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6095B, 6110B, 6120B, 6135B, and 6140B Tractors

(Serial No. 500185 (6095B) -)
(Serial No. 500643 (6110B) -)
(Serial No. 500017 (6120B) -)
(Serial No. 500161 (6135B) -)
(Serial No. 500012 (6140B) -)

OPERATOR'S MANUAL

6095B, 6110B, 6120B, 6135B, and 6140B Tractors

OMSU59780 ISSUE K2 (ENGLISH)

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents
are known to the State of California to cause cancer,
birth defects, and other reproductive harm.

If this product contains a gasoline engine:

WARNING

The engine exhaust from this product contains
chemicals known to the State of California to cause
cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.

John Deere (Tianjin) Co., Ltd.

Introduction

Foreword

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 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 in both metric 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 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 100 hours, schedule an after-sale inspection with your dealer to ensure best performance.

All tractors comply with the enterprise standard Q/12 JDTW 003—2022.

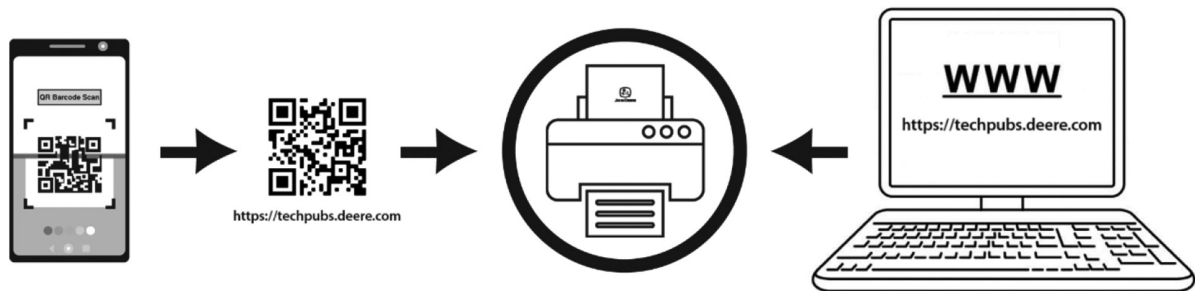
THIS TRACTOR IS DESIGNED SOLELY for use in customary agricultural or similar operations ("INTENDED USE"). Use in any other way is considered as contrary to the intended use. The manufacturer accepts no liability for damage or injury resulting from this misuse, and these risks must be borne solely by 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.

THIS TRACTOR 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 tractor will relieve the manufacturer of all liability for any resulting damage or injury.

If you are not the original owner of this machine, it is in your interest to contact your local John Deere dealer to inform them of this unit's serial number. This will help John Deere notify you of any issues or product improvements.

OUYC278,000079D-19-31OCT22

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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.

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General Information

Product View



John Deere 6135B Tractor

CPA0004364—UN—26APR18

NOTE: Tractor shown has optional equipment.

CP00606,00012E4-19-25APR18

Trademarks

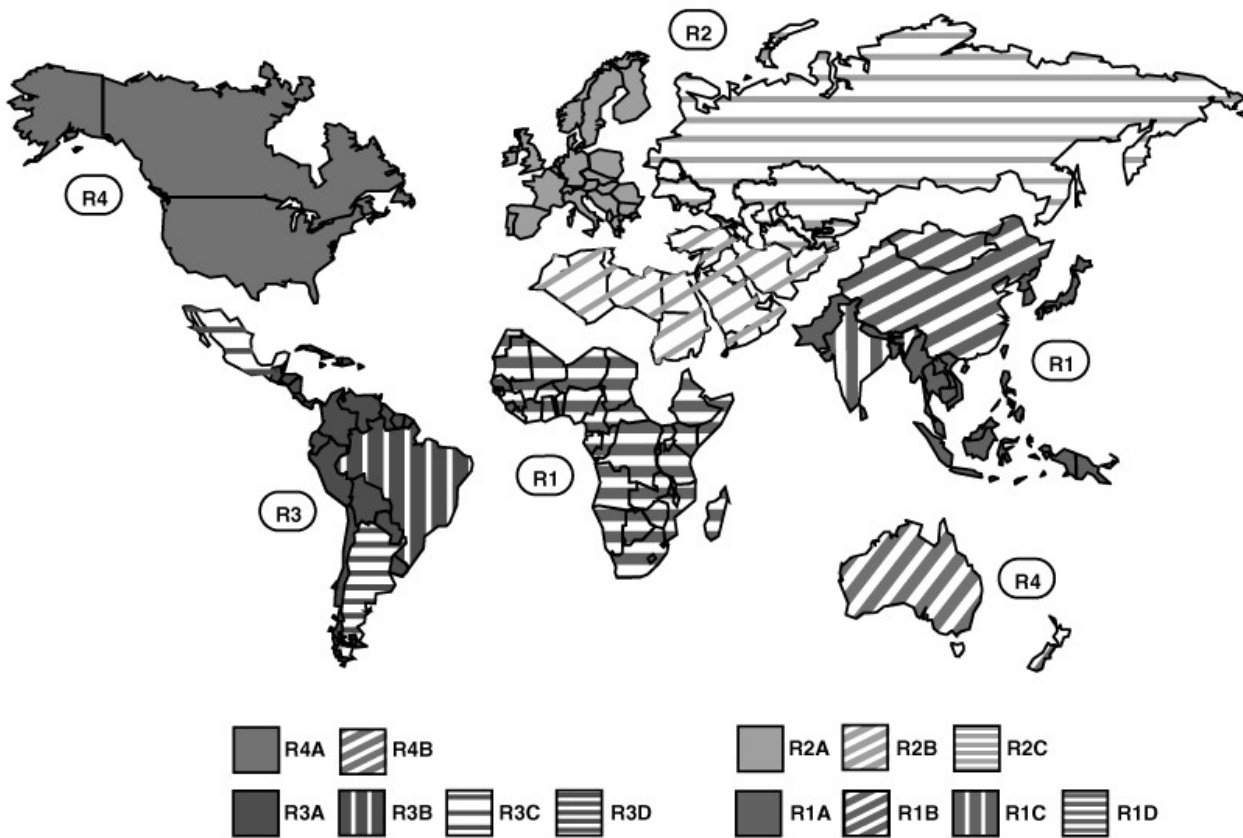
| Trademarks | |
|----------------|------------------------------|
| AutoTrac™ | Trademark of Deere & Company |
| Bio Hy-Gard™ | Trademark of Deere & Company |
| Break-In Plus™ | Trademark of Deere & Company |
| Break-In™ | Trademark of Deere & Company |
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| Roll-Gard™ | Trademark of Deere & Company |
| SERVICEGARD™ | Trademark of Deere & Company |
| TEFLON® | Trademark of Du Pont Co. |
| Torq-Gard™ | Trademark of Deere & Company |
| StarFire™ | Trademark of Deere & Company |

CP00606,00012E5-19-18APR18

Glossary of Terms

| ITEM | ABBREVIATION | DESCRIPTION |
|--------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------|
| Accessory | ACC | Secondary electrical system |
| Air Conditioning | A/C | System used for cooling the air in the cab |
| Alternating Current | AC | Electrical current that reverses its direction at regularly recurring intervals |
| Charge Air Cooler | CAC | A device used for cooling compressed intake air |
| Controller Area Network | CAN | A communication system linking on-board electronics |
| Chassis Control Unit | CCU | Computerized system for the tractor monitoring |
| Cold Cranking Amperes | CCA | Battery capability to perform during cold-weather operation |
| Direct Current | DC | Electrical current flowing in one direction only |
| Forward | FWD | Direction of movement |
| Forward-Neutral-Reverse | FNR | Abbreviation |
| Gallons per Minute | gpm | Amount of fluid displaced over a period of one minute |
| Heating, Ventilating, and Air Conditioning | HVAC | Abbreviation |
| High-Pressure Common Rail | HPCR | Abbreviation |
| Ignition | IGN | Control for starting and stopping the tractor |
| Instrument Cluster Control Unit | ICC | Computerized system used to control instrument cluster functions |
| International Standards Organization | ISO | Standards organization |
| Left-Hand | LH or L-H | Abbreviation |
| Liquid Crystal Display | LCD | A technology used for displaying information |
| Manifold Air Pressure | MAP | Air Pressure measured at engine air intake |
| Mechanical | Mech or MECH | Abbreviation |
| Mechanical Front Wheel Drive | MFWD | A mechanically powered front axle |
| Negative | Neg (—) | Electrical Ground Circuit |
| Number | No. | Abbreviation |
| Open Operator Station | OOS | Abbreviation |
| Positive | Pos (+) | Charged part of an electrical circuit |
| Potentiometer | POT | A device used to vary electrical voltage |
| PowrReverser™ | PR | 3-speed gear case, 4-speed range box, and 2 directional clutch pack with the electrohydraulic shuttle shift |
| Power Take-Off | PTO | Abbreviation |
| PowerTech™ E | PTE | Electronically controlled fuel injection |
| Product Identification Number | PIN | Serial number relating to tractor identification |
| Pulse-Width-Modulation | PWM | Method of controlling electrical signals |
| Region 1 | R1 | Asian Region |
| Reverse | Rev | Direction of movement |
| Revolutions per Minute | rpm | Abbreviation |
| Right-Hand | RH or R-H | Abbreviation |
| Roll-Over Protective Structure | ROPS | Abbreviation |
| Selective Control Valve | SCV | Device used to control remote hydraulic functions |
| Specification | Spec | Abbreviation |
| Three-Point Hitch | 3 PT | Abbreviation |
| Transmission | Trans | Abbreviation |
| Voltage (Volts) | V | Abbreviation |

Regions and Country Versions



RXA0150915—UN—01FEB16

R1—Asia and Sub-Saharan Africa

R1A—Far East, Sri Lanka, and Pakistan

R1B—China

R1C—India

R1D—Sub-Saharan Africa

R2—Europe, North Africa, Mid East, CIS

R2A—European Union (EU 28+)

R2B—North Africa and North Middle East (NANME)

R2C—Common Wealth of Independent States (CIS)

R3—Central and South America

R3A—Latin America (JDLA)

R3B—Brazil

R3C—Mexico

R3D—Argentina

R4—North America

R4A—USA and Canada

R4B—Oceania (Australia and New Zealand)

Regions 1, 2 and 3 equipment is traditionally manufactured with Economic Commission for Europe (ECE) features or systems.

Region 4 equipment is traditionally manufactured with Society of Automotive Engineers (SAE) features or systems.

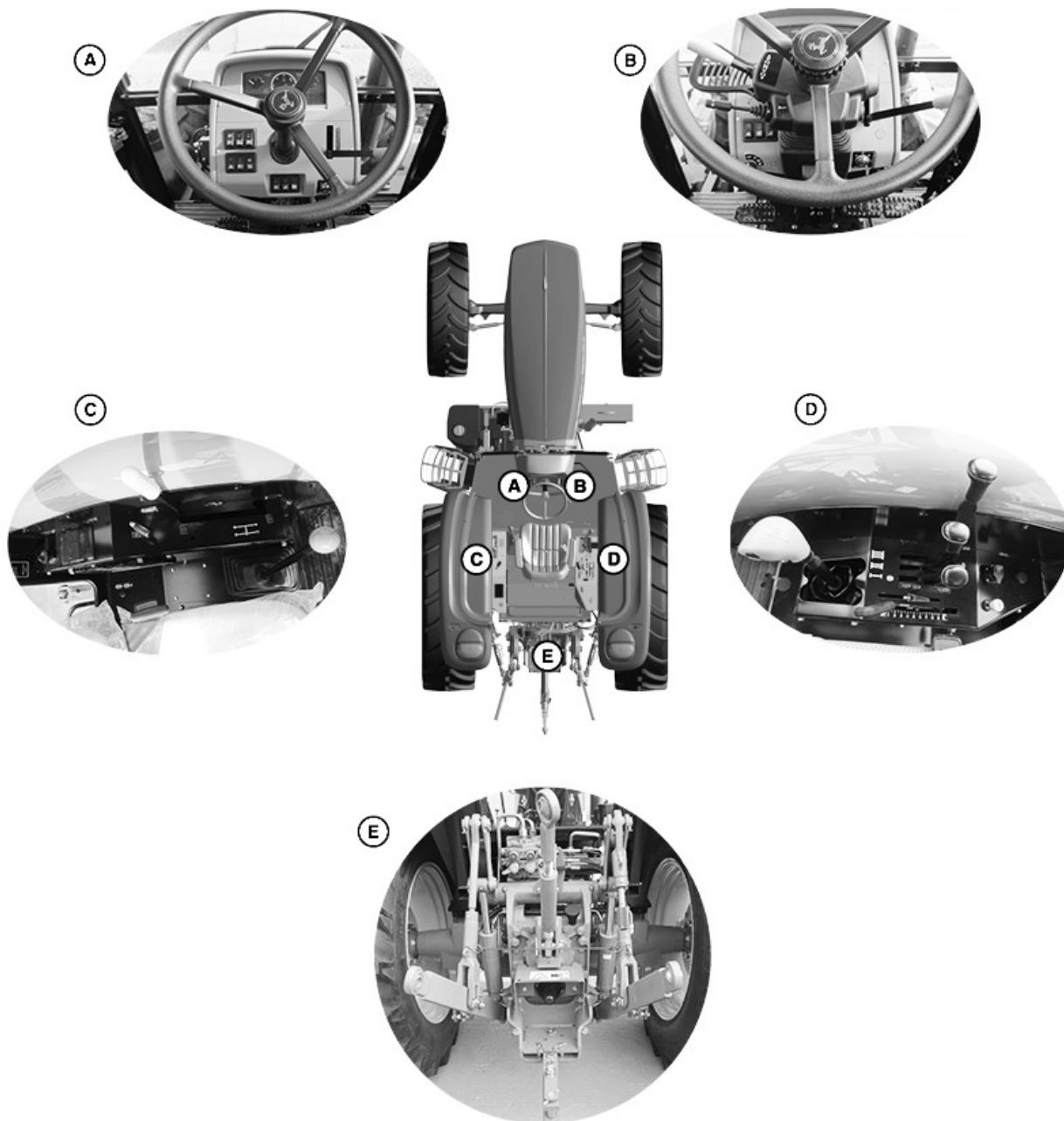
Drive and signal lighting, traffic signs, safety signs, and braking features are some of the systems that differ between ECE and SAE. For example, Text-Free (pictorial only) safety signs are used for ECE while Texts with picture safety signs are used on SAE.

Use information aloft, if equipment information can identify by regions, countries, trade federations, industry standards, or governmental regulations.

CP00606,00012E7-19-18APR18

Machine Overview

IMPORTANT: 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.



A—Front Console Controls (standard)
B—Front Console Controls (premium)
C—Left Side Controls

D—Right Side Controls
E—Rear Hitch

CPA0005140—UN—24JAN18

Operate the machine introduction:

- Sit in the operator seat and fasten seat belt.
- Start engine. (See Operating Engine section.)
- Turn on lights or signals as required. (See Electrical and Lighting Operation section.)
- Move machine by operating transmission. (See Transmission Operation section.)

- Use steering and brakes as required. (See Steering and Brake Operation section.)
- Activate features and implements as required. (See Operational sections.)

Preliminary overview

Before operation, inspect items per following list as a reminder. Detailed operation and service information is available in Operational and Maintenance sections.

- Review manual and machine for safety information and safety signs.
- Review manual for proper operation, adjustment, and service.
- Review manual for engine and drivetrain operations. (throttles, brakes, steering, transmission gears, MFWD, and Differential Lock.)
- Review manual for control devices (hitch, hydraulic, and electrical).
- Review manual for regular lubrication points and intervals.
- Check for visual signs of leaks damage, failures, and flats.
- Prepare machine hardware, fuel, fluids, lubricants, air, and daily maintenance.
- Check and prepare implements or attachments according to implement or attachment Operator Manuals.

Using this manual:

The information provided in this manual is divided into sections. The sections organization classifies by typical machine features or functional systems. These sections are identified at the top of each page. Specific information within each section is organized into modules. These modules are enclosed in boxes and a heading at the top left identifies the main modules. Page numbers identify the section as well as the number of the page in the section.

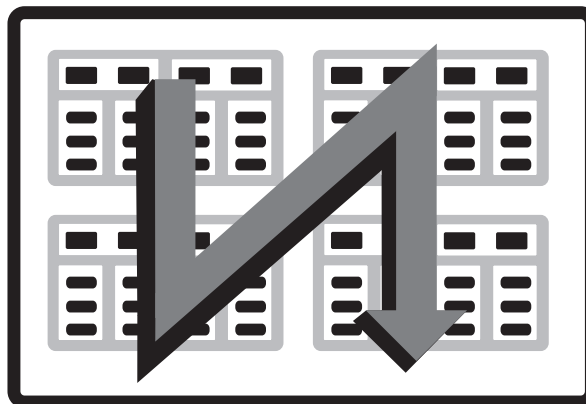
Review guideline for sections as following list

- Safety information is at the beginning
- Operation of all features and systems are in the first half of the manual
- Maintenance Intervals are in the middle of the manual
- Maintenance of all the features and systems are in the second half of the manual,
- Specifications are at the end

A detailed table of contents appears before Safety information and there is an alphabetical index at the very end of the manual.

Operator's Manual content flows as sequential reading

down one column of text and graphic then over to the top of the next column as shown.



Sequential Reading

W28329—UN—18OCT17

LG70251,00014B5-19-19SEP18

Look for Supplemental Information

Occasionally new or revised information will become available after manuals are printed. To get this up-to-date information in your hands, publication supplements are prepared and supplied to the field in the machine literature package.

Supplements can be supplied in the following forms and are usually identified with one of these titles:

- Directions Sheet
- Installation Instructions
- Publications Supplement

Before your initial review of the manual, look through the machine literature package to see if any supplemental information has been provided. If supplied, review this information to determine which procedures are impacted or modified by the revised instructions. Pay close attention to "CAUTION" and "IMPORTANT" statements. CAUTION statements address your safety, the safety of others and safe operation of the machine. IMPORTANT statements refer to machine adjustment, servicing and care.

Manuals are revised annually, at that time the supplemental information is incorporated directly into the manual, thereby eliminating the supplement.

JB06590,00006B4-19-22JUL08

Safety

Recognize Safety Information



T81389—UN—28JUN13

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-19-03OCT22

Understand Signal Words



▲ WARNING

▲ CAUTION

TS187—19—30SEP88

DANGER; The signal word DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

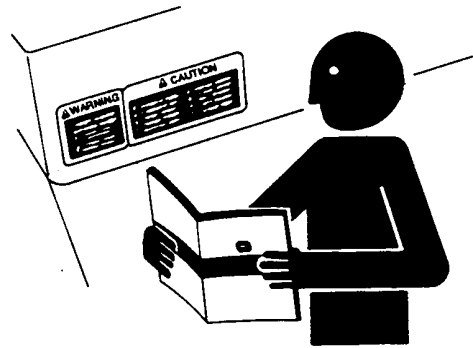
WARNING; The signal word WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION; The signal word CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices associated with events which could lead to personal injury.

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-19-05OCT16

Follow Safety Instructions



TS201—UN—15APR13

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.

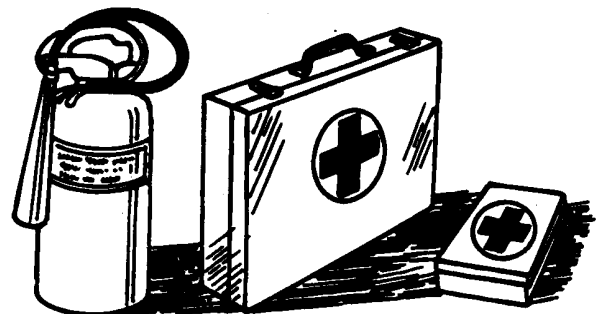
Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

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-19-01AUG22

Prepare for Emergencies



TS291—UN—15APR13

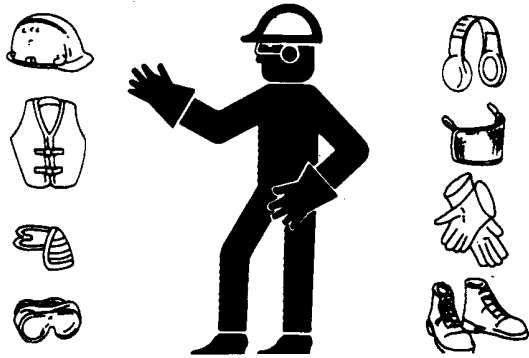
Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

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

DX,FIRE2-19-03MAR93

Wear Protective Clothing



TS206—UN—15APR13

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

Protect Against Noise



TS207—UN—23AUG88

There are many variables that affect the sound level range, including machine configuration, condition and maintenance level of the machine, ground surface, operating environmental, duty cycles, ambient noise, and attachments.

Exposure to loud noise can cause impairment or loss of hearing.

Always wear hearing protection. Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

DX,NOISE-19-03OCT17

Handle Fuel Safely—Avoid Fires



TS202—UN—23AUG88

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

Handle Starting Fluid Safely



TS1356—UN—18MAR92

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.

DX,FIRE3-19-14MAR14

Fire Prevention

To reduce the risk of fire, your tractor should be regularly inspected and cleaned.

- Birds and other animals may build nests or bring other flammable materials into the engine compartment or onto the exhaust system. The tractor should be inspected and cleaned prior to the first use each day.
- A build up of grass, crop material and other debris may occur during normal operation. This is especially true when operating in very dry conditions or conditions where airborne crop material or crop dust is present. Any such build up must be removed to ensure proper machine function and to reduce the risk of fire. The tractor must be inspected and cleaned periodically throughout the day.
- Regular and thorough cleaning of the tractor combined with other routine maintenance procedures listed in the Operator's Manual greatly reduce the risk of fire and the chance of costly downtime.
- Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.
- Check fuel lines, tank, cap, and fittings frequently for damage, cracks or leaks. Replace if necessary.

Follow all operational and safety procedures posted on the machine and the Operator's Manual. Be careful of hot engine and exhaust components during inspection and cleaning. Before carrying out any inspection or cleaning, always shut OFF the engine, place the transmission in PARK or set parking brake, and remove the key. Removal of the key will prevent others from starting the tractor during inspection and cleaning.

DX,WW,TRACTOR,FIRE,PREVENTION-19-12OCT11

In Case of Fire



TS227—UN—15APR13

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:

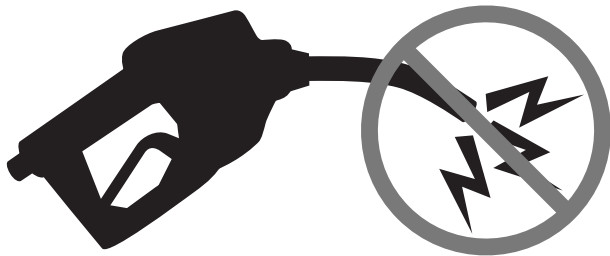
1. Pull the pin. Hold the extinguisher with the nozzle pointing away from you, and release the locking mechanism.
2. Aim low. Point the extinguisher at the base of the fire.
3. Squeeze the lever slowly and evenly.
4. Sweep the nozzle from side-to-side.

DX,FIRE4-19-22AUG13

Avoid Static Electricity Risk When Refueling



RG22142—UN—17MAR14



RG21992—UN—21AUG13

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.

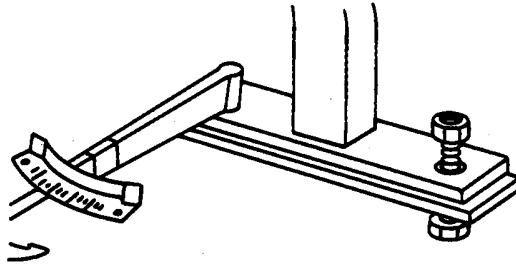
Refineries may have treated the fuel with a static dissipating additive. However, there are many factors that can reduce the effectiveness of the additive over time.

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.

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

Keep ROPS Installed Properly



TS212—UN—23AUG88

Make certain all parts are reinstalled correctly if the roll-over protective structure (ROPS) is loosened or removed for any reason. Tighten mounting bolts to proper torque.

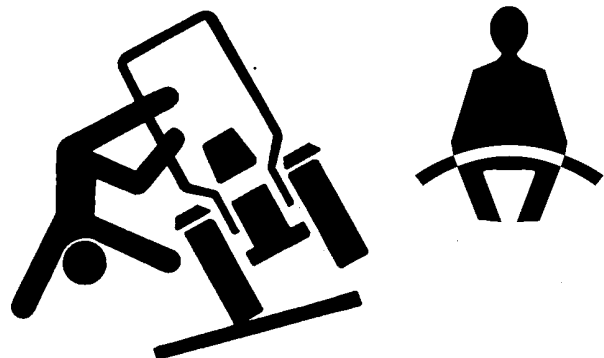
The protection offered by ROPS will be impaired if ROPS is subjected to structural damage, is involved in an overturn incident, or is in any way altered by welding, bending, drilling, or cutting. A damaged ROPS should be replaced, not reused.

The seat is part of the ROPS safety zone. Replace only with John Deere seat approved for your tractor.

Any alteration of the ROPS must be approved by the manufacturer.

DX,ROPS3-19-12OCT11

Use Foldable ROPS and Seat Belt Properly



TS1729—UN—24MAY13

Avoid crushing injury or death during rollover.

- If this machine is equipped with a foldable rollover protective structure (ROPS), keep the ROPS in the fully extended and locked position. USE a seat belt when you operate with a ROPS in the fully extended position.
 - Hold the latch and pull the seat belt across the body.
 - Insert the latch into the buckle. Listen for a click.
 - Tug on the seat belt to make sure that the belt is securely fastened.

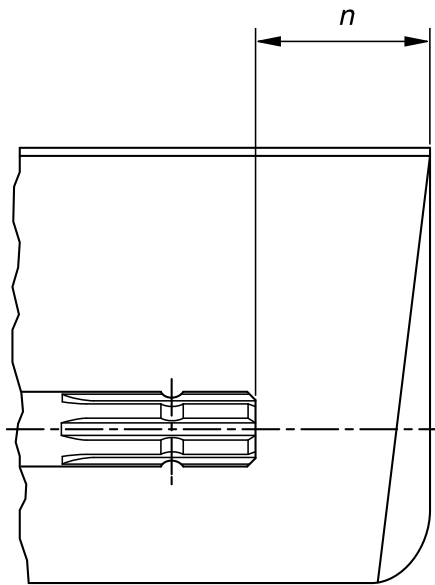
- Snug the seat belt across the hips.
- If this machine is operated with the ROPS folded (for example, to enter a low building), drive with extreme caution. DO NOT USE a seat belt with the ROPS folded.
- Return the ROPS to the raised, fully extended position as soon as the machine is operated under normal conditions.

DX,FOLDROPS-19-22AUG13

Stay Clear of Rotating Drivelines



TS1644—UN—22AUG95



H96219—UN—29APR10

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Wear close fitting clothing. Stop the engine and be sure that PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.

Do not install any adapter device between the tractor

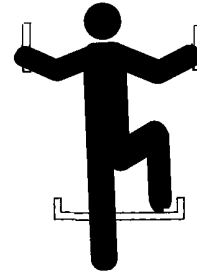
and the primary implement PTO drive shaft that will allow a 1000 rpm tractor shaft to power a 540 rpm implement at speeds higher than 540 rpm.

Do not install any adapter device that results in a portion of the rotating implement shaft, tractor shaft, or the adapter to be unguarded. The tractor master shield shall overlap the end of the splined shaft and the added adaptor device as outlined in the table.

| PTO Type | Diameter | Splines | n ± 5 mm (0.20 in) |
|----------|------------------|---------|--------------------|
| 1 | 35 mm (1.378 in) | 6 | 85 mm (3.35 in) |
| 2 | 35 mm (1.378 in) | 21 | 85 mm (3.35 in) |

N400041,0003662-19-09AUG17

Use Steps and Handholds Correctly



T133468—UN—15APR13

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

Read Operator's Manuals for ISOBUS Controllers

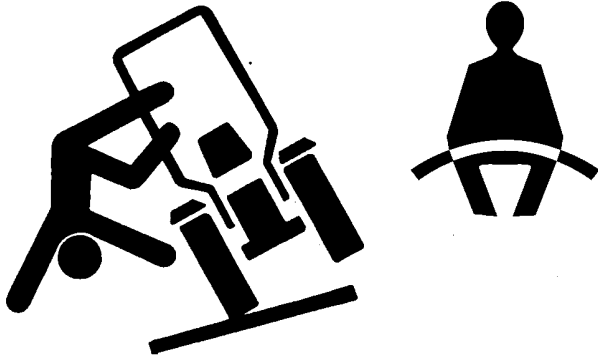
In addition to GreenStar™ Applications, this display can be used as a display device for any ISOBUS Controller that meets ISO 11783 standard. This includes capability to control ISOBUS implements. When used in this manner, information and control functions placed on the display are provided by the ISOBUS Controller and are the responsibility of the ISOBUS Controller manufacturer. Some of these functions could pose a hazard to either the operator or a bystander. Read the Operator's Manual provided by the ISOBUS Controller manufacturer and observe all safety messages in manual and on ISOBUS Controller product prior to use.

GreenStar is a trademark of Deere & Company

NOTE: ISOBUS refers to the ISO Standard 11783

DX,WW,ISOBUS-19-15JUL15

Use Seat Belt Properly



TS1729—UN—24MAY13

Avoid crushing injury or death during rollover.

This machine is equipped with a rollover protective structure (ROPS). USE a seat belt when you operate with a ROPS.

- Hold the latch and pull the seat belt across the body.
- Insert the latch into the buckle. Listen for a click.
- Tug on the seat belt latch to make sure that the belt is securely fastened.
- Snug the seat belt across the hips.

Replace entire seat belt if mounting hardware, buckle, belt, or retractor show signs of damage.

Inspect seat belt and mounting hardware at least once a year. Look for signs of loose hardware or belt damage, such as cuts, fraying, extreme or unusual wear, discoloration, or abrasion. Replace only with replacement parts approved for your machine. See your John Deere dealer.

DX,ROPS1-19-22AUG13

Vibration

All operator's seats approved by John Deere are component type-approved in accordance with 78/764/EEC or (EU) 1322/2014 Annex XIV, being allocated an average of the vibration acceleration actually measured at the seat (a_{ws}), equivalent to $\leq 1.25 \text{ m/s}^2$.

This value must NOT be used to calculate vibration stress as per 2002/44/EC! Local John Deere dealers can provide assistance in assessing vibration stress.

Measures to reduce vibration may include:

- Appropriate style of driving, e.g. not too fast
- Suspended front axle
- Suspended cab

- Correctly adjusted operator's seat
- Correct tire pressure

DX,VIBRATION,EU-19-28FEB17

Operating the Tractor Safely

You can reduce the risk of accidents by following these simple precautions:

- Use your tractor only for jobs it was designed to perform, for example, pushing, pulling, towing, actuating, and carrying a variety of interchangeable equipment designed to conduct agricultural work.
- Operators must be mentally and physically capable of accessing the operator's station and/or controls, and operating the machine properly and safely.
- Never operate machine when distracted, fatigued, or impaired. Proper machine operation requires the operator's full attention and awareness.
- This tractor is not intended to be used as a recreational vehicle.
- Read this operator's manual before operating the tractor and follow operating and safety instructions in the manual and on the tractor.
- Follow operation and ballasting instructions found in the operator's manual for your implements/attachments, such as front loaders.
- Follow the instructions outlined in the operator's manual of any mounted or trailed machinery or trailer. Do not operate a combination of tractor-machine or tractor-trailer unless all instructions have been followed.
- Make sure that everyone is clear of machine, attached equipment, and work area before starting engine or operation.
- Stay clear of the three-point linkage and pickup hitch (if equipped) when controlling them.
- Keep hands, feet, and clothing away from power-driven parts.

Driving Concerns

- Never get on or off a moving tractor.
- Complete any required training prior to operating vehicle.
- Keep all children and nonessential personnel off tractors and all equipment.
- Never ride on a tractor unless seated on a John Deere approved seat with a seat belt.
- Keep all shields/guards in place.
- Use appropriate visual and audible signals when operating on public roads.
- Move to side of road before stopping.
- Reduce speed when turning, applying individual brakes, or operating around hazards on rough ground or steep slopes.

- Stability degrades when attached implements are at high position.
- Couple brake pedals together for road travel.
- Pump brakes when stopping on slippery surfaces.
- Regularly clean fenders and fender valances (mud flaps) if installed. Remove dirt before driving on public roadways.

Heated and Ventilated Operator's Seat

- An overheated seat heater can cause a burn injury or damage to the seat. To reduce the risk of burns, use caution when using the seat heater for extended periods of time, especially if the operator cannot feel temperature change or pain to the skin. Do not place objects on the seat, such as a blanket, cushion, cover, or similar item, which can cause the seat heater to overheat.

Towing Loads

- Be careful when towing and stopping heavy loads. Stopping distance increases with speed and weight of towed loads, and on slopes. Towed loads with or without brakes that are too heavy for the tractor or are towed too fast can cause loss of control.
- Consider the total weight of the equipment and its load.
- Hitch towed loads only to approved couplings to avoid rearward upset.

Parking and Leaving the Tractor

- Before dismounting, shut off SCVs, disengage PTO, stop engine, lower implements/attachments to ground, place implement/attachment control devices in neutral, and securely engage park mechanism, including the park pawl and park brake. In addition, if the tractor is left unattended, remove key.
- Leaving transmission in gear with engine off will NOT prevent the tractor from moving.
- Never go near an operating PTO or an operating implement.
- Wait for all movement to stop before servicing machinery.

Common Accidents

Unsafe operation or misuse of the tractor can result in accidents. Be alert to hazards of tractor operation.

The most common accidents involving tractors are:

- Tractor rollover
- Collisions with motor vehicles
- Improper starting procedures
- Entanglement in PTO shafts
- Falling from tractor
- Crushing and pinching during hitching

DX,WW,TRACTOR-19-08MAY19

Avoid Backover Accidents



PC10857XW—UN—15APR13

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

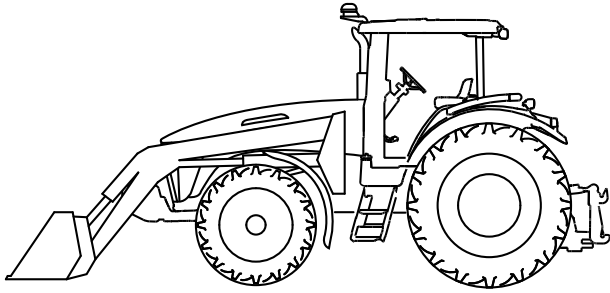
Limited Use in Forestry Operation

The intended use of John Deere tractors when used in forestry operations is limited to tractor-specific applications like transport, stationary work such as log splitting, propulsion, or operating implements with PTO, hydraulic, or electrical systems.

These are applications where normal operation does not present a risk of falling or penetrating objects. Any forestry applications beyond these applications, such as forwarding and loading, requires fitment of application-specific components including Falling Object Protective Structure (FOPS) and/or Operative Protective Structures (OPS). Contact John Deere dealer for special components.

DX,WW,FORESTRY-19-12OCT11

Operating the Loader Tractor Safely



TS1692—UN—09NOV09

When operating a machine with a loader application, reduce speed as required to ensure good tractor and loader stability.

To avoid tractor rollover and damage to front tires and tractor, do not carry load with your loader at a speed over 10 km/h (6 mph).

To avoid tractor damage do not use a front loader or a sprayer tank if the tractor is equipped with a 3 Meter Front Axle.

Never allow anyone to walk or work under a raised loader.

Do not use loader as a work platform.

Do not lift or carry anyone on loader, in bucket, or on implement or attachment.

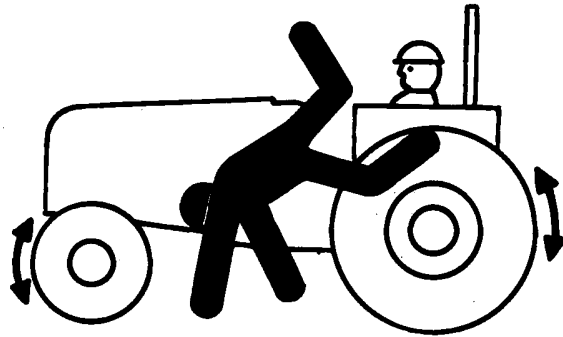
Lower loader to ground before leaving operators station.

The Rollover Protective Structure (ROPS) or cab roof, if equipped, may not provide sufficient protection from load falling onto the operators station. To prevent loads from falling onto the operators station, always use appropriate implements for specific applications (that is, manure forks, round bale forks, round bale grippers, and clammers).

Ballast tractor in accordance to Ballast Recommendations in PREPARE TRACTOR section.

DX,WW,LOADER-19-18SEP12

Keep Riders Off Machine



TS290—UN—23AUG88

Only allow the operator on the machine. Keep riders off.

Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

DX,RIDER-19-03MAR93

Passenger Seat



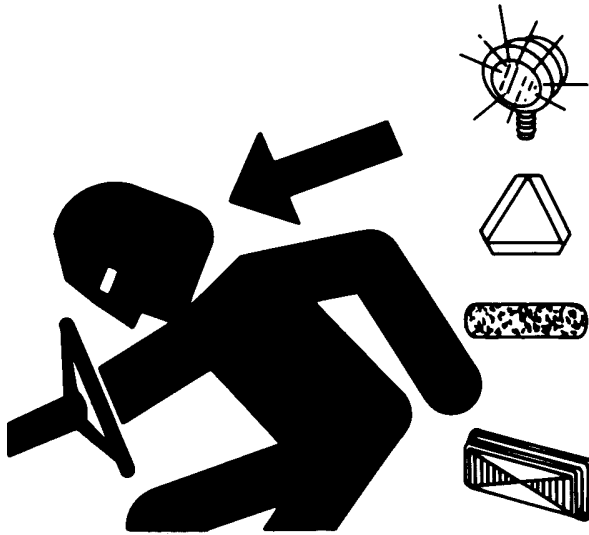
TS1730—UN—24MAY13

The passenger seat is intended only for transport of a passenger in on-road operations (that is, transport from farm to field).

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

DX,SEAT,EU-19-28FEB17

Use Safety Lights and Devices



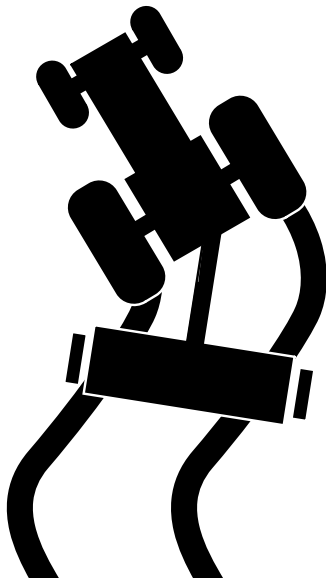
TS951—UN—12APR90

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. An implement safety lighting kit is available from your John Deere dealer.

DX,FLASH-19-07JUL99

Transport Towed Equipment at Safe Speeds



TS1686—UN—27SEP06

Do not exceed the maximum transport speed. This towing unit may be capable of operating at transport speeds that exceed the maximum allowable transport speed for towed implements.

Before transporting a towed implement, determine from signs on the implement or information provided in the implement's operator manual the maximum transport speed. Never transport at speeds that exceed the implement's maximum transport speed. Exceeding the implement's maximum transport speed can result in:

- Loss of control of the towing unit/implement combination
- Reduced or no ability to stop during braking
- Implement tire failure
- Damage to the implement structure or its components

Implements shall be equipped with brakes if the maximum fully loaded weight is greater than 1500 kg (3307 lbs) and greater than 1.5 times the weight of the towing unit.

Example: Implement mass is 1600 kg (3527 lbs) and towing unit mass is 1600 kg (3527 lbs), example implement is not required to have brakes.

Implements without brakes: Do not transport at speeds greater than 32 km/h (20 mph).

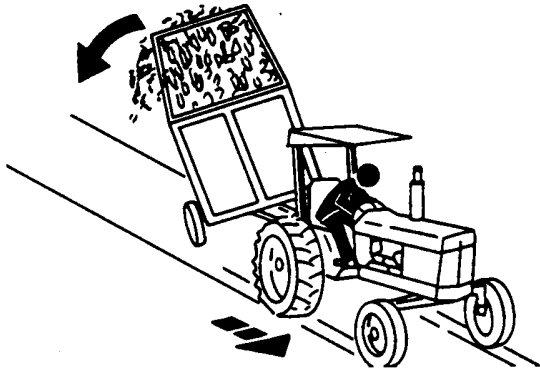
Implements with brakes:

- If the manufacturer does not specify a maximum transport speed, do not tow at speeds greater than 40 km/h (25 mph).
- When transporting at speeds up to 40 km/h (25 mph) the fully loaded implement must weigh less than 4.5 times the towing unit weight.
- When transporting at speeds between 40—50 km/h (25—31 mph) the fully loaded implement must weigh less than 3.0 times the towing unit weight.

When towing a trailer, become familiar with the braking characteristics and ensure the compatibility of the tractor/trailer combination in regard to the deceleration rate.

DX,TOW1-19-28FEB17

Towing Trailers/Implements Safely



TS216—UN—23AUG88

Stopping distance increases with speed and mass of trailer/implement, and when transporting on slopes. Towed mass with or without brakes that is too heavy for the tractor or is towed too fast can cause loss of control. Consider the total weight of the equipment and its load.

When towing a trailer, become familiar with the braking characteristics and ensure the compatibility of the tractor/trailer combination in regard to the deceleration rate.

Stay clear of area between tractor and trailed vehicle.

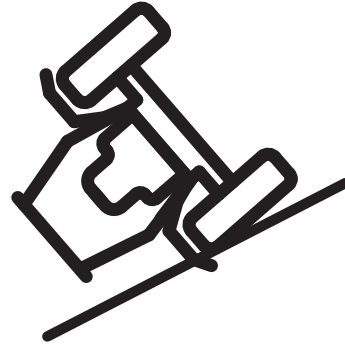
| Trailer/Implement Brake System | Top Speed |
|-----------------------------------|----------------------|
| Unbraked | 25 km/h (15.5 mph) |
| Independent | 25 km/h (15.5 mph) |
| Overrun brake | 25 km/h (15.5 mph) |
| Single-line hydraulic brake | 25 km/h (15.5 mph) |
| Dual-line hydraulic brake | 40 km/h (25 mph) |
| Single-line air brake | 25 km/h (15.5 mph) |
| Dual-line air brake | Maximum design speed |

There may be legal limits in force that restrict travel speeds to figures lower than those quoted here.

Use additional caution when towing loads under adverse surface conditions, when turning, and on inclines.

DX,TOW3,EU-19-28FEB17

Use Caution on Slopes, Uneven Terrain, and Rough Ground



RXA0103437—UN—01JUL09

Avoid holes, ditches, and obstructions which cause the tractor to tip, especially on slopes. Avoid sharp uphill turns.

Driving forward out of a ditch, mired condition, or up a steep slope could cause the tractor to tip over rearward. Back out of these situations if possible.

Danger of overturn increases greatly with narrow tread setting, at high speed.

Not all conditions that can cause a tractor to overturn are listed. Be alert for any situation in which stability may be compromised.

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution.

Uneven terrain or rough ground can cause loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on uneven terrain or rough ground requires extra caution.

Never drive near the edge of a gully, drop-off, ditch, steep embankment, or a body of water. The machine could suddenly roll over if a wheel goes over the edge or the ground caves in.

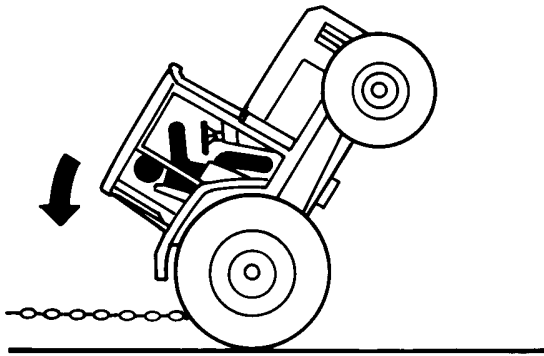
Choose a low ground speed so you will not have to stop or shift while on a slope.

Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the PTO and proceed slowly, straight down the slope.

Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.

DX,WW,SLOPE-19-28FEB17

Freeing a Mired Machine



TS1645—UN—15SEP95



TS263—UN—23AUG88

Attempting to free a mired machine can involve safety hazards such as the mired tractor tipping rearward, the towing tractor overturning, and the tow chain or tow bar (a cable is not recommended) failing and recoiling from its stretched condition.

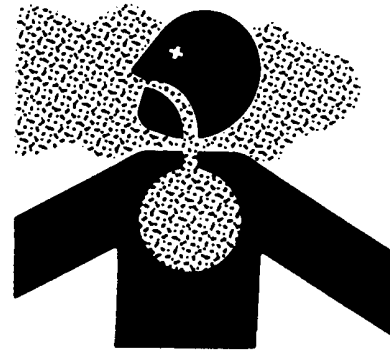
Back your tractor out if it gets mired down in mud. Unhitch any towed implements. Dig mud from behind the rear wheels. Place boards behind the wheels to provide a solid base and try to back out slowly. If necessary, dig mud from the front of all wheels and drive slowly ahead.

If necessary to tow with another unit, use a tow bar or a long chain (a cable is not recommended). Inspect the chain for flaws. Make sure all parts of towing devices are of adequate size and strong enough to handle the load.

Always hitch to the drawbar of the towing unit. Do not hitch to the front pushbar attachment point. Before moving, clear the area of people. Apply power smoothly to take up the slack: a sudden pull could snap any towing device causing it to whip or recoil dangerously.

DX,MIREO-19-07JUL99

Avoid Contact with Agricultural Chemicals



TS220—UN—15APR13



TS272—UN—23AUG88

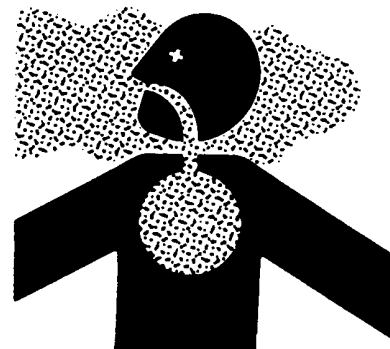
This enclosed cab does not protect against inhaling vapor, aerosol or dust. If pesticide use instructions require respiratory protection, wear an appropriate respirator inside the cab.

Before leaving the cab, wear personal protective equipment as required by the pesticide use instructions. When re-entering the cab, remove protective equipment and store either outside the cab in a closed box or some other type of sealable container or inside the cab in a pesticide resistant container, such as a plastic bag.

Clean your shoes or boots to remove soil or other contaminated particles prior to entering the cab.

DX,CABS-19-25MAR09

Handle Agricultural Chemicals Safely



TS220—UN—15APR13



A34471

A34471—UN—11OCT88

Chemicals used in agricultural applications such as fungicides, herbicides, insecticides, pesticides, rodenticides, and fertilizers can be harmful to your health or the environment if not used carefully.

Always follow all label directions for effective, safe, and legal use of agricultural chemicals.

Reduce risk of exposure and injury:

- Wear appropriate personal protective equipment as recommended by the manufacturer. In the absence of manufacturer's instructions, follow these general guidelines:
 - Chemicals labeled **'Danger'**: Most toxic. Generally require use of goggles, respirator, gloves, and skin protection.
 - Chemicals labeled **'Warning'**: Less toxic. Generally require use of goggles, gloves, and skin protections.
 - Chemicals labeled **'Caution'**: Least toxic. Generally require use of gloves and skin protection.
- Avoid inhaling vapor, aerosol or dust.
- Always have soap, water, and towel available when working with chemicals. If chemical contacts skin, hands, or face, wash immediately with soap and water. If chemical gets into eyes, flush immediately with water.
- Wash hands and face after using chemicals and before eating, drinking, smoking, or urination.
- Do not smoke or eat while applying chemicals.
- After handling chemicals, always bathe or shower and change clothes. Wash clothing before wearing again.
- Seek medical attention immediately if illness occurs during or shortly after use of chemicals.
- Keep chemicals in original containers. Do not transfer chemicals to unmarked containers or to containers used for food or drink.
- Store chemicals in a secure, locked area away from human or livestock food. Keep children away.
- Always dispose of containers properly. Triple rinse

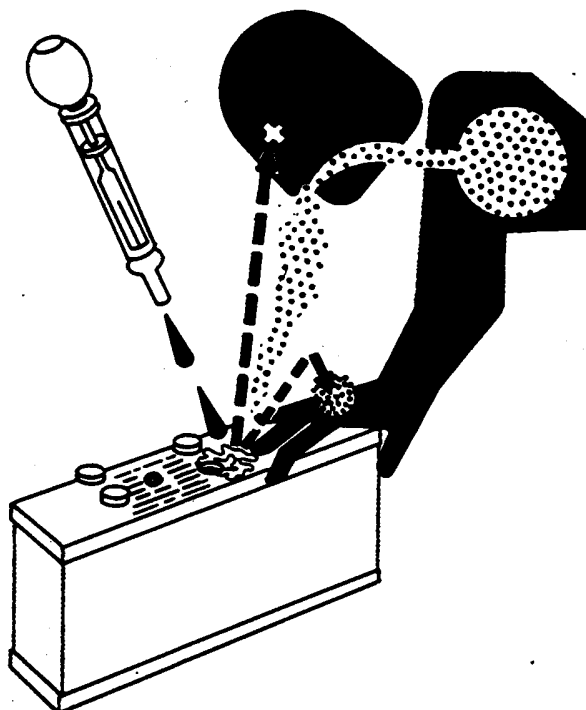
empty containers and puncture or crush containers and dispose of properly.

DX,WW,CHEM01-19-24AUG10

Handling Batteries Safely



TS204—UN—15APR13



TS203—UN—23AUG88

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.**

DX,WW,BATTERIES-19-02DEC10

Avoid Heating Near Pressurized Fluid Lines



TS953—UN—15MAY90

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can accidentally burst when heat goes beyond the immediate flame area.

DX,TORCH-19-10DEC04

Remove Paint Before Welding or Heating



TS220—UN—15APR13

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.

DX,PAINT-19-24JUL02

Handle Electronic Components and Brackets Safely



TS249—UN—23AUG88

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.

DX,WW,RECEIVER-19-24AUG10

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.

Falling while cleaning or working at height can cause serious injury. Use a ladder or platform to easily reach each location. Use sturdy and secure footholds and handholds.

DX,SERV-19-28FEB17

Practice Safe Maintenance



TS218—UN—23AUG88

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 away 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.

Avoid Hot Exhaust



RG17488—UN—21AUG09

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

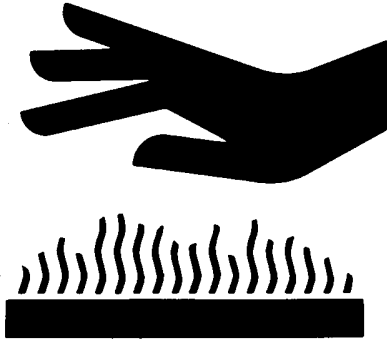
Exhaust parts and streams become very hot during operation. Exhaust gases and components reach temperatures hot enough to burn people, ignite, or melt common materials.

DX,EXHAUST-19-20AUG09

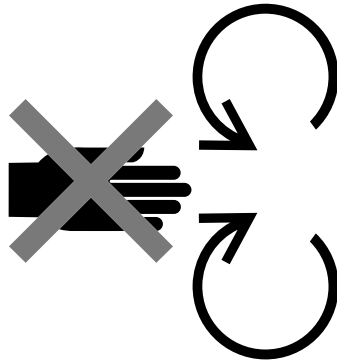
Clean Exhaust Filter Safely



TS227—UN—15APR13



TS271—UN—23AUG88



TS1693—UN—09DEC09



TS1695—UN—07DEC09

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

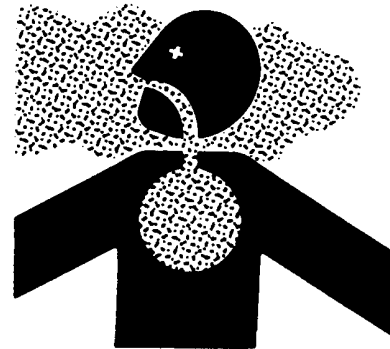
Keep hands, feet, and clothing away from power-driven parts.

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.

DX,EXHAUST,FILTER-19-12JAN11

Work In Ventilated Area



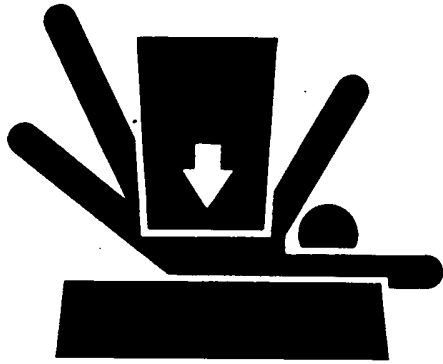
TS220—UN—15APR13

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

Support Machine Properly



TS229—UN—23AUG88

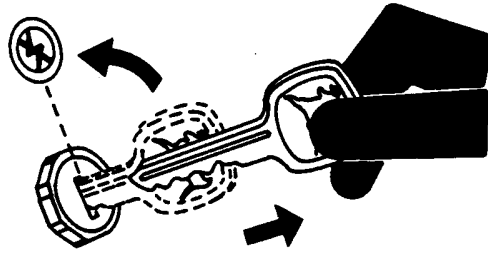
Always lower the attachment or implement to the ground before you work on the machine. If the work requires that the machine or attachment be lifted, provide secure support for them. If left in a raised position, hydraulically supported devices can settle or leak down.

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.

DX,LOWER-19-24FEB00

Park Machine Safely



TS230—UN—24MAY89

Before working on the machine:

- Lower all equipment to the ground.
- Stop the engine and remove the key.
- Disconnect the battery ground strap.
- Hang a "DO NOT OPERATE" tag in operator station.

DX,PARK-19-04JUN90

Prevent Machine Runaway



TS177—UN—11JAN89

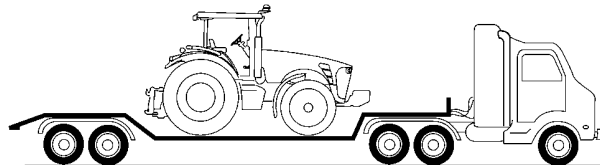
Avoid possible injury or death from machinery runaway.

Do not start engine by shorting across starter terminals. Machine will start in gear if normal circuitry is bypassed.

NEVER start engine while standing on ground. Start engine only from operator's seat, with transmission in neutral or park.

DX,BYPAS1-19-29SEP98

Transport Tractor Safely



RXA0103709—UN—01JUL09

A disabled tractor is best transported on a flatbed carrier. Use chains to secure the tractor to the carrier. The axles and tractor frame are suitable attachment points.

Before transporting the tractor on a low-loader truck or flatbed rail wagon, make sure that the hood is secured over the tractor engine and that doors, roof hatch (if equipped) and windows are properly closed.

Never tow a tractor at a speed greater than 10 km/h (6 mph). An operator must steer and brake the tractor under tow.

DX,WW,TRANSPORT-19-19AUG09

Service Cooling System Safely



TS281—UN—15APR13

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

Shut off engine. Only remove filler cap when cool enough to touch with bare hands. Slowly loosen cap to first stop to relieve pressure before removing completely.

DX,WW,COOLING-19-19AUG09

Service Accumulator Systems Safely



TS281—UN—15APR13

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.

DX,WW,ACCL2-19-22AUG03

Service Tires Safely



RXA0103438—UN—11JUN09

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.

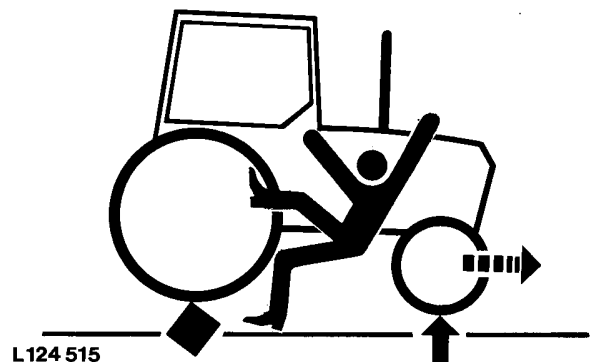
When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

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

Wheels and tires are heavy. When handling wheels and tires use a safe lifting device or get an assistant to help lift, install, or remove.

DX,WW,RIMS-19-28FEB17

Service Front-Wheel Drive Tractor Safely



L124 515

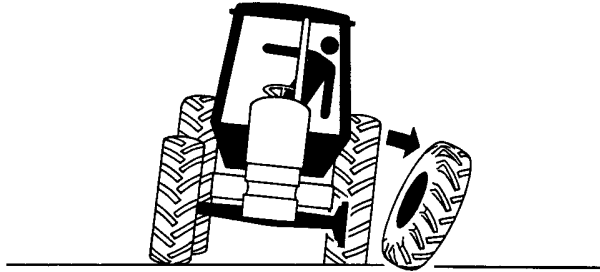
L124515—UN—06AUG94

When servicing front-wheel drive tractor with the rear wheels supported off the ground and rotating wheels by engine power, always support front wheels in a similar manner. Loss of electrical power or transmission hydraulic system pressure will engage the front driving wheels, pulling the rear wheels off the support if front

wheels are not raised. Under these conditions, front drive wheels can engage even with switch in disengaged position.

DX,WW,MFWD-19-19AUG09

Tightening Wheel Retaining Bolts/Nuts



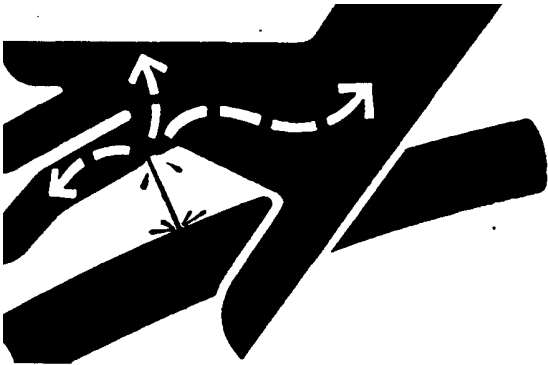
L124 516

L124516—UN—03JAN95

Torque wheel retaining bolts/nuts at the intervals specified in section Break-In Period and Service.

DX,WW,WHEEL-19-12OCT11

Avoid High-Pressure Fluids



X9811—UN—23AUG88

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.

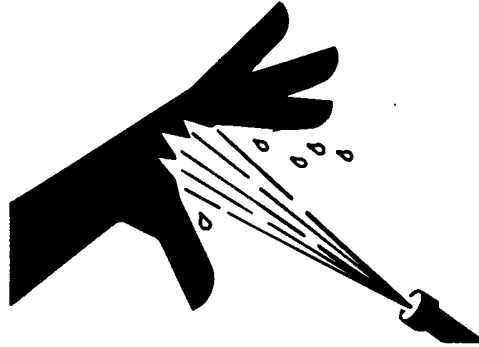
Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

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 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

Do Not Open High-Pressure Fuel System



TS1343—UN—18MAR92

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.)

DX,WW,HPCR1-19-07JAN03

Store Attachments Safely



TS219—UN—23AUG88

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

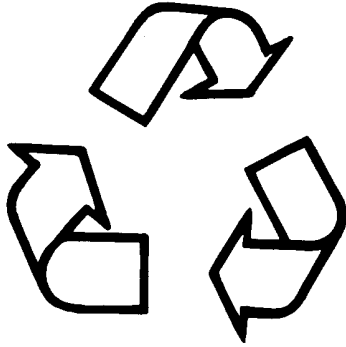
Securely store attachments and implements to prevent falling. Keep playing children and bystanders away from storage area.

DX,STORE-19-03MAR93

Decommissioning — Proper Recycling and Disposal of Fluids and Components

- 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



TS1133—UN—15APR13

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); 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.

Safety Signs

Replace Damaged or Missing Safety Signs

IMPORTANT: Install new safety signs if old signs are damaged, lost or cannot be read. Install a new safety sign when replacing any part that previously had a safety sign.

Keep safety signs clean and in good condition. Replacement signs are available. See your John Deere dealer.



C Post

CPA0001550—UN—28APR15



Decal

PUC1613—UN—03NOV08

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



C Post

CPA0001397—UN—22APR15



Decal

CPA0000207—UN—09OCT13

Use Seat Belt Properly.

CAUTION: Avoid crushing injury or death during rollover.

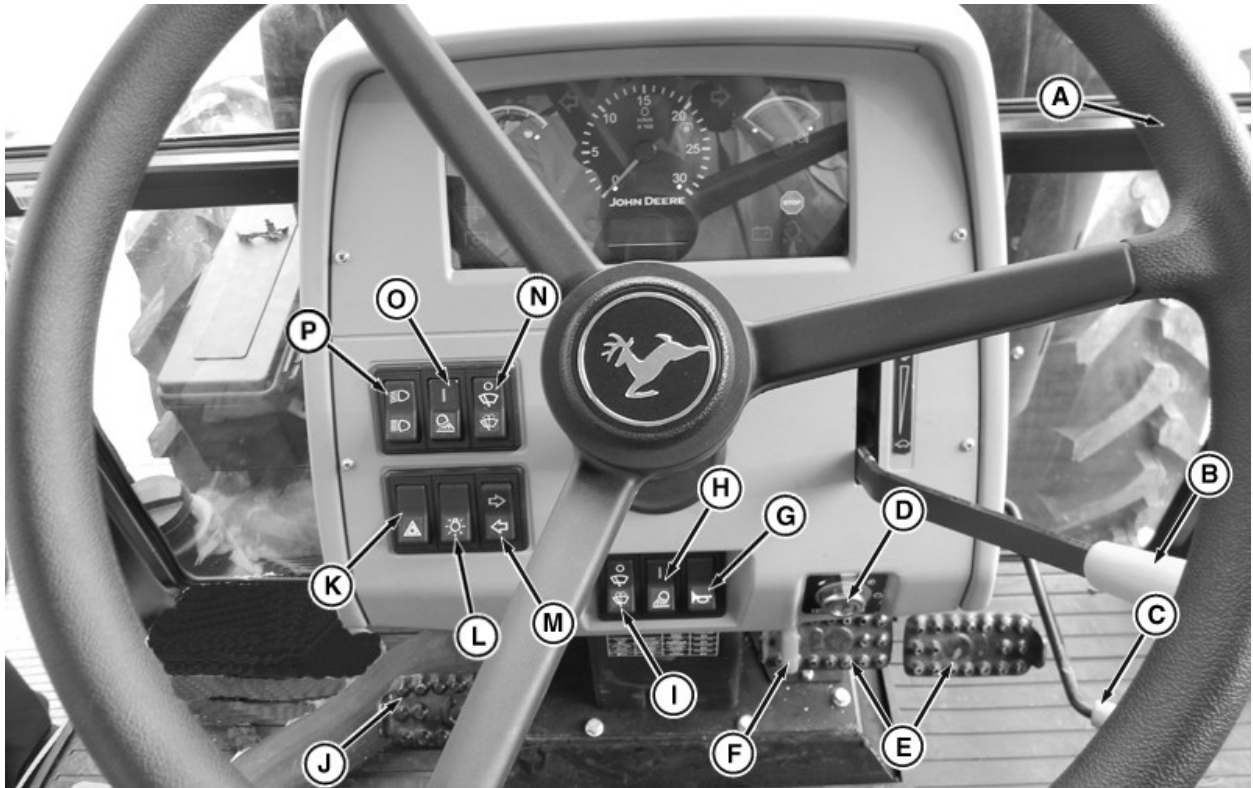
This machine is equipped with a roll-over protective structure (ROPS). USE a seat belt when you operate with a ROPS.

- Hold the latch and pull the seat belt across the body.
- Insert the latch into the buckle. Listen for a click.
- Tug on the seat belt latch to make sure the belt is securely fastened.
- Snug the seat belt across the hips.

JL31334,000087E-19-29APR15

Controls and Instruments

Tractor Controls-Front Console

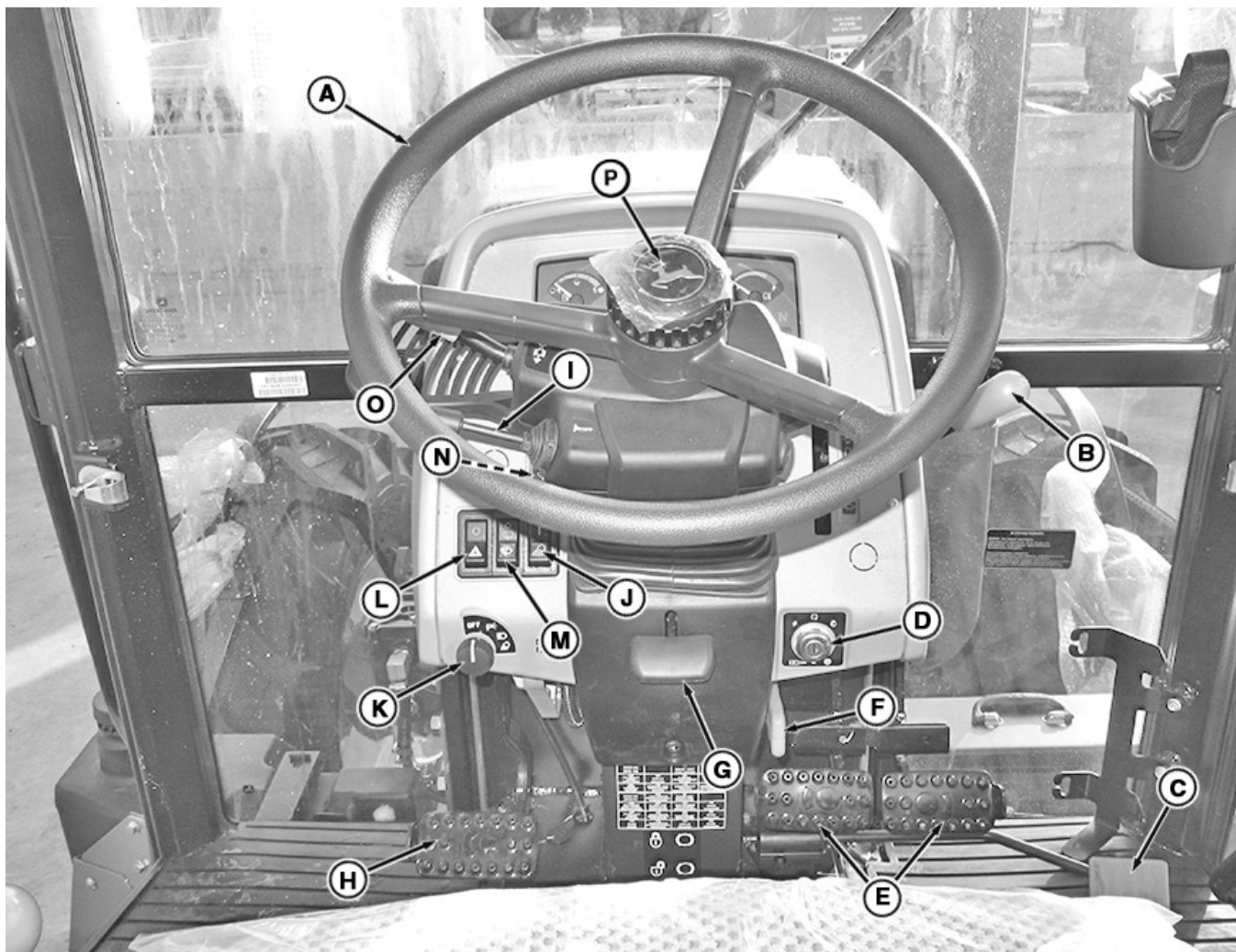


12F×4R/24F×8R Transmission

CPA0004371—UN—09MAY18

A—Steering Wheel
B—Hand Throttle
C—Foot Throttle
D—Ignition Switch
E—Brake Pedals
F—Parking Brake Lever
G—Horn Switch
H—Rear Worklight Switch

I—Windshield Wiper Switch
J—Clutch Pedal
K—Warning Light Switch
L—Road Light Switch
M—Turn Signal Switch
N—Windshield Wiper Switch
O—Front Worklight Switch
P—High/Low Beam Switch



24F×12R Transmission

CPA0004372—UN—09MAY18

- A—Steering Wheel
- B—Hand Throttle
- C—Foot Throttle
- D—Ignition Switch
- E—Brake Pedal (2 used)
- F—Parking Brake Lever
- G—Steering Wheel Adjusting handle
- H—Clutch Pedal

- I—Light Handle
- J—Front Worklight Switch
- K—Light Switch
- L—Warning Light Switch
- M—Front Windshield Wiper Switch
- N—Rear Windshield Wiper Switch
- O—Power Reverser Lever
- P—Cap

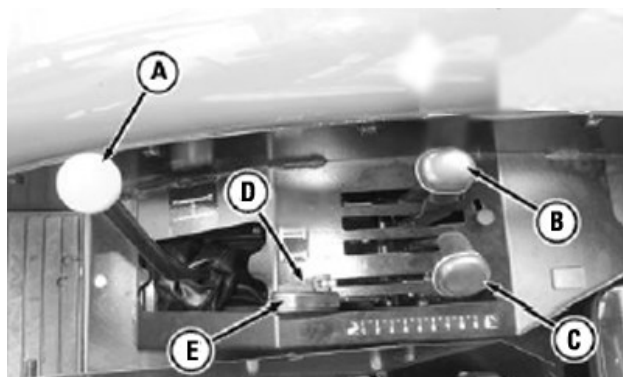
NOTE: Steering column total rotation Angle range $30^{\circ} \pm 2^{\circ}$.

Pull up or down throw the steering wheel adjusting handle (G), at the same time to adjust steering wheel (A), adjust the steering wheel position. After waiting for steering wheel adjustment to the appropriate location, loosen the adjusting handle, locked position of steering column.

Grasp the steering wheel with hands, counterclockwise adjusting cap (P) 90° , can loosen the steering column height adjustment; clockwise adjusting cap (P) 90° , locked position of steering column.

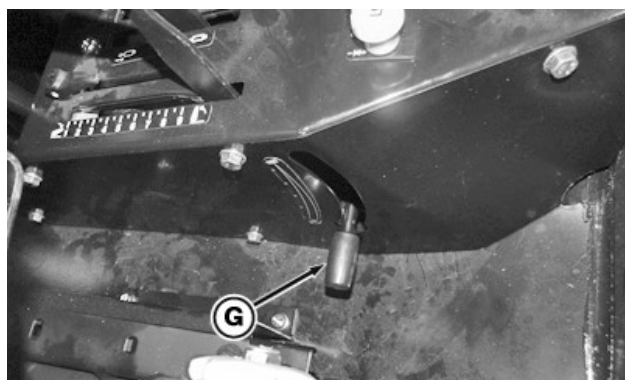
CP00606,00013B9-19-20JUN18

Left-Hand and Right-Hand Side



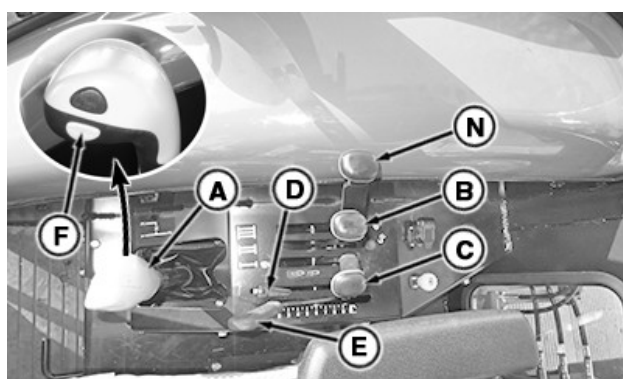
CPA0001107—UN—10NOV14

Right-Hand Side Controls (12F×4R transmission)



CPA0002310—UN—23NOV15

Right-Hand Side



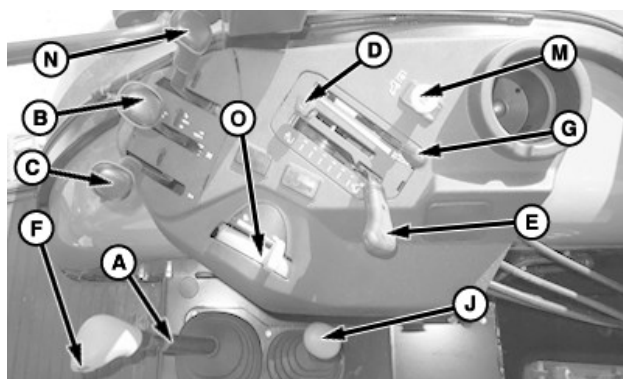
CPA0003009—UN—19OCT16

Right-Hand Side Controls (24F×8R/24F×12R transmission)



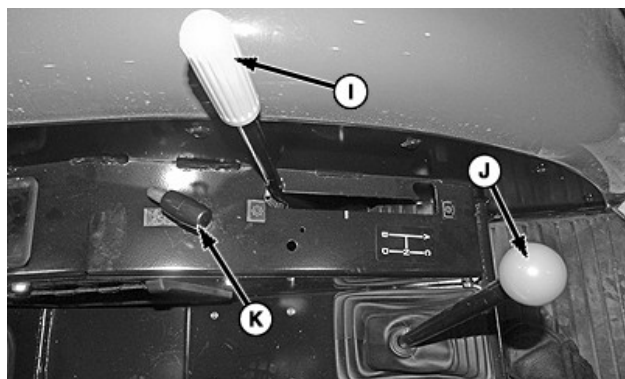
CPA0002058—UN—19OCT15

Left-Hand Side



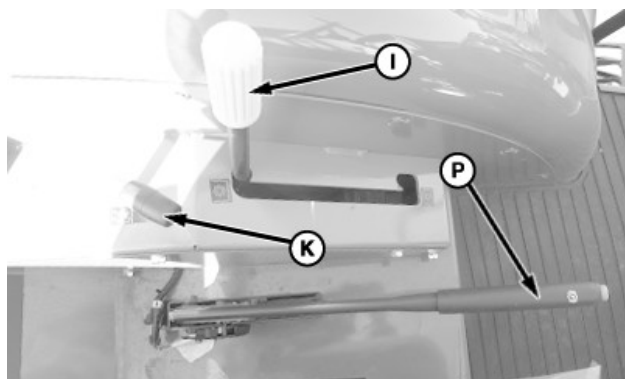
CPA0009650—UN—06NOV19

Right-Hand Side Controls (24F×8R/24F×12R transmission, option)



CPA0002057—UN—22OCT15

Left-Hand Side Controls (dry clutch)



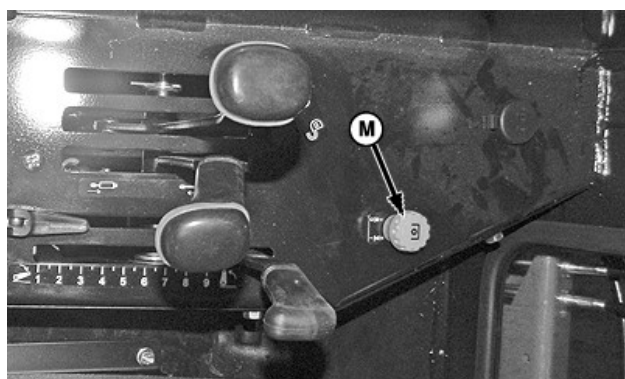
CPA0009651—UN—06NOV19

Left-Hand Side Controls (dry clutch, option)



PY16722—UN—17NOV12

Right-Hand Side



CPA0002039—UN—15OCT15

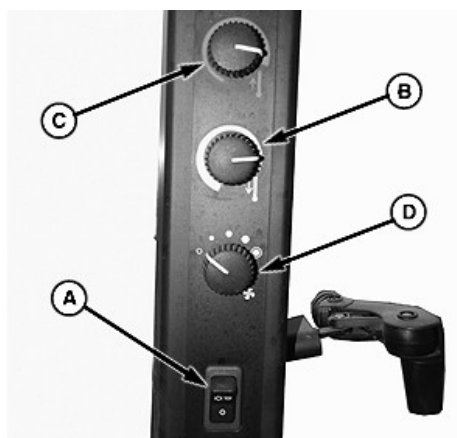
Right-Hand Side

- A—Gearshift Lever
- B—SCV II Lever
- C—SCV I Lever
- D—Position Control Lever Stop
- E—Position Control Lever
- F—High/Low Speed Shift Button
- G—Draft Control Knob
- H—Rate-of-Drop Knob
- I—PTO Control Lever (dry clutch)
- J—Range-Shift Lever
- K—MFWD Lever
- L—Differential Lock Pedal
- M—PTO Switch (wet clutch)
- N—SCV III Lever
- O—Hand Throttle (PTE engine)
- P—Secondary Brae Lever

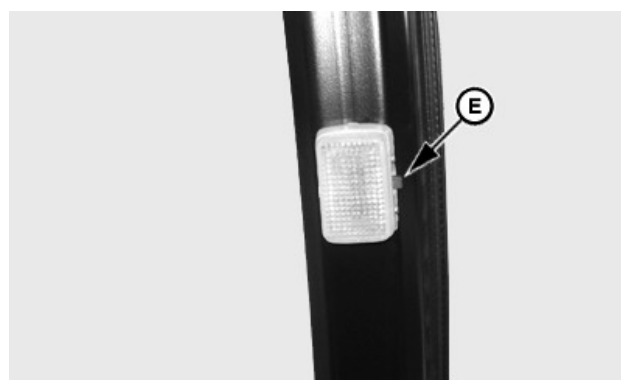
NOTE: Rockshaft rate-of-drop knob (H) is at rear of the driver's seat, on the left-hand side.

N400041,00047C3-19-06NOV19

Electrical Device Controls



CPA0000172—UN—08JUN13



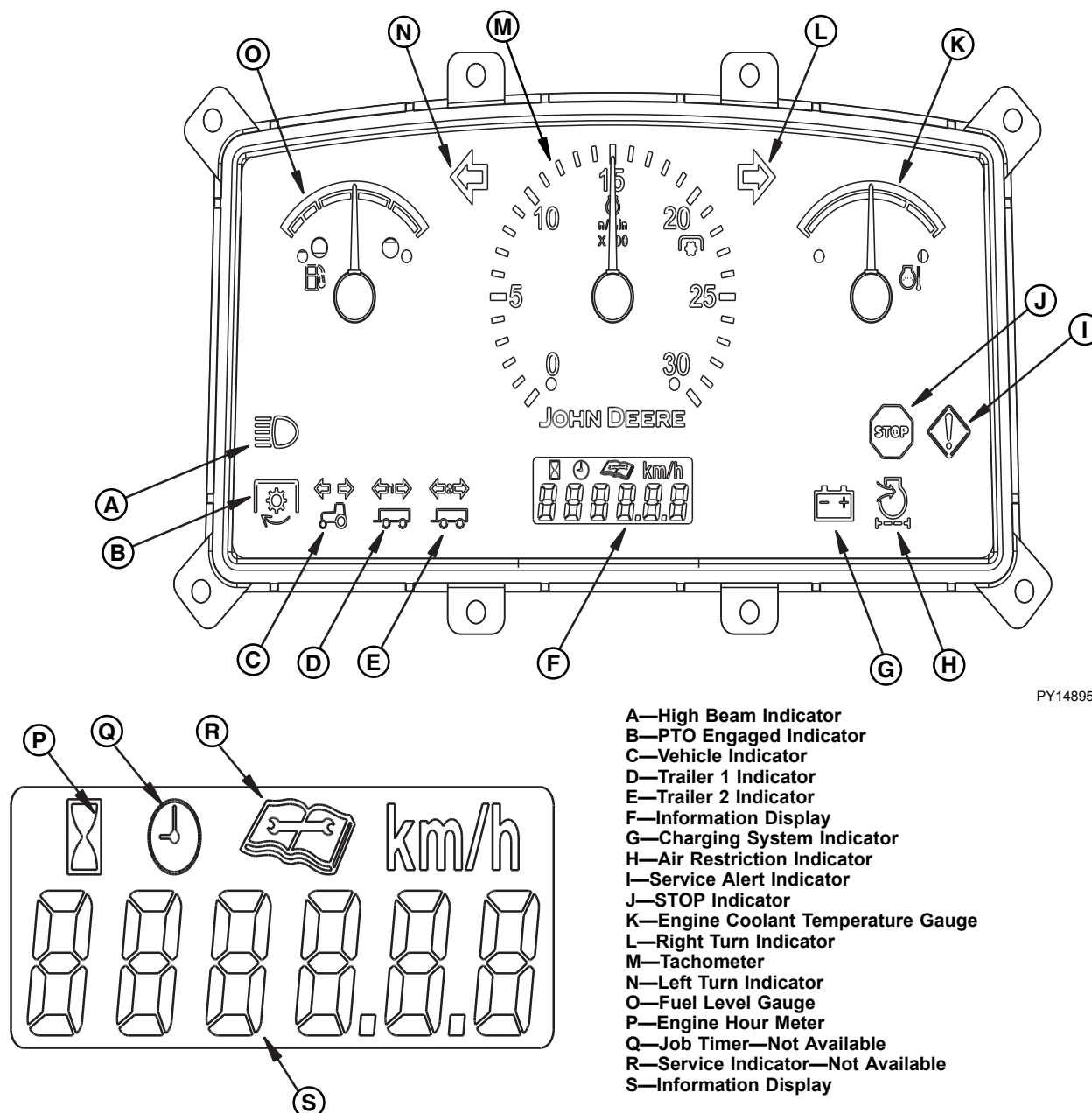
CPA0004370—UN—09MAY18

- A—Air Conditioning and Deicing Switch
- B—Air Conditioning Temperature Control Knob
- C—Heater Temperature Control Knob
- D—Blower Speed Control Knob
- E—Cab Light Switch

CP00606,00013B8-19-02MAY18

Instrument Panel

Dry Clutch Transmission (12F x 4R transmission)



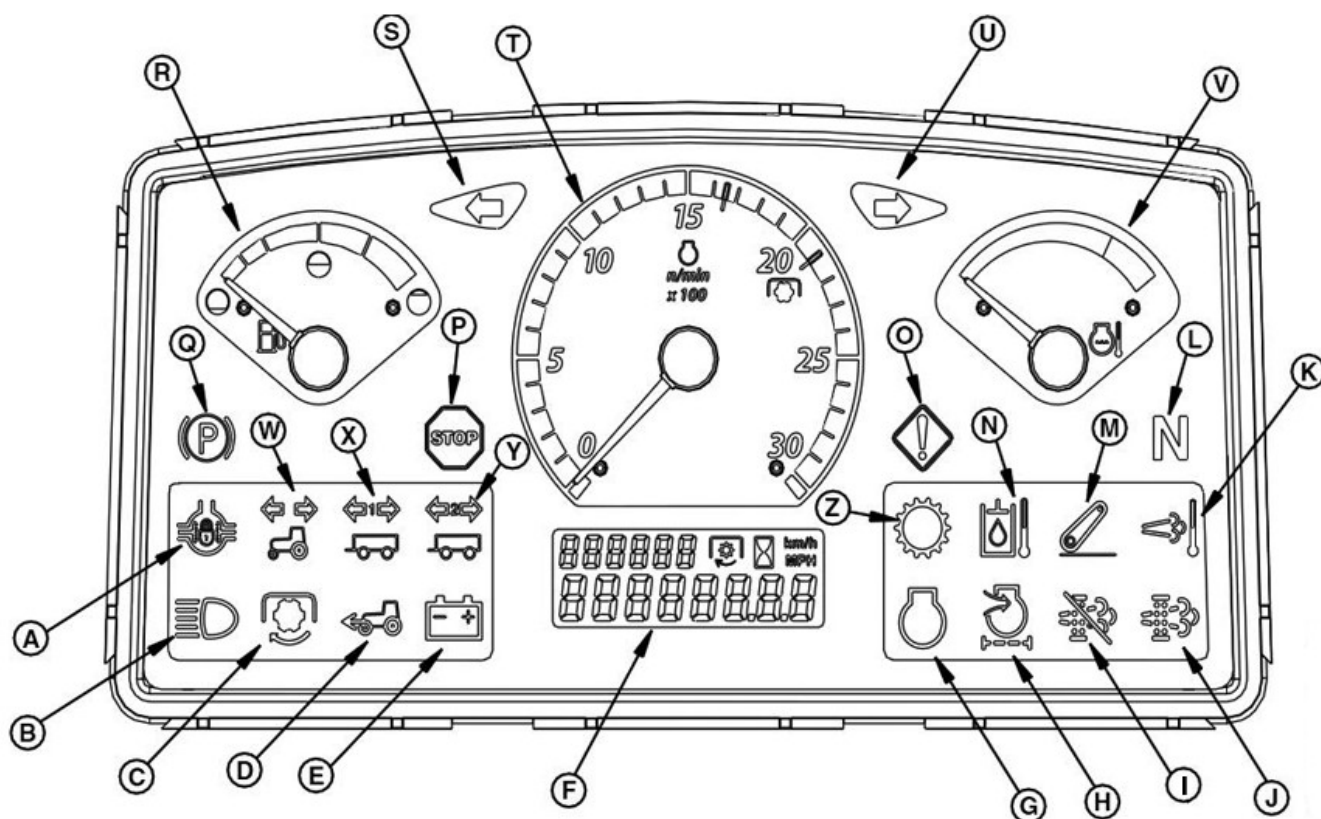
PY14895—UN—31JAN13

PY14922—UN—01FEB13

NOTE: If two turning lights flashing on the vehicle and trailer, vehicle Indicator (C) is illuminated. If three turning lights flashing, vehicle Indicator and trailer 1 indicator (D) are illuminated. If more than three turning lights flashing, vehicle Indicator, trailer 1 indicator, and trailer 2 indicator (E) are illuminated.

NOTE: The information display (F) displays hours when tractor speed is less than 1 km/h; displays speed when speed is above 1 km/h.

Wet Clutch Transmission (24F x 8R/24F x 12R transmission)

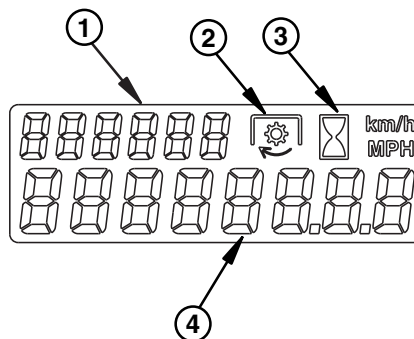


CPA0000722—UN—06MAY14

- A—Differential Lock Indicator—Not Available
 B—High Beam Indicator
 C—PTO Engaged Indicator
 D—MFWD Engaged Indicator—Not Available
 E—Charging System Indicator
 F—Information Display
 G—Engine Oil Pressure Indicator
 H—Air Restriction Indicator
 I—Exhaust Filter Disabled Indicator—Not Available
 J—Exhaust Filter Indicator—Not Available
 K—High Exhaust Temperature Indicator—Not Available
 L—Neutral Indicator
 M—Electrohydraulic Hitch Indicator—Not Available
 N—Hydraulic Oil Temperature

- O—Service Alert Indicator
 P—STOP Indicator
 Q—Park Brake Indicator
 R—Fuel Level Gauge
 S—Left Turn Indicator
 T—Tachometer
 U—Right Turn Indicator
 V—Engine Coolant Temperature Gauge
 W—Vehicle Indicator
 X—Trailer 1 Indicator
 Y—Trailer 2 Indicator
 Z—Transmission Information Indicator
 A1—EPTO Speed Indicator—Not Available

NOTE: If two turning lights flashing on the vehicle and trailer, vehicle Indicator (W) is illuminated. If three turning lights flashing, vehicle Indicator and trailer 1 indicator (X) are illuminated. If more than three turning lights flashing, vehicle Indicator, trailer 1 indicator, and trailer 2 indicator (Y) are illuminated.

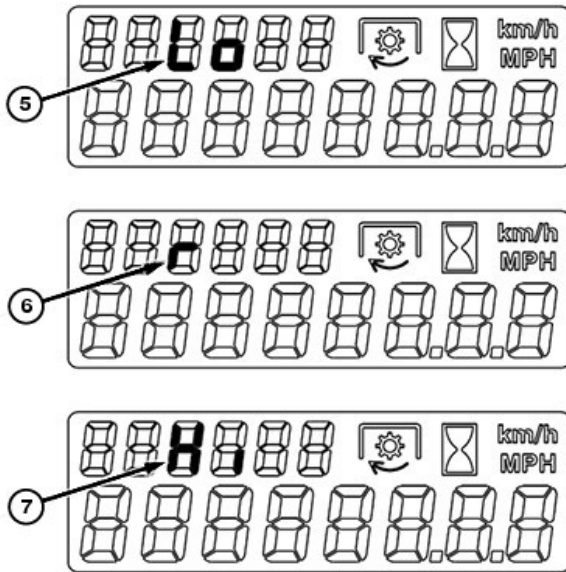


- 1—Information Display
 2—PTO Icon—Not Available
 3—Hour Meter Icon
 4—Information Display

PY14921—UN—01FEB13

NOTE: The information display (4) displays hours when tractor speed is less than 0.1 km/h; displays speed when speed is above 0.1 km/h.

- 5—Low Transmission Gear Display
- 6—Reverse Transmission Gear Display
- 7—High Transmission Gear Display

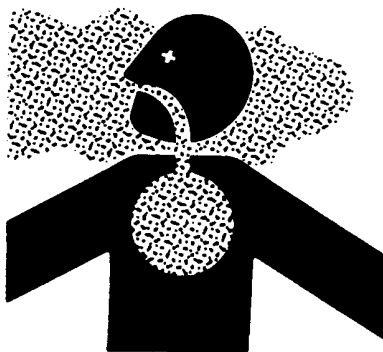


CPA0009487—UN—27AUG19

N400041,00047B0-19-31OCT19

Operating Engine

Before Starting the Engine

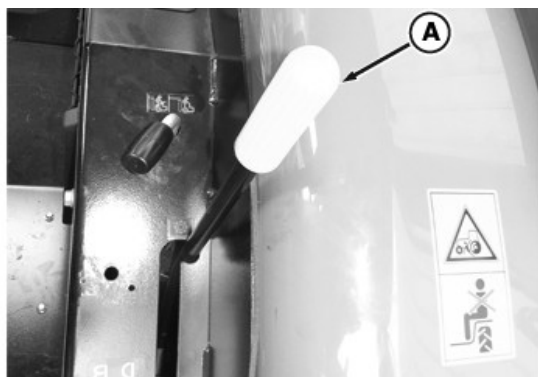


TS220—UN—15APR13

CAUTION: Prevent asphyxiation. Engine exhaust fumes can cause sickness or death to you or someone else.

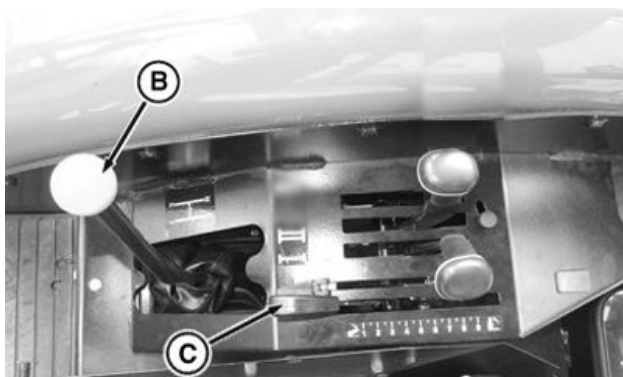
If you must operate engine in a building, be positive there is adequate ventilation. Either use an exhaust pipe extension to remove the exhaust fumes or open doors and windows to bring enough outside air into the area.

1. Check fuel gauge to be sure that tractor has plenty of fuel.



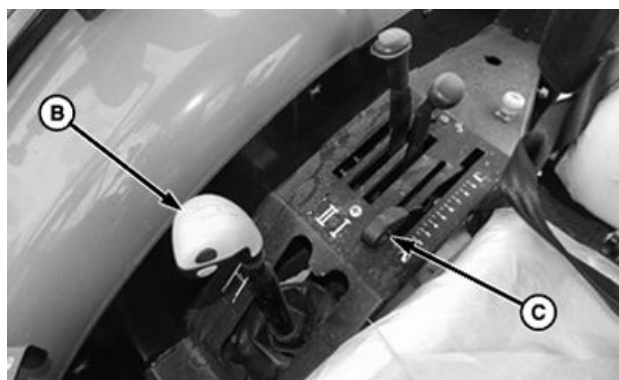
PY14926—UN—18FEB13

Left-Hand Side (dry clutch)



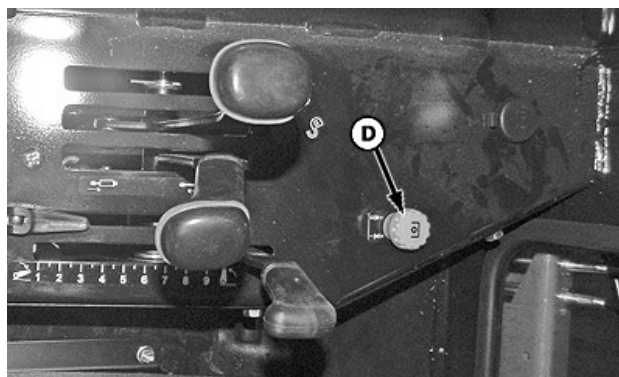
CPA0001109—UN—10NOV14

Right-Hand Side (12F×4R transmission)



CPA0001110—UN—10NOV14

Right-Hand Side (24F×8R/24F x 12R transmission)



CPA0002038—UN—15OCT15

Right-Hand Side (wet clutch)

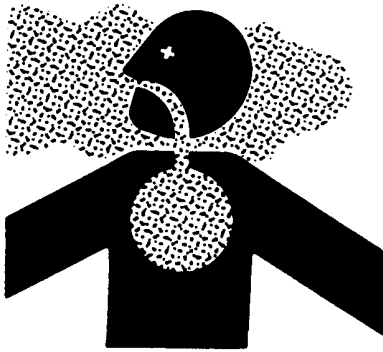
A—PTO Control Lever
B—Gear Shift Lever
C—Position Control Lever
D—PTO Switch

2. Place gear shift lever (B) in neutral, "N" position, and PTO control lever (A) in disengaged (rearmost) position or PTO switch (D) is raised. Starter will not operate if gear shift lever (B) and PTO control lever (A) /PTO switch (D) are not in these positions.
3. Place rockshaft position control lever (C) in lower (forward) position.
4. Check charging system indicator and engine information indicator on instrument cluster. They glow when ignition key is turned to ON position.

If any indicator does not function properly, see your John Deere dealer.

CP00606,00013BB-19-02MAY18

Before Starting Engine (Option)

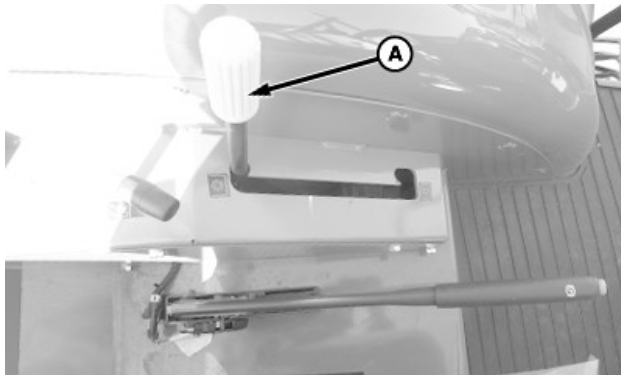


TS220—UN—15APR13

CAUTION: Prevent asphyxiation. Engine exhaust fumes can cause sickness or death to you and others.

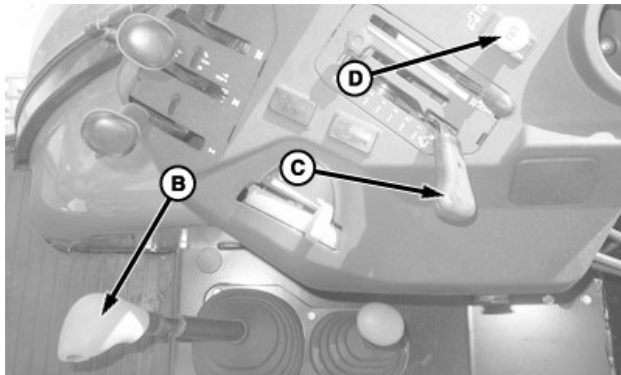
If you have to operate engine in a building, adequate ventilation is necessary. Either use an exhaust pipe extension to remove the exhaust fumes or open doors and windows to bring enough outside air into the area.

1. Check fuel gauge to be sure that tractor has plenty of fuel.



CPA0009615—UN—30OCT19

Left-Hand



CPA0009617—UN—30OCT19

Right-Hand (24F×8R/24F×12R transmission)

A—PTO Control Lever (dry clutch)
B—Gear-shift Lever
C—Rockshaft Position Control Lever

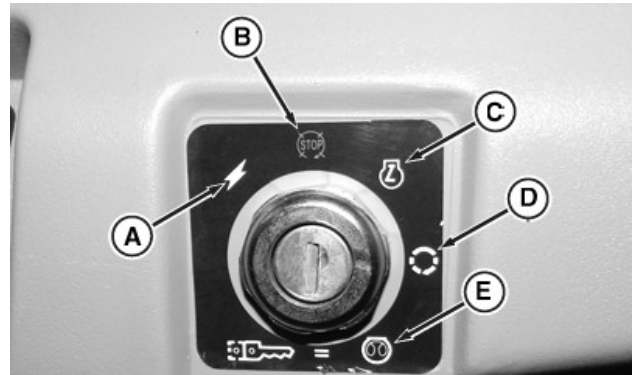
D—PTO Switch (wet clutch)

2. Place gearshift lever (B) in neutral "N" position. PTO control lever (A) is in disengaged (rear-most) position or PTO switch (D) is raised. Starter does not operate if the gearshift lever (B) and PTO control lever (A) /PTO switch (D) are not in these positions.
3. Place the rockshaft position control lever (C) in lower (forward) position.
4. Check charging system indicator and engine information indicator on the instrument cluster. They glow when the key switch is turned to ON position.

If any indicator does not function properly, see an authorized John Deere dealer.

N400041,00047AE-19-31OCT19

Key Switch Positions



PY17042—UN—05OCT12

A—Accessory Position
B—OFF Position
C—RUN Position
D—START Position
E—Cold Weather Start Symbol

Accessory Position (A) - Push key in and turn to Accessory position for accessory operation.

OFF Position (B) - Turn key to OFF position from Accessory or RUN positions to turn off electrical accessories and stop engine.

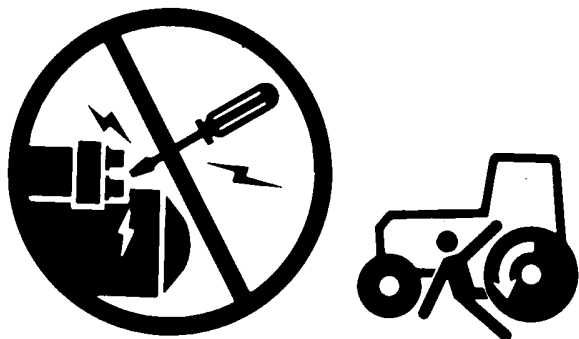
RUN Position (C) - After turning key to START position and releasing key, key returns to RUN position. RUN position enables ON circuit allowing engine to run.

START Position (D) - Turn key to START Position when starting engine. Key will return to RUN position when released. See procedure below for proper starting procedure.

Cold Weather Start Symbol (E) - Tractors can be equipped with an optional intake air heater system.

LG70251,0001913-19-27MAR19

Start the Engine



TS177—UN—11JAN89

CAUTION: Avoid possible injury or death from a machine runaway.

Machine starts in gear and move if normal circuitry is bypassed. **DO NOT** start engine by shorting across starter terminals.

CAUTION: Set the parking brake before starting engine.

Start engine only from operator's seat with transmission in neutral. Never start engine while standing on ground.

IMPORTANT: **DO NOT** run a cold engine at full throttle.

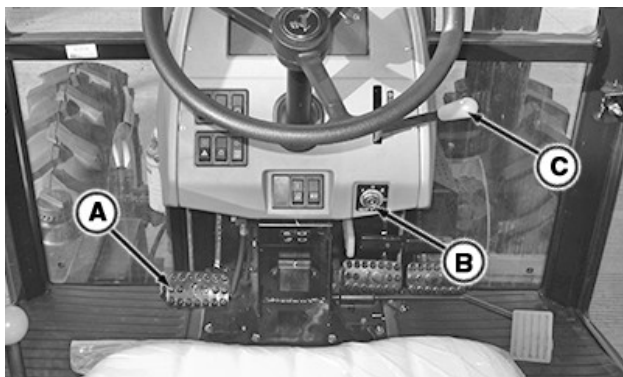
A—Clutch Pedal
B—Ignition Switch
C—Hand Throttle

1. Push hand throttle (C) forward (1/3 of lever travel) to increase engine speed, as indicated by fast/slow indicator.
2. Make sure that gearshift lever is in neutral, "N" position. PTO control lever (dry clutch) in the disengaged position or PTO switch (wet clutch) is raised.
3. Depress clutch pedal (A) and turn ignition switch (B) fully clockwise to START position. Release key when engine starts.
4. If key is released before engine starts, wait until starter and engine stop turning before trying again. Check that all indicators are off after engine starts.

IMPORTANT: **DO NOT** operate starter more than 10 seconds at a time. If engine does not start, wait at least 2 minutes for the starter motor to cool before trying again. If engine does not start in three attempts, refer to Troubleshooting section.

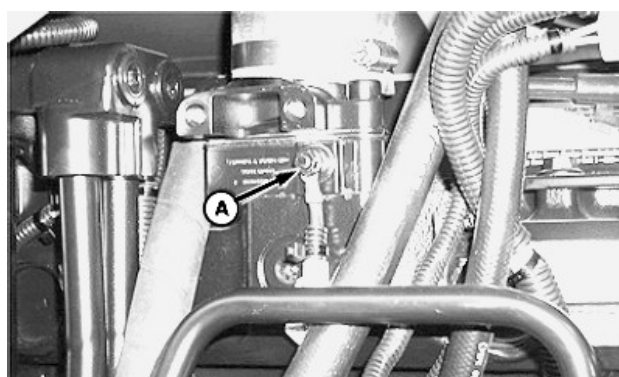
CP00606,00013BC-19-02MAY18

Cold Weather Starting



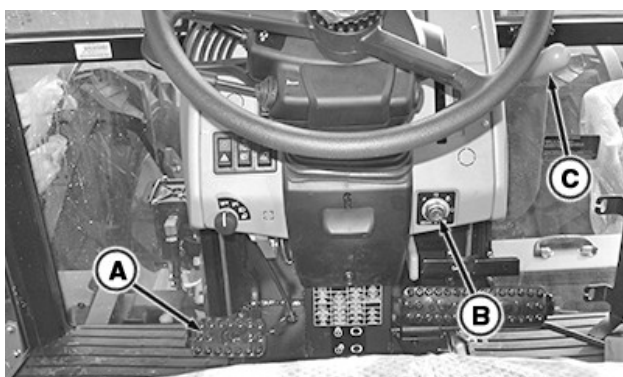
CPA0002993—UN—18OCT16

12F×4R/24F×8R Transmission



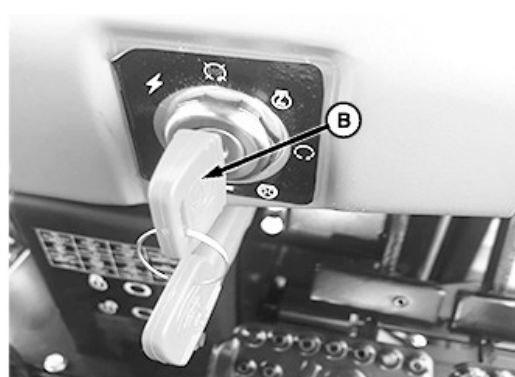
CPA0008130—UN—27MAR19

Air Intake Heater Element



CPA0002990—UN—18OCT16

24F×12R Transmission



CPA0008132—UN—27MAR19

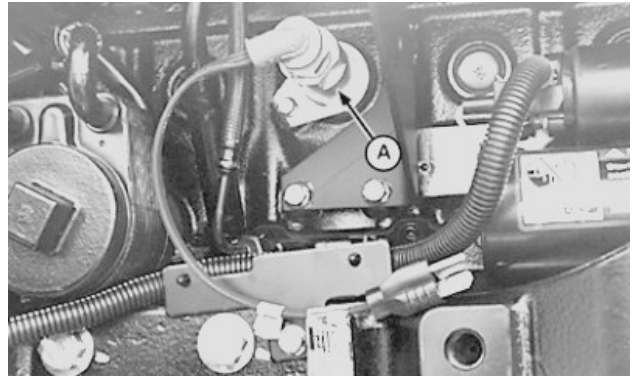
A—Electric Heating Element
B—Key

CAUTION: DO NOT use starting fluid in tractor equipped with a cold weather starting device.

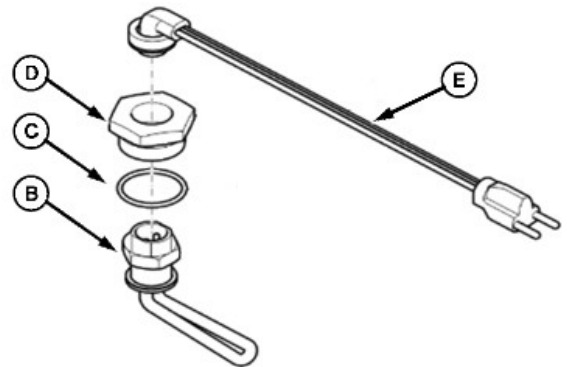
Tractors can be equipped with an optional intake heater system. An electric heating element (A) warms the intake air.

1. To activate cold weather starting device, turn key (B) to RUN position, push in and hold:
 - 10 or 15 seconds for temperatures above 0°C (32°F)
 - 30 seconds for temperatures below 0°C (32°F)
2. Depress clutch pedal and turn key to START position.
3. If engine runs rough, press in on key to reactivate cold weather starting device until engine runs smoothly.
4. Idle engine at 1200 rpm until it warms to operating temperature.

LG70251,0001929-19-02APR19



CPA0008131—UN—27MAR19



CPA0008128—UN—26MAR19

A—Coolant Heater
B—Heating Element
C—O-Ring
D—Adapter Fitting
E—Power Cord

Located on side of the engine, the coolant heater (A) warms the engine coolant, reduces oil drag, eases starting, and shortens warm-up time.

Connect heater plug to a ground fault protected electrical outlet.

LG70251,000192A-19-02APR19

Using Engine Coolant Heater

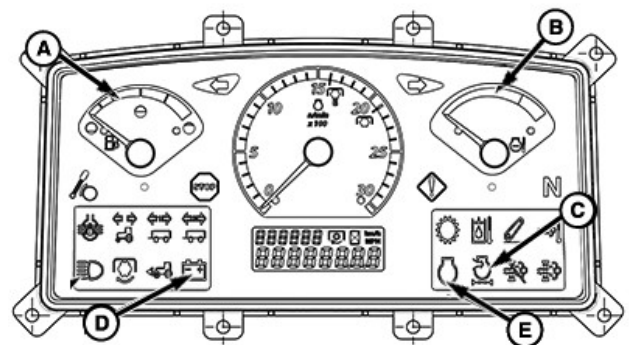


TS210—UN—23AUG88

CAUTION: To avoid shock or hazardous operation, always use a three-wire heavy-duty electrical cord (minimum gauge 10 AWG and no longer than 7.6 m) equipped with three connectors. If a two-to-three contact adapter is used at the wall receptacle, connect green wire to a good ground.

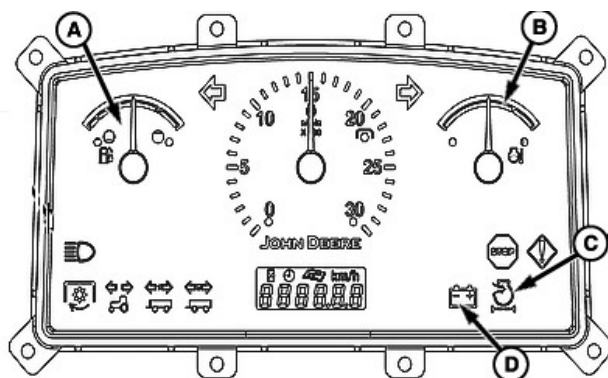
Immerse element in coolant before connecting heater to the power source. NEVER energize the heater in air.

Check Instruments After Starting



CPA0004373—UN—06MAY18

Instrument Cluster (wet clutch)



CPA0004374—UN—06MAY18

Instrument Cluster (dry clutch)

- A—Fuel Level Gauge
- B—Coolant Temperature Gauge
- C—Air Restriction Indicator
- D—Charging System Indicator
- E—Engine Oil Pressure Indicator

IMPORTANT: If charging system indicator (D) or engine oil pressure indicator (E) remains on, or if coolant temperature gauge (B) goes into the red zone, stop engine and determine the cause.

Fuel Level Gauge (A)

Stop to refuel before fuel level gauge (A) reaches empty mark.

IMPORTANT: Use diesel fuel only. (See **Fuels, Lubricants, and Coolant** section for fuel specifications.)

Should tractor run out of fuel and not start in several tries, air must be bled from fuel system. (See **Bleed Fuel System**, in **Maintenance—Fuel System** section.)

Coolant Temperature Gauge (B)

CAUTION: DO NOT remove radiator cap until coolant cools down. Always loosen radiator cap slowly to relieve any excess pressure.

The needle on coolant temperature gauge (B) rises as engine warms up. If the needle reaches red zone, stop engine and determine the cause.

Check coolant level in the surge tank when engine cools. Also check front grille, radiator, and radiator side screens for plugging. Check fan belt tension. If the problem is not corrected, see your John Deere dealer.

Air Restriction Indicator (C)

Air restriction indicator (C) lights if air cleaner becomes plugged. Service air cleaner as soon as possible.

Air restriction indicator lights momentarily when key is turned to START position, and go off when engine starts.

Charging System Indicator (D)

Charging system indicator (D) lights when alternator output is low. Indicator lights when key is turned to START position and go off when engine starts.

If charging system indicator stays lit for longer than 5 seconds in normal operation, stop engine and check for cause.

If loose or broken fan belt is not the cause, see your John.

Engine Oil Pressure Indicator (E)

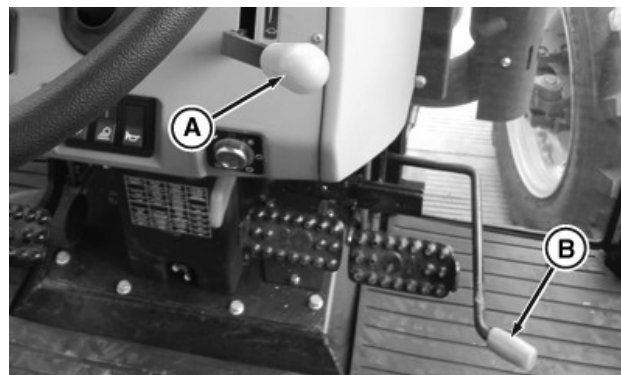
If engine oil pressure falls below minimum, engine oil pressure indicator (E) lights and stays lit.

IMPORTANT: NEVER operate engine without sufficient oil pressure. If the engine oil pressure indicator lights and stays on for longer than 5 seconds under the normal operating conditions, stop engine and check for cause.

If low oil level is not the cause, see your John Deere dealer.

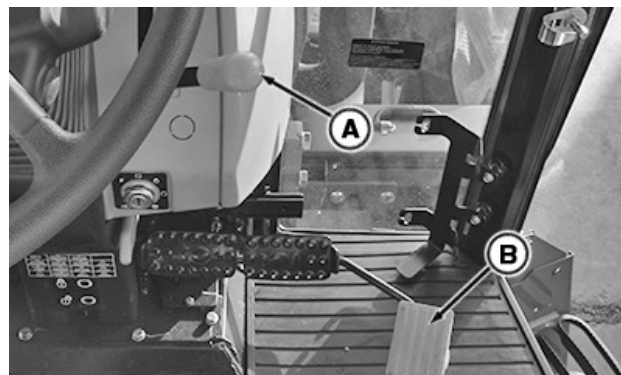
CP00606,00013BE-19-06MAY18

Change Engine Speeds



PY16734—UN—19NOV12

6095 Tractor



CPA0002991—UN—18OCT16

6110B, 6120B, 6135B, and 6140B Tractors

- A—Hand Throttle
- B—Foot Throttle

To increase or decrease engine speed, use hand throttle (A). Engine maintains set speed until hand throttle is moved again. Maximum speed is attained with lever all the way up, and minimum speed with lever all the way down, as indicated by the fast/slow decal on dashboard.

To increase engine speed temporarily, use foot throttle (B). Engine speed returns to the prior speed as soon as foot throttle lever is released.

N400041,000365C-19-14FEB17

Warm Up the Engine

Do not place tractor under full load until it is properly warmed up.

1. Idle engine at about 1500 rpm for several minutes.
2. Run engine at about 1900 rpm and under light load until engine reaches normal operation condition.

JB06590,0000874-19-24NOV08

Restart Stalled Engine

IMPORTANT: Be sure to observe the following, or damage to turbocharger and booster could occur.

Should the engine stall when operating under load, depress clutch and restart it immediately to prevent abnormal heat build up. Continue with normal operation or run engine at slow idle for 1 or 2 min. before stopping.

JB06590,00005E4-19-01OCT09

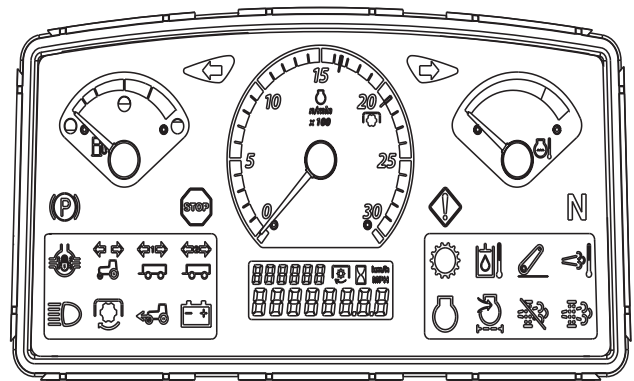
Avoid Idling the Engine

Allowing engine to idle at low rpm uses fuel inefficiently, and can cause a buildup of carbon in the engine.

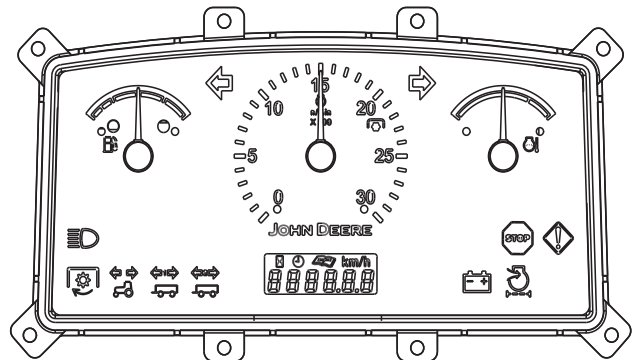
If tractor must be left with the engine running more than 3 or 4 min., minimum engine speed should be 1200 rpm.

JB06590,00005E5-19-01OCT09

Observe Engine Work and Idle Speeds



Instrument Cluster (wet clutch)



Instrument Cluster (dry clutch)

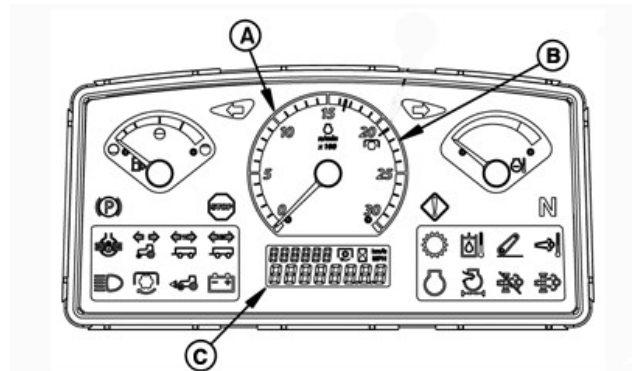
Normal working speed range is:

- 1400 ~ 2200 rpm (for 6095B tractor)
- 1600 ~ 2200 rpm (for 6110B, 6120B, 6135B, and 6140B tractors)

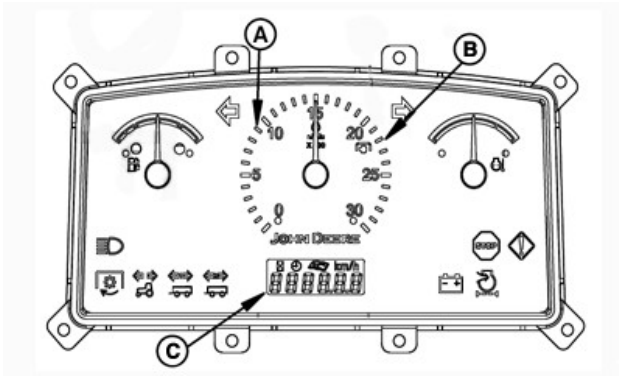
Within these limits, engine can be put under full load.

N400041,00035F3-19-14FEB17

Use Tachometer/Hour Meter



Instrument Cluster (wet clutch)



CPA0003091—UN—14FEB17

Instrument Cluster (dry clutch)

- A—Tachometer
- B—2200 rpm Mark
- C—Hour Meter

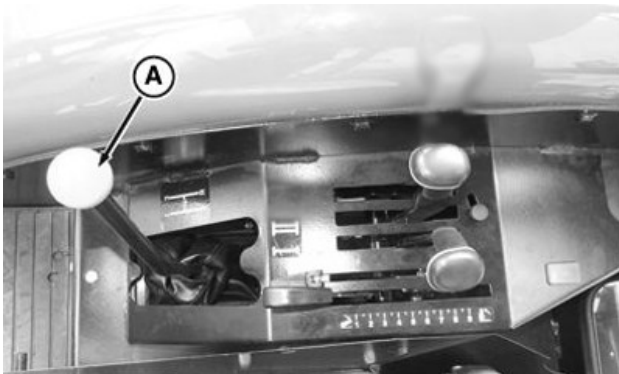
Tachometer (A) shows engine revolutions per minute, read in hundreds.

For **540 or 1000 rpm PTO speed**, increase engine speed until tachometer needle is aligned with 2200 rpm mark (B).

Hour meter (C) shows hours of engine operation in full hours and tenths.

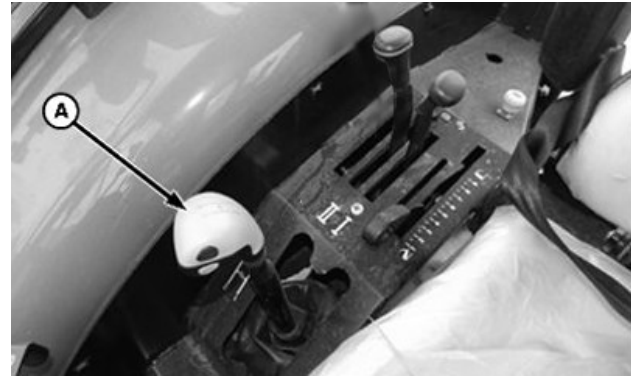
N400041,00035F4-19-15FEB17

Stop the Engine



CPA0001111—UN—10NOV14

12F×4R Transmission

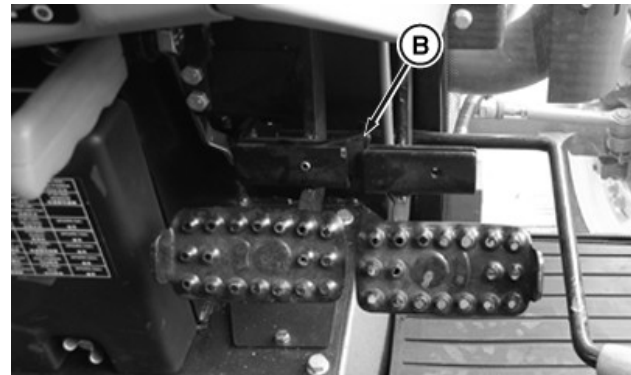


CPA0001112—UN—10NOV14

24F×8R/24F×12R Transmission

A—Gearshift Lever

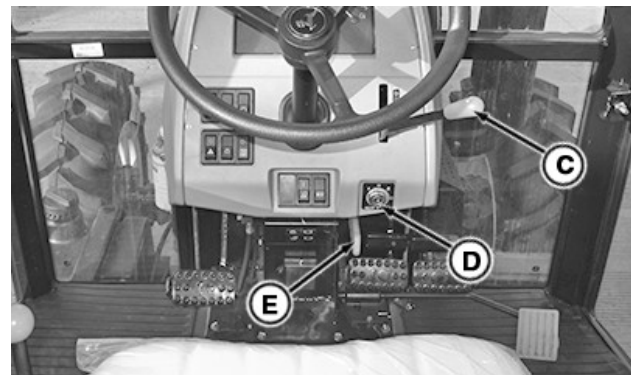
1. Put gearshift lever (A) in neutral, "N".



PY16736—UN—19NOV12

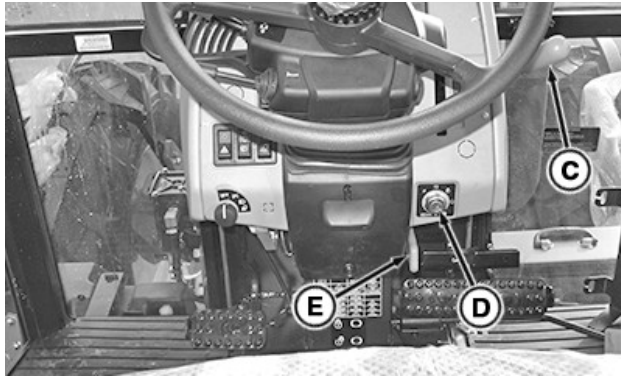
B—Brake Pedals Locking Bar

2. Lock brake pedals together using brake pedals locking bar (B).



CPA0002994—UN—18OCT16

12F×4R/24F×8R Transmission



CPA0002995—UN—18OCT16

24F×12R Transmission

- C—Hand Throttle Lever
D—Ignition Key
E—Parking Brake Lever

- Set parking brake by pressing up brake pedals and pulling parking brake lever (E).

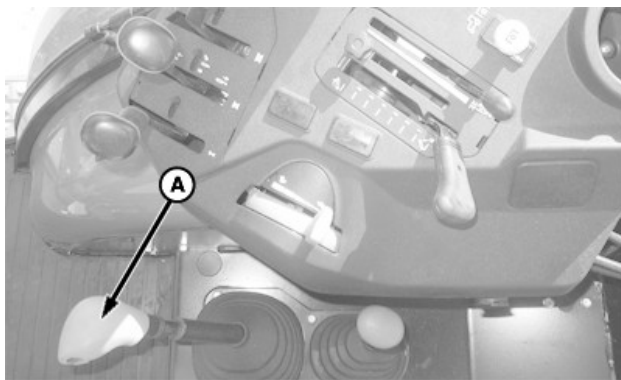
IMPORTANT: Cooling of engine parts is provided by engine oil. Stopping a hot engine suddenly could damage to these parts by overheating or lack of lubrication.

- Reduce load, pull hand throttle lever (C) down to slow engine speed down to around 1200—1300 rpm. Run engine for another 3—5 minutes before stop engine.
- Turn ignition key (D) to the STOP position.

CAUTION: Remove key from ignition switch to prevent operation by untrained personnel.

CP00606,0001358-19-25APR18

Stop the Engine (Option)

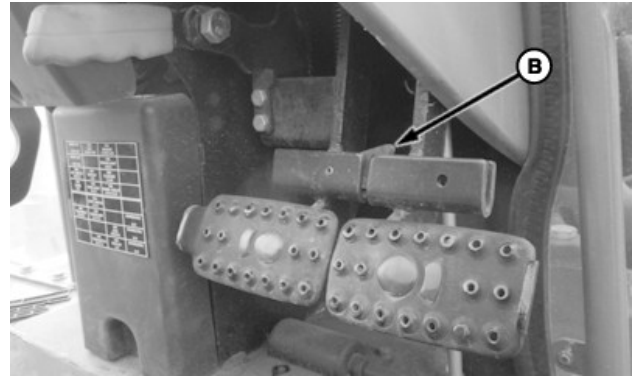


CPA0009619—UN—05NOV19

24F×8R/24F×12R Transmission

- A—Gearshift Lever

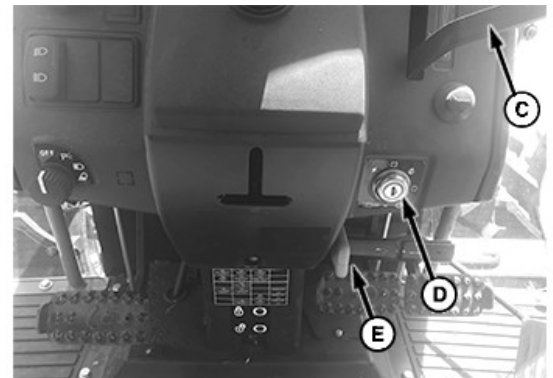
- Stop the tractor and shut off engine. Put gearshift lever (A) in neutral (“N”) position.



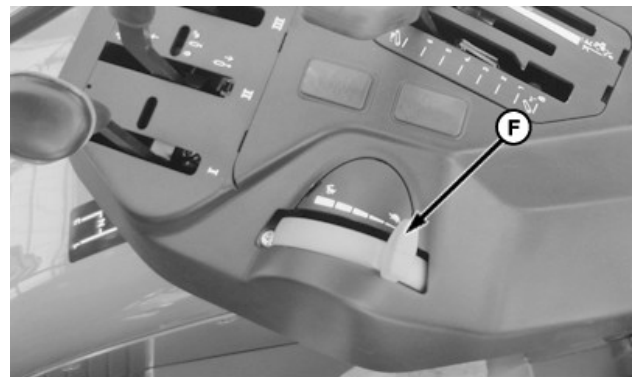
CPA0007596—UN—17DEC18

B—Brake Pedal Locking Bar

- Lock brake pedals together with brake pedal locking bar (B).

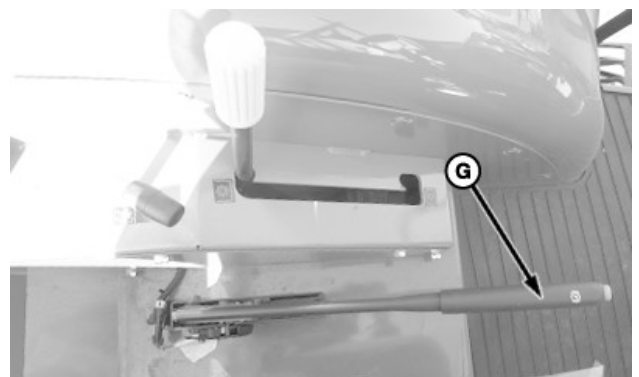


CPA0008325—UN—15MAY19



CPA0007598—UN—17DEC18

PTE Engine



CPA0009620—UN—05NOV19

G—Hand Throttle (PTM engine)

D—Key Switch
E—Park Brake Lever
F—Hand Throttle (PTE engine)
G—Secondary Brake Lever

3. Set park brake by pressing down brake pedals.
4. Pulling up park brake lever (E) and secondary brake lever (G).

IMPORTANT: Cooling of engine parts is provided by engine oil. Stopping a hot engine suddenly could damage parts by overheating or lack of lubrication.

5. Reduce load, and slow down the engine speed to around 1200—1300 rpm. Run engine for another 3—5 minutes before stopping engine.

 **CAUTION:** To prevent operation by untrained personnel, always remove the key from the key switch.

6. Turn key switch (D) to the STOP position.

N400041,00047AF-19-06NOV19

Air Intake, Fuel, Coolant, and Exhaust Operation

Fill Fuel Tank

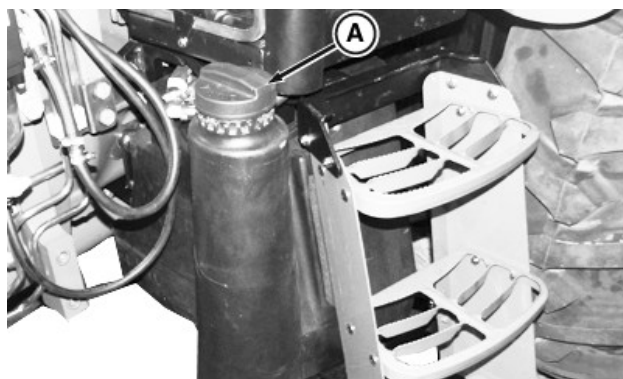
⚠ CAUTION: Handle fuel with care: It is highly flammable. DO NOT refuel the machine while smoking or when near open flame or sparks.

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.



TS202—UN—23AUG88



PY17076—UN—05OCT12

A—Fuel Tank Filler Cap

Fuel tank is filled through fuel tank filler cap (A). Fill fuel tank at end of each day's operation. This prevents condensation in the tank as moist air cools.

Specification

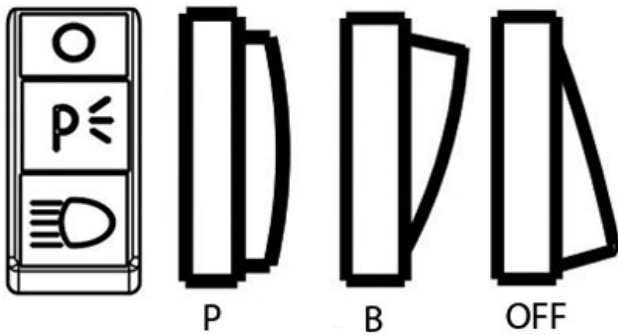
Fuel Tank (6095B)—Capacity. 150 L (39.62 gal)
Fuel Tank (6110B, 6120B, and
6135B)—Capacity. 210 L (55.48 gal)
Fuel Tank (6140B)—Capacity. 255 L (67.36 gal)

NOTE: To reduce fuel gelling and control wax separation during cold weather, John Deere Fuel Flow Improver, or equivalent, may be added to fuel or bulk storage tank.

CP00606,0001359-19-16MAY18

Electrical and Lighting Operation

Light Switch Positions (Fixed Steering Column)



P—Park Position
B—Road Position
OFF—OFF Position

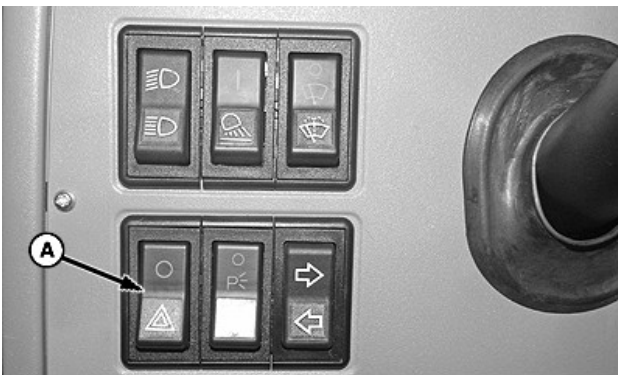
CPA0002067—UN—19OCT15

| Light Switch | | |
|--------------|--------------|----------------|
| Function | Light Switch | In width Light |
| OFF | OFF | OFF |
| PARK | ON | OFF |
| ROAD | ON | ON |

Tractor light switch has three positions.

The table shows control of tail lights and headlights by light switch.

Warning Light Switch



A—Warning Light Switch

CPA0002062—UN—19OCT15

Warning light switch (A) is only used to switch ON the warning lights.

High/Low Beam Switch



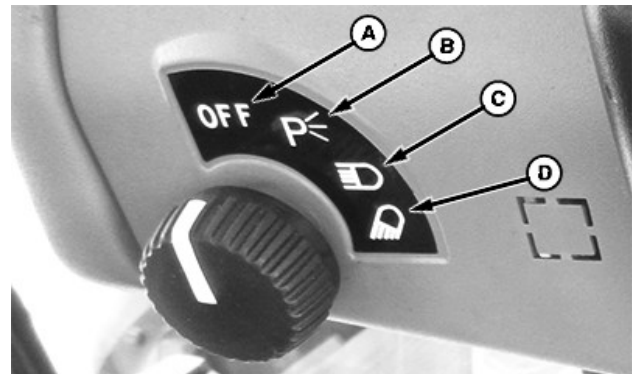
CPA0002063—UN—19OCT15

A—High/Low Beam Switch

High/Low beam switch (A) is used to choose bright headlights or dimmed headlights and is only effective when light switch is in road position.

CP00606,00013C7-19-11MAY18

Light Switch Positions (Tiltable and Telescopic Steering Column)



CPA0005137—UN—17JAN18

A—OFF Position
B—Park Position
C—Road Position
D—Work Position

| Light Switch | | | |
|--------------|------------|----------------------------|-----------------|
| Function | Headlights | Front/Rear Position Lights | Rear Floodlight |
| OFF | OFF | OFF | OFF |
| PARK | OFF | ON | OFF |
| ROAD | ON | ON | OFF |
| WORK | ON | ON | ON |

Tractor light switch has four positions.

The table shows control of headlights, front/rear position lights, and rear floodlight by light switch.

Warning Light Switch

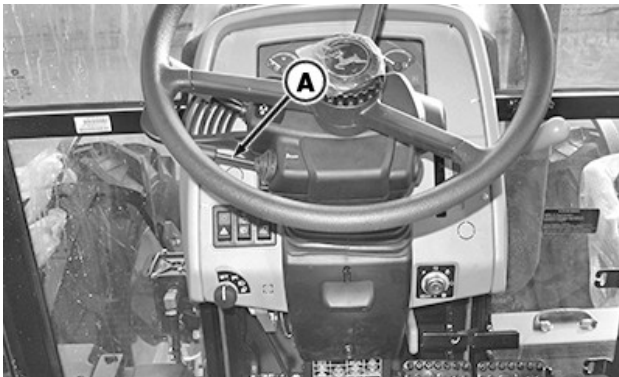


CPA0002984—UN—18OCT16

A—Warning Light Switch

Warning light switch (A) is only used to switch ON warning lights.

Multiple Signal Lever

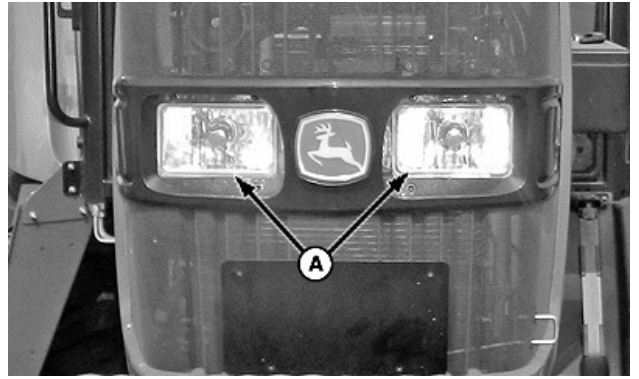


CPA0002985—UN—18OCT16

A—Multiple Signal Lever

Multiple signal lever (A) is used to switch ON turn lights, high/low beam, and horn.

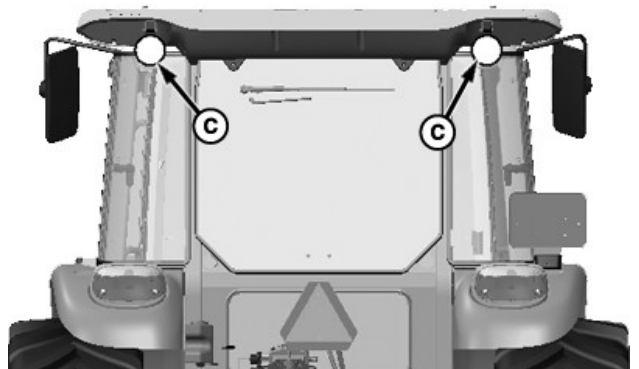
CP00606,00013C8-19-10MAY18



CPA0002059—UN—19OCT15



PY17020—UN—05OCT12

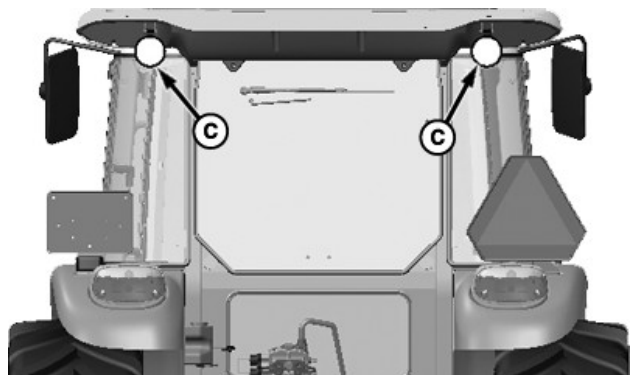


CPA0004046—UN—07AUG17

Option 1

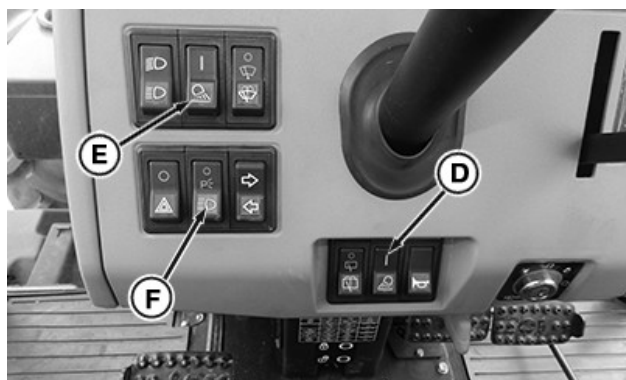
Use Headlights and Floodlights

⚠ CAUTION: Bright lights could blind drivers of other vehicles as they approach. When operating on a road, move high/low beam switch to either bright or dim position. Never use floodlights when transporting.



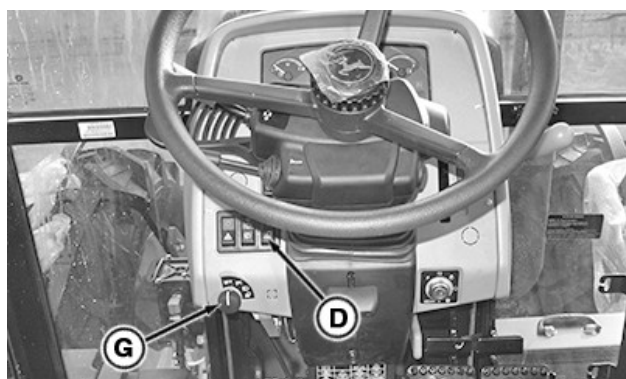
CPA0004047—UN—07AUG17

Option 2



CPA0002414—UN—07DEC15

Fixed Steering Column



CPA0002986—UN—18OCT16

Tiltable and Telescopic Steering Column

- A—Headlight (2 used)
- B—Front Floodlights (2 used)
- C—Rear Floodlights (2 used)
- D—Front Floodlight Switch
- E—Rear Floodlight Switch
- F—Light Switch
- G—Light Switch

Switch the high/low beam switch to high beam position when driving on highway.

Always turn high/low beam switch to low beam position before meeting another vehicle.

Keep headlights adjusted properly. (See Adjust Headlights in Electrical and Lighting Maintenance section.)

IMPORTANT: Rear-facing floodlights can blind or confuse drivers of other vehicles approaching from behind. When driving or transporting tractor on public roads, use headlights only, never use floodlights.

Front floodlights (B) are ON when front floodlight switch (D) is switched ON.

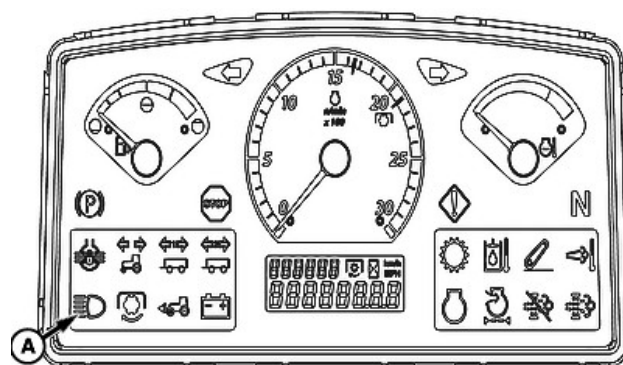
Rear floodlights (C) are ON when rear floodlight switch (E) is switched ON.

For the optional model, rear floodlights (C) are ON when light switch (F or G) is switched to WORK position.

Floodlights are for field work only and should not be used on roads.

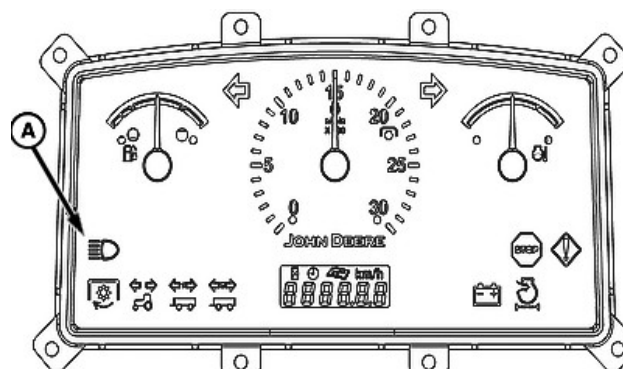
CP00606,000135A-19-27APR18

High Beam Indicator



CPA0004365—UN—25APR18

Instrument Cluster (wet clutch)



CPA0004366—UN—25APR18

Instrument Cluster (dry clutch)

A—High Beam Indicator

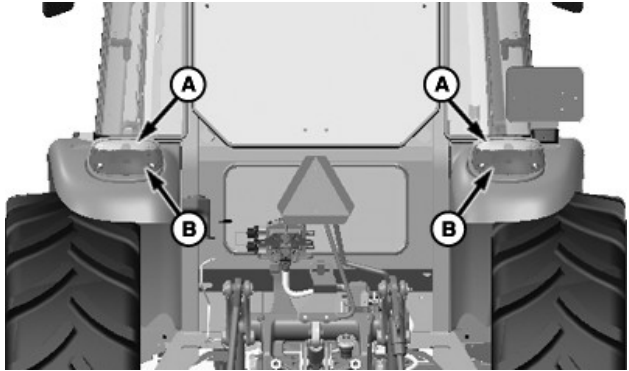
High beam indicator (A) glows when light switch is switched to road position and high/low beam switch is switched to high beam position.

CP00606,000135B-19-25APR18

Use Tail Lights and Warning Lights

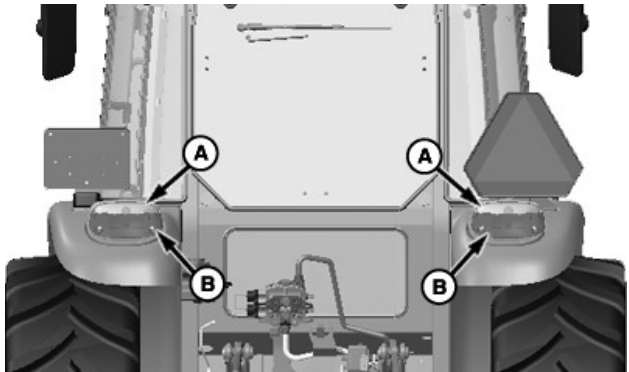
CAUTION: Prevent collisions between the other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use turn signal lights.

Follow local regulations for the 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. An implement safety lighting kit is available from your John Deere dealer.



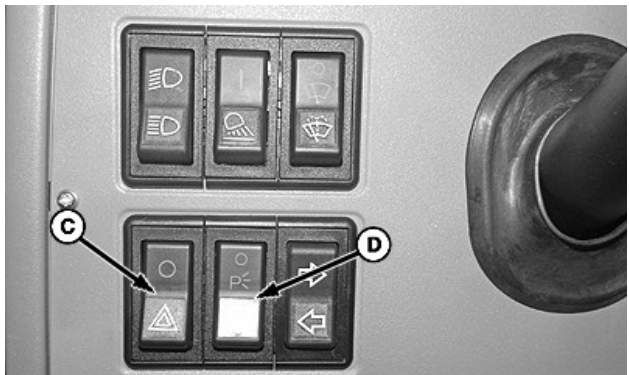
CPA0004048—UN—04SEP17

Option 1



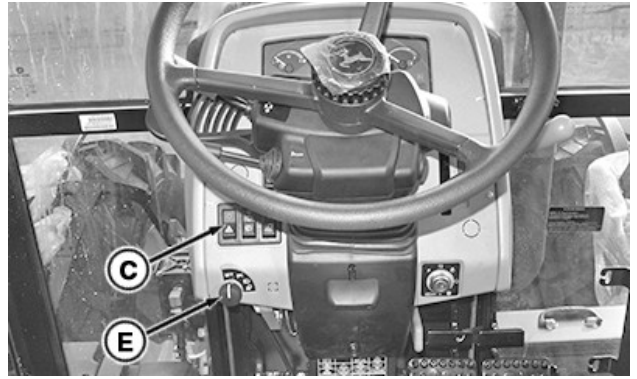
CPA0004049—UN—04SEP17

Option 2



CPA0002065—UN—19OCT15

Fixed Steering Column



CPA0002987—UN—18OCT16

Tilttable and Telescopic Steering Column

- A—Warning Lights (2 used)
- B—Tail Lights (2 used)
- C—Warning Light Switch
- D—Light Switch
- E—Light Switch

Tail lights (B) are ON when the light switch (D or E) is in PARK position or ROAD position.

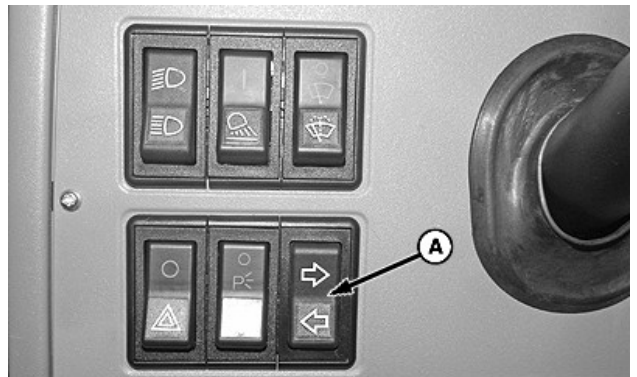
Be sure that tail light lenses are clean before driving on a road, so other drivers can see them easily.

Warning lights can be turned ON or OFF using warning light switch (C).

Flashing warning lights do not indicate turning. Switch off the warning lights before operating the turn signal lights.

CP00606,000135C-19-25APR18

Use Turn Signals



CPA0002066—UN—19OCT15

Fixed Steering Column



Tiltable and Telescopic Steering Column

CPA0002988—UN—18OCT16

- A—Turn Signal Switch
- B—Front Turn Signal Lights (2 used)
- C—Rear Turn Signal Lights (2 used)
- E—Multiple Signal Lever

IMPORTANT: Turn signal switch is not functional when warning lights are flashing. Switch off warning lights with the warning light switch before operating turn signal switch.

NOTE: Be sure to return turn signal switch (A), manually, to center position after turning.

Fixed steering column model:

Press the turn signal switch (A) to left-hand turn position (down) to indicate left-hand turn.

Press the turn signal switch (A) to right-hand turn position (up) to indicate right-hand turn.

Tiltable and telescopic steering column model:

- Horizontal:
 - Push forward multiple signal lever (E), right turn lights can be turned ON.
 - Pull backward multiple signal lever (E), left turn lights can be turned ON.

Center position is OFF.

- Vertical:

Push downward multiple signal lever (E), high beam can be turned ON.

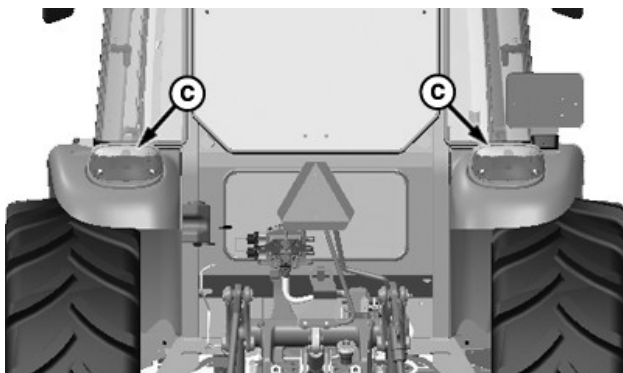
Pull upward multiple signal lever (E), high/low beam can wink alternating. It can be automatically reset after releasing the multiple signal lever (E). It is called overtaking light generally.

Press the end face of the multiple signal lever (E), horn can be turned ON. It can be automatically reset after releasing the multiple signal lever (E).



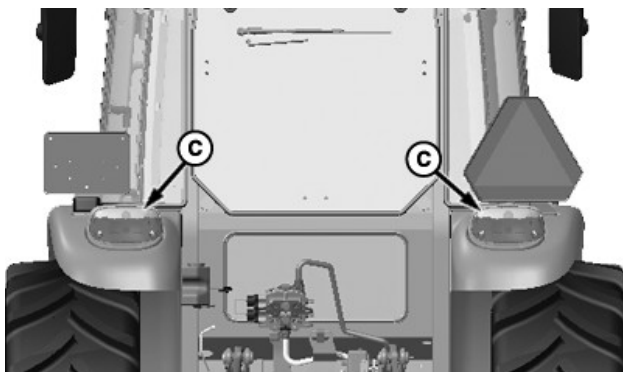
Front Side

PY17022—UN—05OCT12



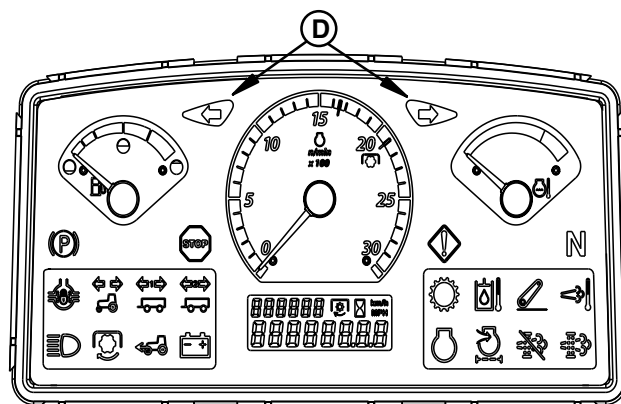
Rear Side(Option 1)

CPA0004050—UN—07AUG17



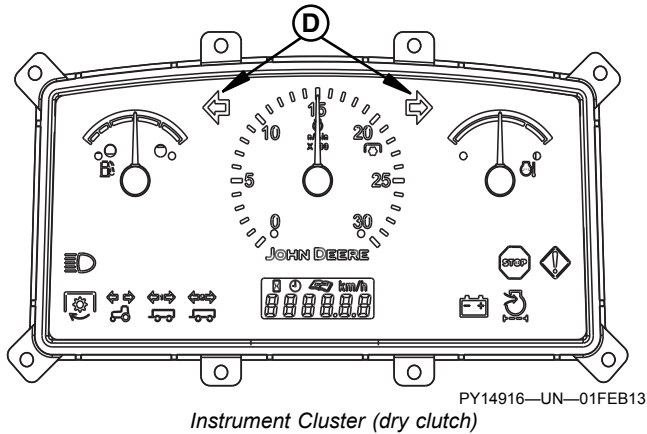
Rear Side (Option 2)

CPA0004051—UN—07AUG17



Instrument Cluster (wet clutch)

PY14899—UN—31JAN13

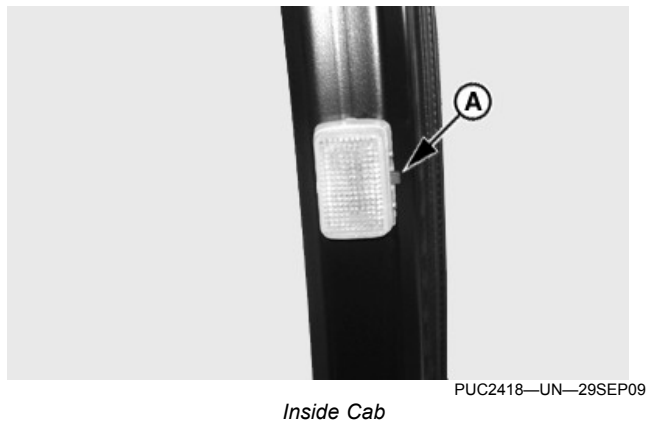


D—Turn Signal Indicators (2 used)

Turn signal indicators (D) on the instrument panel winks to indicate the turn direction.

CO00263,00004E5-19-20OCT17

Use Cab Light



A—Cab Light Switch

Cab light switch has two positions:

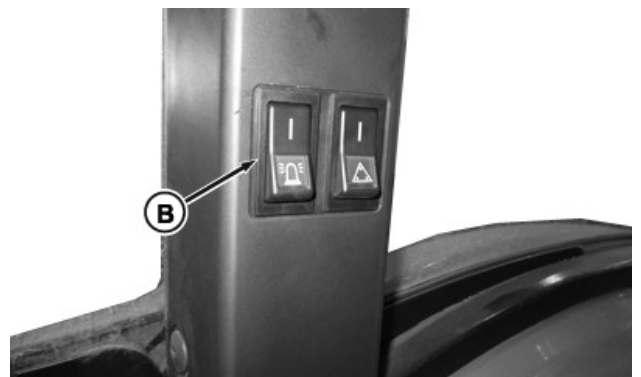
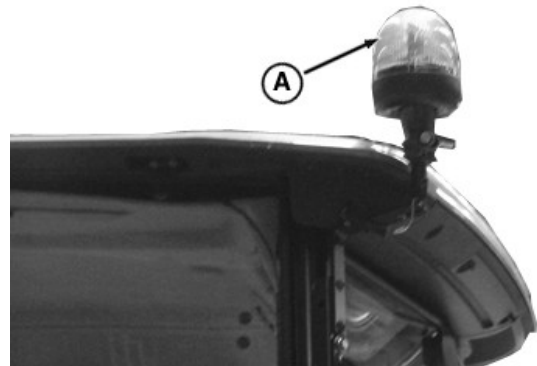
ON - Light ON

OFF - Light OFF

IMPORTANT: Before exiting cab, make sure that cab light switch is in OFF position. Failure to do so causes battery to lose its charge.

N400041,00035E1-19-18JAN17

Operate Rotating Beacon Light (if equipped)



Right-Hand Post

A—Light
B—Switch

Depress switch (B) to activate light (A).

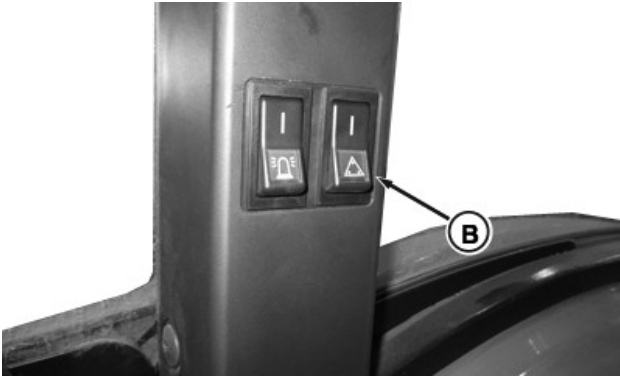
To remove light for storage or clearance:

1. Loosen wing nut and lift light from tube.
2. Install cap on tube end to protect light socket.

N400041,00035E2-19-28JUL17

Operate Identification Lights (if equipped)





PY14894—UN—30JAN13

Right-Hand Post

A—Light
B—Switch

Depress switch (B) to activate light (A).

Make sure to 'ON' identification lights, before driving the tractor on road.

N400041,00035E3-19-28JUL17

Drivetrain Operation

Select a Gear

IMPORTANT: To extend drive train life and avoid excessive soil compaction and rolling resistance, avoid ballasting for **CONTINUOUS** full power operations in gears slower than B-2 gear. When using front-wheel drive, ballasting to one gear slower is appropriate.

The tractor may be operated in any gear with engine speeds between 1800 and 2200 rpm. Within these limits, the engine can be put under full load. For light load operation, use a higher gear and lower engine speed. This saves fuel and reduces wear.

JB06590,00005F3-19-05OCT09

Transmission Operation

Operator Training Required

- Study the Operating the Engine section of this manual before operating tractor.
- Operate tractor in an open, unobstructed area under the direction of an experienced operator.
- Learn use of all controls.
- Operator experience is required to learn moving, stopping, turning and other characteristics of tractor.

LG70251,0001479-19-06SEP18

Operate Transmission

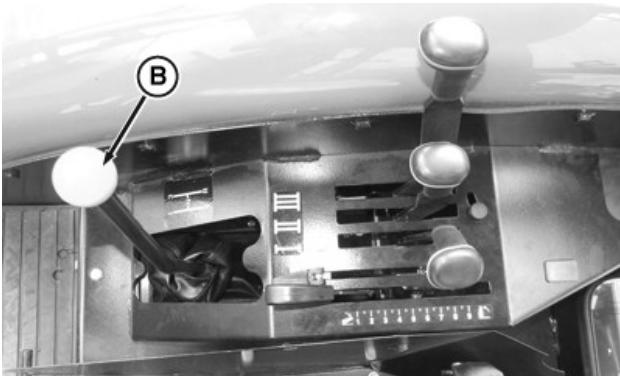
12F×4R Transmission



PY16739—UN—20NOV12

A—Range Shift Lever

Range shift lever (A) provides four forward speed ranges: A, B, C, and D.



PY16738—UN—20NOV12

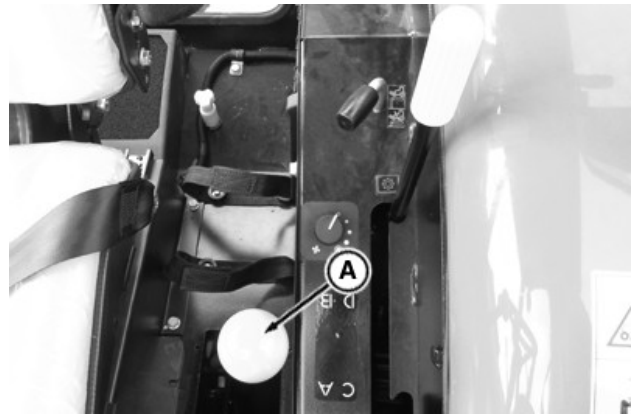
B—Speed Shift Lever

Speed shift lever (B) provides three forward speeds: 1st, 2nd and 3rd, plus one reverse speed.

Using range and speed shift levers in different combinations, 12 forward speeds and 4 reverse speeds can be obtained.

Speed shift lever (B) must be in neutral, "N", for the engine to be started.

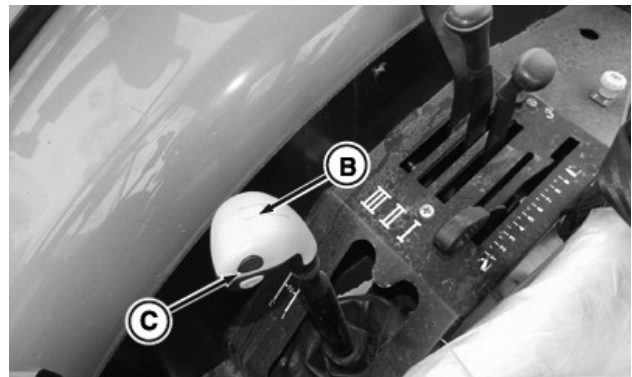
24F×8R Transmission



PY16739—UN—20NOV12

A—Range Shift Lever

Range shift lever (A) provides four forward speed ranges: A, B, C, and D.



PY18747—UN—08JUL13

Right-Hand Side

**B—Speed Shift Lever
C—High/Low Speed Shift Button**

Speed shift lever (B) provides three forward speeds: 1st, 2nd and 3rd, plus one reverse speed.

High/low speed shift switch (C) is used to obtain the higher or lower ground speeds.

Using range shift lever, speed shift lever and high/low speed shift switch in different combinations, 24 forward speeds and 8 reverse speeds can be obtained.

Speed shift lever (B) must be in neutral, "N", for the engine to be started.

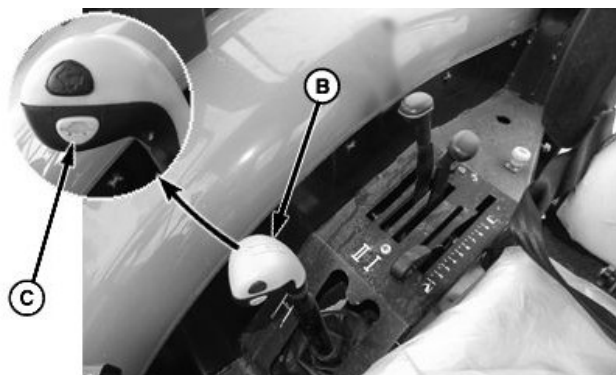
24F×12R Transmission



CPA0002054—UN—19OCT15

A—Range Shift Lever

Range shift lever (A) provides four forward speed ranges: A, B, C, and D.



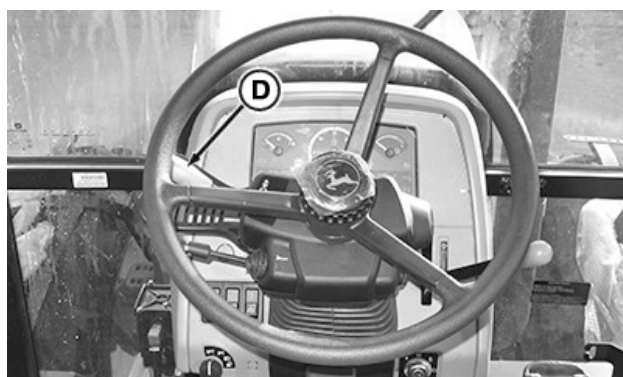
CPA0001114—UN—10NOV14

B—Speed Shift Lever

C—High/Low Speed Shift Button

Speed shift lever (B) provides three forward speeds: 1st, 2nd, and 3rd.

High/low speed shift button (C) is used to obtain the higher or lower ground speeds.



CPA0002998—UN—18OCT16

D—Power Reverser Lever

Power Reverser lever (D) provides travel direction (forward or reverse).

IMPORTANT: DO NOT operate power reverser lever (D) when the tractor ground speed is more than 16 km/h.

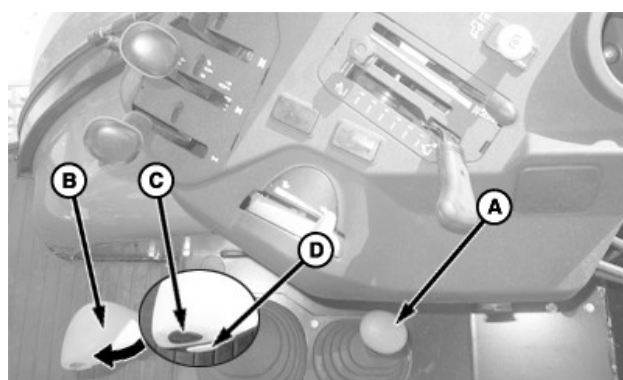
Using range shift lever, speed shift lever, high/low speed shift lever, and Power Reverse lever in different combinations, 24 forward speeds and 12 reverse speeds can be obtained.

Put gearshift lever and power reverser lever in neutral ("N") position when starting the engine.

CO00263,0002116-19-31MAY19

Operate Transmission (Option)

24F×8R Transmission



CPA0009622—UN—05NOV19

A—Range Shift Lever

B—Gearshift Lever

C—High Speed Shift Button

D—Low Speed Shift Button

Range shift lever (A) provides four forward speed ranges: A, B, C, and D.

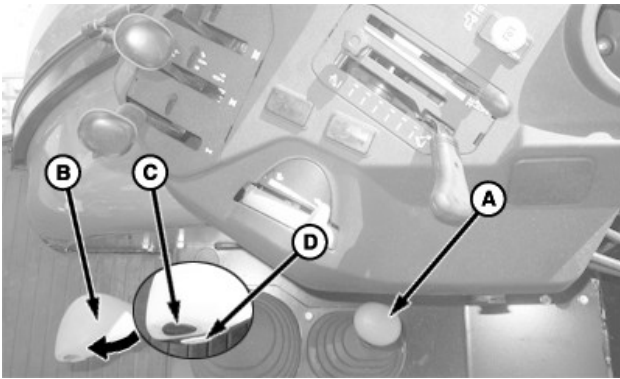
Gearshift lever (B) provides three forward speeds: 1st, 2nd and 3rd, plus one reverse speed.

High/low speed shift button (C and D) is used to obtain the higher or lower ground speeds.

Using range shift lever, gearshift lever and high/low speed shift button in different combinations, 24 forward speeds and 8 reverse speeds can be obtained.

Gearshift lever (B) must be in neutral, "N", for the engine to be started.

24F/12R Transmission



CPA0009622—UN—05NOV19

- A—Range-Shift Lever**
B—Gearshift Lever
C—High Speed Shift Button
D—Low Speed Shift Button

Range-shift lever (A) provides four forward speed ranges: A, B, C, and D.

Gearshift lever (B) provides three forward speeds: 1st, 2nd, and 3rd.

High/low speed shift button (C and D) is used to obtain the higher or lower ground speeds.



CPA0009623—UN—05NOV19

- E—PowrReverser Lever**

PowrReverser lever (E) provides travel direction (forward or reverse).

Use range shift lever, gearshift lever, high/low gearshift lever, and PowrReverser lever in different combinations. Twenty-four forward speeds and 12 reverse speeds can be obtained.

To start the engine, put gearshift lever in neutral (“N”) position.

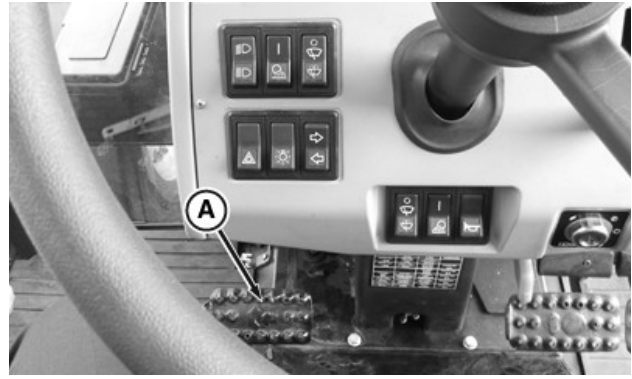
N400041,00047B1-19-31OCT19

Shift Transmission

12F×4R Transmission

Range Shift: When shifting into A or B speed range, tractor must come to a **complete stop**. If shifting into C or D speed range, tractor does not need to stop.

1. Lower engine rpm to idle speed.



PY16740—UN—20NOV12

- A—Clutch Pedal**

2. Depress clutch pedal (A) FULLY.
3. Select desired speed range (A, B, C, D).
4. Slowly release the clutch pedal to take up load gradually.
5. Increase engine speed once shift is completed.

Gear (speed) Shift: Changing gears can be made **on-the-go**, without stopping.

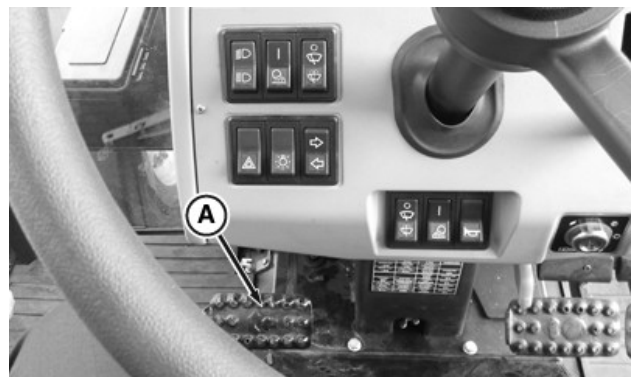
1. With the tractor in motion, depress the clutch pedal (A) FULLY.
2. Select desired speed (1, 2, 3, R).
3. Slowly release the clutch pedal to take up load gradually.

24F×8R Transmission

High/Low Speed Shift: Select high or low ground speed configuration. High or Low ground speed can be selected without depressing the clutch pedal and can be made **on-the-go**, without stopping.

Range Shift: When shifting into A or B speed range, tractor must come to a **complete stop**. If shifting into C or D speed range, tractor does not need to stop.

1. Lower engine rpm to idle speed.



PY16740—UN—20NOV12

- A—Clutch Pedal**

2. Depress clutch pedal (A) FULLY.

3. Select desired speed range (A, B, C, D).
4. Slowly release the clutch pedal to take up load gradually.
5. Increase engine speed once shift is completed.

Gear (speed) Shift: Changing gears can be made **on-the-go**, without stopping.

1. With the tractor in motion, depress the clutch pedal (A) FULLY.
2. Select desired speed (1, 2, 3, R), plus one reverse speed.
3. Slowly release the clutch pedal to take up load gradually.

24F×12R Transmission

High/Low Speed Shift: Select high or low ground speed configuration. High or Low ground speed can be selected without depressing the clutch pedal and can be made **on-the-go**, without stopping.

Range Shift: When shifting into A or B speed range, tractor must come to a **complete stop**. If shifting into C or D speed range, tractor does not need to stop.

1. Lower engine rpm to idle speed.



CPA0003000—UN—18OCT16

A—Clutch Pedal

2. Depress clutch pedal (A) FULLY.
3. Select desired speed range (A, B, C, and D).
4. Slowly release the clutch pedal to take up load gradually.
5. Increase engine speed once shift is completed.

Gear (speed) Shift: Changing gears can be made **on-the-go**, without stopping.

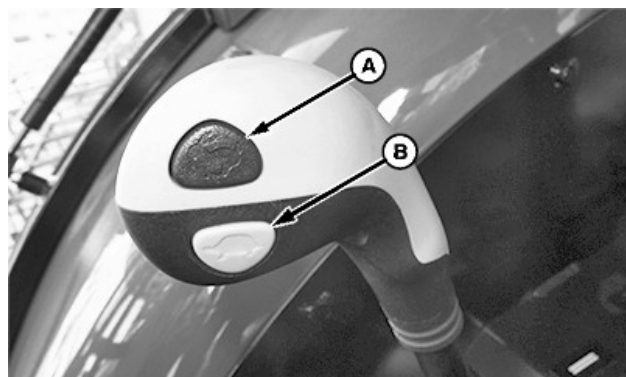
1. With the tractor in motion, depress the clutch pedal (A) FULLY.
2. Select desired speed (1, 2, 3).
3. Slowly release the clutch pedal to take up load gradually.

Power Reverser Lever: With tractor stopped, select desired travel direction (forward or reverse). Travel

direction change can be done without depressing the clutch pedal.

LG70251,000147B-19-06SEP18

High/Low Split-Shift Feature



CPA0005136—UN—16JAN18

High/Low Switches

- A—High Speed Switch
- B—Low Speed Switch

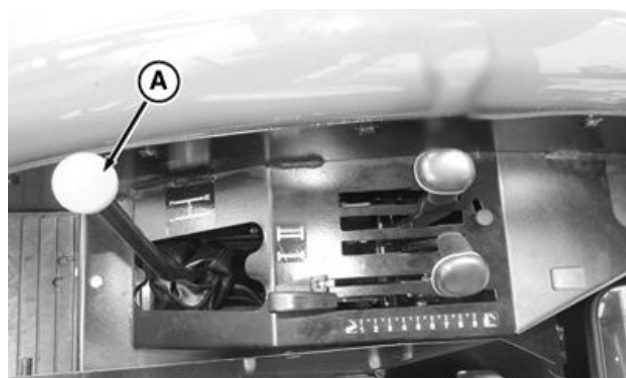
Press the high speed switch (A) and low speed switch (B) can up-shift and down-shift within the selected range and gear.

“H” appears when high-speed is selected in the instrument cluster. And “L” appears in the instrument cluster when low speed is selected.

LG70251,000147C-19-06SEP18

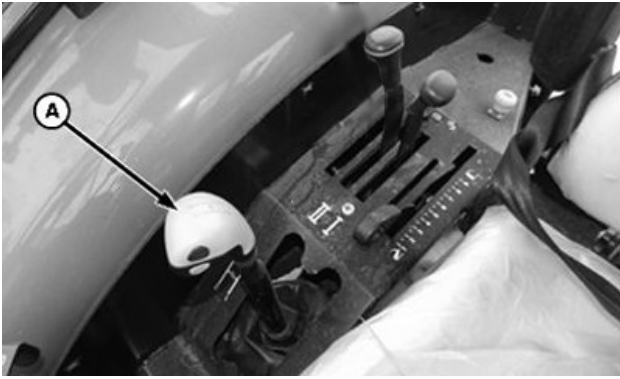
Stop Tractor

CAUTION: Leaving transmission in gear with engine off may not prevent tractor from moving. Always set parking brake before dismounting.

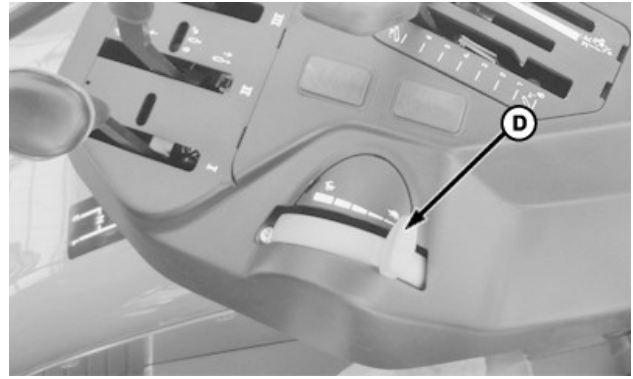


CPA0001111—UN—10NOV14

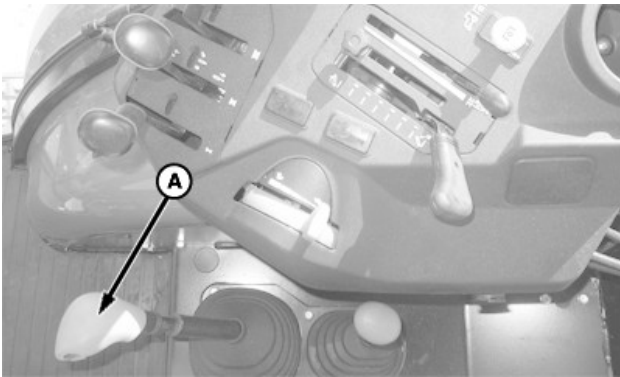
12F×4R Transmission



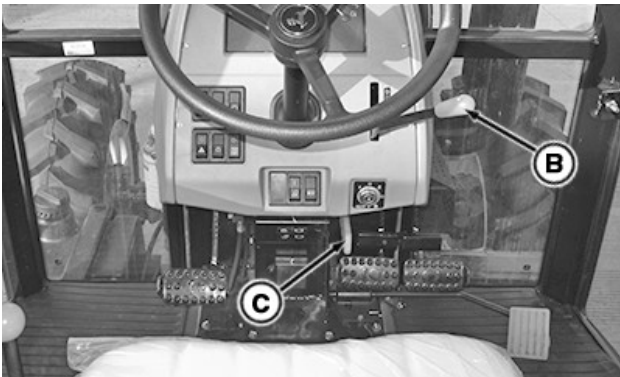
CPA0001112—UN—10NOV14
24F×8R/24F×12R Transmission



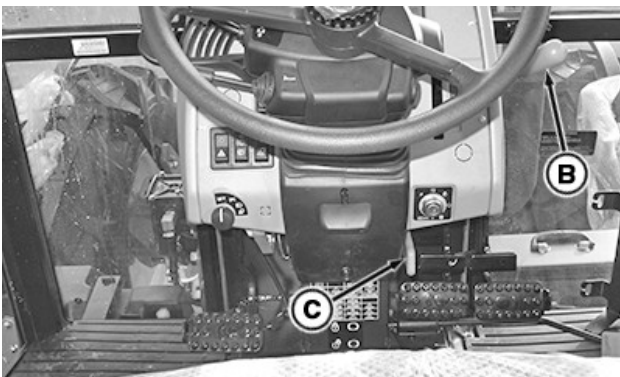
CPA0007566—UN—17DEC18
Option



CPA0009619—UN—05NOV19
24F×8R/24F×12R Transmission (option)



CPA0003001—UN—18OCT16



CPA0003002—UN—18OCT16

- A—Speed Shift Lever
- B—Hand Throttle
- C—Parking Brake Lever
- D—Hand Throttle (option)

1. Place speed shift lever (A) in neutral, “N”, and depress brake pedals until tractor stops, and pull up parking brake lever (C).
2. Lower all implements to the ground. (See Retract Cylinder in Selective Control Valve Operation section.)

IMPORTANT: Cooling of parts such as engine and turbocharger is provided by engine oil. Stopping a hot engine suddenly could damage these parts by overheating or lack of lubrication.

3. Pull hand throttle (B)/push hand throttle (D) down/back to low idle position. Allow engine to idle for 1 to 2 min.

⚠ CAUTION: Remove key from the key switch to prevent operation by untrained personnel.

4. Turn key to OFF position and remove.

N400041,00047C4-19-06NOV19

MFWD and Front Axle Operation

Operate Mechanical Front-Wheel Drive

CAUTION: Mechanical front-wheel drive greatly increases traction. When using this option, extra caution is needed on slopes. Compared to 2WD, front-wheel drive maintains traction on steeper slopes, increasing the possibility of a tip over.

When driving on icy, wet or gravel surfaces, reduce speed and be sure that tractor is properly ballasted to avoid skidding and to prevent loss of steering control. Front-wheel drive provides better control under these road conditions.

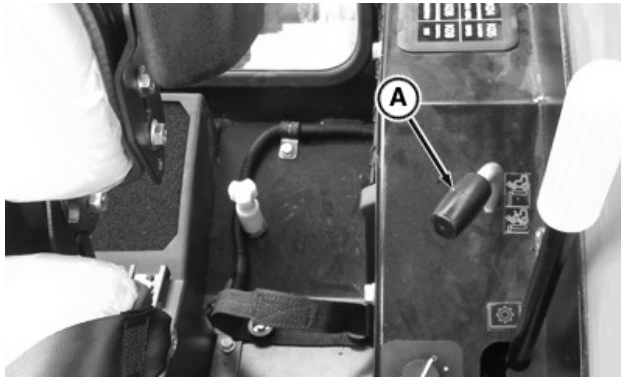
IMPORTANT: To extend front tire life, engage front-wheel drive only when needed in the field. Front tires turn slightly faster than rear tires with MFWD engaged and will wear very quickly if driven in MFWD mode on hard surface for an extended period. Unless absolutely necessary, do not engage MFWD when driving on hard surfaces.

DO NOT install tire chains on front wheels; chains can strike and damage tractor.

While towing an implement and pushing down on MFWD lever to disengage, lever may resist to disengage MFWD. When this occurs the load must first be relieved from the power train. See step 3 below.

Use mechanical front-wheel drive (MFWD) as required for better traction.

MFWD can be engaged or disengaged while in motion.



PY16742—UN—20NOV12

A—MFWD Lever

1. To engage, pull up MFWD lever (A).
2. To disengage, push lever down.
3. If the lever does not go down easily, the load must first be relieved from the power train. Operator may have to perform one or more of the following in order to relieve load:
 - Reduce speed and drive tractor straight ahead for a few feet

- Stop tractor, then drive it briefly in reverse
- Raise implement slightly
- Disengage any ground-engaging tool in use

CP00606,000135D-19-25APR18

Differential and Rear Axle Operation

Use Differential Lock

⚠ CAUTION: DO NOT operate tractor at high speed or attempt to turn with differential lock engaged.

IMPORTANT: To prevent damage to drive train, DO NOT engage differential lock when one wheel is spinning and the other is completely stopped.



PY16741—UN—20NOV12

A—Differential Lock Pedal

When one wheel starts to lose traction, STOP the tractor and engage differential lock by depressing differential lock pedal (A) down. Tractor wheels must be stopped or turning at the same speed before engaging differential lock. If possible, engage differential lock before entering conditions where tires may slip.

Unequal traction will keep the lock engaged. When traction equalizes, lock will disengage itself by spring action. If lock does not disengage, depress one brake pedal and then the other.

If tires repeatedly slip, then get traction, and then slip again, hold pedal (A) in the engaged position.

CP00606,000135E-19-25APR18

Power Take-off (PTO) Operation

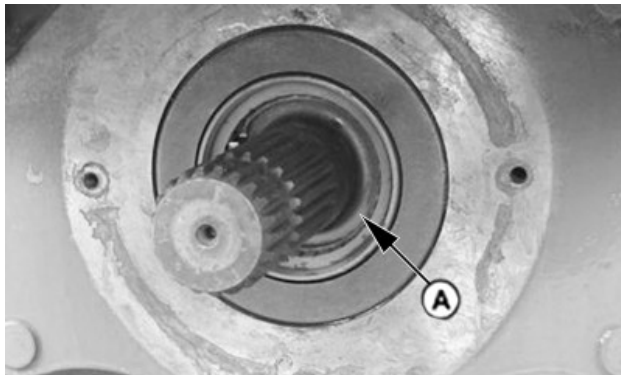
Reversible PTO Stub Shaft

CAUTION: Avoid personal injury. PTO shaft may be hot from operation. Allow shaft to cool before handling it.

IMPORTANT: Implements can be operated at 540 rpm (end with 6 splines) only if the implement power requirement does not exceed 56 kW (75 HP). Operating PTO at lower speeds under heavy load could damage PTO. For implement power requirements of above 57 kW (76 HP) upto 110 kW (147 HP), PTO shaft must be switched to 1000 rpm end, as described below.

NOTE: The 1000 rpm shaft end has 21 splines and the 540 rpm shaft has 6 splines. Consult implement operator's manual to determine shaft suitability, depending on implement power requirement.

Reversible PTO is standard on 6110B and 6135B models and optional for 6095B model.

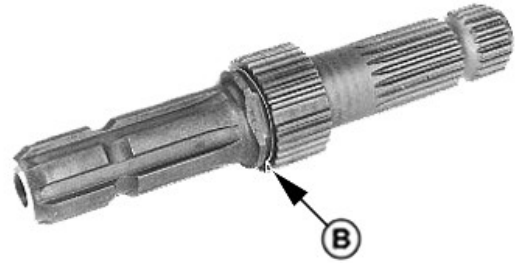


PUC1040—UN—21JUL08

A—Snap Ring

1. Rotate the ends of snap ring (A) until they are aligned with flat section on shaft. Remove snap ring (A) and pull out PTO stub shaft.
2. Clean stub shaft thoroughly. Coat splines with John Deere High-Temperature/Extreme-Pressure/Non-Clay grease, and install into housing.
3. For 540 rpm shaft: Rotate shaft back and forth while installing, to make sure it is seated correctly in housing. Keep pushing shaft in while installing snap ring.
4. For 1000 rpm shaft: Rotate shaft back and forth while installing, until engagement is felt.

NOTE: Shaft is correctly engaged when strong effort is required to turn it.



PUC1118—UN—16JAN08

B—Snap Ring Groove

5. Install snap ring in groove (B) to retain shaft in place. Align ends of ring with flat surface of shaft.

IMPORTANT: Clean shaft center bore thoroughly when installing PTO shaft for 1000 rpm use. Damage to PTO may result if bore is not clean.

CP00606,000135F-19-25APR18

Attach PTO-Driven Implement

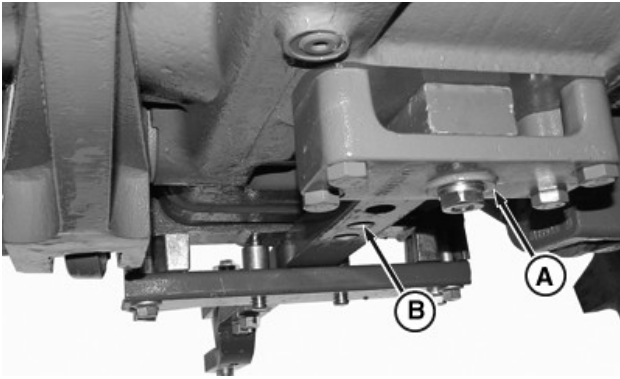
CAUTION: To avoid injury, stop engine before attaching implement or working in area of implement hitch.

1. Attach implement to tractor before connecting PTO drive line. Raise hitch to upward position if it is not to be used.
2. Put gearshift lever in neutral, "N". Lock and depress brake pedals, and set parking brake.
3. Pull down hand throttle all the way and allow engine to idle for 1 to 2 min. Pull out fuel shut off lever and turn off engine.

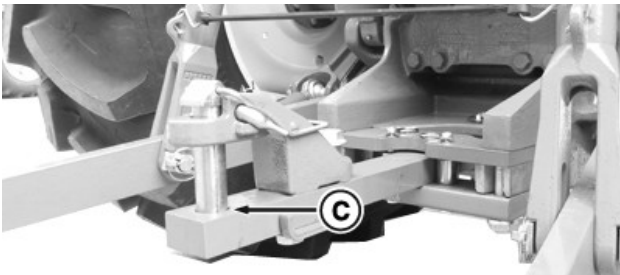
IMPORTANT: Remove clevis assembly on drawbar when using PTO-driven equipment.

IMPORTANT: Short position hole should never be used to attach PTO-driven implement.

IMPORTANT: For drawn PTO-driven implements, drawbar must be in extended position hole (B). This will provide distance between drawbar hitch hole and end of PTO shaft 355 mm (14 in) for 540 rpm shaft or 407 mm (16 in) for 1000 rpm shaft.



PY17063—UN—05OCT12



PY14827—UN—19DEC12

- A—Retaining Pin Nut
- B—Extended Position Hole
- C—Drawbar Hitch Hole

4. Loosen retaining pin nut (A), remove pin and install drawbar in hitch hole. Install pin and nut, then torque nut to specification.

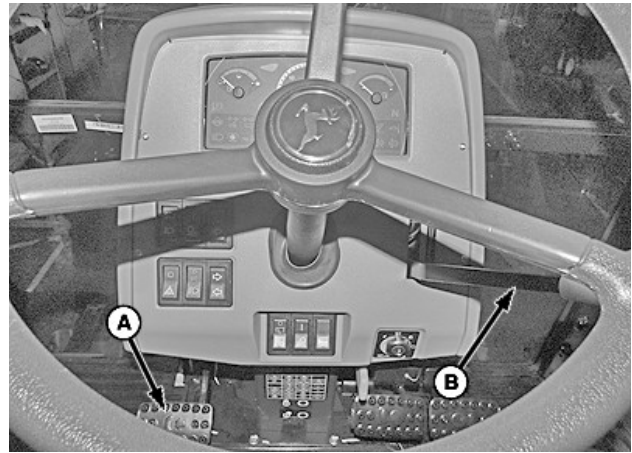
Specification

Retaining Pin Nut—Torque. 410 N·m (300 lb·ft)

5. If implement will be connected to 3-point hitch, be sure that drawbar will not interfere. Remove it if necessary.
6. With engine off, turn shaft slightly by hand if necessary to line up splines. Connect drive line to PTO shaft. Pull out on shaft to be sure that drive line is locked to PTO shaft.
7. Check carefully for any interference, and make sure that hitch is raised to the upper position if it will not be used.

CP00606,0001360-19-25APR18

NOTE: PTO clutch lever or PTO switch is engaged, engine will not start.



CPA0002036—UN—14OCT15

12F×4R/24F×8R Transmission



CPA0003006—UN—18OCT16

24F×12R Transmission



CPA0007568—UN—17DEC18

Option

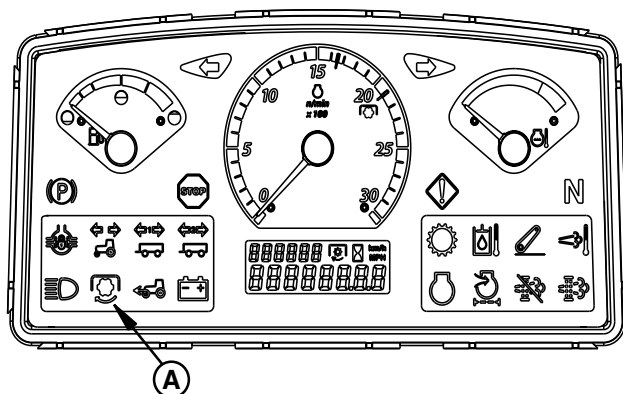
- A—Clutch Pedal
- B—Hand Throttle
- C—Hand Throttle

1. Depress clutch pedal (A), start engine and push hand throttle (B or C) forward until engine speed is sufficient to start PTO implement.

Operate Tractor PTO

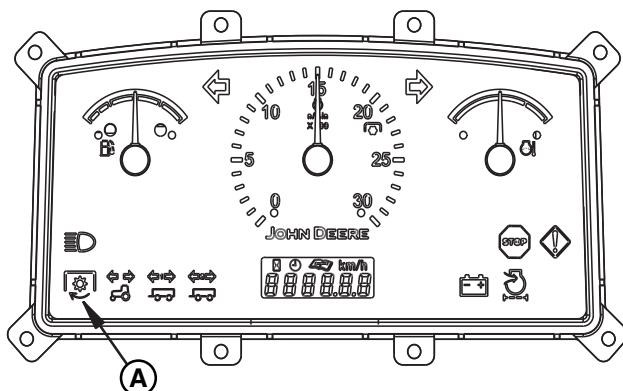
CAUTION: Turn key OFF to stop engine, set parking brake and make sure that all mechanisms have stopped before cleaning out machine or making any adjustments to PTO driven implement.

Power Take-off (PTO) Operation



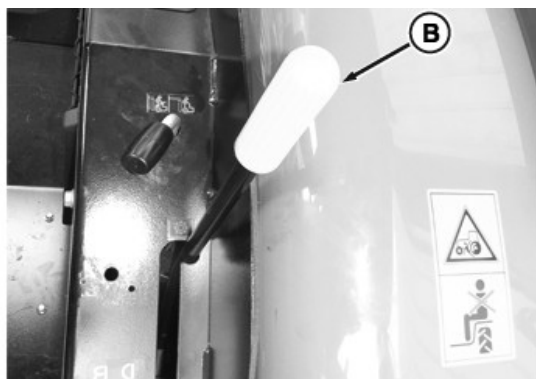
PY14914—UN—31JAN13

Instrument Cluster (wet clutch)



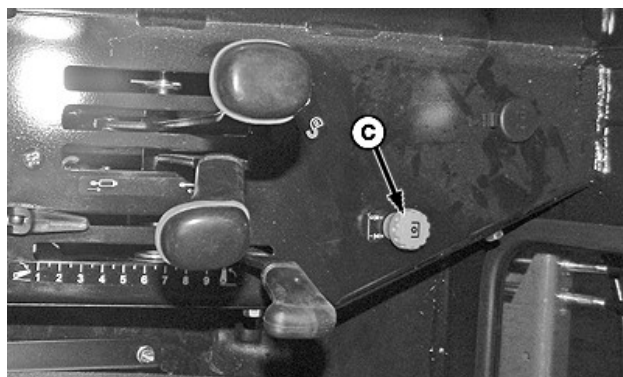
PY14912—UN—31JAN13

Instrument Cluster (dry clutch)



PY14928—UN—18FEB13

PTO Control Lever (dry clutch)



CPA0002037—UN—15OCT15

PTO Switch (wet clutch)



CPA0008364—UN—15MAY19

Option

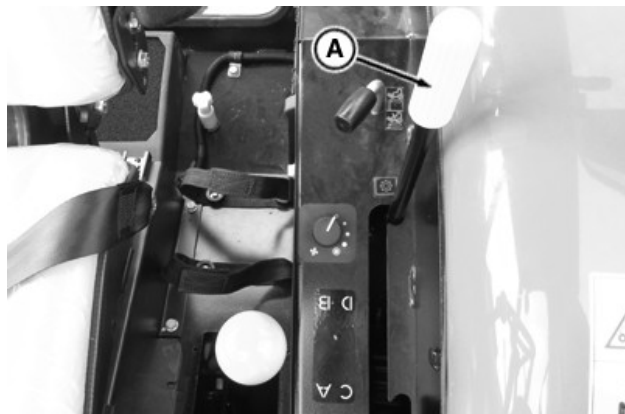
- A—PTO Indicator
- B—PTO Control Lever
- C—PTO switch

2. Move PTO control lever (B) forward or raise PTO switch (C) to engage PTO. PTO indicator (A) will light when PTO is engaged.
3. Increase engine speed to rated 2200 rpm for 540 rpm or 1000 rpm PTO operation.
4. Pull PTO control lever back or press PTO switch to disengage PTO.

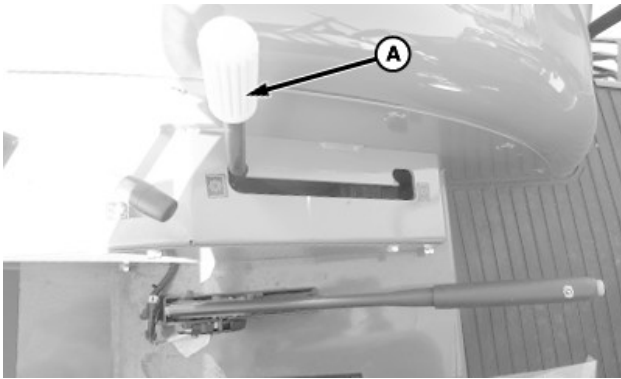
N400041,00047C5-19-06NOV19

Adjust PTO Clutch Operating Rod

NOTE: The adjusting mechanism is at the left-hand side, below cab.



PY16758—UN—23NOV12

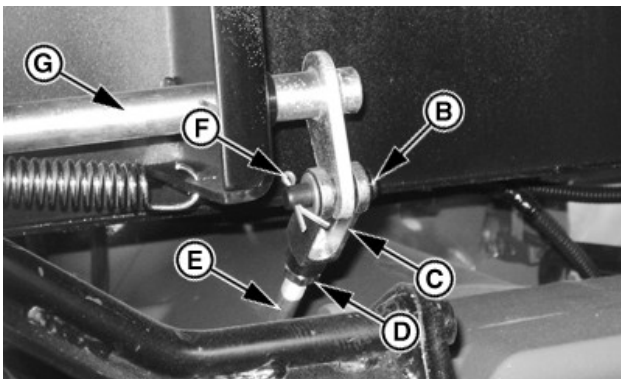


CPA0009615—UN—30OCT19

Option

A—PTO Operating Lever

1. Place PTO control lever (A) in disengaged position (rear position).



PUC2495—UN—06OCT09

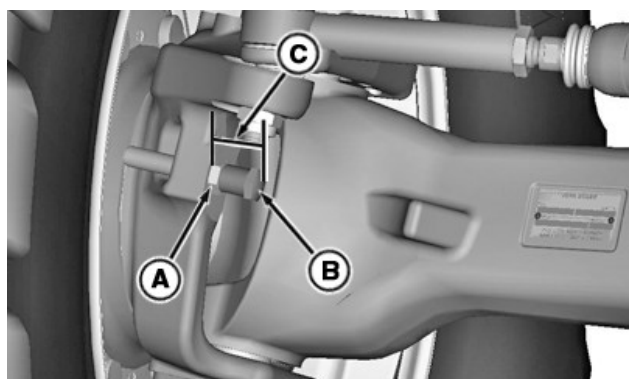
B—Pin Shaft
C—Yoke
D—Lock Nut
E—Rod
F—Cotter Pin
G—PTO Clutch Operating Rod

2. Remove cotter pin (F) and pin shaft (B).
3. Remove yoke (C) from clutch rod (G).
4. Loosen lock nut (D). Turn the yoke (C) (clockwise or counterclockwise as necessary) until its hole align with the hole of the clutch rod (G).
5. Turn yoke (C) 0.5 turn, counterclockwise, to make half turn free play.
6. Align holes on yoke (C) and clutch rod (G), by pushing rod (E) forward.
7. Reinstall yoke (C) to clutch rod (G), tighten up lock nut, and reinstall pin shaft (B) and cotter pin (F).

LG70251,00026D1-19-10NOV21

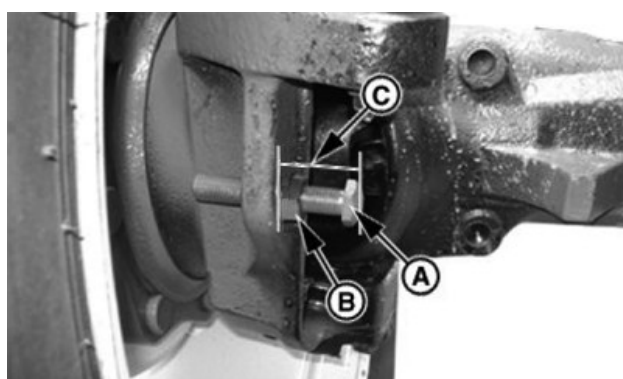
Steering and Brake Operation

Adjust Steering Stop



CPA0002314—UN—07FEB17

For 6120B, 6135B, and 6140B Tractors



CPA0003056—UN—07FEB17

For 6095B and 6110B Tractors

A—Adjusting Screw
B—Lock Nut
C—Adjustment Dimension

Front wheel steering angle must be kept within certain limits according to tire size and tread width. Refer to one of the tables below to set adjustment dimension (C) by turning adjusting screw (A), then tightening lock nut (B) to specification.

NOTE: Make sure adjustment dimension (C) is set to same value on right and left-hand wheels.

This adjustment applies only to tractors equipped with front-wheel drive (MFWD).

All these data are for the front wheel tread from factory setting.

Adjust the dimension C for different wheel tread and make sure that there is no interference to all around when front wheel turning and front axle swaying

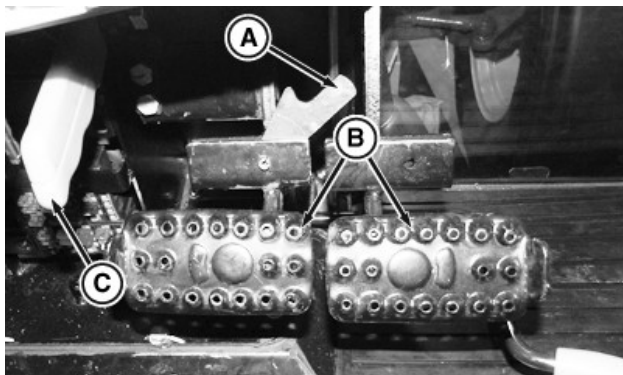
| Item | Measurement | Specification |
|----------|-------------|---------------------|
| Lock Nut | Torque | 200 N·m (150 lb·ft) |

| Rim and Wheel Disk Positions | | | | | |
|--------------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|
| | 6095B | 6110B | 6120B | 6135B | 6140B |
| Tire Size | Adjustment dimension (C) | | | | |
| 320/85R24 without front fender | 55 mm (2.16 in) | | | | |
| 340/85R24 without front fender | | 55 mm (2.16 in) | | | |
| 380/85R24 without front fender | | | 25 mm (0.98 in) | 25 mm (0.98 in) | 25 mm (0.98 in) |
| 320/85R24 with front fender | 70 mm (2.75 in) | | | | |
| 340/85R24 with front fender | | 80 mm (3.14 in) | | | |
| 380/85R24 with front fender | | | 60 mm (2.36 in) | 60 mm (2.36 in) | 60 mm (2.36 in) |

N400041,000352B-19-08FEB17

Use Brakes

CAUTION: Before operating tractor on a road, lock pedals together with locking bar (A). Use brakes lightly and cautiously at transport speeds.



PY17037—UN—05OCT12

A—Brake Pedal Locking Bar
B—Brake Pedals
C—Parking Brake Lever

For field work, brake pedals (B) should NOT be locked together. Instead, apply right brake pedal lightly to assist in making sharp right-hand turns and left pedal for left-hand turns.

To stop tractor completely, lock brake pedals together with locking bar (A), depress brake pedals (B) and pull up parking brake lever (C), after coming to a complete stop. Parking brake lever (C) keeps brake pedals down. To release lever, push down briefly on brake pedals (B). Lever (C) will drop down on its own.

IMPORTANT: To prevent unnecessary wear, NEVER “ride” the brakes by resting a foot on the pedals.

Reduce speed if towed load is not equipped with brakes and weighs more than the tractor. Avoid hard braking applications. Consult implement operator's manual for recommended transport speeds.

Use additional caution when transporting towed loads under adverse conditions, and when turning or stopping on inclines.

CP00606,0001363-19-17MAY18

Hydraulics Operation

Open Center Hydraulic System

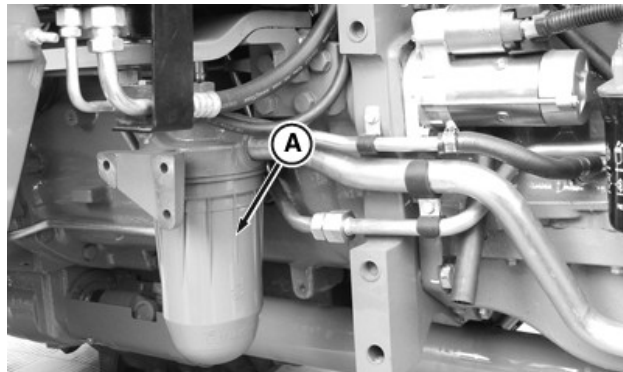
IMPORTANT: Tractor hydraulic system design is known as an open center system. This type of hydraulic system is **NOT COMPATIBLE** with continuous hydraulic motor applications such as those used in: vacuum blower motors, centrifugal sprayer pumps, hydraulically driven rakes or other similar applications. In such cases, the use of a PTO-driven hydraulic pump is strongly recommended. Anytime one of the above applications is considered, consult your nearest John Deere dealer or service facility.

Failure to observe this application information will likely cause serious damage to tractor hydraulic system.

JB06590,000087F-19-24NOV08

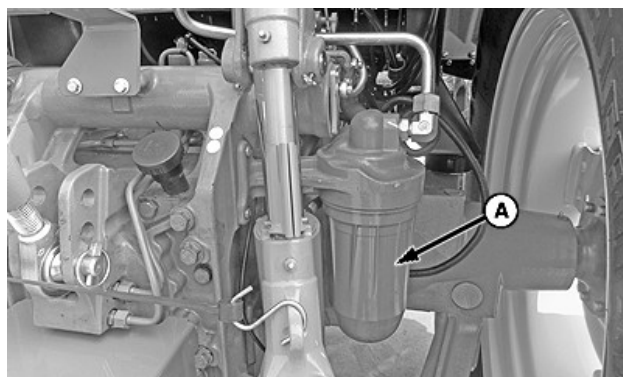
Warm Hydraulic System Oil

CAUTION: Overheating of hydraulic oil will cause malfunction of hydraulic components and possible personal injury. To prevent hydraulic oil from overheating, **DO NOT** hold the SCV or joystick in the extend or retract position for an extended period of time.



PY16756—UN—23NOV12

For 6095B and 6110B Tractors (dry clutch)



CPA0001700—UN—27JUL15

For 6120B, 6135B, and 6140B Tractors (wet clutch)

A—Hydraulic Oil Filter

NOTE: Hydraulic oil filter (A) is located on the right-hand side for dry clutch machine, or at rear of machine for wet clutch machine.

Hydraulic system may be slow to function when tractor is started in cold weather. This is because cold oil will not flow as easily through hydraulic oil filter (A).

Steering may be slow until system warms up.

Hydraulic system will function normally when oil warms up.

To warm up the oil in the system, proceed as follows:

1. Depress clutch pedal, start engine and idle at about 1000 rpm.

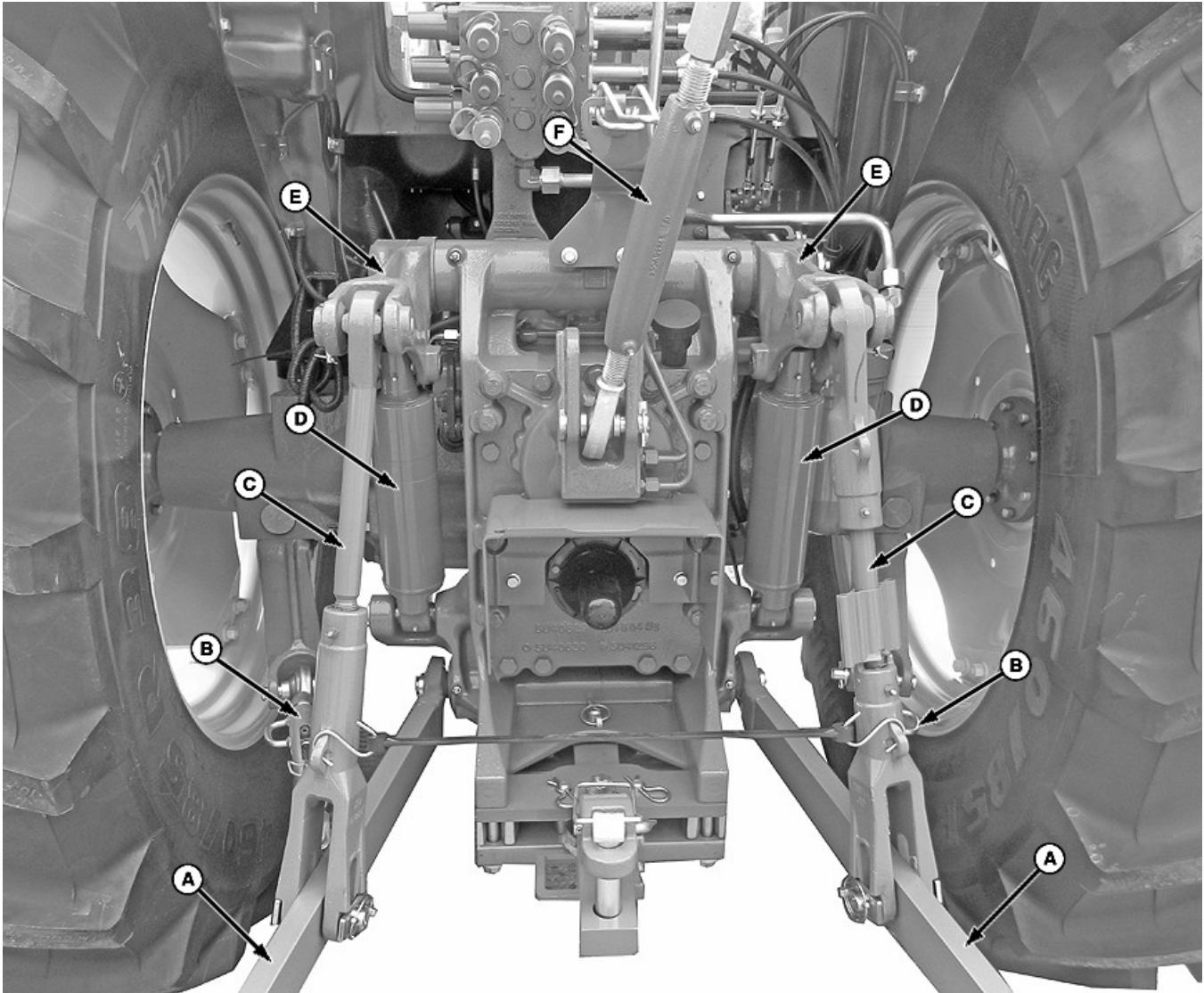
IMPORTANT: To prevent damaging hydraulic pump or relief valve, **DO NOT** exceed 2—3 min warm-up time with steering wheel held in full left or full right turn position.

2. Turn and hold steering wheel in full left or full right turn, for no more than 3 min.

CP00606,0001364-19-10MAY18

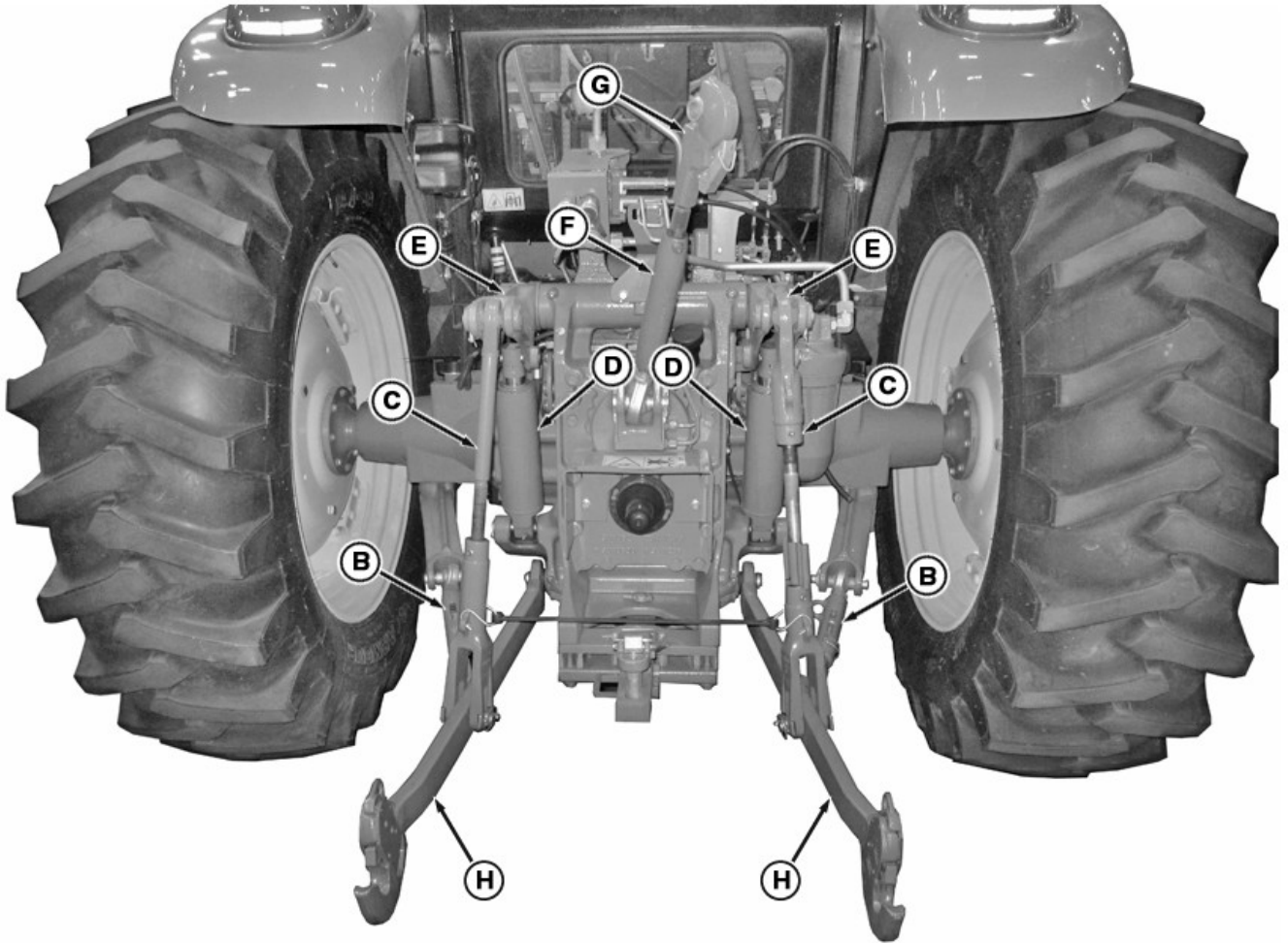
Hitch and Drawbar Operation

3-Point Hitch Components



For 6095B, 6110B, 6120B, 6135B, and 6140B Tractors

CPA0001692—UN—24JUL15



For 6140B Tractor (hook type)

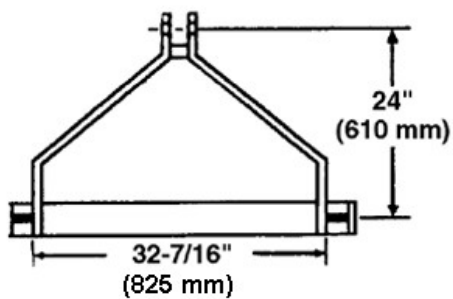
CPA0002933—UN—17JUL16

A—Draft Links (ball type, 2 used)
B—Stabilizer Bars (2 used)
C—Lift Links (2 used)
D—Hitch Cylinders (2 used)

E—Lift Arms (2 used)
F—Center Link
G—Automatic Hook
H—Draft Links (hook type, 2 used)

LG70251,0001926-19-02APR19

Prepare Implement



Implement Mast

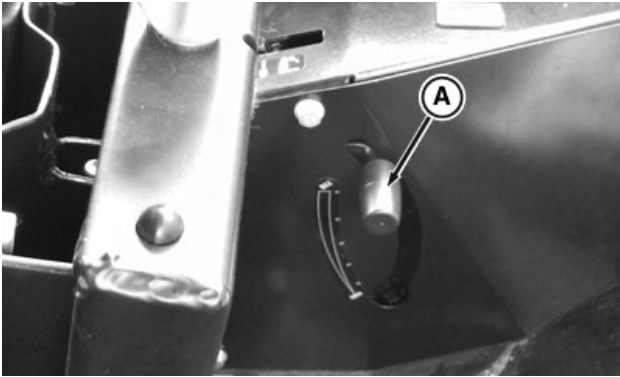
PUC1571—UN—30NOV07

Category II implements should have the top pin hole of the implement mast located 610 mm (24 in) above the lower pin holes. Drill another hole in top mast or extend top mast if necessary.

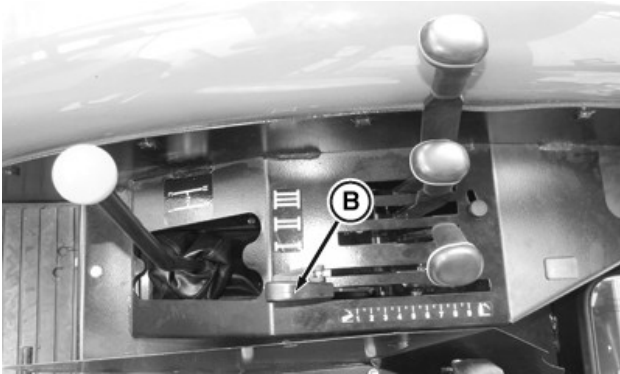
| Mast Height | Width Between Lower Pins | Pin Size | |
|----------------|--------------------------|------------------|----------------|
| | | Lower | Top |
| 610 mm (24 in) | 825 mm (32-7/16 in) | 28 mm (1-1/8 in) | 25.5 mm (1 in) |

N400041,0003559-19-30DEC16

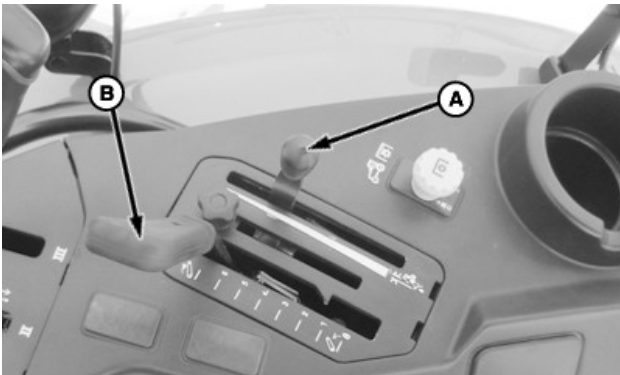
Rockshaft Control Lever



PY16745—UN—20NOV12



PY16746—UN—23NOV12



CPA0007634—UN—17DEC18

Option

A—Draft Control Lever (only for Deere engine)
B—Position Control Lever

The rockshaft is controlled by position control lever (B) and draft control lever (A).

Position control lever (B) raises the hitch when pulled rearward, and lowers the hitch when moved forward. (See Use Rockshaft Position Control in Hitch and Drawbar Operation section.)

Draft control lever (A) controls hitch position relative to draft loads. (See Use Rockshaft Draft Control in Hitch and Drawbar Operation section.)

N400041,00047C7-19-06NOV19

Use Rockshaft Position Control

⚠ CAUTION: To prevent unexpected movement of rockshaft, push draft control lever (A) all the way down before attaching an implement.

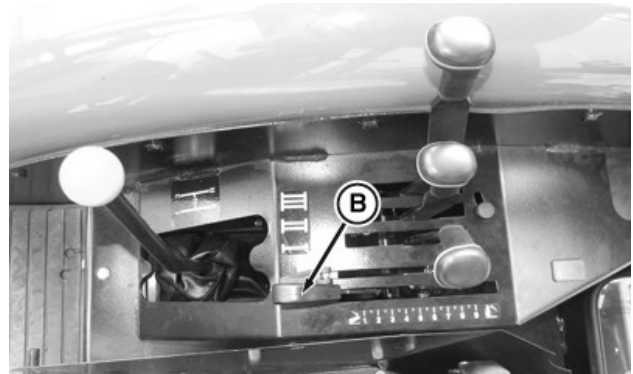


PY16745—UN—20NOV12

On Right-Rear Side of Seat

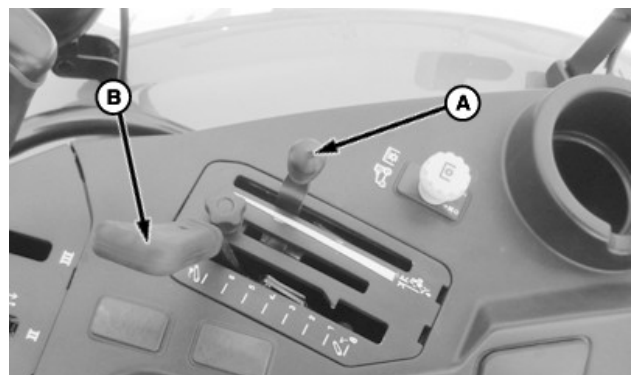
A—Draft Control Lever

Push draft control lever (A) all the way down when you do not want rockshaft to adjust automatically to draft load, such as when attaching implement to tractor.



PY16746—UN—23NOV12

On Right-Hand Side



CPA0007634—UN—17DEC18

Option



P9043—UN—01AUG00

A—Draft Control Lever
B—Position Control Lever

Use position control lever (B) to control hitch movement and depth. Position control should be used for the following applications:

For **CONSTANT DEPTH** USE of implements on level terrain and for implements that do not engage the ground, such as spreaders or sprayers, place position control lever (B) at depth desired.

When **TRANSPORT** of implements and end of field turnaround, position control lever (B) should be moved fully rearward.

FLOAT OPERATION for implements with skids or depth gauge wheels designed to carry full implement weight. Push position control lever (B) all the way forward and draft control lever (A) all the way down so implement can follow the ground contour.

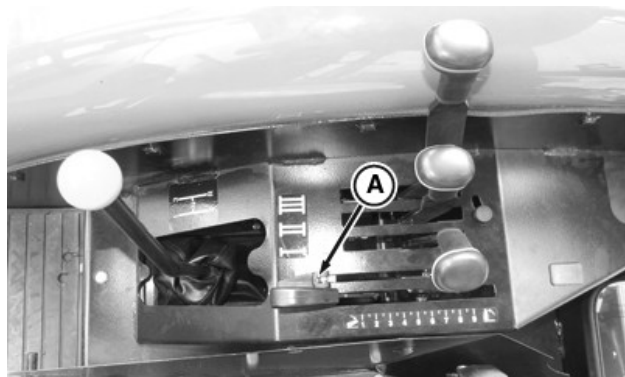
NOTE: Lift links can be adjusted for the implement float. (See Adjust Implement Float in Hitch and Drawbar Operation section.)

N400041,00047C8-19-06NOV19

Set Position Control Lever Stop

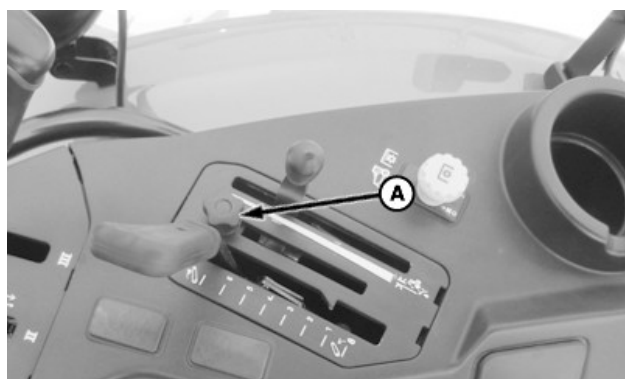
NOTE: Position control lever stop (A) is used when operating depth or height needs to be repeated often.

1. Operate implement for a few minutes to determine proper depth or height.



PY16747—UN—23NOV12

Position Control Lever Stop



CPA0007635—UN—17DEC18

Option

A—Position Control Lever Stop

2. Raise lever stop (A), and slide against position control lever. Lock stop in position by pressing lever down. Rockshaft will now lower to same position each time control lever is pushed forward to the stop.

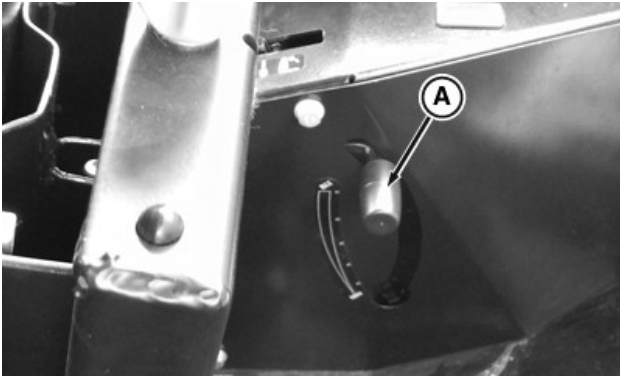
N400041,00047C9-19-06NOV19

Use Rockshaft Draft Control

The rockshaft is equipped with variable draft control system.

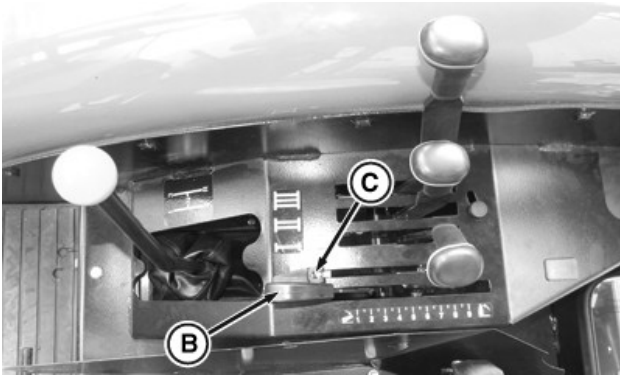
Use draft load sensing when one of the following conditions apply:

- Operating with a fully mounted implement in uneven terrain. The implement will rise and lower to follow the ground contours while maintaining a nearly constant depth.
- Operating in varying soil conditions. The implement is raised slightly to get through tough spots so you do not have to shift to a lower gear.



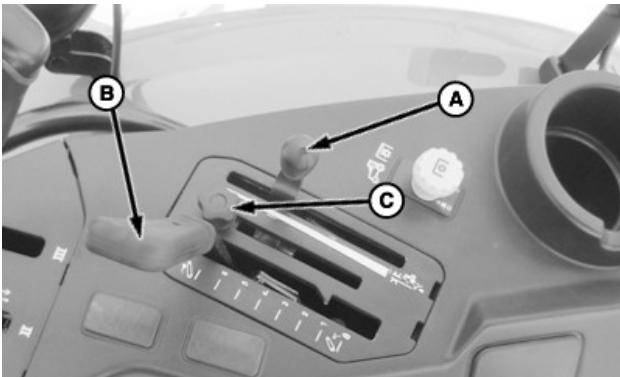
PY16745—UN—20NOV12

On Right-Rear Side of Seat



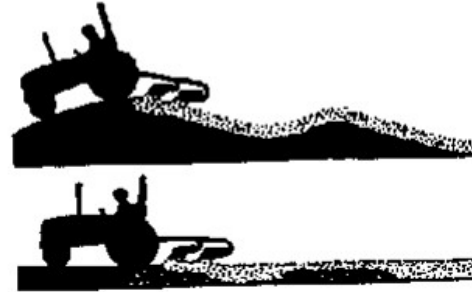
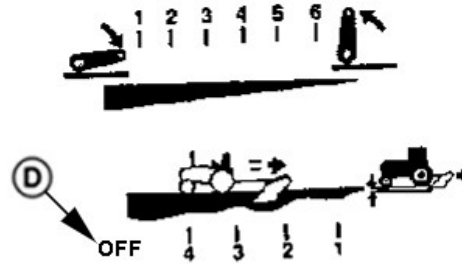
PY16748—UN—23NOV12

On Right-Hand Side



CPA0007636—UN—17DEC18

Option



PUC1186—UN—05DEC07

- A—Draft Control Lever
- B—Position Control Lever
- C—Position Control Lever Stop
- D—Draft Sensing Off Position

Draft control lever (A) controls amount of load required before hitch responds. With knob placed all the way down, there is no draft sensing. Pulling the knob up increases the amount of draft load required to override the position set by position control lever (B) and to raise the rockshaft.

For draft load sensing operation:

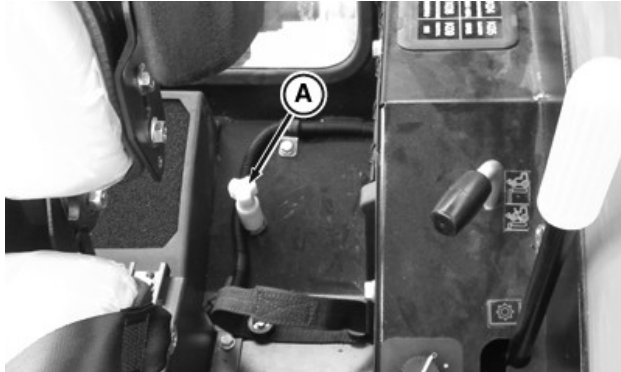
- Initially, place position control lever (B) in its fully forward position and draft control lever (A) in the lowest (least draft) position.
- With tractor moving, pull position control lever (B) backward to set implement operating depth. Set position control lever stop (C) so control lever can be brought back to the same exact position. When the tractor begins to slip, pull draft control lever (A) upward until desired draft sensing level is obtained.
- Position control lever (B) can also be raised slightly to override the draft control setting, in order to help get through slippery spots without getting stuck.
- Position control lever (B) can be moved fully rearward to raise the hitch at the end of the field.

N400041,00047CA-19-06NOV19

Adjust Rockshaft Rate-of-Drop

CAUTION: Excessive rate-of-drop may cause damage to equipment or injury to machine operator. Fully lowering implement should require at least 2 sec.

Rockshaft drops faster when a heavy implement is attached. Adjust rate-of-drop knob so that it is slow enough to be safe and prevent implement damage.



PY16749—UN—23NOV12
On Left-Rear Side of Seat

A—Rate-of-Drop Knob

Rockshaft rate-of-drop knob (A) is located behind the seat. Turn knob clockwise to slow rockshaft drop, and counterclockwise to speed up rate-of-drop.

To lock rockshaft in position, turn knob (A) clockwise to the stop.

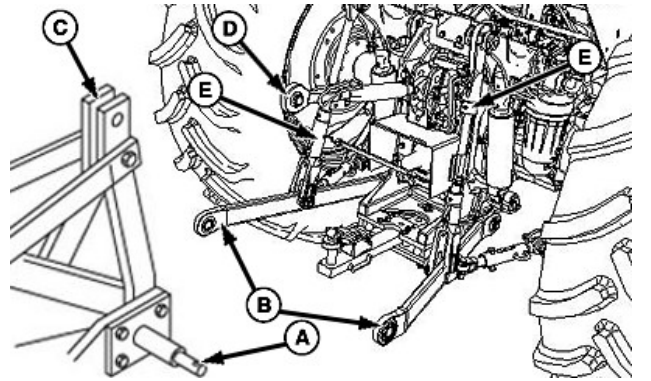
To unlock rockshaft, turn knob (A) counterclockwise and reset rate of drop per instructions above.

CP00606,0001368-19-25APR18

Attach Implements to 3-Point Hitch

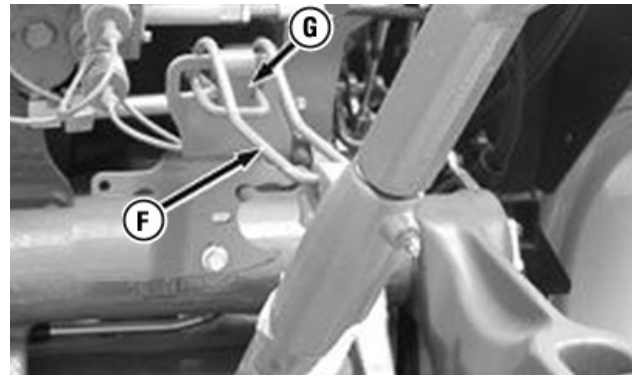
CAUTION: Prevent unexpected movement of rockshaft by placing draft sensing knob all the way down before attaching implement to hitch.

1. Be sure that drawbar will not interfere. If necessary, move drawbar forward or remove it. Check for any other potential interference.
2. Back tractor up to implement so hitch points align. Place gear shift lever in neutral, "N". Lock and depress brake pedals, and pull up parking brake lever.
3. Pull down hand throttle all the way and allow engine to idle for 1—2 min , then turn engine off.

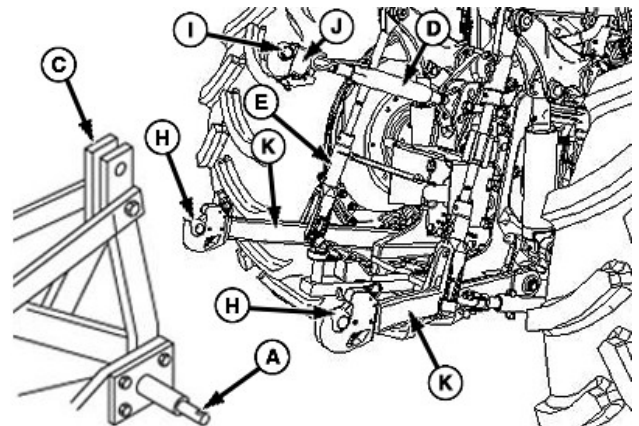


CPA0001731—UN—29JUL15

For Ball Type



CPA0001119—UN—10NOV14



CPA0001687—UN—20AUG15

For Hook Type

- A—Implement Hitch Pin (2 used)
- B—Draft Link (ball type, 2 used)
- C—Implement Top Mast
- D—Center Link
- E—Lift Links (2 used)
- F—Center Link Locking Clip
- G—Tab
- H—Balls (2 used)
- I—Ball
- J—Automatic Hook
- K—Draft Links (hook type, 2 used)

NOTE: For hook type, balls (H and I) should not be on draft links (K) and automatic hook (J) when not using implement, should be assembled with implement.

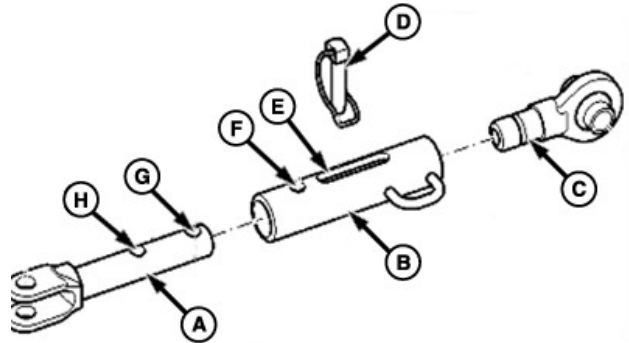
Slip draft links (B or K) over implement hitch pins (A) on both sides and retain with locking pins.

NOTE: Locking pins can be stored on draft links through holes in sway chain ears when not in use.

5. To remove center link (D) from transport hook, lift center link locking clip (F) and rotate tab (G) to rear of clip.
6. Attach center link (D) or automatic hook (J) to implement top mast (C). Retain with pin and locking pin.
7. Adjust center link (D) and lift links (E) as necessary. (See Leveling Hitch in Hitch and Drawbar Operation section.)

CAUTION: To avoid bodily injury or machine damage whenever an implement, implement quick coupler, or other attachment is connected to the 3-Point Hitch, check full range of operation for interference, binding or PTO separation.

Adjust Stabilizer Bar



CPA0003521—UN—27MAR17



CPA0003520—UN—27MAR17



CPA0003523—UN—27MAR17

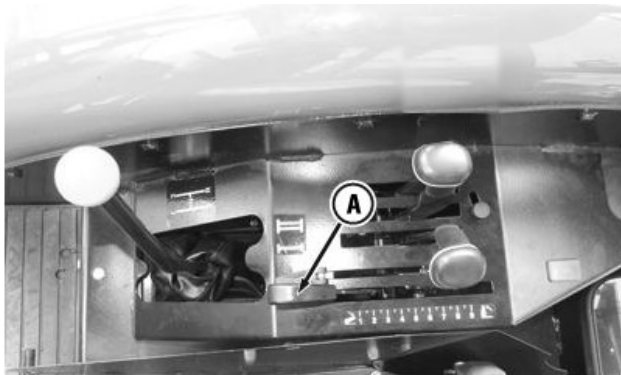
Position 1



CPA0003524—UN—27MAR17

Position 2

A—Rod



CPA0001118—UN—10NOV14

Position Control Lever



CPA0007638—UN—17DEC18

Option

A—Position Control Lever

8. Using rockshaft position control lever (A), lower or raise implement slowly and check for any interference.

N400041,00047CB-19-06NOV19

B—Adjuster
C—Threaded Rod
D—Lock Pin
E—Adjust Hole E
F—Adjust Hole F
G—Adjust Hole G
H—Adjust Hole H
I—Dimension of Bare Thread of Threaded Rod

The stabilizer bars are used to adjust the lateral sway of implements (draft links). Adjust length of stabilizer bars by routing stabilizer adjuster (B). Insert lock pin (D) into adjust holes (F and H) to set as position 1, then the stabilizer bar cannot sway. Insert lock pin into adjust holes (E and G) to set as position 2, then the stabilizer bar can sway in a certain range.

Select position 1 or position 2 on basis of work condition. Recommend setting as position 1 when road travel, or equips with rotary cultivator or hay mower. Recommend setting as position 2 when equips with plough or harrow, tractor will perform better performance.

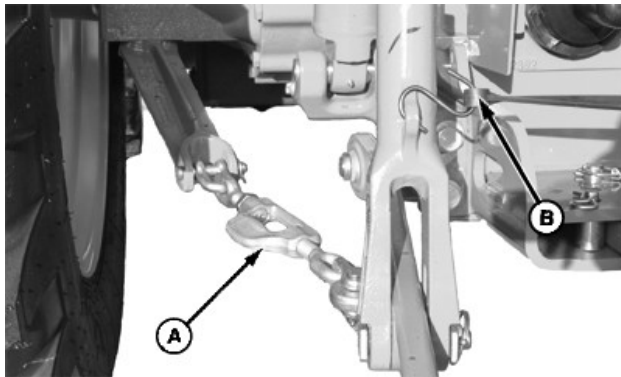
Recommended adjustment method:

- Try to adjust dimension of bare thread of threaded rod (I) to 25 mm (0.98 in) by adjusting adjuster when equips with implement of category II.
- Try to adjust dimension of bare thread of threaded rod (I) to 0 mm (0 in) by adjusting adjuster when equips wider implement.

N400041,0003720-19-21APR17

Adjust Sway Chains (If Equipped)

NOTE: Check implement operator's manual for instructions on the permission of side sway.



A—Sway chain strainer (2 used)
B—Strap

Take up chain slack with the sway chain strainer (A) as needed.

IMPORTANT: DO NOT shorten chains too short which prevents the hitch raises completely. Hydraulic relief valve opens if the chain prevents hitch from rising, causing excessive oil heating and pump or equipment damage.

NOTE: Use strap (B) to keep draft links clear of rear tires when draft links are not attached to implement.

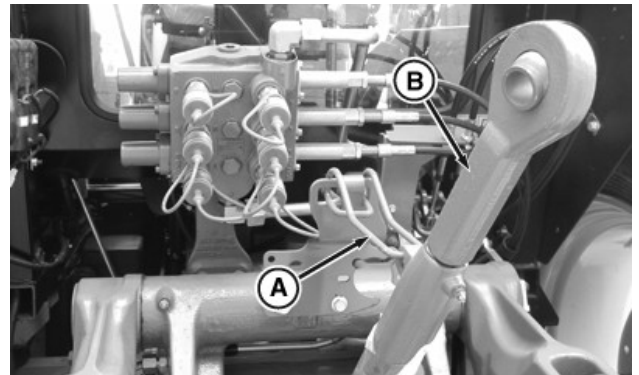
CO00263,0000A13-19-26JAN18

Leveling Hitch

1. Lower implement to take weight off hitch.

IMPORTANT: DO NOT attempt to extend center link beyond limits of locking clip or to raise lift links past the stops. Link body threads could be damaged.

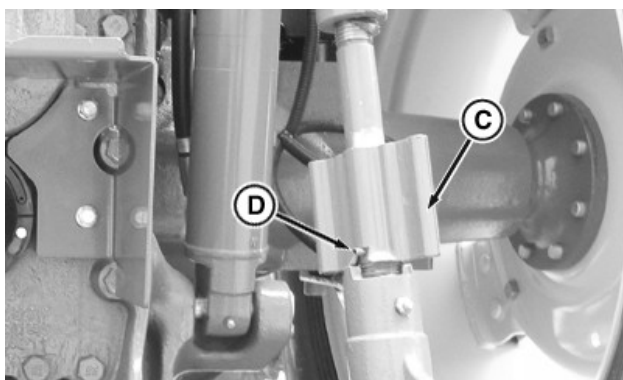
NOTE: Maximum adjustment range of the center link can only be obtained if the ends are positioned equally within the body when attached to an implement.



PY16754—UN—23NOV12

A—Locking Clip
B—Center Link Body

2. Adjust center link to level implement front-to-rear. Unlatch locking clip (A). Rotate center link body (B) clockwise to lengthen center link or counterclockwise to shorten it. Minimum length is 655 mm (25.8 in) and maximum length, 800 mm (31.5 in). Be sure to latch the locking clip (A) again after every adjustment.



PY16755—UN—23NOV12

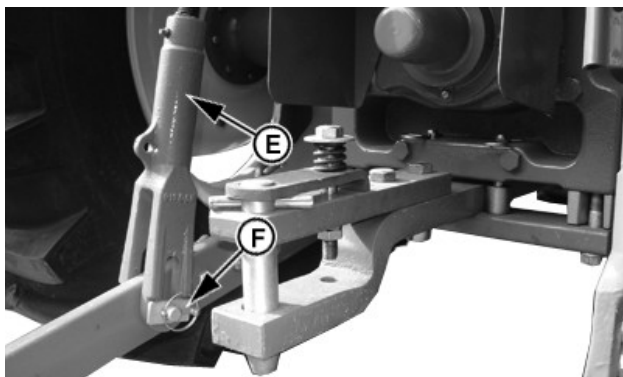
C—Locking Handle
D—Pin

- Adjust right-hand lift link to level implement side-to-side. Lift locking handle (C) and turn 1/4 turn to engage slot onto roll pin (D) in center portion of lift link.

Turn locking handle (C) clockwise to raise draft link.

Turn locking handle (C) counterclockwise to lower draft link.

After adjustment, lift handle and turn it to engage slot onto lower body and to prevent change of adjustment during operation.



PUC2479—UN—05OCT09

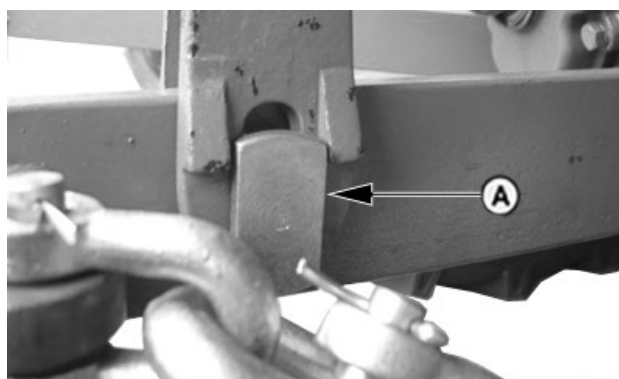
E—Lower End Assembly
F—Lower Link Pin

- The left-hand lift link is also adjustable in length. To change length, remove lower link pin (F) and rotate lower end assembly (E) clockwise to shorten, or counterclockwise to lengthen. Then reinstall pin and locking pin.

Adjust left- and right-hand lift links to accommodate various tire sizes or implement heights. For greatest range of up and down hitch motion, set lift links so that when fully lowered, draft link balls are approximately 178 mm (7 in) off the ground.

CP00606,0001369-19-27APR18

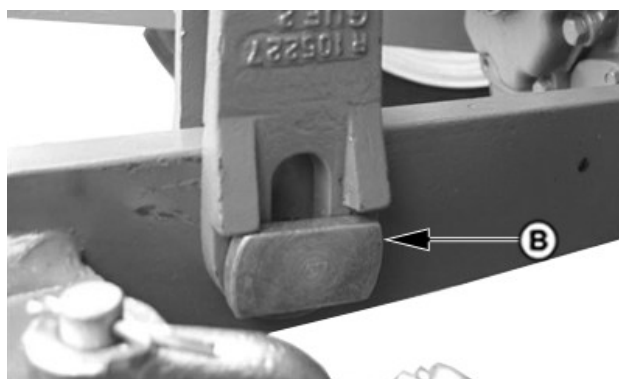
Adjust Implement Float



PUC1157—UN—10OCT07

A—Pin in Vertical (Float) Position

To allow the draft link to raise slightly as implement follows ground contour, place head of pin and rectangular washer in vertical position (A).



PUC1156—UN—10OCT07

B—Pin in Horizontal (Rigid) Position

To hold implement rigid, place head of pin and rectangular washer in horizontal position (B).

Use lift arm pins in the vertical (float) position for hitch-mounted implements such as a cultivator or mower, equipped with ground gauging skids or wheels which may cause the implement to twist relative to the tractor.

Use lift arm pins in the horizontal (rigid) position for implements such as plows and ground engaging implements that should not twist relative to the tractor.

CP00606,000136A-19-27APR18

Observe Drawbar Load Limitations

IMPORTANT: Certain heavy equipment, such as a loaded single-axle trailer, can place excessive strain on drawbar. Strain is greatly increased by speed and rough ground.

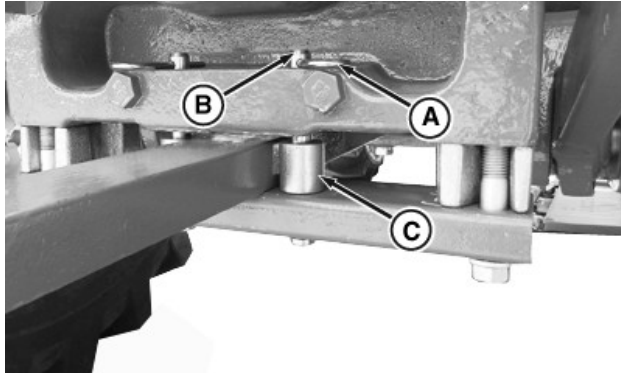
Static vertical load on drawbar should not exceed specification.

Drive slowly with heavy loads.

Specification

| | |
|--------------------------------|-------------------|
| Static Vertical Load, Short | |
| Position—Capacity. | 1900 kg (4189 lb) |
| Static Vertical Load, Extended | |
| Position—Capacity. | 1200 kg (2640 lb) |
| LG70251,0001450-19-03SEP18 | |

Use Swinging Drawbar



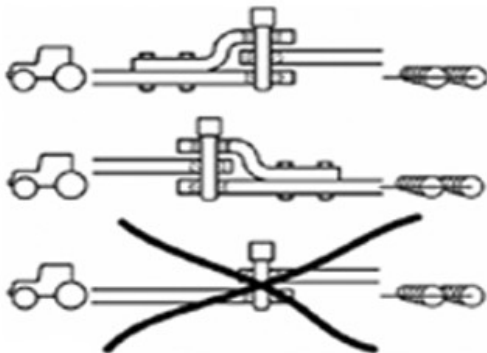
A—Clip
B—Retaining Pin
C—Spacer

PY17091—UN—09OCT12

To allow drawbar to swing sideways, pull clip (A) on retaining pin (B). Pull retaining pin (B) down and remove spacer (C). If full swing of drawbar is needed, remove opposite side pin and spacer.

MD66105,00000B2-19-09OCT12

Proper Use of Drawbar

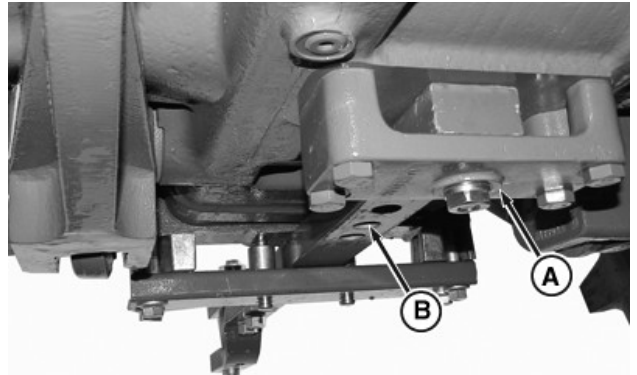


PUC1443—UN—24OCT07

IMPORTANT: Comply with local traffic regulations when using the drawbar. Use suitable, approved hitch pins only. Combine drawbars as shown only.

JB06590,0000884-19-24NOV08

Adjust Drawbar Length



PY17063—UN—05OCT12

A—Retaining Pin and Nut
B—Extended Position Hole

Loosen and remove drawbar retaining pin and nut (A). Select desired position and install retaining pin and nut. Tighten to specifications.

Specification

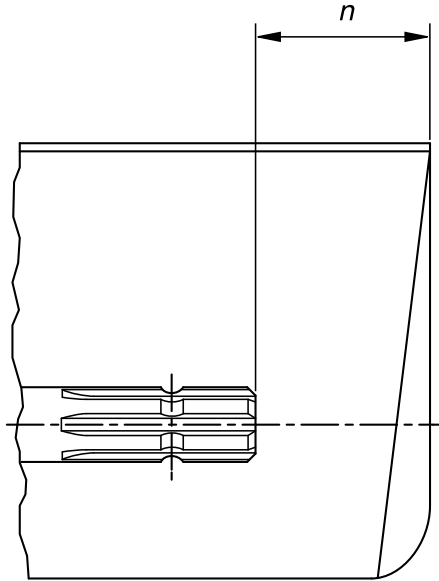
| | |
|-----------------------|---------------------|
| Drawbar Retaining Pin | |
| Nut—Torque. | 410 N·m (300 lb·ft) |

N400041,000355B-19-30DEC16

Stay Clear of Rotating Drivelines



TS1644—UN—22AUG95



H96219—UN—29APR10

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Wear close fitting clothing. Stop the engine and be sure that PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.

Do not install any adapter device between the tractor and the primary implement PTO driveshaft that will allow a 1000 rpm tractor shaft to power a 540 rpm implement at speeds higher than 540 rpm.

Do not install any adapter device that results in a portion of the rotating implement shaft, tractor shaft, or the adapter to be unguarded. The tractor master shield shall overlap the end of the splined shaft and the added adaptor device as outlined in the table.

| PTO Type | Diameter | Splines | $n \pm 5 \text{ mm (0.20 in)}$ |
|----------|------------------|---------|--------------------------------|
| 1 | 35 mm (1.378 in) | 6 | 85 mm (3.35 in) |
| 2 | 35 mm (1.378 in) | 21 | 85 mm (3.35 in) |

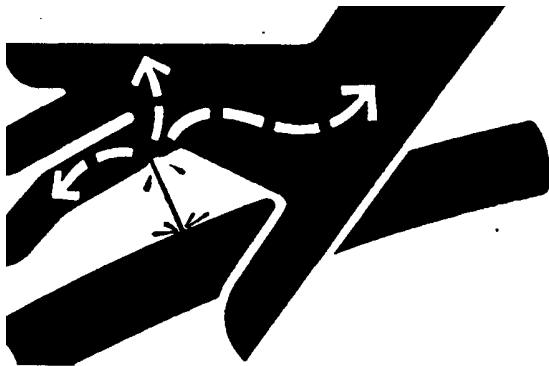
N400041,000355C-19-14FEB17

Selective Control Valve Operation

Connect Cylinder Hoses

⚠ 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 placed under connections. Protect hands and body from high pressure fluids.

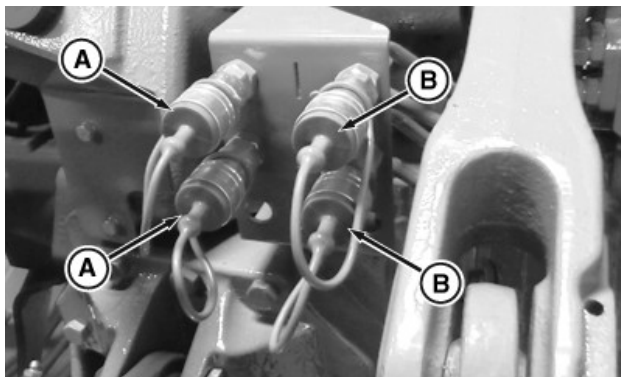
If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours, or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere and Company Medical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



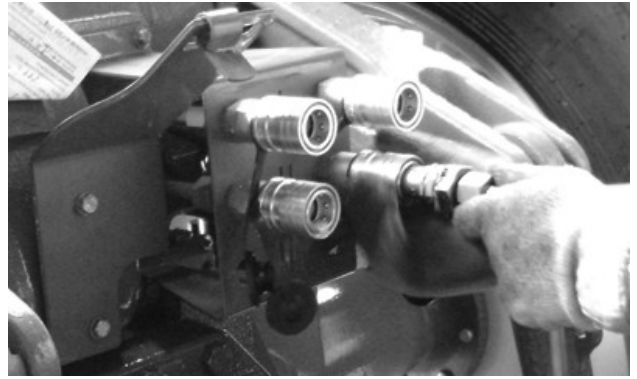
X9811—UN—23AUG88

IMPORTANT: Hydraulic hoses can fail due to physical damage, kinks, age and exposure to the elements. Check hoses regularly. Replace damaged hoses.

1. Remove dust cups (if equipped) from hose ends.
2. Pull dust plugs from couplers.
3. Make sure hose ends and coupler receptacles are clean and dry.



PY17062—UN—05OCT12



PUC2482—UN—06OCT09

A—Supply Hose Couplers
B—Return Hose Couplers

4. Right-hand side couplers (B) receive cylinder return hose.
5. Left-hand side couplers (A) receive cylinder supply hose.
6. To connect each hose, push the coupler sleeve forward and push hose tip firmly into coupler receptacle. Release the sleeve and pull lightly on hose to make sure positive connection was made.

⚠ CAUTION: Hoses that have been reversed when connecting pose a serious hazard. If SCV lever is pushed all the way forward to float or regenerate position, implement would drop suddenly, potentially causing serious injury or death. Therefore, never attempt to use float or regenerate position before you have performed the following verification step.

7. To make sure hoses have been connected to correct receptacle, pull SCV I lever slightly back of center. This should raise implement. If implement lowers instead of rising, hoses are reversed and need to be connected correctly.

CP00606,00013CC-19-10MAY18

Disconnect Cylinder Hoses



X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Relieve hydraulic pressure by moving the control lever/joystick through all the positions. 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 should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.

IMPORTANT: When disconnecting hoses, always grasp metal tip, never the hose itself. Pulling on the hose instead of the tip will eventually damage hose.

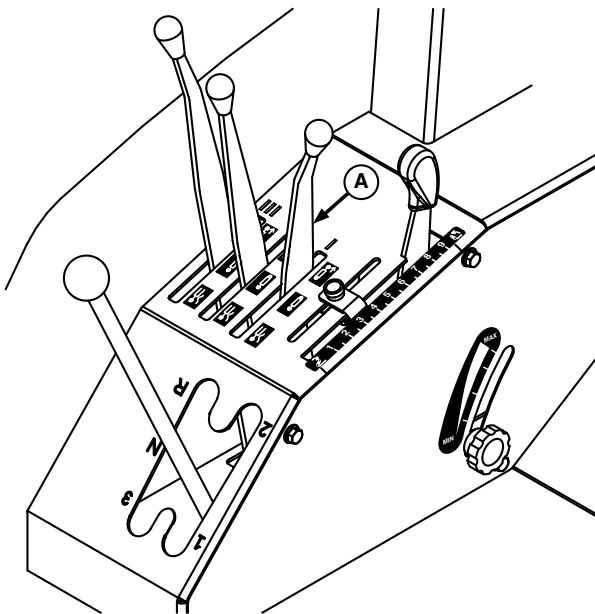
To disconnect hoses, push the coupler sleeve forward, grasp hose tip and give a firm pull.

CP00606,00013CD-19-10MAY18

Reconnect Hoses Under Pressure

If hoses pull from tractor accidentally during use, clean hose tips and coupler receptacles before proceeding to reconnect. Then use following procedure:

IMPORTANT: Implement must be raised slightly to reset coupler check valves, before it can be lowered.



PUC2484—UN—06OCT09



CPA0008171—UN—29MAR19

Option

A—SCV Lever

1. Raise any attached implement slightly by pulling back SCV lever (A).
2. Push SCV lever (A) forward to lower implement and relieve line pressure.
3. Reconnect hoses as directed in Connect Cylinder Hoses in this section. Be sure to observe steps to connect each hose to correct coupler, and to verify correct connection.

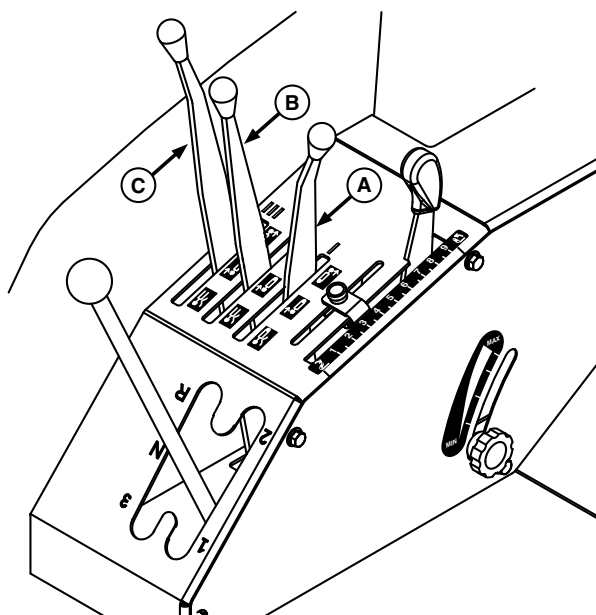
N400041,00047CC-19-06NOV19

Use Correct Hose Tips

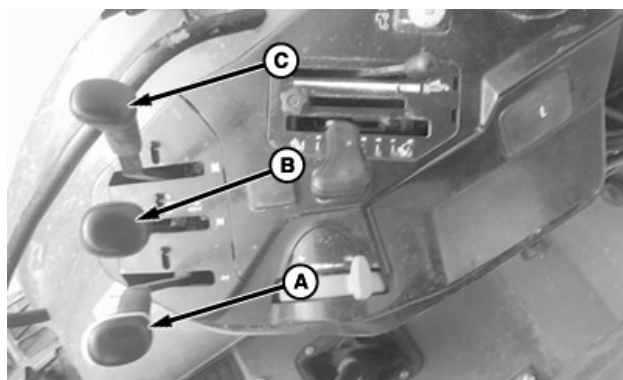
Tractors are equipped with selective control valves (SCV). The coupler receptacles accept a standard hose tip as recommended by ISO and SAE. Adapters to allow connecting older John Deere hose tips to the ISO couplers in your tractor are available from your John Deere dealer.

SK35149,000095A-19-02JAN13

SCV Control Levers and Couplers

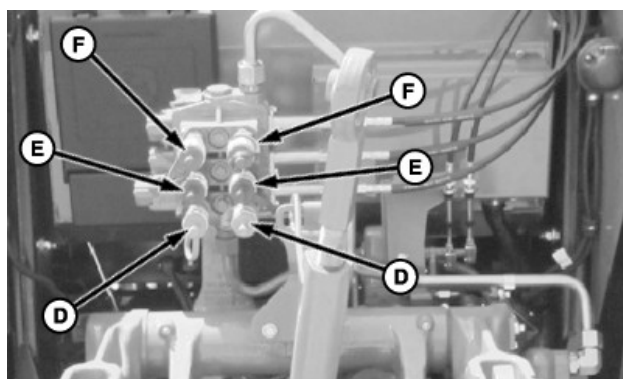


PUC2483—UN—06OCT09



CPA0007642—UN—17DEC18

Option



CPA0007643—UN—17DEC18

SCV Coupler (three sets shown, two sets is similar)

- A—SCV I Lever
- B—SCV II Lever
- C—SCV III Lever
- D—SCV I Couplers
- E—SCV II Couplers
- F—SCV III Couplers

NOTE: Floating mark on SCV lever not represent function of floating SCV will be have.

SCV levers control oil flow to hydraulic hose couplers at the rear of the tractor.

SCV I Lever (A) operates couplers (D).

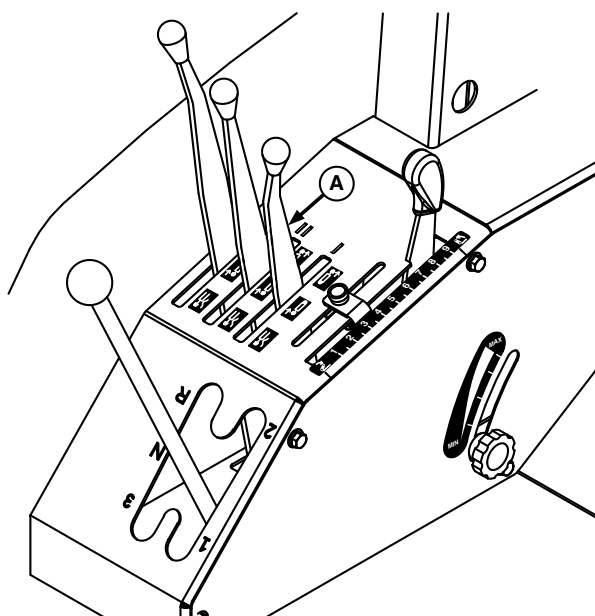
SCV II Lever (B) operates couplers (E).

SCV III Lever (C) operates couplers (F).

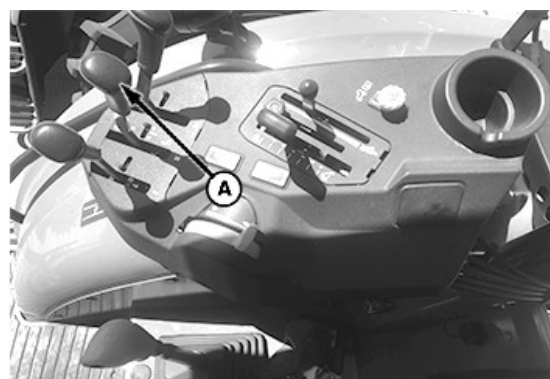
N400041,00047CD-19-06NOV19

Operate SCV Control Levers

Neutral Lever Position



PUC2485—UN—06OCT09



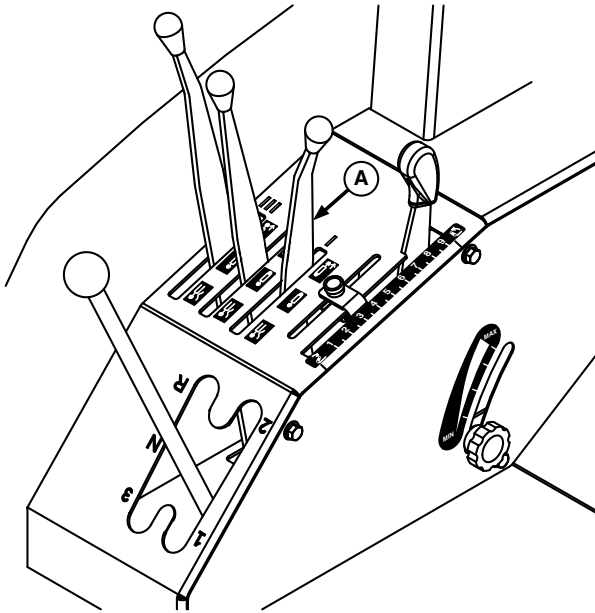
CPA0008368—UN—15MAY19

Option

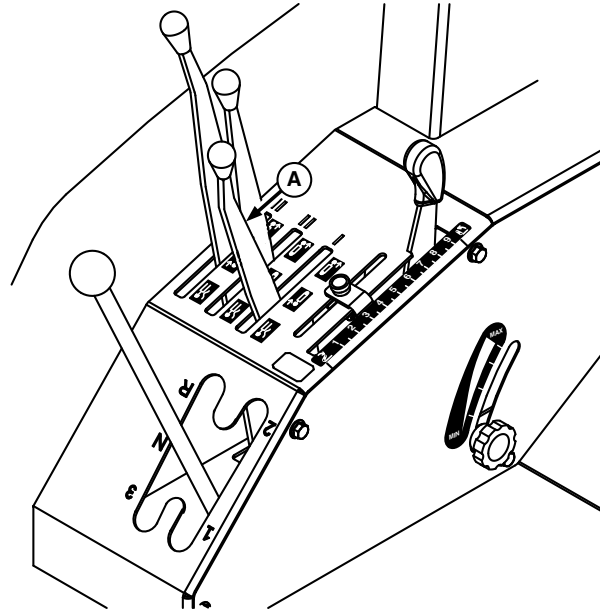
A—SCV Lever (cylinder neutral position)

Spring pressure returns lever to neutral position (unless lever is fully forward, in the “float” position). When lever is centered, the cylinder is hydraulically locked in neutral position.

Extend Cylinder



PUC2484—UN—06OCT09

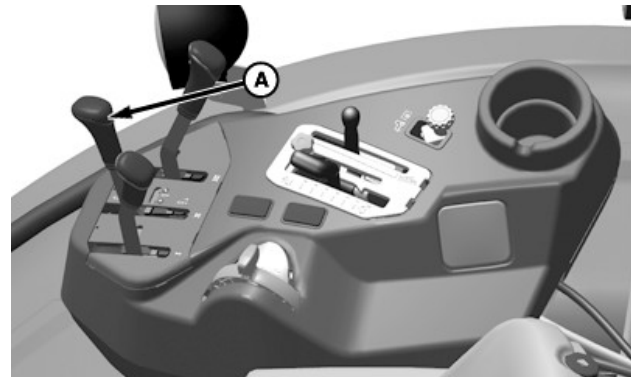


PUC2486—UN—06OCT09



CPA0007646—UN—17DEC18

Option



CPA0007647—UN—17DEC18

Option

A—SCV Lever (cylinder extend position)

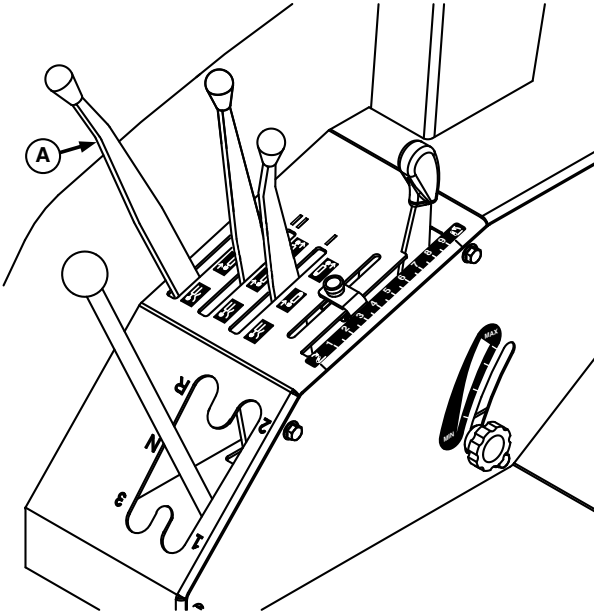
Pull lever slightly to rear of neutral and hold it against spring pressure. This extends cylinder connected to SCV coupler and normally raises implement. Lever returns to neutral when released. When cylinder piston protrudes, oil supply port is connected to SCV quick coupler (supply coupler) for raising implement.

Retract Cylinder

A—SCV Lever (cylinder retract position)

Push lever slightly forward of neutral and hold it against spring pressure. This retracts cylinder connected to SCV couplers and normally lowers implement. Lever returns to neutral when released. When cylinder piston retracts, oil return port is connected to SCV quick coupler for descending the implement.

Cylinder Float Position



PUC2488—UN—06OCT09



CPA0007648—UN—17DEC18

Option

A—SCV Lever (cylinder float position)

Push lever all the way forward, past detent. The detent will keep lever from going back to neutral position, until operator pulls lever back. When lever is in this position, known as “float”, cylinder pressure will allow attached implement to follow ground contour automatically without input from the operator. Cylinder float position is only available in tractors equipped with three SCV.

N400041,00047CE-19-06NOV19

| | Double SCV (Option 1) | Double SCV (Option 2) | Triple SCV |
|-------------|--------------------------|--------------------------|---------------------|
| Spool # III | N/A | N/A | Without Floating |

Besides functions indicated in above table, each valve has raise, descend, and neutral functions.

LG70251,00017E9-19-02JAN19

Match Tractor Power to Implement

IMPORTANT: Tractor power should be matched to the size of certain implements. Excessive power can damage an implement, and too large an implement can damage the tractor. (Refer to your implement operator's manual for minimum and maximum power requirements before attaching an implement.)

JB06590,000087A-19-24NOV08

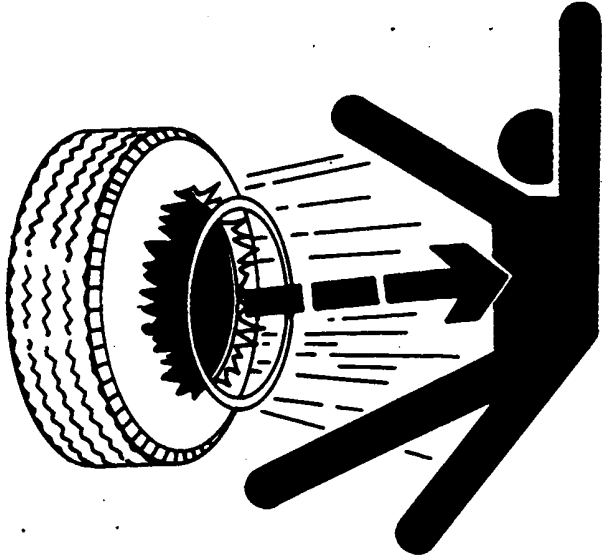
SCV Selection Table

Table below indicates SCV operating options, depending on whether tractor is equipped with one, two or three SCV spools.

| | Double SCV (Option 1) | Double SCV (Option 2) | Triple SCV |
|------------|--------------------------|--------------------------|---------------------|
| Spool # I | Without Floating | With Floating | With Floating |
| Spool # II | Without Floating | With Floating | Without Floating |

Wheels and Tires Operation

Service Tires Safely



TS211—UN—15APR13

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.

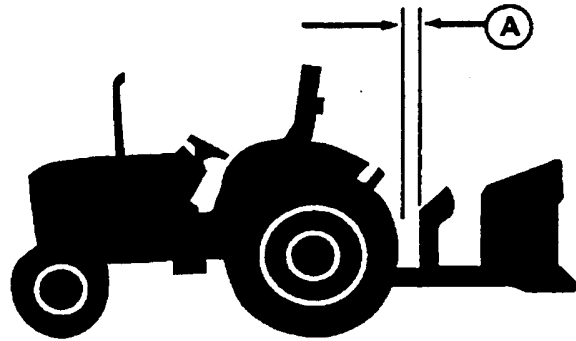
Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

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

DX,RIM1-19-27OCT08

Check Implement-to-Tire Clearance



M47177—UN—31JAN92

A—Clearance

IMPORTANT: Check for adequate clearance (A) between outside diameter of the tire and implement with hitch in raised position.

When large diameter rear tires are installed on a tractor with a 3-point hitch, a quick coupler or similar device may be required to provide adequate implement-to-tire clearance.

MX,WTIP,AA1-19-21APR94

Tire Pressures

Long life and satisfactory performance of the tires depend on proper tire inflation. Under-inflation of tires leads to rapid wear. Over-inflated tires reduce traction and increase wheel slippage.

Since correct tire pressures depend not only on working conditions and load but also on the tractor model, tire size and manufacturer. We recommend that you approach your John Deere dealer or tire company for advice.

CO00263,00004EA-19-29SEP17

Tire Inflation Pressure Guidelines

Check tire inflation pressure while tires are cool, using an accurate dial or stick-type gauge having 10 kPa (0.1 bar) (1 psi) graduations.

NOTE: Use a special air-water gauge and measure with the valve stem at bottom, if tires contain liquid ballast.

Correctly inflated radial tires show a deflection of the sidewall. This phenomenon is normal and does not harm the tire.

Inflation pressures less than 83 kPa (0.8 bar) (12 psi) must be monitored frequently because of the increased risk of low-pressure leaks.

NOTE: *Bead-slip can be experienced in high-traction conditions when using single tires. Increasing inflation pressure is helpful, but reduces the traction.*

Maximum tire pressure is specified on the tire sidewall.

Determine correct tire pressure

Integral implements transfer significant weight to the rear axle. Always include this weight when determining correct inflation pressures. Weigh the tractor as described followings can determine the correct tire pressure:

- **Rear Mounted Implement**

The front axle must be weighed with implement lowered. The rear axle must be weighed with the implement raised.

- **Front Mounted Implement**

The front axle must be weighed with implement raised. The rear axle must be weighed with the implement lowered.

- **Front and Rear Mounted Implement**

Weigh the tractor with front and rear implements both raised.

Set tire inflation pressures according to weight measured. Adjust ballasting and tire inflation pressure when operating conditions change. Use the following inflation tire charts. For tires not found in charts, refer to recommended inflation pressures from manufacturer.

Alter tire inflation pressure

Tractors operating with a loader increase front tire pressures 30 kPa (0.3 bar) (4 psi) above the values listed to compensate for weight transfer.

Tractors operating on the steep side slopes or furrow plowing increase rear tire pressures 30 kPa (0.3 bar) (4 psi) above the values listed for base pressures 80 kPa (0.8 bar) (12 psi) and above to compensate for lateral weight transfer. For base pressures below 80 kPa (0.8 bar) (12 psi), pressure increases by 30%.

Reduce inflation pressure when using towed implements.

Tractors with heavy hitch-mounted implements that require additional front cast-weights to maintain steering stability. In order to carry the increased weight, tractors require increased front and rear tire inflation pressure.

CO00263,00004EB-19-20OCT17

Tire Pressures

| Front Tires | | | |
|-----------------|-----------------|-----------------|-----------------|
| Tire Size | 320/85R24 | 340/85R24 | 380/85R24 |
| Axle Load Index | 122 | 125 | 131 |
| kg (lb) | kPa (bar) (psi) | kPa (bar) (psi) | kPa (bar) (psi) |
| 1814(4000) | 60(0.6)(9) | 60(0.6)(9) | 60(0.6)(9) |
| 2041(4500) | 60(0.6)(9) | 60(0.6)(9) | 60(0.6)(9) |
| 2268(5000) | 85(0.85) (12) | 70(0.7)(10) | 60(0.6)(9) |
| 2495(5500) | 110(1.1)(16) | 85(0.85) (12) | 60(0.6)(9) |
| 2721(6000) | 130(1.3)(19) | 110(1.1)(16) | 70(0.7)(10) |
| 2948(6500) | 160(1.6)(23) | 130(1.3)(19) | 90(0.9)(13) |
| 3180(7000) | — | 150(1.5)(22) | 110(1.1)(16) |
| 3400(7500) | — | 160(1.6)(23) | 120(1.2)(17) |
| 3630(8000) | — | — | 140(1.4)(20) |
| 3860(8500) | — | — | 160(1.6)(23) |

| Rear Tires | | | | |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Tire Size | 420/85R34 | 420/85R38 | 460/85R34 | 460/85R38 |
| Axle Load Index | 142 | 144 | 147 | 149 |
| kg (lb) | kPa (bar) (psi) | kPa (bar) (psi) | kPa (bar) (psi) | kPa (bar) (psi) |
| 3400(7500) | 60(0.6)(9) | 60(0.6)(9) | 60(0.6)(9) | 60(0.6)(9) |
| 3630(8000) | 70(0.7)(10) | 60(0.6)(9) | 60(0.6)(9) | 60(0.6)(9) |
| 3860(8500) | 80(0.8)(12) | 60(0.6)(9) | 60(0.6)(9) | 60(0.6)(9) |
| 4080(9000) | 90(0.9)(13) | 80(0.8)(12) | 60(0.6)(9) | 60(0.6)(9) |
| 4310(9500) | 110(1.1)(16) | 90(0.9)(13) | 70(0.7)(10) | 60(0.6)(9) |

| Rear Tires | | | | |
|-----------------|-----------------|-----------------|------------------|-----------------|
| Tire Size | 420/85R34 | 420/85R38 | 460/85R34 | 460/85R38 |
| Axle Load Index | 142 | 144 | 147 | 149 |
| kg (lb) | kPa (bar) (psi) | kPa (bar) (psi) | kPa (bar) (psi) | kPa (bar) (psi) |
| 4540(10000) | 120(1.2)(17) | 100(1.0)(15) | 85 (0.85) (12) | 70(0.7)(10) |
| 4760(10500) | 130(1.3)(19) | 115(1.15)(17) | 90(0.9)(13) | 80(0.8)(12) |
| 4990(11000) | 140(1.4)(20) | 125(1.25)(18) | 105(1.05)(15) | 90(0.9)(13) |
| 5220(11500) | 150(1.5)(22) | 140(1.4)(20) | 115(1.15)(17) | 100(1.0)(15) |
| 5440(12000) | 160(1.6)(23) | 150(1.5)(22) | 125(1.25)(18) | 110(1.1)(16) |
| 5670(12500) | — | 160(1.6)(23) | 140(1.4)(20) | 120(1.2)(17) |
| 5900(13000) | — | — | 150(1.5)(22) | 130(1.3)(19) |
| 6120(13500) | — | — | 160(1.6)(23) | 140(1.4)(20) |
| 6350(14000) | — | — | — | 150(1.5)(22) |
| 6580(14500) | — | — | — | 160(1.6)(23) |

CP00606,000136D-19-26APR18

Tire Combinations—MFWD

Chart shows combinations of front and rear tires in an MFWD system:

| Front/Rear Tire Size | 6095B | 6110B | 6120B | 6135B | 6140B |
|------------------------|----------|----------|----------|----------|----------|
| 320/85R24 420/85R34 | Standard | N/A | N/A | N/A | N/A |
| 340/85R24 460/85R34 | N/A | Standard | N/A | N/A | N/A |
| 380/85R24 460/85R38 | N/A | N/A | Standard | Standard | Standard |
| 380/85R24 420/85R38 | N/A | Optional | N/A | Optional | N/A |

JL31334,00011AD-19-20JUL17

Calculate Tire Combination

To fully exploit the advantages of 4 wheels drive and to avoid premature wear of transmission and tires, the peripheral speed of the front axle must be higher than the rear. The "MECHANICAL LEAD" (L) is the percentage relative ratio between the peripheral speeds of the front and rear tires.

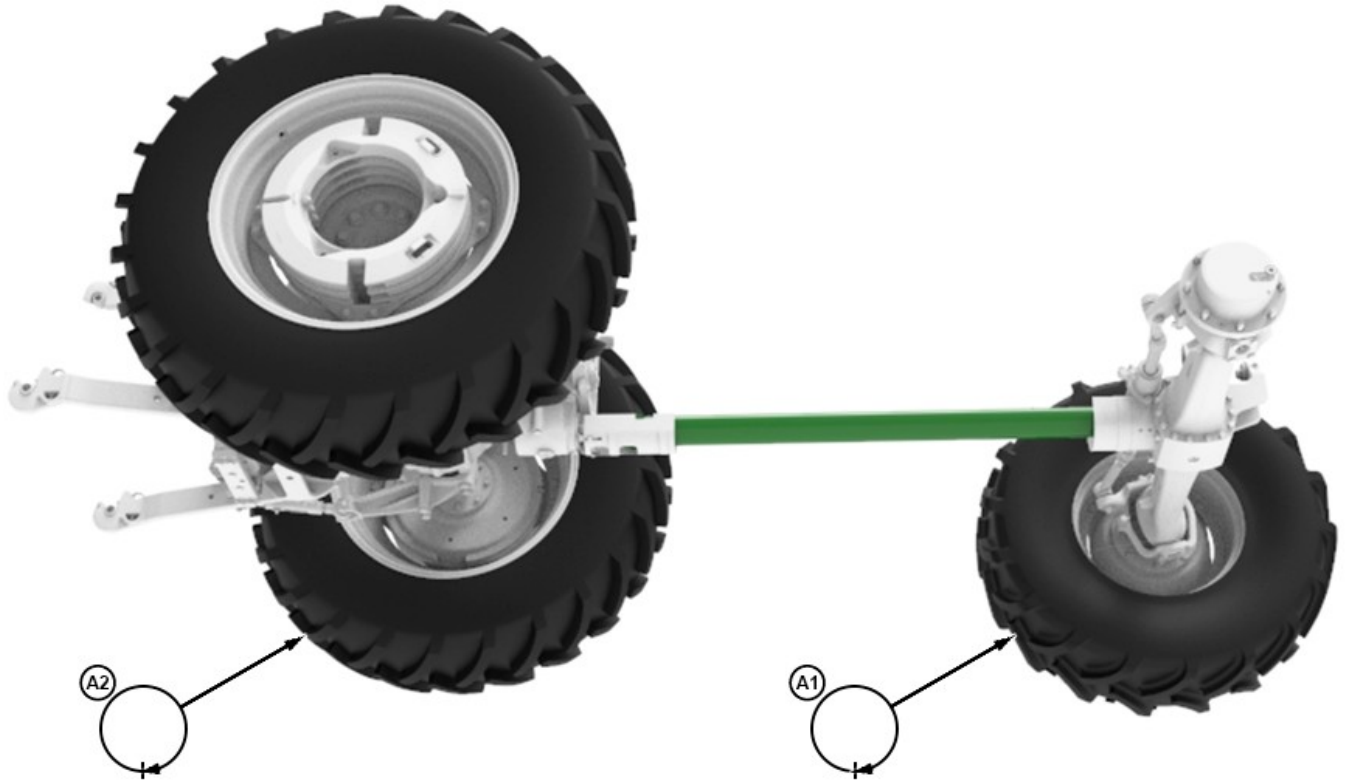
Commonly, the correct advancement of the tractor with double traction foresees a value of L included between +1.5 and + 4% (peripheral speed of front tires > peripheral speed rear tires).

Values of L out of this range could cause problems of

handling instability (L < 1.5, the rear axle "pushes" the tractor in excessive way respect to the frontal axle) or cause excessive creeping between the front and rear tires (L > 4, excessive mechanic effort of all the transmission chain).

In both cases, rises difficulty in the management / insertion of the "gears" and the tires are subjects to rapid and uneven wears.

Calculation of the Front Lead



CPA0010819—UN—02NOV22

$$L = [(A1 * R - A2) / A2] * 100 = (+1.5 \sim +4)$$

where:

A1= rolling circumference of front axle tires (mm)

A2= rolling circumference of rear axle tires (mm)

R = mechanical ratio between front and rear axle

1. Get the data of A1 and A2 from tire manufacturer
2. Consider the clearance limitation with the rear fender, the max rear tire outer diameter is <1850mm
3. See the R in the table

| Transmission Type | 6095B | 6110B | 6120B | 6135B | 6140B |
|-------------------|-------|-------|-------|-------|-------|
| 30K | 1.426 | 1.426 | 1.417 | 1.417 | 1.417 |
| 40K | 1.436 | 1.436 | 1.428 | 1.428 | 1.428 |

Sample Calculation:

The intention is to fit 6135B 30k tractor with 460/85R34 and 340/85R24 tires, made by a certain manufacturer.

A1 = 3547

A2=4945

R = 1.417

$$L = [(3547 * 1.417 - 4945) / 4945] * 100 = (+1.64)\%$$

1.64% can meet requirement.

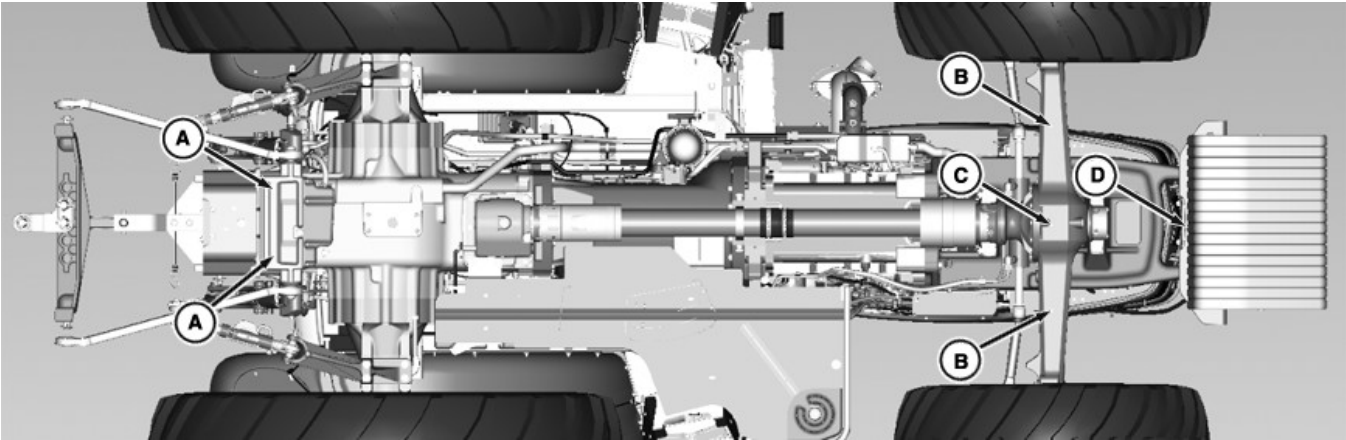
co00263,1664324947596-19-03NOV22

Jack up Tractor—Lifting Points

CAUTION: Use approved lifting equipment only. Jack up tractor on firm, level ground only. Before doing any further work on the tractor, first secure it using suitable support stands. The special John Deere tools shown can be used for this purpose. These support stands are available from your John Deere dealer.

NOTE: Remove front ballast weights before lifting front end of tractor.

This illustration shows the recommended lifting points for jacking up the tractor. Use a stable jack with sufficient lifting force. See Specifications, Loads, and Weights in Specifications section.



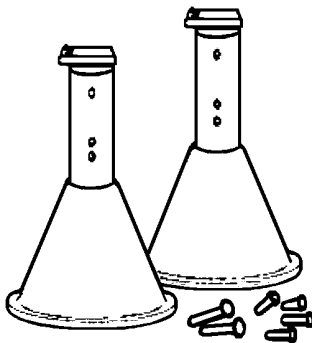
CPA0004367—UN—27APR18

- A—Rear of Tractor Lift Point
 B—Front of Tractor Lift Point
 C—Center of Axle Lift Point (use wooden wedges to prevent axle from tilting)
 D—Front End of Tractor under the Basic Weight



CPA0000738—UN—17JUN14

Decal for indicating lifting points



JT07211

JT07211—UN—14DEC06

JT02043 and JT02044 Support Stands

- JT02043—Support Stand, 482—736 mm (19—29 in)
 JT02044—Support Stand, 863—1117 mm (34—44 in)

CP00606,0001390-19-17MAY18

Tighten Wheel/Axle Hardware Correctly

CAUTION: Never operate the tractor with a loose rim, wheel, hub, or axle.

Anytime hardware is loosened, tighten to the specified torque.

Tighten Front Wheel/Axle Hardware Correctly

Follow checking procedures after adjusting the tread setting.

1. Torque the hardware to the specification after adjusting the tread setting. (see Tighten Bolts—MFWF Axle in Section 80)
2. Check and torque the hardware per the guideline.
 - Torque the hardware after 3 hours and 10 hours in the first working week.
 - Torque the hardware once a day during 100 working hours after the first working week.
 - Torque the hardware every 250 hours regularly.



LX1049890

LX1049890—UN—11FEB11

Example

Tighten Rear Wheel/Axle Hardware Correctly

1. Torque the hardware to the specification after adjusting the tread setting. (see Tighten Bolts—Rear Axle in Section 80)
2. Tighten the hardware to specifications after driving tractor about 100 m (109 yd). (see Tighten Bolts—Rear Axle in Section 80)
3. Check and torque the hardware per the guideline.
 - Torque the hardware after 3 hours and 10 hours in the first working week.
 - Torque the hardware once a day during 100 working hours after the first working week.
 - Torque the hardware every 250 hours regularly.

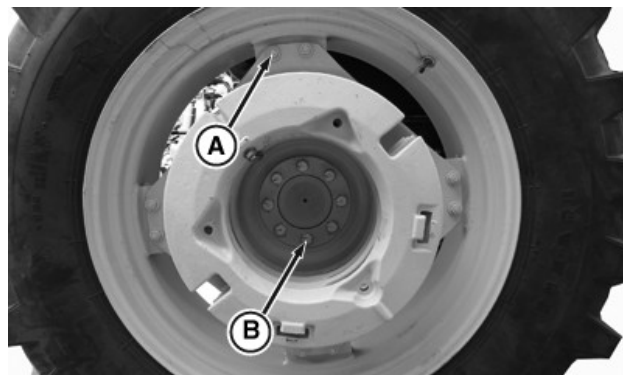
CO00263,00021EA-19-24NOV21

Wheel Disk-to-Axle Flange

Bolts—Torque. 310 N·m (229 lb·ft)

CO00263,00021EB-19-24NOV21

Tighten Bolts—Rear Axle



PY17068—UN—05OCT12

Rear Axle

A—Wheel Rim-to-Disk Bolts (16 used)

B—Wheel Disk-to-Axle Flange Bolts (8 used)

Tighten bolts and nuts to the specifications:

Specification

Wheel Rim-to-Disk

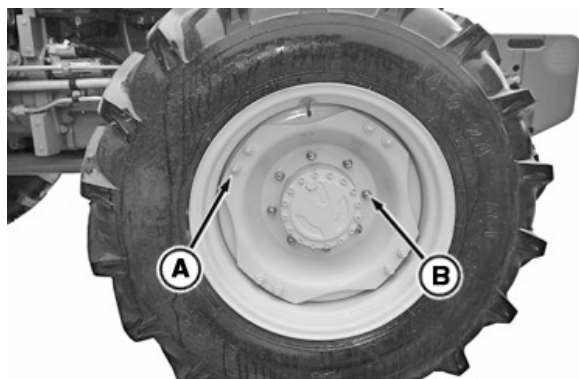
Bolts—Torque. 310 N·m (229 lb·ft)

Wheel Disk-to-Flange

Bolts—Torque. 530 N·m (391 lb·ft)

CO00263,00021EC-19-24NOV21

Tighten Bolts—MFWD Axle



CPA0002312—UN—25NOV15

6095B and 6110B Tractors



PUC2497—UN—06OCT09

6120B, 6135B, and 6140B Tractors

A—Wheel Rim-to-Disk Bolt (16 used)

B—Wheel Disk-to-Axle Flange Bolt (16 used)

Tighten bolts to specifications in the following locations:

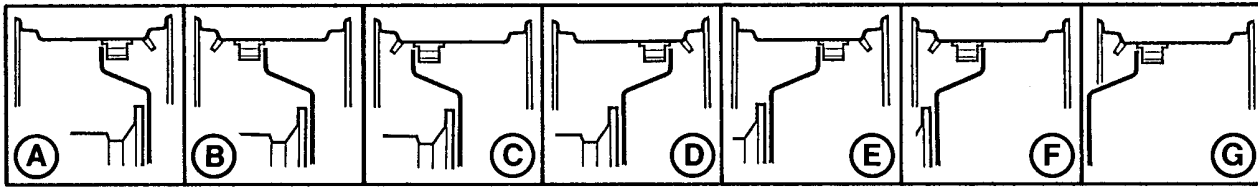
Specification

Wheel Rim-to-Disk

Bolts—Torque. 290 N·m (214 lb·ft)

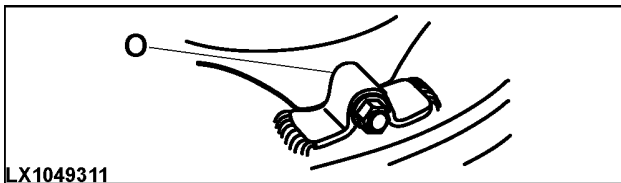
Tread Settings—MFWD Axle

Tread Settings—MFWD Axle (Lug Type)



LX012555

LX012555—UN—27JUN96



LX1049311

LX1049311—UN—08JUL10

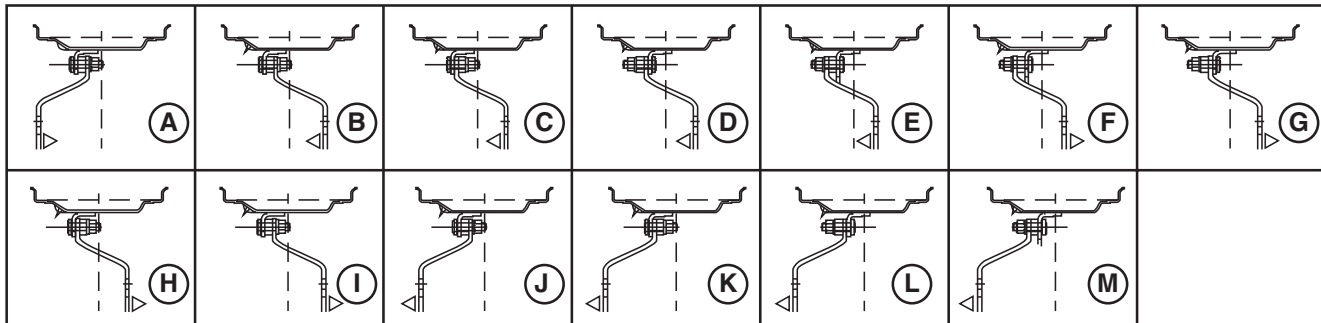
O—Lug

Wheel tread can be adjusted by replacing or reversing the wheel rims. In addition, the complete wheel can be installed on the other side of the tractor. In doing so, maintain the direction of tire rotation. Measure wheel tread as close as possible to the running surface of the wheels. Lugs (O) are available in different widths, so select the appropriate table.

IMPORTANT: When tread adjustment has been completed, check adjustment of fenders and steering stops. See *Adjusting Fenders* in this Section. Selecting tread widths that are not listed in the tables may result in damage to tractor components. Wheel tread on tractors equipped with a front loader must not exceed 1.80 m (71 in).

| TREAD WIDTH mm (in) | | | | | | | |
|-------------------------------|-----|-----|-------------|-------------|-------------|-------------|-------------|
| Rims and Wheel Disk Positions | | | | | | | |
| Tire Size | A | B | C | D | E | F | G |
| 320/85R24 | N/A | N/A | 1625 (64) | 1729 (68.1) | 1825 (71.9) | 1929 (75.9) | 2025 (79.7) |
| 340/85R24 | N/A | N/A | 1625 (64) | 1729 (68.1) | 1825 (71.9) | 1929 (75.9) | 2025 (79.7) |
| 380/85R24 | N/A | N/A | 1636 (64.4) | 1740 (68.5) | 1836 (72.3) | 1940 (76.4) | 2036 (80.2) |

Tread Settings—MFWD Axle (Flange Type)



CPA0001381

CPA0001381—UN—19OCT17

Wheel tread can be adjusted by replacing or reversing the wheel rims. In addition, the complete wheel can be installed on the other side of the tractor. In doing so, maintain the direction of tire rotation. Measure wheel

tread as close as possible to the running surface of the wheels. Flanges are available in different widths, so select the appropriate table.

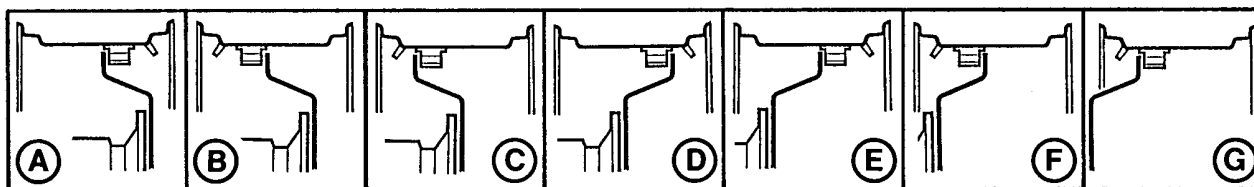
CAUTION: Driving with narrowest wheel tread (B&C) will greatly increase the possibility of roll-over.

| TREAD WIDTH mm (in) | | | | | | | | | | | | | |
|-------------------------------|-----|-----|-----|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Rims and Wheel Disk Positions | | | | | | | | | | | | | |
| Tire Size | A | B | C | D | E | F | G | H | I | J | K | L | M |
| 320/ 85R24 | N/A | N/A | N/A | N/A | 1625 (63.98) | 1729 (68.07) | 1759 (69.25) | 1791 (70.51) | 1821 (71.69) | 1933 (76.10) | 1963 (77.28) | 1995 (78.54) | 2025 (79.72) |
| 340/ 85R24 | N/A | N/A | N/A | N/A | 1625 (63.98) | 1729 (68.07) | 1759 (69.25) | 1791 (70.51) | 1821 (71.69) | 1933 (76.10) | 1963 (77.28) | 1995 (78.54) | 2025 (79.72) |
| 380/ 85R24 | N/A | N/A | N/A | N/A | 1636 (64.41) | 1740 (68.50) | 1770 (69.69) | 1802 (70.94) | 1832 (72.13) | 1944 (76.54) | 1974 (77.72) | 2006 (78.98) | 2036 (80.16) |

LG70251,000190B-19-26MAR19

Tread Settings—Multi-Position Rear Wheels

Tread Settings—Multi-Position Rear Wheels (Lug Type)



LX012555

LX012555—UN—27JUN96

Wheel tread on rear axle with multi-position wheels can be adjusted by repositioning or exchanging the rims or by reversing the wheel disks.

Wheel tread can also be adjusted by exchanging the complete wheel to the opposite side of the tractor. (This maneuver permits the change from disk dished-in to disk dished-out operations without disassembling the wheel.) When changing rear wheels from one side to the other, the arrow on side wall of tire should point in the direction of forward rotation.

The relationship of the wheel disk and rim in obtaining the different tread settings is shown in the diagram and table on this page.

CAUTION: Driving with narrow wheel tread setting (C) will greatly increase the possibility of roll-over. Only applicable for hub extension mounted.

A study of these diagrams before attempting to change tread settings will save unnecessary labor.

IMPORTANT: After setting wheel spacing, tighten rim-to-disk and disk-to-flange bolts. Drive tractor 100 m and tighten again.

Specification

Multi-Position Rear Wheels

Rim-to-Disk Bolts—Torque. 310 N·m (229 lb·ft)

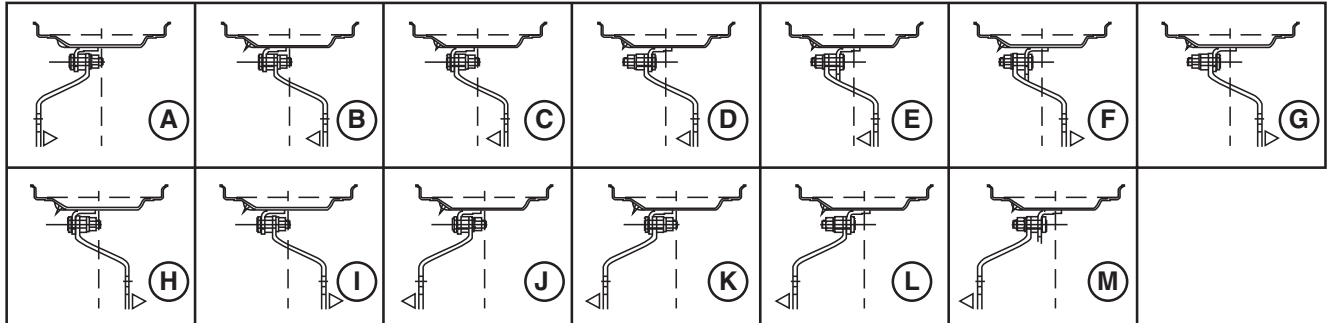
Multi-Position Rear Wheels

Disk-to-Flange Bolts—Torque. 530 N·m (391 lb·ft)

| TREAD WIDTH (Centerline-to-Centerline) mm (in) | | |
|---------------------------------------------------|----------------------|----------------------|
| Diagram | Tire Sizes | Tire Sizes |
| | 420/85R34, 460/85R34 | 420/85R38, 460/85R38 |
| A | N/A | N/A |
| B | N/A | N/A |
| C | 1613 mm (63.50 in) | 1620 mm (63.78 in) |

| TREAD WIDTH (Centerline-to-Centerline) mm (in) | | |
|---------------------------------------------------|--------------------|--------------------|
| Diagram | Tire Sizes | |
| D | 1713 mm (67.44 in) | 1710 mm (67.32 in) |
| E | 1813 mm (71.38 in) | 1820 mm (71.65 in) |
| F | 1913 mm (75.31 in) | 1910 mm (75.20 in) |
| G | 2013 mm (79.25 in) | 2020 mm (79.53 in) |

Tread Settings—Multi-Position Rear Wheels (Flange Type)



CPA0001381

CPA0001381—UN—19OCT17

Wheel tread on rear axle with multi-position wheels can be adjusted by repositioning or exchanging the rims or by reversing the wheel disks.

Wheel tread can also be adjusted by exchanging the complete wheel to the opposite side of the tractor. (This maneuver permits the change from disk dished-in to disk dished-out operations without disassembling the wheel.) When changing rear wheels from one side to the other, the arrow on side wall of tire should point in the direction of forward rotation.

The relationship of the wheel disk and rim in obtaining the different tread settings is shown in the diagram and table on this page.

CAUTION: Driving with narrow wheel tread setting (E) will greatly increase the possibility of roll-over. Only applicable for hub extension mounted.

A study of these diagrams before attempting to change tread settings will save unnecessary labor.

IMPORTANT: After setting wheel spacing, tighten rim-to-disk and disk-to-flange bolts. Drive tractor 100 m and tighten again.

Specification

Multi-Position Rear Wheels

Rim-to-Disk Bolts—Torque. 310 N·m (229 lb·ft)

Multi-Position Rear Wheels

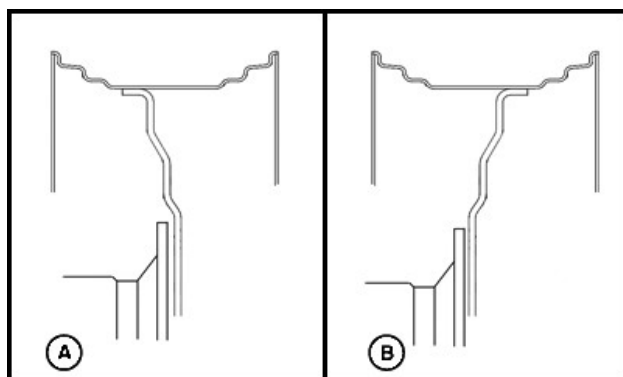
Disk-to-Flange Bolts—Torque. 530 N·m (391 lb·ft)

| TREAD WIDTH (Centerline-to-Centerline) mm (in) | | |
|---------------------------------------------------|--------------------|--------------------|
| Diagram | Tire Sizes | |
| | 460/85R34 | 460/85R38 |
| A | N/A | N/A |
| B | N/A | N/A |
| C | N/A | N/A |
| D | N/A | N/A |
| E | 1617 mm (63.66 in) | 1621 mm (63.82 in) |
| F | 1713 mm (67.44 in) | 1713 mm (67.44 in) |
| G | 1743 mm (68.62 in) | 1743 mm (68.62 in) |
| H | 1783 mm (70.20 in) | 1791 mm (70.51 in) |
| I | 1813 mm (71.38 in) | 1821 mm (71.69 in) |

| TREAD WIDTH (Centerline-to-Centerline) mm (in) | | |
|---------------------------------------------------|--------------------|--------------------|
| Diagram | Tire Sizes | |
| J | 1917 mm (75.47 in) | 1913 mm (75.31 in) |
| K | 1947 mm (76.65 in) | 1943 mm (76.50 in) |
| L | 1987 mm (78.23 in) | 1991 mm (78.39 in) |
| M | 2017 mm (79.41 in) | 2021 mm (79.57 in) |

Tread Settings—Multi-Position Rear Wheels (Option for 6095B Model)

NOTE: The tread setting is option for 6095 tractor.



CPA0010520—UN—30NOV21

CAUTION: Driving with narrow wheel tread setting greatly increases the possibility of roll-over.

Wheel tread on rear axle can be adjusted by exchanging the complete wheel to the opposite side of the tractor. (This maneuver permits the change from disk dished-in to disk dished-out operations without disassembling the wheel.)

When changing rear wheels from one side to the other, the arrow on side wall of tire should point in the direction of forward rotation.

IMPORTANT: After setting wheel spacing, tighten rim-to-disk and disk-to-flange bolts. Drive tractor 100 m and tighten again.

Specification

Multi-Position Rear Wheels

Rim-to-Disk Bolts—Torque. 310 N·m (229 lb·ft)

Multi-Position Rear Wheels

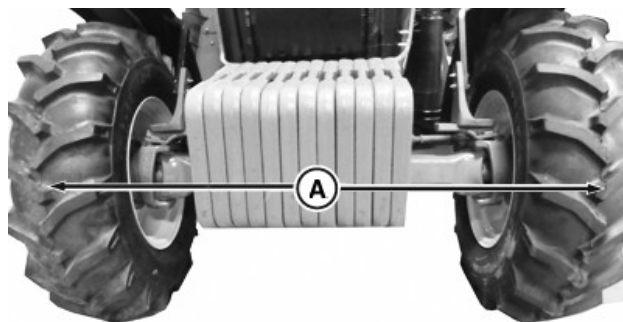
Disk-to-Flange Bolts—Torque. 530 N·m (391 lb·ft)

| TREAD WIDTH (Centerline-to-Centerline) mm (in) | |
|---------------------------------------------------|-----------------|
| Diagram | Tire Sizes |
| | 420/85R34 |
| A | 1617 (63.66 in) |
| B | 1713 (67.44 in) |

CO00263,00021F0-19-30NOV21

Check Toe-In

1. Disengage MFWD and park tractor on smooth, level surface. Steer front wheels straight ahead. Stop engine.



PY17070—UN—05OCT12

A—Distance

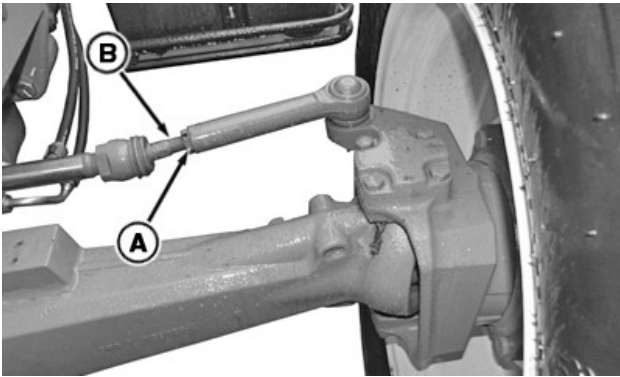
2. Measure distance (A) between centerline of tires at the hub level in the front of axle, using an outside bar

of each tire or an inside bar of each tire. Record measurement and mark the tires.

3. Move tractor back about 1 m (3 ft), so mark is at the hub level behind the axle. Again, measure distance between tires at same point on tire. Record measurement.
4. Determine the difference between front and rear measurements. The front measurement should be smaller than rear i.e. "toe in". Toe-in should be 0—7 mm. Adjust toe-in if necessary. (See Adjust Toe-In in Wheels and Tires Operation section.)

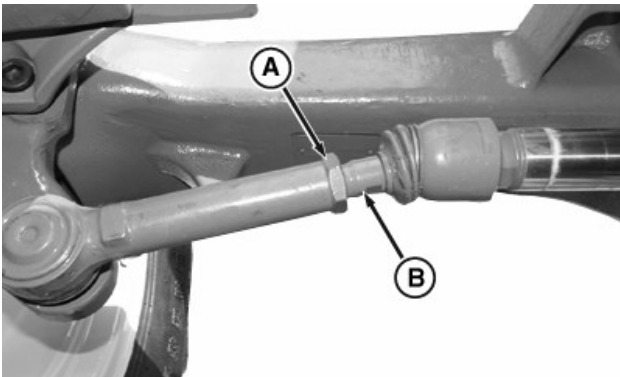
CP00606,00013D0-19-10MAY18

Adjust Toe-In



CPA0002315—UN—25NOV15

For 6095B and 6110B Tractors



PY17071—UN—05OCT12

For 6120B, 6135B, and 6140B Tractors

A—Jam Nut (2 used)
B—Inner Rod (2 used)

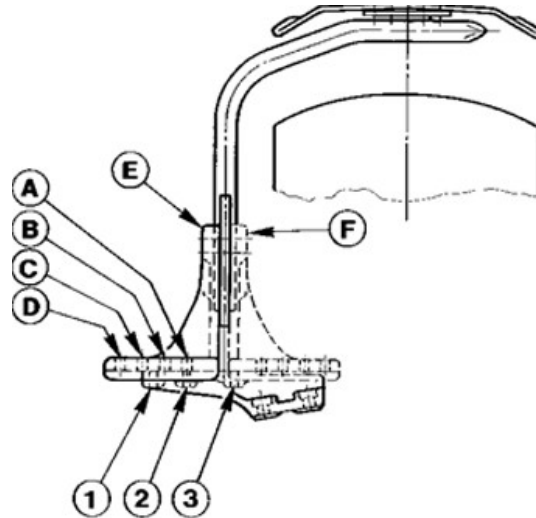
1. Loosen jam nuts (A) on right- and left-hand side tie rod.
2. Adjust each side by rotating inner rod (B) to lengthen or shorten tie rod as needed, to obtain toe-in of 0—7 mm (0—0.27 in).
3. Tighten jam nuts after adjustment.

Specification

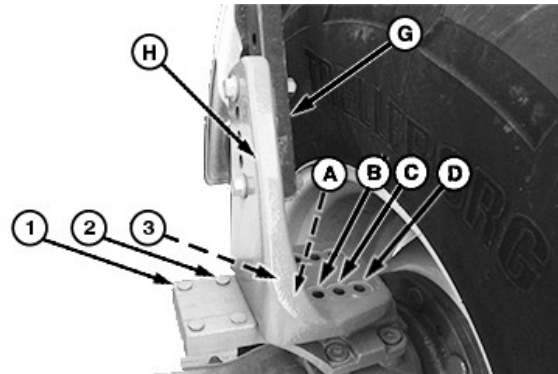
Tie Rod Jam Nut—Torque. 120—150 N·m (88—110 lb·ft)

N400041,000352C-19-17JAN17

Front Fender Adjustment (MFWD axle, if equipped)



CPA0004368—UN—26APR18



CPA0008129—UN—26MAR19

A—Hole Position
B—Hole Position
C—Hole Position
D—Hole Position
E—Bracket Facing Out
F—Bracket Facing In
G—Fender
H—Bracket
1—Hole Position
2—Hole Position
3—Hole Position

Fenders must be installed in correct position depending on tire size and tread width. Fender width is 400 mm (15.7 in). The following table indicates correct position for a given tire size, wheel, and rim disk position.

Explanation of Table Positions

D-2—Indicates which holes (1, 2, or 3 and A, B, C, or D) are bolted together.

NOTE: Every time bracket position is reversed, left-hand side bracket must be installed on right-hand side of tractor and the opposite way.

| Tire Size | Position of Adjustable Rims and Wheel Disks | | | | | | |
|-----------|---------------------------------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | G |
| 320/85R24 | N/A | N/A | A-3 | A-3 | A-3 | A-3 | A-3 |
| 340/85R24 | N/A | N/A | B-3 | A-3 | A-3 | A-3 | A-3 |
| 380/85R24 | N/A | N/A | C-3 | A-3 | A-3 | A-3 | A-3 |

LG70251,000190C-19-27MAR19

Ballast

Plan for Maximum Productivity

Proper ballasting is an important factor in tractor performance. Maximum productivity can be achieved only if tractor weight is appropriate for the job.

John Deere FMO (fundamentals of machine operations) publications provide in-depth information on farming subjects.

TRACTORS discusses methods of determining correct tractor weight and ballast selection.

MACHINERY MANAGEMENT includes information on tractor and implement matching, and on ways to increase productivity.

Your John Deere dealer can assist you with information on these subjects.

N400041,0003603-19-18JAN17

Select Ballast Carefully

Match amount of ballast needed for each job. What is right for one job may be wrong for another job. Ballast for traction and stability.

Factors determining amount of ballast:

- Soil surface—loose or firm.
- Type of implement—integral, semi-integral or towed.
- Travel speed—slow or fast.
- Tractor power output—partial or full load.
- Tires—single, oversize, or dual.
- Type of front axle—2WD or MFWD

Match Ballast to Work Load

Use no more ballast than necessary, and remove ballast when it is no longer needed.

Rather than weighing tractor down to pull heavy loads, try to reduce load. Pulling a lighter load at a higher speed is more economical and more efficient.

| Too Little Ballast | | Too Much Ballast | |
|--------------------|---------------------------------|------------------|-----------------------------------------|
| 1. | Excessive wheel slip | 1. | Increased load |
| 2. | Power loss due to churning soil | 2. | Shortens transmission life |
| 3. | Excessive tire wear | 3. | Power loss due to carrying extra weight |
| 4. | Fuel waste | 4. | Tire strain |
| 5. | Lower productivity | 5. | Soil compaction |
| | | 6. | Fuel waste |
| | | 7. | Lower productivity |

Check for Correct Ballast

The best way to check for correct ballast is to measure amount of travel reduction (slip) of the drive wheels. Under normal field conditions, travel reduction should

be 10—15% for 2WD tractors or 8—12% for MFWD tractors.

Add more weight to drive wheels if slip is excessive. If the slip is less than the minimum requirement, weight should be removed appropriately.

Ballast Limitations

Ballast should be limited by either tire capacity or tractor capacity. Each tire has a recommended carrying capacity which should not be exceeded (See Wheels and Tires Operation section). If a greater amount of weight is needed for traction, a larger tire should be considered.

Ballast can be added as either liquid or cast iron.

Add Ballast on Tractor

Add weight to front end if needed for stability. Heavy pulling and heavy rear-mounted implements tend to lift front wheels. Add enough ballast to maintain steering control and prevent tip-over.

Refer to the implement operator's manual to determine the minimum number of front weights required for your tractor model.

CP00606,00013DF-19-15MAY18

Determine Maximum Rear Ballast

IMPORTANT: Do not overload tires. If maximum weight shown in chart is not enough for safety, reduce load or install heavier ply tires.

Too much ballast will cause excessive soil compaction and rolling resistance, and shorten drivetrain life. Ballast should never exceed the weight required to provide traction for continuous full power loads in third gear. Remove ballast if tractor engine labors when pulling heavy loads in the first three gears.

Rear wheel ballast should never be such that the engine cannot support full load at rated engine speed, while the tractor is moving at 7 km/h (4.3 mph). If the engine labors or stalls below 7 km/h (4.3 mph), this indicates that there is too much ballast on the rear wheels.

Chart shows carrying capacity per tire.

| MAXIMUM LOAD PER WHEEL | |
|-----------------------------|----------------|
| Tire Size Bias ply Tires | Capacity kg |
| 420/85R34 | 2650 (5842 lb) |
| 420/85R38 | 2800 (6172 lb) |
| 460/85R34 | 3075 (6779 lb) |
| 460/85R38 | 3250 (7165 lb) |

JL31334,00011AB-19-01SEP17

Determine Maximum Front Ballast

Use appropriate front ballast for a particular operating condition. Two-wheel drive tractors should only have enough ballast to maintain safe steering control. Remove ballast when it is no longer needed.

Chart shows carrying capacity per tire.

IMPORTANT: Do not overload tires. If maximum weight shown in chart is not enough for safety, reduce load or install tires with a higher load rating.

| MAXIMUM LOAD PER WHEEL | |
|------------------------|----------------|
| Tire Size | Capacity kg |
| 320/85R24 | 1500 (3306 lb) |
| 340/85R24 | 1650 (3638 lb) |
| 380/85R24 | 1950 (4299 lb) |

JL31334,00011AA-19-20JUL17

Use Cast Iron Weights

Cast iron weights are available for rear wheels. They can be installed on the inside or outside of wheel. See your John Deere dealer for more information and recommendations on weight use and placement.

Specification

Cast Iron Weights—Weight. 55 kg (121 lb)

N400041,000355F-19-20OCT17

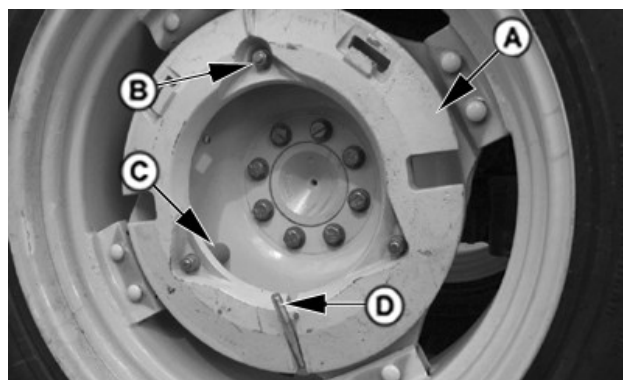
Install Rear Cast Iron Weights

CAUTION: Use appropriate equipment or have the job done by your John Deere dealer. Rear weights weigh 55 kg (121 lb) each. Handle with care!

CAUTION: This prevents weights from falling when retaining bolt is removed. When installing or removing additional weights, always position wheels so that one retainer jaw is at the top.

NOTE: Spacers are required only when weights will not fit into rim's dish. If weights do fit, spacers are optional.

IMPORTANT: Maximum number of weights that can be installed on rear is four on each side wheel.



PUC1556—UN—25NOV07

A—First Weight

B—First Weight Retaining Bolt, Washer, and Nut (3 sets used)

C—Spacer (3 used per weight)

D—Additional Weight Retaining Bolt, Washer, and Nut

1. Attach first weight (A) to wheel disk, using three spacers (C) if necessary, with first weight retaining bolts, washers, and nuts (B). Note that bolts go through first weight and into the rim so that washers and nuts tighten onto the rim and not onto weights. This makes it easy to check regularly for tightness.
2. To install additional weights, position wheel such that one of the retainer jaws is at the top. Hang next weight in retainer jaw, secure with additional weight retaining bolt, washer, and nut (D) as shown. Proceed in similar fashion with any additional weights, up to maximum allowable limit.
3. Tighten all bolt retaining nuts to specification. Tighten again after a few hours of service. Check tightness regularly.

Specification

Retaining Bolts—Torque. 230 N·m (170 lb-ft)

CP00606,0001371-19-26APR18

Additional Equipment

Additional Equipment Operation

Operate attachments or implements refer to relevant Operator's Manual.

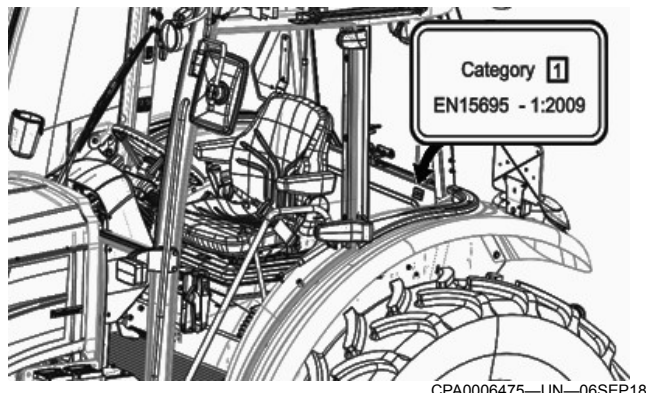
CP00606,000134F-19-20APR18

Operator Station Operation

Operator Station - General Information

Tractors for the Eurasian Economic Union member states are equipped with the cab category 1.

Cab Classification According to EN 15695-1 (for application of crop protection chemicals and liquid fertilizer).



Cab classification according to EN 15695-1 provides information on the effectiveness of protection against harmful substances offered by the cab.

Categories 1— 4 are used for classification and specified on a label inside the cab.

Replace label if missing or damaged. See your John Deere dealer.

A—Category 1 — The cab does not offer any protection against substances which are harmful to health.

B—Category 2 — The cab offers protection against solid airborne particles such as dust, but not against aerosols and vapors.

C—Category 3 — The cab offers protection against dust and aerosols (liquid airborne substances such as spray), but not against vapors.

D—Category 4 — The cab offers protection against dust, aerosols, and vapors.

⚠ CAUTION: Before working in an environment containing hazardous substances, that is, when using pesticides, check whether the cab offers sufficient protection. Refer to the product data sheets of the spraying liquid manufacturer specifying the category required for the cab.

In case of category 3 and category 4 cabs, find out whether the installed filters have been checked according to EN 15695-2:2009 and whether they are suitable for the chemical being used before working in an environment containing hazardous substances.

The cab fresh air and recirculation air filters must be serviced as specified, see Clean Cab Air Filters in Section 290. Refer to product data sheets and product identification of the crop protection chemicals. These contain important information on how to avoid hazards.

Tractors for the Eurasian Economic Union member states are equipped with the cab category 1.

The following requirements must be met to offer best protection:

1. All seals (on door, windows and roof) in good condition.
2. Doors, windows, and roof closed.
3. Grommets for cables in the cab sealed properly.
4. Fan ON.
5. Cab air filters must be in good condition.

LG70251,00014DD-19-28SEP18

Avoid Contact with Agricultural Chemicals



TS220—UN—15APR13



TS272—UN—23AUG88

This enclosed cab does not protect against inhaling vapor, aerosol or dust. If pesticide use instructions require respiratory protection, wear an appropriate respirator inside the cab.

Before leaving the cab, wear personal protective equipment as required by the pesticide use instructions. When re-entering the cab, remove protective equipment and store either outside the cab in a closed box or some other type of sealable container or inside the cab in a pesticide resistant container, such as a plastic bag.

Clean your shoes or boots to remove soil or other contaminated particles prior to entering the cab.

DX,CABS-19-25MAR09

Clean Vehicle of Hazardous Pesticides

CAUTION: During application of hazardous pesticides, pesticide residue can build up on the inside or outside of the vehicle. Clean vehicle according to use instructions of hazardous pesticides.

When exposed to hazardous pesticides, clean exterior and interior of vehicle daily to keep free of the accumulation of visible dirt and contamination.

1. Sweep or vacuum the floor of cab.
2. Clean headliners and inside cowlings of cab.
3. Wash entire exterior of vehicle.
4. Dispose of any wash water with hazardous concentrations of active or non-active ingredients according to published regulations or directives.

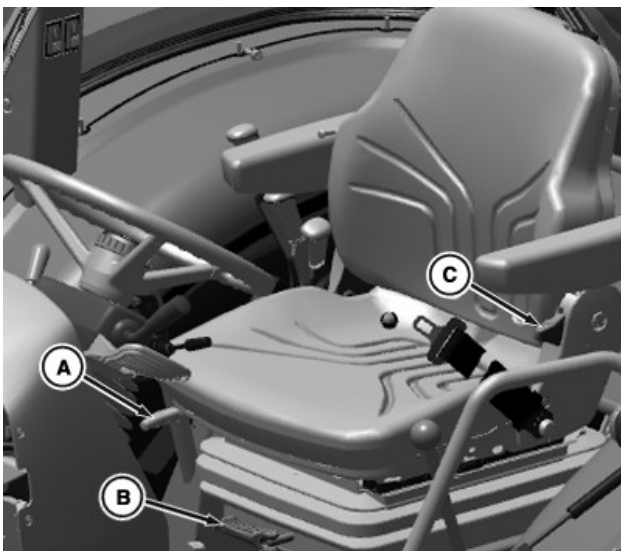
DX,CABS2-19-24JUL01

Seat Adjustments

CAUTION: Do not make adjustments to the seat, while driving.

NOTE: Use these instructions as a guideline. Since everybody is different, the final settings must be determined by personal preferences. Each operator should make adjustments that suit them best.

There are two seat adjustments available:



CPA0003111—UN—15FEB17

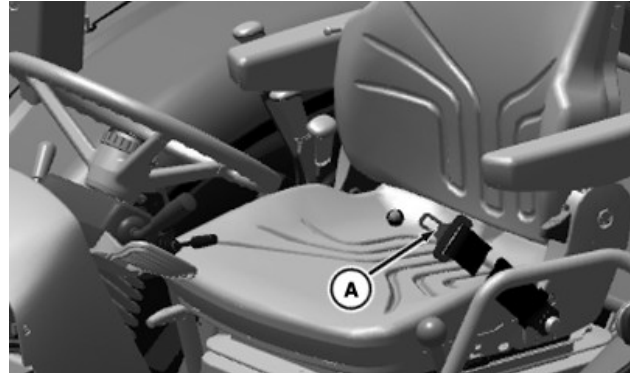
A—Seat Position Adjusting Handle
B—Seat Comfort Adjusting Handle
C—Seat Backrest Adjusting Knob

1. Turn seat position adjusting handle (A) outward to adjust seat back or forth relatively to baseboard. Release the handle to lock the seat after adjusting.

2. According to operator's weight turn the seat comfort adjusting handle (B) to your satisfaction.
3. Turn seat backrest adjusting knob (C) to adjust backrest to your satisfaction.

CP00606,00013E1-19-15MAY18

Use Seat Belt



CPA0003112—UN—21FEB17

A—Seat Belt

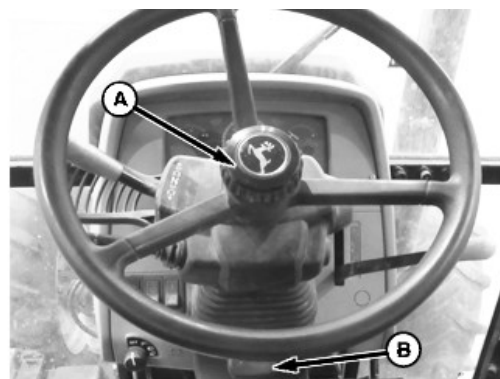
To properly retain operator, seat belt (A) must fit snugly across abdomen. Seat belt (A) extends as necessary to fit comfortably.

Inspect seat belt (A) and mounting hardware annually. (See Check Seat Belt in Operator Station Maintenance section.)

CP00606,0001398-19-27APR18

Adjust Steering Wheel

NOTE: The adjustable steering wheel is available for tiltable and telescopic steering wheel only.



CPA0005131—UN—16JAN18

A—Height Adjustment Ring
B—Angle Adjustment Lever

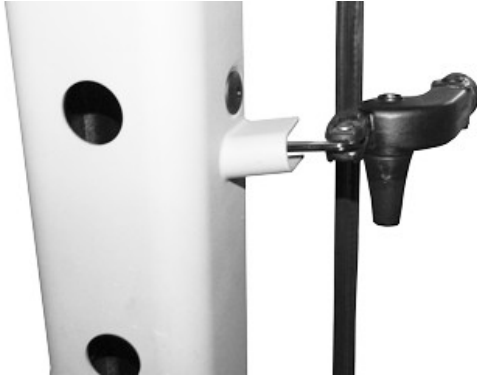
Tilt: Lift angle adjustment lever (B) and move steering column to the desired angle. Release lever to lock into position.

Wheel Height (Telescoping): Loosen height adjust ring

(A) and raise or lower steering wheel to desired height. Tighten ring to lock into position.

CP00606,00013E0-19-15MAY18

Open Windows



Right-Side Window Shown

PY17027—UN—05OCT12



Rear Window

PY17028—UN—05OCT12

Open left and right side, and rear windows for better ventilation.

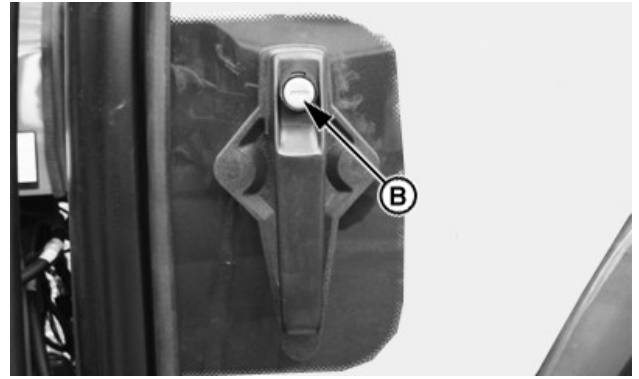
MD66105,000005F-19-04OCT12

Open Door



Inside Cab

PY17048—UN—05OCT12



Outside Cab

PUC2424—UN—29SEP09

A—Handle
B—Knob

Press handle (A) down from inside of cab and push door.

Press knob (B) from outside of cab and pull door.

MD66105,0000060-19-04OCT12

RH Emergency Exit (if equipped)

⚠ CAUTION: Make sure that nobody is near to the RH emergency exit.



Right-Hand Side

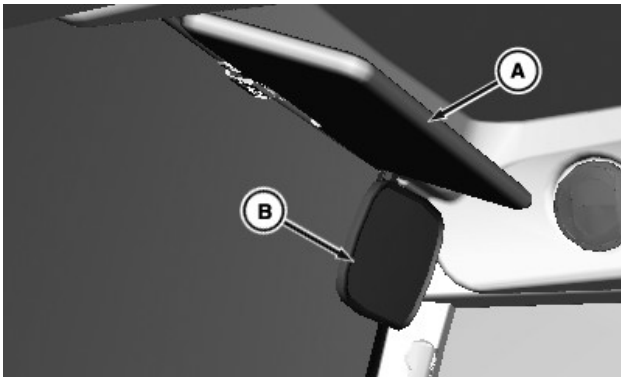
CPA0000405—UN—26NOV13

A—Lever

Turn lever (A) to get access to right-hand (RH) emergency exit.

CP00606,0001373-19-26APR18

Sun Visor



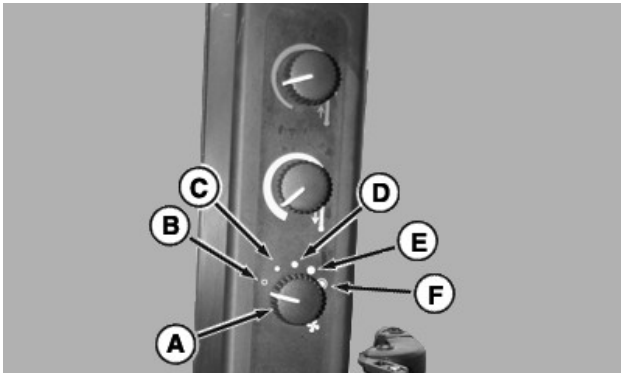
A—Sun Visor
B—Rearview Mirror

Cab is equipped with sun visor (A) and rearview mirror (B).

CPA0003058—UN—12FEB17

N400041,0003653-19-13FEB17

Adjust Blower Speed (with HVAC)



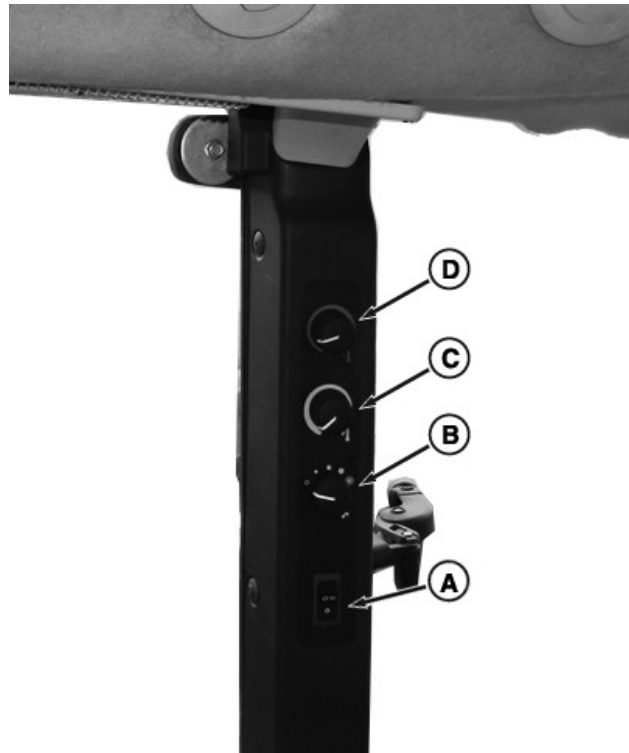
A—Blower Speed Control Knob
B—Off
C—Low
D—Medium
E—High
F—Purge

Turn control knob (A) to desired setting. For rapid flow, use the purge setting (F).

PY18742—UN—08JUL13

N400041,00035E5-19-28JUL17

Control Temperature (with HVAC)



A—Air Conditioning and Deicing Switch
B—Blower Speed Control Knob
C—Air Conditioning Temperature Control Knob
D—Heater Temperature Control Knob

Push top half of switch (A) to turn air conditioning and deicing ON and push bottom half to turn it OFF.

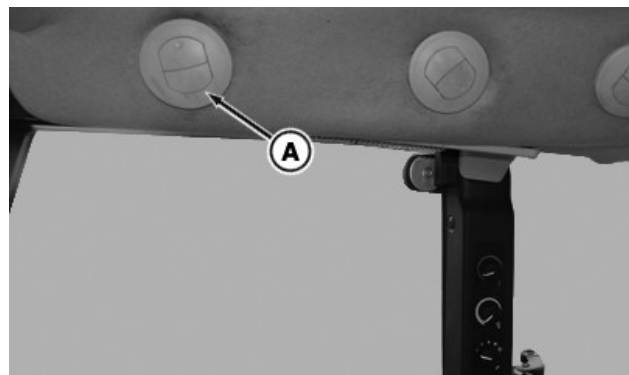
Turn control knob (C) to adjust air conditioning temperature.

Turn control knob (D) to adjust heater temperature.

PY18743—UN—08JUL13

N400041,00035E7-19-28JUL17

Deice, Demist, or Defrost Windshield

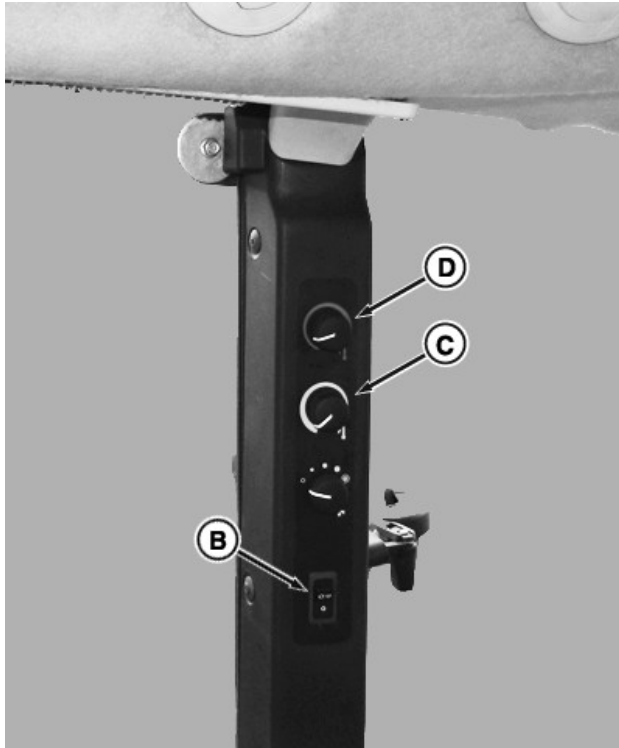


A—Front Vent

1. Aim two front vents (A) toward windshield.

PY18744—UN—08JUL13

NOTE: Closing middle and rear vents will help clear the windshield faster.



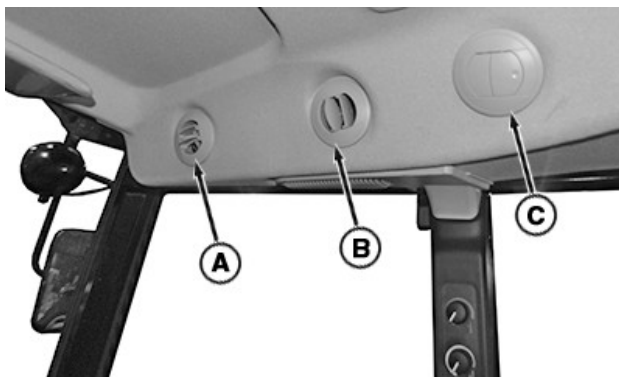
PY18745—UN—08JUL13

B—Deicing Switch
C—A/C Temperature Control Knob
D—Heater Temperature Control Knob

2. Press top half of deicing switch (B) and turn A/C temperature control knob (C) to full counterclockwise position.
3. Turn heater temperature control knob (D) clockwise to obtain desired temperature.

CP00606,0001374-19-26APR18

Optimize A/C and Heater Performance



CPA0002416—UN—07DEC15



CPA0000176—UN—08JUN13

A—Front Vent (2 used)
B—Middle Vent (2 used)
C—Rear Vent (2 used)
D—Heater Temperature Control Knob

Adjust individual vents to target heating or cooling:

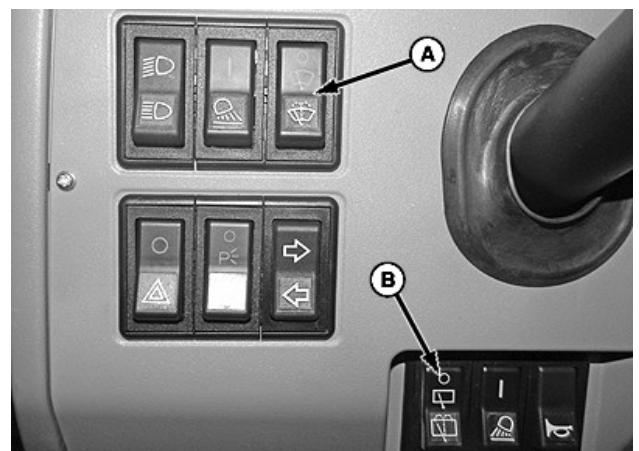
- Position front vents (A) toward legs and mid-body.
- Position middle vents (B) toward your head.
- Position rear vents (C) toward your back.

NOTE: For maximum cooling effect, turn heater temperature control knob (D) to full counterclockwise position.

Position all vents (A, B, and C) down to heat the floor and feet.

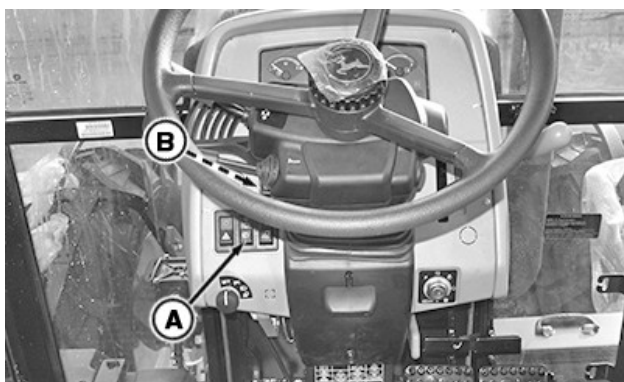
N400041,0003519-19-01SEP17

Operate Windshield Wiper and Washer



CPA0002071—UN—19OCT15

12F×4R/24F×8R Transmission



CPA0002989—UN—19OCT16

24F×12R Transmission

A—Windshield Wiper/Washer Switch (Front)
B—Windshield Wiper/Washer Switch (Rear)

Press the windshield wiper/washer switches (A and B) to move windshield wipers (Front and Rear) to OFF, ON, or Washer position.



PY14925—UN—18FEB13

Rear, Left-Hand Side

C—Washer Fluid Reservoir

Fill washer fluid reservoir (C) with non-freezing windshield washer fluid. Washer Fluid reservoir is located behind cab on inside of the left rear fender.

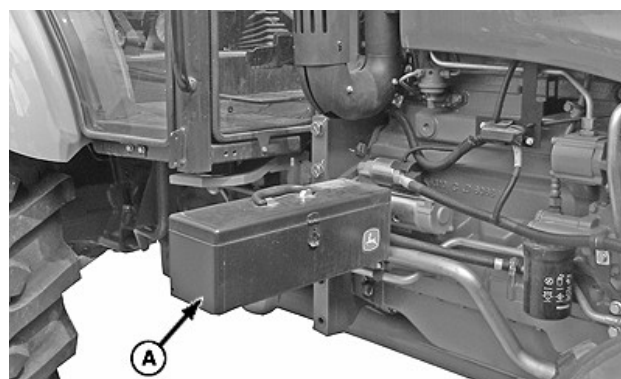
CP00606,00013B5-19-27APR18

Toolbox Location



CPA0001710—UN—24JUL15

For 6095B, 6110B, 6120B, and 6135B Tractors



CPA0001691—UN—24JUL15

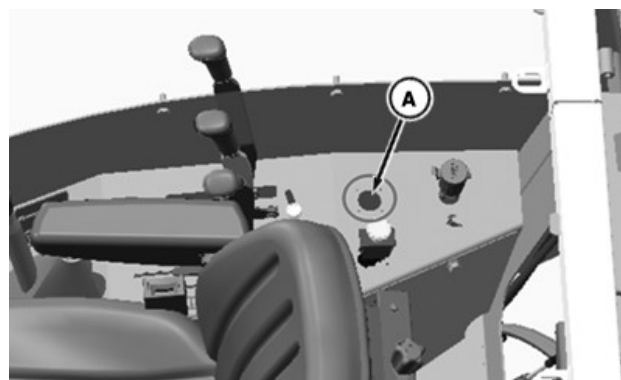
For 6140B Tractor

A—Toolbox

Toolbox (A) location is on left side near hood, or is on right side front cab.

N400041,000351B-19-27DEC16

Use Three-Pole Outlet



CPA0003057—UN—14FEB17

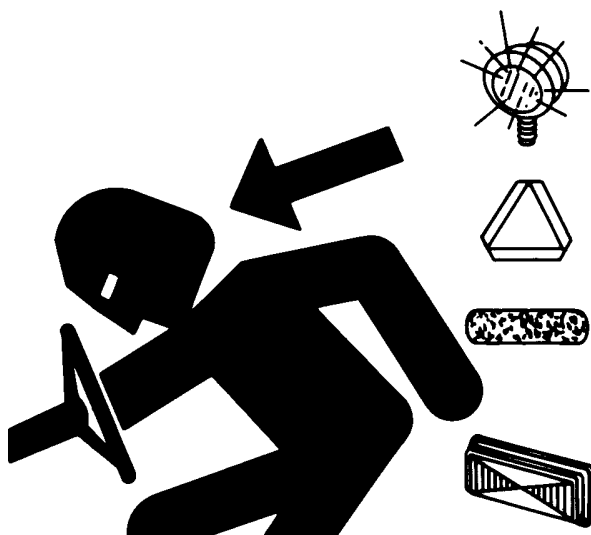
A—Three-Pole Outlet

Three-pole outlet is used to connect compute, etc. Provide three-pole outlet of 12 v.

N400041,0003652-19-13FEB17

Transport and Storage

Use Safety Lights and Devices



TS951—UN—12APR90

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. An implement safety lighting kit is available from your John Deere dealer.

LG70251,000145C-19-05SEP18

rating equal to or greater than the gross weight of the towed machine. Do not use safety chain for towing.

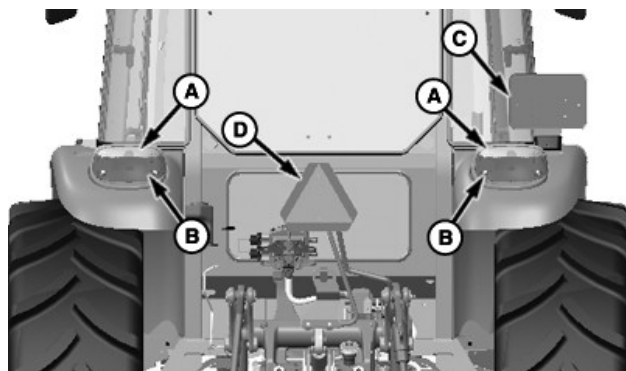
LG70251,000145D-19-05SEP18

Drive Tractor on Roads

CAUTION: Observe the following precautions when operating on a road.

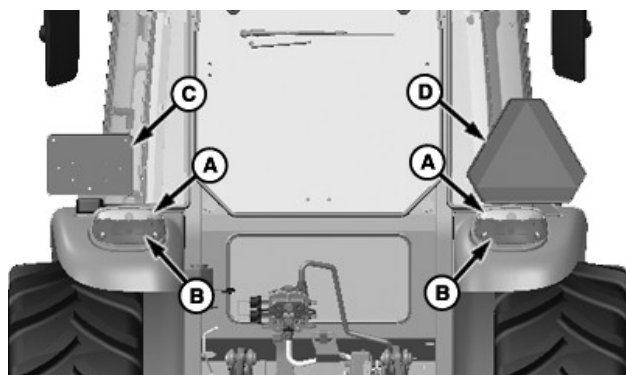
CAUTION: Never operate floodlights (if equipped) when transporting tractor. Clear bright lights at the rear of the tractor could confuse drivers of other vehicles as they approach from behind. Use only headlights for transporting.

IMPORTANT: Refer to Lights section for detailed description of lighting operations and functions.



CPA0004044—UN—04SEP17

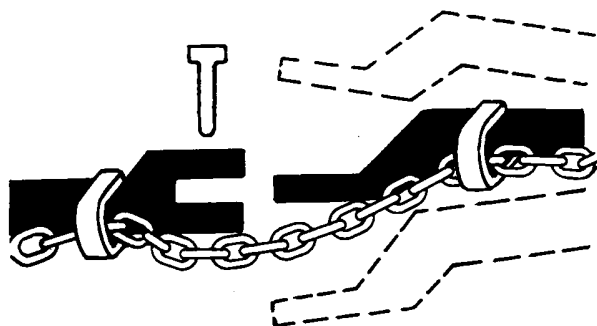
Option 1



CPA0004045—UN—04SEP17

Option 2

Use a Safety Chain



TS217—UN—23AUG88

A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning.

See your John Deere dealer for a chain with a strength

A—Warning Lights (2 used)

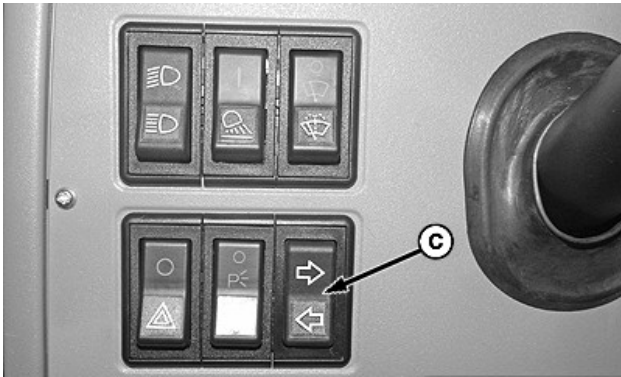
B—Tail Lights (2 used)

C—License Plate

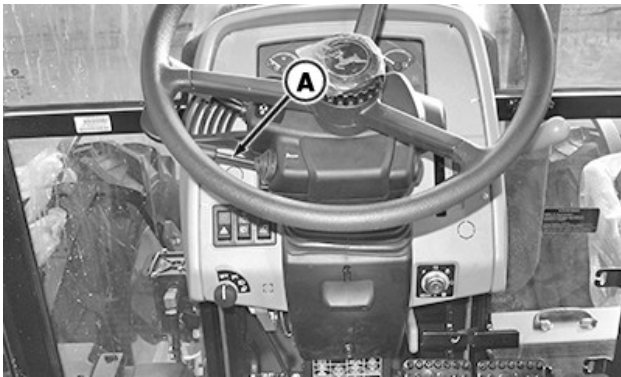
D—Slow Moving Vehicle (SMV) Emblem

1. Before driving the tractor on a public road, ensure warning lights (A) and tail lights (B) are functioning correctly. Install slow moving vehicle (SMV) emblem (D), reflectors, license plate (C), and auxiliary

lighting equipment as required by local safety regulations. Clean SMV emblem for best visibility.



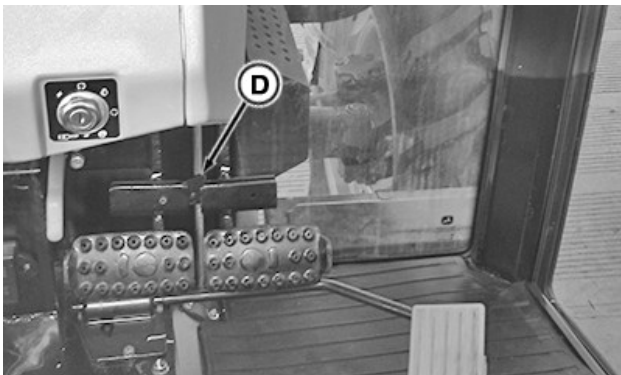
CPA0002077—UN—20OCT15
12F×4R/24F×8R Transmission



CPA0002985—UN—18OCT16
24F×12R Transmission

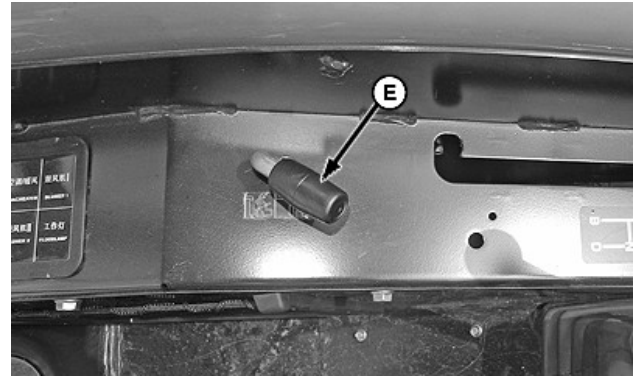
A—Light Handle
C—Turn Signal Switch

2. Use turn signals when turning. Be sure to return turn signal switch (C) or light handle (A) to center position after turning.



D—Brake Pedal Locking Bar

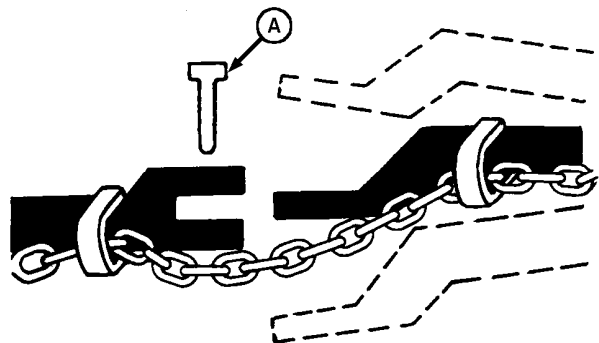
3. Before driving on a road, couple brake pedals together using brake pedal locking bar (D). Avoid hard applications of brakes.



CPA0002078—UN—20OCT15

E—MFWD Lever

4. Disengage mechanical front wheel drive when transporting on hard surface. To disengage, press MFWD lever (E).
5. Drive slow enough to maintain safe control at all times. Slow down for hillsides, rough ground, and sharp turns, especially when transporting heavy, rear-mounted equipment.
6. Before going down a hill, shift to a gear low enough to control speed without using brakes. Never coast down the hill with clutch disengaged. It can overspeed the clutch disk and cause severe clutch damage.
7. When transporting downhill on icy or graveled grades, be alert for skids which could result in loss of steering control. To decrease chance of skids, reduce speed and be sure that tractor has proper ballast.



LV4421—UN—02NOV99

A—Drawbar Pin

CAUTION: A safety chain will help drawn equipment should it accidentally separate from the drawbar. Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning. See your John Deere dealer for a chain with a strength rating equal to or greater than the gross weight of the towed machine. Do not use safety chain for towing.

IMPORTANT: Safety chain is provided for transport only. It is not used for pulling or towing implements or other items not attached to drawbar, or damage to your tractor may result.

8. Transporting Towed Loads:

Lock drawbar pin (A) in place, and use safety chain to help control drawn equipment should it accidentally separate from drawbar while transporting.



LV4042—UN—09JUL99

CAUTION: Stopping distance increases with speed and weight of towed loads, and on slopes. Towed loads with or without brakes that are too heavy for the tractor, or are towed too fast, can cause loss of control. Consider the total weight of the equipment and its load.

Observe these recommended maximum road speeds, or local speed limits which may be lower:

If towed equipment does not have brakes, do not go faster than 32 km/h (20 mph) and do not tow loads more than 1.5 times the tractor weight.

If towed equipment has brakes, do not go faster than 40 km/h (25 mph) and do not tow loads more than 4.5 times the tractor weight.

Make sure that the load does not exceed the recommended weight ratio. Add ballast to recommended maximum for tractor, lighten the load, or get a heavier towing unit. The tractor must be heavy and powerful enough with adequate braking power for the towed load. Use additional caution when towing loads under adverse surface conditions, when turning, and on inclines.

9. Use caution when operating tractor at transport speeds. Reduce speed if towed load weighs more than tractor and is not equipped with brakes. (See towed equipment operator's manual for recommended transport speeds.)

10. Use additional caution when transporting towed

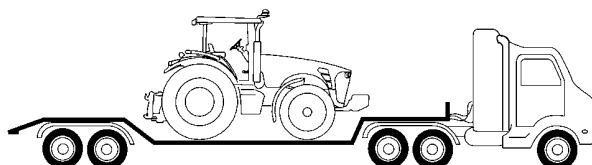
loads under adverse surface conditions, when turning and on inclines.

11. Heavy towed or rear mounted implements may start swaying in transport. Excessive swaying results in loss of steering control. Drive slowly and avoid quick turns of the steering wheel. Refer to your implement operator's manual regarding maximum travel speed limitations.

LG70251,000145E-19-05SEP18

Transport Tractor Safely

CAUTION: It is strongly recommended not to raise the tractor using safety chains. All loading operations should be carried out by the driver of the tractor on the platform.



RXA0103709—UN—01JUL09

A disabled tractor is best transported on a flatbed carrier. Use chains to secure the tractor to the carrier. The axles and tractor frame are suitable attachment points.

Before transporting the tractor on a low-loader truck or flatbed rail wagon, make sure that the hood is secured over the tractor engine and that doors, roof hatch (if equipped) and windows are properly closed.

Never tow a tractor at a speed greater than 10 km/h (6 mph). An operator must steer and brake the tractor under tow.

LG70251,000145F-19-05SEP18

Complete Set

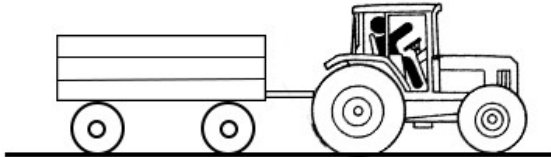
In negotiation with the customer, agreed in the contract for supply, tractor with equipped a braking system control for hydraulic or pneumatic system of brakes, can be equipped without trailer brake system. This tractor can safely be used for aggregation with the hitch-mounted implements for pushing, transportation or actuating of the working equipment in agricultural or forestry, and also for towing of trailers (implements) on the public roads with tow loads not more than 50% total permissible mass of the tractor and speed not faster

than 40 km/h, or with the tow loads not more than total permissible mass of the tractor and speed not faster than 10 km/h.

LG70251,00014CB-19-26SEP18

Towed Mass

Tractor can be equipped without hydraulic or pneumatic trailer/implement system.



CPA0006473—UN—06SEP18

| Trailer/Implement Brake System | Maximum Permissible |
|------------------------------------------------------------------|---------------------|
| Unbraked | 2500 kg |
| Independently Braked | 4000 kg |
| Inertia-Braked | 3500 kg |
| Fitted with the assisted braking system (hydraulic or pneumatic) | 32 000 kg |

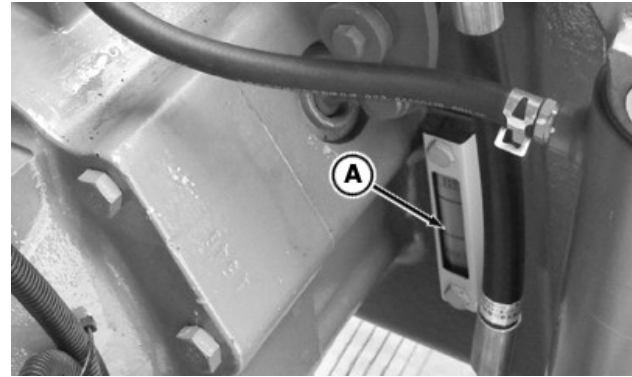
Trailer/implement brake systems determines maximum permissible towable mass.

LG70251,00014D4-19-28SEP18

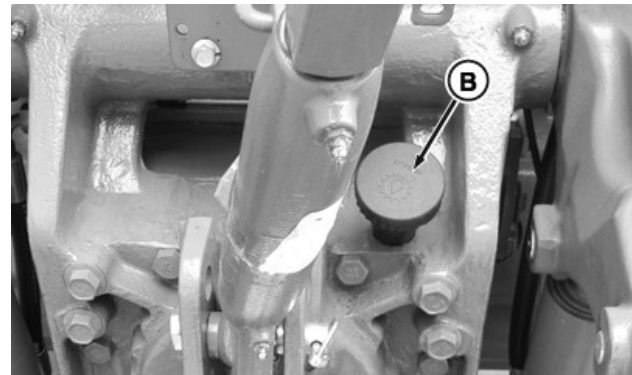
Tow Tractor

IMPORTANT: To avoid transmission and drivetrain component damage, **NEVER** attempt to start tractor by towing. Engine will not start.

- If possible, operate engine above 1250 rpm to provide lubrication, power steering, and power brakes. Have an operator steer and brake tractor.
- **DO NOT** tow a tractor faster than 8 km/h (5 mph). **DO NOT** exceed 3 km/h (2 mph) for the first 10 min in below freezing temperatures.
- Check transmission-hydraulic oil level. Add 1 L (1 qt) for each 90 mm (3-1/2 in) front wheels are raised off the ground. **DO NOT** raise wheels more than 305 mm (12 in). Drain excess oil after transporting.



PY14832—UN—01JAN13



PY14923—UN—18FEB13

A—Transmission/Hydraulic System Sight Glass
B—Hydraulic Oil Fill Port

1. Be sure that transmission/hydraulic system oil is to the full level line on sight glass (A). If tractor is to be towed with front wheels raised, add 1 liter (1 qt) of oil to hydraulic oil fill port (B) for each 90 mm (3-1/2 in) the wheels are raised. **DO NOT** raise front wheels more than 305 mm (12 in) above ground.

NOTE: After transporting tractor, drain oil that was added for towing.

2. Tap brake pedals to make sure that differential lock is not engaged.
3. Make sure that PTO is disengaged.
4. Place gearshift lever in neutral.

After Towing

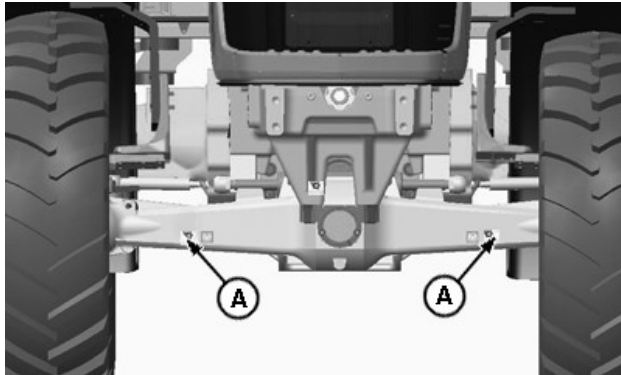
Drain excess transmission-hydraulic oil to lower level back to full.

LG70251,0001461-19-05SEP18

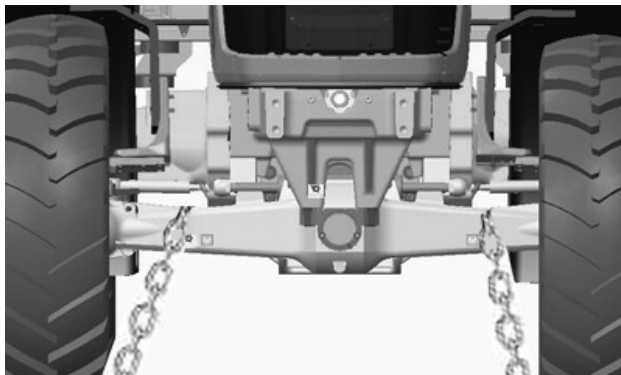
Transporting on Flat-Bed Carrier

⚠ CAUTION: To avoid accident or injury, securely chain the tractor to carrier. **DO NOT** chain to tractor components other than those areas listed. **DRIVE CAREFULLY.**

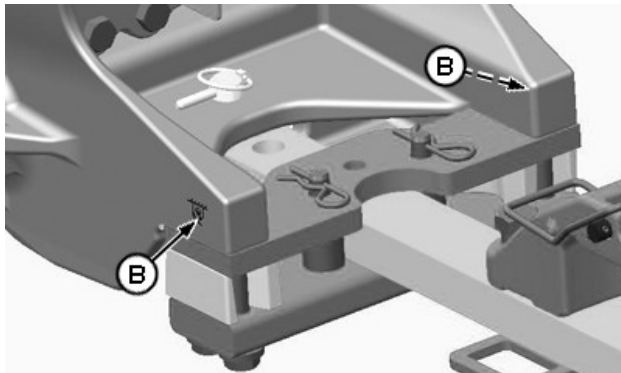
IMPORTANT: A disabled tractor should be hauled on a flat-bed carrier.



CPA0000734—UN—17JUN14



CPA0000739—UN—17JUN14



CPA0000735—UN—17JUN14



CPA0000736—UN—17JUN14



CPA0000737—UN—17JUN14

Tie Down Point Decal

A—Front Axle Tie Down Point (2 used)
B—Rear Tie Down Point (2 used)

Engage PARK position.

NOTE: If park brake has been disengaged, engage park brake.

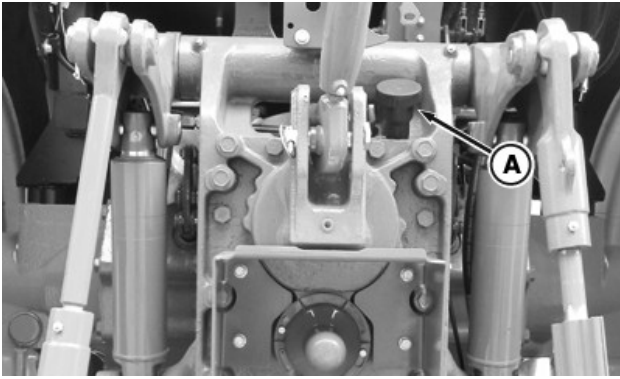
Wrap chain around front axle at front axle tie down points (A) and rear tie down points (B), secure to carrier.

LG70251,0001462-19-05SEP18

Tractor Storage

IMPORTANT: Any time tractor will not be used for several months, use this procedure to minimize corrosion and deterioration. Use an AR41785 Engine Storage Kit and an extra 0.95 L (1 qt) of AR41870 Corrosion Inhibitor.

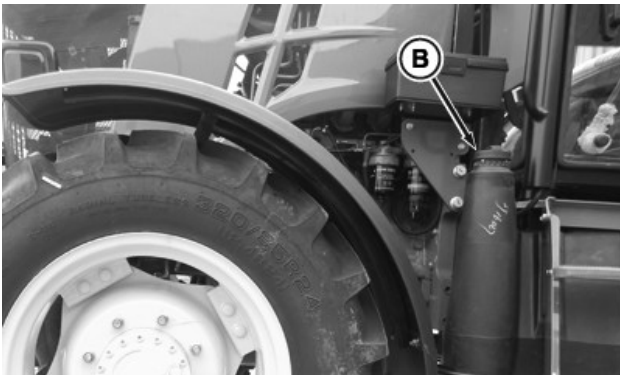
1. Service air cleaner. (See Service Air Cleaner, in Air Intake, Fuel, Coolant, and Exhaust Maintenance section.)
2. If coolant has been in tractor for 2 years, flush cooling system. (See Flush Cooling System, in Air Intake, Fuel, Coolant, and Exhaust Maintenance section.) Add 50 percent antifreeze water mixture. Test coolant for adequate cold-weather protection.
3. Change engine oil and filter. (See Change Engine Oil and Filter, in Engine Maintenance section.)
4. Drain fuel and add back 4 L (1 gal) of fuel. Then add 0.4 L (12 oz) of corrosion inhibitor.



PY14834—UN—01JAN13

A—Transmission Oil Filler Cap

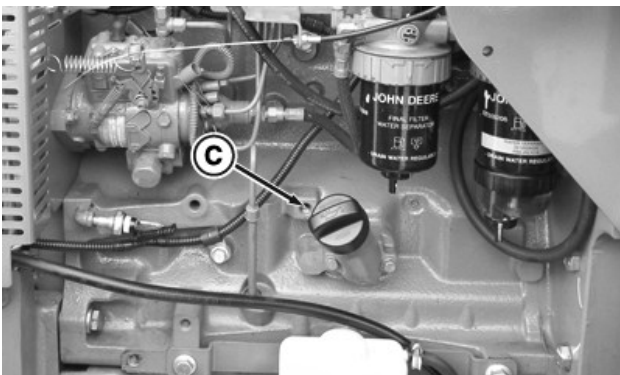
5. Remove transmission oil filler cap (A) and add 0.25 L (8 oz) of corrosion inhibitor to transmission/hydraulic system.
6. Depress clutch and start engine. Run engine until it reaches operating temperature. Also raise and lower rockshaft several times. Shut off engine.



PY14835—UN—01JAN13

B—Fuel Tank Filler Cap

7. Remove fuel tank filler cap (B) and add 0.5 L (16 oz) inhibitor to fuel tank.



PY14836—UN—01JAN13

C—Engine Oil Filler Cap

8. Remove engine oil filler cap (C) and add 0.5 L (16 oz) inhibitor to engine crankcase.
9. Remove air intake hose at manifold. Pour 0.1 L (3 oz) inhibitor into manifold and replace hose. Pull

hand throttle back to low idle position. Crank engine only a few revolutions.

10. Loosen alternator/fan belt after it has cooled.
11. Remove and clean battery. Store in a cool, dry place. Keep it charged.¹
12. Tie or block clutch pedal in the disengaged position.
13. Coat exposed metal surfaces such as adjustable front axles, if they are extended, with grease or a corrosion inhibitor.
14. Use tape to seal dust unloader valve, exhaust pipe, crankcase filer/aspirator, fuel cap, and transmission/hydraulic system filler/cap.
15. Cover dash with opaque material to prevent gauges from fading.
16. Raise tires off ground. Protect them from heat and sunlight.
17. Thoroughly clean tractor. Touch up any painted surfaces that are scratched or chipped.
18. If the tractor must be stored outside, cover it with a waterproof material.

LG70251,0001463-19-05SEP18

Remove Tractor from Storage

1. Check tire inflation pressure. (See Wheels and Tires Operation section.) Lower tires to ground.
2. Unseal all openings sealed in Tractor Storage. (See Tractor Storage in Transport and Storage section.)
3. Install battery.
4. Remove ties or block which secured clutch pedal down.
5. Check levels of engine oil, transmission/hydraulic oil, and engine coolant. Add fluids as needed.
6. Drain a small amount of fuel from fuel tank to purge any moisture condensation that has collected.
7. Fill fuel tank.
8. Perform all appropriate services listed in Maintenance and Service Intervals section, as dictated by elapsed storage period.
9. Check instruments and indicators by turning key switch to RUN position.

IMPORTANT: DO NOT operate starter more than 20 sec at a time, and wait at least 2 min for starter to cool before trying again.

¹ Disconnect battery ground cable for short-term storage periods (20 to 90 days).



CPA0002079—UN—20OCT15

12F×4R/24F×8R Transmission



CPA0003007—UN—18OCT16

24F×12R Transmission

A—Hand Throttle

10. Pull hand throttle (A) all the way down, depress clutch pedal, make sure that gearshift lever is in neutral, "N", and PTO control lever is in disengaged position.
11. Start engine. Operate engine at low idle for several minutes. Wait until engine reaches operating temperature and check all systems before placing tractor under load.

LG70251,0001464-19-05SEP18

Maintenance Intervals

Service Interval Chart - Daily or 10 Hours - 50 Hours - 250 Hours - 500 Hours - Annually or 1000 Hours - Two Years or 2000 Hours- 5000 Hours / Five Years

| Item | Daily or 10 Hours | Every 50 Hours | Every 250 Hours | Every 500 Hours | Every 1000 Hours/ Annually | Every 2000 Hours/Two Years | Every 5000 Hours/ Five Years |
|------------------------------------------------------------------------------------------------------|-------------------|----------------|-----------------|-----------------|----------------------------|----------------------------|------------------------------|
| Clean outside area of engine, remove any dust, mud, and greasy stain. | . | | | | | | |
| Check and fasten bolts on engine, make sure that engine is free from leakage of gas, water, and oil. | . | | | | | | |
| Identify abnormal noise and vibration, observe smoke, check, and remove any failure. | . | | | | | | |
| Check engine oil level. | . | | | | | | |
| Check transmission/hydraulic system oil level. | . | | | | | | |
| Check coolant level. | . | | | | | | |
| Drain water and sediment from fuel filters and water separators. | . | | | | | | |
| Check and tighten ballast weight retaining bolts | | . | | | | | |
| Inspect tires. | | . | | | | | |
| Lubricate steering spindles. ^a | | . | | | | | |
| Lubricate MFWD front axle. ^a | | . | | | | | |
| Lubricate MFWD front axle pivot pins. ^a | | . | | | | | |
| Lubricate MFWD drive shaft. | | . | | | | | |
| Clean battery. | | . | | | | | |
| Check battery condition. | | . | | | | | |
| Loose hardware inspection. | | | . | | | | |
| Service air cleaner. | | | . | | | | |
| Clean cab air filters. | | | . | | | | |
| Adjust brake pedal free play. | | | . | | | | |
| Adjust clutch pedal free play. | | | . | | | | |
| Check neutral start system. | | | . | | | | |
| Lubricate 3-Point hitch links. ^b | | | . | | | | |
| Check MFWD axle housing oil level. | | | . | | | | |
| Check MFWD wheel hub oil level. | | | . | | | | |
| Drain water and sediment from fuel tank. | | | . | | | | |
| Inspect and clean fuel tank filler cap. | | | . | | | | |
| Inspect alternator/fan belt. | | | . | | | | |
| Inspect ROPS/Cab mounting hardware. | | | . | | | | |
| Trailer hitch - Check torque on attaching screws (if equipped). | | | . | | | | |
| Front loader - Mounting frame, check torque on attaching screws (if equipped). | | | . | | | | |
| Check engine idle speed. | | | | . | | | |
| Check hoses and hose clamps for tightness. | | | | . | | | |
| Change engine oil and filter. ^c | | | | . | | | |
| Replace transmission/hydraulic oil filter. | | | | . | | | |
| Lubricate rear axle bearings. ^d | | | | . | | | |
| Check cooling system for leaks. | | | | . | | | |
| Replace secondary fuel filter and water separator. | | | | . | | | |
| Replace final fuel filter and water separator. | | | | . | | | |
| Check and tighten hydraulic cylinders | | | | . | | | |

Maintenance Intervals

| Item | Daily or 10 Hours | Every 50 Hours | Every 250 Hours | Every 500 Hours | Every 1000 Hours/Annually | Every 2000 Hours/Two Years | Every 5000 Hours/ Five Years |
|--------------------------------------------------------|-------------------|----------------|-----------------|-----------------|---------------------------|----------------------------|------------------------------|
| Replace primary and secondary elements of air cleaner. | | | | | • | | |
| Clean engine crankcase vent tube. | | | | | • | | |
| Check seat belt. | | | | | • | | |
| Change transmission/hydraulic system oil. | | | | | • | | |
| Change MFWD front axle housing oil. | | | | | • | | |
| Change MFWD wheel hub oil. | | | | | • | | |
| Flush cooling system. ^{ef} | | | | | | • | |
| Adjust engine valve clearance. ^g | | | | | | • | |
| Test or replace thermostat. ^g | | | | | | | • |
| Replace crankshaft vibration damper. ^g | | | | | | | • |

^a Necessary to perform daily or 10 hr. in wet or muddy conditions.

^b Necessary to perform 50 hours in special conditions (wet, muddy condition, and etc.). Necessary to perform daily or 10 hours in extremely wet or muddy conditions.

^c If PLUS-50 oil and a John Deere filter are not used, lower this service interval to 250 hours

^d Necessary to perform 50 hr. in wet or muddy conditions.

^e Check coolant every year as required, can be extended to 5000 hours or 5 years if John Deere COOL-GARD is used.

^f Check coolant every year as required, can be extended to 6000 hours or 6 years if John Deere COOL-GARD II is used.

^g See an authorized John Deere dealer for service.

CO00263,00021EF-19-09NOV22

Service after First 100 Hours

For service after first 100 hours, see Engine Maintenance- Break-In Service.

CP00606,000139A-19-27APR18

Service Tractor Safely

Disengage power to attachments and stop engine before making any repairs or adjustments.

Do not overspeed engine.

Keep the vehicle and attachments in good operating condition.

Keep safety devices in place and in working condition.

Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.

Before you work on any part of the engine, stop the engine and let it cool. Hot engine parts can burn skin on contact.

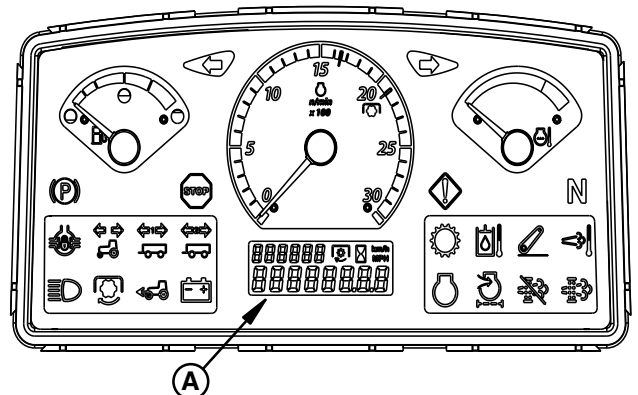
Never start engine unless gear shift lever is in neutral position.

Be careful to prevent clothing, jewelry, or long hair from getting caught in the fan blades, drive belts, or any other moving engine parts.

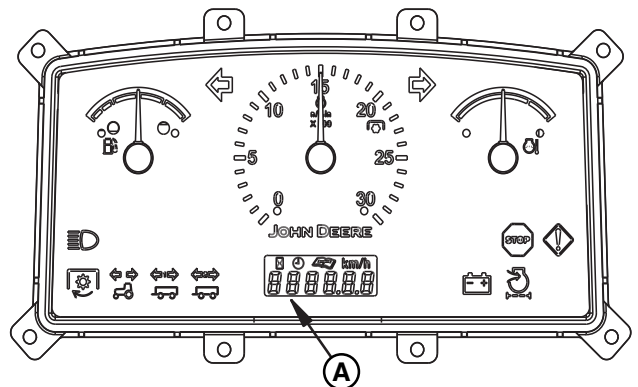
Unauthorized modifications to the machine may impair performance and/or safety and affect machine life.

CP00606,00013E2-19-15MAY18

Observe Service Intervals



PY14907—UN—01FEB13
Instrument Cluster (wet clutch)



PY14913—UN—31JAN13
Instrument Cluster (dry clutch)

A—Hour Meter

Using hour meter (A) as a guide, perform all services at the hourly intervals indicated on the following pages. Keep a service record on charts provided in the Lubrication and Maintenance Record Charts section.

IMPORTANT: Recommended service intervals are for average conditions. Service more often if tractor is operated under adverse conditions.

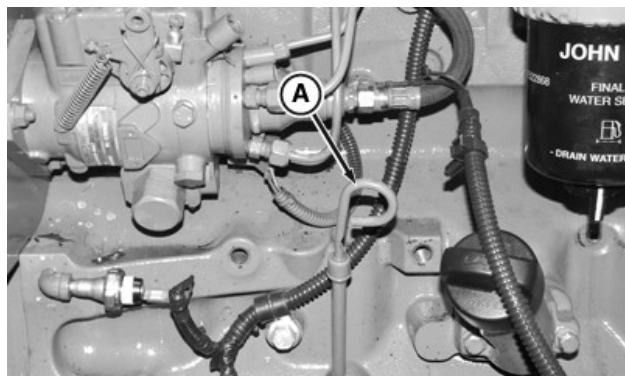
N400041,0003540-19-14FEB17

Use Correct Lubricant

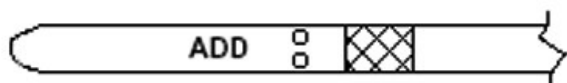
IMPORTANT: Use only lubricants meeting specifications outlined in Fuels, Lubricants, and Coolants section when performing tractor service.

PY80265,0000461-19-17SEP07

Service Daily Before Start-Up



PY16726—UN—17NOV12



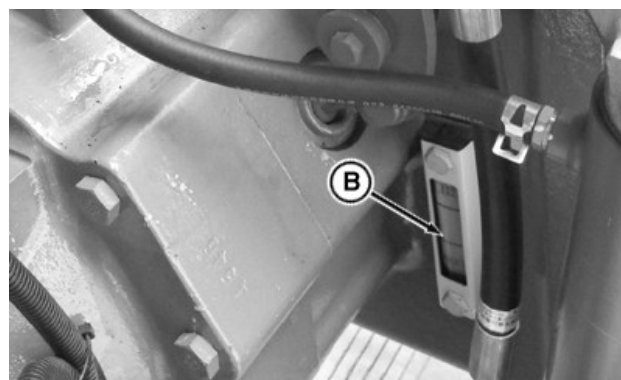
PUC1488—UN—30OCT07

A—Dipstick

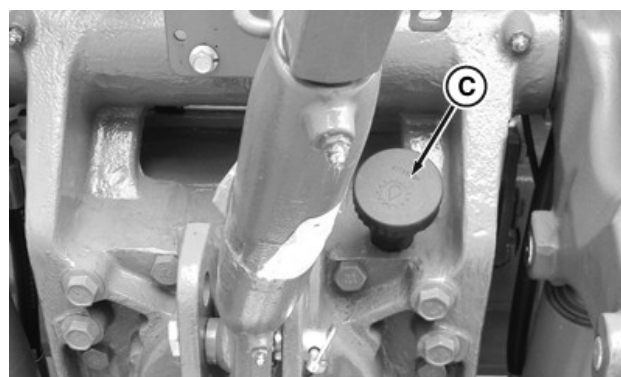
NOTE: Park tractor on level ground before executing checks.

1. Check engine oil level. Remove and clean dipstick (A) and reinsert fully. Remove it and check oil level. The safe operating range is between the upper and lower marks of the dipstick. (See Check Engine Oil Level, in Engine Maintenance section.)

Do not operate the engine if oil level is below minimum mark. In this case, add recommended oil to maintain oil level. (See Fuels, Lubricants, and Coolants section.)



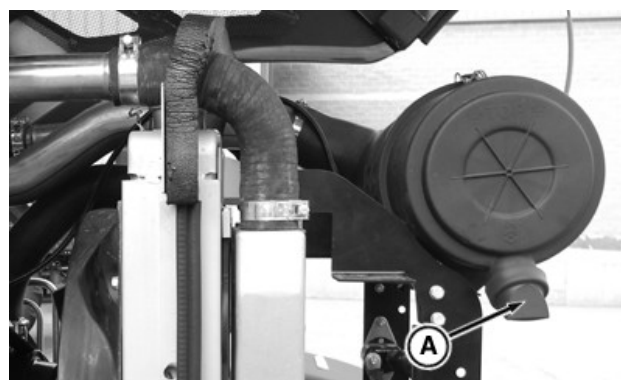
PY16729—UN—17NOV12



PY16727—UN—17NOV12

B—Transmission/Hydraulic Oil Level Sight Glass
C—Transmission/Hydraulic Oil Fill Port

2. Check hydraulic oil level through sight transmission/hydraulic oil level sight glass (B). If oil level is low add oil through fill transmission/hydraulic oil fill port (C). (See Check Transmission/Hydraulic System Oil Level, in Transmission Maintenance section.)

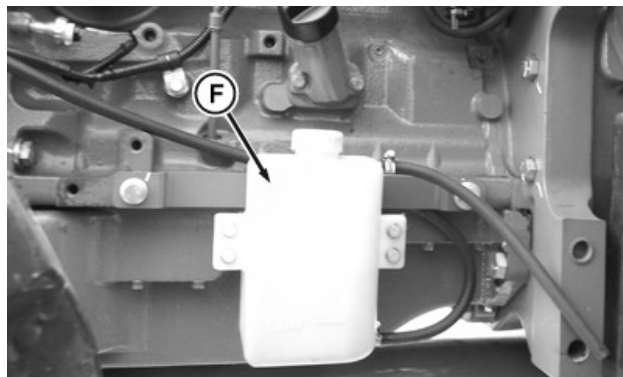


PY16730—UN—17NOV12

For 6095B Tractors

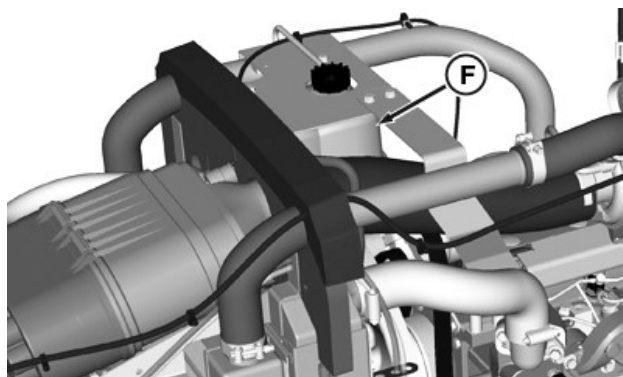
A—Dust Unloader Valve

3. Squeeze dust unloader valve (A) to remove dust.



PY16728—UN—17NOV12

For 6095B Tractor



PY14933—UN—20MAR13

For 6110B, 6120B, 6135B, and 6140B Tractors

F—Coolant Overflow Tank (surge tank)

4. Check coolant level in coolant overflow tank (F). (See Check Coolant Level in Air Intake, Fuel, Coolant, and Exhaust Maintenance section.)

IMPORTANT: If operating in extremely wet or muddy conditions, lubricate several additional components daily as well. (See Lubricate MFWD Front Axle Pivot Pins, Lubricate Steering Spindles and MFWD Drive Shaft, in MFWD and Front Axle Maintenance section.)

CP00606,000139B-19-27APR18

Additional Service Information

This is not a detailed service manual. It contains only information needed for operation and routine maintenance. If you want more detailed service information, order a Technical Manual through your John Deere dealer.

PY80265,00003D9-19-08OCT07

Fuels, Lubricants, and Coolants

Handle Fuel Safely—Avoid Fires



TS202—UN—23AUG88

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

Do not store oily rags; they can ignite and burn spontaneously.

DX,FLAME-19-29SEP98

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 practical 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.

IMPORTANT: The fuel tank is vented through the filler cap. If a new filler cap is required, always replace it with an original vented cap.

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. Keeping the free water drained and treating the bulk fuel storage tank quarterly with a maintenance dose of a biocide will prevent microbial growth. Contact your fuel supplier or John Deere dealer for recommendations.

DX,FUEL4-19-13JAN18

Handle Fluids Safely—Avoid Fires



TS227—UN—15APR13

When you work around fuel, do not smoke or work near heaters or other fire hazards.

Store flammable fluids away from fire hazards. Do not incinerate or puncture pressurized containers.

Make sure machine is clean of trash, grease, and debris.

Cold Weather Operation

IMPORTANT: Viscosity grade selection is critical for cold weather operation of the transmission. Preheat procedures are required when operating transmission at temperatures lower than the oil's MINIMUM critical temperature.

NOTE: See TRANSMISSION AND HYDRAULIC OIL, in this section, for MINIMUM viscosity grade for a given transmission operating temperature.

Warm-Up Procedures

If preheating transmission with Auxiliary Source, preheat transmission oil to MINIMUM temperature before operating.

As an Alternate Procedure, operate tractor with transmission in neutral for approximately 20 minutes, or until oil has warmed to MINIMUM temperature as recommended above.

MX,FLIP,B-19-18MAR92

Hot Weather Operation

NOTE: See TRANSMISSION AND HYDRAULIC OIL, in this section, for correct viscosity grade for a given transmission operating temperature.

Use higher than normal viscosity grade under following conditions:

- Ambient temperatures consistently above 30° C (86° F).
- Frequent stop-and-go driving in hot weather.
- Repeated climbing of high grades in hot weather.

OUO6070,00000DF-19-15FEB01

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.).

Cloud Point should be below the expected lowest ambient temperature or **Cold Filter Plugging Point** (CFPP) should be a maximum 10°C (18°F) below the fuel cloud point.

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).

Materials such as copper, lead, zinc, tin, brass and

bronze should be avoided in fuel handling, distribution and storage equipment as these metals can catalyze fuel oxidation reactions which can lead to fuel system deposits and plugged fuel filters.

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, Stage IV, and Stage V Engines Above 560 kW

- Use ONLY diesel fuel with a maximum of 500 mg/kg (500 ppm) sulfur content.

Sulfur Content for Interim Tier 4, Final Tier 4, Stage III B, Stage IV Engines, and Stage V 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.¹
- 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.

¹ See DX,ENOIL12,OEM, DX,ENOIL12,T2,STD, or DX,ENOIL12,T2,EXT for more information on Engine Oil and Filter Service Intervals.

Improper fuel additive usage may cause damage on fuel injection equipment of diesel engines.

DX,FUEL1-19-01NOV22

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

Testing Diesel Fuel

A fuel analysis program can help to monitor the quality of diesel fuel. The fuel analysis can provide critical data such as calculated cetane index, fuel type, sulfur content, water content, appearance, suitability for cold weather operations, bacteria, cloud point, acid number, particulate contamination, and whether the fuel meets ASTM D975 or equivalent specification.

Contact your John Deere dealer for more information on diesel fuel analysis.

DX,FUEL6-19-13JAN18

Fill Fuel Tank

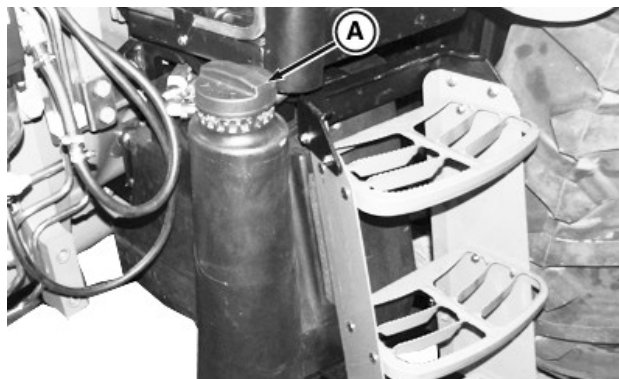
CAUTION: Handle fuel with care: It is highly flammable. DO NOT refuel the machine while smoking or when near open flame or sparks.

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.



TS202—UN—23AUG88



PY17076—UN—05OCT12

A—Fuel Tank Filler Cap

Fuel tank is filled through fuel tank filler cap (A). Fill fuel tank at end of each day's operation. This prevents condensation in the tank as moist air cools.

Specification

Fuel Tank—Capacity. 150 L (39.62 gal) for 6095B tractor
210 L (55.48 gal) for 6110B, 6120B, and 6135B tractors
255 L (67.36 gal) for 6140B tractor

NOTE: To reduce fuel gelling and control wax separation during cold weather, John Deere Fuel Flow Improver, or equivalent, may be added to fuel or bulk storage tank.

CP00606,00013D1-19-10MAY18

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 John Deere branded fluids or fluids that have been tested and/or approved for use in John Deere equipment.

Re-refined base stock products may be used if the finished lubricant meets the performance requirements.

DX,ALTER-19-13JAN18

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

Diesel Engine Break-In Oil — Non-Emissions Certified and Certified Tier 1, Tier 2, Tier 3, Stage I, Stage II, and Stage III

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
- 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 CK-4 | ACEA E9 |
| API CJ-4 | ACEA E7 |
| API CI-4 PLUS | ACEA E6 |
| API CI-4 | ACEA E5 |
| API CH-4 | ACEA E4 |
| API CG-4 | ACEA E3 |
| API CF-4 | |
| API CF-2 | |
| API CF | |

These oils do not allow the engine to break in properly.

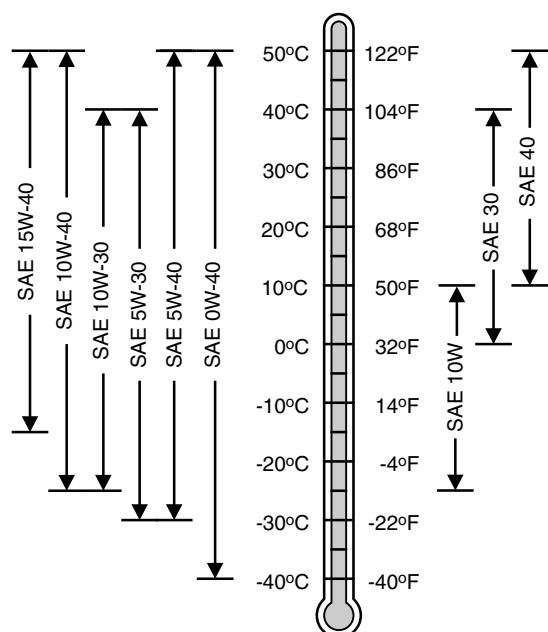
John Deere Break-In Plus™ Engine Oil can be used for all John Deere diesel engines at all emission certification levels.

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.

DX,ENOIL4-19-02NOV16

*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.*

Diesel Engine Oil — Tier 3 and Stage IIIA



TS1743—UN—25APR19

Oil Viscosities for Air Temperature Ranges

Failure to follow applicable oil standards and drain intervals can result in severe engine damage that might not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere oils, parts, or service.

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.

John Deere Torq-Gard™ is also allowed.

Other oils may be used if they meet one or more of the following standards:

- API Service Category CK-4
- API Service Category CJ-4
- API Service Category CI-4 PLUS
- API Service Category CI-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 10 000 mg/kg (10 000 ppm).

DX,ENOil11-19-23APR19

Engine Oil and Filter Service Intervals—Tier 3 and Stage IIIA — PowerTech™ Engines

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.

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 CK-4, API CJ-4, API CI-4 PLUS, API CI-4, ACEA E9, ACEA E7, ACEA E6, ACEA E5, and ACEA E4

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 or other qualified service provider 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 1000 mg/kg (1000 ppm) is **RECOMMENDED**
- Use of diesel fuel with sulfur content 1000—5000 mg/kg (1000—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 or qualified service provider
- **DO NOT** use diesel fuel with sulfur content greater than 10000 mg/kg (10000 ppm)

NOTE: The 500-hour extended oil and filter change interval is only allowed if all of the following conditions are met:

- Use of diesel fuel with sulfur content less than 5000 mg/kg (5000 ppm)
- Use of John Deere Plus-50™ II or John Deere Plus-50™ oil
- Use of an approved John Deere oil filter

| Engine Oil and Filter Service Intervals | |
|-----------------------------------------|---------------------------------|
| Fuel Sulfur | Less than 5000 mg/kg (5000 ppm) |
| Plus-50 Oils | 500 hours |

Plus-50 is a trademark of Deere & Company
Torq-Gard is a trademark of Deere & Company

| Engine Oil and Filter Service Intervals | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Other Oils | 250 hours |
| Fuel Sulfur | 5000—10000 mg/kg (5000—10000 ppm) |
| Plus-50 Oils | 250 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. Oil analysis means taking a series of oil samples at 50-hour increments beyond the normal service interval until either the data indicates the end of useful oil life or the maximum service interval of John Deere Plus-50 oils is reached. | |

IMPORTANT: To avoid engine damage:

- **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.**

DX,ENOIL13,T3,PT,140toMAX-19-13JAN18

Extended Diesel Engine Oil Service Intervals

When John Deere PLUS-50™ oil is used with the specified John Deere filter, the service interval for engine oil and filter changes may be increased by 50% but not to exceed a maximum of 500 hours.

When ACEA E7, ACEA E6, ACEA E5, or ACEA E4 oils are used with specified John Deere filter, use engine oil analysis to determine if the service interval for engine oil and filter changes may be increased by a maximum of 50% but not to exceed 500 hours.

If John Deere PLUS-50™, ACEA E7, ACEA E6, ACEA E5, or ACEA E4 oils are used with other than the specified John Deere filter, change the engine oil and filter at the normal service interval.

If John Deere TORQ-GARD SUPREME™, API CJ-4, API CI-4 PLUS, API CI-4, API CH-4, or ACEA E3 oils are used, change the engine oil and filter at the normal service interval.

If API CG-4, API CF-4, or ACEA E2 oils are used, change the engine oil and filter at 50% of the normal service interval.

DX,ENOIL8-19-13SEP06

Diesel Engine Oil Service Interval for Operation at High Altitude

To avoid excessive oil degradation and potential engine damage, reduce oil and filter service intervals to 50% of the original recommended values when operating engines at altitudes above **1675 m (5500 ft)**.

*PLUS-50 is a trademark of Deere & Company
TORQ-GARD SUPREME is a trademark of Deere & Company*

Oil analysis may allow longer service intervals.

Use only approved oil types.

| Example of Original Hours | Corresponding High Altitude Hours |
|---------------------------|-----------------------------------|
| 125 | 60 |
| 150 | 75 |
| 175 | 85 |
| 200 | 100 |
| 250 | 125 |
| 275 | 135 |
| 300 | 150 |
| 350 | 175 |
| 375 | 185 |
| 400 | 200 |
| 500 | 250 |

DX,ENOIL,SERV,HIALT-19-11NOV14

Oil Filters

Filtration of oils is critical to proper operation and lubrication.

Always change filters regularly as specified in this manual.

Use filters meeting John Deere performance specifications.

DX,FILT-19-18MAR96

Diesel Engine Coolant (engine with wet sleeve cylinder liners)

Failure to follow applicable coolant standards and drain intervals can result in severe engine damage that may not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere coolants, parts, or service.

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 Pre-Mix | Freeze Protection Limit |
|-----------------------|-------------------------|
| 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
- Is formulated with a 2-ethylhexanoic acid (2-EHA) free additive package
- 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
- Is formulated with a 2-ethylhexanoic acid (2-EHA) 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. 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.²

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,COOL3-19-25AUG20

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 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

COOL-GARD is a trademark of Deere & Company

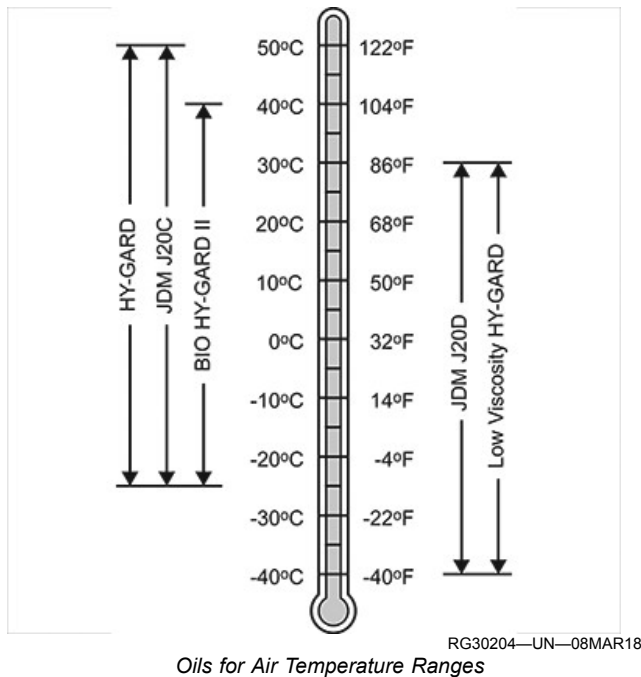
² Coolant analysis may extend the service interval of other "Coolants" to a maximum not to exceed the interval of Cool-Gard II coolants. Coolant analysis means taking a series of coolant samples at 1000 hour increments beyond the normal service interval until either the data indicate the end of useful coolant life or the maximum service interval of Cool-Gard II is reached.

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

Transmission and Hydraulic Oil



Oils for Air Temperature Ranges

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

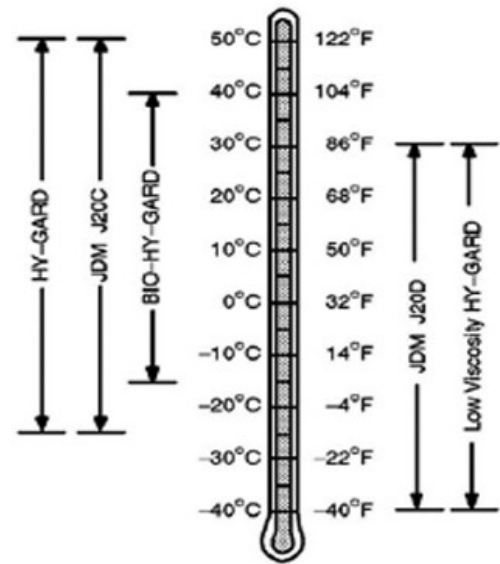
Use John Deere Bio Hy-Gard™ II oil when a biodegradable fluid is required.³

DX,ANTI-19-01JAN18

Hy-Gard is a trademark of Deere & Company
Bio Hy-Gard is a trademark of Deere & Company

³ Bio Hy-Gard II meets or exceeds the minimum biodegradability of 80% within 21 days according to CEC-L-33-T-82 test method. Bio Hy-Gard II should not be mixed with mineral oils, because this reduces the biodegradability and makes proper oil recycling impossible.

MFWD Front Axle Housing Oil



Oils for Air Temperature Ranges

Depending upon the expected air temperature range during the drain interval, use proper oil viscosity.

The following oils are recommended:

- John Deere HY-GARD
- John Deere HY-GARD - LOW VISCOSITY

Greatwall Hydraulic/Transmission/Braking.

Other oils may be used if they meet one of the following:

- John Deere JDM J20C
- John Deere JDM J20D

CP00263,0002117-19-31MAY19

MFWD Wheel Hub Oil

Depending upon the expected air temperature range during the drain interval, use proper oil viscosity.

The following oils are recommended:

- John Deere GL-5
- John Deere JDM J20C
- John Deere EXTREME-GARD

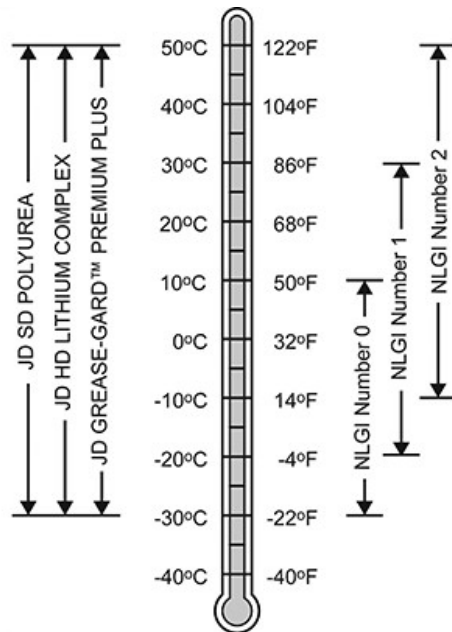
Greatwall Hydraulic/Transmission/Braking

Other GL-5 Service Classification oils that comply with API may also be used.

CP00606,00013E3-19-16MAY18

Multipurpose Extreme Pressure (EP) Grease

IMPORTANT: For automated lubrication systems different ambient air temperatures need to be considered.



RG30199—UN—08MAR18

Greases for Air Temperature Ranges

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 Grease-Gard™ Premium Plus

Other greases may be used if they meet the following:

- NLGI Performance Classification GC-LB
- ISO-L-X-BDHB 2 or DIN KP 2 N-10 Lithium Complex, Non-Synthetic Base Oil (100 to 220 mm²/s @ 40°C)

IMPORTANT: Some types of thickeners, base oils, and additives used in greases are not compatible with others. Mixing greases should be avoided. Consult your grease supplier before mixing different types of grease.

DX, GRE A1-19-13JAN18

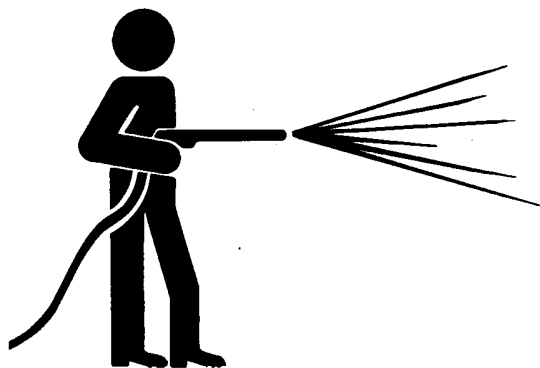
As Required Maintenance

As Required Maintenance

| | |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Service machine for as required maintenance items refer to maintenance sections. | • Inspect Engine air intake system in Air Intake, Fuel, Coolant, and Exhaust Maintenance section. |
| | • Clean grille screens, radiator, oil cooler, radiator screen and A/C condenser in Air Intake, Fuel, Coolant, and Exhaust Maintenance section. |
| | • Bleed fuel system in Air Intake, Fuel, Coolant, and Exhaust Maintenance section. |
| | • Charge battery in Electrical and Lighting Maintenance section. |
| | • Replace headlight element in Electrical and Lighting Maintenance section. |
| | • Replace tail and turn bulbs in Electrical and Lighting Maintenance section. |
| | • Replace worklight element in Electrical and Lighting Maintenance section. |
| | • Adjust headlights in Electrical and Lighting Maintenance section. |
| | • Warm transmission-hydraulic system oil in Hydraulics Maintenance section. |
| | • Check selective control valve in Selective Control Valve Maintenance section. |

N400041.0003A69-19-25JAN18

Wash Machine After Unloading



T6642EJ—UN—18OCT88

IMPORTANT: Reduce corrosion from road salt and sea salt. Promptly wash equipment delivered by truck during winter months or delivered by cargo ship.

Avoid malfunction or damage to machine components. Do not direct high-pressure spray at electronic or electrical components and connectors, bearings, hydraulic seals, fuel injection pumps, or other sensitive components. Reduce water pressure to wash sensitive components.

Avoid water penetration behind seals and similar components. Do not direct spray on these components at an angle less than 45°.

Avoid discoloration of machine paint. Do not use strong soaps, chemical detergents, or cleaning agents that contain acids, caustics, or abrasives. Do not allow cleaning agents to dry on machine. Promptly rinse machine after washing with a cleaning agent.

Use a top-to-bottom wash sequence. Wash behind panels and in hidden areas where salt can accumulate during transport.

If a cleaning agent is used, the agent must be the correct concentration. Do not allow cleaning agent to dry on machine, promptly rinse from top to bottom. Your John Deere dealer has cleaners which are compatible with your equipment and which are recommended to remove protective shipping coatings.

Incorrect detergent, excessive concentration, a delay in rinsing, or incomplete rinsing can discolor paint after delivery.

DX,WASH-19-14MAR14

Controls and Instruments Maintenance

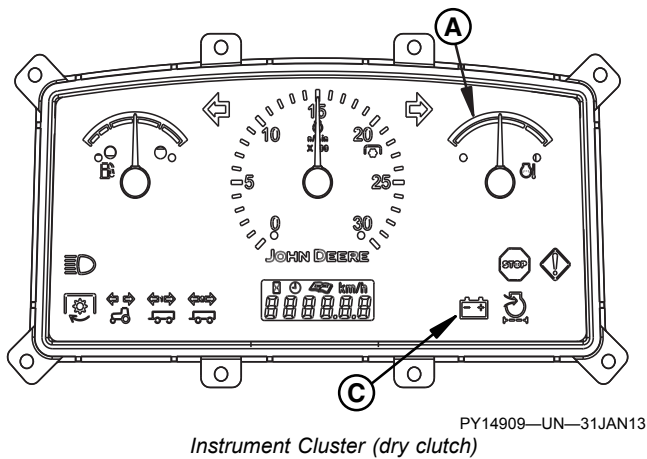
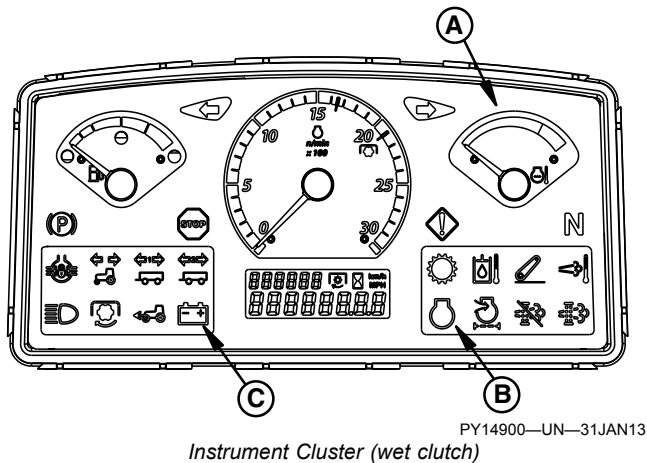
Controls and Instruments Maintenance

Service controls and instruments refer to Controls and Instruments section.

CP00606,0001350-19-20APR18

Engine Maintenance

Observe Engine Operation Closely



A—Coolant Temperature Gauge
B—Engine Oil Pressure Indicator
C—Charging System Indicator

IMPORTANT: Be extra cautious during the first 100 hr., until you become thoroughly familiar with the sound and feel of your new tractor. Stay extra attentive and alert.

Warm up tractor carefully. Check charging system indicator (C), engine oil pressure indicator (B), and coolant temperature gauge (A).

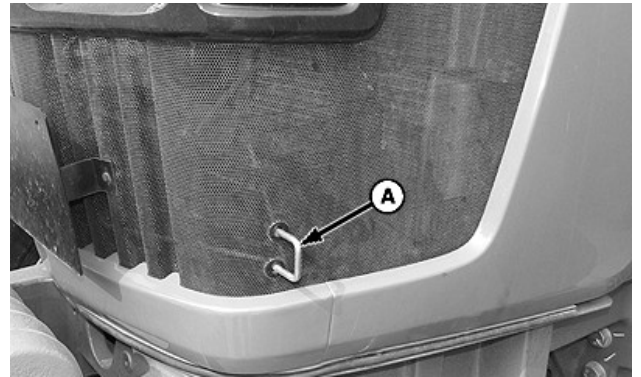
Avoid unnecessary engine idling (5 min).

Check engine oil, coolant, transmission/hydraulic, and mechanical front wheel drive fluid levels frequently. Watch for fluid leaks.

NOTE: If engine oil must be added, use seasonal viscosity grade oil. Use only lubricants meeting specifications given in the Fuels, Lubricants, and Coolant section.

LG70251,00014AC-19-19SEP18

Open Hood



A—Latch Handle

Pull latch handle (A) and lift hood up.

LG70251,00014AE-19-19SEP18

Use Correct Lubricant

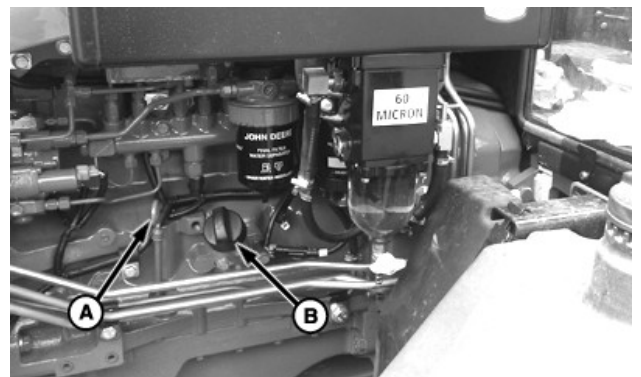
IMPORTANT: Use only lubricants meeting specifications outlined in Fuels, Lubricants, and Coolants section when performing tractor service.

LG70251,00014AF-19-19SEP18

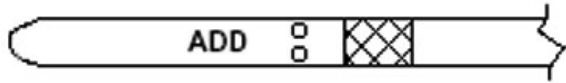
Check Engine Oil Level

Service Interval—Daily or 10 Hours

1. If engine has not been running, start engine and let it run at low idle for 2—3 min. Stop engine and wait 2—3 min. for oil to drain back into oil sump.
2. If engine has been running, turn speed down to low idle and let it run for 2—3 min. Stop engine and wait 2—3 min.



Left-Hand Side



PUC1488—UN—30OCT07

A—Engine Oil Dipstick
B—Engine Oil Filler Hole

3. Check engine oil level. Remove and wipe off dipstick (A), and reinsert it fully. Remove and locate oil level.

NOTE: Remove left-hand side screen, if necessary.

4. Safe operating range is in crosshatched area on dipstick. Do not operate engine when oil level is below lower mark.
5. Add seasonal viscosity grade oil through filler hole (B). (See Fuels, Lubricants, and Coolants section for oil specifications.)

LG70251,00014B0-19-19SEP18

Change Engine Oil and Filter

SERVICE INTERVAL

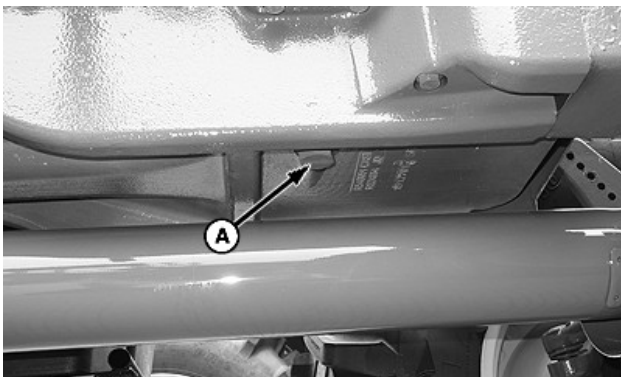
Initial — 100 Hours

Regular — 250 Hours*

Regular — 500 Hours

* If PLUS 50 oil and a John Deere filter are not used, lower this service interval to 250 hours

1. Run engine to heat oil. Turn off engine.



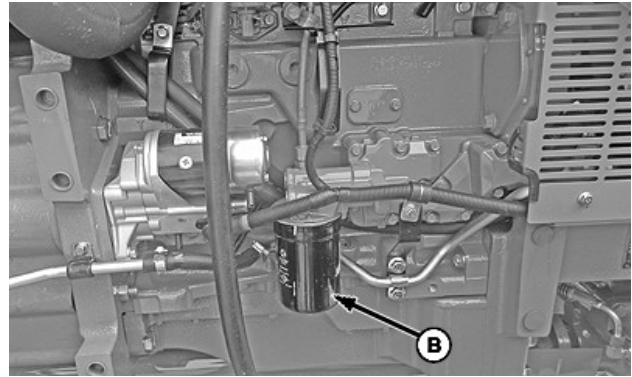
CPA0001717—UN—27JUL15

Bottom of Engine

A—Drain Plug

2. Remove drain plug (A) and drain oil.

NOTE: Oil filter gasket's embossment should match the groove of the filter seat.



CPA0001701—UN—27JUL15

Right-Hand Side

B—Engine Oil Filter

3. Replace engine oil filter (B) when changing oil. Check oil filter gasket and replace it as necessary. Apply a film of oil on the oil filter gasket and install filter. Hand tighten plus 1/2 turn.
4. Install and tighten drain plug (A).
5. Add seasonal viscosity grade oil. (See Fuels, Lubricants, and Coolants section.)

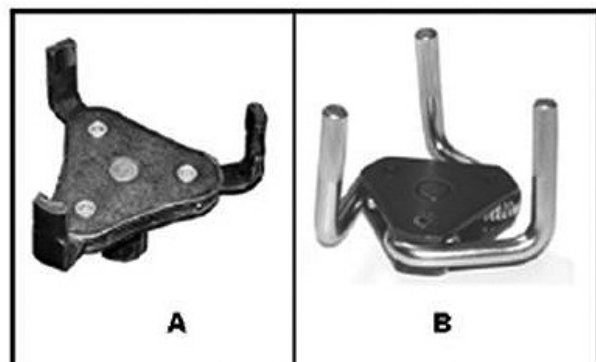
Specification

Engine Crankcase

Oil—Capacity. . . . 15 L (3.96 gal) (6095B, 6110B, 6120B, and 6135B tractors)
22.4 L (5.92 gal) (6140B tractor)

CO00263,0001DFF-19-09NOV22

Change Engine Oil Filter (if equipped with loader frames)



A

B

CPA0000562—UN—14JAN14

Tools



CPA0000593—UN—20JAN14

Installation by Hand



CPA0000563—UN—14JAN14

Using Suggested Tools

When loader mounting frames are installed on tractor, the access to the engine oil filter becomes limited and some conventional filter wrenches may not fit in the opening or may experience interference while turning the filter. A jaws type filter wrench is recommended for this application.

Removal (with wrench JDG18014):¹

1. Hook up filter wrench to an extension bar and ratchet.
2. Place wrench on filter (wrench base should be in contact with filter).
3. Turn the ratchet to grab and loosen the filter.

Installation (without wrench):

1. Apply a layer of clean engine oil on new filter seal.
2. Install the filter and hand-tighten plus 1/2 turn.

Installation (with wrench capable for tightening):

1. Apply a layer of clean engine oil on new filter seal.
2. Install filter and hand-tighten until filter seal contacts filter base.
3. Hook up the filter wrench to ratchet with extension bar.

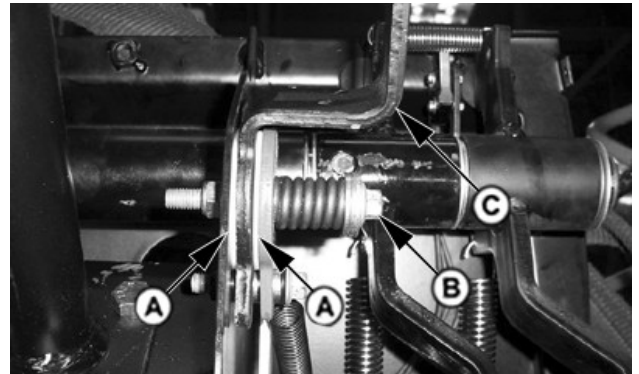
¹ You also can buy this tool at any other tool store.

4. Place the wrench on the filter and rotate the wrench carefully until the jaws grab the filter, from this point, tighten 1/2 turn.

IMPORTANT: Be careful while tightening the filter using a wrench. DO NOT tighten the filter more than 1/2 - 3/4 turn after the filter packing contacts the filter base to avoid filter damages.

LG70251,00014B2-19-19SEP18

Adjust Hand Throttle Friction



PUC1224—UN—17JAN08

A—Friction Plates
B—Lock Nut
C—Hand Throttle Lever

- When throttle lever becomes too loose and fails to keep constant engine speed, friction plates (A) need to be adjusted.
- Tighten lock nut (B) until throttle lever (C) moves easily but stays in place throughout range of travel.
- Linkage is located under dashboard, just right of steering column.

LG70251,00014B3-19-19SEP18

Check Engine Idle Speed

Service Interval—500 Hours

Slow idle speed is attained with hand throttle all the way down.

Fast idle speed is attained with hand throttle all the way up.

If idle speeds are not correct, see your dealer.

Specification

Engine—Slow Idle—Speed. 850 ~ 900 rpm
Engine—Fast Idle (with no
load)—Speed. 2350 ~ 2400 rpm (for 6095B tractor)
2325 ~ 2375 rpm (for 6110B, 6120B, 6135B, and 6140B tractors)

LG70251,00014B4-19-19SEP18

Break-In Service

During the First 10 Hours of Operation:

IMPORTANT: Keep wheel hardware tight to avoid tractor damage. Check torque on wheel bolts before operating, twice during first 10 hours of operation, after 50 hours of operation, and periodically thereafter.

Use engine oil meeting John Deere specifications. (See Diesel Engine Oil in Fuels, Lubricants, and Coolants section.)

Perform service listed for 10 hours in the service interval chart. (See Maintenance Intervals section.)

Tighten wheel bolts. (See Wheels and Tires Operation section.)

LG70251,00014C8-19-26SEP18

Replace Transmission/Hydraulic Oil Filter, in Transmission Maintenance section.)

Change engine oil and filter. (See Change Engine Oil and Filter, in Engine Maintenance section.)

Change MFWD axle oil. (See Check MFWD Front Axle Housing Oil, in MFWD and Front Axle Maintenance section.)

Change MFWD wheel hub oil. (See Change MFWD Wheel Hub Oil, in MFWD and Front Axle Maintenance section.)

Perform 100 hours Service, 10 hours Service, and 50 hours Service.

LG70251,00014CA-19-26SEP18

After the First 50 Hours of Operation:

Tighten wheel bolts. (See Wheels and Tires Operation section.)

Check alternator/fan belt tension.

Tighten air intake hose clamps. (See Check Air Intake System, in Air Intake, Fuel, Coolant, and Exhaust Maintenance section.)

Check cooling system hose clamps. (See Check Hoses and Hose Clamps for Tightness, in Air Intake, Fuel, Coolant, and Exhaust Maintenance section.)

Check brake linkage and brake pedal adjustment. (See Adjust Brake Pedal Free Play in Steering and Brake Maintenance section.)

Check clutch linkage and clutch pedal adjustment. (See Adjust Clutch Pedal Free Play, in Steering and Brake Maintenance section.)

Check PTO clutch linkage. (See Adjust PTO Clutch Operating Rod, in Power Take-off (PTO) Operation section.)

Perform service listed for 50 hours and 10 hours in Service Interval Chart. (See Maintenance Intervals section.)

LG70251,00014C9-19-26SEP18

After the First 100 Hours of Operation:

IMPORTANT: If the tractor was used under light load conditions during first 100 hours, refill with only specified engine oil for an additional 100 hours to allow engine to break in properly. (See Diesel Engine Oil in Fuels, Lubricants, and Coolant section.)

Replace transmission/hydraulic oil filter element. (See

Air Intake, Fuel, Coolant, and Exhaust Maintenance

Service Air Cleaner (6095B model)

Service Interval—250 Hours

A dual element air cleaner is standard. A dirty primary element is indicated when the air restriction indicator on instrument panel illuminates. A dirty element can result in loss of power or excessive smoke.



Right-Hand Side



Right-Hand Side



Right-Hand Side

A—Dust Unloader Valve
B—Air Filter Primary Element
C—Air Filter Secondary Element

IMPORTANT: Check unloader valve (A) frequently. Empty as often as needed to keep it from filling with dust. If valve is allowed to fill with dust, air cleaner element will plug rapidly.

Clean air cleaner primary element (B) when indicator light illuminates or every 10 hours.

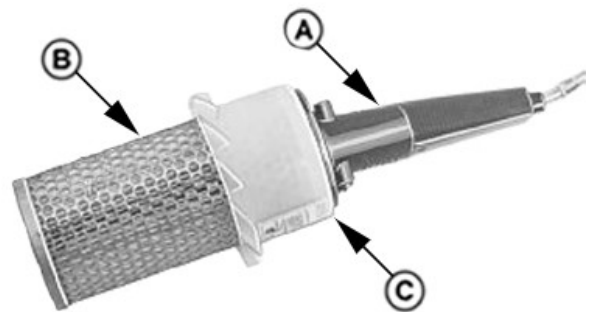
The secondary element (C) should be removed only when being replaced. If it looks too dirty or otherwise not in good condition, do not try to clean it. Instead, replace it.

Both primary and secondary elements should be replaced at the same time, once a year.

(See procedure in Replace Primary and Secondary Elements, in Air Intake, Fuel, Coolant, and Exhaust Maintenance section.)

CP00606,000139F-19-27APR18

Inspect Air Cleaner Elements (6095B model)

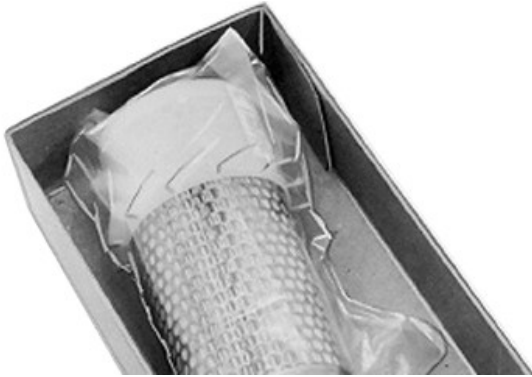


A—Light Source
B—Filter Element
C—Rubber Sealing Surface

1. Hold a bright light source (A) inside filter element (B) and check carefully for holes. Discard any element which shows the slightest hole.
2. Be sure outer screen is not dented. Vibration would quickly wear a hole in filter.
3. Be sure rubber sealing surfaces (C) are in good condition on both ends. If damaged, replace element.

N400041,0003608-19-18JAN17

Store Air Cleaner Elements (6095B model)



PUC1166—UN—21NOV07

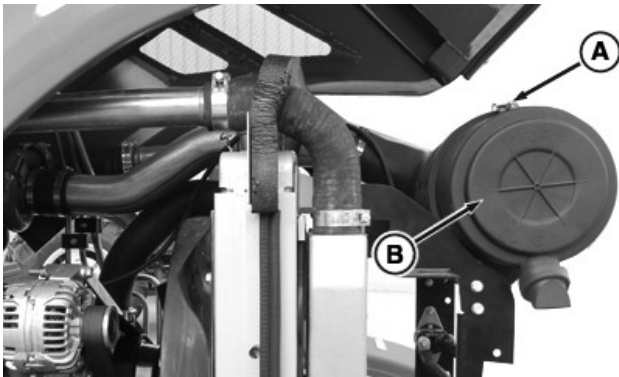
If element is not installed on tractor, seal element in a plastic bag and store in its original shipping container to protect against dust and damage.

N400041,0003609-19-18JAN17

Replace Primary and Secondary Elements of Air Cleaner (6095B model)

Service Interval —Once Every Year

1. Raise Hood.



PY14865—UN—07JAN13

A—Locking Clips
B—Cover

2. Release locking clips (A).
3. Pull out cover (B) and remove.



PY14866—UN—07JAN13

C—Primary Element

4. Remove primary element (C).



PY14867—UN—07JAN13

D—Secondary Element

5. Clean out any dirt in canister, taking care not to damage secondary filter element (D).

IMPORTANT: Remove secondary (inner) element only if replacement is necessary. DO NOT attempt to clean secondary element.

After secondary element is removed, install new element immediately to prevent dust from entering air intake system.

6. Install secondary element (D), primary element (C) and cover (B). Lock in the locking clips (A).

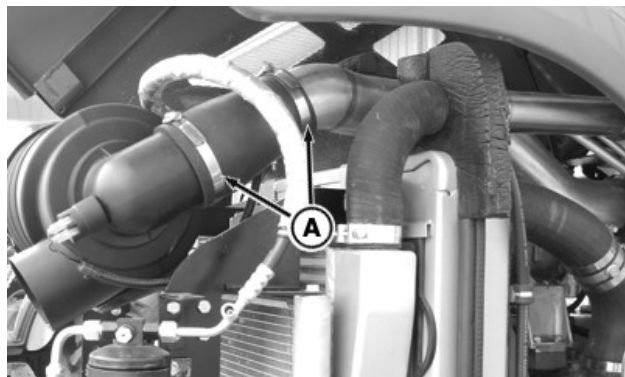
NOTE: Be sure dust unloader valve faces downward after cover is installed.

7. Install side screen.

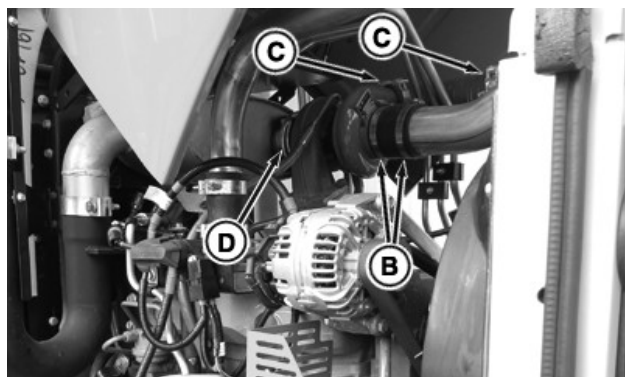
CP00606,000137C-19-26APR18

Check Air Intake System (6095B model)

Service Interval —As Required



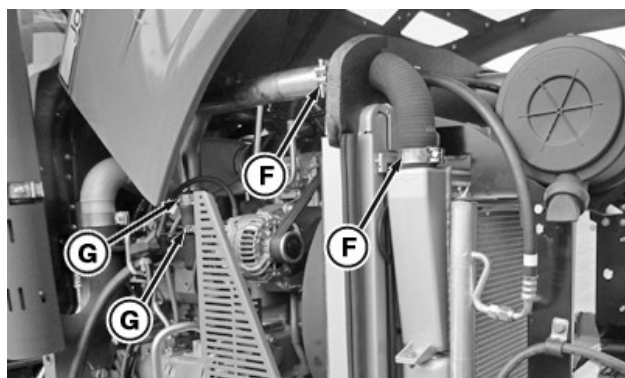
PY14868—UN—07JAN13



PY14869—UN—07JAN13



PY14870—UN—07JAN13



CPA0002354—UN—29NOV15

- A—Air Cleaner Outlet Hose Clamp (2 used)
- B—Turbocharger Inlet Hose Clamp (2 used)
- C—Turbocharger Outlet Hose Clamp (2 used)
- D—Turbine Outlet (exhaust gas) Clamp
- E—Charged Air Cooler Inlet Hose Clamps (2 used)
- F—Charged Air Cooler Outlet Hose Clamps (2 used)
- G—Engine Air Inlet Hose Clamps (2 used)

Check air intake system clamps (A, B, C, D, E, F and G) for tightness.

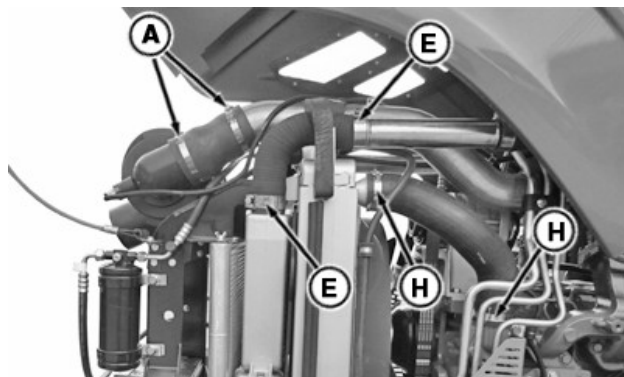
N400041,000360E-19-18JAN17

Check Hoses and Hose Clamps for Tightness (6095B model)

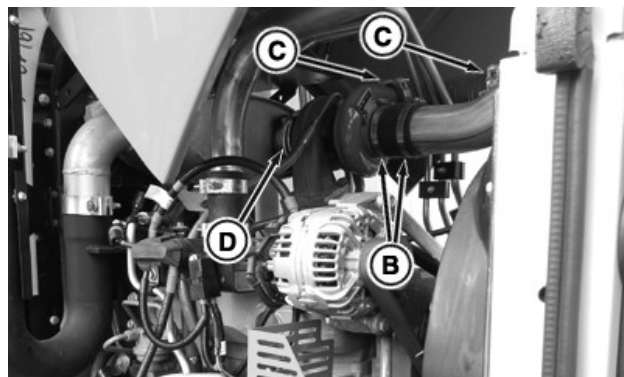
Service Interval—500 Hours

Check the following system hose clamps for tightness:

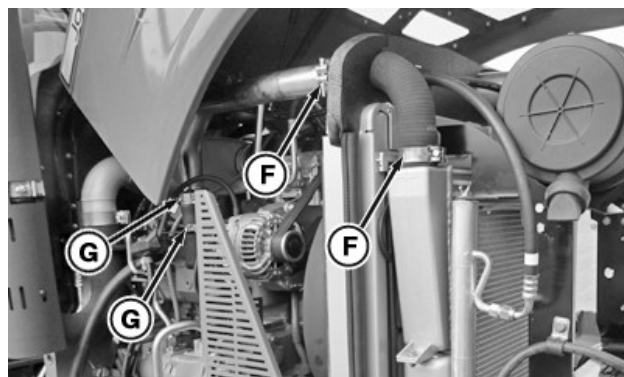
- Engine Air Induction System
- Engine Cooling System
- Hydraulic System
- Fuel System



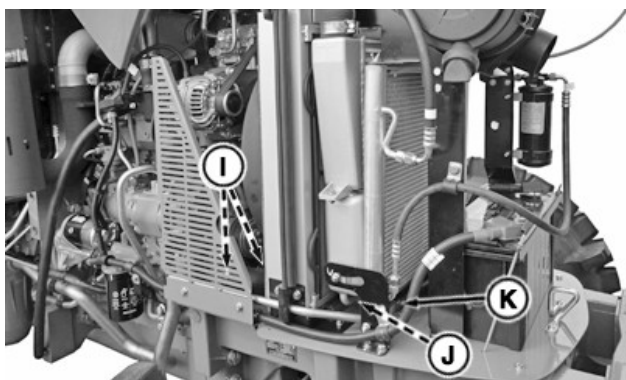
CPA0002363—UN—01DEC15



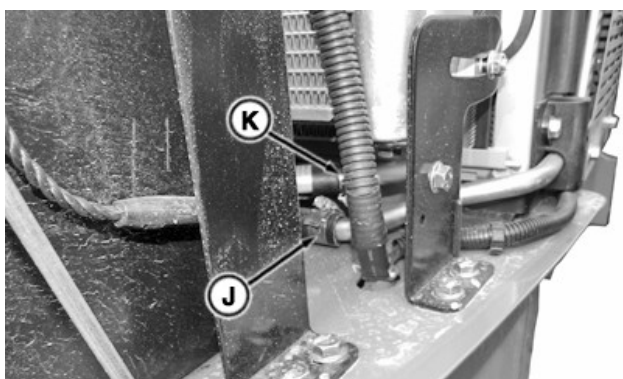
PY14869—UN—07JAN13



CPA0002354—UN—29NOV15



CPA0002364—UN—01DEC15



CPA0002365—UN—01DEC15

A—Air Cleaner Outlet Hose Clamp (2 used)
 B—Turbocharger Inlet Hose Clamp (2 used)
 C—Turbocharger Outlet Hose Clamps (2 used)
 D—Turbine Outlet (exhaust gas) Clamp
 E—Charged Air Cooler Inlet Hose Clamps (2 used)
 F—Charged Air Cooler Outlet Hose Clamps (2 used)
 G—Engine Inlet Hose Clamps (2 used)
 H—Radiator Inlet Hose Clamps (2 used)
 I—Radiator Outlet Hose Clamp (2 used)
 J—Hydraulic Oil Cooler Outlet Clamp (2 used)
 K—Hydraulic Oil Cooler Inlet Clamp (2 used)

Check all hoses for cracks which could cause leaks or possible failure. Replace as necessary.

N400041,0003613-19-18JAN17

Service Air Cleaner (6110B, 6120B, 6135B, and 6140B models)

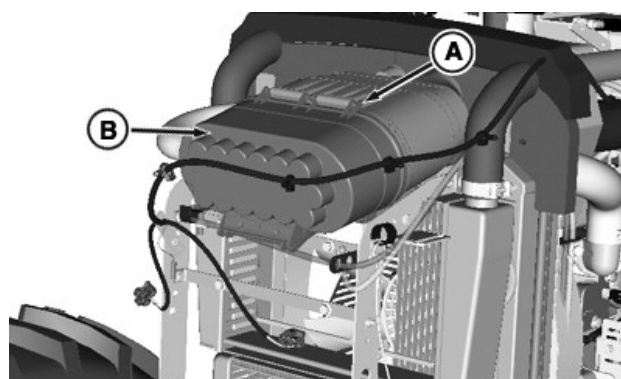
Service Interval—250 Hours

A dual element air cleaner is standard. A dirty primary element is indicated when air filter restriction indicator on instrument panel illuminates. A dirty element can result in loss of power or excessive smoke.

Clean the primary element when indicator on instrument panel illuminates or every 250 hours.

CAUTION: Wear appropriate personal protective equipment including, but not limited to, eye, ear, and respiratory protection during any cleaning operation.

1. Raise the hood.

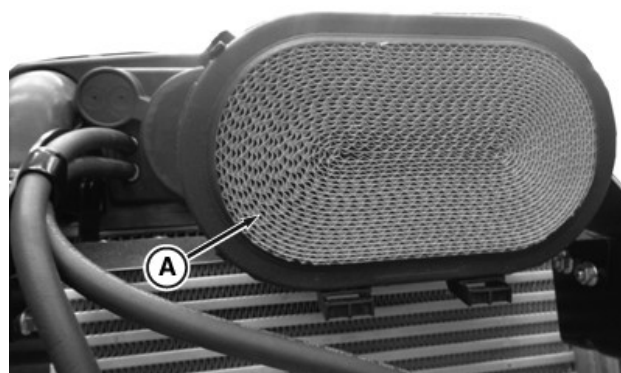


PY14935—UN—15APR13

A—Latch
 B—Cover

2. Loosen latch (A) and remove cover (B).

IMPORTANT: Do not use compressed air to clean the filter, resulting in filter damage.



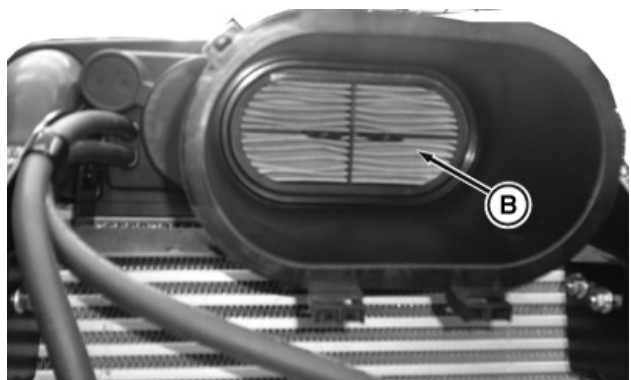
PY15248—UN—15JUN12

Primary Element

A—Primary Filter Element

3. Pull out the primary filter element (A). Do not use excessive force.
4. Place the primary filter element with the dirty end down.
5. Working from the top down, clap and rotate the primary filter.
6. Repeat the clapping sequence for about ten times or until it is obvious that most of the dust has been removed.
7. Check the rubber seal around filter element for cracks and holes. Replace if the element shows any imperfections.

IMPORTANT: Never clean a dirty secondary filter element.



PY15249—UN—15JUN12

Secondary Element

B—Secondary Filter Element

8. Secondary filter element (B) only be removed when being replaced. If it looks dirty or damaged do not attempt to clean, replace it.



PY15250—UN—15JUN12

9. Reinstall the primary element with rubber seal first (arrows on label pointing into filter housing). Push in all the way.

IMPORTANT: If the primary filter is not damaged and indicator on instrument panel remains illuminated, replace both filters.

10. Close cover and raise catch.

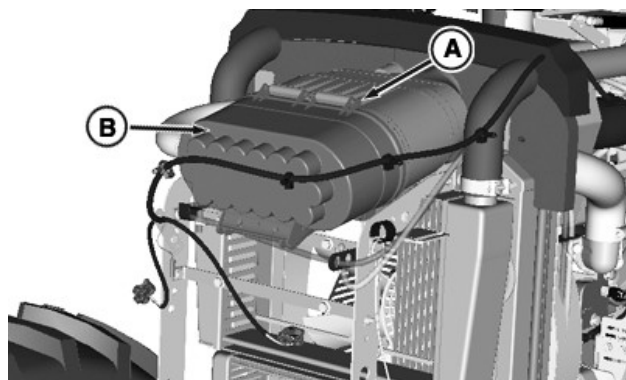
11. Lower hood.

LG70251,0002467-19-30JUL21

Replace Primary Elements of Air Cleaner (6110B, 6120B, 6135B, and 6140B models)

Service Interval—1500 Hours or Six Times Cleaning
Whichever comes first.

1. Raise the hood.

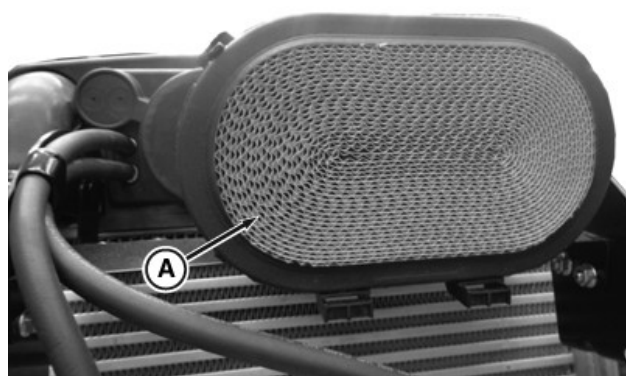


PY14935—UN—15APR13

A—Latch
B—Cover

2. Loosen latch (A) and remove cover (B).

IMPORTANT: Filter maintenance is required when the indicator illustrates. Replace primary filter element after six times cleaning or after 1500 hours, whichever comes first.



PY15248—UN—15JUN12

Primary Element

A—Primary Filter Element

3. Pull out the primary filter element (A). Do not use excessive force.



PY15250—UN—15JUN12

4. Install the new primary element with rubber seal first (arrows on label pointing into filter housing). Push in all the way.

5. Close cover and raise catch.

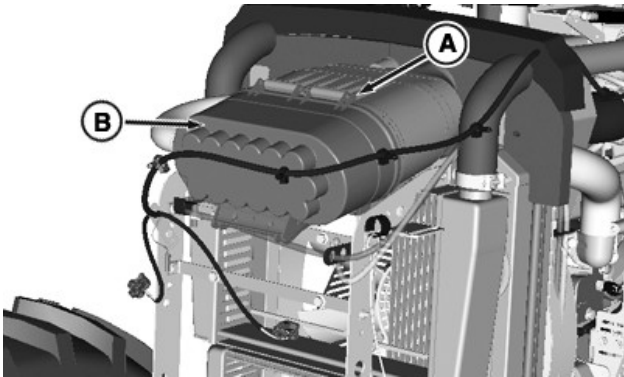
6. Lower hood.

LG70251,0002468-19-30JUL21

Replace Secondary Elements of Air Cleaner (6110B, 6120B, 6135B, and 6140B models)

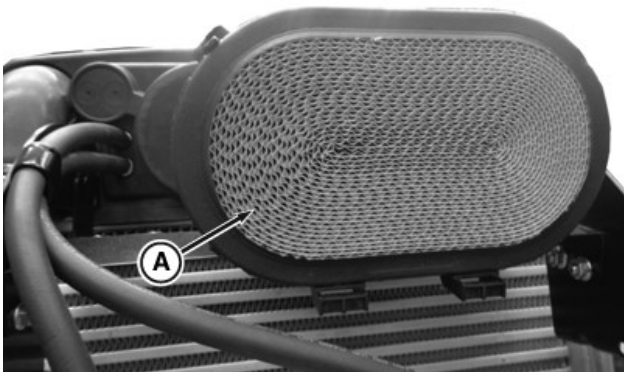
Service Interval—4500 Hours or Every Fourth Replacement of Primary Filter Element
Whichever comes first.

1. Raise the hood.



A—Latch
B—Cover

2. Loosen latch (A) and remove cover (B).



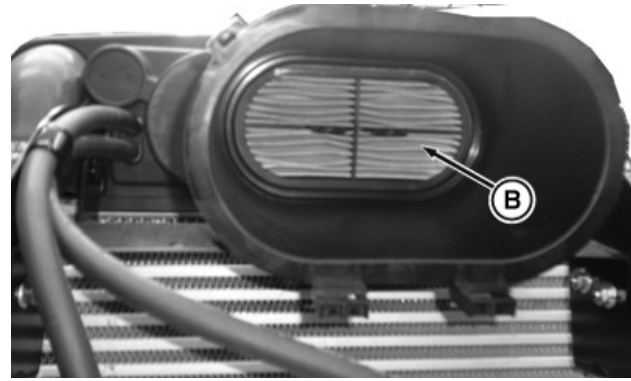
Primary Element

PY15248—UN—15JUN12

A—Primary Filter Element

3. Pull out the primary filter element (A). Do not use excessive force.

IMPORTANT: Never clean the secondary filter element. Replace the secondary filter element at every fourth replacement of primary filter element or every 4500 hours, whichever comes first.



PY15249—UN—15JUN12

Secondary Filter Element

B—Secondary Filter Element

4. Pull out the secondary element (B) using handle on the filter's frame.
5. Install the new secondary element. Push in all the way.



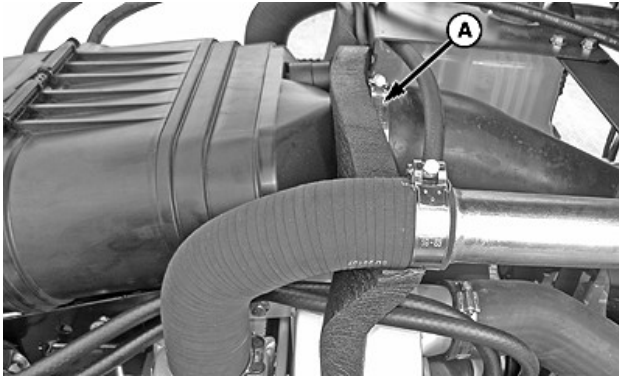
PY15250—UN—15JUN12

6. Install the primary element with rubber seal first (arrows on label pointing into filter housing). Push in all the way.
7. Close cover and raise catch.
8. Lower hood.

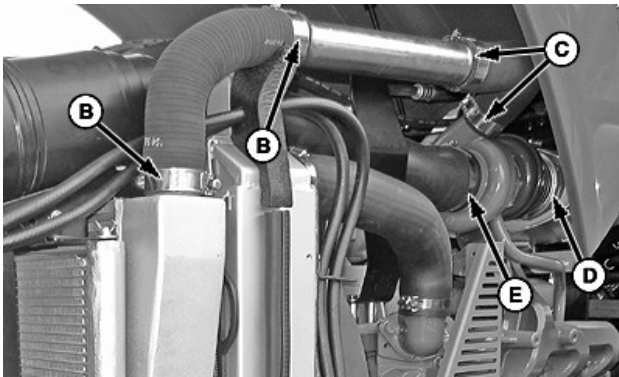
LG70251,0002469-19-30JUL21

Check Air Intake System (6110B, 6120B, 6135B, and 6140B models)

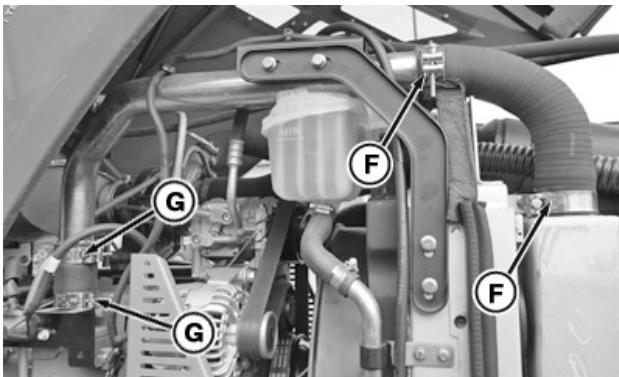
Service Interval —As Required



CPA0001724—UN—28JUL15



CPA0001725—UN—28JUL15



CPA0002355—UN—29NOV15

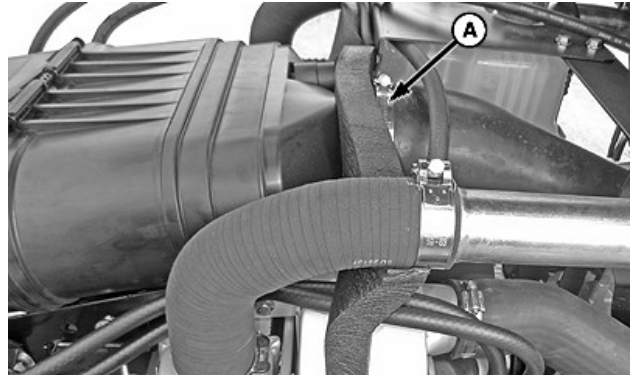
- A—Air Cleaner Outlet Hose Clamp
- B—Charged Air Cooler Inlet Hose Clamps (2 used)
- C—Turbocharger Outlet Hose Clamp (2 used)
- D—Turbine Outlet (exhaust gas) Clamp
- E—Turbocharger Inlet Hose Clamp
- F—Charged Air Cooler Outlet Hose Clamps (2 used)
- G—Engine Air Inlet Hose Clamps (2 used)

Check air intake system clamps (A, B, C, D, E, F and G) for tightness.

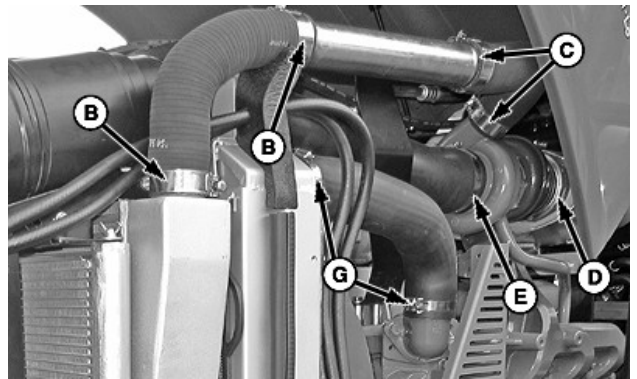
N400041,000360D-19-18JAN17

Check the following system hose clamps for tightness:

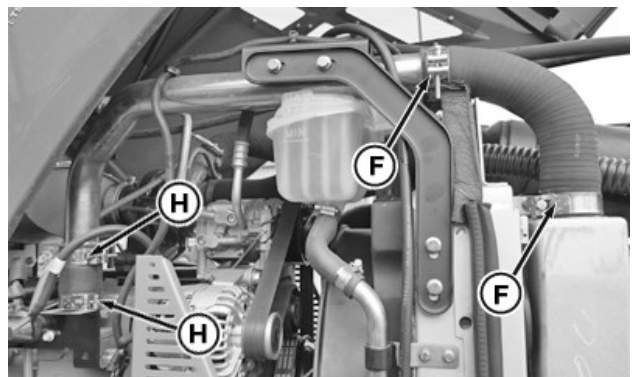
- Engine Air Induction System
- Engine Cooling System
- Hydraulic System
- Fuel System



CPA0001724—UN—28JUL15



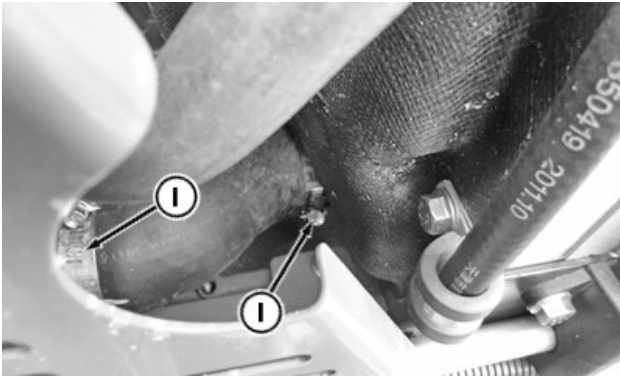
CPA0001727—UN—28JUL15



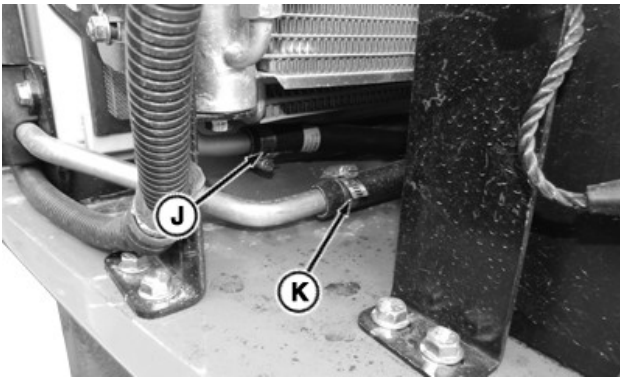
CPA0002366—UN—01DEC15

Check Hoses and Hose Clamps for Tightness (6110B, 6120B, 6135B, and 6140B models)

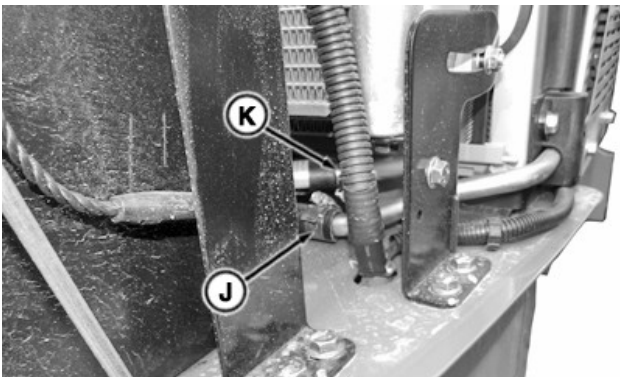
Service Interval—500 Hours



CPA0002367—UN—02DEC15



CPA0002368—UN—01DEC15



CPA0002365—UN—01DEC15

- A—Air Cleaner Outlet Hose Clamp
- B—Charged Air Cooler Inlet Hose Clamps (2 used)
- C—Turbocharger Outlet Hose Clamp (2 used)
- D—Turbine Outlet (exhaust gas) Clamp
- E—Turbocharger Inlet Hose Clamp
- F—Charged Air Cooler Outlet Hose Clamps (2 used)
- G—Radiator Inlet Hose Clamp (2 used)
- H—Engine Inlet Hose Clamps (2 used)
- I—Radiator Outlet Hose Clamps (2 used)
- J—Hydraulic Oil Cooler Outlet Clamp (2 used)
- K—Hydraulic Oil Cooler Inlet Clamp (2 used)

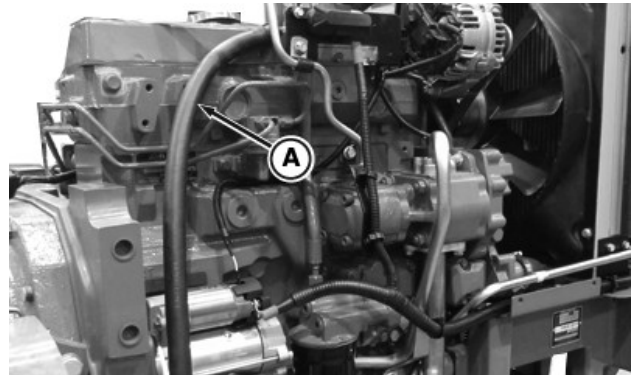
Check all hoses for cracks which could cause leaks or possible failure. Replace as necessary.

N400041.0003614-19-18JAN17

Clean Engine Crankcase Vent Tube

⚠ CAUTION: Reduce compressed air to less than 210 kPa (2 bar) (30 psi) when using for cleaning purposes. Clear area of bystanders, guard against flying chips and wear personal protection equipment, including eye protection.

Service Interval—1000 Hours



PY14872—UN—07JAN13

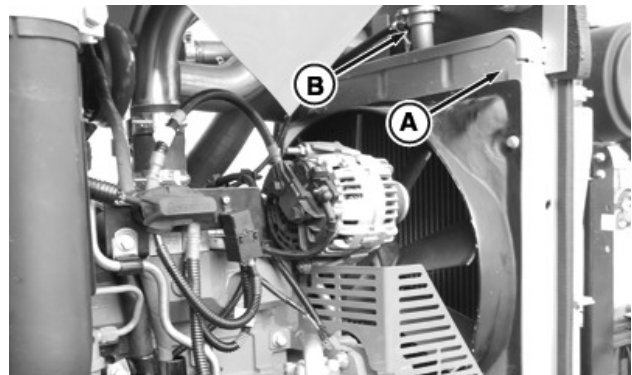
Right-Hand Side

A—Crankcase Vent Tube

- Remove crankcase vent tube (A) from engine. Wash in solvent or blow clean with compressed air.
- Install vent tube breather cap to engine. Be sure vent tube is not kinked or pinched.

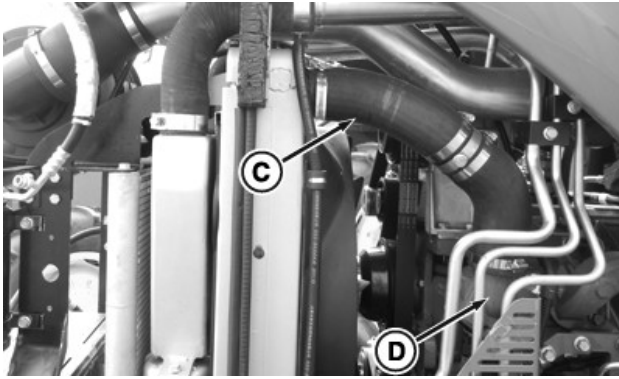
CP00606,000137F-19-26APR18

Engine Cooling System Components

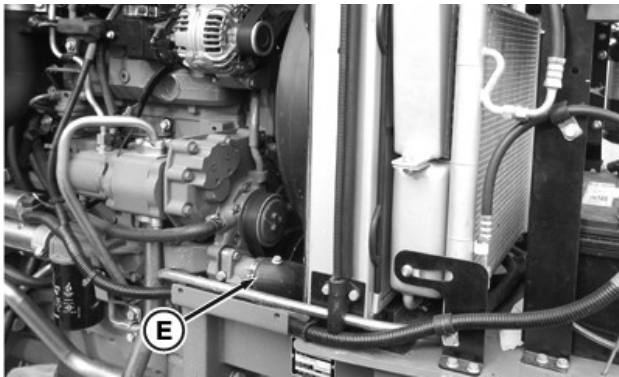


PY14844—UN—03JAN13

For 6095B Tractor



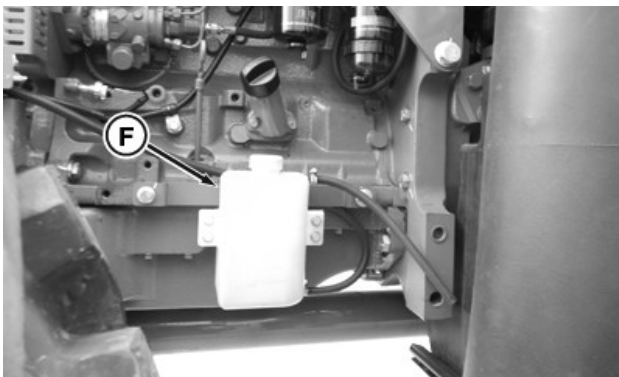
PY14845—UN—07JAN13



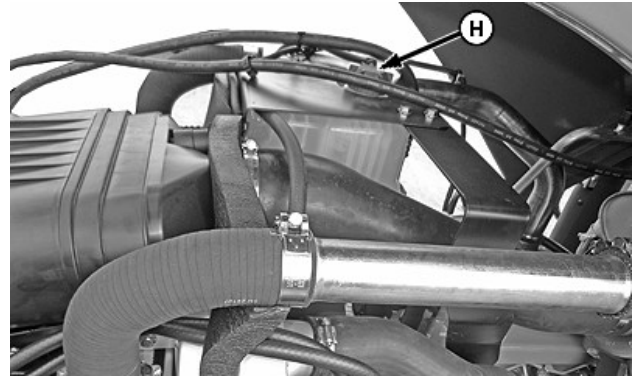
PY14846—UN—07JAN13



CPA0001719—UN—27JUL15
Surge Tank (for 6110B, 6120B, 6135B, and 6140B tractors)



PY14847—UN—07JAN13
Coolant Overflow Tank (for 6095B tractor)



CPA0001737—UN—30JUL15

For 6110B, 6120B, 6135B, and 6140B Tractors

- A—Radiator
- B—Radiator Cap
- C—Upper Radiator Hose
- D—Thermostat Housing
- E—Lower Radiator Hose
- F—Coolant Overflow Tank (for 6095B tractor)
- G—Surge Tank (for 6110B, 6120B, 6135B, and 6140B tractors)
- H—Surge Tank Cap

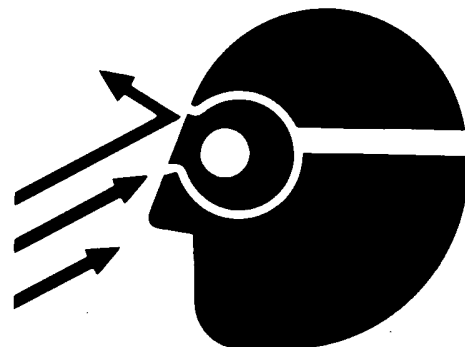
IMPORTANT: Never pour cold water into the cooling system of a hot engine, as it might crack cylinder block or head. **DO NOT** operate engine without coolant for even a few minutes.

If additional coolant is needed, it should be added to coolant overflow tank (F) or surge tank (G), and not directly to radiator. (See Check Coolant Level, in Air Intake, Fuel, Coolant, and Exhaust Maintenance section.)

CP00606,00013A1-19-10MAY18

Front Grille, Side Grille, Radiator and Oil Cooler Cleaning

CAUTION: Reduce compressed air to less than 210 kPa (2 bar) (30 psi) when using for cleaning purposes. Clear area of bystanders, guard against flying chips and wear personal protection equipment, including eye protection.



TS266—UN—23AUG88



A—Front Grille
B—Side Grille

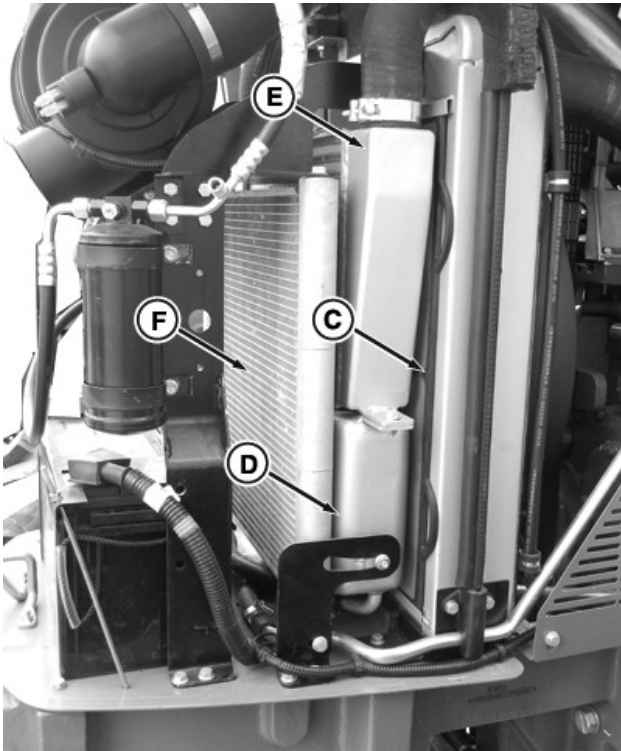
PY14848—UN—07JAN13

Use Lubricant Correctly

IMPORTANT: Use only lubricants meeting specifications outlined in Fuels, Lubricants and Coolant section when performing tractor service.

PY80265,00003F6-19-03SEP07

1. Whenever trash builds up on front grille (A) or side grille (B), stop engine and brush clean.



PY14849—UN—07JAN13

C—Radiator Cleaning Screen
D—Transmission Oil Cooler
E—Charge Air Cooler
F—Condenser

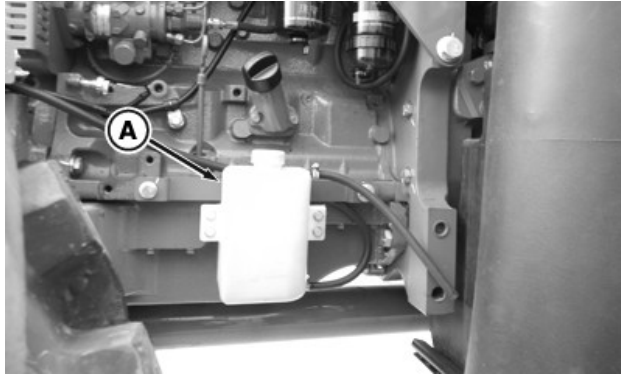
2. Lift the hood up and see if trash has built up on radiator screen. If so, carefully remove and clean radiator cleaning screen (C) using a brush or compressed air.
3. Clean transmission oil cooler (D) and charge air cooler (E) as necessary.
4. If a more thorough cleaning is necessary, clean radiator from behind with compressed air or water. Straighten any bent fins.

CP00606,0001380-19-26APR18

Check Coolant Level

Service Interval—10 Hours

CAUTION: DO NOT remove tank cap until coolant is cold. Always remove tank cap slowly to relieve any excess pressure.



PY14850—UN—07JAN13
Coolant Overflow Tank (for 6095B tractor)



CPA0001721—UN—27JUL15

Surge Tank (for 6110B, 6120B, 6135B, and 6140B tractors)

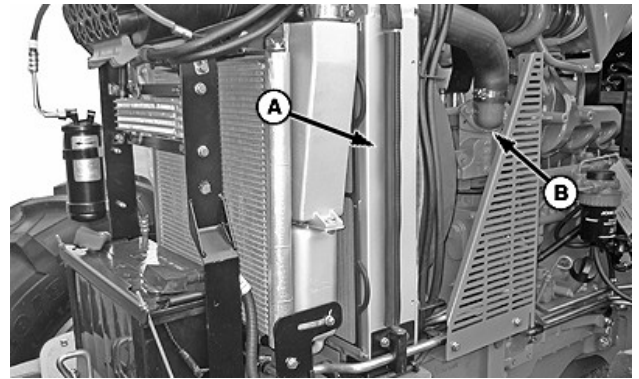
A—Coolant Overflow Tank
B—Surge Tank

Check that coolant level is between HIGH (MAX) and LOW (MIN) marks on tank. If coolant level is below LOW (MIN) mark, add coolant to coolant overflow tank (A) or surge tank (B) to bring level up to HIGH (MAX) mark. (See Air Intake, Fuel, Coolant, and Exhaust Maintenance section.)

CP00606,00013A2-19-11MAY18

Check Cooling System for Leaks

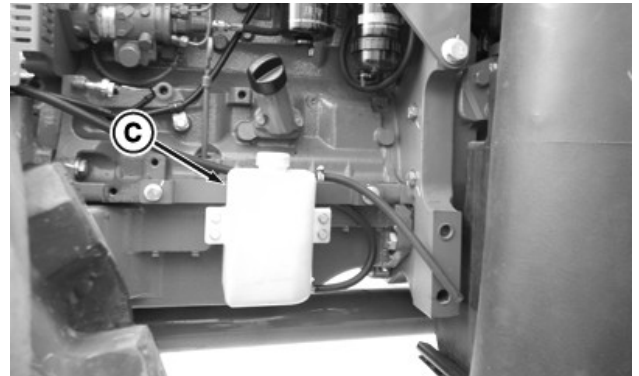
Service Interval—500 Hours



CPA0001733—UN—29JUL15

A—Radiator
B—Thermostat Housing Gasket

1. Check all around base of radiator (A) for pinholes or any area where coolant might be leaking.
2. Inspect area around thermostat housing gasket (B) for any sign of coolant leakage.



PY14852—UN—07JAN13

Coolant Overflow Tank (for 6095B tractor)

C—Coolant Overflow Tank

3. For 6095B tractor, inspect coolant overflow tank (C) for possible cracks or any sign of coolant leakage.



CPA0001722—UN—27JUL15

Surge Tank (for 6110B, 6120B, 6135B, and 6140B tractors)

D—Surge Tank

4. For 6110B, 6120B, 6135B, and 6140B tractors,

inspect surge tank (D) for possible cracks or any sign of coolant leakage.

CP00606,0001382-19-26APR18

Flush Cooling System

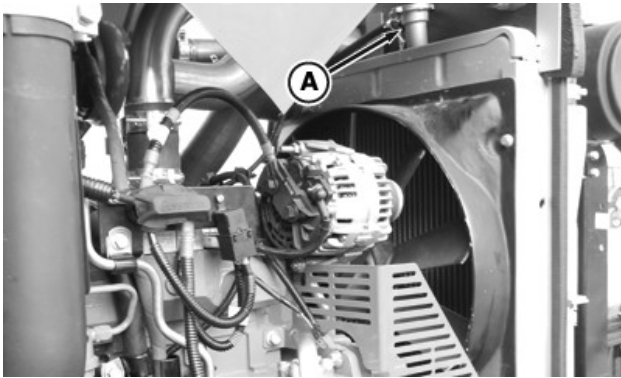
Service Interval—Every 2 Years or 2000 Hours^{ab}

^a Check coolant every year as required, can be extended to 5000 hours or 5 years if John Deere COOL-GARD is used.

^b Check coolant every year as required, can be extended to 6000 hours or 6 years if John Deere COOL-GARD II is used.

CAUTION: DO NOT remove radiator cap or drain coolant until coolant is cold. Always loosen radiator cap slowly to relieve any excess pressure.

For efficient operation, drain old coolant, flush the entire system, and fill with clean antifreeze solution at least once every 2 years.

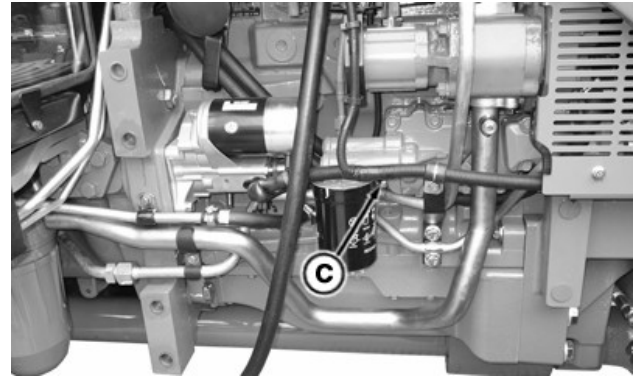


PY14853—UN—07JAN13

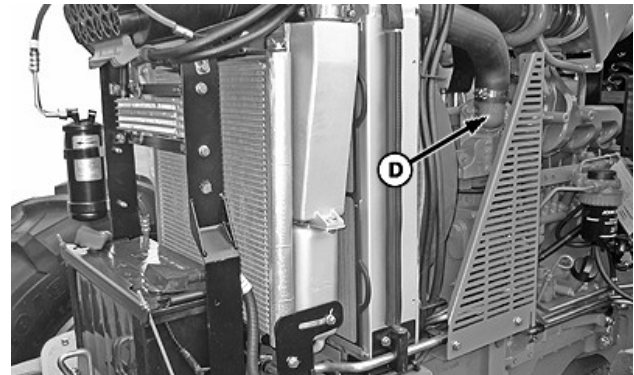
For 6095B Tractor



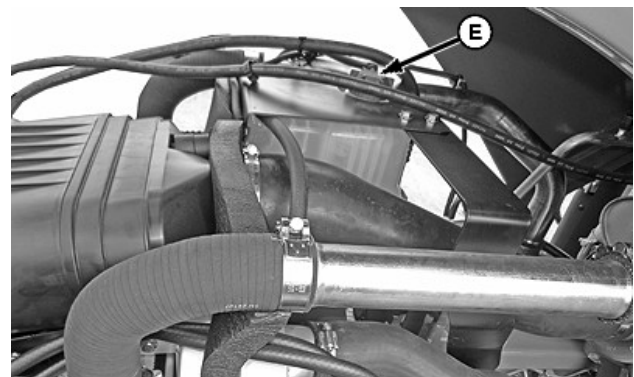
PY14854—UN—07JAN13



CPA0002402—UN—03DEC15

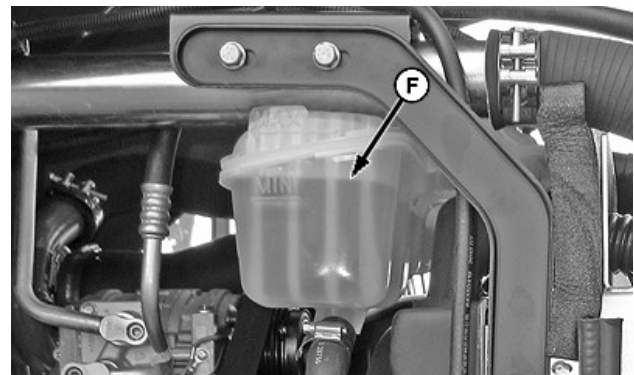


CPA0001734—UN—29JUL15



CPA0001735—UN—29JUL15

For 6110B, 6120B, 6135B, and 6140B Tractors



CPA0001736—UN—29JUL15

For 6110B, 6120B, 6135B, and 6140B Tractors

A—Radiator Cap
B—Radiator Drain Cock
C—Engine Block Drain Cock

D—Thermostat Housing
E—Surge Tank Cap
F—Coolant Level

1. Drain coolant - Remove radiator cap (A) or surge tank cap (E). Open radiator drain cock (B) on radiator and attach a drain hose. Route hose to container and drain coolant from radiator. Drain coolant from engine block by opening engine block drain cock (C).

IMPORTANT: Thermostat must be removed to ensure a thorough flush.

2. Remove thermostat housing (D), remove thermostat and install thermostat housing (without thermostat). Tighten thermostat housing bolts to specification.

Specification

Thermostat Housing
Bolts—Torque. 70 N·m (52 lb·ft)

3. Flush system with water - Close all drain valves/plugs and fill system with clean water. Run engine about 10 min to stir up possible rust or sediment. Stop engine and drain water from system before rust and sediment settle.
4. Flush system with radiator cleaner - Close all drain valve/plugs and fill the cooling system with a good commercial radiator cleaner and water. Follow instructions provided with cleaner. Stop engine and immediately drain system.
5. Flush system with water - Close all drain valves/plugs and fill with clean water to flush the system. Run the engine about 10 min, then drain out flushing water.
6. Remove thermostat housing and clean off the gasket material. Apply gasket sealant to new gasket and install thermostat housing. Tighten thermostat housing bolts to specification.

Specification

Thermostat Housing
Bolts—Torque. 70 N·m (52 lb·ft)

7. Fill with fresh coolant - Close all drain valves/plugs and fill with a mixture of antifreeze, soft water, and coolant conditioner as specified in Fuels, Lubricants, and Coolant section.
8. For 6095B tractor check coolant level - Fill radiator to the top of the filler neck. Run the engine until operating temperature is reached. Let the engine cool (preferably overnight) and recheck the coolant level. Coolant level with a cold engine should be at the bottom of the filler neck.
9. For 6110B, 6120B, 6135B, and 6140B tractors check coolant level - Fill radiator until coolant level (F) is between MAX and MIN marks on the surge tank. Run the engine until operating temperature is

reached. Let the engine cool (preferably overnight) and recheck the coolant level. Coolant level with a cold engine should be at the MIN mark on the surge tank.

10. When filling the cooling system, it may require several operating/cooling periods to stabilize the coolant level in the system. Add additional coolant as needed to bring coolant to the correct level.

CP00606,00013D2-19-10MAY18

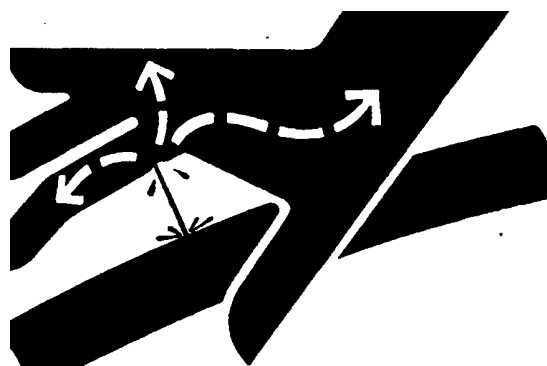
Deaerate Cooling System

Machine leads massive air into cooling system after user change coolant or open cooling system for reasons. It need to deaerate cooling system to protect engine as following instruction:

1. Fill system up to the max mark with prescribed coolant. (Coolant level at top tank and recovery bottle)
2. Start engine and run it for 5 minutes.
3. Shut off engine and check the coolant level, add coolant up to maxi level, if required.
4. Start engine and run coolant up to 98~100°C by using hydraulic or mechanic engine load. After reaching this temperature shut down the engine
5. Let engine and cooling system cool until coolant temperature is equal to ambient temperature.
6. Check coolant level and fill up to the max mark if required.

CP00612,00020B8-19-10NOV14

Bleed Fuel System



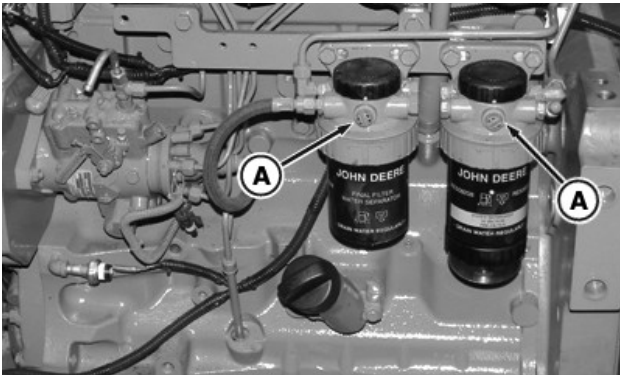
X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin, causing serious injury. Avoid the hazard by relieving system pressure before disconnecting pressurized lines. 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 should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.

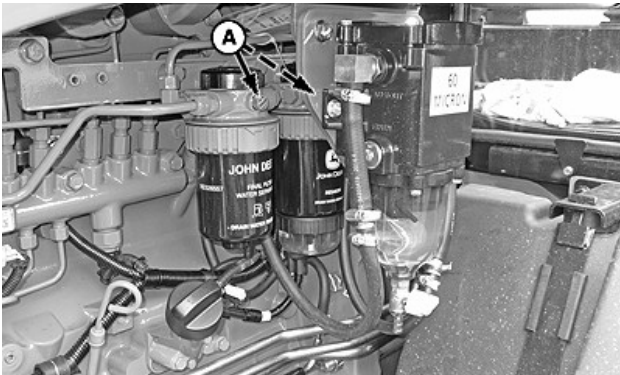
Any time the fuel system has been opened up for service (lines disconnected or filters removed), it will be necessary to bleed air from the system.

To Bleed the System at the Filter, Perform the Following Steps:



6095B Tractor

PY14857—UN—07JAN13

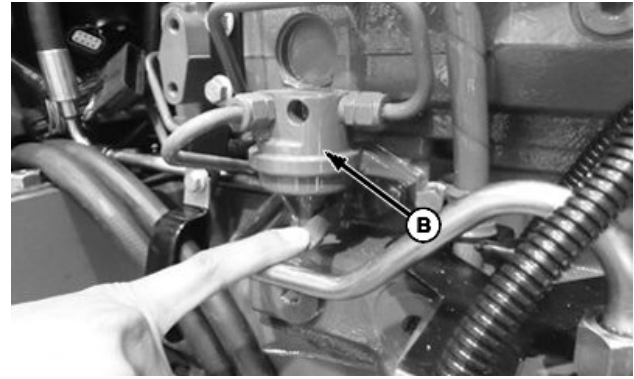


6110B, 6120B, 6135B, and 6140B Tractors

CPA0001713—UN—28JUL15

A—Bleed Vent Screw (2 used)

1. Loosen bleed vent screws (A) in filter two full turns by hand on fuel filter bases.

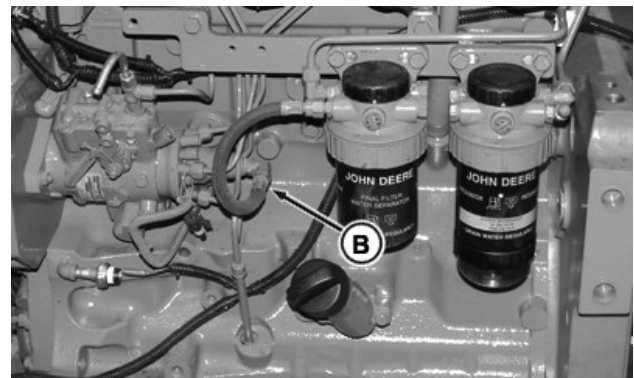


CPA0002139—UN—29OCT15

B—Hand Primer

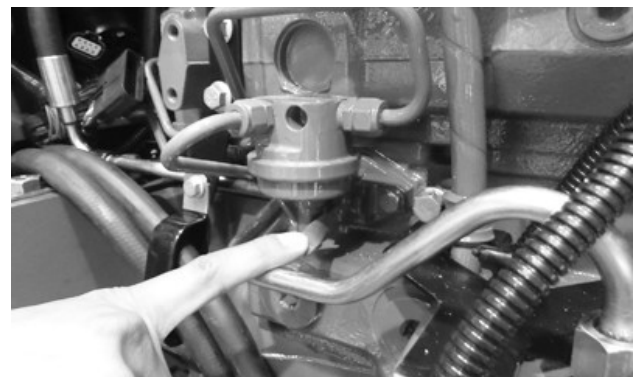
2. Loosen hand primer cap and pump hand primer (B) until a noticeable amount of fuel and air comes out of vent opening. Continue pumping and close bleed vent screw (A) when fuel starts to flow.
3. Pump the hand primer (B) several times until resistance is felt. Continue pumping and open bleed vent screw (A) again.
4. Close bleed vent screw (A) while still pumping hand primer (B). Continue pumping hand primer (B) until resistance is felt again.

To Bleed Fuel System at Fuel Injection Pump, Perform the Following Steps:



6095B Tractor

PY14858—UN—07JAN13



PY17088—UN—09OCT12

Operating Hand Primer

B—Fuel Inlet Line

1. Loosen fuel inlet line (B) at fuel injection pump.
2. Loosen hand primer cap on fuel supply pump.
3. Operate hand primer.
4. As soon as fuel flow is free from air bubbles, tighten fuel inlet line to specification.

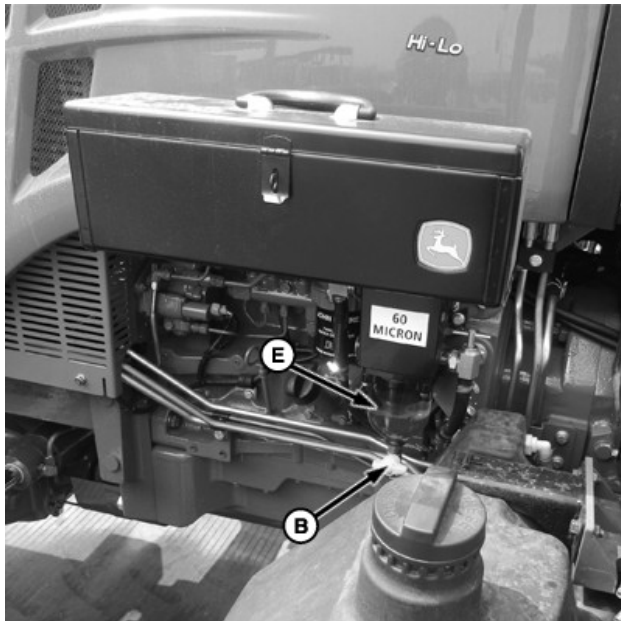
Specification

Fuel Inlet Line—Torque. 27 N·m (20 lb·ft)

CP00606,000138D-19-26APR18

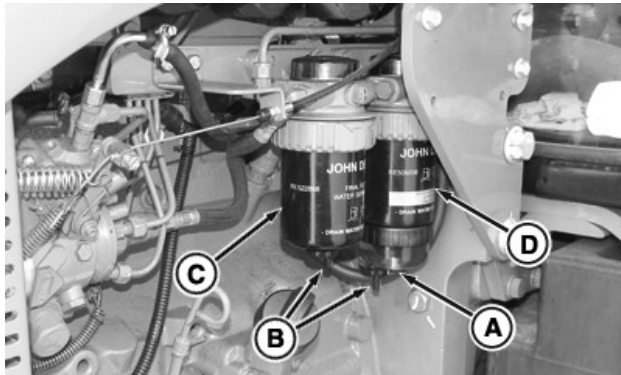
Drain Water and Sediment From Fuel Filters and Water Separators

Service Interval—Daily / 10 Hours



CPA0000723—UN—04JUN14

Left- Hand Side of Engine



PY14859—UN—07JAN13

Left- Hand Side of Engine

A—Wiring Harness
B—Drain Ports (3 used)
C—Final Fuel Filter

D—Secondary Fuel Filter
E—Primary Fuel Filter

NOTE: When loader is installed, servicing of fuel filter will be easier if fuel filter relocation kit is used.

1. Disconnect wiring harness (A).
2. Connect a small hoses to end of drain ports (B).
3. Place a suitable container under drains.
4. Open fuel filter drain ports to drain moisture and sediment from filters (C, D, and E).
5. Close drain ports when fuel runs clear.
6. Remove drain hoses and connect wiring harness.

N400041,000354A-19-30DEC16

Drain Water and Sediment from Fuel Tank

Service Interval—250 Hours



PY17087—UN—09OCT12

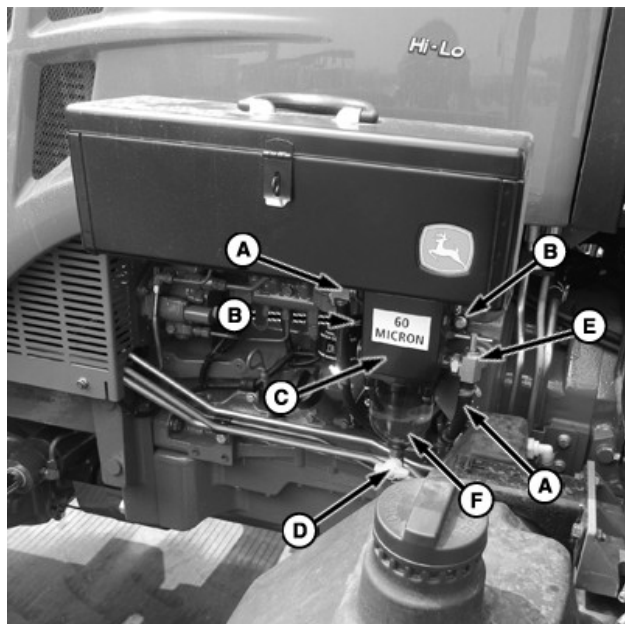
Bottom of Fuel Tank

A—Drain Plug

- Locate drain plug (A) in left front corner of fuel tank, at the bottom.
- Place suitable container under drain plug and loosen plug. When fuel starts to run clear, tighten drain plug.

N400041,000354B-19-30DEC16

Clean Primary Fuel Filter and Water Separator



- A—Fuel Hose (2 used)
B—Cap Screw (2 used)
C—Primary Fuel Filter
D—Drain Valve
E—Hose Valve
F—Water Separator Bowl

CPA0000724—UN—04JUN14

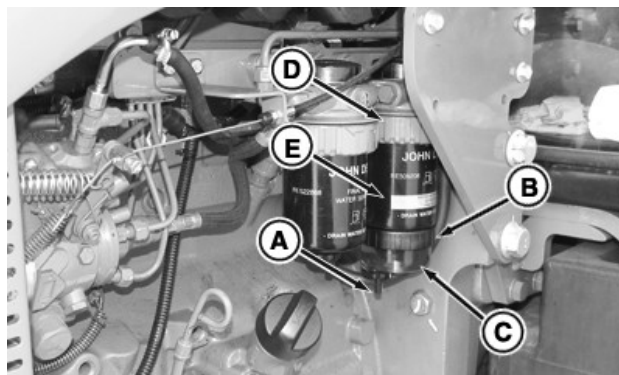
Service Interval—as required

NOTE: When loader is installed, servicing of fuel filter will be easier if fuel filter relocation kit is used.

1. Connect a drain line to drain valve (D) and place a suitable container under drain.
2. Open drain valve and drain fuel from filter and water separator.
3. Close the hose valve (E). Loosen fuel hoses (A), remove cap screws (B), and remove primary fuel filter (C).
4. Inspect fuel hoses for cracks, breaks or other signs of leaking. Replace as necessary.
5. Remove, inspect, clean, and dry water separator bowl (F). Replace as necessary.
6. Discard old filter.
7. Install water separator bowl to new filter.
8. Install new primary fuel filter to machine. Tighten cap screws.
9. Connect fuel hoses. Open hose valve.
10. Bleed fuel system. (See procedure in this section.)

N400041,000354C-19-15FEB17

Replace Secondary Fuel Filter and Water Separator



PY14861—UN—07JAN13

- A—Drain Port
B—Bottom Retaining Ring
C—Water Separator Bowl
D—Top Retaining Ring
E—Secondary Fuel Filter

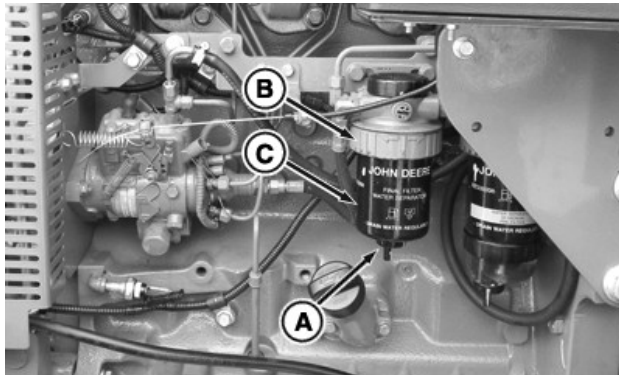
Service Interval—500 Hours

NOTE: When loader is installed, servicing of fuel filter will be easier if fuel filter relocation kit is used.

1. Connect a drain line to drain port (A) and place a suitable container under drain.
2. Open drain port and drain fuel from filter.
3. Loosen bottom retaining ring (B). Remove water separator bowl (C). Disconnect wiring harness.
4. Loosen top retaining ring (D) and remove secondary fuel filter (E) and filter seal.
5. Discard old filter. Inspect filter seal for cracks, breaks or other signs of leaking. Replace as necessary.
6. Clean and dry water separator bowl. Replace as necessary.
7. Install water separator bowl on new primary fuel filter. Tighten retaining ring until it snaps into place. Do not overtighten.
8. Install new secondary fuel filter and filter seal to machine. Tighten retaining ring until it snaps into place. Do not overtighten.
9. Connect wiring harness.
10. Bleed fuel system. (See procedure in this section.)

N400041,000354D-19-30DEC16

Replace Final Fuel Filter and Water Separator



PY14860—UN—07JAN13

A—Drain Port
B—Retaining Ring
C—Fuel Filter

| |
|----------------------------|
| Service Interval—500 Hours |
|----------------------------|

NOTE: When loader is installed, servicing of fuel filter will be easier if fuel filter relocation kit is used.

1. Connect a drain line to drain port (A) and place a suitable container under drain.
2. Open drain port and drain fuel from filter.
3. Loosen retaining ring (B) and fuel filter (C) and filter seal.
4. Discard old filter. Inspect filter seal for cracks, breaks or other signs of leaking. Replace as necessary.
5. Install new filter and seal. Tighten retaining ring until it snaps into place. Do not overtighten.
6. Bleed fuel system. (See procedure in this section.)

N400041,000354E-19-30DEC16

Do Not Modify Fuel System

IMPORTANT: Modification or alteration of the injection pump, the injection pump timing, or the 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 fuel injectors yourself. Special training and special tools are required. (See your John Deere dealer.)

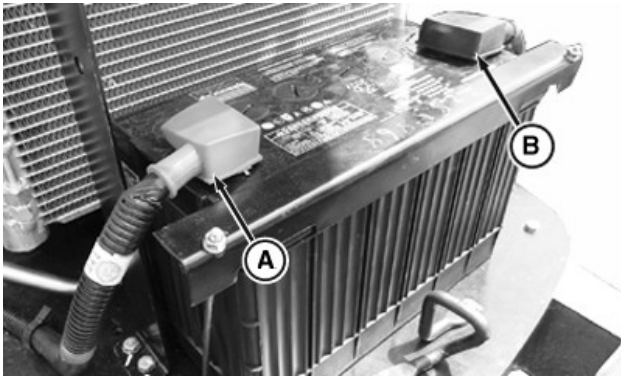
N400041,000354F-19-30DEC16

Electrical and Lighting Maintenance

Observe Electrical Service Precautions



TS204—UN—15APR13



PY17081—UN—09OCT12

A—Positive (+) Battery Cable
B—Negative (—) Battery Cable

CAUTION: Keep all sparks and flames away from batteries, as gas given off by electrolyte is explosive. When using a booster battery, follow instructions in Operating the Engine section.

To avoid shocks and burns, disconnect negative (—) cable (B) before servicing any part of the electrical system, then remove positive (+) cable (A) if removing battery.

Keep all electrical shields in place.

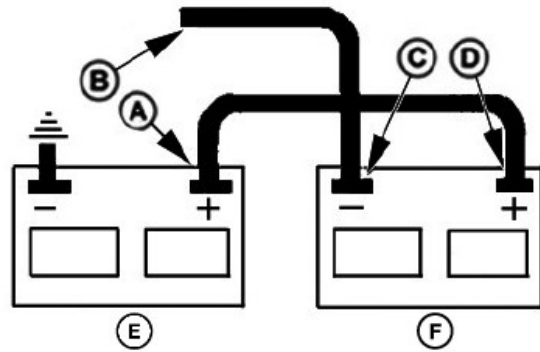
LG70251,0001465-19-05SEP18

Use Booster Battery

CAUTION: Battery gas is explosive:

- DO NOT smoke while charging battery
- Keep all flames and sparks away
- DO NOT charge a frozen battery
- DO NOT connect booster battery negative cable to negative (-) terminal on vehicle you are trying to start. Instead, use clean ground spot the on engine or tractor structural member.

1. Access battery.



CPA0008316—UN—15MAY19

A—Tractor Battery Positive (+) Post
B—Engine Ground
C—Booster Battery Negative (-) Post
D—Booster Battery Positive (+) Post
E—Vehicle Battery
F—Booster Battery

2. Connect positive (+) booster cable to the booster battery positive (+) post (D).
3. Connect the other end of positive (+) booster cable to the tractor battery positive (+) post (A).
4. Connect negative (-) booster cable to the booster battery negative (-) post (C).
5. Connect the other end of negative (-) booster cable to engine ground (B), away from battery and starter.

LG70251,00019D1-19-15MAY19

Battery Access

Battery is located in front of the radiator.

To gain access:



PY14839—UN—01JAN13



A—Latch

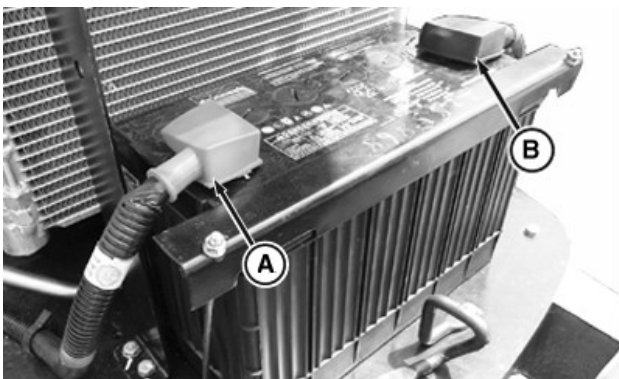
Pull latch (A) and lift the hood.

LG70251.0001467-19-05SEP18

Charge Battery

CAUTION: Gas given off by battery is explosive. Keep sparks and flames away from battery. Before connecting or disconnecting a battery charger, turn charger off. Make last connection and disconnection at a point away from battery.

Keep battery fully charged, especially during cold weather.



A—Positive (+) Battery Terminal
B—Negative (−) Battery Terminal

1. With charger OFF, attach positive battery charger

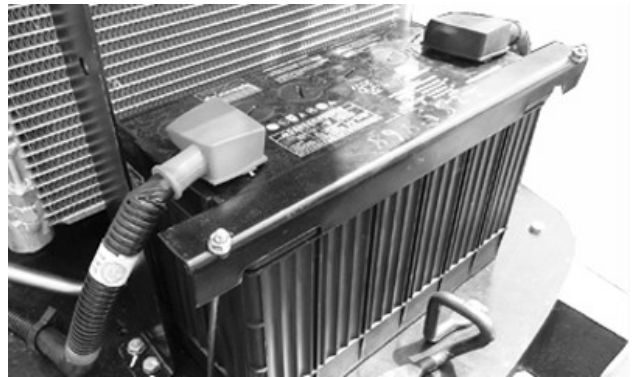
lead to positive (+) battery terminal (A). Attach negative charger lead to tractor frame, away from the battery.

2. Turn charger ON and recharge the battery, following battery manufacturer's instructions for using charger. Check battery condition as described below.
3. To disconnect battery charger, turn charger OFF. Remove negative charger lead first, then positive lead.

LG70251.0001468-19-05SEP18

Clean Battery

Service Interval—50 Hours



To access battery, see procedure in this section.

Put gear shift lever in neutral, "N", lock brake pedals together. Depress brake pedals and set parking brake.

Pull hand throttle all the way down and allow engine to idle for 1 to 2 min. Turn engine off.

Wipe battery with a damp cloth. Clean and tighten connections, if needed.

LG70251.0001469-19-05SEP18

Check Battery Condition

Service Interval—50 Hours



TS204—UN—15APR13

CAUTION: 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 it last.

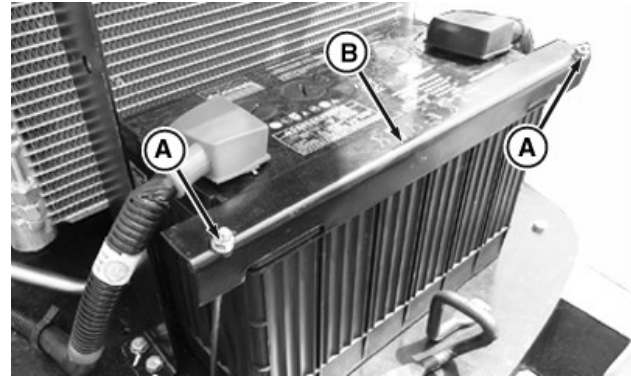
1. Use a battery hydrometer to check specific gravity of electrolyte in each cell. Charge battery if reading is below 1.215. Replace battery if difference between cells is more than 0.050 or if battery will not charge above 1.225.
2. Always correct specific gravity reading for electrolyte temperature variation. Add 0.004 to the reading obtained in step one for every 10 °F above 80 °F (add 0.007 to the reading for every 10° above 27 °C). Subtract at same rate if electrolyte temperature is below 80 °F (27 °C). Correct specific gravity of a fully charged battery is 1.265 to 1.280.
3. A battery is considered fully charged when three consecutive hydrometer readings taken at hourly intervals show no rise in specific gravity.

LG70251,000146A-19-05SEP18

Remove Battery

CAUTION: To avoid sparks, disconnect negative (ground) cable first and connect it last.

1. Gain access to battery.
2. Disconnect negative (—) battery cable, then positive (+) cable.



PY17083—UN—09OCT12

A—Nut (2 used)
B—Hold-Down Bracket

3. Loosen nuts (A) and rotate hold-down bracket (B) downward, freeing battery.
4. Lift and slide battery from machine.

LG70251,000146B-19-05SEP18

Battery Replacement Specifications

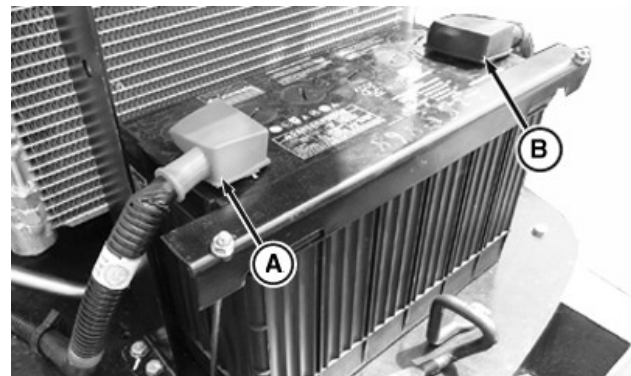
When replacing battery, use John Deere battery or equivalent. See your John Deere dealer.

Specification

Battery—Volts. 12 V
Cold Cranking Amps at -18 °C (0 °F). 850 or 960 A

LG70251,000146C-19-05SEP18

Service Battery



PY17081—UN—09OCT12

A—Positive (+) Battery Terminal
B—Negative (-) Battery Terminal

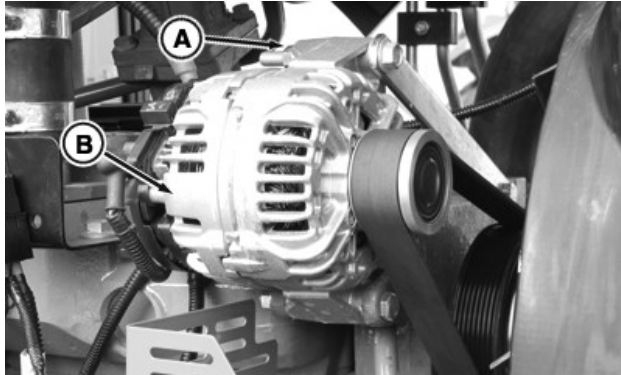
1. Keep battery clean by wiping with a damp cloth. Keep terminals (A and B) clean and tight. To remove any corrosion, wash terminals with a solution of four parts water to one part baking soda.

CAUTION: To avoid sparks, disconnect negative (ground) cable first and connect it last.

2. Keep battery fully charged, especially during cold weather. If a battery charger is connected, attach positive cable to the positive (+) battery terminal (A). Connect the negative (-) battery charger cable to a good ground on the tractor frame.
3. Coat terminals with a small amount of grease.

LG70251,000146D-19-05SEP18

Alternator/Fan Belt Replacement



PY14838—UN—01JAN13

A—Alternator Mounting Bolt
B—Alternator Frame

1. Loosen all mounting bolts (A) and move the alternator (C) towards engine, to free the belt.
2. Remove belt from drive pulley. Belt can be pulled around fan to remove.
3. Install new belt in reverse order of removal.

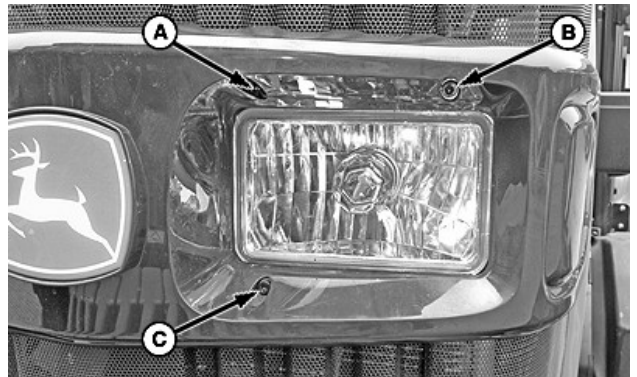
LG70251,0001466-19-05SEP18

Adjust Headlights

Service Interval—As Required

IMPORTANT: Apply penetrating spray lubricant to the threads of top and bottom adjusting screws before starting procedure. If this is not done, it will be quite hard to turn adjusting screws in either direction.

Adjust Headlights (Option 1)



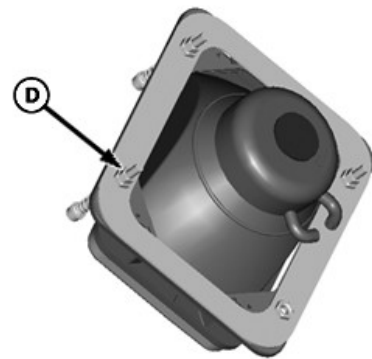
CPA0001723—UN—27JUL15

A—Headlight Mounting Screw
B—Headlight Mounting Screw
C—Headlight Mounting Screw

1. Turn headlight mounting screws (A and B) clockwise to lower the beam or counterclockwise to raise the beam.
2. To adjust beam in toward center of tractor, turn headlight mounting screw (B) clockwise and headlight mounting screws (A and C) counterclockwise an equal number of turns on each screw.
3. To adjust beam out from center of tractor, turn headlight mounting screws (A and C) clockwise and headlight mounting screw (B) counterclockwise an equal number of turns on each screw.

Adjust Headlights (Option 2)

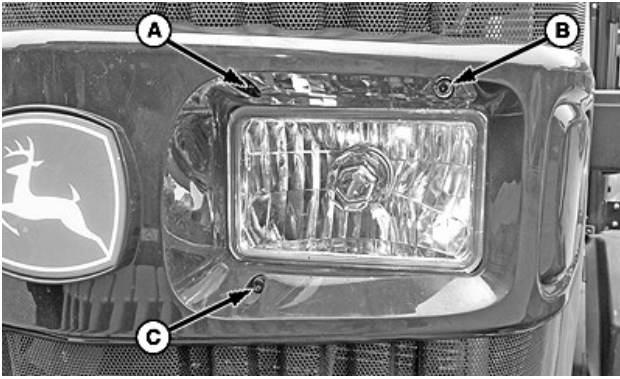
1. Raise hood.



CPA0004404—UN—25OCT17

D—Nuts (3 used)

2. Loosen nuts (D).



CPA0001723—UN—27JUL15

- A—Headlight Mounting Screw
B—Headlight Mounting Screw
C—Headlight Mounting Screw

3. Turn headlight mounting screws (A and B) clockwise to lower the beam or counterclockwise to raise the beam.
4. To adjust beam in toward center of tractor, turn headlight mounting screw (B) clockwise and headlight mounting screws (A and C) counterclockwise an equal number of turns on each screw.
5. To adjust beam out from center of tractor, turn headlight mounting screws (A and C) clockwise and headlight mounting screw (B) counterclockwise an equal number of turns on each screw.
6. After headlights are adjusted, tighten nuts.
7. Lower hood.

LG70251,000146E-19-05SEP18

2. Measure the distance from center of headlight to ground (B).
3. Mark a horizontal line on wall (C), the same as distance from center of headlight to ground (B).
4. Set headlights on low beam and observe bright areas on the wall.
5. Adjust headlights so the upper border of bright area (D) is at least 10% of distance from center of headlight to ground (B) below the horizontal line on wall (C).
6. To adjust headlights, see Adjust Headlights in Electrical and Lighting Maintenance section.

LG70251,000146F-19-05SEP18

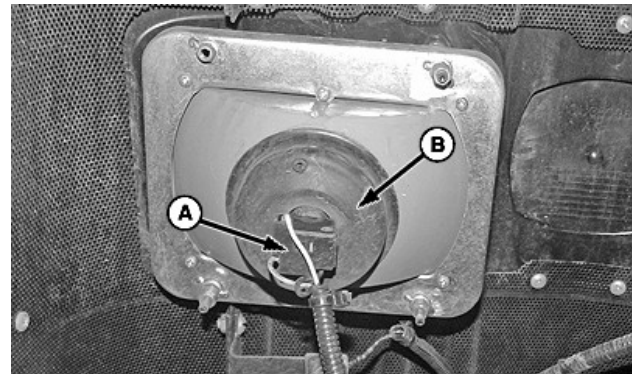
Replace Headlight Bulbs

CAUTION: A halogen bulb is pressurized and may shatter. Protect bulb against abrasions and scratches.

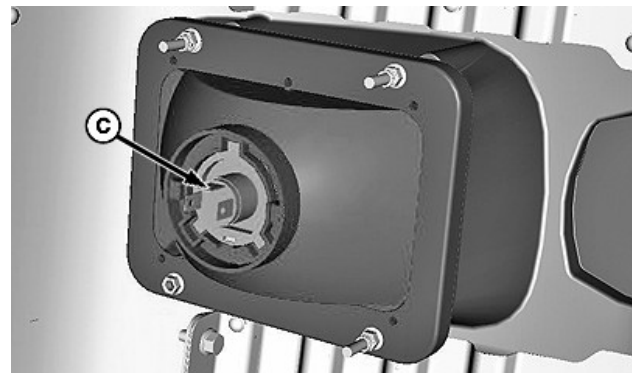
To guard against personal injury, wear protective eyeglasses and clothing when handling bulb. Turn power off when installing and before removing bulb. Dispose of bulb with care.

Allow bulb to cool before removing.

Read and follow all bulb manufacturer's installation instructions.

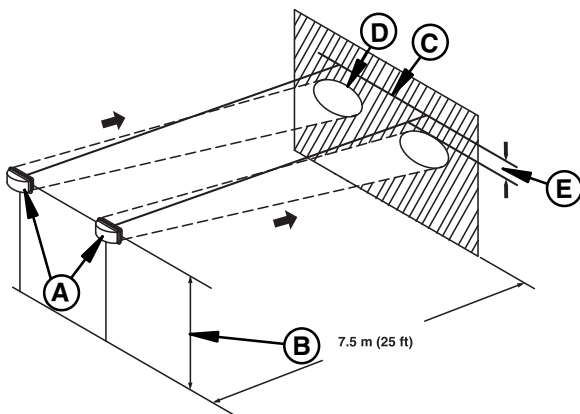


CPA0002080—UN—20OCT15



CPA0002081—UN—20OCT15

Aim Headlights



PY49023—UN—27OCT17

- A—Headlight
B—Distance from Center of Headlight to Ground
C—Horizontal Line on Wall
D—Border of Bright Area
E—10% of Distance (B)

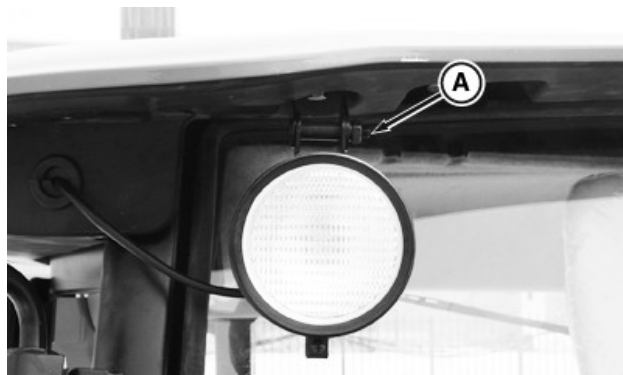
1. Park tractor on a level surface with headlights (A) 7.5 meters (25 ft) from a vertical wall.

A—Connector
B—Seal
C—Bulb

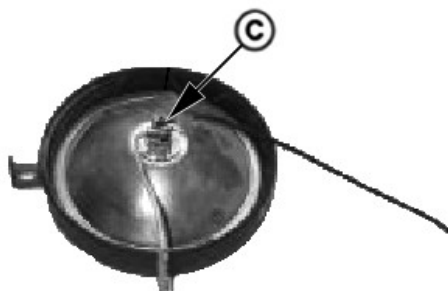
1. Open engine hood.
2. Disconnect connector (A).
3. Remove seal (B).
4. Remove bulb (C) and replace with new bulb.
5. Connect connector and close engine hood.

LG70251,0001470-19-05SEP18

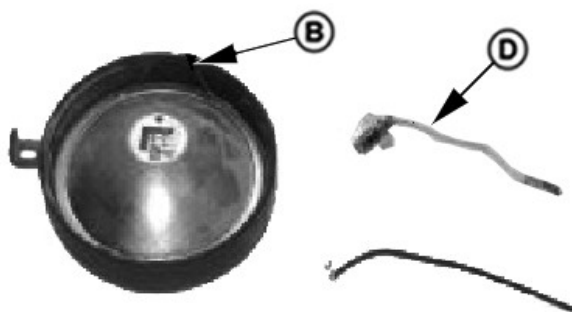
Replace Flood Light Bulb



PY17084—UN—09OCT12



PUC1522—UN—02NOV07



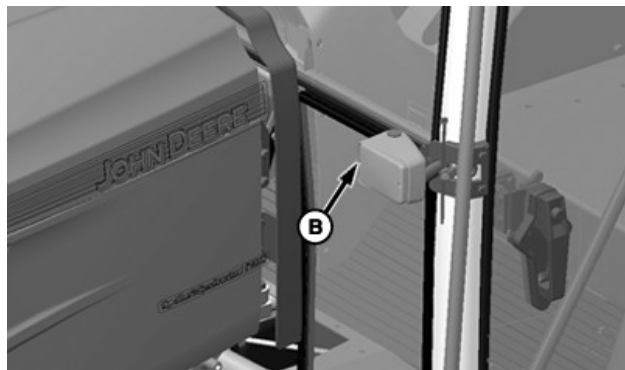
PUC1523—UN—02NOV07

A—Screw
B—Retaining Ring
C—Screw
D—Bulb Assembly

1. Remove screw (A).
2. Open retaining ring (B), disconnect connector and remove screw (C).
3. Remove bulb assembly (D), and install new bulb.
4. Reinstall in reverse order.

LG70251,0001471-19-05SEP18

Replace Front Turn Signal Bulb



CPA0004041—UN—27JUL17

Option 1



PY17085—UN—09OCT12

Option 2

A—Screw (4 used)
B—Screw (2 used)

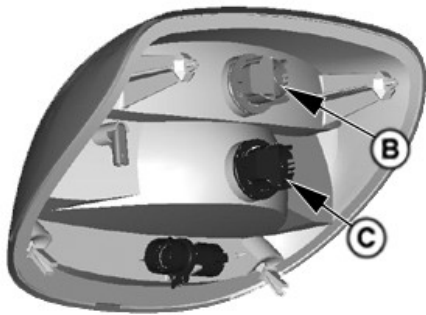
1. Remove screws (A or B) and light cover.
2. Remove bulbs from socket.
3. Mount new bulbs, as needed.
4. Mount light cover and tighten screws (A or B).

LG70251,0001472-19-05SEP18

Replace Tail Light/Rear Turn Signal/Brake Light Bulbs



PY17086—UN—09OCT12



PUC1599—UN—01APR08

A—Screw (2 used)
B—Warning Light Bulb
C—Tail Light Bulb

1. Remove screws (A) and lens.
2. Remove warning light bulb (B).
3. Remove tail light bulb (C).
4. Install new bulbs, as necessary.
5. Install lens and screws (A).

LG70251,0001473-19-05SEP18

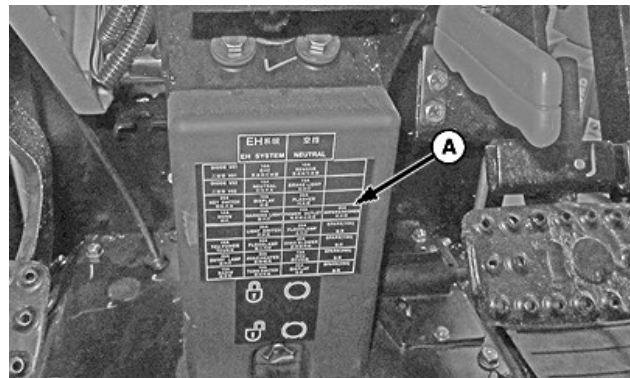
C—Solenoid Wire

IMPORTANT: Disconnect battery negative (ground) cable before servicing any part of electrical system. Make all other connections before connecting ground cable.

- Connect large battery cable (A) and alternator cable (B) to large solenoid post.
- Connect the solenoid wire (C) to small solenoid terminal.

LG70251,0001474-19-05SEP18

Locate Fuses



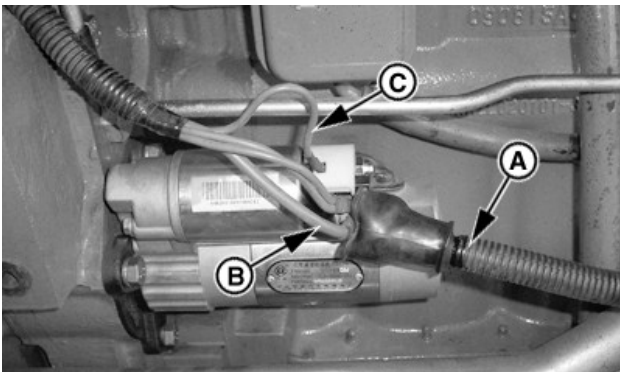
CPA0001801—UN—02SEP15

A—Fuse Box

All electrical circuits are protected by fuses. Amperage rating is marked on each fuse, and fuses are color coded to make correct replacement easier.

| Fuse Rating | Color |
|-------------|--------|
| 5 A | Brown |
| 10 A | Red |
| 15 A | Blue |
| 20 A | Yellow |
| 30 A | Green |

Starter Wiring Connections



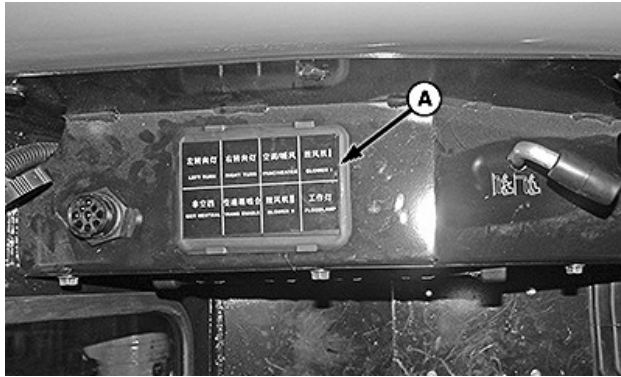
PUC2593—UN—09FEB10

A—Large Battery Cable
B—Alternator Cable

IMPORTANT: DO NOT replace original fuse with higher rated fuse or machine damage may occur. If original size fuse will not carry electrical load and continues to blow, have the electrical system checked by your John Deere dealer.

LG70251,0001485-19-06SEP18

Locate Relays



CPA0002419—UN—10DEC15

A—Relay Cover

Relays are under relay cover (A).

LG70251,0001484-19-06SEP18

Fuse Size and Function

Single Fuse Block

| | | | |
|-------------------|---------------------|--------------------|--------------------|
| 20A KRY SWITCH | 10A DISPLAY | 20A FLASHER | 15A BRAKE LIGHT |
| 10A HORN | 30A LIGHT SWITCH | 30A FLOODLAMP | 10A SPARE |
| 20A ENTRY LAMP | 20A WIPER | 10A ECU | 20A SPARE |
| DIODE V01 | 10A DISPLAY | 10A TURN SWITCH | 30A SPARE |

Single Fuse Block

Double Fuse Block (Option 1)

| | | | |
|-------------------|----------------------|---------------------|---------------------|
| DIODE V01 | 10A EHC | 10A SENSOR | |
| DIODE V02 | 10A NEURAL | 15A BRAKE LIGHT | |
| 20A KRY SWITCH | 10A DISPLAY | 20A FLASHER | |
| 10A HORN | 15A WARNING LIGHT | 15A POWER OUTLET | 20A WIPER&WASHER |
| | 30A LIGHT SWITCH | 20A FLOODLAMP | 10A SPARE |
| 10A TCP POWER | 30A FLOODLAMP | 20A HVAC/BLOWER | 15A SPARE |
| 20A ENTRY LAMP | 30A HVAC/HEATER | 10A ECU | 20A SPARE |
| 10A RADIO | 10A TURN SWITCH | 10A DISPLAY | 30A SPARE |

Double Fuse Block (Option 1)

Double Fuse Block (Option 2)

| | | | |
|-------------------|----------------|--------------------|-------------------|
| DIODE V01 | 10A EHC | 10A SENSOR | 30A SOCKET BAT |
| DIODE V02 | | 15A BRAKE LIGHT | 30A SOCKET IGN |
| 20A KRY SWITCH | 10A DISPLAY | 20A FLASHER | 15A HEAD LIGHT |

Electrical and Lighting Maintenance

| | | | |
|-------------------|----------------------|---------------------|---------------------|
| 10A HORN | 15A WARNING LIGHT | 15A POWER OUTLET | 20A WIPER&WASHER |
| DIODE V03 | 30A LIGHT SWITCH | 5A FLOODLAMP | |
| 10A TCP POWER | 30A FLOODLAMP | 20A HVAC/BLOWER | 15A SPARE |
| 20A ENTRY LAMP | 30A HVAC/HEATER | 10A ECU | 20A SPARE |
| 10A RADIO | 10A TURN SWITCH | 10A DISPLAY | 30A SPARE |

Double Fuse Block (Option 2)

Double Fuse Block (Option 3)

| | | | |
|-------------------|----------------------|---------------------|---------------------|
| DIODE V01 | 10A EHC | 10A SENSOR | 30A SOCKET BAT |
| DIODE V02 | | 15A BRAKE LIGHT | 30A SOCKET IGN |
| 20A KRY SWITCH | 10A DISPLAY | 20A FLASHER | 15A HEAD LIGHT |
| 10A HORN | 15A WARNING LIGHT | 15A POWER OUTLET | 20A WIPER&WASHER |
| DIODE V03 | 20A LIGHT SWITCH | 5A FLOODLAMP | |
| 10A TCP POWER | 30A FLOODLAMP | 20A HVAC/BLOWER | 15A SPARE |
| 20A ENTRY LAMP | 30A HVAC/HEATER | 10A ECU | 20A SPARE |
| 10A RADIO | 10A TURN SWITCH | 10A DISPLAY | 30A SPARE |

Double Fuse Block (Option 3)

LG70251,0001486-19-06SEP18

Relay Size and Function

| | | | |
|-------------|--------------|-------------|-----------|
| LEFT TURN | RIGHT TURN | HVAC/HEATER | BLOWER I |
| NOT NEUTRAL | TRANS ENABLE | BLOWER II | FLOODLAMP |

CPA0004405—UN—25OCT17
LG70251,0001478-19-05SEP18

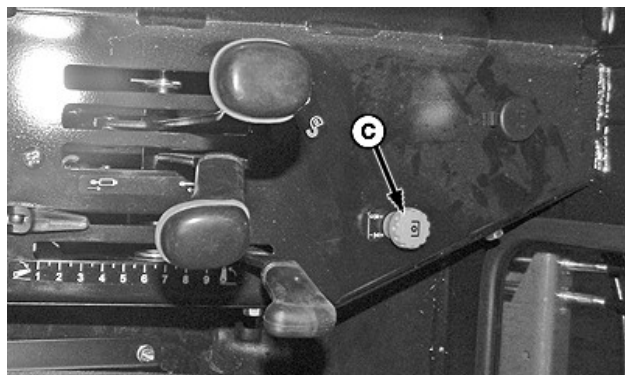
Drive Train Maintenance

Use Correct Transmission/Hydraulic Filter Element

To protect systems, replace transmission/hydraulic oil filter with a John Deere service filter element. Minimum and maximum performance specifications are printed on John Deere filters. Other filters may be used if they meet these performance specifications.

See Transmission Maintenance section for recommended filter change intervals.

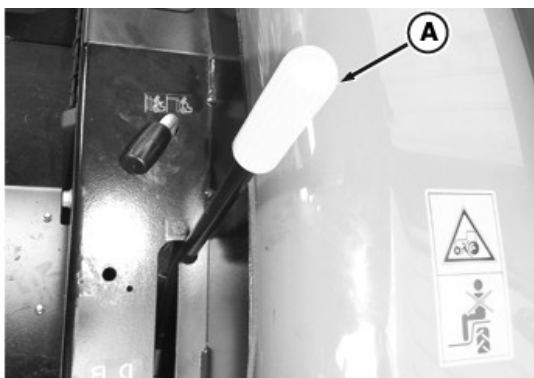
CP00606,00013A4-19-27APR18



CPA0002037—UN—15OCT15

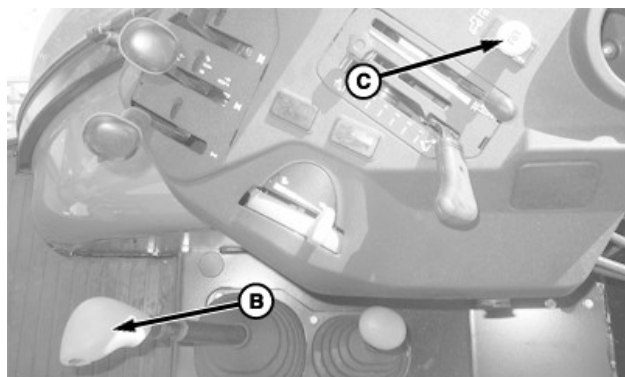
PTO Switch (wet clutch)

Check Neutral Start System



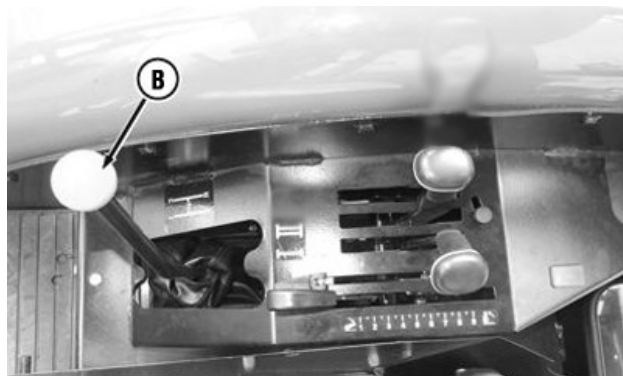
PY14926—UN—18FEB13

PTO Control Lever (dry clutch)



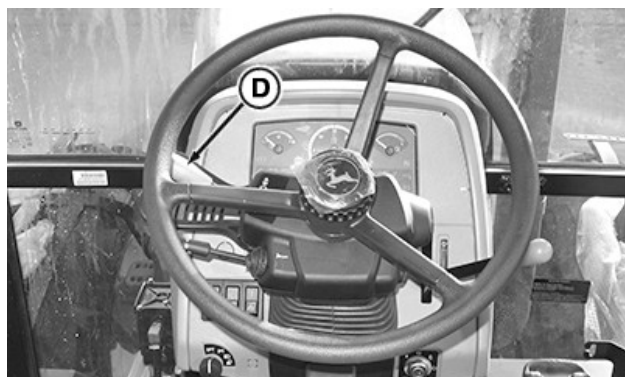
CPA0009652—UN—06NOV19

Option



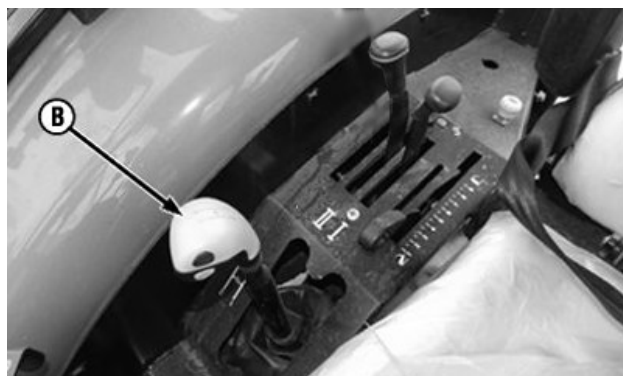
CPA0001113—UN—10NOV14

12F×4R Transmission



CPA0002998—UN—18OCT16

24F×12R Transmission



CPA0001126—UN—10NOV14

24F×8R Transmission


- A—PTO Control Lever
- B—Gearshift Lever
- C—PTO Switch
- D—Power Reverser Lever

Service Interval—250 Hours

Your John Deere tractor is equipped with interlocks to prevent inadvertent movement when the engine is started. Turning the key switch with the clutch pedal depressed should start the engine if all of the following conditions exist:

- Gearshift lever (B) is in neutral, “N” position
- Power Reverser lever (D) is in neutral, “N” position

- PTO control lever (A) is in disengaged (rear) position or PTO switch (C) is raised

 CAUTION: If the starter turns engine in either of the following steps, have the neutral start system repaired by your John Deere dealer.

Turning the key switch to the start position should NOT start the engine, if either of the following conditions is present:

- Gearshift lever is in gear (not in neutral)
- PTO control lever is in engaged (forward) position or PTO switch is pressed

N400041,00047CF-19-06NOV19

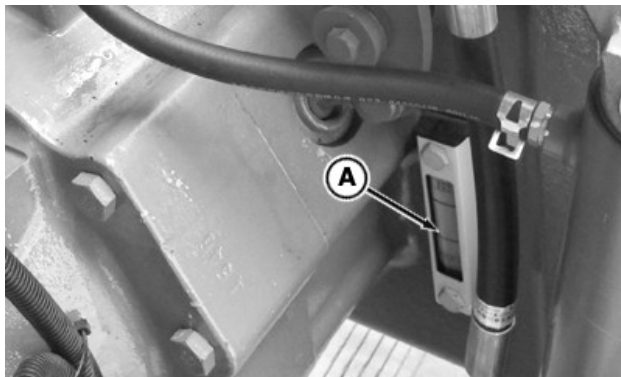
Transmission Maintenance

Check Transmission/Hydraulic System Oil Level

Check oil level at sight glass, daily.

IMPORTANT: Routine checks will help prevent downtime. The operator can aid in preventive maintenance by documenting all leak and malfunction problems. Since the transmission operates in oil and by means of oil, it is very important to keep oil clean and at correct level at all times.

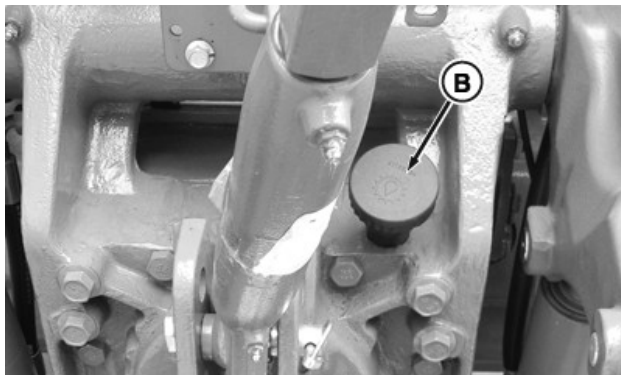
1. Park on level ground. Put gear shift lever in neutral "N", lock brake pedals together. Depress pedals and set parking brake.
2. Make sure rockshaft is positioned all the way down. (See Rockshaft Control Lever in Hitch and Drawbar Operation section.)
3. Pull hand throttle all the way down and allow engine to idle for 5 min. Turn engine off.
4. Wait a minimum of 5 min. for oil to settle.



PY14832—UN—01JAN13

A—Hydraulic Oil Sight Glass

5. Check level at sight glass (A). Level should be between upper and lower lines on the sight glass.



PY14923—UN—18FEB13

B—Hydraulic Oil Fill Port Cap

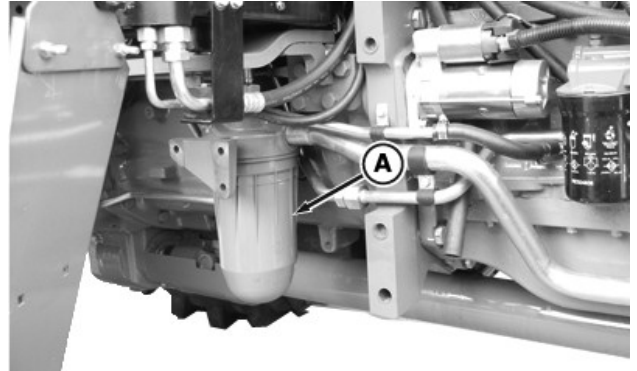
6. Add oil to fill port (B) if level is low. (See Transmission

and Hydraulic Oil in Fuels, Lubricants, and Coolants section.)

7. Inspect and thoroughly clean fill port cap vents before installing cap.

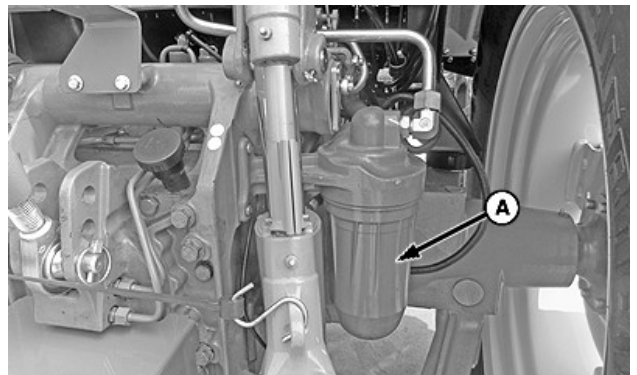
CP00606,00013A5-19-27APR18

Replace Transmission/Hydraulic Oil Filter



PY14843—UN—03JAN13

Right-Hand Side (dry clutch)

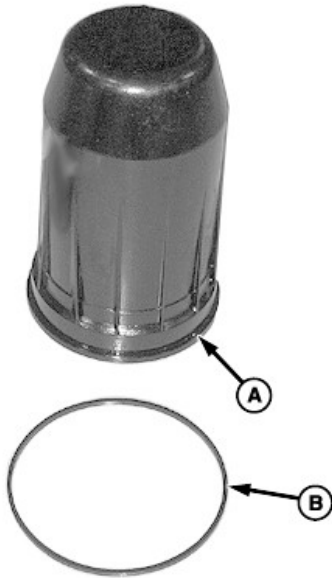


CPA0001700—UN—27JUL15

Rear of Tractor (wet clutch)

Change Transmission/Hydraulic System Oil

Service Interval—1000 Hours



A—Filter Housing Assembly
B—Filter O-Ring Seal

P15271—UN—07APR08

Service Interval—500 Hours
Initial, First 100 Hours

NOTE: For different tractors the position of hydraulic oil filter is on the right-hand side or rear of tractor.

Replace hydraulic filter housing and filter as a complete assembly.

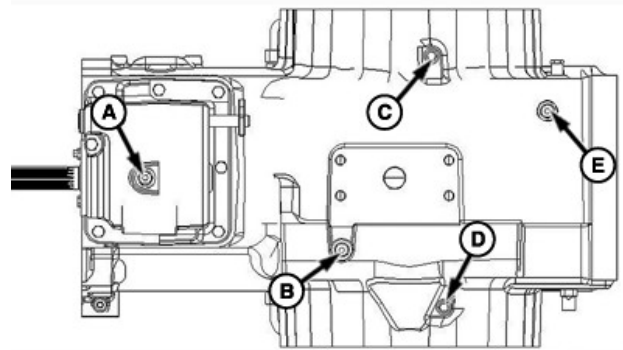
1. Remove filter housing assembly (A) and filter O-ring seal (B).
2. Discard filter housing assembly (A) and filter O-ring seal (B).
3. Inspect new filter housing assembly and filter O-ring seal for any possible damage.
4. Apply hydraulic oil to new filter O-ring seal (B) and install on filter housing assembly.
5. Install new filter housing assembly and tighten to specification.

Specification

Filter Housing Assembly—Torque. 24 N·m (212 lb·in)

6. Run engine for five minutes.
7. Shut off engine and check oil level. Add hydraulic oil as required. (See Check Transmission-Hydraulic System Oil Level in Transmission Maintenance section section.)

CP00606,00013A6-19-27APR18



CPA0005198—UN—25JAN18

View From Below

A—MFWD Axle Drop Gear Box Drain Plug (If Equipped)
B—Transmission Main Case Drain Plug
C—Left-Side Final Drive Drain Plug
D—Right-Side Final Drive Drain Plug
E—PTO Case Drain Plug

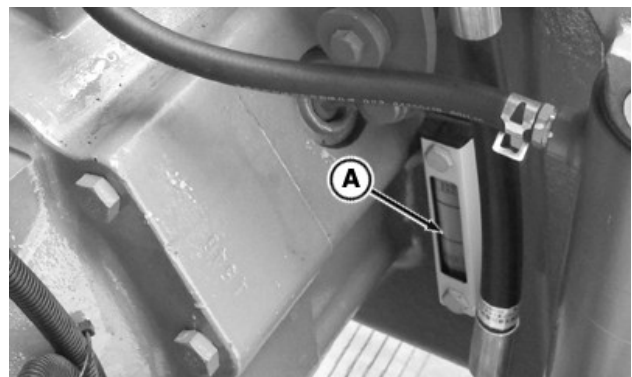
1. Move rockshaft lever full forward to lower hitch all the way down.
2. Remove drain plugs (A—E).
3. Replace transmission-hydraulic oil filter. (See Replace Transmission/Hydraulic Oil Filter section.)

NOTE: Always dispose of used oil in accordance with applicable laws and regulations.

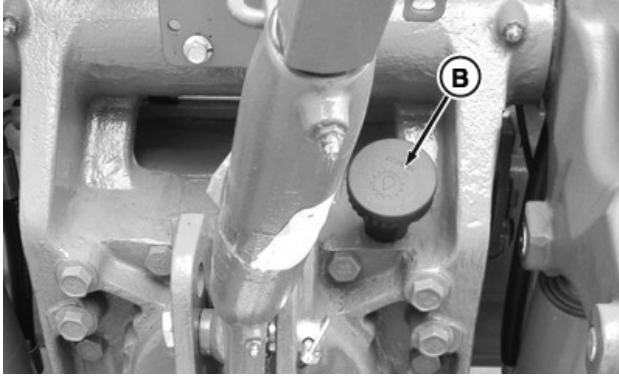
4. Install all plugs to specification.

Specification

Plug (A)—Torque. 58.6-79.4 N·m
(518.6-702.7 lb·ft)
Plugs (B and E)—Torque. 43-52 N·m
(381-460 lb·ft)
Plugs (C and D)—Torque. 16-24 N·m
(142-212 lb·ft)



PY14832—UN—01JAN13



PY14923—UN—18FEB13

A—Sight Glass
B—Filler Cap

IMPORTANT: Do not overfill transmission. This will cause overheating and result in transmission damage.

5. Remove cap (B) and fill system with oil as specified in Fuels, Lubricants and Coolant section.

Specification

Transmission-Hydraulic

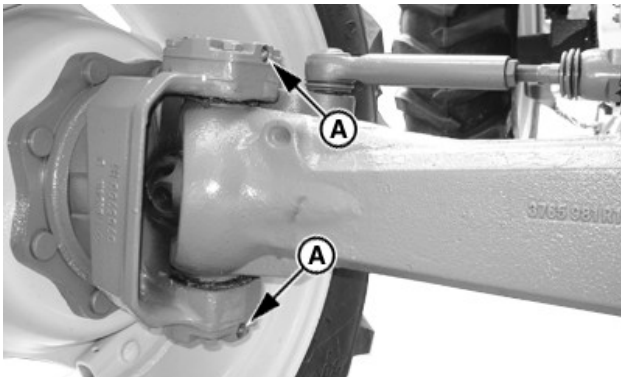
Oil—Capacity. 60 L
(15.85 gal)

6. Check oil level at sight glass (A) after filling.
7. Install filler cap.
8. Start engine and operate for five minutes.
9. Shut off engine and check oil level. Add oil if necessary.

XL68979,00018E3-19-10MAY22

MFWD and Front Axle Maintenance

Lubricate Steering Spindles



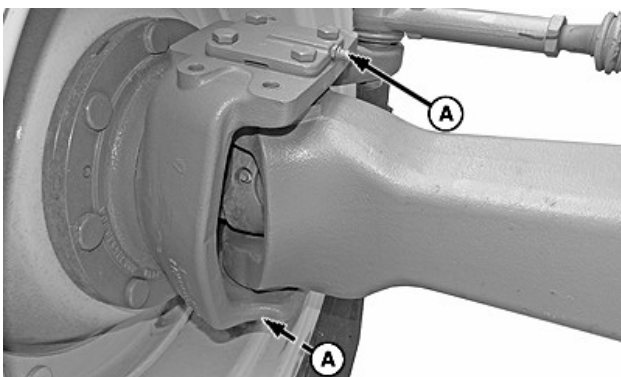
PUC2545—UN—08OCT09
For 6095B and 6110B Tractors

Service Interval—50 Hours

Extremely Wet or Muddy Conditions—10 Hours

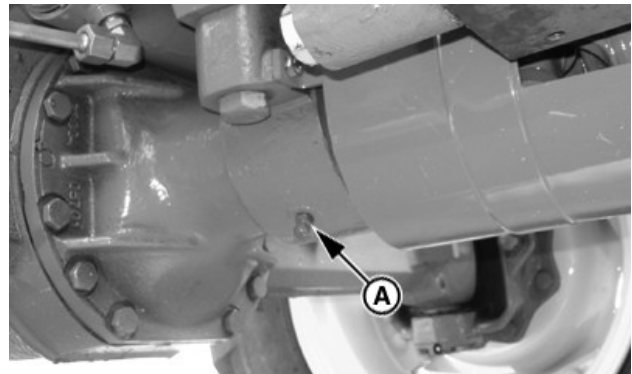
- Apply several pumps of grease to lube fitting (A) on front axle universal joint, both left and right sides.
- Each lube fitting can only be accessed from the front by turning wheels until fitting is exposed.
- When one fitting is exposed the opposite side fitting is not accessible, so after lubricating one side, wheels must be turned all the way opposite to access lube fitting on other side. (See Fuels, Lubricants, and Coolants section.)

CP00606,00013A7-19-27APR18



CPA0002087—UN—21OCT15
For 6120B, 6135B, and 6140B Tractors

Lubricate MFWD Front Axle Pivot Pins



PUC2547—UN—08OCT09
For 6095B and 6110B Tractors

A—Lube Fittings (4 used)

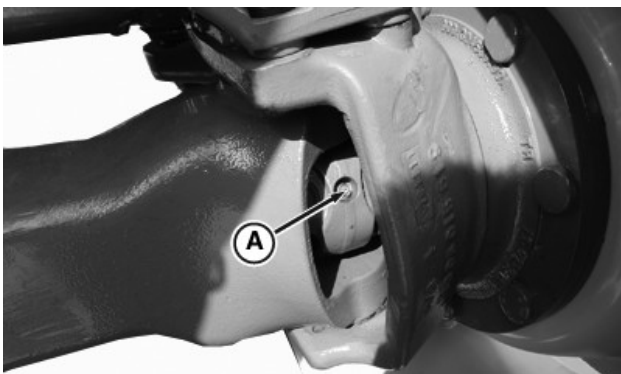
Service Interval—50 Hours

Extremely Wet or Muddy Conditions—10 Hours

Apply several pumps of grease to steering spindle lube fittings (A), on both left and right sides.

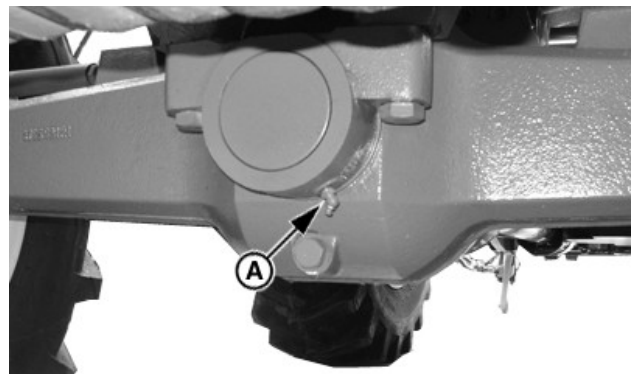
N400041,0003536-19-29DEC16

Lubricate MFWD Front Axle

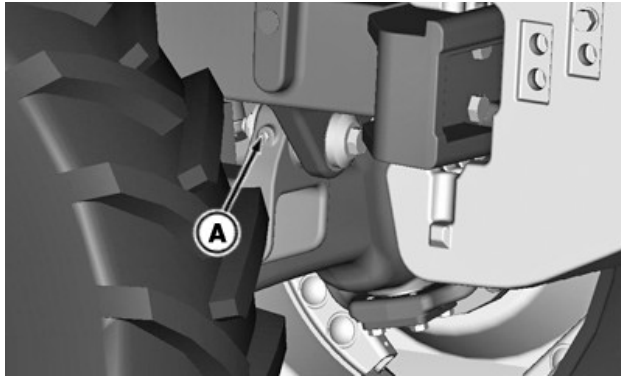


A—Lube Fitting

PY17080—UN—05OCT12

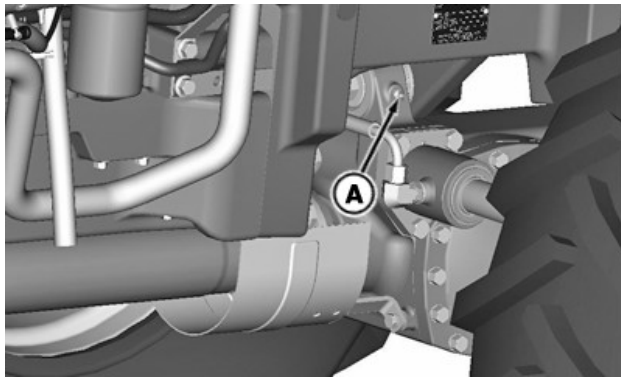


PUC2548—UN—08OCT09
For 6095B and 6110B Tractors



CPA0002381—UN—02DEC15

For 6120B, 6135B, and 6140B Tractors



CPA0002382—UN—02DEC15

For 6120B, 6135B, and 6140B Tractors

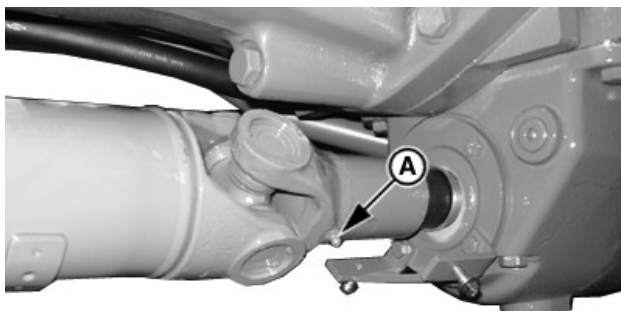
A—Lube Fitting (2 used)

Service Interval—50 Hours
Extremely Wet or Muddy Conditions—10 Hours

MFWD front axle has two separate pivot pins. Use appropriate grease on each pivot pin lube fitting (A). (See Fuels, Lubricants, and Coolants section.)

CP00606,00013A8-19-27APR18

Lubricate MFWD Drive Shaft



PUC2549—UN—08OCT09

Shield Removed

A—Lube Fitting

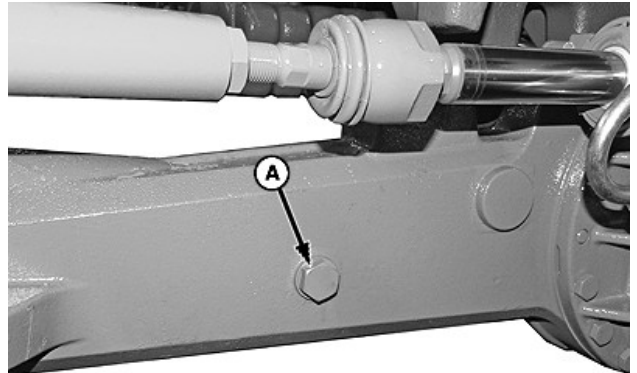
Service Interval—50 Hours

Apply several pumps of grease to lube fitting (A) on MFWD shaft U-joint.

JB06590,0000636-19-08OCT09

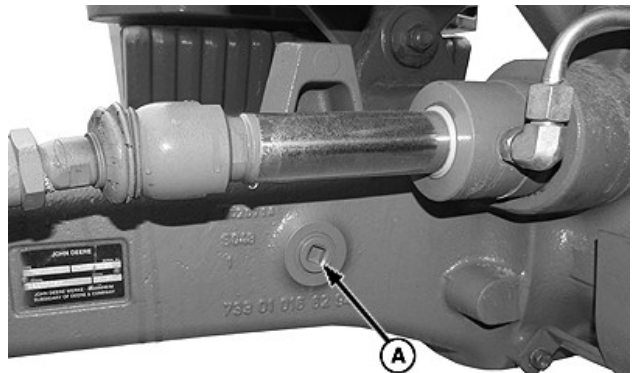
Check MFWD Axle Housing Oil Level

Service Interval—250 Hours



CPA0002089—UN—22OCT15

For 6095B and 6110B Tractors



CPA0002088—UN—21OCT15

For 6120B, 6135B, and 6140B Tractors

A—Oil Check Plug

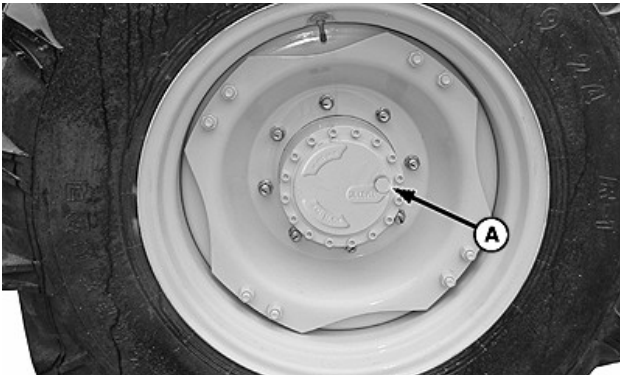
1. Park tractor on level surface.
2. Remove oil check plug (A) to check oil level in axle housing. Make sure that oil level is even with bottom of hole.
3. If oil level is low, add oil. (See Fuels, Lubricants, and Coolants section.)

CP00606,00013A9-19-27APR18

Check MFWD Wheel Hub Oil Level

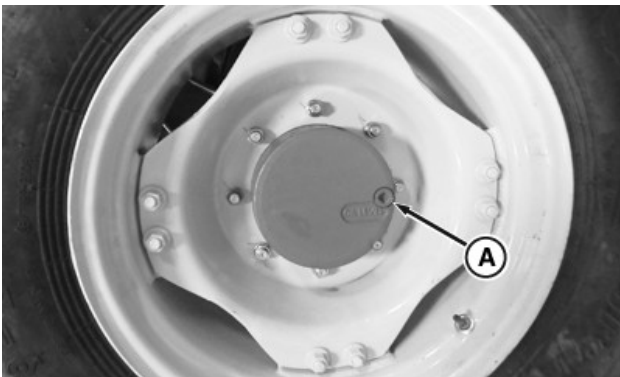
Service Interval—250 Hours

1. Move tractor to level surface.
2. Drive tractor forward until the words "OIL LEVEL" are parallel to ground.



CPA0002094—UN—22OCT15

For 6095B and 6110B Tractors



PY171109—UN—09OCT12

For 6120B, 6135B, and 6140B Tractors

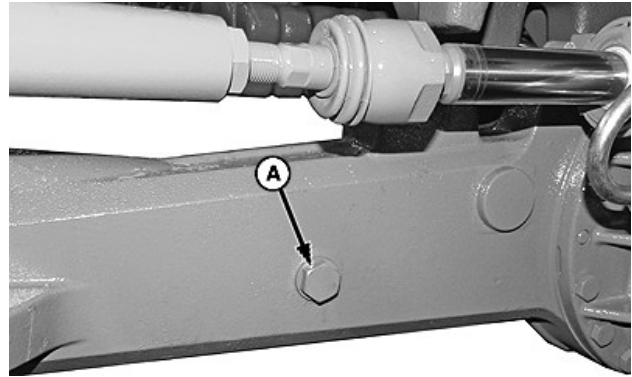
A—Wheel Hub Oil Plug

3. Remove wheel hub oil plug (A). Make sure that oil level is even with edge of plug hole.
4. If oil level is low, add oil through same hole. (See MFWD Axle and Wheel Hub Oil in Fuels, Lubricants, and Coolants section.)

CP00606,00013AA-19-27APR18

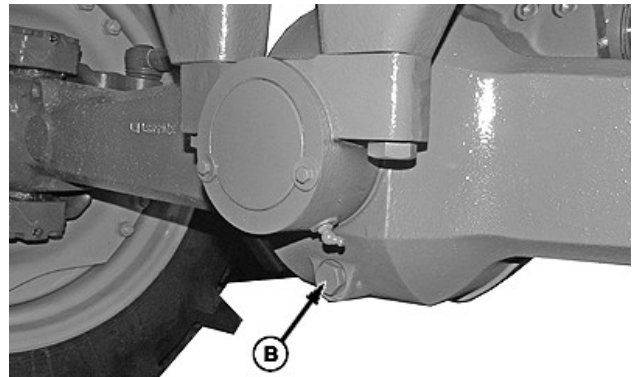
Change MFWD Front Axle Housing Oil

Service Interval—1000 Hours
Initial, First 100 Hours



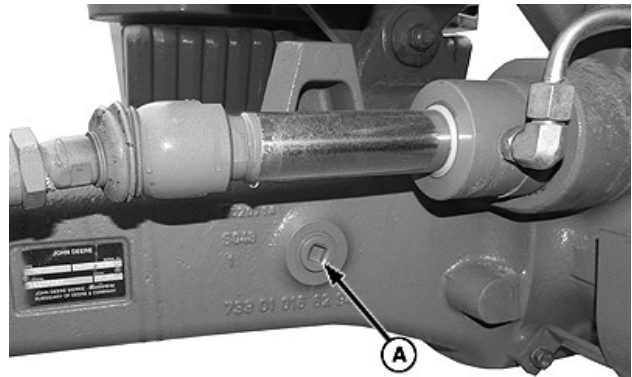
CPA0002089—UN—22OCT15

For 6095B and 6110B Tractors



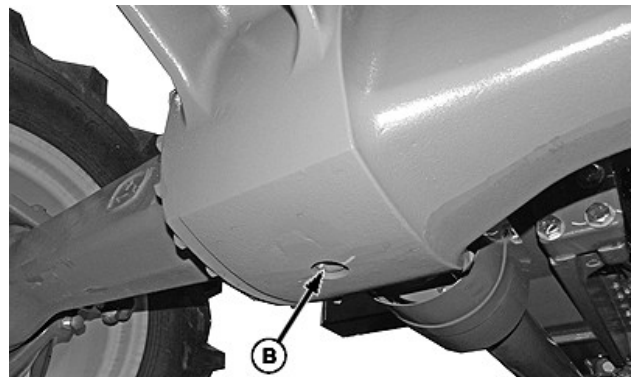
CPA0002090—UN—22OCT15

For 6095B and 6110B Tractors



CPA0002088—UN—21OCT15

For 6120B, 6135B, and 6140B Tractors



CPA0002091—UN—22OCT15

For 6120B, 6135B, and 6140B Tractors

A—Inspection/Fill Plug
B—Drain Plug

1. Park tractor on level surface, lock brake pedals together. Depress brake pedals and set parking brake.
2. Remove drain plug (B). Allow oil to drain. Install drain plug and tighten to specification.
3. Remove inspection/fill plug (A).
4. Add MFWD axle oil through fill hole until oil level becomes even with lower edge of hole. (See Fuels, Lubricants, and Coolants section.)
5. Install fill plug and tighten to specification.

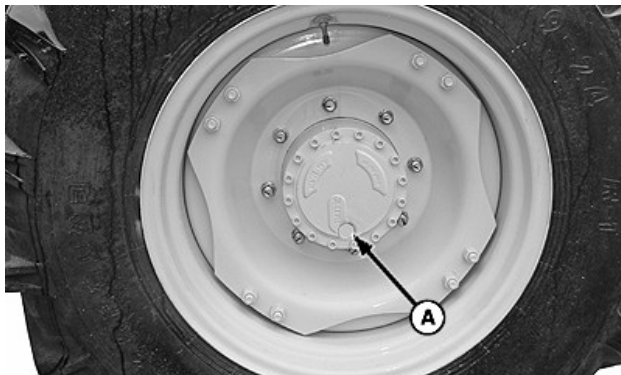
MFWD Axle — Specification

Oil—Capacity. 5.5 L (1.45 gal) for 6095B and 6110B tractors
 5 L (1.32 gal) for 6120B, 6135B, and 6140B tractors
 Fill and Drain Plugs—Torque. 150 N·m (110 lb·ft)

CP00606,00013AB-19-27APR18

Change MFWD Wheel Hub Oil

Service Interval—1000 Hours
Initial, First 100 Hours



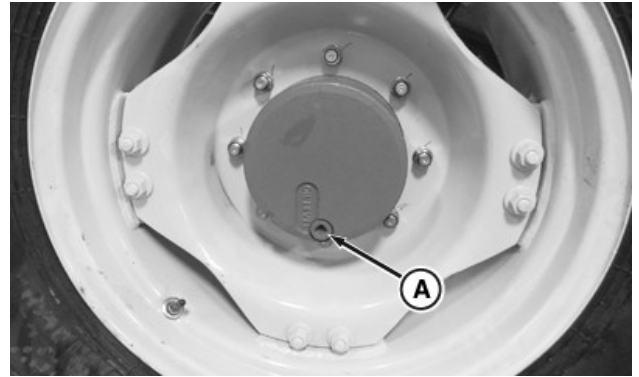
CPA0002095—UN—22OCT15

Position to Drain (for 6095B and 6110B tractors)



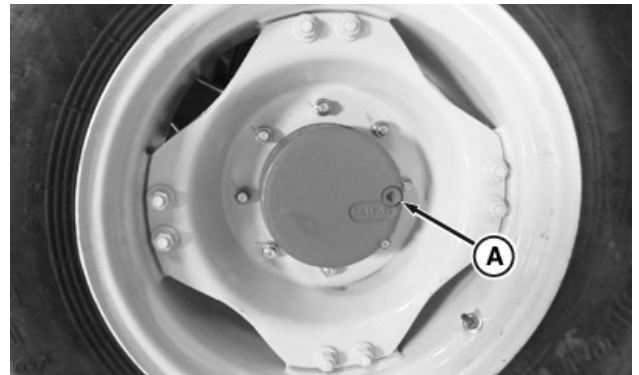
CPA0002094—UN—22OCT15

Position to Fill (for 6095B and 6110B tractors)



PY17108—UN—09OCT12

Position to Drain (for 6120B, 6135B, and 6140B tractors)



PY17109—UN—09OCT12

Position to Fill (for 6120B, 6135B, and 6140B tractors)

A—Drain/Fill Plug

1. Move tractor to level surface.
2. Drive tractor forward until drain/fill plug (A) is at lowest point (position to drain). Remove plug and allow hub oil to drain completely.
3. Drive tractor back until drain/fill plug (A) is positioned horizontally and words OIL LEVEL parallel to ground (position to fill).
4. Add MFWD wheel hub oil through fill hole until oil level is just below edge of hole. Install plug and tighten to specification. (See Fuels, Lubricants, and Coolants section.)
5. Repeat procedure on opposite wheel hub.

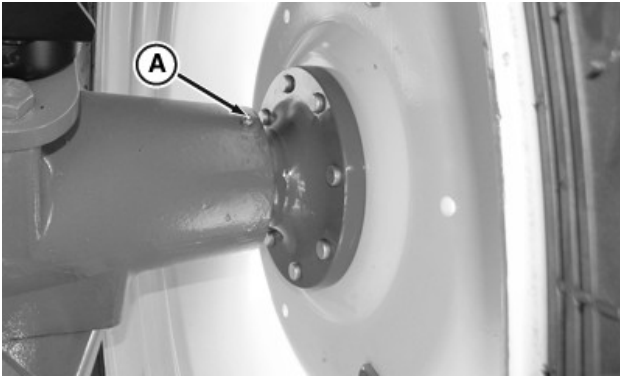
MFWD Wheel Hub — Specification

Oil—Capacity. 1.1 L (37 oz) for 6095B and 6110B tractors
 0.8 L (27 oz) for 6120B, 6135B, and 6140B tractor
 Drain/Fill Plug—Torque. 150 N·m (110 lb·ft)

CP00606,00013AC-19-27APR18

Differential and Rear Axle Maintenance

Lubricate Rear Axle Bearings



PY17113—UN—09OCT12

A—Rear Axle Lube Fitting (2 used)

Service Interval—500 Hours
Extremely Wet or Muddy Conditions—50 Hours

Lubricate rear axle lube fittings (A), both sides, with several shots of grease. (See Fuels, Lubricants, and Coolants section.)

CP00606,00013AD-19-27APR18

Power Take Off (PTO) Maintenance

Lubricate PTO Stub Shaft

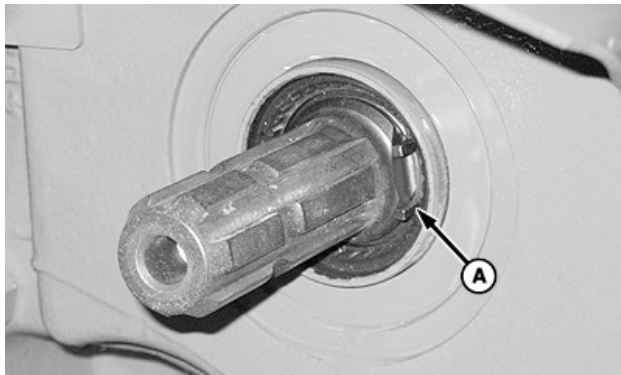
1. Place tractor in PARK position and SHUT OFF engine. Remove key.

IMPORTANT: If the 21-splined end (1000 rpm) needs to face out, the snap ring can be assembled after the PTO shaft is inserted PTO housing.

If the 21-splined end (1000 rpm) needs to face out, the snap ring can be assembled after the PTO shaft is inserted PTO housing.



TS1644—UN—22AUG95



P15236—UN—06FEB08



LV12604—UN—26APR05

A—Snap Ring
B—Stub Shaft
C—Bore

2. Remove the snap ring (A) with the PTO shaft (B). If the 6-splined end is facing out, align the snap ring ends with the access flat first.

3. Clean PTO shaft thoroughly and coat with grease. Make sure the end bore (C) is clean.

4. Insert PTO shaft back into the PTO housing:

- If the 6-splined end (540 rpm) needs to face out, put the snap ring in the groove of the shaft. Align the ends to the access flat before the shaft is in the PTO housing. Move the shaft with the snap ring in the PTO housing until the snap ring snaps into the groove.
- If the 21-splined end (1000 rpm) needs to face out, the snap ring can be assembled after the PTO shaft is inserted PTO housing.

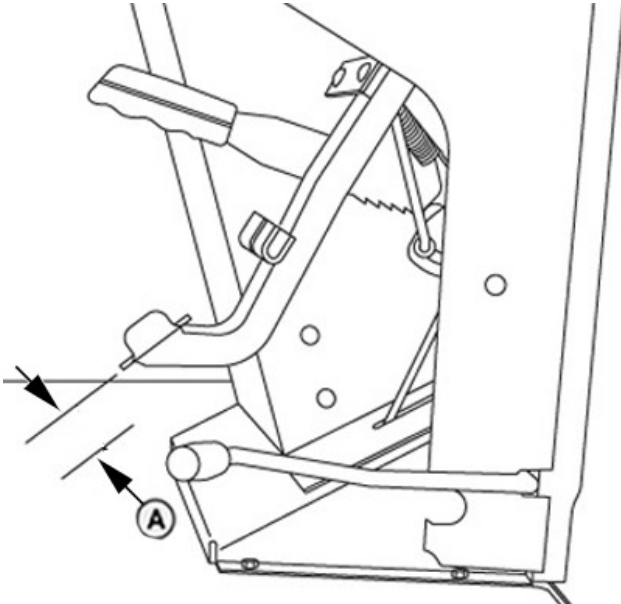
N400041,0003A3B-19-29JAN18

Steering and Brake Maintenance

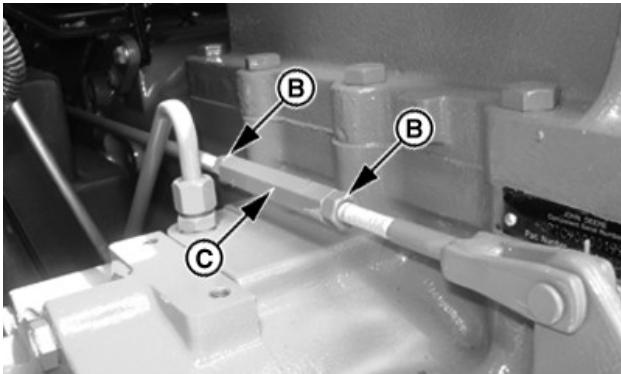
Adjust Brake Pedal Free Play

Service Interval —250 Hours

1. Park tractor on level surface. Chock wheels to prevent machine movement.
2. Unlock brake pedals.



PUC1121—UN—03OCT07



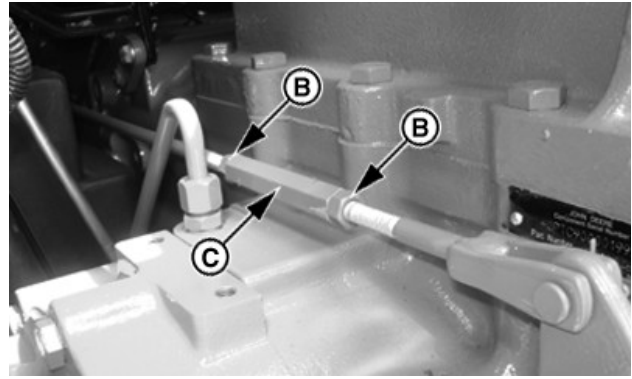
PUC2525—UN—07OCT09

A—Brake Pedal Free Play

3. Applying approximately 10 kg (22 lb) force on one of the brake pedals, measure brake pedal free play (A) between the engaged pedal and the disengaged pedal.
4. Adjust brake linkage until brake pedal free play (A) is to specification.

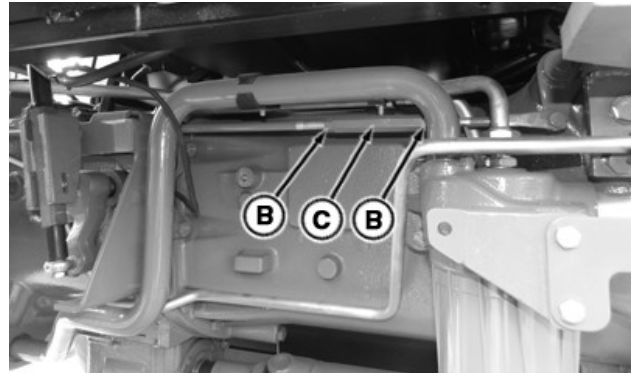
Specification

Brake Pedal Free
Play—Distance. 67 — 73 mm (2.64 — 2.87 in)



PUC2525—UN—07OCT09

Left-Hand Side—Above Rear Axle



CPA0002360—UN—30NOV15

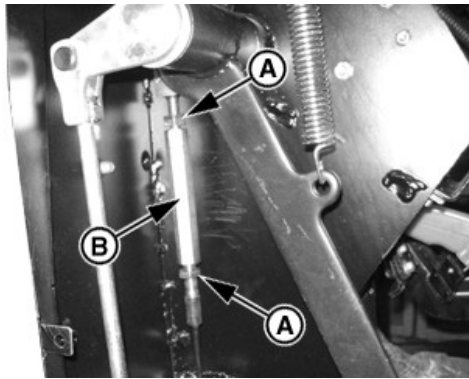
Right-Hand Side

B—Lock Nuts (2 used)
C—Turnbuckle

5. Each side of tractor has an adjustment rod with turnbuckle (C) and lock nuts (B), so each brake pedal should be adjusted separately. Adjustment mechanism is near the back end of the rod on the left side, and near the front end on the right side.
6. To adjust linkage, loosen lock nuts (B) on each side of turnbuckle (C). Rotate turnbuckle (C) as needed to increase or decrease tension on adjustment rod in order to obtain free travel specification.
7. After pedal travel is within specification, tighten lock nuts (B) on both sides of turnbuckle (C).

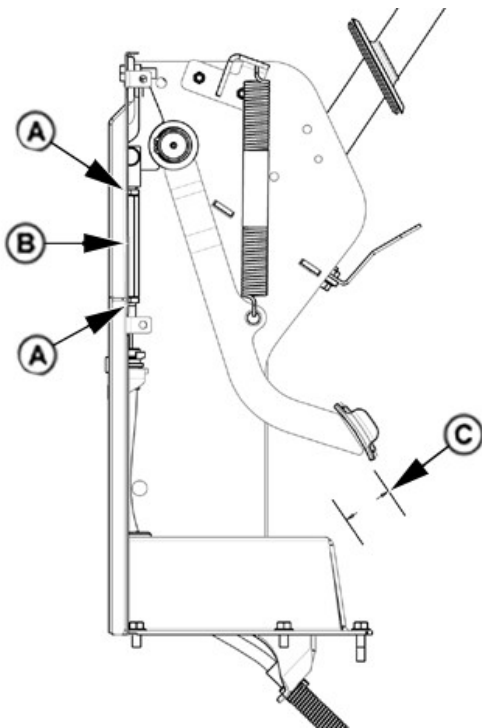
CP00606,0001389-19-26APR18

Adjust Clutch Pedal Free Play



Left-Hand Side

PUC2601—UN—28OCT09



PUC1558—UN—24MAR08

- A—Lock Nuts (2 Used)
- B—Turnbuckle
- C—Clutch Pedal Free Play

Specification

Clutch Pedal Free
Play—Distance. 30 ± 5 mm
($1\frac{1}{8} \pm \frac{3}{16}$ in)

To adjust linkage, loosen both lock nuts (A) and rotate turnbuckle (B) to increase or decrease free travel. When free travel is correct, tighten lock nuts (A).

N400041,0003563-19-17JAN17

Service Interval —250 Hours

IMPORTANT: The adjustment of the cable attached to the clutch pedal has been set by the factory and does not require further adjustment during the life of the tractor, unless the cable is removed or disconnected.

Measure clutch pedal free play (C) clutch pedal travels before clutch engagement is felt. Adjust linkage to specification.

Hydraulics Maintenance

Hydraulics Maintenance

Use Transmission Maintenance section for servicing hydraulic oil and filters.

CO00263,00008E1-19-15JAN18

Warm Transmission-Hydraulic System Oil

Service Interval—As Required

Warm hydraulic system oil. (See Warm Transmission-Hydraulic System Oil in Hydraulics Maintenance section.)

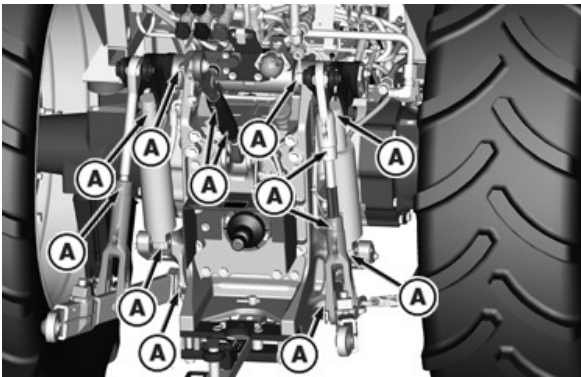
CP00606,00013AE-19-27APR18

Hitch and Drawbar Maintenance

Lubricate 3-Point Hitch Links

| Service Interval |
|------------------------------------------|
| Regular —250 Hours ^a |
| Regular — 50 Hours ^b |
| Regular — Daily or 10 Hours ^c |

^aPerform in normal field condition
^bNecessary to perform 50 hours in special conditions (wet, muddy conditions, and etc.,)
^cNecessary to perform daily or 10 hours in extremely wet or muddy conditions



CPA0001551—UN—03MAY15

A—Lube Fittings (13 used)

Lubricate 3-Point Hitch Links at lube fittings (A) with several pumps of grease. (See Fuels, Lubricants, and Coolants section.)

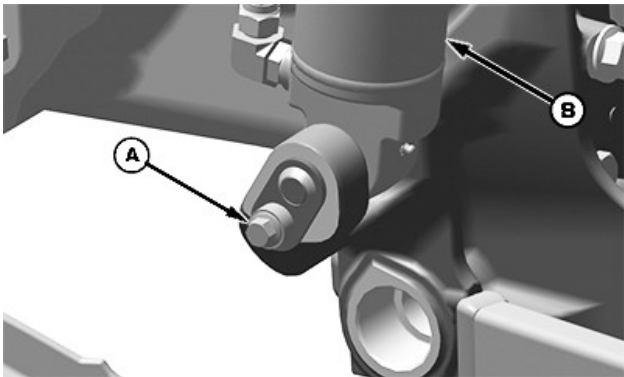
CP00606,00013AF-19-09NOV22

Specification

| | |
|----------------------------|-------------------|
| Screw to Hydraulic | |
| Cylinder—Torque. | 76 N·m (56 lb·ft) |
| CO00263,00021EE-19-30NOV21 | |

Check and Tighten Hydraulic Cylinders

| Service Interval—Every 500 Hours |
|----------------------------------|
|----------------------------------|



CPA0010519—UN—29NOV21

Tighten Hydraulic Cylinder (left-hand side shown, right-hand side is similar)

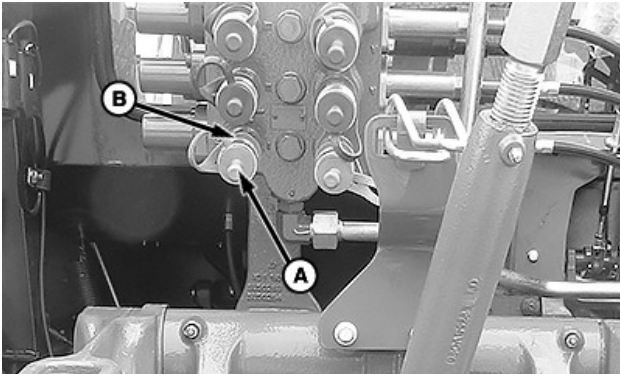
A—Screw (2 used)
B—Hydraulic Cylinder (2 used)

Check hydraulic cylinders (B) and tighten screws (A) to specification:

Selective Control Valve Maintenance

Check Selective Control Valve

Service Interval—As Required



CPA0004363—UN—23APR18

A—Dust Cover (4 used)
B—Quick-Coupler (4 used)

- Check dust covers (A) for damage, replace as needed.
- Clean quick-couplers (B).
- Check coupler receptacles for oil leakage. Consult your dealer if this problem occurs.

CP00606,0001354-19-24APR18

Wheels and Tires Maintenance

Loose Hardware Inspection

Service Interval— Every 250 Hours

| Item | Measurement | Specification |
|-------------------------------------------------|-------------|---------------------|
| MFWD Axle Rim-to-Disk Bolts | Torque | 290 N·m (214 lb·ft) |
| MFWD Axle Disk-to-Flange Bolts | Torque | 310 N·m (229 lb·ft) |
| Multi-Position Rear Wheels Rim-to-Disk Bolts | Torque | 310 N·m (229 lb·ft) |
| Multi-Position Rear Wheels Disk-to-Flange Bolts | Torque | 530 N·m (391 lb·ft) |

CO00263,00021E7-19-24NOV21

Inspect Tires

Service Interval—50 Hours

1. Check tires daily for damage or noticeably low pressure.
2. Have any cuts or breaks repaired as soon as possible.
3. Protect tires from exposure to sunlight, petroleum products and chemicals.
4. Drive carefully. Try to avoid rocks and sharp objects.

IMPORTANT: Minimum pressures may be used only for light loads and only if tractor has no added weight. If you install ballast or mounted implements, or if you pull heavy loads, increase pressure.

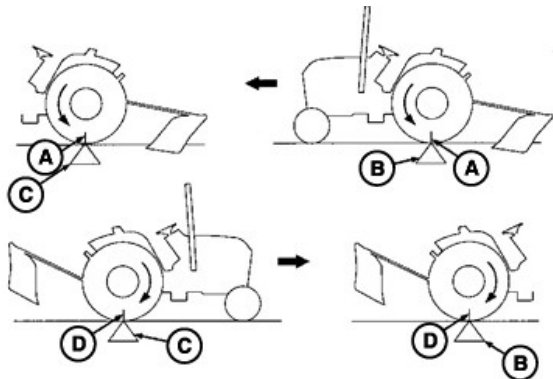
5. Check tires with an accurate gauge having 10 kPa (0.1 bar) (1 psi) graduations. If tires contain liquid ballast, use a special air-water gauge and measure with valve stem positioned toward bottom.

Refer to Tire Inflation Pressure Chart in Wheels, Tires and Treads section.

JB06590,000066F-19-28OCT09

Ballasting Maintenance

Measure Rear Wheel Slip—Manually



N4A0004749—UN—11JAN18

A—Initial Tire Mark
B—Ground Starting Point
C—10 Revolutions Ground Mark
D—Second Tire Mark

1. Place a mark (A) on a rear tire which is easily observed (a chalk mark is recommended).
2. With tractor working and implement lowered, mark a starting point (B) on the ground at the place where tire mark (A) meets the ground.
3. Mark the ground again where tire mark (A) completes 10 full revolutions (C).
4. With implement raised, return in the opposite direction. At the second mark on the ground (C), mark tire a second time (D).
5. While driving the tractor along the same path (implement raised), count the tire revolutions required to reach starting point (B).
6. Use the non-loaded wheel revolutions count in "Wheel Slippage Chart" below, to determine slippage.

NOTE: Ideal wheel slippage is 10—15 % for 2WD tractors, and 8-12 % for MFWD tractors.

7. Adjust ballast or load to give correct slippage.

NOTE: Available horsepower is greatly reduced when wheel slip drops below minimum percentage.

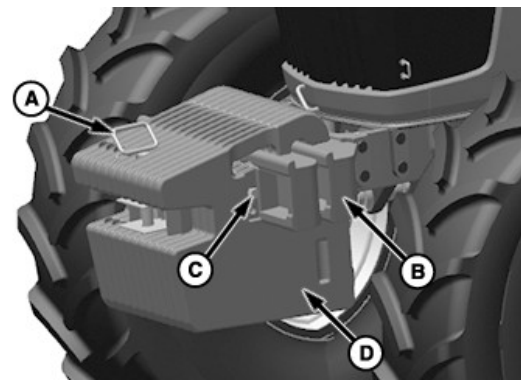
| WHEEL SLIPPAGE CHART | | |
|----------------------|----|-------------|
| 7 | 30 | Add Ballast |

CP00606,00013B2-19-27APR18

Ballast Front End for Transport

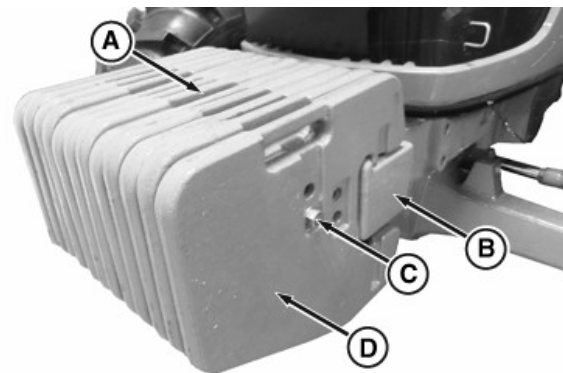
CAUTION: Additional front ballast is needed for transporting rear-mounted implements. When implement is raised, drive slowly over the rough ground, regardless of how much ballast is used.

Weights are heavy. Use the proper lifting equipment.



50 kg Ballast

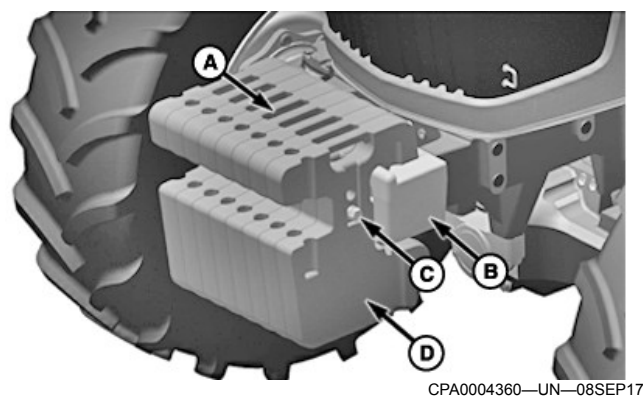
CPA0003115—UN—15FEB17



47 kg Ballast

PY17065—UN—05OCT12

| WHEEL SLIPPAGE CHART | | |
|---------------------------------------|------------------|--------------------|
| Non-Loaded Wheel Revolutions (Step 5) | Estimated % Slip | Recommended Action |
| 10 | 0 | Remove Ballast |
| 9-1/2 | 5 | Remove Ballast |
| 9 | 10 | CORRECT BALLAST |
| 8-1/2 | 15 | CORRECT BALLAST |
| 8 | 20 | Add Ballast |
| 7-1/2 | 25 | Add Ballast |



40 kg Ballast

- A—Ballast Center
B—Front Ballast Bracket
C—Ballast Retaining Bolt (2 used)
D—Additional Weights

Specification

Additional Weight (6095B, 6110B, and 6135B tractors, for CIS models)—Weight. 50 kg (110.23 lb)
Additional Weight (6095B tractors, for JDA models)—Weight. 40 kg (88.18 lb)
Additional Weight (6110B, 6120B, 6135B, and 6140B tractors, for JDA models)—Weight. 47 kg (103.61 lb)

1. Install weights in pairs, one on each side of the ballast center (A).
2. To hold weights in place, run ballast retaining bolts (C) through holes from side-to-side. Tighten to specification.

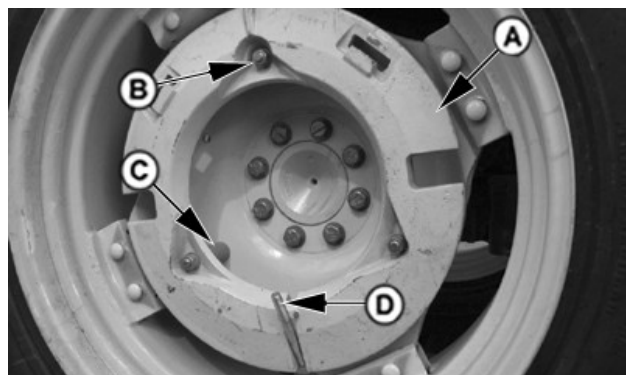
Specification

Ballast Retaining Bolt—Torque. 230 N·m (170 lb·ft)

NOTE: Torque the ballast retaining bolts (C) to specification every 50 hours.

CO00263,00021E8-19-24NOV21

IMPORTANT: Maximum number of weights that can be installed on rear is four on each side wheel.



PUC1556—UN—25NOV07

- A—First Weight
B—First Weight Retaining Bolt, Washer, and Nut (3 sets used)
C—Spacer (3 used per weight)
D—Additional Weight Retaining Bolt, Washer, and Nut

1. Attach first weight (A) to wheel disk, using three spacers (C) if necessary, with first weight retaining bolts, washers, and nuts (B). Note that bolts go through first weight and into the rim so that washers and nuts tighten onto the rim and not onto weights. This makes it easy to check regularly for tightness.
2. To install additional weights, position wheel such that one of the retainer jaws is at the top. Hang next weight in retainer jaw, secure with additional weight retaining bolt, washer, and nut (D) as shown. Proceed in similar fashion with any additional weights, up to maximum allowable limit.
3. Tighten all bolt retaining nuts to specification. Tighten again after a few hours of service. Check tightness regularly.

Specification

Retaining Bolts—Torque. 230 N·m (170 lb·ft)

NOTE: Torque retaining bolts to specification every 50 hours.

CO00263,00021E9-19-24NOV21

Install Rear Cast Iron Weights

CAUTION: Use appropriate equipment or have the job done by an authorized John Deere dealer. Rear weights weigh 55 kg (121 lb) each. Handle with care!

CAUTION: When installing or removing additional weights, always position wheels so that one retainer jaw is at the top.

NOTE: Spacers are required when weights are not fit into rim's dish. If weights do fit, spacers are optional.

Additional Equipment Maintenance

Additional Equipment Maintenance

Service additional equipment refer to additional equipment Operator's manual.

CP00606,0001353-19-23APR18

Operator Station Maintenance

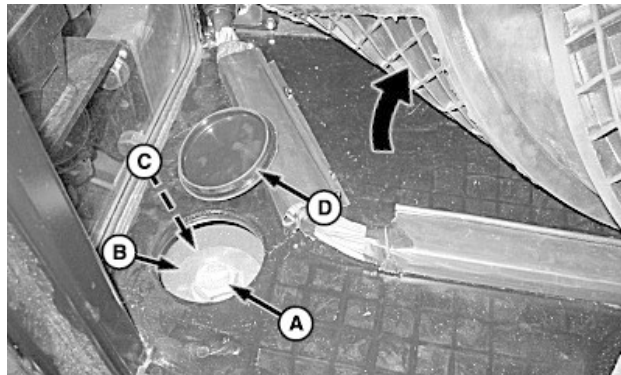
Keep Cab Protection System Installed Properly

Service Interval—250 Hours

CAUTION: Make certain all parts are installed correctly if cab protection system is loosened or removed for any reason. Tighten mounting cap screws to specification.

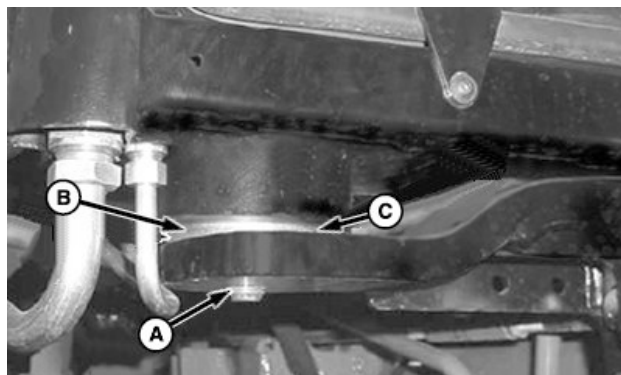
The protection offered by cab protection system will be impaired if cab protection system is subjected to structural damage, as in an overturn incident, or is in any way altered by welding, bending, drilling, or cutting. A damaged cab protection system should be replaced, not reused. Any alteration to the cab protection system must be approved by the manufacturer.

When installation of equipment on a machine necessitates loosening or removing cab protection system, mounting cap screws should be tightened to specification



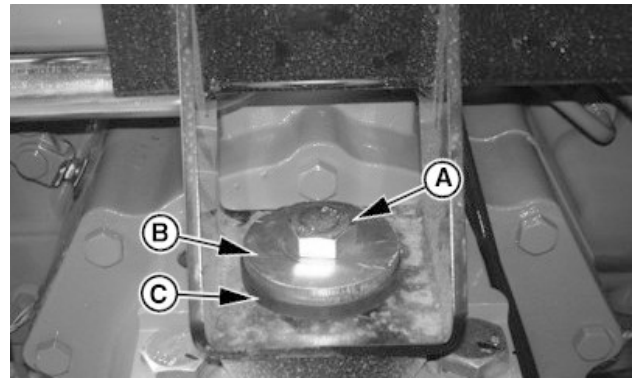
CPA0005201—UN—25JAN18

Front Cab Mount (Left-Hand Side)



CPA0005202—UN—25JAN18

Front Cab Mount (Right-Hand Side)



CPA0005200—UN—25JAN18

Rear Cab Mount (Left-Hand Side)

A—Cap Screw
B—Washer
C—Isolator
D—Plug

Lift up rubber floor mat and pry out plugs (D) to access FRONT mounting hardware.

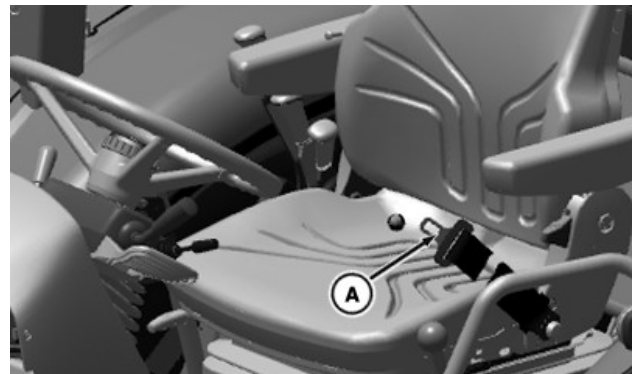
Check front and rear mounting hardware (A—C) for proper torque.

Specification

Cab Protection System
Mounting Cap Screws—Torque. 220 N·m
(162 lb·ft)

N400041.0003A30-19-29JAN18

Check Seat Belt



CPA0003112—UN—21FEB17

A—Seat Belt

Service Interval—Once Every Year

- Inspect seat belt and mounting hardware in your machine at least once a year.
- If the belt shows signs of cuts, fraying, extreme or unusual wear, discoloration, abrasion, damage to the buckle or retractor, the entire seat belt should be replaced immediately.
- For your safety, replace belt system only with

replacement parts approved for your machine, obtained from your John Deere dealer.

N400041,0003668-19-15FEB17

Clean Cab Air Filters

Service Interval—250 Hours*

** Interval can vary according to operating conditions*

CAUTION: The air quality system air filters are not designed to filter out harmful chemicals. Follow the instructions in the implement operator's manual and those given by the chemical manufacturer when using agricultural chemicals.

Recirculation Filters (inside cab)

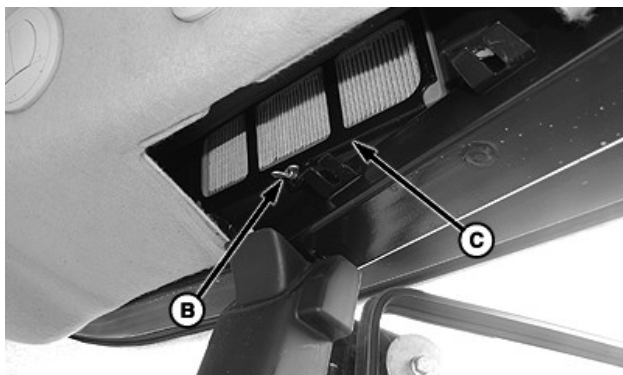
NOTE: There are filters on BOTH sides of cab. Left-hand side is shown.



CPA0000180—UN—20JUN13

A—Cover

1. Pry off cover (A). (Pull down along window.)



CPA0000181—UN—20JUN13



CPA0000182—UN—20JUN13

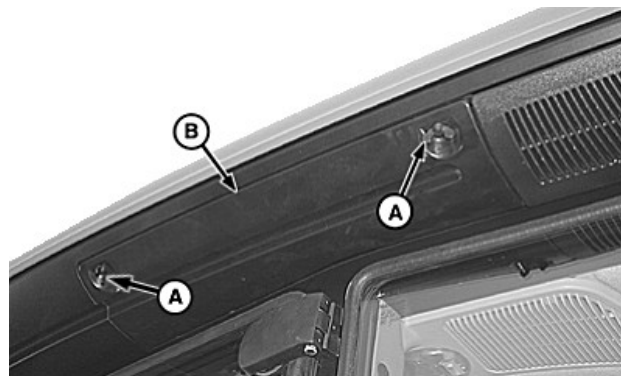
**B—Wing Screw
C—Filter Retainer
D—Filter**

2. Remove wing screw (B), retainer (C) and filter (D).
3. Inspect filter for holes or damage. Inspect rubber seal for cracks or wear. Replace as necessary.

NOTE: Do not clean filter with water or compressed air. Cleaning the filter is not recommended and should be replaced as needed.

4. Replace filter when it becomes dirty. It may require replacing filter more often in dusty conditions.
5. Install filter with rubber seal toward retainer (C).
6. Install retainer, wing screw and cover.
7. Repeat procedure on opposite side.

Fresh Air Filters (outside cab)

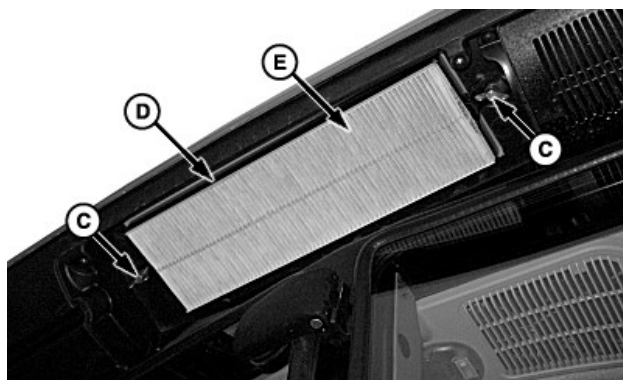


P14491—UN—30OCT07

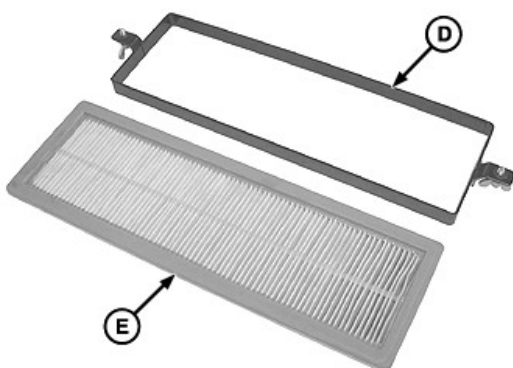
Under Roof, Above Cab Door

**A—Wing Screws
B—Filter Cover**

1. Remove two wing screws (A) and cover (B).



P14489—UN—30OCT07



P14492—UN—30OCT07

C—Wing Screws
D—Filter Retainer
E—Filter

2. Remove wing screws (C), retainer (D) and filter (E).
3. Inspect filter for holes or damage. Inspect rubber seal for cracks or wear. Replace as necessary.

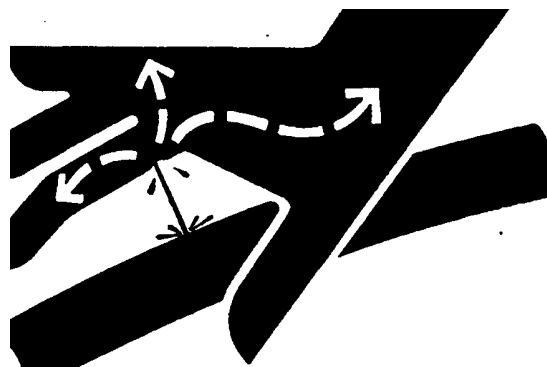
NOTE: Do not clean filter with water or compressed air. Cleaning the filter is not recommended and should be replaced as needed.

4. Replace filter when it becomes dirty. It may require replacing filter more often in dusty conditions.
5. Install filter with rubber seal toward cab.
6. Install retainer and wing screws.
7. Install cover and wing screws.
8. Repeat procedure on opposite side.

CP00606,00013E8-19-16MAY18

Service Air-Conditioning System

Service Interval —As Required



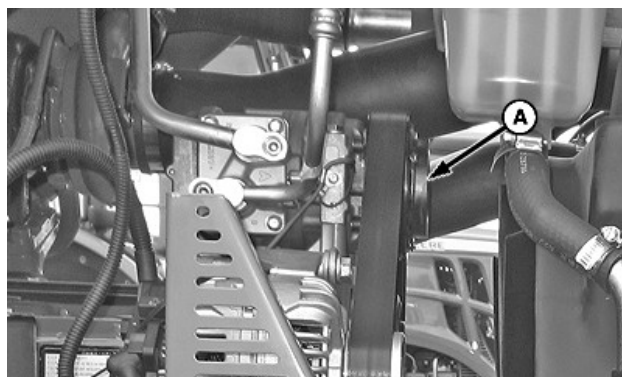
X9811—UN—23AUG88

CAUTION: Refrigerant is under pressure. Improper servicing causes refrigerant to penetrate eyes and skin or cause burns.

IMPORTANT: R-134a refrigerant must be used. This operation requires special equipment and procedures. See an authorized John Deere dealer.

NOTE: Some oil seepage from the compressor shaft seal is normal.

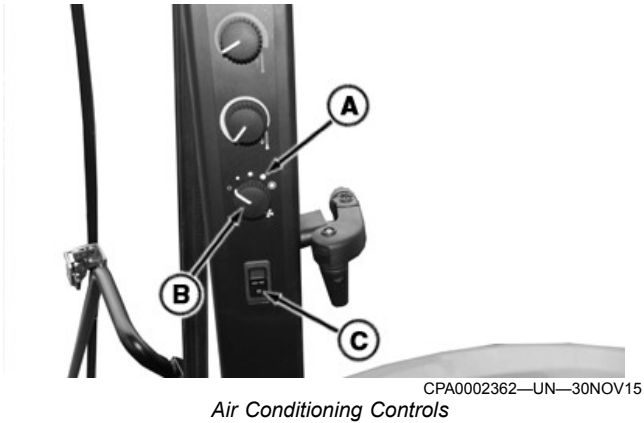
Check the following if air conditioner is not cool or the cooling is intermittent.



CPA0001730—UN—28JUL15

A—Clutch Cover

- If the clutch of the air compressor slips after the tractor is in storage, the air compressor is stuck. Stop engine and turn key switch to OFF position. Remove three cap screws and clutch cover (A). Rotate clutch hub back and forth to free compressor.



6. After finishing step 5, operator can run the engine at the desired speed.

CO00263,000194A-19-30JUL18

- A—High Position**
B—Blower Control Knob
C—Air-conditioning and Defrost Switch

Run engine at 2000 rpm. Push top half of the air-conditioning and defrost switch (C) and set blower control knob (B) to high position (A). If air flow is not cool, see an authorized John Deere dealer.

- If the cooling is intermittent, clean front grille, side vents, radiator, and condenser. If this problem is not solved, see an authorized John Deere dealer.
- Inspect operator enclosure (cab) filters for restriction. (See Clean Cab Air Filters in this section). If this problem persists, see an authorized John Deere dealer.

LG70251,00014DE-19-28SEP18

Air-Conditioning System - Instruction for Starting up the Air-Conditioning Compressor

NOTE: Carry out following procedures whenever the air conditioning system is replaced or cleaned if the system is not used for more than 1 month.

NOTE: Do not switch on the compressor while the engine is running until the step 5 has been reached.

1. Open all the air vents/louvers
2. Start the engine and stabilize the low idle speed
3. Set the blower to maximum power
4. Set the air-conditioning to maximum 'Cold'.
5. Switch on the air conditioning system and continuously run the compressor at low idle speed for at least 3 minutes. When the time is up, the compressor spreads the oil throughout the refrigerant system.

Troubleshooting

Engine Troubleshooting

| Symptom | Problem | Solution |
|-----------------------------------------------------|---------------------------------------|----------------------------------------------------------------------|
| Engine hard to start or will not start | Improper starting procedure | Review starting procedure |
| | No fuel | Check fuel tank |
| | Air in fuel tank | Bleed fuel tank |
| | Fuel pump hand primer left raised | Push primer down |
| | Slow starter speed | See “Starter Cranks Slowly” |
| | Crankcase oil too heavy | Use oil of proper viscosity |
| | Improper type of fuel | Consult fuel supplier; use proper type fuel for operating conditions |
| | Water, dirt, or air in fuel system | Drain, flush, fill and bleed system |
| | Clogged fuel filter | Replace filter element |
| Engine knocks | Dirty or faulty injectors | Have John Deere dealer check injectors |
| | Insufficient oil | Add oil |
| | Incorrect injection pump timing | See your John Deere dealer |
| | Low coolant temperature | See your John Deere dealer |
| | Engine overheating | See “Engine Overheats” |
| Engine runs irregularly or stalls frequently | Low coolant temperature | See your John Deere dealer |
| | Clogged fuel filter | Replace filter element |
| | Water, dirt, or air in fuel system | Drain, flush, fill, and bleed system |
| | Dirty or faulty injectors | Have John Deere dealer check injectors |
| | Improper type of fuel | Use proper fuel |
| Below normal engine temperature | Defective temperature gauge or sender | Check gauge and sender |
| Lack of power | Engine overloaded | Reduce load or shift to lower gear |
| | Low fast idle speed | See your John Deere dealer |
| | Intake air restriction | Service air cleaner |

Troubleshooting

| Symptom | Problem | Solution |
|-------------------------------------------------|---------------------------------|----------------------------------------------------------------|
| | Clogged fuel filter | Replace filter element |
| | Improper type of fuel | Use proper fuel |
| | Overheated engine | See “Engine Overheats” |
| | Below normal engine temperature | See your John Deere dealer |
| | Improper valve clearance | See your John Deere dealer |
| | Dirty or faulty injectors | Have John Deere dealer check injectors |
| | Incorrect injection pump timing | See your John Deere dealer |
| | Turbocharger not functioning | See your John Deere dealer |
| | Restricted fuel line | See your John Deere dealer |
| | Restricted return line | See your John Deere dealer |
| | Improper ballast | Adjust ballast to load |
| Low oil pressure | Low oil level | Add oil |
| | Improper type of oil | Drain, fill crankcase with oil of proper viscosity and quality |
| High oil consumption | Crankcase oil too light | Use proper viscosity oil |
| | Oil leaks | Check for leaks in lines, around gaskets and drain plugs |
| | Restricted crankcase vent tube | Clean vent tube |
| Engine emits black or gray exhaust smoke | Improper type of fuel | Use proper fuel |
| | Clogged or dirty air cleaner | Service air cleaner |
| | Engine overloaded | Reduce load or shift to a low gear |
| | Injection nozzles dirty | See your John Deere dealer |
| | Defective turbocharger | See your John Deere dealer |
| | Incorrect engine timing | See your John Deere dealer |
| Engine emits white smoke | Improper type fuel | Use proper fuel |
| | Engine out of time | See your John Deere dealer |
| | Defective thermostat | Replace thermostat |

| Symptom | Problem | Solution |
|------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------|
| | Defective injection nozzles | See your John Deere dealer |
| | Turbocharger not functioning | See your John Deere dealer |
| | Cold start advance or light load advance not functioning | See your John Deere dealer |
| | Cold engine | Bring engine to operating temperature |
| Engine overheats | Dirty radiator core or grille screens | Remove all trash |
| | Engine overloaded | Shift to lower gear or reduce load |
| | Low engine oil level | Check oil level. Add oil as required |
| | Low coolant level | Fill radiator to proper level, check radiator and hoses for loose connection or leaks |
| | Faulty radiator cap | Replace cap |
| | Loose or defective fan belt | Adjust belt tension |
| | Cooling system needs flushing | Flush cooling system |
| | Defective thermostat | See your John Deere dealer |
| | Defective temperature gauge or sender | See your John Deere dealer |
| High fuel consumption | Improper type of fuel | Use proper fuel type |
| | Incorrect grade of fuel | Use correct grade of fuel |
| | Clogged or dirty air cleaner | Service air cleaner |
| | Engine overloaded | Reduce load or shift to a lower gear |
| | Improper valve clearance | See your John Deere dealer |
| | Injection nozzles dirty | See your John Deere dealer |
| | Incorrect engine timing | See your John Deere dealer |
| | Implement improperly adjusted | See implement operator's manual |
| | Low engine temperature | See your John Deere dealer |
| | Excessive ballast | Adjust ballast to load |
| | Restricted air intake system | Check system |
| | Plugged crankcase vent tube | Clean vent tube |

Troubleshooting

| Symptom | Problem | Solution |
|---------|------------------------|----------------------------|
| | Defective turbocharger | See your John Deere dealer |

PY80265,000042C-19-03SEP07

Transmission Troubleshooting

| Symptom | Problem | Solution |
|----------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------|
| Transmission oil overheats | Low oil supply | Fill system with correct oil |
| | Clogged transmission/hydraulic oil filter | Replace filter |
| | Internal hydraulic leak | See your John Deere dealer |
| | Dirty or clogged oil cooler | Clean or flush oil cooler |
| Low transmission oil pressure | Low oil supply | Fill system with correct oil |
| | Clogged transmission/hydraulic oil filter | Replace filter |
| | Failed pressure relief valve | Check valve, replace if necessary |
| Transmission stuck in neutral or it is hard to shift ant gear | Speed shift linkage stuck or rusty | Clean or lubricate the speed shift lever linkages |
| | Interlock cable misadjusted | Adjust interlock cable per technical repair manual |

PY80265,000042D-19-03SEP07

Hydraulic System Troubleshooting

| Symptom | Problem | Solution |
|--------------------------------------------------|--------------------------------------------|-------------------------------------------|
| Entire hydraulic system fails to function | Low oil supply | Fill system with correct oil |
| | Clogged transmission/hydraulic filter | Replace filter |
| | High-pressure internal leak | See your John Deere dealer |
| | Hydraulic pump not plumbed correctly | See your John Deere dealer |
| Hydraulic oil overheats | Low oil supply | Fill system with correct oil |
| | Clogged transmission/hydraulic oil filter | Replace filter |
| | Internal hydraulic leak | See your John Deere dealer |
| | Hitch feedback linkage improperly adjusted | Reset linkage. See your John Deere dealer |

Troubleshooting

| Symptom | Problem | Solution |
|---------|-----------------------------|---------------------------|
| | Dirty or clogged oil cooler | Clean or flush oil cooler |

JB06590,00008A2-19-27NOV08

Brakes Troubleshooting

| Symptom | Problem | Solution |
|-------------------------------------|--------------------------------|----------------------------|
| No solid pedal feel | Pedals adjusted incorrectly | See your John Deere dealer |
| Pedal settles | Rear brake piston seal leaking | See your John Deere dealer |
| Excessive pedal travel | Pedals adjusted incorrectly | See your John Deere dealer |
| Brakes drag during transport | Brakes out of adjustment | See your John Deere dealer |

JB06590,00008A3-19-27NOV08

Rockshaft and 3-Point Hitch Troubleshooting

| Symptom | Problem | Solution |
|----------------------------------------------------|-------------------------------------------------|----------------------------------|
| Insufficient transport clearance | Center link too long | Adjust center link |
| | Lift links too long | Adjust lift links |
| | Implement not level | Level implement |
| | Implement not properly adjusted | See implement operator's manual |
| | Front of center link in upper holes | Move center link to lower holes |
| | Sway chains adjusted too short | Lengthen sway chains |
| Hitch drops slowly | Rockshaft rate-of-drop control not properly set | Adjust rate-of-drop control knob |
| Hitch fails to lift or lifts slowly | Excessive load on hitch | Reduce load |
| | Low oil level | Fill system with proper oil |
| | Hydraulic oil too cold | Allow oil to warm |
| | Transmission/hydraulic oil filter clogged | Replace filter |
| Implement will not operate at desired depth | Lift links too short | Adjust lift links |
| | Lack of penetration | See implement operator's manual |
| | Improper setting of limit stop | Reset limit stop |

Troubleshooting

| Symptom | Problem | Solution |
|---------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| | Improper setting of draft control lever | See Hitch and Drawbar Operation section |
| Insufficient or no hitch response to draft load | Front attachment of center link in upper holes | Move center link attachment to lower bracket holes |
| | Draft control knob in "Min" position | Pull knob upward |
| | Lift links too short | Adjust lift links |
| | Lack of penetration | See implement operator's manual |
| | Rate-of-drop too slow | Adjust rate-of-drop control knob |
| Hitch too responsive | Front attachment on center link in lower bracket holes | Move center link attachment to upper bracket holes |
| | Improper draft sensing adjustment | Push knob down |
| Hitch drops too fast | Rate-of-drop set too fast | Adjust rate-of-drop control knob |
| Rockshaft control levers "drift" Levers too loose. | Friction disks are loose | Adjust rockshaft control lever friction. See procedures in Hitch and Drawbar Operation section or see your John Deere dealer |

CP00606,00013B1-19-27APR18

Hydraulic Cylinders Troubleshooting

| Symptom | Problem | Solution |
|-------------------------------------------------|----------------------------------------|------------------------------------|
| Direction of cylinder travel is reversed | Improper hose connections | Reverse hose connections |
| Hoses will not couple | Improper hose male tips | Replace tip with ISO standard tips |
| Cylinder will not lift load | Excessive load | Reduce load |
| | Hoses not completely installed | Attach hoses correctly |
| | Incorrect remote cylinder size | Use correct size cylinder |
| Direction of travel reverses on II SCV | SCV lever moved to regenerate position | Reverse hose couplings |

JB06590,00008A5-19-27NOV08

Electrical System Troubleshooting

| Symptom | Problem | Solution |
|--------------------------------|-------------------------------|-------------------------------|
| Battery will not charge | Loose or corroded connections | Clean and tighten connections |

Troubleshooting

| Symptom | Problem | Solution |
|----------------------------------------------------------------------------|----------------------------------------|----------------------------------------------|
| Charging system indicator glows with engine running | Sulfated or worn-out battery | Check electrolyte level and specific gravity |
| | Loose or defective alternator/fan belt | Adjust belt tension or replace belt |
| | Low engine speed | Increase speed |
| | Defective battery | Check electrolyte level and specific gravity |
| | Defective alternator | See your John Deere dealer |
| Starter inoperative | Slipping alternator/fan belt | Adjust belt tension |
| | Shift lever in gear | Move shift lever to neutral |
| | PTO lever in engaged position | Move PTO lever to disengaged position |
| | Low battery output | See your John Deere dealer |
| | Blown fuse | Replace fuse |
| Starter cranks slowly | Low battery output | Check electrolyte level and specific gravity |
| | Crankcase oil too heavy | Use proper viscosity oil |
| | Loose or corroded connections | Clean and tighten battery connection |
| Light system does not function; rest of electrical system functions | Blown fuse | Replace fuse |
| Entire electrical system does not function | Fusible link blown | See your John Deere dealer |
| | Faulty battery connections | Clean and tighten connections |
| | Sulfated or worn-out battery | Check electrolyte level and specific gravity |
| | Blown fuse | Replace fuse |
| Relays sticking or nonfunctional; repeated failures | Failed diodes | See your John Deere dealer |

JB06590,000048E-19-15APR08

Specifications

Machine Specifications

NOTE: Specifications and design subject to change without notice.

| General Specifications | | | | | | | |
|-----------------------------------|---------------------------------------------------------|-----------------------------------|---------------|------------|---------------|-----------|------------------|
| Engine | | | | | | | |
| Tractor Model | 6095B | 6110B | 6120B | | 6135B | | 6140B |
| Engine Type | Inline, Mechanical | Inline, High-Pressure Common Rail | | | | | |
| Engine Model | 4045HCP04 | 4045HCP05 | 4045HCP10 | | 4045HCP11 | 4045HCP20 | 6068HCP01 |
| Cooling Mode | Water cooled | | | | | | |
| Aspiration | Turbocharger, Intercooler | | | | | | |
| Engine Power at rated rpm kW (hp) | 69.9 (95) | 80.9 (110) | 88.2 (120) | 93.5 (127) | 99.3 (135) | | 103.1(140) |
| Max. Engine Torque N·m (lb·ft) | 375 (277) | 452 (333) | 493 (364) | 548 (404) | 552 (407) | 556 (410) | 602 (444) |
| Number of Cylinders | 4 | | | | | | 6 |
| Bore x Stroke, mm (in) | 106.5 x 127 (4.19 x 5) | | | | | | |
| Rated Speed, rpm | 2200 | | | | | | |
| Displacement (L) | 4.5 | | | | | | 6.8 |
| Compression | 18.5 ± 0.7 | 19 ± 0.7 | 17:1 | | 19 ± 0.7 | | 19:1 |
| Slow Idle, rpm | 850~900 | | | | | | |
| Fast Idle, rpm | 2350~2400 | 2325~2375 | | | | | |
| Air Cleaner | Dry-type air filter with primary and secondary elements | | | | | | |
| Electrical System | | | | | | | |
| Tractor Model | 6095B | 6110B | 6120B | | 6135B | | 6140B |
| Battery Voltage (V) | 12 | | | | | | |
| Alternator Amperage | 90 | | | | | | |
| 7-Pin Power Socket | Optional | | | | | | |
| 3-Pole Power Socket | Optional | | | | | | |
| Transmission | | | | | | | |
| Tractor Model | 6095B | 6110B | 6120B | | 6135B | | 6140B (Stage II) |
| Transmission Type (Optional 1) | - | 24F/12R (40k) | - | | 24F/12R (40k) | | |
| Transmission Type (Optional 2) | 24F/12R (30k) | - | 24F/12R (30k) | | | | |
| Transmission Type (Optional 3) | - | 24F/8R (40k) | - | | 24F/8R (40k) | | - |
| Transmission Type (Optional 4) | 24F/8R (30k) | - | 24F/8R (30k) | | | | |
| Transmission Type (Optional 5) | 12F/4R | | | | | | - |
| Clutch (Traction) | Wet / Dry | | Wet | | | | |
| Clutch (PTO) | Wet / Dry | | Wet | | | | |
| Gear Shifting Type | Synchronizer | | | | | | |
| Range Shifting Type | A / B : Collar Shift, C /D : Synchronizer | | | | | | |
| Brakes | Sealed Wet Disk, Mechanically Actuated | | | | | | |
| Power Take-Off (PTO) | | | | | | | |
| Tractor Model | 6095B | 6110B | 6120B | | 6135B | | 6140B |
| Control | Full Independent | | | | | | |
| Activation | Optional 1 | Electrohydraulic | | | | | |
| | Optional 2 | Mechanical | | - | | | |
| PTO Speed | 540 / 1000 | | | | | | |
| PTO Gear Ratio | (112:29) / (95:46) | | | | | | |
| PTO Output Shaft Splines | 6 / 21 | | | | | | |

Specifications

| General Specifications | | | | | |
|------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------|-----------|--------------|--------------|
| Engine | | | | | |
| Tractor Model | 6095B | 6110B | 6120B | 6135B | 6140B |
| PTO Output Shaft Dia. (mm) | 35 | | | | |
| PTO Output Power kW (hp) | 59.4 (80.8) | 68.8 (93.5) | 72 (97.9) | 84.4 (114.8) | 87.6 (119.1) |
| Hydraulic System | | | | | |
| Tractor Model | 6095B | 6110B | 6120B | 6135B | 6140B |
| Type | Open Center | | | | |
| Hydraulic Pump | Gear Type Pump | | | | |
| System Pressure (MPa) | 19-20 | | | | |
| Hydraulic Pump Flow at 2200 rpm (L/min) | 50 (Dry Clutch) / 60 (Wet Clutch) | 60 | | | |
| Steering Pump | Gear Type Pump | | | | |
| Through Out Lift Capacity OECD (Kg.) 610 mm (24 in) behind Hitch Balls | 2500 | 3300 | | | |
| Maximum Lift Capacity (Kg.) Hitch Balls | 4100 | 5400 | | | |
| Lift Cylinder Dia. Mm | 70 | 80 | | | |
| Selective Control Valve (SCV) | II, III | | | | |
| Three-Point Hitch | | | | | |
| Tractor Model | 6095B | 6110B | 6120B | 6135B | 6140B |
| Hitch Type | Category II | | | | |
| Lower Link Type | Ball | | | | Ball / Hook |
| Control Type | Control cable from CAB | | | | |
| Control Modes | Working depth limit, Position control, Draft sensing control, Rate of drop | | | | |
| Lateral Sway Control | Stabilizer Bar | | | | |
| Lateral Sway Control Optional | Sway Chain | | | | |
| Drawbar Type | Category II | | | | |

CO00263,000214F-19-03,JUL19

Machine Dimensions and Weights

NOTE: All dimensions are of a machine equipped with standard tires.

NOTE: Specifications and design subject to change without notice.

| Main Technical Parameters | | | | | |
|---------------------------|-------------------------------------|---------------|---------------|-------|---------------|
| Dimensions | | | | | |
| Tractor Model | 6095B | 6110B | 6120B | 6135B | 6140B |
| Type/Use | 4WD/Agricultural use | | | | |
| Overall Length, mm (in) | Length without front ballast weight | 4235 (166.73) | 4415 (173.81) | | 4580 (180.31) |
| | Length with front ballast weight | 4655 (183.26) | 4835 (190.35) | | 4900 (192.91) |
| Overall Width, mm (in) | Min | 2151 (84.68) | 2188 (86.14) | | 2200 (86.61) |
| | Max | 2473 (97.36) | 2516 (99.05) | | 2520 (99.21) |
| Overall Height, mm (in) | Height to the cab roof | 2680 (105.51) | 2740 (107.87) | | |
| | Height to | 2740 (107.87) | 2800 (110.24) | | |

Specifications

| Main Technical Parameters | | | | | | | | | | | | | | |
|----------------------------------------------------|---------------------------|-------------------------|------------------|-----------------------|-------------------|-------------------------|--|-------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|--|
| Dimensions | | | | | | | | | | | | | | |
| Tractor Model | | 6095B | | 6110B | | 6120B | | 6135B | | | 6140B | | | |
| | identification sign light | | | | | | | | | | | | | |
| | Height to beacon light | 2880 (113.38) | | 2940 (115.74) | | | | | | | | | | |
| Wheelbase, mm (in) | | 2310 (90.94) | | 2560 (100.79) | | | | | | | 2677 (105.40) | | | |
| Ground Clearance | | | | | | | | | | | | | | |
| MFWD Differential bottom, mm (in) | | 350 (13.77) | | 380 (14.96) | | 480 (18.90) | | | | | | | | |
| Drawbar bottom, mm (in) | | 320 (12.60) | | 340 (13.39) | | 410 (16.14) | | | | | | | | |
| Vehicle Turning Radius, m (ft) | | | | | | | | | | | | | | |
| MFWD ON | | 4.5 (14.76) | | 5.5 (18.04) | | | | | | | 6 (19.68) | | | |
| MFWD OFF | | 4 (13.12) | | 5 (16.40) | | | | | | | 5.5 (18.04) | | | |
| Weight and Ballast | | | | | | | | | | | | | | |
| Tractor Model | | 6095B | | 6110B | | 6120B | | 6135B | | | 6140B | | | |
| Shipping Weight, kg (lb) | | 4200 (9259) | | 4290 (9458) | | 4520 (9965) | | | 4860 (10714) | | | | | |
| Shipping Weight Distribution - Front/Rear, kg (lb) | | 1600 / 2600 (3527/5732) | | 1500/2790 (3307/6151) | | 1740 / 2780 (3836/6129) | | | 1900 / 2960 (4189/6526) | | | | | |
| Max. Front Ballasts, kg (lb) | | 40 (88.1-8) x 8 | 50 (110.2-3) x 6 | 47 (103.-61) x 12 | 50 (110.2-3) x 12 | 47 (103.61) x 12 | | 47 (103.-61) x 12 | 50 (110.-23) x 12 | 47 (103.6-1) x 12 | 50 (110.2-3) x 12 | 47 (103.6-1) x 16 | 50 (110.2-3) x 14 | |
| Max. Rear Ballasts, kg (lb) | | 55 (121.25) x 4 | | 55 (121.25) x 8 | | | | | | | | | | |
| Max. Permissible Load, kg (lb) | | 6200 (13669) | | 6800 (14991) | | 7750 (17086) | | 8000 (17637) | | | | | | |
| Operator Platform | | | | | | | | | | | | | | |
| Tractor Model | | 6095B | | 6110B | | 6120B | | 6135B | | | 6140B | | | |
| Operator Platform | | Cab | | | | | | | | | | | | |
| Drain and Refill Capacities | | | | | | | | | | | | | | |
| Tractor Model | | 6095B | | 6110B | | 6120B | | 6135B | | | 6140B | | | |
| Fuel Tank - L (gal) | | 150 (39.62) | | 220 (58.11) | | | | | | | | | 255 (67.36) | |
| Engine cooling system - L (gal) | | 18 (4.76) | | | | | | | | | | 23 (6.07) | | |
| Crankcase, including filter - L (gal) | | 15 (3.96) | | | | | | | | | | 22.4 (5.92) | | |
| Transmission Case - L (gal) | | 60 (15.65) | | | | | | | | | | | | |
| MFWD Axle Housing - L (gal) | | 5.5 (1.45) | | | | 5 (1.32) | | | | | | | | |
| MFWD Wheel Hub (Each Side) - L (qt) | | 1.1 (1.16) | | | | 0.8 (0.84) | | | | | | | | |
| Refrigerant for Air Conditioner (g) | | 1800, R-134a | | | | | | | | | | | | |

CO00263,0001E00-19-09NOV22

Sound Level

NOTE: The operator ear sound level is below the directive requirement of 90 dB(A) with the cab windows and door closed. The drive by sound level is below the directive requirement of 85 dB(A).

| | | |
|-------------------------------------------|----------|-------------------------------------------------------------------------------|
| Maximum sound level at the operator's ear | 90 dB(A) | Measurement method in accordance with Directive 2009/76/EC (1), Supplement II |
| Maximum pass-by noise | 85 dB(A) | Measurement method in accordance with Directive 2009/63/EC (2) |

LG70251,000192F-19-10APR19

Specifications

Ground Speeds

NOTE: Ground speeds for engine speed at 2200 rpm.

| 12F X 4R | | 420/85R34 Tires | | 460/85R34 Tires | | 420/85R38, 460/85R38 Tires | |
|----------|-------|-----------------|-------|-----------------|-------|----------------------------|-------|
| Range | Range | kph | mph | kph | mph | kph | mph |
| A | 1 | 2.7 | 1.7 | 2.9 | 1.8 | 3.1 | 1.9 |
| A | 2 | 3.9 | 2.4 | 4.2 | 2.6 | 4.4 | 2.7 |
| A | 3 | 5.2 | 3.2 | 5.6 | 3.5 | 5.8 | 3.6 |
| B | 1 | 5.6 | 3.5 | 6.0 | 3.7 | 6.3 | 3.9 |
| B | 2 | 7.9 | 4.9 | 8.6 | 5.3 | 9 | 5.6 |
| B | 3 | 10.6 | 6.6 | 11.4 | 7.1 | 12 | 7.5 |
| C | 1 | 9.4 | 5.8 | 10.1 | 6.3 | 10.6 | 6.6 |
| C | 2 | 13.4 | 8.3 | 14.4 | 9.0 | 15.2 | 9.5 |
| C | 3 | 17.8 | 11.1 | 19.2 | 11.9 | 20.2 | 12.6 |
| D | 1 | 14.4 | 9.0 | 15.5 | 9.6 | 16.3 | 10.1 |
| D | 2 | 20.5 | 12.8 | 22.1 | 13.7 | 23.2 | 14.4 |
| D | 3 | 27.3 | 17.0 | 29.4 | 18.3 | 30.9 | 19.2 |
| A | R | -5.3 | -3.3 | -5.7 | -3.5 | -6 | -3.7 |
| B | R | -10.9 | -6.8 | -11.7 | -7.3 | -12.3 | -7.6 |
| C | R | -18.4 | -11.4 | -19.8 | -12.3 | -20.8 | -12.9 |
| D | R | -28.1 | -17.5 | -30.3 | -18.8 | -31.9 | -19.8 |

| 24F X 8R | | 30K | | | | | | 40K | |
|----------|-------|-----------------|------|-----------------|------|----------------------------|------|----------------------------|------|
| | | 420/85R34 Tires | | 460/85R34 Tires | | 420/85R38, 460/85R38 Tires | | 420/85R38, 460/85R38 Tires | |
| Range | Range | kph | mph | kph | mph | kph | mph | kph | mph |
| A | 1L | 2.3 | 1.4 | 2.4 | 1.5 | 2.6 | 1.6 | 2.5 | 1.6 |
| A | 1H | 2.7 | 1.7 | 2.9 | 1.8 | 3.0 | 1.9 | 2.9 | 1.8 |
| A | 2L | 3.3 | 2.1 | 3.5 | 2.2 | 3.6 | 2.2 | 3.7 | 2.3 |
| A | 2H | 3.9 | 2.4 | 4.2 | 2.6 | 4.3 | 2.7 | 4.4 | 2.7 |
| A | 3L | 4.4 | 2.7 | 4.6 | 2.9 | 4.8 | 3.0 | 5.1 | 3.2 |
| A | 3H | 5.2 | 3.2 | 5.5 | 3.4 | 5.7 | 3.5 | 6.0 | 3.7 |
| B | 1L | 4.7 | 2.9 | 5.0 | 3.1 | 5.2 | 3.2 | 6.0 | 3.7 |
| B | 1H | 5.6 | 3.5 | 5.9 | 3.7 | 6.2 | 3.9 | 7.1 | 4.4 |
| B | 2L | 6.7 | 4.2 | 7.1 | 4.4 | 7.4 | 4.6 | 9.0 | 5.6 |
| B | 2H | 8.0 | 5.0 | 8.4 | 5.2 | 8.8 | 5.5 | 10.6 | 6.6 |
| B | 3L | 8.9 | 5.5 | 9.5 | 5.9 | 9.9 | 6.2 | 12.2 | 7.6 |
| B | 3H | 10.6 | 6.6 | 11.2 | 7.0 | 11.7 | 7.3 | 14.5 | 9.0 |
| C | 1L | 7.9 | 4.9 | 8.4 | 5.2 | 8.8 | 5.5 | 10.2 | 6.3 |
| C | 1H | 9.4 | 5.8 | 10.0 | 6.2 | 10.4 | 6.5 | 12.1 | 7.5 |
| C | 2L | 11.3 | 7.0 | 12.0 | 7.5 | 12.5 | 7.8 | 15.3 | 9.5 |
| C | 2H | 13.4 | 8.3 | 14.3 | 8.9 | 14.9 | 9.3 | 18.1 | 11.3 |
| C | 3L | 15.0 | 9.3 | 16.0 | 9.9 | 16.7 | 10.4 | 20.8 | 12.9 |
| C | 3H | 17.8 | 11.1 | 18.9 | 11.8 | 19.7 | 12.2 | 24.7 | 15.4 |
| D | 1L | 12.2 | 7.6 | 12.9 | 8.0 | 13.5 | 8.4 | 16.0 | 9.9 |
| D | 1H | 14.4 | 9.0 | 15.3 | 9.5 | 16.0 | 9.9 | 18.9 | 11.7 |
| D | 2L | 17.4 | 10.8 | 18.4 | 11.4 | 19.2 | 11.9 | 24.0 | 14.9 |
| D | 2H | 20.6 | 12.8 | 21.8 | 13.6 | 22.8 | 14.2 | 28.4 | 17.7 |
| D | 3L | 23.0 | 14.3 | 24.5 | 15.2 | 25.5 | 15.8 | 32.6 | 20.3 |
| D | 3H | 27.3 | 17.0 | 29.0 | 18.0 | 30.2 | 18.8 | 38.7 | 24.1 |
| A | RL | -4.5 | -2.8 | -4.8 | -3.0 | -5.0 | -3.1 | -4.3 | -2.7 |

Specifications

| 24F X 8R | | 30K | | | | | | 40K | |
|----------|-------|-----------------|-------|-----------------|-------|----------------------------|-------|----------------------------|-------|
| | | 420/85R34 Tires | | 460/85R34 Tires | | 420/85R38, 460/85R38 Tires | | 420/85R38, 460/85R38 Tires | |
| Range | Range | kph | mph | kph | mph | kph | mph | kph | mph |
| A | RH | -5.3 | -3.3 | -5.7 | -3.5 | -5.9 | -3.7 | -5.1 | -3.2 |
| B | RL | -9.2 | -5.7 | -9.8 | -6.1 | -10.2 | -6.3 | -10.5 | -6.5 |
| B | RH | -10.9 | -6.8 | -11.6 | -7.2 | -12.1 | -7.5 | -12.4 | -7.7 |
| C | RL | -15.5 | -9.6 | -16.5 | -10.3 | -17.2 | -10.7 | -17.9 | -11.1 |
| C | RH | -18.4 | -11.4 | -19.5 | -12.1 | -20.4 | -12.7 | -21.2 | -13.2 |
| D | RL | -23.8 | -14.8 | -25.3 | -15.7 | -26.3 | -16.3 | -28.0 | -17.4 |
| D | RH | -28.2 | -17.5 | -29.9 | -18.6 | -31.2 | -19.4 | -33.1 | -20.6 |

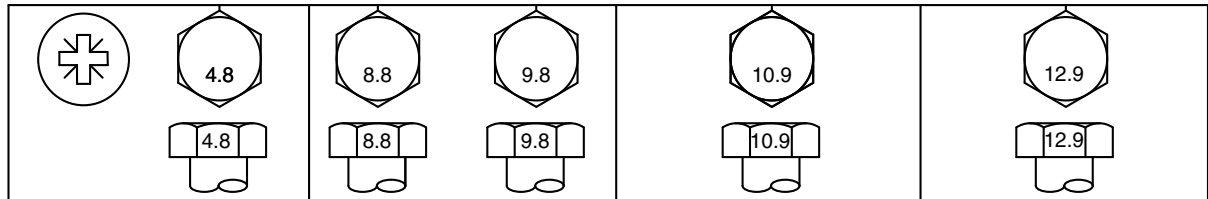
| 24F X 12R | | 30K | | | | 40K | | | |
|-----------|-------|-----------------|-------|----------------------------|-------|-----------------|-------|----------------------------|-------|
| | | 420/85R34 Tires | | 420/85R38, 460/85R38 Tires | | 460/85R34 Tires | | 420/85R38, 460/85R38 Tires | |
| Range | Range | kph | mph | kph | mph | kph | mph | kph | mph |
| A | 1L | 2.3 | 1.4 | 2.6 | 1.6 | 2.3 | 1.4 | 2.5 | 1.6 |
| A | 1H | 2.7 | 1.7 | 3.0 | 1.9 | 2.8 | 1.7 | 2.9 | 1.8 |
| A | 2L | 3.3 | 2.1 | 3.6 | 2.2 | 3.5 | 2.2 | 3.7 | 2.3 |
| A | 2H | 3.9 | 2.4 | 4.3 | 2.7 | 4.1 | 2.5 | 4.4 | 2.7 |
| A | 3L | 4.4 | 2.7 | 4.8 | 3.0 | 4.8 | 3.0 | 5.1 | 3.2 |
| A | 3H | 5.2 | 3.2 | 5.7 | 3.5 | 5.6 | 3.5 | 6.0 | 3.7 |
| B | 1L | 4.7 | 2.9 | 5.2 | 3.2 | 5.6 | 3.5 | 6.0 | 3.7 |
| B | 1H | 5.6 | 3.5 | 6.2 | 3.9 | 6.7 | 4.2 | 7.1 | 4.4 |
| B | 2L | 6.7 | 4.2 | 7.4 | 4.6 | 8.4 | 5.2 | 9.0 | 5.7 |
| B | 2H | 7.9 | 4.9 | 8.8 | 5.5 | 10.0 | 6.2 | 10.6 | 6.6 |
| B | 3L | 8.9 | 5.5 | 9.9 | 6.2 | 11.5 | 7.1 | 12.2 | 7.6 |
| B | 3H | 10.6 | 6.6 | 11.7 | 7.3 | 13.6 | 8.5 | 14.5 | 9.0 |
| C | 1L | 7.9 | 4.9 | 8.8 | 5.5 | 9.6 | 6.0 | 10.2 | 6.3 |
| C | 1H | 9.4 | 5.8 | 10.4 | 6.5 | 11.4 | 7.1 | 12.1 | 7.5 |
| C | 2L | 11.3 | 7.0 | 12.5 | 7.8 | 14.4 | 8.9 | 15.3 | 9.5 |
| C | 2H | 13.4 | 8.3 | 14.9 | 9.3 | 17.0 | 10.6 | 18.1 | 11.2 |
| C | 3L | 15.0 | 9.3 | 16.7 | 10.4 | 19.6 | 12.2 | 20.8 | 12.9 |
| C | 3H | 17.8 | 11.1 | 19.7 | 12.2 | 23.2 | 14.4 | 24.7 | 15.3 |
| D | 1L | 12.1 | 7.5 | 13.5 | 8.4 | 15.0 | 9.3 | 16.0 | 9.9 |
| D | 1H | 14.4 | 9.0 | 16.0 | 9.9 | 17.8 | 11.1 | 18.9 | 11.7 |
| D | 2L | 17.3 | 10.8 | 19.2 | 11.9 | 22.5 | 14.0 | 24.0 | 14.9 |
| D | 2H | 20.5 | 12.8 | 22.8 | 14.2 | 26.7 | 16.6 | 28.4 | 17.6 |
| D | 3L | 23.0 | 14.3 | 25.5 | 15.9 | 30.6 | 19.0 | 32.6 | 20.3 |
| D | 3H | 27.3 | 17.0 | 30.2 | 18.8 | 36.3 | 22.6 | 38.7 | 24.0 |
| A | 1R | -2.5 | -1.6 | -2.8 | -1.7 | -2.5 | -1.6 | -2.7 | -1.7 |
| A | 2R | -3.5 | -2.2 | -4.0 | -2.5 | -3.8 | -2.4 | -4.0 | -2.5 |
| A | 3R | -4.7 | -2.9 | -5.3 | -3.3 | -5.1 | -3.2 | -5.5 | -3.4 |
| B | 1R | -5.1 | -3.2 | -5.8 | -3.6 | -6.1 | -3.8 | -6.5 | -4.0 |
| B | 2R | -27.3 | -17.0 | -8.2 | -5.1 | -9.1 | -5.7 | -9.7 | -6.0 |
| B | 3R | -9.6 | -6.0 | -10.9 | -6.7 | -12.4 | -7.7 | -13.2 | -8.2 |
| C | 1R | -8.6 | -5.3 | -9.7 | -6.0 | -10.4 | -6.5 | -11.0 | -6.8 |
| C | 2R | -12.2 | -7.6 | -13.8 | -8.6 | -15.5 | -9.6 | -16.6 | -10.3 |
| C | 3R | -16.2 | -10.1 | -18.4 | -11.4 | -21.2 | -13.2 | -22.5 | -14.0 |
| D | 1R | -13.1 | -8.1 | -14.9 | -9.3 | -16.2 | -10.1 | -17.3 | -10.7 |
| D | 2R | -18.7 | -11.6 | -21.2 | -13.2 | -24.3 | -15.1 | -25.9 | -16.1 |

Specifications

| 24F X 12R | | 30K | | | | 40K | | | |
|-----------|-------|-----------------|-------|----------------------------|-------|-----------------|-------|----------------------------|-------|
| | | 420/85R34 Tires | | 420/85R38, 460/85R38 Tires | | 460/85R34 Tires | | 420/85R38, 460/85R38 Tires | |
| Range | Range | kph | mph | kph | mph | kph | mph | kph | mph |
| D | 3R | -24.9 | -15.5 | -28.2 | -17.5 | -33.1 | -20.5 | -35.3 | -21.9 |

JL31334,00011B0-19-25JUL17

Metric Bolt and Screw Torque Values



TS1742—UN—31MAY18

| Bolt or Screw Size | Class 4.8 | | | | Class 8.8 or 9.8 | | | | Class 10.9 | | | | Class 12.9 | | | |
|--------------------|-----------------------|-------|--------------------------|-------|-----------------------|-------|--------------------------|-------|-----------------------|-------|--------------------------|-------|-----------------------|-------|--------------------------|-------|
| | Hex Head ^a | | Flange Head ^b | | Hex Head ^a | | Flange Head ^b | | Hex Head ^a | | Flange Head ^b | | Hex Head ^a | | Flange Head ^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 | 3.6 | 31.9 | 3.9 | 34.5 | 6.7 | 59.3 | 7.3 | 64.6 | 9.8 | 86.7 | 10.8 | 95.6 | 11.5 | 102 | 12.6 | 112 |
| | | | | | | | | | N·m | lb·ft | N·m | lb·ft | N·m | lb·ft | N·m | lb·ft |
| M8 | 8.6 | 76.1 | 9.4 | 83.2 | 16.2 | 143 | 17.6 | 156 | 23.8 | 17.6 | 25.9 | 19.1 | 27.8 | 20.5 | 30.3 | 22.3 |
| | | | N·m | lb·ft | N·m | lb·ft | N·m | lb·ft | | | | | | | | |
| M10 | 16.9 | 150 | 18.4 | 13.6 | 31.9 | 23.5 | 34.7 | 25.6 | 46.8 | 34.5 | 51 | 37.6 | 55 | 40.6 | 60 | 44.3 |
| | N·m | lb·ft | | | | | | | | | | | | | | |
| M12 | — | — | — | — | 55 | 40.6 | 61 | 45 | 81 | 59.7 | 89 | 65.6 | 95 | 70.1 | 105 | 77.4 |
| M14 | — | — | — | — | 87 | 64.2 | 96 | 70.8 | 128 | 94.4 | 141 | 104 | 150 | 111 | 165 | 122 |
| M16 | — | — | — | — | 135 | 99.6 | 149 | 110 | 198 | 146 | 219 | 162 | 232 | 171 | 257 | 190 |
| M18 | — | — | — | — | 193 | 142 | 214 | 158 | 275 | 203 | 304 | 224 | 322 | 245 | 356 | 263 |
| M20 | — | — | — | — | 272 | 201 | 301 | 222 | 387 | 285 | 428 | 316 | 453 | 334 | 501 | 370 |
| M22 | — | — | — | — | 365 | 263 | 405 | 299 | 520 | 384 | 576 | 425 | 608 | 448 | 674 | 497 |
| M24 | — | — | — | — | 468 | 345 | 518 | 382 | 666 | 491 | 738 | 544 | 780 | 575 | 864 | 637 |
| M27 | — | — | — | — | 683 | 504 | 758 | 559 | 973 | 718 | 1080 | 797 | 1139 | 840 | 1263 | 932 |
| M30 | — | — | — | — | 932 | 687 | 1029 | 759 | 1327 | 979 | 1466 | 1081 | 1553 | 1145 | 1715 | 1265 |
| M33 | — | — | — | — | 1258 | 928 | 1398 | 1031 | 1788 | 1319 | 1986 | 1465 | 2092 | 1543 | 2324 | 1714 |
| M36 | — | — | — | — | 1617 | 1193 | 1789 | 1319 | 2303 | 1699 | 2548 | 1879 | 2695 | 1988 | 2982 | 2199 |

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

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 that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.
- Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil.
- Properly start thread engagement.

Specifications

| Bolt or Screw Size | Class 4.8 | | Class 8.8 or 9.8 | | Class 10.9 | | Class 12.9 | |
|--------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|
| | Hex Head ^a | Flange Head ^b | Hex Head ^a | Flange Head ^b | Hex Head ^a | Flange Head ^b | Hex Head ^a | Flange Head ^b |

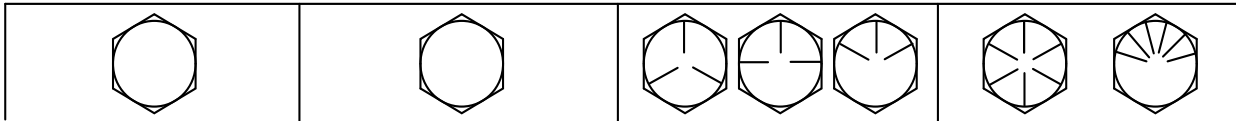
TS1741—UN—22MAY18

^aHex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.

^bHex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.

DX,TORQ2-19-09MAY22

Unified Inch Bolt and Screw Torque Values



TS1671—UN—01MAY03

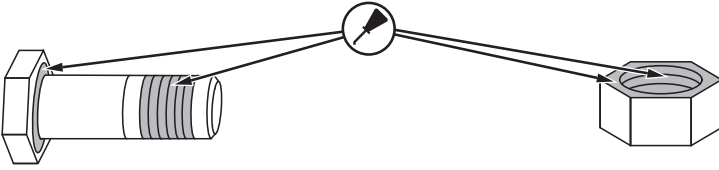
| Bolt or Screw Size | SAE Grade 1 ^a | | | | SAE Grade 2 ^b | | | | SAE Grade 5, 5.1 or 5.2 | | | | SAE Grade 8 or 8.2 | | | |
|--------------------|--------------------------|-------|--------------------------|-------|--------------------------|-------|--------------------------|-------|-------------------------|-------|--------------------------|-------|-----------------------|-------|--------------------------|-------|
| | Hex Head ^c | | Flange Head ^d | | Hex Head ^c | | Flange Head ^d | | Hex Head ^c | | Flange Head ^d | | Hex Head ^c | | Flange Head ^d | |
| | 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 | 3.1 | 27.3 | 3.2 | 28.4 | 5.1 | 45.5 | 5.3 | 47.3 | 7.9 | 70.2 | 8.3 | 73.1 | 11.2 | 99.2 | 11.6 | 103 |
| | | | | | | | | | | | | | N·m | lb·ft | N·m | lb·ft |
| 5/16 | 6.1 | 54.1 | 6.5 | 57.7 | 10.2 | 90.2 | 10.9 | 96.2 | 15.7 | 139 | 16.8 | 149 | 22.2 | 16.4 | 23.7 | 17.5 |
| | | | | | | | | | N·m | lb·ft | N·m | lb·ft | | | | |
| 3/8 | 10.5 | 93.6 | 11.5 | 102 | 17.6 | 156 | 19.2 | 170 | 27.3 | 20.1 | 29.7 | 21.9 | 38.5 | 28.4 | 41.9 | 30.9 |
| | | | | | N·m | lb·ft | N·m | lb·ft | | | | | | | | |
| 7/16 | 16.7 | 148 | 18.4 | 163 | 27.8 | 20.5 | 30.6 | 22.6 | 43 | 31.7 | 47.3 | 34.9 | 60.6 | 44.7 | 66.8 | 49.3 |
| | N·m | lb·ft | N·m | lb·ft | | | | | | | | | | | | |
| 1/2 | 25.9 | 19.1 | 28.2 | 20.8 | 43.1 | 31.8 | 47 | 34.7 | 66.6 | 49.1 | 72.8 | 53.7 | 94 | 69.3 | 103 | 75.8 |
| 9/16 | 36.7 | 27.1 | 40.5 | 29.9 | 61.1 | 45.1 | 67.5 | 49.8 | 94.6 | 69.8 | 104 | 77 | 134 | 98.5 | 148 | 109 |
| 5/8 | 51 | 37.6 | 55.9 | 41.2 | 85 | 62.7 | 93.1 | 68.7 | 131 | 96.9 | 144 | 106 | 186 | 137 | 203 | 150 |
| 3/4 | 89.5 | 66 | 98 | 72.3 | 149 | 110 | 164 | 121 | 230 | 170 | 252 | 186 | 325 | 240 | 357 | 263 |
| 7/8 | 144 | 106 | 157 | 116 | 144 | 106 | 157 | 116 | 370 | 273 | 405 | 299 | 522 | 385 | 572 | 422 |
| 1 | 216 | 159 | 236 | 174 | 216 | 159 | 236 | 174 | 556 | 410 | 609 | 449 | 785 | 579 | 860 | 634 |
| 1-1/8 | 305 | 225 | 335 | 247 | 305 | 225 | 335 | 247 | 685 | 505 | 751 | 554 | 1110 | 819 | 1218 | 898 |
| 1-1/4 | 427 | 315 | 469 | 346 | 427 | 315 | 469 | 346 | 957 | 706 | 1051 | 775 | 1552 | 1145 | 1703 | 1256 |
| 1-3/8 | 564 | 416 | 618 | 456 | 564 | 416 | 618 | 456 | 1264 | 932 | 1386 | 1022 | 2050 | 1512 | 2248 | 1658 |
| 1-1/2 | 743 | 548 | 815 | 601 | 743 | 548 | 815 | 601 | 1665 | 1228 | 1826 | 1347 | 2699 | 1991 | 2962 | 2185 |

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

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 that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.
- Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil.
- Properly start thread engagement.

Specifications

| Bolt or Screw Size | SAE Grade 1 ^a | | SAE Grade 2 ^b | | SAE Grade 5, 5.1 or 5.2 | | SAE Grade 8 or 8.2 | |
|------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|--------------------------|-----------------------|--------------------------|
| | Hex Head ^c | Flange Head ^d | Hex Head ^c | Flange Head ^d | Hex Head ^c | Flange Head ^d | Hex Head ^c | Flange Head ^d |
|  | | | | | | | | |

TS1741—UN—22MAY18

^aGrade 1 applies for hex cap screws over 6 in (152 mm) long, and for all other types of bolts and screws of any length.

^bGrade 2 applies for hex cap screws (not hex bolts) up to 6 in (152 mm) long.

^cHex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.

^dHex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.

DX,TORQ1-19-09MAY22

Identification Numbers

Eurasian Economic Union



EAC Marking

TS1738—UN—26APR16

This information applies only to products which bear the EAC conformity mark of the Eurasian Economic Union member states.

Manufacturer:

John Deere (Tianjin) Co., Ltd.

Name of the authorized representative in the Eurasian Economic Union:

Limited Liability Company
"John Deere Rus"

Address of the authorized representative:

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 marking on or near the serial number plate.

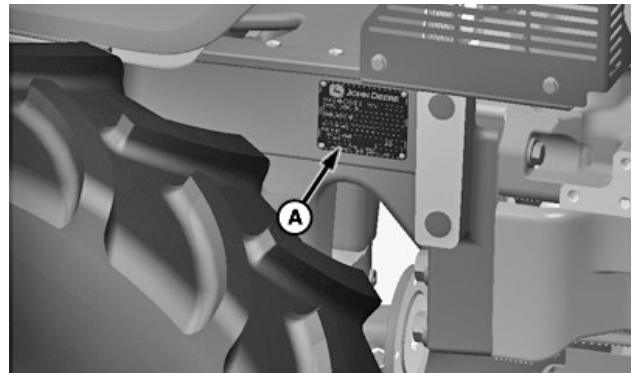
LG70251,00014A6-19-19SEP18

Identification Plates

Each tractor has the identification plates shown on these pages. The letters and numbers stamped on the plates identify a component or assembly. ALL these characters are needed when ordering parts or identifying a tractor or component for any John Deere product support program. They are also needed for law enforcement to trace your tractor if it is ever stolen. ACCURATELY record these characters in the spaces provided next to each of the following photographs.

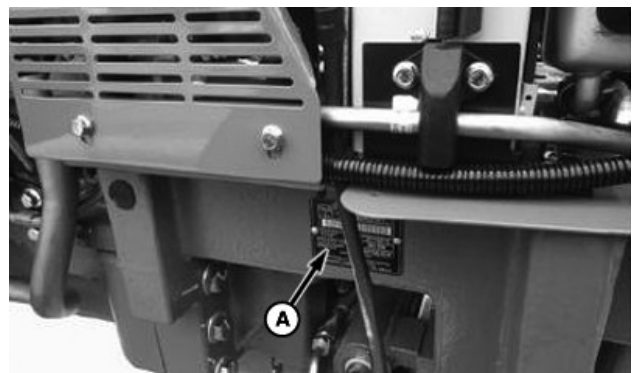
LG70251,0001489-19-07SEP18

Record Tractor Serial Number



CPA0004017—UN—16AUG17

Left Side (if appropriated)



CPA0004316—UN—16AUG17

Right Side (if appropriated)

A—Serial Number Plate

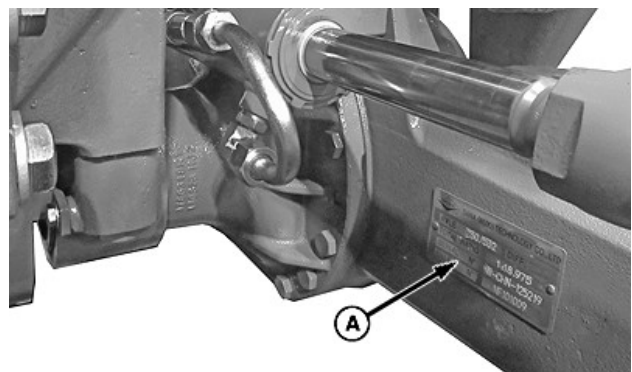
Serial number plate is on the left or right side of the front support member of the tractor.

Serial number is also stamped next to the serial number plate.

Tractor Serial Number:

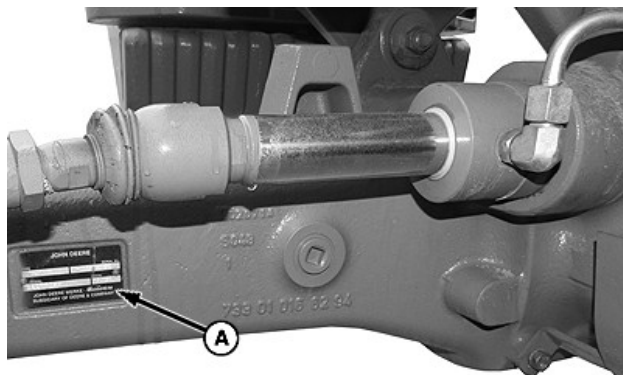
CO00263,00004CF-19-06SEP17

Record MFWD Front Axle Serial Number



CPA0002180—UN—06NOV15

For 6095B and 6110B Tractors



CPA0002179—UN—06NOV15

For 6120B, 6135B, and 6140B Tractors

A—Serial Number Plate

The MFWD front-axle serial number plate (A) is located on the right rear side of the axle housing.

| |
|----------------------------------|
| Front Axle Serial Number: |
| |
| |
| |

N400041,00035D8-19-18JAN17

Record Transmission Serial Number



CPA0004317—UN—16AUG17

Transmission Serial Number

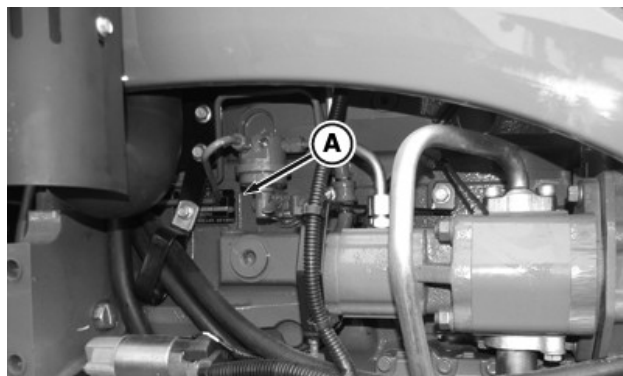
A—Serial Number Plate

Transmission serial number plate is on the transmission housing, above left-hand side rear axle.

| |
|------------------------------------|
| Transmission Serial Number: |
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| |

JL31334,00011B9-19-31AUG17

Record Engine Serial Number



PY14885—UN—30JAN13

6095B Model Shown

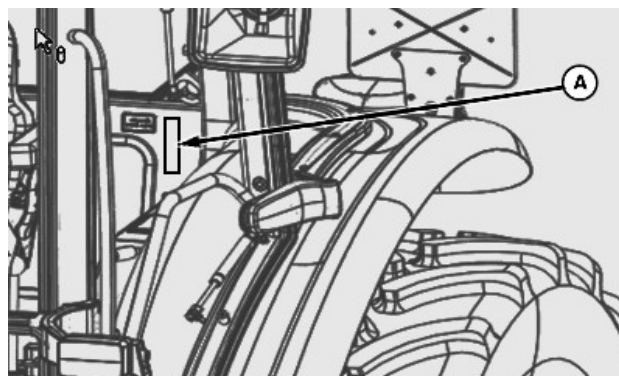
A—Engine Serial Number Plate

The engine serial number plate is located on the left-hand side of the engine, on air intake manifold.

| |
|------------------------------|
| Engine Serial Number: |
| |
| |
| |

N400041,00035D9-19-18JAN17

Record ROPS Serial Number



CPA0006478—UN—06SEP18

ROPS Serial Number Plate

A— ROPS Serial Number Plate

JOHN DEERE

Кабина трактора John Deere
John Deere тракторының кабинасы

Модель:
Моделі
CG115

Серийный номер:
Сериялық нөмірі

OECD approval # 4/1 665/1
OECD approval # 4/1 665/1

ГОСТ Р ИСО 5700
ГОСТ Р ИСО 5700

ГОСТ Р ИСО 3449
ГОСТ Р ИСО 3449

ROPS разработано для версий тракторов John Deere:
John Deere тракторларының келесі нұсқалары үшін өзірленген ROPS
6095B, 6110B, 6135B

Изготовитель:
Дайындаушы
John Deere (Tianjin) Company
Limit, No 89, 13 Avenue, TEDA
Tianjin, P.R. China

Сделано в Китае
Қытайда жасалған

EAC

CPA0006483—UN—18SEP18

| |
|----------------------------|
| ROPS Serial Number: |
| |
| |
| |

LG70251,00014D6-19-28SEP18

Service Records

Daily or 10 Hours, 50, 250, 500 Hours Service Chart

Every 10 Hours

- Clean outside area of engine, remove any dust, mud, and greasy stain.
- Check and fasten bolts on engine, make sure that engine is free from leakage of gas, water, and oil.
- Identify abnormal noise and vibration, observe smoke, check, and remove any failure.
- Check engine oil level.
- Check transmission/hydraulic system oil level.
- Check coolant level.
- Drain water and sediment from fuel filters and water separators.

Every 50 Hours

- Loose hardware inspection.
- Inspect tires
- Lubricate steering spindles¹
- Lubricate MFWD front axle¹
- Lubricate MFWD front axle pivot pins¹
- Lubricate MFWD drive shaft
- Clean battery.
- Check battery condition.

Every 250 Hours

- Service air cleaner.

- Clean cab air filters.
- Adjust brake pedal free play.
- Adjust clutch pedal free play.
- Check neutral start system.
- Lubricate 3-point hitch links.
- Check MFWD axle housing oil level.
- Check MFWD wheel hub oil level.
- Drain water and sediment from fuel tank.
- Inspect and clean fuel tank filler cap.
- Inspect alternator/fan belt.
- Inspect ROPS/Cab mounting hardware.
- Trailer hitch - Check torque on attaching screws (If Equipped).
- Front loader - Mounting frame, check torque on attaching screws (If Equipped).

Every 500 Hours

- Check engine idle speeds
- Check hoses and hose clamps for tightness.
- Change engine oil and filter.²
- Replace transmission/hydraulic oil filter.
- Lubricate rear axle bearings.³
- Check cooling system for leaks.
- Replace secondary fuel filter and water separator.
- Replace final fuel filter and water separator.

| | | | | | | | | | |
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| Date | | | | | Date | | | | |

¹ Necessary to perform daily or 10 hr. in wet or muddy conditions.

³ Necessary to perform 50 hr. in wet or muddy conditions.
² If PLUS-50 oil and a John Deere filter are not used, lower this service interval to 250 hours.

Annually or 1000 Hour Service Chart**Every 1000 Hours**

- Replace primary and secondary elements of air cleaner.
- Clean engine crankcase vent tube.

- Check seat belt.
- Change transmission/hydraulic system oil.
- Change MFWD front axle housing oil.
- Change MFWD wheel hub oil.

| | | | | | | | | | |
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2000, 5000 Hour Service Chart**Every 2 Years or 2000 Hours (Whichever Comes First)**

- Flush cooling system⁴.
- Adjust engine valve clearance⁵.

Every 5 Years or 5000 Hours (Whichever Comes First)

- Test or replace thermostat⁵.
- Replace crankshaft vibration damper⁵.

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| Hours | | | | | Hours | | | | |
| Date | | | | | Date | | | | |

⁴ Can be extended to 5000 hours or 5 years if John Deere COOL-GARD is used.

⁵ See your John Deere dealer for service.

Service Records

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N400041,0003543-19-30DEC16

As Required Service Chart

Service as Required

- Inspect air cleaner elements.
- Check air intake system.
- Service air conditioner (cab).
- Adjust hand throttle friction.
- Front grille, side Screens, radiator and oil cooler cleaning.
- Bleed fuel system.
- Charge battery.
- Service battery.
- Adjust headlights.
- Replace bulb: floodlights, headlights, turn signal lights, tail/warning lights.
- Check and adjust transmission.⁶
- Check and adjust front, rear drive axle.⁶
- Check and adjust differential.⁶
- Clean primary fuel filter and water separator.

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⁶ See your John Deere dealer for service.

Service Records

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| Date | | | | | Date | | | | |
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N400041,0003544-19-15FEB17

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John Deere Service Literature Available

Technical Information

Technical information can be purchased from John Deere. Publications are available in print or CD-ROM format.

Orders can be made using one of the following:

- John Deere Technical Information Store: **www.JohnDeere.com/TechInfoStore**
- Call 1-800-522-7448
- Contact your John Deere dealer

Available information includes:



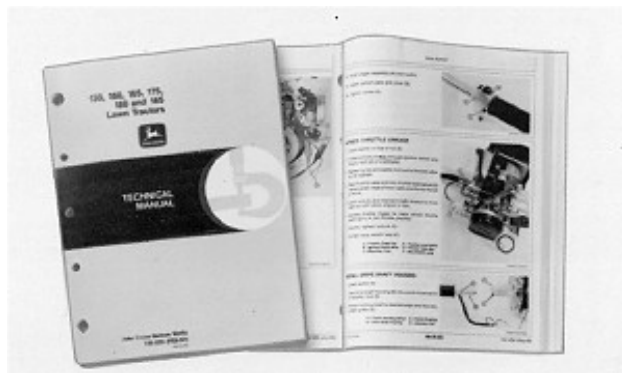
TS189—UN—17JAN89

PARTS CATALOGS list service parts available for your machine with exploded view illustrations to help you identify the correct parts. It is also useful in assembling and disassembling.



TS191—UN—02DEC88

OPERATOR'S MANUALS providing safety, operating, maintenance, and service information.



TS224—UN—17JAN89

TECHNICAL MANUALS outlining service information for your machine. Included are specifications, illustrated assembly and disassembly procedures, hydraulic oil flow diagrams, and wiring diagrams. Some products have separate manuals for repair and diagnostic information. Some components, such as engines, are available in a separate component technical manual.



TS1663—UN—10OCT97

EDUCATIONAL CURRICULUM including five comprehensive series of books detailing basic information regardless of manufacturer:

- Agricultural Primer series covers technology in farming and ranching.
- Farm Business Management series examines “real-world” problems and offers practical solutions in the areas of marketing, financing, equipment selection, and compliance.
- Fundamentals of Services manuals show you how to repair and maintain off-road equipment.
- Fundamentals of Machine Operation manuals explain machine capacities and adjustments, how to improve machine performance, and how to eliminate unnecessary field operations.
- Fundamentals of Compact Equipment manuals provide instruction in servicing and maintaining equipment up to 40 PTO horsepower.

DX,SERV LIT-19-07DEC16

John Deere Service Keeps You On The Job

John Deere Parts



TS100—UN—23AUG88

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

School is never out for John Deere service technicians.

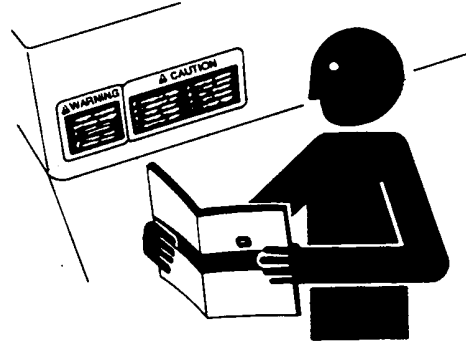
Training schools are held regularly to be sure our personnel know your equipment and how to maintain it.

Result?

Experience you can count on!

DX,IBC,C-19-04JUN90

John Deere Is At Your Service



TS201—UN—15APR13

CUSTOMER SATISFACTION is important to John Deere.

Our dealers strive to provide you with prompt, efficient parts and service:

- Maintenance and service parts to support your equipment.
- Trained service technicians and the necessary diagnostic and repair tools to service your equipment.

CUSTOMER SATISFACTION PROBLEM RESOLUTION PROCESS

Your John Deere dealer is dedicated to supporting your equipment and resolving any problem you may experience.

1. When contacting your dealer, be prepared with the following information:

- Machine model and product identification number
- Date of purchase
- Nature of problem

2. Discuss problem with dealer service manager.

3. If unable to resolve, explain problem to dealership manager and request assistance.

4. If you have a persistent problem your dealership is unable to resolve, ask your dealer to contact John Deere for assistance. Or contact the Ag Customer

The Right Tools



TS101—UN—23AUG88

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

Well-Trained Technicians



TS102—UN—23AUG88

Assistance Center at 1-866-99DEERE (866-993-3373)
or e-mail us at www.deere.com/en_US/ag/contactus/.

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, China

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Service Hotline: 400-6576-555

Website: www.johndeere.com.cn

PG57337,00001C5-19-06APR12

