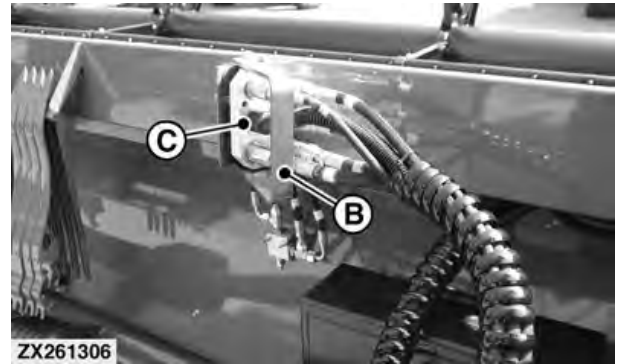
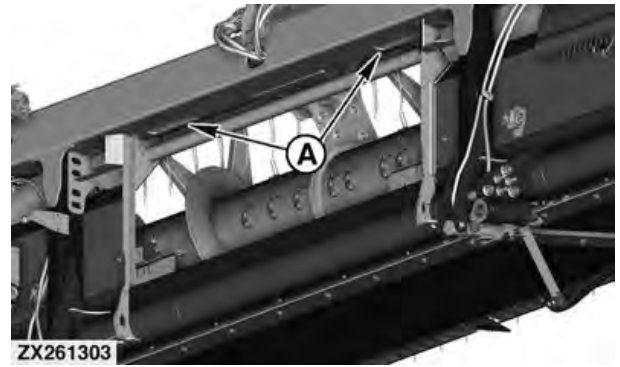
Attach The Header to Feeder House

To attach the header, proceed as follows:

1. Drive machine slowly forward until feeder house is centered in header opening.
2. Raise the feeder house. Insert the two hooks on the feeder house into openings (A) in the header frame.
3. Open handle (B) and remove multicoupler (C) from header storage bracket.

A—Opening
B—Handle

C—Multicoupler



Continued on next page

OUC002,0004A56 -19-27JAN16-1/4

ZX261303 —UN—22OCT15

ZX261306 —UN—22OCT15

4. Remove cover (A) from feeder house and clean multicoupler face (B).

NOTE: Store cover (A) on header multicoupler storage bracket.

5. Slightly raise the header.

IMPORTANT: Do not actuate latch pins with header on ground. If multicoupler must be actuated with header on ground, unhook cable from handle.

NOTE: To prevent damage to latching cable, a shear screw is attached to the handle. Attempts to actuate latching pins with header on ground results in screw shearing. (See Shear Screw Location section.)

6. Connect multicoupler (C) to the receptacle on the feeder house. Pull down handle (D) to engage the feeder house latch pins.

A—Cover

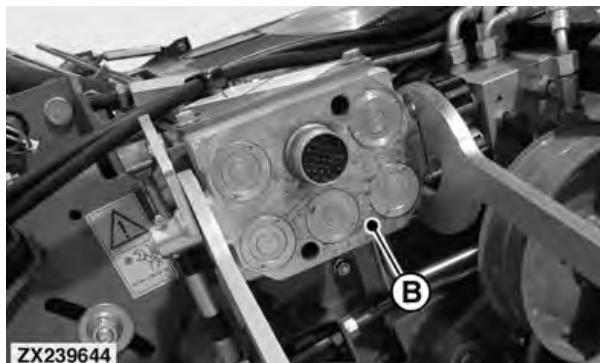
B—Multicoupler Face

C—Multicoupler

D—Handle



ZX239643 —UN—16APR15



ZX239644 —UN—16APR15



ZX261307 —UN—22OCT15

Continued on next page

OUCC002,0004A56 -19-27JAN16-2/4

7. Check Latch Pins:

Latch pins (A) must move freely through latch plate holes in header when multicoupler is latched. Latch plate (B) must contact bracket (C). Less clearance (D) must be maintained between bottom of plate and pin rather than top of plate (B) and pin. This may require latch plate to be flipped.

If adjustment is needed: Remove flange screws (E), flip plate end for end and reinstall.

Tighten flange screws (E) to **80 N·m (60 lb-ft)**.

8. Detach driveline (F) from its storage support (G).

9. Connect driveline (F) to feeder house countershaft. Let quick-attach collar (H) lock completely.

CAUTION: Do not leave drivelines on machine if header is not intended to be operated. Personal injury or machine damage may occur if feeder house is accidentally engaged.

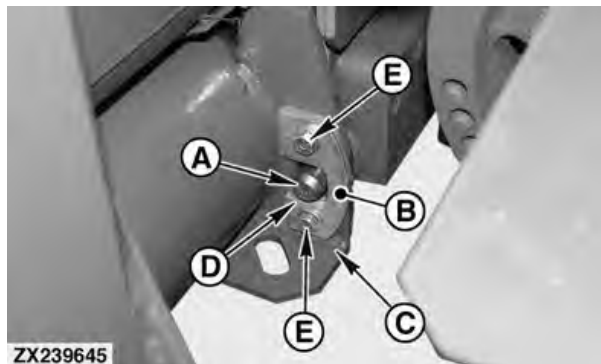
NOTE: Engage the driveline shield chain at a suitable location.

10. Before operating the header:

- Check that header model is detected by the header auto detection system (see **Operating the Controls and Displays** section).
- Calibrate the header (see **Operating the Controls and Displays** section).
- Adjust header tilt angle (see **Adjust Feeder House Fore/Aft Tilt Frame (Level Land Machine)** or **Adjust Feeder House Fore/Aft Tilt Frame (HillMaster™ Machine)** section).

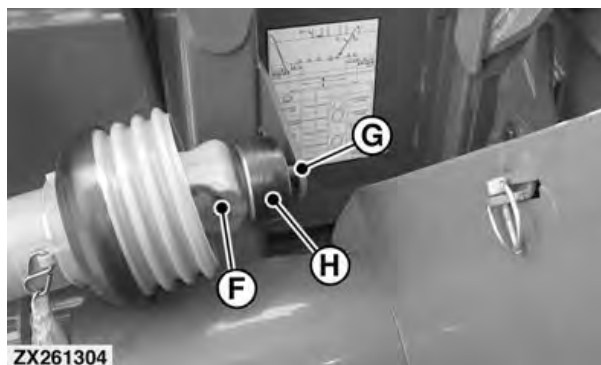
A—Latch Pin
B—Latch Plate
C—Bottom Bracket
D—Gap

E—Flange Screw
F—Driveline
G—Support
H—Quick-Attach Collar



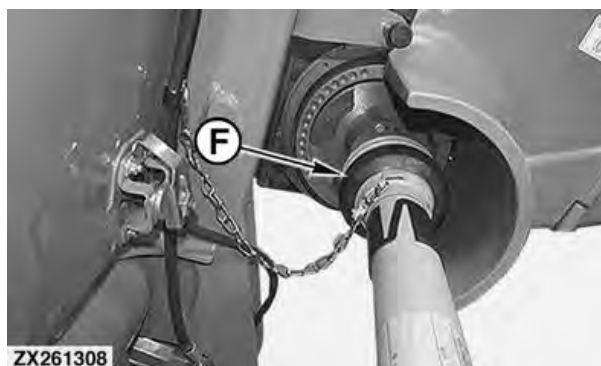
ZX239645

ZX239645 —UN—16APR15



ZX261304

ZX261304 —UN—22OCT15



ZX261308

ZX261308 —UN—23OCT15

Continued on next page

OUC002.0004A56 -19-27JAN16-3/4

Detach the Header From Feeder House

NOTE: For complete detaching procedure refer to header Operator's Manual.

Detach the header as follows:

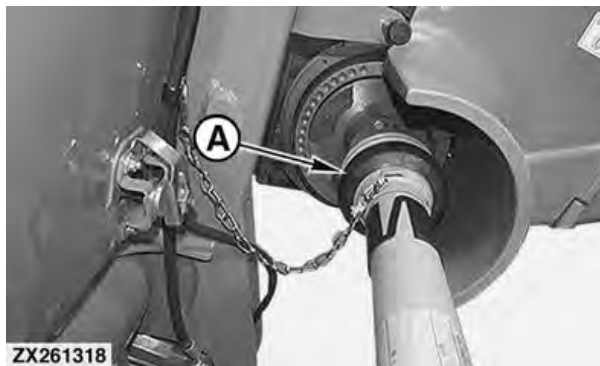
1. Disconnect driveline (A) from feeder house countershaft.
2. Attach driveline (A) to storage support (B). Let quick-attach collar (C) lock completely.
3. Pull up handle (D) to disconnect multicoupler (E) from the feeder house receptacle and disengage the feeder house latch pins.

IMPORTANT: Latch pins are not to be actuated with header on ground. If multicoupler must be actuated with header on ground, unhook cable from handle.

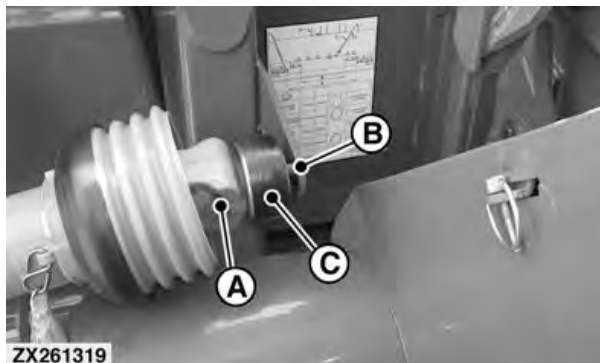
NOTE: Latch pins should be fully retracted when handle is up all the way against the stop. Adjust cable mounting if latch pins are not fully retracted (see Adjust Single Point Latching section).

4. Store multicoupler (E) on header storage bracket and secure with handle (F).
5. Slightly lower the feeder house until hooks are below top beam of header, and drive machine slowly rearward.

A—Driveline	D—Handle
B—Support	E—Multicoupler
C—Quick-Attach Collar	F—Handle



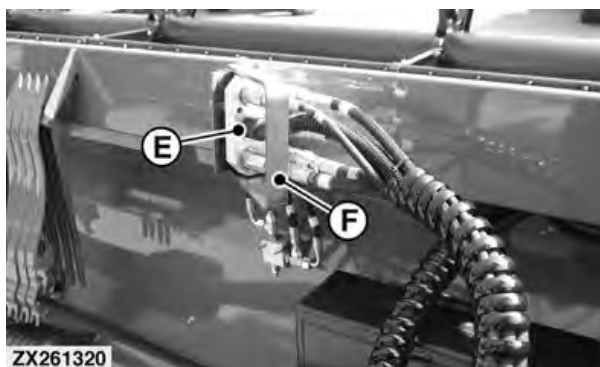
ZX261318—UN—23OCT15



ZX261319—UN—23OCT15



ZX261317—UN—23OCT15



ZX261320—UN—23OCT15

OUCC002,0004A56 -19-27JAN16-4/4

Adjust Single Point Latching

NOTE: On Lateral Tilt Feeder House: Adjustments must only be made to cable at multicoupler handle.

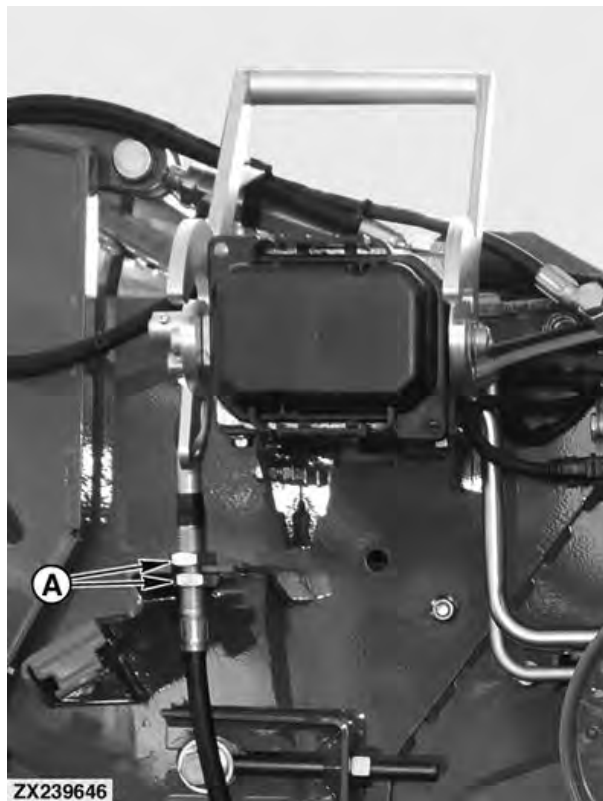
Open left-hand feeder house shield.

Loosen cable lock nuts (A).

IMPORTANT: Verify that handle is against stop on multicoupler. Failure to verify that handle is against stop results in inaccurate pin dimensions and could result in header falling off while harvesting or transporting.

Rest multicoupler handle against stop.

A—Lock Nuts



OUCC002,0004A57 -19-27JAN16-1/5

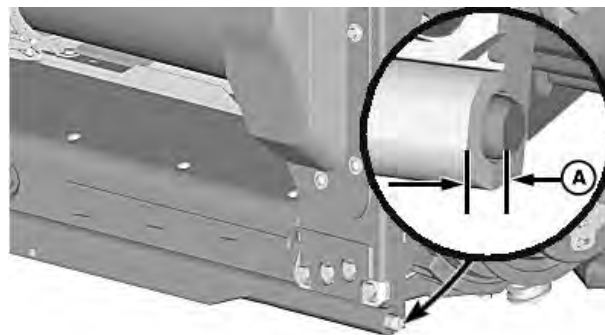
NOTE: Moving cable "up" in bracket pulls pin farther in.

Moving cable "down" in bracket pushes pin farther out.

Adjust cable in bracket as needed for proper pin adjustment:

- Left-hand latching pin must be flush to +/- 2 mm (0.08 in) (A).

A—Dimension



Left-Hand Latching Pin

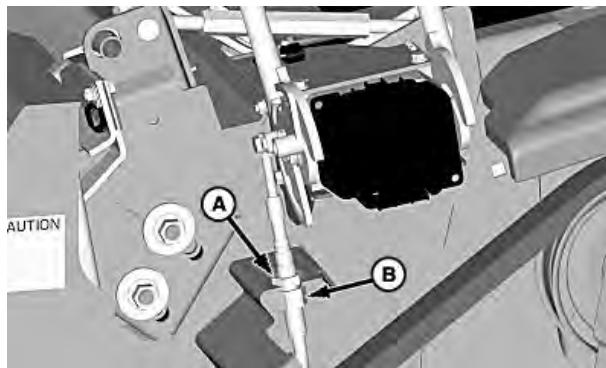
Continued on next page

OUCC002,0004A57 -19-27JAN16-2/5

Hold bottom lock nut (B) and tighten top lock nut (A).

A—Top Lock Nut

B—Bottom Lock Nut



H90932—UN—28FEB08

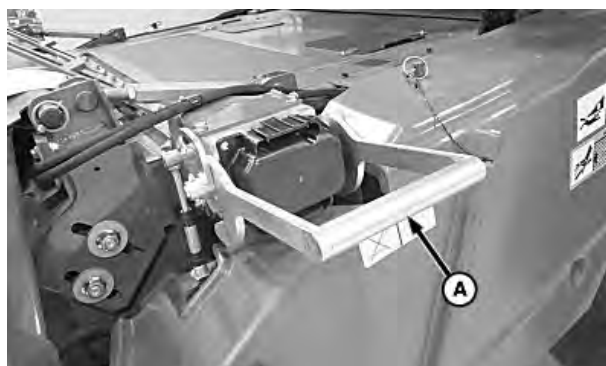
OUCC002,0004A57 -19-27JAN16-3/5

IMPORTANT: Failure to verify that pins are set to specified dimensions could result in header falling off while harvesting or transporting.

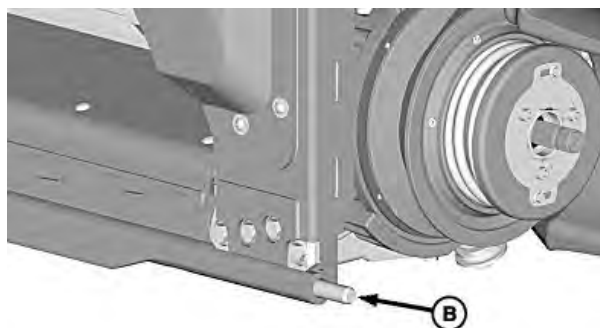
Fully lower multicoupler handle (A) and verify pins (B) (both sides) are set to **45—52 mm (1.77—2 in)**. Readjust if not set to specification.

A—Multicoupler Handle

B—Pins



H109781—UN—05FEB14



H90933—UN—28FEB08

Continued on next page

OUCC002,0004A57 -19-27JAN16-4/5

If pin in and out settings cannot be achieved, check feeder house lower cable end.

Adjustments should be made to lower end of latching cable if threads (A) are not centered in bracket (B).

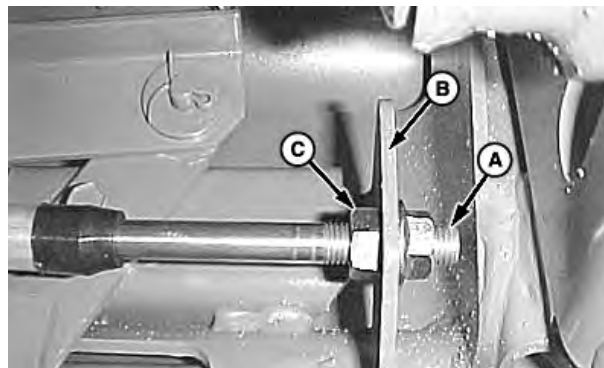
Loosen lock nuts (C) and adjust cable so that threads are centered in bracket.

Tighten lock nuts.

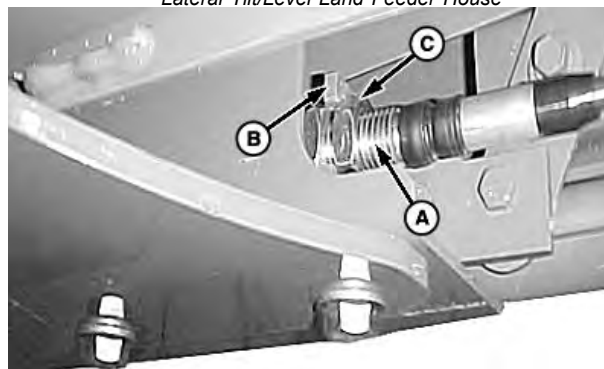
Readjust latch pin "in and out" dimensions, if necessary.

A—Threads
B—Bracket

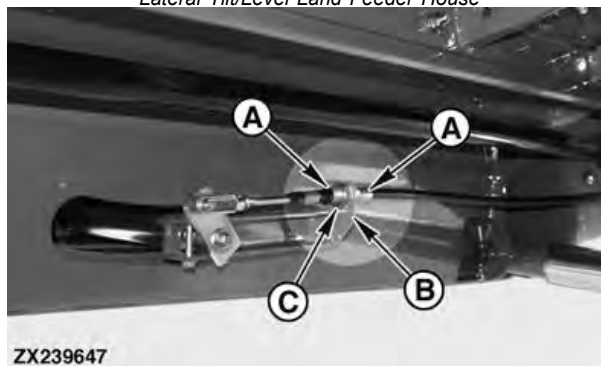
C—Lock Nuts



Lateral Tilt/Level Land Feeder House



Lateral Tilt/Level Land Feeder House



ZX239647

HillMaster™ Feeder House

OUC002,0004A57 -19-27JAN16-5/5

H79380 —UN—10DEC03

H79389 —UN—10DEC03

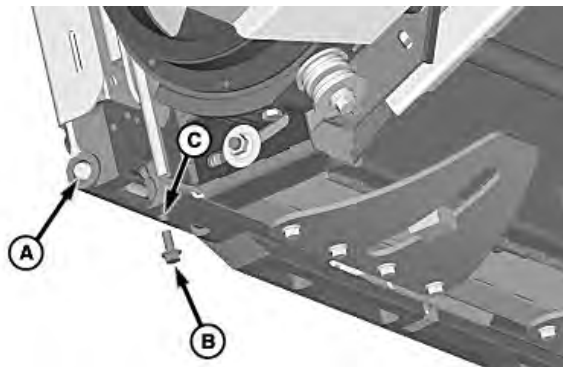
ZX239647 —UN—16APR15

Unlatch Feeder House Manually

To remove header if shear screw fails, push latching pins (A) through latch plates and install M12 cap screw (B) in hole (C). Repeat on opposite side.

A—Latching Pins
B—Cap Screw

C—Hole



OUC002,0004A04 -19-21JAN16-1/1

H84881 —UN—04NOV05

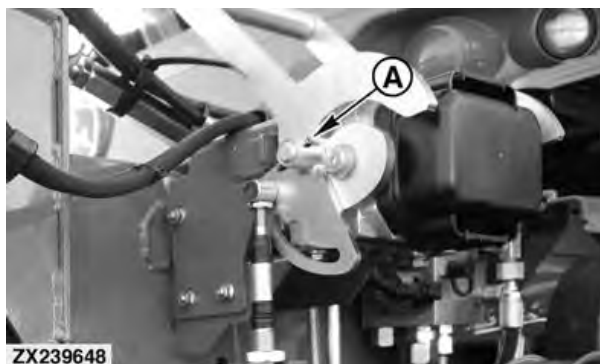
Shear Screw Location

NOTE: Three extra shear screws are provided.

If shear screw (A) breaks, remove and replace with extra shear screw (B).

A—Shear Screw

B—Extra Shear Screws



ZX239648 —UN—16APR15



ZX239649 —UN—16APR15

OUCC002,0004A05 -19-21JAN16-1/1

Basic Machine Settings—Harvesting Tips

General Settings

Adjust machine to crop being harvested and to field conditions.

Select a ground speed that does not overload machine. Engine must be at full rpm to keep separator at full speed. Select a ground speed for slower travel, but do not slow engine speed.

If concave is set too close for harvested crop, straw will be excessively ground up requiring more horsepower to thresh the crop.

If concave is set too wide for harvested crop, it will not be completely threshed.

After concave is adjusted properly, adjust separator speed to achieve maximum threshing with the least amount of crop damage. If crop damage does occur, do not widen threshing clearance. Concave spacing in these crops has very little effect on seed damage.

Crops such as edible beans and peas are easily cracked and can require the use of a slower feed accelerator drive. When harvesting edible beans and peas keep machine full to provide enough material to cushion the crop against cracking.

For potential improvements in straw quality consider that the following can help improve straw quality depending on conditions:

- Slowing feeder house chain speed
- Opening concave
- Reducing spacing between threshing elements

When using a cutting platform, cut crop as high as possible without loss of low heads. Adjust reel position and speed for even feeding. Keep cutterbar in register and guards in alignment for clean cutting.

When harvesting corn, keep corn head only as low as necessary for ears. Keep it centered in the rows to prevent ear loss.

When using a belt pickup, keep windrow centered so material is fed evenly into feeder house. Grain heads must be lying in one direction. Operate machine so heads are picked up first.

When harvesting soybeans with a corn head, keep header as low as possible. When harvesting crops such as sorghum (milo) or sunflowers, operate header just low enough to cut the heads from the stalks.

Adjust chaffer openings to pass grain or seed to the lower sieve in the first two-thirds of the chaffer without admitting too much coarse material.

Use as much air as possible without blowing over clean grain and seed. Heavy crops require more air than light seed crops.

To fine tune settings and adapt machine to crop and harvesting conditions, refer to:

- **Crop Settings—Automatic Combine Adjust (ACA)** **Crop Settings** section.
- **Crop Settings—Manual Settings Range (W Series or T Series)** section.
- **Machine-to-Crop Conversion Chart (W Series or T Series)** section.

Cylinder/Concave Specific Settings

An excessive cylinder speed leads to:

- High chaff generation.
- Broken kernels.
- Bad straw quality.

A too low cylinder speed leads to:

- A risk of blockage.
- Separator losses (low centrifugal force and unthreshed kernels).

A too big concave opening leads to:

- Unthreshed heads.
- Kernels with husk.
- Kernels with awns.

A too small concave opening leads to:

- An increased power consumption
- Limited throughput

De-awning plates are recommended for bearded crops such as durum and barley, and closing concave does not solve the issue.

NOTE: De-awning plates reduce separation capacity.

If equipped with, swing booster bar in for all small grains, unless there are too much broken kernels that cannot be eliminated with another adjustment.

Cleaning Shoe Specific Settings

Settings guideline:

1. Increase cleaning fan speed as high as possible without losses.
2. Open lower sieve until chaff gets in grain tank, close again.
3. Reduce cleaning fan speed until chaff gets in grain, increase again.

Check if:

- Sieve type fits to crop.
- Actual and displayed sieve opening match.
- Precleaner is at 10 mm (0.4 in) opening.

Settings:

- Set machine to ACA for each crop.

Continued on next page

OUC002.0004A4E -19-27JAN16-1/2

- Keep in mind that:
 - A bigger sieve openings needs a higher cleaning fan speed.
 - A smaller sieve opening needs a slower cleaning fan speed.
 - Use HP sieves with cleaning fan speed increased by 100 rpm.
 - For best performance keep tailings down.

An excessive cleaning fan speed leads to:

- Shoe losses. Kernels are blown out of the back of the machine.
- High tailings. Grain is prevented from falling through the sieve.

A too low cleaning fan speed leads to:

- Shoe losses. Kernels walk out of the back of the machine as they cannot make their way through the chaff mat.
- Dirty grain tank. Chaff can fall through sieve.

A too big precleaner opening (never more than 10 mm [0.4 in]) leads to separator losses on T series machine.

Air blast from precleaner will disturb separation at rear beater grate and at the front of the walkers (Separator performance reduction).

A too far closed precleaner leads to less available pre-separation area.

A too big chaffer opening leads to high tailings (with high chaff amount).

A too small chaffer opening leads to shoe losses (kernels cannot fall through as crop mat is not aerated enough).

A too big sieve opening leads to dirty grain tank.

A too small sieve opening leads to:

- High tailings (with lots of free grain as kernels cannot fall through).
- Separator losses (free grain in tailings are returned into separator and may appear as separator losses).

OUC002,0004A4E -19-27JAN16-2/2

Crop Settings—Automatic Combine Adjust (ACA) Crop Settings

The crops listed below are stored in the automatic combine adjust system (see **Operating the Controls and Displays** section).

Crop	Threshing Cylinder Speed (rpm)	Threshing Clearance (mm)	Cleaning Fan Speed (rpm)	Chaffer Position (mm)	Sieve Position (mm)	Precleaner Position (mm)
Wheat - Winter	950	8	1200	16	8	10
Wheat - Spring	950	4	1100	16	8	10
Barley	900	8	1100	17	8	10
Sorghum	600	25	900	16	6	10
Rye	900	10	1100	16	8	10
Oats	950	12	900	16	9	10
Canola	450	30	780	12	5	10
Rape seed - Wet	450	30	750	12	5	10
Rape seed - Dry	400	30	800	12	5	10
Grass seeds	950	8	550	15	6	10
Peas	380	30	1100	16	10	10
Soybeans	550	30	1000	16	10	10
Sunflowers	350	40	1000	15	7	10
Corn - Dry	380	35	1250	17	12	10
Corn - Wet	450	35	1350	19	12	10
Rice	550	10	1000	16	6	10
Triticale	900	6	1100	16	8	10
Alfalfa	600	0	700	12	3	10
Lentils	400	15	760	18	12	10
Mustard	750	7	750	10	5	10
Navy beans	250	28	1000	16	11	10
Popcorn	400	30	1250	15	10	10
Safflower	600	10	1050	16	6	10
Chickpeas	600	20	1000	15	10	10
Lupins	500	25	1100	16	6	10
Millet	550	15	950	12	5	10
Flax	900	6	900	12	3	10
Edible beans	250	25	1000	16	11	10

OUCC002,0004A58 -19-27JAN16-1/1

Crop Settings—Manual Settings Range (W Series)

Depending on harvesting conditions, the required setting may be somewhere within the following ranges.

Crop	Threshing Cylinder Speed (rpm)	Threshing Clearance (mm)	Cleaning Fan Speed (rpm)	Chaffer Position (mm)	Sieve Position (mm)	Precleaner Position (mm)	Beater Grate Position
Wheat - Winter	950	1050 - 1350	2 - 12	15 - 18	5 - 9	10	Closed
Wheat - Spring	750 - 950	1050 - 1350	2 - 12	15 - 18	5 - 9	10	Closed
Barley	750 - 950	950 - 1300	2 - 12	16 - 20	5 - 9	10	Closed
Sorghum	450 - 750	750 - 1050	15 - 30	12 - 18	4 - 10	10	Closed
Rye	750 - 950	1000 - 1300	2 - 12	15 - 18	5 - 9	10	Closed
Oats	750 - 950	750 - 1000	8 - 15	15 - 20	5 - 9	10	Closed
Canola	400 - 650	750 - 1050	25 - 40	12 - 18	3 - 6	10	Open
Rape seed - Wet	400 - 650	700 - 1000	25 - 40	12 - 18	3 - 6	10	Open
Rape seed - Dry	400 - 650	750 - 1050	25 - 40	12 - 18	3 - 6	10	Open
Grass seeds	650 - 950	440 - 600	5 - 10	8 - 15	2 - 8	10	Closed
Peas	300 - 450	1000 - 1300	25 - 35	14 - 20	8 - 14	10	Closed
Soybeans	450 - 650	900 - 1100	20 - 35	14 - 20	8 - 12	10	Closed
Sunflowers	250 - 400	900 - 1100	35 - 40	10 - 15	4 - 10	10	Open
Corn - Dry	250 - 480	1050 - 1350	25 - 38	14 - 22	10 - 18	10	Open
Corn - Wet	250 - 480	1050 - 1350	25 - 38	14 - 22	10 - 18	10	Open
Rice	400 - 650	900 - 1200	15 - 30	15 - 20	5 - 9	10	Closed
Triticale	750 - 950	1000 - 1300	2 - 12	15 - 18	5 - 9	10	Closed
Alfalfa	480 - 800	700 - 850	0 - 5	10 - 18	1 - 6	10	Closed
Lentils	300 - 480	700 - 850	10 - 20	14 - 22	8 - 14	10	Closed
Mustard	600 - 900	700 - 900	4 - 10	8 - 14	4 - 8	10	Closed
Navy beans	250 - 350	900 - 1300	15 - 30	14 - 22	10 - 18	10	Closed
Popcorn	250 - 450	1000 - 1300	25 - 38	14 - 18	6 - 8	10	Closed
Safflower	450 - 750	900 - 1200	8 - 14	12 - 18	4 - 10	10	Closed
Chickpeas	450 - 800	900 - 1100	15 - 30	12 - 18	8 - 12	10	Closed
Lupins	450 - 800	950 - 1200	15 - 30	12 - 18	4 - 10	10	Closed
Millet	480 - 650	850 - 1100	10 - 20	8 - 14	4 - 8	10	Open
Flax	800 - 950	800 - 1100	0 - 10	8 - 15	2 - 8	10	Closed
Edible beans	250 - 350	950 - 1350	15 - 30	14 - 22	10 - 18	10	Open

OUCC002,0004A59 -19-27JAN16-1/1

Machine-to-Crop Conversion Chart (W Series)

	Small Grain	Grass Seed	Rape Seed	Sun-flower	Peas & Beans	Rice	Dry Corn	Wet Corn	CCM
Feeder House									
Drum Position	Down	Down	Up	Down	Up	Down	Up	Up	Up
Sprocket (teeth)	High (33)	High (33)	High (33)	Slow (15)	Slow (15)	High (33)	Slow (15)	Slow (15)	Slow (15)
Feeder house top shaft scraper	No	No	If needed	No	No	Yes	If needed	If needed	If needed
Perforated doors	No	No	No	No	Yes	No	No	No	No
Threshing									
Stone trap cover plate	No	No	No	Yes	No	No	Yes	Yes	Yes
Booster bar	If needed	No	No	No	No	No	No	No	No
Concave small grain - full wire with de-awing plates	Yes	Yes	Yes	Yes	No	No	No	No	No
Concave universal - full wire with de-awing plates	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Concave mixed short wire with insert	Yes	No	Yes	No	No	No	No	No	Yes
Spike-tooth cylinder and concave with insert	No	No	No	No	No	Yes	No	No	No
Cylinder filling plates	No	No	No	Yes	Perforated if needed	No	If needed	If needed	If needed
De-awing plates	If needed	No need	No need	No need	No need	No need	No need	No need	No need
2-Speed cylinder drive	No	No	If needed	Yes	Yes	No	Yes	Yes	Yes
Threshing speed range	High	High	If needed	Low	Low	High	Low	Low	Low
Threshing speed (rpm)	900/950	950	400/450	350	250/600	550	380	450	400
Threshing clearance (mm)	8/10	8	30	40	20/30	25	35	35	30
Separation									
Rear beater grate position	Closed	Closed	Open	Open	Open	Close	Open	Open	Open
Rear beater speed reduction	No	No	No	No	Yes	No	Yes	If needed	No
Fishback	If needed	If needed	No	No	No	If needed	No	No	No
Power separator	If needed	No need	If needed	If needed	No need	No need	No need	No need	No need
Rubber Flap	No	No	No	Yes	No	No	No	No	No
Cleaning shoe									
Precleaner (mm)	10	10	10	10	10	10	10	10	10
Chaffer standard—GP	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Chaffer corn—CZ4	No	No	No	No	No	No	Yes	Yes	No
Chaffer—HP	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Chaffer—CCM (frog mouth)	No	No	No	No	No	No	No	No	Yes
Side hill kit for HP chaffer	If needed	If needed	If needed	If needed	If needed	No	No	No	No
Sieve standard—GP	Yes	Yes	Yes	Yes	Yes	Yes	If needed	No	No
Sieve corn—CZ4	No	No	No	No	No	No	Yes	Yes	Yes
Tailings Cover	No	No	No	No	No	No	No	If needed	Yes
Sheet located in rear hood to separate chaff from straw flow	Can be used if no straw chopper is installed								
Cleaning fan brush	No	No	No	No	No	No	Yes	Yes	Yes
Dual range cleaning fan drive	No	Yes	No	No	No	No	No	No	No
Cleaning fan speed (rpm)	1100/1200	550	750/800	1000	1000/1100	1050	1250	1350	1250
Chaffer position (mm)	16/17	15	12	15	15/16	16	17	19	15
Sieve position (mm)	8	6	5	7	10/11	6	12	12	10
Grain Handling									
Clean grain elevator steel paddles	No	Yes	No	No	Yes	No	No	No	No
Adjustable auger cover position	1-3	4-6	1-3	1-3	1-3	1-3	1-3	1-3	1-3
U-joint paddle on grain tank filling auger	No need	Yes	No need	No need	No need	No need	No need	No need	No need

Continued on next page

OUC0002.0004A26 -19-06FEB16-1/2

Field Operation

	Small Grain	Grass Seed	Rape Seed	Sun-flower	Peas & Beans	Rice	Dry Corn	Wet Corn	CCM
Perforated doors for elevator, cross auger, perf. tailing auger tube	No	No	No	No	Yes	No	No	No	No
Clean grain elevator slip clutch	No	Yes	No	No	Yes	No	No	No	No
Change of grain tank speeds	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Residue									
Dual speed chopper drive	Option	Option	Option	Yes	Option	Option	Yes	Yes	Yes
Chaff spreader	Option	Option	Option	Option	Option	Option	Option	Option	Option
2-speed chaff spreader valve	Option	Option	Option	Option	Option	No	Yes	Yes	Yes
2-speed chaff spreader valve range speed	High	High	High	High	High	Not needed	Low	Low	Low
Speed of chopper	High	High	High	Slow	Slow	High	Slow	Slow	Slow
Counterknife position	Installed	Installed	Retracted	Re-tracted	Retracted	Removed	Removed	Removed	Re-moved
Crossbar	As needed	As needed	Retracted	Re-tracted	Retracted	Removed	Removed	Removed	Re-moved
Fixed windrow deflector rake	If needed	If needed	If needed	If needed	If needed	If needed	If needed	If needed	If needed
Adjustable windrow deflector rake	If needed	If needed	If needed	If needed	If needed	If needed	If needed	If needed	If needed
Chopper cob deflector	No	No	No	No	No	No	Yes	Yes	Yes
Residue Corn kit	No	No	No	No	No	No	Yes	Yes	Yes
Chaff spreader extension paddles	No	No	No	No	No	No	Yes	Yes	Yes
Counterknife sheet	No	No	No	No	No	No	Yes	Yes	Yes

OUEC002,0004A26 -19-06FEB16-2/2

Crop Settings—Manual Settings Range (T Series)

Depending on harvesting conditions, the required setting may be somewhere within the following ranges.

NOTE: To obtain some speeds, installation of speed reduction kit is required. Contact your John Deere dealer.

Crop	Threshing Cylinder Speed (rpm)	Threshing Clearance (mm)	Cleaning Fan Speed (rpm)	Chaffer Position (mm)	Sieve Position (mm)	Precleaner Position (mm)	Separator Rotor Speed (rpm)	Separator Grate Position	Rear Beater Grate Position
Wheat - Spring	750 - 950	1050 - 1350	2 - 12	15 - 18	5 - 9	10	740	Closed	Closed
Wheat - Winter	750 - 950	1050 - 1350	2 - 12	15 - 18	5 - 9	10	740	Closed	Closed
Barley	750 - 950	950 - 1350	2 - 12	16 - 20	5 - 9	10	740	Closed	Closed
Sorghum	450 - 750	750 - 1050	15 - 30	12 - 18	4 - 10	10	370	Open	Closed
Rye	750 - 950	1000 - 1350	2 - 12	15 - 18	5 - 9	10	740	Closed	Closed
Oats	750 - 950	750 - 1000	8 - 15	15 - 20	5 - 9	10	740	Closed	Closed
Canola	400 - 650	800 - 1050	25 - 40	12 - 18	3 - 6	10	370	Open	Open
Rape seed - Wet	400 - 650	750 - 1050	25 - 40	12 - 18	3 - 6	10	370	Open	Open
Rape seed - Dry	400 - 650	800 - 1050	25 - 40	12 - 18	3 - 6	10	370	Open	Open
Grass seeds	650 - 950	440 - 600	5 - 10	8 - 15	2 - 8	10	740	Closed	Closed
Peas	300 - 450	1000 - 1300	25 - 35	14 - 20	8 - 14	10	310	Open	Closed
Soybeans	450 - 650	900 - 1100	20 - 35	14 - 20	8 - 12	10	370	Open	Closed
Sunflowers	250 - 400	900 - 1100	35 - 40	10 - 15	4 - 10	10	310	Open	Open
Corn - Dry	250 - 400	1050 - 1350	25 - 38	14 - 22	10 - 18	10	260	Open	Open
Corn - Wet	250 - 400	1050 - 1350	25 - 38	14 - 22	10 - 18	10	260	Open	Open
Rice	400 - 650	900 - 1200	15 - 30	15 - 20	5 - 9	10	740	Closed	Closed
Triticale	750 - 950	1000 - 1350	2 - 12	15 - 18	5 - 9	10	740	Closed	Closed
Alfalfa	480 - 800	700 - 850	0 - 5	10 - 18	1 - 6	10	370	Open	Closed
Lentils	300 - 480	700 - 850	10 - 20	14 - 22	8 - 14	10	370	Open	Closed
Mustard	600 - 900	700 - 900	4 - 10	8 - 14	4 - 8	10	370	Open	Closed
Navy beans	220 - 350	900 - 1300	15 - 30	14 - 22	10 - 18	10	370	Open	Closed
Popcorn	200 - 450	1000 - 1300	25 - 38	10 - 14	6 - 8	10	260	Open	Closed
Safflower	450 - 750	900 - 1200	8 - 14	12 - 18	4 - 10	10	370	Open	Closed
Chickpeas	450 - 800	900 - 1100	15 - 30	12 - 18	8 - 12	10	370	Open	Closed
Lupins	450 - 800	950 - 1200	15 - 30	12 - 18	4 - 10	10	370	Open	Closed

OUC002.0004A24 -19-23JAN16-1/1

Machine-to-Crop Conversion Chart (T Series)

	Small Grain	Grass Seed	Rape Seed	Sunflower	Peas & Beans	Dry Corn	Wet Corn	CCM
Feeder House								
Drum Position	Down	Down	Up	Up	Down	Up	Up	Up
Sprocket (teeth)	High (33)	High (33)	High (33)	Slow (15)	Slow (15)	Slow (15)	Slow (15)	Slow (15)
Feeder house top shaft scraper	No	No	If needed	No	No	If needed	If needed	If needed
Perforated doors	No	No	No	No	Yes	No	No	No
Threshing								
Stone trap cover plate	No	No	No	Yes	No	Yes	Yes	Yes
Booster bar	If needed	No	No	No	No	No	No	No
Concave small grain - full wire with de-awing plates	Yes	Yes	Yes	Yes	No	No	No	No
Concave universal - full wire with de-awing plates	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cylinder filling plates	No	No	No	Yes	Perforated if needed	If needed	If needed	If needed
De-awing plates	If needed	No need	No need	No need	No need	No need	No need	No need
2-Speed cylinder drive	No	No	If needed	Yes	Yes	Yes	Yes	Yes
Threshing speed range	High	High	If needed	Low	Low	Low	Low	Low
Threshing speed (rpm)	900/950	950	400/450	350	250/600	380	450	400
Threshing clearance (mm)	8/10	8	30	40	20/30	35	35	30
Separation								
Rear beater grate position	Closed	Closed	Open	Open	Open	Open	Open	Open
Separator Grate Position	Closed	Closed	Open	Open	Open	Open	Open	Open
Separator reduced speed	Fast	Fast	Fast	Low	Low	Low	Low	Low
Tangential separator speed 310 rpm kit	No	No	No	No	No	No	Yes	No
Tangential separator speed 260 rpm kit	No	No	No	No	Yes	No	Yes	No
Fishback	If needed	If needed	No	No	No	No	No	No
Rubber Flap	No	No	No	Yes	No	No	No	No
Cleaning shoe								
Precleaner (mm)	10	10	10	10	10	10	10	10
Chaffer standard—GP	Yes	Yes	Yes	Yes	Yes	No	No	No
Chaffer corn—CZ4	No	No	No	No	No	Yes	Yes	No
Chaffer—HP	Yes	Yes	Yes	Yes	Yes	No	No	No
Chaffer—CCM (frog mouth)	No	No	No	No	No	No	No	Yes
Side hill kit for HP chaffer	If needed	If needed	If needed	If needed	If needed	No	No	No
Sieve standard—GP	Yes	Yes	Yes	Yes	Yes	If needed	No	No
Sieve corn—CZ4	No	No	No	No	No	Yes	Yes	Yes
Tailings Cover	No	No	No	No	No	No	If needed	Yes
Sheet located in rear hood to separate chaff from straw flow	Can be used if no straw chopper is installed							
Cleaning fan brush	No	No	No	No	No	Yes	Yes	Yes
Dual range cleaning fan drive	No	Yes	No	No	No	No	No	No
Cleaning fan speed (rpm)	1100/1200	550	750/800	1000	1000/1100	1250	1350	1250
Chaffer position (mm)	16/17	15	12	15	15/16	17	19	15
Sieve position (mm)	8	6	5	7	10/11	12	12	10
Grain Handling								
Clean grain elevator steel paddles	No	Yes	No	No	Yes	No	No	No
Adjustable auger cover position	1-3	4-6	1-3	1-3	1-3	1-3	1-3	1-3
U-joint paddle on grain tank filling auger	No need	Yes	No need	No need	No need	No need	No need	No need
Perforated doors for elevator, cross auger, perf. tailing auger tube	No	No	No	No	Yes	No	No	No
Clean grain elevator slip clutch	No	Yes	No	No	Yes	No	No	No

Continued on next page

OUC0002,0004A25 -19-06FEB16-1/2

Field Operation

	Small Grain	Grass Seed	Rape Seed	Sunflower	Peas & Beans	Dry Corn	Wet Corn	CCM
Change of grain tank speeds	No	Yes	No	No	Yes	Yes	Yes	Yes
Residue								
Dual speed chopper drive	Option	Option	Option	Yes	Option	Yes	Yes	Yes
Chaff spreader	Option	Option	Option	Option	Option	Option	Option	Option
2-speed chaff spreader valve	Option	Option	Option	Option	Option	Yes	Yes	Yes
2-speed chaff spreader valve range speed	High	High	High	High	High	Low	Low	Low
Speed of chopper	High	High	High	Slow	Slow	Slow	Slow	Slow
Counterknife position	Installed	Installed	Retracted	Retracted	Retracted	Removed	Removed	Removed
Crossbar	As needed	As needed	Retracted	Retracted	Retracted	Removed	Removed	Removed
Fixed windrow deflector rake	If needed	If needed	If needed	If needed	If needed	If needed	If needed	If needed
Adjustable windrow deflector rake	If needed	If needed	If needed	If needed	If needed	If needed	If needed	If needed
Chopper cob deflector	No	No	No	No	No	Yes	Yes	Yes
Residue Corn kit	No	No	No	No	No	Yes	Yes	Yes
Chaff spreader extension paddles	No	No	No	No	No	Yes	Yes	Yes
Counterknife sheet	No	No	No	No	No	Yes	Yes	Yes

OUCC002,0004A25 -19-06FEB16-2/2

Operate Harvest Smart™ Feed Rate (If Equipped)

Operating Safely

IMPORTANT: Harvest Smart™ Feed Rate is intended to aid the operator for more efficient machine operation. Operator is still responsible for machine and must continue to pay attention to surrounding environment during operation.

Read and understand this manual before operating Harvest Smart™. Do not let others operate system without instruction. If you do not understand any part of this manual and need assistance, see your John Deere dealer.

When system is activated, remain alert and pay attention to surrounding environment. Be prepared to take control of ground speed when deactivating system at end rows.

Description

Harvest Smart™ Feed Rate varies ground speed to maintain a constant flow of material through machine, maximizing productivity and reducing operator stress. As crop material gets lighter, machine ground speed increases and as crop material gets heavier machine ground speed decreases. **Operator limits maximum ground speed always by pulling back on multi-function lever.** System begins to slow machine ground speed when engine power level goes above operator desired maximum engine power setting. This helps prevent engine from pulling down and from stalling.

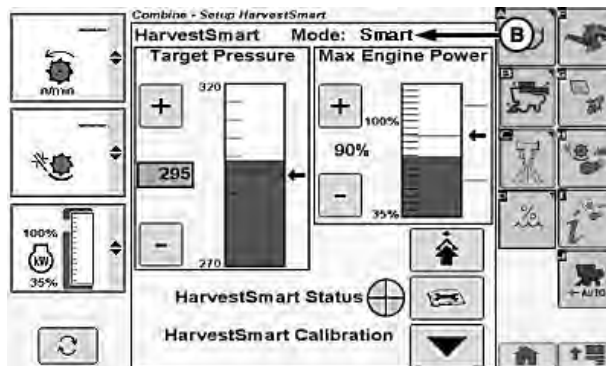
System may not perform optimally if used in the following conditions:

- Extreme Hilly Conditions
- Tangled or Lodged Crop Conditions
- Muddy Conditions

Smart or Capacity Modes

Press Harvest Smart™ feed rate enable button (A) to toggle between the different operating modes (B):

- **Smart Mode:** Monitors loss levels with VisionTrak™ to ensure that system is at operator designated level (loss monitor calibrated). System is set when grain loss



A—Harvest Smart™ Feed Rate Enable Button B—Operating Modes

calibration icon is selected. When loss monitor levels are consistently above or below operator desired levels, system increases or decreases material flow levels, bringing loss levels back into desired range.

NOTE: Smart mode is the preferred operating method for controlling the machine.

- **Capacity Mode:** Maintains a constant material flow allowing machine to increase ground speed when crop materials are lighter and decrease ground speed when crop materials are heavier. Capacity mode does not adjust VisionTrak™ monitor settings, since mode is only maintaining a constant material flow.

Continued on next page

OUCC002,0004A5A -19-27JAN16-1/14

ZX270096 —JUN—26JAN16

H111265 —JUN—23MAY14

Target Pressure

H94473 —UN—31MAR10

NOTE: Target pressure cannot be adjusted through the Harvest Smart™ setup screen in Smart mode.

Target pressure allows operator to adjust target volume without changing VisionTrak™ loss monitor settings. Target volume measures amount of material entering separator by monitoring rotor pressure.

Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when Harvest Smart™ Feed Rate setup icon (A) is highlighted.

Touch or press confirm button when plus (+) icon (B) or minus (-) icon (C) is highlighted or when target pressure box (D) is highlighted to adjust target pressure.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired target pressure value is shown. Press confirm button to save value.

Touchscreen Only: Enter desired target pressure value on numeric display. Touch enter/accept icon to save value.

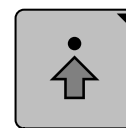
NOTE: Bar graph indicates current target pressure level. Arrow indicator and line display operator setpoint value.

Arrow indicator (E) adjusts to operator setpoint value.

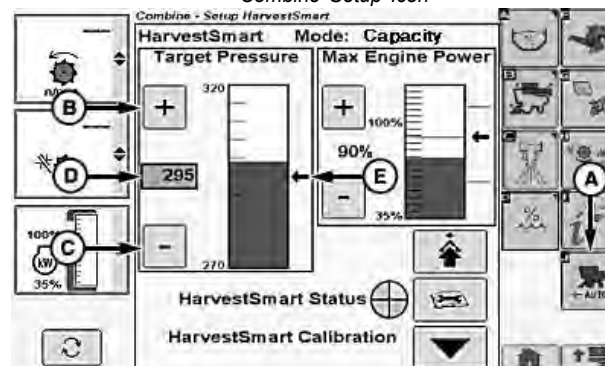
- **System Adjustments:** Target Pressure (30—420) — use this to set target volume or throughput independently of VisionTrak™ loss monitor.

NOTE: Target pressure cannot be adjusted through Harvest Smart™ setup screen while in Smart Mode.

- Parameter can be used when operator likes to adjust target volume (based on rotor load) without changing VisionTrak™ loss monitor calibration.



Combine Setup Icon



- A—Harvest Smart™ Feed Rate Setup Icon
- B—Plus Icon
- C—Minus Icon
- D—Target Pressure Box
- E—Arrow Indicator

- Recommended way of adjusting target pressure is in Smart Mode using up/down arrow buttons on VisionTrak™. Performing settings through VisionTrak™ keeps target volume/loss relationship intact (example: If VisionTrak™ calibration factor is acceptable, but machine maintains a slow ground speed, increase target volume parameter by 20. If ground speed is high, decrease target volume parameter by 20).

Continued on next page

OUC002,0004A5A -19-27JAN16-2/14

H106440 —UN—03JAN13

Max Engine Power

H94473 —UN—31MAR10

Max engine power sets maximum allowable engine load at which Harvest Smart™ is allowed to operate.

Touch or press confirm button when combine setup icon is highlighted.

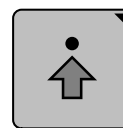
Touch or press confirm button when Harvest Smart™ Feed Rate setup icon (A) is highlighted.

Touch or press confirm button when plus (+) icon (B) or minus (-) icon (C) is highlighted to adjust max engine power.

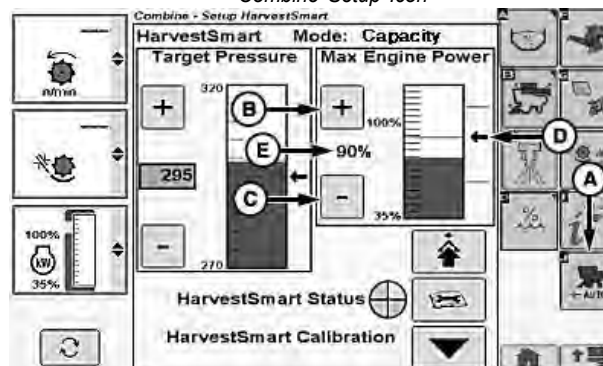
NOTE: Bar graph indicates current engine power level. Arrow indicator and line display operator setpoint value.

Arrow indicator (D) adjusts to operator setpoint value and displays max engine power percentage (E).

- **System Adjustments:** Max Engine Power Icon – use this to set maximum allowable engine load Harvest Smart™ will allow.
 - If slug feeding is a concern, decrease setting to allow for more cushion on engine load.
 - Using engine load to control ground speed can be accomplished by setting value close to operating maximum engine power level. This can be done in crops where there are large header loads relative to threshing loads (example corn).



Combine Setup Icon



A—Harvest Smart™ Feed Rate Setup Icon
B—Plus Icon
C—Minus Icon

D—Arrow Indicator
E—Max Engine Power Percentage

Continued on next page

OUC002,0004A5A -19-27JAN16-3/14

H106441 —UN—03JAN13

Max Harvest Speed

H94473 —UN—31MAR10

Max harvest speed sets maximum allowable ground speed for Harvest Smart™ to operate. System will not exceed setting, regardless of crop volume.

Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when Harvest Smart™ Feed Rate setup icon (A) is highlighted.

Touch or press confirm button when advanced setup icon (B) is highlighted.

Touch or press confirm button when max harvest speed box (C) is highlighted.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired max harvest speed value is shown. Press confirm button to save value.

Touchscreen Only: Enter desired max harvest speed value on numeric display. Touch enter/accept icon to save value.

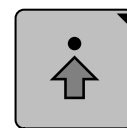
Touch or press confirm button when return/back icon (D) is highlighted to return to previous page.

- **System Adjustments:** Max Harvest Speed (2.0 - 14.0 km/h) (1.2 - 8.6 mph) – use parameter to set maximum ground speed when Harvest Smart™ is active.

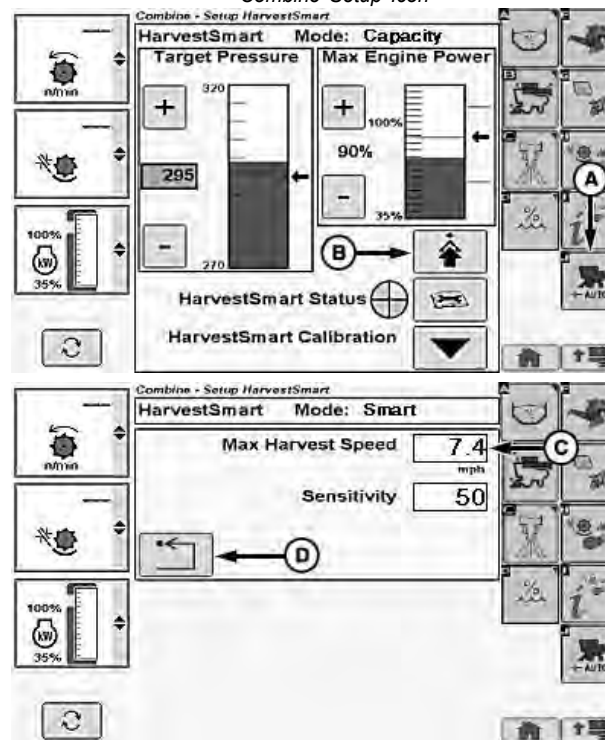
NOTE: Parameters can be modified to increase functionality and optimize performance.

- Sets a comfortable maximum ground speed without having to move multi-function lever back. Otherwise, when crop conditions change from normal yields to light yields, system increases ground speed until target pressure or multi-function lever position speed is reached.
- One option is to set maximum ground speed 0.8—1.6 km/h (0.5—1 mph) higher in lightest crop conditions. By limiting maximum ground speed to just above normal operating speed, system is more efficient (not a large speed range to adapt to and learn parameters).

NOTE: Multi-function lever position set by operator always limits maximum ground speed.



Combine Setup Icon



A—Harvest Smart™ Feed Rate Setup Icon
B—Advanced Setup Icon

C—Max Harvest Speed Box
D—Return/Back Icon

Continued on next page

OUCC002,0004A5A -19-27JAN16-4/14

H106442 —UN—03JAN13

H106492 —UN—08JAN13

Sensitivity

H94473 —UN—31MAR10

Sensitivity sets aggressiveness of Harvest Smart™ response to crop density changes. High response settings cause machine to make abrupt changes to ground speed maintaining crop volume. Low response settings cause machine to make less aggressive changes.

Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when Harvest Smart™ Feed Rate setup icon (A) is highlighted.

Touch or press confirm button when advanced setup icon (B) is highlighted.

Touch or press confirm button when sensitivity box (C) is highlighted.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired sensitivity value is shown. Press confirm button to save value.

Touchscreen Only: Enter desired sensitivity value on numeric display. Touch enter/accept icon to save value.

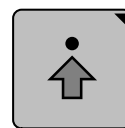
Touch or press confirm button when return/back icon (D) is highlighted to return to previous page.

- **System Adjustments:** Sensitivity (0—100) – use this to adjust how aggressively Harvest Smart™ makes ground speed changes.

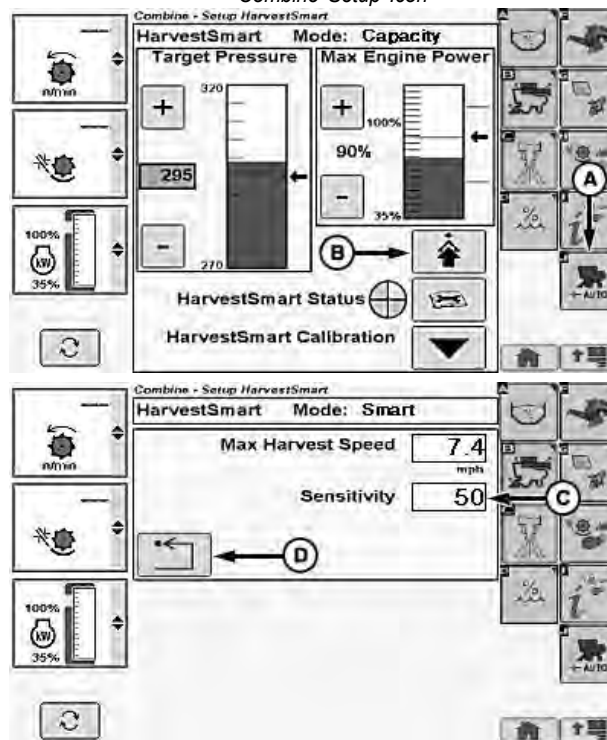
NOTE: Parameters can be modified to increase functionality and optimize performance.

- It is best to start low and make large (10-20) increases until ground speed changes feel too aggressive. Back down numbers from there.
- Rates vary with header because of difference in feeding function (example: corn head might perform best at high rates, whereas a draper needs low rates).
- Rates need to be adjusted based on ground speed. At slow speeds a higher rate might perform better than at high speeds. In highly variable conditions (large

density changes in short distances) it is recommended to keep response rate in mid range setting (40—60).



Combine Setup Icon



A—Harvest Smart™ Feed Rate Setup Icon
B—Advanced Setup Icon

C—Sensitivity Box
D—Return/Back Icon

Continued on next page

OUC002,0004A5A -19-27JAN16-5/14

H106442 —UN—03JAN13

H106493 —UN—08JAN13

Status Identifications

H94473 —UN—31MAR10

Touch or press confirm button when combine setup icon is highlighted.

Touch or press confirm button when Harvest Smart™ Feed Rate setup icon (A) is highlighted.

NOTE: Harvest Smart™ status indicator (B) shows which state that machine is currently operating in.

Touch or press confirm button when diagnostic readings icon (C) is highlighted.

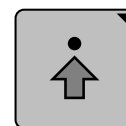
Screen displays the following machine state, condition and status information:

- Harvest Smart™ Installed
- Manual Mode Deactivated
- Separator Engaged
- Header Engaged
- Engine at High Idle
- Road Mode Inactive
- Activation Button 2 or 3 Pressed
- Multi-Function Lever Limited
- Multi-Function Lever Position
- Harvest Smart™ Commanded Position

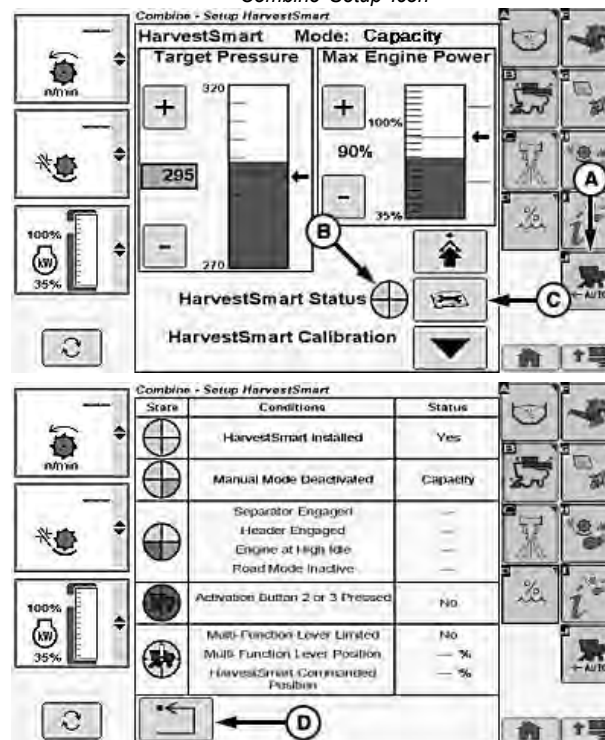
Touch or press confirm button when return/back icon (D) is highlighted to return to previous page.

A—Harvest Smart™ Feed Rate Setup Icon
B—Harvest Smart™ Status Indicator

C—Diagnostic Readings Icon
D—Return/Back Icon



Combine Setup Icon



Continued on next page

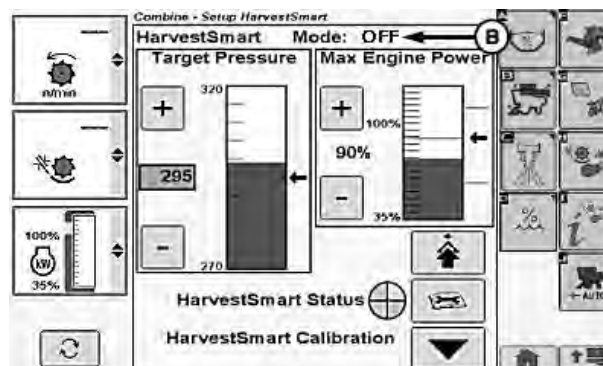
OUC002,0004A5A -19-27JAN16-6/14

H106444 —UN—04JAN13

H106446 —UN—04JAN13



ZX270097 —UN—26JAN16



H106449 —UN—04JAN13

A—Harvest Smart™ Feed Rate Enable Button
B—OFF
C—Header Engage Switch

D—Separator Engage Switch

Initial Calibration

NOTE: Calibration **MUST** be done when harvesting crops for the first time, changing crops, or when field conditions change.

Turn header engage switch (C) and separator engage switch (D) ON and lower header.

Press Harvest Smart™ feed rate enable button (A) until OFF (B) is shown on display.

OUC002,0004A5A -19-27JAN16-7/14

Touch or press confirm button when combine setup icon is highlighted.

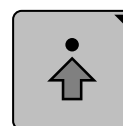
H94473 —UN—31MAR10

Touch or press confirm button when Harvest Smart™ Feed Rate setup icon (A) is highlighted.

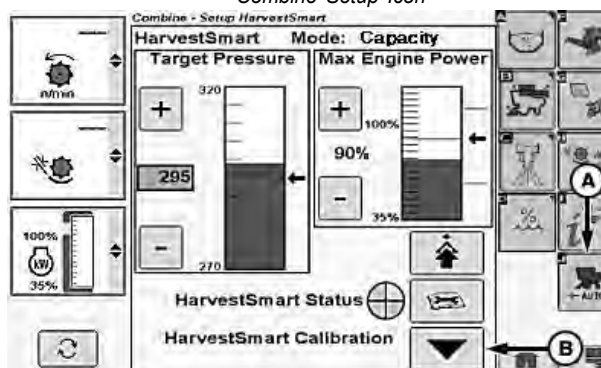
Operate machine in consistent crop at desired loss levels, maintaining that level for 10 – 15 seconds to allow machine to stabilize.

Touch or press confirm button when Harvest Smart™ calibration icon (B) is highlighted. This sets material flow and loss targets for Harvest Smart™.

A—Harvest Smart™ Feed Rate Setup Icon
B—Harvest Smart™ Calibration Icon



Combine Setup Icon



Capacity Mode Shown

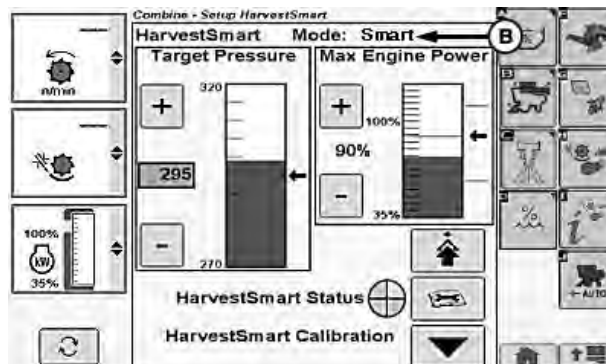
H106450 —UN—04JAN13

Continued on next page

OUC002,0004A5A -19-27JAN16-8/14



ZX270097 —UN—26JAN16



H106438 —UN—03JAN13

A—Harvest Smart™ Feed Rate Enable Button
B—Smart
C—Header Engage Switch

D—Separator Engage Switch

Operation

NOTE: If operator leaves seat while Harvest Smart™ is activated, system will continue to operate for three seconds before system disengages and machine slows to a stop. To activate system, place multi-function lever in neutral position and press activation button 2 or 3 on multi-function lever.

Press Harvest Smart™ feed rate enable button (A) until Smart (B) is shown on display.

Turn header engage switch (C) and separator engage switch (D) ON and lower header.

OUCC002.0004A5A -19-27JAN16-9/14

Press activation button 2 or 3 on multi-function lever to activate system and move multi-function lever fully forward.

NOTE: Multi-function lever limits maximum ground speed. Move multi-function lever rearward to slow or stop machine. Move multi-function lever forward to slowly allow machine to go to operator preset ground speed.

Maximum allowable ground speed is shown on CommandCenter™ display.

CAUTION: Once activation button 1 is pressed machine will accelerate to multi-function lever position, returning full control of multi-function lever to operator.

When coming to end of field, press activation button 1 on multi-function lever. This temporarily deactivates the system, allowing machine to accelerate to multi-function lever position. When system is temporarily deactivated, operator has full control of machine. Pull multi-function lever rearward to slow machine.

NOTE: It can take up to five minutes for Harvest Smart™ to determine an average harvest speed after a new



ZX270098 —UN—26JAN16

calibration is entered. This speed is then used to resume machine ground speed when entering crop and Harvest Smart™ is active.

When entering crops, press activation button 2 or 3 on multi-function lever to reactivate system and move multi-function lever fully forward.

Continued on next page

OUCC002.0004A5A -19-27JAN16-10/14

Additional Information (Unloading Auger ON and Field Conditions)

NOTE: Harvest Smart™ maintains ground speed of machine when unloading auger button is pressed (if multi-function lever is not moved rearward). When unloading system is engaged, system remains in control; however, response is limited to prevent sudden changes that would overrun grain cart.

- When unloading auger drive button (A) is pressed, Harvest Smart™ will still be active. If operator wants manual control while unloading, pull multi-function lever rearward until machine slows slightly to temporarily deactivate system. Operator now has full control of ground speed. When unloading auger button is shut OFF, system automatically reactivates and controls ground speed.
- When crop conditions are highly variable, operator should move multi-function lever rearward to slow and limit entry speed into heavier crop conditions. After 5 seconds move multi-function lever fully forward.



A—Unloading Auger Drive Button

ZX270099 —UN—26JAN16

OUEC002,0004A5A -19-27JAN16-11/14

- If system consistently makes machine drive faster than normal, increase grain loss calibration value by 2 or 3. If system consistently makes machine drive slower than normal, decrease grain loss calibration value by 2 or 3.
 - a. Touch or press confirm button when combine setup icon is highlighted.
 - b. Touch or press confirm button when crop setup icon (A) is highlighted.
 - c. Touch or press confirm button when grain loss calibration value (B) is highlighted.
 - d. Select desired grain loss calibration value:

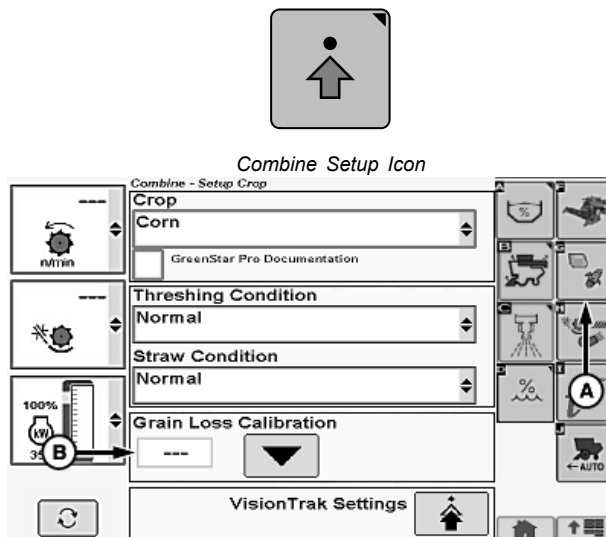
Non-Touchscreen or Touchscreen: Rotate selection dial until desired grain loss calibration value is shown. Press confirm button to save value.

Touchscreen Only: Enter desired grain loss calibration value on numeric display. Touch enter/accept icon to save value.

A—Crop Setup Icon

B—Grain Loss Calibration Value

H94473 —UN—31MAR10



H111425 —UN—12JUN14

Continued on next page

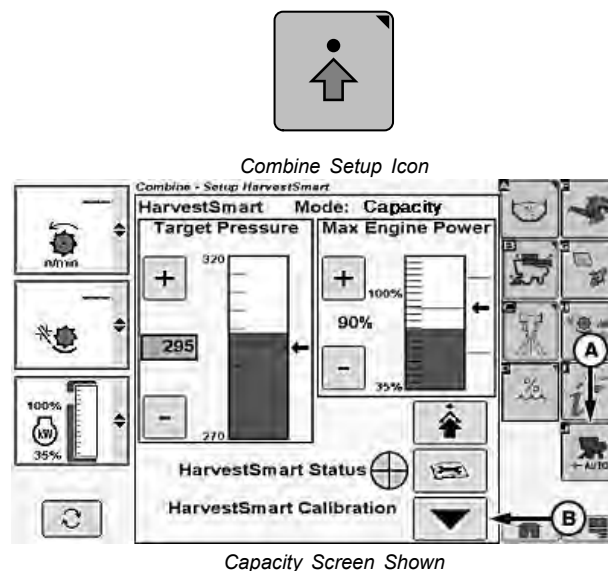
OUEC002,0004A5A -19-27JAN16-12/14

Best Practices

H94473 —UN—31MAR10

- **Calibrate System:** Touch or press confirm button when combine setup icon is highlighted.
Touch or press confirm button when Harvest Smart™ Feed Rate setup icon (A) is highlighted.
Operate machine in desired crop at acceptable throughput and loss level for 15-20 seconds ensuring steady operation (allows rotor pressure and loss levels to steady).
Touch or press confirm button when grain loss calibration icon (B) is highlighted. Calibrating sets the following parameters:
 - Target Volume (Throughput)
 - Target Loss
 - VisionTrak™ Loss Calibration Factor

A—Harvest Smart™ Feed Rate Setup Icon B—Grain Loss Calibration Icon



H106450 —UN—04JAN13

OUC002,0004A5A -19-27JAN16-13/14

- **Activate System:** Press Harvest Smart™ feed rate enable button (A) until Smart or Capacity mode is shown on display:
 - Smart mode - is the recommended method.
 - Capacity mode - if losses are not a concern or VisionTrak™ is not reliable due to conditions.
 Press activation button 2 or 3 on multi-function lever to activate system and move multi-function lever forward allowing system to increase speed accordingly to crop density.

NOTE: System will not command a speed greater than multi-function lever position.

A—Harvest Smart™ Feed Rate Enable Button



ZX270096



ZX270100

ZX270096 —UN—26JAN16

ZX270100 —UN—26JAN16

OUC002,0004A5A -19-27JAN16-14/14

Harvest Smart™ Feed Rate—System and Field Symptoms

Machine is accelerating too slow:

- Increase sensitivity rate, see **Operate Harvest Smart™ Feed Rate—Sensitivity** section.
 - At higher sensitivity rates, machine responds faster to changes.

NOTE: Increasing sensitivity rate by increments of one is hardly noticeable. Increasing sensitivity rate by increments of 20 is more noticeable. After getting in an acceptable performance range, settings can be refined more closely.

Increasing sensitivity rate has no effect on maximum deceleration.

Machine stops or overspeeds dramatically:

- If machine is at low end of threshing speed range and feed rate overspeeds, increase rotor speed by 20 - 30 rpm. Ground speed is held for ten seconds after rotor speed is increased or decreased. After ten seconds a five second average of rotor pressure is taken and a new value is set for target pressure.

NOTE: Harvest Smart™ has limits detecting rotor load at the low and high end of threshing speed. If after fifteen seconds, averaged system seems unstable, calibrate Target Value again.

Ground speed oscillating:

NOTE: When harvesting new crops, it is normal for machine to oscillate for a short period of time.

- Decrease sensitivity rate.
- Machine is operating near maximum power (under rated speed of engine) and is causing machine to oscillate (speed up/slow down ground speed), see **Operate Harvest Smart™ Feed Rate—Sensitivity** section.
 - Decrease sensitivity rate to stop oscillation and adjust target engine speed to control ground speed.

Ground speed oscillating in hilly conditions:

- As machine moves uphill, it keeps a constant ground speed. If machine is moving up a steep hill, machine slows slightly due to high hydrostatic forces, see **Operate Harvest Smart™ Feed Rate—Max Harvest Speed** section.
- As machine moves downhill, it increases in speed, see **Operate Harvest Smart™ Feed Rate—Max Harvest Speed** section.
 - Operator should set a maximum harvest ground speed that is comfortable. This allows machine to not exceed maximum speed when going down a hill.

NOTE: When harvesting in areas where crop conditions are tougher or along waterways and

washouts, it is recommended that operator pull back on multi-function lever. This gains control of machine and slows ground speed if operator feels machine is moving too fast.

Target or ground speed increases with no losses:

- When operating in Smart Mode, VisionTrak™ sensors are not working (matted over, disconnected, or are damaged), which causes machine to increase speed resulting in high losses, see **Operate Harvest Smart™ Feed Rate—Smart or Capacity Modes** section.
 - Change from operating in Smart Mode to Capacity Mode. This allows constant material flow, allowing machine to increase speed when crop materials are lighter and decrease speed when crop materials are heavier.

System loses target values:

- When operating in Smart Mode, system continuously recalculates target pressure values to adjust ground speed.
- Harvest Smart™ must be recalibrated each time key switch is cycled. System does not retain entry speed through key cycles.

Machine reacts too slow for crop changes:

- Machine sensitivity rate adjust is too slow, see **Operate Harvest Smart™ Feed Rate—Sensitivity** section.

NOTE: Increasing sensitivity rate by increments of one is hardly noticeable. Increasing sensitivity rate by increments of 20 is more noticeable.

- Continue to increase sensitivity rate until oscillating occurs and lower sensitivity rate from that point.
- High sensitivity rate settings cause machine to make abrupt ground speed changes to maintain crop volume.
- Low sensitivity rate settings allow for less aggressive changes.

Machine reacts aggressively to crop losses:

- Capacity Mode allows constant material flow, allowing machine to increase speed when crop materials are lighter and decrease speed when crop materials are heavier.
 - Recalibrate VisionTrak™, see **Operate Harvest Smart™ Feed Rate—Initial Calibration** section.
 - If recalibrating VisionTrak™ has no effect, switch to Capacity Mode, see **Operate Harvest Smart™ Feed Rate—Smart or Capacity Modes** section.
 - In some conditions, Capacity Mode is a better mode for operation.

OUC002,0004A28 -19-24JAN16-1/1

Harvest Smart™ Feed Rate—Troubleshooting

Harvest Smart™ Feed Rate Control

Symptom	Problem	Solution
Machine slows way down or stops when Harvest Smart™ Feed Rate Control is activated.	<i>NOTE: It can take up to five minutes for Harvest Smart™ to determine an average harvest speed after a new calibration is entered.</i>	Recalibrate system.
	Machine has a bad calibration value.	
	Harvest Smart™ must be recalibrated each time key switch is cycled.	Recalibrate system.
	System does not retain entry speed through key cycles.	
After calibrating system machine drives too slow.	Target rotor torque is too low.	Increase grain loss calibration value by 2 or 3.
	Machine has a bad calibration value.	Recalibrate system.
After calibrating system machine drives faster than desired.	Target rotor torque is too high.	Decrease grain loss calibration value by 2 or 3.
	Machine has a bad calibration value.	Recalibrate system.
With Harvest Smart™ Feed Rate Control active machine is oscillating speed too much.	Gain/Aggressiveness is set too high.	Decrease sensitivity setting.
	Loss monitor too sensitive.	Try running Harvest Smart™ Feed Rate Control System on Capacity Mode.
With Harvest Smart™ Feed Rate Control active system seems sluggish to respond to changes.	Gain/Aggressiveness is set too low.	Increase sensitivity setting.
Harvest Smart™ Feed Rate Control is operating erratically.	Machine has a bad calibration value.	Recalibrate system.
	Loss monitor not working properly.	Try running Harvest Smart™ Feed Rate Control System on Capacity Mode.

Harvest Smart™ Feed Rate Control Drive By Wire

Symptom	Problem	Solution
Machine stops unexpectedly and will not move.	System has a component out of tolerance.	Return multi-function lever to neutral and clear all diagnostic trouble codes. After codes are cleared try to drive machine.
	Swashplate position sensor detects a stuck valve or has malfunctioned and is showing multiple diagnostic trouble codes.	(Non ProDrive™ Machines) Refer to Harvest Smart™ Feed Rate Limp and Emergency Modes section for further information or see your John Deere dealer.

Continued on next page

OUCC002.0004A29 -19-24JAN16-1/2

Symptom	Problem	Solution
		(ProDrive™ Machines) Refer to Harvest Smart™ Feed Rate Limp Mode section for further information or see your John Deere dealer.
	System has lost one or more of the redundancy channels or channels are in discrepancies and is showing multiple diagnostic trouble codes.	(Non ProDrive™ Machines) Refer to Harvest Smart™ Feed Rate Limp and Emergency Modes section for further information or see your John Deere dealer.
Machine will stop after driver is out of seat for three seconds.	Operator out of seat.	(ProDrive™ Machines) Refer to Harvest Smart™ Feed Rate Limp Mode section for further information or see your John Deere dealer. Operator must return to seat and return multi-function lever to neutral before operation can resume.

OUCC002,0004A29 -19-24JAN16-2/2

Harvest Smart™ Feed Rate—Limp Mode and Emergency Modes

Limp Mode

IMPORTANT: ALLOWS MACHINE TO OPERATE UP TO FOUR HOURS. NOT TO BE USED FOR NORMAL OPERATION. Call your John Deere dealer to have machine inspected immediately.

Use **LIMP** mode to allow machine to move temporarily.

Press main menu icon or button.

Touch or press confirm button when message center icon is highlighted.

Touch or press confirm button when diagnostic address icon is highlighted.

NOTE: Touch or press confirm button when down arrow is highlighted to scroll through listing.

Touch or press confirm button when device drop down menu is highlighted.

Touch or press confirm button when **VCM** control unit is highlighted in menu listing.

Touch or press confirm button when down arrow is highlighted.

Touch or press confirm button when address **103** is highlighted in menu listing.

Touch or press confirm button when enter/accept icon is highlighted.

NOTE: Change 0 to 1 to enable limp mode.

Touch or press confirm button when digit one is highlighted.

- 0= Disabled
- 1= Enabled

Touch or press confirm button when enter/accept icon is highlighted.

Touch or press confirm button when enter/accept icon is highlighted to save address value.

Press main menu icon or button.

Touch or press confirm button when combine main page icon is highlighted.

Emergency Mode

IMPORTANT: ALLOWS MACHINE TO OPERATE UP TO FOUR HOURS. NOT TO BE USED FOR NORMAL

OPERATION. Call your John Deere dealer to have machine inspected immediately.

Use **EMERGENCY** mode to move machine out of the way.

Press main menu icon or button.

Touch or press confirm button when message center icon is highlighted.

Touch or press confirm button when diagnostic address icon is highlighted.

NOTE: Touch or press confirm button when down arrow is highlighted to scroll through listing.

Touch or press confirm button when device drop down menu is highlighted.

Non ProDrive™ Machines: Touch or press confirm button when **VCM** control unit is highlighted in menu listing.

ProDrive™ Machines: Touch or press confirm button when **PTP** control unit is highlighted in menu listing.

Touch or press confirm button when down arrow is highlighted.

Non ProDrive™ Machines: Touch or press confirm button when address **102** is highlighted in menu listing.

ProDrive™ Machines: Touch or press confirm button when address **119** is highlighted in menu listing.

Touch or press confirm button when enter/accept icon is highlighted.

NOTE: Change 0 to 1 to enable emergency mode.

Touch or press confirm button when digit one is highlighted.

- 0= Disabled
- 1= Enabled

Touch or press confirm button when enter/accept icon is highlighted.

Touch or press confirm button when enter/accept icon is highlighted to save address value.

Press main menu icon or button.

Touch or press confirm button when combine main page icon is highlighted.

OUC002,0004A5B -19-27JAN16-1/1

Operate De-Awning Plates

3 articulated plates (A) open or close the first segments of the concave as efficient de-awning device in hard to thresh barley or durum wheat.

IMPORTANT: On machine with quick-engage booster bar on concave, first swing booster bar in then close the de-awning plates (see Operate Quick-Engage Booster Bar (If Equipped) section).

The de-awning plates (A) have two positions:

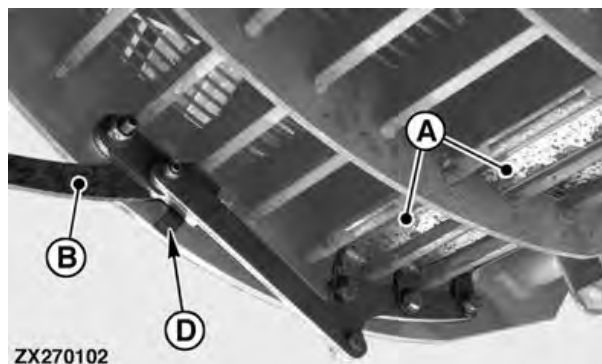
- To set the de-awning plates in closed position, place handle (B) in position(1).
- To set the de-awning plates in open position, place handle (B) in position(2).

NOTE: An operating de-awning plate decal (C) is located on tailings elevator. Spring lock (D) maintains the de-awning plates in closed position (1).

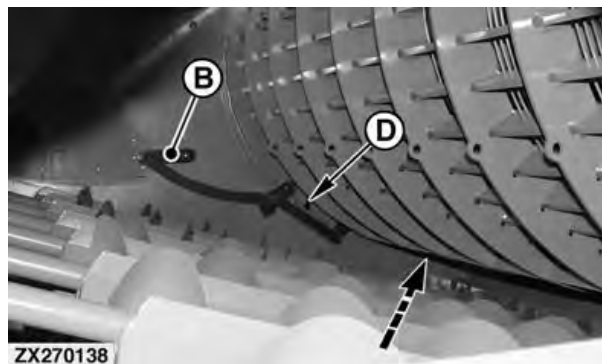
IMPORTANT: Always clean the concave after use of de-awning plates. The spaces between concave wires must be manually cleaned from below (see arrow).

A—Plate
B—Handle
C—Decal

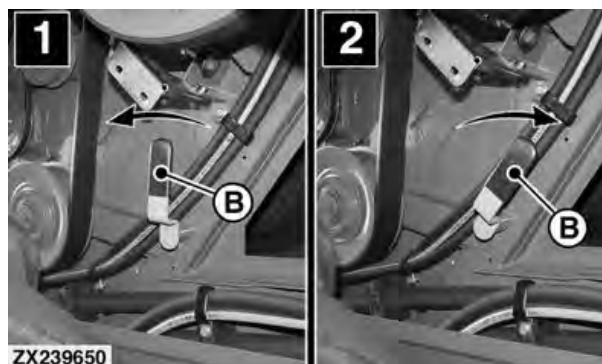
D—Spring Lock
1—Closed Position
2—Open Position



ZX270102 —UN—26JAN16



ZX270138 —UN—27JAN16



ZX239650 —UN—27JAN16



ZX270101 —UN—26JAN16

OUCC002,0004A6F -19-27JAN16-1/1

Operate Quick-Engage Booster Bar (If Equipped)

IMPORTANT: Always fully engage or disengage booster bar. Do not use an intermediate position.

NOTE: An operating quick-engage booster bar decal (C) is located on left-hand side of feeder house.

To increase productivity, operate machine with booster bar (B) engaged and open concave 3 mm (0.12 in) more than usual.

Open stone trap (see **Stone Trap** section).

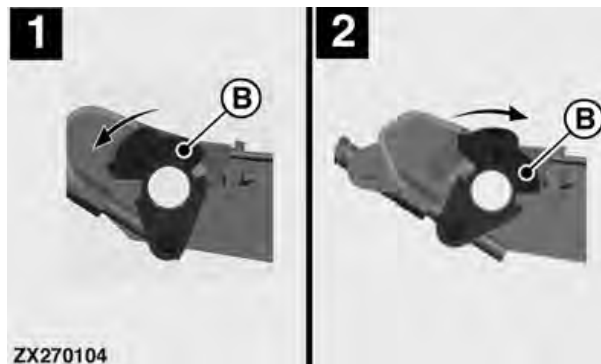
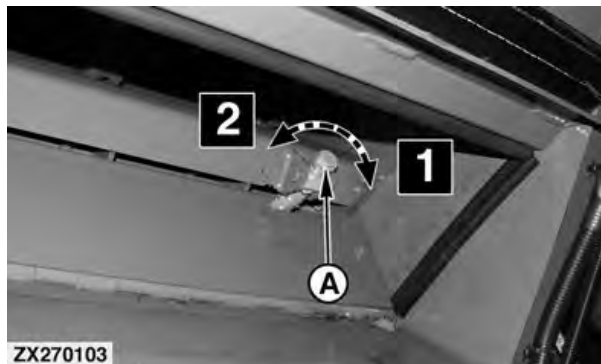
- To swing in booster bar (B) in disengaged position (1), fully rotate adjusting screw (A) clockwise (until it bottoms).
- To swing out booster bar (B) in engaged position (2), fully rotate adjusting screw (A) counterclockwise (until it bottoms).

Harvesting Tips:

- **Small Grain:** Always run with booster bar (B) swung in if grain quality allows it. If a high amount of broken kernels appears, and slowing down cylinder does not help, then swing out booster bar (B).
- **Corn/Beans/Rape:** Swing out booster bar (B).

A—Adjusting Screw
B—Booster Bar
C—Decal

1—Swing Out Position (Disengaged)
2—Swing In Position (Engaged)



ZX270103 —UN—27JAN16

ZX270104 —UN—30JAN16

ZX270105 —UN—26JAN16

OUCC002,0004A5E -19-27JAN16-1/1

Operate the Straw Chopper (If Equipped)

CAUTION: Do not let anyone stand behind the straw chopper while it is running. Combine engine must be off and key removed before adjusting straw chopper.

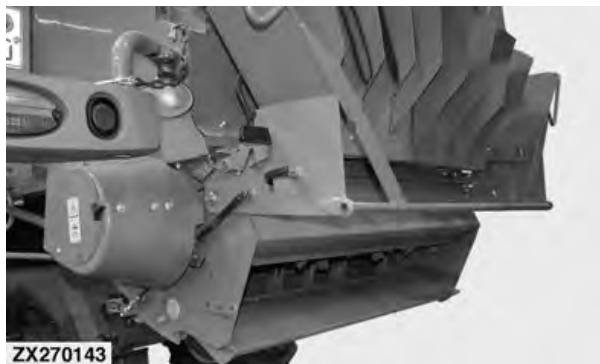
Normal use wears the bottom of the chopper vanes to a sharp edge.

Before carrying out any adjustment or service work, always disengage all drives, shut off engine and wait until all moving parts have stopped.

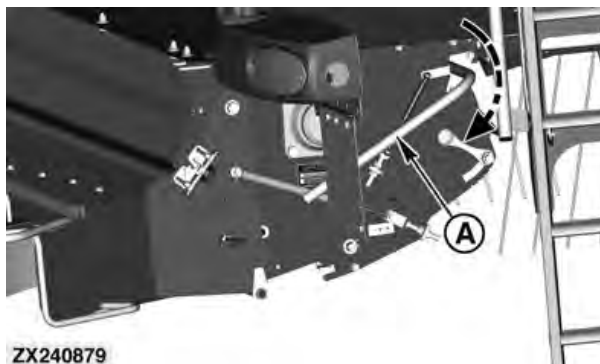
CAUTION: Before switching the straw chopper on and off, switch off all drives, shut off the engine and wait until all moving parts have come to a stop.

Before engaging the straw chopper, put the chop-to-drop door (B) in the chopping position; to do this, move the lever (A) into the chopping position, as shown.

A—Lever in Chopping Position B—Chop-to-Drop Door

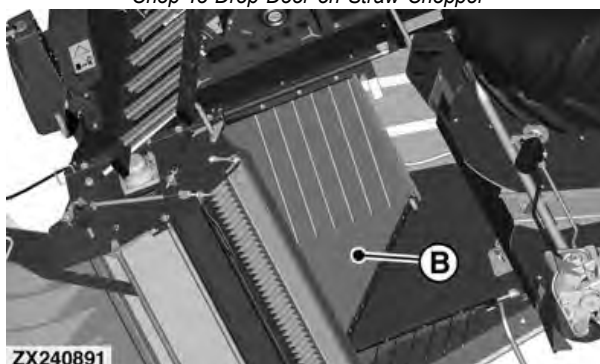


ZX270143—UN—27JAN16



ZX240879—UN—16APR15

Chop-To-Drop Door on Straw Chopper



ZX240891—UN—16APR15

Continued on next page

OUCC002,0004A83 -19-31JAN16-1/8

If the chopper tailboard (A) is in transport position, place tailboard (A) into working position as follows:

1. Release latch (B) from either side.

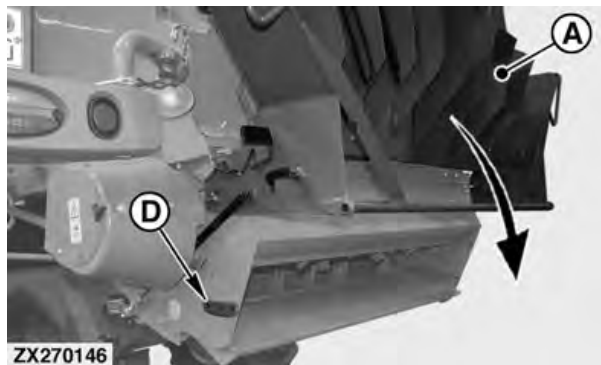
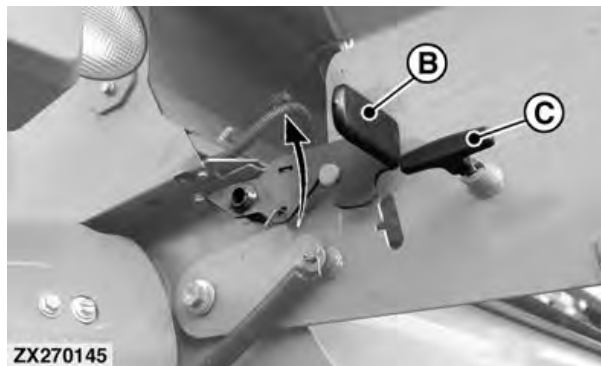
NOTE: One latch (B) is located at each side of the straw chopper. Both latches are simultaneously engaged or disengaged.

2. Pull and rotate knob (C) on both sides.
3. Slowly lower tailboard (A) until knob (C) can be engaged into positioning hole (D). Rotate knob (C) so that it engages.

IMPORTANT: Make sure the knob (C) is firmly engaged into positioning hole (D).

A—Chopper Tailboard
B—Latch

C—Knob
D—Positioning Hole



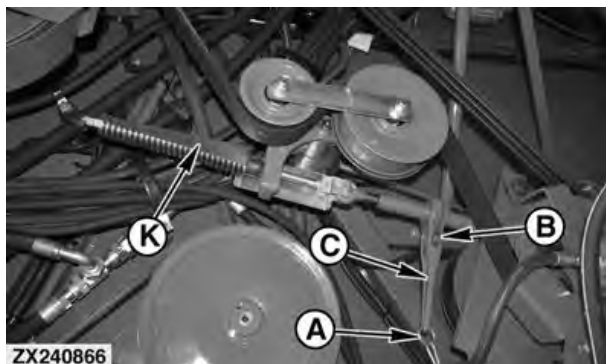
Continued on next page

OUCC002,0004A83 -19-31JAN16-2/8

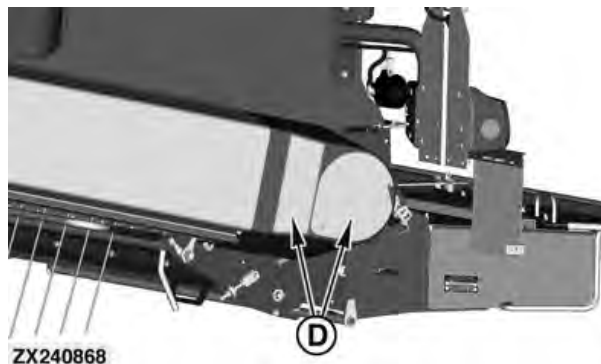
ZX270145 —UN—27 JAN16

ZX270146 —UN—27 JAN16

Adjust Chopping Speed (Dual-Speed Chopper Drive Only)

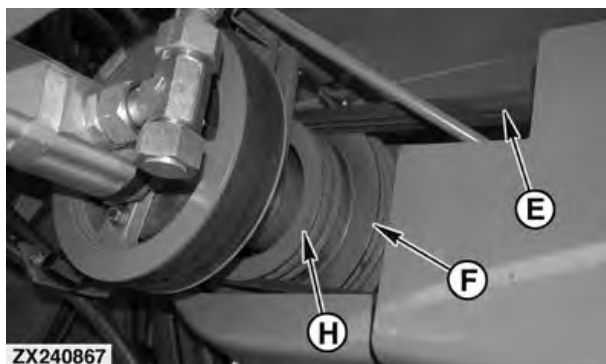


ZX240866 —UN—28JAN16



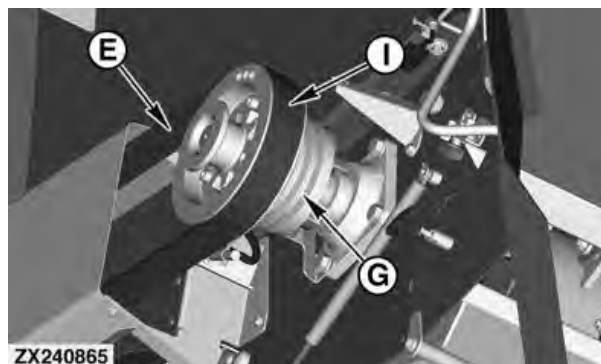
ZX240868

ZX240868 —UN—16APR15



ZX240867

ZX240867 —UN—16APR15



ZX240865

ZX240865 —UN—16APR15

The chopper can be operated at two different drive speeds.

3400 rpm: For small grain with very fine cut chopping, grass seeds and rape seed.

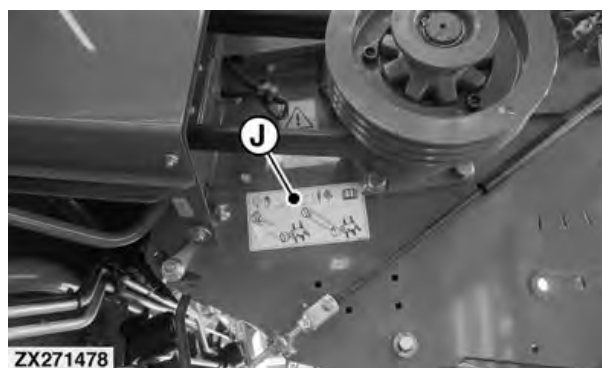
1800 rpm: Recommended for peas, beans, corn, and sunflowers.

IMPORTANT: To chop corn straw and sunflower stems, all the counterknives must be removed, and sheet must be installed (see Straw Chopper Corn Adaptation (Bundle) section).

NOTE: The counterknife carrier must remain installed.

To change the chopping speed:

1. Disconnect safety chain (A).
2. Release pawl (B) so that drive belt tension is relieved when operating ratchet (C).
3. Relieve drive belt tension until the belt can be moved from one pulley to the other.
4. Remove shield assembly (D).
 - To obtain the high speed, place drive belt (E) on the large diameter pulley (F) at the front and on the small diameter pulley (G) at the rear.
 - To obtain the low speed, place drive belt (E) on the small diameter pulley (H) at the front and on the large diameter pulley (I) at the rear.



ZX271478

ZX271478 —UN—28JAN16

A—Safety Chain
B—Pawl
C—Ratchet
D—Shield Assembly
E—Drive Belt
F—Large Pulley—Front

G—Small Pulley—Rear
H—Small Pulley—Front
I—Large Pulley—Rear
J—Decal
K—Tension Gauge

NOTE: Also refer to decal (J).

5. Adjust belt tension using the ratchet (C) so that the tensioning spring is adjusted to the length of tension gauge (K). Secure the ratchet lever with the safety chain (A).

Continued on next page

OUC002,0004A83 -19-31JAN16-3/8

Engage/Disengage Claw Clutch

CAUTION: Before switching the straw chopper on and off, switch off all drives, shut off the engine and wait until all moving parts have come to a stop.

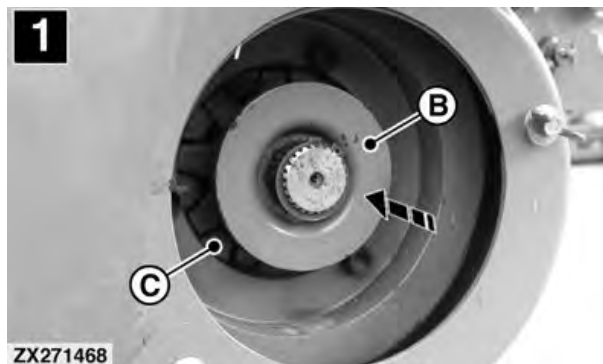
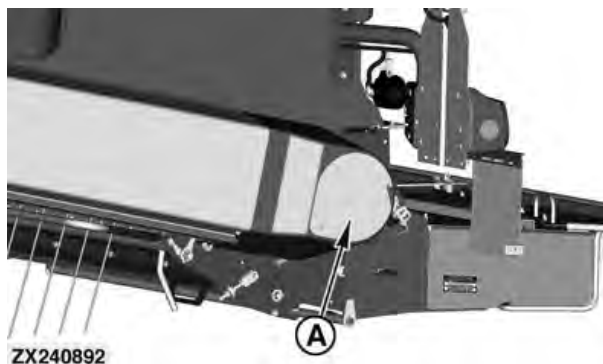
Open cover (A).

- To switch on (Position 1) straw chopper, push flange (B) inwards and engage claw clutch (C).
- To switch off (Position 2) straw chopper, pull out flange (B) and disengage claw clutch (C).

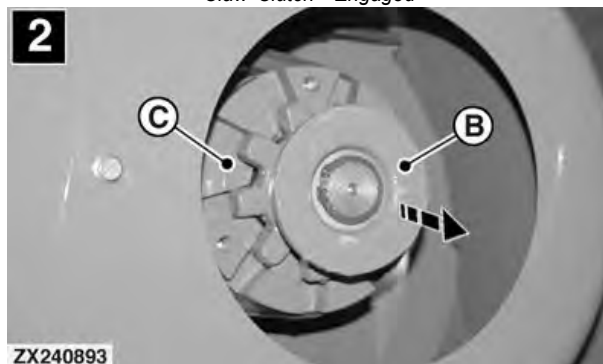
Before switching off, fold chop-to-drop door to the windrow position by lowering lever (D).

Install clutch cover (A) back in place.

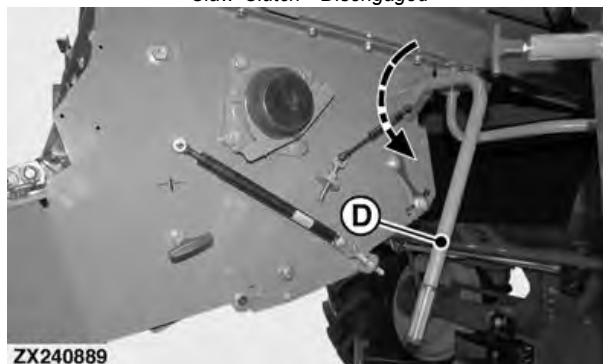
- | | |
|---------------|-----------------------------------|
| A—Cover | D—Lever in Windrow Position |
| B—Flange | 1—Claw Clutch Engaged Position |
| C—Claw Clutch | 2—Claw Clutch Disengaged Position |



Claw Clutch—Engaged



Claw Clutch—Disengaged



Chop-To-Drop Door on Windrows

Continued on next page

OUC002,0004A83 -19-31JAN16-4/8

ZX240892 —UN—16APR15

ZX271468 —UN—27JAN16

ZX240893 —UN—27JAN16

ZX240889 —UN—16APR15

Adjust Spreading Width

NOTE: Remove trash and dirt from chopper housing to achieve an even distribution of chopped material.

Spreading width can be adjusted by positioning straw chopper tailboard (A) to an upper, intermediate or lower position.

Tailboard Adjustment:

1. Hold the straw chopper tailboard assembly by hand, then slightly rotate and release knob (B) (both sides).

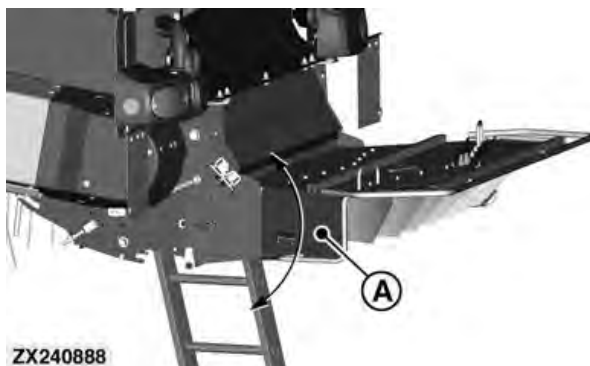
NOTE: Tailboard is supported by gas struts.

2. Align cursor (C) with desired positioning slot (D).
 1. Lower position for a narrow spreading width.
 2. Intermediate position for average spreading width.
 3. Upper position for a large spreading width.
3. Rotate and latch knob (B) to secure tailboard (A) in the desired position. It is recommended to start with tailboard in position 2.

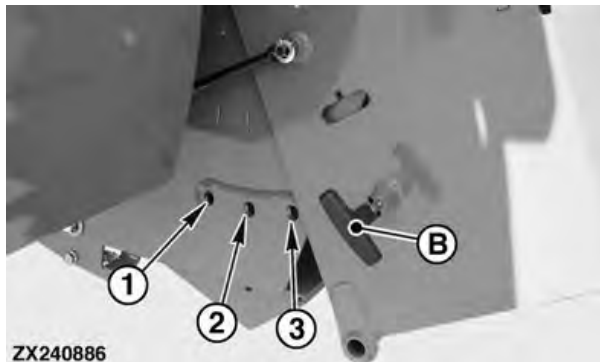
IMPORTANT: Make sure knob (A) is firmly engaged in the desired position on both sides.

A—Chopper Tailboard
B—Knob

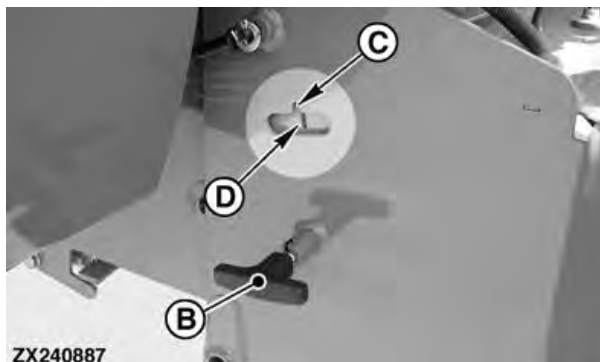
C—Cursor
D—Slot



ZX240888 —UN—16APR15



ZX240886 —UN—16APR15



ZX240887 —UN—16APR15

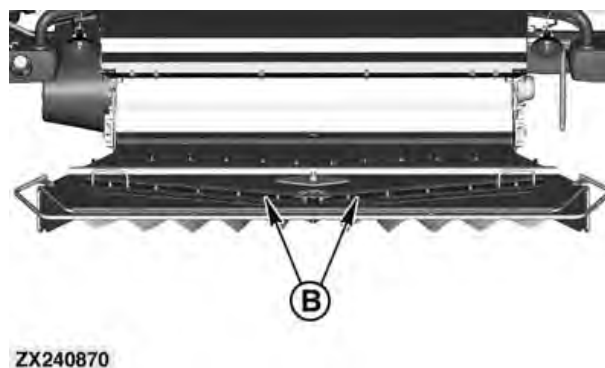
Continued on next page

OUCC002,0004A83 -19-31JAN16-5/8

Adjust Straw Chopper Vanes



ZX240872 —UN—16APR15



ZX240870 —UN—16APR15

If the wind is blowing from the side, set tailboard vanes against the wind to prevent the standing crop from becoming covered with chopped material. This setting can be retained if the machine drives around the field in a circle and not up and down its length.

Manual Adjustment: Tailboard vanes (A) are adjusted by sliding bars (B) of vane actuating system.

Electrical Adjustment (If Equipped): Tailboard vanes (A) are adjusted centrally with an electric motor (C). The adjustment is made from the operator's cab.

The vane actuating system features a link (D) with several hole locations (E) to be installed between different connecting pins (F).

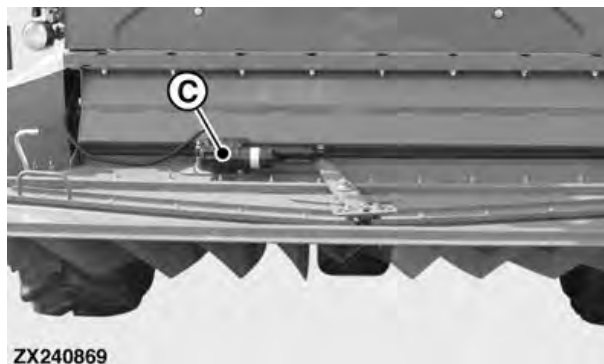
As an initial setting, consider the header working width.

Depending on the header width, change the link (D) location to modify position of vane (A):

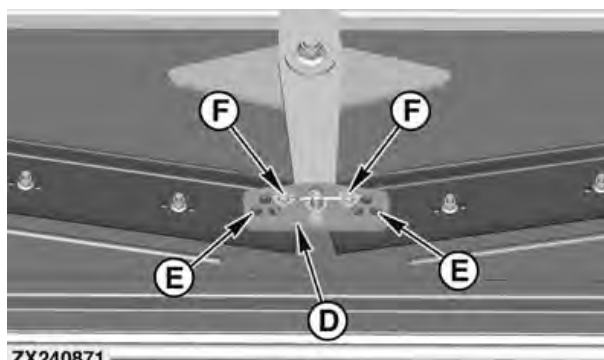
- 1 — Position for 20 ft header and smaller.
- 2 — Position for 22 ft header.
- 3 — Position for 25 ft header.
- 4 — Position for 30 ft header and larger.

A—Vanes
B—Bar
C—Electric Motor

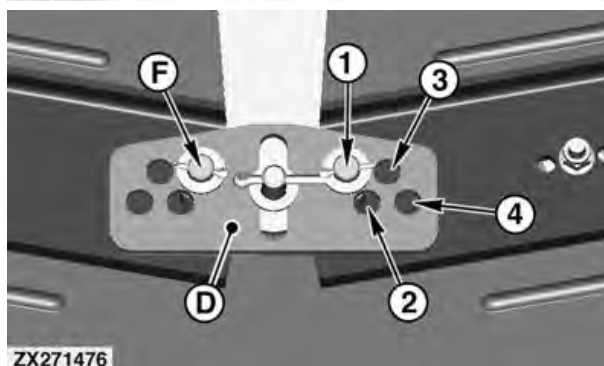
D—Link
E—Hole Location
F—Connecting Pins



ZX240869 —UN—16APR15



ZX240871 —UN—16APR15



ZX271476 —UN—28JAN16

Continued on next page

OUC0002,0004A83 -19-31JAN16-6/8

Adjust Counterknives

CAUTION: Before servicing or adjusting the machine, always disengage all drives, shut off engine and wait until all moving parts have stopped.

IMPORTANT: Any accumulation of dirt in the chopper housing may impair the straw chopper function. Remove any accumulation of dirt before harvesting.

IMPORTANT: Adjust the straw chopper correctly considering crop, chopping result and combine capacity.

Counterknife position

To adjust the counterknives (A), unfasten lock nut (B) on both sides, then rotate counterknife assembly with handle (C) to the desired position.

The length of chopped material can be modified by pivoting the counterknives to a different angle.

Recommended counterknife positions:

- 1 — Position for dry straw (cereals)
- 2 — Position for dry straw (cereals)
- 3 — Position for damp straw (cereals)
- 4 — Position for corn, sunflowers and pea straw
- 5 — Position for rape (counterknives completely out)

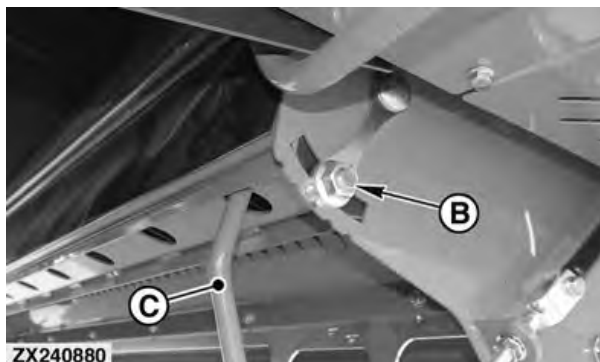
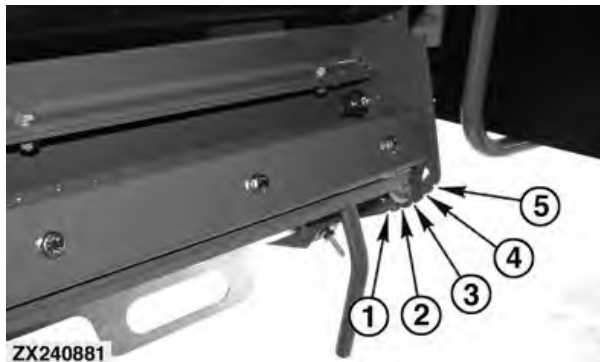
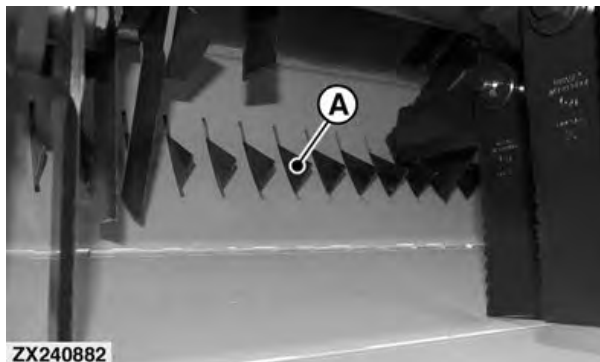
Start with a low setting (1 or 2) and work your way in until desired chopping quality is reached.

NOTE: Adaptation parts for corn can be installed. In this case the counterknives are completely removed (see *Straw Chopper Corn Adaptation (Bundle)* section).

NOTE: Knives that are moved in too far do not provide better chopping quality, and use a lot of power.

A—Counterknife
B—Lock Nut

C—Handle



Continued on next page

OUC002,0004A83 -19-31JAN16-7/8

Splitting and Chopping

IMPORTANT: It is very important to set the crossbar (A) to storage position (1) before harvesting corn, sunflowers, and crops with high straw content or tough straw such as beans and rape.

NOTE: For a better chopping effect, it is possible to equip the chopper with serrated knives.

Pivot the counterknives to suit the type of material being chopped (see Adjust Counterknives section).

The crossbar (A) serves as the first splitting stage. It is needed in tough conditions when expected chopping quality is not achieved with counterknife adjustment.

Before engaging crossbar (A), check that knives are still sharp enough.

IMPORTANT: Use of crossbar increases fuel consumption. Adjust counterknives first.

- When used, set the crossbar (A) to position (2) for light splitting effect or to position (3) for stronger effect.
- When not used, set the crossbar (A) to storage position (1).

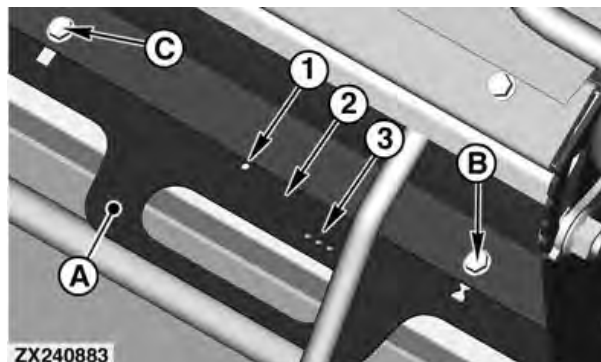
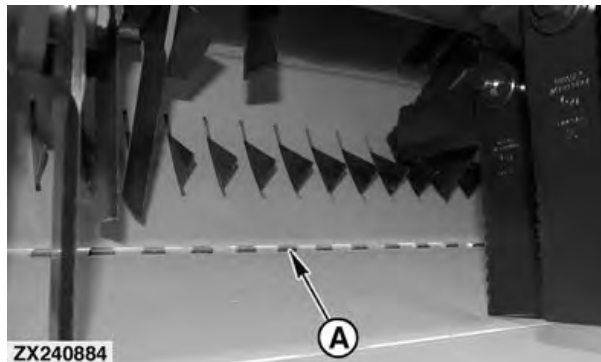
To change position of crossbar (A), proceed as follows:

1. Remove the two outer attaching screws (B).
2. Slacken off all inner screws (C).
3. Slide crossbar (A) to the desired visible position mark (1, 2 or 3).
4. Install outer screws (B) then tighten all screws (B), (C).

NOTE: Adaptation parts for corn can be installed. In this case the crossbar is completely removed (see Straw Chopper Corn Adaptation (Bundle) section).

A—Crossbar
B—Screw—Outer
B—Screw—Inner

1— Crossbar—Storage
Position Mark
2— Crossbar— Light Splitting
Position Mark
3— Crossbar—Strong Splitting
Position Mark



ZX240885 —UN—16APR15

ZX240884 —UN—16APR15

ZX240883 —UN—28JAN16

OUC002.0004A83 -19-31JAN16-8/8

Operate the Chaff Spreader (If Equipped)



ZX240873 — UN—16APR15



ZX240874 — UN—16APR15

Chaff Spreader Operating/Service Positions

The chaff spreader is recommended for crops that generate large volumes of residue.

- When operating the chaff spreader, swing it in to position (1) and make sure lock (A) is firmly latched.
- For service work and readjustment in the area of the sieves, unlatch lock (A) then use handle (B) to swing back chaff spreader (C) to position (2).

NOTE: When the machine is equipped with standard or adjustable windrow rakes, remove them before swinging back the chaff spreader (see Standard and Adjustable Windrow Rake section).

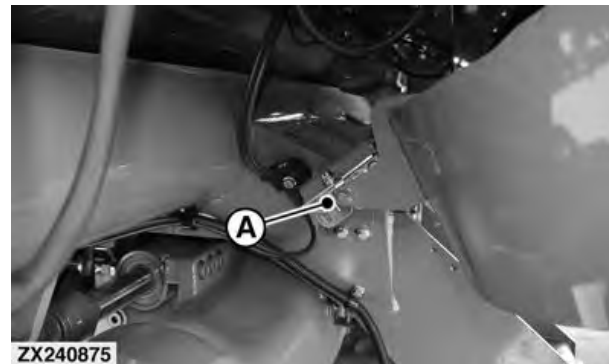
NOTE: On 5-Walker machine, set spreading vanes to their down position before swinging chaff spreader into service position.

IMPORTANT: Two gas struts hold the chaff spreader in service position (2) but are not intended to keep chaff spreader in this position when machine is running.

If for any reason the machine needs to be operated with the chaff spreader in service position (2), chaff spreader must be secured into this position to prevent chaff spreader to swing in by itself and plug the shoe.

To prevent the straw walker plugging, the chaff spreader speed is monitored via speed sensor and the operator warned in case the chaff spreader has stalled.

To adapt the chaff spreader to corn crop, special paddle extensions can be installed. Contact your John deer dealer.



ZX240875 — UN—16APR15



ZX240876 — UN—16APR15

A—Lock
B—Handle
C—Chaff Spreader

1— Chaff Spreader—Operating Position
2— Chaff Spreader—Service Position

Continued on next page

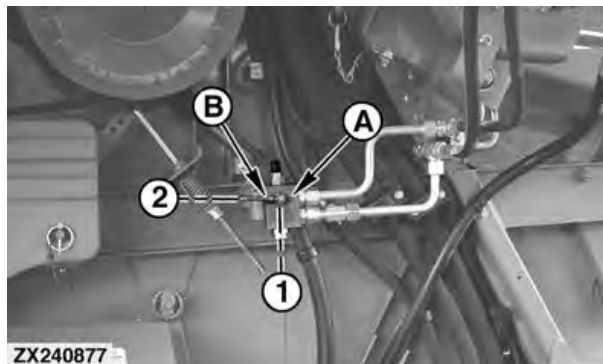
OUC002,0004A81 -19-31JAN16-1/3

Adjust Operating Speed

In standard configuration, the chaff spreader speed is not adjustable.

If the machine is equipped with the two-speed chaff spreader valve (A), the speed can be adjusted as follows:

- When operating the chaff spreader in **Small Grains**, place lever (B) of valve (A) in position (1) for high speed (about 800 rpm).
- When operating the chaff spreader in **Corn**, reduce speed to avoid damage to the spreader housing. Place lever of valve (A) in position (2) for low speed (about 400 rpm).



A—Valve
B—Lever

1—Maximal Speed Position
2—Minimal Speed Position

OUCC002,0004A81 -19-31JAN16-2/3

ZX240877 —UN—30JAN16

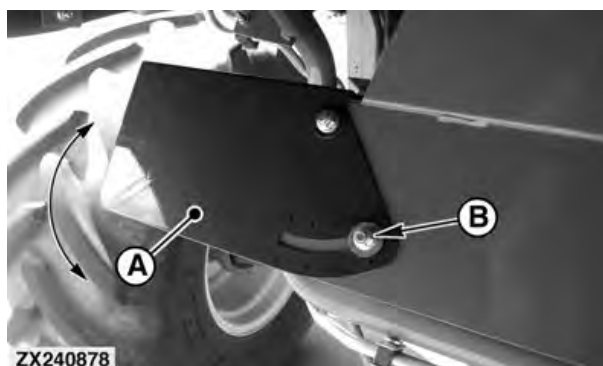
Adjust Spreading Width

The vanes (A) need to be adjusted to working width depending on crop type and conditions. For example:

- 635 Cutting platform — Vane (A) fully up.
- 620 Cutting platform — Vane (A) fully down.

To adjust spread, unfasten self-locking nut (B) and set vane (A) to give the desired spreading width.

NOTE: On 5-Walker machine, set spreading vanes to their down position before swinging chaff spreader into service position.



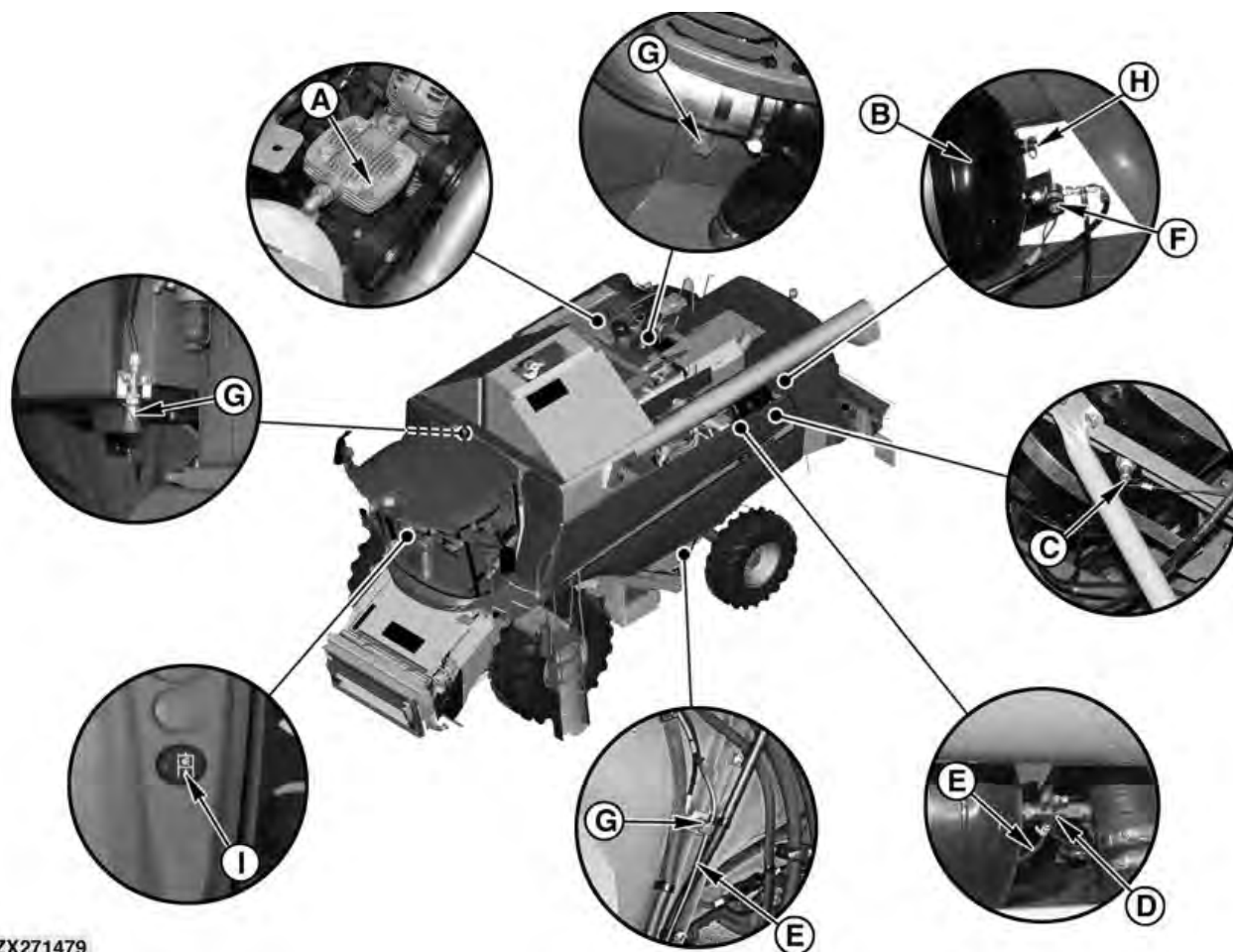
A—Vane

B—Self-Locking Nut

OUCC002,0004A81 -19-31JAN16-3/3

ZX240878 —UN—30JAN16

Operate the Air Compressor System (If Equipped)



ZX271479

ZX271479—UN—30JAN16

A—Motor
B—Reservoir
C—Drain Valve

D—Relief Valve
E—Escape Line
F—Control Valve

G—Quick Coupler
H—Diagnostic Receptacle

I—Activation Button

Air Compressor System Description:

The air compressor system features the following main components:

- The air compressor motor (A)
- The compressed air reservoir (B)
- A drain valve (C)
- A pressure relief valve (D) with escape line (E)
- An interlock control valve (F) for activation control
- Three quick couplers (G) for compressed air
- One receptacle (H) for diagnostic purpose
- One activation button (I) on armrest
- One hose with pistol style air gun and optional 300 mm (1 ft) extender (not illustrated)

The air compressor motor (A) being continuously driven by the engine, the escape line (E) allows the compressed air to escape while the system is not operated.

IMPORTANT: The air compressor system is not intended for use with air tools.

Air compressor system has the following specifications:

- Reservoir Size – **60 L (16 gal)**
- Operating Temperature Range: **-40 to 105 °C (-40 to 221 °F)**
- Storing Temperature Range: **-50 to 105 °C (-40 to 221 °F)**
- Operating Pressure – Continuous pressure of about **620 kPa (6.2 bar - 90 psi)** at quick coupler when engaged
- Flow
 - Engine running at high idle: **450 L/min (16 ft³/min)**
 - Engine running at low idle: **225 L/min (8 ft³/min)**
- Tank Fill Time – About **90 seconds** to fill the tank from **0 to 810 kPa (0 to 8.1 bar - 0 to 117 psi)**

Continued on next page

OUCC002,0004A8B -19-30JAN16-1/4

Field Operation

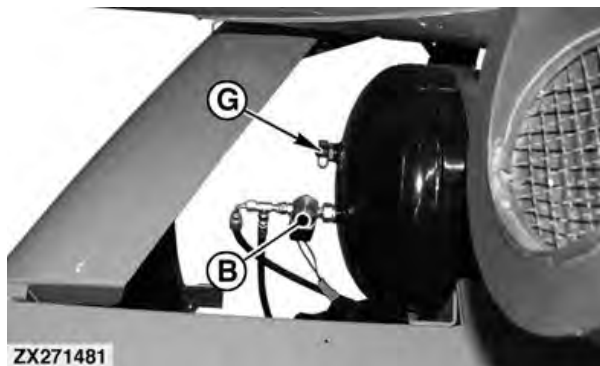
- Hose Length – **10 m (33 ft)** from quick coupler location to air gun

Continued on next page

OUC002,0004A8B -19-30JAN16-2/4



ZX271480 —UN—30JAN16



ZX271481 —UN—30JAN16

To operate the air compressor system, an activation is required.

Activate/Operate Air Compressor System:

The air compressor system is activated from the cab. Activating air compressor is only possible if the following conditions are met (see **CommandTouch™ Armrest Console** in Operating the Controls and Displays section):

- Switch key to RUN position or engine running at low idle (if continuous pressure is required)
- Road safety mode button in road mode
- Park brake engaged
- Multi-function lever in neutral position
- Separator not engaged
- Header not engaged
- Unloading auger not engaged
- Unloading auger swing or fold functions are not moving
- Feeder house raise or lower and lateral tilt functions are not moving
- Header reel raise or lower functions are not moving
- Folding grain tank covers not moving
- Chopper vane angle system (if equipped) not moving
- Chassis tilt functions are not moving (HillMaster™ machine)

Press the air compressor button (A) once to activate the air compressor control valve (B). Indicator light (C) turns ON when air compressor is ready to use.

Attach air hose to the desired quick coupler (D).

If necessary, relieve the system air pressure as follows:

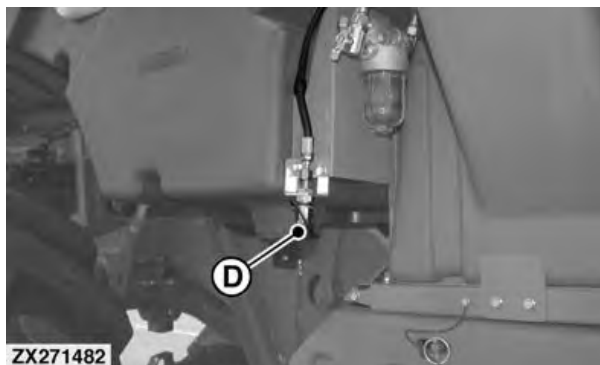
IMPORTANT: Do not relieve system air pressure with system activated.

Daily drain water from air reservoir. Open drain valve (E) by pulling down cable (F).

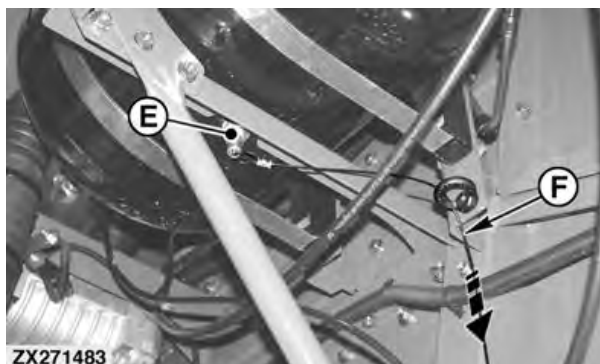
1. De-activate system. Press air compressor button (A) and check that indicator light (C) turns off.

IMPORTANT: The park brake automatic mode returns to the previous state when the air compressor system is turned off.

2. Shut off engine.



ZX271482 —UN—30JAN16



ZX271483 —UN—30JAN16



ZX271484 —UN—30JAN16

A—Air Compressor Button
B—Control Valve
C—Indicator Light
D—Quick Coupler

E—Drain Valve
F—Cable
G—Receptacle

Continued on next page

OUC002,0004A8B -19-30JAN16-3/4

Field Operation

3. Pull down cable (F) to open the drain valve (E) underneath the air reservoir, as long as necessary.

*NOTE: In normal operation, do not use receptacle (G).
Receptacle (G) is for diagnostic purpose only
(contact your John Deere dealer).*

OUC002,0004A8B -19-30JAN16-4/4

Operate the Video Camera (If Equipped)

CAUTION: Do not rely on a camera for collision avoidance or bystander detection. To avoid possible injury or death to operator or others, always remain alert and aware of surroundings when operating machine. Read and understand Avoid Backover Accidents in Safety section.

IMPORTANT:

- Correctly understand whether camera or video application is "mirrored".
- Do not modify factory-installed camera location.
- Understand camera's field of view.
- Keep camera properly serviced.
- Keep camera lens clean.

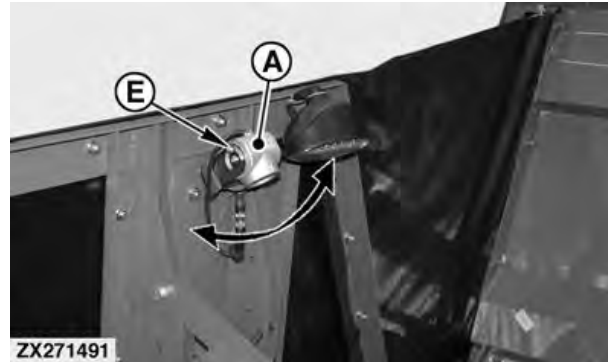
The video system on the machine allows the operator to see, both by manual selection and by automatic triggering, images captured on video cameras mounted in remote areas of the machine.

NOTE: To access the video interface refer to CommandCenter™ Display section.

Up to four video cameras (A—D) can be installed.

The camera view angle can be adjusted in a vertical manner. To adjust camera position, slacken off lock nut (E) and rotate camera to the desired position.

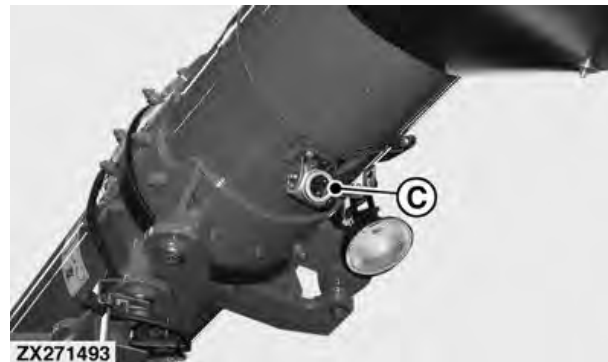
- | | |
|--------------------------|---------------------|
| A—Grain Tank Camera | D—Rear Hitch Camera |
| B—Backward Camera | E—Lock Nut |
| C—Unloading Auger Camera | |



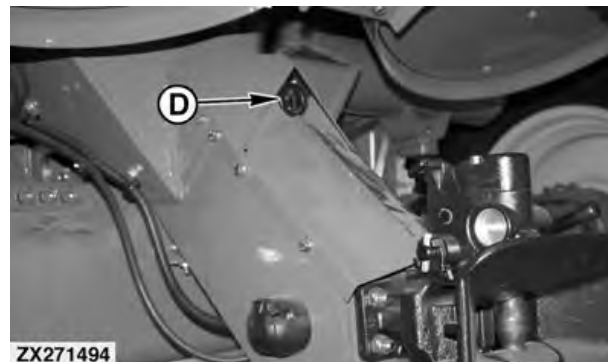
ZX271491 —UN—30JAN16



ZX271492 —UN—30JAN16



ZX271493 —UN—30JAN16



ZX271494 —UN—30JAN16

Continued on next page

OUCC002,0004A8A - 19-30JAN16-1/2

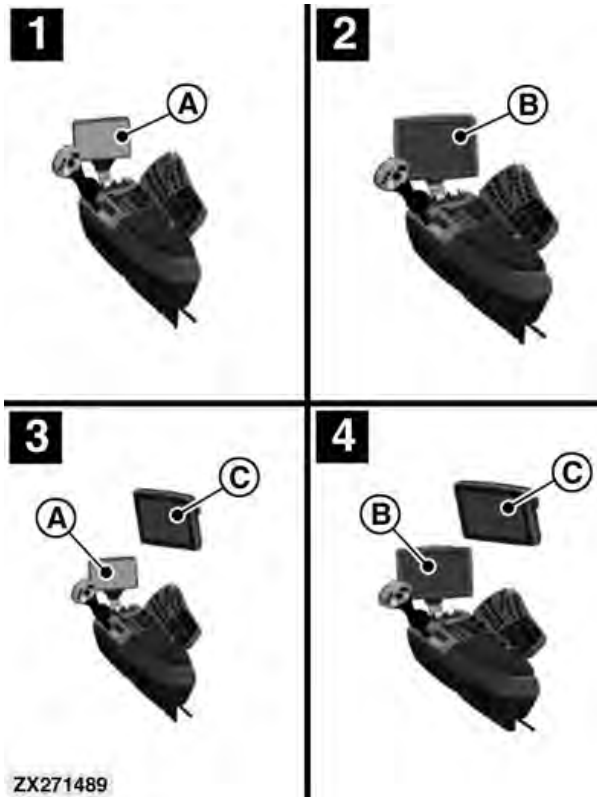
Depending on the display configurations (1—4), the camera video signal support differs.

1. **One** camera supported by CommandCenter™ display (A).
2. **Three** cameras supported by GreenStar™ 2630 display (B) on armrest.
3. **One** camera supported by CommandCenter™ display (A) and **one** camera supported by GreenStar™ 3 2630 display (C) on rail.
4. **Three** cameras supported by GreenStar™ 2630 display (B) on armrest and **one** camera supported by GreenStar™ 3 2630 display (C) on rail.

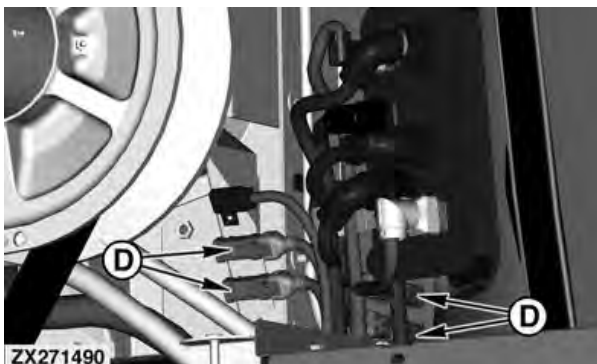
Video camera connection interface is located behind the cab on the right-hand side. All cameras can be individually connected or disconnected at video connectors (D) and are fuse protected (see **Inline Fuses** section).

IMPORTANT: Video camera cable connection is labelled to avoid wrong video signal routing. If several cameras are disconnected from connectors (D), make sure to reconnect camera cable to its relevant connector.

A—CommandCenter™ Display C—GreenStar™ 3 2630 Display
B—GreenStar™ 2630 Display (Rail Mounted)
D—Video Connector



ZX271489



ZX271490

ZX271489 —UN—30JAN16

ZX271490 —UN—30JAN16

OUC002,0004A8A -19-30JAN16-2/2

Stone Trap

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set park brake and remove key.

Stone trap (A) protects the cylinder and concave from rock or stone damage.

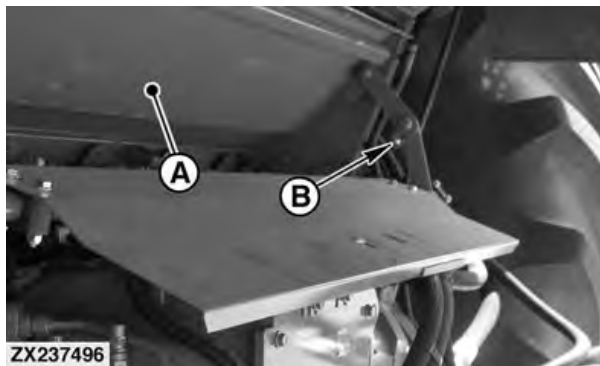
To dump stone trap, remove latch (B) then move up lever (C).

To close stone trap, push lever (A) downward until latch (B) can be reinstalled.

NOTE: To prevent cob and heads (corn and sunflower) from falling into the stone trap, a stone trap cover can be installed. Contact your John Deere dealer.

A—Stone Trap
B—Latch

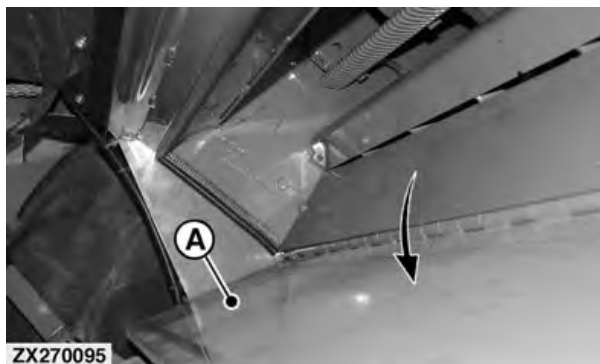
C—Lever



ZX237496 —UN—16APR15



ZX237494 —UN—16APR15



ZX270095 —UN—22JAN16

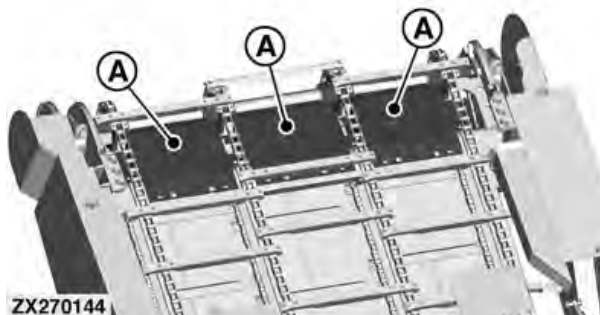
OUCC002,0004A75 -19-28JAN16-1/1

Feeder House Conveyor Top Shaft Scraper (Bundle)

A set of special scrapers (A) can be installed on conveyor top shaft when harvesting rape or weedy crops in case wrapping appears. Contact your John Deere dealer.

NOTE: Scrapers (A) are not adjustable.

A—Scraper



ZX270144 —UN—27JAN16

OUCC002,0004A7A -19-28JAN16-1/1

Adjust Feeder House Drum Height

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set park brake and remove key.

Open feeder house shields.

HillMaster™ Machine:

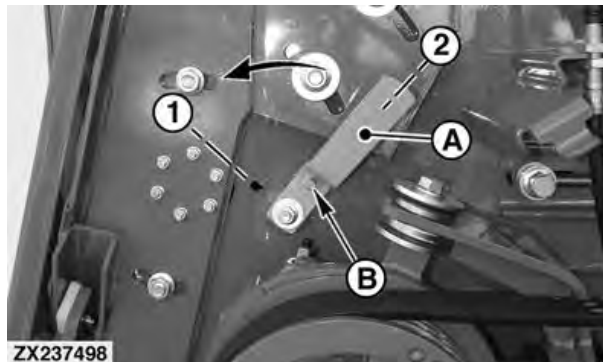
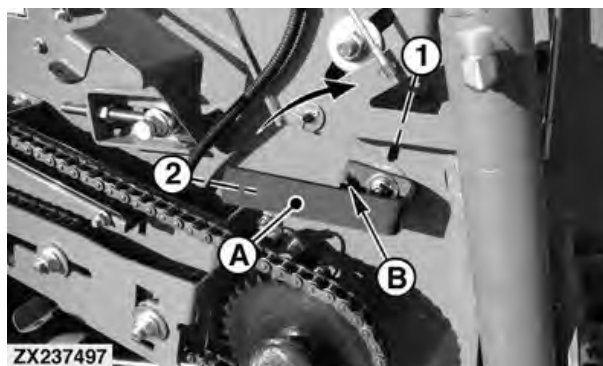
Pull and rotate handle (A) then insert pin (B) into desired crop position (1) or (2) on both sides.

1. Corn Only Position
2. Small Grain Position

Close feeder house shields.

A—Drum Height Handle

B—Pin



ZX237497 —UN—16APR15

ZX237498 —UN—16APR15

OUC002,0004A2D -19-25JAN16-1/2

Level Land Machine:

Open feeder house shields.

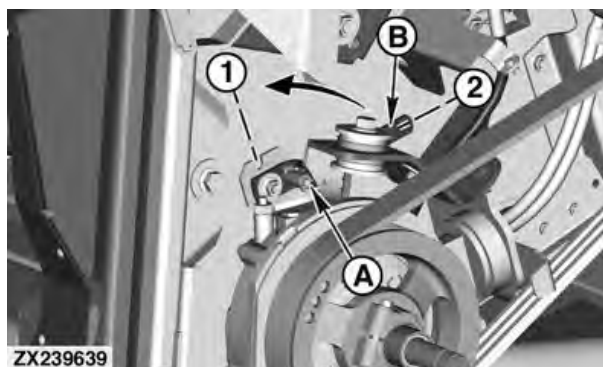
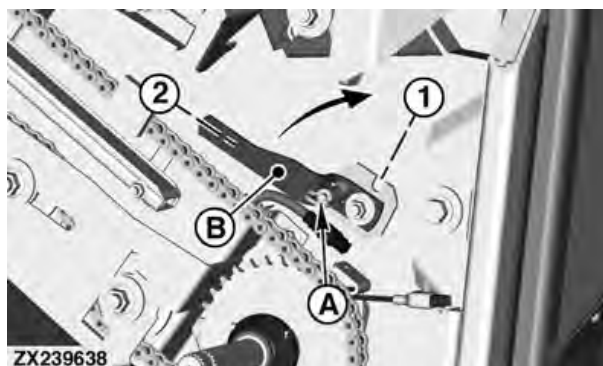
Pull and hold pin (A) while rotating handle (B) to desired crop position (1) or (2) on both sides.

1. Corn Only Position
2. Small Grain Position

Close feeder house shields.

A—Pin

B—Drum Height Handle



ZX239638 —UN—16APR15

ZX239639 —UN—26JAN16

OUC002,0004A2D -19-25JAN16-2/2

Adjust Feeder House Conveyor Chain Speed

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set park brake and remove key.

NOTE: Refer to *Machine-to-Crop Conversion Chart (W Series)* or *Machine-to-Crop Conversion Chart (T Series)* sections for recommended feeder house conveyor sprocket settings.

Important Note About 33-Tooth Sprocket:

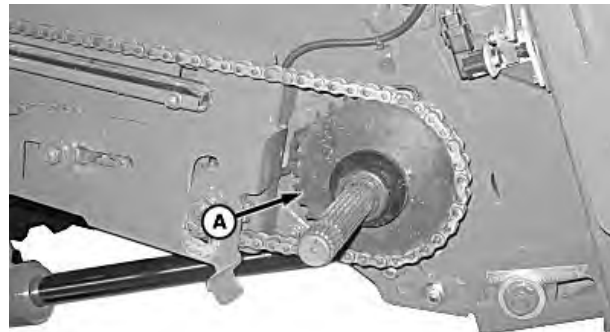
- Sprocket is not recommended for corn use.

Recommended for conditions when feeding is poor due to following crops and conditions:

- Crops:** Barley, Canola, Oats, Rice, Rye, and Wheat
- Conditions:** High Volume, Green, Wet, Windrowed, and Poor Feeding

As crop conditions change or feeding improves (drier, more even windrows, lighter straw), it is recommended to use the 15 tooth sprocket. Chain speed slows and reduces potential for straw damage or pre-threshing and extends chain life.

Feeder conveyor chain can be set to two different speeds by selecting drive sprocket (A) on right-hand side of the lower shaft.



A—Sprocket

Use 15-tooth sprocket for slow speed and 33-tooth sprocket for high speed.

IMPORTANT: It is necessary to shorten drive chain when changing from 33-tooth to 15-tooth sprocket configuration.

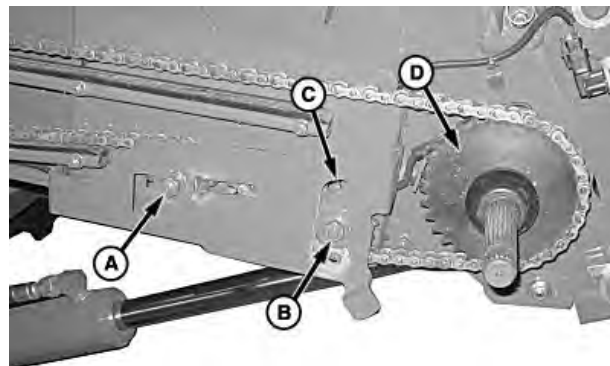
OUC002,0004A2E -19-02FEB16-1/4

H102187—UN—13JUN11

- To move drive chain to smaller sprocket:** Open right-hand front shield.
- Loosen nut (A) and push sprocket rearward.
- Loosen nut (B) and move sprocket to upper position (C).
- Push in on coupler and move sprocket (D) outward until it engages detent.

A—Nut
B—Nut

C—Upper Position
D—Sprocket



Continued on next page

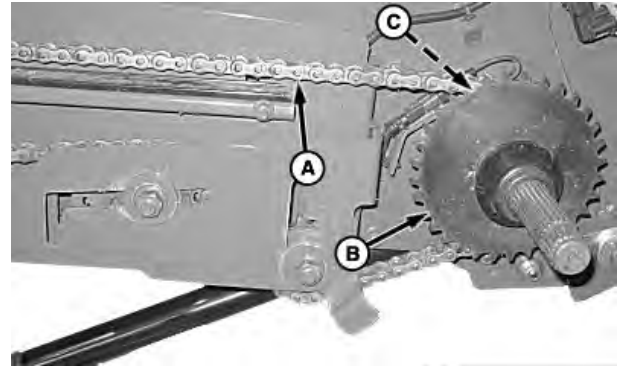
OUC002,0004A2E -19-02FEB16-2/4

H102188—UN—13JUN11

5. Move chain (A) from large sprocket (B) to small sprocket (C).

A—Chain
B—Large Sprocket

C—Small Sprocket



H102189 —UN—13JUN11

OUC002,0004A2E -19-02FEB16-3/4

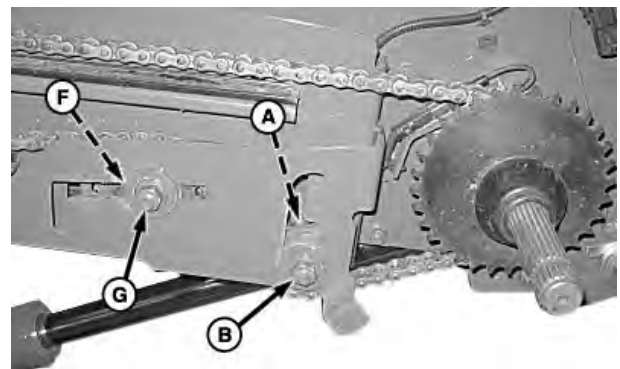
6. Move sprocket (A) to lower position and tighten nut (B).
7. Loosen nuts (C) and slide chain guide (D) into desired notches (E) and tighten nuts.

NOTE: Do not over tighten feeder conveyor drive chain. It is acceptable for chain to ride on plastic guide.

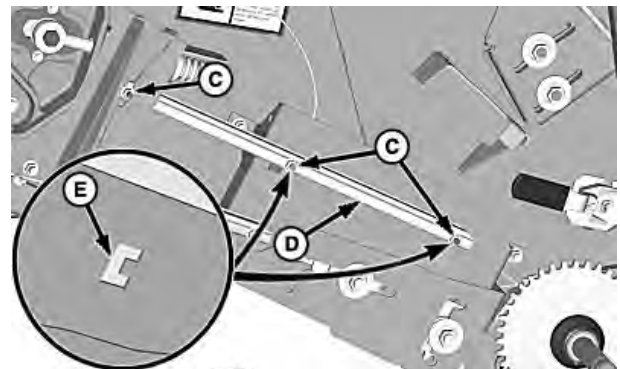
8. Use pry bar in holes of inside plate to move sprocket (F) forward and tighten nut (G).
9. Close right-hand front shield.

A—Sprocket
B—Nut
C—Nuts
D—Chain Guide

E—Notches
F—Sprocket
G—Nut



H102190 —UN—13JUN11



H91064 —UN—02APR08

OUC002,0004A2E -19-02FEB16-4/4

Adjust Feeder House Fore/Aft Tilt Frame (Level Land Machine)

CAUTION: Shut OFF engine, set park brake and remove key.

IMPORTANT: Do not adjust feeder house fore/aft tilt frame with header attached to the machine. Always detach header from the machine before adjusting fore/aft tilt frame angle.

Fore/Aft tilt frame (A) is used to set the correct relationship between platform skid plates and the ground. It compensates for different tire sizes and other variables.

Tilt frame is set to an approximate position at factory, but if tires are changed or ground conditions change (soft ground), it may be necessary to readjust.

An approximate setting can be obtained without a header attached by the following:

- With machine on a smooth level surface, lower or raise feeder house until flange screw (E) to ground distance is set to about **900 mm (2 ft 11.4 in)**.
- Using a bubble level as a reference, adjust fore/aft tilt frame (A) until front face is vertical.

Proceed as follows:

1. Loosen tilt frame flange nuts (B) on both sides.

IMPORTANT: Do not loosen flange screw (E).

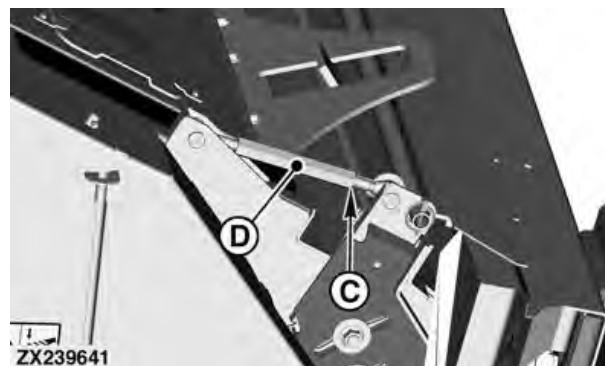
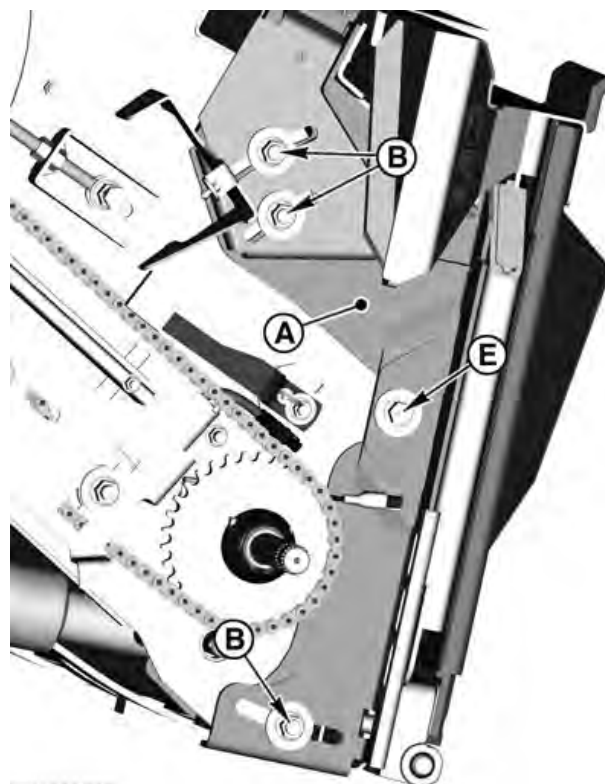
2. Loosen nut (C) and adjust turnbuckle (D) on both sides as needed for correct header angle.

IMPORTANT: Hose clamp on multicoupler may need to be repositioned when adjusting fore/aft tilt frame.

3. Tighten turnbuckle nut (C) on both sides.
4. Tighten tilt frame flange nuts (B) on both sides to **300 N·m (221 lb·ft)**.

A—Tilt Frame
B—Flange Nut
C—Nut

D—Turnbuckle
E—Flange Screw



ZX239640—UN—16APR15

ZX239641—UN—16APR15

OUC002,0004A3F -19-25JAN16-1/1

Adjust Feeder House Fore/Aft Tilt Frame (HillMaster™ Machine)

CAUTION: Shut OFF engine, set park brake and remove key.

IMPORTANT: Do not adjust feeder house fore/aft tilt frame with header attached to the machine. Always detach header from the machine before adjusting fore/aft tilt frame angle.

Fore/Aft tilt frame (A) is used to set the correct relationship between platform skid plates and the ground. It compensates for different tire sizes and other variables.

Tilt frame is set to an approximate position at factory, but if tires are changed or ground conditions change (soft ground), it may be necessary to readjust.

An approximate setting can be obtained without a header attached by the following:

- With machine on a smooth level surface, lower or raise feeder house until pivot (E) to ground distance is set to about **900 mm (2 ft 11.4 in)**.
- Using a bubble level as a reference, adjust fore/aft tilt frame (A) until front face is vertical.

Proceed as follows:

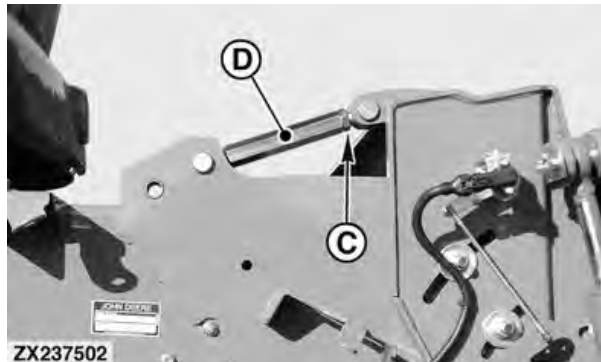
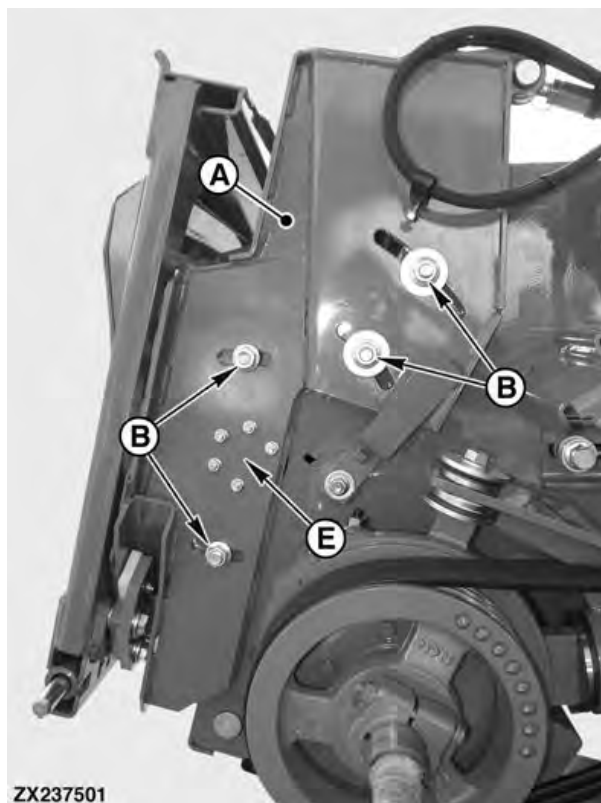
1. Loosen tilt frame flange nuts (B) on both sides.
2. Loosen nut (C) and adjust turnbuckle (D) on both sides as needed for correct header angle.

IMPORTANT: Hose clamp on multicoupler may need to be repositioned when adjusting fore/aft tilt frame.

3. Tighten turnbuckle nut (C) on both sides.
4. Tighten tilt frame flange nuts (B) on both sides to **300 N·m (221 lb·ft)**.

A—Tilt Frame
B—Flange Nut
C—Nut

D—Turnbuckle
E—Pivot



ZX237501 —UN—16APR15

ZX237502 —UN—16APR15

OUC002.0004A5C -19-27JAN16-1/1

Cylinder Filler Plates (Bundle)

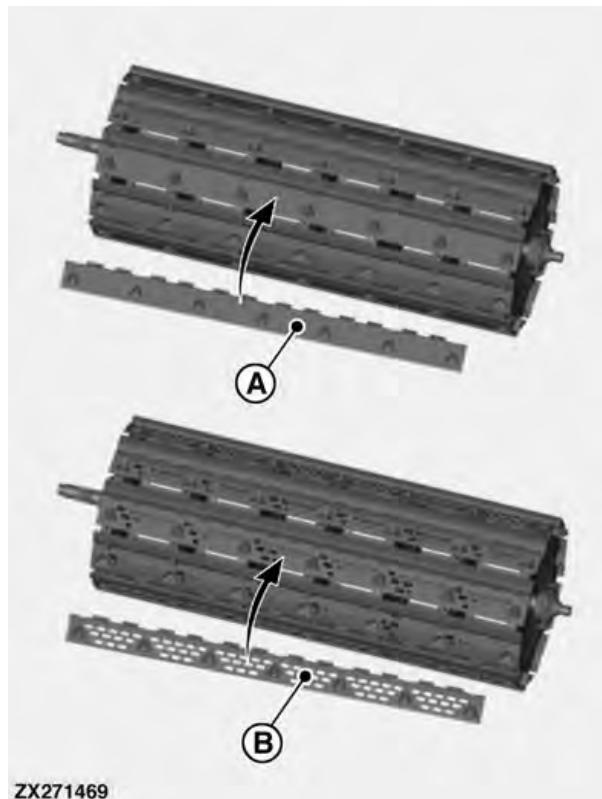
- In case of unthreshed or broken cobs (corn or sunflower) leaving the machine, the cylinder filler plates (A) can be installed on cylinder.
- In case of shells (peas or beans) leaving the machine, and if no other adjustment can help then perforated cylinder filler plates (B) can be installed on cylinder.

NOTE: Contact your John Deere dealer.

To install filler plates, refer to **Replace Threshing Cylinder Filler Plates (If Equipped)** section.

A—Filler Plate

B—Perforated Filler Plate



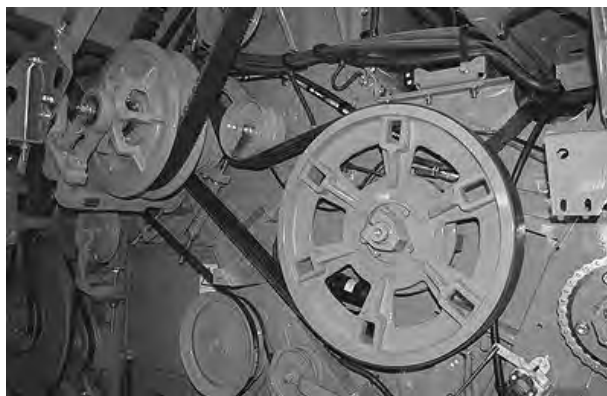
ZX271469

ZX271469 —UN—28JAN16

OUCC002,0004A70 -19-28JAN16-1/1

Cylinder Drive—Single Drive Range

The cylinder speed adjusting range is 450-950 rpm.



ZX1045876 —UN—04JUL12

OUCC002,0004A1B -19-22JAN16-1/1

Cylinder Drive—Dual Drive Range (If Equipped)

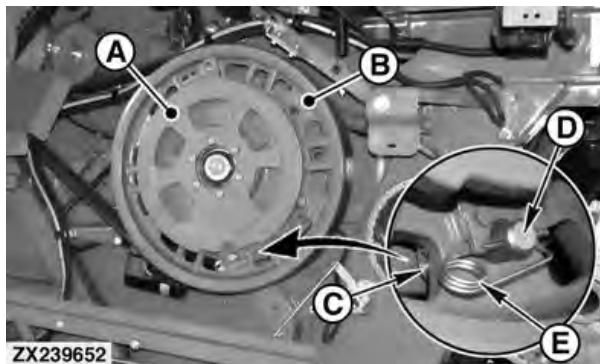
Upper speed range (450 to 950 rpm)

CAUTION: Shut off engine, set park brake and remove key.

Align notched area of wheel (A) to one of the holes in sheave (B).

Insert pin (D) into the hole and speed pickup casting, and secure with cotter pin (E).

A—Wheel
B—Sheave
C—Speed Pickup Casting
D—Pin
E—Cotter Pin



ZX239652

ZX239652 —UN—16APR15

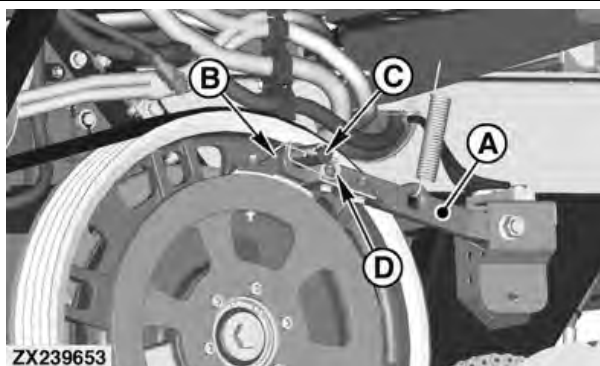
OUC002,0004A1C -19-22JAN16-1/2

Lower speed range (250 to 490 rpm)

Pull down on arm (A) and align with lug (B) on drive wheel.

Insert pin (C) and lock with cotter pin (D).

A—Arm
B—Lug
C—Pin
D—Cotter Pin



ZX239653

ZX239653 —UN—16APR15

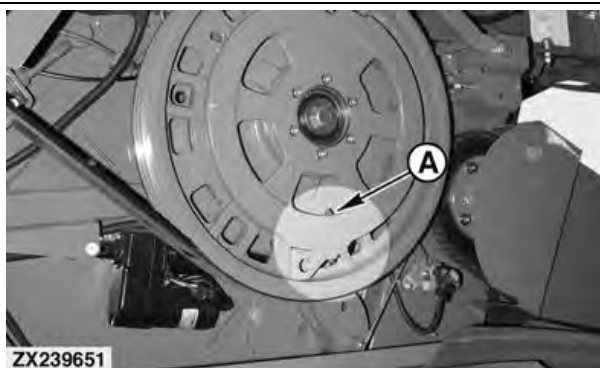
OUC002,0004A1C -19-22JAN16-2/2

Cylinder Drive Shear Bolt—Dual Drive Range Only

Shear bolt (A) is located in the cylinder drive sheave.

IMPORTANT: Use only 10.9 grade M6X75 shear bolts. Contact your John Deere dealer.

A—Shear Bolt



ZX239651

ZX239651 —UN—16APR15

OUC002,0004545 -19-26MAR15-1/1

Power Unplugging of Cylinder

To unplug cylinder with machine running, proceed as follows:

1. Shut off separator and header.
2. Open the concave to the full open position.

CAUTION: Shut off engine, set park brake and remove key.

3. Remove safety pin, then remove pin from cylinder drive.
4. Open stone trap and clean.
5. Sound horn, start engine, and set engine speed at low idle.
6. Engage separator to clean out material.
7. Set cylinder speed to mid range.
8. Shut off separator.

CAUTION: Shut off engine, set park brake and remove key.

9. Place cylinder drive in low range and lock with pin and safety pin removed previously.
10. Sound horn, start engine, and set engine speed at low idle.
11. When cylinder is unplugged, set concave and cylinder speed back to original setting.

IMPORTANT: To prevent damage to engine PTO gearcase and wet clutch, do not engage separator clutch with plugged cylinder more than three times in a period of three min. with engine at high idle.

CAUTION: Shut off engine, set park brake and remove key.

12. (If originally operating in high range) Remove safety pin and pin from cylinder drive and shift back to high range (direct drive). Replace pin and safety pin.
13. Resume operation.

OUC002,0004547 -19-26MAR15-1/1

Unplug Cylinder With Breaker Bar

CAUTION: Shut off engine, set park brake and remove key. After clearing cylinder, remove breaker bar (A) before restarting engine.

Open the concave fully. Remove the shield covering the cylinder drive.

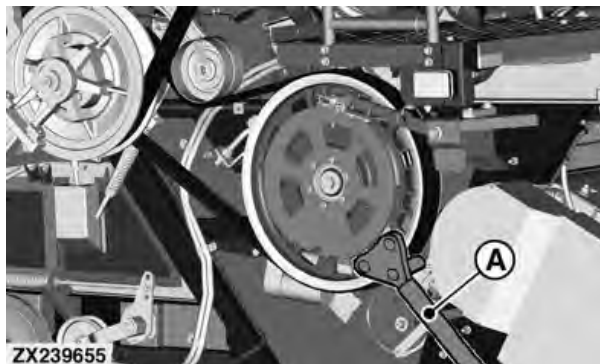
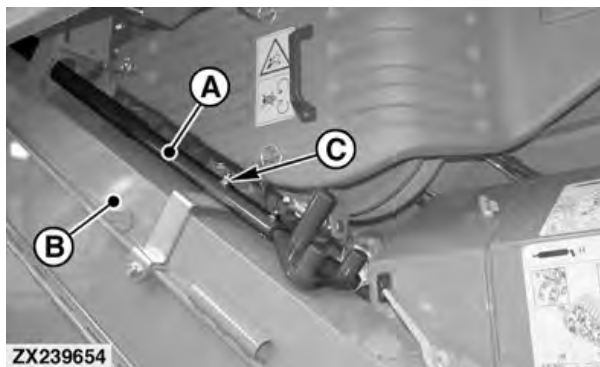
Insert breaker bar (A) as shown and rock the cylinder back and forth until it is clear.

Slide shield back into position and secure with cap screw.

Put the concave back in its original position.

Store breaker bar (A) on tailings elevator housing (B) and secure with stud (C), as shown.

A—Breaker Bar
B—Tailing Elevator Housing
C—Stud



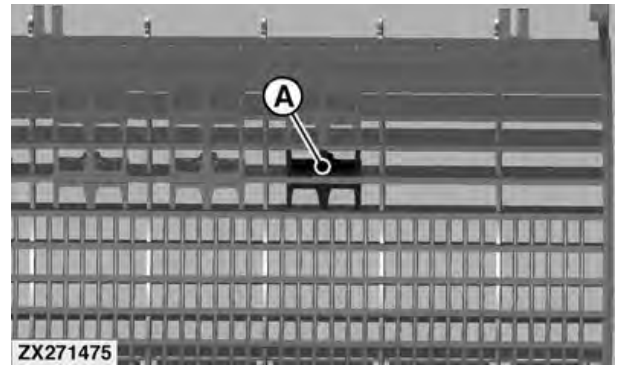
OUC002,0004A35 -19-25JAN16-1/1

Concave Inserts—W Series (Bundle)

- Concave inserts (A) should always be used when harvesting high moisture corn (above 20%).
- Concave inserts should be used in very dry conditions (grain) where there is a large amount of chaff. Inserts prevent the cleaning shoe from becoming overloaded.

NOTE: Contact your John Deere dealer.

A—Insert



ZX271475 —UN—28JAN16

OUC002,0004A71 -19-28JAN16-1/1

Adjust Beater Grate Position (W Series)

The beater grate under the beater has two positions:

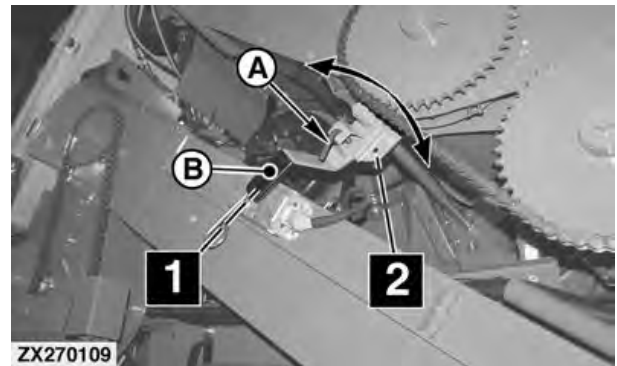
- To set the beater grate at its closed position, place lever (A) in position (1).
- To set the beater grate at its open position, place lever (A) in position (2).

To adjust the beater grate, release locking lever (B), then move the lever (A) to the desired position.

NOTE: An adjusting beater grate decal is located nearby the adjusting lever.

A—Adjusting Lever
B—Locking Lever

1—Beater Grate in Closed Position
2—Beater Grate in Open Position



ZX270109 —UN—26JAN16

OUC002,0004A5F -19-27JAN16-1/1

Adjust Separator Grate Position (T Series)

The separator grate under the separator rotor has two positions:

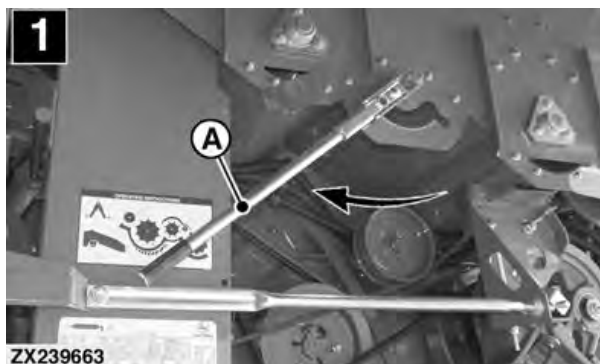
- To set the separator grate at its closed position, place lever (A) in position **(1)**.
- To set the separator grate at its open position, place lever (A) in position **(2)**.

To adjust the separator grate, pull adjusting lever (A) away from the machine and out of its detent (against spring force), then move the lever to the desired position.

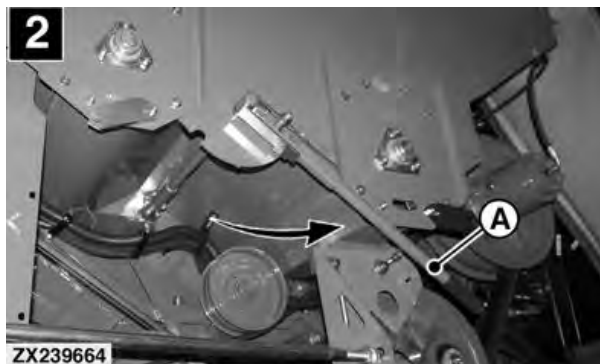
NOTE: An adjusting separator grate decal (B) is located on the clean grain elevator.

A—Adjusting Lever
B—Decal

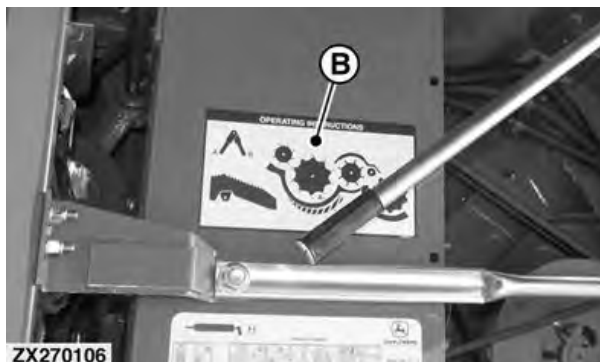
1—Separator Grate in Closed Position
2—Separator Grate in Open Position



ZX239663 —UN—26JAN16



ZX239664 —UN—16APR15



ZX270106 —UN—26JAN16

OUCC002,0004A60 -19-27JAN16-1/1

Adjust Separator Rotor Drive Speed (T Series)

Depending on harvesting conditions, two different drive speeds of the separator rotor can be used:

- **370 rpm:** Low speed recommended for corn and rape.
- **740 rpm:** High speed recommended in hard to thresh crops and for peas.

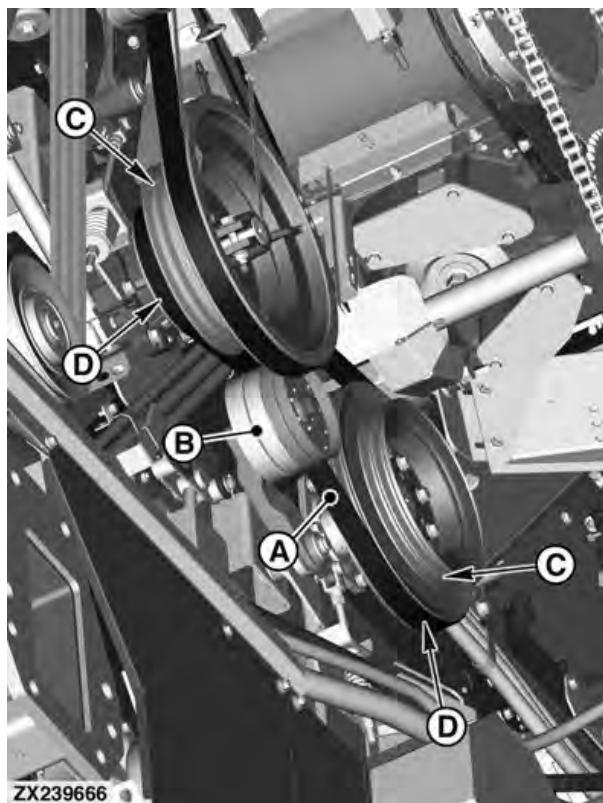
To change drive speed, relieve pressure on drive belt (A) at lever (E) then place the drive belt over the desired pulleys and actuate lever (E) to put pressure back on the belt.

NOTE: To improve wet corn, peas, and beans harvesting conditions, two reduction speed kits (380 to 260 rpm and 380 to 310 rpm) are available. Contact your John Deere dealer.

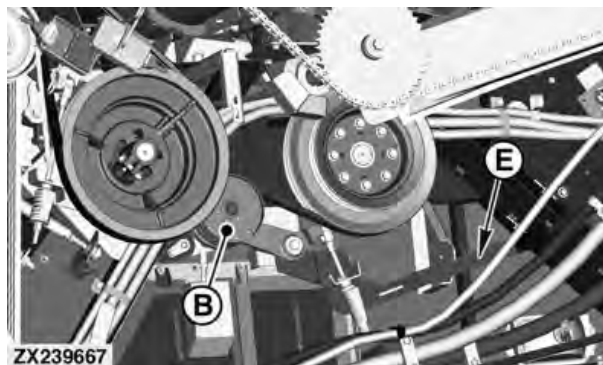
NOTE: An adjusting separator rotor drive speed decal (F) is located on the tailings elevator.

A—Drive Belt
B—Tensioning Roller
C—740 rpm Pulleys

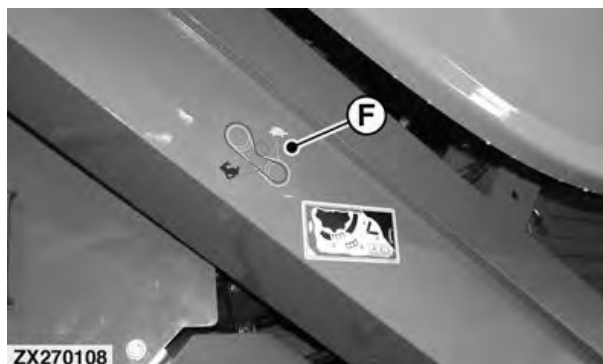
D—370 rpm Pulleys
E—Lever
F—Decal



ZX239666 —UN—16APR15



ZX239667 —UN—16APR15



ZX270108 —UN—26JAN16

OUC002.0004A42 -19-25JAN16-1/1

Adjust Rear Beater Grate Position (T Series)

The rear beater grate under the rear beater rotor has two positions:

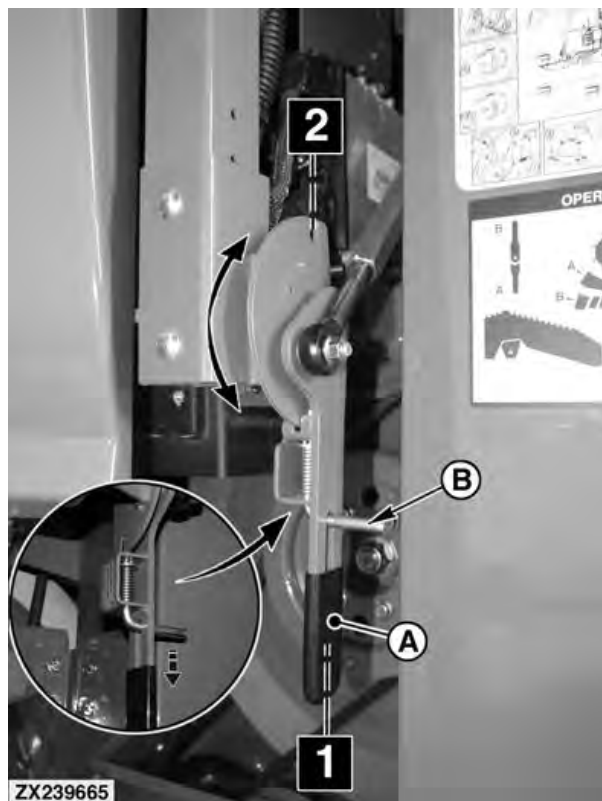
- To set the rear beater grate at its closed position, place lever (A) in position **(1)**.
- To set the rear beater grate at its open position, place lever (A) in position **(2)**.

To adjust the rear beater grate, pull latch (B) out of its detent (against spring force), then move the adjusting lever (A) to the desired position.

NOTE: An adjusting rear beater grate decal (C) is located on the clean grain elevator.

A—Adjusting Lever
B—Latch
C—Decal

1—Rear Beater Grate in Closed Position
2—Rear Beater Grate in Open Position



ZX239665 —UN—26JAN16

ZX270107 —UN—26JAN16

OUC002.0004A61 -19-27JAN16-1/1

Straw Warning Device

CAUTION: Never attempt to unplug the straw walkers or straw hood area while machine is running. Always shut off the engine, set the park brake, and remove the key before unplugging machine.

Two sensors (A) for monitoring the straw flow are installed above the straw walkers and at the end of the straw hood. When either straw warning sensor is pressed during operation due to plugging, a warning is displayed.

NOTE: Parts removed for illustration purpose only.
Sensor above straw walkers is accessible from the outside of the hood.

In this case, stop the machine immediately and unplug the area above the straw walkers.

A—Sensor



Sensor—Above Straw Walkers



Sensor—End of Straw Hood

OUC002,0004A62 -19-27JAN16-1/1

ZX270088 —UN—03FEB16

ZX270087 —UN—22JAN16

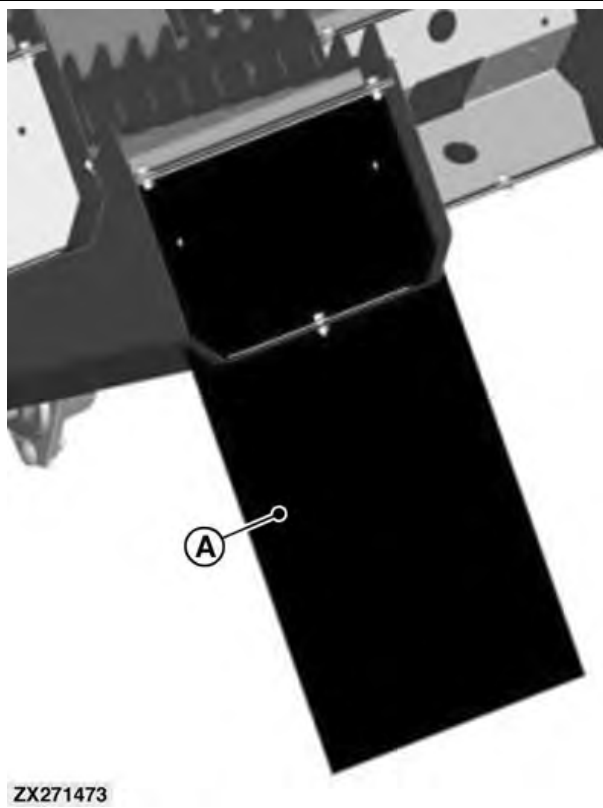
Straw Walker Rubber Flaps (Bundle)

To prevent sunflower stalks (top part) from getting caught in the chop-to-drop door of the straw chopper, the rubber flaps (A) can be installed at the back of straw walker (one per walker).

The flaps (A) cover the gap between walker and chop-to-drop door, and can remain installed for other crops.

NOTE: Contact your John Deere dealer.

A—Rubber Flap



ZX271473

OUC002,0004A78 -19-28JAN16-1/1

ZX271473 —UN—28JAN16

Straw Walker Grids (Bundle)

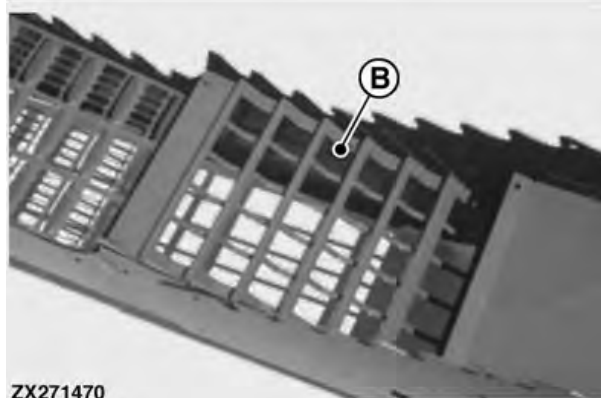
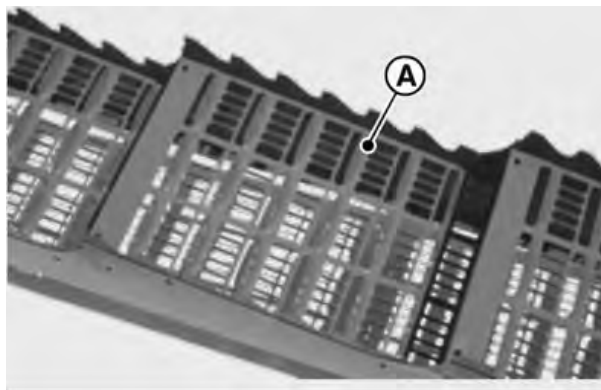
Straw walkers can be configured with different grid types.

- Universal walker grids (A) for dry conditions or Southern countries. Smaller holes limit the straw and chaff particles going to the cleaning shoe, but can limit separation capacity in moist conditions.
- CCM walker grids (B) for wet condition or Northern countries. A higher separation capacity is obtained, but too much chaff can pass to the cleaning shoe in dry conditions, resulting in overloading of the shoe.

NOTE: Contact your John Deere dealer.

A—Universal Walker Grid

B—CCM Grid



ZX271470

ZX271470—UN—28JAN16

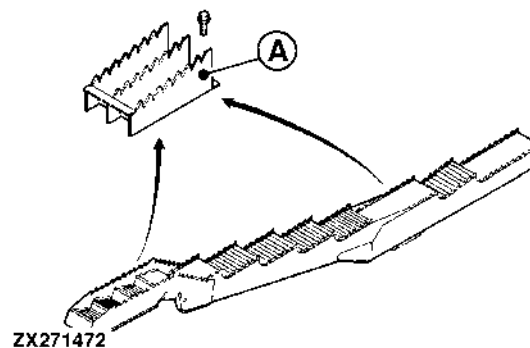
OUCC002,0004A72 -19-28JAN16-1/1

Straw Walker Fishbacks (Bundle)

To improve separation in wet conditions or bearded crops (barley and durum when nests of grain leave the machine as they are trapped in awns), two different kind of fishbacks (A) can be installed on some portions of straw walkers. Contact your John Deere dealer.

IMPORTANT: On W Series machine, do not install fishbacks if machine is equipped with the power separator.

A—Fishbacks



ZX271472

ZX271472—UN—28JAN16

OUCC002,0004A86 -19-29JAN16-1/1

Straw Walker Curtain

NOTE: Remove curtain (A) from inside the machine.

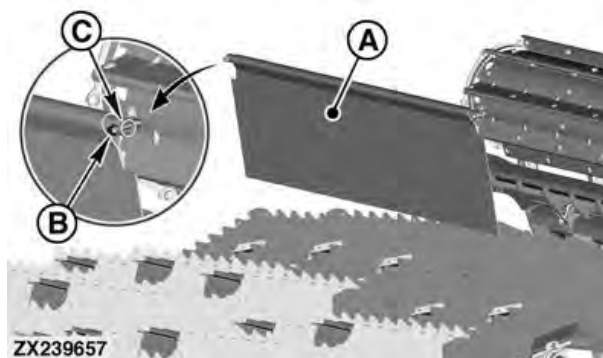
Depending on crop and harvesting conditions, the curtain (A) can be removed.

To remove curtain (A), remove both locking screws (B).

Push one end of pipe (C) inside side sheet then remove curtain (A) by sliding pipe through curtain.

A—Curtain
B—Locking Screw

C—Pipe



ZX239657 —UN—16APR15

OUC002,0004A63 -19-27JAN16-1/1

Adjust Cleaning Fan Drive Speed—Dual Drive Range (If Equipped)

IMPORTANT: Depending on the selected drive speed range, the belt tensioner (A) must be relocated to apply adequate belt tension. Each time the drive speed configuration is changed, the Primary Display Unit (PDU) Control Unit requires new calibration address setup. Follow operating instructions on decal (E) or contact your John Deere dealer.

The dual drive has a range of **300—600** and **550—1550** rpm and is recommended for use in light weight crops such as grass seeds only (contact your John Deere dealer).

To change the cleaning fan drive speed, proceed as follows:

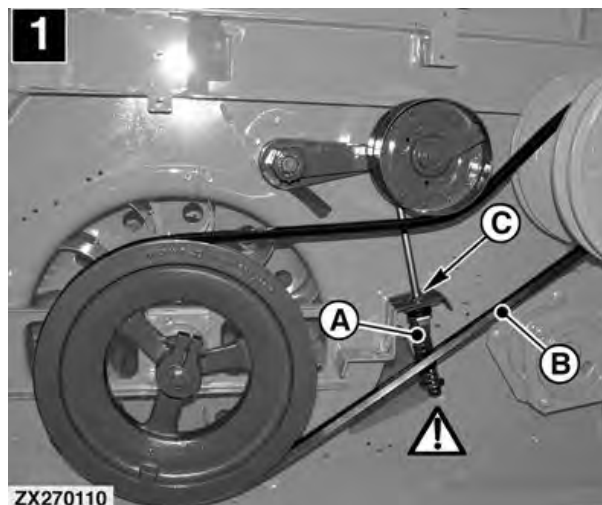
1. Relieve belt tension at tensioner (A).
2. - To use cleaning fan drive speed **300-600 rpm** range, place drive belt (B) on outer sheaves as shown in configuration (1) and ensure that tensioner (A) assembly is located in REAR anchor (C).
- To use cleaning fan drive speed **550-1350 rpm** range, place drive belt (B) on inner sheaves as shown in configuration (2) and ensure that tensioner (A) assembly is located in FRONT anchor (D).

IMPORTANT: Always relocate tensioner (A) assembly for the relevant configuration.

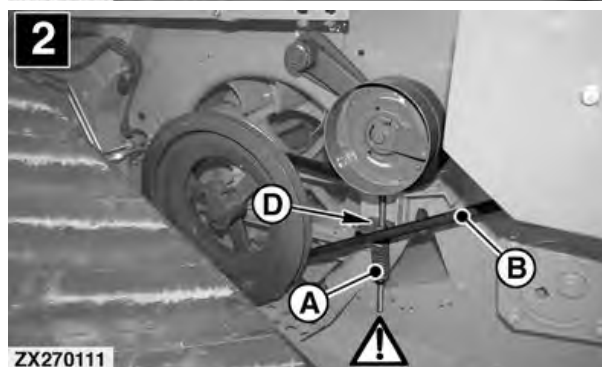
3. Apply tension to the drive belt (B). See **Adjust Cleaning Fan Belt Tension** in Lubrication and Maintenance section.
4. Access Primary Display Unit (PDU) Control Unit and setup following addresses:
 - a. Address **PDU 129** with input **300** and address **PDU 130** with input **600** for configuration (1).
 - b. Address **PDU 129** with input **550** and address **PDU 130** with input **1350** for configuration (2).

A—Tensioner
B—Belt
C—Tensioner in Rear Anchor—300-600 rpm Range

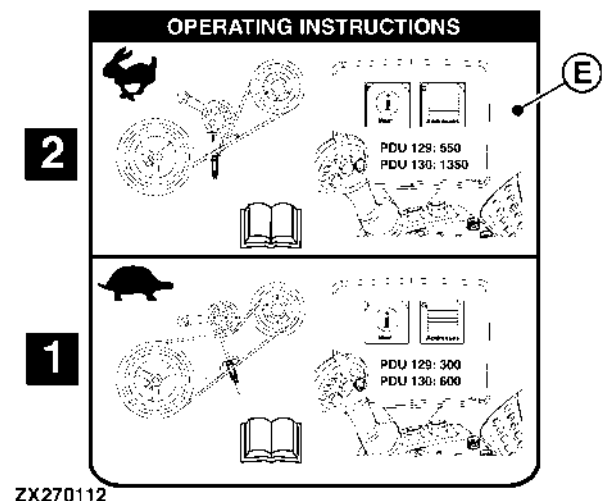
D—Tensioner in Front Anchor—550-1350 rpm Range
E—Decal



ZX270110 —UN—27JAN16



ZX270111 —UN—27JAN16



ZX270112 —UN—26FEB16

OUC002,0004A45 -19-26JAN16-1/1

Precleaner

Precleaner (A) is not intended to be adjusted. Precleaner is factory set to 10 mm (0.4 in) for all crops.

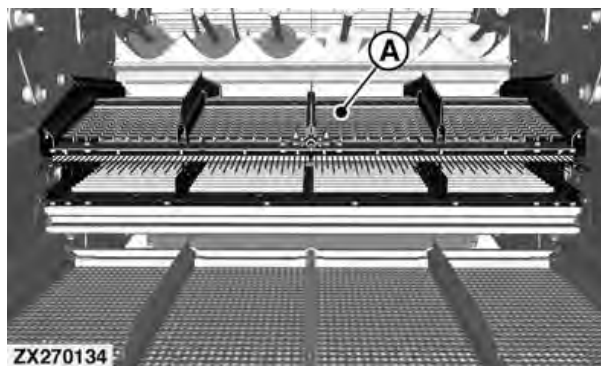
IMPORTANT: Never open precleaner more than 10 mm (0.4 in).

Factory setting must be kept unless precleaner is plugging. In this case opening can be manually reduced to avoid plugging.

NOTE: Precleaner plugging can occur in grass, rape, corn, wet or high sugar content crops.

In case of plugging, try first with 5 mm (0.2 in) opening then close completely if necessary.

IMPORTANT: With precleaner closed, cleaning fan speed needs to be reduced if tailings amount rises. A far too closed precleaner generates a less available pre-separation area.



A—Precleaner

ZX270134 —UN—27 JAN 16

OUC002,0004A64 -19-27JAN16-1/1

Chaffer and Sieve Elements

To adapt the machine to the crop harvested, several types of chaffer elements (A) and sieve elements (B) are available. Contact your John Deere dealer.

Chaffer and sieves can be manually adjusted using relevant switch (C) or (D).

IMPORTANT: Each time a different chaffer or sieve element type is installed, the Control Unit CAB address 116 must be set accordingly (see **Replace Chaffer or Sieve Element** section).

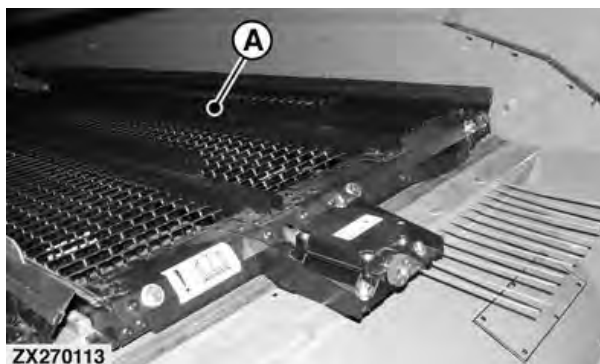
Available chaffer or sieve elements:

- **For small grain crop**
 - Chaffer and sieves **GP** (General Purpose)
 - Chaffer **HP** (High Performance)
- **For corn crop**
 - Chaffer **CP** (CZ4)
 - Sieves **GP** (General Purpose)
- **For CCM crop**
 - Chaffer **CCM**

Refer to **Replace Chaffer or Sieve Element** section to remove and install chaffer and sieve elements.

A—Chaffer Element
B—Sieve Element

C—Switch—Chaffer Adjustment
D—Switch—Sieve Adjustment



ZX270113 —UN—27JAN16



ZX270114 —UN—27JAN16



ZX271486 —UN—30JAN16

OUCC002,0004A88 -19-29JAN16-1/1

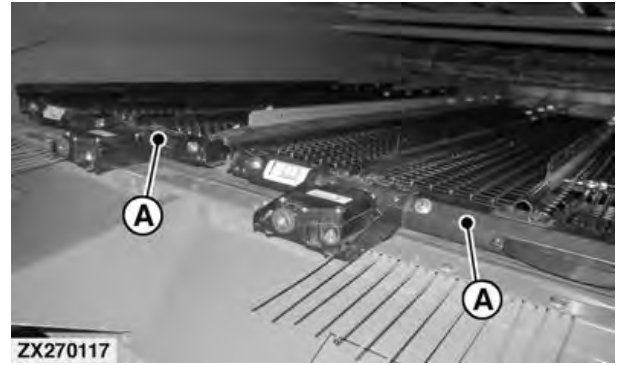
Replace Chaffer and Sieve Element

Two half-width chaffer (A) and two half-width sieves (B) are installed in 6-walker machines. The 5-walker machines feature a full-width chaffer (A) and sieves (B) type.

To replace chaffer (A) and sieves (B), proceed as follows:

A—Chaffer Element

B—Sieve Element



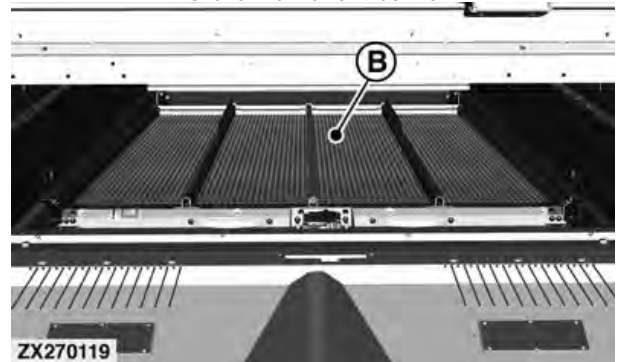
Chaffer—6-Walker Machine



Sieves—6-Walker Machine



Chaffer—5-Walker Machine



Sieves—5-Walker Machine

Continued on next page

OUC002.0004A87 -19-29JAN16-1/4

ZX270117 —UN—27JAN16

ZX270118 —UN—27JAN16

ZX270116 —UN—27JAN16

ZX270119 —UN—27JAN16

NOTE: 6-walker chaffer and sieves replacement procedure illustrated. The procedure stands for both 5 and 6-walker machines.

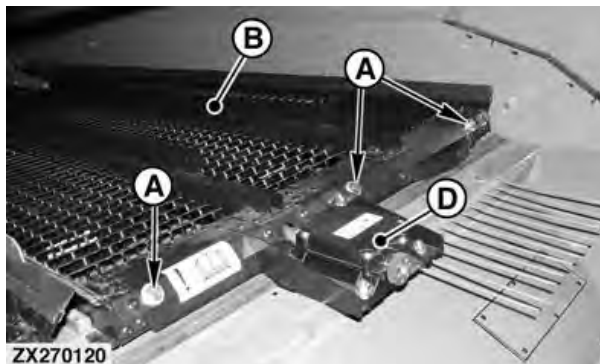
1. On 6-walker machines, remove three attaching screws and washers (A) of each chaffer element (B).

NOTE: On 5-walker machines, remove four attaching screws and washers (A) of chaffer element (B).

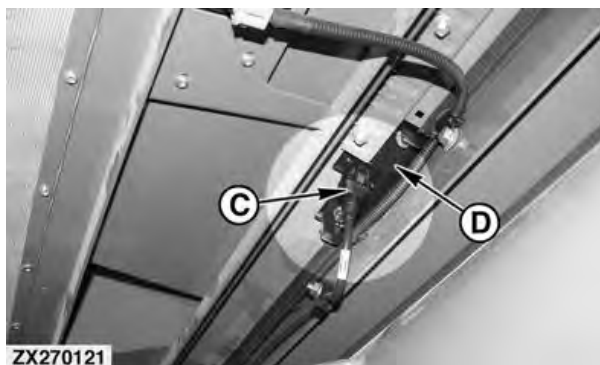
2. If equipped with, disconnect connector (C) from chaffer element adjusting motor (D) underneath the shoe tailboard.
3. On 6-walker machines, repeat on other chaffer element.
4. Slide chaffer element (B) out of cleaning shoe frame. Sieve elements (E) are now accessible.

A—Screw and Washer
B—Chaffer Element
C—Connector

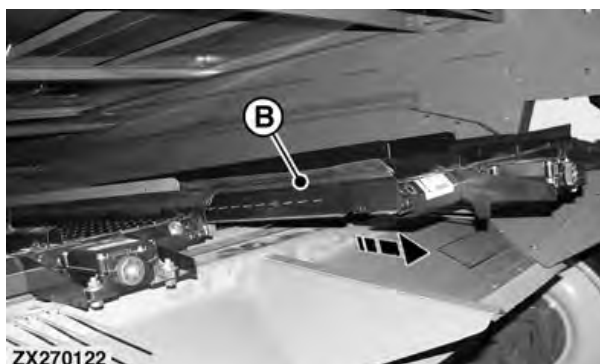
D—Motor
E—Sieve Element



ZX270120 —UN—27 JAN16



ZX270121 —UN—27 JAN16



ZX270122 —UN—27 JAN16



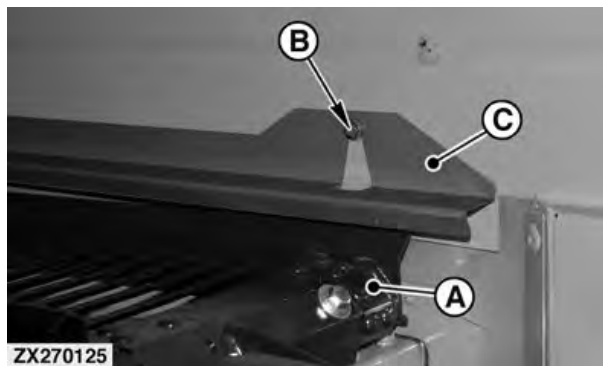
ZX270123 —UN—27 JAN16

Continued on next page

OUC002,0004A87 -19-29JAN16-2/4



ZX270124 —UN—27JAN16



ZX270125 —UN—27JAN16

5. To remove sieve element (A), remove attaching screw (B) then pull up guide (C) as shown.

NOTE: On 5-walker machines, pull up both guides (C).

6. If equipped with, disconnect sieve element adjusting motor (D).

NOTE: To ease connector disconnection, it is recommended to remove wiring harness clamps (E) from cleaning shoe frame.

7. On 6-walker machines, remove three attaching screws and washers (F) of each sieve element (A).

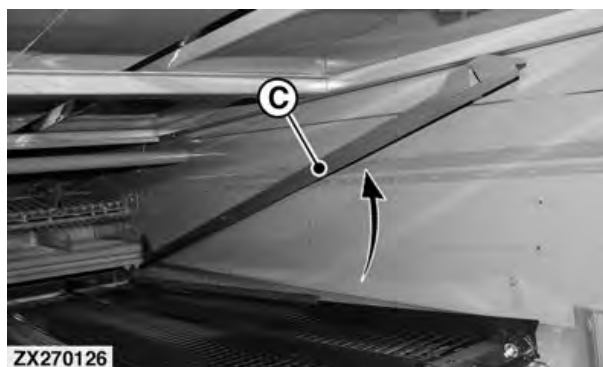
NOTE: On 5-walker machines, remove four attaching screws and washers (F) of sieve element (A).

8. On 6-walker machines, repeat on other sieve elements.

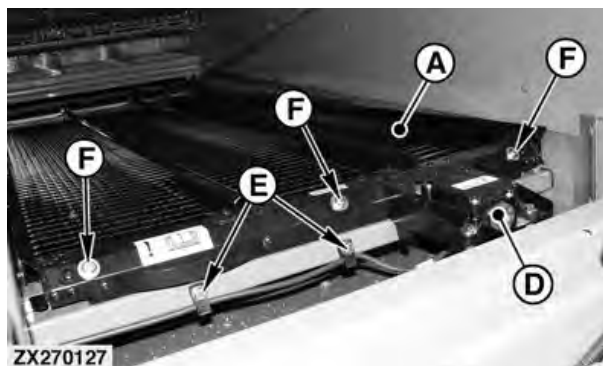
9. Slide sieve element (A) out of cleaning shoe frame.

A—Sieve Element
B—Screw
C—Guide

D—Motor
E—Clamp
F—Screw and Washer



ZX270126 —UN—27JAN16



ZX270127 —UN—27JAN16



ZX270128 —UN—27JAN16

Continued on next page

OUC002.0004A87 -19-29JAN16-3/4

Install sieves and chaffer elements in reverse order as the removal process. Pay attention to the following:

- Ensure that chaffer and sieve element beds (A) are free from debris before installing chaffer and sieves back in place.
- Ensure that chaffer and sieves are well seated in their respective beds (A) before attaching elements.
- On 6-walker machines, check that once chaffer and sieves are installed, sealings (B) are correctly seated alongside center rail (C), as shown.
- After chaffer and sieves motor connection, check that chaffer and sieves can be adjusted with the relevant switch (D) and (E).

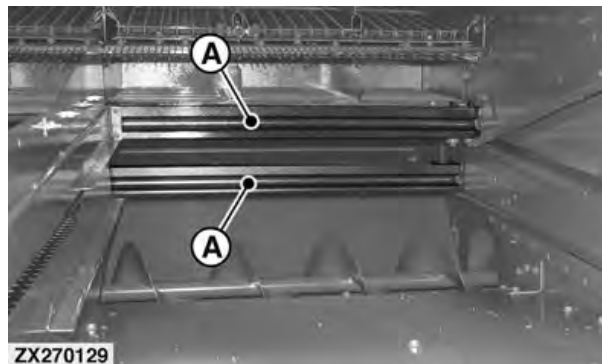
IMPORTANT: If you are not familiar with Control Unit address access, contact your John Deere dealer for appropriate CAB—116 address setup.

After complete installation, proceed to the Control Unit address **CAB—116** setup. Depending on the chaffer and sieve type installed, enter the following values:

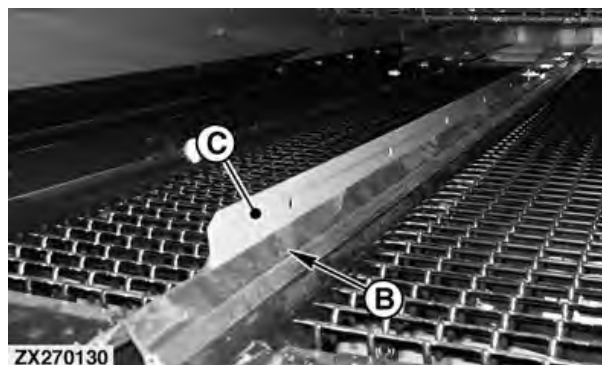
- Set digit “- - - - nn - -” for chaffer and digit “- - - - - nn” for sieves to:
 - “00” in case of **CCM** or manual adjust type chaffer/sieve element.
 - “09” in case of **GP** or **HP** type chaffer/sieve element on 5-walker machine.
 - “10” in case of **CZ4** or deep tooth type chaffer/sieve element on 5-walker machine.
 - “11” in case of **GP** or **HP** type chaffer/sieve element on 6-walker machine.
 - “12” in case of **CZ4** or deep tooth type chaffer/sieve element on 6-walker machine.

A—Bed
B—Sealing
C—Rail

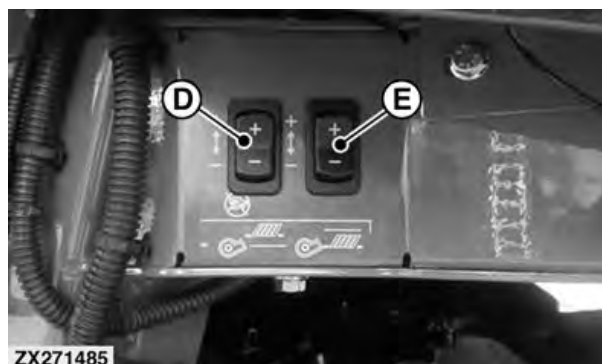
D—Switch—Chaffer Adjustment
E—Switch—Sieve Adjustment



ZX270129 —UN—27 JAN16



ZX270130 —UN—27 JAN16



ZX271485 —UN—30 JAN16

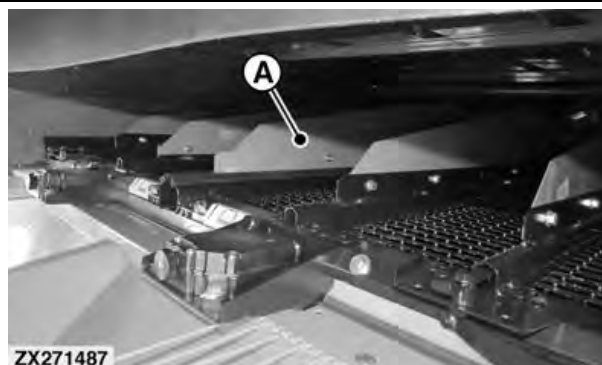
OUC002,0004A87 -19-29JAN16-4/4

Side Hill Adaptation For Level Land Machine (Bundle)

High separating walls (A) can be installed on chaffer frame when machine is operated in small slopes that do not require HillMaster™ system.

NOTE: Contact your John Deere dealer.

A—Separating Wall



ZX271487 —UN—03 FEB16

OUC002,0004A89 -19-29JAN16-1/1

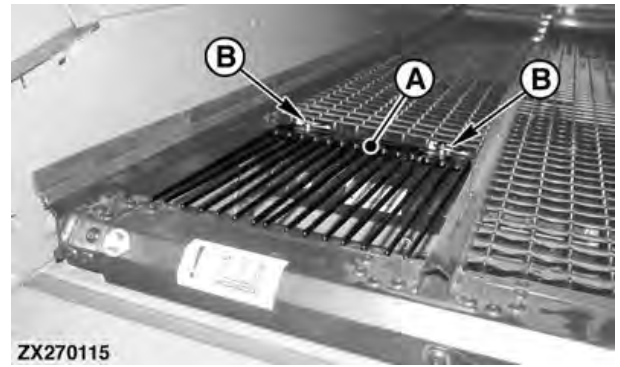
Chaffer Fingers

The chaffer fingers (A) are used for normal operating conditions. During operation on extreme slopes, remove the quick-lock pins (B), then the chaffer fingers (A).

NOTE: Chaffer fingers on left-hand side shown.

A—Fingers

B—Quick-Lock Pin



ZX270115 —UN—27JAN16

OUC002,0004A48 -19-26JAN16-1/1

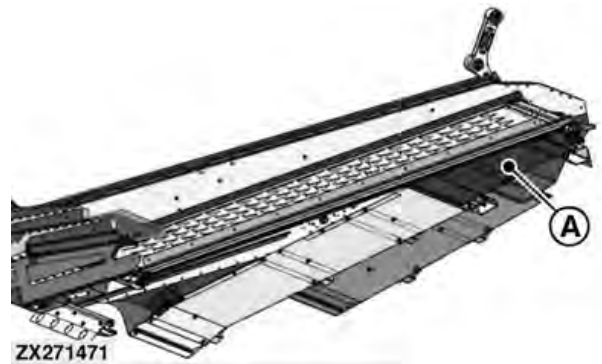
Tailings Cover (Bundle)

Tailings cover (A) can be installed when machine is configured with CCM chaffer or CZ4 chaffer in wet corn (above 32% moisture).

NOTE: Sieves are removed when tailings cover is installed.

Contact your John Deere dealer.

A—Tailings Cover



ZX271471 —UN—28JAN16

OUC002,0004A73 -19-28JAN16-1/1

Check Tailings

CAUTION: Disengage the separator and shut off the engine.

Tailings elevator door (A) is located on the left-hand side of the cab, behind lower door (B).

The door (A) drops to check position (1) after unlocking it.

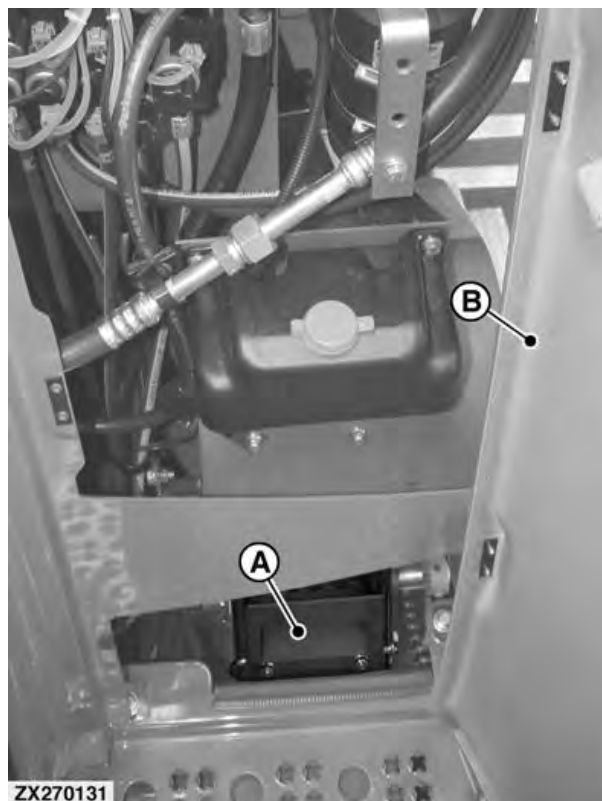
Now the machine may be operated in the field for a short distance until the separator load has reached its normal level.

Stop the machine, shut off the engine and check the tailings that have dropped out of the open channel.

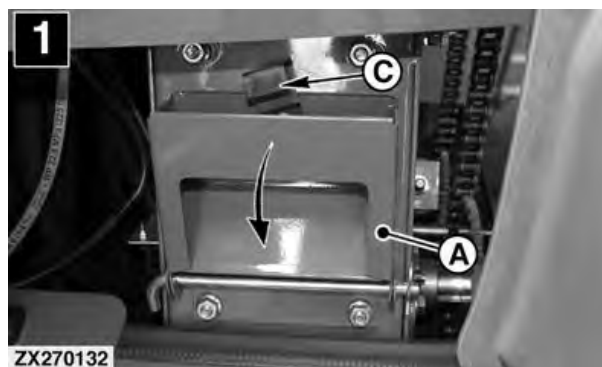
Close and lock the door (A) in position (2).

A—Tailings Elevator Door
B—Access Door
C—Lock

1—Open Position (for Tailings Sampling)
2—Closed Position (for Normal Operation)

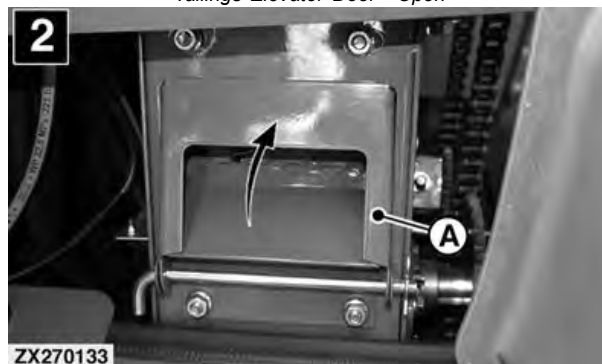


ZX270131 —UN—27JAN16



ZX270132 —UN—27JAN16

Tailings Elevator Door—Open



ZX270133 —UN—27JAN16

Tailings Elevator Door—Closed

Continued on next page

OUCC002,0004A4B -19-26JAN16-1/2

On machines equipped with tailings elevator sensor (A), the tailings volume is displayed at the Primary Display Unit (PDU) in the cab.

NOTE: For more information, refer to *Operating the Controls and Displays* section.

A—Tailings Sensor



ZX239661

ZX239661 —UN—26JAN16

OUC002,0004A4B -19-26JAN16-2/2

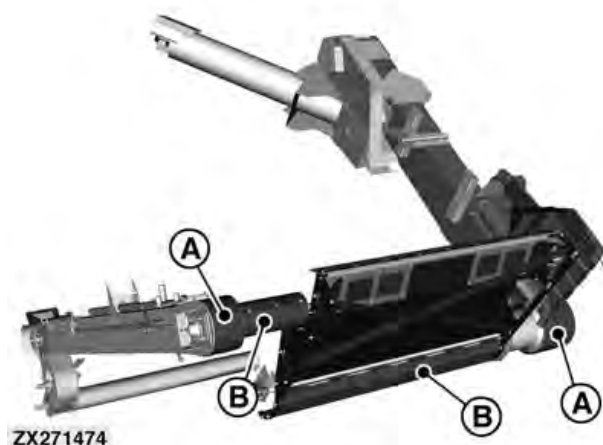
Tailings and Clean Grain Elevator Perforated Door and Trough (Bundle)

To evacuate soil from the machine, perforated doors (A) and troughs (B) can be used for peas and beans. It is recommended to use perforated doors and troughs with perforated feeder house floor.

NOTE: Contact your John Deere dealer.

A—Perforated Door

B—Perforated Trough



ZX271474

ZX271474 —UN—28JAN16

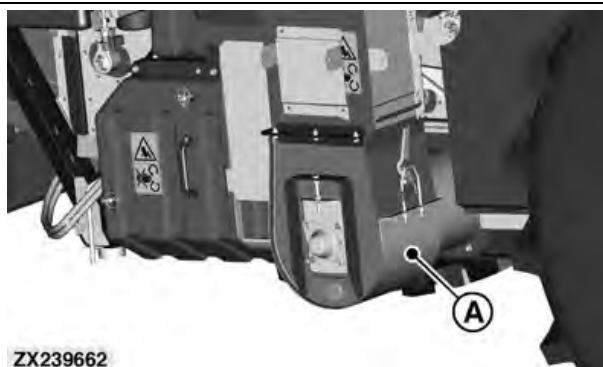
OUC002,0004A79 -19-28JAN16-1/1

Clean Grain Elevator Lower Access Cover

The lower access cover (A) on the clean grain elevator allows access to the elevator paddle chain.

- If the machine is exposed to wet weather for a lengthy period, engage the catch on this cover as shown in the illustration, leaving a gap at the bottom of about 1 cm (0.4 in.); this allows any water that gets in at the top to drain out.
- If the machine is used to harvest peas, the cover can be replaced with a cover that has holes in it, allowing dirt, leaves, and other fine material to be sieved out.

A—Cover



ZX239662

ZX239662 —UN—16APR15

OUC002,000455B -19-29MAR15-1/1

Grain Tank Access

CAUTION: Prevent falls by facing the machine when getting on and off. Maintain 3-point contact with steps, handholds, and handrails.

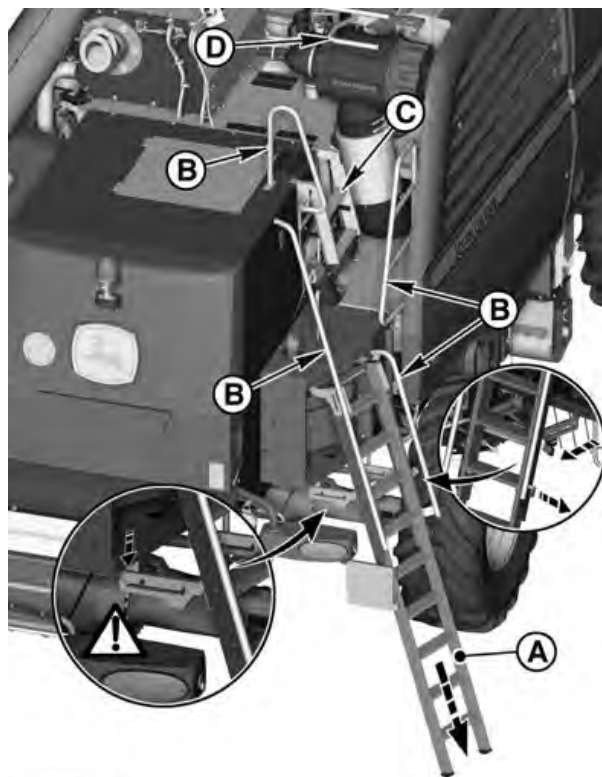
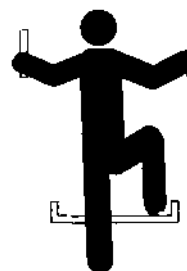
Use extra care when mud, snow, or moisture present slippery conditions. Keep steps clean and free of grease or oil. Never jump when exiting machine. Never mount or dismount a moving machine.

CAUTION: Shut off the engine and set the park brake.

To access grain tank, fold out and lower rear access ladder (A) to the ground.

A—Ladder
B—Handrail

C—Foot Steps
D—Handhold



ZX240896

T133468 —UN—15APR13

ZX240896 —UN—16APR15

Continued on next page

OUC002,0004A52 -19-27JAN16-1/2

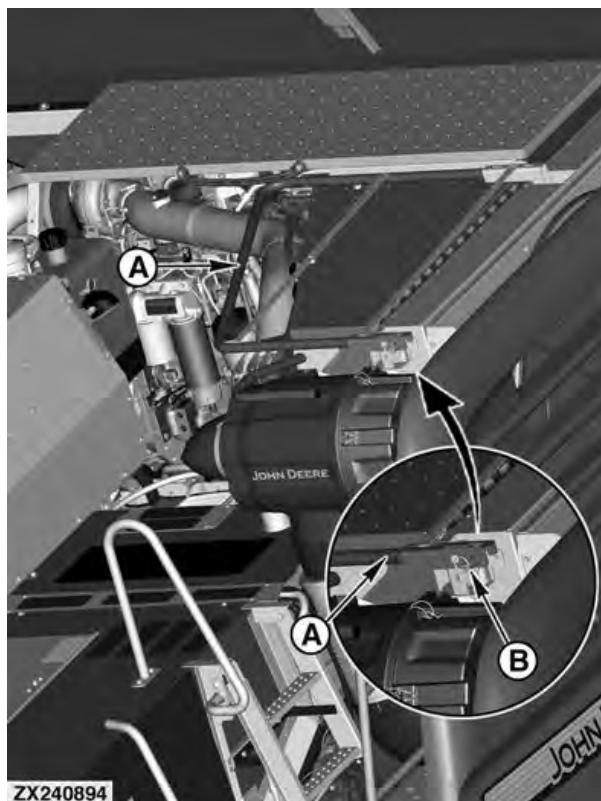
Rotate handrail (A) up until lock-out pin (B) locks handrail into place.

Use foot steps (C) then step on covers (D) to reach the grain tank.

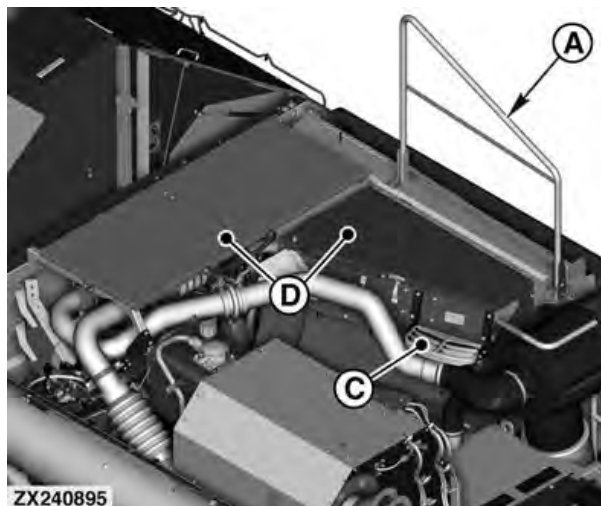
NOTE: To lower the handrail (A), first pull out lock-out pin (B) then rotate handrail.

A—Handrail
B—Lock-Out Pin

C—Foot Steps



ZX240894 —UN—16APR15



ZX240895 —UN—16APR15

OUCC002,0004A52 -19-27JAN16-2/2

Open Grain Tank Covers (One-Touch Button)

CAUTION: Grain tank covers must be closed and antenna retained with hook on cab roof before transporting machine on roadway. Avoid contact with low hanging power lines and tree limbs.

IMPORTANT: Open grain tank covers before engaging separator.

NOTE: Separator does not engage until grain tank covers are fully open.

Clean grain loading auger rises when grain tank covers are opened. Auger swings down when covers are closed.

Press folding functions shortcut button (A) on armrest. See **Folding Functions Setup in CommandCenter™ Display Screens** section for further information on raising or lowering grain tank covers.



A—Folding Functions Shortcut Button

OUCC002,0004A84 -19-29JAN16-1/1

Open the Grain Tank Manually (10000 and 11 000 L Grain Tank)

CAUTION: Grain tank covers must be closed before transporting machine on roadway.

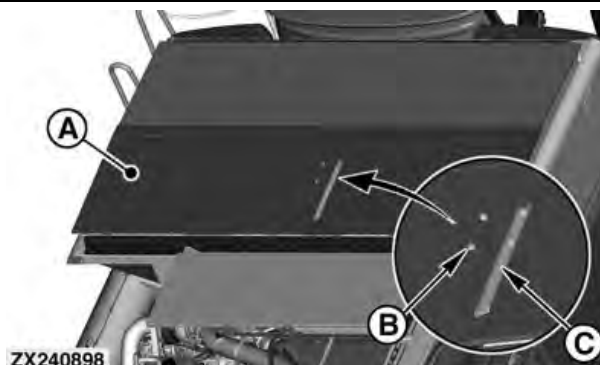
IMPORTANT: Open grain tank covers before engaging separator.

CAUTION: Shut off engine and engage park brake before entering the grain tank.

Whenever necessary, the rear grain tank cover (A) can be manually opened.

Take out the four screws (B) then open cover (A) by hand.

Use brace (C) to hold rear grain tank cover (A) in an open position.



A—Cover
B—Screw

C—Brace

OUCC002,0004A4F -19-27JAN16-1/1

Open the Grain Tank Manually (8000 and 9000 L Grain Tank)

CAUTION: Grain tank covers must be closed before transporting machine on roadway.

IMPORTANT: Open grain tank covers before engaging separator.

When covers are opened, the clean grain loading auger swings up with them.

NOTE: The grain tank cover must be raised before the window in the cab can be cleaned on the grain tank side.

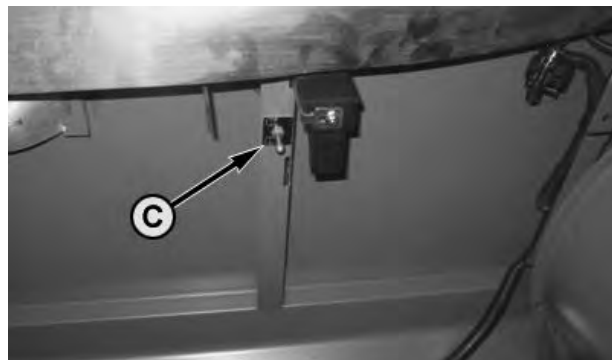
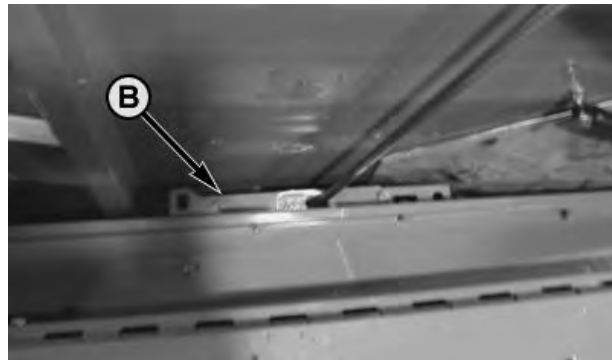
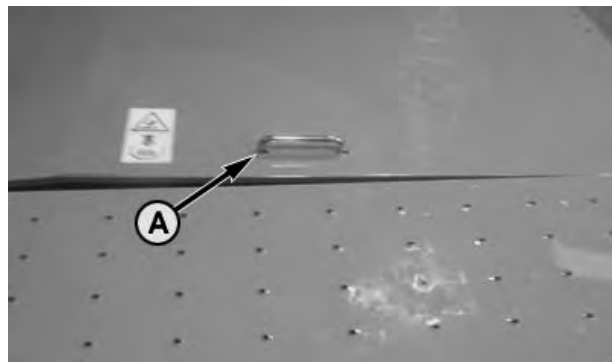
Raise the right side of the grain tank cover at handle (A).

Use a screwdriver to push latch (B) to the left, and raise half of the grain tank cover as high as it will go. Now the grain tank cover is supported by the strut.

Climb into the grain tank and, with the ignition on, raise the left half of the grain tank cover by actuating switch (C); this enables the cab window to be cleaned.

A—Handle
B—Latch

C—Grain Tank Cover Switch



ZX1038297 —UN—09JAN09

ZX1038298 —UN—09JAN09

ZX1038299 —UN—09JAN09

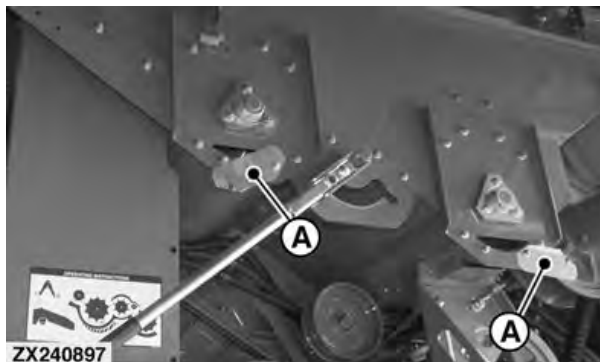
OUC002,0004A50 -19-27JAN16-1/1

Grain Tank Drain Holes

Grain tank drain hole flaps (A) are located on the right and left-hand sides of cross augers and must be opened during storage or for cleaning grain tank.

Loosen cap screws and slide flaps (A) away from drain holes.

A—Flap



Grain Tank Drain Holes—Right-Hand Side



Grain Tank Drain Holes—Left-Hand Side



Grain Tank Drain Holes—Left-Hand Side

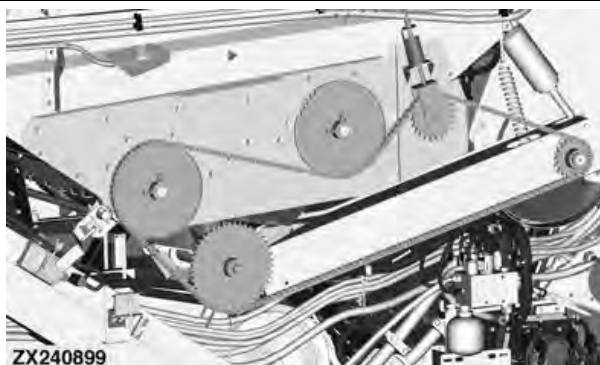
OUCC002,0004A67 -19-27JAN16-1/1

Reduced Speed Unloading System (Optional)

Adaptation kits to change the speed of the unloading system are available. Contact your John Deere dealer.

- **Machine with Standard Unloading Rate type vertical auger drive gear case:** the speed of grain tank cross augers is reduced and the speed of vertical auger drive gear case is increased.
- **Machine with High Unloading Rate type vertical auger drive gear case:** only the speed of grain tank cross augers is reduced.

This kit is recommended for use in grass or wet corn above 32% moisture content.



OUCC002,0004A68 -19-27JAN16-1/1

Grain Tank Fill Sensors

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Header drive must be engaged for buzzer to sound.

Grain Tank 3/4 Full Sensor:

3/4 full sensor (A) is located on the front side of the clean grain loading auger or on the right-hand grain tank cover

Grain tank 3/4 full icon appears on display when grain reaches the sensor.

When grain tank is 3/4 full, beacon lights illuminate to provide a signal to the grain cart operator that grain tank is nearly full.

Grain Tank 4/4 Full Sensor:

Grain tank 4/4 full sensor (B) is located on the grain tank cover.

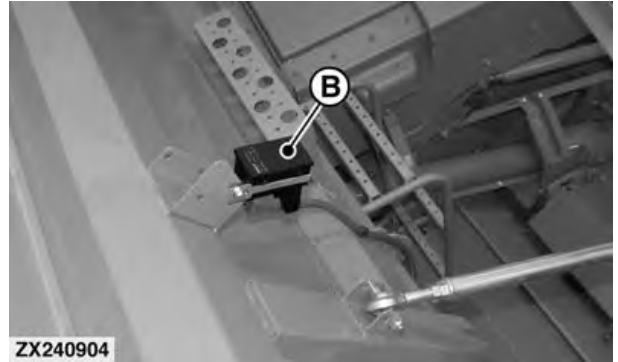
Grain tank 4/4 full icon appears on display when grain reaches the sensor.

A—3/4 Full Sensor

B—4/4 Full Sensor



ZX240906 —UN—16APR15



ZX240904 —UN—16APR15

OUC002,0004A69 -19-27JAN16-1/1

Grain Tank Cross Auger Adjustable Covers (If Equipped)

CAUTION: Shut off engine, set park brake and remove key.

Adjustable covers (A) can be set to 6 positions.

It is recommended to operate the machine with covers set to position 1 to 3 in all crops excepted in dry grass seeds.

IMPORTANT: If covers (A) are open too far (position 4 to 6) when harvesting crops other than dry grass seeds, the auger drive shear bolt may break repeatedly, or damage could occur to the augers or grain tank.

Operate machine with covers (A) in positions 5 and 6 only for dry grass seeds crop.

NOTE: Adjust the covers (A) down to slow unloading rate.

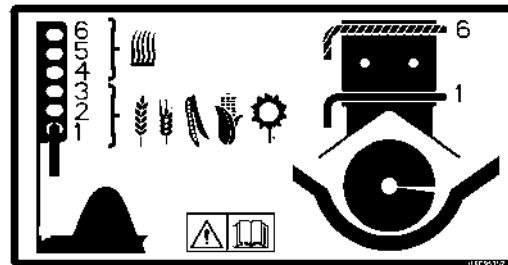
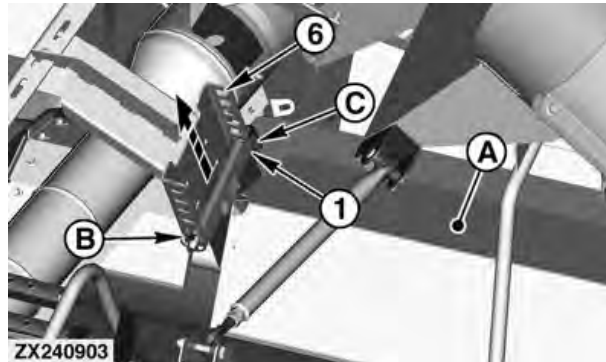
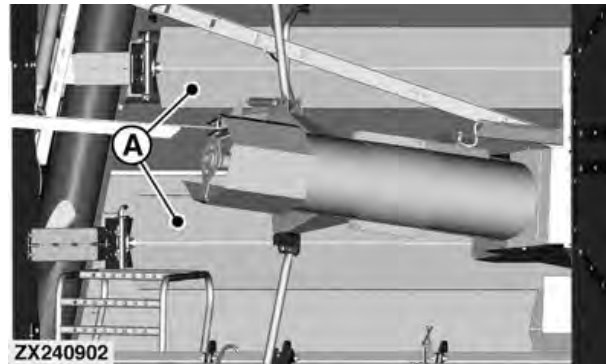
To select the cover position, proceed as follows:

1. Remove locking pins (B) and pins (C) holding ends of auger cover (A) to grain tank.
2. Hold cover in desired position and install previously removed pins and locking pins. Refer to auger cover position decals.

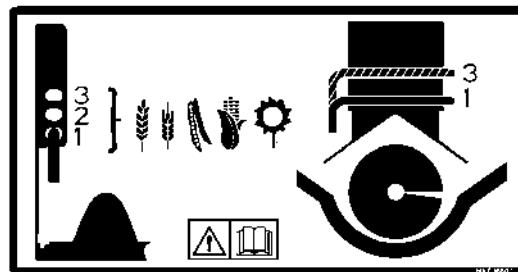
IMPORTANT: Covers (A) must be level and mounted so each cover is at the same distance from auger over entire length.

A—Auger Cover
B—Locking Pin

C—Pin



ZX270141



ZX270142

OUCC002,0004A6A -19-27JAN16-1/1

Cross Auger Drive Shear Bolt

CAUTION: Shut off engine, set parking brake and remove key.

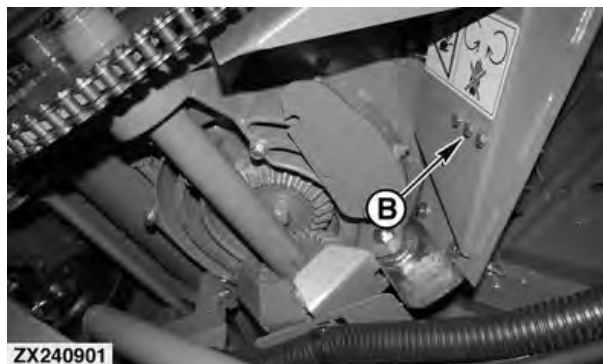
Shear bolt (A) protects the unloading auger system. Three extra bolts (B) are provided to the left of the drive.

Use only John Deere supplied shear bolt (A) (cap screw through hub), see your John Deere dealer for replacement shear bolts.

IMPORTANT: Coat machined face and pilot shoulder of hub with grease whenever shear bolt (A) is replaced.

A—Shear Bolt

B—Extra Bolts



ZX240900 —UN—16APR15

ZX240901 —UN—16APR15

OUC002,000459D -19-02APR15-1/1

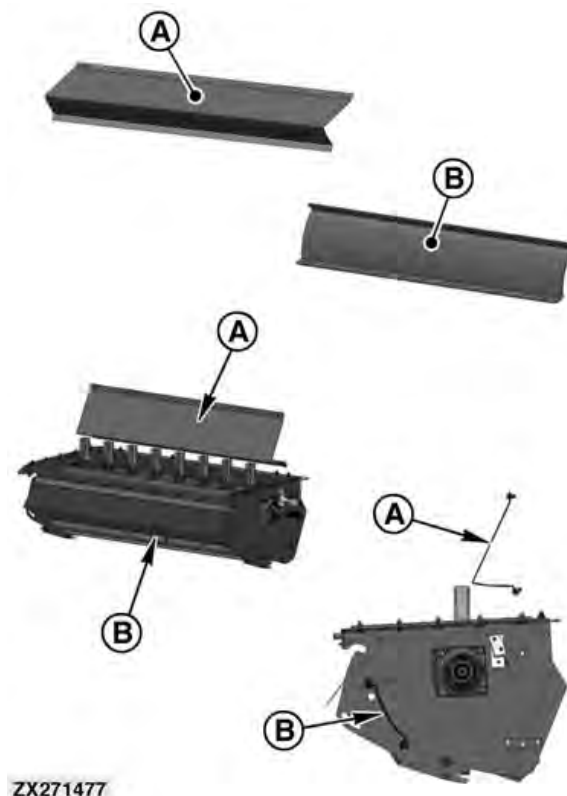
Straw Chopper Corn Adaptation (Bundle)

A corn cob deflector (A) and a corn counterknife sheet (B) can be installed to adapt the straw chopper for corn, CCM, or sunflower. Contact your John Deere dealer.

NOTE: Installation of the counterknife sheet (B) requires the counterknife carrier and the crossbar to be removed from the chopper frame.

A—Cob Deflector

B—Counterknife Sheet



ZX271477 —UN—28JAN16

OUC002,0004A7D -19-28JAN16-1/1

Standard and Adjustable Windrow Rake

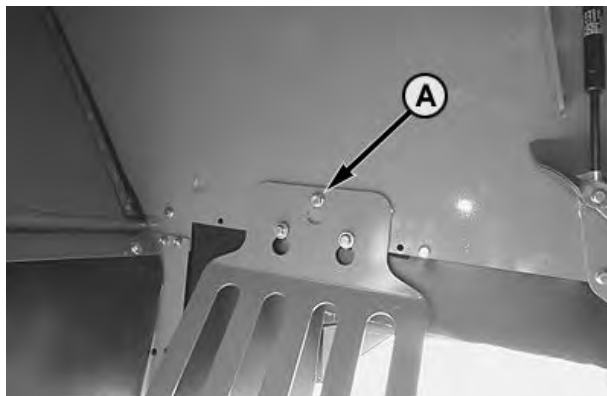
Standard Windrow Rake

Standard windrow rakes are not adjustable.

NOTE: Windrow rake must be removed when chaff spreader is swung back to its service position (see *Operate the Chaff Spreader (If Equipped)* section).

To remove windrow rake, loosen screws (A) then remove the windrow rake toward the top.

A—Screw



ZX1045960—UN—03JUL13

OUCC002,0004A82 -19-30JAN16-1/2

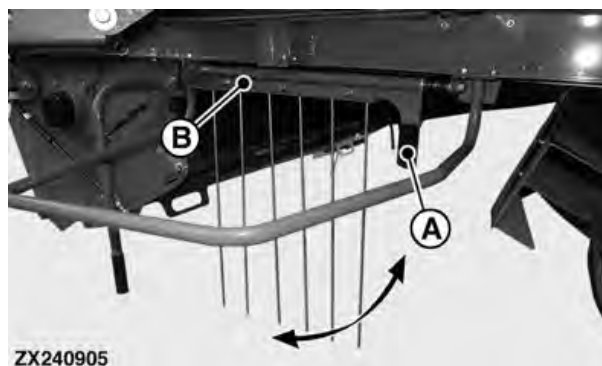
Adjustable Windrow Rake

To adjust windrow rake finger position, pull on handle (A) and set the finger assembly (B) to one of the adjusting slots (C).

NOTE: Adjustable windrow rake finger must be set all the way out when chaff spreader is swung back to its service position (see *Operate the Chaff Spreader (If Equipped)* section).

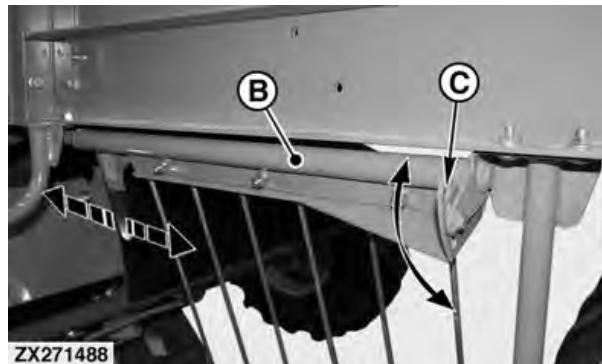
A—Handle
B—Finger

C—Slot



ZX240905

ZX240905—UN—30JAN16



ZX271488

ZX271488—UN—30JAN16

OUCC002,0004A82 -19-30JAN16-2/2

Lubrication and Maintenance

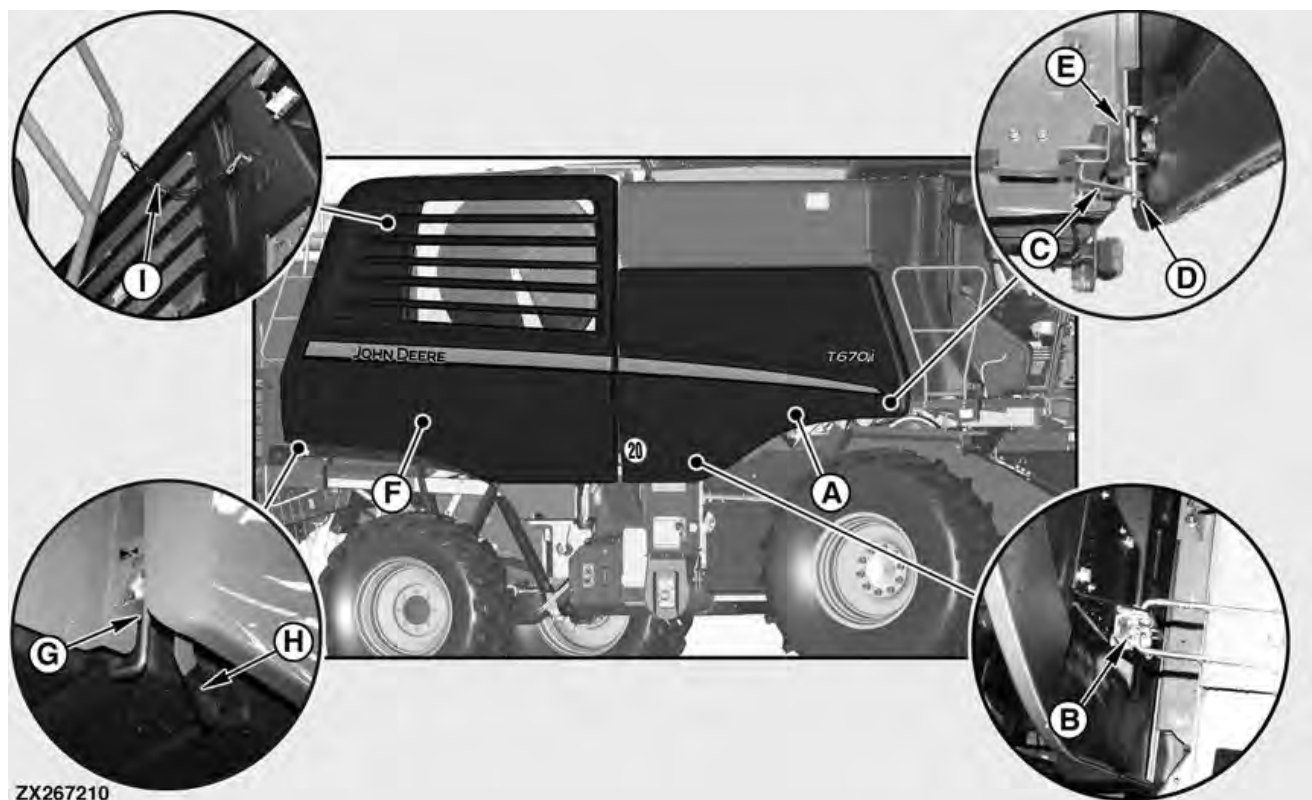
Required Emission-Related Information

Service Provider

A qualified repair shop or person of the owner's choosing may maintain, replace, or repair emission control devices and systems with original or equivalent replacement parts. However, warranty, recall, and all other services paid for by John Deere must be performed at an authorized John Deere service center.

DX,EMISSIONS,REQINFO -19-12JUN15-1/1

Machine Shielding



ZX267210

ZX267210—UN—21DEC15

A—Gull Wing Door
B—Latch
C—Locking Plate

D—Quick-Lock Pin
E—Magnet

F—Shield
G—Latch
H—Lever

I—Chain

Right-Hand Side Machine Shielding—Part 1:

CAUTION: Shut OFF engine, set the park brake, and remove key.

- To open right side wing door (A), turn latch (B) and pull out on gull wing door (A) to raise.

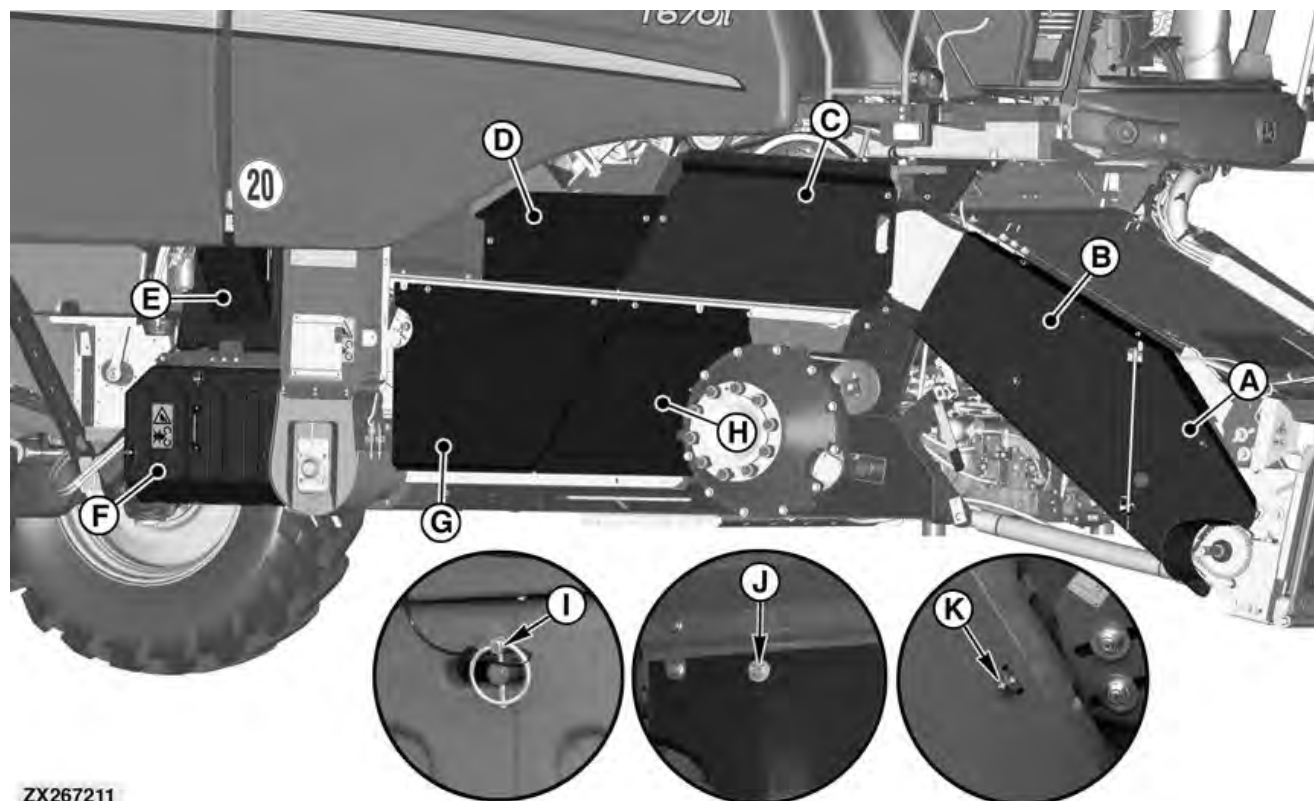
IMPORTANT: When transporting machine on a truck, close gull wing door (A), engage locking plate (C) and retain with quick-lock pin (D) as shown.

- To open landing assembly shield (F), pull down latch (G) then pull out on lever (H) to swing landing assembly out until it latches.

IMPORTANT: Before stepping on landing assembly, ensure that chain (I) is kept in closed position as shown.

Continued on next page

OUC002.00049D1 -19-18JAN16-1/5



ZX267211

A—Feeder House—Front Shield
B—Feeder House—Rear Shield
C—Separator—Upper Front Shield

D—Separator—Upper Rear Shield
E—Tailings Elevator Drive—Upper Shield
F—Tailings Elevator Drive—Lower Shield

G—Cleaning Shoe Drive—Rear Shield
H—Cleaning Shoe Drive—Front Shield
I— Quick-Lock Pin

J— Latch
K—Bolt

Right-Hand Side Machine Shielding—Part 2:

CAUTION: Shut OFF engine, set the park brake, and remove key.

- To open shield (A), remove bolt (K).
- To remove shields (A) and (B), remove quick-lock pins (I) and bolt (K).

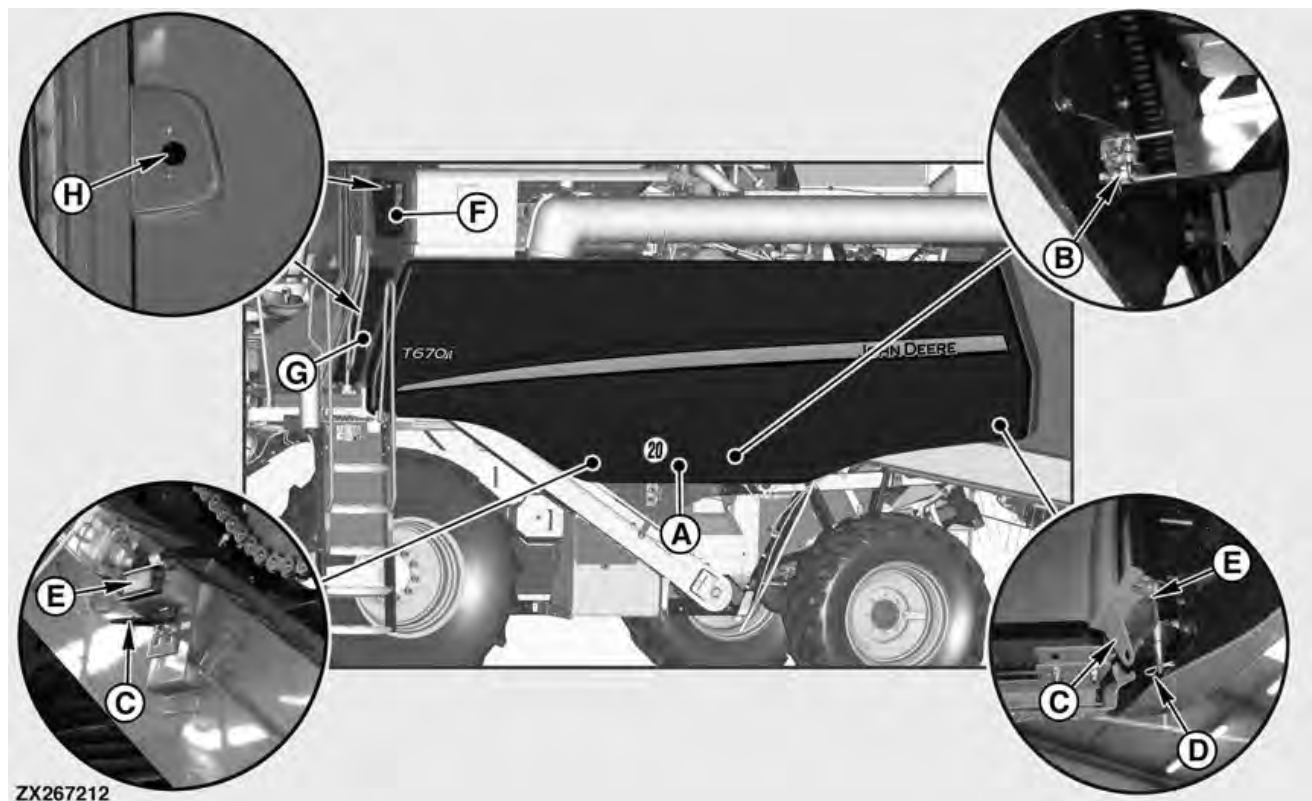
- To remove shields (C), (D), (G), and (H), turn relevant latches (J) to unlock then remove shields.
- To remove shield (F), remove quick-lock pins (I).

NOTE: To remove shield (E), it is necessary to remove one holder (not illustrated).

Continued on next page

OUC002,00049D1 -19-18JAN16-2/5

ZX267211 —UN—21DEC15



A—Gull Wing Door
B—Latch

C—Locking Plate
D—Quick-Lock Pin

E—Magnet
F—Door
G—Door

H—Latch

Left-Hand Side Machine Shielding—Part 1:

CAUTION: Shut OFF engine, set the park brake, and remove key.

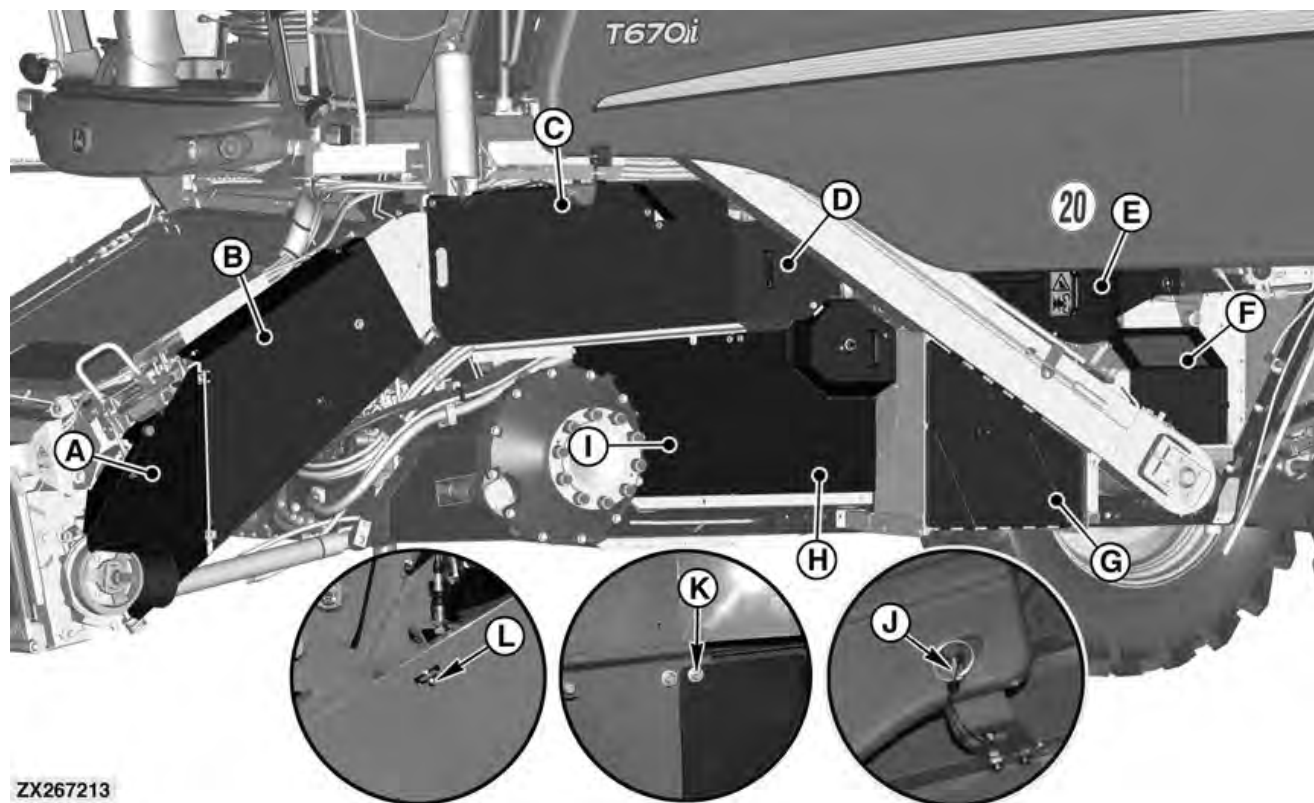
- To open left side wing door (A), turn latch (B) and pull out on gull wing door (A) to raise.

IMPORTANT: When transporting machine on a truck, close gull wing door (A), engage locking plates (C) and retain with quick-lock pins (D) as shown.

- To open front doors (F) and (G), turn relevant latch (H).

Continued on next page

OUC002.00049D1 -19-18JAN16-3/5



ZX267213

A—Feeder House—Front Shield
B—Feeder House—Rear Shield
C—Separator—Upper Front Shield

D—Separator—Upper Rear Shield
E—Fan Drive—Variator Shield
F—Battery Shield

G—Tool Box Shield
H—Fan Drive—Rear Shield
I—Fan Drive—Front Shield

J—Quick-Lock Pin
K—Latch
L—Bolt

Left-Hand Side Machine Shielding—Part 2:

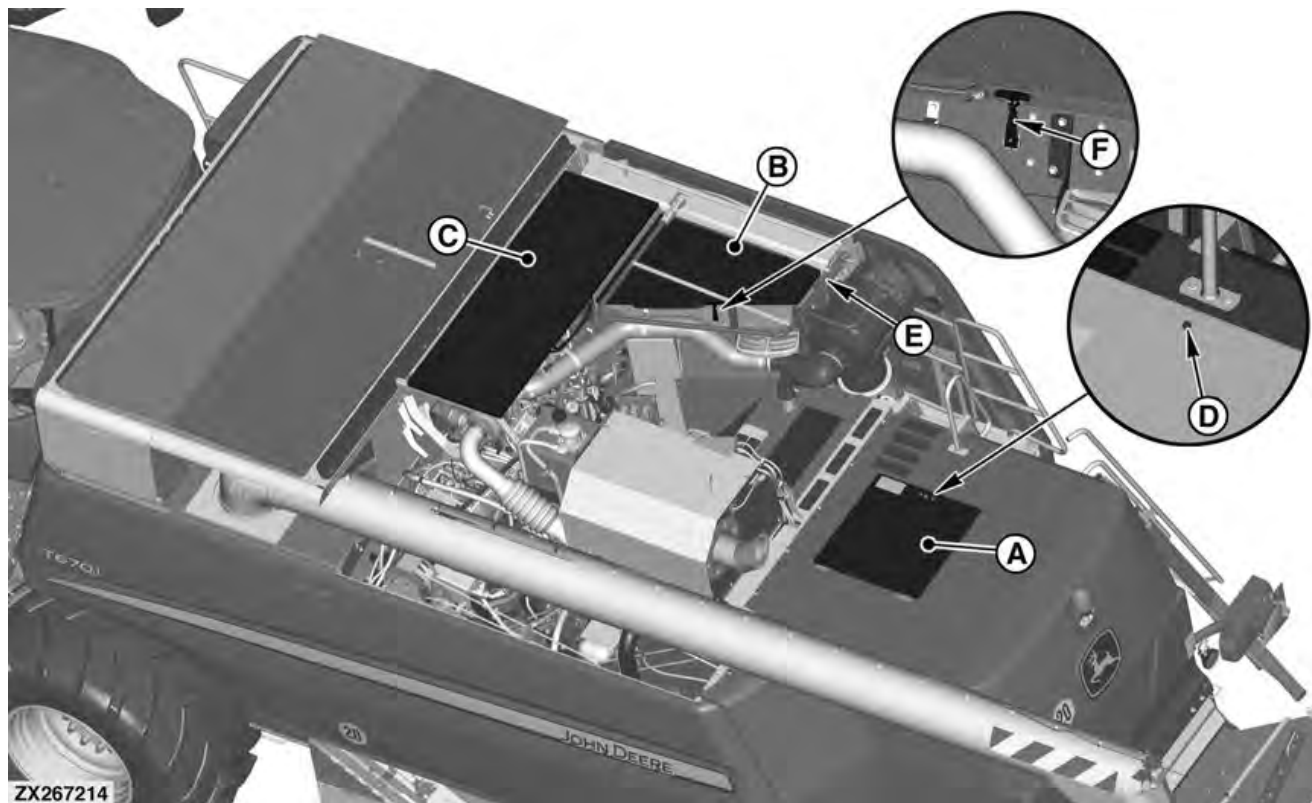
CAUTION: Shut OFF engine, set the park brake, and remove key.

- To open shield (A), remove the bolt (L).
- To remove shields (A) and (B), remove quick-lock pins (J) and bolt (L).

- To remove shields (C), (D), (H), and (I), turn relevant latches (K) to unlock then remove shields.
- To remove shields (E) and (F), remove quick-lock pins (J).
- To open tool box (G), remove quick-lock pins (J).

Continued on next page

OUCC002,00049D1 -19-18JAN16-4/5



A—Straw Walker Access Trap
B—Expansion Tank Access Door¹

C—Engine Access Door
D—Latch
E—Handrail

F—Latch

Machine Top Shielding:

CAUTION: Shut OFF engine, set the park brake, and remove key.

- To open access door (A), turn latch (D) to unlock.

- To open access door (B), unlatch and raise handrail (E) then unhook plastic latch (F) to raise door.
- To open access door (C), first open door (B) then raise door (C).

NOTE: To open access trap (A), turn latch to unlock.

¹Machine with Final Tier 4/Stage IV engine only

Engine Platform and Grain Tank Access

CAUTION: Prevent falls by facing the machine when getting on and off. Maintain 3-point contact with steps, handholds, and handrails.

Use extra care when mud, snow, or moisture present slippery conditions. Keep steps clean and free of grease or oil. Never jump when exiting machine. Never mount or dismount a moving machine.

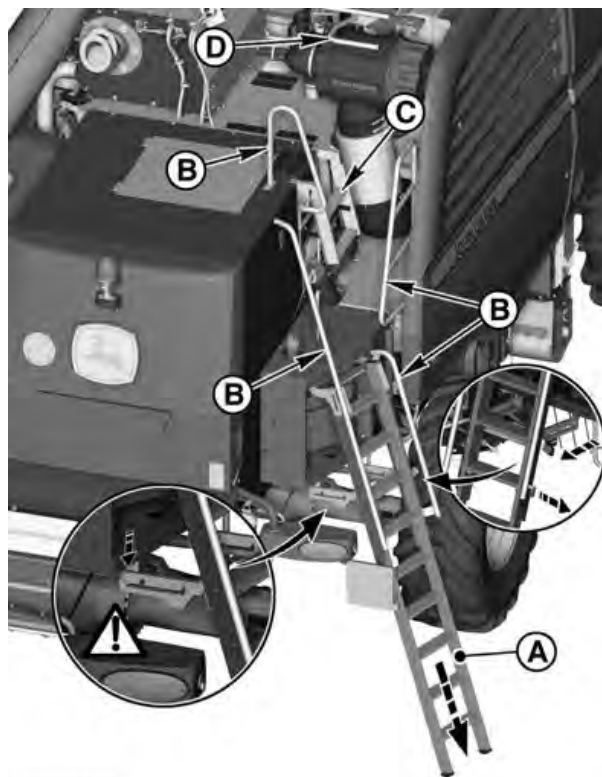
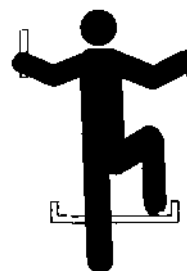
CAUTION: Shut off the engine and set the park brake.

To access engine platform or grain tank, fold out and lower rear access ladder (A) to the ground.

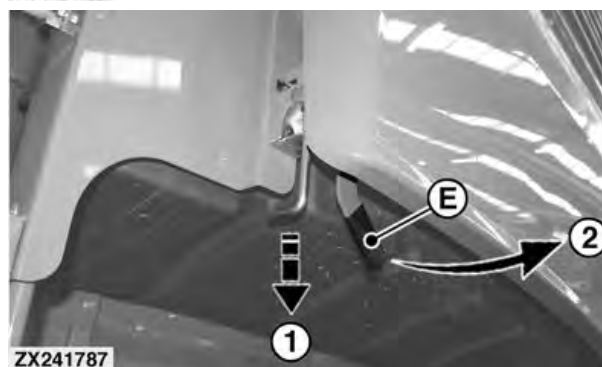
To access cooling system, unlock then push up on lever (E) and swing landing assembly out until it latches.

A—Ladder
B—Handrail
C—Foot Steps

D—Handhold
E—Lever



ZX240896



ZX241787

T133468 —UN—15APR13

ZX240896 —UN—16APR15

ZX241787 —UN—22JAN16

Continued on next page

OUCC002,000496F -19-12JAN16-1/3

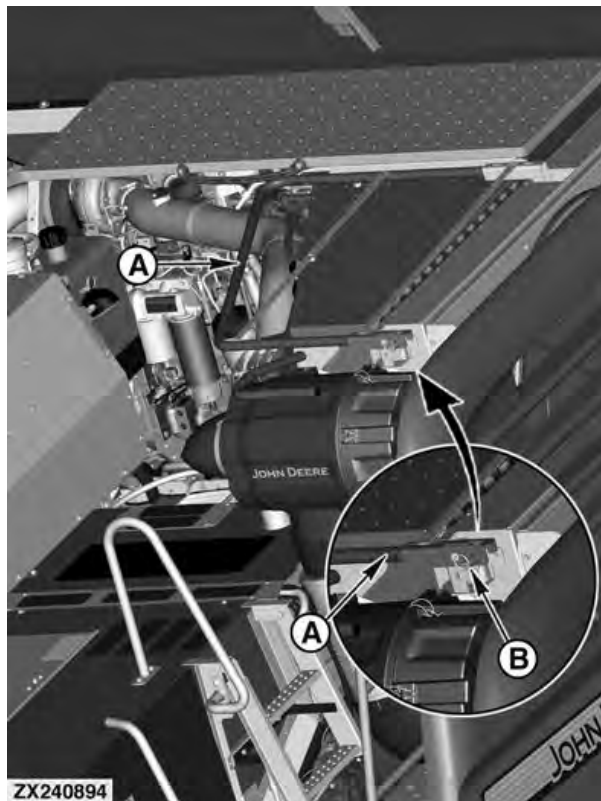
Rotate handrail (A) up until lock-out pin (B) locks handrail into place.

Use foot steps (C) then step on covers (D) to reach the grain tank.

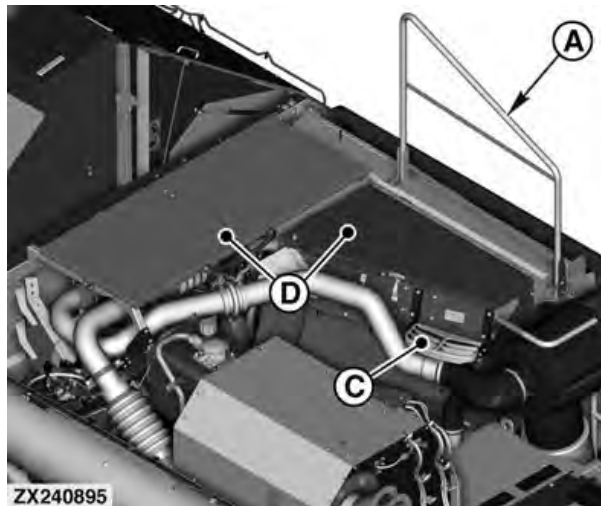
NOTE: To lower the handrail (A), first pull out lock-out pin (B) then rotate handrail.

A—Handrail
B—Lock-Out Pin

C—Foot Steps
D—Covers



ZX240894 —UN—16APR15



ZX240895 —UN—16APR15

Continued on next page

OUC002,000496F -19-12JAN16-2/3

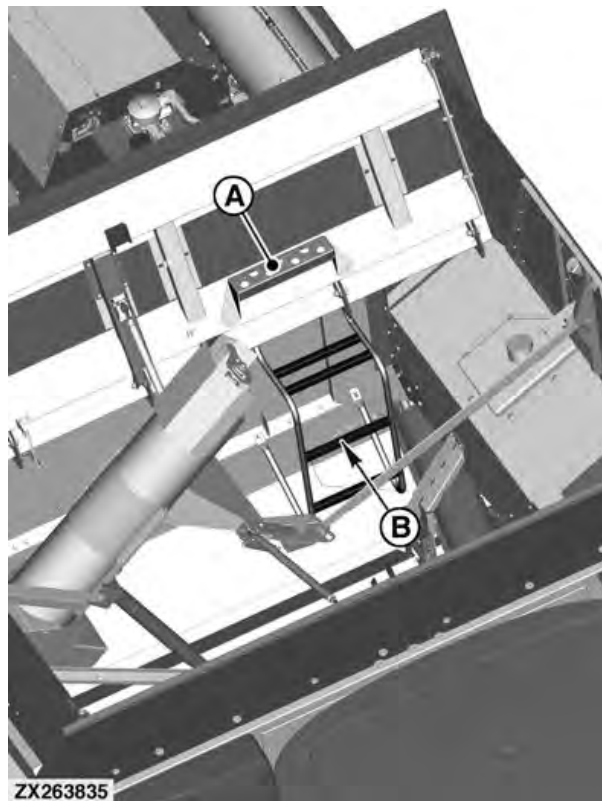
⚠ CAUTION: Maintain 3-point contact while accessing inside of grain tank.

NOTE: Left-hand part of 8000/9000 L grain tank removed for illustration purpose only.

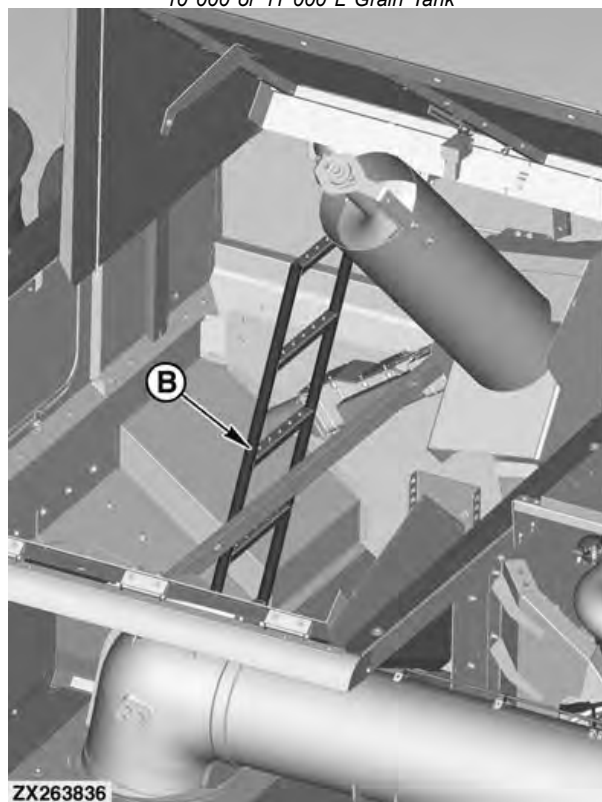
To access inside of grain tank, always use foot steps (A) and ladder (B).

A—Foot Steps

B—Ladder



10 000 or 11 000 L Grain Tank



8000 or 9000 L Grain Tank

OUCC002,000496F -19-12JAN16-3/3

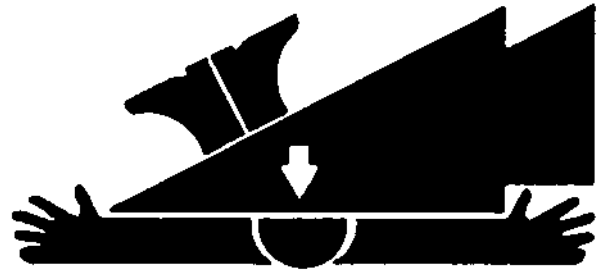
Hydraulic Cylinder Safety Stop

CAUTION: Shut OFF engine, set park brake and remove key.

Cracking of hydraulic line fittings to lower feeder house results in an instantaneous dropping of feeder house and header.

Lower safety stop (A) onto hydraulic cylinder rod.

A—Safety Stop



ZX237493

OUC002,000497A -19-12JAN16-1/1

TS696 —UN—21SEP89

ZX237493 —UN—20OCT15

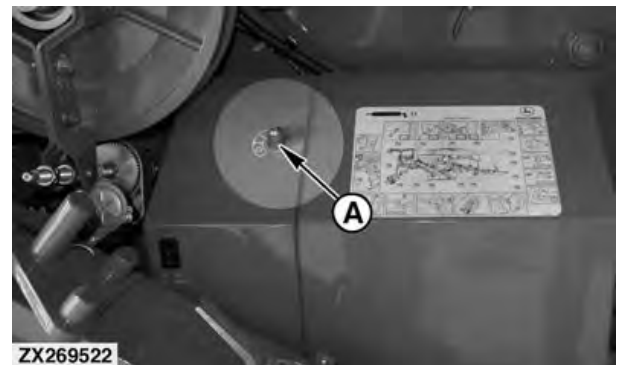
Battery Disconnect Switch

With battery disconnect switch lever (A) in “OFF” position, the battery is disconnected from the machine and the entire electrical and electronic system of the machine is disabled.

Turn battery disconnect switch lever (A) to “ON” position to activate the electrical and electronic system of the machine.

IMPORTANT: Do not disconnect battery until Selective Catalyst Reduction (SCR) system has had enough time to automatically purge system of Diesel Exhaust Fluid (DEF). If adequate time is not allowed for system to be purged, any DEF remaining can crystallize and plug system. At temperatures below -15°C (5°F), unpurged DEF freezes and damages system components. Wait at least 4 minutes after machine stops before disconnecting battery.

CAUTION: Never turn power off on the battery disconnect switch while the engine is running. This could result in serious damage to the machine's electrical components.



ZX269522

A—Battery Disconnect Switch

IMPORTANT: During a long storage period, always turn battery disconnect switch to OFF position. If the battery disconnect switch is left ON, the battery could lose power.

OUC002,000499C -19-15JAN16-1/1

ZX269522 —UN—15JAN16

General Cleaning Guidelines

Machine must be inspected periodically throughout the harvest day. Buildup of crop material and other debris must be removed to ensure proper machine function and to reduce the risk of fire. Frequency of inspections and cleanings will vary depending on a number of factors, including operating conditions, machine settings, crop conditions, operating speeds, and weather conditions. Inspections and cleanings may be required multiple times throughout the harvest day, particularly in dry, hot, and windy conditions.

IMPORTANT: Regular and thorough cleaning of machine combined with other routine maintenance procedures listed in the Operator's Manual greatly reduce the risk of fire, chance of costly downtime, and improve machine performance.

Crop material and other debris can accumulate in various areas. Direction of wind, type of crop,

and crop moisture content can all impact where and how much crop material and debris can accumulate. Be aware of harvest conditions and adjust your cleaning schedule to ensure proper machine function and to reduce the risk of fire. Inspect and clean these areas as needed throughout the harvest day.

Harvesting certain crops can cause special issues. Some crops are very "sticky" and it is often more difficult to clean the machine when harvesting these crops. Examples of these crops include sunflower, canola, and safflower. Take special care in cleaning the machine when harvesting these crops.

Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always shut OFF engine, set park brake and remove key.

OUCC002,000497B -19-12JAN16-1/1

Cleaning Out Machine (Periodic Cleanout)

The machine must be inspected periodically throughout the harvest day. Buildup of crop material and other debris must be removed to ensure proper machine function and to reduce the risk of fire.

This section shows areas of the machine that require periodic cleaning, inspection, and adjustment.

Frequency of inspection varies depending on a number of factors including operating conditions, weather, crop conditions, machine settings, and operating speeds.

Crop debris can accumulate within several hours or longer over several days.

The illustrations in this section show areas of the machine that require regular inspection and cleaning. While there are other areas that require regular cleaning, these areas provide the greatest impact on fire prevention.

Regular and thorough cleaning of the machine combined with the other routine maintenance procedures listed in the Operator's Manual greatly reduces the chance of downtime and improves machine performance. Always follow all safety procedures posted on the machine and in the Operator's Manual.

IMPORTANT: These areas may require more frequent cleaning, even multiple times per day, depending on harvest conditions. Be aware of harvest conditions and adjust your cleaning schedule to ensure proper machine function and to reduce the risk of fire.

Other areas not covered in this section may also collect crop debris and MUST be cleaned periodically for machine function and appearance. Thoroughly inspect the entire machine on a regular basis throughout the harvest season.

Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always shut OFF engine, set park brake and remove key.

Thoroughly clean machine from top to bottom with compressed air. First clean all areas accessible from



engine deck. Start with engine compartment and work outwards and counterclockwise to other areas around engine compartment, floor underneath engine, top rear of rotor and rear deck, including areas around Exhaust Aftertreatment Enclosure (if equipped). Once top areas of machine are clean, proceed to cleaning areas accessible from ground level.

From ground level, clean around unloading auger turret, and around the fuel tank area including the two support cavities that go through the fuel tank. Clean around the entire lower portion of the machine. Clean the top of the straw chopper tailboard (if equipped).

Exhaust Aftertreatment Enclosure area (if equipped) will also need to be cleaned from ground level. Once the cleaning from ground level is finished, recheck engine compartment for any crop debris that could have blown in from ground level cleaning.

Continued on next page

OUC002,00048F3 -19-20JAN16-1/7

TS227 —UN—15APR13

T81389 —UN—28JUN13

Cleaning Out Machine (Periodic Cleanout)

CAUTION: To prevent injury, never clean machine with engine running and separator engaged. Shut OFF engine, set park brake and remove key (B).

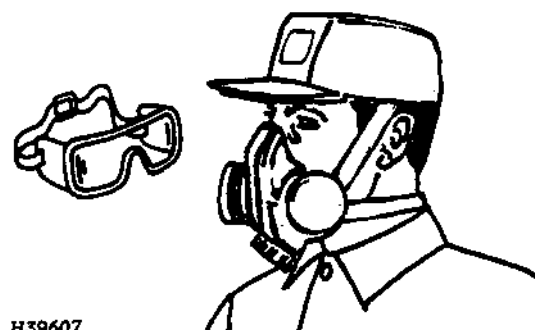
CAUTION: Sound horn (A) to clear everyone from area.

CAUTION: When working with compressed air in dusty conditions, you must wear goggles and dust mask for personal protection. Air hose must have a 2 m (6 ft) wand (end).

Start at top of machine and work down.

A—Horn

B—Key Switch



Continued on next page

OUCC002,00048F3 -19-20JAN16-2/7

ZX270083—UN—22JAN16

H39607—UN—11OCT88

Engine Compartment (Top Areas)

NOTE: Some shields were removed for photo clarity. Illustrations show machine with Final Tier 4/Stage IV engine. Machine with Tier 2/Stage II engine slightly differs.

- (1) — Top area of engine and turbocharger(s).
- (2) — Exhaust manifold and manifold shield, exhaust gas recirculation (EGR) cooler tube.
- (3) — Main engine gearcase.
- (4) — Around and underneath hydraulic oil tank.



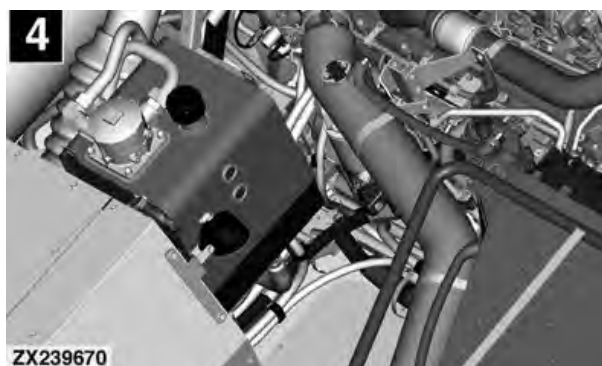
ZX239668 —UN—16APR15



ZX239669 —UN—16APR15



ZX239671 —UN—16APR15



ZX239670 —UN—16APR15

Continued on next page

OUC002,00048F3 -19-20JAN16-3/7

Engine Compartment (Top Areas)

NOTE: Some shields were removed for photo clarity.

(1) — Areas around and under Exhaust Aftertreatment Enclosure (if equipped).

(2) — Areas around alternator, air-conditioning compressor, and air compressor (if equipped).

(3) — Engine cooling package.

(4) — Engine access platform above fuel tank and DEF tank (if equipped).



ZX239672 —UN—16APR15



ZX240844 —UN—16APR15



ZX240845 —UN—16APR15



ZX240846 —UN—16APR15

Continued on next page

OUC002,00048F3 -19-20JAN16-4/7

Ground Accessible (Bottom Areas)



ZX241778 —UN—19APR15



ZX239673 —UN—19APR15

NOTE: Some shields were removed for photo clarity.

(1) — Fuel tank.

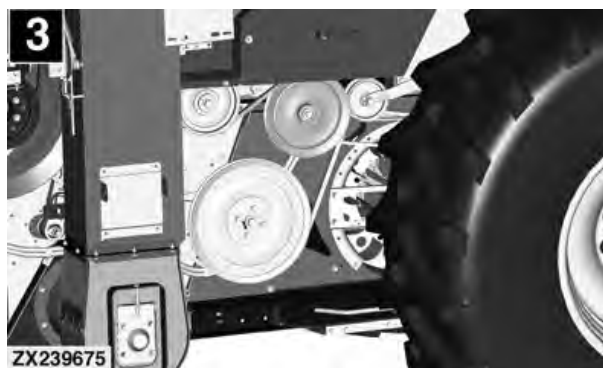
IMPORTANT: Lift rubber parts (see arrows) and blow air in direction of machine side wall to remove crop debris accumulation.

(2) — Straw walker drives and tailings auger drives.

(3) — Clean grain elevator drives and cleaning shoe drives.

(4) — Threshing cylinder drives.

(5) — Right side feeder house shields.



ZX239675 —UN—19APR15



ZX239674 —UN—19APR15



ZX239676 —UN—19APR15

Continued on next page

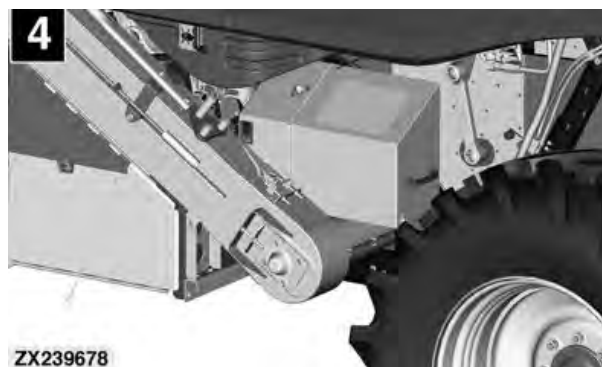
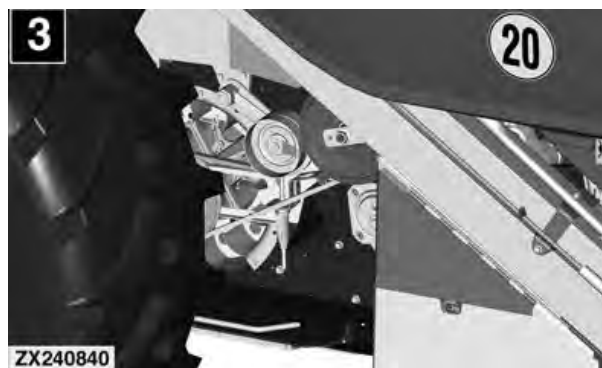
OUC002,00048F3 -19-20JAN16-5/7

Ground Accessible (Bottom Areas)



NOTE: Some shields were removed for photo clarity.

- (1) — Transmission.
- (2) — Left side feeder house shields.
- (3) — Cleaning fan drives.
- (4) — Tailings elevator and battery box.
- (5) — Unloading auger turret.



Continued on next page

OUC002,00048F3-19-20JAN16-6/7

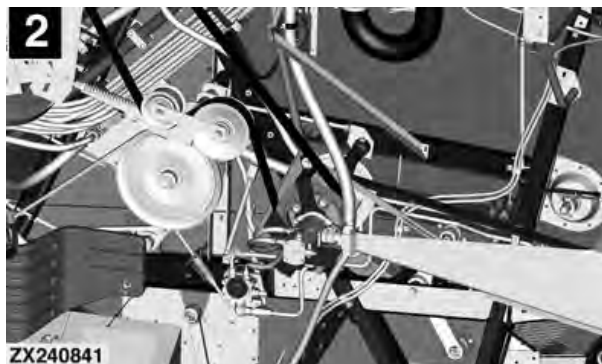
Ground Accessible (Bottom Areas)

NOTE: Some shields were removed for photo clarity.

- (1) — Fuse center.
- (2) — Straw chopper drives and chaff spreader drives (if equipped).
- (3) — Areas around engine residue management system and under Exhaust Aftertreatment Enclosure (if equipped).
- (4) — Areas around rear axle and trailer hitch.



ZX240842 —UN—16APR15



ZX240841 —UN—16APR15



ZX240848 —UN—16APR15



ZX239679 —UN—16APR15

OUC002,00048F3 -19-20JAN16-7/7

Cleaning Out Machine (Annual Cleanout and Specialty Crops)

CAUTION: To prevent injury, never clean machine with engine running and separator engaged. Shut OFF engine, set park brake and remove key (B).

The following instructions are recommended when cleaning out machine for certified seed crops or when transporting machine inter-state.

CAUTION: Block header safely so it does not move. Lower reel safety stops.

Remove header from machine.

Drive machine over end rows or bumps to jar and shake dirt loose. Shut OFF engine, set park brake and remove key.

Open or remove all doors and drain holes.

CAUTION: Sound horn (A) to clear everyone from area. Stay clear of machine when discharging chaff.

Turn key switch (B) to start engine.

Engage separator until chaff stops coming out rear of machine.

Lower engine rpm to low idle and engage separator several times. Running the separator at low idle removes dirt from inside the rotor.

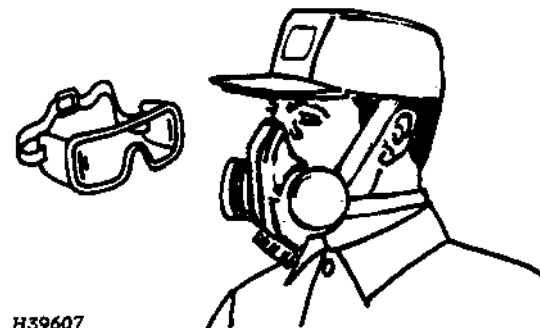
Move throttle to high rpm and run for a few minutes. Repeat cycle until chaff no longer comes out of the rear of machine.

CAUTION: Keep bystanders clear of machine when discharging chaff.

Drive machine onto blocking so right-hand side is about 150 mm (6 in) higher, or park on incline so dirt can run out.



ZX270083



H39607

A—Horn

B—Key Switch

CAUTION: Shut OFF engine, set park brake, remove key, block wheels and lower feeder house safety stop.

When working with compressed air in dusty conditions, you must wear goggles and dust mask for personal protection. Air hose must have a 2 m (6 ft) wand (end).

Start at top of machine and work down.

Continued on next page

OUC002.000489F -19-20JAN16-1/18

ZX270083 —JUN—22JAN16

H39607 —JUN—11OCT88

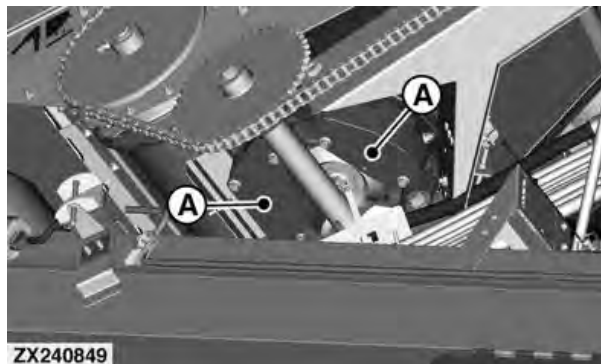
Open cleanout doors (A), (B), and (C).

Clean grain from under grain tank cross augers over to the sump.

Clean grain from edges of unloading auger sump to the bottom. Grain must be cleaned out from doors standing on ground.

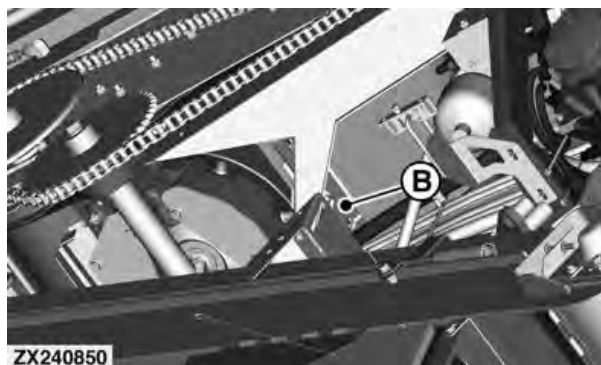
A—Cleanout Door
B—Cleanout Door

C—Cleanout Door



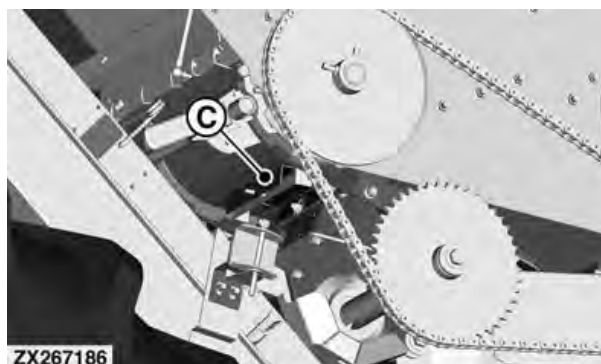
ZX240849

ZX240849 —UN—16APR15



ZX240850

ZX240850 —UN—16APR15



ZX267186

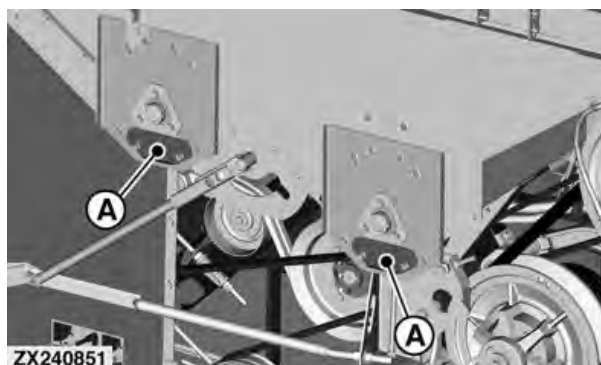
ZX267186 —UN—18DEC15

OUCC002,000489F -19-20JAN16-2/18

Open cleaning flaps (A) then insert an air nozzle 30 cm (1 ft) into the opening in the underside of the grain tank and blow material out.

Continue inserting the nozzle 30 cm (1 ft) at a time and blow out the remaining material.

A—Cleaning Flap



ZX240851

ZX240851 —UN—16APR15

Continued on next page

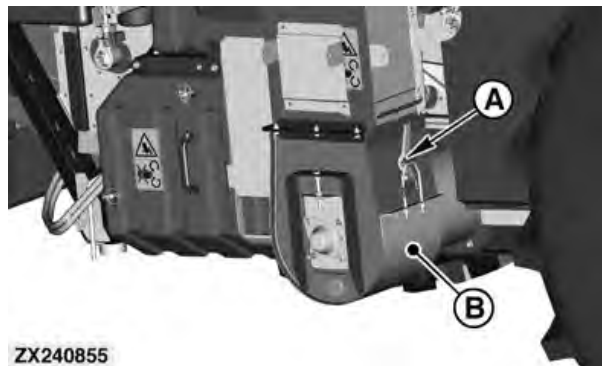
OUCC002,000489F -19-20JAN16-3/18

Release latch (A) and open lower clean grain elevator flap (B).

NOTE: On machine equipped with perforated grain elevator flap, ensure that holes of flap are not obstructed.

A—Latch

B—Lower Clean Grain Elevator Flap



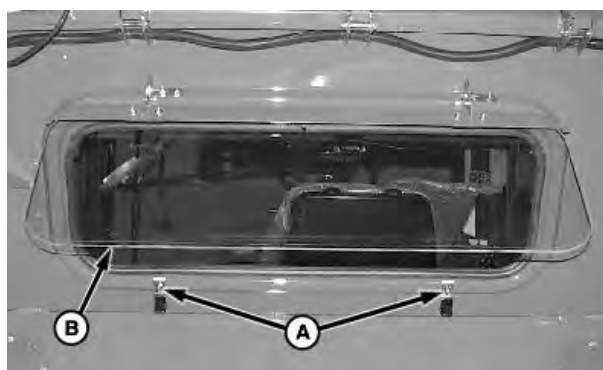
ZX240855 —UN—16APR15

OUCC002,000489F -19-20JAN16-4/18

Loosen clamps (A) and swing grain tank window (B) up. Clean out area behind cab, around primary countershaft and over cylinder.

A—Clamps

B—Grain Tank Window



H76204 —UN—28APR03

Continued on next page

OUCC002,000489F -19-20JAN16-5/18

Rotate handrail (A) up until lock-out pin (B) locks handrail into place.

NOTE: Pull lock-out pin (B) to rotate handrail (A) downward.

Open engine access covers (C) and clean top side of engine compartment area.

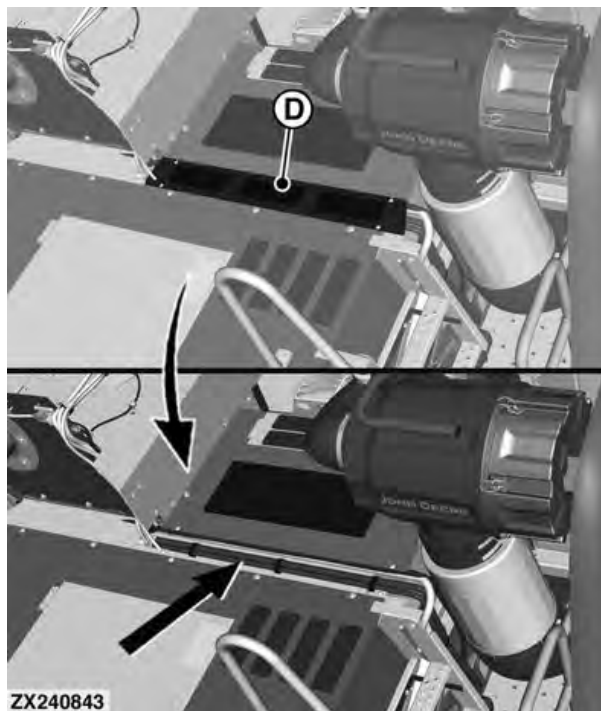
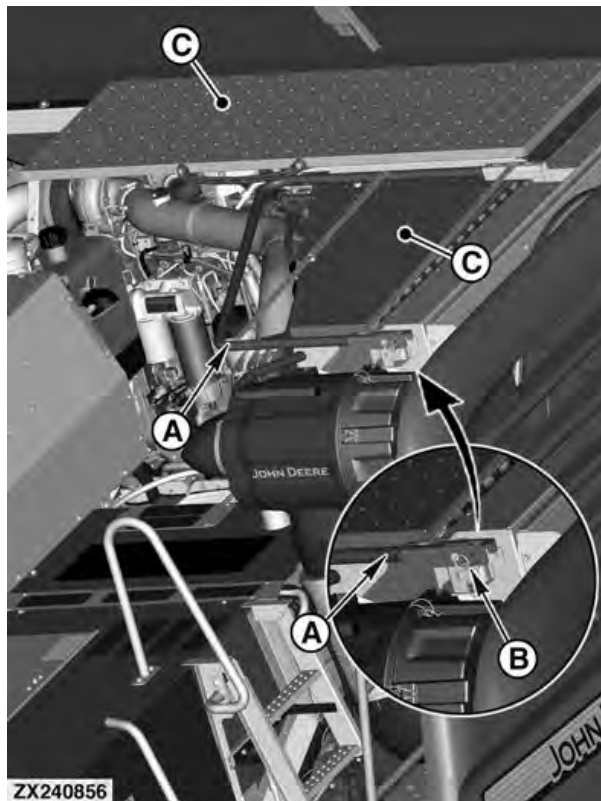
Clean entire engine compartment area, especially under engine.

Wipe up any oil or grease found on engine area.

Remove cover plate (D) on engine platform then blow out dust around hoses.

A—Handrail
B—Lock-Out Pin

C—Engine Access Covers
D—Cover Plate



ZX240856 —UN—16APR15

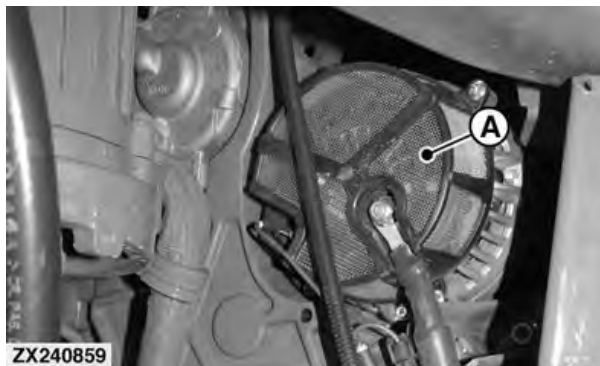
ZX240843 —UN—16APR15

Continued on next page

OUCC002,000489F -19-20JAN16-6/18

Remove alternator screen (A) and clean out.

A—Alternator Screen



ZX240859 —UN—16APR15

OUC002,000489F -19-20JAN16-7/18

Clean the radiator, oil cooler, condenser and the rotating radiator screen from inside to outside. Clean top of fuel tank.



ZX240857 —UN—16APR15

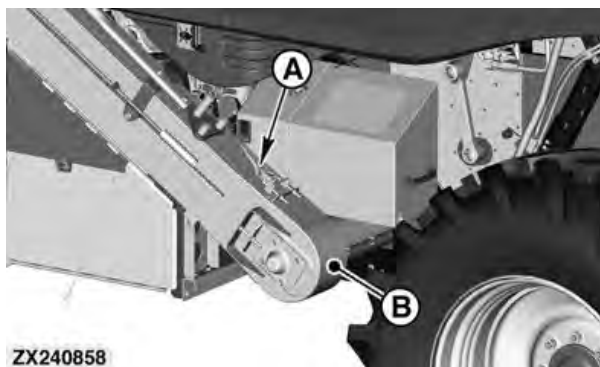
OUC002,000489F -19-20JAN16-8/18

Release latch (A) and open lower tailings elevator flap (B).

From the top down, clean the elevator and clean out tailings auger trough.

A—Latch

B—Lower Tailings Elevator Flap



ZX240858 —UN—16APR15

Continued on next page

OUC002,000489F -19-20JAN16-9/18

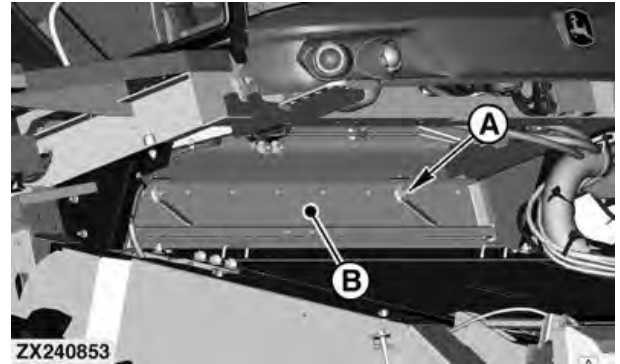
Remove cap screw (A) and turn both handles to open flap (B).

Clean out chaff between cylinder and side sheets. Clean remaining chaff and seed from concave and threshing cylinder. Also clean inside of threshing cylinder. Clean upper tailings auger housing on the inside and the area around it.

CAUTION: The feed plate seal, through normal operation, develops a sharp edge. Avoid bodily injury from contact with sharp edge when servicing this area.

A—Cap Screw

B—Flap



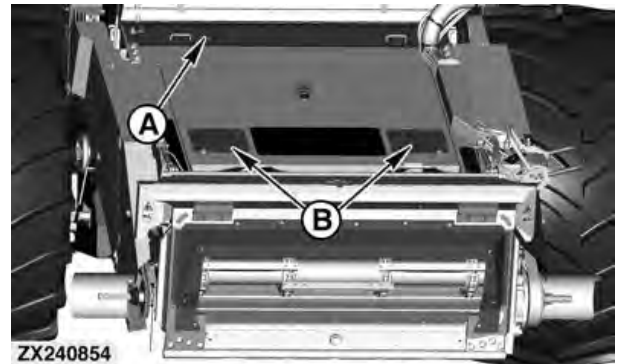
ZX240853 —UN—16APR15

OUCC002,000489F -19-20JAN16-10/18

Clean feeder house through top (A) and bottom flaps (B).

A—Top Flap

B—Bottom Flap



ZX240854 —UN—16APR15

OUCC002,000489F -19-20JAN16-11/18

Lower stone trap and feed plate. Clean areas out.

CAUTION: Always lower safety stop before working under feeder house.

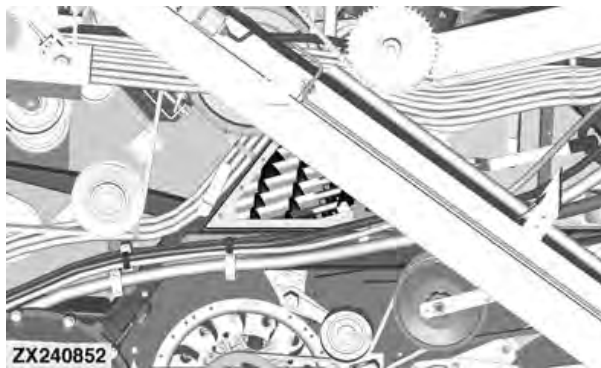


ZX1037747 —UN—13SEP06

Continued on next page

OUCC002,000489F -19-20JAN16-12/18

Remove conveyor auger service flap. Use scraper to loosen material, and clean out through sides of combine. Then clean off top of axle and transmission.



ZX240852 —UN—16APR15

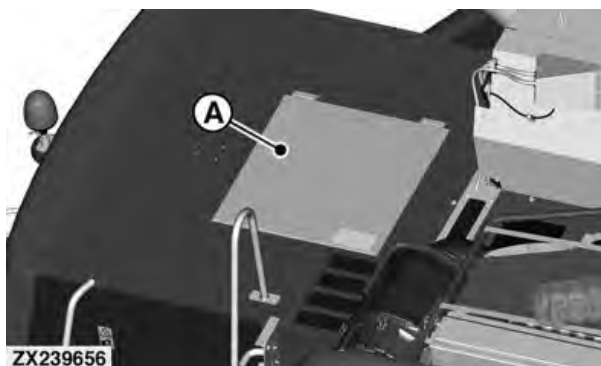


ZX240860 —UN—16APR15

OUCC002,000489F -19-20JAN16-13/18

Clean power separator and walker area through service door (A).

A—Service Door



ZX239656 —UN—16APR15

Continued on next page

OUCC002,000489F -19-20JAN16-14/18

Remove sieve, chaffer and precleaner sections. Clean out chaff from areas where sides meet. Open sieve, chaffer and precleaner as far as possible and clean.



ZX240861

ZX240861 —UN—16APR15

OUCC002,000489F -19-20JAN16-15/18

Clean out rear axle area.

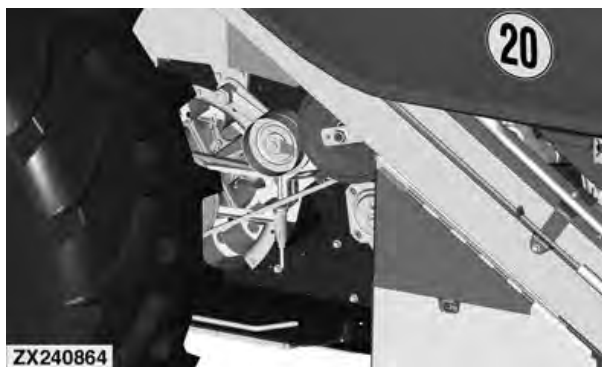


ZX240862

ZX240862 —UN—16APR15

OUCC002,000489F -19-20JAN16-16/18

Remove lower shields and clean out cleaning fan area.



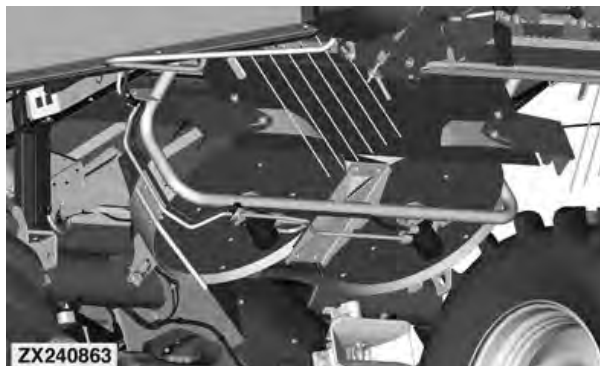
ZX240864

ZX240864 —UN—16APR15

Continued on next page

OUCC002,000489F -19-20JAN16-17/18

Clean chaff from spreader (if equipped) drive area and spreader hood.



ZX240863 —JUN—16APR15

OUC002,000489F -19-20JAN16-18/18

Break-in Service

During first 100 hours of operation:

- Perform daily or 10-hour service (refer to **Every 10 Hours or Daily** in this section).
- Avoid unnecessary engine idling.
- Monitor coolant temperature closely.
- Check engine oil level and coolant level more frequently. Watch for any signs of leaks.

- If engine oil must be added during break-in, use seasonal viscosity grade oil, meeting specifications given in **Fuel, Lubricants, Coolant and Capacities** section.
- Check engine air intake system hoses and hose clamps for tightness.
- Check drive belts for proper tension and adjust, if necessary.

OUC002,00045C3 -19-14APR15-1/1

After the First 10 Operating Hours

Retighten steering cylinder bracket attaching screws at rear axle to 240 N·m (170 lb·ft).

OUC002,00048A3 -19-16DEC15-1/1

During the First 50 Operating Hours

After the first hour of operation and then every ten hours during the first 50 hours of operation, check the hardware and tighten to the specified torque:

Retighten front wheel bolts (lubricated) to 710 N·m (524 lb·ft).

Retighten rear wheel nuts (dry) to 550 N·m (400 lb·ft).

Retighten attaching screws at rear axle pivots to 310 N·m (228 lb·ft).

Retighten ProDrive™, 3-speed mechanical or Push-Button Shift transmission attaching screws to 180 N·m (133 lb·ft).

OUC002,00048BE -19-17DEC15-1/1

After the First 100 Operating Hours

Perform all work shown under Every 10 Operating Hours or Daily.

Change engine oil and filter.

IMPORTANT: Do not operate engine with oil level below low mark on dipstick.

Clean suction screen (3-Speed Mechanical and Push-Button Shift transmission).

Change hydraulic oil filter (ProDrive™ transmission).

Change oil of rear axle differential (four-wheel drive).

Change oil of rear axle reduction gears (four-wheel drive).

Change oil of rear axle wheel hubs (two-wheel drive).

Check and adjust drive belt tension.

Check engine air intake and cooling system hoses and hose clamps for tightness.

Check fuel injection lines for loose connections.

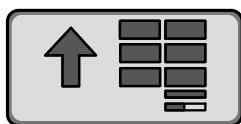
OUC002,00048BF -19-17DEC15-1/1

After the First 1000 Operating Hours

Check the feeder house top shaft sprockets for wear (see **Check Feeder House Top Shaft Sprockets** in this section).

OUC002.00048E6 -19-18DEC15-1/1

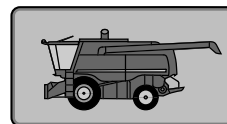
Service Intervals—Clearing or Delaying



Main Menu Icon (Display) / Main Menu Switch (Armrest)

H95847 —UN—12OCT10

H95878 —UN—29MAR10



Performance Monitor Application Icon

CAUTION: To prevent injury, never lubricate or service machine, header, or engine while it is running. Shut OFF engine, set park brake and remove key.

Press main menu icon or switch.

Touch or press confirm switch when performance monitor icon is highlighted.

IMPORTANT: Service times are for average conditions. Service more often if machine is used in extreme conditions.

OUC002.000498D -19-12JAN16-1/3

Touch or press confirm switch when advanced settings icon (A) is highlighted.

Touch or press confirm switch when service alarm interval (B) is highlighted.

Non-Touchscreen or Touchscreen: Rotate selection dial until desired service interval is shown. Press confirm switch to save value.

Touchscreen Only: Enter desired service interval on numeric display. Touch enter/accept icon to save value.

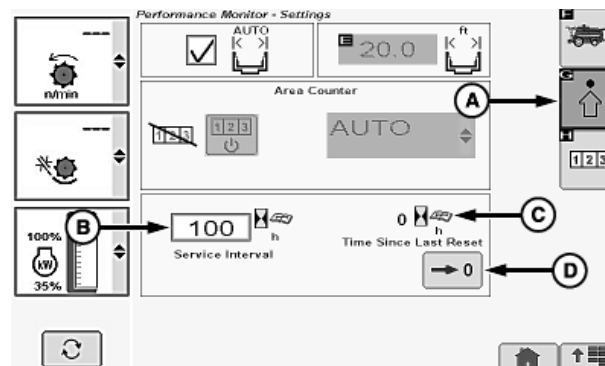
NOTE: Use service screen as a guide to when the machine needs to be serviced.

Service screen appears every 50 hours of engine operation, indicating machine needs to be serviced.

When service screen appears, two choices can be selected:

- Operator can choose to ignore servicing machine at this time.
- Operator can choose to service machine at this time.

NOTE: If operator selects return/back icon ignoring service at this time the screen disappears. The next time the key switch is turned to the "RUN" position the screen will appear.



A—Advanced Settings Icon
B—Service Alarm Interval

C—Time Since Last Reset
D—Reset Icon

Time since last reset (C) appears and alerts operator the amount of hours that has passed since being serviced.

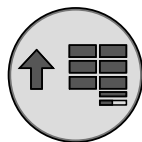
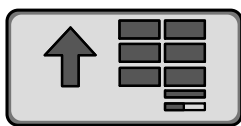
After service is performed, touch or press confirm switch when reset icon (D) is highlighted to reset to zero.

Continued on next page

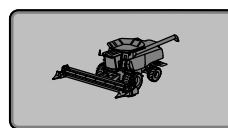
OUC002.000498D -19-12JAN16-2/3

H95957 —UN—05OCT10

H95845 —UN—31MAR10



H95878 —UN—29MAR10



Combine Main Application Icon

Main Menu Icon (Display) / Main Menu Switch (Armrest)

Press main menu icon or switch.

Touch or press confirm switch when combine main page icon is highlighted.

OUCC002,000498D -19-12JAN16-3/3

Maintenance Interval Charts

CAUTION: Never maintain or lubricate the machine while the engine is running. Shut OFF engine, set park brake and remove key.

Interval	Machine type	Maintenance action	Operation
As required	All	Primary fuel filter (DTC)	Replace
	All	Secondary fuel filter (DTC)	Replace
	All	Cab recirculation air filter	Clean or replace
	All	Cab fresh air filter	Clean or replace
	All	Windshield washer reservoir	Refill
	All	Alternator(s) screen	Clean

Interval	Machine type	Maintenance action	Operation
Every 10 operating hours or daily	All	Engine oil	Check level
	All	Hydraulic/Hydrostatic oil	Check level
	All	Coolant expansion tank	Check level
	All	Engine gear case oil	Check level
	All	Stone trap	Clean
	HillMaster™ only	Leveling cylinder barrel	Lubricate
	HillMaster™ only	Final drive pivot	Lubricate
	HillMaster™ only	Pivoting front plate master cylinder rod	Lubricate

Interval	Machine type	Maintenance action	Operation
Every 50 operating hours or weekly	HillMaster™ only	Pivoting shield (feeder house)	Clean
	HillMaster™ only	Pivoting front plate (feeder house)	Lubricate
	HillMaster™ only	Pivoting front plate slave cylinder rod (feeder house)	Lubricate
	All	Cleaning fan drive variable sheaves	Lubricate
	All	Rear axle spindle bearing	Lubricate
	All	Rear axle pivot	Lubricate
	If equipped	Water separator at fuel precleaner	Drain
	All	Water separator at fuel filters	Drain
	All	Cylinder variable drive upper sheave	Lubricate
	All	Unloading auger	Lubricate
	All	Cab fresh air filter	Clean
	All	Cooling elements	Clean

Interval	Machine type	Maintenance action	Operation
Every 250 operating hours or every year	All	Powered rear axle universal-jointed shafts	Lubricate
	All	Powered rear axle reduction gear oil	Check level
	All	Powered rear axle differential housing oil	Check level
	All	Powered rear axle motor cavity oil	Check level
	All	Non-powered rear axle wheel hub oil	Check level
	All	Engine oil—6.8 and 9.0 L Engine Final Tier 4/Stage IV without John Deere Plus-50™ II oil Engine oil—6.8 and 9.0 L Engine Tier 2/Stage II	Drain and refill
	All	Engine oil filter—6.8 and 9.0 L Engine Final Tier 4/Stage IV without John Deere Plus-50™ II oil Engine oil filter—6.8 and 9.0 L Engine Tier 2/Stage II	Replace
	All	Fuel tank breather	Clean
	All	Diesel Exhaust Fluid (DEF) tank breather	Clean

Continued on next page

OUC002,0004970 -19-20JAN16-1/3

Lubrication and Maintenance

Interval	Machine type	Maintenance action	Operation
Every 400 operating hours or every year	All	Engine oil—9.0 L Engine Final Tier 4/Stage IV with John Deere Plus-50™ II oil	Drain and refill
	All	Engine oil filter—9.0 L Engine Final Tier 4/Stage IV with John Deere Plus-50™ II oil	Replace
	All	Beater bearing	Lubricate
	All	Fan shaft bearings	Lubricate
	All	Cylinder variable drive	Lubricate
	All	Cylinder drive bearing	Lubricate
	All	Cylinder drive reduction gear oil	Check level
	All	Primary countershaft bearing	Lubricate
	All	Right lube bank	Lubricate
	All	Feeder house slip clutch	Lubricate
	If equipped	Clean grain elevator top shaft slip clutch	Lubricate
	T Series	Left bearing of rear beater	Lubricate
	T Series	Right lube bank - Right bearing of stripper roller	Lubricate
	T Series	Right lube bank - Right bearing of overshot beater	Lubricate
	T Series	Right lube bank - Right bearing of beater	Lubricate
	All	Conveyor auger drive bearings	Lubricate
	All	Outer bearings of final drive	Lubricate
	3-Speed mechanical or Push-Button Shift transmission	Brake fluid	Check level
	All	Straw chopper drive sheave	Lubricate
	All	Chopper drive countershaft bearings	Lubricate
	All	Unloading auger turret bearing	Lubricate
	All	Reverser oil	Check level
	All	Left lube bank	Lubricate
	All	Feeder house drive	Lubricate
	If equipped	Grain tank high unloading rate lower gear case bearing	Lubricate
	All	Engine gear case oil filter	Replace
	All	Primary countershaft gear case oil	Check level
	All	Battery	Clean
	All	Final drive shaft couplers	Check wear
	9.0 L FT4 Engines	Variable speed driver sheave	Lubricate
	3-Speed Push-Button Shift transmission	Park brake cable	Check adjustment
	All	Hydrostatic charge filter	Replace
	All	Hydraulic oil reservoir filter	Replace

Interval	Machine type	Maintenance action	Operation
Every 500 hours	All	Engine oil—6.8 L Engine Final Tier 4/Stage IV with John Deere Plus-50™ II oil	Drain and refill
	All	Engine oil filter—6.8 L Engine Final Tier 4/Stage IV with John Deere Plus-50™ II oil	Replace

Continued on next page

OUC002,0004970 -19-20JAN16-2/3

Lubrication and Maintenance

Interval	Machine type	Maintenance action	Operation
Every 1000 hours	ProDrive™ transmission	Engine gear case oil	Drain and refill
	ProDrive™ transmission	Engine gear case oil screen	Clean
	ProDrive™ transmission	Transmission oil	Drain and refill
	All	Powered rear axle reduction gear oil	Drain and refill
	All	Powered rear axle differential housing oil	Drain and refill
	All	Powered rear axle motor cavity oil	Drain and refill
	All	Non-powered rear axle wheel hub oil	Drain and refill

Interval	Machine type	Maintenance action	Operation
Every 1500 hours	6.8 L FT4 Engines	Filter at the cylinder head	Replace

Interval	Machine type	Maintenance action	Operation
Every 2000 hours	All	Engine valve clearance	Check by the dealer
	6.8 L Engines	Glow plugs	Check
	All	Primary countershaft gear case oil	Drain and refill
	All	Reverser gear case oil	Drain and refill
	All	Oil in final drives	Drain and refill
	3-Speed mechanical or Push-Button Shift transmission	Transmission oil	Drain and refill
	All	Hydraulic reservoir oil	Drain and refill
	3-Speed mechanical or Push-Button Shift transmission	Engine gear case oil	Drain and refill
	All	Cylinder drive reduction gear oil	Drain and refill
	T Series	Overshot beater gear case oil	Drain and refill

Interval	Machine type	Maintenance action	Operation
Every 4500 hours or three years	6.8 L and 9.0 L FT4 Engines	Diesel Exhaust Fluid (DEF) dosing filter and equalizing element	Replace
Every 4500 hours or five years	All	Engine crankshaft damper	Replace

OUC002.0004970 -19-20JAN16-3/3

Interval	Machine type	Maintenance action	Operation
Every 6000 hours	All	Coolant	Drain and refill

OUC002,0004970 -19-20JAN16-4/3

Lubrication Decal Locations

IMPORTANT: HillMaster™ Machines: Avoid crushing injuries. Always completely lower machine leveling system before getting underneath for service, adjustments or repairs. Shut OFF engine, set park brake and remove key.

Lubrication decals (A) show the different locations of grease points around the machine. Follow lubrication times provided on decals and refer to hour intervals listed in this section for further information.

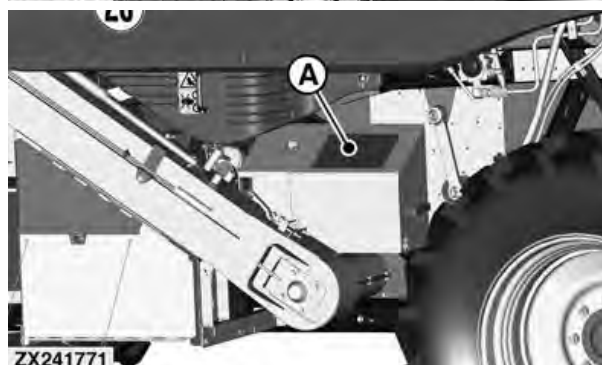
Bearing failures or overheating can result in a fire. To reduce bearing failures or overheating, follow hour intervals listed in this section.

Crop material and other debris may accumulate around bearings and bearing covers. Inspect and clean these areas periodically throughout the harvest day.

A—Lubrication Decal



ZX241770 —UN—16APR15



ZX241771 —UN—16APR15

OUC002,000498C -19-12JAN16-1/1

Lubricated at Factory

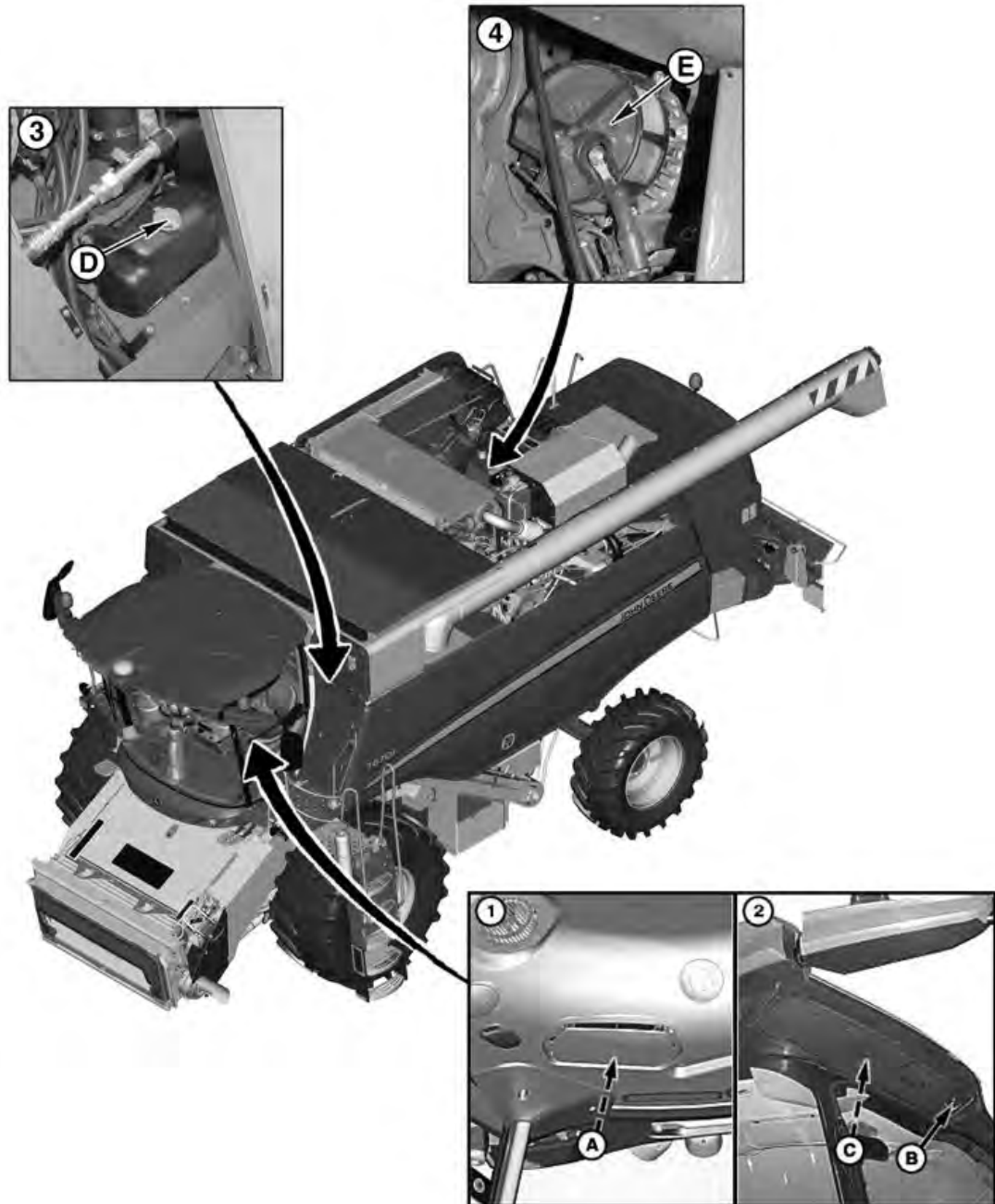
IMPORTANT: The grease fitting located behind the feeder house drive sheave (see arrow) is lubricated at the factory. Do not apply any grease to it.



ZX267188 —UN—18DEC15

OUC002,00048A4 -19-16DEC15-1/1

As Required



A—Recirculation Air Filter

B—Knob

C—Fresh Air Filter

D—Reservoir Cap

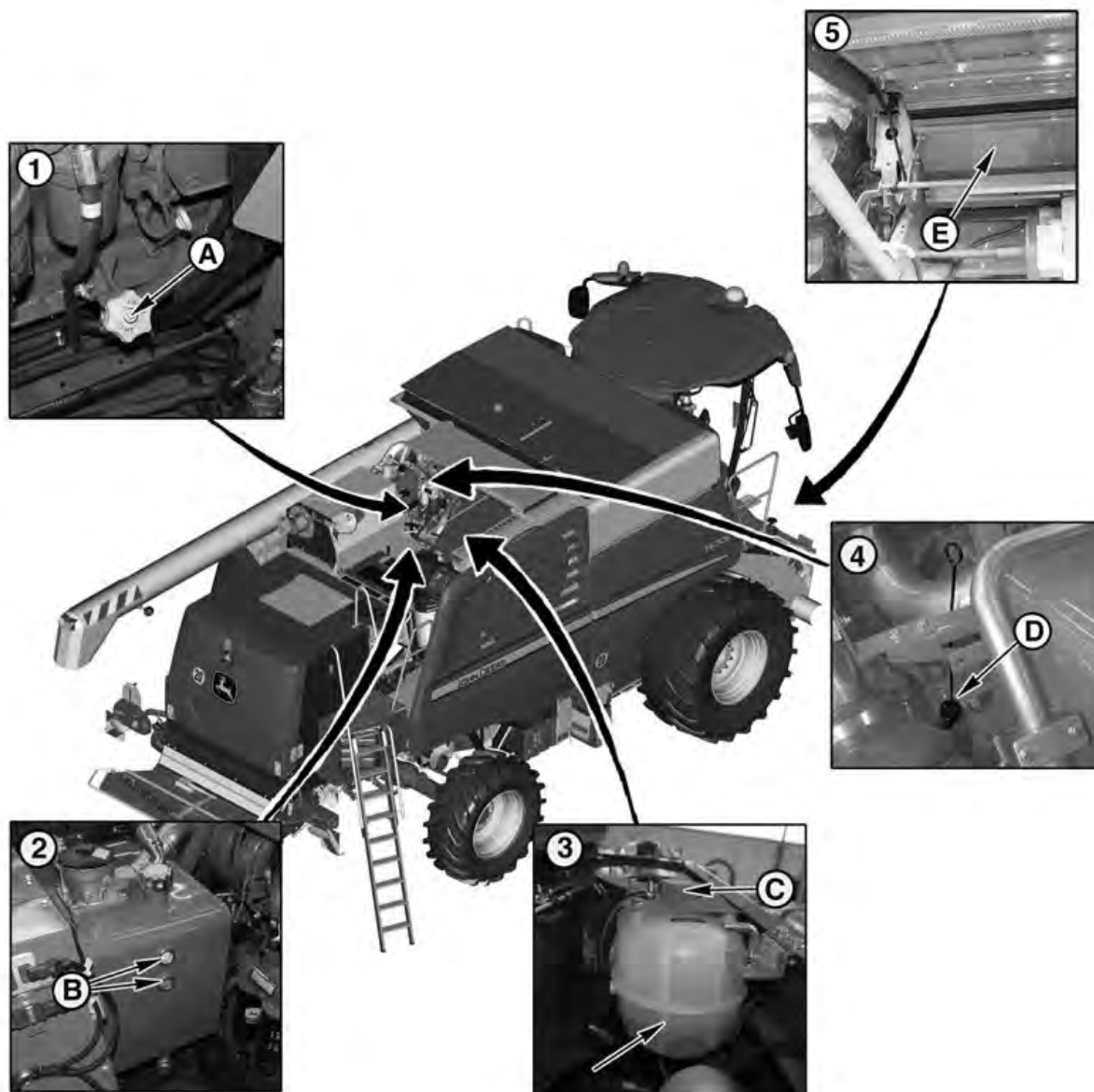
E—Alternator Screen

1. Recirculation air filter - Remove cover to clean or replace recirculation air filter (A).
2. Cab fresh air filter - Turn knob (B) and lower access cover. Remove fresh air filter (C) to clean or replace as needed.
3. Windshield washer reservoir - Open cap (D) and fill windshield washer reservoir as needed.
4. Alternator(s) screen - Clean screen (E) when 50% covered with debris.

OUCC002,00048CF -19-17DEC15-1/1

ZX243193—UN—18DEC15

Every 10 Operating Hours or Daily



A—Dipstick of Diesel Engine C—Filler Cap on Expansion Tank E—Stone Trap
B—Sight Glass on Hydraulic Oil D—Dipstick on Engine Gearcase

1. Engine oil - Check oil level at dipstick (A). Oil level must be between the "ADD" mark and the top of the cross-hatched area.

NOTE: To check the oil level, screw the dipstick all the way in.

Continued on next page

OUEC002,00048C4 -19-17DEC15-1/2

ZX243176—UN—18DEC15

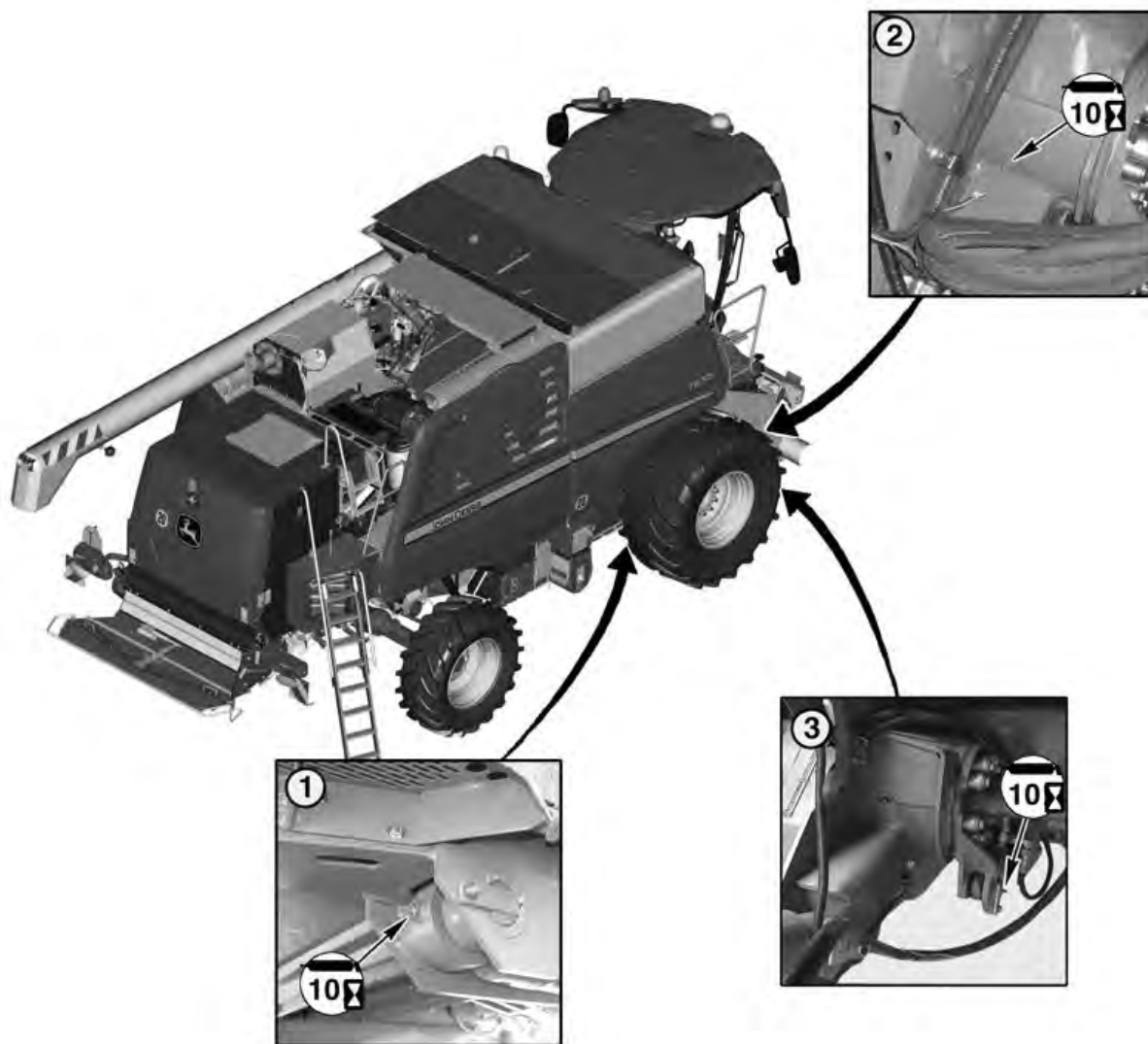
2. Hydrostatic/Hydraulic Oil Reservoir - Check with header lowered to the ground and unloading auger in transport position. HillMaster™ machine must be lowered to transport position.

Oil level in the hydraulic oil reservoir must be in the center of sight glass (B). On HillMaster™ and/or ProDrive™ machine, check oil level at upper sight glass.

3. Expansion Tank - Check coolant level when engine is cold. Coolant level must be up to the "COLD" mark (arrow).
4. Engine Gear case - Check oil level at engine gear case. Fill to proper level, if necessary.
5. Empty the stone trap (E) every day.

OUCC002,00048C4 -19-17DEC15-2/2

Every 10 Operating Hours or Daily (HillMaster™ Only)



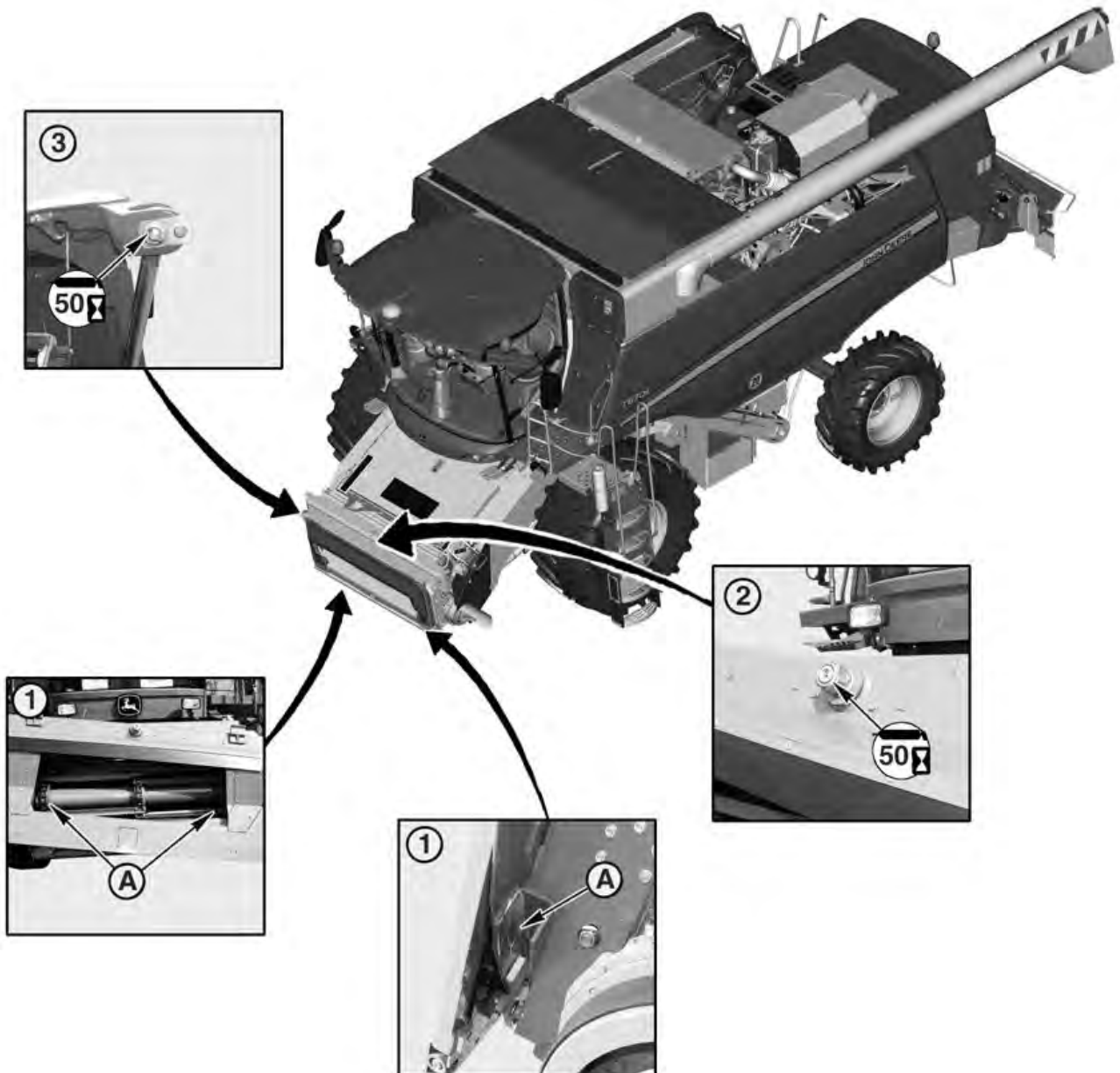
1. Leveling Cylinder Barrel - Lubricate until grease comes out (both sides).
2. Final Drive Pivot - Lubricate until grease comes out (both sides).

3. Pivoting Front Plate Master Cylinder Rod - Two shots of grease (R.h. side only).

OUCC002,00048C5 -19-17DEC15-1/1

ZX243177 —JUN—18DEC15

Every 50 Operating Hours or Weekly (HillMaster™ Only)



A—Cleanout Areas

1. Pivoting Shield - To ensure the header can pivot freely to its maximum extent, check areas (A) for material build-up; clean out if required.

2. Lubrication Fitting of Pivoting Front Plate - Two shots of grease.

Continued on next page

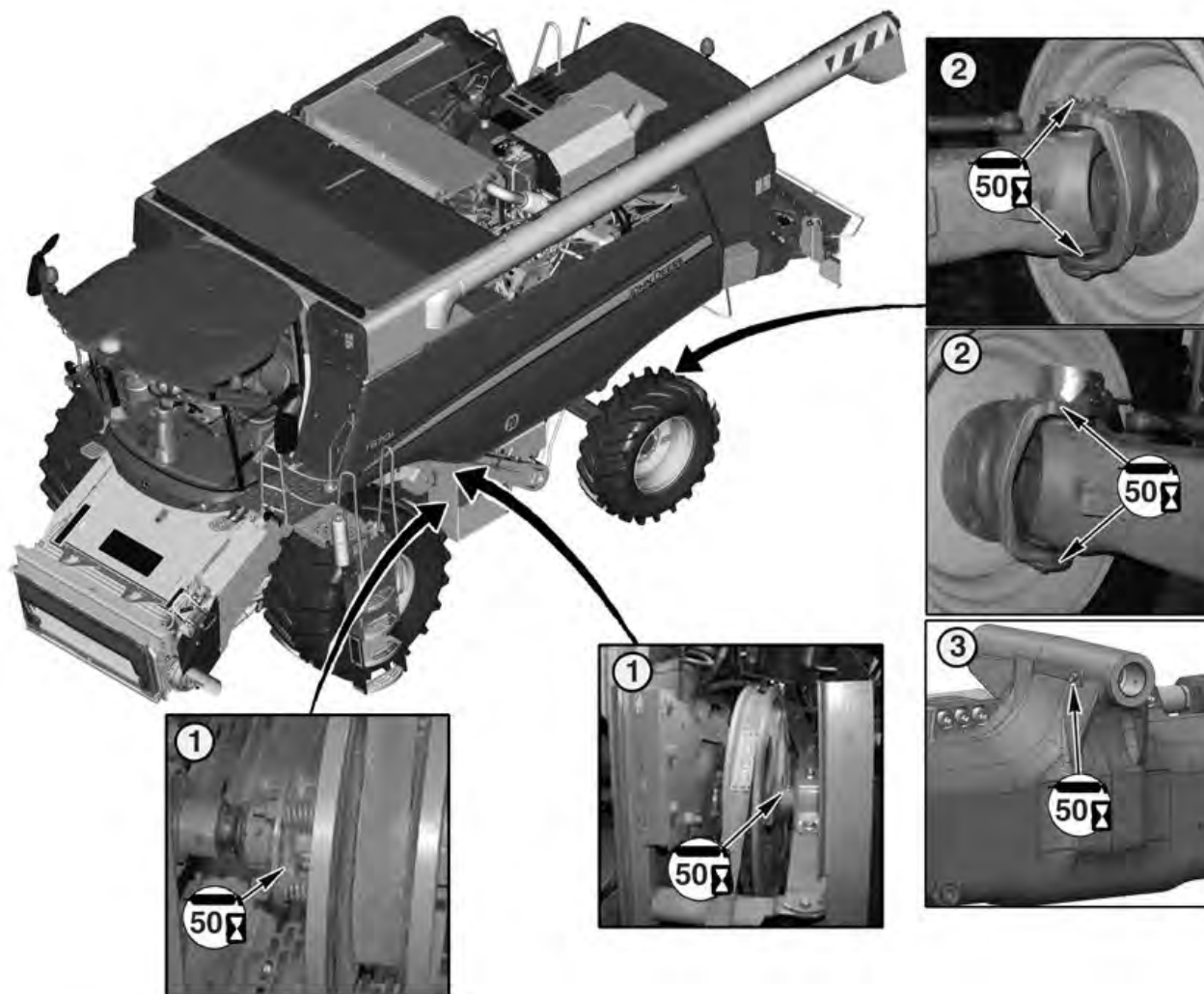
OUC002,00048C6 -19-17DEC15-1/2

ZX243178 —UN—18DEC15

3. Pivoting Front Plate Slave Cylinder Rod - Two shots of grease.

OUC002,00048C6 -19-17DEC15-2/2

Every 50 Operating Hours or Weekly

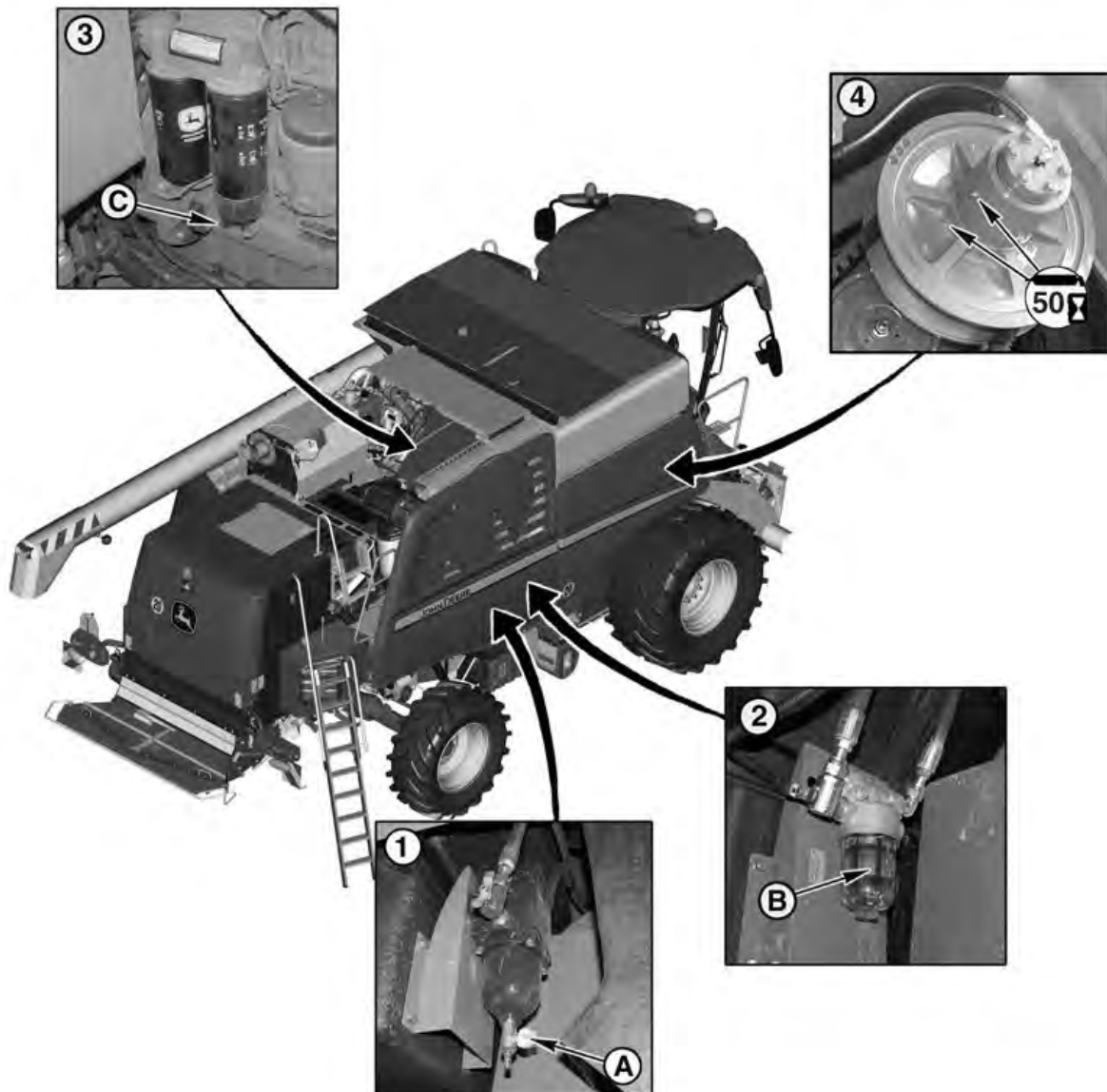


1. Variable sheaves of cleaning fan drive - Lubricate.
2. Spindle Bearing (both sides) - Lubricate after 50 hours under normal conditions.
3. Rear Axle Pivot - Lubricate after 50 hours under normal conditions.

OUC002,00048CE -19-17DEC15-1/1

ZK243179 —UN—18DEC15

Every 50 Operating Hours or Weekly



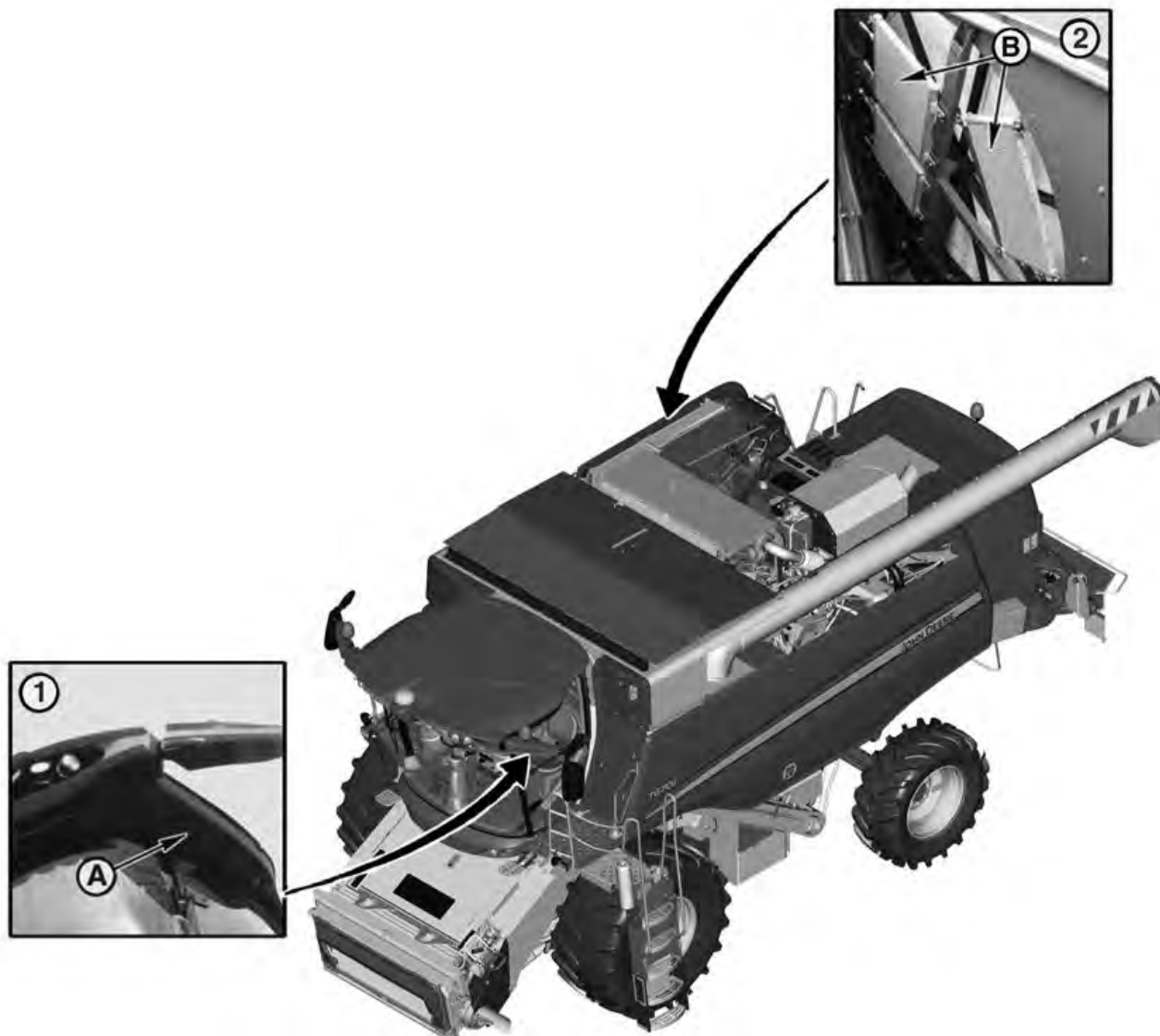
A—Drain Valve on Heavy-Duty Fuel Precleaner (if Equipped) B—Bowl of Fuel Precleaner
C—Drain Plug on Fuel Filter (9.0 L Engine Shown)

1. Water separator for heavy-duty fuel precleaner - Check for water. Drain the water at valve (A).
2. Water separator for fuel precleaner - Check for water. Drain the water at bowl (B).
3. Water separators at fuel filter - Drain the water at plugs (C).
4. Cylinder variable drive upper sheave - Lubricate with sheaves closed (in high-speed position).

OUCC002,00048CD -19-17DEC15-1/1

ZX243180 —UN—18DEC15

Every 50 Operating Hours or Weekly



A—Fresh Air Filter

B—Cooling Package

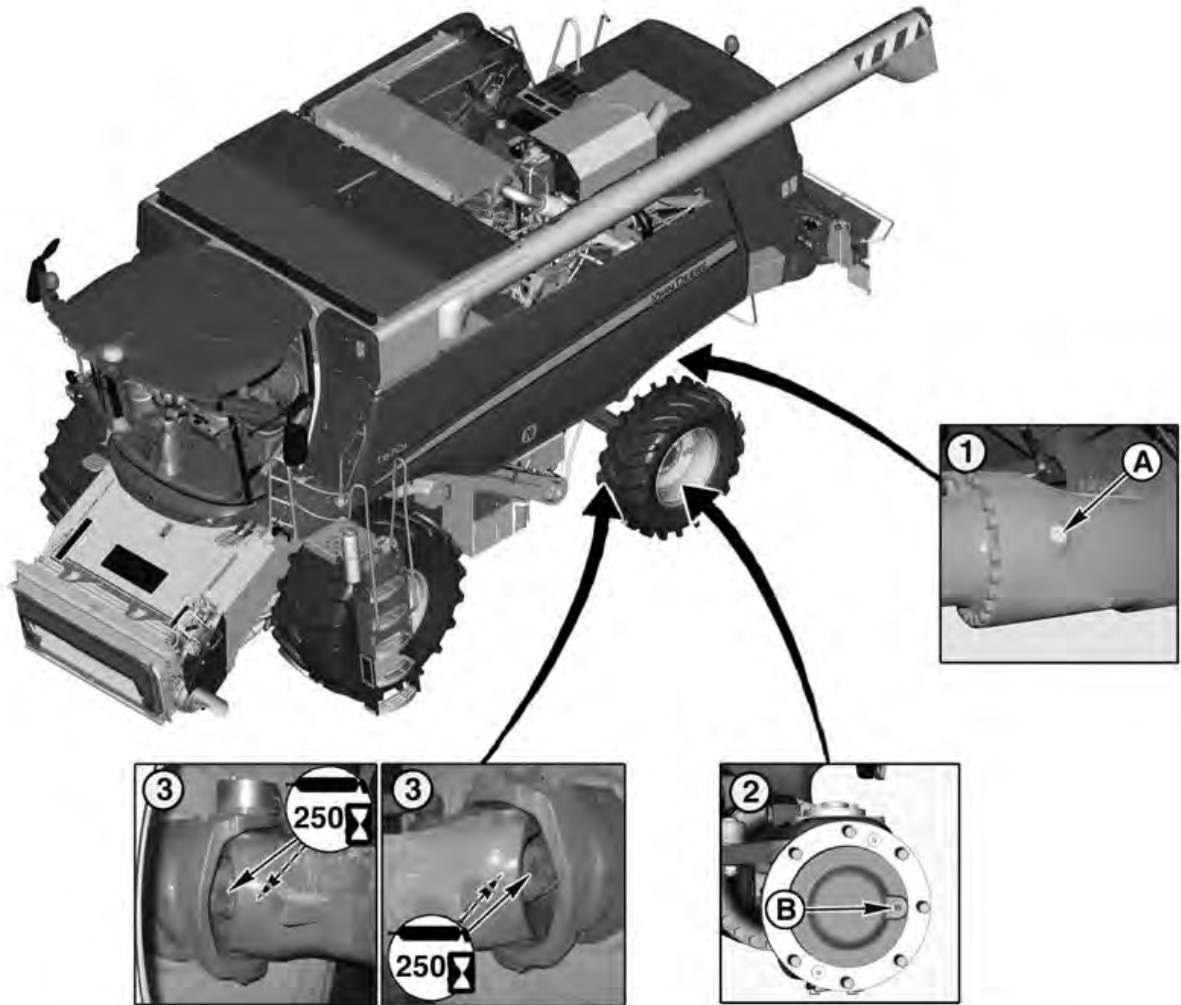
1. Fresh Air Filter - Clean element.

2. Cooling elements - Clean all the cooling elements.

OUC002,00048D6 -19-17DEC15-1/1

ZX243181—UN—18DEC15

Every 250 Operating Hours or Every Year



A—Differential Housing Level Plug

B—Wheel Hub/Reduction Gear Level Plug

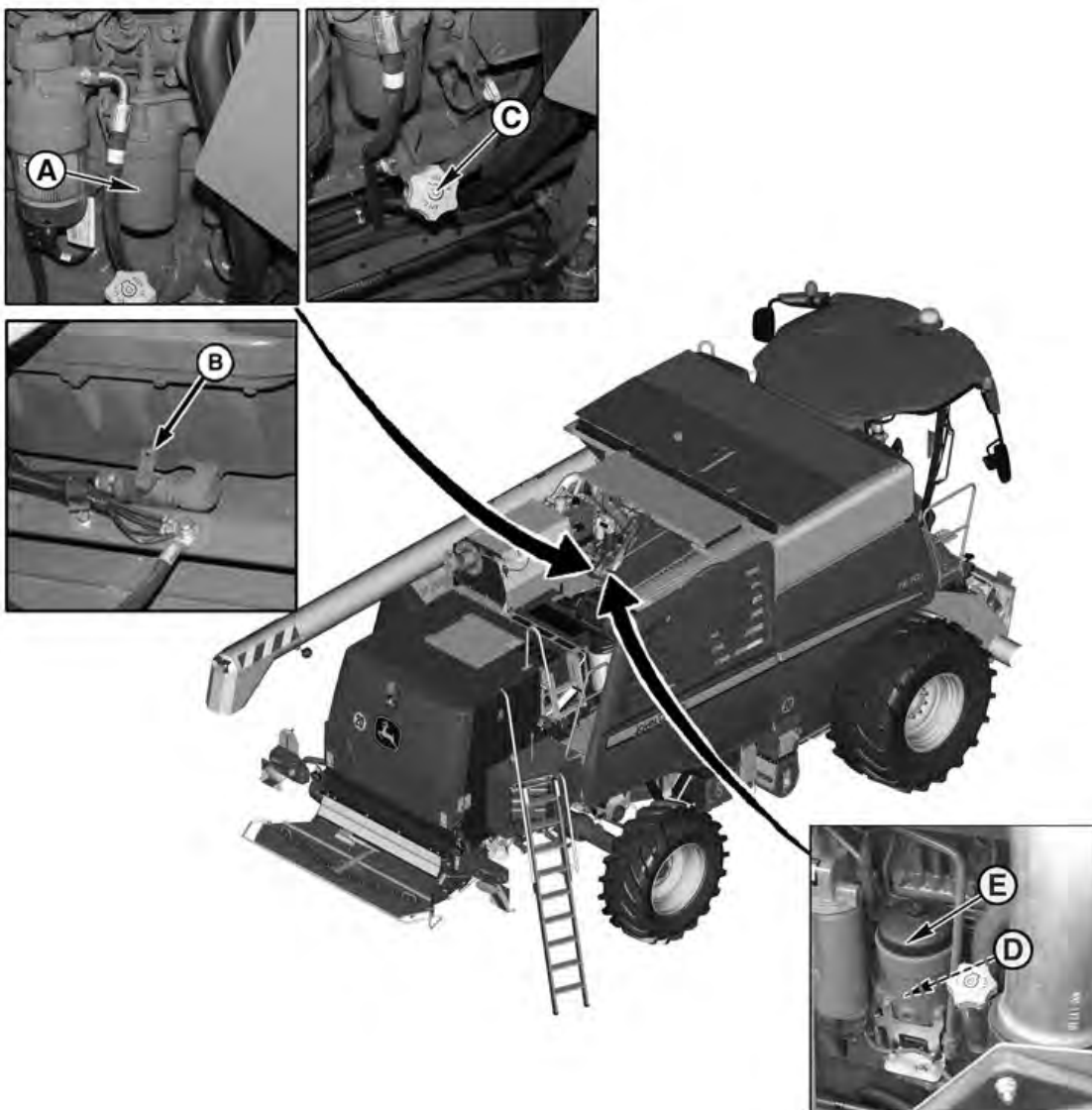
1. Check differential housing oil level at level plug (A).
2. Check wheel hub (non-powered rear axle) or reduction gears (powered rear axle) oil level at level plug (B). Oil level must be at the bottom of level plug (B) hole.
3. Universal-jointed shaft of powered rear axle (both sides-two grease nipples) - Lubricate.

NOTE: Rotate the reduction gear or wheel hub so that OIL LEVEL mark is parallel to the ground.

OUCC002,00048CC -19-17DEC15-1/1

ZX243183—UN—18DEC15

Every 250 Operating Hours or Every Year



A—Filter, 6.8 L Engine
B—Drain Valve

C—Engine Oil Filler Cap
D—Filter, 9.0 L Engine

E—Filter Cover

IMPORTANT: On 6.8 and 9.0 L Engine Tier 2/Stage II: Change oil every 100 hours if fuel contains more than 0.5% sulfur.

On 6.8 and 9.0 L Engine Final Tier 4/Stage IV: Change oil every 250 hours when using other oils as specified.

On 6.8 L Engine Final Tier 4/Stage IV Only: Change oil every 500 hours when using John Deere Plus-50™ II.

On 9.0 L Engine Final Tier 4/Stage IV Only: Change oil every 400 hours when using John Deere Plus-50™ II.

Final Tier 4/Stage IV engines require ultra low sulfur diesel (ULSD) fuel with a maximum sulfur content of 15 mg/kg (15 ppm).

1. Drain engine oil at drain valve (B).

Continued on next page

OUC002,00048BD -19-17DEC15-1/2

ZX243184 —JUN—18DEC15

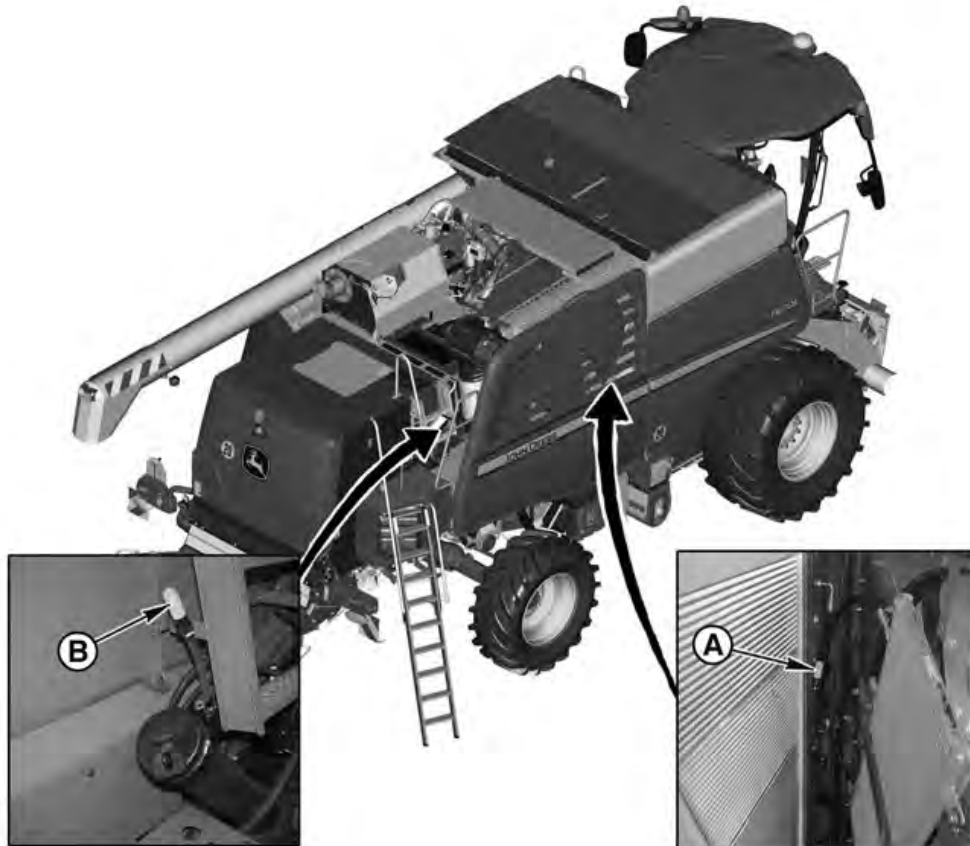
2. Unscrew oil filter (A) (6.8 L engine). Coat the gasket of the new filter with oil, and install the new oil filter, tightening by hand.
3. Unscrew cover of oil filter housing (E) (9.0 L engine). Install new filter element (D), put on the oil filter cover

(remembering to include a new gasket), and tighten to 40 N·m (30 lb·ft).

4. Take off engine oil filler cap (C) and top up with engine oil. Check oil at dipstick after filling.

OUCC002,00048BD -19-17DEC15-2/2

Every 250 Operating Hours or Every Year



A—Fuel Tank Breather

B—Diesel Exhaust Fluid (DEF) Tank Breather

Fuel Tank Breather - Visually inspect fuel tank breather (A). Do not allow debris to collect on breather. Remove fuel tank breather from hose and clean.

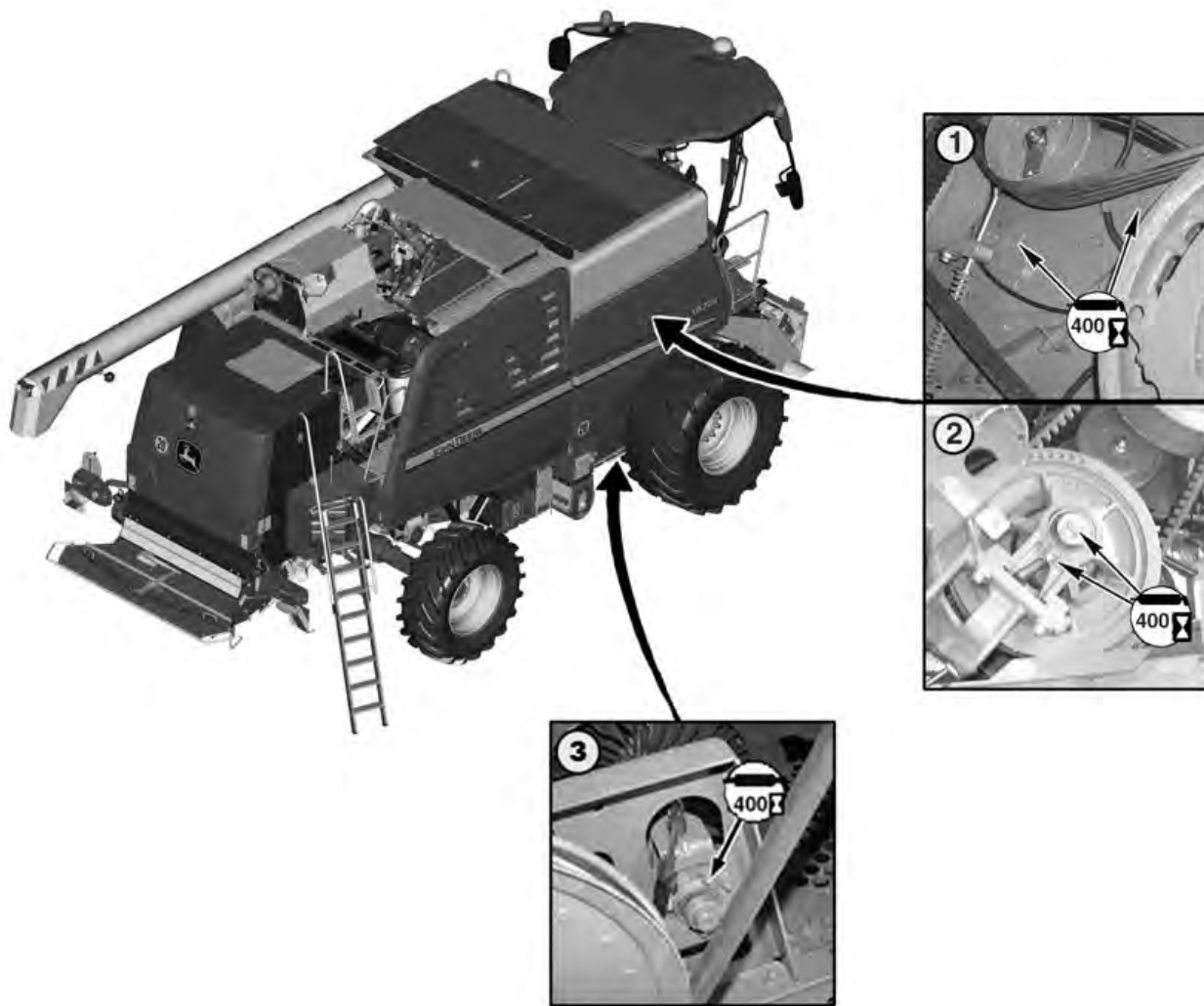
Diesel Exhaust Fluid (DEF) Tank Breather - Visually inspect Diesel Exhaust Fluid (DEF) tank breather (B). Do

not allow debris to collect on breather. Remove breather from hose and clean.

OUCC002,00048D5 -19-17DEC15-1/1

ZX243185—UN—18DEC15

Every 400 Operating Hours or Every Year



1. Beater bearing - Lubricate.
2. Lubricate cylinder variable drive.

IMPORTANT: Set cylinder variable drive to highest speed setting.

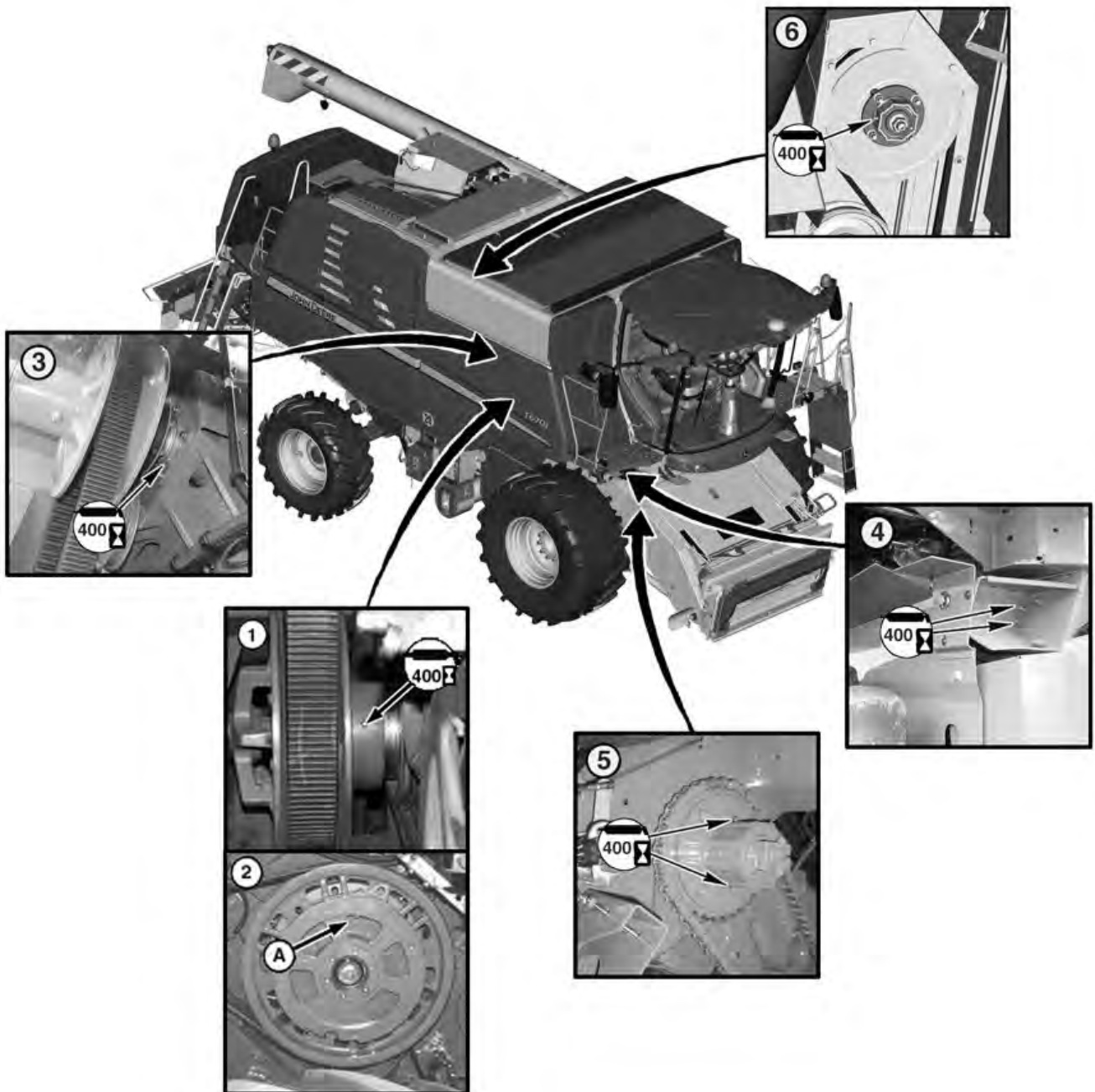
Shut off engine, set park brake and remove key.
Apply grease to the fitting.

3. Fan shaft bearing (both sides) - Lubricate.

OUCC002,00048CB -19-17DEC15-1/1

ZX243186 —UN—18DEC15

Every 400 Operating Hours or Every Year



A—Check/Drain Plug

1. Cylinder drive bearing - Lubricate.
2. Cylinder drive reduction gear.

Cylinder drive reduction gear - Check oil level as described in **Check Cylinder Drive Reduction Gear Oil Level** section.

3. Primary countershaft bearing - Lubricate.

Continued on next page

OUCC002,0004964 -19-11JAN16-1/2

ZX267191 —UN—11JAN16

4. Right lube bank (two fittings) - Lubricate:

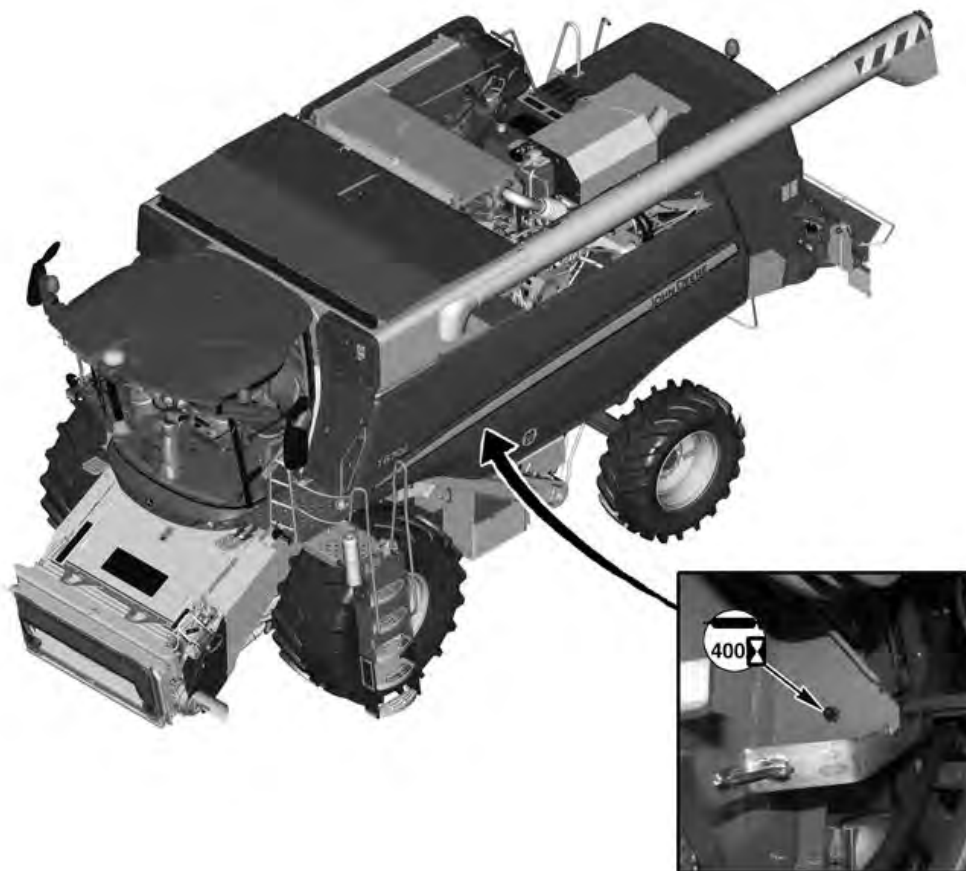
- Top - cylinder shaft bearing.
- Bottom - bearing of cylinder with variable speed.

5. Feeder house slip clutch - Lubricate.

6. Clean grain elevator top shaft slip clutch (if equipped) - Lubricate.

OUCC002,0004964 -19-11JAN16-2/2

Every 400 Operating Hours or Every Year (T Series)



Left bearing of rear beater - Lubricate.

OUCC002,00048C9 -19-17DEC15-1/1

ZK243194 —UN—18DEC15

Every 400 Operating Hours or Every Year (T Series)

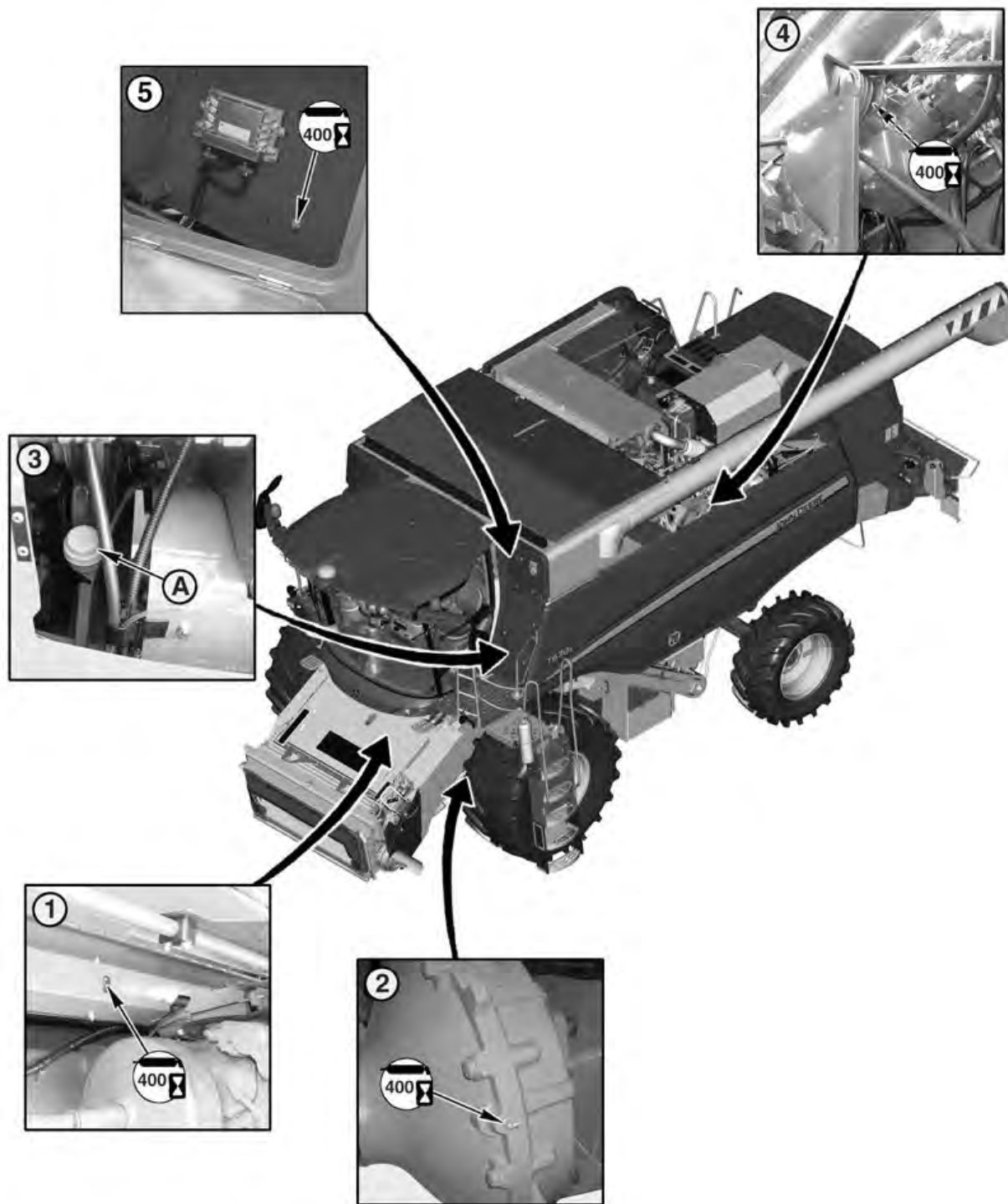


Lubricate right lube bank.

OUC002.0004971 -19-12JAN16-1/1

ZX267192 —UN—27JAN16

Every 400 Operating Hours or Every Year (3-Speed Mechanical and Push-Button Shift Transmission)



A—Brake Fluid Reservoir

1. Conveyor Auger Drive Bearings - Two fittings - Lubricate.

2. Lubricate outer bearings of final drives (in wet and muddy conditions) after 10 hours of operation.

Continued on next page

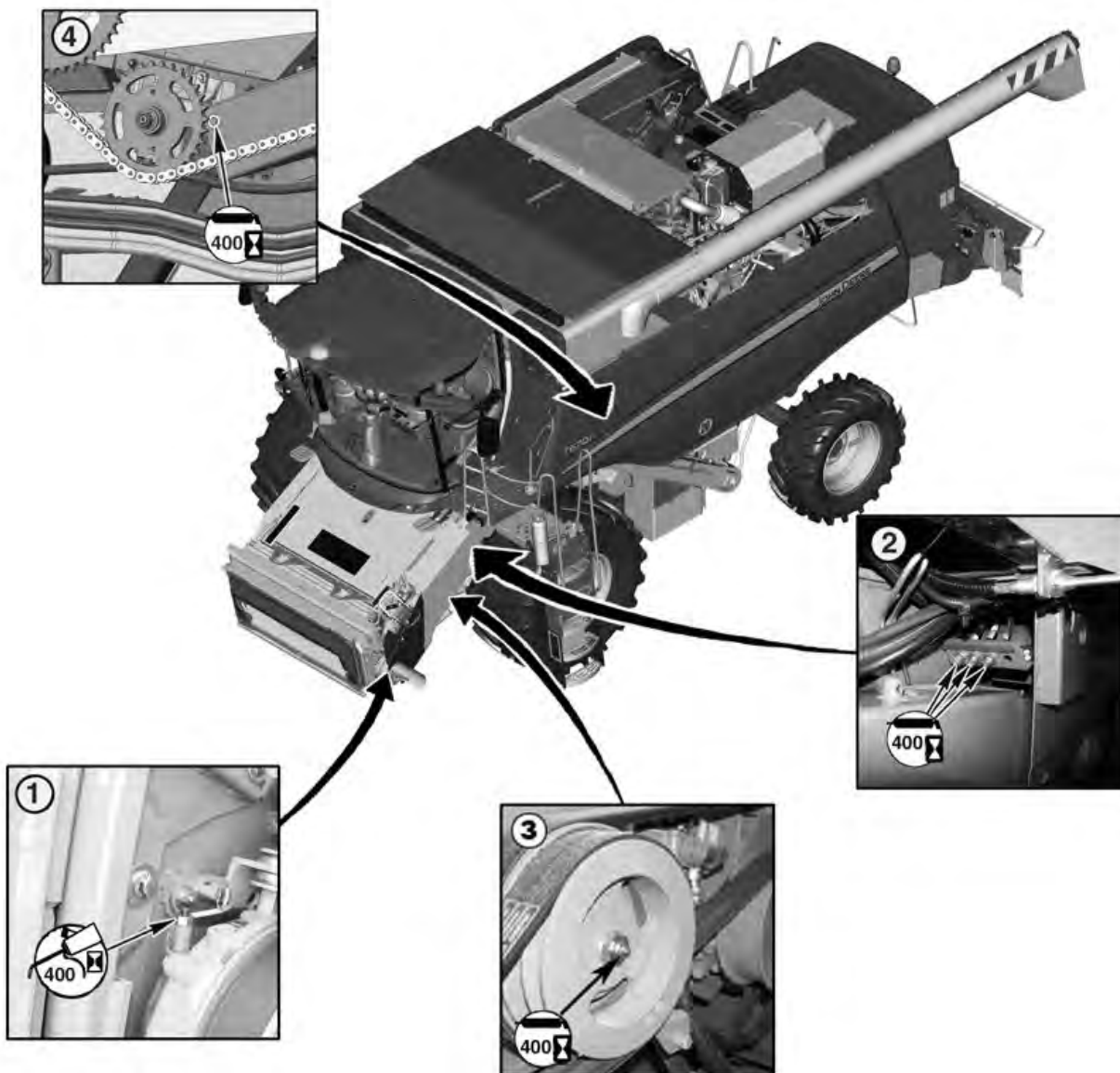
OUC002,00048BA -19-17DEC15-1/2

ZX243182 —UN—18DEC15

3. Brake fluid reservoir (A) - Check brake fluid level.
4. Straw chopper drive sheave - Lubricate.
5. Unloading auger turret bearing - Lubricate.

OUCC002,00048BA -19-17DEC15-2/2

Every 400 Operating Hours or Every Year

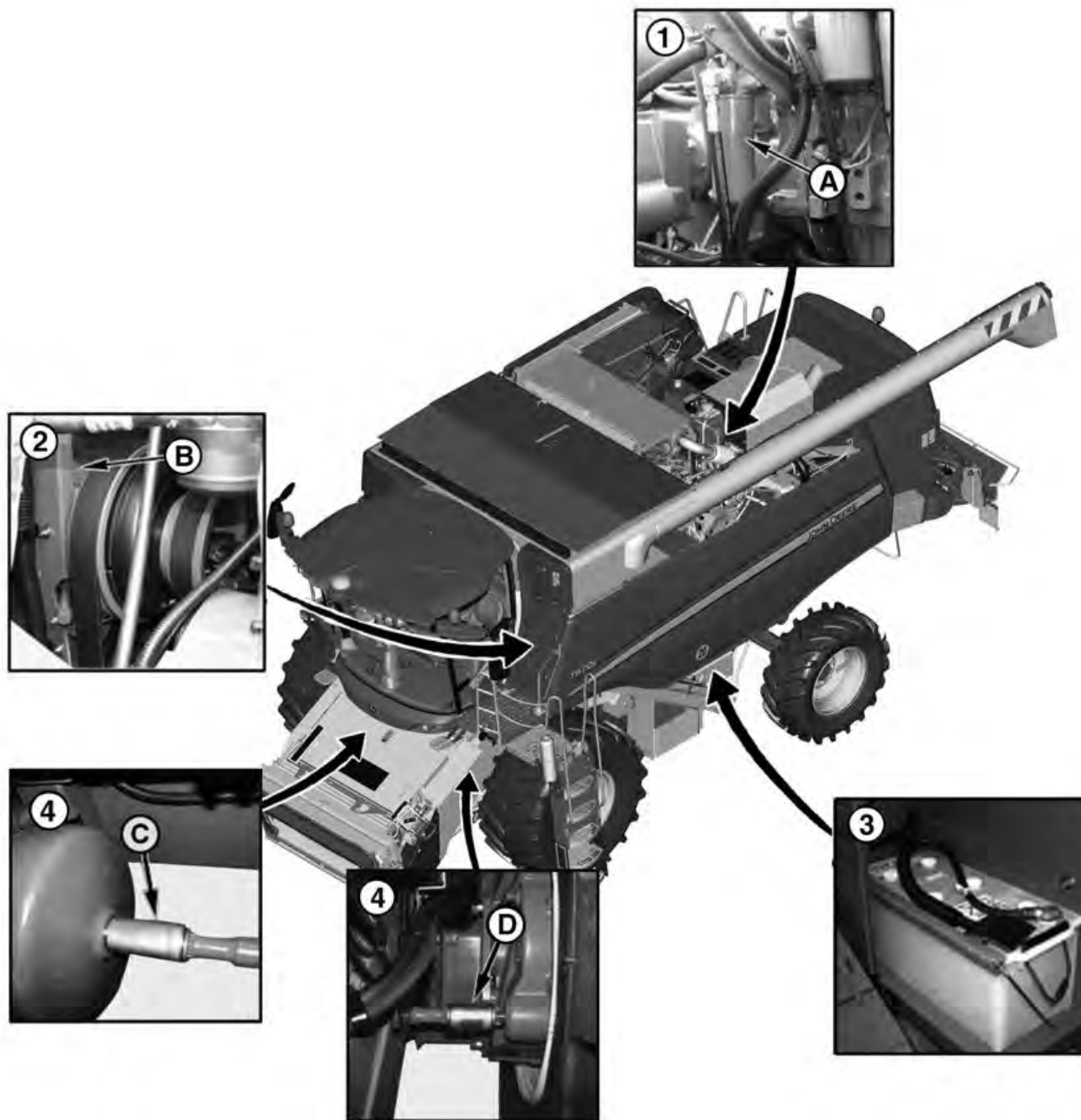


1. Reverser - Raise feeder house all the way. Oil level must show on knurled part of dipstick.
2. Lubricate left lube bank.
3. Feeder house drive - Lubricate.
4. High unloading rate grain tank unloading lower gear case - Lubricate.

OUCC002,00048B7 -19-17DEC15-1/1

ZX243195—UN—18DEC15

Every 400 Operating Hours or Every Year



A—Engine Gearcase Oil Filter
B—Primary Countershaft Gear Case

C—Drive Shaft Coupler Sleeve, Transmission Side

D—Drive Shaft Coupler Sleeve, Final Drive Side

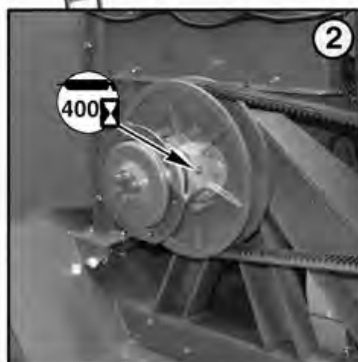
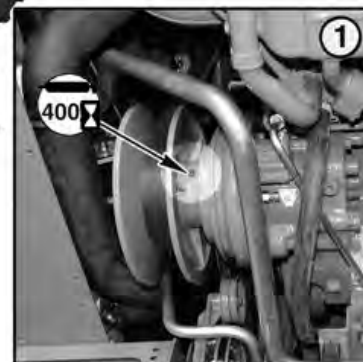
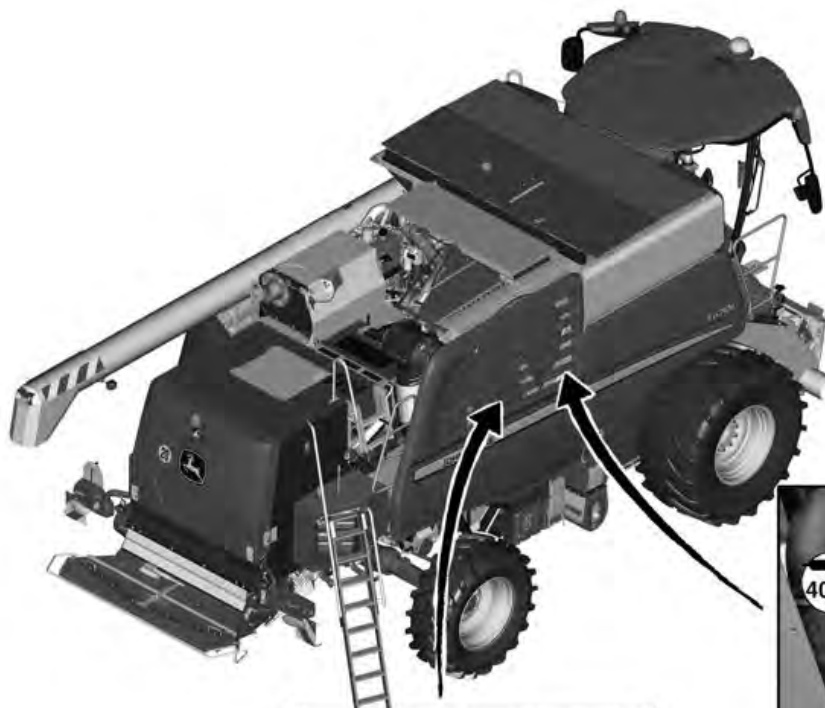
1. Engine gear case oil filter (A) - Change the oil filter. Coat seal on new filter with oil. Tighten the filter by hand then tighten by another half-turn.
2. Primary countershaft gear case (B) - Check oil level. Check with engine shut off.
3. Battery - Clean the battery and check electrolyte level in the cells. Fill to bottom of filler neck with distilled water, if necessary.
4. On both sides, unlock and slide final drive shaft coupler sleeves (C) and (D). Check splines for wear and cracks.

Continued on next page

OUCC002,00048B6 -19-20JAN16-1/2

ZX267193 —UN—29DEC15

Every 400 Operating Hours or Every Year (9.0 L Engine Final Tier 4/Stage IV)



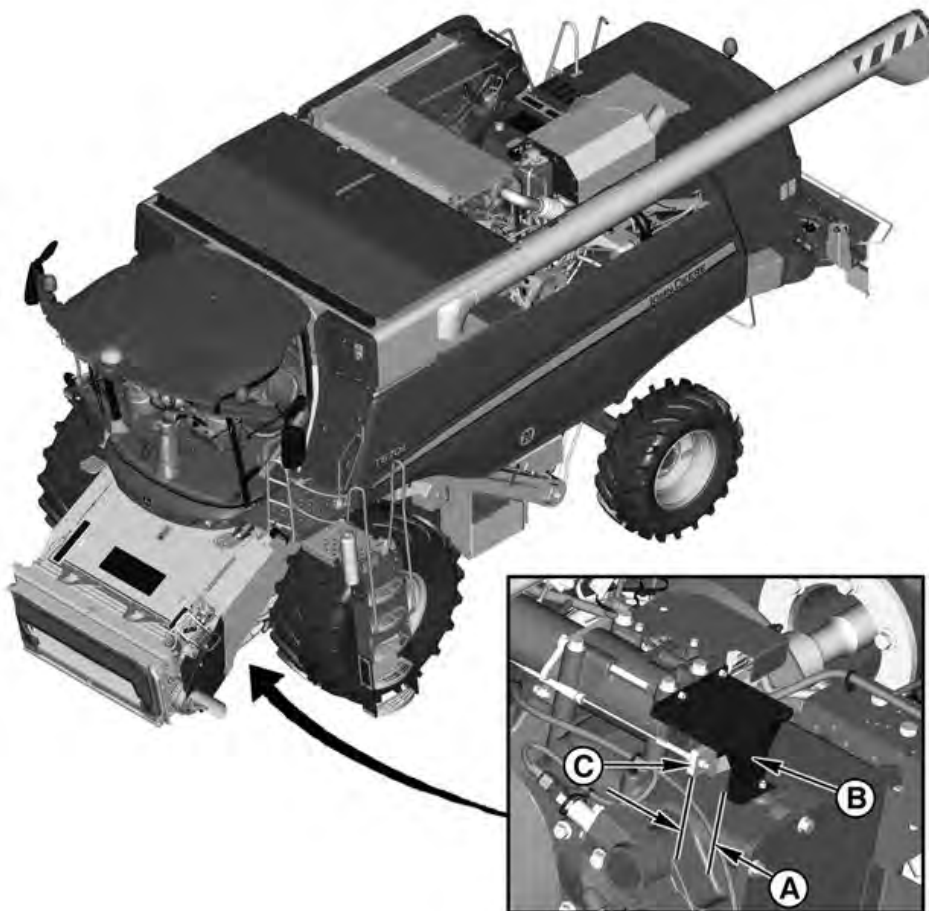
1. Variable speed driver sheave - Pull driver sheave until completely open. Pump 10 — 12 shots of grease into fitting. Excess grease will purge from front side of driver sheave.
2. Variable speed driven sheave - Push variable speed driven sheave until completely closed. Pump 10 — 12

shots of grease into fitting. Excess grease will purge from front side of driven sheave.

ZX243188 — UN — 18DEC15

OUCC002,00048D0 -19-17DEC15-1/1

Every 400 Operating Hours or Every Year (Push-Button Shift Transmission)



A—Dimension

B—Cover Plate

C—Balancer

NOTE: Apply park brake.

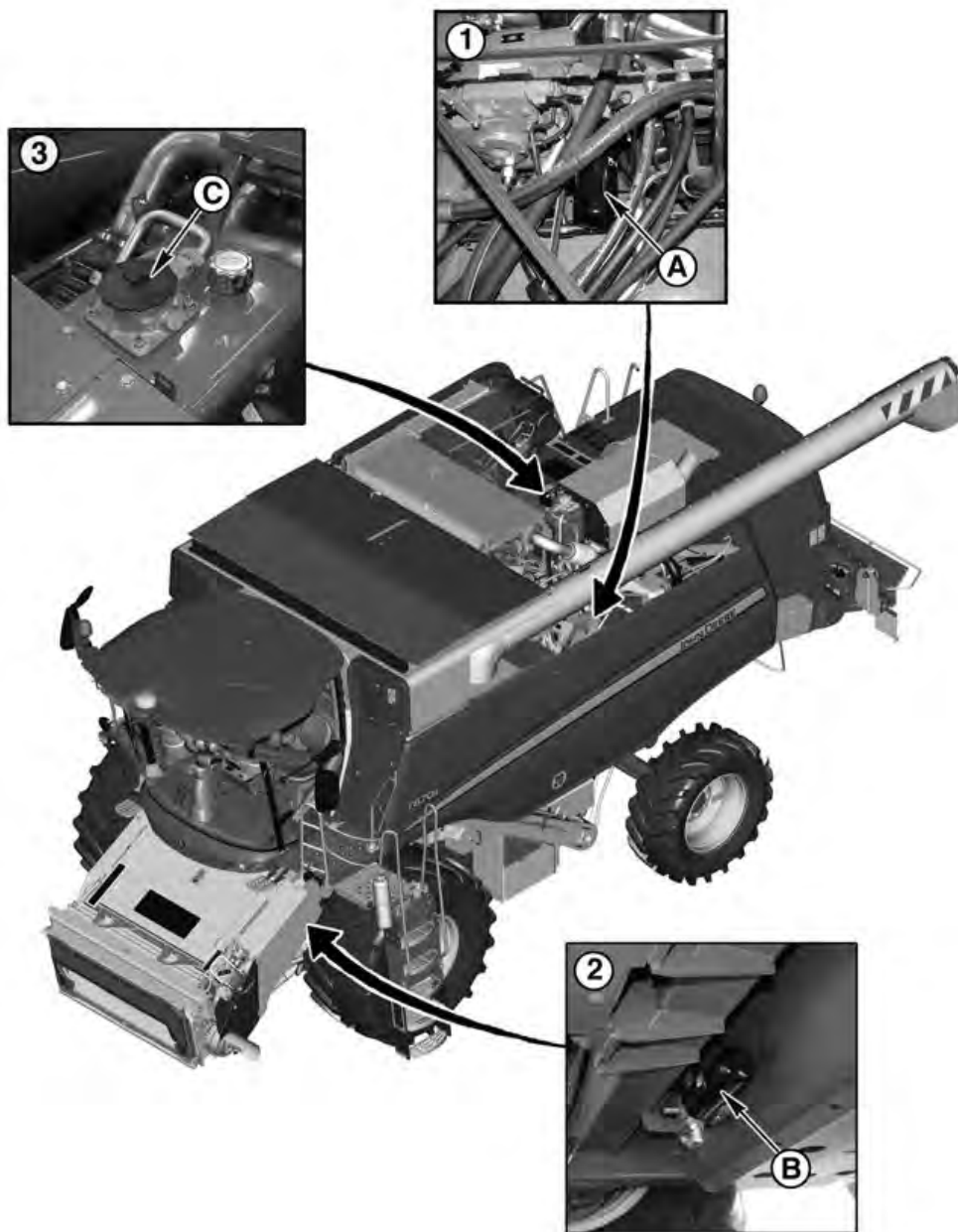
Park brake cable — On both sides, check that dimension (A) from cover plate (B) to balancer (C) is 33.5 to 36.5 mm (1.32 to 1.43 in).

If these values are not reached, contact your John Deere dealer.

OUC002,00048B8 -19-17DEC15-1/1

ZX267194 —UN—18DEC15

Every 400 Hours or Every Year



A—Hydrostatic Charge Filter

B—Hydrostatic Charge Filter

C—Filter Cap

1. Hydrostatic charge filter (3-Speed mechanical and Push-Button Shift Transmission) - Coat seal on new filter (A) with oil. Tighten the filter by hand, then tighten by another half-turn.
2. Hydrostatic charge filter (ProDrive™ Transmission) - Coat seal on new filter (B) with oil. Tighten the filter by hand, then tighten by another half-turn.

3. Hydraulic reservoir filter - Remove and replace filter when performance decline is noticed or diagnostic trouble code is generated.

CAUTION: Remove cap screws equally to relieve spring pressure from filter cap.

Continued on next page

OUC002.00048B9 -19-20JAN16-1/2

ZX243189—UN—22JAN16

NOTE: Inspect and replace O-ring underneath filter cap as needed.

- a. Remove and retain filter cap (C).
- b. Remove and retain spring on top of filter.
- c. Remove and discard filter.
- d. Install replacement filter as shown with previously removed spring.

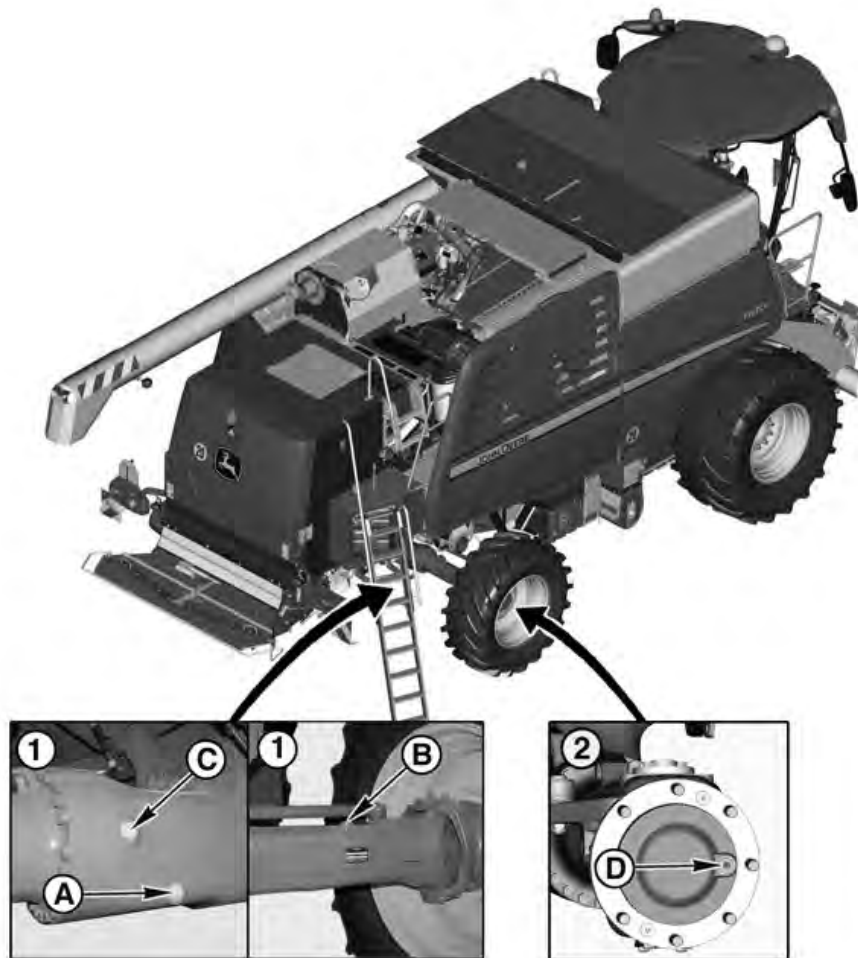
e. Install previously removed filter cap.

f. Use filter cap to compress spring and install previously removed cap screws.

IMPORTANT: Verify that O-ring remains in place when installing filter cap.

OUCC002,00048B9 -19-20JAN16-2/2

Every 1000 Operating Hours



A—Drain Plug
B—Filler Plug

C—Level Plug
D—Level, Fill and Drain Plug

NOTE: Clean area around filter cap before removing to prevent system contamination. It is not necessary to drain system when replacing filter.

1. Rear axle differential oil (powered rear axle only) - Remove drain plug (A) and filler plug (B) from housing.
 - a. Drain oil into a suitable container.
 - b. At filler plug (B) hole, add an oil that meets the specification. Check oil level at level plug (C), and top up as necessary.
2. Rear axle reduction gear/Wheel hub oil - Before draining oil from reduction gear or wheel hub, rotate the wheel so that plug (D) is at the highest position and partially unscrew plug (D) to relieve possible pressure.

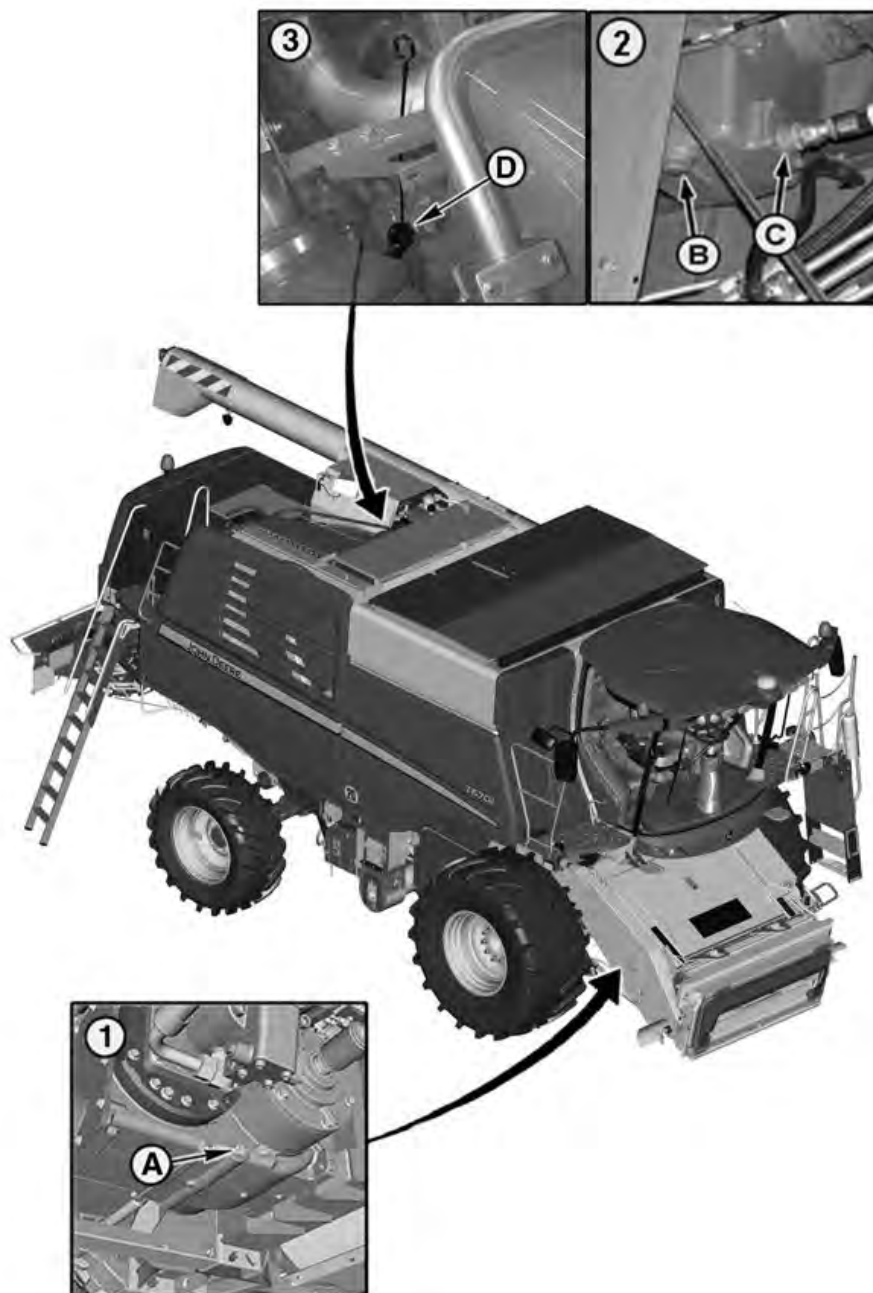
NOTE: Filling the axle housing with oil to the correct level can take up to 30 minutes time.

- a. Rotate the reduction gear or wheel hub so that the plug (D) is toward the ground.
- b. Remove plug (D) and drain oil into a suitable container.
- c. Rotate the reduction gear or wheel hub so that the **OIL LEVEL** mark is parallel to the ground.
- d. Fill oil that meets the specification up to the bottom of the plug hole.
- e. Reinstall plug (D).

OUC002,00048D1 -19-20JAN16-1/1

ZX243187 —UN—22JAN16

Every 1000 Operating Hours (ProDrive™ Transmission Only)



A—Drain Plug on ProDrive™ Transmission

B—Drain Plug on Engine Gear Case

C—Fitting With Screen
D—Filler Hole With Dipstick

1. Remove drain plug (A) from the ProDrive™ transmission and drain oil.
2. Remove drain plug (B) from the engine gear case and drain oil.

3. Take off fitting (C) and clean the screen element. At filler hole and dipstick (D), add an oil that meets the specification. Check oil level at dipstick (D), and top up as necessary.

Continued on next page

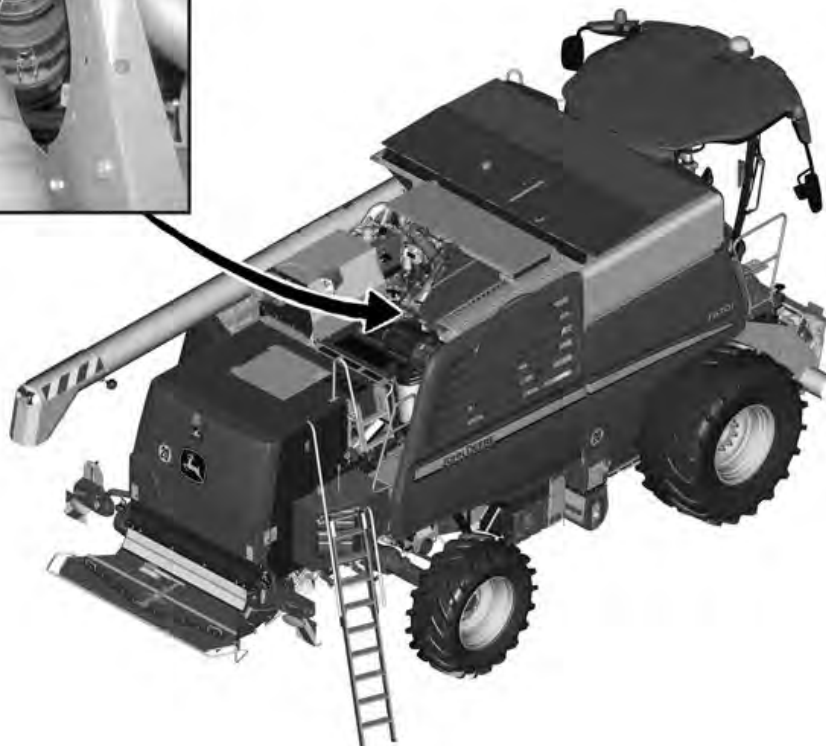
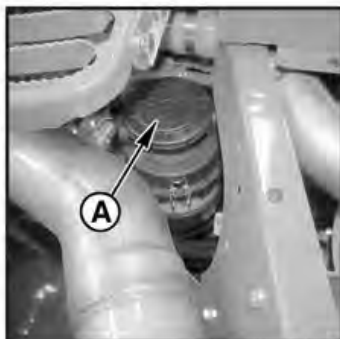
OUC002,00048BB -19-17DEC15-1/2

ZX243191 —JUN—18DEC15

NOTE: Run the engine at slow idle for 2 minutes and then recheck the oil level.

OUCC002,00048BB -19-17DEC15-2/2

Every 1500 Operating Hours (6.8 L Engine Final Tier 4/Stage IV Only)



A—Cylinder Head

Replace the filter at the cylinder head (A).

OUCC002,00048C0 -19-17DEC15-1/1

ZX267195—UN—18DEC15

Every 2000 Operating Hours



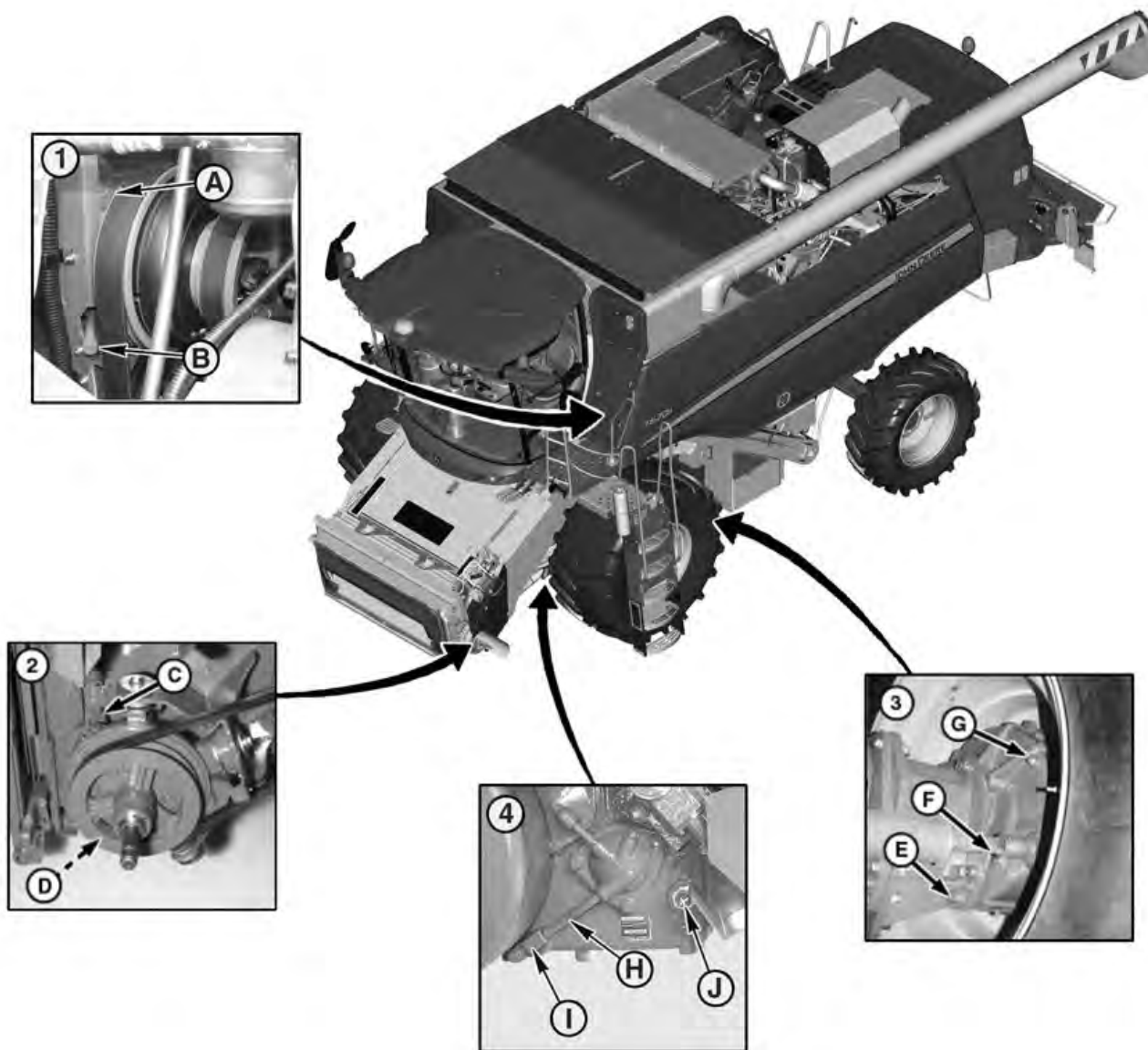
Have engine valve clearance checked and adjusted by your John Deere dealer.

On 6.8 L engine, check the glow plugs.

OUC002,00048C1 -19-17DEC15-1/1

ZX267196—UN—22JAN16

Every 2000 Operating Hours



A—Plug
B—Dipstick
C—Filler Hole

D—Drain Hole
E—Drain Hole
F—Check Hole

G—Filler Hole
H—Tube
I—Block

J— Check Hole

1. Primary countershaft gear case - Drain at plug (A) and refill at dipstick (B). Oil level must show on knurled part of dipstick.

NOTE: Access dipstick (B) from inside the grain tank.

2. Reverser gear case - Raise feeder house and lower safety stop. Drain at (D) and refill at (C). Check oil level with feeder house all the way up. Oil level must show on knurled part of dipstick.

3. Final drives - Drain at (E) and refill at (G) to within 12 mm (0.5 in) of bottom of check hole (F).

Continued on next page

OUC002,00048C2 -19-17DEC15-1/2

ZX267197 —UN—18DEC15

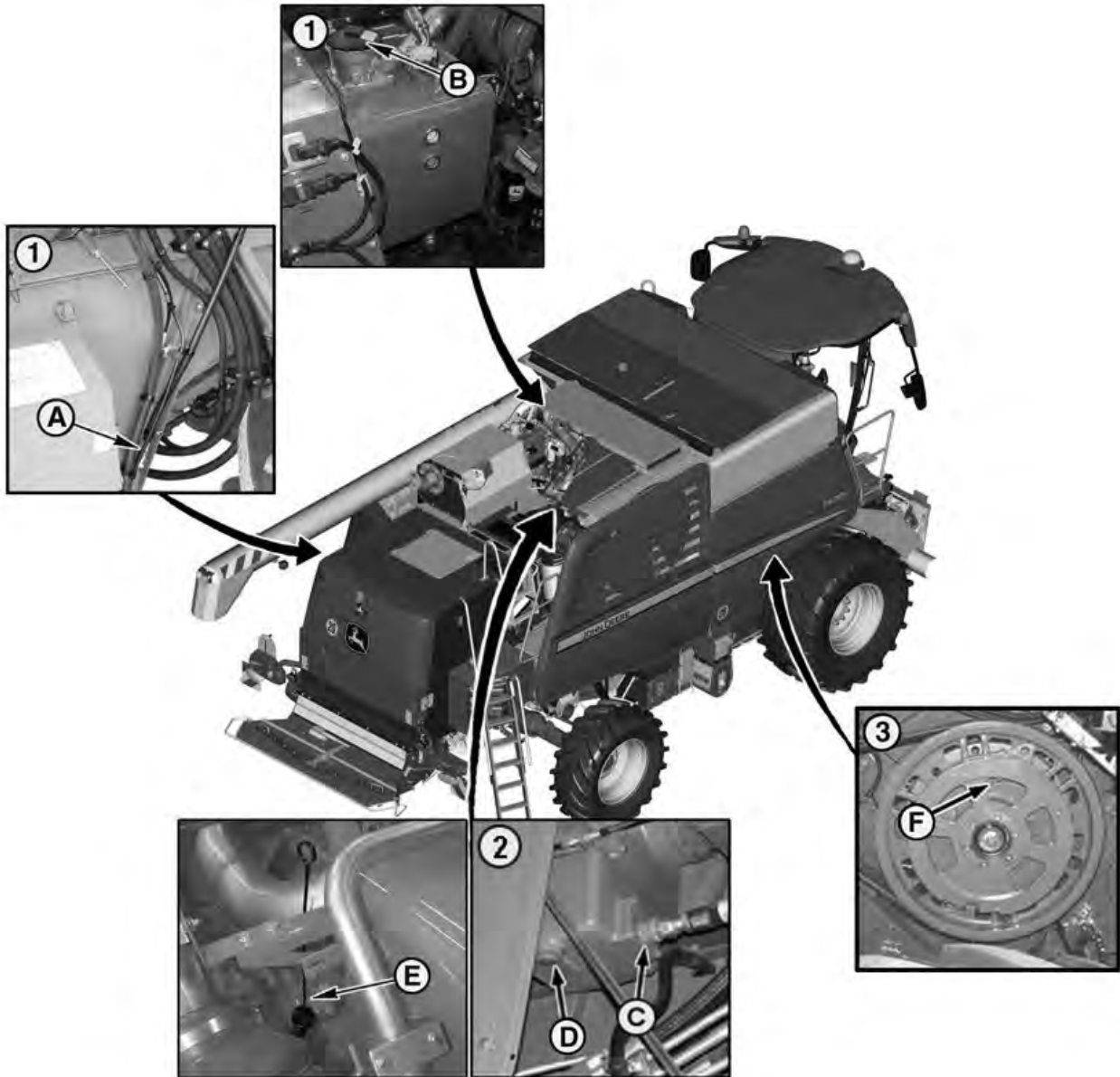
NOTE: On HillMaster™ machines, check oil level with machine lifted in center position (field operation).

(I). Remove block to drain transmission. Fill at hole (J) to within 12 mm (0.5 in) of bottom of hole.

4. Transmission (3-speed mechanical and Push-Button Shift transmission only) - Slide tube (H) out of block

OUCC002,00048C2 -19-17DEC15-2/2

Every 2000 Operating Hours



A—Drain Hose
B—Cap

C—Fitting With Screen

D—Drain Screw
E—Tube

F—Plug

1. Hydraulic reservoir - Drain at drain hose (A). Clean screen and cap (B) and refill. Oil must be visible in sight glass (on HillMaster™ and/or ProDrive™ machine, check oil level at upper sight glass).

2. Engine gear case (machines without ProDrive™ Transmission Only) - Drain at screw (D). Clean breather on dipstick. Take off fitting (C) and clean the screen element. Refill at tube (E).

Continued on next page

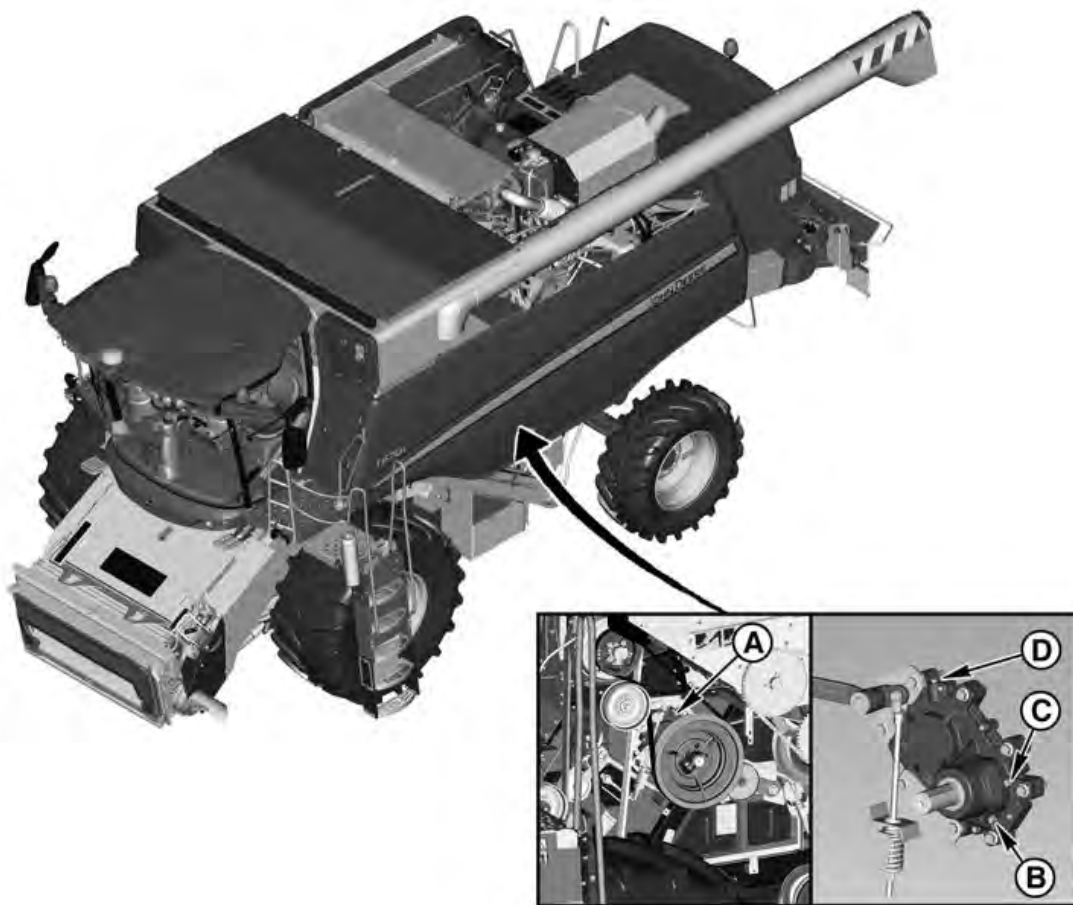
0UCC002,00048BC -19-17DEC15-1/2

ZX243190—UN—18DEC15

3. Cylinder drive reduction gear - Drain at plug (F). Add oil and check level with arrow up. Do not get oil on belts.

OUCC002,00048BC -19-17DEC15-2/2

Every 2000 Operating Hours (T Series)



A—Overshot Beater Gear Case B—Drain Plug
C—Level Plug

D—Vent Plug

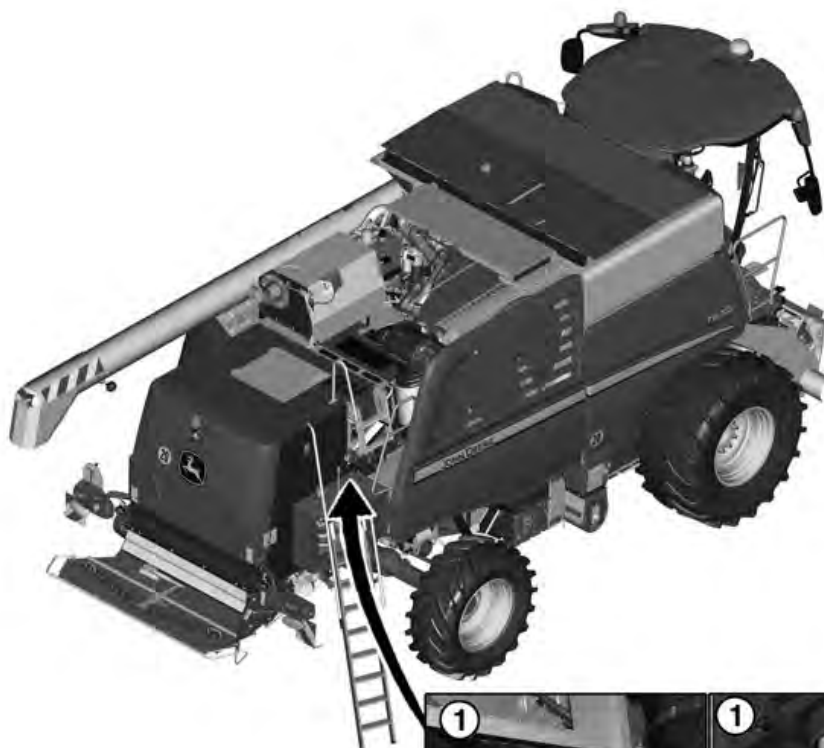
1. Overshot beater drive gear case (A) - Take out drain plug (B) and drain the gear case oil.

2. Fill gear case with 0.9 L (0.24 gal) of SAE 80W90 synthetic gear case oil.

OUCC002,0004972 -19-12JAN16-1/1

ZX267198 — UN—18DEC15

Every 4500 Operating Hours or Three Years (Final Tier 4/Stage IV)



A—Cap
B—Equalizing Element

C—Filter Tool

D—Filter

CAUTION: Diesel Exhaust Fluid (DEF) contains urea. Do not get fluid in eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. In event fluid is ingested, contact a physician immediately. Reference Materials Safety Data Sheet (MSDS) for additional information.

Shut OFF engine, set park brake and remove key before performing maintenance work.

NOTE: If fluid is spilled or contacts any surface other than storage tank, immediately clean surface with clear water. Fluid is corrosive to painted surfaces and can distort some plastic and rubber components.

Continued on next page

OUC002.000498B -19-12JAN16-1/2

ZX243199 —UN—30JAN16

1. Diesel Exhaust Fluid (DEF) dosing filter - Remove cap (A) and discard equalizing element (B). Use filter tool (C) to remove and discard filter (D). Replace filter and

equalizing element. Install cap and tighten cap to 20 N·m (177 lb·in). See **Replace Diesel Exhaust Fluid (DEF) Dosing Filter** section.

OUCC002,000498B -19-12JAN16-2/2

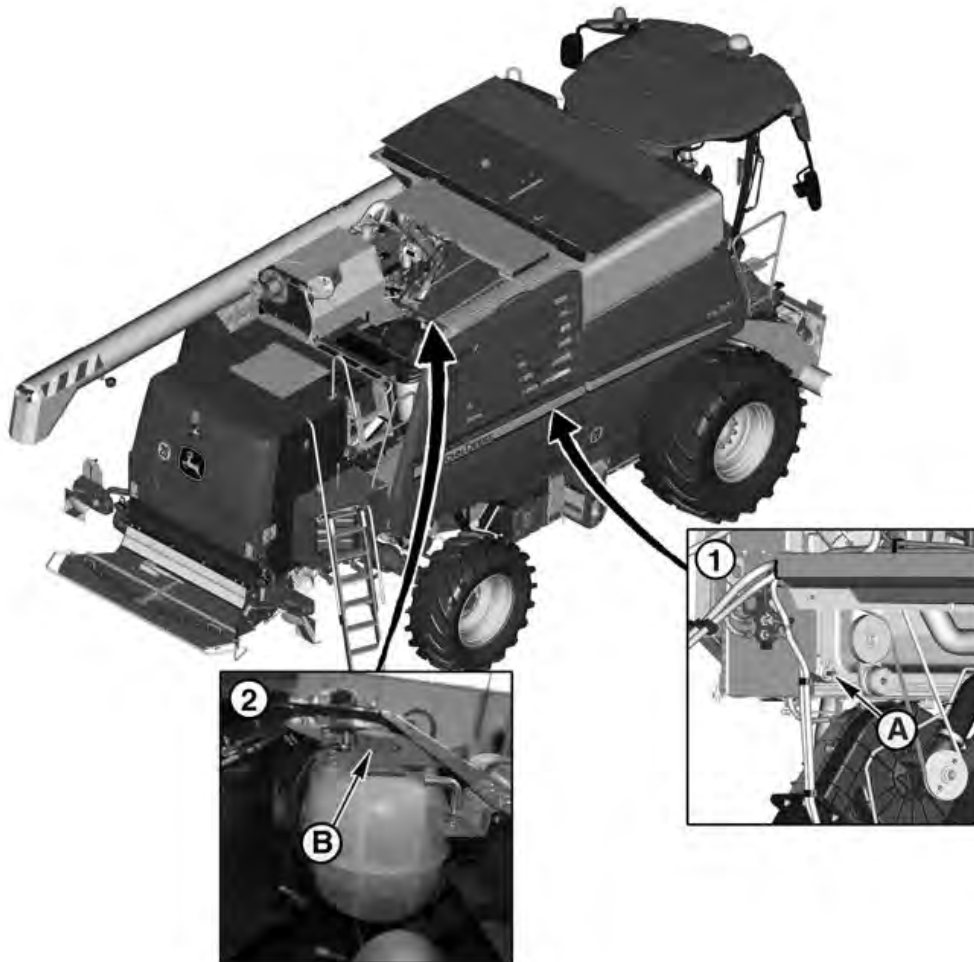
Every 4500 Operating Hours or Five Years

IMPORTANT: The vibration damper assembly is not repairable and should be replaced every five years or 4500 hours, whichever occurs first.

Have your John Deere dealer replace the engine crankshaft damper.

OUCC002,00048D3 -19-17DEC15-1/1

Every 6000 Operating Hours or Six Years



A—Drain Valve

B—Surge Tank

NOTE: When COOL-GARD™ II or COOL-GARD™ II PG is used, the drain interval is 6 years or 6000 hours of operation.

If a coolant other than COOL-GARD™ II or COOL-GARD™ II PG is used, reduce the drain interval to 2 years or 2000 hours of operation.

1. Radiator - Open drain valve (A) to remove coolant from radiator.

2. Surge tank - Flush and refill with correct coolant and conditioner (see **Drain Cooling System** section and coolant recommendations). Check engine coolant level in surge tank (B) with engine cold. Level must be up to "Max Cold" line.

OUC002,00048D4 -19-17DEC15-1/1

ZX243192 —UN—18DEC15

Handle Fuel Safely—Avoid Fires

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

Use only an approved fuel container for transporting flammable liquids.

Never fill fuel container in pickup truck with plastic bed liner. Always place fuel container on ground before refueling. Touch fuel container with fuel dispenser nozzle before removing can lid. Keep fuel dispenser nozzle in contact with fuel container inlet when filling.



TS202 —UN—23AUG88

Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.

DX,FIRE1 -19-12OCT11-1/1

Avoid Static Electricity Risk When Refueling

The removal of sulfur and other compounds in Ultra-Low Sulfur Diesel (ULSD) fuel decreases its conductivity and increases its ability to store a static charge.

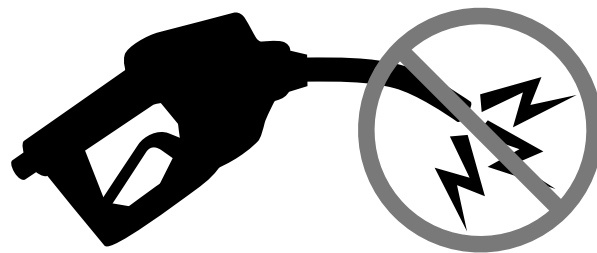
Refineries may have treated the fuel with a static dissipating additive. However, there are many factors that can reduce the effectiveness of the additive over time.

Static charges can build up in ULSD fuel while it is flowing through fuel delivery systems. Static electricity discharge when combustible vapors are present could result in a fire or explosion.

Therefore, it is important to ensure that the entire system used to refuel your machine (fuel supply tank, transfer pump, transfer hose, nozzle, and others) is properly grounded and bonded. Consult with your fuel or fuel system supplier to ensure that the delivery system is in compliance with fueling standards for proper grounding and bonding practices.



RG22142 —UN—17MAR14



RG21992 —UN—21AUG13

DX,FUEL,STATIC,ELEC -19-12JUL13-1/1

Fill the Fuel Tank

CAUTION: Handle fuel carefully. Do not refuel machine while smoking. Shut OFF engine, set park brake and remove key before filling tank.

Do not overfill fuel tank. Bodily injury can result from fuel splash back. Leakage can result from expansion of fuel. If tank is too full, then left in direct sunlight or if temperature gets too hot, tank will overflow.

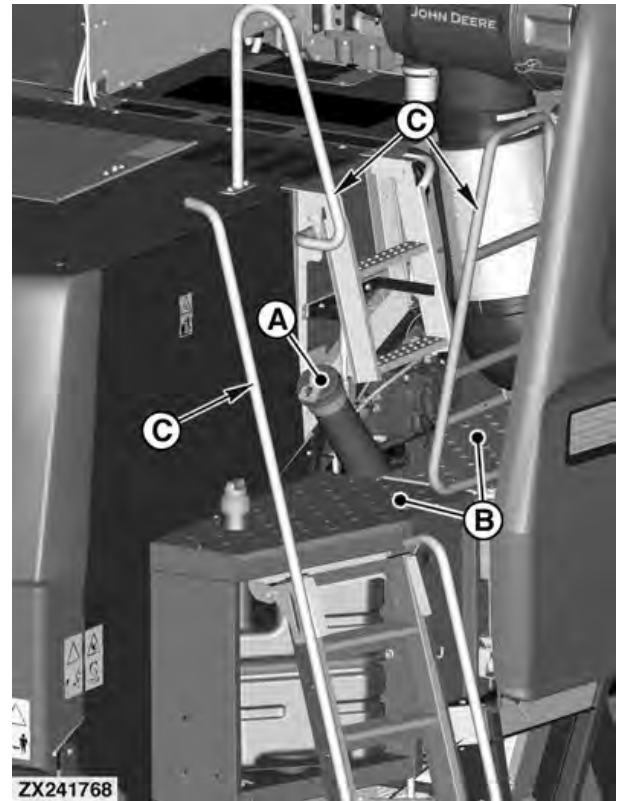
Do not fill fuel tank (A) from the rear access ladder. To fill the fuel tank (A), always stay on floor (B) and use handrails (C).

IMPORTANT: Final Tier 4/Stage IV Engines: Use ONLY ultra low sulfur diesel fuel. See Diesel Fuel and Biodiesel Fuel in this section for further information.

Fill fuel tank (A) at end of each day. This prevents condensation in tank as moist air cools.

A—Fuel Tank
B—Floor

C—Handrail



ZX241768 —UN—16APR15

OUC002,000498A -19-12JAN16-1/1

Handling and Storing Diesel Fuel

CAUTION: Reduce the risk of fire. Handle fuel carefully. DO NOT fill the fuel tank when engine is running. DO NOT smoke while you fill the fuel tank or service the fuel system.

Fill the fuel tank at the end of each day's operation to prevent water condensation and freezing during cold weather.

Keep all storage tanks as full as practicable to minimize condensation.

Ensure that all fuel tank caps and covers are installed properly to prevent moisture from entering. Monitor water content of the fuel regularly.

When using BioDiesel fuel, the fuel filter may require more frequent replacement due to premature plugging.

Check engine oil level daily prior to starting engine. A rising oil level may indicate fuel dilution of the engine oil.

When fuel is stored for an extended period or if there is a slow turnover of fuel, add a fuel conditioner to stabilize the fuel and prevent water condensation. Contact your fuel supplier or John Deere dealer for recommendations.

OUC0075,000163E -19-06SEP13-1/1

Diesel Fuel

Consult your local fuel distributor for properties of the diesel fuel available in your area.

In general, diesel fuels are blended to satisfy the low temperature requirements of the geographical area in which they are marketed.

Diesel fuels specified to EN 590 or ASTM D975 are recommended. Renewable diesel fuel produced by hydrotreating animal fats and vegetable oils is basically identical to petroleum diesel fuel. Renewable diesel that meets EN 590, ASTM D975, or EN 15940 is acceptable for use at all percentage mixture levels.

Required Fuel Properties

In all cases, the fuel shall meet the following properties:

Cetane number of 40 minimum. Cetane number greater than 47 is preferred, especially for temperatures below -20°C (-4°F) or elevations above 1675 m (5500 ft.).

Cold Filter Plugging Point (CFPP) should be at least 5°C (9°F) below the expected lowest temperature or **Cloud Point** below the expected lowest ambient temperature.

Fuel lubricity should pass a maximum scar diameter of 0.52 mm as measured by ASTM D6079 or ISO 12156-1. A maximum scar diameter of 0.45 mm is preferred.

Diesel fuel quality and sulfur content must comply with all existing emissions regulations for the area in which the engine operates. DO NOT use diesel fuel with sulfur content greater than 10 000 mg/kg (10 000 ppm).

E-Diesel fuel

DO NOT use E-Diesel (Diesel fuel and ethanol blend). Use of E-Diesel fuel in any John Deere machine may void the machine warranty.

 **CAUTION:** Avoid severe injury or death due to the fire and explosion risk from using E-Diesel fuel.

Sulfur content for Interim Tier 4, Final Tier 4, Stage III B, and Stage IV Engines

- Use ONLY ultra low sulfur diesel (ULSD) fuel with a maximum of 15 mg/kg (15 ppm) sulfur content.

Sulfur Content for Tier 3 and Stage III A Engines

- Use of diesel fuel with sulfur content less than 1000 mg/kg (1000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content 1000—2000 mg/kg (1000—2000 ppm) REDUCES the oil and filter change interval.
- BEFORE using diesel fuel with sulfur content greater than 2000 mg/kg (2000 ppm), contact your John Deere dealer.

Sulfur Content for Tier 2 and Stage II Engines

- Use of diesel fuel with sulfur content less than 2000 mg/kg (2000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content 2000—5000 mg/kg (2000—5000 ppm) REDUCES the oil and filter change interval.
- BEFORE using diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm), contact your John Deere dealer.

Sulfur Content for Other Engines

- Use of diesel fuel with sulfur content less than 5000 mg/kg (5000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm) REDUCES the oil and filter change interval.

IMPORTANT: Do not mix used diesel engine oil or any other type of lubricating oil with diesel fuel.

Improper fuel additive usage may cause damage on fuel injection equipment of diesel engines.

DX,FUEL1 -19-13JAN16-1/1

BioDiesel Fuel

BioDiesel fuel is comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats. BioDiesel blends are BioDiesel mixed with petroleum diesel fuel on a volume basis.

Before using fuel containing BioDiesel, review the BioDiesel Use Requirements and Recommendations in this Operator's Manual.

Environmental laws and regulations can encourage or prohibit the use of biofuels. Operators should consult with appropriate governmental authorities prior to using biofuels.

All John Deere Engines with Exhaust Filter (Released 2011 and After)

While 5% blends (B5) are preferred, BioDiesel concentrations up to a 20% blend (B20) in petroleum diesel fuel can be used. BioDiesel blends up to B20 can be used ONLY if the BioDiesel (100% BioDiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

BioDiesel concentrations above B20 can harm the engine's emission control systems and should not be used. Risks include, but are not limited to, more frequent stationary regeneration, soot accumulation, and increased intervals for ash removal.

John Deere approved fuel conditioners, which contain detergent and dispersant additives, are required when using BioDiesel blends from B10—B20, and are recommended when using lower BioDiesel blends.

All John Deere Engines Excluding Exhaust Filter (Primarily Released Prior to 2012)

While 5% blends (B5) are preferred, BioDiesel concentrations up to a 20% blend (B20) in petroleum diesel fuel can be used. BioDiesel blends up to B20 can be used ONLY if the BioDiesel (100% BioDiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

These John Deere engines can operate on BioDiesel blends above B20 (up to 100% BioDiesel). Operate at levels above B20 ONLY if the BioDiesel is permitted by law and meets the EN 14214 specification (primarily available in Europe). Engines operating on BioDiesel blends above B20 might not fully comply with or be permitted by all applicable emissions regulations. Expect up to a 12% reduction in power and an 18% reduction in fuel economy when using 100% BioDiesel.

John Deere approved fuel conditioners, which contain detergent and dispersant additives, are required when using BioDiesel blends from B10—B20, and are recommended when using lower BioDiesel blends.

BioDiesel Use Requirements and Recommendations

The petroleum diesel portion of all BioDiesel blends must meet the requirements of ASTM D975 (US) or EN 590 (EU) commercial standard.

BioDiesel users in the U.S. are strongly encouraged to purchase BioDiesel blends from a BQ-9000 Certified Marketer and sourced from a BQ-9000 Accredited Producer (as certified by the National BioDiesel Board). Certified Marketers and Accredited Producers can be found at the following website: <http://www.bq9000.org>.

BioDiesel contains residual ash. Ash levels exceeding the maximums allowed in either ASTM D6751 or EN14214 can result in more rapid ash loading and require more frequent cleaning of the Exhaust Filter (if present).

The fuel filter can require more frequent replacement, when using BioDiesel fuel, particularly if switching from diesel. Check engine oil level daily prior to starting engine. A rising oil level can indicate fuel dilution of the engine oil. BioDiesel blends up to B20 must be used within 90 days of the date of BioDiesel manufacture. BioDiesel blends above B20 must be used within 45 days from the date of BioDiesel manufacture.

When using BioDiesel blends up to B20, the following must be considered:

- Cold-weather flow degradation
- Stability and storage issues (moisture absorption, microbial growth)
- Possible filter restriction and plugging (usually a problem when first switching to BioDiesel on used engines)
- Possible fuel leakage through seals and hoses (primarily an issue with older engines)
- Possible reduction of service life of engine components

Request a certificate of analysis from your fuel distributor to ensure that the fuel is compliant with the specifications provided in this Operator's Manual.

Consult your John Deere dealer for approved fuel conditioners to improve storage and performance with BioDiesel fuels.

The following must also be considered if using BioDiesel blends above B20:

- Possible coking or blocked injector nozzles, resulting in power loss and engine misfire if John Deere approved fuel conditioners are not used
- Possible crankcase oil dilution (requiring more frequent oil changes)
- Possible lacquering or seizure of internal components
- Possible formation of sludge and sediments
- Possible thermal oxidation of fuel at elevated temperatures
- Possible compatibility issues with other materials (including copper, lead, zinc, tin, brass, and bronze) used in fuel handling equipment

Continued on next page

DX,FUEL7 -19-15MAY13-1/2

- Possible reduction in water separator efficiency
- Possible damage to paint if exposed to BioDiesel
- Possible corrosion of fuel injection equipment
- Possible elastomeric seal and gasket material degradation (primarily an issue with older engines)
- Possible high acid levels within fuel system
- Because BioDiesel blends above B20 contain more ash, using blends above B20 can result in more rapid

ash loading and require more frequent cleaning of the Exhaust Filter (if present)

IMPORTANT: Raw pressed vegetable oils are NOT acceptable for use as fuel in any concentration in John Deere engines. Their use could cause engine failure.

DX,FUEL7 -19-15MAY13-2/2

Lubricity of Diesel Fuel

Most diesel fuels manufactured in the United States, Canada, and the European Union have adequate lubricity to ensure proper operation and durability of fuel injection system components. However, diesel fuels manufactured in some areas of the world may lack the necessary lubricity.

IMPORTANT: Make sure the diesel fuel used in your machine demonstrates good lubricity characteristics.

Fuel lubricity should pass a maximum scar diameter of 0.52 mm as measured by ASTM D6079 or ISO 12156-1. A maximum scar diameter of 0.45 mm is preferred.

If fuel of low or unknown lubricity is used, add John Deere Fuel-Protect Diesel Fuel Conditioner (or equivalent) at the specified concentration.

Lubricity of BioDiesel Fuel

Fuel lubricity can improve significantly with BioDiesel blends up to B20 (20% BioDiesel). Further increase in lubricity is limited for BioDiesel blends greater than B20.

DX,FUEL5 -19-07FEB14-1/1

Supplemental Diesel Fuel Additives

Diesel fuel can be the source of performance or other operational problems for many reasons. Some causes include poor lubricity, contaminants, low cetane number, and a variety of properties that cause fuel system deposits. These and others are referenced in other sections of this Operator's Manual.

To optimize engine performance and reliability, closely follow recommendations on fuel quality, storage, and handling, which are found elsewhere in this Operator's Manual.

To further aid in maintaining performance and reliability of the engine's fuel system, John Deere has developed a family of fuel additive products for most global markets. The primary products include Fuel-Protect Diesel Fuel Conditioner (full feature conditioner in winter and summer formulas) and Fuel-Protect Keep Clean (fuel injector deposit removal and prevention). Availability of these and other products varies by market. See your local John Deere dealer for availability and additional information about fuel additives that might be right for your needs.

DX,FUEL13 -19-07FEB14-1/1

Minimizing the Effect of Cold Weather on Diesel Engines

John Deere diesel engines are designed to operate effectively in cold weather.

However, for effective starting and cold-weather operation, a little extra care is necessary. The following information outlines steps that can minimize the effect that cold weather may have on starting and operation of your engine. See your John Deere dealer for additional information and local availability of cold-weather aids.

Use Winter Grade Fuel

When temperatures fall below 0 °C (32 °F), winter grade fuel (No. 1-D in North America) is best suited for cold-weather operation. Winter grade fuel has a lower cloud point and a lower pour point.

Cloud point is the temperature at which wax begins to form in the fuel. This wax causes fuel filters to plug. **Pour point** is the lowest temperature at which movement of the fuel is observed.

NOTE: On average, winter grade diesel fuel has a lower Btu (heat content) rating. Using winter grade fuel may reduce power and fuel efficiency, but should not cause any other engine performance effects. Check the grade of fuel being used before troubleshooting for low-power complaints in cold-weather operation.

Air Intake Heater

An air intake heater is an available option for some engines to aid cold weather starting.

Ether

An ether port on the intake is available to aid cold weather starting.

CAUTION: Ether is highly flammable. Do not use ether when starting an engine equipped with glow plugs or an air intake heater.

Coolant Heater

An engine block heater (coolant heater) is an available option to aid cold weather starting.

Seasonal Viscosity Oil and Proper Coolant Concentration

Use seasonal grade viscosity engine oil based on the expected air temperature range between oil changes and a proper concentration of low silicate antifreeze as recommended. (See DIESEL ENGINE OIL and ENGINE COOLANT requirements in this section.)

Diesel Fuel Flow Additive

Use John Deere Fuel-Protect Diesel Fuel Conditioner (winter formula), which contains anti-gel chemistry, or equivalent fuel conditioner to treat non-winter grade fuel (No. 2-D in North America) during the cold-weather season. This generally extends operability to about 10 °C (18 °F) below the fuel cloud point. For operability at even lower temperatures, use winter grade fuel.

IMPORTANT: Treat fuel when outside temperature drops below 0 °C (32 °F). For best results, use with untreated fuel. Follow all recommended instructions on label.

BioDiesel

When operating with BioDiesel blends, wax formation can occur at warmer temperatures. Begin using John Deere Fuel-Protect Diesel Fuel Conditioner (winter formula) at 5 °C (41 °F) to treat BioDiesel fuels during the cold-weather season. Use B5 or lower blends at temperatures below 0 °C (32 °F). Use only winter grade petroleum diesel fuel at temperatures below -10 °C (14 °F).

Winterfronts

Use of fabric, cardboard, or solid winterfronts is not recommended with any John Deere engine. Their use can result in excessive engine coolant, oil, and charge air temperatures. This can lead to reduced engine life, loss of power and poor fuel economy. Winterfronts may also put abnormal stress on fan and fan drive components potentially causing premature failures.

If winterfronts are used, they should never totally close off the grill frontal area. Approximately 25% area in the center of the grill should remain open at all times. At no time should the air blockage device be applied directly to the radiator core.

Radiator Shutters

If equipped with a thermostatically controlled radiator shutter system, this system should be regulated in such a way that the shutters are completely open by the time the coolant reaches 93 °C (200 °F) to prevent excessive intake manifold temperatures. Manually controlled systems are not recommended.

If air-to-air aftercooling is used, the shutters must be completely open by the time the intake manifold air temperature reaches the maximum allowable temperature out of the charge air cooler.

For more information, see your John Deere dealer.

DX,FUEL10 -19-15MAY13-1/1

Diesel Exhaust Fluid (DEF) (Final Tier 4/Stage IV)

Diesel exhaust fluid (DEF) is a high purity liquid that is injected into the exhaust system of engines equipped with selective catalytic reduction (SCR) systems. Maintaining the purity of DEF is important to avoid malfunctions in the SCR system. Engines requiring DEF shall use a product that meets the requirements for aqueous urea solution 32 (AUS 32) according to ISO 22241-1.

The use of John Deere Diesel Exhaust Fluid is recommended. John Deere Diesel Exhaust Fluid is available at your John Deere dealer in a variety of package sizes to suit your operational needs.

If John Deere Diesel Exhaust Fluid is not available, use DEF that is certified by the American Petroleum Institute

AdBlue is a trademark of VDA, the German Association of the Automotive Industry.

(API) Diesel Exhaust Fluid Certification Program or by the AdBlue™ Diesel Exhaust Fluid Certification Program. Look for the API certification symbol or the AdBlue™ name on the container.

In some cases, DEF is referred to by one or more of these names:

- Urea
- Aqueous Urea Solution 32
- AUS 32
- AdBlue™
- NOx Reduction Agent
- Catalyst Solution

OUC6075,0001829 -19-10JUN14-1/1

Testing Diesel Exhaust Fluid (DEF) (Final Tier 4/Stage IV)

IMPORTANT: Using DEF with the correct concentration is critical to engine and aftertreatment system performance. Extended storage and other conditions can adversely alter the DEF concentration.

If DEF quality is questionable, draw a sample out of the DEF tank or storage tank into a clear container. DEF must be crystal clear with a light ammonia smell. If DEF appears cloudy, has a colored tint, or has a profound ammonia smell, it is likely not within specification. DEF in this condition should not be used. Drain tank, flush with distilled water and refill with new or good DEF. After refilling the tank, check the DEF concentration.

If the DEF passes the visual and smell test, check the DEF concentration with a handheld refractometer calibrated to measure DEF.

DEF concentration should be checked when the engine has been stored for extended periods, or if there is

suspicion the engine or packaged DEF fluid has been contaminated with water.

Two approved tools are available through your John Deere dealer:

- JDG11594 Digital DEF Refractometer—A digital tool providing an easy to read concentration measurement
- JDG11684 DEF Refractometer—Low-cost alternative tool providing an analog reading

Follow instructions included with either tool to obtain the measurement.

The correct DEF concentration is 31.8—33.2% urea. If the DEF concentration is not within specification, drain the DEF tank, flush with distilled water and fill with new or good DEF. If packaged DEF is not within specification, dispose of DEF packages and replace with new or good DEF.

OUC6075,000182A -19-10JUN14-1/1

Storing Diesel Exhaust Fluid (DEF) (Final Tier 4/Stage IV)

⚠ CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

Do not ingest DEF. In the event DEF is ingested, contact a physician immediately. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: It is unlawful to tamper with or remove any component of the aftertreatment system. Do not use DEF that does not meet the required specifications and can damage the aftertreatment system.

Never attempt to create DEF by mixing agricultural grade urea with water. Agricultural grade urea does not meet the necessary specifications and can damage the aftertreatment system.

Do not add any chemicals or additives to DEF in an effort to prevent freezing. Any chemicals or additives added to DEF can damage the aftertreatment system.

Never add water or any other fluid in place of, or in addition to DEF. Operating with a modified DEF or using an unapproved DEF can damage the aftertreatment system.

Storage information provided below is for reference and is to be used as a guideline only.

It is preferred to store DEF out of extreme ambient temperatures. DEF freezes at -11°C (12°F). Exposure to temperatures greater than 30°C (86°F) can degrade DEF over time.

Dedicated DEF storage containers must be sealed between uses to prevent evaporation and contamination. Containers made of polyethylene, polypropylene or stainless steel are recommended to transport and store DEF.

Ideal conditions for storage of DEF are:

- Store at temperatures between -5°C and 30°C (23°F and 86°F).
- Store in dedicated containers sealed to avoid contamination and evaporation.

Under these conditions, DEF is expected to remain useable for a minimum of 18 months. Storing DEF at higher temperatures can reduce its useful life by approximately 6 months for every 5°C (9°F) temperature above 30°C (86°F).

If unsure how long or under what conditions DEF has been stored, test DEF. See Testing Diesel Exhaust Fluid (DEF).

Long term storage in the DEF tank (over 12 months) is not recommended. If long term storage is necessary, test DEF prior to operating engine. See Testing Diesel Exhaust Fluid (DEF).

It is recommended to purchase DEF in quantities that will be consumed within 12 months.

OUO6075,0001640 -19-06SEP13-1/1

Disposal of Diesel Exhaust Fluid (DEF) (Final Tier 4/Stage IV)

Although there is little issue with minor spillage of DEF on the ground, large amounts of DEF should be contained. If large spills occur, contact local environmental authorities for assistance with clean up.

If a substantial quantity of DEF is not within specification, contact the DEF supplier for assistance with disposal. Do

not dump substantial quantities of DEF onto the ground or send DEF to wastewater treatment facilities.

OUO6075,000164A -19-10SEP13-1/1

Fill Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage IV)

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

Do not ingest DEF. In the event DEF is ingested, contact a physician immediately. Reference the Materials Safety Data Sheet (MSDS) for additional information.

Do not fill DEF tank (A) from the rear access ladder. To fill the DEF tank (A), always stay on floor (B) and use handrails (C).

IMPORTANT: Use only distilled water to rinse components that are used to deliver DEF. Tap water can contaminate DEF. If distilled water is not available, rinse with clean tap water, then thoroughly rinse with ample amounts of DEF.

If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

If DEF is filled into engine fuel tank or other fluid compartment, do not operate engine until system is properly purged of DEF. Contact your John Deere dealer immediately to determine how to clean and purge the system.

DEF tank cap is not vented. Excess air is vented through Diesel Exhaust Fluid (DEF) tank breather (D).

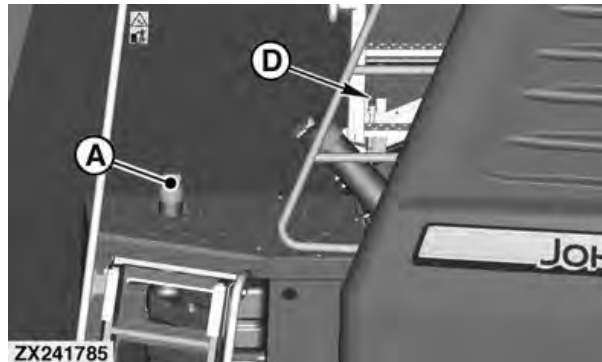
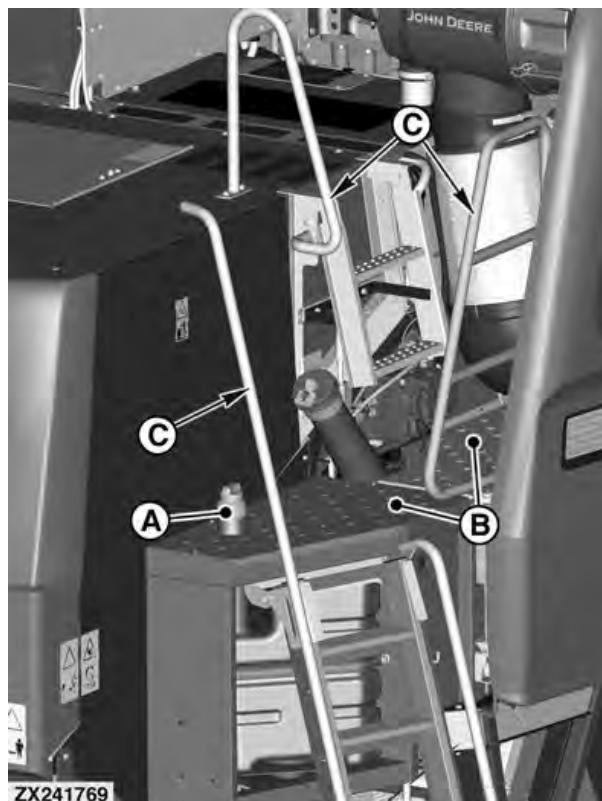
Visually inspect breather. Do not allow excessive amounts of chaff or debris to collect on breather. If breather is covered with debris, it does not allow tank to breathe. Remove breather from hose and clean.

Fill tank every time machine is refueled. If this cannot be done, monitor Diesel Exhaust Fluid (DEF) level indicator on Primary Display Unit (PDU) display and refill as necessary. To avoid drastic changes in machine performance, always keep fluid level above topmost red mark on level indicator. See **Selective Catalytic Reduction (SCR) System** section.

NOTE: Spilled DEF, if left to dry or if only wiped away with a cloth, leaves white residues. Aside from cosmetic issues, an improperly cleaned DEF spill may interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

To fill tank:

1. Wash and rinse containers with distilled water to remove contaminants before adding fluid.



A—Tank
B—Floor

C—Handrail
D—Diesel Exhaust Fluid (DEF)
Tank Breather

2. Wipe area around cap before removing to reduce chance of contaminating fluid.
3. Using funnel, carefully pour fluid into tank, watching level through sight glass.
4. Install previously removed cap.
5. Carefully clean any spills, using distilled water.

Continued on next page

OUC002,00048D7 -19-17DEC15-1/2

IMPORTANT: If an unapproved fluid, such as diesel fuel or coolant is added to the DEF tank, contact your John Deere dealer immediately to determine how to clean and purge the system.

If water has been added to the DEF tank, a tank cleaning is necessary. See Clean Diesel

Exhaust Fluid (DEF) Tank in this section. After refilling the tank, check the DEF concentration. See Testing Diesel Exhaust Fluid (DEF).

OUC002,00048D7 -19-17DEC15-2/2

Diesel Engine Coolant (engine with wet sleeve cylinder liners)

Preferred Coolants

The following pre-mix engine coolants are preferred:

- John Deere COOL-GARD™ II
- John Deere COOL-GARD II PG

COOL-GARD II pre-mix coolant is available in several concentrations with different freeze protection limits as shown in the following table.

COOL-GARD II pre-mix	Freeze Protection Limit
COOL-GARD II 20/80	-9 °C (16 °F)
COOL-GARD II 30/70	-16 °C (3 °F)
COOL-GARD II 50/50	-37 °C (-34 °F)
COOL-GARD II 55/45	-45 °C (-49 °F)
COOL-GARD II PG 60/40	-49 °C (-56 °F)
COOL-GARD II 60/40	-52 °C (-62 °F)

Not all COOL-GARD II pre-mix products are available in all countries.

Use COOL-GARD II PG when a non-toxic coolant formulation is required.

Additional Recommended Coolants

The following engine coolant is also recommended:

- John Deere COOL-GARD II Concentrate in a 40—60% mixture of concentrate with quality water.

IMPORTANT: When mixing coolant concentrate with water, do not use less than 40% or greater than 60% concentration of coolant. Less than 40% gives inadequate additives for corrosion protection. Greater than 60% can result in coolant gelation and cooling system problems.

Other Coolants

Other ethylene glycol or propylene glycol base coolants may be used if they meet the following specification:

- Pre-mix coolant meeting ASTM D6210 requirements

COOL-GARD is a trademark of Deere & Company

- Coolant concentrate meeting ASTM D6210 requirements in a 40—60% mixture of concentrate with quality water

If coolant meeting one of these specifications is unavailable, use a coolant concentrate or pre-mix coolant that has a minimum of the following chemical and physical properties:

- Provides cylinder liner cavitation protection according to either the John Deere Cavitation Test Method or a fleet study run at or above 60% load capacity
- Is formulated with a nitrite-free additive package
- Protects the cooling system metals (cast iron, aluminum alloys, and copper alloys such as brass) from corrosion

Water Quality

Water quality is important to the performance of the cooling system. Distilled, deionized, or demineralized water is recommended for mixing with ethylene glycol and propylene glycol base engine coolant concentrate.

Coolant Drain Intervals

Drain and flush the cooling system and refill with fresh coolant at the indicated interval, which varies with the coolant used.

When COOL-GARD II or COOL-GARD II PG is used, the drain interval is 6 years or 6000 hours of operation.

If a coolant other than COOL-GARD II or COOL-GARD II PG is used, reduce the drain interval to 2 years or 2000 hours of operation.

IMPORTANT: Do not use cooling system sealing additives or antifreeze that contains sealing additives.

Do not mix ethylene glycol and propylene glycol base coolants.

Do not use coolants that contain nitrites.

DX,COOL3 -19-15MAY13-1/1

John Deere COOL-GARD™ II Coolant Extender

Some coolant additives gradually deplete during engine operation. For COOL-GARD™ II pre-mix and COOL-GARD II Concentrate, replenish coolant additives between drain intervals by adding COOL-GARD II Coolant Extender.

COOL-GARD II Coolant Extender should not be added unless indicated by COOL-GARD II Test Strips. These test strips provide a simple, effective method to check the freeze point, additive levels, and pH of your engine coolant.

Test the coolant solution at intervals of 12 months and whenever excessive coolant is lost through leaks or overheating.

IMPORTANT: Do not use COOL-GARD II Test Strips with COOL-GARD II PG.

COOL-GARD II Coolant Extender is a chemically matched additive system for use with all COOL-GARD II coolants.

COOL-GARD is a trademark of Deere & Company

COOL-GARD II Coolant Extender is not intended for use with nitrite-containing coolants.

IMPORTANT: Do not add a supplemental coolant additive when the cooling system is drained and refilled with any of the following:

- John Deere COOL-GARD II
- John Deere COOL-GARD II PG

The use of non-recommended supplemental coolant additives can result in additive drop-out, gelation of the coolant, or corrosion of cooling system components.

Add the recommended concentration of COOL-GARD II Coolant Extender. DO NOT add more than the recommended amount.

DX,COOL16 -19-15MAY13-1/1

Operating in Warm Temperature Climates

John Deere engines are designed to operate using recommended engine coolants.

Always use a recommended engine coolant, even when operating in geographical areas where freeze protection is not required.

IMPORTANT: Water may be used as coolant *in emergency situations only*.

Foaming, hot surface aluminum and iron corrosion, scaling, and cavitation occur when water is used as the coolant, even when coolant conditioners are added.

Drain cooling system and refill with recommended engine coolant as soon as possible.

DX,COOL6 -19-15MAY13-1/1

Water Quality for Mixing with Coolant Concentrate

Engine coolants are a combination of three chemical components: ethylene glycol (EG) or propylene glycol (PG) antifreeze, inhibiting coolant additives, and quality water.

Water quality is important to the performance of the cooling system. Distilled, deionized, or demineralized water is recommended for mixing with ethylene glycol and propylene glycol base engine coolant concentrate.

All water used in the cooling system should meet the following minimum specifications for quality:

Chlorides	<40 mg/L
Sulfates	<100 mg/L
Total solids	<340 mg/L
Total dissolved hardness	<170 mg/L
pH	5.5—9.0

IMPORTANT: Do not use bottled drinking water because it often contains higher concentrations of total dissolved solids.

Freeze Protection

The relative concentrations of glycol and water in the engine coolant determine its freeze protection limit.

Ethylene Glycol	Freeze Protection Limit
40%	-24 °C (-12 °F)
50%	-37 °C (-34 °F)
60%	-52 °C (-62 °F)
Propylene Glycol	Freeze Protection Limit
40%	-21 °C (-6 °F)
50%	-33 °C (-27 °F)
60%	-49 °C (-56 °F)

DO NOT use a coolant-water mixture greater than 60% ethylene glycol or 60% propylene glycol.

DX, COOL19 -19-15MAY13-1/1

Testing Coolant Freeze Point

The use of a handheld coolant refractometer is the quickest, easiest, and most accurate method to determine coolant freeze point. This method is more accurate than a test strip or a float-type hydrometer which can produce poor results.

A coolant refractometer is available through your John Deere dealer under the SERVICEGARD™ tool program. Part number 75240 provides an economical solution to accurate freeze point determination in the field.

To use this tool:

1. Allow cooling system to cool to ambient temperatures.
2. Open radiator cap to expose coolant.
3. With the included dropper, collect a small coolant sample.
4. Open the lid of the refractometer, place one drop of coolant on the window and close the lid.
5. Look through the eyepiece and focus as necessary.
6. Record the listed freeze point for the type of coolant (ethylene glycol coolant or propylene glycol) being tested.



SERVICEGARD™ Part Number 75240



Image with a Drop of 50/50 Coolant Placed on the Refractometer Window

SERVICEGARD is a trademark of Deere & Company

DX,COOL,TEST -19-13JUN13-1/1

TS1732—UN—04SEP13

TS1733—UN—04SEP13

Diesel Engine Break-In Oil (Tier 2/Stage II)

New engines are filled at the factory with either John Deere Break-In™ or John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In™ or Break-In Plus™ Engine Oil, respectively, as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help seat engine components properly.

If John Deere Break-In™ Engine Oil is used during the initial operation of a new or rebuilt engine, change the oil and filter at a maximum of 100 hours.

If John Deere Break-In Plus™ Engine Oil is used, change the oil and filter at a minimum of 100 hours and a maximum equal to the interval specified for John Deere Plus-50™ II or Plus-50™ oil.

After engine overhaul, fill the engine with either John Deere Break-In™ or Break-In Plus™ Engine Oil.

If John Deere Break-In™ or Break-In Plus™ Engine Oil is not available, use an SAE 10W-30 viscosity grade diesel engine oil meeting one of the following and change the oil and filter at a maximum of 100 hours of operation:

- API Service Classification CE
- API Service Classification CD

Break-In is a trademark of Deere & Company.

Break-In Plus is a trademark of Deere & Company

Plus-50 is a trademark of Deere & Company.

- API Service Classification CC
- ACEA Oil Sequence E2
- ACEA Oil Sequence E1

IMPORTANT: Do not use Plus-50™ II, Plus-50™, or engine oils meeting any of the following for the initial break-in of a new or rebuilt engine:

API CJ-4	ACEA E9
API CI-4 PLUS	ACEA E7
API CI-4	ACEA E6
API CH-4	ACEA E5
API CG-4	ACEA E4
API CF-4	ACEA E3
API CF-2	
API CF	

These oils do not allow the engine to break in properly.

John Deere Break-In Plus™ Engine Oil can be used for all John Deere diesel engines at all emission certification levels.

After the break-in period, use John Deere Plus-50™ II, John Deere Plus-50™, or other diesel engine oil as recommended in this manual.

OUO6075,00016F9 -19-19DEC13-1/1

John Deere Break-In Plus™ Engine Oil (Final Tier 4/Stage IV)

New engines are filled at the factory with John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In Plus™ Engine Oil, as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help seat engine components properly.

During the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and maximum equal to the interval specified for John Deere Plus-50™ II oil.

After engine overhaul, fill the engine with John Deere Break-In Plus™ Engine Oil.

If John Deere Break-In Plus™ Engine Oil is not available, use an SAE 10W-30 viscosity grade diesel engine oil meeting one of the following:

Break-In Plus is a trademark of Deere & Company

Plus-50 is a trademark of Deere & Company.

- API Service Category CJ-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E6

If one of these oils is used during the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and a maximum of 250 hours.

IMPORTANT: Do not use any other engine oils during the initial break-in of a new or rebuilt engine.

John Deere Break-In Plus™ Engine Oil can be used for all John Deere diesel engines at all emission certification levels.

After the break-in period, use John Deere Plus-50™ II or other diesel engine oil as recommended in this manual.

OUO6075,0001701 -19-20DEC13-1/1

Diesel Engine Oil (Tier 2/Stage II)

Use oil viscosity based on the expected air temperature range during the period between oil changes.

John Deere Plus-50™ II oil is preferred.

John Deere Plus-50™ is also recommended.

Other oils may be used if they meet one or more of the following:

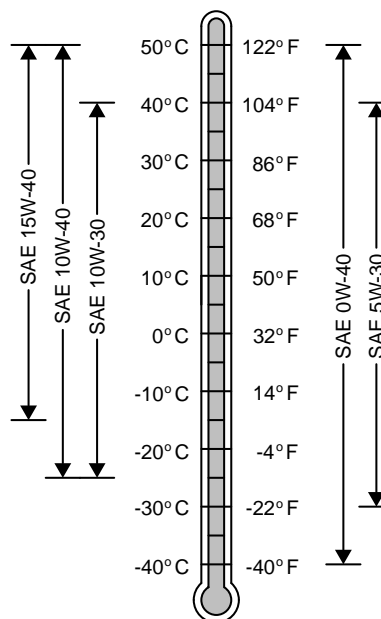
- John Deere Torq-Gard™
- API Service Category CJ-4
- API Service Category CI-4 PLUS
- API Service Category CI-4
- API Service Category CH-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E7
- ACEA Oil Sequence E6
- ACEA Oil Sequence E5
- ACEA Oil Sequence E4

Multi-viscosity diesel engine oils are preferred.

Diesel fuel quality and fuel sulfur content must comply with all existing emissions regulations for the area in which the engine operates.

DO NOT use diesel fuel with sulfur content greater than 10000 mg/kg (10000 ppm).

Plus-50 is a trademark of Deere & Company
Torq-Gard is a trademark of Deere & Company



Oil Viscosities for Air Temperature Ranges

TS1689—UN—18JUL07

OUO6075,00016FB -19-19DEC13-1/1

Diesel Engine Oil (Final Tier 4/Stage IV)

Use oil viscosity based on the expected air temperature range during the period between oil changes.

John Deere Plus-50™ II is the recommended engine oil.

Extended service intervals may apply when John Deere Plus-50™ II engine oil is used. Refer to the engine oil drain interval table and consult your John Deere dealer for more information.

If John Deere Plus-50™ II engine oil is not available, engine oil meeting one or more of the following may be used:

- API Service Category CJ-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E6

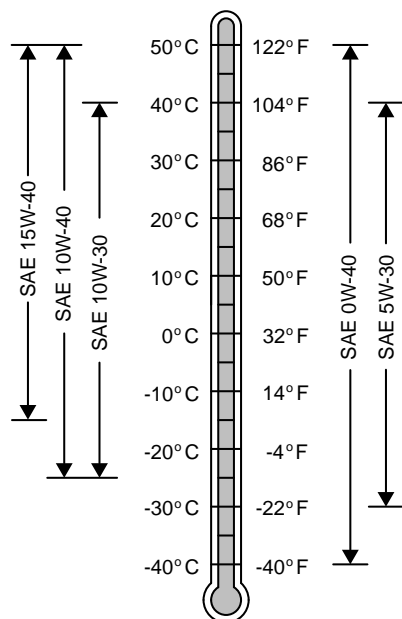
DO NOT use engine oil containing more than 1.0% sulfated ash, 0.12% phosphorus, or 0.4% sulfur.

Multi-viscosity diesel engine oils are preferred.

Diesel fuel quality and fuel sulfur content must comply with all existing emissions regulations for the area in which the engine operates.

IMPORTANT: Use only ultra low sulfur diesel (ULSD) fuel with a maximum sulfur content of 15 mg/kg (15 ppm).

Plus-50 is a trademark of Deere & Company



Oil Viscosities for Air Temperature Ranges

TS1691 —UN—18JUL07

OUO6075,0001703 -19-20DEC13-1/1

Engine Oil and Filter Service Intervals (Tier 2/Stage II)

Recommended oil and filter service intervals are based on a combination of oil pan capacity, type of engine oil and filter used, and sulfur content of the diesel fuel. Actual service intervals also depend on operation and maintenance practices.

Use oil analysis to evaluate the condition of the oil and to aid in selection of the proper oil and filter service interval. Contact your John Deere dealer for more information on engine oil analysis.

Change the oil and oil filter at least once every 12 months even if the hours of operation are fewer than the otherwise recommended service interval.

Diesel fuel sulfur content affects engine oil and filter service intervals.

- Use of diesel fuel with sulfur content less than 2000 mg/kg (2000 ppm) is **RECOMMENDED**.
- Use of diesel fuel with sulfur content 2000—5000 mg/kg (2000—5000 ppm) **REDUCES** the oil and filter change interval.
- **BEFORE** using diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm), contact your John Deere dealer.

IMPORTANT: To avoid engine damage:

*Plus-50 is a trademark of Deere & Company
Torq-Gard is a trademark of Deere & Company*

- **Reduce oil and filter service intervals by 50% when using BioDiesel blends greater than B20. Oil analysis may allow longer service intervals.**
- **Use only approved oil types.**

Approved Oil Types:

- “Plus-50 Oils” include John Deere Plus-50™ II and John Deere Plus-50™.
- “Other Oils” include John Deere Torq-Gard™, API CJ-4, API CI-4 PLUS, API CI-4, API CH-4, ACEA E9, ACEA E7, ACEA E6, ACEA E5, and ACEA E4.

Engine Oil and Filter Service Intervals	
Fuel Sulfur	Less than 2000 mg/kg (2000 ppm)
Plus-50 Oils	375 hours
Other Oils	250 hours
Fuel Sulfur	2000—5000 mg/kg (2000—5000 ppm)
Plus-50 Oils	275 hours
Other Oils	150 hours
Fuel Sulfur	5000—10000 mg/kg (5000—10000 ppm)
Plus-50 Oils	187 hours (See John Deere dealer)
Other Oils	125 hours (See John Deere dealer)
Oil analysis may extend the service interval of “Other Oils”, to a maximum not to exceed the interval for Plus-50 Oils.	

OUO6075.00016FD -19-19DEC13-1/1

Engine Oil and Filter Service Intervals (Final Tier 4/Stage IV)

Recommended oil and filter service intervals are based on a combination of oil pan capacity, type of engine oil and filter used, and sulfur content of the diesel fuel. Actual service intervals also depend on operation and maintenance practices.

Use oil analysis to evaluate the condition of the oil and to aid in selection of the proper oil and filter service interval. Contact your John Deere dealer for more information on engine oil analysis.

Change the oil and oil filter at least once every 12 months even if the hours of operation are fewer than the otherwise recommended service interval.

Diesel fuel sulfur content affects engine oil and filter service intervals. Higher fuel sulfur levels reduce oil and filter service intervals.

Use of diesel fuel with sulfur content less than 15 mg/kg (15 ppm) is **REQUIRED**.

IMPORTANT: To avoid engine damage:

Plus-50 is a trademark of Deere & Company

- **Reduce oil and filter service intervals by 50% when using BioDiesel blends greater than B20. Oil analysis may allow longer service intervals.**
- **Use only approved oil types.**

Approved Oil Types

- John Deere Plus-50™ II
- “Other Oils” include API CJ-4, ACEA E9, and ACEA E6

6.8 L Engine Oil and Filter Service Intervals	
John Deere Plus-50™ II	500 hours
Other Oils	250 hours
Oil analysis may extend the service interval of “Other Oils” to a maximum not to exceed the interval of Plus-50™ II oils.	

9.0 L Engine Oil and Filter Service Intervals	
John Deere Plus-50™ II	400 hours
Other Oils	250 hours
Oil analysis may extend the service interval of “Other Oils” to a maximum not to exceed the interval of Plus-50™ II oils.	

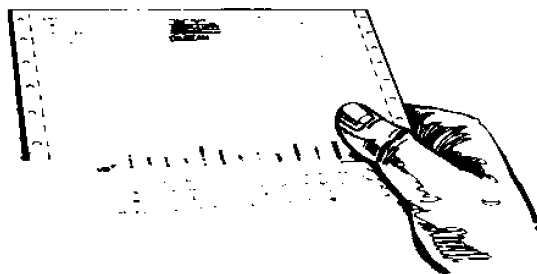
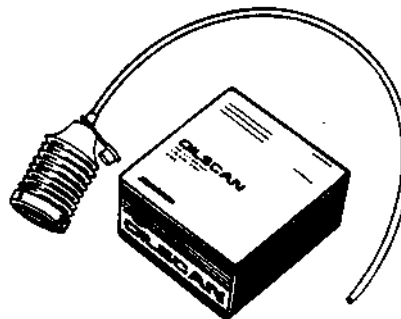
OUCC002,00045B7 -19-13APR15-1/1

Oilscan™ and CoolScan™

Oilscan™ and CoolScan™ are John Deere sampling programs to help you monitor machine performance and identify potential problems before they cause serious damage.

Oil and coolant samples should be taken from each system before its recommended change interval.

Check with your John Deere dealer for the availability of Oilscan™ and CoolScan™ kits.



Oilscan is a trademark of Deere & Company
CoolScan is a trademark of Deere & Company

DX,OILSCAN -19-13SEP11-1/1

T6828AB —UN—15JUN89

T6829AB —UN—26AUG11

Transmission Oil

Use oil viscosity based on the expected air temperature range during the period between oil changes.

The following oils are preferred:

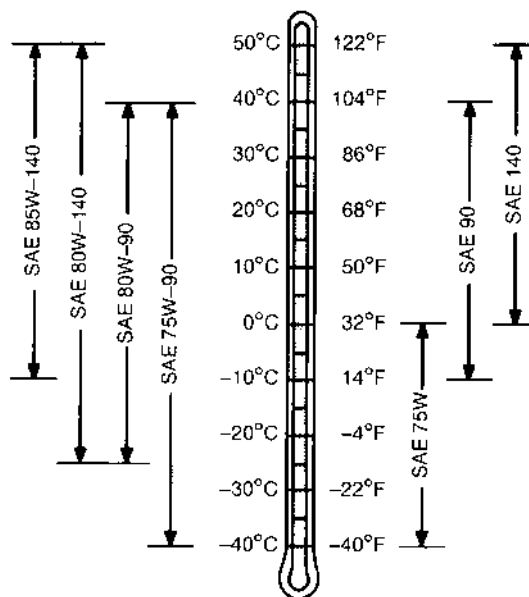
- John Deere GL-5 Gear Lubricant
- John Deere EXTREME-GARD™

Other oils may be used if they meet the following:

- API Service Category GL-5

Use of Transmission Oil

- Transmission
- Final drives
- Feeder house reverser
- Dual-range cylinder drive
- Primary countershaft drive gearcase
- Overshot beater gearcase (T Series)



Oil Viscosities for Air Temperature Ranges

OUC002,00045B8 -19-14APR15-1/1

TS1653—UN—14MAR96

Hydraulic Oil

Use oil viscosity based on the expected air temperature range during the period between oil changes.

The following oils are preferred:

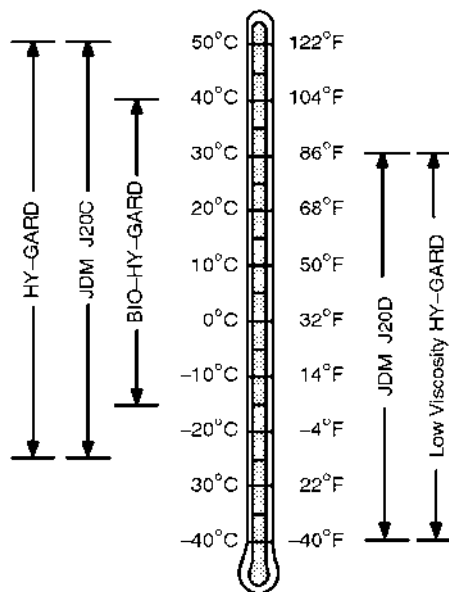
- John Deere Hy-Gard™
- John Deere Low Viscosity Hy-Gard™

Other oils may be used if they meet one of the following:

- John Deere Standard JDM J20C
- John Deere Standard JDM J20D

Use of Hydraulic Oil

- Hydraulic system
- Engine gearcase
- ProDrive™ transmission



OUC002,00045B9 -19-13APR15-1/1

TS1660—UN—10OCT97

Straw Walker Gearcase

John Deere CORN HEAD GREASE is recommended for the straw walker gear case.

You may also use SAE Multipurpose Grease with Extreme Pressure (EP) Performance and meeting NLGI Consistency Number 0.

AG,OUO6435,478 -19-19NOV99-1/1

Grease

Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

John Deere SD Polyurea Grease is preferred.

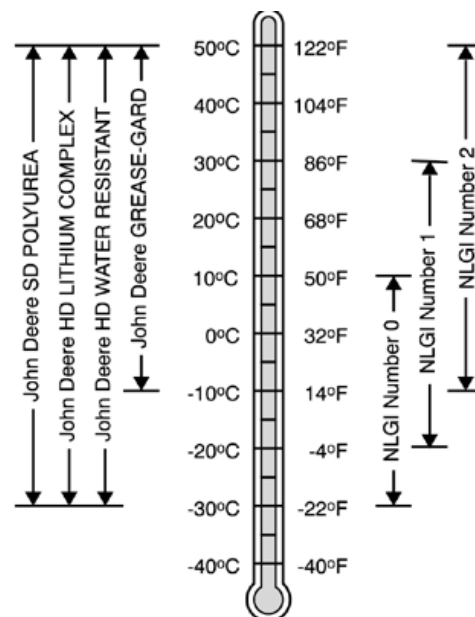
The following greases are also recommended:

- John Deere HD Lithium Complex Grease
- John Deere HD Water Resistant Grease
- John Deere GREASE-GARD™

Other greases may be used if they meet the following:

- NLGI Performance Classification GC-LB

IMPORTANT: Some types of grease thickeners are not compatible with others. Consult your grease supplier before mixing different types of grease.



Greases for Air Temperature Ranges

TS1673 —UN—31OCT03

GREASE-GARD is a trademark of Deere & Company

DX,GREA1 -19-14APR11-1/1

Brake Fluid (3-Speed Mechanical and Push-Button Shift Transmission)

IMPORTANT: When removing reservoir cap, keep contaminants from entering the reservoir.

Fluid should be 6 mm (1/4 in) from top.

Fill reservoir with SAE J1703d, DOT-3 or DOT-4 hydraulic brake fluid.

OUCC002,0004997 -19-13JAN16-1/1

Lubricant Storage

Your equipment can operate at top efficiency only when clean lubricants are used.

Use clean containers to handle all lubricants.

Store lubricants and containers in an area protected from dust, moisture, and other contamination. Store containers on their side to avoid water and dirt accumulation.

Make certain that all containers are properly marked to identify their contents.

Properly dispose of all old containers and any residual lubricant they may contain.

DX,LUBST -19-11APR11-1/1

Alternative and Synthetic Lubricants

Conditions in certain geographical areas may require lubricant recommendations different from those printed in this manual.

Some John Deere brand coolants and lubricants may not be available in your location.

Consult your John Deere dealer to obtain information and recommendations.

Synthetic lubricants may be used if they meet the performance requirements as shown in this manual.

The temperature limits and service intervals shown in this manual apply to both conventional and synthetic lubricants.

Re-refined base stock products may be used if the finished lubricant meets the performance requirements.

OUO6075,0001759 -19-30MAY01-1/1

Oil Filters

Filtration of oils is critically important for proper operation and lubrication. John Deere brand oil filters have been designed and produced specifically for John Deere applications.

John Deere filters adhere to engineering specifications for quality of the filter media, filter efficiency rating, strength

of the bond between the filter media and the element end cap, fatigue life of the canister (if applicable), and pressure capability of the filter seal. Non-John Deere branded oil filters might not meet these key John Deere specifications.

Always change oil filters regularly as specified in this manual.

DX,FILT1 -19-11APR11-1/1

Fuel Filters

The importance of fuel filtration cannot be overemphasized with modern fuel systems. The combination of increasingly restrictive emission regulations and more efficient engines requires fuel system to operate at much higher pressures. Higher pressures can only be achieved using fuel injection components with very close tolerances. These close

manufacturing tolerances have significantly reduced capacities for debris and water.

John Deere brand fuel filters have been designed and produced specifically for John Deere engines.

To protect the engine from debris and water, always change engine fuel filters as specified in this manual.

DX,FILT2 -19-14APR11-1/1

Capacities

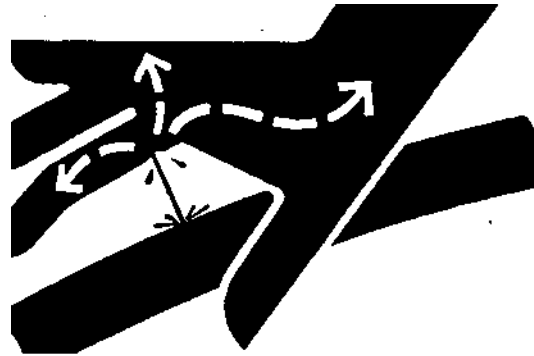
Fuel tank	800 L (210 gal)
Diesel Exhaust Fluid (DEF) tank	32 L (8.45 gal)
Cooling system (with heater) (6.8 L engine)	40 L (10.56 gal)
Cooling system (with heater) (9.0 L engine)	45 L (11.88 gal)
Engine crankcase with filter (6.8 L engine)	32 L (8.45 gal)
Engine crankcase with filter (9.0 L engine)	29 L (7.6 gal)
3-speed Mechanical and Push-Button Shift transmission	9.6 L (2.53 gal)
ProDrive™ transmission	13.0 L (3.43 gal)
Final drives (each)	7.0 L (1.85 gal)
Feeder house reverser gearcase	2.0 L (0.5 gal)
Countershaft drive gearcase	1.2 L (2.53 pt)
Cylinder drive reduction gear	1.9 L (4.01 pt)
Engine gearcase (machine with 3-speed transmission)	16 L (4.22 gal)
Engine gearcase (machine with ProDrive™ transmission)	20 L (5.25 gal)
Hydraulic system oil reservoir—Tier 2/Stage II Machines and 3-speed Transmission (Mechanical) Machines	35 L (9.25 gal)
Hydraulic system oil reservoir—Final Tier 4/Stage IV machines with 3-speed Transmission (Mechanical and PBST)	35 L (9.25 gal)
Hydraulic system oil reservoir—Final Tier 4/Stage IV machines with ProDrive™ transmission or HillMaster™ machines	45 L (11.88 gal)
Loading auger gearcase on clean grain elevator	3.8 L (1.0 gal)
Overshot beater gearcase (T Series)	0.9 L (0.24 gal)
Rear axle differential (powered axle only)	5-Walker machine: 23.0 L (6.07 gal) 6-Walker machine: 24.5 L (6.47 gal)
Rear axle reduction (powered axle only)	0.7 L (0.19 gal)
Rear axle wheel hub (non-powered axle only)	0.5 L (0.13 gal)
Rear axle motor housing (powered axle only)	1 L (0.26 gal)

OUC002,00049E6 -19-19JAN16-1/1

Fuel System

CAUTION: Escaping diesel fuel under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pin holes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks. Do not use your hand.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.



X9811 —UN—23AUG88

OUO6075,000058E -19-11FEB10-1/1

Do Not Modify Fuel System

IMPORTANT: Modification or alteration of the injection pump, injection pump timing, or fuel injectors in ways not recommended by the manufacturer will terminate the warranty obligation to the purchaser. See warranty information inside front cover.

Do not attempt to service injection pump or injection nozzles yourself. Special

training and special tools are required. See your John Deere dealer.

John Deere dealers are in violation of their dealership agreement if found to be altering power levels of John Deere equipment.

Combine warranty is void if power level is changed from factory specifications.

OUCC002,00045EC -19-19APR15-1/1

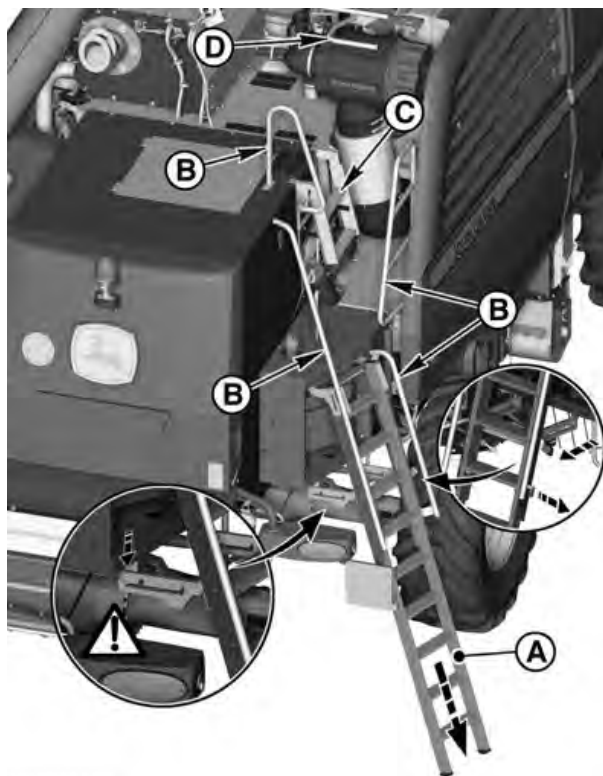
Access Engine Platform

CAUTION: Always use handrails (B) and handhold (D) to access the engine platform.

Push up on lever (E) and swing landing assembly out until it latches.

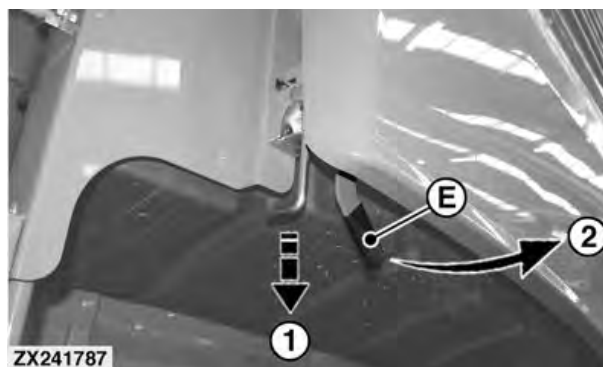
A—Ladder
B—Handrail
C—Foot Steps

D—Handhold
E—Lever



ZX240896

ZX240896 —UN—16APR15



ZX241787

ZX241787 —UN—22JAN16

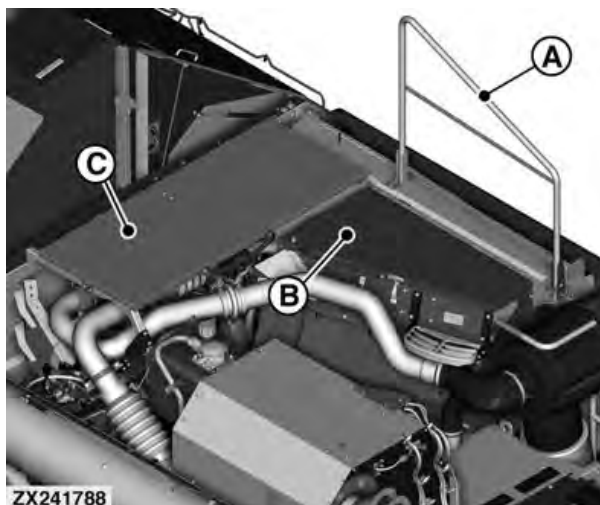
OUC002,00045F1 -19-19APR15-1/1

Engine Compartment Covers

To open cover (B) then cover (C), first unlatch handrail (A) and fold it up. Lower covers (B) and (C), and handrail (A) when not servicing.

A—Handrail
B—Cover

C—Cover



ZX241788 —UN—18DEC15

OUC002,00048DA -19-17DEC15-1/1

Cleaning Engine Compartment

CAUTION: Dirt, oil, chaff and crop debris in the engine compartment and on the engine are fire hazards. The direction of wind, the type of crop and its moisture content can all have an effect on where and how much chaff and debris can accumulate. Inspect and clean these areas frequently. Do not clean the engine or the engine compartment with the engine running.



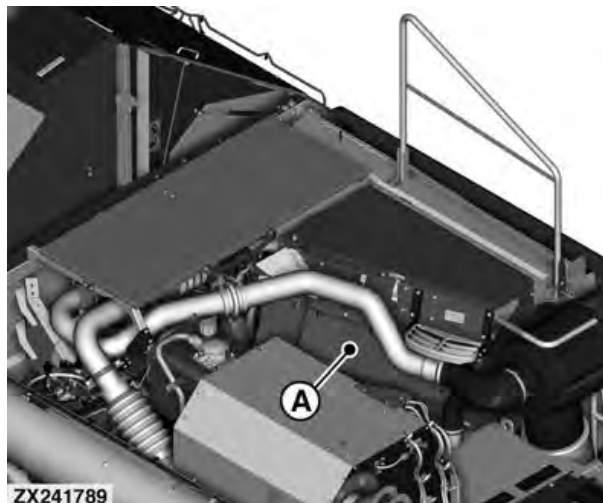
ZX241779 —UN—19APR15

OUC002,00045F2 -19-19APR15-1/1

Belt Shield

CAUTION: Drive belts on engine are enclosed behind a shield (A). Keep shield (A) in place except to service. Shut off engine, set park brake and remove key before opening.

A—Shield



ZX241789

ZX241789—UN—21APR15

OUCC002,00045F4 -19-19APR15-1/1

Engine Oil Level

IMPORTANT: It is vital to maintain the engine oil at the correct level to ensure a long service life of the engine. Check oil level with combine parked on level ground.

NOTE: Verify that dipstick is fully screwed or pushed completely into housing before removing to check oil level.

Remove dipstick (A) and check oil level. Oil level should be between the "ADD" mark and the top of the cross-hatch area on dipstick. If needed, add oil recommended in the **Fuel, Lubricants, Coolant and Capacities** Section.

Do not operate engine with oil level below ADD mark.

A—Dipstick



ZX237470

ZX237470—UN—16APR15

Dipstick, 6.8 L Engine



ZX237471

ZX237471—UN—16APR15

Dipstick, 9.0 L Engine

OUCC002,00045ED -19-19APR15-1/1

Drain Engine Oil

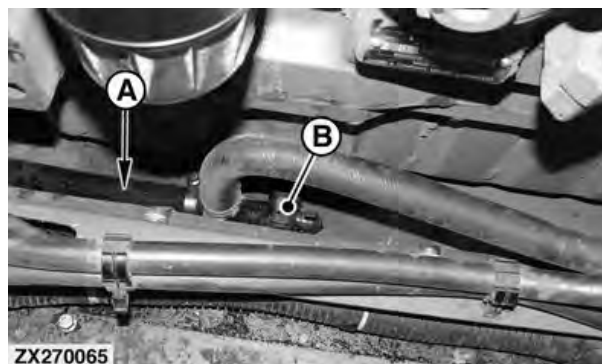
Run the engine for approx. 5 minutes to heat up oil. Then shut engine off.

On left-hand side of machine place a suitable container underneath the drain hose (A).

Open drain valve (B) to drain crankcase oil while warm.

A—Drain Hose

B—Drain Valve



ZX270065 —UN—19JAN16



ZX270066 —UN—19JAN16

OUCC002,00049D6 -19-18JAN16-1/1

Drain Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage IV)

CAUTION: Shut OFF engine, set park brake and remove key before performing maintenance work.

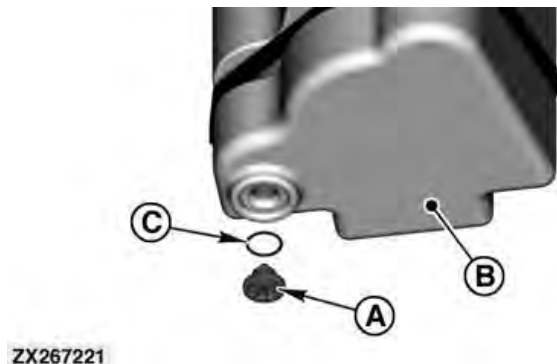
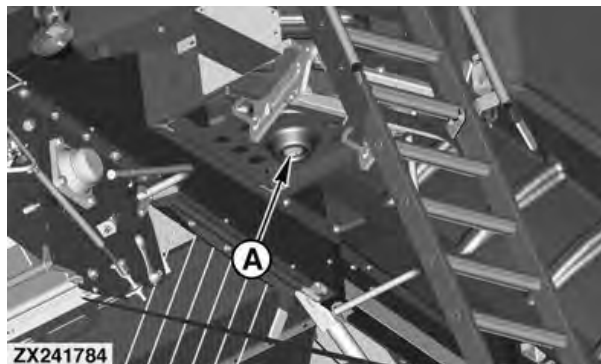
IMPORTANT: Long term storage in vehicle (over 6 months) is not recommended. If long term storage is necessary, periodic testing of fluid is recommended to ensure that urea concentration does not fall out of specification.

If an unapproved fluid, such as diesel fuel, or engine coolant is added, drain tank and rinse with distilled water, then refill tank. If system does not operate correctly after cleaning and refilling, contact your John Deere dealer to determine how to clean and purge system. If water has been added to tank, drain tank, flush with distilled water and refill with Diesel Exhaust Fluid (DEF). Check concentration fluid after filling tank. See Testing Diesel Exhaust Fluid (DEF) in Fuels and Lubricants section for further information.

NOTE: If fluid is spilled or contacts any surface other than storage tank, immediately clean surface with clear water. Fluid is corrosive to painted surfaces and can distort some plastic and rubber components.

Remove drain plug (A) at bottom of tank (B) to drain fluid.

NOTE: Do not lose O-ring (C).



A—Drain Plug
B—DEF Tank

C—O-Ring

OUC002,00048F4 -19-22DEC15-1/1

ZX241784 —UN—21APR15

ZX267221 —UN—29DEC15

Clean Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage IV)

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

If foreign material or fluid has been added to the DEF tank (A), drain the DEF tank (A), flush, and fill with new DEF.

If DEF quality is in question, pull a sample out of the DEF tank (A) and place into a clear container. DEF should be crystal clear with a light ammonia smell. If DEF appears cloudy, has a colored tint or has a profound ammonia smell, it is likely not within specification. DEF in this condition should not be used.

1. Remove drain plug (B) and drain bad DEF from DEF tank.

NOTE: Do not lose O-ring (C).

2. Clean DEF tank (A) with new DEF.

DEF must pass visual, smell, and concentration checks before the engine can be ran. See **Diesel Exhaust Fluid (DEF) (Final Tier 4/Stage IV)** section for more information.

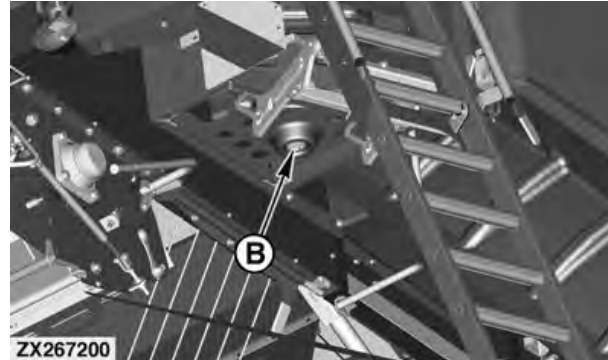
3. Drain DEF tank (A).

NOTE: Repeat steps 2—3 until DEF tank has been cleaned.

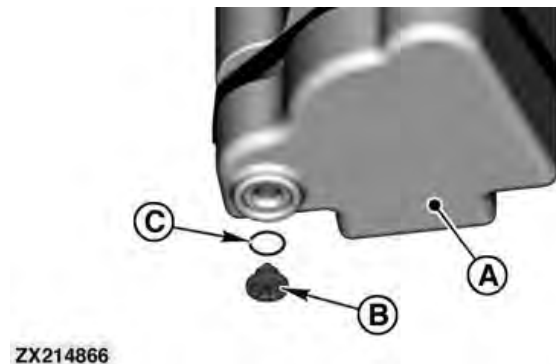
4. Change DEF dosing unit filter.
5. Install drain plug (B) in DEF tank (A) with its O-ring (C).
6. Fill DEF tank (A) with new DEF.
7. Check DEF concentration with DEF refractometer, such as JDG11594 or JDG11684. The correct DEF



ZX267199 — UN — 18DEC15



ZX267200 — UN — 18DEC15



ZX214866 — UN — 06OCT14

A—DEF Tank
B—Drain Plug

C—O-Ring

concentration is 31.8% — 33.2%. See your authorized dealer for more information.

8. If DEF is not within specification, does not appear clear, or does not have a slight ammonia smell, contact your authorized dealer.

OUC002,00048F5 -19-22DEC15-1/1

Replace Diesel Exhaust Fluid (DEF) Dosing Filter (Final Tier 4/Stage IV)

CAUTION: Diesel Exhaust Fluid (DEF) contains urea. Do not get fluid in eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. In event fluid is ingested, contact a physician immediately. Reference Materials Safety Data Sheet (MSDS) for additional information.

Shut OFF engine, set park brake and remove key before performing maintenance work.

IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and may distort some plastic and rubber components.

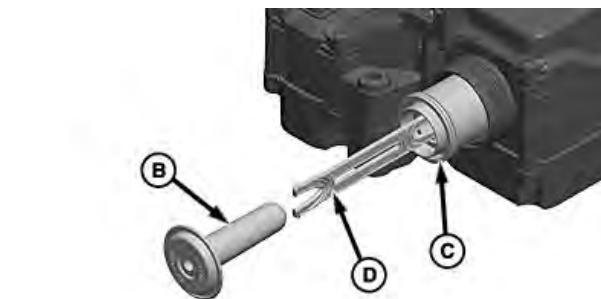
NOTE: The diesel exhaust fluid (DEF) line connecting the DEF dosing unit to the DEF dosing valve is under low pressure and should not be disconnected while the engine is running or before the system has completed the purge process after engine shutdown. Disconnecting the DEF line while under low pressure could cause DEF to spray.

1. Shut OFF engine, set park brake and remove key.
2. Remove and retain cap (A).
3. Remove and discard equalizing element (B).
4. Check inside of filter (C) for color code (gray or black).
5. Insert same color end of filter tool (D) into filter until a click is felt or heard. This indicates filter tool is fully engaged.

NOTE: Tool (D) is provided with the filter package.

If necessary, a tool such as a screwdriver can be inserted into slot of filter tool to assist in removal.

6. Pull filter tool to remove filter from dosing unit.



A—Cap
B—Equalizing Element

C—Filter
D—Filter Tool

7. Discard filter and filter tool.
8. Clean dosing unit threads and mating surfaces with distilled water.
9. Lubricate new filter O-rings with clean engine oil.
10. Insert filter and new equalizing element into dosing unit.
11. Install cap (A) and tighten to 20—25 N·m (15—18 lb·ft).

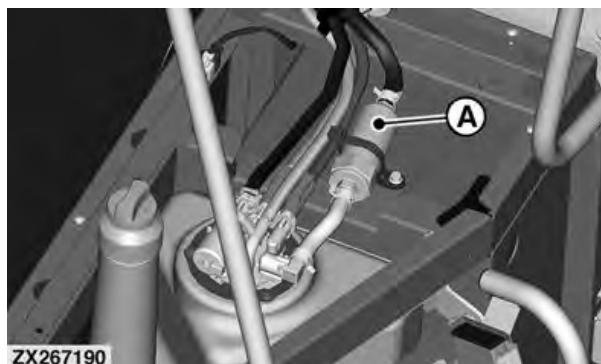
OUC002,0004989 -19-12JAN16-1/1

Diesel Exhaust Fluid (DEF) Tank Header Filter

The purpose of the filter (A) is to prevent contamination in the coolant from damaging the coolant control valve in the Diesel Exhaust Fluid (DEF) header.

IMPORTANT: The filter (A) is designed for lifetime and no regular service is required.

A—Filter



OUC002,00048A7 -19-16DEC15-1/1

Fuel Tank Cap

CAUTION: Handle fuel carefully. Do not refuel the machine while smoking. Shut off engine, remove key and set park brake before filling tank. The rotary radiator screen turns when the engine is running.

Fuel tank cap (A) is not vented.

A—Fuel Tank Cap



ZX241790

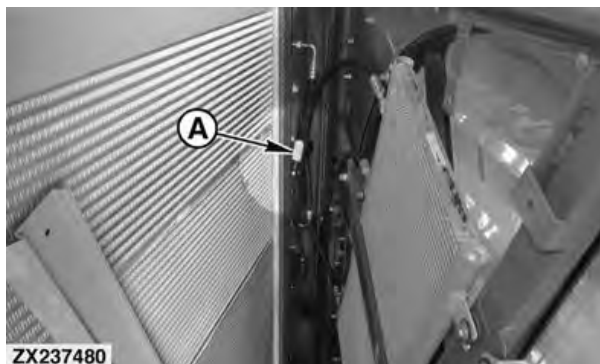
ZX241790—UN—21APR15

OUCC002,00045F5 -19-19APR15-1/1

Fuel Tank Breather

Visually inspect fuel tank breather (A) weekly. Do not allow excessive amounts of chaff or debris to collect on breather. If breather is covered with debris, it does not allow fuel tank to breathe. Remove fuel tank breather from hose and clean.

A—Fuel Tank Breather



ZX237480

ZX237480—UN—16APR15

OUCC002,00045F6 -19-19APR15-1/1

Drain Fuel Tank

CAUTION: Shut off engine, set park brake and remove key before performing maintenance work.

Remove plug (A) at bottom of fuel tank to drain fuel.

IMPORTANT: Do not lose O-ring.

A—Drain Plug



ZX270079

ZX270079—UN—19JAN16

OUCC002,00049E2 -19-19JAN16-1/1

Fuel Tank Shut-Off Valve

CAUTION: Shut off engine, set park brake and remove key before performing maintenance work.

Close valve (A) at bottom of fuel tank when servicing fuel filters.

A—Shut-Off Valve



ZX270078

ZX270078 —UN—19JAN16

OUCC002,00049E3 -19-19JAN16-1/1

Replace Fuel Filter (6.8 L Engine—Tier 2/Stage II)

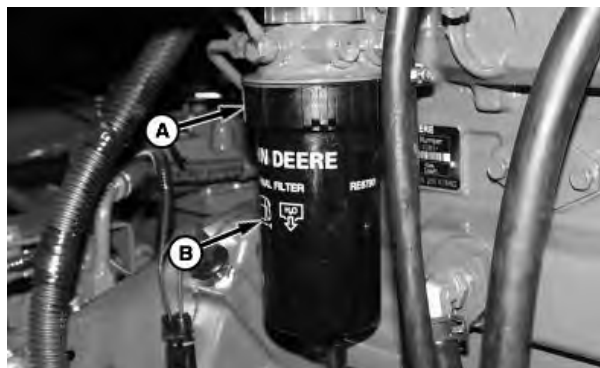
CAUTION: Always shut off engine, set park brake and remove key before performing maintenance work on fuel filter.

Unscrew ring (A) and remove filter element (B).

Insert new filter element and retighten ring.

Use the following procedure to bleed the filter:

1. Turn key to the ON position so that the fuel transfer pump is operating.
2. Allow 40 seconds for electronic transfer pump to complete priming.
3. Repeat if necessary.



Fuel filter

A—Ring

B—Filter Element

H69357 —UN—18JUL01

OUCC002,0004988 -19-12JAN16-1/1

Replace Fuel Filter Elements (6.8 L Engine—Final Tier 4/Stage IV)

IMPORTANT: The primary and secondary filters must be changed at the same time.

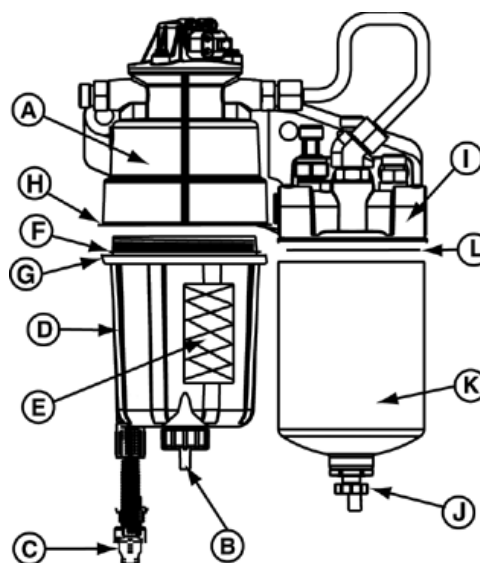
Remove and install the primary fuel filter element

1. Thoroughly clean the primary filter head (A) and surrounding area to keep dirt and debris from getting into fuel system.
2. On the underside of the filter, connect a fuel-drain line to filter drain valve (B) and drain all the fuel out of primary filter housing (D).
3. Disconnect plug (C; for water-in-fuel sensor).
4. To remove, turn primary filter housing (D) counterclockwise.
5. After removing the primary filter housing, remove primary filter element (E) by pulling it out of primary filter head (A) from below.
6. Examine the surface of the primary filter-head gasket. Clean as required.

IMPORTANT: Never put fuel in the filter. Doing so allows residue to get into the fuel system.

7. Put a new gasket on the primary filter housing.
8. Apply some fuel to the primary filter gasket.
9. Insert the primary filter element into the housing so that the lugs fit on the underside of the housing.
10. Screw the housing into the primary filter head (turn it clockwise). Tighten housing lip (G) until it is just touching the lip (H) on the head, then tighten to 14 N·m (120 lb.-in.).

11. Connect the plug for the water-in-fuel sensor.



Primary and secondary filters

- | | |
|---|-----------------------------------|
| A—Primary filter head | G—Lip on primary filter housing |
| B—Drain valve on primary filter housing | H—Lip on primary filter head |
| C—Plug for water-in-fuel sensor | I—Secondary fuel filter head |
| D—Primary filter housing | J—Drain valve on secondary filter |
| E—Primary filter element | K—Secondary fuel filter |
| F—Gasket on primary filter | L—Gasket on secondary filter |

RG14250—UN—06JUN05

Continued on next page

OUCC002,00045FA -19-20APR15-1/2

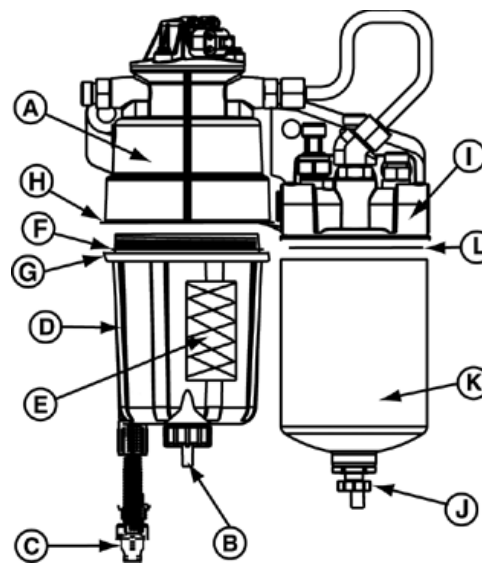
Remove and install the secondary fuel filter

1. Thoroughly clean filter head (I) and surrounding area to keep dirt and debris from getting into fuel system.
2. On the underside of the filter, connect a fuel-drain line to filter drain valve (J) and drain all the fuel out of filter.
3. To remove, turn filter (K) counterclockwise.
4. Examine the surface of the secondary filter-head gasket. Clean as required.
5. Install a new fuel filter drain valve and tighten it to 3.4—4 N·m (30—35 lb.-in.).
6. Put a new gasket (L) on the filter.
7. Apply some fuel to the gasket.

IMPORTANT: Never put fuel in the filter. Doing so allows residue to get into the fuel system.

8. Screw the fuel filter into the filter head. Tighten the fuel filter so that it is tight against secondary filter head (I).
9. Then tighten it by a further 1/2 to 3/4 turn.

NOTE: Before starting the engine, turn the ignition key to ON for 60 seconds so that the fuel system can be primed.



- | | |
|---|-----------------------------------|
| A—Primary filter head | G—Lip on primary filter housing |
| B—Drain valve on primary filter housing | H—Lip on primary filter head |
| C—Plug for water-in-fuel sensor | I—Secondary fuel filter head |
| D—Primary filter housing | J—Drain valve on secondary filter |
| E—Primary filter element | K—Secondary fuel filter |
| F—Gasket on primary filter | L—Gasket on secondary filter |

RG14250 —UN—06JUN05

OUCC002,00045FA -19-20APR15-2/2

Replace Fuel Filter Elements (9.0 L Engine—Tier 2/Stage II)

CAUTION: High-pressure fluid remaining in fuel lines can cause serious injury. Only technicians familiar with this type of system should perform repairs. Before disconnecting fuel lines, sensors, or any other components between the high-pressure fuel pump and nozzles on engines with High Pressure Common Rail (HPCR) fuel system, wait a minimum of 15 minutes after engine is stopped.

NOTE: Do not clean fuel precleaner and change primary and secondary fuel filter at the same time. Doing so makes it difficult to restart machine. Perform fuel precleaner cleaning procedure then run engine before changing primary and secondary fuel filter.

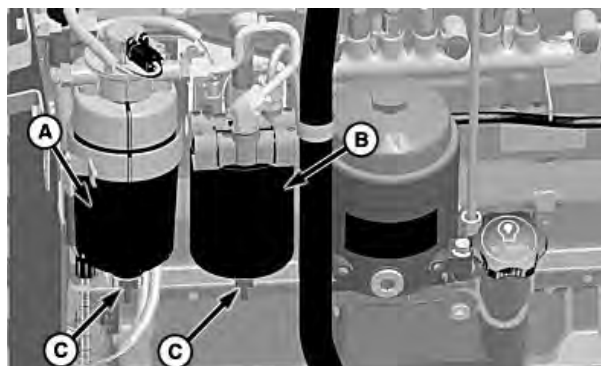
Change primary and secondary fuel filters if performance decline is noticed or a diagnostic trouble code appears. Reset code after replacing filters.

1. Start engine and run three—five minutes at low idle if machine had not been previously operating.
2. Shut OFF engine and close valve at bottom of fuel tank.
3. Thoroughly clean exterior of filter elements and filter mounting areas.

CAUTION: Fuel in filters may be under pressure. Do not remove filters without completing the following step.

NOTE: Use a catch pan when draining fuel and when removing fuel filters.

4. Drain fuel contaminants and relieve pressure from primary fuel filter (A) and secondary fuel filter (B) by opening drain valves (C).
5. Close drain valves and remove fuel filters.



A—Primary Fuel Filter
B—Secondary Fuel Filter
C—Drain Valves

NOTE: Additional fuel will drain from filter housings.

6. Remove primary fuel filter and secondary fuel filter.

IMPORTANT: Do NOT prefill either fuel filter with fuel.

NOTE: Lube filter seals with diesel fuel before installing.

7. Install primary fuel filter (A) assembly on engine. Tighten filter assembly 3/4 of a turn after seal contacts filter housing.
8. Install replacement secondary fuel filter (B). Tighten filter 3/4 of a turn after seal contacts filter housing.
9. Verify that drain valves (C) are closed.
10. Open valve at bottom of fuel tank.
11. Turn key switch ON for 60 seconds to allow fuel pump to prime fuel system.
12. Start engine and run three—five minutes at low idle.

OUC002,0004604 -19-21APR15-1/1

H95381 —UN—16FEB10

Replace Fuel Filter Elements (9.0 L Engine—Final Tier 4/Stage IV)

CAUTION: High-pressure fluid remaining in fuel lines can cause serious injury. Only technicians familiar with this type of system should perform repairs. Before disconnecting fuel lines, sensors, or any other components between the high-pressure fuel pump and nozzles on engines with High Pressure Common Rail (HPCR) fuel system, wait a minimum of 15 min. after engine is stopped.

NOTE: Do not clean fuel precleaner and change primary and secondary fuel filter at the same time. Doing so makes it difficult to restart machine. Perform fuel precleaner cleaning procedure then run engine before changing primary and secondary fuel filter.

Change primary and secondary fuel filters if performance decline is noticed or a diagnostic trouble code appears. Reset code after replacing filters.

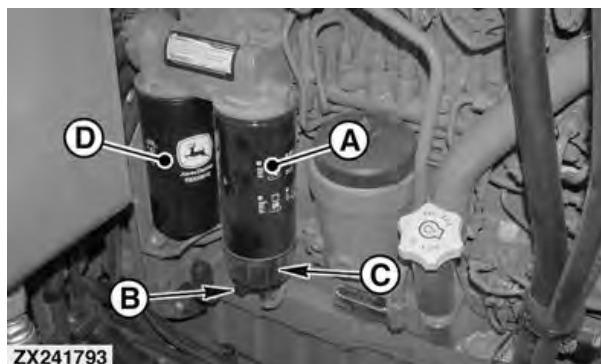
1. Start engine and run three—five min. at low idle if machine had not been previously operating.
2. Shut OFF engine and close valve at bottom of fuel tank.
3. Thoroughly clean exterior of filter elements and filter mounting areas.

CAUTION: Fuel in filters may be under pressure. Do not remove filters without completing the following step.

NOTE: Use a catch pan when draining fuel and when removing fuel filters.

4. Drain fuel contaminants and relieve pressure from primary fuel filter (A) by opening drain valve (B).
5. Close drain valve and remove and retain separator bowl (C).

NOTE: Additional fuel will drain from filter housings.



A—Primary Fuel Filter
B—Drain Valve

C—Separator Bowl
D—Secondary Fuel Filter

6. Remove primary fuel filter and secondary fuel filter (D).

IMPORTANT: Do NOT prefill either fuel filter with fuel.

NOTE: Lube filter seals with diesel fuel before installing.

7. Install previously removed separator bowl (C) on replacement primary fuel filter (A).
8. Install primary fuel filter assembly on engine. Tighten filter assembly 3/4 of a turn after seal contacts filter housing.
9. Install replacement secondary fuel filter (D). Tighten filter 3/4 of a turn after seal contacts filter housing.
10. Verify that drain valve (B) is closed.
11. Open valve at bottom of fuel tank.
12. Turn key switch ON for 60 sec. to allow fuel pump to prime fuel system.
13. Start engine and run three—five min. at low idle.

OUC002,00045FE -19-20APR15-1/1

ZX241793 —UN—21APR15

Flush Heavy Duty Fuel Precleaner Filter (Optional)

NOTE: Do not clean fuel precleaner and change primary and secondary fuel filters at the same time. Doing so makes it difficult to restart machine. Perform this procedure, then run engine before changing primary and secondary fuel filters.

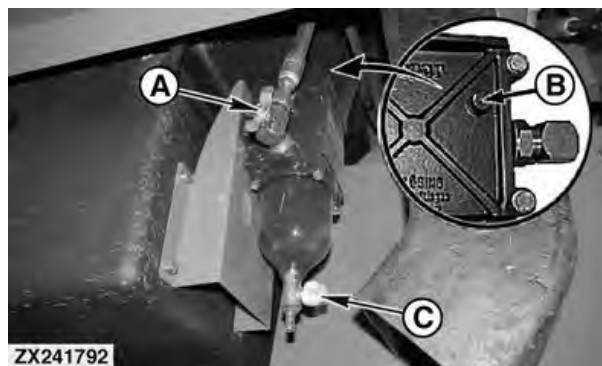
Heavy duty fuel precleaner should be back flushed whenever bowl is half full of water or when diagnostic code appears. Reset code after cleaning. If code still displays, see *Clean/Replace Heavy Duty Fuel Precleaner Filter (Optional)*.

Filter element can be back flushed up to five times before being replaced.

1. Shut OFF engine and close valve (A) at bottom of fuel tank.
2. Open bleed screw (B) on top of water separator. Allow water and dirt to be released from filter element and settle in bottom of bowl.
3. Push in on drain valve (C) and turn counterclockwise to drain water and dirt from bowl.

NOTE: As fuel, water, and dirt is drained from bowl, more water and dirt will be flushed from filter element and collect in bottom of bowl.

4. Close drain valve and allow water and dirt to settle again.



ZX241792 —JUN—21APR15

A—Valve
B—Bleed Screw

C—Drain Valve

5. Repeat steps 3 and 4 until all dirt and water is removed.
6. Close bleed screw and open valve at bottom of fuel tank.
7. Turn key switch ON for 60 seconds to allow fuel pump to prime fuel system and check for leaks.
8. Start engine and run three—five minutes at low idle. If engine does not start or dies, replace fuel filter element(s).

OUC002,00045FC -19-20APR15-1/1

Clean/Replace Heavy Duty Fuel Precleaner Filter (Optional)

Replace Filter

NOTE: After filter element has been back flushed five times, clean filter. Replace filter when light is no longer visible while holding filter up to light.

1. Shut OFF engine and close valve at bottom of fuel tank.
2. Loosen lid screws evenly in sequence shown.

NOTE: Lid and spring cassette is used again, but a replacement filter element must be installed.

3. Remove lid (A), spring cassette (B), and filter element (C).
4. Install replacement filter element and previously removed spring cassette (B).
5. Inspect lid gasket (D) and replace if necessary.
6. Install lid and tighten in sequence shown.
7. Open valve at bottom of fuel tank.
8. Turn key switch ON for 60 seconds to allow fuel pump to prime fuel system and check for leaks.
9. Start engine and run three—five minutes at low idle. If engine does not start or dies, see Primary and Secondary Fuel Filter Element—Replacing.

Clean Filter

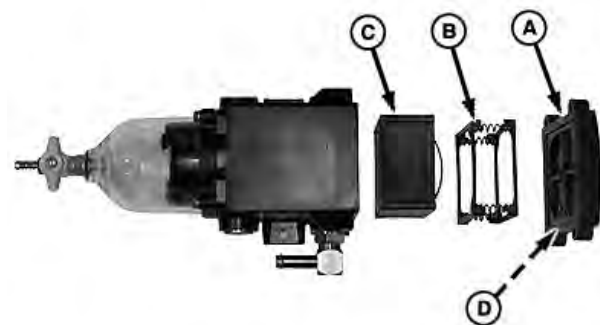
1. Shut OFF engine and close valve at bottom of fuel tank.

NOTE: Use a catch pan when draining fuel.

2. Open drain valve and drain fuel from bowl.
3. Loosen lid screws evenly in sequence shown.
4. Remove lid (A) and spring cassette (B).
5. Lift out filter element (C) by handle.

NOTE: Inspect filter for damage. If damaged, install replacement filter.

6. Wash filter in clean diesel fuel or mineral spirits.



A—Lid
B—Spring Cassette

C—Filter Element
D—Gasket

7. Install filter element and spring cassette.
8. Inspect lid gasket (D) and replace if necessary.
9. Install lid and cap screws and leave cap screws finger tight.
10. Tighten cap screws in sequence as shown.
11. Open valve at bottom of fuel tank.
12. Turn key switch ON for 60 seconds to allow fuel pump to prime fuel system and check for leaks.
13. Start engine and run three—five minutes at low idle.

RXA0084320 —UN—26SEP05

H91103 —UN—09APR08

OUCC002,00045FD -19-20APR15-1/1

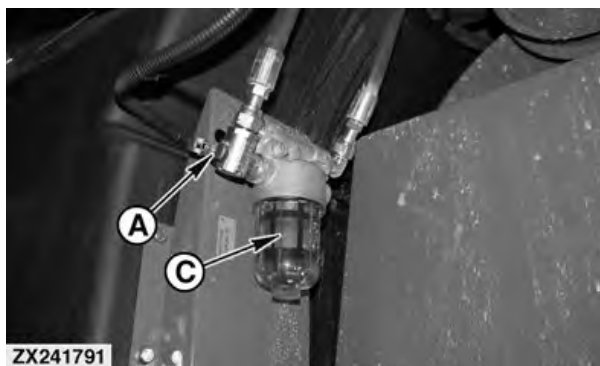
Clean Fuel Precleaner Filter

Close valve (A).

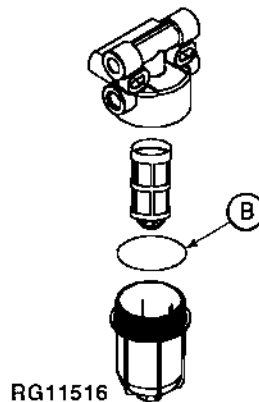
NOTE: Do not clean fuel precleaner and change primary and secondary fuel filters at the same time. Doing so makes it difficult to restart machine. Perform this procedure, then run engine before changing primary and secondary fuel filters.

Clean fuel precleaner filter if buildup is visible on filter screen or if a diagnostic trouble code appears. Reset code after cleaning filter.

1. Start engine and run three—five min. at low idle if machine had not been previously running.
2. Shut OFF engine and close valve at bottom of fuel tank to prevent drain back within supply line.
3. Thoroughly clean fuel precleaner assembly and surrounding area.
4. Remove precleaner bowl (C).
5. Clean filter screen and precleaner bowl. Inspect O-ring (B).
6. Install screen and tighten precleaner bowl.
7. Open valve at bottom of fuel tank to fill precleaner.
8. Start engine and run three—five min. at low idle.



ZX241791 —UN—21APR15



RG11516 —UN—10NOV00

A—Valve
B—O-ring

C—Precleaner Bowl

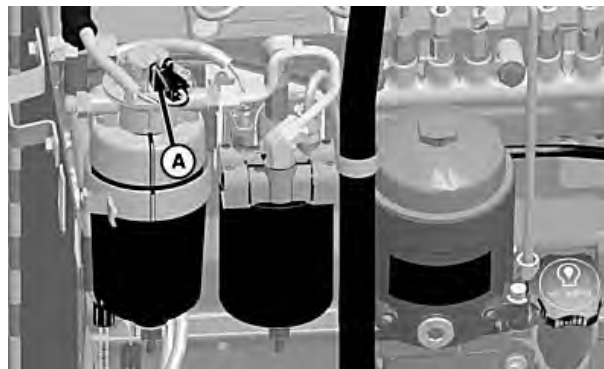
OUC002,00045FB -19-20APR15-1/1

Bleed Fuel System

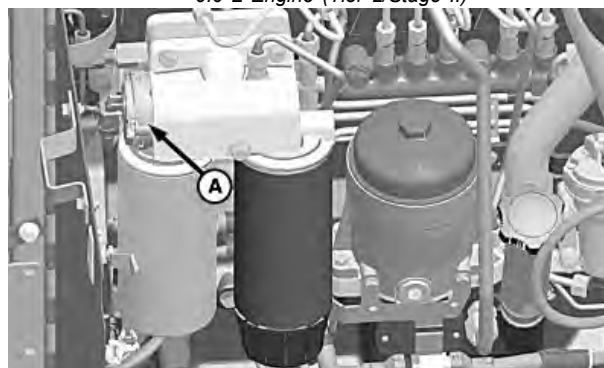
CAUTION: Shut OFF engine, set park brake and remove key before performing maintenance work.

Air can enter fuel system when changing fuel filters or when machine has run out of fuel. Air in fuel system could prevent engine from starting. If engine does not start, turn key switch ON for 60 sec. to allow fuel pump (A) to prime fuel system.

A—Fuel Pump



9.0 L Engine (Tier 2/Stage II)



9.0 L Engine (Final Tier 4/Stage IV)

OUC002,00045FF -19-20APR15-1/1

H95383 —UN—16FEB10

H95337 —UN—12FEB10

Drain Cooling System

CAUTION: Avoid being scalded when opening surge tank cap. Open cap 1.5 turns to relieve pressure. Never open cap when engine is hot. Allow system to cool before draining.

NOTE: Radiator drain is on front side of radiator.

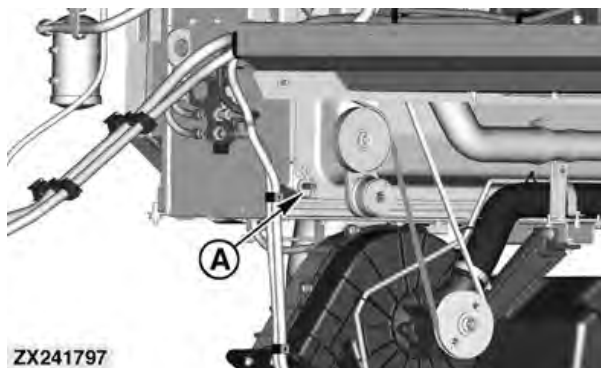
When COOL-GARD™ II or COOL-GARD™ II PG is used, the drain interval is 6 years or 6000 hours of operation.

If a coolant other than COOL-GARD™ II or COOL-GARD™ II PG is used, reduce the drain interval to 2 years or 2000 hours of operation.

To drain coolant proceed as follows:

1. Open drain valve (A) on lower left inner side of radiator.

A—Drain Valve



ZX241797

Continued on next page

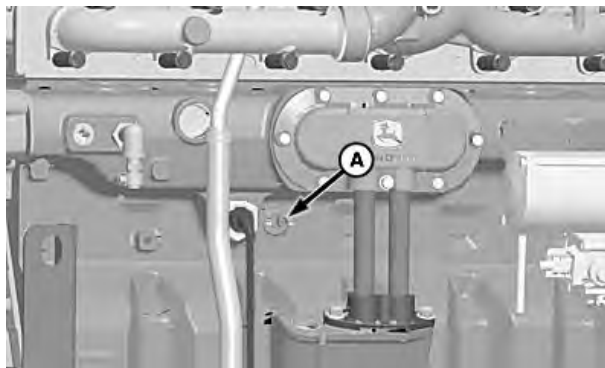
OUC002,00049D2 -19-18JAN16-1/4

TS281 —UN—15APR13

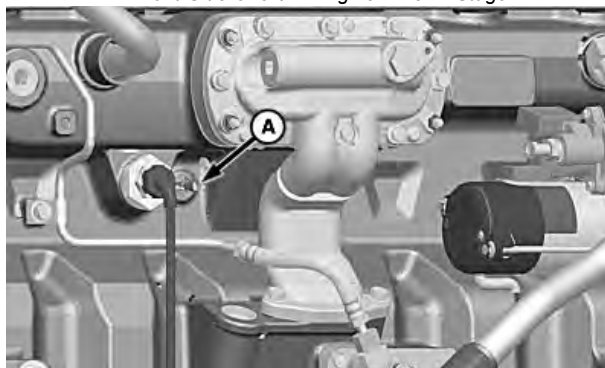
ZX241797 —UN—21APR15

2. If equipped, open drain valve (A) on engine block.

A—Drain Valve



Front Side of 9.0 L Engine—Tier 2/Stage II



Front Side of 9.0 L Engine—Final Tier 4/Stage IV

OUC002,00049D2 -19-18JAN16-2/4

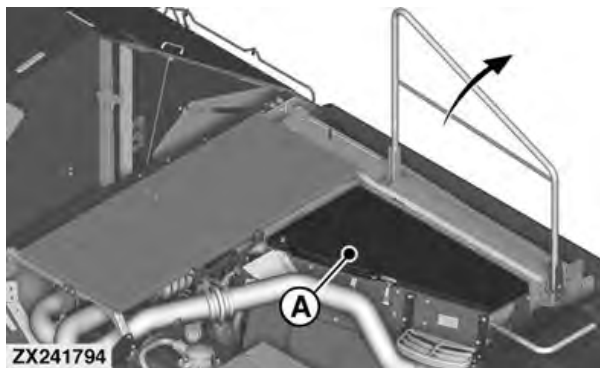
H104941 —UN—28FEB12

H104943 —UN—28FEB12

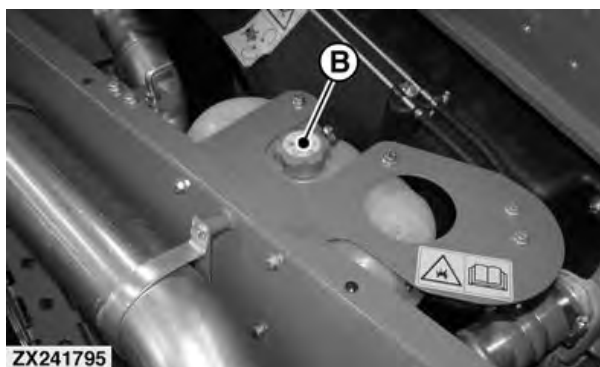
3. **Machine With Final Tier 4/Stage IV Engine:** Unlatch and fold up handrail (see arrow) then open top cover (A) to access surge tank cap (B).
4. Open surge tank cap (B) to allow coolant to drain faster.

A—Top Cover

B—Surge Tank Cap



ZX241794



ZX241795

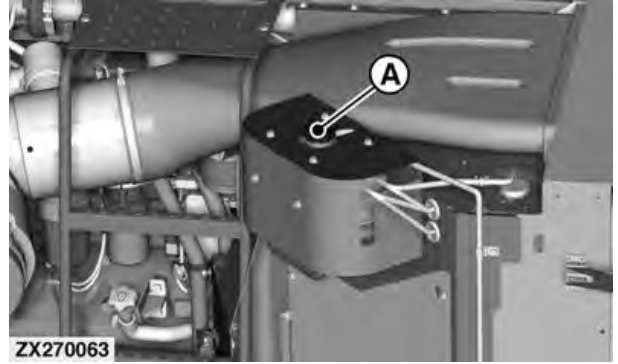
ZX241794 —UN—21DEC15

ZX241795 —UN—21APR15

Continued on next page

OUC002,00049D2 -19-18JAN16-3/4

5. **Machine With Tier 2/Stage II Engine:** Open surge tank cap (A) to allow coolant to drain faster.
6. Close radiator drain and fill system with clean water.
7. Install surge tank cap and run engine until it reaches operating temperature with heater ON.
8. Shut OFF engine, carefully remove surge tank cap and drain water out before rust or sediment settles. Dispose of old coolant in accordance with local laws and ordinances.
9. Close radiator drain and refill system with a solution of clean water and John Deere Cooling System Cleaner PT500 or equivalent. Follow instructions with cleaner.
10. After using cleaner, flush system with clean water and drain.
11. Close radiator drains and fill system (refer to **Refill Cooling System** in this section for filling procedure



A—Surge Tank Cap

and **Diesel Engine Coolant (engine with wet sleeve cylinder liners)** section for coolant specifications).

OUCC002,00049D2 -19-18JAN16-4/4

ZX270063 —UN—19JAN16

Refill Cooling System

CAUTION: Avoid being scalded when opening surge tank cap. Open cap 1.5 turns to relieve pressure. Never open cap when engine is hot and never fill cooling system when engine is overheated unless engine is idling slowly. Pour coolant in slowly. Check coolant level when engine is cold.

IMPORTANT: A special cap is used on the surge tank and radiator. If cap is damaged or missing, it must be replaced by an equivalent cap.

Never pour cold water into a hot engine as it might crack cylinder block or head. Do not operate engine without coolant.

Machine With Final Tier 4/Stage IV Engine: Unlatch and fold up handrail (see arrow) then open top cover (A) to access surge tank cap (B).

Remove surge tank cap (B) and fill until fluid is at "Max Cold" line (C).

Install cap on surge tank, turn ON heater, and run engine until it reaches operating temperature.

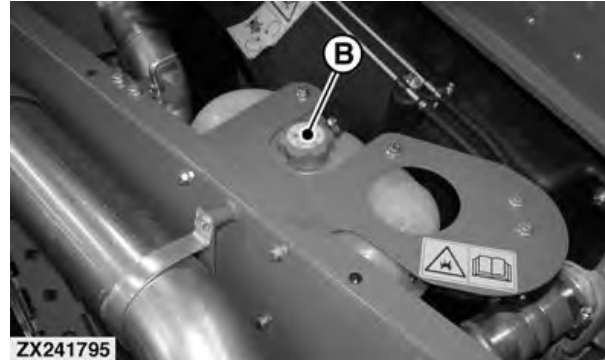
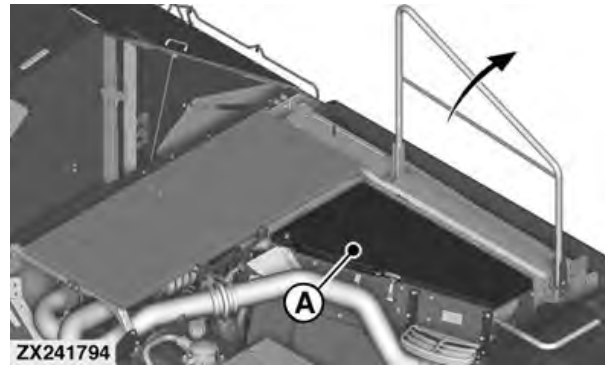
Carefully remove cap from surge tank and refill as necessary. Install cap on surge tank.

When engine is cool, coolant level should be at "Max Cold" line.

NOTE: Coolant level must be between "Max Cold" and "Min Cold" lines. Add coolant as needed if coolant is below "Min Cold" line.

A—Top Cover
B—Surge Tank Cap

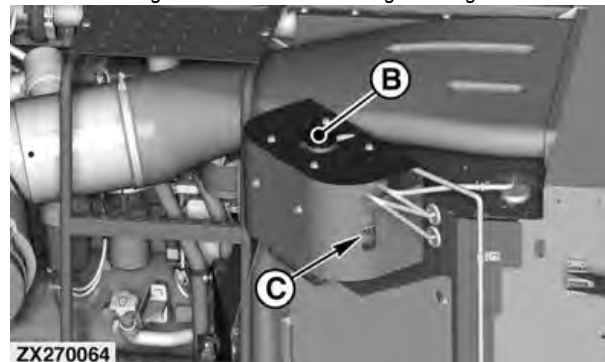
C—Max Cold Line



Surge Tank—Final Tier 4/Stage IV Engine



Surge Tank—Final Tier 4/Stage IV Engine



Surge Tank—Tier 2/Stage II Engine

OUC002,00049D3 -19-18JAN16-1/1

Winterize Cooling System

IMPORTANT: Do not drain cooling system to protect against freezing. Heater does not drain completely, so damage would result.

Before cold weather, be sure cooling system has enough antifreeze. Use a reliable brand of permanent-type ethylene glycol antifreeze which contains a rust inhibitor

and water pump lubricant, but does not contain a leak-stopping additive, (see Fuels and Lubricants in this manual for correct recommendations).

After adding antifreeze, turn heater ON and run engine until it reaches operating temperature. This mixes the solution and circulates it through the system.

OUC002,0004603 -19-20APR15-1/1

Clean Rotary Screen, Oil Cooler, Condenser, Radiator and Charge Air Cooler

CAUTION: Shut off engine, set park brake and remove key.

Pull latches (A) and open rotary screen door (B).

Check the rotary screen daily to be certain it turns freely.

Clean oil cooler, condenser and radiator.

Clean the charge air cooler.

Clean with compressed air, blowing from inside out.

IMPORTANT: When using compressed air or high-pressure water for cleaning, be careful to avoid cooling fin damage. Use a fin comb to straighten bent fins. Bent fins will decrease cooler performance.

A—Latch

B—Rotary Screen Door



ZX243172 —UN—21APR15

ZX243175 —UN—21APR15

OUC002,0004608 -19-21APR15-1/1

Replace Air Cleaner Filters (Final Tier 4/Stage IV Engine)

IMPORTANT: When servicing filters, shut OFF engine, set park brake and remove key so dirt cannot be pulled into engine.

Service filters only when engine air filter icon is displayed on armrest display.

Unsnap dust cover (A) and remove primary air filter (B).

Unscrew safety filter (C) in a counterclockwise direction to remove. Safety filter stops dirt that would pass through a damaged primary filter.

IMPORTANT: Never wash, brush, or knock elements. If blowing out the primary element, use dry compressed air (500 kPa; 72.5 psi). Clean the element from the inside out making sure that the tip of the air gun does not come in contact with the filter paper.

Never clean the safety element. Replace if dirty.

Never run engine without both filters in place.

Service filters as needed.

Install safety filter (C) and turn in a clockwise direction until hand tight.

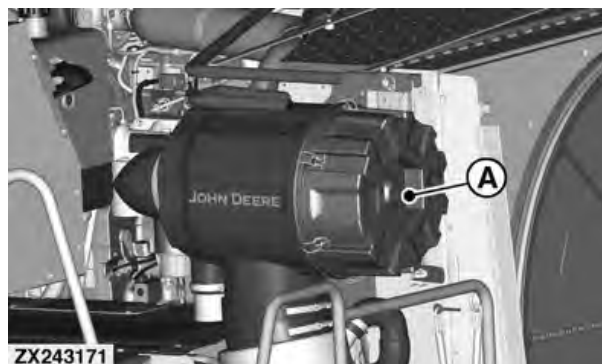
Install primary air filter (B) and dust cover.

Check all connections in the air intake system. Be certain they are tight.

IMPORTANT: Do not use any exhaust flow cleaning unit to blow chaff off combine. Using such a unit can cause air filter failure, followed by engine failure.

A—Dust Cover
B—Primary Air Filter

C—Safety Filter



ZX243171 —UN—21APR15

ZX243173 —UN—21APR15

ZX243174 —UN—21APR15

OUC002,00049CF -19-18JAN16-1/1

Replace Air Cleaner Filters (Tier 2/Stage II Engine)

IMPORTANT: When servicing filters, shut OFF engine, set park brake and remove key so dirt cannot be pulled into engine.

Service filters only when engine air filter icon is displayed on armrest display.

Unsnap dust cover (A) and remove primary air filter (B).

Unscrew safety filter (C) in a counterclockwise direction to remove. Safety filter stops dirt that would pass through a damaged primary filter.

IMPORTANT: Never wash, brush, or knock elements. If blowing out the primary element, use dry compressed air (500 kPa; 72.5 psi). Clean the element from the inside out making sure that the tip of the air gun does not come in contact with the filter paper.

Never clean the safety element. Replace if dirty.

Never run engine without both filters in place.

Service filters as needed.

Install safety filter (C) and turn in a clockwise direction until hand tight.

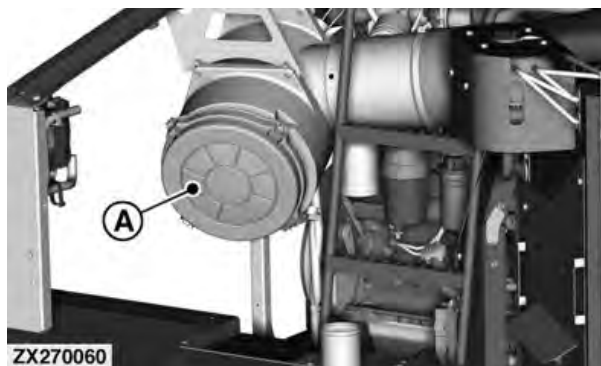
Install primary air filter (B) and dust cover.

Check all connections in the air intake system. Be certain they are tight.

IMPORTANT: Do not use any exhaust flow cleaning unit to blow chaff off combine. Using such a unit can cause air filter failure, followed by engine failure.

A—Dust Cover
B—Primary Air Filter

C—Safety Filter



ZX270060 —UN—19JAN16



ZX270061 —UN—19JAN16



ZX270062 —UN—19JAN16

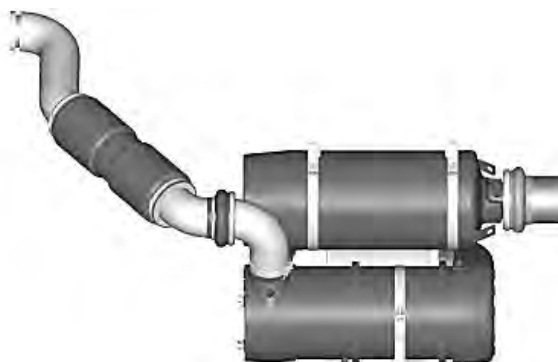
OUC002,00049D0 -19-18JAN16-1/1

Diesel Particulate Filter Maintenance and Service (Final Tier 4/Stage IV)

The Exhaust Filter includes the Diesel Oxidation Catalyst and Diesel Particulate Filter (DPF). The DPF is designed to retain residual ash, which is a noncombustible result of additives used in crankcase lubrication oils and the fuel. The DPF provides many hours of maintenance free operation. At some point the DPF will require professional service to remove the accumulated ash. The exact number of hours of operation before service is required will vary depending upon the engine's power category, duty cycle and operating conditions, engine oil ash content, and fuel quality. Adhering to John Deere's recommended oil and fuel specifications will maximize the hours of operation before professional DPF service is required.

As the engine owner, you are responsible for performing the required maintenance described in your Operator's Manual. During normal equipment operation the DPF maintenance requirements will depend on the rate at which ash accumulates in it. Generally, DPFs on engines above 175 hp / 130 kW will require servicing at about 4,500 hours. As ash levels rise in the DPF the capacity for soot storage is reduced and the back pressure of the exhaust system will rise more frequently. A diagnostic trouble code will appear indicating when the DPF needs servicing.

The removal of DPF ash must be done by removing the DPF from the machine and placing it into specialized equipment. Do not remove ash by using water or other chemicals. Removing ash by these methods may damage the material securing the DPF in its canister, resulting in the loosening of the DPF element in the canister and subjecting it to damage from vibration.



H106032 — UN — 09JAN13

Failure to follow the approved ash removal methods may violate U.S. federal, state and local hazardous waste laws, along with damage to the DPF resulting in potential denial of the Diesel Exhaust Filter emissions warranty. It is strongly recommended you take the DPF to an authorized John Deere service location or other qualified service provider for servicing.

When AUTO or PARKED cleaning is enabled, the exhaust temperature may be high under no load or light load conditions at certain times during the exhaust filter cleaning cycle.

Disable exhaust filter cleaning system in conditions where it may be unsafe for elevated exhaust temperatures.

Disable the automatic exhaust filter cleaning system only when necessary.

OUO6075,00012A1 -19-15MAY13-1/1

Exhaust Filter / Diesel Particulate Filter Ash Handling and Disposal (Final Tier 4/Stage IV)

CAUTION: Under federal, state, and/or local laws or regulations, Diesel Particulate Filter ash may be classified as a hazardous waste. Hazardous wastes must be disposed of in accordance with all applicable federal, state and local laws or regulations governing hazardous waste disposal.

Only a qualified service provider should remove ash from the DPF. Personal protective equipment and clothing, maintained in a sanitary and reliable condition, should be used when handling and cleaning a DPF. See your John Deere dealer or qualified service provider for assistance.

OUO6075,00012A2 -19-17OCT12-1/1

Exhaust Filter Disposal (Final Tier 4/Stage IV)

CAUTION: Proper management of an Exhaust Filter that has reached the end of its useful life is required, since the ash or catalyst material in the device may be classified as hazardous waste under federal, state, and/or

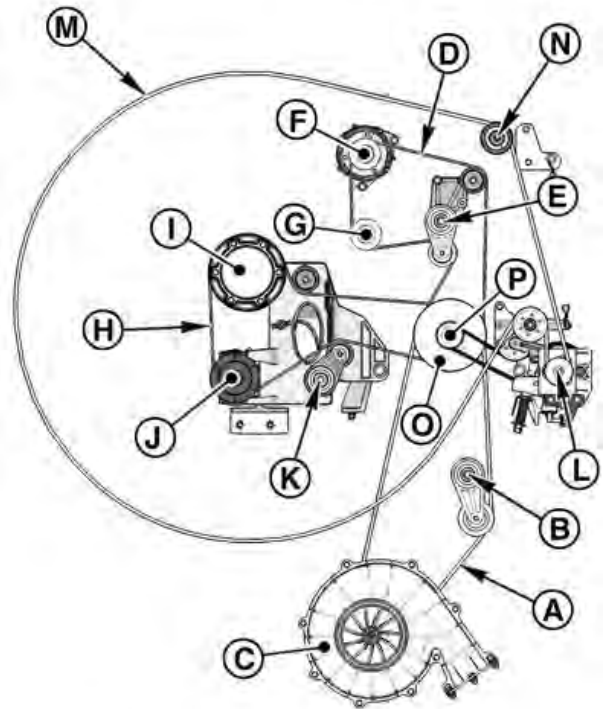
local laws or regulations. Used Exhaust Filters, which include the Diesel Particulate Filter, may be exchanged at any John Deere dealer or qualified service provider.

OUO6075,00012A3 -19-11SEP13-1/1

Engine Belt Layouts

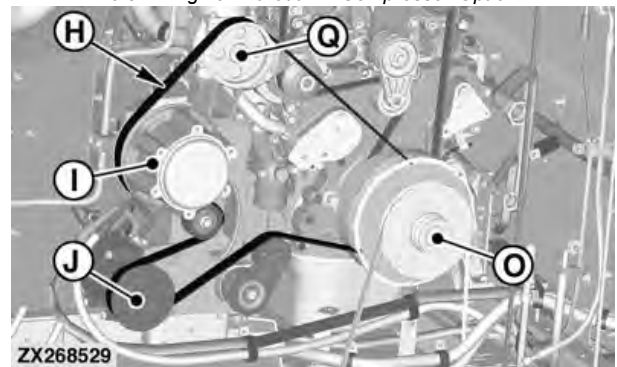
6.8 L Engine Belt Layout

- | | |
|--------------------------------|------------------------------|
| A—Suction Fan Drive Belt | J—Air Conditioner |
| B—Suction Fan Drive Belt Idler | Compressor |
| C—Suction Fan | K—Fan/Air Conditioner |
| D—Alternator Drive Belt | Compressor Drive Belt Idler |
| E—Alternator Drive Belt Idler | L—Rotary Screen Drive Sheave |
| F—Alternator | (Countershaft Drive) |
| G—Tensioner Roll | M—Rotary Screen Drive Belt |
| H—Fan/Air Conditioner | N—Tensioner Roll |
| I—Fan Drive Sheave | O—Engine Crankshaft Sheave |
| | P—Rotary Screen |
| | Countershaft Drive Sheave |
| | Q—Air Compressor Motor |



ZX268531

6.8 L Engine Without Air Compressor Option



ZX268529

6.8 L Engine With Air Compressor Option

Continued on next page

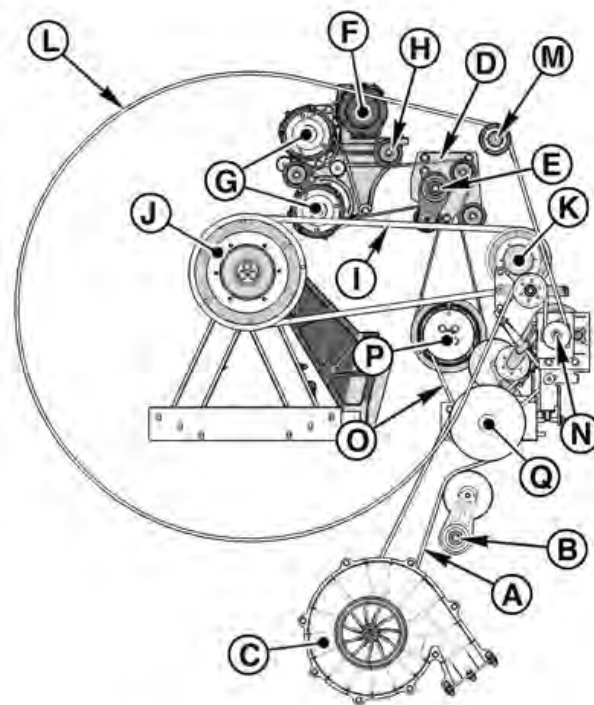
OUC002,0004974 -19-12JAN16-1/2

ZX268531 —UN—11JAN16

ZX268529 —UN—11JAN16

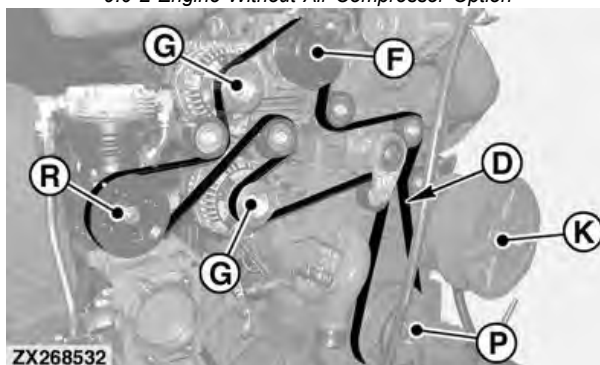
9.0 L Engine Belt Layout

- | | |
|--|---|
| A—Suction Fan Drive Belt | J—Fan Drive Sheave |
| B—Suction Fan Drive Belt Idler | K—Fan Variable Drive |
| C—Suction Fan | L—Rotary Screen Drive Belt |
| D—Alternator/Air Conditioner Compressor Drive Belt | M—Tensioner Roll |
| E—Alternator/Air Conditioner Compressor Drive Belt Idler | N—Rotary Screen Drive Sheave (Countershaft Drive) |
| F—Air Conditioner Compressor | O—Rotary Screen Countershaft Drive Belt |
| G—Alternator | P—Engine Crankshaft Sheave |
| H—Tensioner Roll | Q—Suction Fan Drive Sheave (Countershaft Drive) |
| I—Fan Drive Belt | R—Air Compressor Motor |



ZX268530

9.0 L Engine Without Air Compressor Option



ZX268532

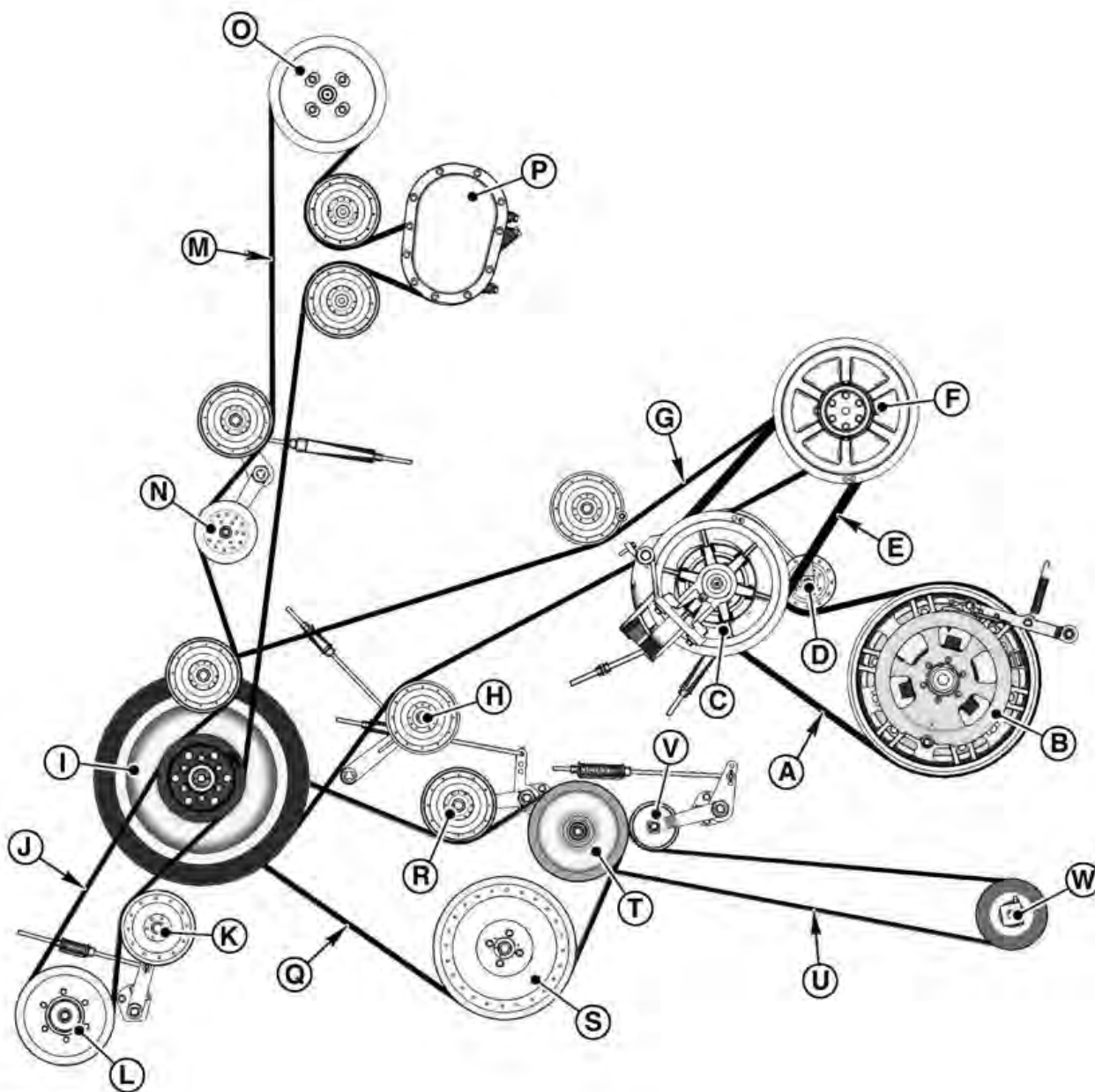
9.0 L Engine With Air Compressor Option

OUCC002,0004974 -19-12JAN16-2/2

ZX268530 —UN—11JAN16

ZX268532 —UN—11JAN16

Drive Belts (W Series)



ZX268525

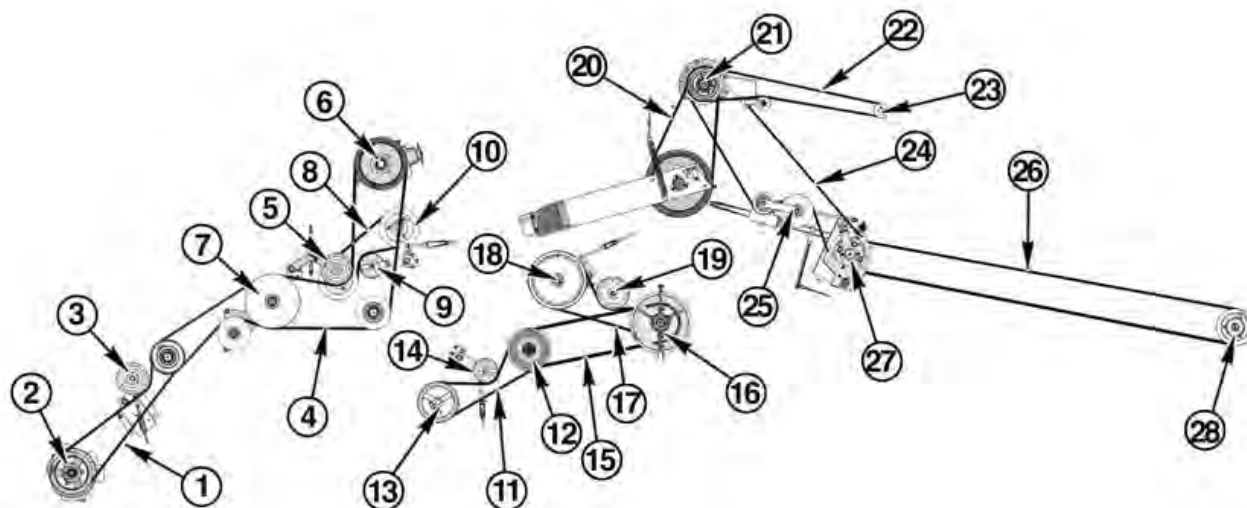
Drive Belts—Right-Hand Side

- | | | | |
|-------------------------------------|--|--|------------------------------------|
| A—Cylinder Drive Belt | H—Secondary Countershaft Belt Idler | L—Tailings Auger And Elevator Drive Sheave | S—Cleaning Shoe Drive Sheave |
| B—Cylinder Drive | I—Secondary Countershaft/Tailings Elevator/Clean Grain Elevator/Cleaning Shoe Drive Sheave | M—Clean Grain Elevator Belt | T—Cleaning Shoe Auger Drive Sheave |
| C—Cylinder Intermediate Drive | J—Tailings Auger And Elevator Belt | N—Clean Grain Elevator Belt Idler | U—Cleaning Shoe Auger Belt |
| D—Cylinder Drive Belt Idler | K—Tailings Auger And Elevator Belt Idler | O—Clean Grain Elevator Drive Sheave | V—Cleaning Shoe Auger Belt Idler |
| E—Cylinder Intermediate Belt | | P—Loading Auger Gearcase | W—Cleaning Shoe Auger Sheave |
| F—Primary Countershaft Drive Sheave | | Q—Cleaning Shoe Belt | |
| G—Secondary Countershaft Belt | | R—Cleaning Shoe Belt Idler | |

Continued on next page

OUC002,0004A08 -19-21JAN16-1/2

ZX268525—UN—11JAN16



ZX268527 —UN—11JAN16

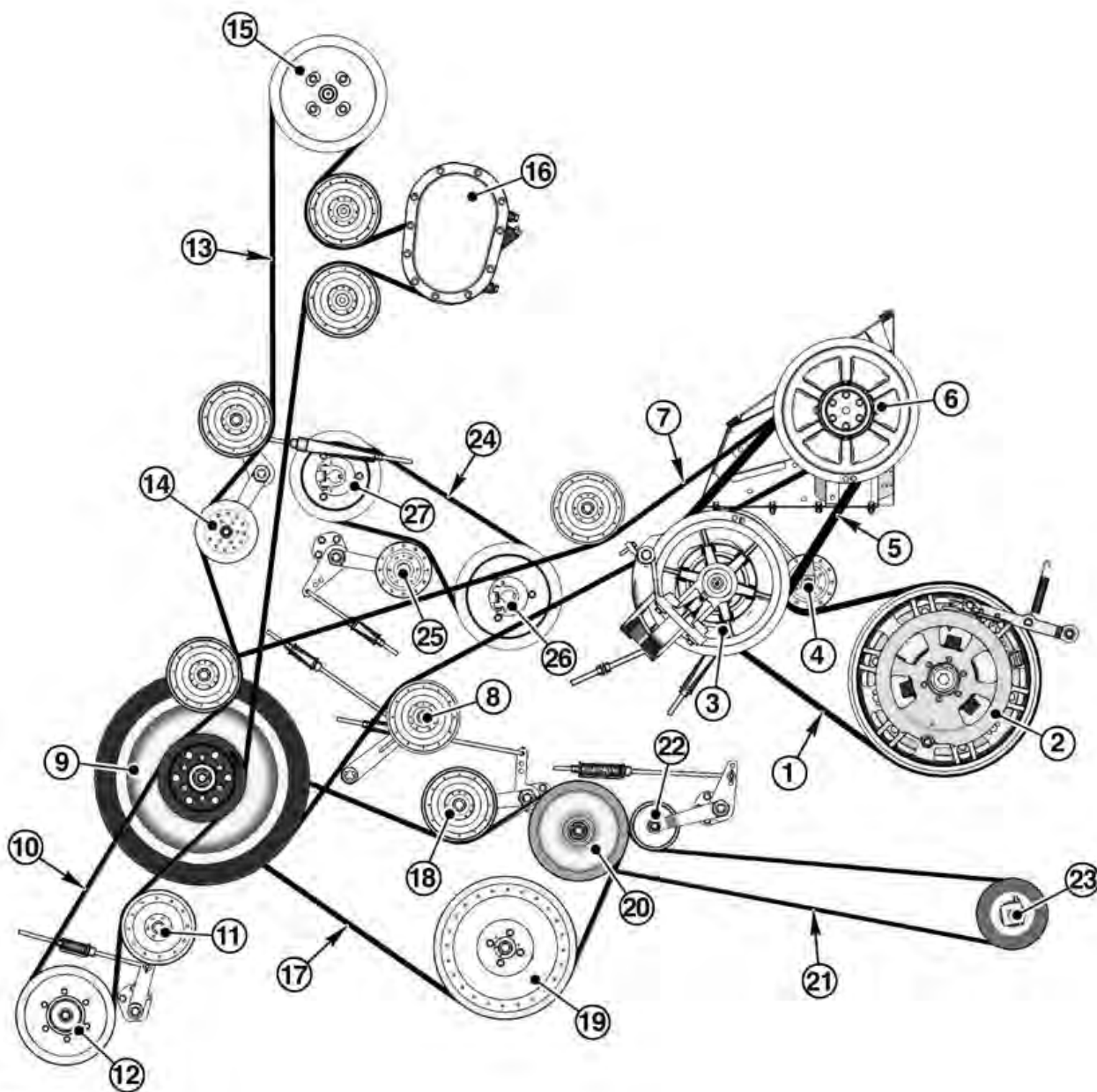
ZX268527

Drive Belts—Left-Hand Side

- | | | | |
|-------------------------------------|--------------------------------|--|--|
| 1— Feeder House Reverser Belt | 10— Beater Drive Sheave | 19— Straw Walker Belt Idler | 25— Reel and Chaff Spreader Pumps/Straw Chopper Drive Belt Idler |
| 2— Feeder House Reverser | 11— Cleaning Fan Belt | 20— Unloading Auger Belt | 26— Straw Chopper Belt |
| 3— Feeder House Reverser Belt Idler | 12— Cleaning Fan Drive Sheave | 21— Unloading Auger/Reel Pump/Exhaust Debris Management Drive Sheave | 27— Reel and Chaff Spreader Pumps/Straw Chopper Drive Sheave |
| 4— Feeder House Drive Belt | 13— Cleaning Fan Sheave | 22— Exhaust Debris Management Belt | 28— Straw Chopper Drive Sheave |
| 5— Feeder House Drive Belt Idler | 14— Cleaning Fan Belt Idler | 23— Exhaust Debris Management Blower Drive Sheave | |
| 6— Electrical Clutch Sheave | 15— Cleaning Fan Variator Belt | 24— Reel and Chaff Spreader Pumps/Straw Chopper Drive Belt | |
| 7— Intermediate Sheave | 16— Cleaning Fan Variator | | |
| 8— Beater Belt | 17— Straw Walker Belt | | |
| 9— Beater Belt Idler | 18— Straw Walker Drive Sheave | | |

OUC002,0004A08 -19-21JAN16-2/2

Drive Belts (T Series)



ZX268526

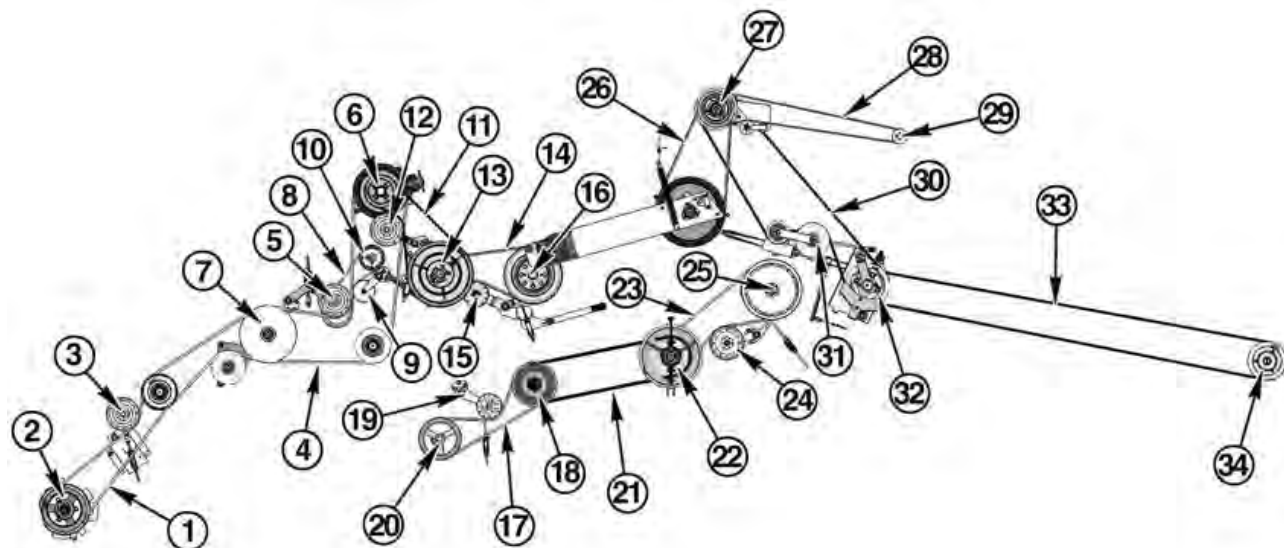
Drive Belts—Right-Hand Side

- | | | | |
|-------------------------------------|--|--------------------------------------|-----------------------------------|
| 1—Cylinder Drive Belt | 9—Secondary Countershaft/Tailings Elevator/Clean Grain Elevator/Cleaning Shoe Drive Sheave | 14—Clean Grain Elevator Belt Idler | 21—Cleaning Shoe Auger Belt |
| 2—Cylinder Drive | 10—Tailings Auger And Elevator Belt | 15—Clean Grain Elevator Drive Sheave | 22—Cleaning Shoe Auger Belt Idler |
| 3—Cylinder Intermediate Drive | 11—Tailings Auger And Elevator Belt Idler | 16—Loading Auger Gearcase | 23—Cleaning Shoe Auger Sheave |
| 4—Cylinder Drive Belt Idler | 12—Tailings Auger And Elevator Drive Sheave | 17—Cleaning Shoe Belt | 24—Beater Belt |
| 5—Cylinder Intermediate Belt | 13—Clean Grain Elevator Belt | 18—Cleaning Shoe Belt Idler | 25—Beater Belt Idler |
| 6—Primary Countershaft Drive Sheave | | 19—Cleaning Shoe Drive Sheave | 26—Separator Sheave |
| 7—Secondary Countershaft Belt | | 20—Cleaning Shoe Auger Drive Sheave | 27—Beater Drive Sheave |
| 8—Secondary Countershaft Belt Idler | | | |

Continued on next page

OUC002.0004A09 -19-21JAN16-1/2

ZX268526—UN—11JAN16



ZX268528

Drive Belts—Left-Hand Side

- | | | | |
|-------------------------------------|----------------------------------|---|--|
| 1— Feeder House Reverser Belt | 11— Overshot Beater Belt | 22— Cleaning Fan Variator | 30— Reel and Chaff Spreader Pumps/Straw Chopper Drive Belt |
| 2— Feeder House Reverser | 12— Overshot Beater Belt Idler | 23— Straw Walker Belt | 31— Reel and Chaff Spreader Pumps/Straw Chopper Drive Belt Idler |
| 3— Feeder House Reverser Belt Idler | 13— Overshot Beater Drive Sheave | 24— Straw Walker Belt Idler | 32— Reel and Chaff Spreader Pumps/Straw Chopper Drive Sheave |
| 4— Feeder House Drive Belt | 14— Separator Belt | 25— Straw Walker Drive Sheave | 33— Straw Chopper Belt |
| 5— Feeder House Drive Belt Idler | 15— Separator Belt Idler | 26— Unloading Auger Belt | 34— Straw Chopper Drive Sheave |
| 6— Electrical Clutch Sheave | 16— Separator Drive Sheave | 27— Unloading Auger/Reel Pump/Exhaust Debris Management Blower Drive Sheave | |
| 7— Intermediate Sheave | 17— Cleaning Fan Belt | 28— Exhaust Debris Management Belt | |
| 8— Stripper Roller Belt | 18— Cleaning Fan Drive Sheave | 29— Exhaust Debris Management Blower Drive Sheave | |
| 9— Stripper Roller Belt Idler | 19— Cleaning Fan Belt Idler | | |
| 10— Stripper Roller Drive Sheave | 20— Cleaning Fan Sheave | | |
| | 21— Cleaning Fan Variator Belt | | |

OUCC002,0004A09 -19-21JAN16-2/2

ZX268528—UN—11JAN16

Feeder House Access Doors

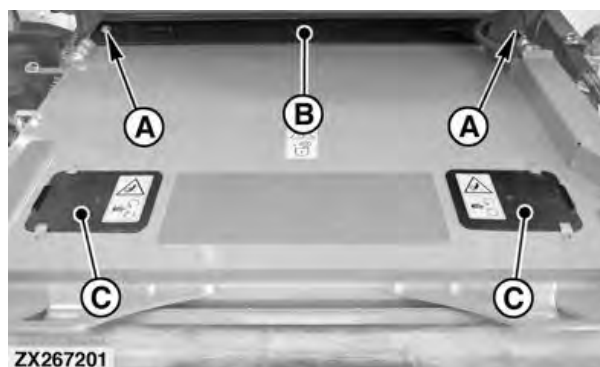
CAUTION: For lubrication and service, engine must be off, park brake set and key removed.

Loosen nuts (A), slide latches in and pull door (B) forward to remove.

To access inside of feeder house, release clamps and take out doors (C).

A—Nuts
B—Door

C—Door



ZX267201

ZX267201—UN—21DEC15

OUCC002,000493D -19-08JAN16-1/1

Adjust Feeder House Drive Chain

CAUTION: Raise feeder house, lower safety stop, shut off engine, set park brake and remove key.

1. Open right front side shield.
2. Loosen nut (A) and push sprocket forward to increase tension of chain (B) (see arrow). Do not change position of sprocket (C).

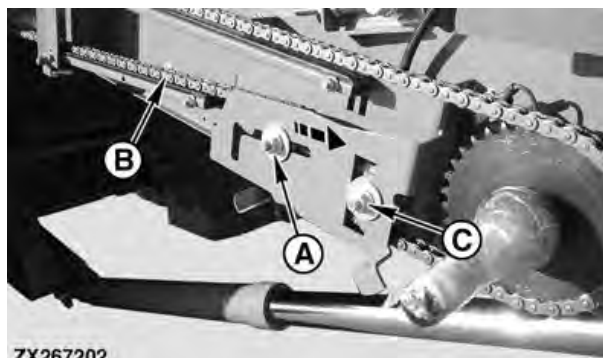
NOTE: Sprocket (C) position depends on the conveyor chain speed configuration (see Adjust Feeder House Conveyor Chain Speed in Field Operation section).

Do not over tighten drive chain (B). It is acceptable for chain to ride on plastic guide (D).

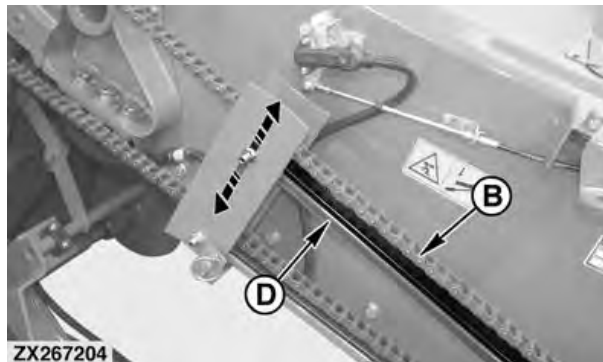
3. Use pry bar in holes of inside plate to move sprocket forward and tighten nut (A).
4. If necessary, adjust plastic guide (D).

A—Nut
B—Drive Chain

C—Sprocket
D—Plastic Guide



ZX267202



ZX267204

ZX267202 —UN—21DEC15

ZX267204 —UN—21DEC15

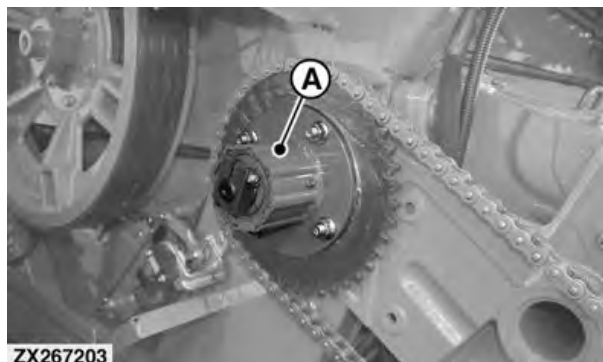
OUC002,0004987 -19-12JAN16-1/1

Feeder House Slip Clutch

Slip clutch (A) is factory set to **900 N·m (663 lb·ft)** and is not adjustable.

IMPORTANT: Lubricate slip clutch (two grease fittings) every 400 operating hours or every year.

A—Slip Clutch



ZX267203

ZX267203 —UN—21DEC15

OUC002,000493B -19-08JAN16-1/1

Check Feeder House Top Shaft Sprockets

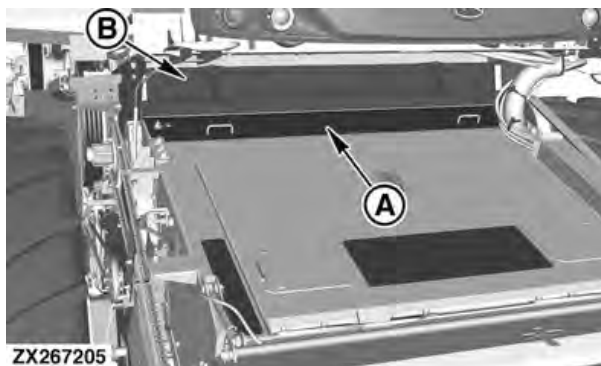
After 1000 operating hours, depending on the crops being harvested, check the top shaft sprockets for wear.

Proceed as follows:

1. Remove feeder house rear door (A) and threshing cylinder service flap (B).
2. If the sprockets (C) are worn past 12 mm (0.5 in) (X), sprockets can be reversed for additional use. Contact your John Deere dealer.

A—Door
B—Service Flap

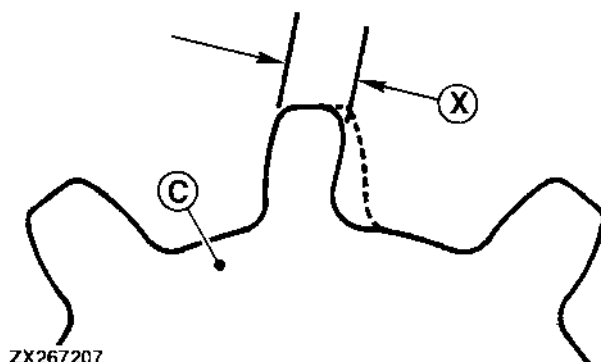
C—Sprocket
X—12 mm (0.5 in)



ZX267205 —UN—21DEC15



ZX267206 —UN—22JAN16



ZX267207 —UN—21DEC15

OUCC002,000493C -19-08JAN16-1/1

Adjust Feeder House Conveyor Chain Tension

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set park brake and remove key.

Loosen screw (A) on both sides of feeder house.

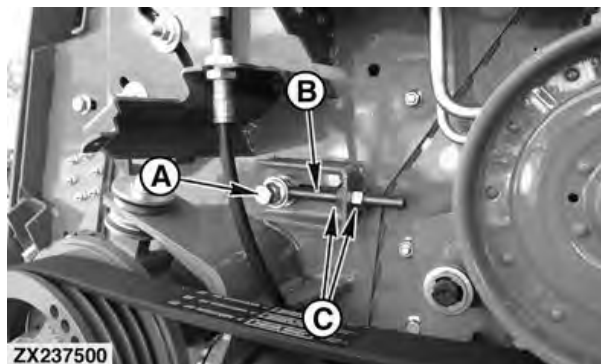
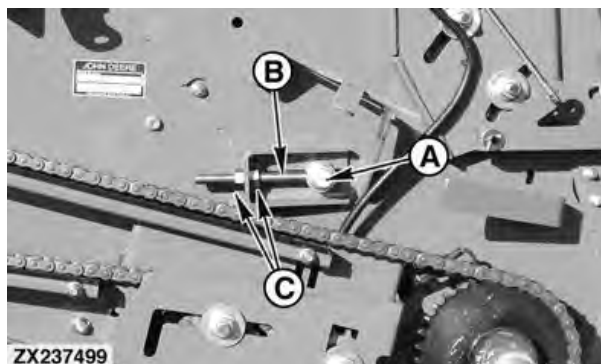
Move lower feeder house drum to lower position (for grain).

Adjust eyebolt (B) with adjusting nuts (C) on both sides of feeder house so that the third conveyor slat (seen from the front) slightly touches the feeder house bottom.

Tighten screw and adjusting nuts.

A—Screw
B—Eyebolt

C—Nut



ZX237499 —UN—16APR15

ZX237500 —UN—16APR15

OUC002,0004986 -19-21JAN16-1/1

Feeder House Conveyor Chain Links

NOTE: When replacing chain links always check sprockets for wear (see Check Feeder House Top Shaft Sprockets section).

Remove offset links (A) for initial chain adjustment.

Remove offset links (B) for second adjustment. When adjustment is used up from second adjustment, chain is worn out and must be replaced.

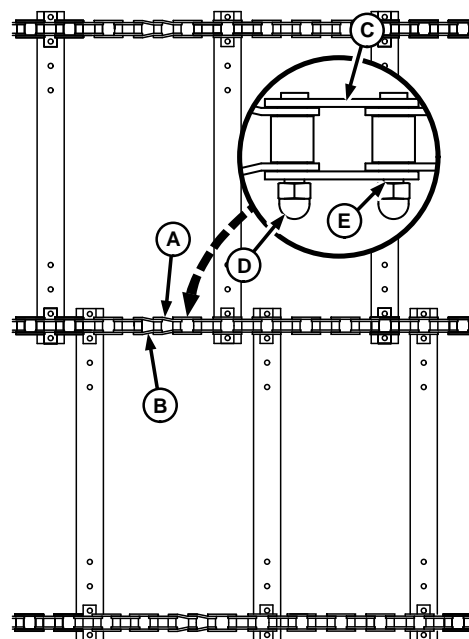
Tighten cap nuts (D) to 25 N·m (18 lb·ft).

IMPORTANT: When installing connector links, cap nuts (D) must be oriented away from drum rings.

When chain link cap nuts (D) are torqued to specification, gap (E) of 1—2 mm (0.04—0.08 in) should exist between connector link sidebar (C) and cap nut.

A—Offset Link
B—Offset Link
C—Sidebar

D—Cap Nut
E—Gap



5-Walkers Machine Feeder House Shown

H87543 —UN—17APR07

OUC002,00049FE -19-21JAN16-1/1

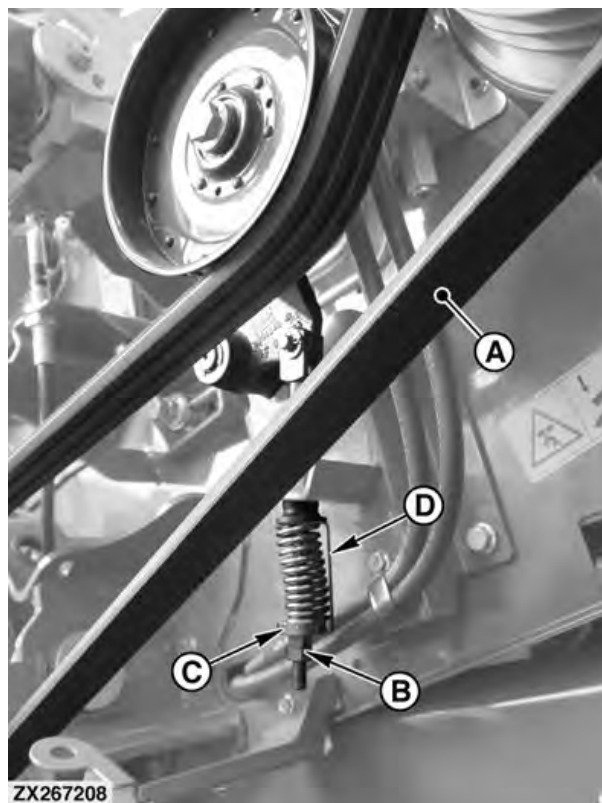
Adjust Feeder House Reverser Belt Tension

CAUTION: Shut off engine, set park brake and remove key.

To adjust tension of feeder house reverser drive belt (A), tighten nuts (B) until washer (C) aligns with end of gauge (D) at tensioner.

A—Belt
B—Nut

C—Washer
D—Gauge



ZX267208 —UN—11JAN16

OUCC002,0004985 -19-12JAN16-1/1

Replace Feeder House Reverser Belt

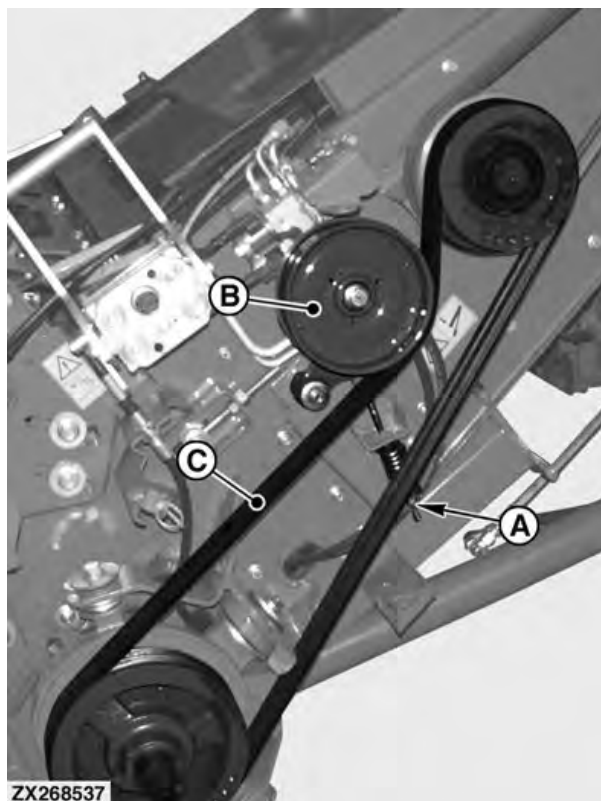
CAUTION: Shut off engine, set park brake and remove key.

Loosen nuts (A) of idler (B) to relieve belt tension then remove belt (C).

Install new belt (C) and adjust idler (A). See **Adjust Feeder House Reverser Belt Tension** section.

A—Nut
B—Idler

C—Belt



ZX268537 —UN—11JAN16

OUC002,0004984 -19-12JAN16-1/1

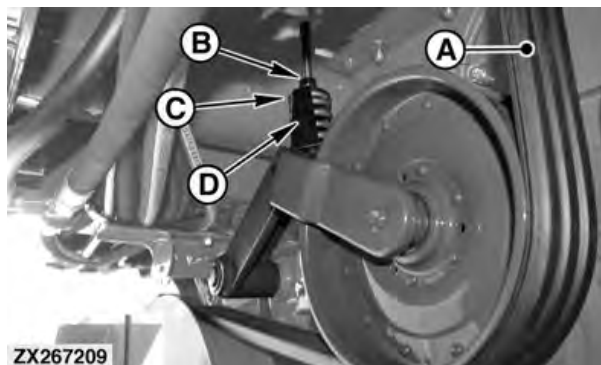
Adjust Feeder House Belt Tension

CAUTION: Shut off engine, set park brake and remove key.

To adjust tension of feeder house drive belt (A), tighten nuts (B) until washer (C) aligns with end of gauge (D) at tensioner.

A—Belt
B—Nut

C—Washer
D—Gauge



ZX267209 —UN—11JAN16

OUC002,0004983 -19-12JAN16-1/1

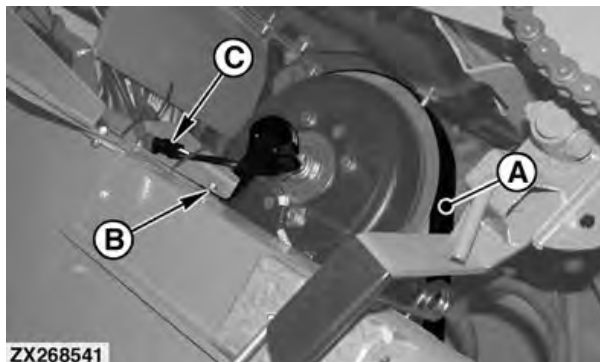
Replace Feeder House Belt (W Series)

CAUTION: Shut off engine, set park brake and remove key.

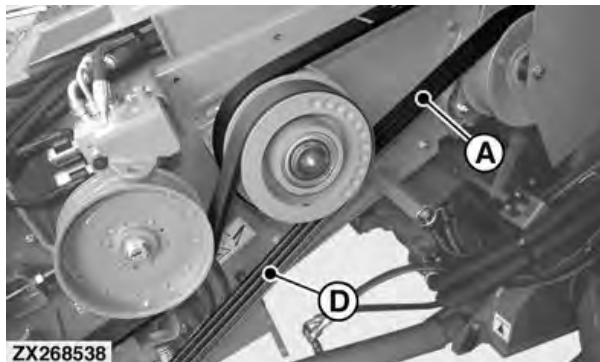
To replace feeder house drive belt (A), proceed as follows:

1. Remove electric clutch module strap cap screw (B) and disconnect connector (C).
2. Remove feeder house reverser belt (D). See **Replace Feeder House Reverser Belt** section.
3. Loosen nuts (E) on feeder house drive tensioner (F) and remove drive belt (A) from electric clutch.
4. Install new feeder house drive belt (A) in reverse order.
5. Apply tension to drive belts (A) and (D). See **Adjust Feeder House Belt Tension** section.

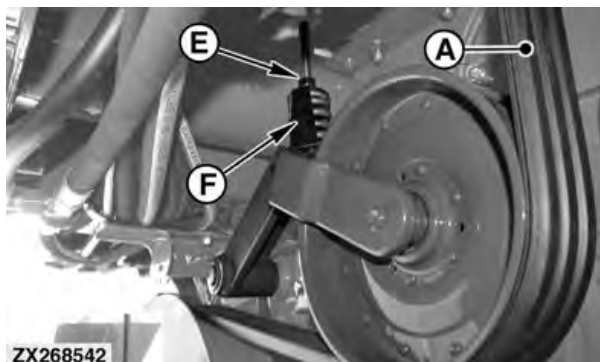
A—Belt—Feeder House Drive	D—Belt—Feeder House Reverser Drive
B—Cap Screw	E—Nut
C—Harness Connector	F—Tensioner



ZX268541 —UN—11 JAN16



ZX268538 —UN—11 JAN16



ZX268542 —UN—11 JAN16

OUCC002,0004982 -19-12JAN16-1/1

Replace Feeder House Belt (T Series)

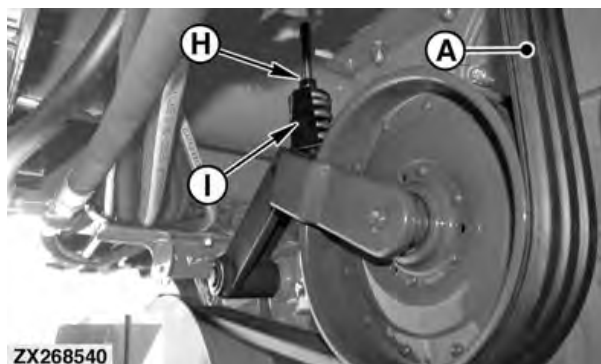
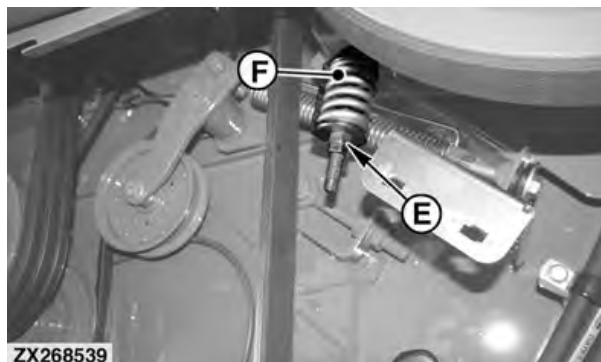
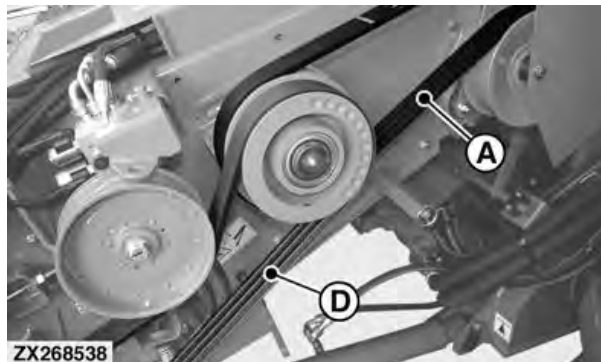
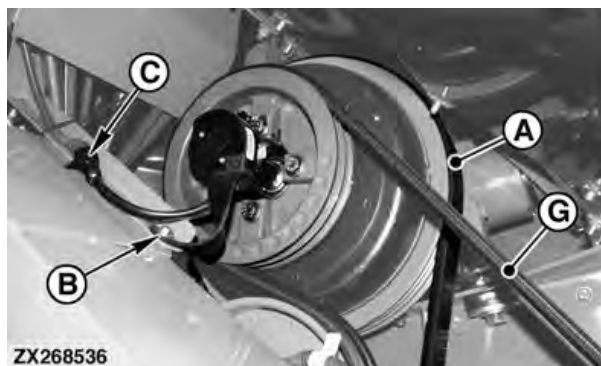
CAUTION: Shut off engine, set park brake and remove key.

To replace feeder house drive belt (A), proceed as follows:

1. Remove electric clutch module strap cap screw (B) and disconnect connector (C).
2. Remove feeder house reverser belt (D). See **Replace Feeder House Reverser Belt** section.
3. Loosen nuts (E) of overshoot beater belt tensioner (F) to relieve belt tension.
4. Remove drive belt (G) from electric clutch.
5. Loosen nuts (H) on feeder house drive tensioner (I) and remove drive belt (A) from electric clutch.
6. Install new feeder house drive belt (A) in reverse order.
7. Apply tension to drive belts (A), (D), and (G). See **Adjust Feeder House Belt Tension**, **Adjust Feeder House Reverser Belt Tension**, and **Adjust Overshot Beater Belt Tension (T Series)** sections.

A—Belt—Feeder House Drive
B—Cap Screw
C—Harness Connector
D—Belt—Feeder House Reverser Drive
E—Nut

F—Tensioner—Overshot Beater Drive
G—Belt—Overshot Beater Drive
H—Nut
I—Tensioner



OUCC002,0004981 -19-12JAN16-1/1

ZX268536 —UN—11JAN16

ZX268538 —UN—11JAN16

ZX268539 —UN—11JAN16

ZX268540 —UN—11JAN16

Replace Threshing Cylinder Rasp Bars

CAUTION: Shut OFF engine, set the park brake, and remove key.

IMPORTANT: If a rasp bar is replaced, always replace the opposite bar to avoid cylinder imbalance.

Make sure to replace bent rasp bars.

IMPORTANT: Pay attention to the rasp bar teeth orientation (see arrows) and install rasp bars in the same way as original arrangement.

Lower feeder house. To help rotating the threshing cylinder on machine:

- **With Single-Range Cylinder Drive** — Release tension of the cylinder drive belt.
- **With Dual-Range Cylinder Drive** — Remove pin on cylinder drive.

Remove feeder house rear cover (A).

Remove cap screws (B) on both sides and turn handles (C). Remove threshing cylinder service flap (D).

IMPORTANT: One rasp bar is held on both sides by a cap screw (F) AND a washer. Re-install washer at same location when installing relevant rasp bar. These rasp bar is used for initial concave adjustment (see **Adjust Concave Initial Position** section).

Check rasp bars (E) for wear condition and replace if necessary.

Tighten cap screws (F) to **130 N·m (95 lb·ft)**.

IMPORTANT: To provide a good support for the flange nut (G), always use square washer (H).

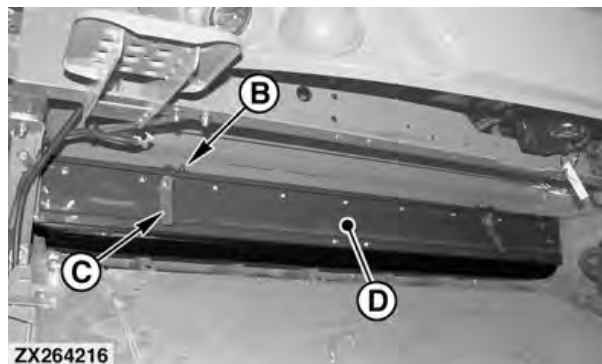
On machine with single-range cylinder drive, adjust tension of the cylinder drive belt (see **Adjust Cylinder Drive Belt Tension** section).

A—Cover
B—Cap Screw
C—Handle
D—Service Flap

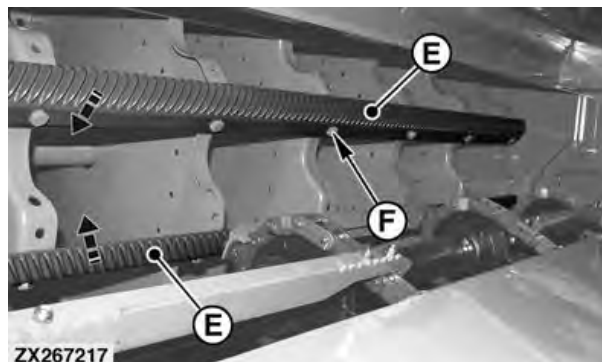
E—Rasp Bar
F—Cap Screw
G—Flange Nut
H—Square Washer



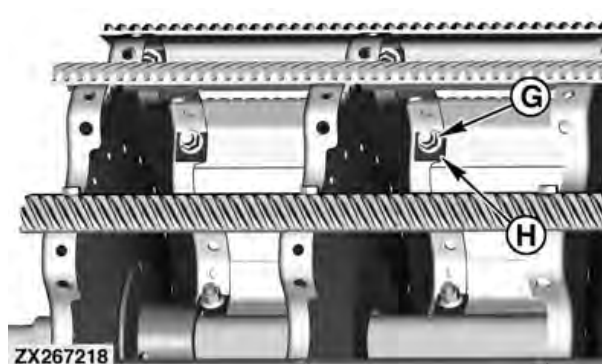
ZX267215 —UN—21DEC15



ZX267216 —UN—21DEC15



ZX267217 —UN—21DEC15



ZX267218 —UN—21DEC15

OUC002,000493E -19-08JAN16-1/1

Replace Threshing Cylinder Filler Plates (If Equipped)

The machine can be equipped with two types of threshing cylinder filler plates:

- Cylinder filler plates (A) for corn and sunflower.

NOTE: Required if unthreshed or broken cobs leave the machine.

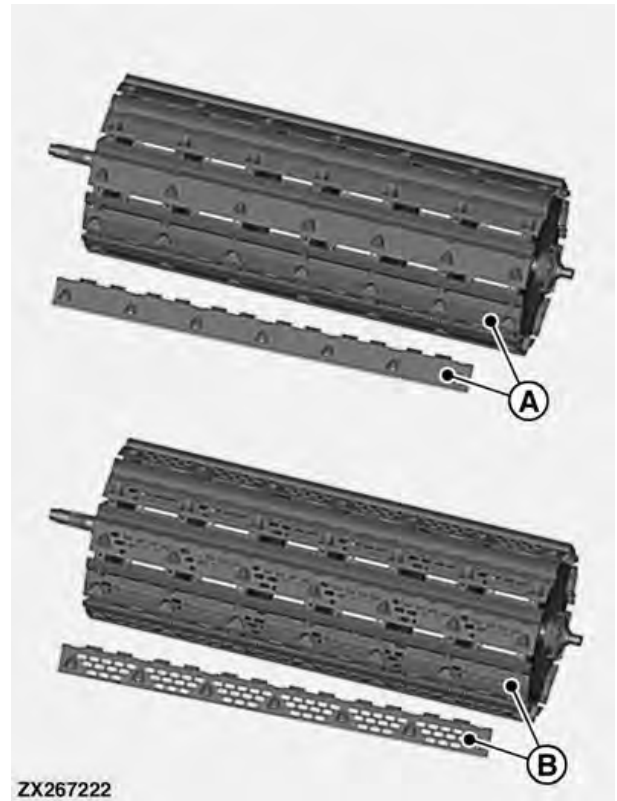
- Perforated cylinder filler plates (B) for peas and beans.

NOTE: Required if shells leave the machine and no other adjustment can help.

To replace filler plate (A) or (B), proceed as follows:

A—Cylinder Filler Plates

B—Perforated Cylinder Filler Plates



ZX267222

ZX267222 —UN—29DEC15

Continued on next page

OUC002,000493F -19-08JAN16-1/2

CAUTION: Shut OFF engine, set the park brake, and remove key.

Lower feeder house. To help rotating the threshing cylinder on machine:

- **With Single-Range Cylinder Drive** — Release tension of the cylinder drive belt.
- **With Dual-Range Cylinder Drive** — Remove pin on cylinder drive.

Remove feeder house rear cover (A).

Remove cap screws (B) on both sides and turn handles (C). Remove threshing cylinder service flap (D).

Filler plates (E) are required for harvesting corn.

Tighten cap screws (F) to **70 N·m (50 lb·ft)**.

On machine with single-range cylinder drive, adjust tension of the cylinder drive belt (see **Adjust Cylinder Drive Belt Tension** section).

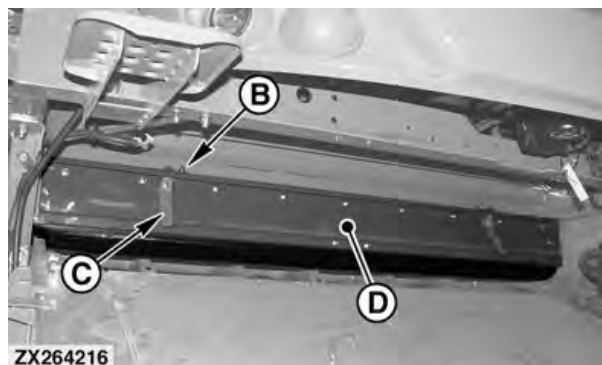
A—Cover
B—Cap Screw
C—Handle
D—Service Flap

E—Filler Plate
F—Cap Screw
G—Rasp Bar



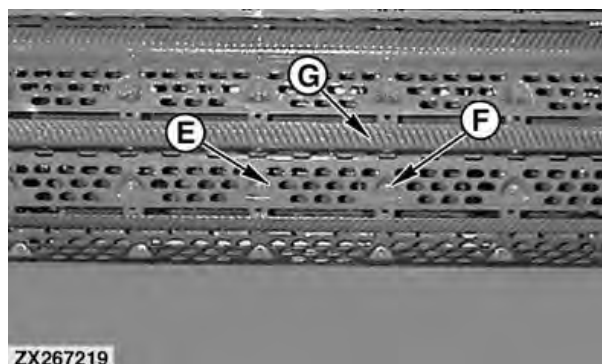
ZX267215

ZX267215—UN—21DEC15



ZX264216

ZX267216—UN—21DEC15



ZX267219

ZX267219—UN—29DEC15

OUCC002,000493F -19-08JAN16-2/2

Check Cylinder Drive Reduction Gear Oil Level

Move arrow mark (A) to upper position for checking the oil level in cylinder drive reduction gear.

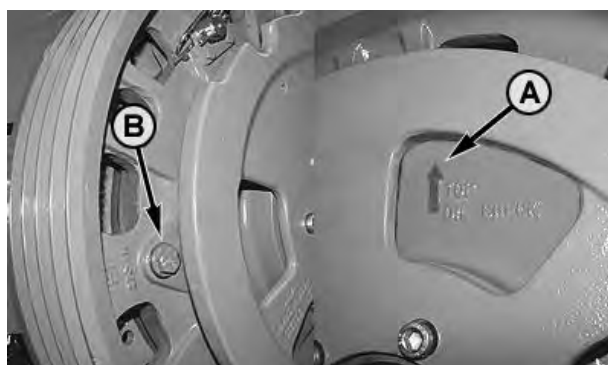
Check oil level at plug (B).

IMPORTANT: Check cylinder drive reduction oil level every 400 operating hours or every year.

NOTE: Transmission oil level must be up to the bottom edge of check plug bore.

A—Arrow Mark

B—Level Plug



ZX1038336—UN—20OCT09

OUCC002,0004940 -19-08JAN16-1/1

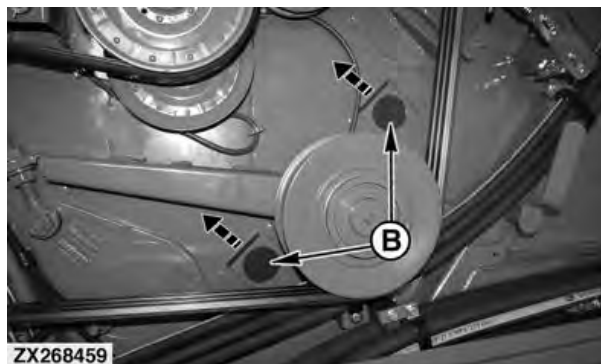
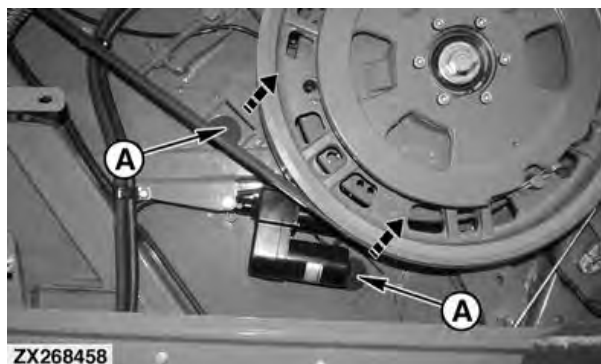
Adjust Concave Initial Position

Adjust concave initial position in the following step order:

1. Remove inspection hole covers (A) and (B).

A—Cover—Right Side

B—Cover—Left Side



ZX268458 —UN—30DEC15

ZX268459 —UN—30DEC15

OUC002,0004941 -19-08JAN16-1/11

2. Open concave

To help rotating the threshing cylinder on machine:

- **With Single-Range Cylinder Drive** — Release tension of the cylinder drive belt (A).
- **With Dual-Range Cylinder Drive** — Remove pin (B) from cylinder drive.

Open the concave fully until the clutch on the adjusting motor makes a ratcheting sound.

A—Drive Belt

B—Locking Pin



ZX268460 —UN—30DEC15

ZX268461 —UN—30DEC15

Continued on next page

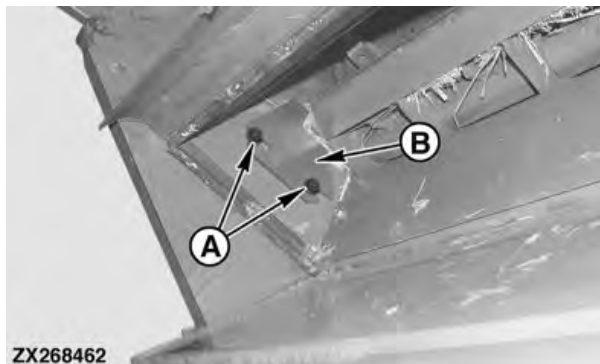
OUC002,0004941 -19-08JAN16-2/11

3. Loosen concave stop

Open stone trap then loosen cap screws (A) of concave stop (B).

A—Cap Screw

B—Stop



ZX268462

ZX268462 — UN — 30DEC15

OUC002,0004941 -19-08JAN16-3/11

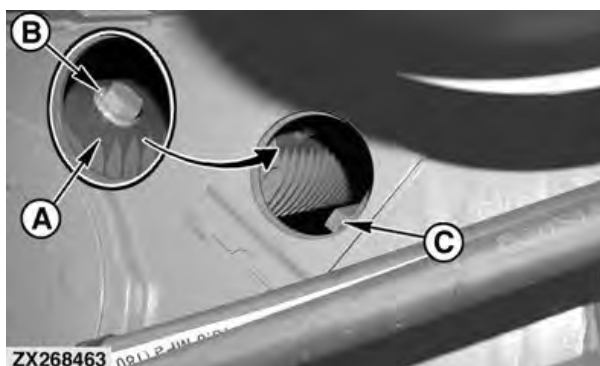
4. Close concave

Rotate cylinder until rasp bar (A) with washer (B) appears in the front inspection hole.

Close the concave until the concave crossbar (C) appears in the inspection hole.

A—Rasp Bar
B—Washer

C—Crossbar



ZX268463

ZX268463 — UN — 30DEC15

Inspection Hole—Left-hand side shown

OUC002,0004941 -19-08JAN16-4/11

5. Insert gauge in front right inspection hole

Insert gauge 5 mm (0.20 in) into front inspection hole.

Slowly close the concave until the rasp bar touches the gauge and a ratcheting sound is heard.



ZX268464

ZX268464 — UN — 30DEC15

Continued on next page

OUC002,0004941 -19-08JAN16-5/11

6. Insert gauge in front left inspection hole

Go to the left side of the machine and insert gauge into the front inspection hole between the rasp bar and the concave; it should fit firmly.

If adjustment is necessary, loosen screw (A) on eyebolt and adjust nuts (B) to obtain correct clearance.

Tighten screw (A) to **285 N·m (200 lb·ft)**.

Remove gauge from the left side of the concave then fully open concave.

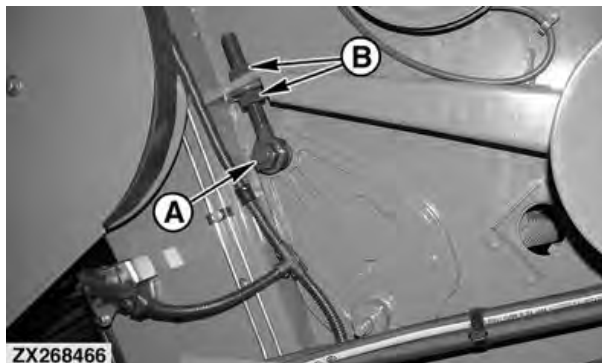
A—Screw

B—Nut



ZX268465

ZX268465 —UN—30DEC15



ZX268466

ZX268466 —UN—30DEC15

OUC002,0004941 -19-08JAN16-6/11

7. Insert gauge in rear right inspection hole

Rotate cylinder clockwise until rasp bar with washer is visible in the rear inspection hole.

Insert gauge into the rear right inspection hole.

Slowly close concave until the rasp bar is resting against the gauge and a ratcheting sound is heard. If a ratcheting sound is heard before the concave touches the cylinder, adjustment is necessary.

Loosen screw (A) on eyebolt and adjust nuts (B).

Tighten screw (A) to **285 N·m (200 lb·ft)**.

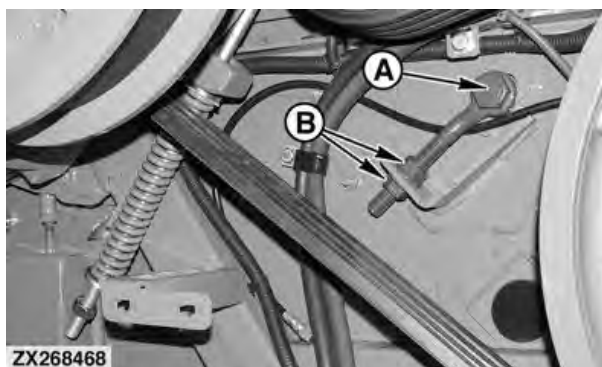
A—Screw

B—Nut



ZX268467

ZX268467 —UN—30DEC15



ZX268468

ZX268468 —UN—30DEC15

Continued on next page

OUC002,0004941 -19-08JAN16-7/11

8. Insert gauge in rear left inspection hole

Go to the left side of the combine and insert gauge into rear left inspection hole between the rasp bar and the concave; it should fit firmly.

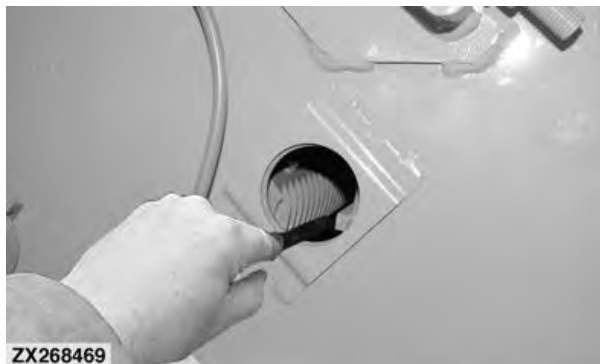
If adjustment is needed, loosen retaining screw (A) and adjust nuts (B) to obtain correct clearance.

Tighten screw (A) to **285 N·m (200 lb·ft)**.

Open the concave completely.

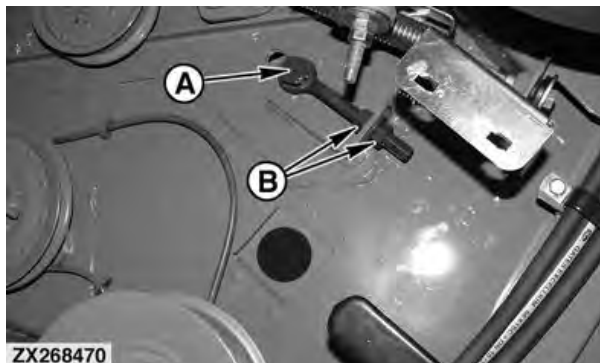
A—Screw

B—Nut



ZX268469

ZX268469 —UN—30DEC15



ZX268470

ZX268470 —UN—30DEC15

OUCC002,0004941 -19-08JAN16-8/11

9. Insert gauge in front right inspection hole

Rotate the cylinder counterclockwise until the rasp bar with the washer is visible in the front inspection hole.

Slowly close the concave until the concave crossbar appears in the inspection hole.

Insert the gauge between the rasp bar and the concave.

Close the concave until the rasp bar is against the gauge and a ratcheting sound is heard.



ZX268464

ZX268464 —UN—30DEC15

Continued on next page

OUCC002,0004941 -19-08JAN16-9/11

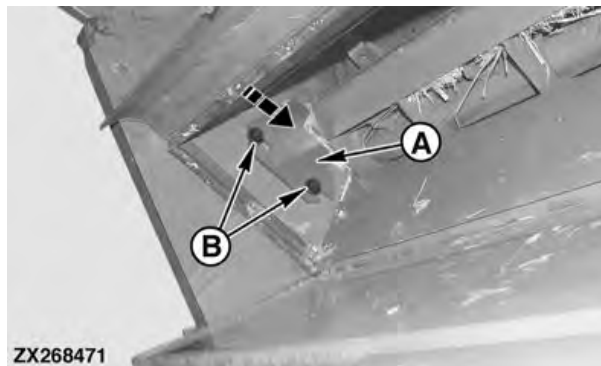
10. **Secure concave stop**

Slide concave stop (A) against the concave and retighten cap screws (B) securing stop.

After adjusting the concave, rotate the cylinder by hand to make sure that it rotates freely then perform the Threshing Clearance Calibration procedure (see **Calibration Procedures** section).

A—Stop

B—Cap Screw



ZX268471 —UN—30DEC15

Continued on next page

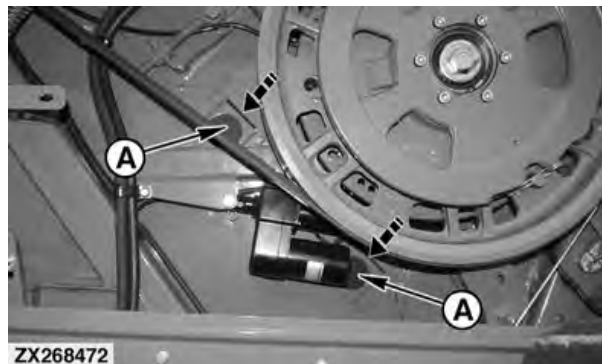
OUCC002,0004941 -19-08JAN16-10/11

11. Install inspection hole covers (A) and (B) back in place.

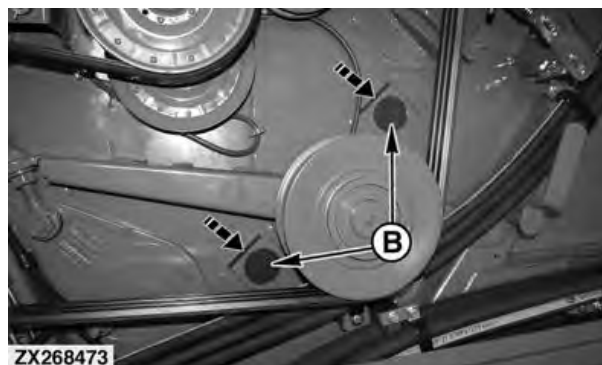
- **Machine With Single-Range Cylinder Drive** —
Adjust tension of the cylinder drive belt (C).
- **Machine With Dual-Range Cylinder Drive** —
Install and retain pin (D) on cylinder drive.

A—Cover
B—Cover

C—Drive Belt
D—Locking Pin



ZX268472 —UN—30DEC15



ZX268473 —UN—30DEC15



ZX268474 —UN—30DEC15



ZX268475 —UN—30DEC15

OUCC002,0004941 -19-08JAN16-11/11

Adjust Cylinder Drive Gap

CAUTION: Shut off engine, set park brake and remove key.

Run cylinder sheaves to close the intermediate sheaves. Sheave gap must be 6 mm (0.24 in).

IMPORTANT: A sheave gap more than 8 mm (0.32 in) limits the sheave travel. Any of these failures can occur when drive is operated at the high end of either low or high range:

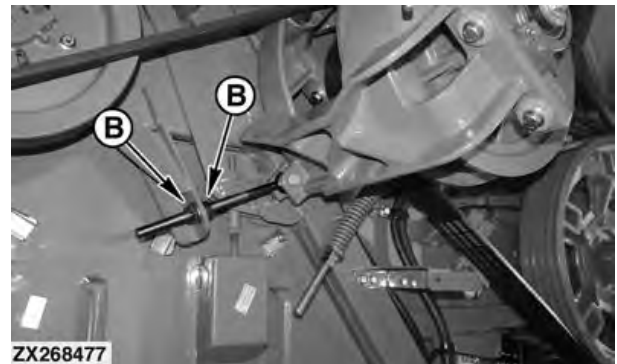
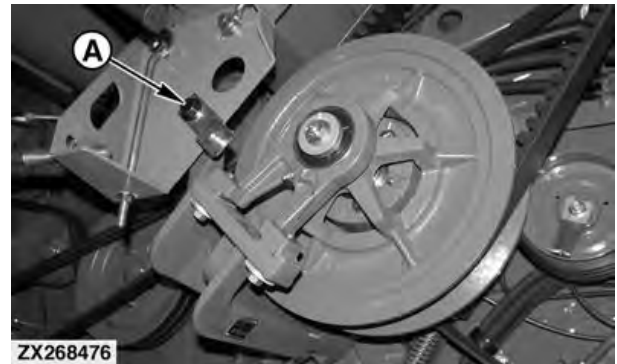
- Belt failure
- Belt stretch
- Bearing failure
- Shaft failure

A sheave gap less than 4 mm (0.16 in) limits torque sensing. Any of these failures can occur when drive is operated at the low end of either low or high range:

- Belt failure
- Belt slipping (burning)

To adjust sheave gap, loosen bolt (A) then use nuts (B) to get a 6 mm (0.24 in) gap.

Tighten bolt (A).



A—Bolt

B—Nut

OUCC002,00048FB -19-30DEC15-1/1

ZX268476 —UN—30DEC15

ZX268477 —UN—30DEC15

Replace Cylinder Intermediate Belt

Replace cylinder intermediate belt (A) as follows:

1. Run cylinder drive at slowest speed.

CAUTION: Shut off engine, set park brake and remove key.

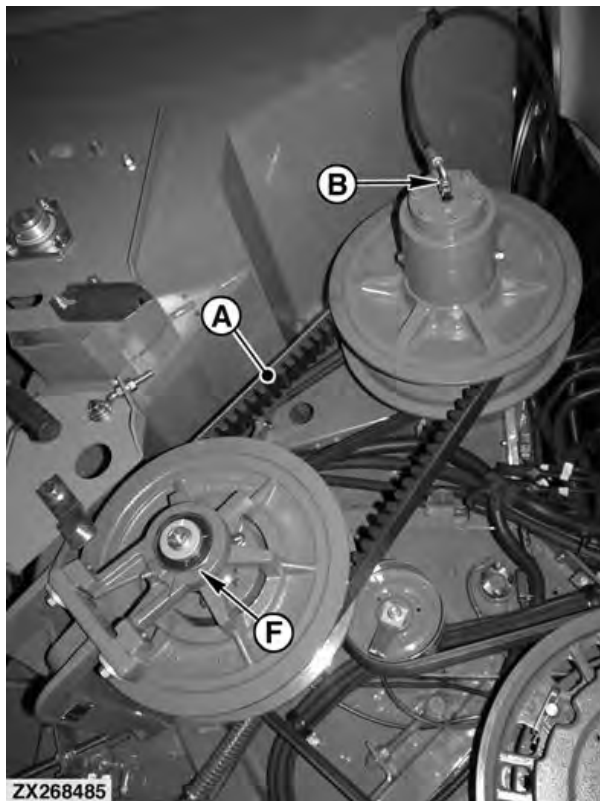
2. Disconnect hydraulic hose (B).

CAUTION: Lower variable sheave is under spring tension; if belt is removed, it will snap back to a closed position.

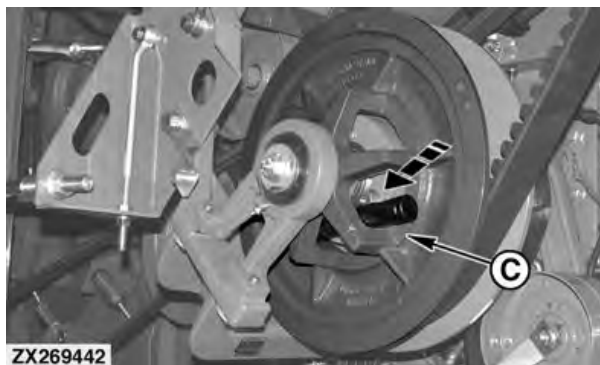
3. Place a block of wood in opening of sheave (C) to hold sheave apart.
4. Relieve belt tension at tensioner (D).
5. Remove two bolts (E),
6. Swing mounting (F) aside and remove belt (A).
7. Install new belt and check alignment (see **Align Cylinder Drive** section).

A—Belt
B—Hydraulic Hose
C—Sheave

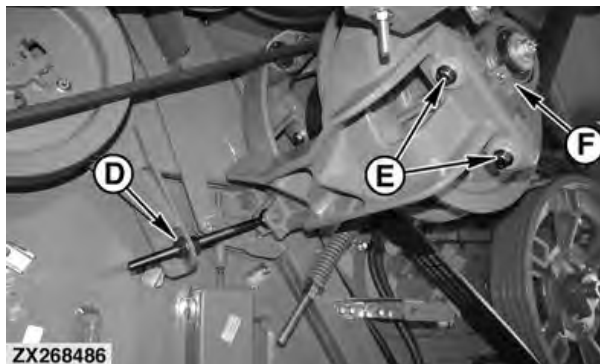
D—Tensioner
E—Bolts
F—Mounting



ZX268485 —UN—11JAN16



ZX269442 —UN—11JAN16



ZX268486 —UN—11JAN16

OUCC002,000494A -19-08JAN16-1/1

Align Cylinder Drive

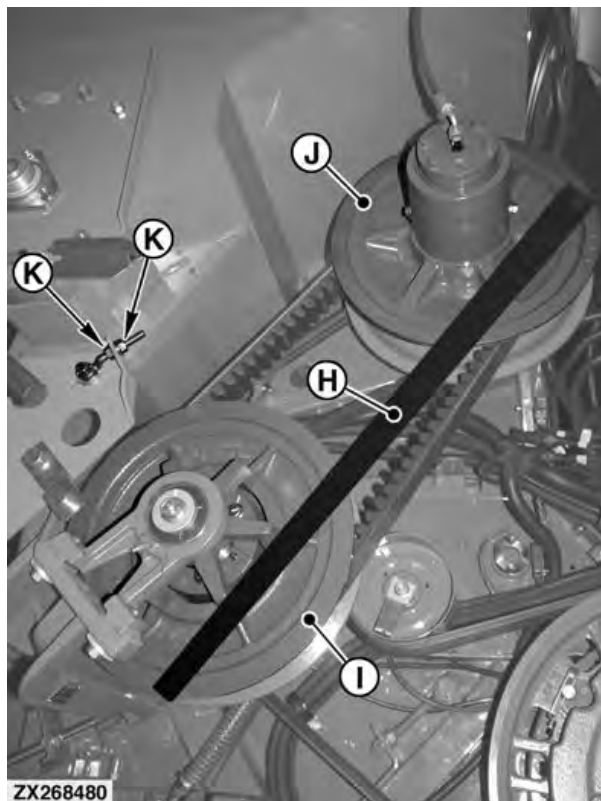
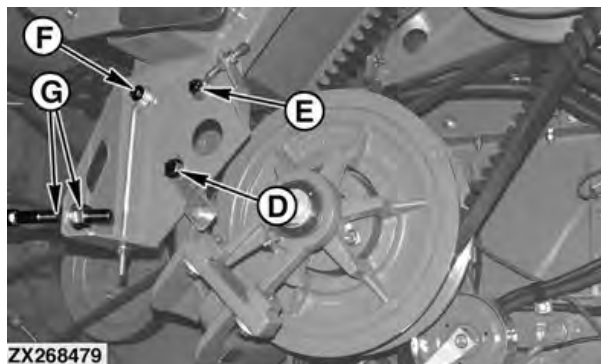
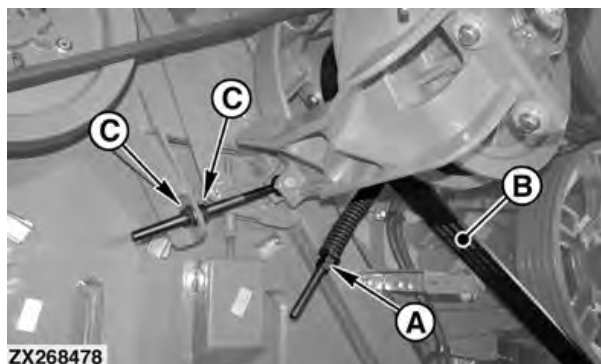
CAUTION: Shut off engine, set park brake and remove key.

Align cylinder drive as follows:

1. Loosen nuts (A) to remove tension from cylinder drive belt (B).
2. Loosen countershaft assembly with nuts (C).
3. Loosen flange screws (D), (E), and (F).
4. Loosen nuts (G).
5. Using a straight edge (H), check the alignment of the countershaft sheaves (I) to the sheaves on the primary countershaft (J).
6. The countershaft sheaves (I) must be aligned with the primary countershaft sheaves (J) within ± 2 mm (0.08 in). Adjust alignment using nuts (K).
7. Tighten nuts (K).

A—Nuts
B—Drive Belt
C—Nut
D—Flange Screw
E—Flange Screw
F—Flange Screw

G—Nut
H—Straight Edge
I—Countershaft Sheave
J—Primary Countershaft Sheave
K—Nut



Continued on next page

OUCC002,00049BB -19-15JAN16-1/2

ZX268478 —UN—30DEC15

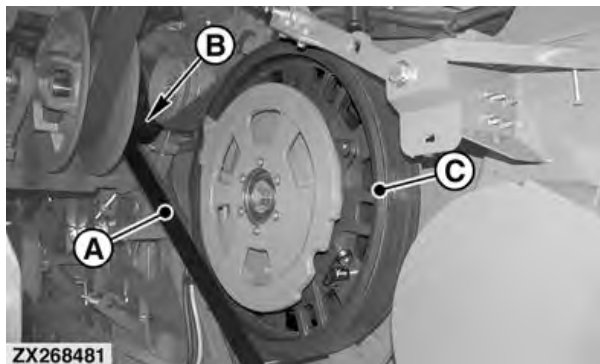
ZX268479 —UN—30DEC15

ZX268480 —UN—30DEC15

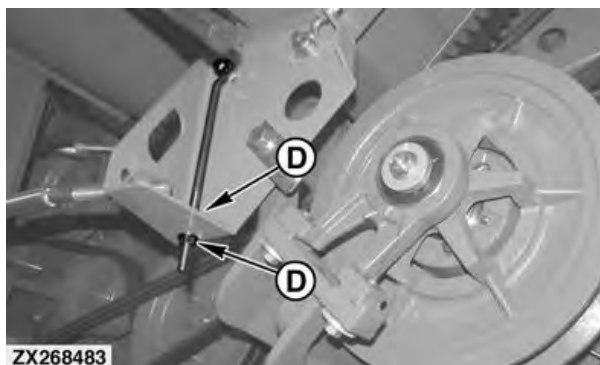
8. Using a straight edge (A), check the alignment of the countershaft sheaves (B) to the sheaves on the cylinder drive (C).
9. The countershaft sheave (B) must be aligned with the cylinder drive sheave (C) within ± 2 mm (0.08 in). Adjust alignment using nuts (D).
10. Tighten flange screws (E), (F) and (G).
11. Tighten nuts (H).
12. Readjust cylinder drive gap (see **Adjust Cylinder Drive Gap** section).
13. Adjust tension of cylinder drive belt (see **Adjust Cylinder Drive Belt Tension** section).

A—Straight Edge
B—Countershaft Sheave
C—Cylinder Drive Sheave
D—Nut

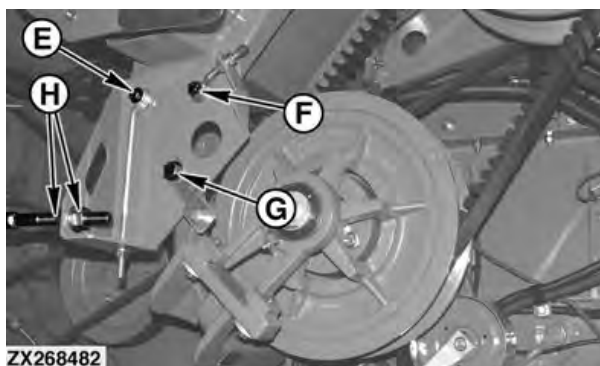
E—Flange Screw
F—Flange Screw
G—Flange Screw
H—Nut



ZX268481 —UN—15JAN16



ZX268483 —UN—30DEC15



ZX268482 —UN—30DEC15

OUC002,00049BB -19-15JAN16-2/2

Adjust Cylinder Drive Belt Tension

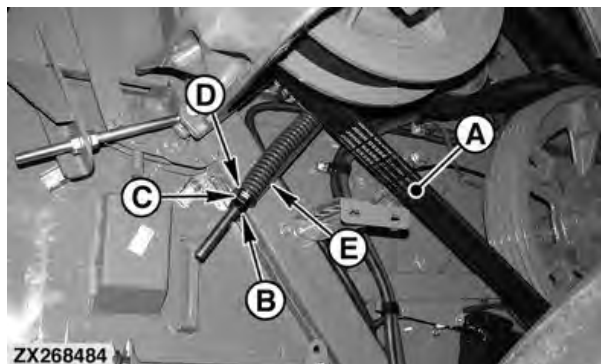
CAUTION: Shut off engine, set park brake and remove key.

Adjust tension of drive belt (A) as follows:

1. Loosen lock nut (B).
2. Tighten nuts (C) until washer (D) aligns with the end of gauge (E).
3. Tighten lock nut (B).

A—Drive Belt
B—Lock Nut
C—Nut

D—Washer
E—Gauge



OUC002,00048FC -19-31DEC15-1/1

ZX268487 —UN—02JAN16

ZX268484 —UN—02JAN16

Replace Cylinder Drive Belt

Replace cylinder drive belt (A) as follows:

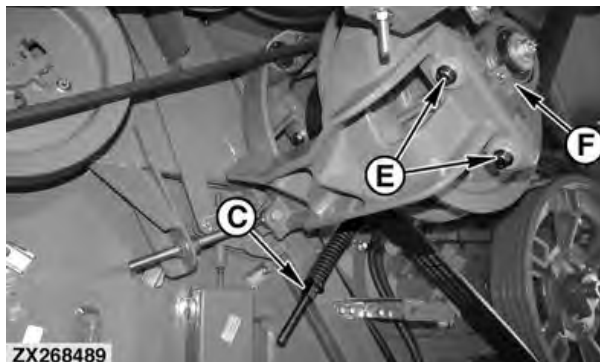
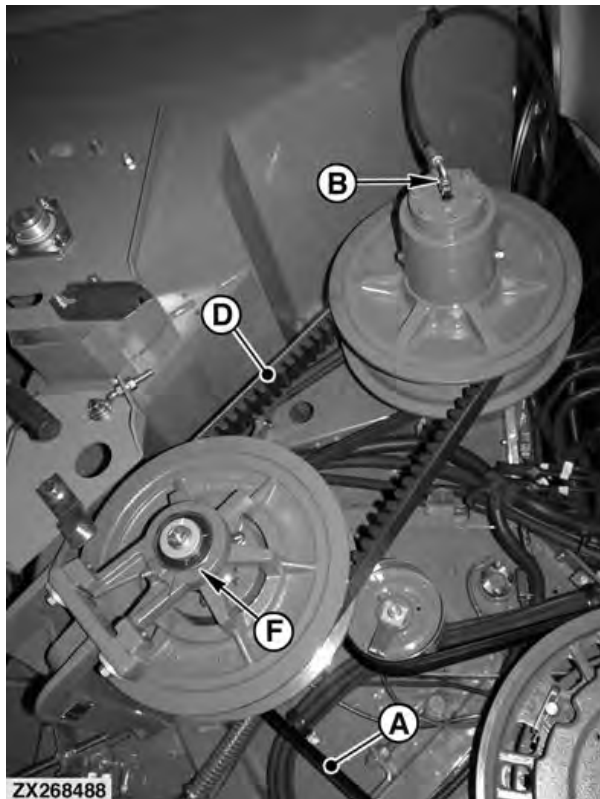
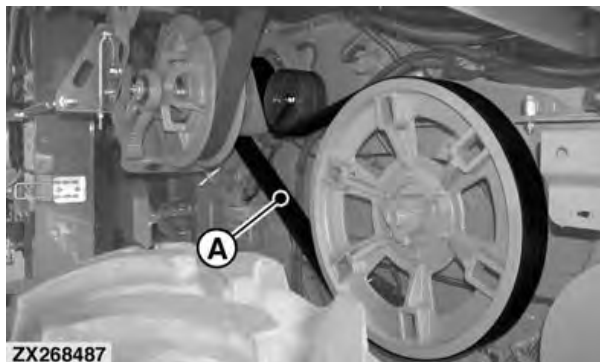
1. Run cylinder drive at slowest speed.

⚠ CAUTION: Shut off engine, set park brake and remove key.

2. Disconnect hydraulic hose (B).
3. Loosen lock nut (C) to relieve tension on cylinder belt (A).
4. Roll cylinder belt (A) under cylinder intermediate belt (D).
5. Remove two bolts (E) and swing mounting (F) aside.
6. Remove cylinder belt (A).
7. Install a new belt then adjust cylinder belt tension (see **Adjust Cylinder Drive Belt Tension** section).
8. Check alignment of intermediate belt (D) (see **Align Cylinder Drive** section).

A—Cylinder Drive Belt
B—Hydraulic Hose
C—Lock Nut

D—Cylinder Intermediate Belt
E—Bolts
F—Mounting



ZX268487 —UN—02JAN16

ZX268488 —UN—02JAN16

ZX268489 —UN—02JAN16

OUC002,0004949 -19-08JAN16-1/1

Adjust Beater Belt Tension (W Series)

CAUTION: Shut off engine, set park brake and remove key.

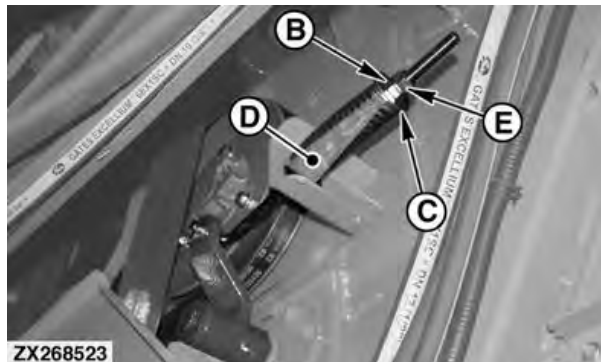
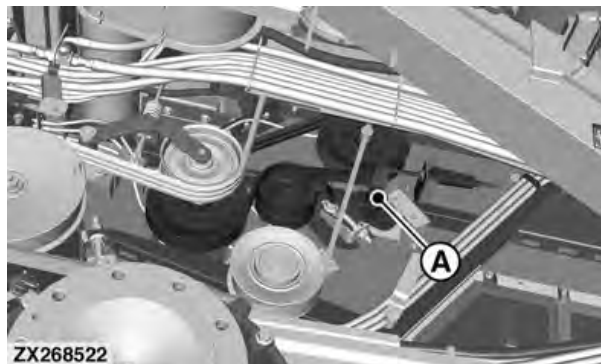
The beater drive belt idler (A) is located on the left side of the machine behind the tailings elevator.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut



OUC002,0004946 -19-08JAN16-1/1

ZX268522 —UN—11JAN16

ZX268523 —UN—11JAN16

Replace Beater Belt (W Series)

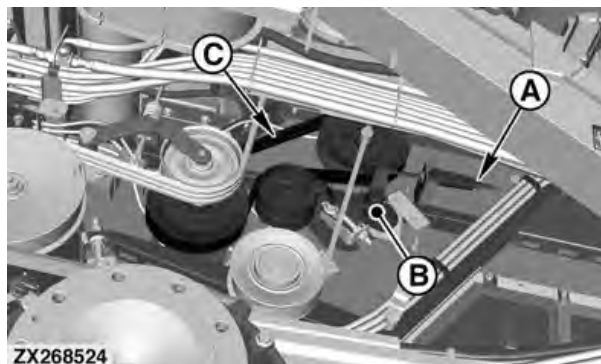
CAUTION: Shut off engine, set park brake and remove key.

Loosen nuts (A) of idler (B) to relieve belt tension then remove belt (C).

Install new belt (C) and adjust idler (B). See **Adjust Beater Belt Tension (W Series)** section.

A—Nut
B—Idler

C—Belt



OUC002,0004947 -19-08JAN16-1/1

ZX268524 —UN—11JAN16

Adjust Power Separator Belt Tension (W Series—If Equipped)

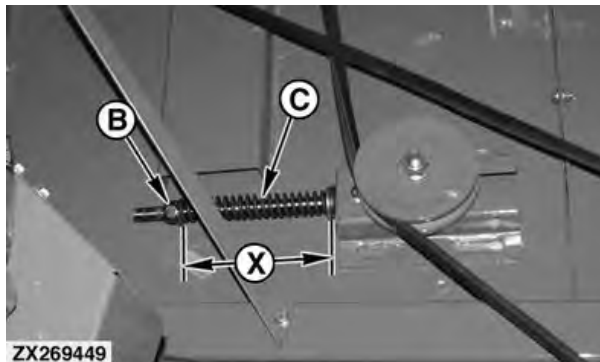
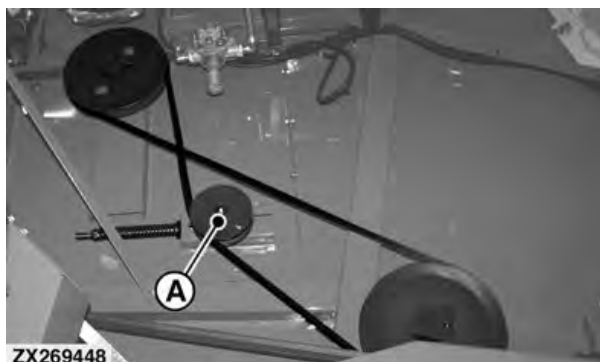
CAUTION: Shut off engine, set park brake and remove key.

The power separator drive belt idler (A) is located on the rear left side of the machine.

To adjust belt tension, tighten nut (B) until length (X) of spring (C) is **169 to 175 mm (6.65 to 6.89 in)**.

A—Idler
B—Nut

C—Spring
X—169 to 175 mm (6.65 to 6.89 in)



ZX269448 —UN—11JAN16

ZX269449 —UN—11JAN16

OUCC002,0004975 -19-12JAN16-1/1

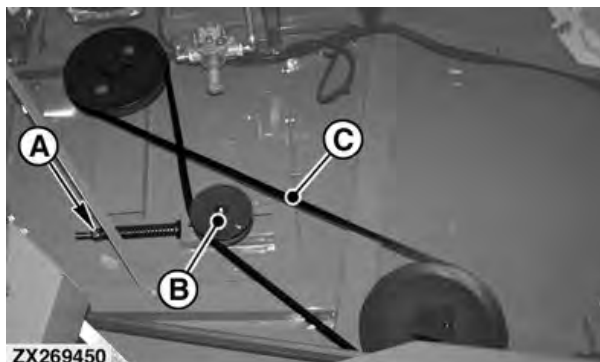
Replace Power Separator Belt (W Series—If Equipped)

CAUTION: Shut off engine, set park brake and remove key.

Loosen nut (A) of idler (B) to relieve belt tension then remove belt (C).

IMPORTANT: Note twisted position and routing of belt (C) for further installation.

Install new belt (C) and adjust idler (B). See **Adjust Power Separator Belt Tension (W Series—If Equipped)** section.



A—Nut
B—Idler

C—Belt

ZX269450 —UN—11JAN16

OUCC002,0004976 -19-12JAN16-1/1

Adjust Belt Tension of Stripper Roller (T Series)

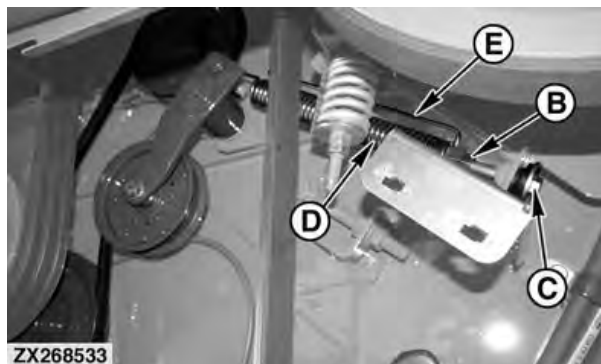
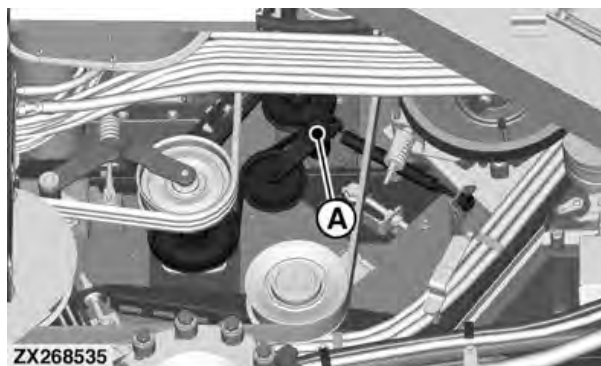
CAUTION: Shut off engine, set park brake and remove key.

The drive belt idler (A) of stripper roller is located on the left side of the machine behind the tailings elevator.

To adjust belt tension, loosen lock nut (B) then tighten adjusting screw (C) until spring (D) has same length as the gauge (E).

Tighten lock nut (B).

A—Idler
B—Lock Nut
C—Adjusting Screw
D—Spring
E—Gauge



ZX268535 —UN—11JAN16

ZX268533 —UN—11JAN16

OUC002,000492D -19-07JAN16-1/1

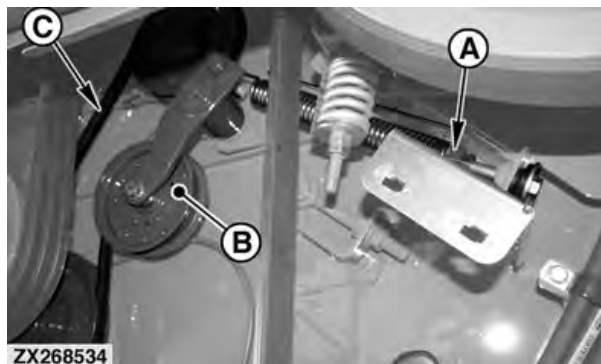
Replace Stripper Roller Belt (T Series)

CAUTION: Shut off engine, set park brake and remove key.

Loosen adjusting screw (A) of idler (B) to relieve belt tension then remove belt (C).

Install new belt (C) and adjust idler (B). See **Adjust Belt Tension of Stripper Roller (T Series)** section.

A—Adjusting Screw
B—Idler
C—Belt



ZX268534 —UN—11JAN16

OUC002,0004930 -19-07JAN16-1/1

Adjust Overshot Beater Belt Tension (T Series)

CAUTION: Shut off engine, set park brake and remove key.

The overshot beater drive belt idler (A) is located on the left side of the machine behind the tailings elevator.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

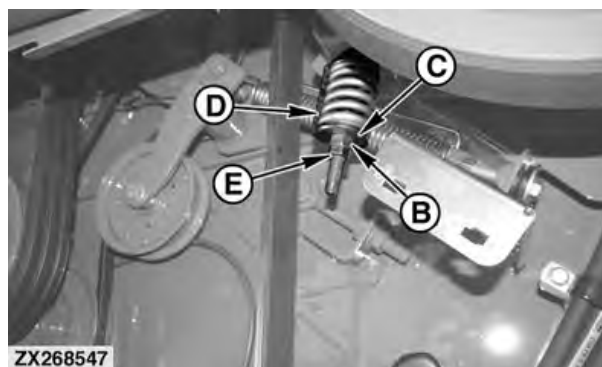
Tighten lock nut (E).

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut



ZX268546 —UN—11JAN16



ZX268547 —UN—11JAN16

OUC002,0004936 -19-07JAN16-1/1

Replace Overshot Beater Belt (T Series)

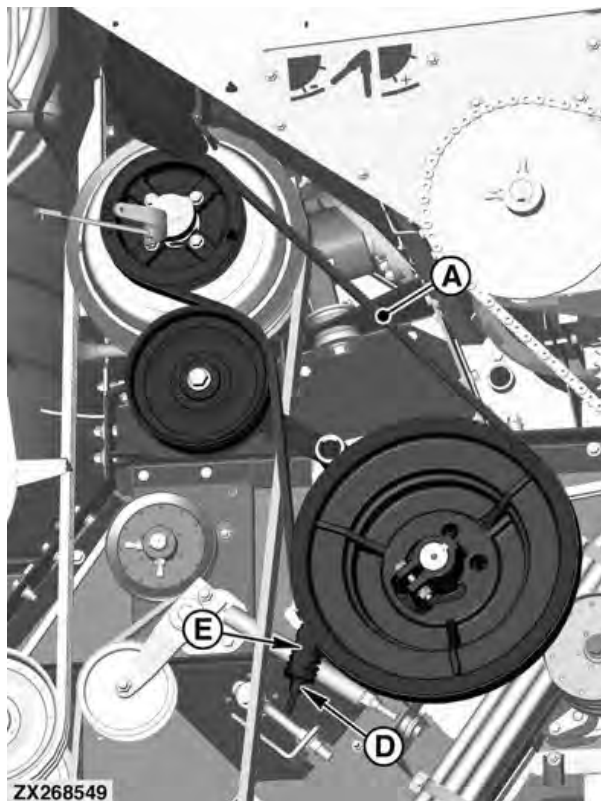
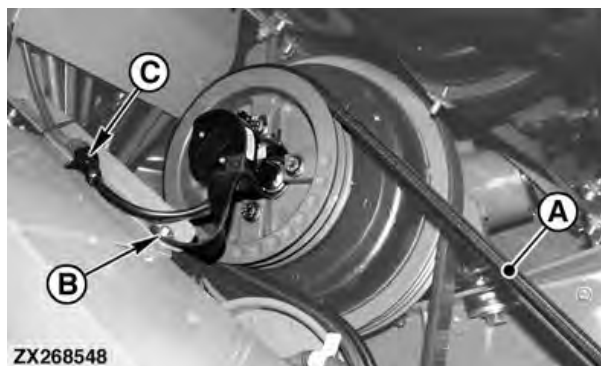
CAUTION: Shut off engine, set park brake and remove key.

To replace overshot beater drive belt (A), proceed as follows:

1. Remove electric clutch module strap cap screw (B) and disconnect connector (C).
2. Loosen nuts (D) of overshot beater belt tensioner (E) to relieve belt tension.
3. Remove drive belt (A).
4. Install new belt (A) in reverse order and adjust belt tensioner (E). See **Adjust Overshot Beater Belt Tension (T Series)** section.

A—Belt
B—Cap Screw
C—Connector

D—Nut
E—Tensioner



ZX268548 —UN—11JAN16

ZX268549 —UN—11JAN16

OUC002,0004942 -19-08JAN16-1/1

Adjust Separator Belt Tension (T Series)

CAUTION: Shut off engine, set park brake and remove key.

The separator belt idler (A) is located on the left side of the machine behind the tailings elevator.

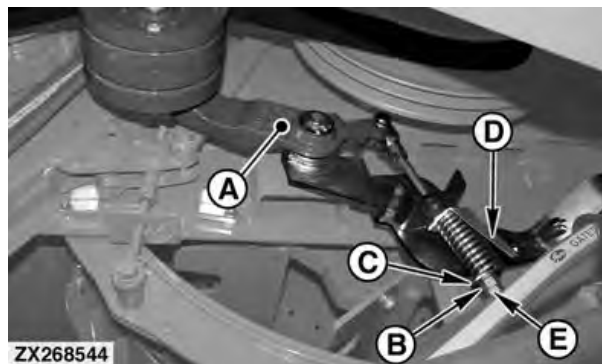
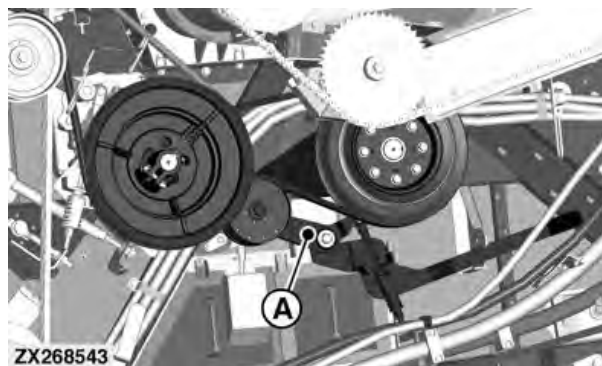
To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

IMPORTANT: To apply tension on drive belt, pull down and engage separator belt idler lever (F) in its retaining hook as shown.

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut
F—Lever



ZX268543 —UN—11 JAN16

ZX268544 —UN—11 JAN16

ZX268545 —UN—11 JAN16

OUC002,0004935 -19-07JAN16-1/1

Replace Separator Belt (T Series)

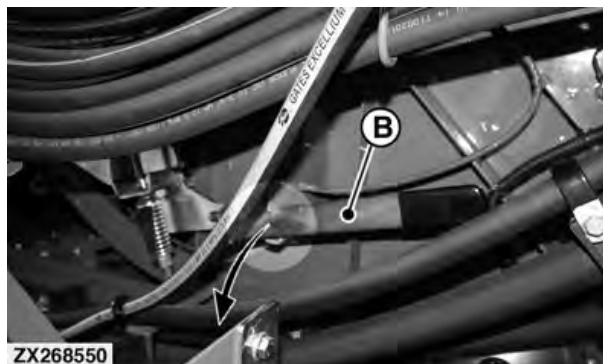
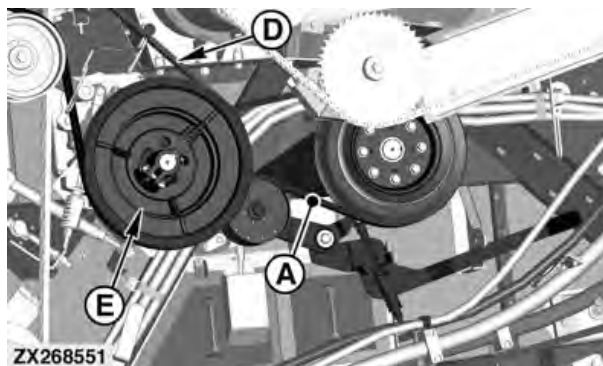
CAUTION: Shut off engine, set park brake and remove key.

To replace separator drive belt (A), proceed as follows:

1. Pull down and disengage separator belt idler lever (B) from its retaining hook to relieve tension of belt (A).
2. Loosen overshot beater drive belt tensioner (C) then remove belt (D) from overshot beater drive sheave (E).
3. Install new belt (A) in reverse order and apply belt tension. See **Adjust Separator Belt Tension (T Series)** section.
4. Install belt (D) back in place and apply belt tension. See **Adjust Overshot Beater Belt Tension (T Series)** section.

A—Belt—Separator Drive
B—Lever
C—Tensioner

D—Belt—Overshot Beater Drive
E—Overshot Beater Drive Sheave



OUC002,0004943 -19-08JAN16-1/1

ZX268551 —UN—11JAN16

ZX268550 —UN—11JAN16

ZX268552 —UN—11JAN16

Adjust Rear Beater Belt Tension (T Series)

CAUTION: Shut off engine, set park brake and remove key.

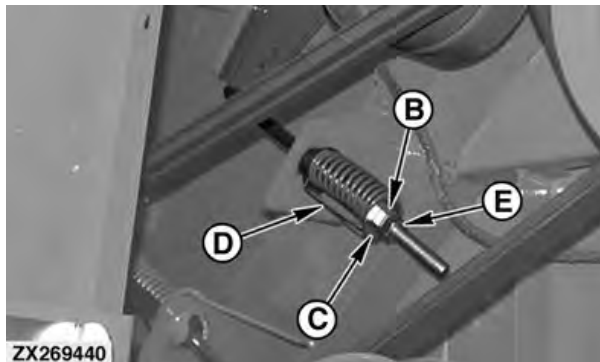
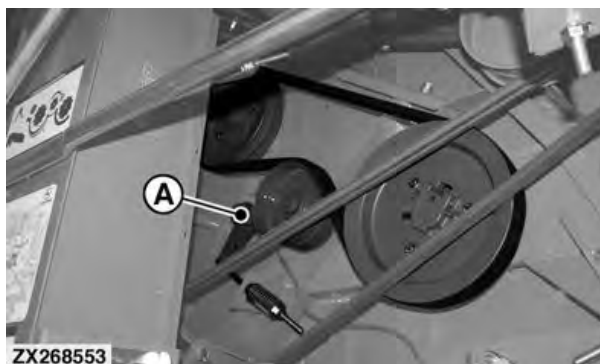
The rear beater drive belt idler (A) is located on the right side of the machine behind the clean grain elevator.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut



OUCC002,0004944 -19-08JAN16-1/1

Replace Rear Beater Belt (T Series)

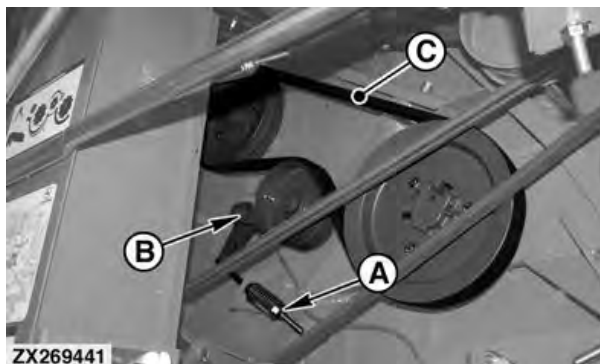
CAUTION: Shut off engine, set park brake and remove key.

Loosen nuts (A) of idler (B) to relieve belt tension then remove belt (C).

Install new belt (C) and adjust idler (B). See **Adjust Rear Beater Belt Tension (T Series)** section.

A—Nut
B—Idler

C—Belt



OUCC002,000495A -19-09JAN16-1/1

Adjust Secondary Countershaft Belt Tension

CAUTION: Shut off engine, set park brake and remove key.

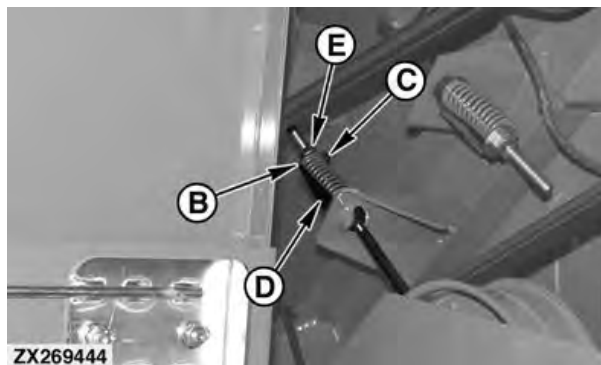
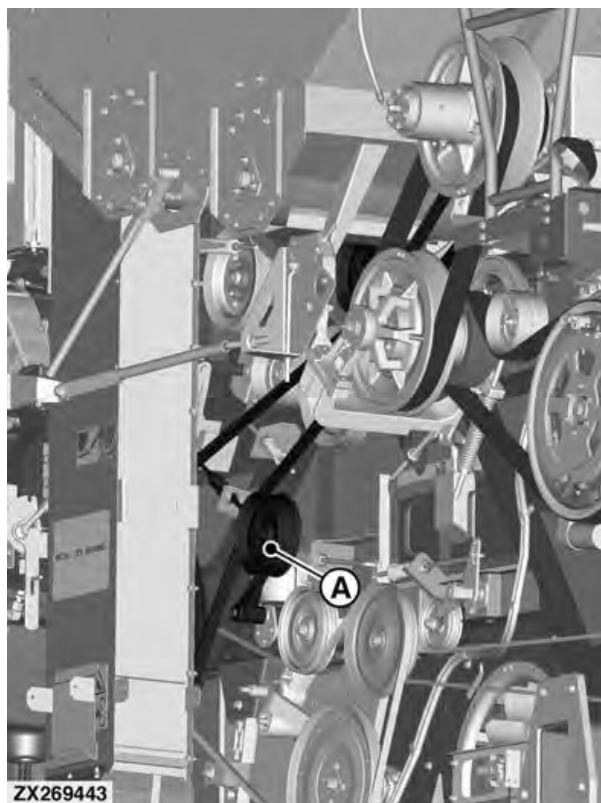
The secondary countershaft drive belt idler (A) is located on the right side of the machine behind the clean grain elevator.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut



ZX269443 —UN—11/JAN16

ZX269444 —UN—11/JAN16

OUC002,000494B -19-08JAN16-1/1

Replace Secondary Countershaft Belt

Replace secondary countershaft belt (A) as follows:

1. Run cylinder drive at slowest speed.

CAUTION: Shut off engine, set park brake and remove key.

2. Relieve belt tension at tensioner (B).

CAUTION: Lower variable sheave is under spring tension; if belt is removed, it will snap back to a closed position.

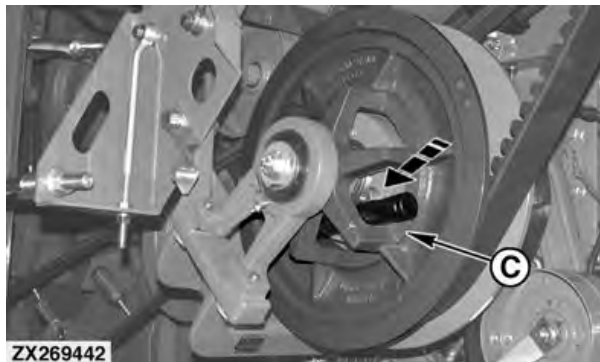
3. Place a block of wood in opening of sheave (C) to hold sheave apart.
4. Disconnect hydraulic hose (D) and relieve tension of cylinder intermediate belt (E) to allow removal of belt (A) from drive sheave (F). See **Replace Cylinder Intermediate Belt** section.

A—Belt—Secondary Countershaft
B—Tensioner
C—Sheave

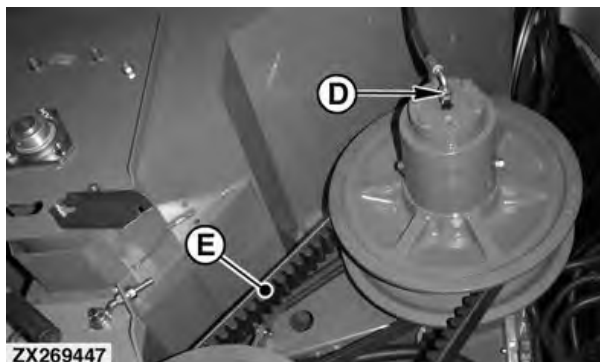
D—Hydraulic Hose
E—Belt—Cylinder Intermediate Drive
F—Sheave



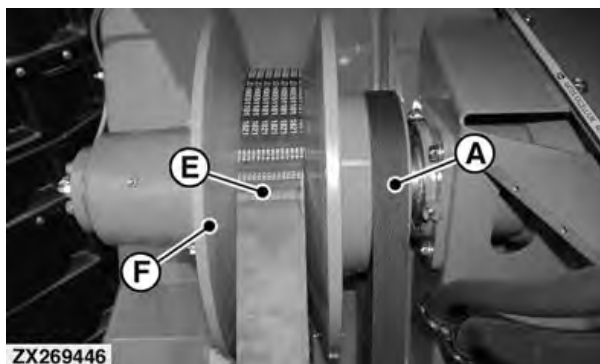
ZX269445 —UN—11JAN16



ZX269442 —UN—11JAN16



ZX269447 —UN—11JAN16



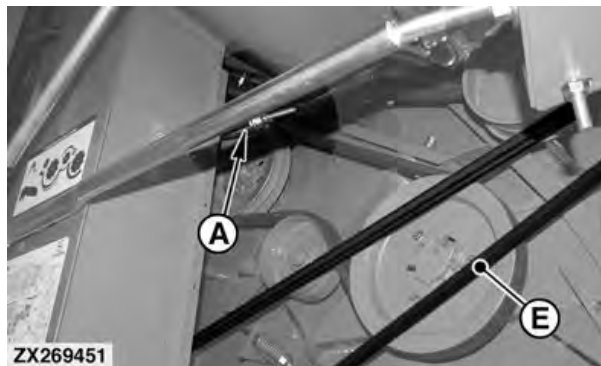
ZX269446 —UN—11JAN16

Continued on next page

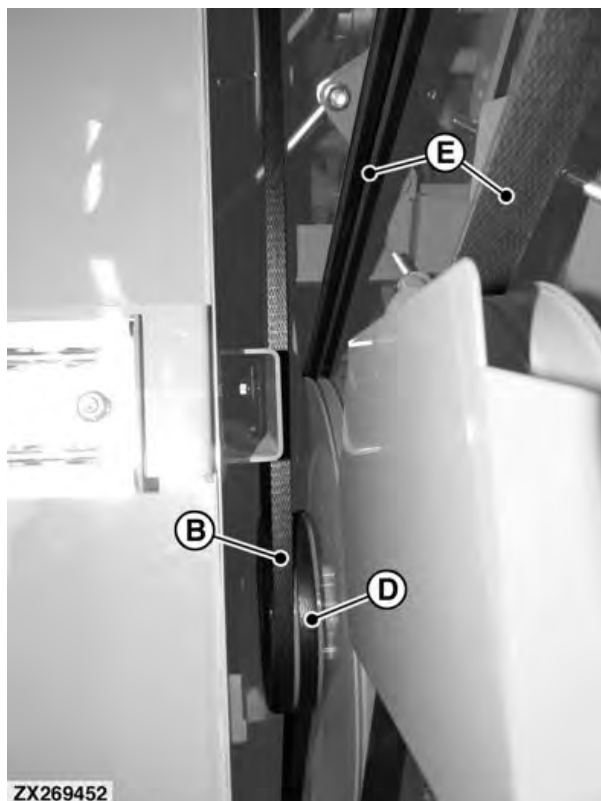
OUCC002.000496C -19-11JAN16-1/3

5. Relieve tension of clean grain elevator belt idler (A) then remove belt (B) from bottom sheave.
6. Relieve tailings elevator belt idler (C) then remove belt (D) from top sheave.
7. Remove secondary countershaft belt (E).

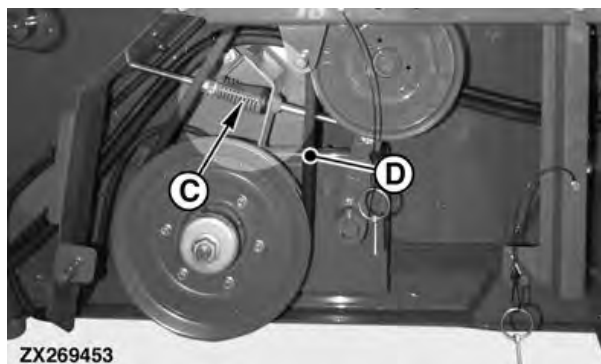
A—Clean Grain Elevator Belt Idler	D—Belt—Tailings Elevator
B—Belt—Clean Grain Elevator	E—Belt—Secondary Countershaft
C—Tailings Elevator Belt Idler	



ZX269451 —UN—11JAN16



ZX269452 —UN—11JAN16



ZX269453 —UN—11JAN16

Continued on next page

OUC002,000496C -19-11JAN16-2/3

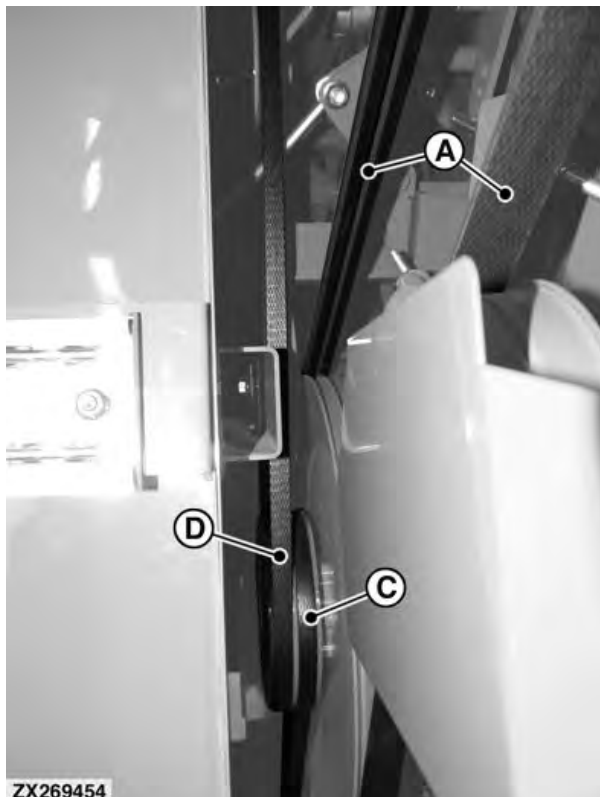
8. Install new belt (A) and adjust tensioner (B). See **Adjust Secondary Countershaft Belt Tension** section.
9. Install tailings elevator belt (C) and adjust tension. See **Adjust Tailings Auger And Elevator Belt Tension** section.
10. Install clean grain elevator belt (D) and adjust tension. See **Adjust Clean Grain Elevator Belt Tension** section.
11. Install cylinder intermediate belt (E) back in place.
12. Check alignment of cylinder intermediate drive (see **Align Cylinder Drive** section).

A—Belt—Secondary
Countershaft
B—Tensioner
C—Belt—Tailings Elevator

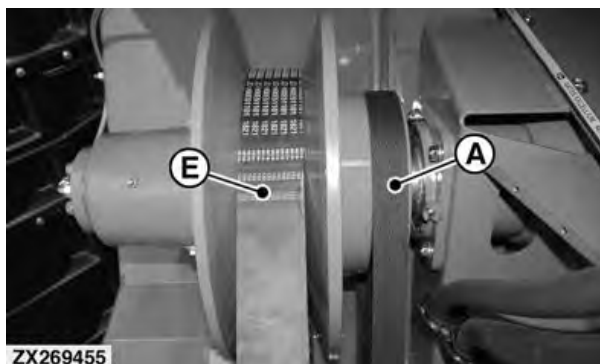
D—Belt—Clean Grain Elevator
E—Belt—Cylinder Intermediate
Drive



ZX269445 —UN—11JAN16



ZX269454 —UN—11JAN16



ZX269455 —UN—11JAN16

OUCC002,000496C -19-11JAN16-3/3

Adjust Cleaning Fan Belt Tension

CAUTION: Shut off engine, set park brake and remove key.

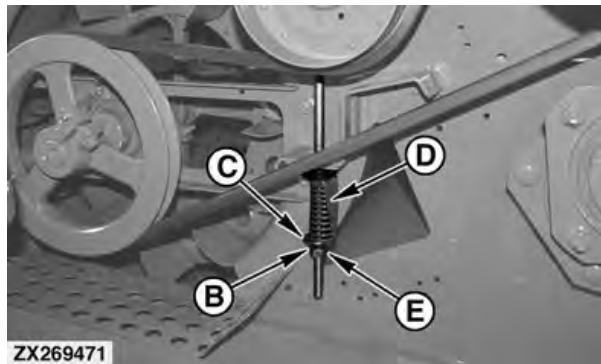
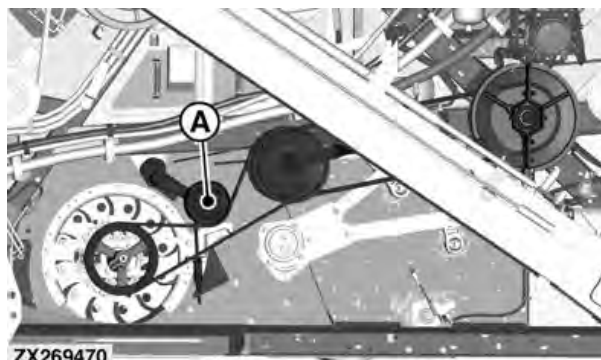
The cleaning fan drive belt idler (A) is located on the left side of the machine.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut

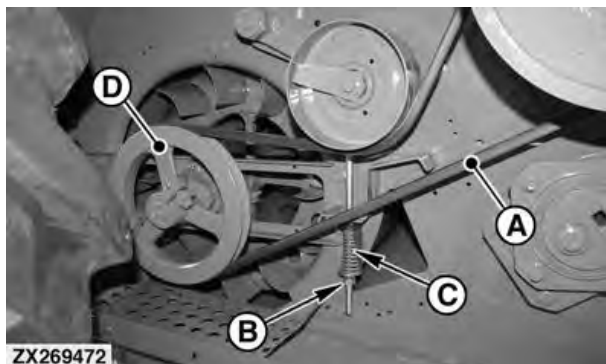


ZX269470 —UN—11JAN16

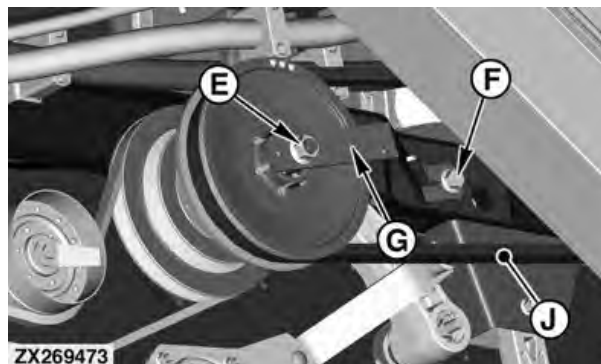
ZX269471 —UN—12JAN16

OUC002,000495E -19-10JAN16-1/1

Replace Cleaning Fan Belt



ZX269472 — UN—11JAN16



ZX269473 — UN—11JAN16

To replace the cleaning fan belt (A), proceed as follows:

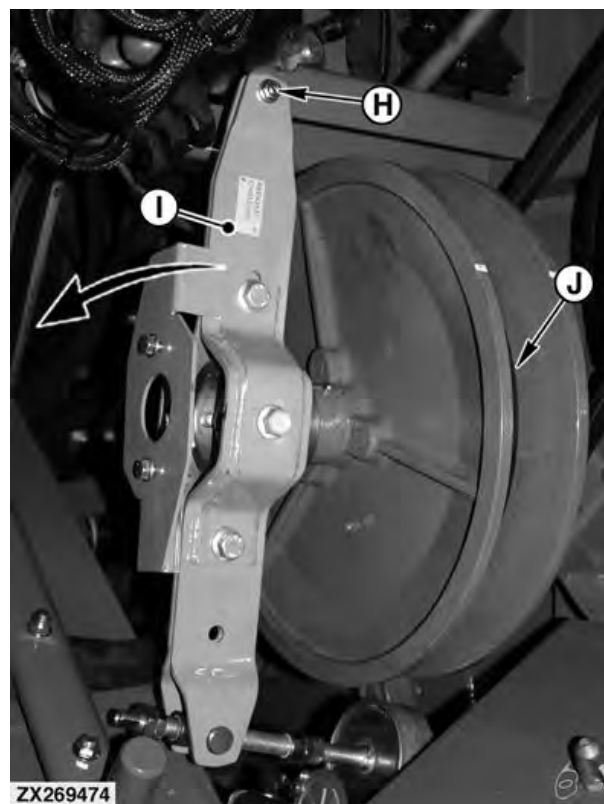
1. Operate fan at its slowest speed.

CAUTION: Shut off engine, set park brake and remove key.

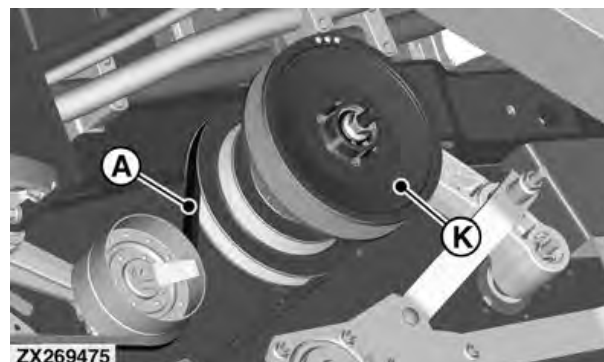
2. Loosen nuts (B) of idler (C) to relieve tension of belt (A).
3. Remove belt (A) from sheave (D).
4. Remove attaching nut (E) and flange screw (F) then remove strap (G).
5. Remove attaching screw (H) with the spacer from variator arm (I) then swing arm out of the way (see arrow).
6. Remove variator belt (J) from cleaning fan variator driven sheave (K).
7. Remove cleaning fan belt (A).
8. Install new belt (A) and adjust idler (C). See **Adjust Cleaning Fan Belt Tension** section.
9. Install remaining parts back in place in reverse order.

A—Belt—Cleaning Fan Drive
B—Nut
C—Idler
D—Sheave
E—Nut
F—Flange Screw

G—Strap
H—Screw
I— Arm
J— Belt—Cleaning Fan Variator
K—Sheave



ZX269474 — UN—11JAN16



ZX269475 — UN—11JAN16

OUC002,000495D -19-10JAN16-1/1

Adjust Straw Walker Belt Tension (W Series)

CAUTION: Shut off engine, set park brake and remove key.

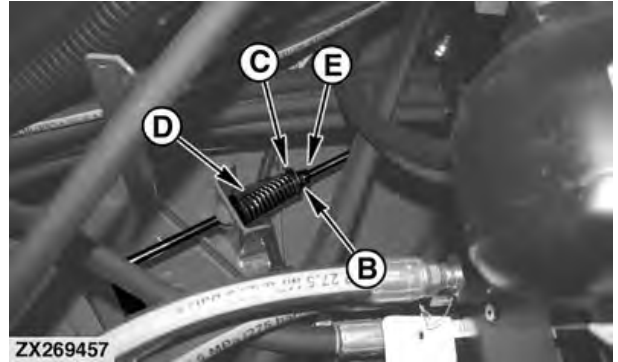
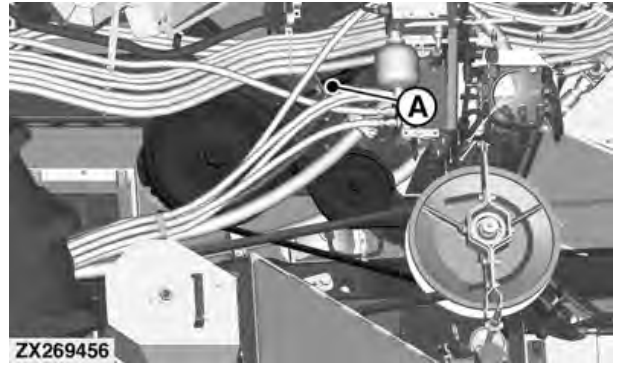
The straw walker drive belt idler (A) is located on the left side of the machine behind the main hydraulic block.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut



ZX269456 —UN—11.JAN16

ZX269457 —UN—11.JAN16

OUC002,0004953 -19-09JAN16-1/1

Replace Straw Walker Belt (W Series)

To replace the straw walker belt (A), proceed as follows:

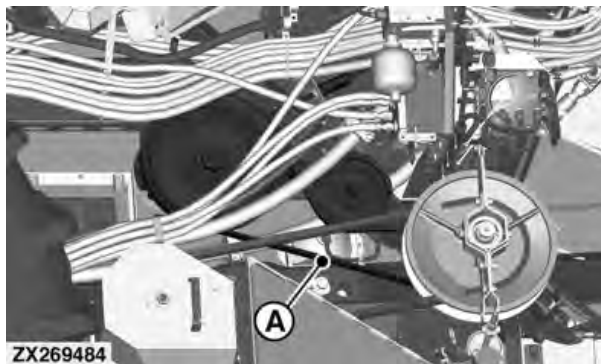
1. Operate fan at its slowest speed.

CAUTION: Shut off engine, set park brake and remove key.

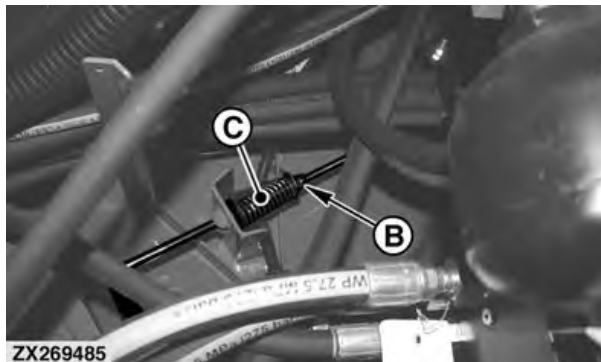
2. Loosen nuts (B) of idler (C) to relieve tension of belt (A).
3. Remove attaching screw (D) with the spacer from variator arm (E) then swing arm out of the way (see arrow).
4. Remove straw walker belt (A).
5. Install new belt (A) and adjust idler (C). See **Adjust Straw Walker Belt Tension (W Series)** section.
6. Install remaining parts back in place in reverse order.

A—Belt—Straw Walker Drive
B—Nut
C—Idler

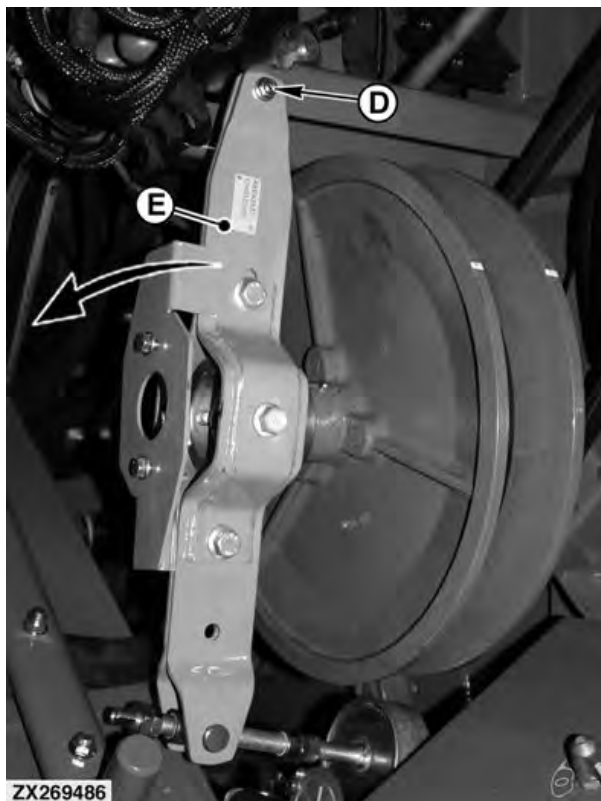
D—Screw
E—Arm



ZX269484 —UN—11JAN16



ZX269485 —UN—11JAN16



ZX269486 —UN—11JAN16

OUCC002,0004961 -19-11JAN16-1/1

Adjust Straw Walker Belt Tension (T Series)

CAUTION: Shut off engine, set park brake and remove key.

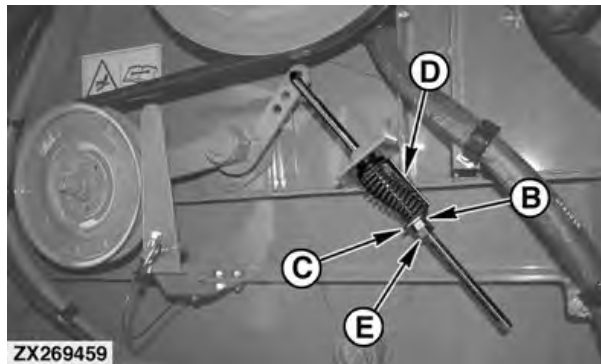
The straw walker drive belt idler (A) is located on the left side of the machine.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut



ZX269458 —UN—11 JAN16

ZX269459 —UN—11 JAN16

OUC002,0004954 -19-09JAN16-1/1

Replace Straw Walker Belt (T Series)

To replace the straw walker belt (A), proceed as follows:

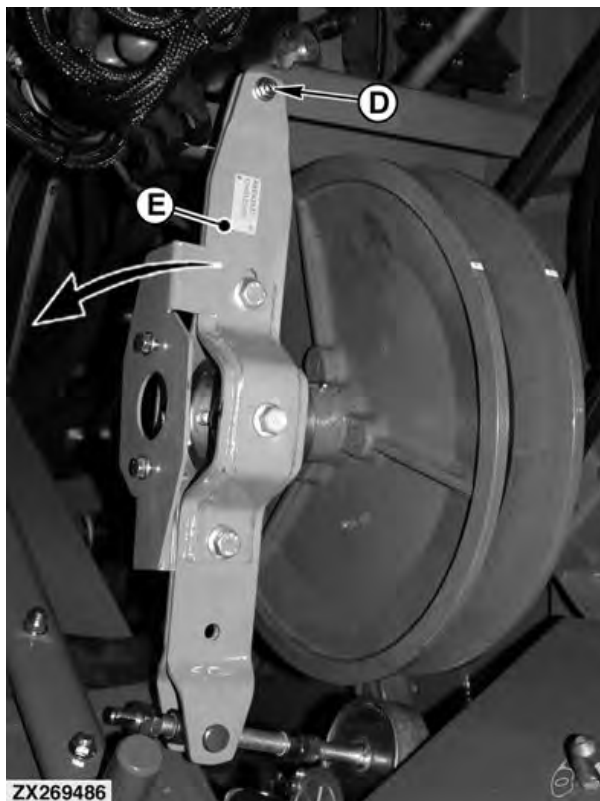
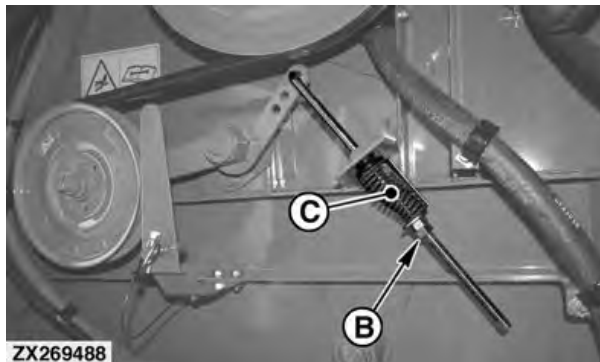
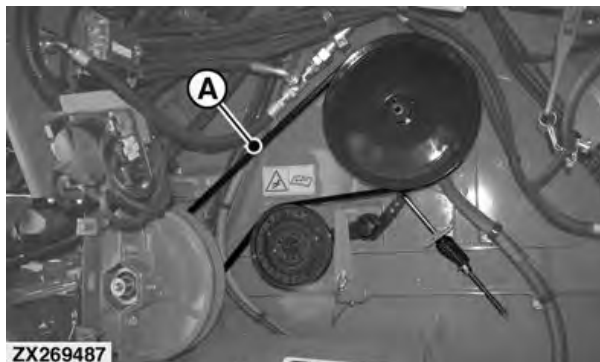
1. Operate fan at its slowest speed.

CAUTION: Shut off engine, set park brake and remove key.

2. Loosen nuts (B) of idler (C) to relieve tension of belt (A).
3. Remove attaching screw (D) with the spacer from variator arm (E) then swing arm out of the way (see arrow).
4. Remove straw walker belt (A).
5. Install new belt (A) and adjust idler (C). See **Adjust Straw Walker Belt Tension (T Series)** section.
6. Install remaining parts back in place in reverse order.

A—Belt—Straw Walker Drive
B—Nut
C—Idler

D—Screw
E—Arm



ZX269487 —UN—11JAN16

ZX269488 —UN—11JAN16

ZX269486 —UN—11JAN16

OUCC002,0004962 -19-11JAN16-1/1

Cleaning Shoe Auger Bevel Gears

CAUTION: Raise feeder house and lower safety stop.

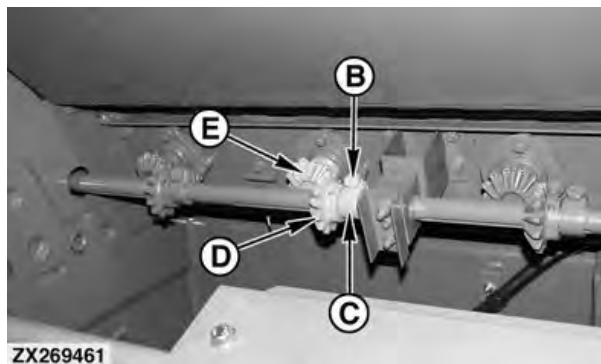
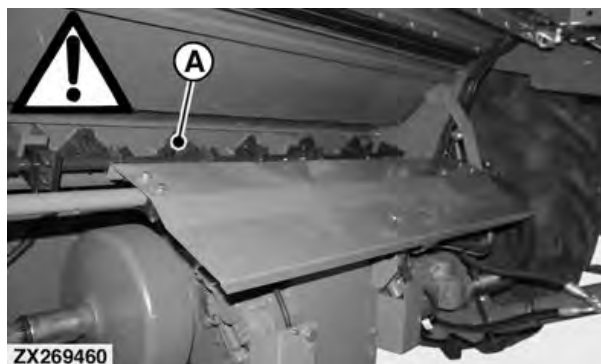
Shut off engine, set park brake and remove key.

If necessary, backlash of cleaning shoe auger bevel gears (A) can be adjusted as follows:

1. Raise feeder house and lower safety stop.
2. Loosen nut (B) on bevel gear clamp (C).
3. Push clamp (C) until bevel gears (D) and (E) are in contact.
4. Back clamp (C) off **0.8 mm (0.03 in)** and tighten nut (B).

IMPORTANT: Do not run bevel gears (D) and (E) too tight.

A—Cleaning Shoe Auger Bevel Gears
B—Nut
C—Clamp
D—Bevel Gear
E—Bevel Gear



OUC002,000495F -19-10JAN16-1/1

Adjust Cleaning Shoe Auger Bevel Gear Belt Tension

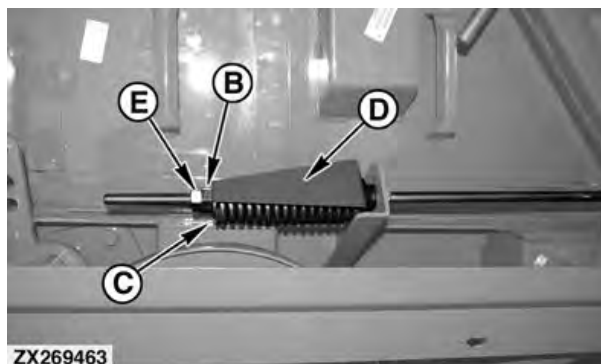
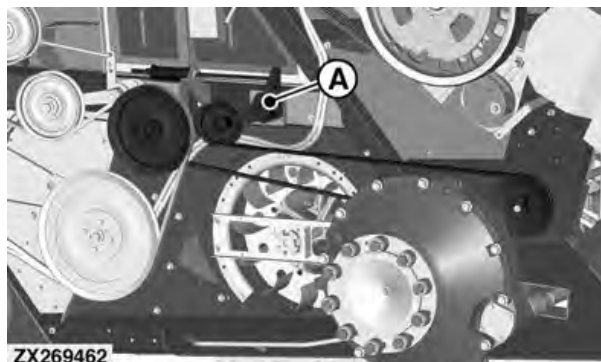
CAUTION: Shut off engine, set park brake and remove key.

The bevel gear drive belt idler (A) is located on the right side of the machine.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

A—Idler
B—Nut
C—Washer
D—Gauge
E—Lock Nut



OUC002,000495F -19-09JAN16-1/1

Replace Cleaning Shoe Auger Bevel Gear Belt

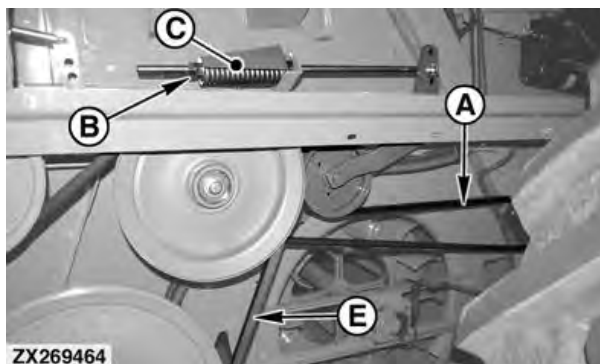
⚠ CAUTION: Shut off engine, set park brake and remove key.

To replace cleaning shoe auger bevel gear belt (A), proceed as follows:

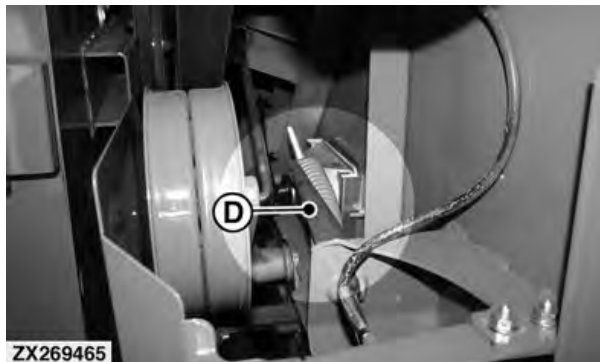
1. Loosen nuts (B) of idler (C) to relieve tension of belt (A).
2. Relieve cleaning shoe belt idler (D) then remove belt (E) from front sheave (F).
3. Remove belt (A).
4. Install new belt (A) and adjust idler (C). See **Adjust Cleaning Shoe Auger Bevel Gear Belt Tension** section.
5. Install belt (E) back in place and adjust idler (D). See **Adjust Cleaning Shoe Belt Tension** section.

A—Belt—Cleaning Shoe Auger Bevel Gear Drive
B—Nut
C—Cleaning Shoe Auger Bevel Gear Belt Idler

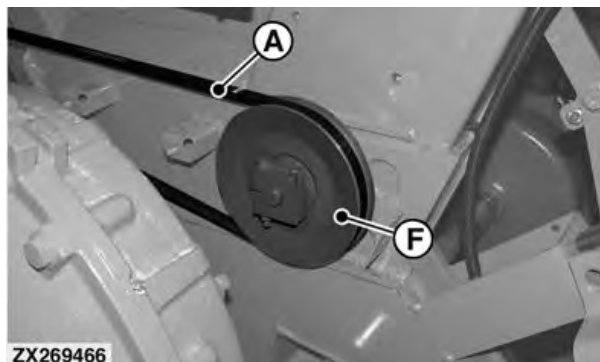
D—Cleaning Shoe Belt Idler
E—Belt—Cleaning Shoe Drive
F—Sheave



ZX269464 —UN—11JAN16



ZX269465 —UN—11JAN16



ZX269466 —UN—10FEB16

OUC002,0004959 -19-09JAN16-1/1

Adjust Cleaning Shoe Belt Tension

CAUTION: Shut off engine, set park brake and remove key.

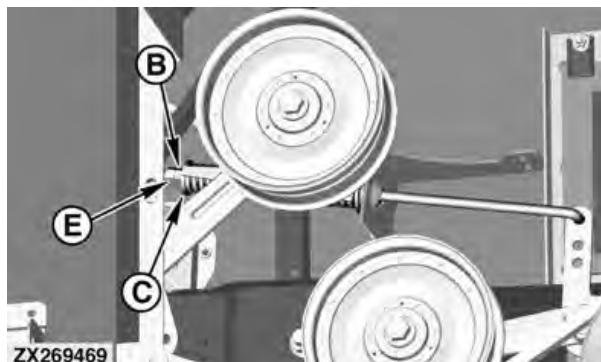
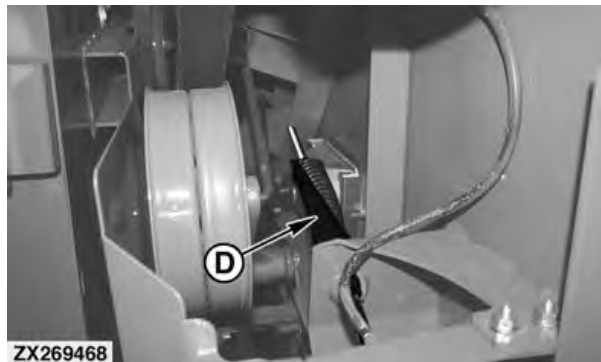
The cleaning shoe drive belt idler (A) is located on the right side of the machine.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut



ZX269467 —UN—11.JAN16

ZX269468 —UN—11.JAN16

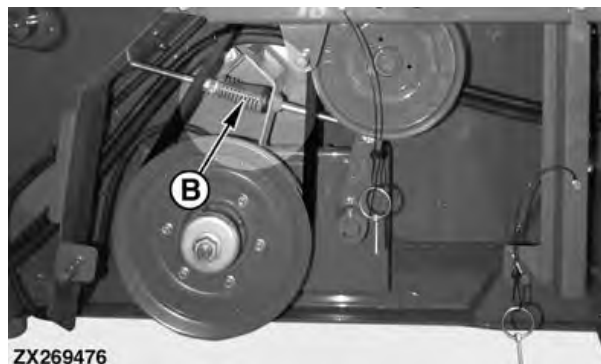
ZX269469 —UN—11.JAN16

OUC002,000495B -19-10JAN16-1/1

Replace Cleaning Shoe Belt



ZX269480 —UN—11JAN16



ZX269476 —UN—11JAN16

CAUTION: Shut off engine, set park brake and remove key.

To replace cleaning shoe belt (A), proceed as follows:

1. Relieve tension of tailings elevator belt idler (B).
2. Relieve tension of clean grain elevator belt idler (C).
3. Relieve tension of secondary countershaft belt idler (D).
4. Relieve tension of cleaning shoe belt idler (E).

A—Belt—Cleaning Shoe
B—Tailings Elevator Belt Idler
C—Clean Grain Elevator Belt Idler

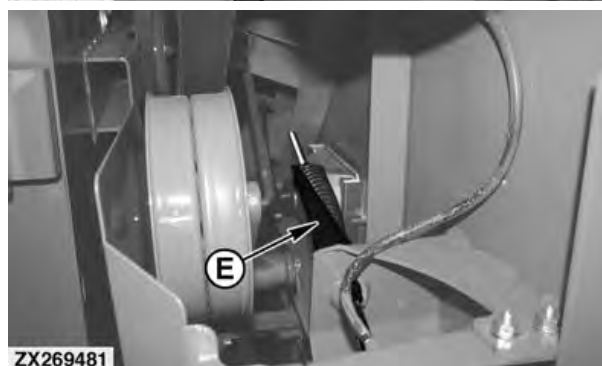
D—Secondary Countershaft Belt Idler
E—Cleaning Shoe Belt Idler



ZX269477 —UN—11JAN16



ZX269478 —UN—11JAN16



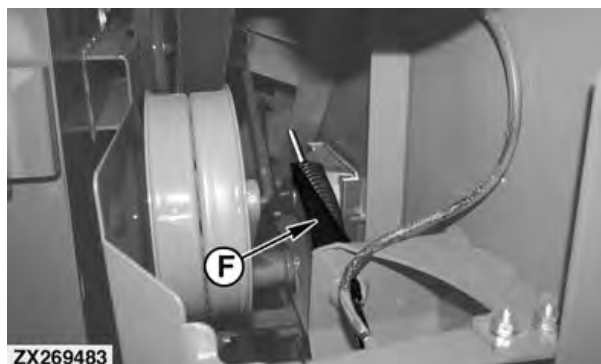
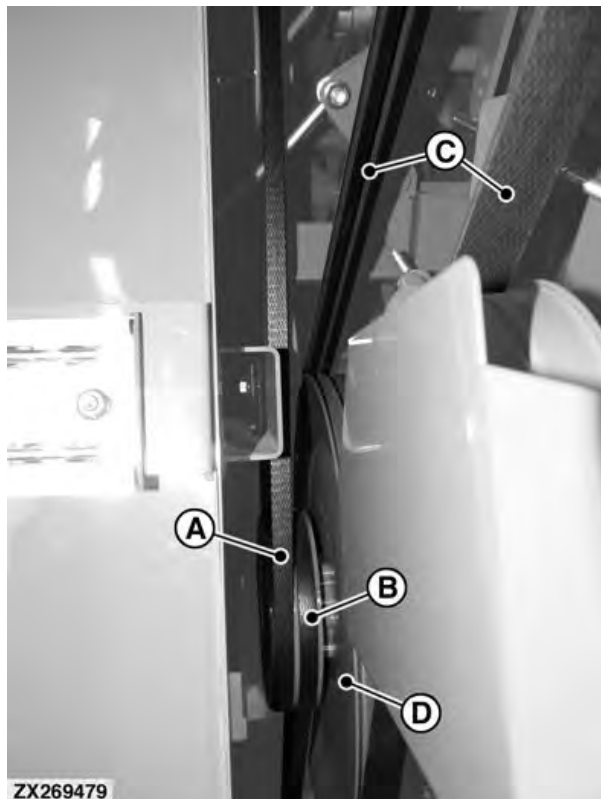
ZX269481 —UN—11JAN16

Continued on next page

OUC002,0004977 -19-12JAN16-1/2

5. Remove clean grain elevator belt (A), tailings elevator belt (B), and secondary countershaft belt (C) from secondary countershaft drive sheave (D) then cleaning shoe belt (E).
6. Install new belt (E) and adjust tensioner (F). See **Adjust Cleaning Shoe Belt Tension** section.
7. Install secondary countershaft belt (C) and adjust tension. See **Adjust Secondary Countershaft Belt Tension** section.
8. Install tailings elevator belt (B) and adjust tension. See **Adjust Tailings Auger And Elevator Belt Tension** section.
9. Install clean grain elevator belt (A) and adjust tension. See **Adjust Clean Grain Elevator Belt Tension** section.

A—Belt—Clean Grain Elevator Drive	D—Drive Sheave
B—Belt—Tailings Elevator Drive	E—Belt—Cleaning Shoe Drive
C—Belt—Secondary Countershaft Drive	F—Tensioner



ZX269479 —UN—11JAN16

ZX269482 —UN—11JAN16

ZX269483 —UN—11JAN16

OUC002,0004977 -19-12JAN16-2/2

Clean Grain Elevator Drives—Top Access

CAUTION: Shut off engine, set park brake and remove key.

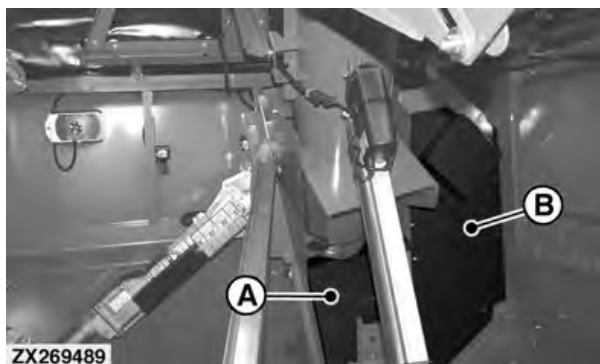
To access clean grain elevator drive components, remove both sheets (A) and (B).

For certain crops, such as grass seeds or wet corn, a slip clutch (F) is available for the upper clean grain elevator shaft.

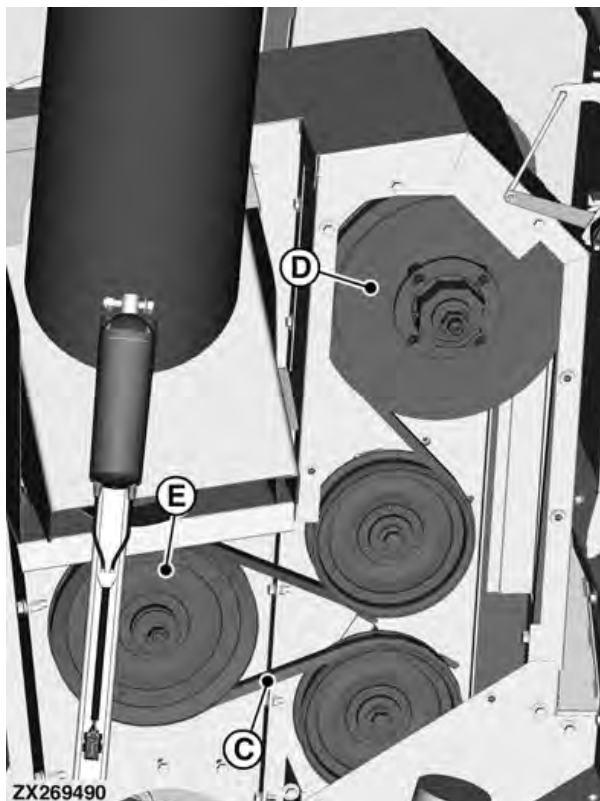
Slip clutch (F) is factory set to **300 N·m (221 lb·ft)** and is not adjustable.

IMPORTANT: Lubricate slip clutch (one grease fitting) every 400 operating hours or every year.

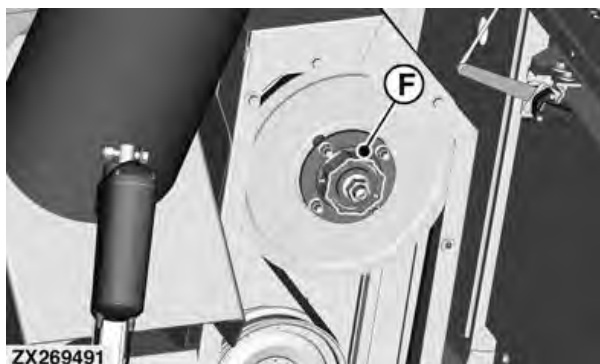
- | | |
|-----------------------------|---|
| A—Sheet | D—Clean Grain Elevator Chain Drive Sheave |
| B—Sheet | E—Filling Auger Gear Case Drive Sheave |
| C—Clean Grain Elevator Belt | F—Slip Clutch (If Equipped) |



ZX269489 —UN—11JAN16



ZX269490 —UN—11JAN16



ZX269491 —UN—11JAN16

OUCC002,0004963 -19-11JAN16-1/1

Adjust Clean Grain Elevator Belt Tension

CAUTION: Shut off engine, set park brake and remove key.

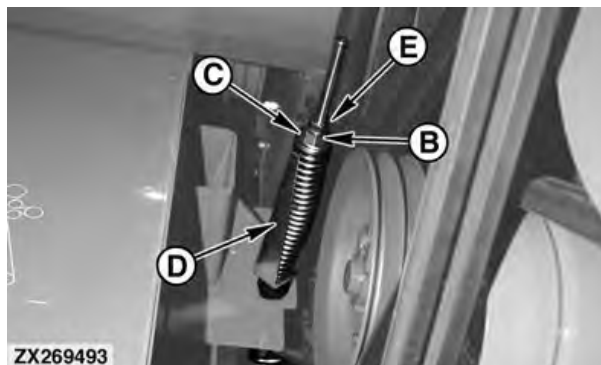
The clean grain elevator drive belt idler (A) is located on the right side of the machine behind the clean grain elevator.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut



ZX269492 —UN—11JAN16

ZX269493 —UN—11JAN16

OUC002,0004965 -19-11JAN16-1/1

Replace Clean Grain Elevator Belt

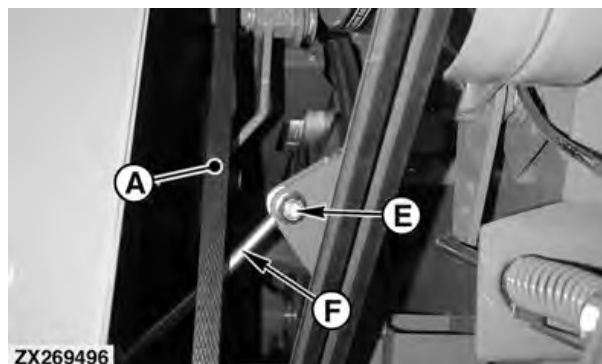
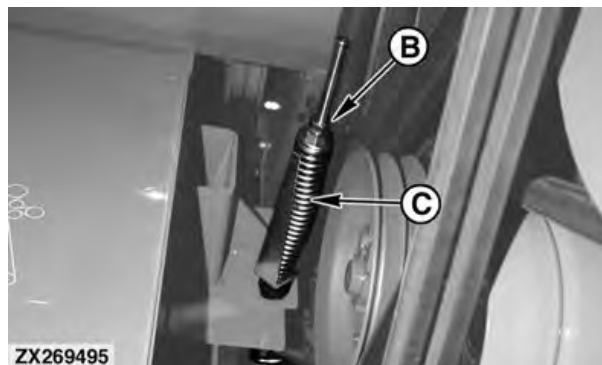
CAUTION: Shut off engine, set park brake and remove key.

To replace the clean grain elevator belt (A), proceed as follows:

1. Loosen nuts (B) of idler (C) to relieve tension of belt (A).
2. Remove belt (A) from sheave (D).
3. **On T-Series Machine Only:** Remove attaching screw (E) then disconnect rear beater grate adjusting rod (F).

A—Belt—Clean Grain Elevator
Drive
B—Nut
C—Idler

D—Sheave
E—Screw
F—Rod (T Series Only)



Continued on next page

OUCC002,0004978 -19-12JAN16-1/2

4. On top of grain elevator, remove belt (A) from sheaves (B) and (C).
5. Disconnect rod (D) from idler arm (E) then remove belt (A).

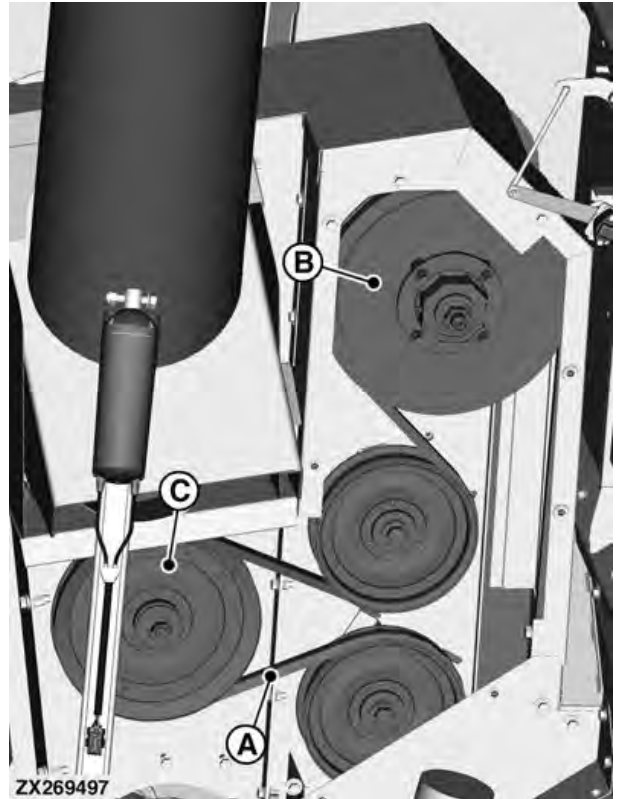
NOTE: Some parts are removed for illustration purpose only.

6. Install new belt (A) and adjust idler (F). See **Adjust Clean Grain Elevator Belt Tension** section.

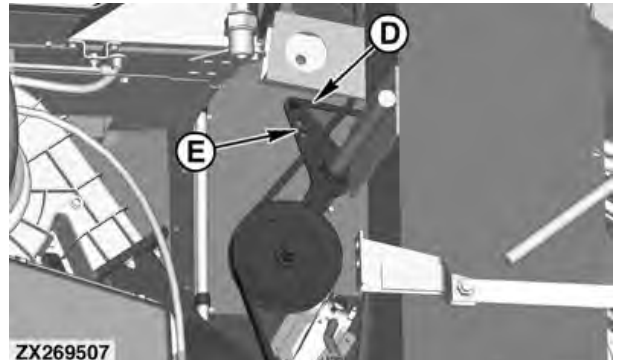
IMPORTANT: Refer to decal on clean grain elevator for proper belt (A) routing.

7. Install remaining parts back in place in reverse order.

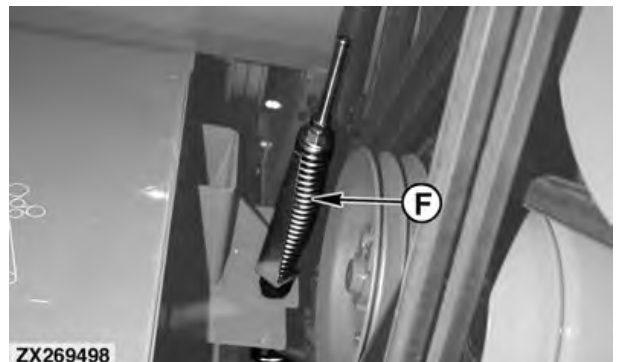
A—Belt—Clean Grain Elevator Drive	D—Rod
B—Clean Grain Elevator Chain Drive Sheave	E—Arm
C—Filling Auger Gear Case Drive Sheave	F—Idler



ZX269497 —UN—11JAN16



ZX269507 —UN—12JAN16



ZX269498 —UN—10FEB16

OUCC002,0004978 -19-12JAN16-2/2

Adjust Clean Grain Elevator Paddle Chain Tension

⚠ CAUTION: Shut off engine, set park brake and remove key.

Slacken off the four attaching screws (A) and nut (B).

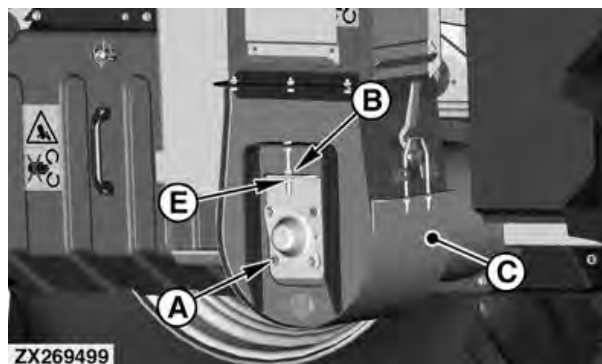
Release latch and open lower clean grain elevator flap (C).

Adjust tension of chain (D) using nut (E) so that lower end of chain can be slid across the sprocket or can be pulled **6 mm (0.24 in)** away from the sprocket.

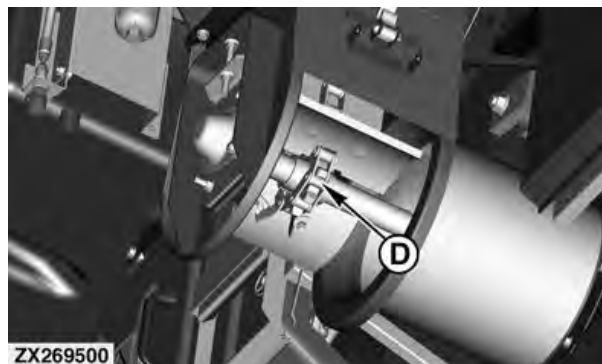
Tighten nut (B) and screws (A).

A—Screw
B—Nut
C—Flap

D—Chain
E—Nut



ZX269499 —UN—11 JAN16



ZX269500 —UN—11 JAN16

OUCC002,0004979 -19-12JAN16-1/1

Adjust Tailings Auger And Elevator Belt Tension

⚠ CAUTION: Shut off engine, set park brake and remove key.

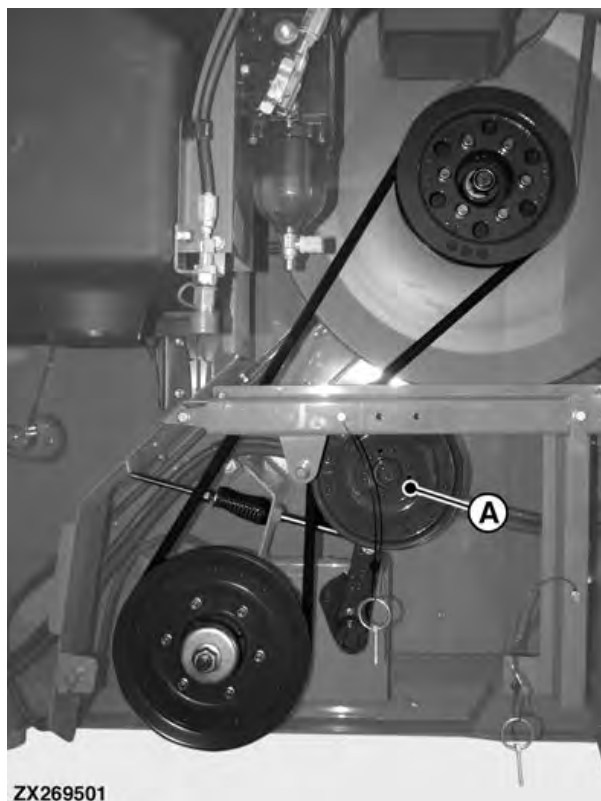
The tailings auger and elevator drive belt idler (A) is located on the right side of the machine.

To adjust belt tension, tighten nut (B) until washer (C) aligns with end of gauge (D).

Tighten lock nut (E).

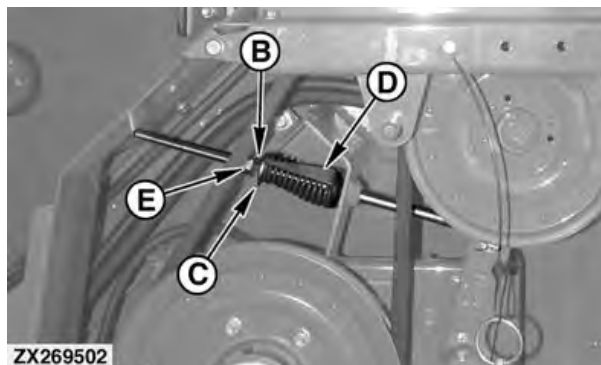
A—Idler
B—Nut
C—Washer

D—Gauge
E—Lock Nut



ZX269501

ZX269501 —UN—11JAN16



ZX269502

ZX269502 —UN—11JAN16

OUC002,000496A -19-11JAN16-1/1

Replace Tailings Auger And Elevator Belt

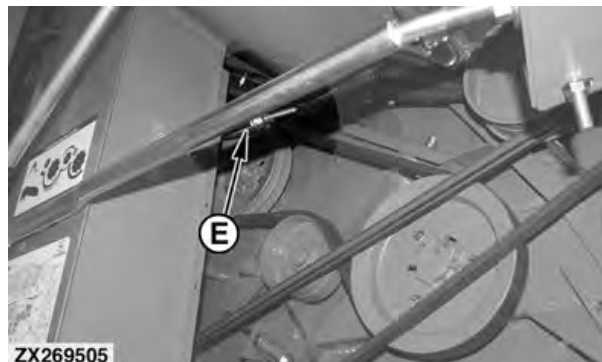
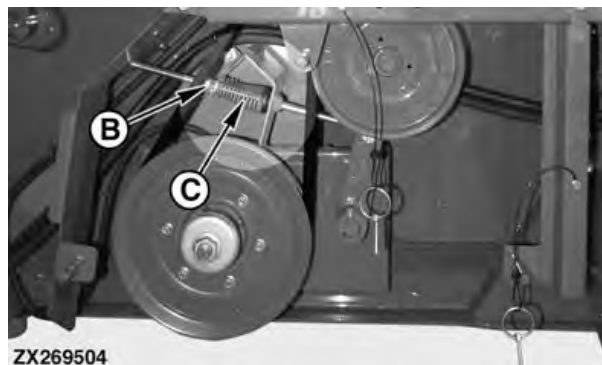
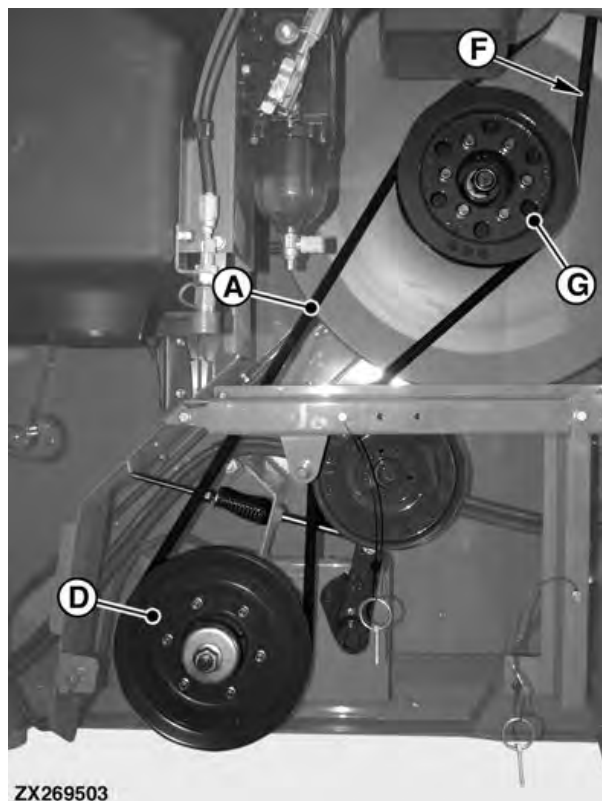
CAUTION: Shut off engine, set park brake and remove key.

To replace the tailings auger and elevator belt (A), proceed as follows:

1. Loosen nuts (B) of idler (C) to relieve tension of belt (A).
2. Remove belt (A) from sheave (D).
3. Relieve tension of clean grain elevator belt idler (E).
4. Remove belt (F) then belt (A) from sheave (G).
5. Install new belt (A) and adjust idler (C). See **Adjust Tailings Auger And Elevator Belt Tension** section.
6. Install clean grain elevator belt (F) and adjust tension. See **Adjust Clean Grain Elevator Belt Tension** section.

A—Belt—Tailings Auger and Elevator Drive
B—Nut
C—Tailings Auger and Elevator Belt Idler
D—Sheave

E—Clean Grain Elevator Belt Idler
F—Belt—Clean Grain Elevator Drive
G—Sheave



ZX269503 —UN—12JAN16

ZX269504 —UN—11JAN16

ZX269505 —UN—11JAN16

OUC002,000496B -19-11JAN16-1/1

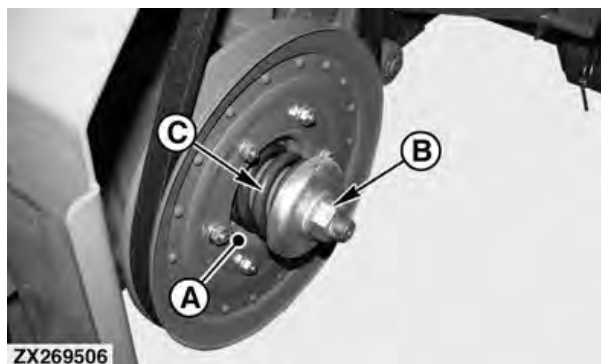
Tailings Auger And Elevator Slip Clutch

CAUTION: Shut off engine, set park brake and remove key.

If the slip clutch (A) is ever repaired, tighten nut (B) against the shoulder of the shaft. This will correctly compress spring (C).

A—Slip Clutch
B—Nut

C—Spring



ZX269506 —UN—11JAN16

OUC002,0004991 -19-12JAN16-1/1

Adjust Tailings Elevator Paddle Chain Tension

CAUTION: Shut off engine, set park brake and remove key.

Slacken off the four attaching screws (A) and nut (B).

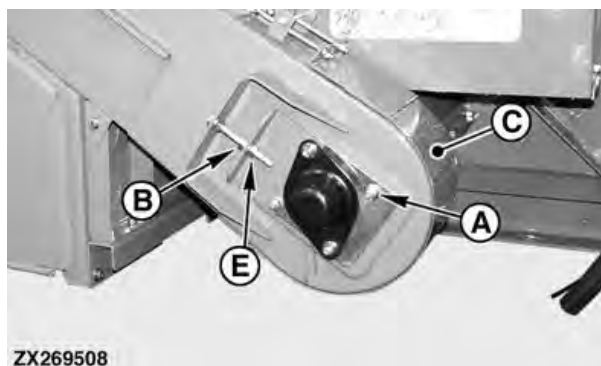
Release latch and open lower clean grain elevator flap (C).

Adjust tension of chain (D) using nut (E) so that lower end of chain can be slid across the sprocket or can be pulled **6 mm (0.24 in)** away from the sprocket.

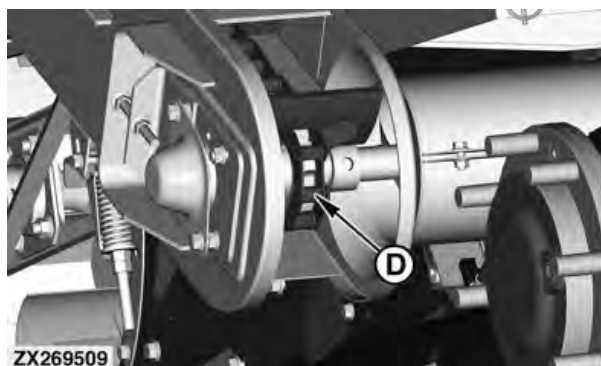
Tighten nut (B) and screws (A).

A—Screw
B—Nut
C—Flap

D—Chain
E—Nut



ZX269508 —UN—12JAN16



ZX269509 —UN—12JAN16

OUC002,000498E -19-12JAN16-1/1

Adjust Upper Tailings Auger Drive Chain Tension

⚠ CAUTION: Shut off engine, set park brake and remove key.

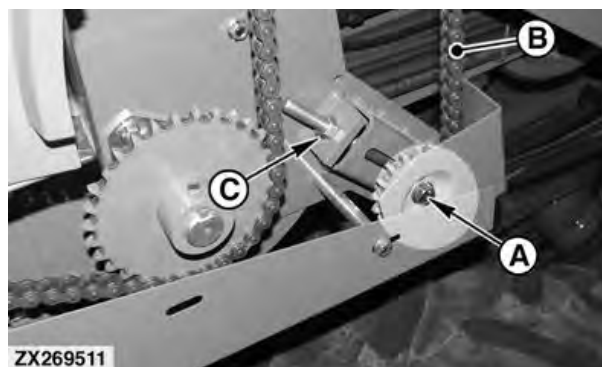
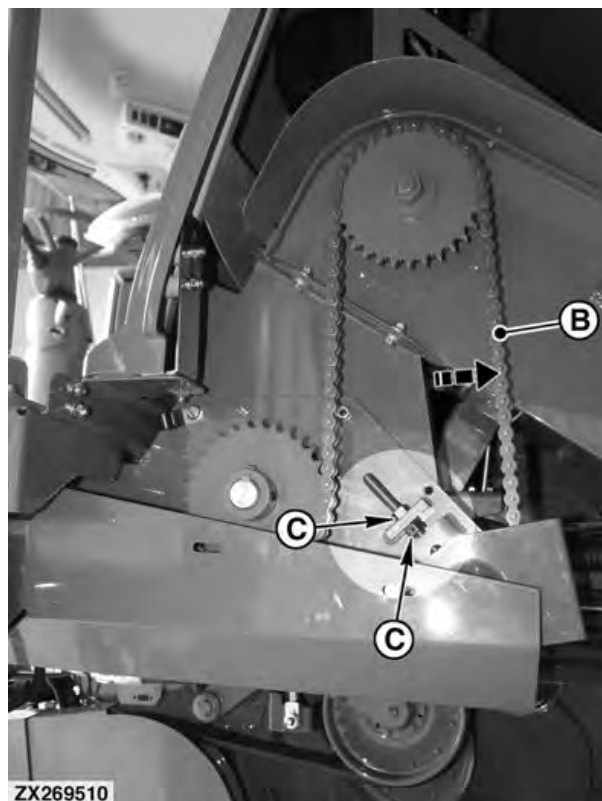
Loosen bolt (A) of tensioner sprocket.

Adjust tensioner sprocket of drive chain (B) so that a chain tension slack of **10 mm (0.4 in)** on the strand is obtained (see arrow).

Adjust tension of chain (B) using nuts (C) then tighten nuts (C).

A—Bolt
B—Chain

C—Nut



OUCC002,000498F -19-12JAN16-1/1

Adjust Grain Tank Cross Auger Drive Chain Tension

CAUTION: Shut off engine, set park brake and remove key.

IMPORTANT: Be certain unloading auger drive is disengaged.

Adjust tension of chain (A) at tensioner sprocket (B).

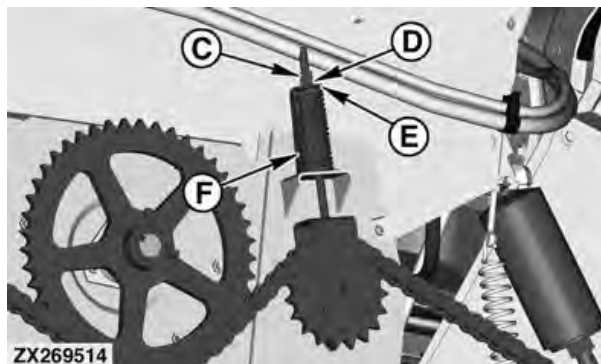
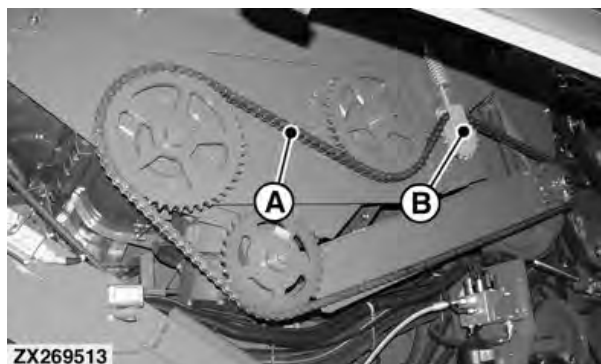
Loosen lock nut (C) of tensioner sprocket (B).

Tighten nut (D) until washer (E) aligns with the end of gauge (F).

Tighten lock nut (C).

A—Chain
B—Tensioner Sprocket
C—Lock Nut

D—Nut
E—Washer
F—Gauge



ZX269513 —UN—12JAN16

ZX269514 —UN—12JAN16

OUCC002,0004994 -19-12JAN16-1/1

Adjust Unloading Auger Support Stud

CAUTION: Shut off engine, set park brake and remove key.

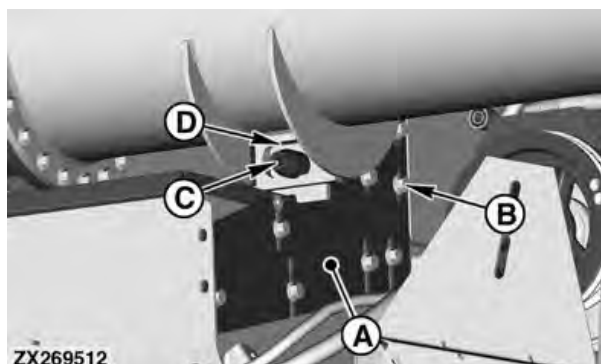
IMPORTANT: Periodically check that the auger fully slides on stud (C) when the auger is fully retracted. Readjust as needed.

NOTE: Some parts are removed for illustration purpose only.

Clearance (D) between top of stud (C) and slot must be 0 to 3 mm (0 to 0.12 in) when auger is empty.

To adjust position of stud plate (A), loosen the eight nuts (B) and slide plate (A) accordingly.

Firmly tighten nuts (B).



A—Plate
B—Nut

C—Stud
D—Clearance

ZX269512 —UN—12JAN16

OUCC002,0004990 -19-12JAN16-1/1

Replace Unloading Auger Drive Belt

CAUTION: Shut off engine, set park brake and remove key.

IMPORTANT: Be certain unloading auger drive is disengaged.

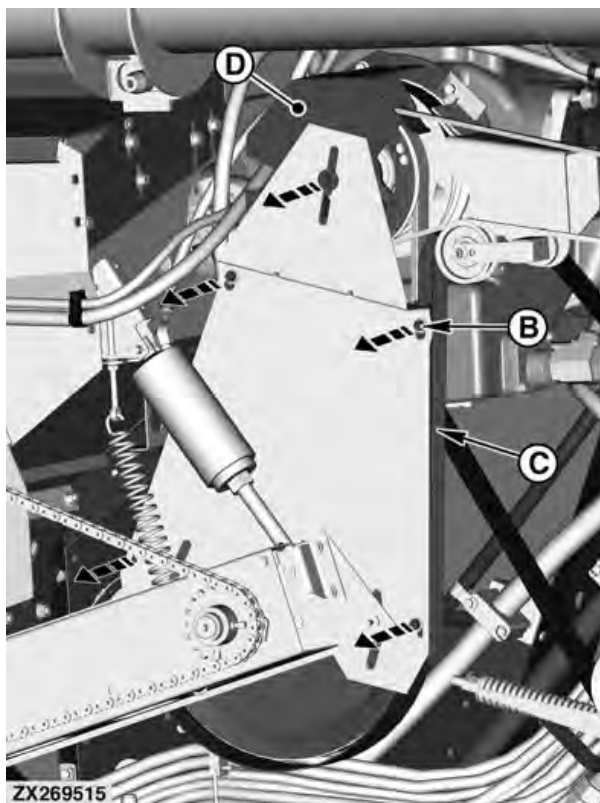
To replace the unloading auger drive belt (A), proceed as follows:

1. Remove bolts (B) then remove trap (C).
2. Remove belt trap (D).
3. On machine with Final Tier 4/Stage IV engine only, remove belt (E).
4. Remove belt (A).
5. Install new belt (A) then all remaining parts in reverse order.

NOTE: Adjust position of trap (C) and belt trap (D) so that they do not touch belt (A).

A—Belt—Unloading Auger Drive
B—Bolt
C—Trap

D—Belt Trap
E—Belt—Exhaust Debris Management Blower Drive



ZX269515 —UN—15JAN16



ZX269516 —UN—15JAN16



ZX269517 —UN—15JAN16

Continued on next page

OUCC002,0004A0A -19-21JAN16-1/2

6. Engage then disengage unloading auger drive. If the unloading auger drive does not shut off (disengage) as the new belts have not stretched yet, adjust unloading auger drive cylinder (A) as follows:

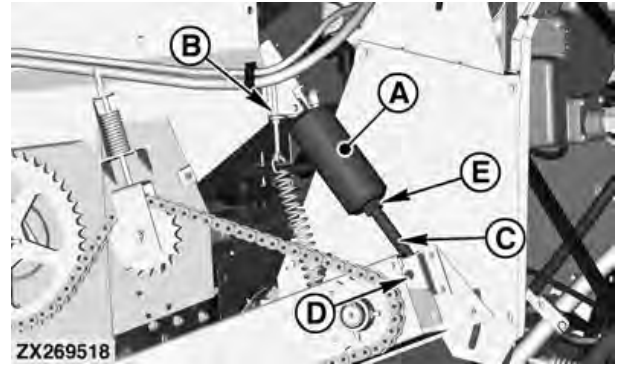
- a. Loosen nut (B) to relieve spring tension.

IMPORTANT: Note position on nut (B) to recover initial spring tension setting.

- b. Disconnect cylinder rod (C) from pin (D).
- c. Loosen lock nut (E) then shorten length of rod (C) so that when rod (C) is reconnected to the pin (D), the unloading auger drive belt is driven when unloading auger drive is disengaged.

NOTE: To reduce length of rod (C) , rotate rod (C) clockwise.

- d. Tighten lock nut (E) against cylinder barrel and adjust spring tension to its initial setting.



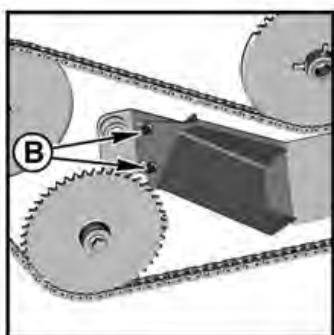
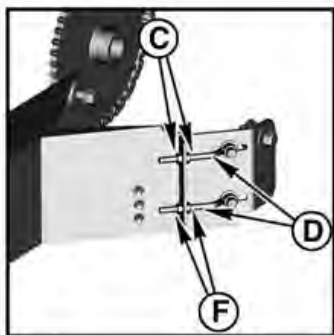
A—Cylinder
B—Nut
C—Cylinder Rod

D—Pin
E—Lock Nut

ZX269518 —UN—15JAN16

OUC002,0004A0A -19-21JAN16-2/2

Align Unloading Auger Drive



ZX269519

A—Top of Arm
B—Nut
C—Adjusting Nut

D—Eyebolt
E—Bottom of Arm

F—Adjusting Nut
X—657 mm (2 ft 1.86 in)

CAUTION: Shut off engine, set park brake and remove key.

IMPORTANT: Be certain unloading auger drive is disengaged.

Check distance (X) from side machine sheet and top of arm (A) is **657 mm (2 ft 1.86 in)**. If necessary, align unloading auger drive frame as follows:

1. Loosen nuts (B).

2. Loosen nuts (C) and adjust bolts (D) until top of arm (A) is at a distance (X) of **657 mm (2 ft 1.86 in)** from side sheet.
3. Tighten nuts (C).
4. Check for **657 mm (2 ft 1.86 in)** dimension from bottom of arm (E) to side sheet. Adjust with nuts (F).
5. Tighten nuts (B).

ZX269519 — UN—15JAN16

OUCC002,0004996 -19-15JAN16-1/1

Adjust Exhaust Debris Management Belt Tension

CAUTION: Shut off engine, set park brake and remove key.

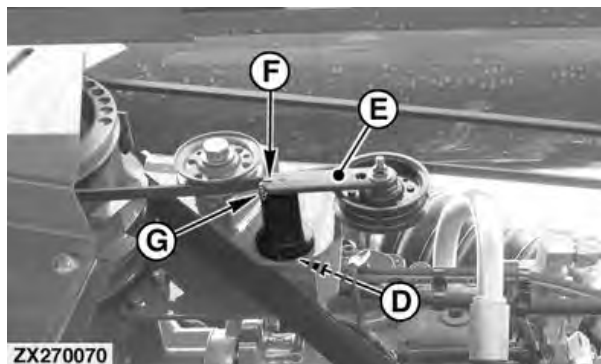
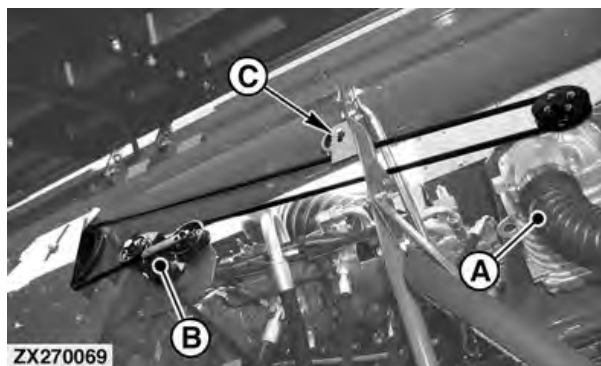
Drive belt idler (B) of exhaust debris management system (A) is located on the left side of the machine.

To adjust belt tension, proceed as follows:

1. Loosen tensioner roll (C).
2. Remove attaching screw (D) of idler arm (E).
3. Reposition idler arm (E) in its attaching tube. Use indicator (F) on arm (E) and sectors (G) on tube to select new arm position.
4. Apply tensioner roll (C) against belt then tighten attaching screw.

A—Exhaust Debris Management System
B—Idler
C—Tensioner Roll
D—Screw

E—Idler Arm
F—Indicator
G—Sector



OUC002,0004A0B -19-21JAN16-1/1

ZX270069—UN—19JAN16

ZX270070—UN—19JAN16

Replace Exhaust Debris Management Drive Belt

CAUTION: Shut off engine, set park brake and remove key.

To replace the exhaust debris management drive belt (A), proceed as follows:

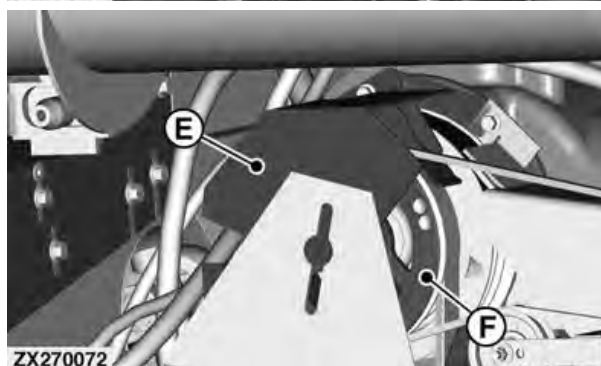
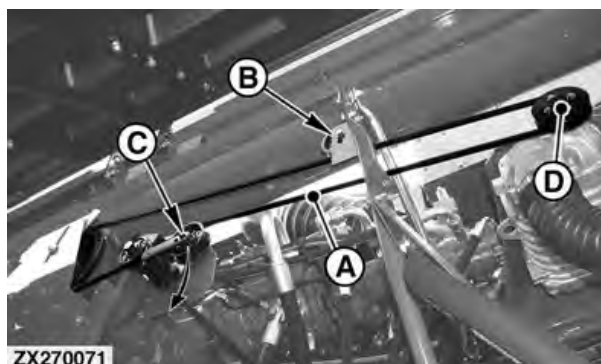
1. Loosen tensioner roll (B).
2. Pull down idler (C) then remove belt (A) from driven sheave (D).
3. Remove belt trap (E) then remove belt (A) from drive sheave (F).
4. Install new belt (A) then all remaining parts in reverse order.

NOTE: Adjust position of belt trap (E) so that it does not touch belt (A).

5. Apply tensioner roll (B) against belt then tighten attaching screw.

A—Belt
B—Tensioner Roll
C—Idler

D—Sheave—Driven
E—Belt Trap
F—Sheave—Drive



OUC002,0004A0C -19-21JAN16-1/1

ZX270071—UN—19JAN16

ZX270072—UN—19JAN16

Adjust Reel and Chaff Spreader Pump Belt Tension (Machine With Straw Chopper)

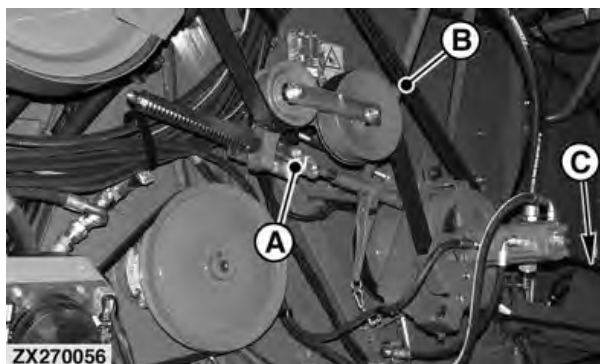
CAUTION: Shut off engine, set park brake and remove key.

Tensioner (A) simultaneously applies tension to chaff spreader/reel pump drive belt (B) and straw chopper drive belt (C).

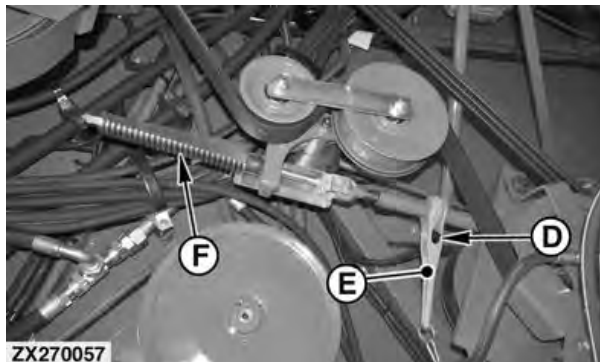
To adjust tensioner (A), proceed as follows:

1. Unlatch lock (D) of pawl (E) to relieve tension of spring (F).
2. Adjust nuts (G) so that a distance (X) of **50 mm (1.97 in)** between tip of tensioner rod and washer (H) is obtained.
3. Apply tension to tensioner (A) using pawl (E) until washer (H) aligns with the end of gauge (I).

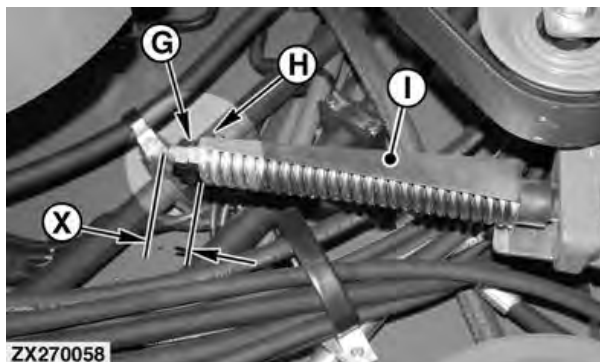
A—Tensioner	F—Spring
B—Belt—Reel and Chaff Spreader Pump Drive	G—Nut
C—Belt—Straw Chopper Drive	H—Washer
D—Lock	I—Gauge
E—Pawl	X—50 mm (1.97 in)



ZX270056 —UN—15JAN16



ZX270057 —UN—15JAN16



ZX270058 —UN—15JAN16

OUC002,00049CD -19-15JAN16-1/1

Replace Reel and Chaff Spreader Pump Drive Belt (Machine With Straw Chopper)

CAUTION: Shut off engine, set park brake and remove key.

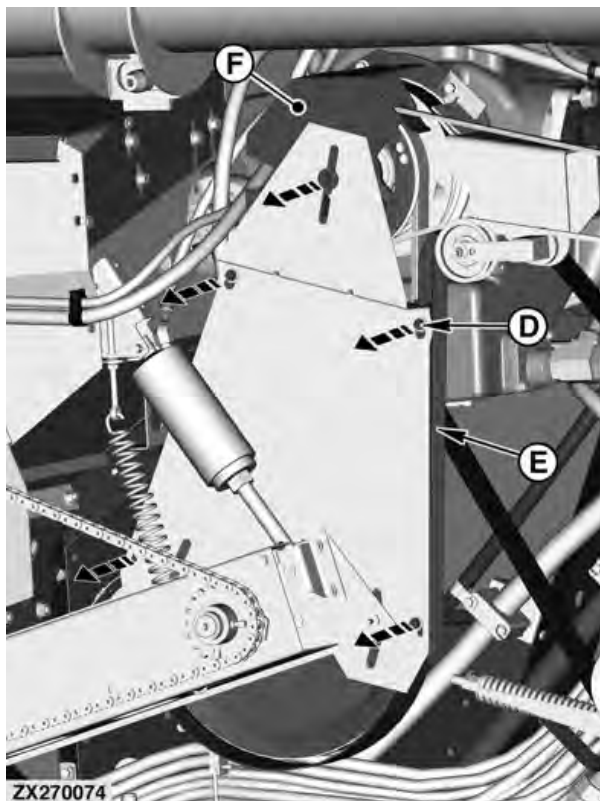
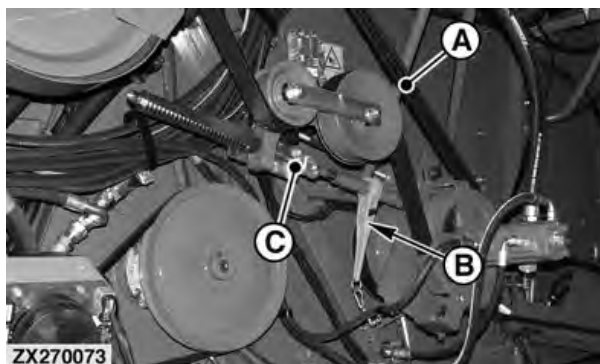
IMPORTANT: Be certain unloading auger drive is disengaged.

To replace drive belt (A) of the reel and chaff spreader pump, proceed as follows:

1. Unlatch lock of pawl (B) to relieve spring tension of tensioner (C).
2. Remove bolts (D) then remove trap (E).
3. Remove belt trap (F).
4. On machine with Final Tier 4/Stage IV engine only, remove belt (G).

A—Belt—Reel and Chaff
Spreader Pump Drive
B—Pawl
C—Tensioner
D—Bolt

E—Trap
F—Belt Trap
G—Belt—Exhaust Debris
Management Blower Drive



ZX270073 —UN—19JAN16

ZX270074 —UN—19JAN16

ZX270075 —UN—19JAN16

Continued on next page

OUC002,0004A0D -19-21JAN16-1/2

5. Remove belt (A).
6. Remove belt trap (B) then remove belt (C) from upper sheave (D).
7. Remove strap (E) then remove attaching screws (F) of reel and chaff spreader drive pump and support assembly (G).

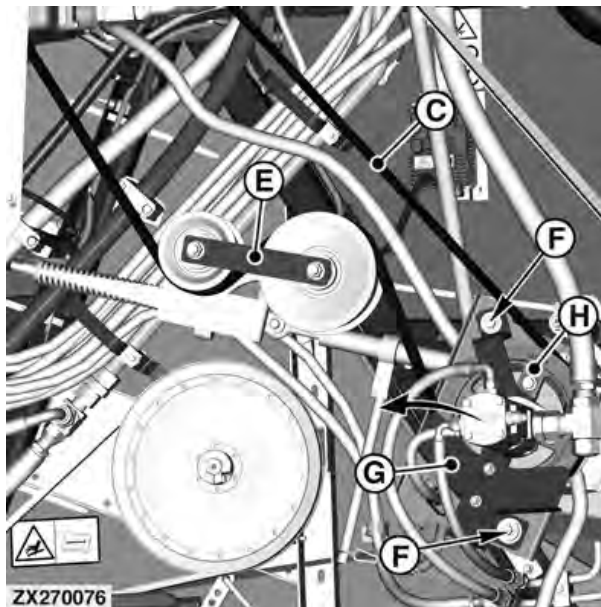
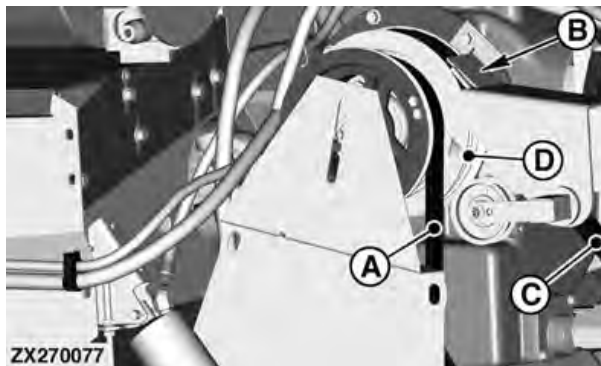
IMPORTANT: Do not disconnect any hydraulic hose from drive pump.

8. Pull reel and chaff spreader drive pump and support assembly (G) aside then remove belt (C) from lower sheave (H).
9. Install new belt (A) then all remaining parts in reverse order.

NOTE: Adjust position of belt traps so that they do not touch belts.

10. Apply tension to reel and chaff spreader pump drive belt (see **Adjust Reel and Chaff Spreader Pump Belt Tension (Machine With Straw Chopper)** section).

- | | |
|---|-----------------------------|
| A—Belt—Unloading Auger Drive | E—Strap |
| B—Belt Trap | F—Screw |
| C—Belt—Reel and Chaff Spreader Pump Drive | G—Pump and Support Assembly |
| D—Sheave | H—Sheave |



ZX270077 —UN—19JAN16

ZX270076 —UN—19JAN16

OUC002,0004A0D -19-21JAN16-2/2

Replace Straw Chopper Rotating Knives

CAUTION: Shut off engine, set park brake and remove key.

Always jam the rotor to prevent accidents when replacing rotating knives.

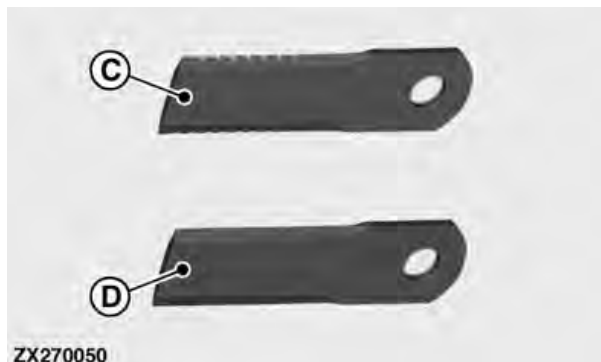
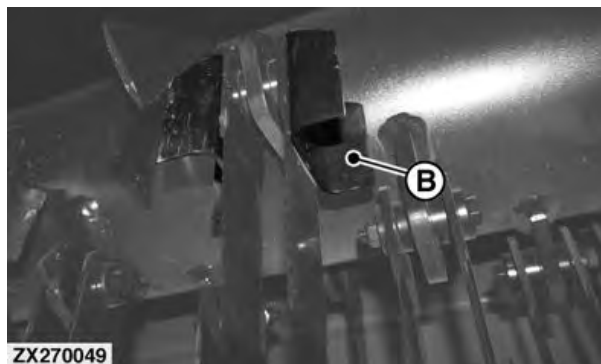
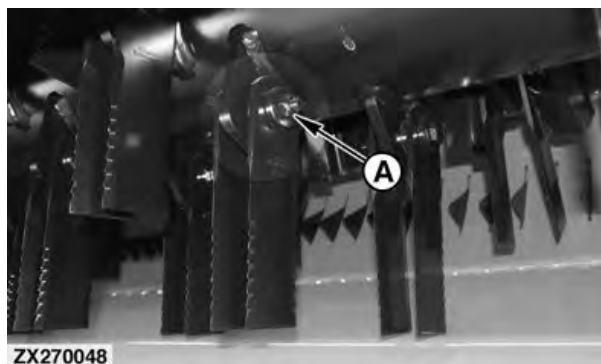
IMPORTANT: Always use M10x50 screws (A) of 10.9 grade together with self-locking nuts. Tighten screws (A) to 65 N·m (47 lb·ft).

To avoid unbalancing the straw chopper, proceed as follows:

- Excessive vibration may be caused by broken knives.
- Remove the broken knife (together with the knife that is most nearly opposite) at once, lubricate and install new knives.
- Do not sharpen knives that go dull. Instead, turn them round or replace them. This ensures that all the knives weigh approximately the same.
- Install the screws (A) in direction as removed.
- Always reinstall deflectors (B) in their original position.
- Do not mix serrated (C) and smooth (D) knives.

A—Screw
B—Deflector

C—Knife—Serrated
D—Knife—Smooth



OUC002,00049CA -19-15JAN16-1/1

ZX270048 —UN—15JAN16

ZX270049 —UN—15JAN16

ZX270050 —UN—15JAN16

Replace Straw Chopper Counterknives

CAUTION: Shut off engine, set park brake and remove key.

Loosen flange screws (A).

Remove the cover strip (B).

Note orientation of counterknife (C) (sharpen side up) then pull out the counterknives one by one.

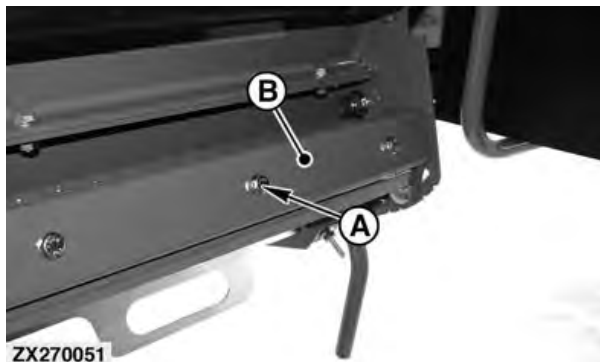
CAUTION: The blades are sharp.

Install new counterknife with sharpen side up.

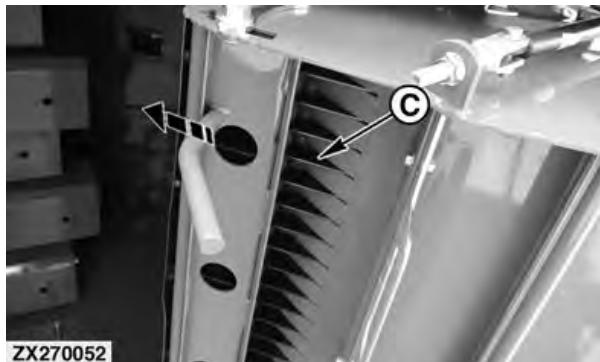
Install cover strip (B) back in place.

A—Flange Screw
B—Cover Strip

C—Counterknife



ZX270051—UN—15JAN16



ZX270052—UN—15JAN16

OUC002,00049CB -19-15JAN16-1/1

Adjust Chaff Spreader Frame Operating Position

CAUTION: Shut off engine, set park brake and remove key.

Place chaff spreader (A) into operating position and lock it in position.

Check that distance (X) between frame of chaff spreader (A) and shoe tailboard (B) is about **18 mm (0.71 in)**.

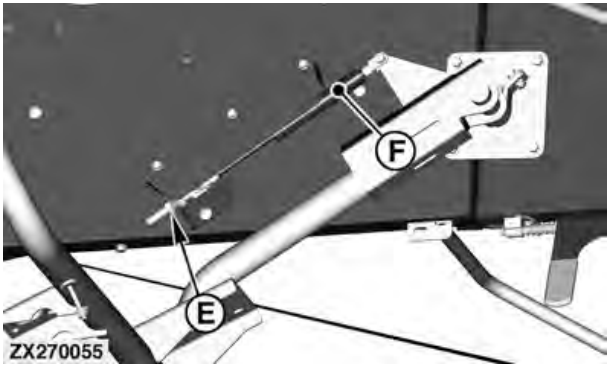
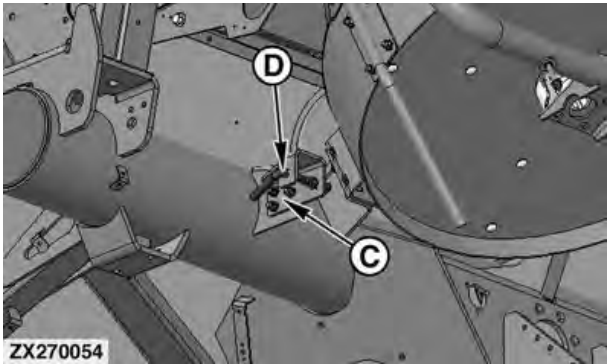
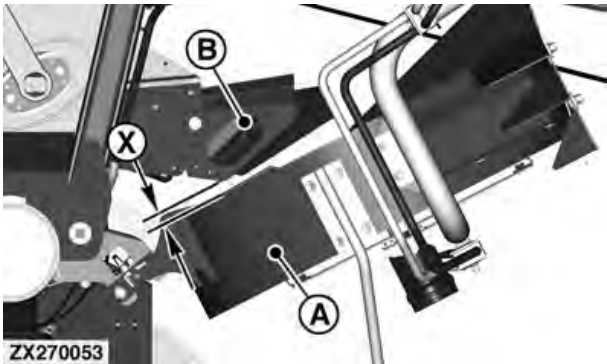
To adjust chaff spreader frame operating position, slacken off both attaching screws (C) of latch (D) then adjust eyebolt (E) on both gas cylinders (F) so that the required distance (X) is obtained.

Tighten attaching screws (C).

IMPORTANT: Unlatch and swing chaff spreader (A) into service position then swing it back to operating position. Check that latch (D) engages smoothly. If necessary, readjust latch (D) and check distance (X) again.

- A—Chaff Spreader
B—Shoe Tailboard
C—Screw
D—Latch

E—Eyebolt
F—Gas Cylinder
X—18 mm (0.71 in)



ZX270053 —UN—15JAN16

ZX270054 —UN—16FEB16

ZX270055 —UN—15JAN16

OUCC002,00049CC -19-15JAN16-1/1

Electrical System (General Information)

Alternator capacity	200 A ^a
Battery Voltage	12 V
Battery capacity	176 Ah

^a2X 200 A alternators on 9.0 L engine

OUCC002,0004999 -19-14JAN16-1/1

Weld Near Electronic Control Units

IMPORTANT: Do not jump-start engines with arc welding equipment. Currents and voltages are too high and may cause permanent damage.

1. Disconnect the negative (-) battery cable(s).
2. Disconnect the positive (+) battery cable(s).
3. Short the positive and negative machine battery cables together. Do not attach to machine frame.
4. Clear or move any wiring harness sections away from welding area.
5. Connect welder ground close to welding point and away from control units.
6. After the repair area is complete and all components are back in their proper locations, connect positive (+)



TS953 —UN—15MAY90

battery cable(s) first, then connect negative (-) battery cable(s).

OUC002,0003D8D -19-05AUG13-1/1

Keep Electronic Control Unit Connectors Clean

IMPORTANT: Do not open control unit and do not clean with a high-pressure spray. Moisture, dirt, and other contaminants may cause permanent damage.

1. Keep terminals clean and free of foreign debris. Moisture, dirt, and other contaminants may cause the terminals to erode over time and not make a good electrical connection.
2. If a connector is not in use, put on the proper dust cap or an appropriate seal to protect it from foreign debris and moisture.
3. Control units are not repairable.
4. Since control units are the components LEAST likely to fail, isolate failure before replacing by completing a diagnostic procedure. (See your John Deere dealer.)
5. The wiring harness terminals and connectors for electronic control units are repairable.

DX,WW,ECU04 -19-11JUN09-1/1

Observe Electrical Precautions

CAUTION: Batteries must be on a flat surface to accurately check fluid levels. Battery fluid level should be visible at the top of each fill port covering the plates in each cell.

Keep all sparks and flames away from batteries as gas given off by electrolyte is explosive. To avoid sparks, connect ground cable last and disconnect it first. To avoid shocks and burns, turn battery disconnect switch OFF before servicing any part of the electrical system or when removing batteries.



ZX269523 —UN—15JAN16

OUC002,000499A -19-14JAN16-1/1

Basic Electrical Component Handling - Precautions for Machines Equipped with Computer Controlled Systems

- Never disconnect the batteries while the key switch is on and the engine is running.
Why: This can cause electrical voltage spikes that can damage electronic components.
- Do not connect jumper cables while the key switch is on.
Why: This can cause electrical voltage spikes that can damage electronic components.
- Disconnect batteries prior to recharging (if possible).
Why: Electrical loads in the machine can slow the recharging process. Battery chargers can cause electrical voltage spikes that can damage electronic components.
- Never jump start the machine with a voltage higher than the machine is designed to operate on.
Why: This can damage electronic components.
- Do not connect or disconnect electrical connectors while the key switch is on or the machine is running.
- Do not apply power or ground to any component as a test unless specifically instructed to do so.
Why: Connecting the wrong voltage to the wrong point of an electronic system can cause electronic component failures.
- When welding on the machine, make sure to connect ground lead to the parts being welded. For maximum protection disconnect all electronic control units before welding.
Why: The high currents associated with welding can damage wiring harnesses that are involved in the ground path. Welding can also cause electrical voltage spikes that can damage electronic components.

OUCC002,0003D8F -19-05AUG13-1/1

Handling Batteries Safely

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (-) battery clamp first and replace grounded clamp last.

Sulfuric acid in battery electrolyte is poisonous and strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid hazards by:

- Filling batteries in a well-ventilated area
- Wearing eye protection and rubber gloves
- Avoiding use of air pressure to clean batteries
- Avoiding breathing fumes when electrolyte is added
- Avoiding spilling or dripping electrolyte
- Using correct battery booster or charger procedure.

If acid is spilled on skin or in eyes:

1. Flush skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush eyes with water for 15—30 minutes. Get medical attention immediately.

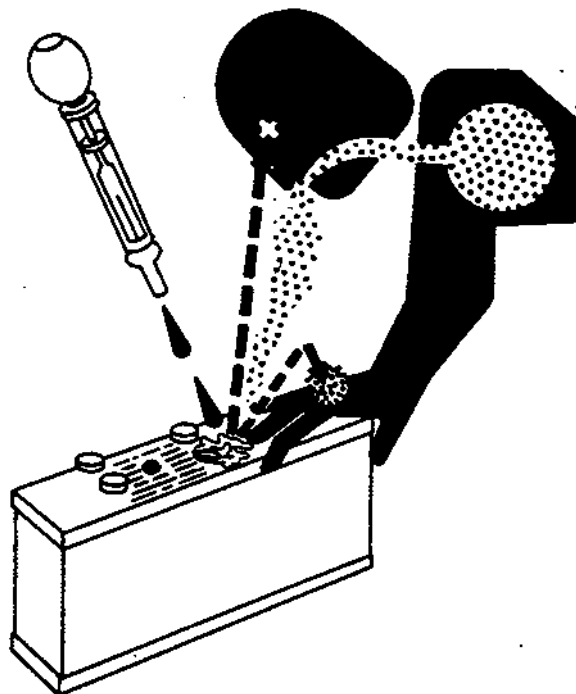
If acid is swallowed:

1. Do not induce vomiting.
2. Drink large amounts of water or milk, but do not exceed 2 L (2 qt.).
3. Get medical attention immediately.

WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.**



TS204—UN—15APR13



TS203—UN—23AUG88

DX,WW,BATTERIES -19-02DEC10-1/1

Battery Charging

Keep battery fully charged, especially during cold weather. Failure to keep battery fully charged, above 12.50 volts, may result in reduced battery life.

CAUTION: Never charge a frozen battery. Thaw at room temperature before connecting to battery charger. Only charge batteries in a well ventilated area. Disconnect both cables from battery terminals when charging batteries in combine.

IMPORTANT: If batteries are not fully charged electrolyte may freeze.

Disconnect both battery cables and connect charger positive cable to (+) terminal and charger negative cable to (-) terminal.

Follow instructions provided with charger. Always charge batteries with a 12-volt charger.

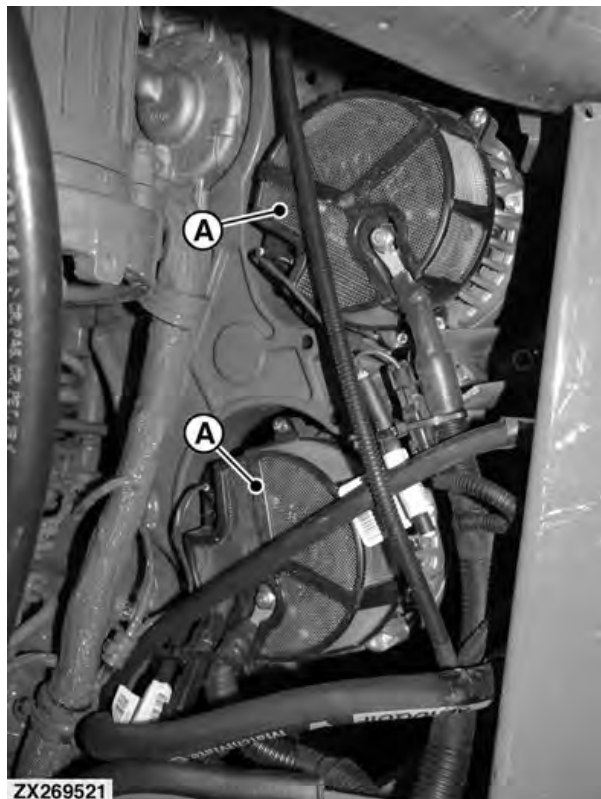
OUC002,000499D -19-14JAN16-1/1

Alternator

IMPORTANT: Always turn off battery switch before working on alternator (A).

NOTE: 6.8 L engine features only one alternator.

A—Alternator



9.0 L Engine Alternators Shown

ZX269521 —UN—15JAN16

OUC002,00049AE -19-14JAN16-1/1

Battery Cable Connection

CAUTION: BATTERIES ARE NEGATIVE GROUNDED ONLY. Always connect battery ground strap to negative (-) post of battery. Connect starter cable to positive (+) post of battery. Incorrect polarity at battery or generator connections causes permanent damage to the electrical system. Connect ground strap to negative (-) terminal last.

When connecting batteries:

Turn off all switches and accessories. Clean battery posts and terminals.

QUICKLY TAP ground strap to negative post. Arcing must not occur. If arcing occurs, DO NOT MAKE CONNECTION. Check to see if battery position is reversed.

If arcing still occurs, check again that all switches and accessories are off. Then check for shorts, broken wires and corroded or loose terminals.

Connect ground cable (-) to battery.

OUC002,000499E -19-14JAN16-1/1

Fuse Center Cover

Fuse center (A) is located on the left-hand side of the machine.

Press lock tab (B) and turn cover (C) counterclockwise to open fuse center.

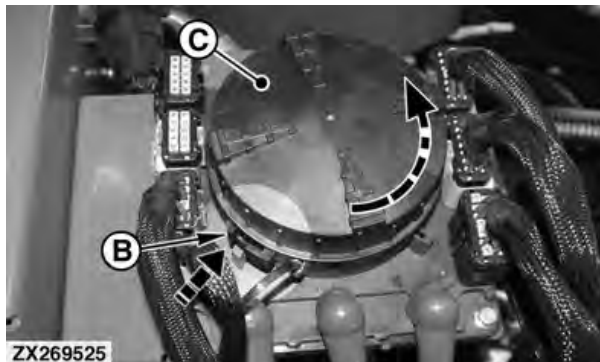
NOTE: Spare fuses (D) and fuse puller (E) are located underneath cover.

A—Fuse Center
B—Lock Tab
C—Cover

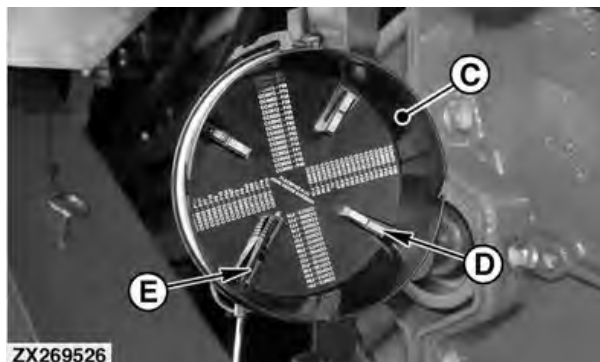
D—Spare Fuses
E—Fuse Puller



ZX269524 —UN—15JAN16



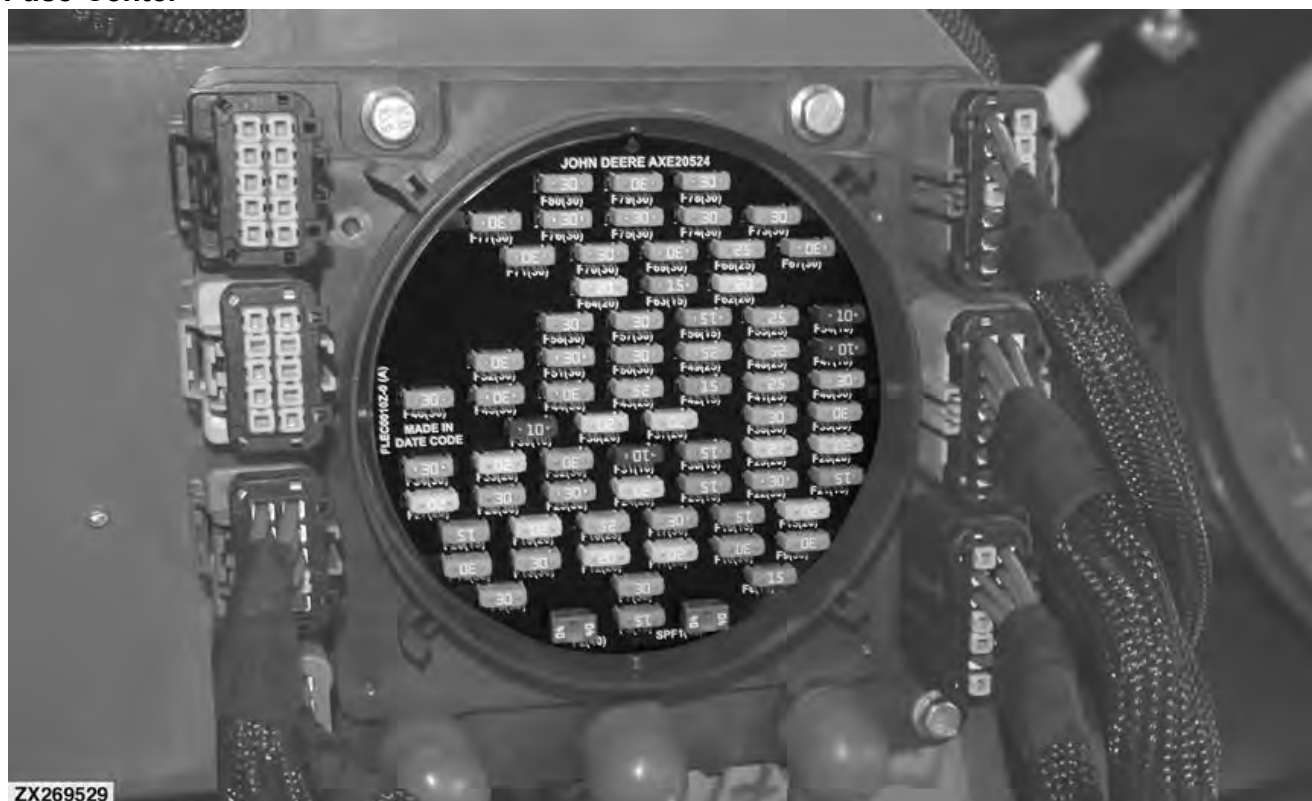
ZX269525 —UN—15JAN16



ZX269526 —UN—15JAN16

OUCC002,000499F -19-14JAN16-1/1

Fuse Center



- SPF1 – Not used
- F2 – Not used
- F3 – Not used
- F6 – Not used
- F7 – Right Control Unit 1, lead 1 (30 amps)
- F8 – Left Power Module 1B, lead 2 (30 amps)—Power supply to folding unloading auger
- F9 – Right Power Module 1, lead 5 (30 amps)—Power supply to left hazard lights and engine service lights
- F10 – CAB Control Unit, lead 2 (30 amps)
- F11 – Right Power Module 1, lead 3 (20 amps)—Power supply to right hazard lights
- F12 – Right Power Module 1, lead 2 (20 amps)—Power supply to chopper vane and grain tank light
- F13 – Spare fuse (30 amps)
- F14 – Cab Power Module 1A, lead 1 (30 amps)—Cab headlights 2 and 7, seat heater
- F15 – Right Power Module 1, lead 4 (20 amps)—Power supply to 6.8 L engine T2 fuel pump
- F16 – Spare
- F17 – Moisture sensor (30 amps)
- F18 – Right Control Unit 1, lead 2 (25 amps)
- F19 – Cab Power Module 1A, lead 3 (20 amps)—Power supply for wiper and power strip
- F20 – Power supply for interior lighting and adjustable outside mirrors (15 amps)
- F21 – Cab Power Module 1B, lead 4 (15 amps)—Power supply to left fascia lights
- F22 – CAB Control Unit, lead 1 (30 amps)
- F23 – Cab Power Module 1B, lead 3 (15 amps)—Power supply to right fascia lights
- F24 – Cab Power Module 1B, lead 5 (20 amps)—Power supply to lower driving lights
- F25 – Spare
- F26 – Unswitched power supply to wiper and power strip (30 amps)
- F27 – Control Unit LC1, lead 2 (20 amps)
- F28 – Power supply to recirculating fan, lead 2 (20 amps)
- F29 – Power supply to recirculating fan, lead 1 (20 amps)
- F30 – Unswitched power supply to AUX power supply (15 amps)
- F31 – Unswitched power supply to radio, MTG, satellite module, and main display (10 amps)
- F32 – Left Power Module 1A, lead 4 (30 amps)—Power supply to header stubble lights
- F33 – Power supply for accessories (20 amps)—Power supply to key switch and AutoTrac™
- F34 – Left Power Module 1A, lead 1 (30 amps)—Power supply to cleaning fan speed and left rear discharge light
- F35 – Spare
- F36 – Right Power Module 1, lead 1 (30 amps)—Power supply to grain tank covers and shoe service lights
- F37 – Power supply to seat compressor (20 amps)
- F38 – Power supply to cab switch module, steering column module, camera power, secondary display, horn, and subwoofer assembly (20 amps)
- F39 – Power supply to AutoTrac™ (10 amps)
- F40 – Cab Power Module 1A, lead 4 (30 amps)—Power supply to right fascia lights
- F41 – Cab Power Module 1A, lead 2 (25 amps)—Power supply to cab headlights 1, 3, 6, and 8

Continued on next page

UCC002.00049C8 -19-15JAN16-1/2

- F42 – Power supply to GreenStar™ display and primary display unit (15 amps)
- F43 – ECU power supply, lead 3 (25 amps)—FT4 engine battery bypass
- F44 – Not used
- F45 – Left Power Module 1A, lead 2 (30 amps)—Power supply to chopper vane and grain tank light
- F46 – Left Power Module 1A, lead 3 (30 amps)—Power supply to transmission lock
- F47 – Automatic temperature control (10 amps)
- F48 – Engine Control Unit, lead 1 (25 amps)
- F49 – Cab Power Module 1A, lead 5 (25 amps)—Power supply to cab high beam lights 4 and 5 and pressurizer blower
- F50 – Spare fuse (30 amps)
- F51 – Control Unit LC1, lead 1 (30 amps)
- F52 – Spare
- F54 – ProDrive™ Control Unit (10 amps)
- F55 – Engine Control Unit, lead 2 (25 amps)
- F56 – Power supply to fuel transfer pump (15 amps)
- F57 – Not used
- F58 – Cab Power Module (30 amps)
- F62 – Spare
- F63 – Power supply to dosing pump (15 amps)
- F64 – Not used
- F67 – Power supply to chopper raise/lower (30 amps)
- F68 – Left Power Module 1, lead 5 (25 amps)—Power supply to gull wing service lights and left row finder light
- F69 – Spare
- F70 – Spare
- F71 – Spare
- F73 – Control Unit LC2, lead 1 (30 amps)
- F74 – Spare
- F75 – Spare
- F76 – Spare
- F77 – Spare
- F78 – Control Unit LC2, lead 2 (30 amps)
- F79 – Spare
- F80 – Not used

OUCC002,00049C8 -19-15JAN16-2/2

Cab Fuse (Diode Module Fuse)

NOTE: Diode module fuse is located inside cab underneath the bottle holder on right-hand side.

- F85 (5 A / Diode Module Fuse)



ZX269531 —UN—15JAN16

OUCC002,00049C6 -19-15JAN16-1/1

Inline Fuses

ProDrive™ Transmission Control Unit (PTP) Fuse (If Equipped):

NOTE: Fuse is located on engine deck near control unit.

- F86 (10 A / Alternator Redundant Power for PTP Fuse)



ZX269538 —UN—15JAN16

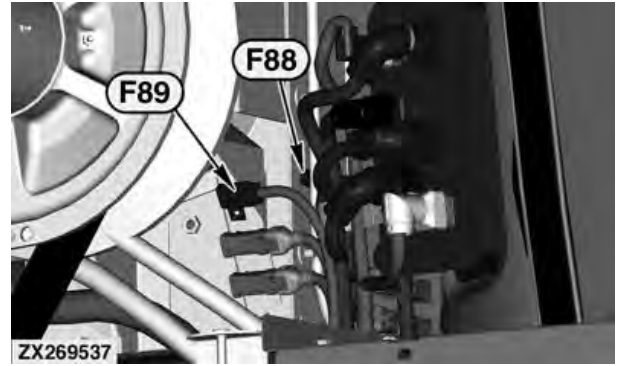
Continued on next page

OUCC002,00049C7 -19-15JAN16-1/3

Video System Fuses (If Equipped):

NOTE: Video power fuses are located outside cab on rear right-hand side.

- F88 (7.5 A / Video Power Fuse)
- F89 (7.5 A / Video Power Fuse)



ZX269537 —UN—15JAN16

OUC002,00049C7 -19-15JAN16-2/3

Switched Battery Power Fuse (6.8 L Engine Only):

NOTE: Fuse is located on engine deck near control unit.

- F5000 (50 A / Switched Battery Power Fuse)



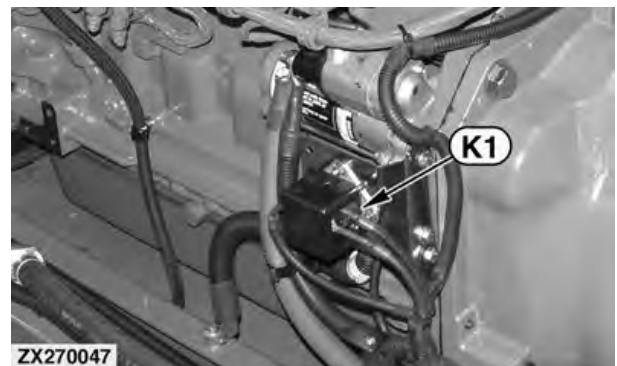
ZX269539 —UN—15JAN16

OUC002,00049C7 -19-15JAN16-3/3

Starter Relay

NOTE: Starter relay is located on right-hand side of the engine underneath the starter motor.

- K1 (Starter Relay)



ZX270047 —UN—15JAN16

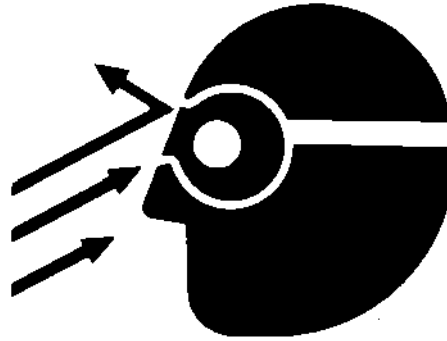
OUC002,00049C9 -19-15JAN16-1/1

Safety Rules When Replacing Halogen Bulbs

⚠ CAUTION: Halogen bulbs (A) contain gas under pressure. Handling a bulb improperly could cause it to shatter into flying fragments. To avoid possible injury:

- Turn light switch OFF and allow bulb to cool before changing bulbs. Leave switch OFF until bulb change is complete.
- Wear eye protection when changing bulb.
- Handle bulb by its base. Wear protective gloves or avoid touching light bulb surface.
- Use a clean cloth and alcohol to remove any fingerprints from glass bulb before installing. Skin oil deposited on bulb will cause overheating and premature failure.
- Do not drop or scratch bulb.
- Keep moisture away from bulb.
- Do not operate bulb outside of its enclosure. Bulb has a high internal pressure and if cracked or broken it could explode and cause injury.
- Place used bulb in new bulb carton and dispose of properly. Keep out of reach of children.

A—Halogen Bulb



TS286 —UN—23AUG88

H59774 —UN—30AUG99

OUC002,00049A1 -19-14JAN16-1/1

Replace Cab Headlight Bulb (Non Light Emitting Diode (LED) Lights)

⚠ CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

Disconnect wiring harness connector (A) from headlight assembly (B).

Rotate light housing toward outside of cab.

Turn bulb assembly (C) counterclockwise and remove.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Replace bulb.

Push in bulb assembly and turn clockwise to install into housing.

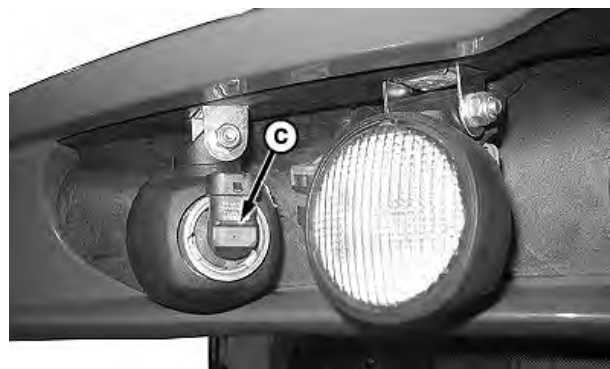
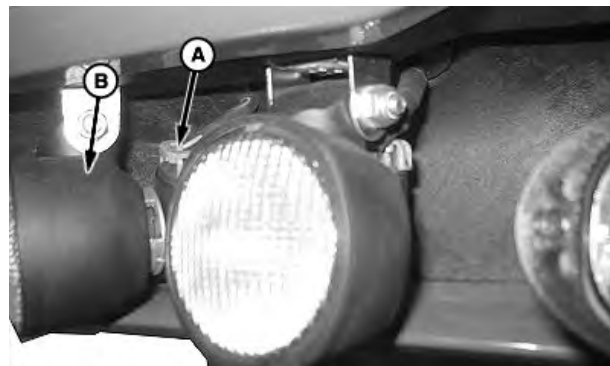
Rotate light housing to previous operating position and connect wiring harness.

Repeat on remaining lights as needed.

A—Connector

B—Headlight Assembly

C—Bulb Assembly



H96621 —UN—25MAY10

H96622 —UN—25MAY10

OUC002,00049A2 -19-14JAN16-1/1

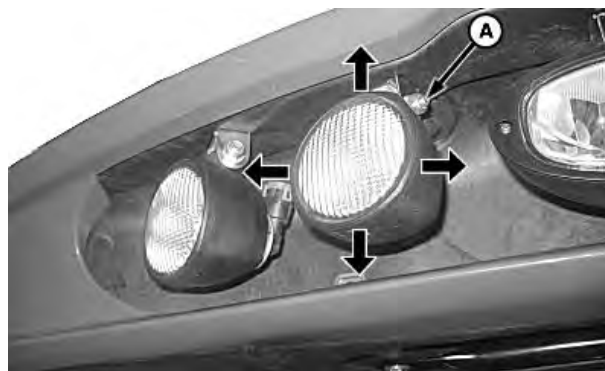
Adjust Cab Headlights

CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

NOTE: Light assemblies can be adjusted as needed to achieve correct lighting angles.

Vertical Adjustment: Loosen cap screw (A). Rotate light assembly up or down to desired position and tighten cap screw. Repeat on remaining lights as needed.

Horizontal Adjustment: Rotate light assembly left or right to desired position. Repeat on remaining lights as needed.



A—Cap Screw

OUCC002,00049A3 -19-14JAN16-1/1

H96624 —UN—25MAY10

Replace Cab Halogen Light Bulb

CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

Remove screws (A) and face plate lens (B) from housing.

Squeeze clips (C) to remove bulb assembly (D).

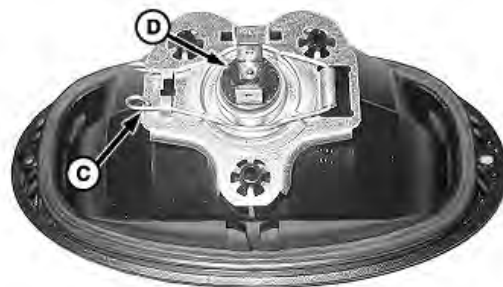
NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Remove and replace bulb.

Attach bulb assembly using clips on light bulb base.

Align face plate lens with connector inside housing and retain with screws.

Repeat on remaining lights as needed.



A—Screws
B—Face Plate Lens

C—Clip
D—Bulb Assembly

OUCC002,00049A4 -19-14JAN16-1/1

H96625 —UN—25MAY10

H96626 —UN—25MAY10

Adjust Cab Halogen Lights

CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

NOTE: Light assemblies can be adjusted as needed to achieve correct lighting angles.

Loosen cap screw (A). Rotate light assembly up or down to desired position and tighten cap screw. Repeat on remaining lights as needed.

A—Cap Screw



H98628—UN—25MAY10

OUCC002,00049A5 -19-14JAN16-1/1

Replace Fascia Light Bulb (If Equipped)

CAUTION: Lower feeder house fully before replacing or adjusting headlights.

Disconnect wiring harness connector (A) from bulb assembly (B).

Turn bulb assembly counterclockwise and remove.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

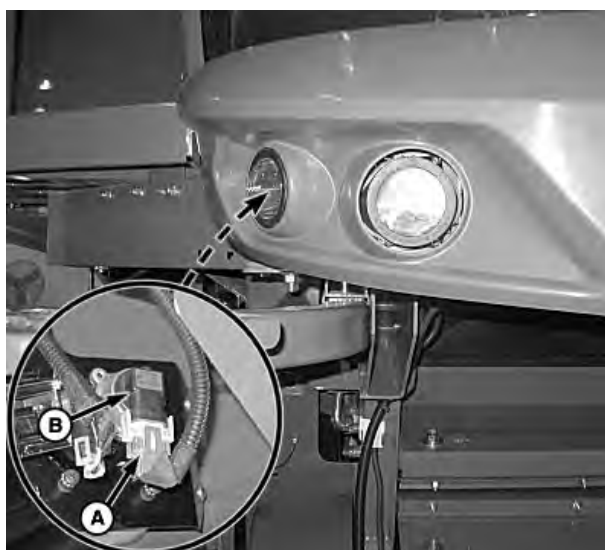
Remove and replace bulb.

Push in bulb assembly and turn clockwise to install into housing and connect wiring harness.

Repeat on remaining lights as needed.

A—Connector

B—Bulb Assembly



H98976—UN—02NOV10

OUCC002,00049A6 -19-14JAN16-1/1

Replace Lower Driving Light Bulb (If Equipped)

CAUTION: Lower feeder house fully before replacing or adjusting headlights.

Disconnect wiring harness connector (A) from bulb assembly (B).

Turn bulb assembly counterclockwise and remove.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

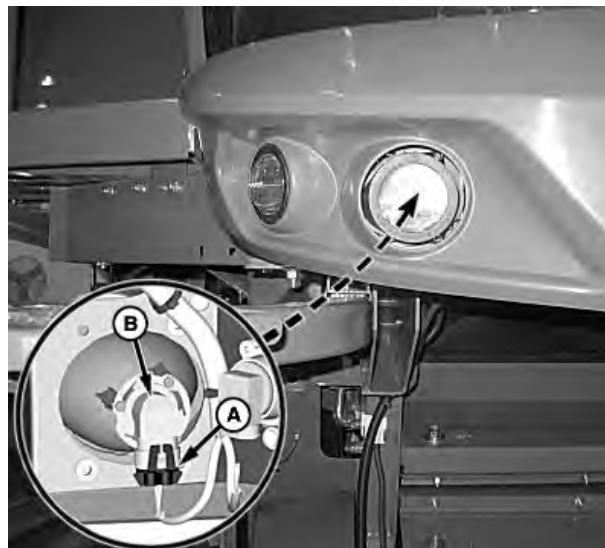
Remove and replace bulb.

Push in bulb assembly and turn clockwise to install into housing and connect wiring harness.

Repeat on remaining lights as needed.

A—Connector

B—Bulb Assembly



H98629 —UN—02NOV10

OUCC002.00049A7 -19-14JAN16-1/1

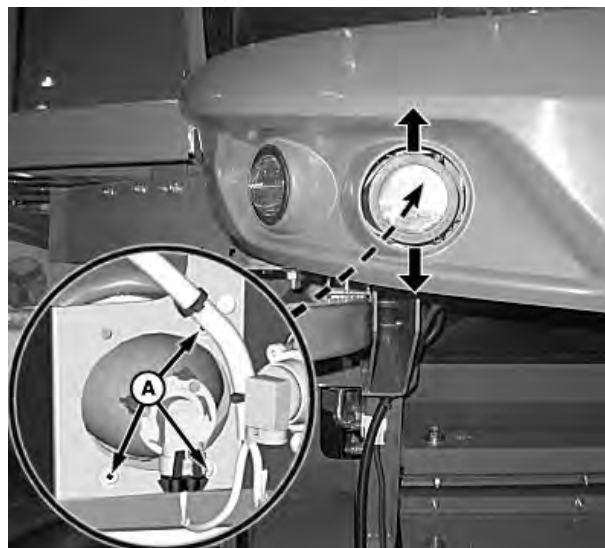
Adjust Lower Driving Lights (If Equipped)

CAUTION: Lower feeder house fully before replacing or adjusting headlights.

NOTE: Light assemblies can be adjusted as needed to achieve correct lighting angles.

Adjust screws (A) to rotate light assembly up or down to desired position and tighten screws. Repeat on remaining lights as needed.

A—Screws



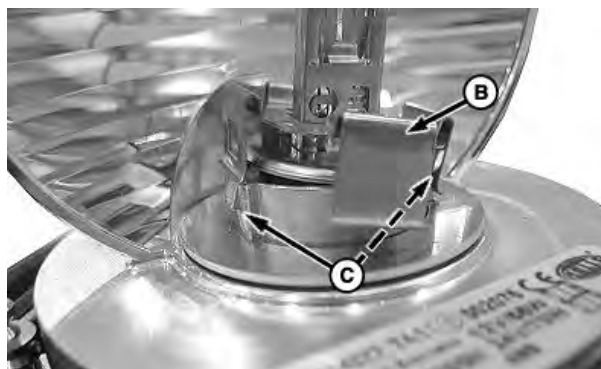
H98977 —UN—02NOV10

OUCC002.00049A8 -19-14JAN16-1/1

Replace Beacon Light Bulb (Non Light Emitting Diode (LED) Lights)



H96613 —UN—25MAY10



H96614 —UN—25MAY10

CAUTION: Raise feeder house and lower safety stop before replacing beacon lights.

Push down on lens (A) and turn counterclockwise to remove.

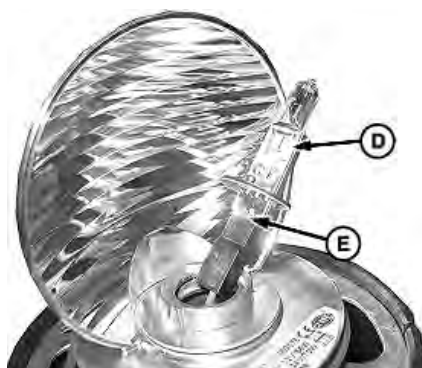
Pry clip (B) from locking tab (C).

Remove bulb assembly (D) from connector (E).

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Replace bulb and install in reverse order.

Repeat on remaining lights as needed.



H96615 —UN—25MAY10

A—Lens
B—Clip
C—Locking Tab

D—Bulb Assembly
E—Connector

OUC002,00049A9 -19-14JAN16-1/1

Replace Beacon Light (Light Emitting Diode (LED) Lights)

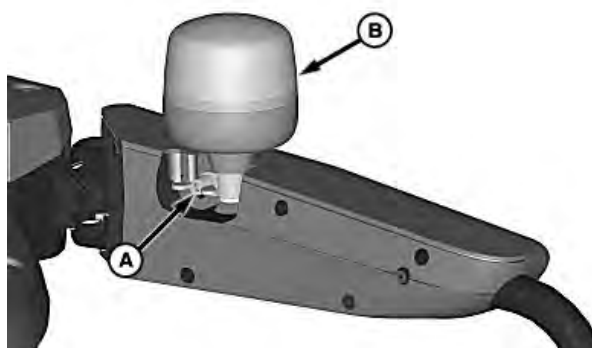
CAUTION: Raise feeder house and lower safety stop before replacing beacon lights.

NOTE: Light emitting diodes are required to meet local and government regulations for road transportation height requirements when 710/70R42 tires are installed.

Loosen wing nut (A) and remove beacon light (B) from electrical outlet.

Replace beacon light and install in reverse order.

Repeat on remaining lights as needed.



H111428 —UN—12JUN14

A—Wing Nut

B—Beacon Light

OUC002,00049AA -19-14JAN16-1/1

Replace Discharge Lights, Auxiliary Field Lights, Access Door Work Lights, Stubble Lights, Grain Tank and Unloading Auger Light

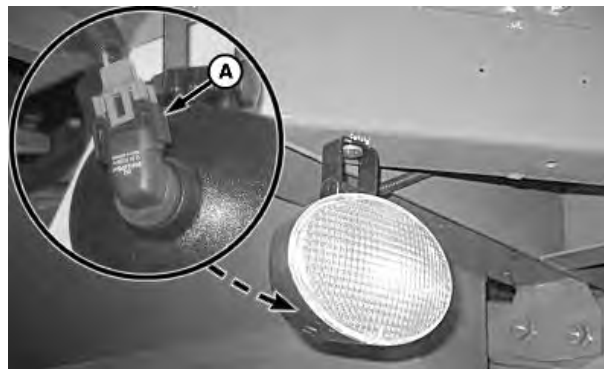
Disconnect wiring harness connector (A) from bulb assembly.

Turn bulb assembly counterclockwise and remove.

Remove and replace bulb.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Push in bulb assembly and turn clockwise to install into housing and connect wiring harness.



Right-Hand Stubble Light

A—Connector

OUC002,00049AB -19-14JAN16-1/1

H96617 —UN—25MAY10

Replace Side Finder Lights and Cleaning Shoe Lights

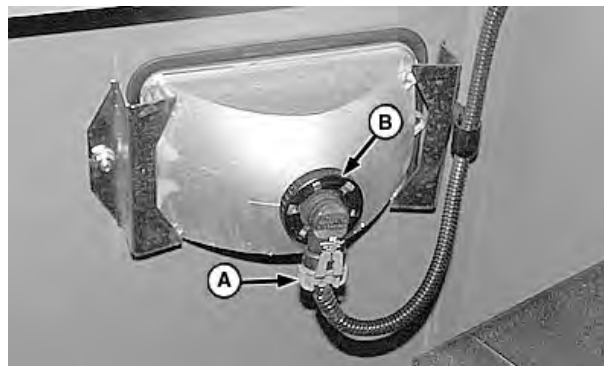
Disconnect wiring harness connector (A) from bulb assembly.

Push in and twist retainer ring (B) counterclockwise and remove.

Remove and replace bulb.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Install bulb assembly in reverse order and connect wiring harness.



A—Connector

B—Retainer Ring

OUC002,00049AC -19-14JAN16-1/1

H57680 —UN—28MAY99

Replace Hazard/Marker Lights, Marker/Brake Lights and Rear Hazard Lights

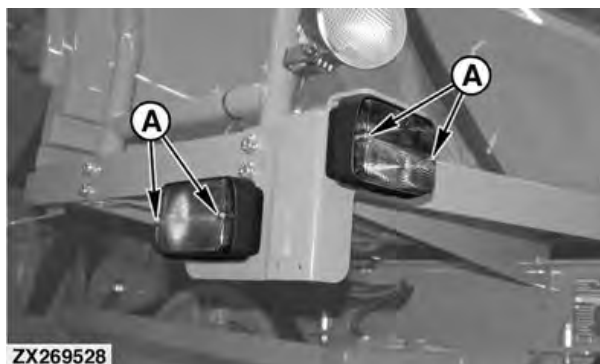
Remove screws (A) from lens covers.

Remove light bulb by pushing in and turning counterclockwise.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Install bulb and lens cover in reverse order.

A—Screw



ZX269528

Hazard/Marker Lights



ZX269527

Marker/Brake Lights and Rear Hazard Lights

OUC002,00049AD -19-14JAN16-1/1

ZX269528 —UN—15JAN16

ZX269527 —UN—15JAN16

Replace Cab Interior Light

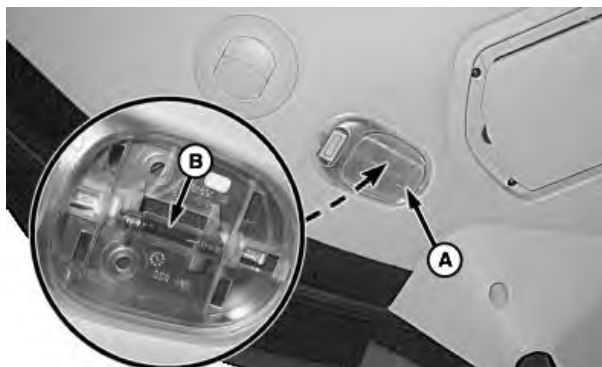
Remove lens cover (A) and replace bulb (B).

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Install bulb and lens cover in reverse order.

A—Lens Cover

B—Bulb



OUC002,0003DAE -19-07AUG13-1/1

H96618 —UN—02JUN10

Replace Map Light

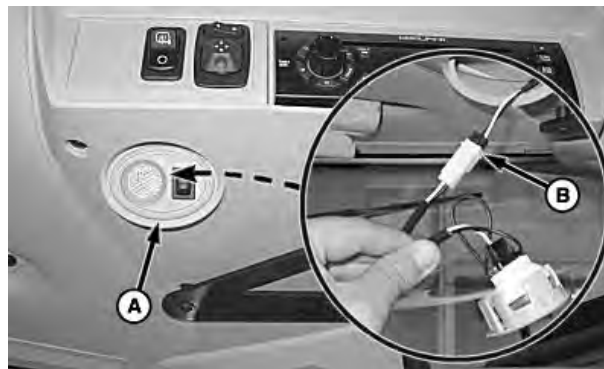
Remove map light assembly (A) and disconnect wiring harness connector (B).

Remove and replace map light assembly.

Install and orient map light assembly in reverse order.

A—Map Light Assembly

B—Connector



H97965—UN—13SEP10

OUC002,0003DAF -19-07AUG13-1/1

Hydraulic System (General Information)

The combine hydraulic system is an open center system. In an open center system the pump runs continuously, even when system components are not activated (system is in neutral). When the system is in neutral, oil flows through the system and back to the reservoir - the "open center" feature.

There are two reservoirs in the hydraulic system; the hydraulic/hydrostatic reservoir and the steering/engine gearcase reservoir. The hydraulic/hydrostatic reservoir supplies oil for the hydraulic and hydrostatic systems. The steering/engine gearcase reservoir supplies oil for the steering, separator clutch, gearcase lubrication and unloading auger drive.

There are two oil coolers; one for each reservoir. Oil cooler bypass valves provide quick warmup of the oil in cold weather.

There are three oil filters providing filtration for the hydrostatic system, the steering/engine gearcase system and the combined return oil from the hydraulic and hydrostatic systems.

There are three pumps supplying oil to the steering/engine gearcase system, hydraulic system and the hydrostatic system. The hydrostatic system uses its own charge pump to supply oil to the hydrostatic ground speed drive unit.

CAUTION: It is normal for the system to allow a raised feeder house (with or without a header) to slowly lower to the ground after a long period of time. Always lower the safety stop when the combine is unattended. If the feeder house should lower itself to the ground in less than 12 hours (approximate), see your John Deere dealer.

IMPORTANT: The components in this system are built to very close tolerances and have been adjusted at the factory. Do not attempt to service these components except to maintain proper oil level and to change oil and filter. See your John Deere dealer for all other service.

OUC002,00049B0 -19-14JAN16-1/1

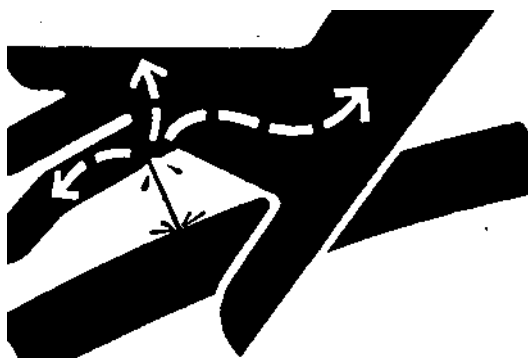
Hydraulic System Cleanliness

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury may call the Deere & Company Medical Department in Moline, Illinois, or other knowledgeable medical source.

Cleanliness

If hydraulic system should be disconnected for service, protect ends of hoses, tubing and ports of components from contamination with clean, lint-free towels or clean plastic bags.



X9811—UN—23AUG88

Before installing any replacement hose, flush the inside with unused diesel fuel or unused commercial petroleum cleaning solvent for ten seconds minimum. Do not use water, water soluble cleaners or compressed air.

Remove cover from multi-coupler and attach to docking station on header. When coupling to header clean multi-coupler surfaces to remove dirt and debris.

OUCC002,00049B1 -19-14JAN16-1/1

Hydraulic Hose Replacement

Hydraulic hoses should be inspected frequently for leakage, kinking, cuts, cracks, abrasion, corrosion, exposed wire braid, or any other signs of wear or damage. Worn or damaged hose assemblies can fail during use and should be replaced immediately. See your John Deere dealer for replacement hoses.

CAUTION: If incorrectly rated hose is used, machine damage, injury or death could occur.

If hoses are to be fabricated, ensure that hoses are the same rating as one being replaced. See your John Deere dealer for correct hose rating replacements.

Incorrect hose length or routing can increase chance of hose wear or damage. Use old hose as guide for length and hose routing.

Incorrect fittings can damage mating parts or cause leaks. Make sure to use steel fittings approved for use with hose manufacture. Use correct size and thread type as replaced hose.

OUCC002,00048E9 -19-19DEC15-1/1

Header Lift Accumulator (General Information)

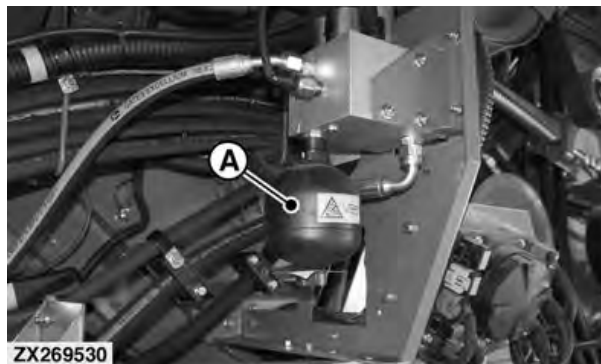
IMPORTANT: Every time the header is changed or the skid plates are installed/removed, have your John Deere dealer check and if necessary readjust the pressure charge of the accumulator.

The accumulator (A) is integrated into the header lift system. It supports the Automatic Header Control (AHC) system when ground pressure control is active.

The accumulator has a volume of **0.7 L (0.19 gal)**.

It is maintenance-free and cannot be repaired if damaged.

NOTE: Due to temperature differences, accumulator pressures can vary significantly and will need to be adjusted. See your John Deere dealer for further information.



A—Accumulator

OUC002,00049B2 -19-14JAN16-1/1

ZX269530 —UN—15JAN16

Adjust Header Lift Accumulator

The reactivity and performance of the feeder house suspension depends on the weight of the header.

Refer to the following chart to determine if charge pressure of accumulator (A) needs to be changed. Contact your John Deere dealer to set charge pressure at the required pressure.

A—Accumulator



ZX269530 —JUN—15JAN16

Header Type	Header Weight	Feeder House With 63 mm Lift Cylinders	Feeder House With 70 mm Lift Cylinders
614R	1450 kg (3200 lb)	4500 kPa (650 psi)	—
614R with extension for harvesting rape or sunflowers	1800 kg (7500 lb)	6000 kPa (870 psi)	—
616R	1650 kg (3640 lb)	5000 kPa (725 psi)	—
616R with extension for harvesting rape or sunflowers	2005 kg (4420 lb)	8000 kPa (1160 psi)	—
618R	1820 kg (4080 lb)	6000 kPa (870 psi)	—
618R with extension for harvesting rape or sunflowers	2205 kg (4860 lb)	8000 kPa (1160 psi)	—
618 PremiumFlow	2380 kg (5250 lb)	9000 kPa (1305 psi)	—
620R	2000 kg (4400 lb)	8000 kPa (1160 psi)	—
620R with extension for harvesting rape or sunflowers	2370 kg (5225 lb)	9000 kPa (1305 psi)	—
620F	2272 kg (5010 lb)	8000 kPa (1160 psi)	—
620 PremiumFlow	2540 kg (5600 lb)	9000 kPa (1300 psi)	—
622R	2110 kg (4650 lb)	8000 kPa (1160 psi)	—
622R with extension for harvesting rape or sunflowers	2370 kg (5225 lb)	9000 kPa (1300 psi)	—
622F	2400 kg (5290 lb)	9000 kPa (1300 psi)	—
622 PremiumFlow	2830 kg (6240 lb)	10 000 kPa (1450 psi)	—
622X	2650 kg (5840 lb)	10 000 kPa (1450 psi)	—
625R	2580 kg (5690 lb)	9000 kPa (1300 psi)	—
625R with extension for harvesting rape or sunflowers	3080 kg (6790 lb)	10 000 kPa (1450 psi)	—
625F	2600 kg (5730 lb)	9000 kPa (1300 psi)	—
625D	2100 kg (4630 lb)	8000 kPa (1160 psi)	—
625 PremiumFlow	3080 kg (6790 lb)	10 000 kPa (1450 psi)	—
625X	2900 kg (6390 lb)	10 000 kPa (1450 psi)	—
630R	2910 kg (6415 lb)	10 000 kPa (1450 psi)	—
630R with extension for harvesting rape or sunflowers	3500 kg (7720 lb)	10 000 kPa (1450 psi)	—
630F	3040 kg (6700 lb)	10 000 kPa (1450 psi)	—
630D	3225 kg (7110 lb)	10 000 kPa (1450 psi)	—
630 PremiumFlow	4000 kg (8820 lb)	—	10 000 kPa (1450 psi)
630X	3360 kg (7410 lb)	10 000 kPa (1450 psi)	—
635R	3400 kg (7500 lb)	10 000 kPa (1450 psi)	—
635F	3490 kg (7700 lb)	9000 kPa (1300 psi)	—
635D	3940 kg (8690 lb)	10 000 kPa (1450 psi)	—
635X	4090 kg (9020 lb)	—	10 000 kPa (1450 psi)
640X	4450 kg (9810 lb)	—	10 000 kPa (1450 psi)

Continued on next page

OUCC002,00049B3 -19-14JAN16-1/2

Header Type	Header Weight	Feeder House With 63 mm Lift Cylinders	Feeder House With 70 mm Lift Cylinders
606C folding	2250 kg (4960 lb)	8000 kPa (1160 psi)	—
606C rigid	2250 kg (4960 lb)	8000 kPa (1160 psi)	—
606C StalkMaster™ folding	2620 kg (5770 lb)	9000 kPa (1300 psi)	—
606C StalkMaster™ rigid	2620 kg (5770 lb)	9000 kPa (1300 psi)	—
608C folding	2900 kg (6400 lb)	10 000 kPa (1450 psi)	—
608C rigid	2900 kg (6400 lb)	10 000 kPa (1450 psi)	—
608C StalkMaster™ folding	3260 kg (7180 lb)	10 000 kPa (1450 psi)	—
608C StalkMaster™ rigid	3260 kg (7180 lb)	10 000 kPa (1450 psi)	—

OUC002,00049B3 -19-14JAN16-2/2

Adjust Shift Linkage (3-Speed Transmission With Gearshift Lever)

If the gearshift lever is hard to shift, it does not necessarily mean that the cable needs adjustment.

Hard shifting can be caused by:

- A damaged, dirty, rusty or pinched shift cable. For these problems, inspect, clean, adjust or replace the cable.
- Internal transmission problems: If you suspect a transmission problem, see your John Deere dealer.

To adjust the shift linkage, shift transmission into second gear. The gearshift lever should be leaning slightly forward when in second gear.

From under cab, loosen nut (A) and adjust ball joint (B) to meet dimension (C) of **237 mm (9.33 in)**.

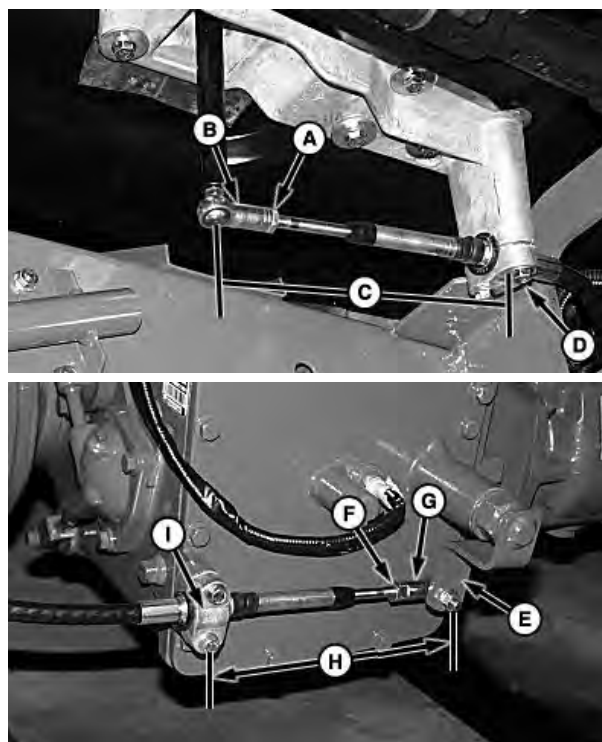
IMPORTANT: Do not adjust clamp (D).

At the transmission, shift arm (E) should be straight down as shown. Loosen nut (F) and adjust ball joint (G) until the stud on the ball joint aligns with the hole in shift arm (E).

Check for dimension (H) of **237 mm (9.33 in)**.

IMPORTANT: Do not adjust clamp (I).

- | | |
|-----------------------------------|-----------------------------------|
| A—Nut | F—Nut |
| B—Ball Joint | G—Ball Joint |
| C—Measurement of 237 mm (9.33 in) | H—Measurement of 237 mm (9.33 in) |
| D—Clamp | I—Clamp |
| E—Shift Arm | |



Shield Removed for Clarity

H68534 —UN—12JUN01

H68704 —UN—12JUN01

OUC002,00049B4 -19-14JAN16-1/1

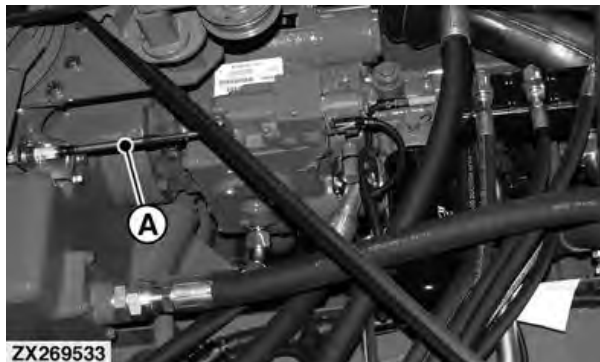
Hydrostatic Drive — Adjusting Cable (3-Speed Mechanical and Push-Button Shift Transmission)

IMPORTANT: Adjusting cable (A) cannot be repaired. Have cable replaced and adjusted by your John Deere dealer.

A—Hydrostatic Drive Adjusting Cable



ZX269532 —UN—15JAN16



ZX269533 —UN—15JAN16

OUCC002,00049BA -19-15JAN16-1/1

Brake Fluid (3-Speed Mechanical and Push-Button Shift Transmission)

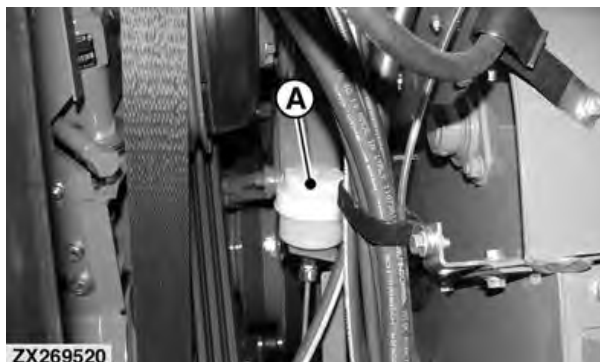
IMPORTANT: When removing reservoir cap, keep contaminants from entering the reservoir.

IMPORTANT: In case of any leakage see your John Deere dealer.

Use only brake fluid meeting SAE Standard J 1703 (DOT 3 or DOT 4).

Check fluid level every 400 hours of operation.

Use only specified brake fluid to top up. Fluid should be 6 mm (0.24 in) from top.



ZX269520 —UN—15JAN16

A—Brake Fluid Reservoir

OUCC002,00049B9 -19-15JAN16-1/1

Brake System

CAUTION: In case of any leakage or malfunction of the brake system see your John Deere dealer.

IMPORTANT: If you experience soft or spongy brakes, a loss of braking power or the park brake will not hold, see your John Deere dealer.

On Machines With 3-Speed Mechanical and Push-Button Shift Transmission: Drum brakes are

adjusted automatically when brake pedals are depressed. Further adjustment is not necessary.

On Machines With ProDrive™ Transmission: At least once a year, check the brake disk thickness, see your John Deere dealer.

OUC002,00049B8 -19-15JAN16-1/1

ClimaTrak™ Air Conditioner—Servicing



A—Defrost Switch

B—Temperature Control Dial

C—Fan Speed Control Dial

CAUTION: Escaping refrigerant under pressure can penetrate eyes and skin causing serious injury to you or others. Do not attempt to repair or service refrigerant system. See your John Deere dealer.

IMPORTANT: R134a refrigerant must be used. Special equipment and procedures are required to service air conditioning system. See your John Deere dealer.

NOTE: Some oil seepage from compressor shaft seal on lower front is normal.

If air conditioner clutch slips after machine was in storage, compressor may be stuck. Shut OFF engine, set park brake and remove key. Open engine access doors and rotate clutch hub back and forth to free compressor. If

clutch hub does not rotate, or looks damaged, see your John Deere dealer.

Start machine and run engine at high idle.

Press defrost switch (A). Indicator light will turn ON indicating system is activated.

Turn temperature control dial (B) fully counterclockwise to decrease temperature.

Turn fan speed control dial (C) fully clockwise to increase fan speed.

If cooling is intermittent, clean radiator and condenser. If problem persists, see your John Deere dealer.

Inspect cab filters for restriction. Clean cab filters if needed. If problem persists, see your John Deere dealer.

OUC002,00049C1 -19-15JAN16-1/1

Clean ClimaTrak™ Fresh Air Filter and Recirculation Air Filter

NOTE: If system is not cooling, check evaporator filter. Clean filter only if other service does not provide enough cooling. Evaporator filter can be inspected from outside cab after removing fresh air filter. If it looks clean, do not remove and clean it. See your John Deere dealer.

Clean filter by one of the following methods:

- Tap gently on flat surface, dirty side down. Do not tap on a tire.

- Blow compressed air through filter in opposite direction of arrows on filter.
- Soak 15 minutes in warm (not hot) water with R36757 John Deere Dry Filter Element Cleaner or its equal (non-sudsing detergent).
- Rinse until clean with water from hose. Do not use a high-pressure washer.
- Shake extra water from filter and allow element to dry. Do not use compressed air to dry filter. It may rupture it.

OUCC002,00049C0 -19-15JAN16-1/1

Replace Fresh Air Filter

NOTE: Fresh air filter may require cleaning sooner in very dusty conditions.

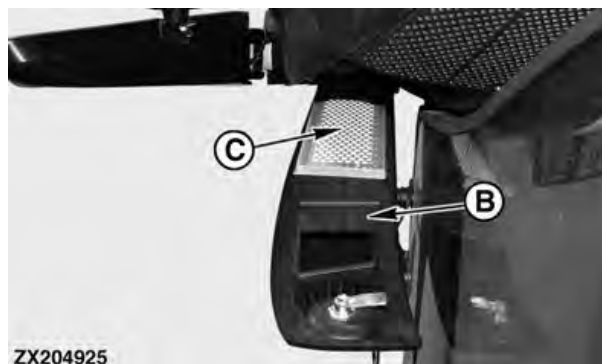
Turn knob (A) and lower access cover (B). Remove fresh air filter (C) to clean or replace.

A—Knob
B—Cover

C—Fresh Air Filter



ZX204924 —UN—14AUG13



ZX204925 —UN—14AUG13

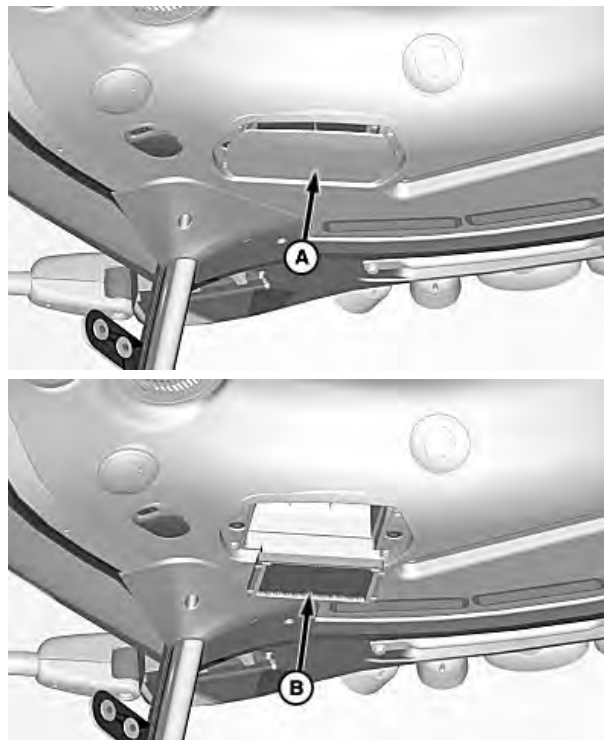
OUCC002,00049BF -19-15JAN16-1/1

Replace Recirculation Air Filter

Remove cover (A). Remove recirculation air filter (B) to clean or replace.

A—Cover

B—Recirculation Air Filter



H94839 —UN—19MAY10

H94840 —UN—19MAY10

OUC002,00049BE -19-15JAN16-1/1

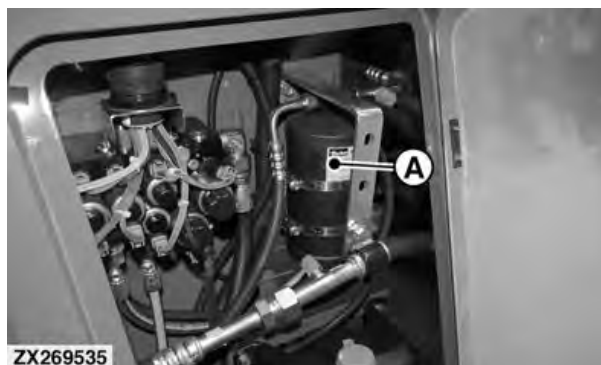
Check Refrigerant Level

IMPORTANT: The air-conditioning system operates using R134a refrigerant (tetrafluoroethane). This substance does not contain any chlorine atoms, so it does not have a detrimental effect on the ozone in the Earth's atmosphere.

Even so, the refrigerant must never be discharged straight into the air. It must be trapped in a recycling unit. Therefore do not separate any line connections and have service and repair work done only by your John Deere dealer having appropriate recovery or recycling equipment available.

Regularly check refrigerant level. With air-conditioning system controls set for maximum cooling and engine running, check if diagnostic trouble code **ATC 000871.18** displayed.

If diagnostic trouble code **ATC 000871.18** is displayed, refrigerant level is low and system should be recharged by your John Deere dealer.



A—Receiver-Drier

ZX269535 —UN—15JAN16

OUC002,00049BD -19-15JAN16-1/1

Fill Windshield Washer Reservoir

Remove cap (A) and fill reservoir with automotive windshield washer fluid.

A—Cap



ZX269534

ZX269534 —UN—15JAN16

OUC002,00049BC -19-15JAN16-1/1

Jacking Points (Jack Pocket Locations Decal)

CAUTION: Always empty grain tank before raising machine.

Block both sides of tires to prevent machine movement. Use chock blocks (B).

CAUTION: Always use suitable lifting device and secure front or rear axle with suitable jackstand.

Jack pocket locations decal (A) is located on cab ladder. Decal shows correct locations for raising machine using proper jacks.

Engage park brake and prevent the machine from rolling away by putting down chock blocks (B).

A—Jack Pocket Locations
Decal

B—Chock Block



ZX269536

ZX269536 —UN—15JAN16



ZX270094

ZX270094 —UN—22JAN16

OUC002,00049C2 -19-21JAN16-1/1

Service Tires Safely

⚠ CAUTION: Explosive separation of a tire and rim parts can cause serious injury or death.

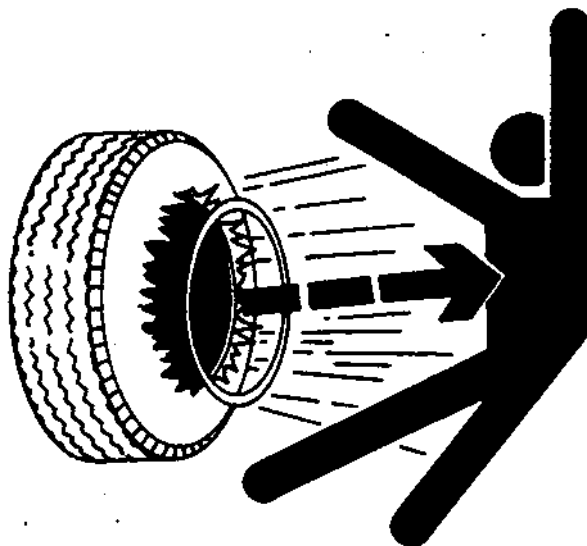
Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure.

Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check tires for low pressure, cuts, bubbles, damaged rims or missing lug bolts and nuts.



TS211 —UN—15APR13

OUCC002,0003E1D -19-05OCT13-1/1

Care and Service of Tires

Check tires daily for damage and noticeably low pressure. Long life and satisfactory performance depend on proper tire inflation.

At least every 100 hours of operation, check tire pressure. If tires contain liquid ballast, use a special air-water gauge and measure with valve stem at bottom.

A small puncture in a tubeless tire can be temporarily repaired without dismounting the tire, thus avoiding down time during a busy season.

IMPORTANT: A permanent, inside-out repair should be made as soon as possible to prevent any further tire damage.

Have cuts or tears repaired as soon as possible, or change tire.

Protect tires from unnecessary exposure to sunlight, petroleum products and chemicals.

Drive carefully. Try to avoid rocks and sharp objects.

OUCC002,0003C9D -19-04JUL13-1/1

Wheel Bolts and Nuts

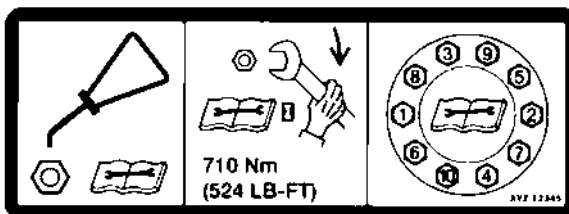
After the first hour of operation and then every ten hours during the first 50 hours of operation, check the hardware and tighten to the specified torque:

NOTE: Before installing the wheel bolts, coat the front thread area with JDM J20C oil or its equivalent. Make sure that the screw head and contact surface are not coated with oil. The screw head and contact surface must remain dry.

- Front axle wheel bolts (Lubricated) to 710 N·m (524 lb·ft)
- Rear axle wheel nuts (Dry) to 550 N·m (405 lb·ft)



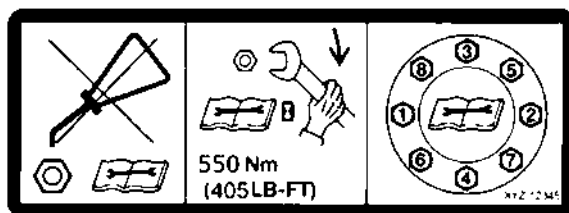
H96809—UN—09JUN10



ZX224019

Torque of Front Wheel Bolts

ZX224019—UN—08NOV14



ZX224020

Torque of Rear Wheel Nuts

ZX224020—UN—08NOV14

OUC002,0003C9E -19-22JAN16-1/1

Mounting Tires

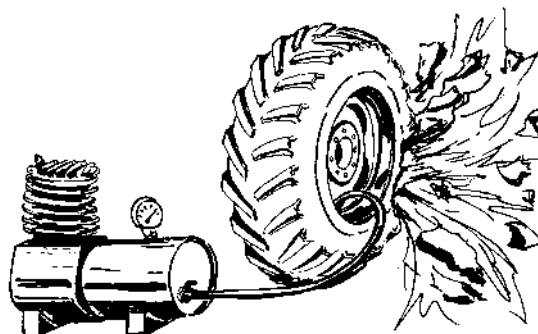
CAUTION: Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your John Deere dealer or a qualified tire repair service.

When seating tire beads on rims, never exceed maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force.

If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead and reinflate.

Detailed agricultural tire mounting instructions, including the necessary safety precautions, are available from your local tire manufacturer agents.

IMPORTANT: Operate machine only with correct tire pressure. Keep valve caps screwed down on



Z 20924

valve stems to prevent foreign material from accumulating in the valve cores.

Check tire pressure frequently, referring to tire pressure charts. Required pressure may vary as load changes with installation of different headers.

OUC002,0003C9F -19-04JUL13-1/1

Z20924 —UN—15AUG94

Changing Tires

IMPORTANT: The tires on any one axle must come from the same manufacturer and have the same tread, same designation, and same load-bearing index.

If tires are changed from what was originally shipped from the factory, it is necessary to:

- Recalibrate the system.

IMPORTANT: When changing drive wheels, tire radius may also change. CAB control unit **MUST** be set to new tire radius. See your John Deere dealer for further information.

- In some configurations, it is necessary to adjust the steering angle. Adjust steering angle with setting screw (A) so that rear tires do not come in contact with any part of the machine.
- In some configurations, it is necessary to modify the rear axle oscillating range stops (B) so that rear tires do not come in contact with any part of the machine.

For more information, contact your John Deere Dealer.

A—Setting Screw

B—Stop



ZX252561



ZX270093

OUC002,00049FC -19-22JAN16-1/1

ZX252561 —UN—09SEP15

ZX270093 —UN—22JAN16

Tire Pressures

⚠ CAUTION: Never exceed the maximum air pressure specified on each tire. Risk of explosion.

Tire pressure requirements vary with load and speed of the machine.

- If tire pressure is too low, rolling drag torque increases, resulting in higher operating temperatures in the carcass of the tire. The tire will wear out faster and eventually have to be replaced.

- If tire pressure is too high, the tire will no longer act as a spring, causing the load-bearing elements of the machine to be subjected to higher loads.

To ascertain the necessary tire pressure, consult your John Deere dealer or the tire manufacturer.

IMPORTANT: Also refer to the tire manufacturer recommendations to choose the relevant tire pressure. Contact tire manufacturer or visit manufacturer web site.

OUC002,00049C3 -19-15JAN16-1/1

Use Genuine John Deere Parts

Genuine John Deere parts have been specifically designed for John Deere machines.

Other parts are neither examined nor released by John Deere. Installation and use of such products could have negative effects upon the design characteristics of the machine and thereby affect its safety.

Avoid this risk by using only genuine John Deere parts.



ES 118837

ES118837 —UN—07JUN95

FX,ORI -19-04DEC90-1/1

Engine Storage Guidelines for Long Term Storage

1. John Deere engines can be stored outside for up to three (3) months with no long term preparation IF COVERED BY WATERPROOF COVERING. Outside storage is not recommended without a waterproof covering.
2. John Deere engines can be stored inside for up to six (6) months with no long term preparation.
3. John Deere engines expected to be stored more than six (6) months MUST have long term storage preparation.
4. Long term storage includes the use of a stabilized rust preventive oil to protect internal metal components of the engine. This oil should be an SAE 10 oil with 1—4 % morpholine or equivalent vapor corrosion inhibitor. These rust preventive oils are available from area distributors.

Preparing engine for long term storage

IMPORTANT: Any time your engine will not be used for over six (6) months, the following recommendations for storing it and removing it from storage will help to minimize corrosion and deterioration.

IMPORTANT: DO NOT USE BIODIESEL DURING MACHINE STORAGE. When using biodiesel blends, switch to petroleum diesel for long

term storage. Before storage, operate engine on at least one complete tank of petroleum diesel fuel to purge the fuel system. Follow normal storage procedures once the fuel system has been purged.

The following storage preparations are used for long term engine storage up to one year. After that, the engine should be started, warmed up, and retreated for an extended storage period.

- Change engine oil and replace filter. Used oil will not give adequate protection. Add one (1) ounce of rust preventive oil to the engine crankcase for every quart of oil. This rust preventive oil should be an SAE 10 oil with 1—4 % morpholine or equivalent vapor corrosion inhibitor.
- Ensure the machine fuel tank is filled with high quality petroleum diesel fuel. Filling the tank completely will ensure that water does not build up due to condensation. For storage of more than one year, use John Deere PREMIUM DIESEL FUEL CONDITIONER (or equivalent) at the specified concentration.
- Draining and flushing of cooling system is not necessary if engine is to be stored only for several months. However, for extended storage periods of a year or longer, it is recommended that the cooling system be drained, flushed, and refilled. Refill with appropriate coolant.

OUC002,0003CB3 -19-09JUL13-1/1

Prepare Machine for Storage

IMPORTANT: When fuel is stored in fuel tank of machines or storage tank of farms for extended periods, or if there is a slow turn over of fuel, add a fuel conditioner to stabilize the fuel and prevent water condensation. Contact your John Deere dealer for recommendations.

For prolonged machine storage the best practice is to drain biodiesel and fill machine with regular petroleum diesel fuel. Otherwise use biodiesel stabilizer (anti-oxidant) additives or fully formulated biodiesel conditioners. Contact your John Deere dealer for recommendations.

If possible, store the machine in a dry, sheltered place and prepare the machine for storage as follows:

General:

- Thoroughly clean the machine inside (through service openings) and outside. Debris and dirt will attract moisture, which leads to corrosion.

IMPORTANT: Directing pressurized water at electronic/electrical components or connectors, bearings and hydraulic seals, fuel injection pumps or other sensitive parts and components may cause product malfunctions. Reduce pressure, and spray at a 45 to 90 degree angle.

Leave elevator doors and drain covers open.

- Thoroughly clean outside of engine with salt-free water.

CAUTION: Do not use petrol!

- Thoroughly clean all drive belts, but do not use aggressive cleaning agents such as petrol, benzene, turpentine oil or similar cleaning solvents. It is recommended to use the following:
 - A cloth dipped in liquid ammonia
 - Soap water
 - A 1:10 mixture of glycerine and spirits
- Drain air compressor reservoir (if equipped).
- With the separator running, open and close the concave several times to prevent material from collecting in the area of the concave.
- Block up machine, taking load off tires. Leave tires inflated.
- If machine is stored outside, jack it up on supports and remove wheels. Store wheels in a cool, dark and dry room.
- Fill fuel tank to prevent condensation.
- Lubricate machine and grease adjusting bolt threads.
- Grease bare metal surfaces of hydraulic cylinder piston rods well and retract rods as far as possible.
- Coat all lever linkages and bearing points without grease fittings with oil.
- Swing rotary screen away and carefully clean radiator fins, using compressed air or a weak water jet.

- Clean condenser and oil cooler after cleaning radiator. Clean charge air cooler.
- Clean inside of air cleaner and install new elements.
- Repaint areas where needed.
- List all service work to be done before the next season and have it carried out in good time. Your John Deere dealer is in a better position to carry out necessary service and repairs during the off season.
- Charge batteries completely. Specific gravity will equal 1.260 volts. Remove negative lead to batteries to minimize unintended discharging of the batteries.
- If machine is to be stored for a long period of time remove and clean batteries. Store them in a cool dry place and keep them charged.
- Slacken all drive belts. Place strips of strong paper between belt and pulleys to prevent sticking.

Engine:

If machine is to be stored for some time (during the winter months), engine metal parts must be protected from corrosion and the fuel system must be protected from gummy deposits.

To protect engine and fuel system, use the rust inhibitor available from your John Deere dealer. The rust inhibitor set includes one can of rust inhibitor, masking tape and protective caps to cover engine openings.

IMPORTANT: Rust inhibitor agents evaporate very easily. For this reason, seal all openings after the inhibitor has been added. Also keep the inhibitor container closed at all times.

- Drain engine oil and replace filter element. Drain oil when still warm. Refill crankcase with oil of specified quality and viscosity. Operate engine for a few minutes before adding rust inhibitor. Add rust inhibitor as follows: Add 650 cm³ (40 in³) of rust inhibitor to engine oil and run engine for a few minutes.

NOTE: This engine oil can be used again at the beginning of the next season for approx. 20—25 operating hours. Then drain the oil and refill crankcase with fresh engine oil of specified quality and viscosity.

- Drain hydraulic oil and power distribution gear oil reservoir and fill with fresh oil of specified quality. Add approx. 50 cm³ (3.05 in³) of rust inhibitor.
- Drain fuel tank and pour 150 cm³ (9.2 in³) of rust inhibitor into empty tank. Add 10 L (2.6 gal.) of fuel. Start engine and run at high idle for 15—20 minutes to distribute the mixture in the complete fuel system.
- Drain, flush and refill cooling system with fresh coolant every two years.

IMPORTANT: Use only John Deere Cool-Gard™ in the cooling system, independent of the season.

- Drain water separator.

Continued on next page

OUC002,00049C4 -19-15JAN16-1/2

- With the engine running, operate all hydraulic functions several times.
 - Stop the engine and allow it to cool for approx. 15—20 minutes.
 - Remove plug of intake manifold and inject approx. 35 cm³ (2 in³) of rust inhibitor per cylinder into this opening. At the same time, crank engine with starting motor.
 - Do not start engine after rust inhibitor has been added.
- Disconnect turbocharger air intake line and inject 90 cm³ (5.49 in³) of rust inhibitor into turbocharger intake side. Connect and tighten air intake line.
- Disconnect turbocharger exhaust line and inject 90 cm³ (5.49 in³) of rust inhibitor into turbocharger outlet side. Connect and tighten exhaust line.

Cool-Gard is a trademark of Deere & Company.

- Seal all openings with plugs or grease proof paper. Cover muffler opening.
- Thoroughly clean engine and spray with anti-rust fluid; then cover engine with a tight-fitting, waterproof tarpaulin.

Air-conditioning system:

- Every 60 to 90 days start engine and turn air conditioning ON. Run engine at low idle for several minutes for compressor seal lubrication. Outside temperature should be above 5 °C (40 °F) for proper air conditioning operation.

OUC002,00049C4 -19-15JAN16-2/2

Remove Machine from Storage

General:

- Reconnect and/or charge batteries.
- Close service covers.
- Close elevator doors and service flaps.
- Check oil and coolant levels. Inspect for leaks and add oil and coolant if needed.
- Adjust and check tension of drive belts.
- Check tire inflation and review machine operator's manual.
- Inspect fire extinguisher by following maintenance instructions on fire extinguisher label. Recharge or replace as necessary.
- Go over complete machine and make sure that all bolts are tight and cotter pins are in place.
- Afterwards run machine at half-speed for about an hour. Check all bearings for overheating.

Engine:

- Remove engine tarpaulin, plugs from engine openings, and paper strips between fan belt and pulleys. Tension drive belt.
- Check all seals and coolant level. Antifreeze and rust inhibitor should be left in the cooling system during the summer months as a protection against corrosion.
- If rust inhibitor was added to the engine oil before storing the machine, this oil can be used for approx. 25 hours at the beginning of the new season. Otherwise, drain the oil and fill crankcase with fresh oil of specified quality and viscosity.

- Before starting the engine after longer storage periods (Long Term Storage): Remove fuse F48. Crank engine for 30 seconds — or until engine oil pressure indicator light goes out. This will ensure proper lubrication of all engine parts during the starting procedure. Reinstall fuse F48. Then start engine and run for approx. 5 minutes at half-rated speed.

IMPORTANT: DO NOT operate starter more than 30 seconds at a time. Wait at least 2 minutes for starter to cool before trying again.

NOTE: If using BIODIESEL blends after long term storage, frequency of fuel filter plugging may increase initially.

- Check all lines and seals for leaks. See your John Deere dealer, if necessary.

Air-Conditioning System:

CAUTION: The air-conditioning system should only be serviced by your John Deere dealer.

- Clean evaporator.
- Clean or replace fresh air filter.
- Clean or replace recirculation air filter.

OUC002,00049C5 -19-15JAN16-1/1

Specifications

W540 Combine

Engine:	Manufacturer	John Deere
	Engine types	6068HZ501 (6.8 L Tier 4/Stage 4) 6068HZ483 (6.8 L Tier 2/Stage 2)
	Engine power at 2200 rpm	175 kW (235 hp)
	Max engine power at 2000 rpm	191 kW (256 hp)
	Displacement	6.8 L (414 in³)
	Air cleaner	Dry type with safety element
	Thermostats (two)	82°C (180°F)
Fuel tank:	Capacity	800 L (210 gal)
DEF tank:	Capacity	33 L (8.7 gal)
Electrical system:	12 volt, 200 amp alternator	
Transmission:	ProDrive™, electrical (PBST) or mechanical shift	
Brakes:	Hydraulic drum brakes	
Separator:	Type	Tangential separator with beater
Threshing cylinder:	Number of rasp bars	10
	Diameter	660 mm (26 in)
	Width	1400 mm (55 in)
Concave:	Dimensions	750 x 1400 mm (30 x 55 in)
Beater:	Number of wings	8
Second concave:	Type	Open bars, adjustable to two positions
	Number of bars	10
Straw walkers:	Type	11-stage perforated walkers
	Number of walkers	5
	Walker length	4.78 m (15 ft 8.2 in)
Power separator:	Type	Retractable
	Number of Fingers	15
Grain tank:	Capacity	8000 L (227 bu)
		10 000 L (287 bu) (option)
	Maximum unload rate	5280 L/min (150 bu./min.)
Weight:	Without header, with straw chopper and chaff spreader	12 580 kg (27,700 lb)

OUCC002,000488D -19-15DEC15-1/1

Specifications

W550 Combine

Engine:	Manufacturer	John Deere
	Engine types	6068HZ500 (6.8 L Tier 4/Stage 4) 6068HZ483 (6.8 L Tier 2/Stage 2)
	Engine power at 2200 rpm	202 kW (271 hp)
	Max engine power at 2000 rpm	224 kW (300 hp)
	Displacement	6.8 L (414 in³)
	Air cleaner	Dry type with safety element
	Thermostats (two)	82°C (180°F)
Fuel tank:	Capacity	800 L (210 gal)
DEF tank:	Capacity	33 L (8.7 gal)
Electrical system:	12 volt, 200 amp alternator	
Transmission:	ProDrive™, electrical (PBST) or mechanical shift	
Brakes:	Hydraulic drum brakes	
Separator:	Type	Tangential separator with beater
Threshing cylinder:	Number of rasp bars	10
	Diameter	660 mm (26 in)
	Width	1400 mm (55 in)
Concave:	Dimensions	750 x 1400 mm (30 x 55 in)
Beater:	Number of wings	8
Second concave:	Type	Open bars, adjustable to two positions
	Number of bars	10
Straw walkers:	Type	11-stage perforated walkers
	Number of walkers	5
	Walker length	4.78 m (15 ft 8.2 in)
Power separator:	Type	Retractable
	Number of Fingers	15
Grain tank:	Capacity	8000 L (227 bu)
		10 000 L (287 bu) (option)
	Maximum unload rate with Regular Unload Rate gear case	5280 L/min (150 bu./min.)
	Maximum unload rate with High Unload Rate gear case	6900 L/min (196 bu./min.)
Weight:	Without header, with straw chopper and chaff spreader	12 580 kg (27,700 lb)

OUCC002,000488E -19-15DEC15-1/1

Specifications

W650 Combine

Engine:	Manufacturer	John Deere
	Engine types	6090HZ016 (9.0 L Tier 4/Stage 4) 6068HZ483 (6.8 L Tier 2/Stage 2)
	Engine power at 2200 rpm for Tier 4 Engine power at 2400 rpm for Tier 2	225 kW (302 hp) 202 kW (271 hp)
	Max engine power at 2000 rpm for Tier 4 Max engine power at 2200 rpm for Tier 2	256 kW (343 hp) 224 kW (300 hp)
	Displacement for Tier 4 Displacement for Tier 2	9.0 L (554 in³) 6.8 L (414 in³)
	Air cleaner	Dry type with safety element
	Thermostats (two)	82°C (180°F)
Fuel tank:	Capacity	800 L (210 gal)
DEF tank:	Capacity	33 L (8.7 gal)
Electrical system:	12 volt, 200 amp alternators	
Transmission:	ProDrive™, electrical (PBST) or mechanical shift	
Brakes:	Hydraulic drum brakes	
Separator:	Type	Tangential separator with beater
Threshing cylinder:	Number of rasp bars	10
	Diameter	660 mm (26 in)
	Width	1670 mm (65 in)
Concave:	Dimensions	750 x 1670 mm (30 x 65 in)
Beater:	Number of wings	8
Second concave:	Type	Open bars, adjustable to two positions
	Number of bars	10
Straw walkers:	Type	11-stage perforated walkers
	Number of walkers	6
	Walker length	4.78 m (15 ft 8.2 in)
Power separator:	Type	Retractable
	Number of Fingers	18
Grain tank:	Capacity	9000 L (257 bu)
		11 000 L (312 bu) (option)
	Maximum unload rate	5280 L/min (150 bu./min.)
Weight:	Without header, with straw chopper and chaff spreader	13 530 kg (29,800 lb)

OUCC002,000488F -19-15DEC15-1/1

Specifications

W660 Combine

Engine:	Manufacturer	John Deere
	Engine types	6090HZ016 (9.0 L Tier 4/Stage 4) 6090HZ007 (9.0 L Tier 2/Stage 2)
	Engine power at 2200 rpm for Tier 4 Engine power at 2400 rpm for Tier 2	249 kW (334 hp) 239 kW (320 hp)
	Max engine power at 2000 rpm for Tier 4 Max engine power at 2200 rpm for Tier 2	285 kW (382 hp) 273 kW (365 hp)
	Displacement	9.0 L (554 in³)
	Air cleaner	Dry type with safety element
	Thermostats (two)	82°C (180°F)
Fuel tank:	Capacity	800 L (210 gal)
DEF tank:	Capacity	33 L (8.7 gal)
Electrical system:	12 volt, 200 amp alternators	
Transmission:	ProDrive™, electrical (PBST) or mechanical shift	
Brakes:	Hydraulic drum brakes	
Separator:	Type	Tangential separator with beater
Threshing cylinder:	Number of rasp bars	10
	Diameter	660 mm (26 in)
	Width	1670 mm (65 in)
Concave:	Dimensions	750 x 1670 mm (30 x 65 in)
Beater:	Number of wings	8
Second concave:	Type	Open bars, adjustable to two positions
	Number of bars	10
Straw walkers:	Type	11-stage perforated walkers
	Number of walkers	6
	Walker length	4.78 m (15 ft 8.2 in)
Power separator:	Type	Retractable
	Number of Fingers	18
Grain tank:	Capacity	9000 L (257 bu)
		11 000 L (312 bu) (option)
	Maximum unload rate with Regular Unload Rate gear case	5280 L/min (150 bu./min.)
	Maximum unload rate with High Unload Rate gear case	6900 L/min (196 bu./min.)
Weight:	Without header, with straw chopper and chaff spreader	13 530 kg (29,800 lb)

OUCC002,0004890 -19-15DEC15-1/1

Specifications

T550 Combine

Engine:	Manufacturer	John Deere
	Engine types	6068HZ500 (6.8 L Tier 4/Stage 4) 6068HZ483 (6.8 L Tier 2/Stage 2)
	Engine power at 2200 rpm	202 kW (271 hp)
	Max engine power at 2000 rpm	224 kW (300 hp)
	Displacement	6.8 L (414 in³)
	Air cleaner	Dry type with safety element
	Thermostats (two)	82°C (180°F)
Fuel tank:	Capacity	800 L (210 gal)
DEF tank:	Capacity	33 L (8.7 gal)
Electrical system:	12 volt, 200 amp alternator	
Transmission:	three-speed, electrical (PBST) or mechanical shift	
Brakes:	hydraulic drum brakes	
Threshing cylinder:	Number of rasp bars	10
Concave:	Type	13 open bar
Separator rotor:	Diameter	800 mm (31 in)
Separator Grate:	Type	Finger rake, eight rows, adjustable to two positions
Beater:	Number of wings	8
Third concave:	Type	Open bars, adjustable to two positions
	Number of bars	10
Finger rake:	Type	Adjustable
Separator:	Type	Separator rotor/straw walkers
Straw walkers:	Type	Perforated plate
	Number of walkers	5
Grain tank:	Capacity	8000 L (227 bu)
		10 000 L (287 bu) (option)
	Maximum unload rate with Regular Unload Rate gear case	5280 L/min. (150 bu/min.)
	Maximum unload rate with High Unload Rate gear case	6900 L/min (196 bu/min.)
Weight:	Without header, with straw chopper and chaff spreader	14 240 kg (28 000 lb)

OUCC002,0004891 -19-15DEC15-1/1

Specifications

T560 Combine

Engine:	Manufacturer	John Deere
	Engine types	6090HZ016 (9.0 L Tier 4/Stage 4)
	Engine power at 2200 rpm	249 kW (334 hp)
	Max engine power at 2000 rpm	285 kW (382 hp)
	Displacement	9.0 L (554 in³)
	Air cleaner	Dry type with safety element
	Thermostats (two)	82°C (180°F)
Fuel tank:	Capacity	800 L (210 gal)
DEF tank:	Capacity	33 L (8.7 gal)
Electrical system:	12 volt, 200 amp alternators	
Transmission:	Three-speed, electrical (PBST) or mechanical shift	
Brakes:	Hydraulic drum brakes	
Threshing cylinder:	Number of rasp bars	10
Concave:	Type	13 open bar
Separator rotor:	Diameter	800 mm (31 in)
Separator Grate:	Type	Finger rake, eight rows, adjustable to two positions
Beater:	Number of wings	8
Third concave:	Type	Open bars, adjustable to two positions
	Number of bars	10
Finger rake:	Type	Adjustable
Separator:	Type	Separator rotor/straw walkers
Straw walkers:	Type	Perforated plate
	Number of walkers	5
Grain tank:	Capacity	8000 L (227 bu)
		10 000 L (287 bu) (option)
	Maximum unload rate	6900 L/min (196 bu/min)
Weight:	Without header, with straw chopper and chaff spreader	14 240 kg (28 000 lb)

OUC002,0004892 -19-15DEC15-1/1

Specifications

T660 Combine

Engine:	Manufacturer	John Deere
	Engine types	6090HZ016 (9.0 L Tier 4/Stage 4) 6090HZ007 (9.0 L Tier 2/Stage 2)
	Engine power at 2200 rpm for Tier 4 Engine power at 2400 rpm for Tier 2	249 kW (334 hp) 239 kW (320 hp)
	Max engine power at 2000 rpm for Tier 4 Max engine power at 2200 rpm for Tier 2	285 kW (382 hp) 273 kW (365 hp)
	Displacement	9.0 L (554 in³)
	Air cleaner	Dry type with safety element
	Thermostats (two)	82°C (180°F)
Fuel tank:	Capacity	800 L (210 gal)
DEF tank:	Capacity	33 L (8.7 gal)
Electrical system:	12 volt, 200 amp alternators	
Transmission:	Three-speed, electrical (PBST) or mechanical shift	
Brakes:	Hydraulic drum brakes	
Threshing cylinder:	Number of rasp bars	10
Concave:	Type	13 open bar
Separator rotor:	Diameter	800 mm (31 in)
Separator Grate:	Type	Finger rake, eight rows, adjustable to two positions
Beater:	Number of wings	8
Third concave:	Type	Open bars, adjustable to two positions
	Number of bars	10
Finger rake:	Type	Adjustable
Separator:	Type	Separator rotor/straw walkers
Straw walkers:	Type	Perforated plate
	Number of walkers	6
Grain tank:	Capacity	9000 L (287 bu)
		11 000 L (312 bu) (option)
	Maximum unload rate with Regular Unload Rate gear case Maximum unload rate with High Unload Rate gear case	5280 L/min. (150 bu/min.) 6900 L/min (196 bu/min.)
Weight:	Without header, with straw chopper and chaff spreader	15 290 kg (32 400 lb)

OUCC002,0004893 -19-15DEC15-1/1

Specifications

T670 Combine

Engine:	Manufacturer	John Deere
	Engine types	6090HZ016 (9.0 L Tier 4/Stage 4) 6090HZ007 (9.0 L Tier 2/Stage 2)
	Engine power at 2200 rpm for Tier 4 Engine power at 2400 rpm for Tier 2	292 kW (392 hp) 239 kW (320 hp)
	Max engine power at 2000 rpm for Tier 4 Max engine power at 2200 rpm for Tier 2	335 kW (449 hp) 317 kW (425 hp)
	Displacement	9.0 L (554 in³)
	Air cleaner	Dry type with safety element
	Thermostats (two)	82°C (180°F)
Fuel tank:	Capacity	800 L (210 gal)
DEF tank:	Capacity	33 L (8.7 gal)
Electrical system:	12 volt, 200 amp alternators	
Transmission:	Three-speed, electrical (PBST) or mechanical shift	
Brakes:	Hydraulic drum brakes	
Threshing cylinder:	Number of rasp bars	10
Concave:	Type	13 open bar
Separator rotor:	Diameter	800 mm (31 in)
Separator Grate:	Type	Finger rake, eight rows, adjustable to two positions
Beater:	Number of wings	8
Third concave:	Type	Open bars, adjustable to two positions
	Number of bars	10
Finger rake:	Type	Adjustable
Separator:	Type	Separator rotor/straw walkers
Straw walkers:	Type	Perforated plate
	Number of walkers	6
Grain tank:	Capacity	11000 L (312 bu)
	Maximum unload rate	6900 L/min (196 bu/min.)
Weight:	Without header, with straw chopper and chaff spreader	15 290 kg (32 400 lb)

OUCC002,0004894 -19-15DEC15-1/1

Specifications

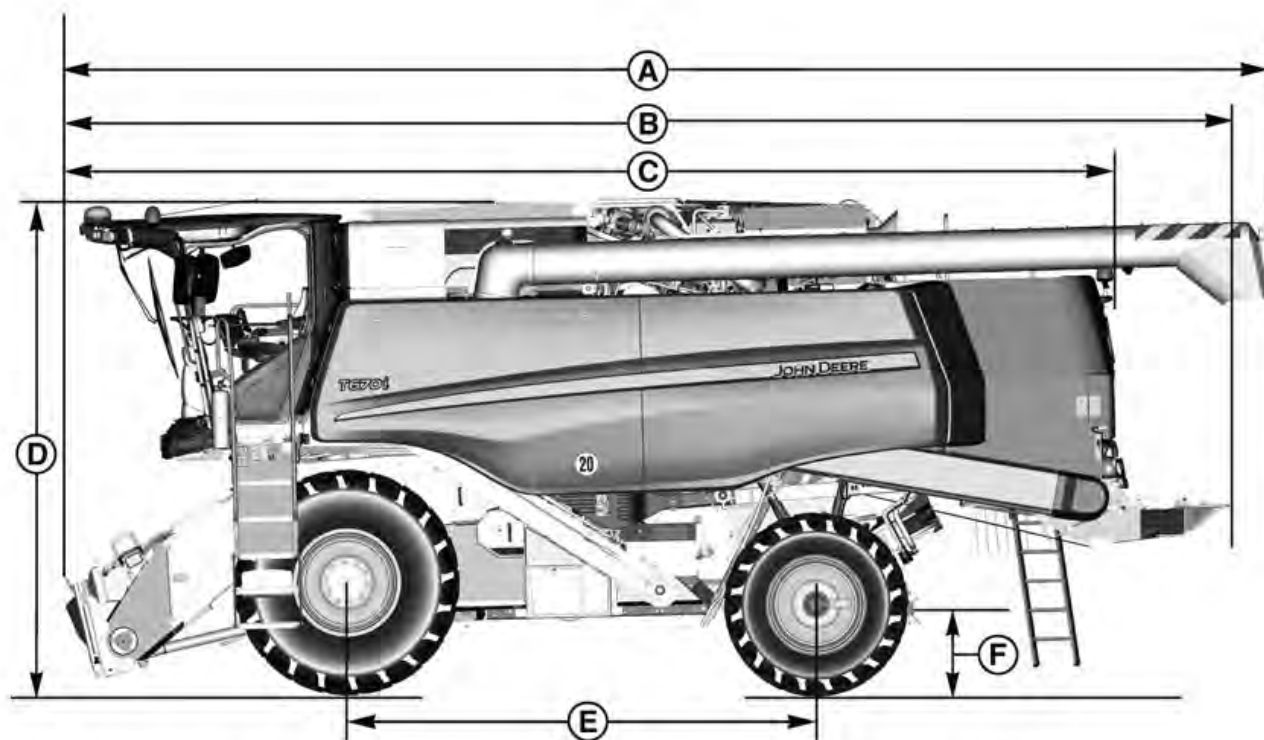
Operating Speeds

Speeds shown are average and can vary from machine to machine. Speeds are rated at high idle with separator engaged, no load.

Threshing cylinder	Speed	450 - 950 rpm
Threshing cylinder, drive with reduction gear	High speed	450 - 950 rpm
	Low speed	250 - 480 rpm
Power separator (W Series)	Speed	540 rpm
Separator rotor (T Series)	High speed	740 rpm
	Low speed	370 rpm
Feeder house lower shaft	Speed	490 rpm
Cleaning fan	Speed	550 - 1350 rpm
Clean grain elevator	Speed	370 rpm
Tailings elevator	Speed	430 rpm
Straw walkers	Speed	540 rpm
Straw chopper (basic model)	Speed	3400 rpm
Straw chopper (dual speed)	High speed	3400 rpm
	Low speed	1800 rpm
Chaff spreader	High speed	800 rpm
	Low speed	400 rpm

OUCC002,000488C -19-15DEC15-1/1

Dimensions



ZX267165

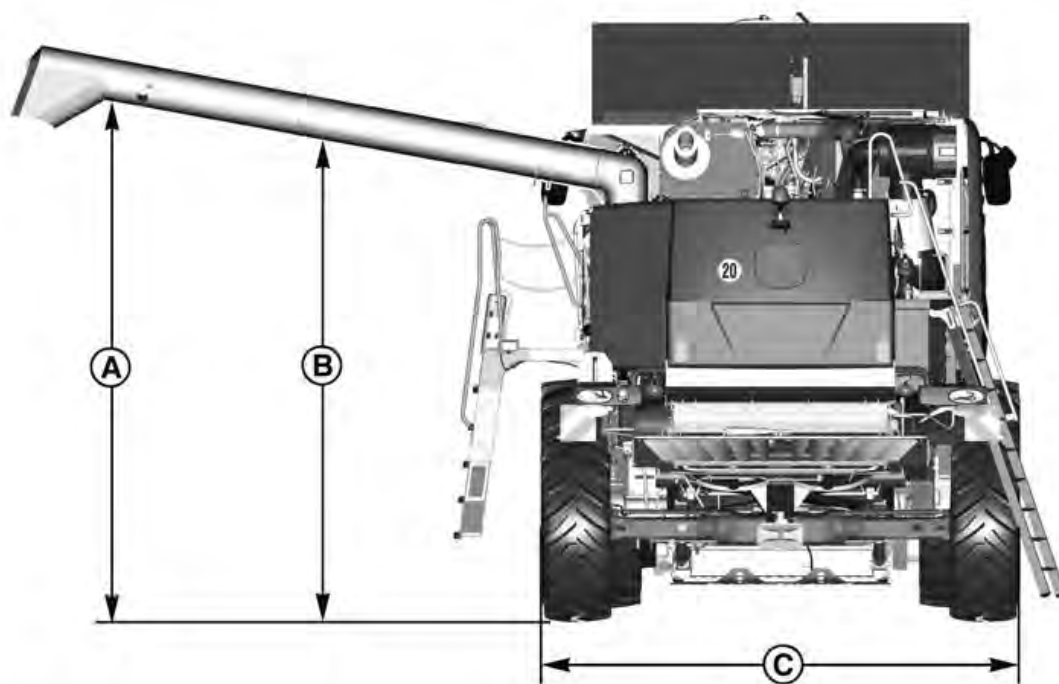
ZX267165 —UN—18DEC15

DIMENSION	Standard machine	HillMaster™
A	9.00 m (29 ft 5 in) with 5.20 m (17 ft) unloading auger 9.30 m (30 ft 6 in) with 5.60 m (18.5 ft) unloading auger 9.9 m (32 ft 5 in) with 6.10 m (20 ft) unloading auger 10.30 m (33 ft 9 in) with 6.50 m (21.5 ft) unloading auger 10.91 m (35 ft 9 in) with 7.20 m (23.5 ft) unloading auger	9.00 m (29 ft 5 in) with 5.20 m (17 ft) unloading auger 9.30 m (30 ft 6 in) with 5.60 m (18.5 ft) unloading auger 9.9 m (32 ft 5 in) with 6.10 m (20 ft) unloading auger 10.30 m (33 ft 9 in) with 6.50 m (21.5 ft) unloading auger 10.91 m (35 ft 9 in) with 7.20 m (23.5 ft) unloading auger
B	9.2 m (29 ft 10 in)	9.25 m (29 ft 11 in)
C	8.45 m (27 ft 8 in)	8.53 m (27 ft 11 in)
D	3.98 m (12 ft 11 in)	3.98 m (12 ft 11 in)
E	3.77 m (12 ft 4 in)	3.80 m (12 ft 5 in)
F	0.61 m (2 ft 0 in)	0.61 m (2 ft 0 in)

Continued on next page

OUC002,0004895 -19-15DEC15-1/2

Specifications



ZX267164

ZX267164 —UN—18DEC15

DIMENSION	
A	4.50 m (14 ft 9 in) with 7.05 m (23.5 ft) unloading auger 4.20 m (13 ft 9 in) with 6.50 m (21.5 ft) unloading auger
B	3.92 m (12 ft 10 in) with 5.2 m (17 ft) unloading auger 4.07 m (13 ft 4 in) with 6.10 m (20 ft) unloading auger 4.30 m (14 ft 1 in) with 7.20 m (23.5 ft) unloading auger
C	3.19 m (10 ft 6 in) overall width 3.29 m (10 ft 9 in) overall width 3.49 m (11 ft 6 in) overall width 3.79 m (12 ft 5 in) overall width 3.99 m (13 ft 1 in) overall width

OUCC002,0004895 -19-15DEC15-2/2

Vibrations at Operator's Position

Conditions: Travel speed 5 km/h, separator engaged.

Measured in accordance with ISO 2631 and ISO 5349.

1. Max. acceleration value to which the body of the operator is subjected..... 2.26 m/s²
2. Max. acceleration value to which the seat surface is subjected..... 1.13 m/s²
3. Max. acceleration value to which the feet of the operator are subjected..... 1.16 m/s²

ZX08994,0000289 -19-12OCT04-1/1

Sound Level

The sound level inside the operator's cab ranges from 74.3 to 80.1 dB(A) as measured on several representative machines in accordance with ISO 5131. The sound level depends upon the engine speed and load, separator settings, field and crop conditions and the type of cutting platform used.

ZX08994,000014C -19-15MAY02-1/1

Specifications

Type Plates

Serial numbers identifying machine components or assemblies are stamped on components or factory serial number plates.

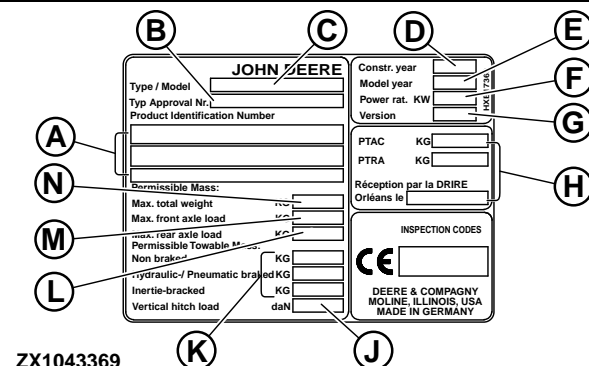
These numbers and letters are required when ordering replacement parts.

To ensure that you always have these numbers at hand, enter the appropriate serial numbers in the spaces provided in each illustration.

OUC002,0004897 -19-15DEC15-1/1

Combine (Product Identification) Type Plate

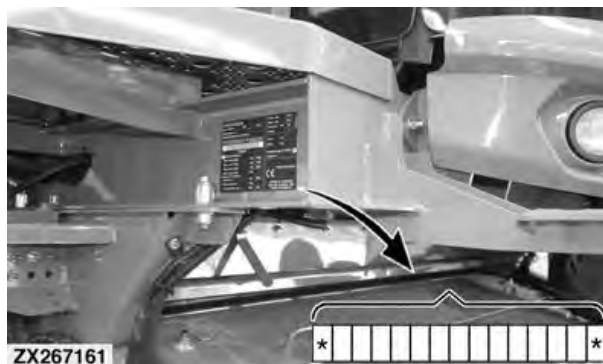
- | | |
|--|--|
| A —Product Identification Number | H —French Homologation Purpose Only |
| B —Type Approval Number (in Certain Countries Only) | J —Permissible Drawbar Load |
| C —Model | K —Permissible Trailer Load |
| D —Year of Production | L —Permissible Rear Axle Load |
| E —Model Year | M —Permissible Front Axle Load |
| F —Engine Power | N —Permissible Total Weight |
| G —Version (in Certain Countries Only) | |



OUC002,0004898 -19-15DEC15-1/1

Product Identification Number

The product identification number is located on the right side of the operator's platform.

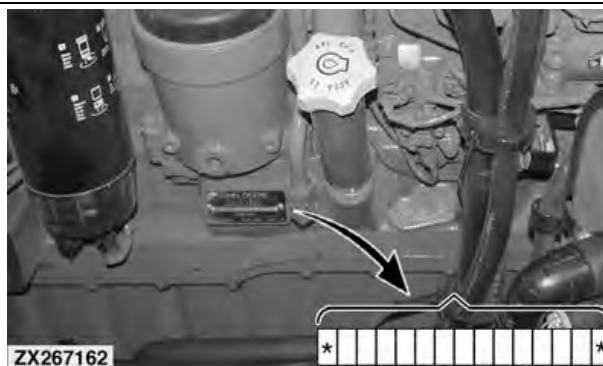


OUC002,0004899 -19-15DEC15-1/1

Machine Component Serial Numbers

Engine Serial Number—PowerTech™ PSS 6090 (Final Tier 4/Stage IV)

The serial number is located near the oil filter.



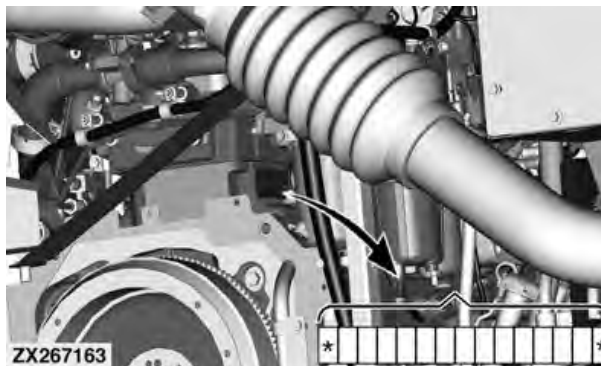
Continued on next page

OUC002,000489C -19-21DEC15-1/25

Specifications

Engine Serial Number—PowerTech™ PSS 6068 (Final Tier 4/Stage IV)

The serial number is located behind the fuel filter.



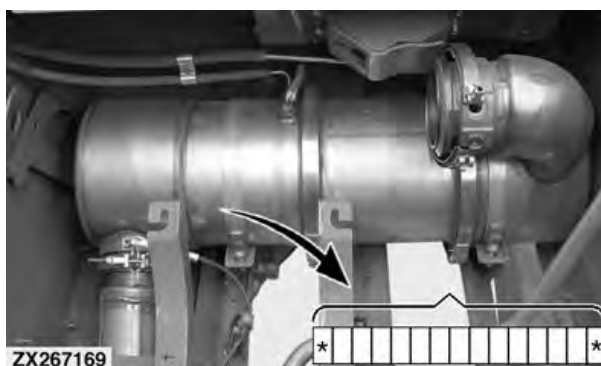
ZX267163 —UN—18DEC15

OUC002,000489C -19-21DEC15-2/25

Exhaust Filter System Serial Number (Final Tier 4/Stage IV Engine Only)

The serial number is located on top.

NOTE: Several parts are removed for illustration purpose only.



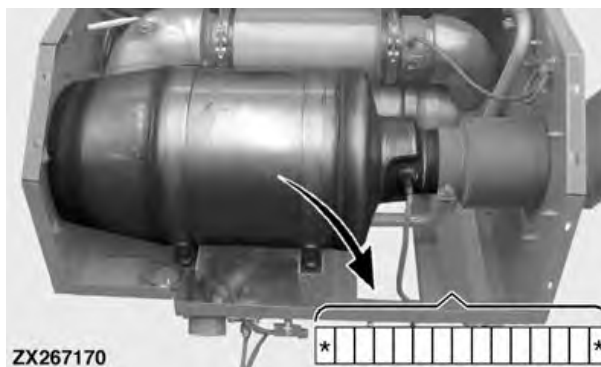
ZX267169 —UN—18DEC15

OUC002,000489C -19-21DEC15-3/25

SCR (Selective Catalytic Reduction) Module Serial Number (Final Tier 4/Stage IV Engine Only)

The serial number is located on top.

NOTE: Several parts are removed for illustration purpose only.



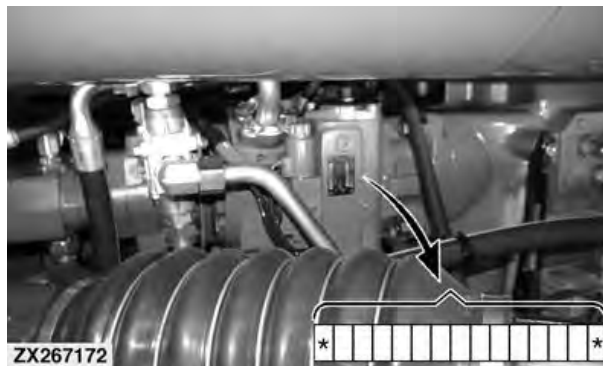
ZX267170 —UN—18DEC15

Continued on next page

OUC002,000489C -19-21DEC15-4/25

Hydrostatic Pump Serial Number (ProDrive™ Transmission)

The serial number is located on the pump housing.

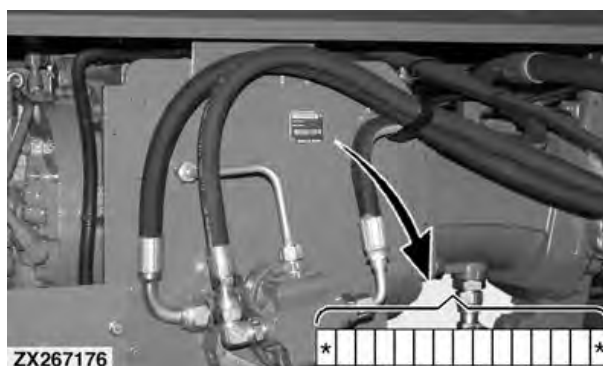


ZX267172 —UN—18DEC15

OUCC002,000489C -19-21DEC15-5/25

ProDrive™ Transmission Serial Number

The serial number is located on the transmission housing.

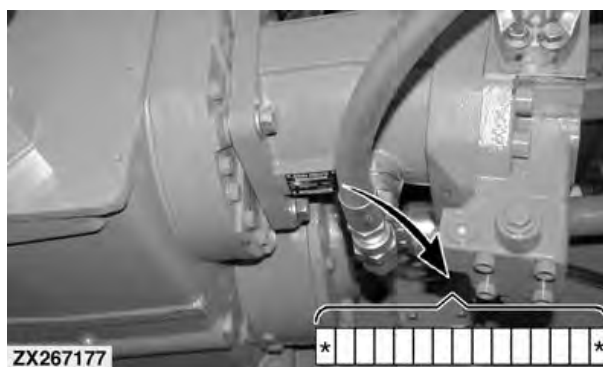


ZX267176 —UN—18DEC15

OUCC002,000489C -19-21DEC15-6/25

Main Drive Motor Serial Number (ProDrive™ Transmission)

The serial number is located on the motor housing.



ZX267177 —UN—18DEC15

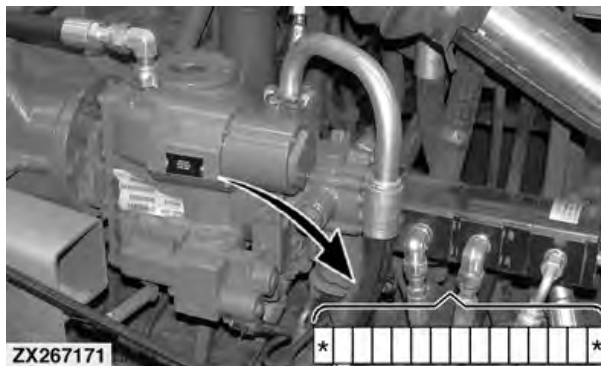
Continued on next page

OUCC002,000489C -19-21DEC15-7/25

Specifications

Hydrostatic Pump Serial Number (3-Speed Mechanical And Push-Button Shift Transmission)

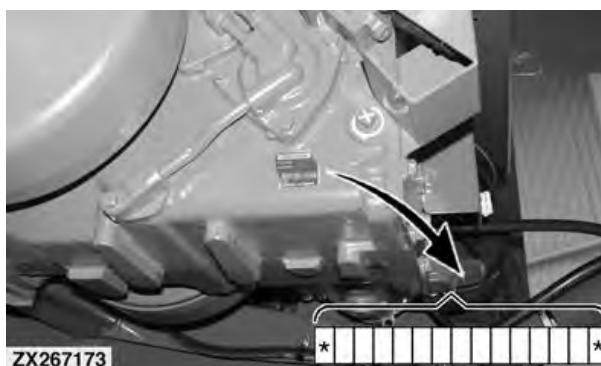
The serial number is located on the pump housing.



OUCC002,000489C -19-21DEC15-8/25

3-Speed Mechanical And Push-Button Shift Transmission Serial Number

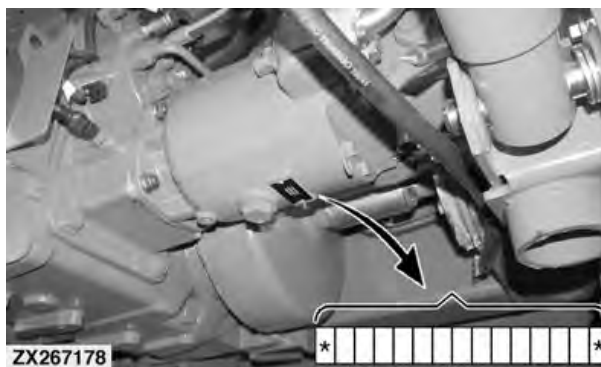
The serial number is located on the right side of the transmission.



OUCC002,000489C -19-21DEC15-9/25

Main Drive Motor Serial Number (3-Speed Mechanical And Push-Button Shift Transmission)

The serial number is located on the motor housing.



Continued on next page

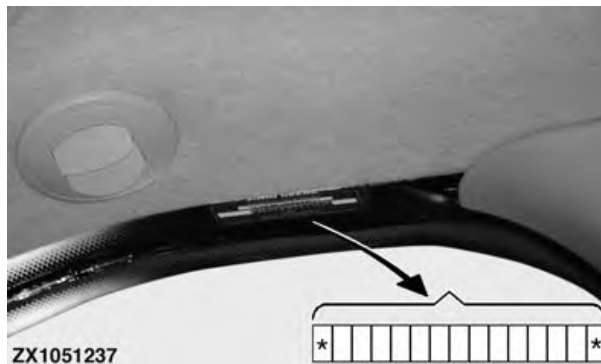
OUCC002,000489C -19-21DEC15-10/25

Specifications

Cab Serial Number

The serial number is located on the inside of the right-hand side panel.

NOTE: The cab serial number is the same as for the air-conditioning system.



ZX1051237 —UN—20JUN13

OUCC002,000489C -19-21DEC15-11/25

Feeder House Serial Number

The serial number plate is located on the right side of the feeder house.

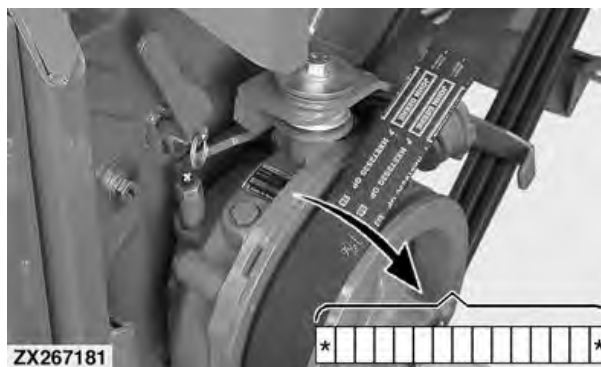


ZX267179 —UN—18DEC15

OUCC002,000489C -19-21DEC15-12/25

Reverser Gear Case Serial Number

The serial number is located on the upper part of the gear case.



ZX267181 —UN—18DEC15

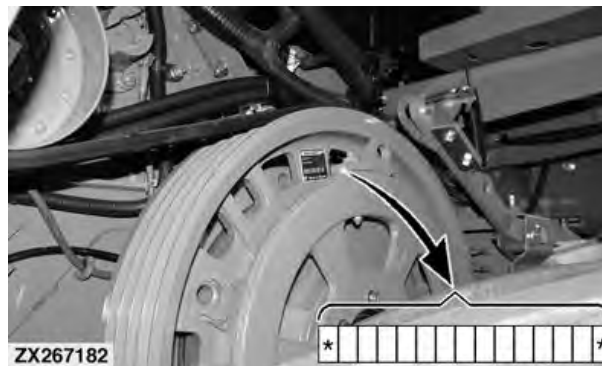
Continued on next page

OUCC002,000489C -19-21DEC15-13/25

Specifications

Cylinder Drive Reduction Gear Serial Number

The serial number is located on the sheave.

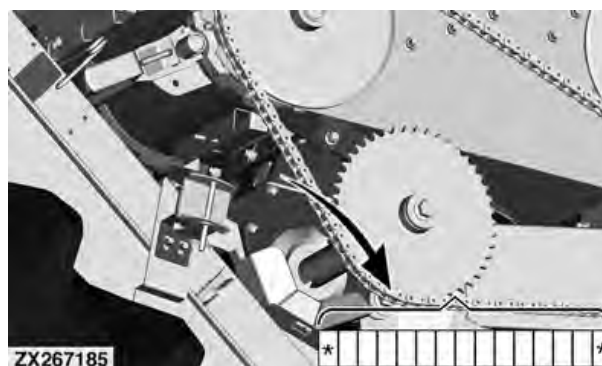


ZX267182 —UN—18DEC15

OUCC002,000489C -19-21DEC15-14/25

Vertical Auger Lower Gear Case

The serial number is located on the front side of the gear case.



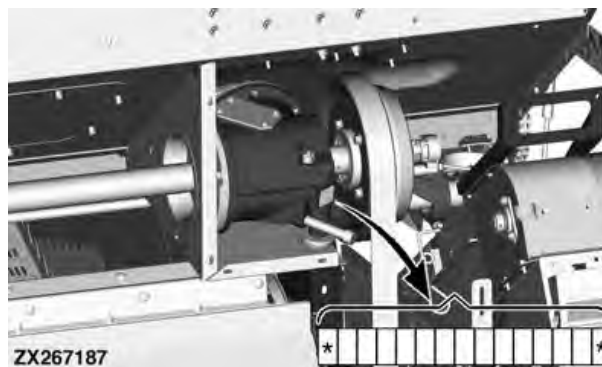
ZX267185 —UN—18DEC15

OUCC002,000489C -19-21DEC15-15/25

Primary Countershaft Gear Case

The serial number is located on the front side of the gear case.

NOTE: Several parts are removed for illustration purpose only.



ZX267187 —UN—18DEC15

Continued on next page

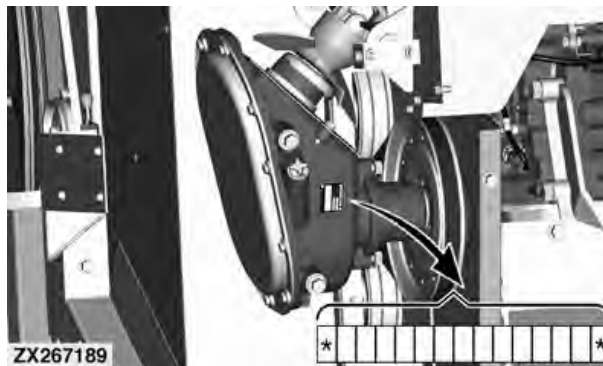
OUCC002,000489C -19-21DEC15-16/25

Specifications

Clean Grain Elevator Gear Case

The serial number is located on the front side of the gear case.

NOTE: Several parts are removed for illustration purpose only.

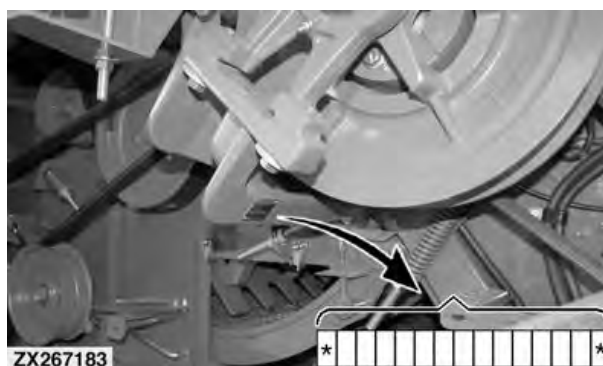


ZX267189 —UN—18DEC15

OUCC002,000489C -19-21DEC15-17/25

Countershaft Drive Serial Number

The serial number is located on the countershaft drive mounting support.



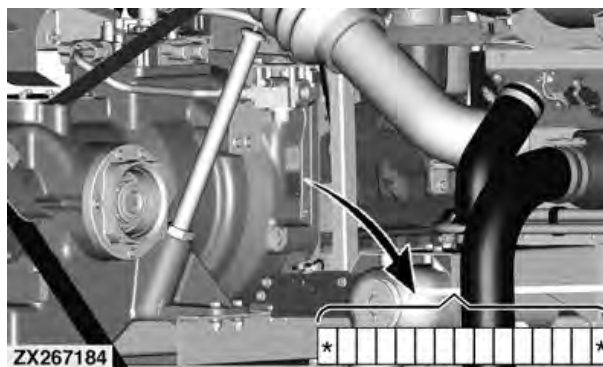
ZX267183 —UN—18DEC15

OUCC002,000489C -19-21DEC15-18/25

Engine Gear Case Serial Number

The serial number is located on the rear of the housing at the engine junction.

NOTE: Several parts are removed for illustration purpose only.



ZX267184 —UN—18DEC15

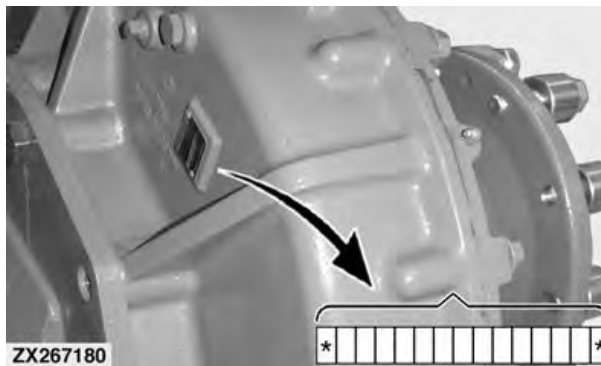
Continued on next page

OUCC002,000489C -19-21DEC15-19/25

Specifications

Final Drive Serial Number

The serial number is located on the transmission housing opposite the input shaft.

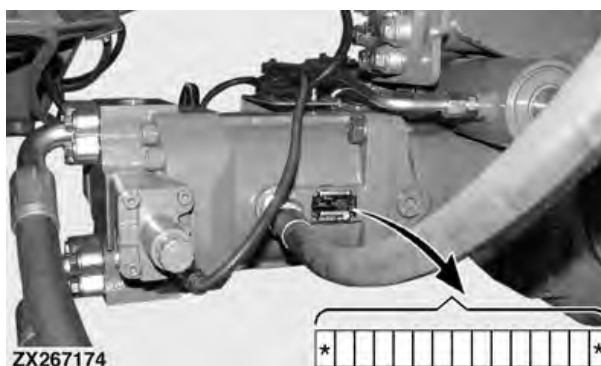


ZX267180 —UN—18DEC15

OUCC002,000489C -19-21DEC15-20/25

Rear Wheel Drive Motor Serial Number

The serial number is located on the left-hand side of the motor.

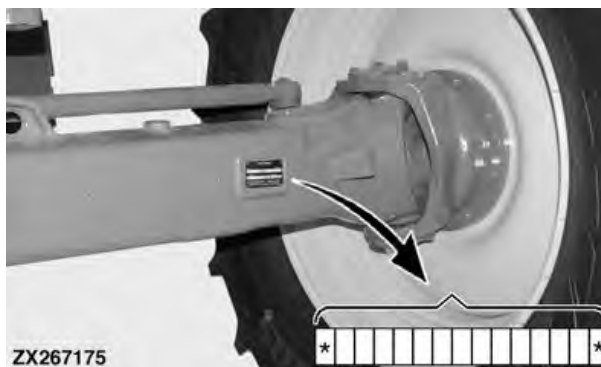


ZX267174 —UN—18DEC15

OUCC002,000489C -19-21DEC15-21/25

Rear Axle Serial Number

The serial number is located on the rear side (right-hand) of the rear axle.

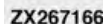


ZX267175 —UN—18DEC15

Continued on next page

OUCC002,000489C -19-21DEC15-22/25

The serial number is located on the right side of the chopper housing.



ZX267166 —UN—18DEC15

OUCC002,000489C -19-21DEC15-23/25

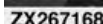
The serial number is located on the right side of the deflector housing.



ZX267167 —UN—18DEC15

OUCC002.000489C -19-21DEC15-24/25

The serial number is located on the rear of the chaff spreader.



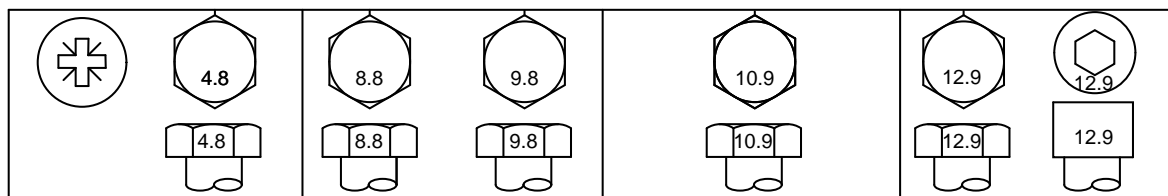
ZX267168 —UN—18DEC15

OUCC002,000489C -19-21DEC15-25/25

Specifications

Metric Bolt and Screw Torque Values

TS1670 —UN—01MAY03



Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated ^a		Dry ^b		Lubricated ^a		Dry ^b		Lubricated ^a		Dry ^b		Lubricated ^a		Dry ^b	
	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.
M6	4.7	42	6	53	8.9	79	11.3	100	13	115	16.5	146	15.5	137	19.5	172
									N·m	lb.-ft.	N·m	lb.-ft.	N·m	lb.-ft.	N·m	lb.-ft.
M8	11.5	102	14.5	128	22	194	27.5	243	32	23.5	40	29.5	37	27.5	47	35
			N·m	lb.-ft.	N·m	lb.-ft.	N·m	lb.-ft.								
M10	23	204	29	21	43	32	55	40	63	46	80	59	75	55	95	70
	N·m	lb.-ft.														
M12	40	29.5	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	46	80	59	120	88	150	110	175	130	220	165	205	150	260	190
M16	100	74	125	92	190	140	240	175	275	200	350	255	320	235	400	300
M18	135	100	170	125	265	195	330	245	375	275	475	350	440	325	560	410
M20	190	140	245	180	375	275	475	350	530	390	675	500	625	460	790	580
M22	265	195	330	245	510	375	650	480	725	535	920	680	850	625	1080	800
M24	330	245	425	315	650	480	820	600	920	680	1150	850	1080	800	1350	1000
M27	490	360	625	460	950	700	1200	885	1350	1000	1700	1250	1580	1160	2000	1475
M30	660	490	850	625	1290	950	1630	1200	1850	1350	2300	1700	2140	1580	2700	2000
M33	900	665	1150	850	1750	1300	2200	1625	2500	1850	3150	2325	2900	2150	3700	2730
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2770	4750	3500

Torque values listed are for general use only, based on the strength of the bolt or screw. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For stainless steel fasteners or for nuts on U-bolts, see the tightening instructions for the specific application. Tighten plastic insert or crimped steel type lock nuts by turning the nut to the dry torque shown in the chart, unless different instructions are given for the specific application.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class. Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original. Make sure fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

^a“Lubricated” means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or M20 and larger fasteners with JDM F13C, F13F or F13J zinc flake coating.

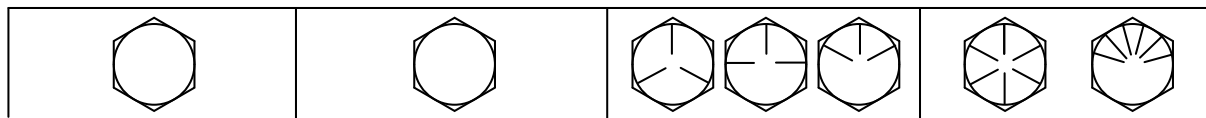
^b“Dry” means plain or zinc plated without any lubrication, or M6 to M18 fasteners with JDM F13B, F13E or F13H zinc flake coating.

DX,TORQ2 -19-12JAN11-1/1

Specifications

Unified Inch Bolt and Screw Torque Values

TS1671 —UN—01MAY03



Bolt or Screw Size	SAE Grade 1				SAE Grade 2 ^a				SAE Grade 5, 5.1 or 5.2				SAE Grade 8 or 8.2			
	Lubricated ^b		Dry ^c		Lubricated ^b		Dry ^c		Lubricated ^b		Dry ^c		Lubricated ^b		Dry ^c	
	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.	N·m	lb.-in.
1/4	3.7	33	4.7	42	6	53	7.5	66	9.5	84	12	106	13.5	120	17	150
													N·m	lb.-ft.	N·m	lb.-ft.
5/16	7.7	68	9.8	86	12	106	15.5	137	19.5	172	25	221	28	20.5	35	26
									N·m	lb.-ft.	N·m	lb.-ft.				
3/8	13.5	120	17.5	155	22	194	27	240	35	26	44	32.5	49	36	63	46
			N·m	lb.-ft.	N·m	lb.-ft.	N·m	lb.-ft.								
7/16	22	194	28	20.5	35	26	44	32.5	56	41	70	52	80	59	100	74
	N·m	lb.-ft.														
1/2	34	25	42	31	53	39	67	49	85	63	110	80	120	88	155	115
9/16	48	35.5	60	45	76	56	95	70	125	92	155	115	175	130	220	165
5/8	67	49	85	63	105	77	135	100	170	125	215	160	240	175	305	225
3/4	120	88	150	110	190	140	240	175	300	220	380	280	425	315	540	400
7/8	190	140	240	175	190	140	240	175	490	360	615	455	690	510	870	640
1	285	210	360	265	285	210	360	265	730	540	920	680	1030	760	1300	960
1-1/8	400	300	510	375	400	300	510	375	910	670	1150	850	1450	1075	1850	1350
1-1/4	570	420	725	535	570	420	725	535	1280	945	1630	1200	2050	1500	2600	1920
1-3/8	750	550	950	700	750	550	950	700	1700	1250	2140	1580	2700	2000	3400	2500
1-1/2	990	730	1250	930	990	730	1250	930	2250	1650	2850	2100	3600	2650	4550	3350

Torque values listed are for general use only, based on the strength of the bolt or screw. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For plastic insert or crimped steel type lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application. Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

Replace fasteners with the same or higher grade. If higher grade fasteners are used, tighten these to the strength of the original. Make sure fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

^aGrade 2 applies for hex cap screws (not hex bolts) up to 6 in. (152 mm) long. Grade 1 applies for hex cap screws over 6 in. (152 mm) long, and for all other types of bolts and screws of any length.

^b"Lubricated" means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or 7/8 in. and larger fasteners with JDM F13C, F13F or F13J zinc flake coating.

^c"Dry" means plain or zinc plated without any lubrication, or 1/4 to 3/4 in. fasteners with JDM F13B, F13E or F13H zinc flake coating.

DX,TORQ1 -19-12JAN11-1/1

EC Declaration of Conformity

John Deere GmbH & Co. KG
John Deere Werk Zweibruecken
Homburger Straße 117
D-66482 Zweibruecken, Germany

The person named below declares that
the product

Machine type: Combine

Model: W500, W600, T500, T600

fulfills all relevant provisions and essential requirements of the following directives:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery directive	2006/42/EC	Self-certification
General safety requirements for agricultural machines	DIN EN ISO 4254-1	Self-certification
Machine safety	DIN EN ISO 12100	Self-certification
Safety of forage harvesters and combines	DIN EN ISO 4254-7	Self-certification
U.j. shafts and their protection devices	DIN EN 12965	Self-certification
EMC directive	2004/108/EC	Self-certification

Name and address of the person in the European Community authorized to compile the technical construction file:

Brigitte Birk
John Deere GmbH & Co. KG
Mannheim Regional Center
John Deere Straße 70
D-68163 Mannheim, Germany
EUConformity@johndeere.com

Place of declaration: D-66482 Zweibruecken,
Germany

Name: Martin Bueermann

Date of declaration: 26 October 2015

Title: Manager Combine Engineering

Manufacturing unit: John Deere Werk
Zweibruecken

DXCE01 —UN—28APR09



OUC002,000489B -19-15DEC15-1/1

Customs Union—EAC

This information applies only to products which bear the EAC conformity mark of the Customs Union member states.

Manufacturer: Deere & Company
Moline, Illinois U.S.A.

Models: W540, W550, W650, W660, T550, T560, T660 and T670 Combines

Made in Zweibrücken, Germany

Name and address of the authorized representative in the Customs Union of Russia, Belarus and Kazakhstan:
Limited Liability Company
"John Deere Rus"

Address:
142050, Russia, Moscow region, Domodedovo district, Domodedovo, Belye Stolbi micro district, vladenye "Warehouse 104," Building 2.

For technical support, contact your dealer.

Date of manufacture is denoted by the product label.

A—Month of Manufacture

B—Year of Manufacture

JOHN DEERE		<div style="position: relative; height: 100px;"> A B </div>
Type / Model		
Typ Approval Nr.		Constr. date
Product Identification Number		Model year
		Power rat. KW
		Version
		PTAC KG
		PTRA KG
		Réception par la DREAL
		Orléans le
		EAC CE INSPECTION CODES DEERE & COMPANY MOLINE, ILLINOIS, USA MADE IN GERMANY
Permissible Mass:		
Max. total weight	KG	
Max. axle 1 load	KG	
Max. axle 2 load	KG	
Max. axle 3 load	KG	
Permissible Towable Mass:		
Non braked	KG	
Inertia-braked	KG	
Vertical hitch load	daN	

Product Label Example

ZX08994,0000A35 -19-12AUG14-1/1

H111543 —UN—08JUL14

Safety Note Regarding the Subsequent Installation of Electrical and Electronic Appliances and/or Components

The machine is equipped with electronic components whose function may be influenced by electromagnetic radiation from other appliances. Such influences may be hazardous, so take the following safety instructions into account.

If electrical and electronic appliances are subsequently installed on the machine and connected to the onboard system, the user must verify whether the installation affects the electronics or other components. This applies particularly to:

- Personal Computer
- GPS (Global Positioning System) receiver

In particular, subsequently installed electrical/electronic components must comply with the relevant edition of EMC Directive 2004/108/EC, and be CE marked.

If mobile communication systems (e.g. radio communication, telephone) are to be installed

subsequently, the following extra requirements must be met:

- Only devices with an approval complying with the valid national regulation (i.e. BZT approval in Germany) shall be installed;
- The device shall be installed securely;
- Portable or mobile devices may be operated in the vehicle only if connected to a fixed outside antenna;
- Transmitters shall be installed separately from the vehicle's electronics;
- The antenna must be installed in a professional manner, with a good ground connection between the antenna and the vehicle ground.

Wiring, installation and maximum permissible current supply must be as stated in the installation instructions of the machine manufacturer.

OUCC002,0003B9D -19-11JAN13-1/1

Index

	Page		Page
A			
Access Door Work Lights	04-197	Separator Grate (T Series)	03-97
Access Engine Platform	04-89	Separator Rotor Drive Speed (T Series).....	03-98
Access Ladder		Shift Linkage	04-203
Engine Platform	01-13, 04-6	Single Point Latching	03-42
Grain Tank.....	01-13, 03-113, 04-6	Straw Chopper Belt Tension	04-178
Access Manager Application		Straw Chopper Counterknives	03-77
Access Level Settings.....	02-183	Straw Chopper Spreading Width	03-75
Change Password.....	02-183	Straw Chopper Vanes	03-76
Lock/Unlock Applications.....	02-184	Straw Walker Belt Tension (T Series)	04-157
Accumulator (General Information)	04-201	Straw Walker Belt Tension (W Series)	04-155
Activation Button Mode Combinations.....	02-81	Tailings Auger and Elevator Belt Tension.....	04-169
Active Header Control Display.....	02-80	Tailings Elevator Paddle Chain Tension.....	04-171
Active Header Float.....	02-88	Unloading Auger Support Stud	04-173
Adjust		Upper Tailings Auger Drive Chain Tension	04-172
Beater Belt (W Series)	04-141	Windrow Rake.....	03-121
Beater Belt Tension (W Series).....	04-141	After the First 10 Operating Hours.....	04-26
Beater Grate (W Series)	03-96	After the First 100 Operating Hours.....	04-26
Belt Tension of Stripper Roller (T Series).....	04-143	After the First 1000 Operating Hours.....	04-27
Cab Halogen Lights	04-194	Air Compressor Button	02-45
Cab Headlight	04-193	Air Compressor System	
Chaff Spreader Frame Operating Position.....	04-183	Operate	03-81
Chaff Spreader Spread Width.....	03-79	Air Conditioner	
Chopping Speed	03-73	Maintenance	04-205
Clean Grain Elevator Belt Tension	04-165	Air-Conditioning System	
Clean Grain Elevator Paddle Chain Tension.....	04-168	Clean Fresh Air Filter	04-206
Cleaning Fan Belt Tension.....	04-153	Clean Recirculation Air Filter	04-206
Cleaning Fan Drive Speed-Dual Drive Range	03-103	Refrigerant Level.....	04-207
Cleaning Shoe Auger Bevel Gear Tension	04-159	Replace Fresh Air Filter	04-206
Cleaning Shoe Auger Bevel Gears	04-159	Replace Recirculation Air Filter.....	04-207
Cleaning Shoe Belt Tension.....	04-161	Alarm	
Concave Initial Position.....	04-129	Back-up.....	03-2
Cylinder Drive Belt Tension.....	04-139	Align Cylinder Drive	04-137
Cylinder Drive Gap.....	04-135	Align Unloading Auger Drive	04-176
Exhaust Debris Management Belt Tension.....	04-177	Alternator	04-187
Feeder House Belt Tension.....	04-123	Annual Cleanout and Specialty Crops.....	04-18
Feeder House Conveyor Chain Speed	03-89	Antenna	02-17
Feeder House Conveyor Chain Tension	04-121	Armrest	
Feeder House Drive Chain	04-119	Chaffer Adjust Button.....	02-52
Feeder House Drum Height.....	03-88	Cleaning Fan Speed Adjust Button.....	02-49
Feeder House Fore/Aft Tilt Frame	03-91, 03-92	ClimaTrak™ Automatic Temperature Control	02-55
Feeder House Reverser Belt Tension	04-122	CommandARM™ Controls	02-46
Grain Tank Cross Auger Drive Chain.....	04-173	Discharge Swap Button	02-49
Header Lift Accumulator	04-202	Feeder House Rate Adjust Button	02-50
Lower Driving Lights	04-195	Feeder House Sensitivity Adjust Button.....	02-50
Operator's Seat (Basic Seat)	02-8, 02-11	Header Adjust Button.....	02-47
Operator's Seat (Premium Cloth		HillMaster™ Leveling Control Switches	02-54
Seat).....	02-9, 02-11	Light Buttons.....	02-57
Operator's Seat (Premium Leather		Operator Interface Controls	02-58
Seat).....	02-10, 02-11	Radio Function Buttons.....	02-56
Overshot Beater Belt Tension (T Series)	04-144	Setpoint Modes (Manual or Automatic).....	02-99
Power Separator Belt Tension (W Series)	04-142	Sieve Adjust Button.....	02-52
Rear Beater Belt Tension (T Series)	04-148	Tailboard Vane Angle Adjust Button.....	02-53
Rear Beater Grate (T Series).....	03-99	Threshing Clearance Adjust Button	02-51
Reel and Chaff Spreader Pump Belt Tension	04-178	Threshing Speed Adjust Button	02-48
Secondary Countershaft Belt Tension.....	04-149	Attach Header to Feeder House.....	03-38
Separator Belt Tension (T Series).....	04-146	Automatic Combine Adjust Crop Settings	03-48

Continued on next page

	Page		Page
Automatic Header Control (AHC) Settings		Feeder House Rate Adjust.....	02-50
Active Header Float	02-144	Feeder House Sensitivity Adjust.....	02-50
Deck Plate Position.....	02-144	Folding Functions.....	02-44
Header Height Resume	02-144	Four-Wheel Drive.....	02-41
Header Height Sensing.....	02-144	Gear (PBST Only).....	02-39
Lateral Tilt	02-144	Harvest Smart™ Feed Rate Enable	02-36
Automatic Header Height Control System.....	02-80	Header Activation.....	02-63
AutoTrac™ Resume Button.....	02-63	Header Adjust	02-47
Auxiliary Field Lights.....	04-197	Lights	02-57
Avoid static electricity risk when		Machine Lights.....	02-26
fueling	01-8, 04-66	Machine Sync	02-64
		Operator Interface Controls	02-58
B		Park Brake	02-38
Back-Up Alarm	03-2	ProDrive™ Mode 1 and 2 Buttons	02-39
Battery Cable Connection.....	04-187	Quick Stop	02-60
Battery Charging.....	04-186	Road Safety Mode	01-5, 02-34
Battery Disconnect Switch.....	03-17, 04-9	Sieve Adjust.....	02-52
Battery Handling, Safety		Tailboard Vane Angle Adjust.....	02-53
Safety, Battery Handling	01-23, 04-186	Threshing Clearance Adjust.....	02-51
Beacon Light (LED)	04-196	Threshing Speed Adjust.....	02-48
Beacon Light Bulb	04-196	Unloading Auger Drive.....	02-61
Beater Belt (W Series).....	04-141	Buttons	
Beater Belt Tension (W Series)	04-141	Radio Functions	02-56
Beater Grate (W Series).....	03-96		
Belt Pickup Speed		C	
Automatic Adjust.....	02-90	Cab	02-2
Manual Adjust	02-90	12 V Power Outlet.....	02-21
Belt Shield	04-91	Access	02-2, 02-3
BioDiesel fuel.....	04-69	Antenna.....	02-17
Bleed Fuel System	04-105	Brake Pedals.....	02-7
Bolt and screw torque values		Cab Interior Lights.....	02-20
Metric	05-21	Cab Roof Louvers	02-18
Unified inch	05-22	CommandARM™ Control Console	02-13
Brake fluid.....	04-85	CommandCenter™ Display	02-14
Brake Fluid	04-204	CommandTouch™ Armrest Console	02-13
Brake Light Bulb	04-198	Emergency Exit.....	02-4
Brake Pedals	02-7	Gearshift Lever	02-7
Brake System	04-205	Heated/Ventilated Seat Switch (Premium	
Break-In Check First 100 Hours	03-11	Cloth Seat).....	02-12
Break-in engine oil		Heated/Ventilated Seat Switch (Premium	
Final Tier 4/Stage IV	04-79	Leather Seat).....	02-12
Break-in engine oil (Tier 2/Stage II).....	04-79	Instructional Seat	02-13
Break-in Service	04-26	Light Selection Switch.....	02-26
Break-In Service After 100 Hours.....	03-12	Lighting Locations	02-27
Break-In Service After 400 Hours.....	03-13	Loudspeaker	02-19
Breaking-In Engine.....	03-8, 03-11, 03-13	Lumbar Support Switch (Premium Leather Seat).....	02-12
Button		Manual Park Brake	02-7
Air Compressor	02-45	Microphone	02-15
Air Conditioner	02-55	Mirror Control Switch	02-15
AutoTrac™ Resume	02-63	Mirror Heater Switch	02-15
Chaffer Adjust	02-52	Operator's Seat (Basic Seat)	02-8, 02-11
Cleaning Fan Speed Adjust.....	02-49	Operator's Seat (Premium Cloth	
CommandARM™ Controls	02-46	Seat).....	02-9, 02-11, 02-12
Defrog.....	02-55	Operator's Seat (Premium Leather	
Differential Lock	02-41	Seat).....	02-10, 02-12
Discharge Swap.....	02-49	Outside Mirrors	02-17
Engine Speed	02-37	Overhead Control Panel	02-15

Continued on next page

	Page		Page
Power Outlet Socket Strip	02-21	Cleaning Fan Belt Tension	04-153
Pull-Down Sunshade	02-18	Cleaning Fan Drive Speed	03-103
Radio Controls	02-16	Cleaning Fan Speed Adjust Button	02-49
Radio Types	02-15	Cleaning Shoe Auger Bevel Gear Belt	04-160
Recirculation Air Filter	02-19	Cleaning Shoe Auger Bevel Gear Tension	04-159
Seat Belts	02-13	Cleaning Shoe Auger Bevel Gears	04-159
Steering Column	02-5	Cleaning Shoe Belt	04-162
Storage Locations	02-24, 02-25	Cleaning Shoe Belt Tension	04-161
Cab Halogen Light Bulb	04-193	Cleaning Shoe Light Bulb	04-197
Cab Halogen Lights	04-194	Clear Crop Totals	02-106
Cab Headlight Bulb	04-192	Clear Field Totals	02-105
Cab Headlights	04-193	ClimaTrak™ Automatic Temperature Control	02-55
Cab Interior Light	04-198	Combine Setup	
Cab Interior Lights		Moisture Correction Settings	02-112
Dome Light	02-20	Combine Improvement Targets	02-125
Map Light	02-20	Combine Main	
Calibration		Reconfigure Detail Machine Settings	02-101
Manual Adjust Yield Calibration Factor	02-116	Reconfigure Performance Monitor Settings	02-101
Moisture Sensor Temperature Calibration	02-118	Combine setup	
Yield	02-113	Change crop modifiers menu	02-122
Calibrations		Change Machine Settings	02-122
Machine Systems	02-193	Yield units setting	02-112
When to Calibrate	02-192	Combine Setup	
Calibrations Screen	02-148	Change Crops	02-120
Capacities	04-87	Change Grain Loss Settings	02-120
Chaff Spreader		Combine Improvement Targets	02-125
Operate	03-79	Crop Settings	02-108
Spread Width	03-79	Folding Corn Head	02-111
Chaff Spreader Frame Operating Position	04-183	Folding Function Settings	02-107
Chaffer Adjust Button	02-52	Folding Unloading Auger	02-111
Chaffer and Sieve Element	03-106	Grain Loss Calibration	02-108
Chaffer and Sieves	03-105	Grain Loss Improvement	02-126
Chaffer Fingers	03-110	Grain Quality Improvement	02-127
Change Cut Width	02-140	Grain Tank Covers	02-111
Change Header Settings	02-140	Grain Tank Level	02-110
Change Minimum Reel Speed	02-140	Grain Tank Level Settings	02-106
Change Row Spacing	02-140	Harvest Priority Settings	02-126
Change Tire Radius Code	02-117	Harvest Smart™ Feed Rate Settings	02-109
Check		Interactive Combine Adjustment ... 02-109,	
Cylinder Drive Reduction Gear Oil Level	04-128	02-124, 02-132	
Feeder House Top Shaft Sprockets	04-120	Interactive Combine Adjustment (System	
Check Engine Oil Level	04-91	Monitoring)	02-128, 02-133
Check Tailings	03-111	Machine Settings	02-108
Chopper Vanes	03-76	Moisture Sensor Settings	02-112
Clean Diesel Exhaust Fluid (DEF) tank	04-94	Moisture Settings	02-107
Clean Fuel Precleaner Filter	04-104	Name Customized Crops	02-123
Clean Grain Elevator Belt	04-166	Optimization Complete	02-131, 02-136
Clean Grain Elevator Belt Tension	04-165	Recommended Machine	
Clean Grain Elevator Drives Top Access	04-164	Changes	02-127, 02-131, 02-132, 02-136
Clean Grain Elevator Lower Access Cover	03-112	Sample Rate Settings	02-112
Clean Grain Elevator Paddle Chain Tension	04-168	Unloading Rate Offset	02-110
Clean Grain Elevator Perforated Door and Trough	03-112	Unloading Rate Offset Settings	02-106
Cleaning		Verify Improvement Settings	02-129, 02-134
Machine Cleanout (Annual Cleanout and		Verify Previously Acceptable Parameter	
Specialty Crops)	04-18	Settings	02-130, 02-135
Machine Cleanout (Periodic Cleanout)	04-11	Yield Units Settings	02-107
Cleaning Engine Compartment	01-12, 04-90	Combine Setup Screen	02-106
Cleaning Fan Belt	04-154	CommandARM™ Control Console	02-13

Continued on next page

Continued on next page

	Page		Page
Diesel Particulate Filter		VisionTrak™ Performance Monitor	
Maintenance and Service	04-112	(General Information)	02-187
Diesel Particulate Filter Maintenance and Service	04-112	VisionTrak™ Performance Monitor—Operating ..	02-188
Differential Lock Button	02-41	Yield Calibration	02-113
Dimensions	05-10	Yield Units Settings	02-107
Diode Module Fuse (CAB)	04-190	Display Icon Identification	02-76
Discharge Lights	04-197	Display Screen	
Discharge Swap Button	02-49	CommandCenter™	02-65
Disconnect the Battery	03-16	Disposal	
Display		Diesel Exhaust Fluid (DEF)	04-73
Activation Button Mode Combinations	02-81	Disposal, Exhaust Filter	04-112
Active Header Control	02-80	Dome Light	02-20
Active Header Float	02-88	Drain Cooling System	04-105
Automatic Header Height Control System	02-80	Drain Diesel Exhaust Fluid (DEF) Tank	04-93
Auxiliary Controls	02-173	Drain Engine Oil	04-92
Boundary Box Color	02-164	Drain Fuel Tank	04-96
Brightness Level	02-164	Drive Belts (T Series)	04-117
Calibrations Screen	02-148	Drive Belts (W Series)	04-115
Change Tire Radius Code	02-117	Driving Machine	
Combine Setup Screen	02-106	Road Transporting	03-26
Crop Settings	02-108	Driving Machine on Roads	03-26
Cutterbar Fore/Aft Position	02-97	During the First 50 Operating Hours	04-26
Deck Plate Position Resume	02-93		
Diagnostic Readings	02-170		
Diagnostic Readings Screen	02-149		
Dial-A-Speed™ System	02-90		
Display Region Layouts	02-70		
Display Tests	02-170		
Engine Information Screen	02-145		
Folding Function Settings	02-107		
Grain Loss Calibration	02-108		
Grain Tank Level Settings	02-106		
Harvest Smart™ Feed Rate Settings	02-109		
Harvesting Information Screen	02-102		
Header Height Resume	02-86		
Header Height Sensing	02-82		
Header Height Sensing (HydraFlex™ Platforms) ..	02-84		
Home Page Region Setup	02-179		
Interactive Combine Adjustment	02-109		
Languages	02-167		
Lateral Tilt System	02-95		
Layout Manager Application	02-179		
Machine Settings	02-108		
Manual Recording	02-100		
Message Center Application	02-174		
Moisture Sensor Temperature Calibration	02-118		
Moisture Settings	02-107		
Multi-function Lever Setup	02-145		
Reconfigure Detail Machine Settings	02-101		
Reconfigure Performance Monitor Settings	02-101		
Reel Position Resume	02-91		
Regional Settings	02-167		
Special Tests Screen	02-149		
Time/Date Settings	02-167		
Tow Mode Setup Screen	02-149		
Units of Measurement	02-167		
Unloading Rate Offset Settings	02-106		
VisionTrak™	02-185		

E

Effect of cold weather on diesel engines	04-71
Electrical Component Handling Precautions	04-185
Electrical System	
Adjust Cab Halogen Lights	04-194
Adjust Cab Headlight	04-193
Alternator	04-187
Battery Cable Connection	04-187
Battery Charging	04-186
Battery Disconnect Switch	04-9
Beacon Light (LED)	04-196
Beacon Light Bulb	04-196
Brake Light Bulb	04-198
Cab Halogen Light Bulb	04-193
Cab Headlight Bulb	04-192
Cab Interior Light	04-198
Cleaning Shoe Light Bulb	04-197
Component Handling Precautions	04-185
Diode Module Fuse	04-190
Fascia Light Bulb	04-194
Fuse Center	04-189
Fuse Center Cover	04-188
General	04-183
Halogen Bulb Safety Rules	04-192
Hazard/Marker Light Bulb	04-198
Inline Fuses	04-190
Lower Driving Light Bulb	04-195
Lower Driving Lights	04-195
Map Light	04-199
Precautions	04-184
Rear Hazard Light Bulb	04-198
Side Finder Light Bulb	04-197
Starter Relay	04-191
Weld Near Electronic Control Units	04-184

Continued on next page

Continued on next page

Continued on next page

Continued on next page

Continued on next page

	Page		Page
P		Reconfigure Performance Monitor Settings.....	02-101
Park Brake Button	02-38	Recording	
Payable Moisture and Density Chart.....	02-119	Header stop height.....	02-140
Performance Monitor	02-176	Manual ON/OFF.....	02-100
Performance Monitor (General Information).....	02-187	Reduced Speed Unloading System.....	03-117
Performance Monitor—Operating.....	02-188	Reel and Chaff Spreader Pump Belt Tension.....	04-178
Periodic Cleanout	04-11	Reel and Chaff Spreader Pump Drive Belt.....	04-179
Periodic Services		Reel Position Resume	02-91
After the First 10 Operating Hours	04-26	Reel Speed	
After the First 100 Operating Hours	04-26	Automatic Adjust	02-90
After the First 1000 Operating Hours	04-27	Manual Adjust	02-90
During the First 50 Operating Hours	04-26	Refill Cooling System	04-108
Phone		Refrigerant Level	04-207
Operating	02-159	Refueling, avoid static electricity risk.....	01-8, 04-66
Phone Book	02-160	Replace	
Phone Directories	02-161	Beacon Light (LED).....	04-196
Phone Settings.....	02-162	Beacon Light Bulb.....	04-196
Phone Book (Premium Radio).....	02-160	Brake Light Bulb.....	04-198
Phone Directories (Premium Radio).....	02-161	Cab Halogen Light Bulb	04-193
Phone Settings (Premium Radio).....	02-162	Cab Headlight Bulb	04-192
Platform Reel Lift and Reel Fore/Aft Switch	02-62	Cab Interior Light	04-198
Power Outlet Socket Strip	02-21	Chaffer and Sieve Element	03-106
Power Separator Belt (W Series)	04-142	Clean Grain Elevator Belt	04-166
Power Separator Belt Tension (W Series).....	04-142	Cleaning Fan Belt	04-154
Power Unplugging of Cylinder	03-95	Cleaning Shoe Auger Bevel Gear Belt.....	04-160
Precleaner	03-104	Cleaning Shoe Belt	04-162
Prestarting Checks	03-2	Cleaning Shoe Light Bulb	04-197
Primary Display Unit (PDU).....	02-67	Cylinder Drive Belt	04-140
ProDrive™ Mode 1 and 2 Buttons.....	02-39	Cylinder Intermediate Belt.....	04-136
Pull-Down Sunshade	02-18	Exhaust Debris Management Drive Belt.....	04-177
		Fascia Light Bulb	04-194
Q		Feeder House Belt	04-124, 04-125
Quick Stop Button.....	02-60	Feeder House Reverser Belt	04-123
Quick-Engage Booster Bar.....	03-70	Fresh Air Filter	04-206
		Halogen Bulb	04-192
R		Hazard/Marker Light Bulb	04-198
Radio	02-15	Lower Driving Light Bulb	04-195
Auxiliary (AUX) Home Page	02-157	Map Light	04-199
Bluetooth® Audio	02-157	Overshot Beater Belt (T Series).....	04-145
CD/MP3 Home Page	02-153	Power Separator Belt (W Series).....	04-142
MW/LW home page	02-151	Rear Beater Belt (T Series).....	04-148
Settings	02-158	Rear Hazard Light Bulb.....	04-198
Source Select.....	02-150	Recirculation Air Filter.....	04-207
USB Home Page.....	02-155	Reel and Chaff Spreader Pump Drive Belt	04-179
Radio Function Buttons	02-56	Secondary Countershaft Belt	04-150
Rear Beater Belt (T Series)	04-148	Separator Belt (T Series)	04-147
Rear Beater Belt Tension (T Series).....	04-148	Side Finder Light Bulb.....	04-197
Rear Beater Grate (T Series)	03-99	Straw Chopper Rotating Knives.....	04-181, 04-182
Rear Hazard Light Bulb	04-198	Straw Walker Belt (T Series).....	04-158
Recirculation Air Filter	02-19, 04-206, 04-207	Straw Walker Belt (W Series)	04-156
Recommended Fire Preventions	01-43	Stripper Roller Belt (T Series).....	04-143
Recommended Machine Changes ...	02-127, 02-131, 02-132, 02-136	Tailings Auger and Elevator Belt.....	04-170
Reconfigure Detail Machine Settings	02-101	Threshing Cylinder Filler Plates	04-127
		Threshing Cylinder Rasp Bars	04-126
		Unloading Auger Drive Belt.....	04-174
		Replace Access Door Work Lights	04-197
		Replace Air Cleaner Filters.....	04-110, 04-111
		Replace Auxiliary Field Lights	04-197

Continued on next page

	Page		Page
Replace Diesel Exhaust Fluid (DEF) Dosing Filter...	04-95	Combine Improvement Targets.....	02-125
Replace Discharge Lights.....	04-197	Folding Corn Head.....	02-111
Replace Grain Tank and Unloading Auger Light	04-197	Folding Unloading Auger	02-111
Replace Stubble Lights.....	04-197	Grain Loss Improvement.....	02-126
Retorque Wheel Bolts and Nuts	01-18	Grain Loss Settings.....	02-120
Road Safety Mode Button	01-5, 02-34	Grain Quality Improvement	02-127
Rotational Alarm System	03-1	Grain Tank Covers	02-111
		Grain Tank Level	02-110
S		Harvest Priority Settings	02-126
Safety		Header Screen.....	02-137
Back-Up Alarm.....	03-2	Interactive Combine Adjustment	02-124, 02-132
Emergency Exit.....	02-4	Interactive Combine Adjustment (System	
Feeder House Stop.....	04-9	Monitoring)	02-128, 02-133
Halogen Bulb Safety Rules	04-192	Moisture Correction.....	02-112
Header transport.....	01-3	Moisture Sensor.....	02-112
Retorque Wheel Bolts and Nuts.....	01-18	Multi-function Lever.....	02-145
Road Safety Mode Button.....	01-5	Name Customized Crops.....	02-123
Seat Belts.....	02-13	Optimization Complete.....	02-131, 02-136
Safety Decals	01-26	Recommended Machine	
Safety, Avoid High-Pressure Fluids		Changes.....	02-127, 02-131, 02-132, 02-136
Avoid High-Pressure Fluids	01-16	Sample Rate	02-112
Safety, Handle Fuel Safely, Avoid Fires		Unloading Rate Offset.....	02-110
Avoid Fires, Handle Fuel Safely.....	01-7, 04-66	Verify Improvement Settings	02-129, 02-134
Safety, Steps and Handholds		Verify Previously Acceptable Parameter	
Use Steps and Handholds Correctly	01-21	Settings	02-130, 02-135
Sample Rate Settings.....	02-112	Shear Screw Location	03-45
Seat Belts	02-13	Shift Linkage (3-Speed Transmission with	
Secondary Countershaft Belt.....	04-150	Gearshift Lever).....	04-203
Secondary Countershaft Belt Tension	04-149	Side Belt Speed Reduction (System	
Select Yield Wet or Dry.....	02-104	Monitoring Icons)	02-78
Selective Catalyst Reduction (SCR) System.....	03-18	Side Finder Light Bulb	04-197
Separator Belt (T Series).....	04-147	Side Hill Adaptation For Level Land Machine.....	03-109
Separator Belt Tension (T Series)	04-146	Sieve Adjust Button	02-52
Separator Engage Switch.....	02-36	Sound level.....	05-11
Separator Grate (T Series).....	03-97	Special Tests Screen.....	02-149
Separator Rotor Drive Speed (T Series)	03-98	Specifications	
Serial Numbers		Dimensions	05-10
Machine Components.....	05-12	Sound level	05-11
Product Identification Number.....	05-12	T550 Combine	05-5
Type Plate.....	05-12	T560 Combine	05-6
Service		T660 Combine	05-7
Cleaning (Annual Cleanout and Specialty Crops)..	04-18	T670 Combine	05-8
Cleaning (Periodic Cleanout).....	04-11	W540 Combine	05-1
Filling fuel tank.....	04-67	W550 Combine	05-2
Fire Extinguisher Operation	01-44	W650 Combine	05-3
Recommended Fire Preventions	01-43	W660 Combine	05-4
Service intervals		Splitting and Chopping	03-78
Clearing or delaying	04-27	Standard Weights Chart	02-119
Setpoint Modes (Manual or Automatic)	02-99	Starter Relay.....	04-191
Settings		Steering Column.....	02-5
Harvesting tips	03-46	Stone Trap.....	03-87
Setup		Storage	
Change Crop.....	02-120	Guidelines	04-213
Change Machine Settings.....	02-122	Long Term	04-213
Combine		Prepare Machine.....	04-214
Crop modifiers menu	02-122	Remove Machine from Storage	04-215
Yield unit setting	02-112	Storing	
		Diesel Exhaust Fluid (DEF).....	04-73

Continued on next page

Continued on next page

Page

V

Verify Improvement Settings.....	02-129, 02-134
Verify Previously Acceptable Parameter Settings.....	02-130, 02-135
Video Application	
Contrast Adjusting.....	02-180
Mirror Settings.....	02-181
Video Interface Capability	02-180
Video Safety.....	02-180
Video Setup	02-182
Video Cameras.....	03-85
Video Interface Capability.....	02-180
VisionTrak™	
Display	02-185, 02-187, 02-188
Operational Checks	02-191
Preliminary Adjustments on Machine.....	02-190
VisionTrak™ Display	02-185
VisionTrak™ Operational Checks.....	02-191
VisionTrak™ Performance Monitor.....	02-188
VisionTrak™ Performance Monitor (General Information).....	02-187
VisionTrak™—Preliminary Adjustments on Machine	02-190

W

Weekly.....	04-37, 04-40
Weld Near Electronic Control Units	04-184
Wheel Bolts and Nuts.....	01-18, 04-210
Windrow Rake	
Adjustable	03-121
Standard	03-121
Windshield Washer, Filling Reservoir	04-208
Winterize Cooling System	04-109

Y

Yield Calibration	02-113
Yield units	
Settings.....	02-112
Yield Units Settings	02-107

John Deere Service Keeps You On the Job

John Deere Parts

We help minimize downtime by putting genuine John Deere parts in your hands in a hurry.

That's why we maintain a large and varied inventory—to stay a jump ahead of your needs.



DX,IBC,A -19-04JUN90-1/1

TS100 —UN—23AUG88

The Right Tools

Precision tools and testing equipment enable our Service Department to locate and correct troubles quickly . . . to save you time and money.



DX,IBC,B -19-04JUN90-1/1

TS101 —UN—23AUG88

Well-Trained Technicians

School is never out for John Deere service technicians.

Training schools are held regularly to be sure our personnel know your equipment and how to maintain it.

Result?

Experience you can count on!



DX,IBC,C -19-04JUN90-1/1

TS102 —UN—23AUG88

Prompt Service

Our goal is to provide prompt, efficient care when you want it and where you want it.

We can make repairs at your place or at ours, depending on the circumstances: see us, depend on us.

JOHN DEERE SERVICE SUPERIORITY: We'll be around when you need us.



DX,IBC,D -19-04JUN90-1/1

TS103 —UN—23AUG88



Покупайте оригинальные и аналоговые
запчасти Джон Дир в компании "Аврора Агро Партс"

www.aa-p.ru



+7-800-550-3170 | +7-920-595-9888

ПН-ПТ с 8:00 до 17:00, СБ-ВС – Выходной

zakaz@aa-p.ru