

5075GL, 5085GL 5075GV, 5085GV, 5075GN to 5100GN, 5075GF to 5100GF Tractors



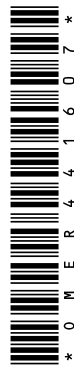
OPERATOR'S MANUAL

**5075GL, 5085GL, 5075GF, 5085GF,
5100GF, 5075GN, 5085GN, 5100GN,
5075GV, 5085GV**

OMER441607 ISSUE A8 (ENGLISCH)

**John Deere GmbH & Co. KG
John Deere Werk Mannheim**
(This manual replaces OMER441607 B5)

Export Edition
Printed in U.S.A.



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.

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.

LX,IFC 002144 -19-03FEB02-1/1

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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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Identification Views

5085GL and 5075GL Tractors



Tractor shown may have optional equipment.

OULXBER,0002292 -19-05NOV13-1/1

LX205077 —UN—01OCT14

5085GV and 5075GV Tractors



Tractor shown may have optional equipment.

OULXBER,0002446 -19-06OCT14-1/1

AGCPTJD0607 —UN—01OCT14

5085GN, 5075GN and 5100GN Tractors



Tractor shown may have optional equipment.

OULXBER.0002447 -19-01OCT14-1/1

AGCPTJD0608 —UN—01OCT14

5085GF, 5075GF and 5100GF Tractors



Tractor shown may have optional equipment.

OULXBER.0002448 -19-01OCT14-1/1

AGCPTJD0609 —UN—01OCT14

Safety

Recognize Safety Information

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

Follow recommended precautions and safe operating practices.



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

TS1389 —UN—28JUN13

Understand Signal Words

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.

 **DANGER**

 **WARNING**

 **CAUTION**

DX,SIGNAL -19-05OCT16-1/1

TS187 —19—30SEP88

Follow Safety Instructions

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

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

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

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

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



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

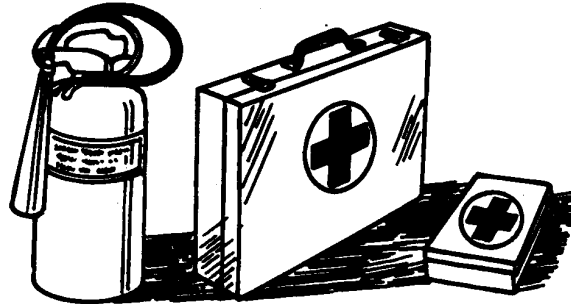
TS201 —UN—15APR13

Prepare for Emergencies

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

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



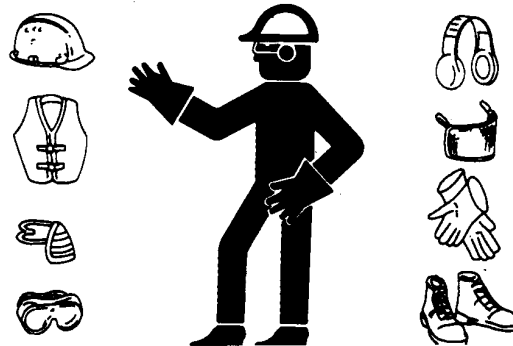
TS291 —UN—15APR13

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

Wear Protective Clothing

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

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



TS206 —UN—15APR13

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

Protect Against Noise

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.



TS207 —UN—23AUG88

DX,NOISE -19-03OCT17-1/1

Handle Fuel Safely—Avoid Fires

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

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

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

Use only an approved fuel container for transporting flammable liquids.

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



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

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

TS202 —UN—23AUG88

Handle Starting Fluid Safely

Starting fluid is highly flammable.

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

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

Do not incinerate or puncture a starting fluid container.

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



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

TS1356 —UN—18MAR92

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 -19-12OCT11-1/1

In Case of Fire

CAUTION: Avoid personal injury.

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

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

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

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



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

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

TS227 —UN—15APR13

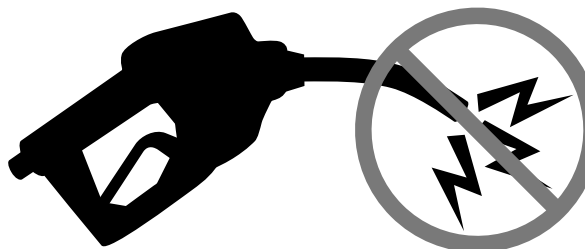
Avoid Static Electricity Risk When Refueling

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

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

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

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



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

RG22142 —UN—17MAR14

RG21992 —UN—21AUG13

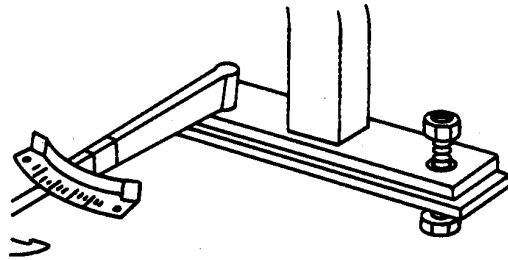
Keep ROPS Installed Properly

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.



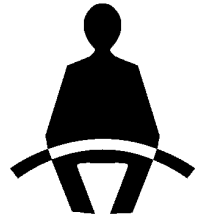
DX,ROPS3 -19-12OCT11-1/1

TS212 —UN—23AUG88

Use Foldable ROPS and Seat Belt Properly

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 -19-22AUG13-1/1

TS1729 —UN—24MAY13

Stay Clear of Rotating Drivelines

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.

Only use power take-off driveshafts with adequate guards and shields.

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.

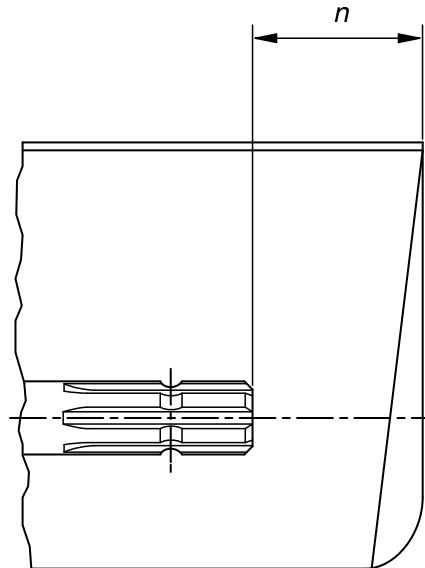
The angle at which the primary implement PTO driveshaft can be inclined may be reduced depending on the shape and size of the tractor master shield and the shape and size of the guard of the primary implement PTO driveshaft.

Do not raise implements high enough to damage the tractor master shield or guard of primary implement PTO driveshaft. Detach the PTO driveline shaft if it is necessary to increase implement height. (See Attching/Detaching PTO Driveline)

When using Type 3/4 PTO, inclination and turning angles may be reduced depending on type of PTO master shield and coupling rails.



TS1644 —UN—22AUG95



H96219 —UN—29APR10

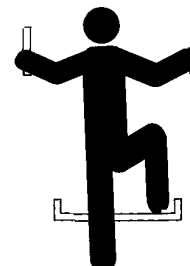
PTO Type	Diameter	Splines	$n \pm 5 \text{ mm (0.20 in.)}$
1	35 mm (1.378 in.)	6	85 mm (3.35 in.)
2	35 mm (1.378 in.)	21	85 mm (3.35 in.)
3	45 mm (1.772 in.)	20	100 mm (4.00 in.)
4	57.5 mm (2.264 in.)	22	100 mm (4.00 in.)

DX,PTO -19-28FEB17-1/1

Use Steps and Handholds Correctly

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

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



T133468 —UN—15APR13

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

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.

GreenStar is a trademark of Deere & Company

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.

NOTE: ISOBUS refers to the ISO Standard 11783

DX,WW,ISOBUS -19-15JUL15-1/1

Use Seat Belt Properly

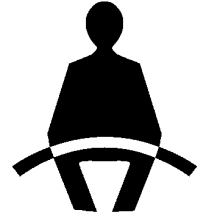
Avoid crushing injury or death during rollover.

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,



TS1728 —UN—24MAY13

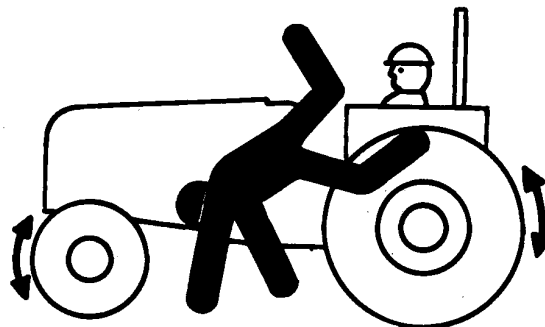
discoloration, or abrasion. Replace only with replacement parts approved for your machine. See your John Deere dealer.

DX,ROPS1 -19-22AUG13-1/1

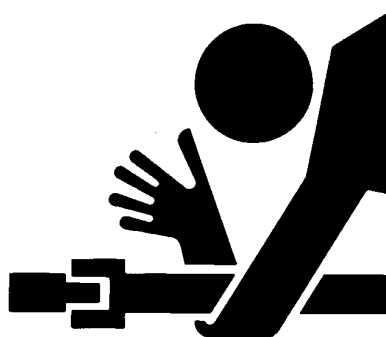
Operating the Tractor Safely

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.
- 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 pick-up hitch (if equipped) when controlling them.
- Keep hands, feet, and clothing away from power-driven parts.



TS290 — UN—23AUG88



TS276 — UN—23AUG88

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 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.

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 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:

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

DX,WW,TRACTOR -19-28FEB17-1/1

Avoid Backover Accidents

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

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



PC10857XW —UN—15APR13

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

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 -19-12OCT11-1/1

Operating the Loader Tractor Safely

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.

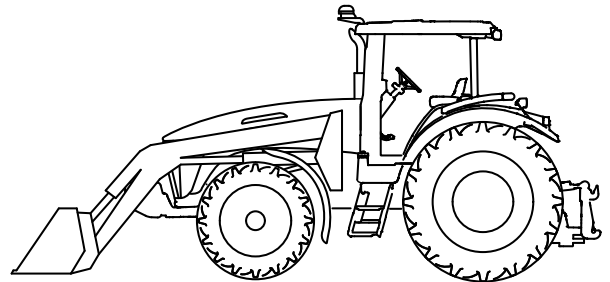
Never allow anyone to walk or work under a raised loader.

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



TS1692 —UN—09NOV09

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).

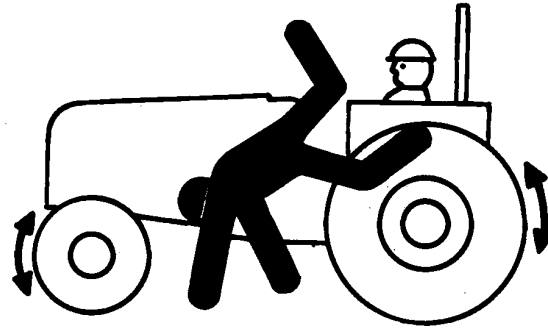
Ballast tractor in accordance to Ballast Recommendations in PREPARE TRACTOR section.

DX,WW,LOADER -19-18SEP12-1/1

Keep Riders Off Machine

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.

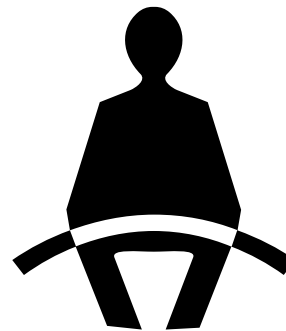


TS290 —UN—23AUG88

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

Instructional Seat

The instructional seat, if so equipped, has been provided only for training operators or diagnosing machine problems.



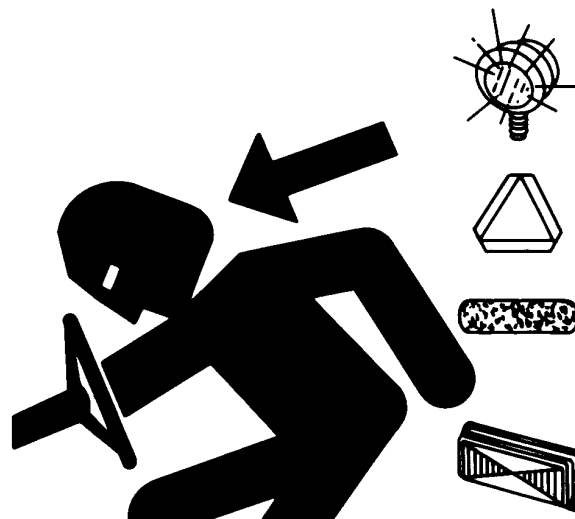
TS1730 —UN—24MAY13

DX,SEAT,NA -19-22AUG13-1/1

Use Safety Lights and Devices

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

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible, clean, and in good working order. Replace or repair lighting and marking that has been damaged or lost. An implement safety lighting kit is available from your John Deere dealer.



TS951 —UN—12APR90

DX,FLASH -19-07JUL99-1/1

Transport Towed Equipment at Safe Speeds

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

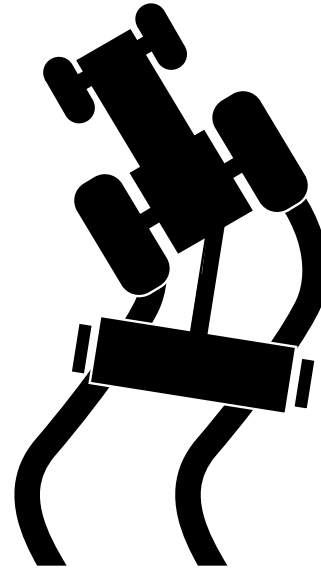
Implements shall be equipped with brakes if the maximum fully loaded weight is greater than 1500 kg (3307 lbs) and greater than 1.5 times the weight of the towing unit.

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.

TS1686 —UN—27SEP06

DX,TOW1 -19-28FEB17-1/1

Use Caution on Slopes, Uneven Terrain, and Rough Ground

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.

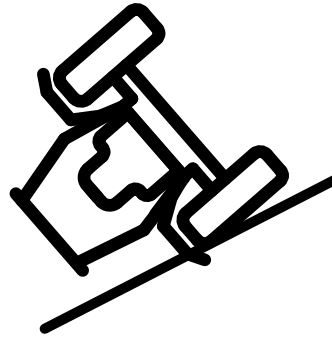
Danger of overturn increases greatly with narrow tread setting, at high speed.

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.



RXA0103437 —UN—01JUL09

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 -19-28FEB17-1/1

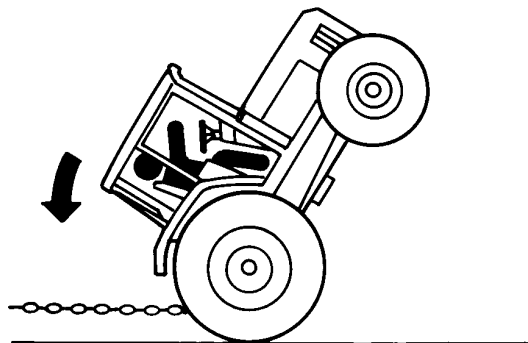
Freeing a Mired Machine

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.



TS1645 —UN—15SEP05



TS263 —UN—23AUG88

DX,MIREO -19-07JUL99-1/1

Avoid Contact with Agricultural Chemicals

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.



TS220 —UN—15APR13

TS272 —UN—23AUG88

DX,CABS -19-25MAR09-1/1

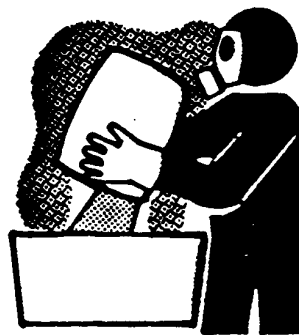
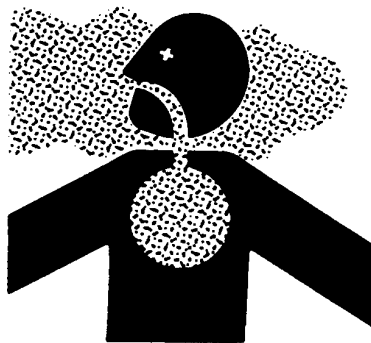
Handle Agricultural Chemicals Safely

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.



A34471

- 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.

TS220 —UN—15APR13

A34471 —UN—11OCT88

DX,WW,CHEM01 -19-24AUG10-1/1

Handling Batteries Safely

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

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

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

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

Avoid hazards by:

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

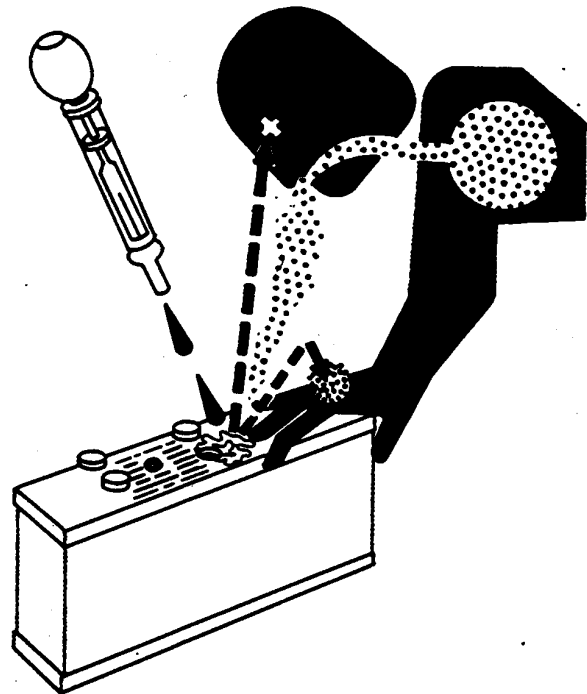
If acid is spilled on skin or in eyes:

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

If acid is swallowed:

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

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



TS204 —UN—15APR13

TS203 —UN—23AUG88

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

Avoid Heating Near Pressurized Fluid Lines

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 -19-10DEC04-1/1

TS953 —UN—15MAY90

Remove Paint Before Welding or Heating

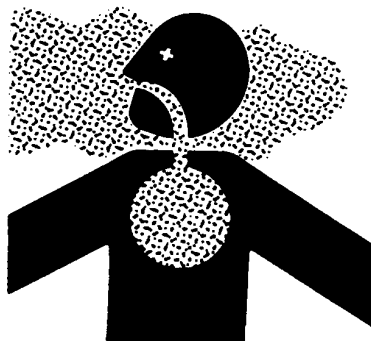
Avoid potentially toxic fumes and dust.

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

Remove paint before heating:

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

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



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

Dispose of paint and solvent properly.

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

TS220 —UN—15APR13

Handle Electronic Components and Brackets Safely

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

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

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



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

TS249 —UN—23AUG88

Practice Safe Maintenance

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

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing 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. 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.



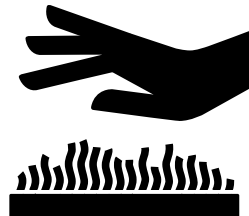
TS218 —UN—23AUG88

DX,SERV -19-28FEB17-1/1

Avoid Hot Exhaust

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

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



RG17488 —UN—21AUG09

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

Clean Exhaust Filter Safely

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

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

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

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

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

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

Avoid contact with these components until cooled to safe temperatures.

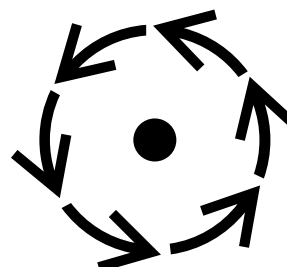
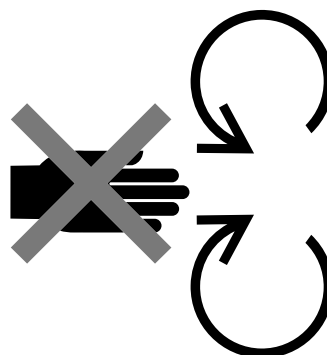
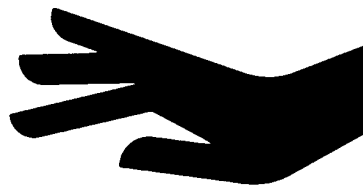
If service procedure requires engine to be running:

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

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

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

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



STOP

TS227 —UN—15APR13

TS271 —UN—23AUG88

TS1683 —UN—09DEC09

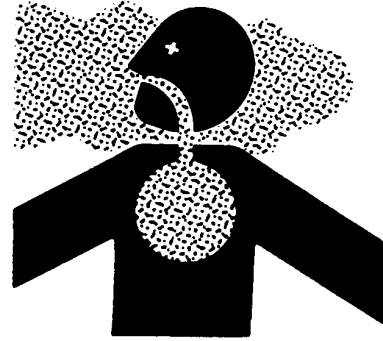
TS1685 —UN—07DEC09

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

Work In Ventilated Area

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

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



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

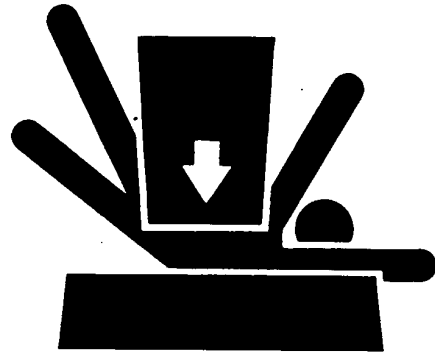
TS220 —UN—15APR13

Support Machine Properly

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

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

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



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

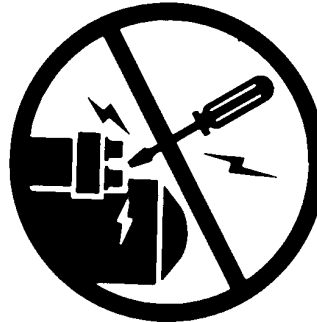
TS229 —UN—23AUG88

Prevent Machine Runaway

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.



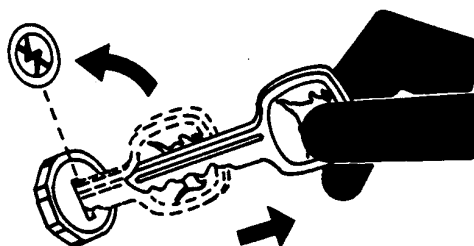
DX,BYPAS1 -19-29SEP98-1/1

TS177 —UN—11JAN89

Park Machine Safely

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.



TS230 —UN—24MAY89

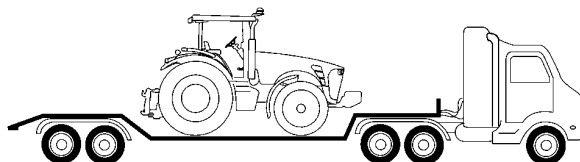
DX,PARK -19-04JUN90-1/1

Transport Tractor Safely

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.



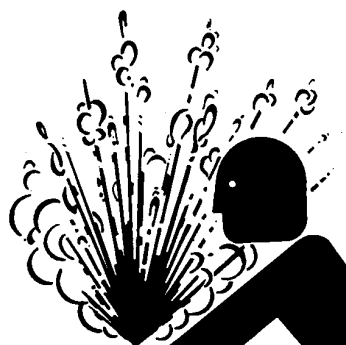
RXA0103709 —UN—01JUL09

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

Service Cooling System Safely

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.



TS281 —UN—15APR13

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

Service Accumulator Systems Safely

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

Relieve pressure from the pressurized system before removing accumulator.

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

Accumulators cannot be repaired.



T5281 —UN—15APR13

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

Service Tires Safely

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

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

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

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

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



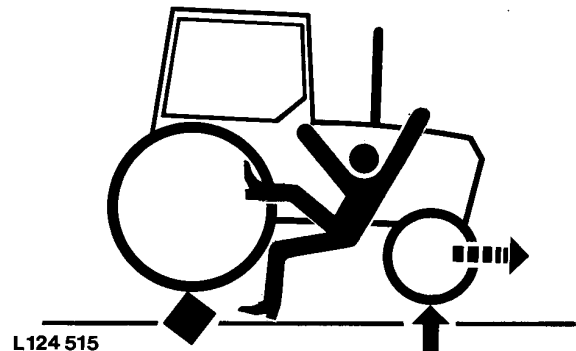
RXA0103438 —UN—11JUN09

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 -19-28FEB17-1/1

Service Front-Wheel Drive Tractor Safely

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.



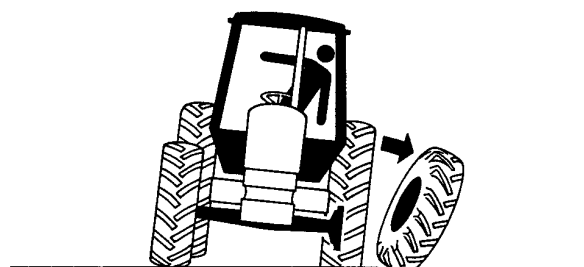
L124 515

L124515 —UN—06AUG04

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

Tightening Wheel Retaining Bolts/Nuts

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



L124 516

L124516 —UN—03JAN95

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

Avoid High-Pressure Fluids

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

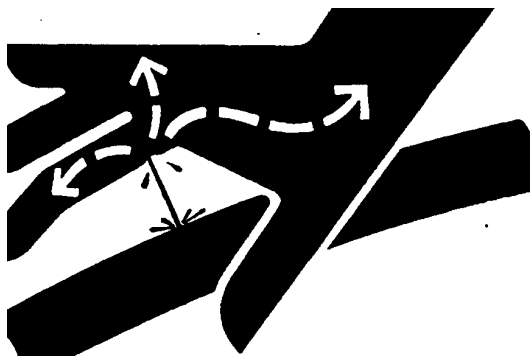
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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

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

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

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



X9811 —UN—23AUG88

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

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

Do Not Open High-Pressure Fuel System

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

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



TS1343 —UN—18MAR92

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

Store Attachments Safely

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

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



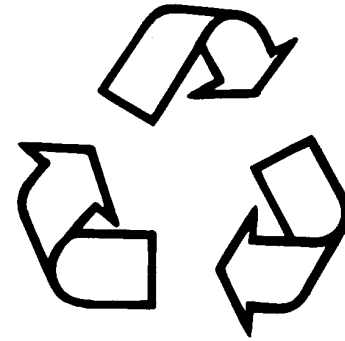
DX,STORE -19-03MAR93-1/1

TS219—UN—23AUG88

Decommissioning — Proper Recycling and Disposal of Fluids and Components

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

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



filters; batteries; and, other substances or parts. Burning of flammable fluids or components in other than specially designed incinerators may be prohibited by law and could result in exposure to harmful fumes or ashes.

- Service and dispose of air conditioning systems appropriately. Government regulations may require a certified service center to recover and recycle air conditioning refrigerants which could damage the atmosphere if allowed to escape.
- Evaluate recycling options for tires, metal, plastic, glass, rubber, and electronic components which may be recyclable, in part or completely.
- Contact your local environmental or recycling center, or your John Deere dealer for information on the proper way to recycle or dispose of waste.

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

TS1133—UN—15APR13

Safety Decals

Pictorial Safety Signs

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

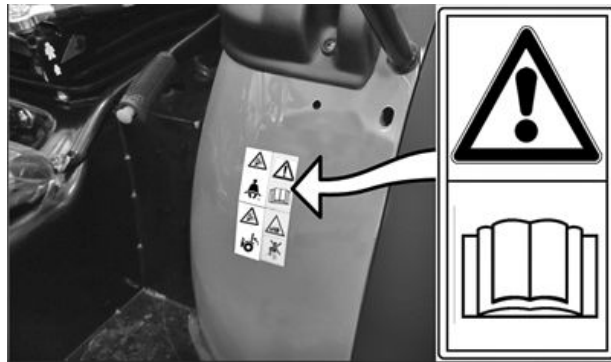


TS231 —19—07OCT88

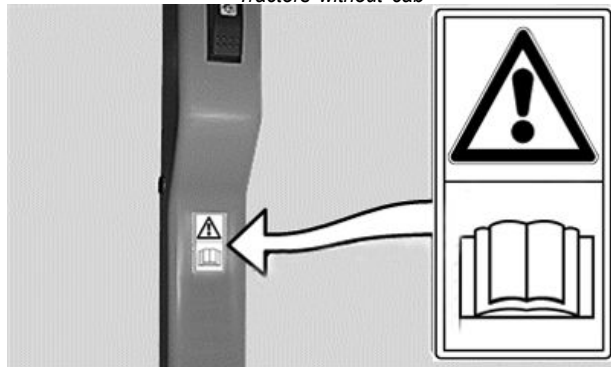
LX,LABEL 002079 -19-01MAY92-1/1

Operator's Manual

CAUTION: Avoid the risk of injury. This Operator's Manual contains important information necessary for safe machine operation and explanation of safety signs. Carefully observe all safety rules to avoid accidents.



Tractors without cab



Tractors with cab

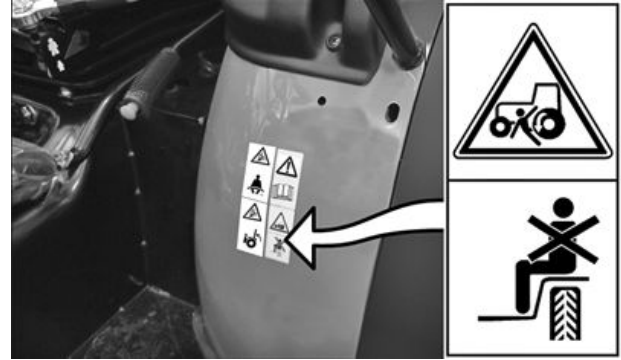
LX205079 —UN—14NOV13

AGCPTJ00713 —UN—21JAN15

OULXBER,0002548 -19-05NOV14-1/1

No Riders

CAUTION: Avoid falling and being struck. 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.



LX205081—UN—14NOV13

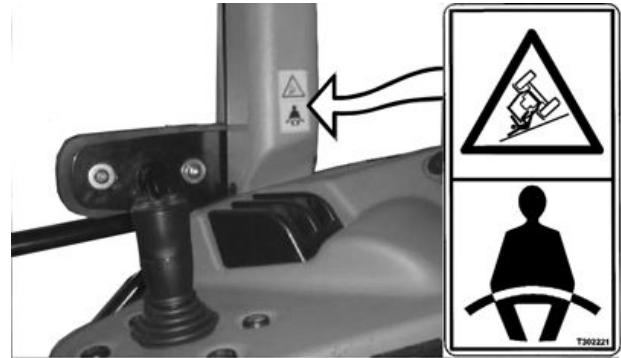
OULXBER,000254A -19-05NOV14-1/1

Use Seat Belt Properly (Tractors With Cab or Fixed ROPS)

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 to make sure that the belt is securely fastened.
- Snug the seat belt across the hips.



LX103970—UN—22JAN14

OULXBER,0002546 -19-05NOV14-1/1

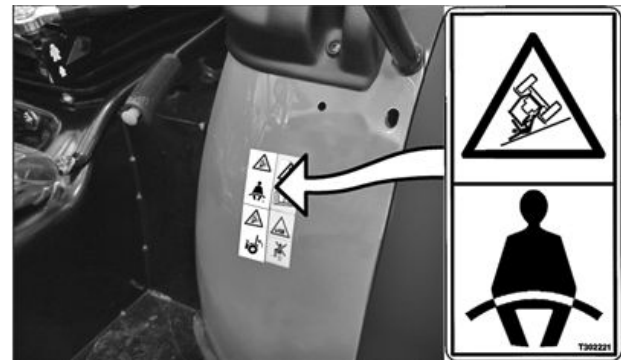
Use Seat Belt Properly (Tractors With Foldable ROPS)

Use Foldable ROPS and Seat Belt Properly

CAUTION: Avoid crushing injury or death during rollover. This machine is equipped with a foldable roll-over protective structure (ROPS). **Keep the ROPS in the fully extended and locked position. 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 to make sure that the belt is securely fastened.
- Snug the seat belt across the hips.

CAUTION: If this machine is operated with the ROPS folded (e.g., to enter a low building), drive



LX205080—UN—14NOV13

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.

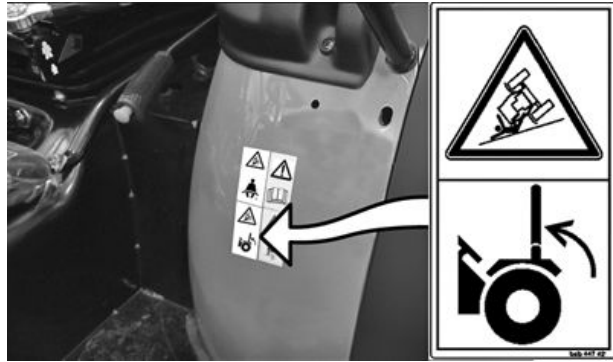
OULXBER,0002547 -19-05NOV14-1/1

ROPS in Normal Position

CAUTION: Avoid crushing injury or death during rollover. Use Foldable ROPS and Seat Belt Properly. If this machine is equipped with a foldable roll-over 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.

CAUTION: If this machine is operated with the ROPS folded (e.g., to enter a low building), drive with extreme caution. DO NOT USE a seat belt



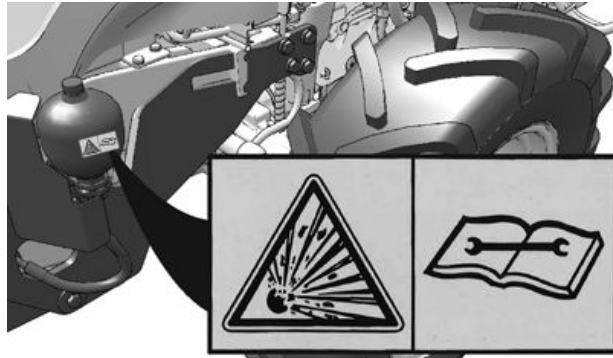
with the ROPS folded. Return the ROPS to the raised, fully extended position as soon as the machine is operated under normal conditions.

OULXBER,0002549 -19-05NOV14-1/1

LX205082 —UN—14NOV13

Accumulator (Tractors With Front Hitch)

CAUTION: Avoid crushing and fluid injection. Releasing pressure may cause machine movement and exposure to fluid under pressure. See dealer for instruction on relieving pressure before servicing system.

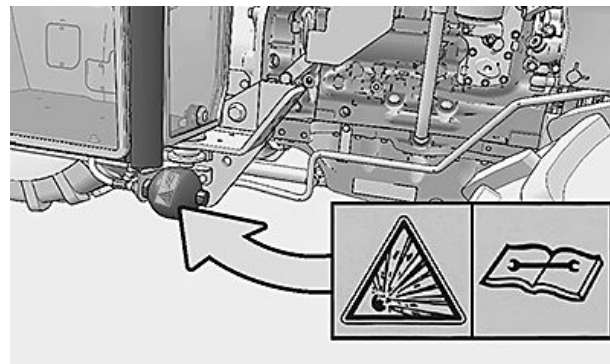


OULXBER,000254B -19-05NOV14-1/1

LX203974 —UN—21JAN15

Accumulator (Tractors With 24/12 Transmission)

CAUTION: Avoid crushing and fluid injection. Releasing pressure may cause machine movement and exposure to fluid under pressure. See dealer for instruction on relieving pressure before servicing system.

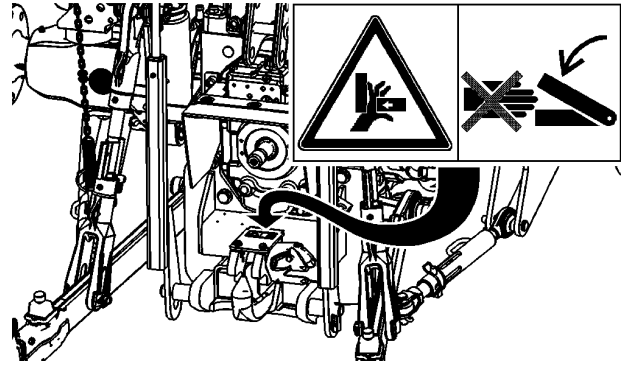


OULXBER,00024D5 -19-05NOV14-1/1

AGCPTJD0688 —UN—21JAN15

Pick-Up Hitch

- ⚠ CAUTION: Avoid crushing and pinching.**
When attaching or detaching an implement, there is a risk of crushing in the area between the tractor and implement. Keep clear of pick-up hitch components while operating the pick-up hitch.

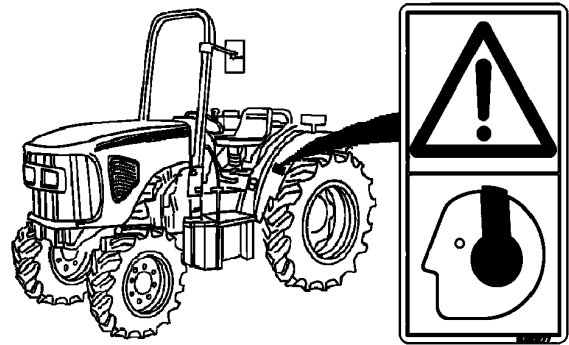


OULXBER,0002325 -19-22JAN14-1/1

LX1054654 —UN—02FEB12

Protect Against Noise (Australia and New Zealand Only)

- ⚠ CAUTION: Avoid hearing damage.**
Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear suitable hearing protection.

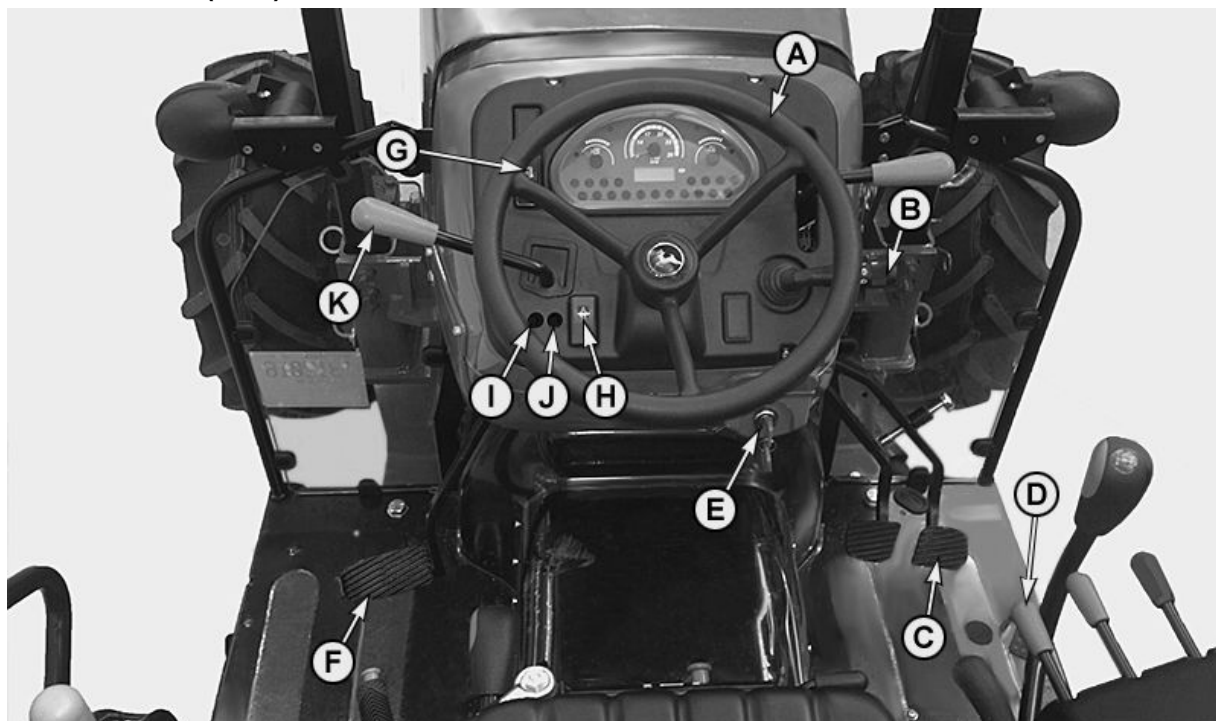


OULXBER,00027FB -19-13NOV15-1/1

LX1057771 —UN—15OCT12

Controls and Instruments

Vehicle Controls (5GL)



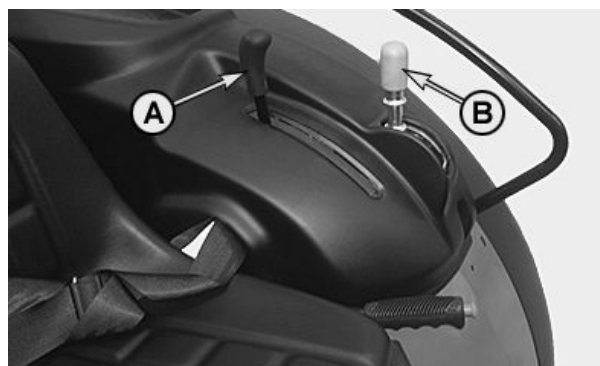
5GL tractors

A—Steering Wheel	D—Accelerator Pedal	H—Hazard Warning Light Switch	K—Reverser Lever
B—Light, Horn and Turn Signal Switch	E—Key Switch	I—Clock Setting Switch	J—Programming Switch
C—Left and Right Brake Pedals	F—Clutch Pedal	G—Beacon Light Switch (Open Station Tractors Only)	

OULXBER,00024DA -19-07NOV14-1/8

AGCPTJD0395 —UN—12JUL13

A—PTO Mode Selector Lever (Independent or Ground Speed)	B—PTO Engagement Lever

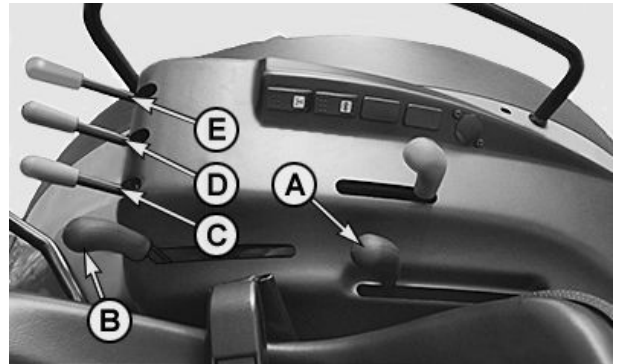


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OULXBER,00024DA -19-07NOV14-2/8

AGCPTJD0396 —UN—12JUL13

- A—Hitch Load Control Lever
 B—Hitch Position Control Lever
 C—First Selective Control Valve Lever
 D—Second Selective Control Valve Lever
 E—Third Selective Control Valve Lever



AGCPTJD0397—UN—11JUL13

OULXBER,00024DA -19-07NOV14-3/8

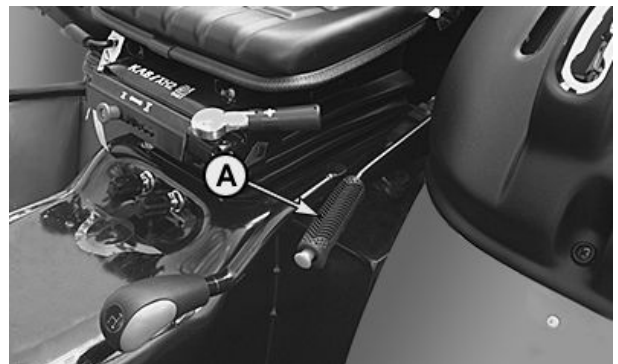
- A—Adjusting Knob - Hitch Rate-Of-Drop Valve
 B—Adjusting Knob - Hitch Sensitivity Control Valve



AGCPTJD0401—UN—12JUL13

OULXBER,00024DA -19-07NOV14-4/8

- A—Park Brake Lever



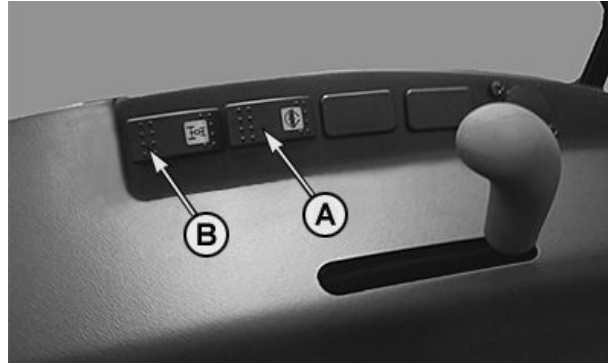
AGCPTJD0400—UN—12JUL13

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OULXBER,00024DA -19-07NOV14-5/8

A—Differential Lock Switch

B—Front-Wheel Drive Switch



OULXBER,00024DA -19-07NOV14-6/8

AGCPTJD0399 —UN—12JUL13

A—Gear Shift Lever
(Mechanically Version
Shown)

B—Range Shift Lever

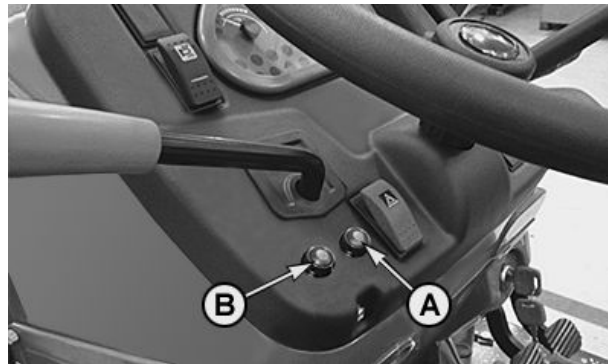


OULXBER,00024DA -19-07NOV14-7/8

AGCPTJD0398 —UN—12JUL13

A—Program Switch

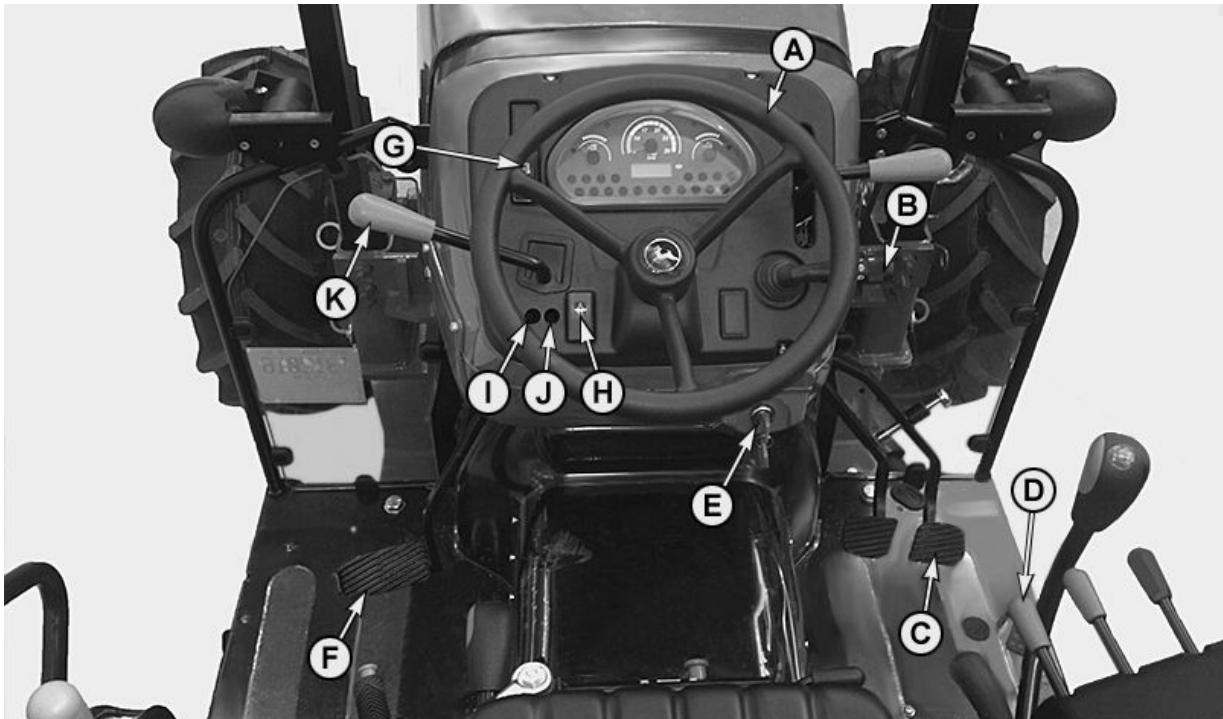
B—Clock Adjust and Hour
Meter Switch



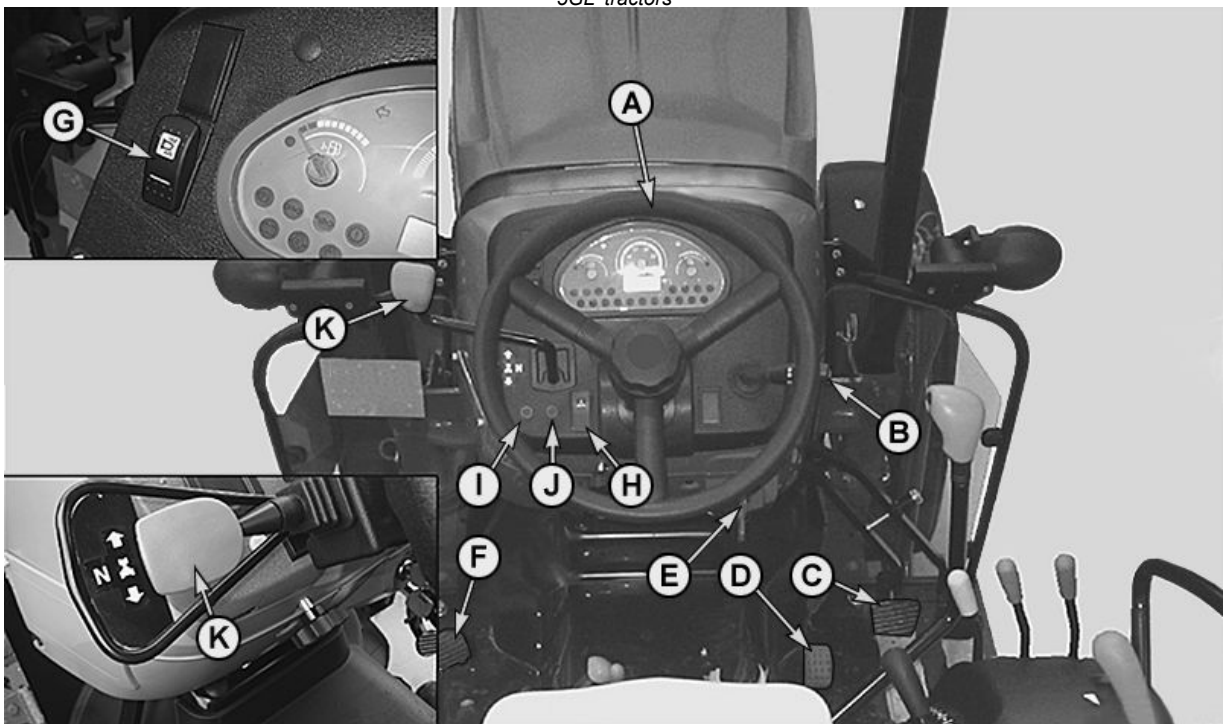
OULXBER,00024DA -19-07NOV14-8/8

AGCPTJD0405 —UN—10JUL13

Vehicle Controls (5GV, 5GN and 5GF)



5GL tractors



5V, 5N and 5VF tractors

A—Steering Wheel	D—Accelerator Pedal	H—Hazard Warning Light Switch	K—Reverser Lever
B—Light-, Horn and Turn Signal Switch	E—Key Switch	I—Clock Setting Switch	
C—Left and Right Brake Pedals	F—Clutch Pedal	J—Programming Switch	
	G—Beacon Light Switch (Open Station Tractors Only)		

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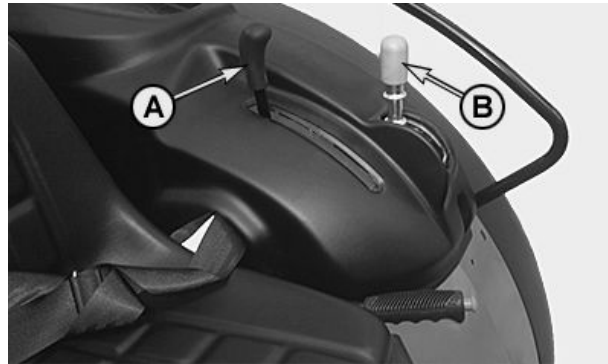
OULXBER,00024DB -19-06NOV14-1/11

AGCPTJD0395—UN—12JUL13

AGCPTJD0669—UN—29OCT14

**A—PTO Mode Selector Lever
(Independent or Ground
Speed)**

B—PTO Engagement Lever

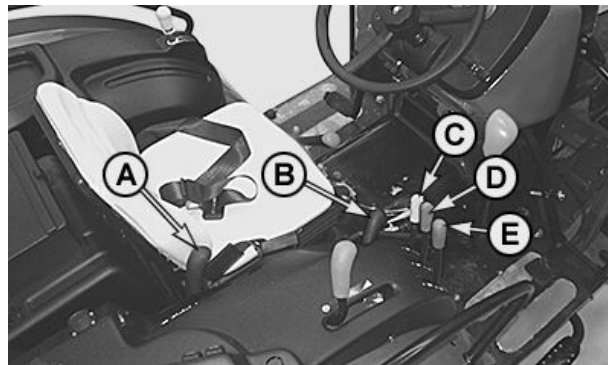


AGCPTJD0396 —UN—12JUL13

OULXBER,00024DB -19-06NOV14-2/11

**A—Hitch Load Control Lever
B—Hitch Position Control
Lever
C—First Selective Control
Valve Lever**

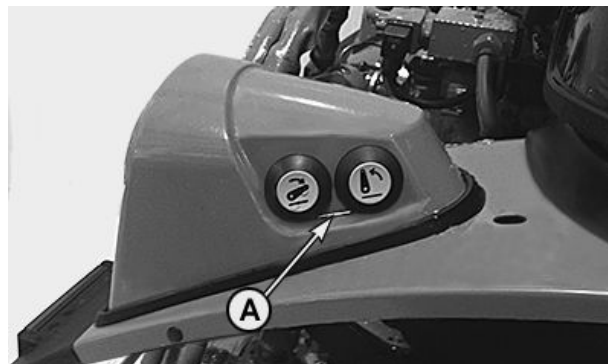
**D—Second Selective Control
Valve Lever
E—Third Selective Control
Valve Lever**



AGCPTJD0595 —UN—24OCT14

OULXBER,00024DB -19-06NOV14-3/11

**A—Hitch remote control
switches (tractors with EHS
II only)**



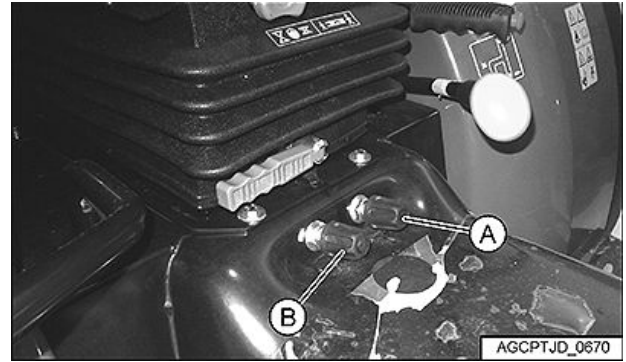
AGCPTJD0603 —UN—24OCT14

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OULXBER,00024DB -19-06NOV14-4/11

**A—Adjusting Knob - Hitch
Rate-Of-Drop Valve**

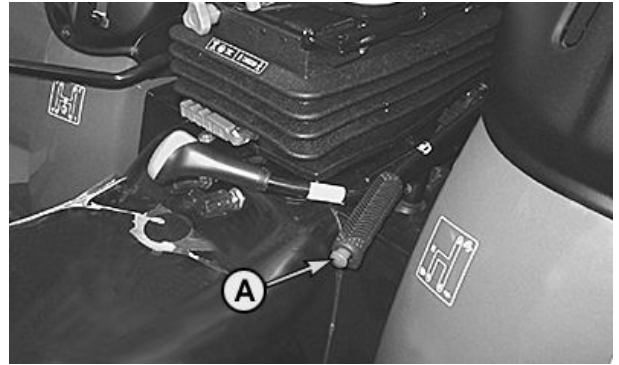
**B—Adjusting Knob - Hitch
Sensitivity Control Valve**



AGCPTJD0670 —UN—02NOV15

OULXBER,00024DB -19-06NOV14-5/11

A—Park Brake Lever



AGCPTJD0671 —UN—29OCT14

Continued on next page

OULXBER,00024DB -19-06NOV14-6/11

A—Electronic hitch control panel

B—Raise/Lower Switch



AGCPTJD0596—UN—24OCT14

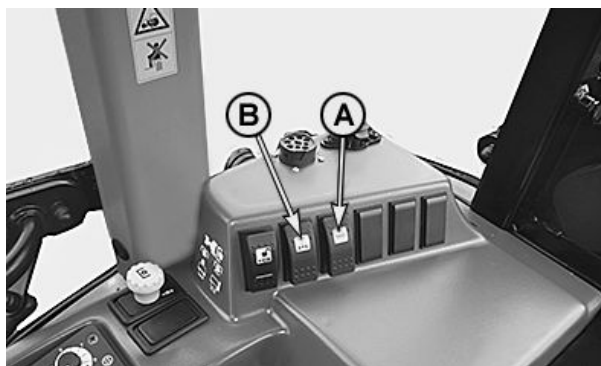


AGCPTJD0597—UN—24OCT14

OULXBER,00024DB -19-06NOV14-7/11

A—Differential Lock Switch

B—Front-Wheel Drive Switch



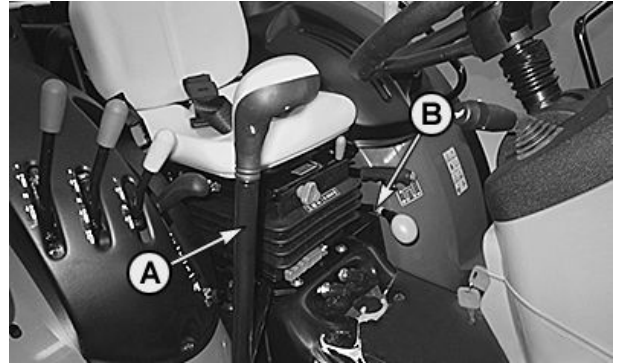
AGCPTJD0599—UN—24OCT14

Continued on next page

OULXBER,00024DB -19-06NOV14-8/11

A—Gear Shift Lever
(Mechanically Version
Shown)

B—Range Shift Lever

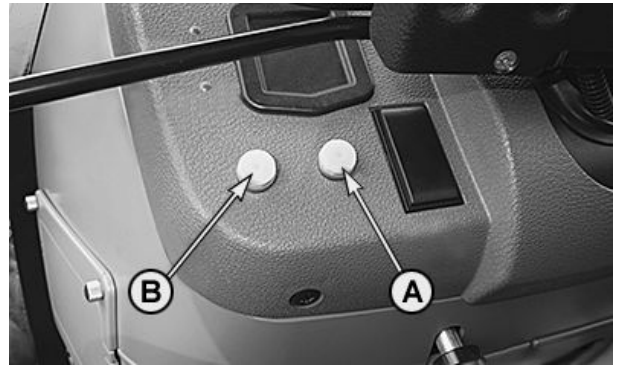


AGCPTJD0598 —UN—24OCT14

OULXBER,00024DB -19-06NOV14-9/11

A—Program Switch

B—Clock Adjust and Hour
Meter Switch

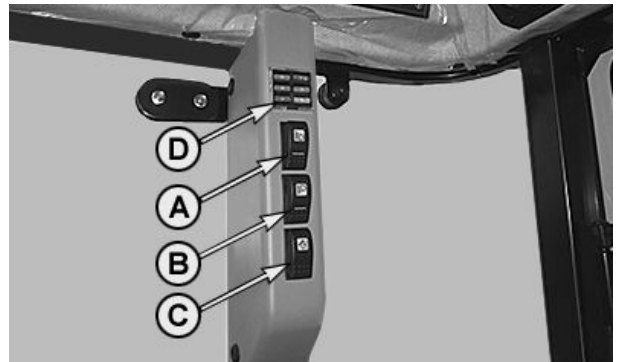


AGCPTJD0600 —UN—24OCT14

OULXBER,00024DB -19-06NOV14-10/11

A—Front Roof Worklight
Switch
B—Rear Roof Worklights
Switch

C—Wiper and Washer Switch
D—Fuse box (CAB)



AGCPTJD0601 —UN—24OCT14

5Gv, 5GN and 5GF with cab

OULXBER,00024DB -19-06NOV14-11/11

PTO Controls

The PTO mode selector lever (A) allows the PTO to be operated in the following modes:

- N - Neutral
- 1 - Ground Speed PTO
- 2 - Independent PTO Speed

A—PTO Mode Selector Lever



5GL, PTO controls



5GV, 5GN and 5GF, PTO controls

OULXBER,000210AGL -19-22OCT14-1/2

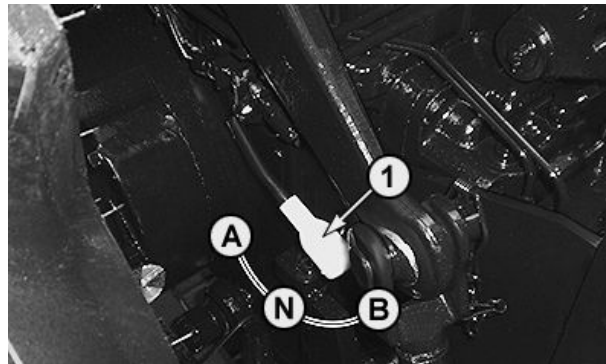
AGCPTJD0402 —UN—12JUL13

AGCPTJD0594 —UN—31JAN14

The PTO speed selector lever (1) allows the PTO to be operated with different speeds.

IMPORTANT: The PTO speed selector lever must only be used when no equipment is connected to the PTO.

1—PTO speed selector lever	A—540 rpm
N—Neutral	B—750 rpm (540E) or optional 1000 rpm



5GV, 5GN and 5GF, PTO Speed Selector Lever

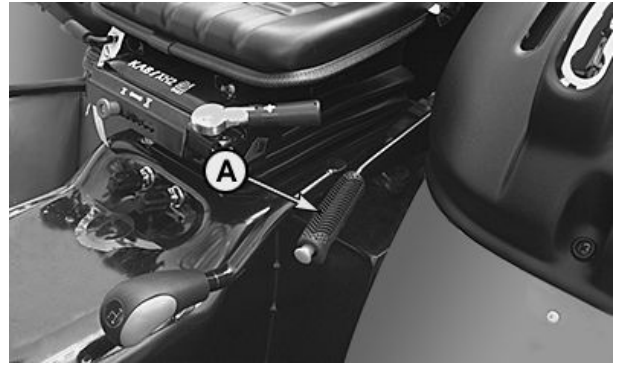
OULXBER,000210AGL -19-22OCT14-2/2

AGCPTJD0610 —UN—27OCT14

Parking Brake

NOTE: In the event of service brake failure, the auxiliary brake system can be used to brake the tractor.

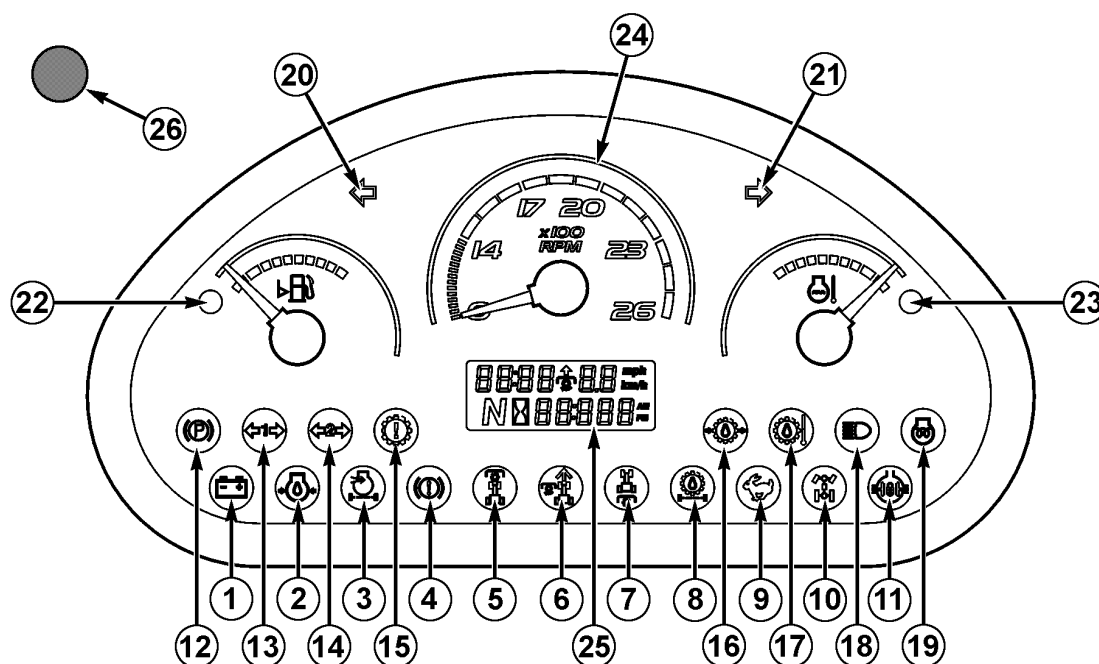
A—Parking Brake Lever



AGCPTJD0400 —UN—12JUL13

OULXBER,0002109GL -19-10JUL13-1/1

Indicator Lights and Displays



1. Alternator Indicator Light - Comes on if there is a problem in the charging system.
2. Engine Oil Pressure Indicator Light - Comes on when engine oil pressure is low.
3. Air Cleaner Restriction Indicator Light - Comes on when engine air cleaner is clogged.
4. Brake Oil Level Indicator Light - Comes on when the brake oil level is low.
5. Front PTO Indicator Light - Comes on when the front PTO is switched on.
6. Ground Drive PTO Indicator Light - Comes on when the ground drive PTO is activated.
7. Rear PTO Indicator Light - Comes on when the rear PTO is switched on.
8. Transmission Oil Filter indicator light - Comes on when the transmission oil filter is clogged.
9. High Speed Indicator Light - Comes on when electrohydraulic Hi-Lo transmission is in Hi mode.
10. Front-wheel drive indicator light - Comes on when front-wheel drive is switched on.
11. Differential lock indicator light - Comes on when differential lock is switched on.
12. Park brake Indicator Light - Comes on when the park brake is activated.
13. Turn Signal Indicator Light (first trailer).
14. Turn Signal Indicator Light (second trailer).
15. Transmission Failure Light - For PowrReverser transmission only.
16. Transmission Low Oil Pressure Light - Comes on when transmission oil pressure is low.
17. Transmission Oil Temperature Light - Comes on when Oil temperature is high.
18. High Beam Indicator Light - Comes on when switch is in "high beam" position.
19. Preheater Indicator Light - Indicates that the preheater is activated, turn key switch to start position only when preheating sequence has finished.
20. Flashing indicator light on left - Starts flashing when left turn signal light or hazard warning lights are switched on.
21. Flashing indicator light on right - Starts flashing when right turn signal light or hazard warning lights are switched on.
22. Fuel Level Warning Light - Comes on when fuel level is low.
23. Engine Coolant Temperature Warning Light - Comes on when coolant temperature is high.
24. Tachometer - Indicates crankshaft speed in revolutions per minute.
25. Digital Display - Displays information for the operator.
26. Trailer brake valve warning light (CUNA version only)

OULXBER,00024DC -19-22OCT14-1/1

AGCPTJD0714 -JUN-30OCT14

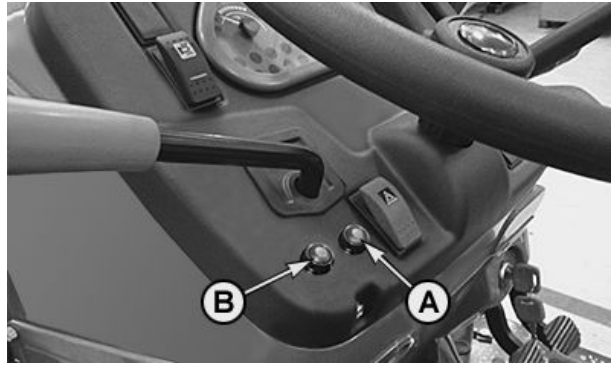
Digital Display - Clock Adjustment

1. Turn key switch to first position (engine not running), push button (B) until clock mode is shown on the dashboard panel.
2. Keep button (B) pressed for more than 3 seconds to gain access to hour setup function.

A—Program Button

C—Key Switch

B—Clock Adjustment Button



AGCPTJD0351—UN—10JUL13

AGCPTJD0352—UN—10JUL13

OULXBER,00022E2 -19-07NOV14-1/2

Time Setting:

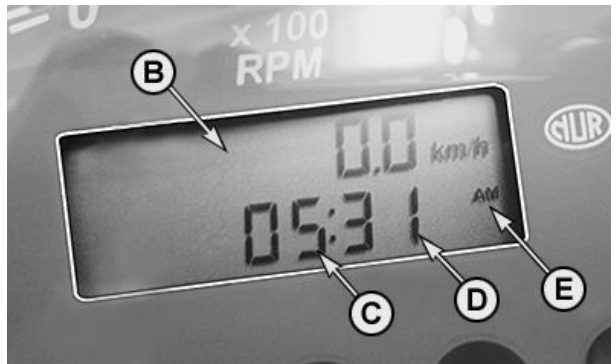
- Hours flashing.
- Push clock adjustment button to set correct hour (C).
- Keep clock adjustment button pressed to gain access to minutes setup function.
- Minutes flashing
- Push clock adjustment button to set correct minutes (D).
- Choose between 12/24h mode (E) and keep clock adjustment button pressed for more than 3 seconds to complete the setup procedure.

B—Dashboard

D—Minutes

C—Hour

E—12/24h mode



AGCPTJD0350—UN—10JUL13

OULXBER,00022E2 -19-07NOV14-2/2

Digital Display - Initial Setup (Matching with Tractor)

NOTE: Data indicated by digital display depend on the tractor configuration.

Adjustments can be done for:

- Tire size
- PTO speed (540/540E or 540/1000 rpm)
- Transmission type (e.g. for 5GL 24/24 transmission)
- Front PTO
- 2WD/4WD

If one of these factors changes (e.g. tire size), the program number must also be changed. (Entering the corresponding number in relevant control field).

Refer to the chart below for the appropriate program number.

EXAMPLE - For setup of PTO from tractors with mechanical transmission or Power Reverser transmission:

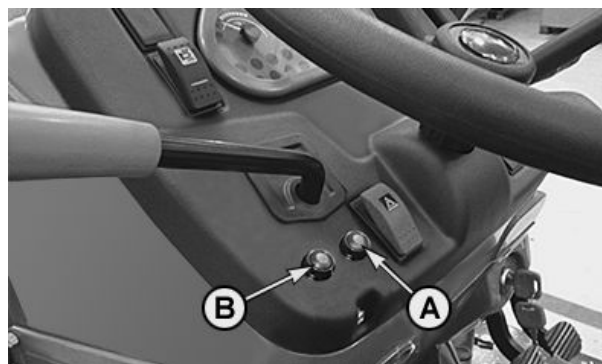
540 rpm PTO only (Mechanical reverser) - Appropriate program number = **10**

EXAMPLE - For setup of the tire size :

New tire size 380/70R20 - Appropriate new program number = **263**

Changing the program number:

1. **Accessing the initial setup menu:** Press and hold the buttons (A) and (B) simultaneously, then turn key switch in ON position.



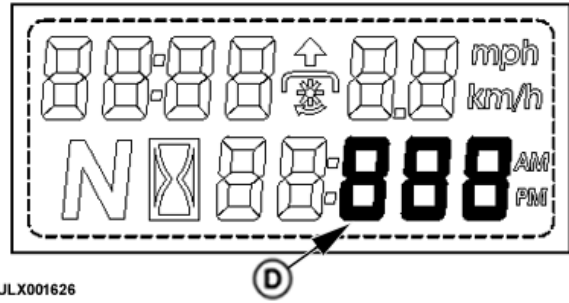
AGCPTJD0351—UN—10JUL13

AGCPTJD0352—UN—10JUL13

Continued on next page

OULXBER,00024DD -19-23OCT14-1/7

2. **Tire Size:** After entering the initial setup menu the digit (D) flashes. Press button (B) to choose the digit and confirm it by pressing button (A).



PULX001626

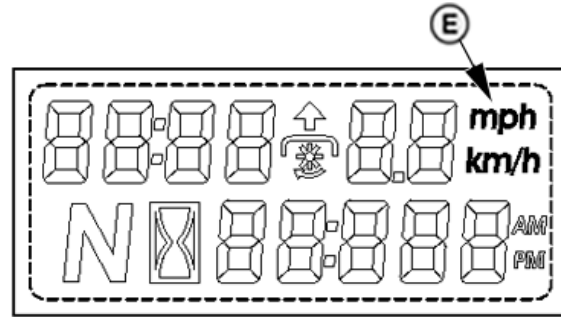
PULX001626—UN—25SEP08

Rear Tires				Program number (Speed parameters)	
				30 km/h (18,64 mph)	40 km/h (24,85 mph)
				5GV-5GN-5GF	5GL-5GV-5GN-5GF
320/70-R20	11.2-R20	280/85-R20		361	287
360/70-R20	12.4-R20	320/85-R20		341	271
380/70 R 20	13.6 R 20	440/65 R20	340/85 R 20	331	263
320/70-R24	11.2-R24	280/85-R24		325	258
360/70 R 24	12.4 R 24	420/65 R24	320/85 R 24	311	247
9.5-R28	250/85-R28			313	249
380/70 R 24	13.6 R 24	440/65 R24	340/85 R 24	299	237
320/70-R28	11.2-R28	280/85-R28		297	236
480/65-R24				290	230
420/70-R24	14.9-R24	380/85-R24		287	228
360/70-R28	12.4-R28	320/85-R28		285	226
380/70-R28	13.6-R28	340/85-R28		275	219
480/70-R24	16.9-R24	420/85-R24	13.6-R28	272	216
480/65-R28				268	213
420/70-R28	14.9-R28	380/85-R28		263	209
420/70-R30	14.9-R30	380/85-R30		253	201
480/70-R28	16.9-R28	420/85-R28		252	200
12.4-R36	320/85-R36			244	194
540/65 R30				243	193
480/70-R30	16.9-R30	420/85-R30		241	191
480/70-R34	16.9-R34	420/85-R34		225	179
18.4-R26				249	198
18.4-R34	13.6-R38			220	175
16.9-R38				213	170
23.1 - 26				222	176
18.4-R30				230	183

Continued on next page

OULXBER,00024DD -19-23OCT14-2/7

3. **Km/h or mph mode:** Set km/h or mph mode (E) and confirm by pressing button (A).



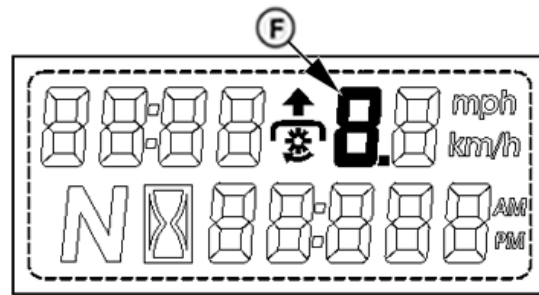
PULX001627

OULXBER,00024DD -19-23OCT14-3/7

PULX001627 —UN—25SEP08

4. **PTO/mechanical transmission or PowrReverser transmission:** Enter the value (F) and confirm by pressing button (A).

Value	PTO Version	Power Reverser
1	540 rpm	x
2	540 - 540E rpm	x
3	540 - 1000 rpm	x
4	540 rpm	—
5	540 - 540E rpm	—
6	540 - 1000 rpm	—



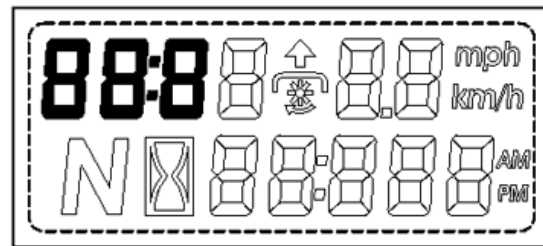
PULX001628

OULXBER,00024DD -19-23OCT14-4/7

PULX001628 —UN—25SEP08

5. **Front PTO:** Set the front PTO value to **4 8 5**.

Press button (B) to select the digit and confirm with button (A).



PULX000643

Continued on next page

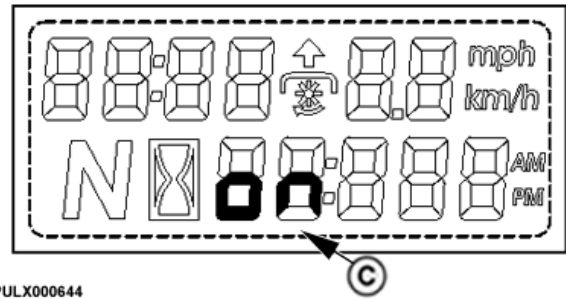
OULXBER,00024DD -19-23OCT14-5/7

PULX000643 —UN—30JUL08

6. **2WD or 4WD:** Choose "**on**" if tractor is equipped with hydraulically actuated four-wheel drive.

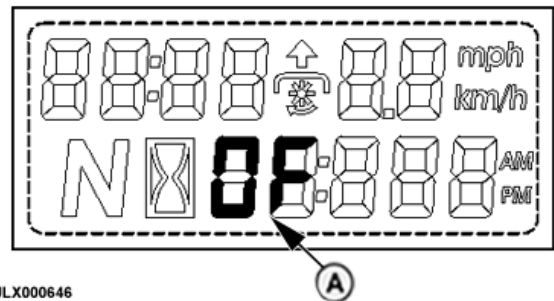
Choose "**OFF**" if tractor is equipped with two-wheel drive or mechanically actuated four-wheel drive.

Confirm with button (A).



PULX000644

PULX000644 —UN—19SEP08



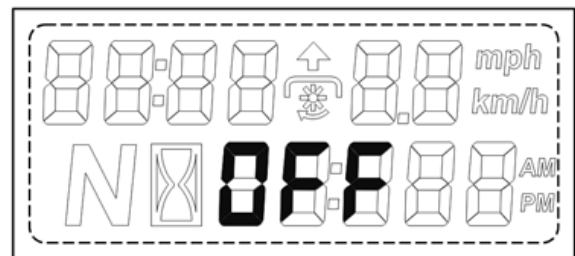
PULX000646

PULX000646 —UN—19SEP08

OULXBER,00024DD -19-23OCT14-6/7

7. After the last confirmation the display will show "**OFF**".

Turn the key switch to OFF, program change procedure completed.



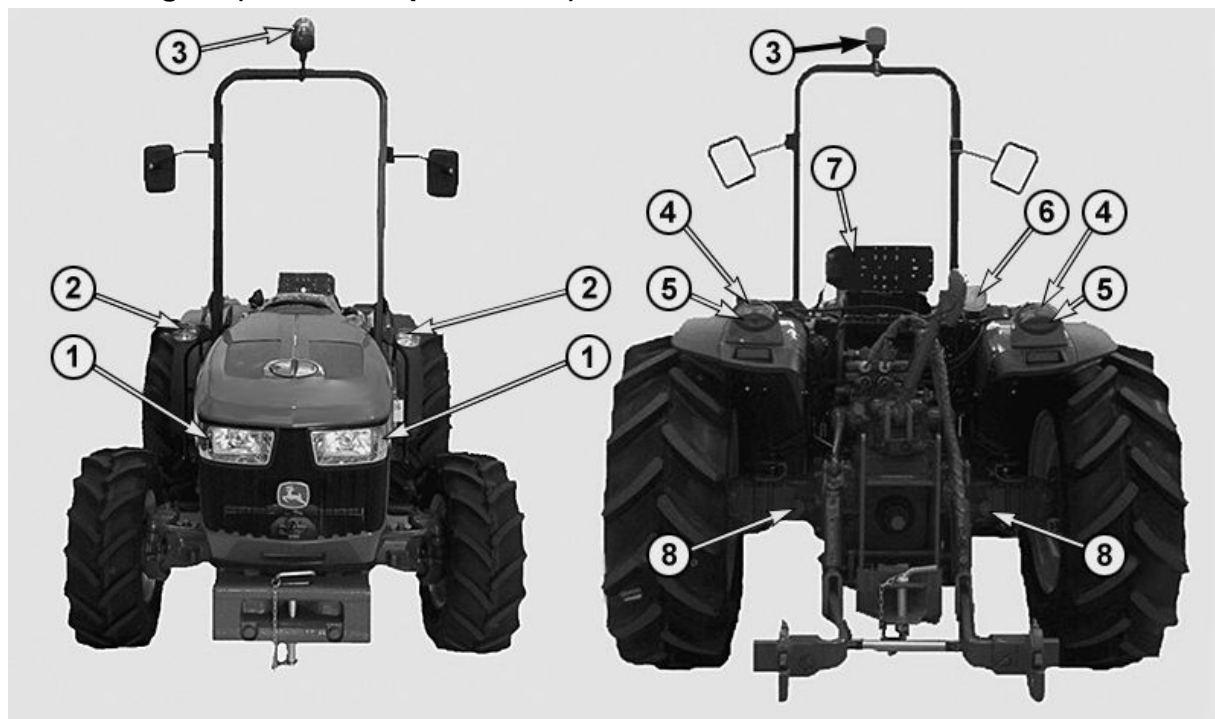
PULX001629

PULX001629 —UN—25SEP08

OULXBER,00024DD -19-23OCT14-7/7

Lights

Total View - Lights (5GF with 2-post ROPS)



1— Headlights, High- and Low Beam

2— Front Turn Signal and Clearance Lights

3— Beacon Light

4— Rear Turn-Signal Lights

5— Tail Lights and Brake Lights

6— Worklights

7— License Plate Light

8— Reflectors

CAUTION: Never use worklights on public roads.

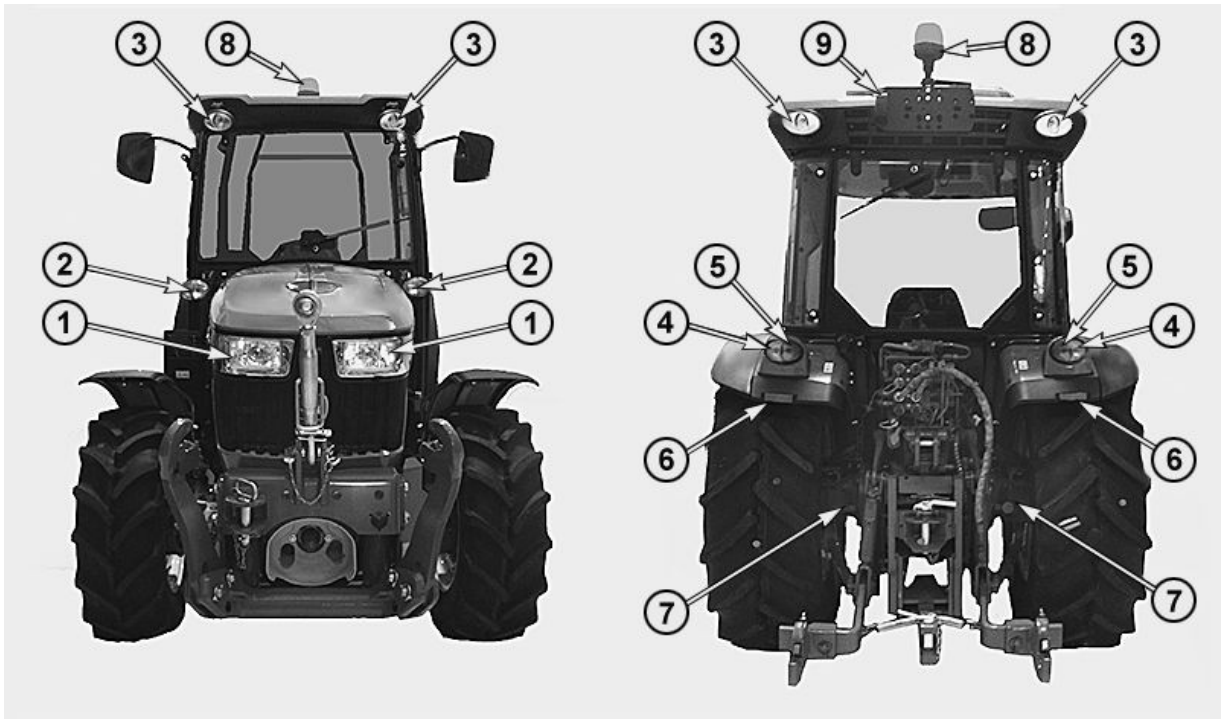
Clean all light lenses before driving on a public roads.

NOTE: If a bulb on one side is replaced, also replace the bulb on the other side.

AGCPTJD0527 —UN—17DEC13

OULXBER,00024E3 -19-23OCT14-1/1

Total View - Lights (5GF with cab)



1—Headlights, High- and Low Beam

2—Front Turn Signal and Clearance Lights

3—Worklights

4—Rear Turn-Signal Lights

5—Tail Lights and Brake Lights

6—Reflectors

7—Reflectors

8—Beacon Light

9—License Plate Light

CAUTION: Never use worklights on public roads.

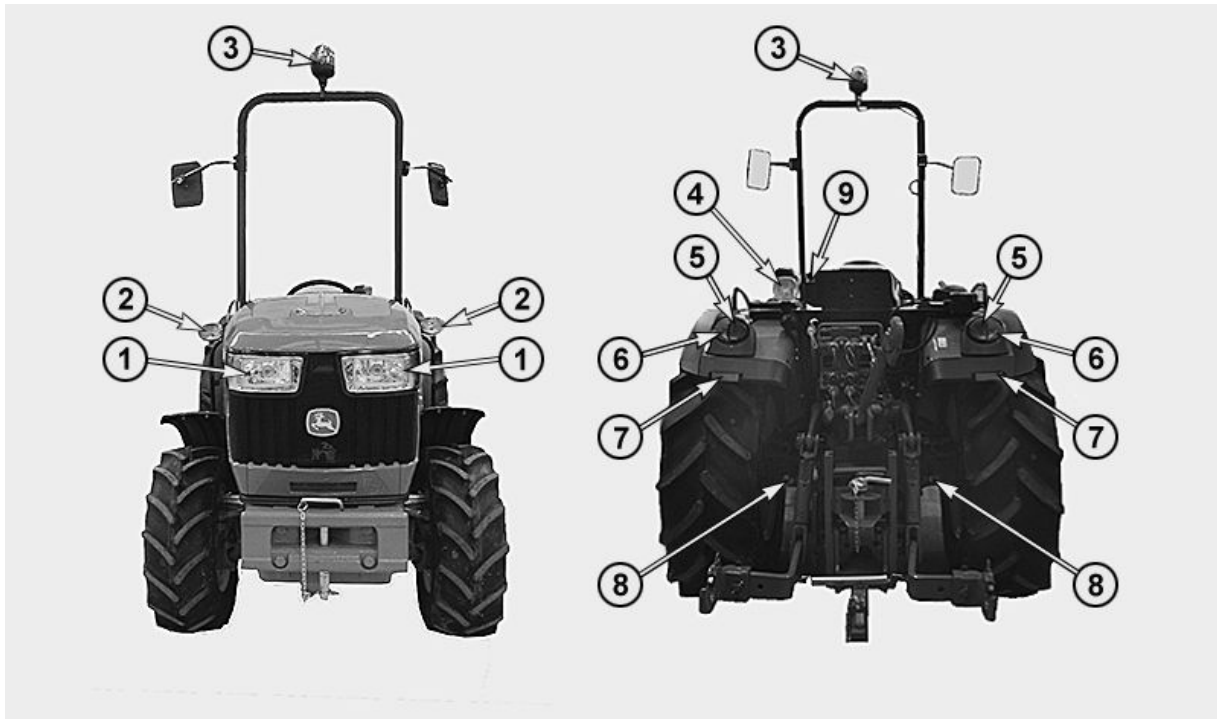
Clean all light lenses before driving on a public roads.

NOTE: If a bulb on one side is replaced, also replace the bulb on the other side.

OULXBER,00024DF -19-23OCT14-1/1

AGCPTJD0606—UN—27OCT14

Total View - Lights (5GN with 2-post ROPS)



1— Headlights, High- and Low Beam
2— Front Turn Signal and Clearance Lights

3— Beacon Light
4— Worklights
5— Tail Lights and Brake Lights

6— Rear Turn-Signal Lights
7— Reflectors
8— Reflectors

9— License Plate Light

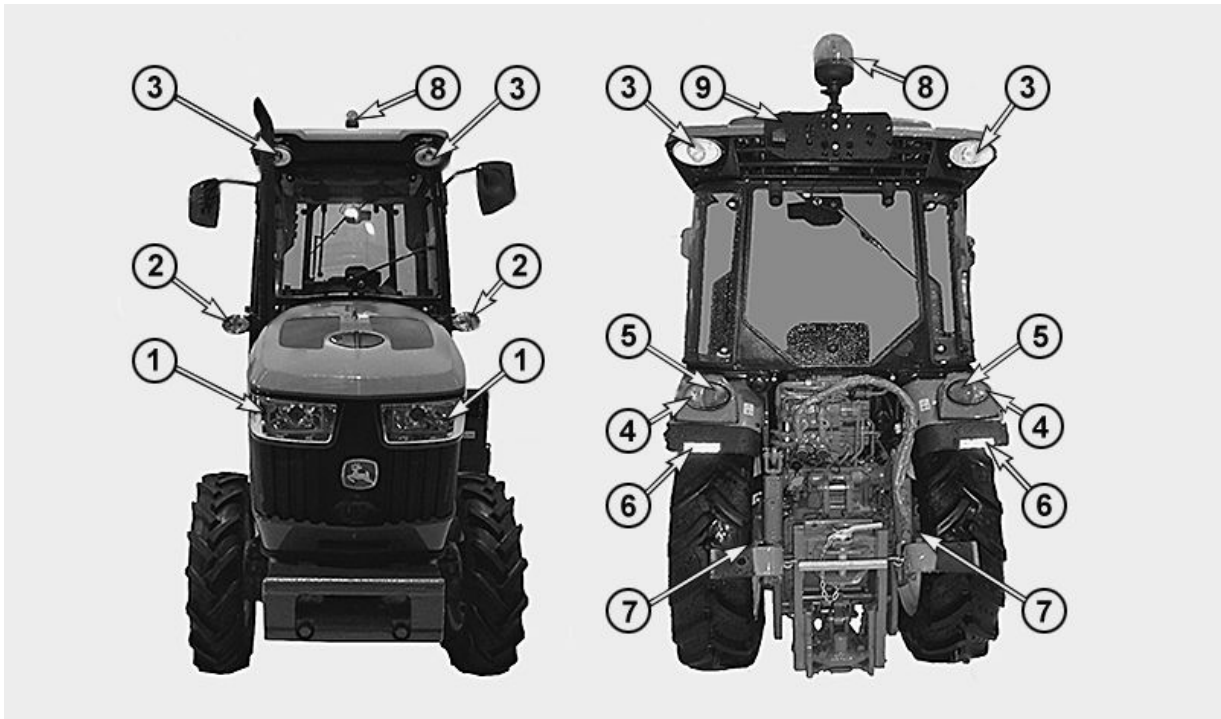
CAUTION: Never use worklights on public roads.
Clean all light lenses before driving on a public roads.

NOTE: If a bulb on one side is replaced, also replace the bulb on the other side.

OULXBER,00024E1 -19-23OCT14-1/1

AGCPTJD0605 —UN—27OCT14

Total View - Lights (5GV with cab)



- 1— Headlights, High- and Low Beam
- 2— Front Turn Signal and Clearance Lights

- 3— Worklights
- 4— Rear Turn-Signal Lights
- 5— Tail Lights and Brake Lights

- 6— Reflectors
- 7— Reflectors
- 8— Beacon Light
- 9— License Plate Light

⚠ CAUTION: Never use worklights on public roads.
Clean all light lenses before driving on a public roads.

NOTE: If a bulb on one side is replaced, also replace the bulb on the other side.

OULXBER,00024E2 -19-23OCT14-1/1

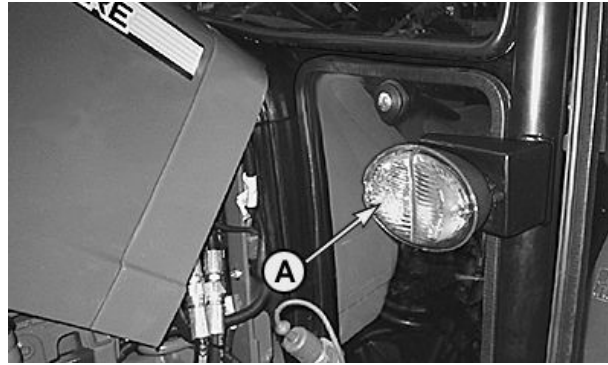
AGCPTJD0604 —UN—24OCT14

Lights

NOTE: For tractors with open operator's station, front lights (A) can be folded in to avoid contact with tree branches during work in orchards or similar.

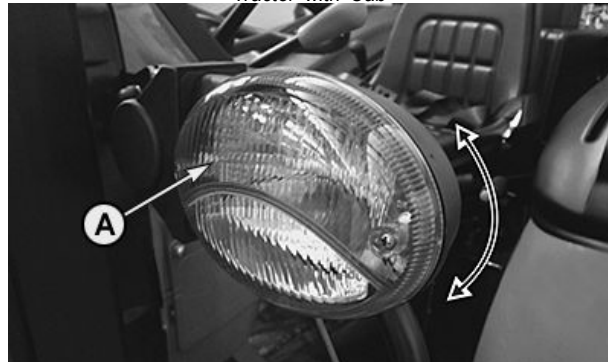
Turn front lights (A) to the correct position before driving on public roads.

A—Headlights



AGCPTJD0616—UN—27OCT14

Tractor with Cab



AGCPTJD0388—UN—16OCT13

Tractor without Cab



AGCPTJD0385—UN—16OCT13

Continued on next page

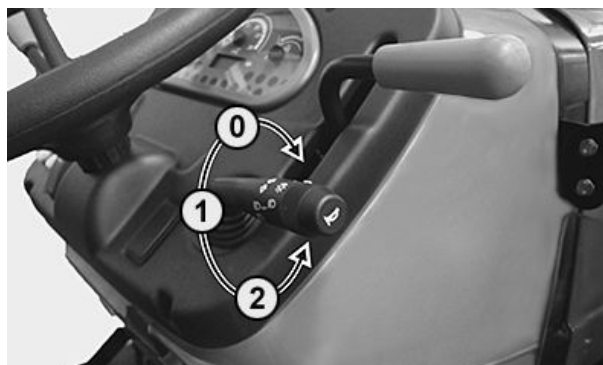
OULXBER,00024E4 -19-23OCT14-1/2

Tail lights (B) are switched on when light switch is turned to position (1) or (2).

A—Tail lights



AGCPTJD0385 —UN—16OCT13



AGCPTJD0383 —UN—16OCT13

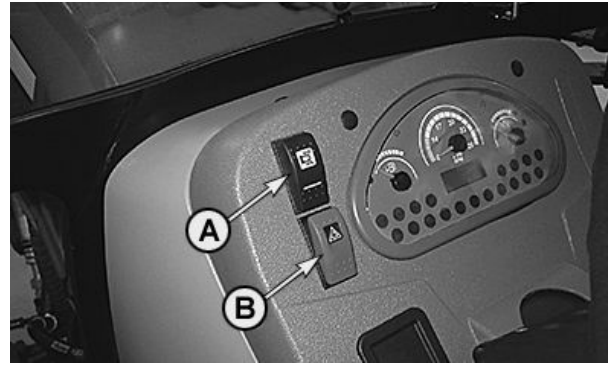
OULXBER,00024E4 -19-23OCT14-2/2

Light Switch and Turn Signal Switch

Position	Function
0	OFF (fully rotated clockwise)
1	First position (counterclockwise) - Dashboard lights, tail lights and license plate light ON
Center position	OFF
2	Second position (counterclockwise) - Low beam, dashboard lights, tail lights and license plate light ON
2+3	Second position (counterclockwise) and pulling upward in the direction of the steering wheel switches Hi beam ON Pull again and release switch to turn OFF Hi beam.
4	Left turn signal lights ON
5	Right turn signal lights ON
6	Push switch to activate horn

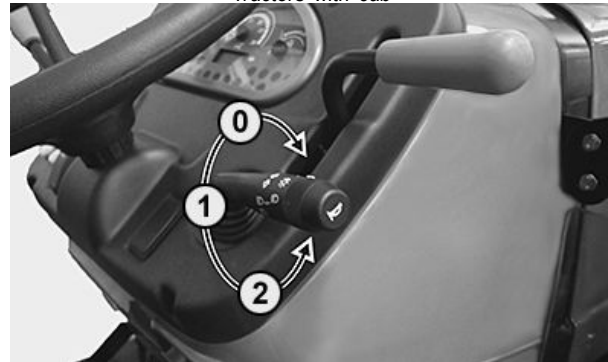
A—Beacon Light Switch

B—Hazard Warning Light Switch

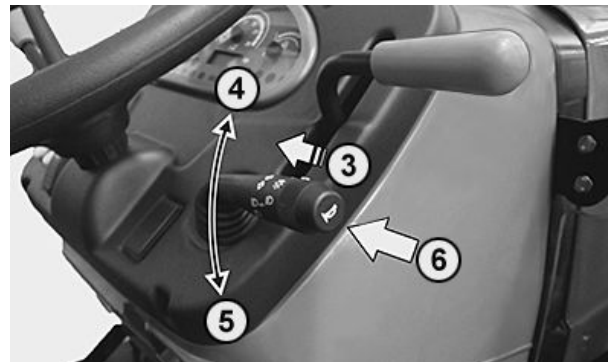


AGCPTJD0617 —UN—27OCT14

Tractors with cab



AGCPTJD0383 —UN—16OCT13



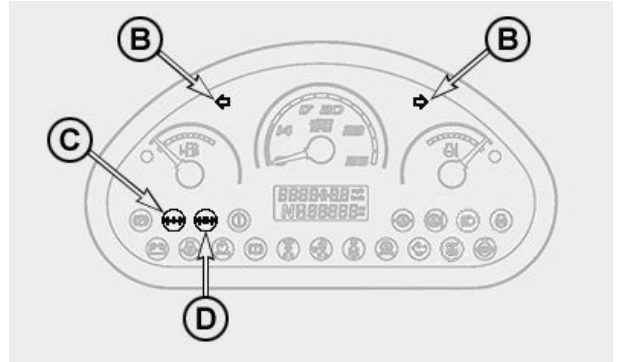
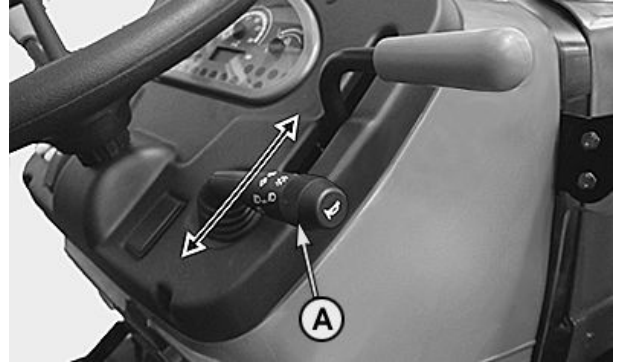
AGCPTJD0384 —UN—16OCT13

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OULXBER,00024E5 -19-23OCT14-1/2

NOTE: When towing one trailer, the indicator light (C) flashes. When towing two trailers, the indicator lights (C) and (D) are flashing.

A—Turn Signal Switch	C—Turn Signal Indicator Light for First Trailer
B—Turn Signal Indicator Lights	D—Turn Signal Indicator Light for Second Trailer



AGCPTJD0390 —UN—16OCT13

AGCPTJD0391 —UN—21OCT13

OULXBER,00024E5 -19-23OCT14-2/2

Worklight Switches

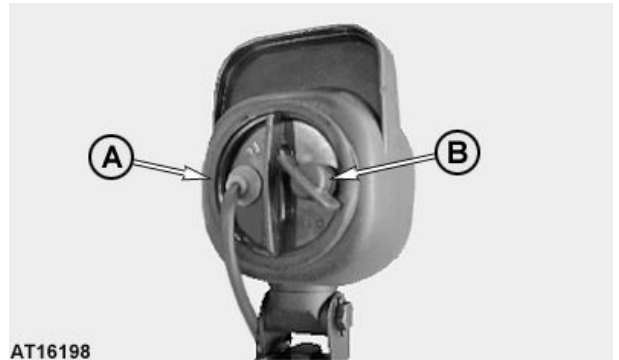
CAUTION: Do not switch on worklights when driving on public roads.

On tractors with open operator's station the work light (A) is switched on by work light switch (B).

Adjust the work lights (A) by turning them to the desired position.

1— Rear Worklight

2— Worklight Switch



AT16198

AT16198 —UN—07FEB03

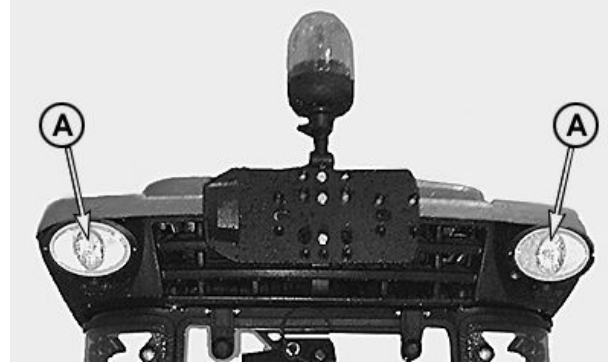


AGCPTJD0386 —UN—16OCT13

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OULXBER,00024E6 -19-23OCT14-1/3

On tractors with cab, the work light is switched on by the work light switch in the post on the right-hand side, see "Operator's Cab Switches" in Section "Operator's Station and Cab".



Tractor with cab

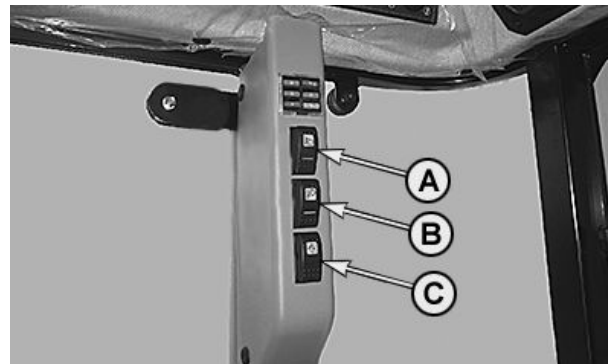
AGCPTJD0715 — UN — 07NOV14

OULXBER,00024E6 -19-23OCT14-2/3

On tractors with cab the work light switches are located in the post on the right-hand side.

A—Front work light switch
B—Rear work light switch

C—Windshield wiper and washer switch (see Section 25)



Tractors with cab

AGCPTJD0622 — UN — 27OCT14

OULXBER,00024E6 -19-23OCT14-3/3

Hazard Warning Light Switch

Use the switch to operate hazard warning lights when driving on roadways.

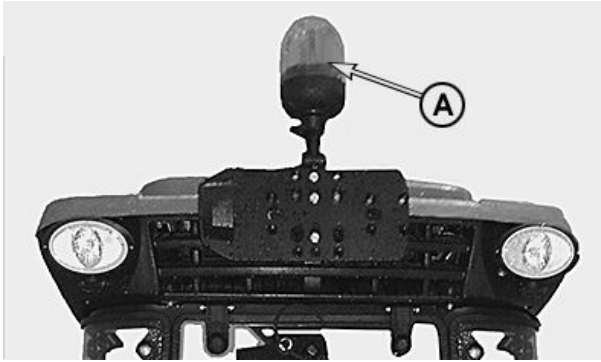
A—Hazard Warning Light Switch



AGCPTJD0618 — UN — 27OCT14

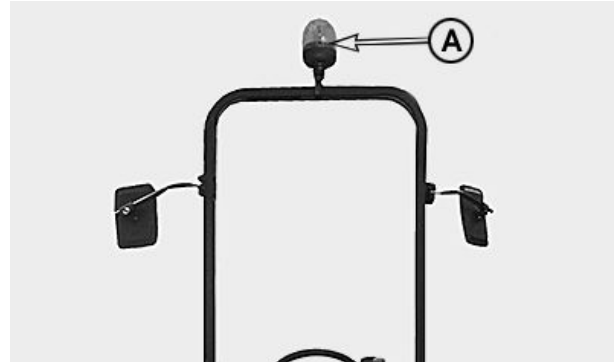
OULXBER,00024E7 -19-23OCT14-1/1

Beacon Light Switch (Option)



Tractor with cab

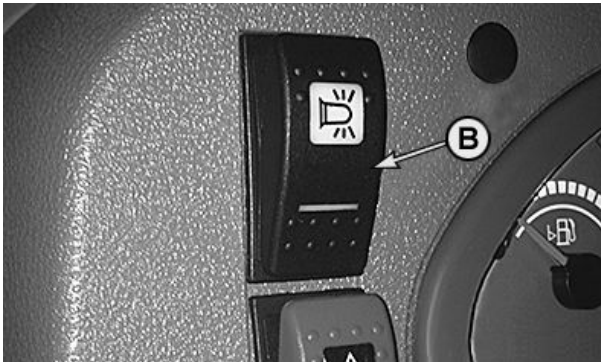
AGCPTJD0613 —UN—27OCT14



Tractor without cab

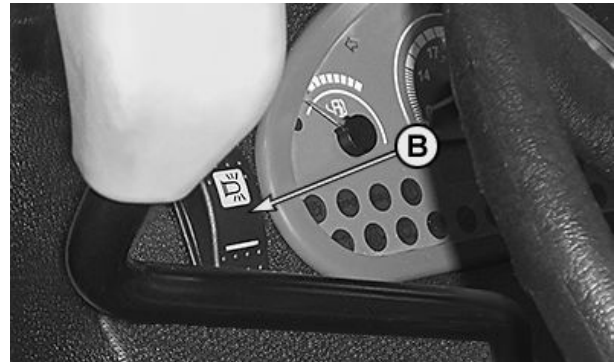
AGCPTJD0615 —UN—27OCT14

OULXBER,00024E8 -19-23OCT14-1/2



Tractor with cab

AGCPTJD0612 —UN—27OCT14



Tractor without cab

AGCPTJD0614 —UN—27OCT14

A—Beacon Light

B—Beacon Light Switch

The beacon light (A) is turned on by switch (B). Use beacon light (A) as requested by local regulations.

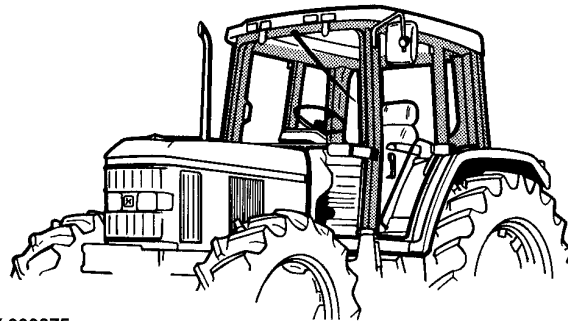
OULXBER,00024E8 -19-23OCT14-2/2

Operator's Station and Cab

Roll-Over Protective Structure

⚠ CAUTION: A four-post roll-over protective structure (ROPS) is incorporated into each operator's cab. On this construction, as well as on ROPS on tractors without cab, do not under any circumstances modify structural members by welding on additional parts, drilling holes, cutting or grinding etc. Disregarding this instruction will affect the rigidity of the ROPS.

A tractor roll-over places a severe strain on the ROPS. Therefore, replace the ROPS immediately if structural members have been bent, buckled or otherwise damaged.



LX 000375

LX000375 —UN—03JAN95

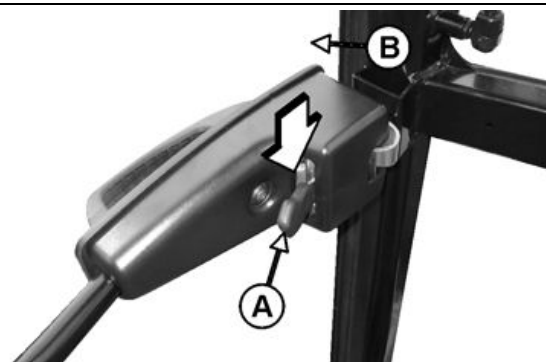
LX,OKAB 000212 -19-01OCT90-1/1

Emergency Exits

In an emergency, exit the cab through the cab doors. It is also possible to exit the cab through the open rear window.

Exit through doors

To open, pull down latch (A) and push door (B) outwards.



LX1054642 —UN—21DEC11



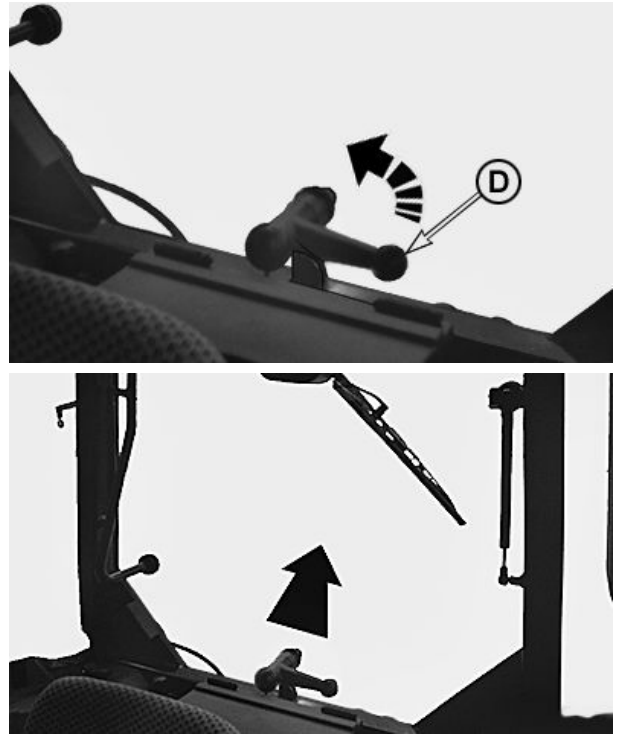
AGCPTJD0621 —UN—27OCT14

Continued on next page

OULXBER,00024E9 -19-24OCT14-1/2

Exit through rear window

To open, turn lever (D) to the left and push window outwards.



AGCPTJD0619—UN—27OCT14

AGCPTJD0620—UN—27OCT14

OULXBER,00024E9 -19-24OCT14-2/2

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 -19-24JUL01-1/1

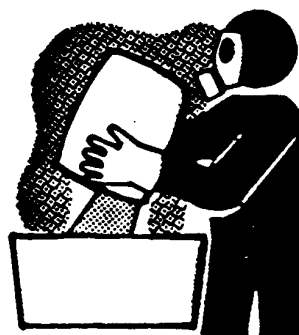
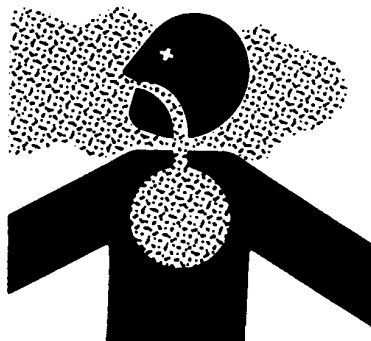
Handle Agricultural Chemicals Safely

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.



A34471

- 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.

TS220 —UN—15APR13

A34471 —UN—11OCT88

DX,WW,CHEM01 -19-24AUG10-1/1

Avoid Contact with Agricultural Chemicals

⚠ CAUTION: This enclosed cab does not protect against inhaling vapor, aerosol or dust.

1. When operating in an environment where pesticides are present, wear a long-sleeved shirt, long-legged pants, shoes, and socks.
2. If pesticide use instructions require respiratory protection, wear an appropriate respirator inside the cab.
3. Wear personal protective equipment as required by the pesticide use instructions when leaving the enclosed cab:
 - into a treated area
 - to work with contaminated application equipment such as nozzles which must be cleaned, changed or redirected
 - to become involved with mixing and loading activities
4. Before 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.
5. Clean your shoes or boots to remove soil or other contaminated particles prior to entering the cab.



DX,CABS1 -19-25MAR09-1/1

TS220 —UN—15APR13

TS272 —UN—23AUG88

Operating Roll-Over Protective Structure

CAUTION: Make certain all parts are installed correctly if 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, as in an overturn incident, or is in any way altered by welding, bending, drilling or cutting. A damaged ROPS should be replaced, not reused. Any alteration to the ROPS must be approved by the manufacturer.

Always keep upper part of ROPS pinned in vertical position (as pictured) when operating tractor. If tractor is operated with ROPS folded (e.g. to enter a low building) drive with extreme caution.

Do not use a seat belt if operating with ROPS folded down or without ROPS.

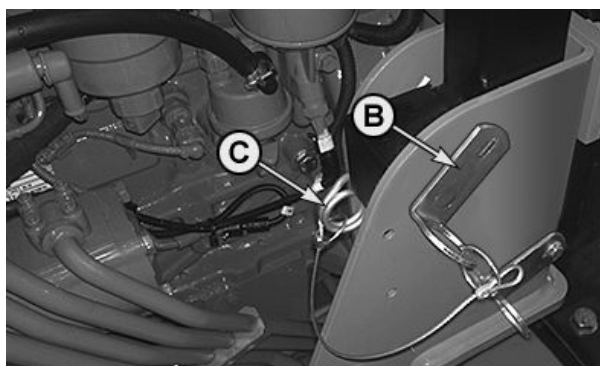
Fold the ROPS up again as soon as the tractor is operated under normal conditions.

To lower ROPS:

1. Remove quick-lock pins (C) and headed pins (B).
2. Lower ROPS onto stops.
3. Reinstall pins (B) and (C) to lock ROPS in down position.

Folding ROPS into operating position:

1. Remove quick-lock pins (C) and headed pins (B).



2. Lift ROPS to position shown. Install pins (B) and quick-lock pins (C).

OULXBER,0002277 -19-04NOV13-1/1

Seat Adjustment

Adjusting Operator's Seat Position for Tractors with ROPS

Seat fore-and-aft adjustment: Move lever (A) and slide seat forward or backward to desired position.

Seat height adjustment: While sitting on the seat turn knob (B).

Seat suspension adjustment: Turn the lever (C) to the desired vertical travel range.



OULXBER,0002112GL -19-23OCT13-1/1

Seat Adjustment (5GV, 5GN and 5GF)

Adjusting Operator's Seat Position (Standard and Comfort Seat) for Tractors with Cab

Seat fore-and-aft adjustment:

Move lever (A) and slide seat forward or backward to desired position.

Seat height adjustment:

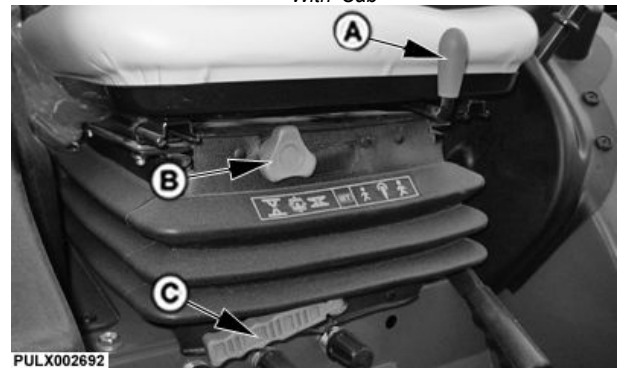
While sitting on the seat turn knob (B).

Seat suspension adjustment:

Turn the adjusting lever (C) to the desired vertical travel range.



With Cab



Open Operator's Station

OULXBER,00024EA -19-24OCT14-1/2

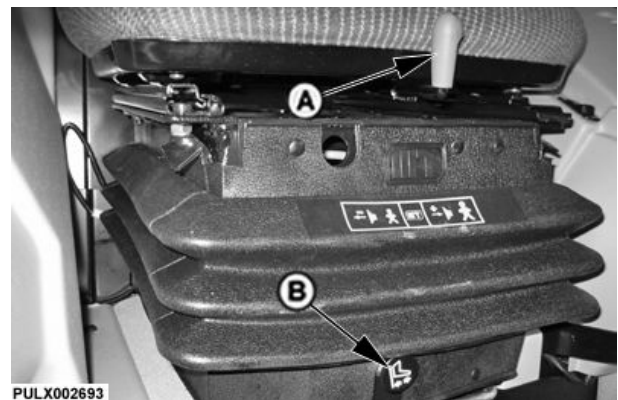
PULX002691 —UN—06NOV08

PULX002692 —UN—06NOV08

Adjusting Operator's Seat Position (Air Suspension Seat) for Tractors with Cab

Move the lever (A) and slide seat forward or backward to desired position.

To adjust the seat height, operate the lower knob (B).



OULXBER,00024EA -19-24OCT14-2/2

PULX002693 —UN—06NOV08

7-Terminal Trailer Socket

The socket allows lights, turn signals, and other electrical equipment on a trailer or implement to be connected. Always use additional lighting on a mounted implement if this conceals the turn signals and other lights at the rear of the tractor.

NOTE: Suitable connectors can be obtained from your John Deere dealer.

A—7-Terminal Trailer Socket



OULXBER,0002293GL -19-05NOV13-1/1

AGCPTJD0394 —UN—16OCT13

Mirrors (Open Operator's Station)

To adjust the mirror (A), loosen the clamp screw, move the mirror to the desired position and re-tighten the clamp screw.

CAUTION: Make sure that the mirrors are always clean and correctly adjusted.



OULXBER,00024EB -19-07NOV14-1/1

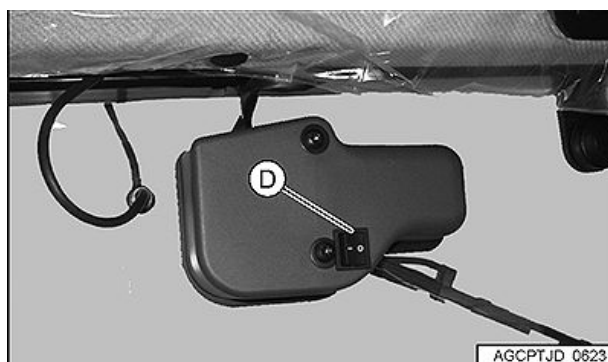
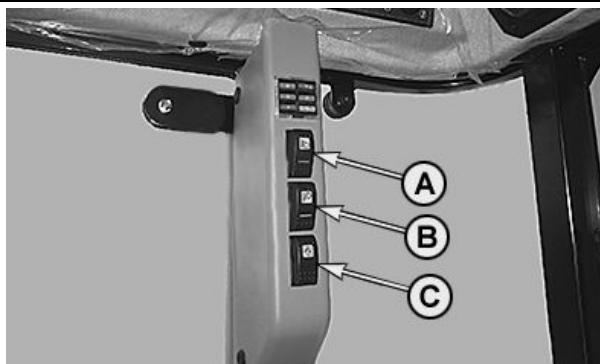
AGCPTJD0716 —UN—02NOV15

Operator's Cab Switches

The cab switches are located in the post on the right-hand side.

A—Front work light switch
B—Rear work light switch

C—Windshield wiper and washer switch
D—Rear window wiper switch



OULXBER,00024EC -19-24OCT14-1/1

AGCPTJD0622 —UN—27OCT14

AGCPTJD0623 —UN—02NOV15

Dome Light

The dome light (A) can be switched on by means of the switch located at the light.



AGCPTJD0624—UN—27OCT14

OULXBER,00024ED -19-24OCT14-1/1

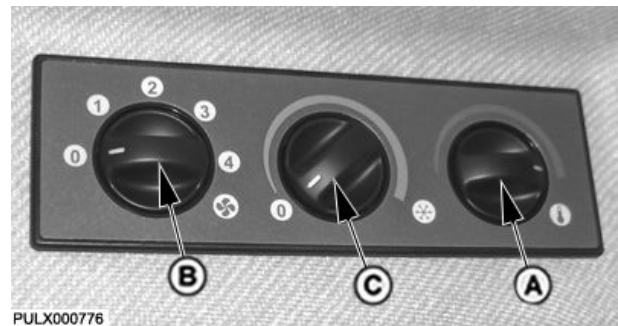
Heater and Air Conditioning System Controls

The cab has been designed to produce comfortable working conditions for the operator with all the windows closed. Fresh air can be brought in from outside the cab or the heated or cooled air within the cab can be recirculated.

The air conditioning system is operated with the following controls:

A—Heater control
B—Blower control

C—Air conditioner control



Tractors with air conditioning system

PULX000776—UN—23JUL08

OULXBER,00024EF -19-28OCT15-1/8

Blower control knob operates the four-speed blower fan. Turn the knob counterclockwise to switch off the fan.

NOTE: When the air conditioning system is switched on and fan switch is off, fan will operate at fan speed (1).

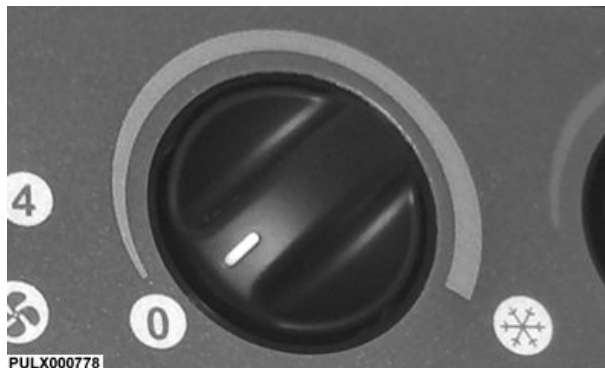


PULX000777—UN—19SEP08

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OULXBER,00024EF -19-28OCT15-2/8

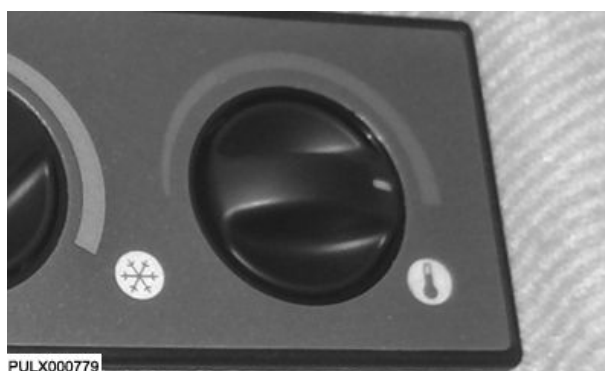
Air conditioner control knob is used to adjust the desired temperature. Turn the knob counterclockwise to switch off and clockwise to cool the air. Always turn off when not in use.



PULX000778 —UN—19SEP08

OULXBER,00024EF -19-28OCT15-3/8

Heat control knob is used to adjust the heat delivered. Turn the knob counterclockwise to switch off and clockwise to heat the air. Full heat output will only be available when the engine has reached full operating temperature.



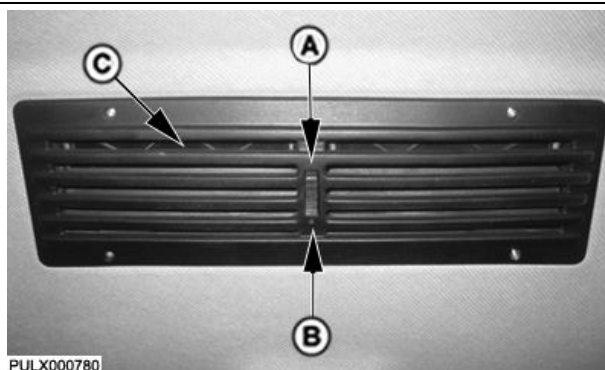
PULX000779 —UN—23JUL08

OULXBER,00024EF -19-28OCT15-4/8

Air Recirculation Control

Move air recirculation control up toward (A) (close) to maximize fresh air into the cab. Moving the air recirculation control down toward (B) (open) will recirculate the air in the cab. The recirculated air will pass through the vents (C), the air filter and back into the blower.

Move air recirculation control up toward (A) (close) to obtain fresh air from outside the cab that gives the maximum cooling effect with the air conditioning off.



PULX000780 —UN—23JUL08

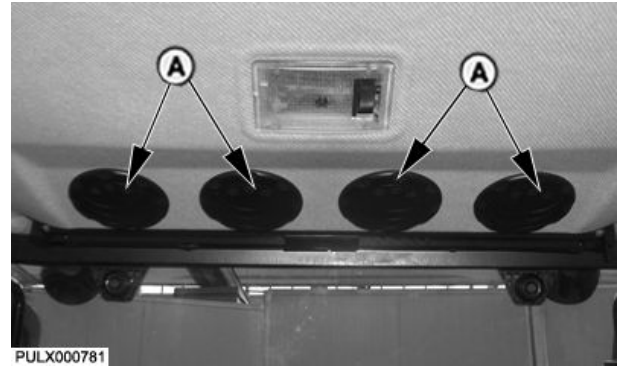
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OULXBER,00024EF -19-28OCT15-5/8

Air Flow Louvers

Fresh air entering the cab from the outside passes through the air filter, blower, heater and air conditioner evaporator. It is blown through a set of four adjustable louvers (A) above the windshield.

⚠ CAUTION: The cab air filter is designed to remove dust from the air but may not exclude chemical vapor. Follow the chemical manufacturer's directions regarding protection from hazardous chemicals.



PULX000781 — UN — 30JUL08

Continued on next page

OULXBER,00024EF -19-28OCT15-6/8

Cold Weather Operation

Open the air recirculation control (A) to recirculate air that has already been heated. This gives the maximum heating effect.

It will be necessary to adjust the opening of the various louvers (B) and (C) to balance the heat output between the windshield and rear window.

To move large quantities of heat to the floor, open the left-hand and right-hand louvers in row (B) and close or partially close the others. Set the blower control (D) to full speed.

Defrosting the Windshield

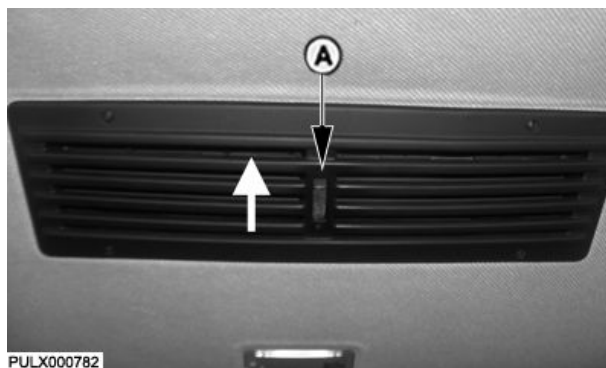
Close the air recirculation control (E) to remove the humidity in the cab. When clear, open the air recirculation control to recirculate air that has already been heated. Open and direct the louvers (B) and (C) to the windshield. Set the blower control (D) to maximum.

Dusty Conditions

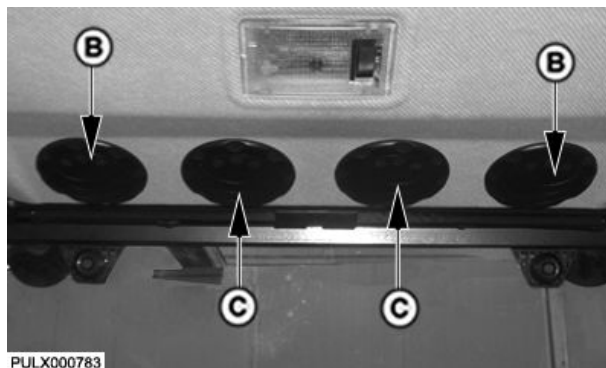
Close the air recirculation control (E) and run the blower on maximum to pressurize the air in the cab.

A—Air recirculation control
B—Louvers
C—Louvers

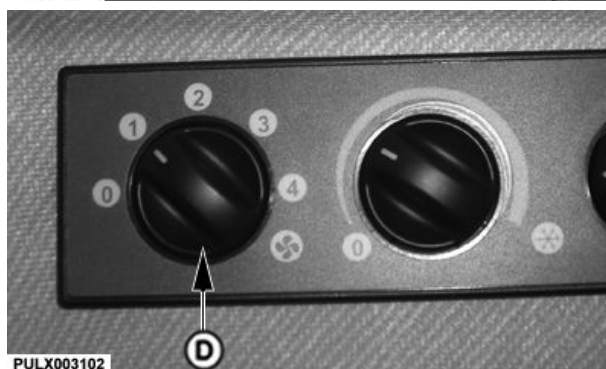
D—Blower control
E—Air recirculation control



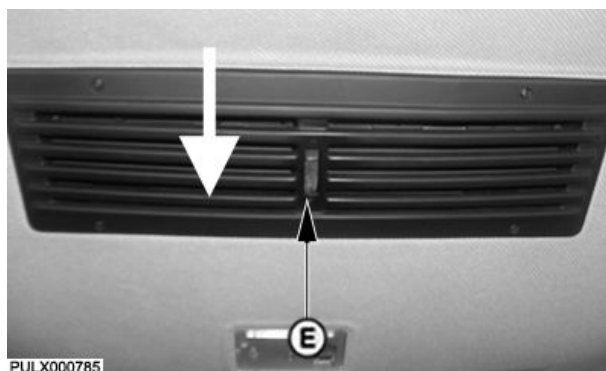
PULX000782 —UN—23JUL08



PULX000783 —UN—23JUL08



PULX003102 —UN—20JAN09



PULX000785 —UN—23JUL08

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OULXBER,00024EF -19-28OCT15-7/8

Air Conditioning Operation

Operating the System

Make sure that all doors, windows, and the roof hatch are closed.

Make sure that the heater control (1) is turned off.

With the engine running, turn on the air conditioner temperature control (2).

Turn on the blower control (3) to mid speed.

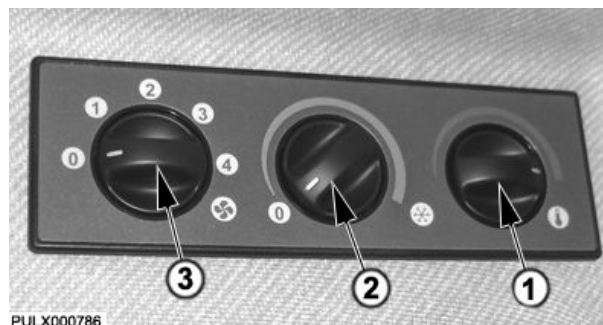
Fully open the air recirculation control (4) by moving left. This will recirculate the air that has been already cooled to give the best cooling effect.

Open and adjust the louvers (5) to obtain the best cooling for the ambient temperature and humidity. Lower blower speeds result in cooler air.

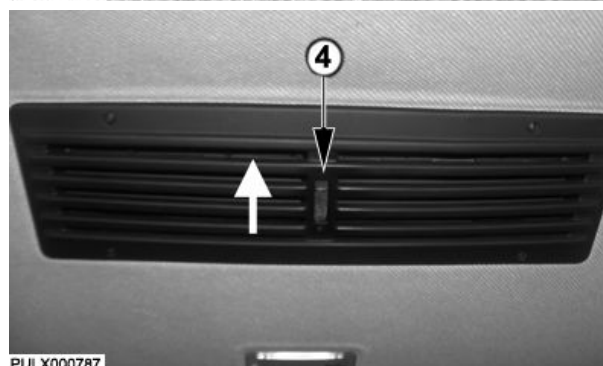
When the desired temperature has been obtained, adjust the blower speed and temperature control to maintain the cooling level. If problems are experienced with the system, immediately inspect for a clogged condenser in front of the engine radiator.

IMPORTANT: Switch on the air conditioning system for approximately 20 minutes every month, even in the cooler seasons. This lubricates the moving parts of the system, e.g. the compressor, and prevents loss of refrigerant.

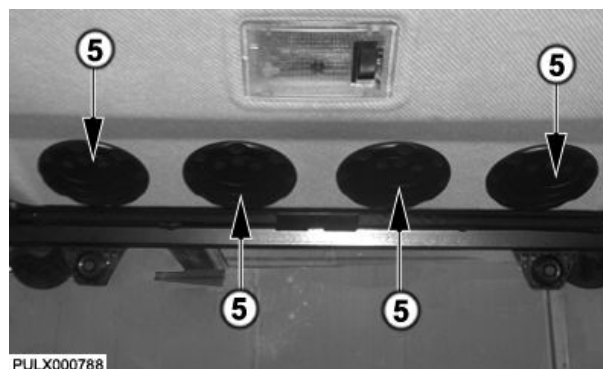
If the blower stops working, set the fan control knob to position 4 and wait at least 1 minute, to allow the fan resistor to cool down. Then restart the blower by switching the control knob to any intermediate position (1 / 2 / 3). If the problem persists, contact your authorized dealer.



PULX000786



PULX000787



PULX000788

PULX000786 —UN—23JUL08

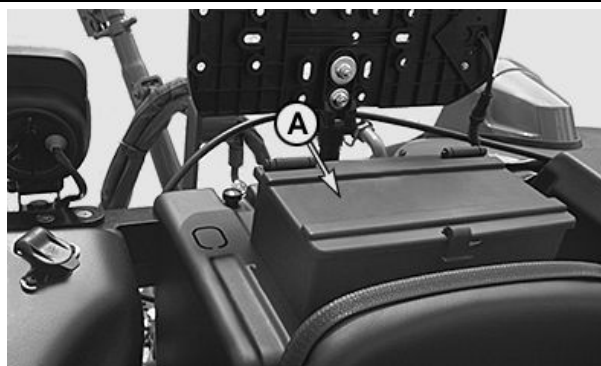
PULX000787 —UN—23JUL08

PULX000788 —UN—23JUL08

OULXBER,00024EF -19-28OCT15-8/8

Tool Box

The tool box (A) can be used for storing a number of tools.

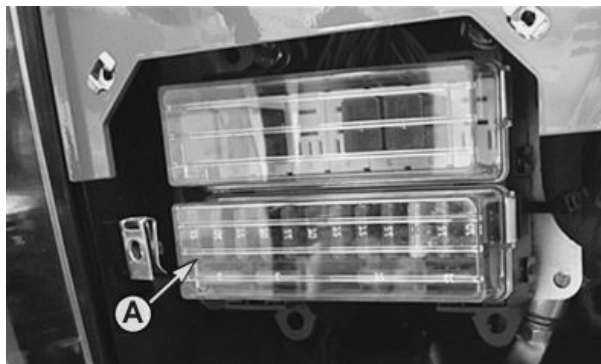


AGCPTJD0381 —UN—12JUL13

OULXBER,0002113GL -19-15JUL13-1/1

Fuse Box

Remove left side cover of instrument unit to gain access to the main fuse box. See "Fuses and Relays" in Section 130.



AGCPTJD0555—UN—18DEC13

OULXBER,0002278GL -19-19DEC13-1/1

Break-In Period

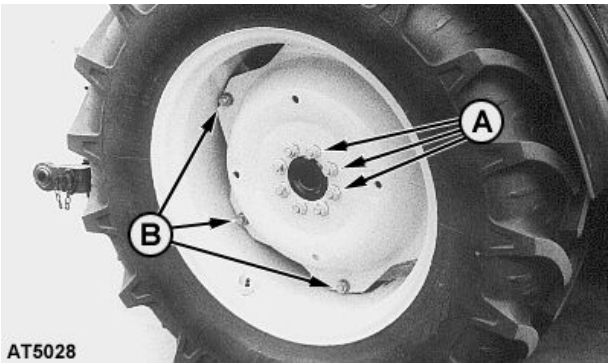
After the First 4 and 8 Hours of Operation

Tighten rear wheel nuts and bolts to specified torque

IMPORTANT: Check tightness of rim, disk and wheel bolts after 10 hours every time you replace wheels.

Specification	
(A)—Torque.....	400 N·m (295 lb-ft)
(B) M18 bolt—Torque.....	280 N·m (207 lb-ft)
(B) M16 bolt—Torque.....	210 N·m 155 lb-ft)

(A) — Disk to axle flange (B) — Rim to disk



AT5028 —UN—15AUG97

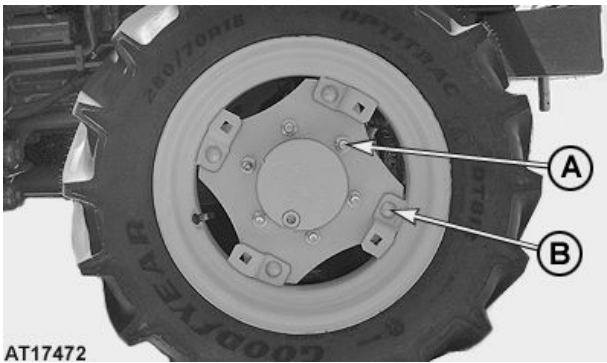
OULXBER,00024F1 -19-02OCT15-1/4

Tighten wheel nuts of front wheel drive axle

IMPORTANT: Check tightness of rim, disk and wheel bolts after 10 hours every time you replace wheels.

Specification	
(A)—Torque.....	300 N·m (220 lb-ft)
(B) M18 bolt—Torque.....	280 N·m (207 lb-ft)
(B) M16 bolt—Torque.....	210 N·m 155 lb-ft)

(A) — Disk to axle flange (B) — Rim to disk



AT17472 —UN—26JUL07

Continued on next page

OULXBER,00024F1 -19-02OCT15-2/4

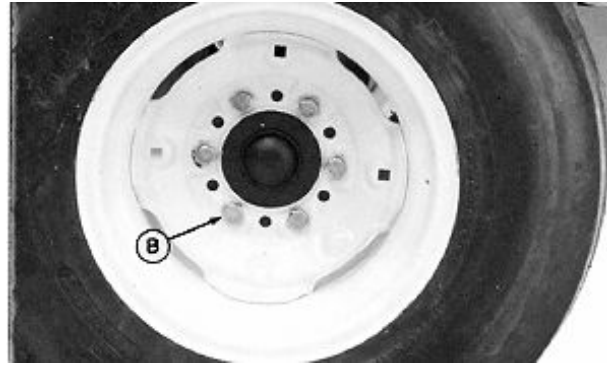
Tighten front wheel nuts and bolts to specified torque

IMPORTANT: Check tightness of rim, disk and wheel bolts after 10 hours every time you replace wheels.

Specification

Disk to axle flange
(tractors without front-wheel drive)—Torque..... 175 N·m (130 lb-ft)

(B) — Disk to axle flange



F-type tractors



AT5117

V-type tractors

OULXBER,00024F1 -19-02OCT15-3/4

M46420 —UN—31JAN92

AT5117 —UN—25OCT00

Adjustable front axle (tractors without front wheel drive)

Specification

(A)—Torque..... 150 N·m (110 lb-ft)

Engine

During the first 100 hours of operation:

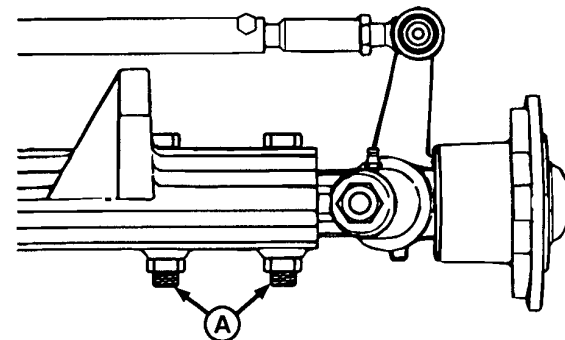
- Operate the engine in the mid- to upper load range, and do not idle it for long periods of time.
- Check oil level in engine frequently.

IMPORTANT: Top up with oil only when the level has dropped to the “low” mark.

NOTE: During the break-in period a higher-than-usual oil consumption should be considered as normal.

If necessary, top up with oils according to standards ACEA E7 and API CI 3.

Recommended



(A) — Axle bolts

- SAE 10W30
- SAE 15W40
- SAE 20W40

OULXBER,00024F1 -19-02OCT15-4/4

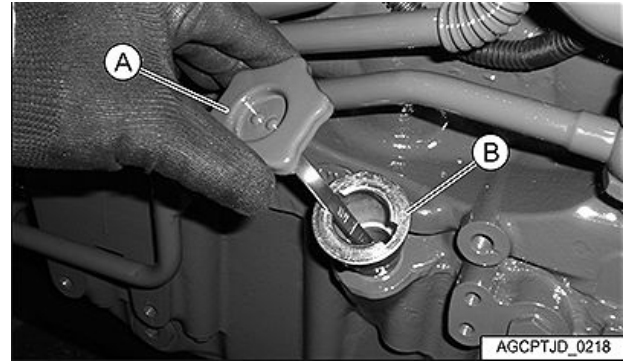
LV812 —UN—20JUL94

Prestarting Checks

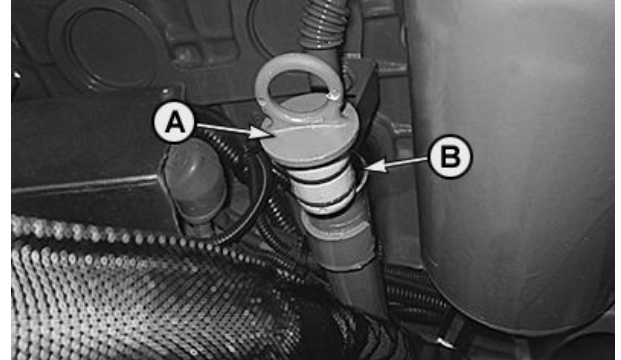
Prestarting Checks

Check engine oil level

Check engine oil level. Remove dipstick (A), wipe clean and reinsert it fully. Remove and check oil level. Safe operating range is between the two marks on dipstick (A). Do not operate engine when oil level is below lower mark on dipstick (A). In this case add specified oil through filler neck (B). See Section 80, "Fuel, Lubricants, Hydraulic Oil and Coolant"



5GL, 5075GV, 5085GV, 5075GN, 5085GN, 5075GF, and 5085GF



5100GN and 5100GF

OULXBER,00024F2 -19-24OCT14-1/2

AGCPTJD0218 —UN—02NOV15

AGCPDAJD0001 —UN—24OCT14

Check coolant level

CAUTION: Only remove radiator cap when engine is cold. Slowly loosen cap to first stop to relieve pressure before removing completely.

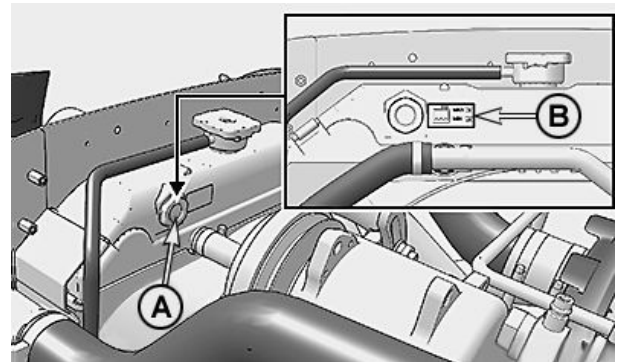
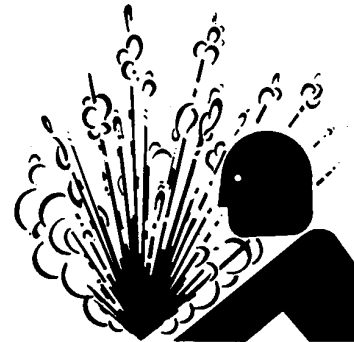
Check coolant level in radiator through the sight glass (A). Coolant level with a cold engine should be between the two marks on the decal (B). Add coolant if necessary.

Lubricate

Lubricate the following items every 10 hours of operation when operating in extremely wet or muddy conditions:

- Front axle pivot pin
- Front axle king pins
- Tie rod ends

Use specified multi-purpose grease. See Section 80, "Fuel, Lubricants, Hydraulic Oil and Coolant". For detailed information, refer to "Lubrication and Periodic Service" in Section 85.



OULXBER,00024F2 -19-24OCT14-2/2

TS281 —UN—15APR13

AGCPTJD0672 —UN—01OCT14

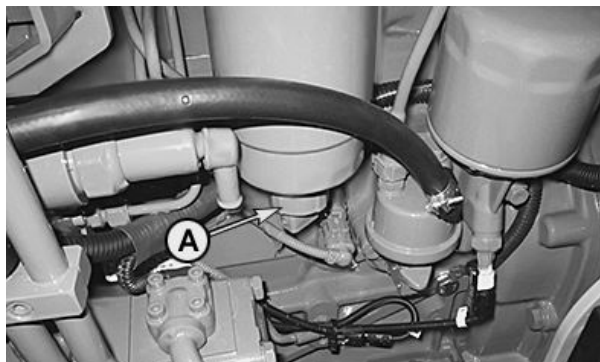
Check the Fuel Filter

⚠ CAUTION: Never open the fuel system when engine is hot. Handle fuel with care, it is highly flammable. Do not replace fuel filter while smoking or when near open flame or sparks.

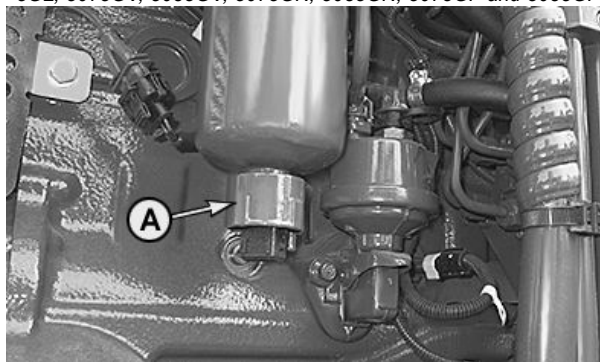
1. Loosen drain screw (A).
2. Retighten drain screw (A) as soon as water and sediment deposits have drained out.

If water was present in fuel filter, open fuel tank drain screw (C), located under the lower fuel tank, to bleed accumulated moisture and sediment from the fuel tank. After draining off any water deposits, retighten drain screw (C) until it is hand-tight.

NOTE: Place a small container under drain screw to catch draining fuel.



5GL, 5075GV, 5085GV, 5075GN, 5085GN, 5075GF and 5085GF



5100GN and 5100GF



All models

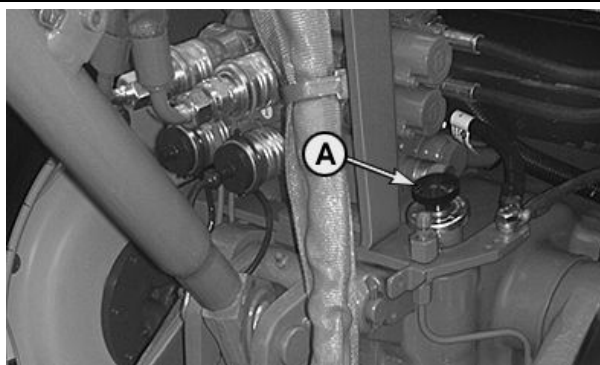
OULXBER,00024F3 -19-04NOV14-1/1

Check Transmission/Hydraulic System Oil Level

Remove dipstick (A), wipe clean and reinsert it fully. Then remove dipstick again and check the Oil level. Add oil if level is not between full mark and end of dipstick. Do not overfill the Transmission/Hydraulic System.

Proceed as described in "Checking Transmission/Hydraulic System Oil Level" in Section "Service - Daily or Every 10 Hours".

If using implements that require a greater quantity of oil in the hydraulic circuit, the oil level must be up to mark "XXX".



OULXBER,0002116GL -19-16JUL13-1/1

Comply with Operator's Manuals of Implement Manufacturers

! CAUTION: Before operating the tractor in conjunction with a mounted implement or trailer, it is the responsibility of the operator to make himself familiar with the relevant Operator's Manuals. Operator errors may have serious consequences.

Operator's Manuals and the safety decals on mounted implements and trailers provide important information on how to operate them safely. For this reason, it is important to make yourself familiar with them before starting work. Operator's Manuals must be provided for all operators of the tractor.



TS201 —UN—15APR13

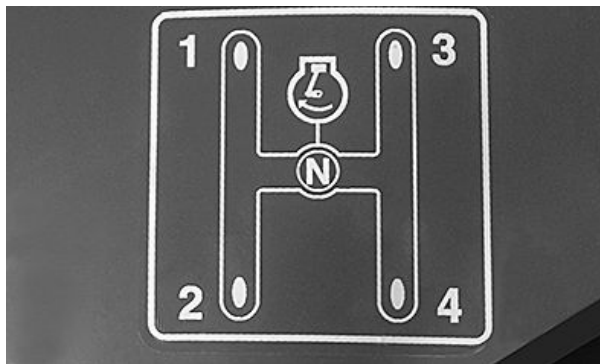
OULXBER,0001B74 -19-16DEC11-1/1

Operating the Engine

Neutral Start Switch

CAUTION: If a range and a gear is selected with the engine running and the reverse drive lever is not in neutral position the tractor will start moving. Always engage parking brake and put the gear lever in **NEUTRAL** position before restarting the tractor. Otherwise the tractor may move slightly even with the reverse drive lever in neutral position.

NOTE: If the tractor is equipped with neutral start switch on the transmission, the gear lever has to be in neutral position, otherwise the engine will not start.



AGCPTJ00725 —UN—30OCT14

OULXBER,00024D8 -19-22OCT14-1/1

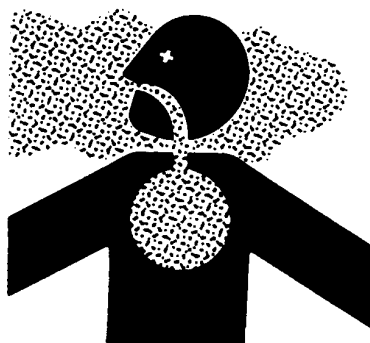
Starting the Engine

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

If you must operate engine in a building, make sure 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.

Also refer to Prevent Machine Runaway in the Safety section.

NOTE: If temperature is below 5° C (40° F), refer to Cold Weather Starting Procedure Using Intake Air Heater System in this Section.



TS220 —UN—15APR13

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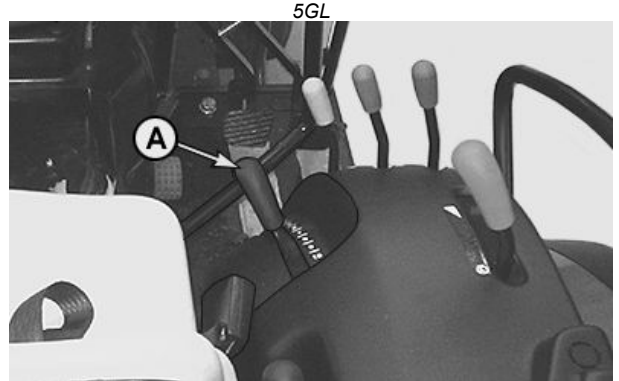
OULXBER,00024D7 -19-04NOV14-1/8

1. Check fuel gauge to be sure that there is plenty of fuel in the tank.
2. Place hitch control lever (A) in lower position.
3. Check alternator indicator light and engine oil pressure indicator light. The indicator lights should glow when key switch is turned to the ON position.

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



AGCPTJD0331 —UN—10JUL13



AGCPDAJD0003 —UN—24OCT14

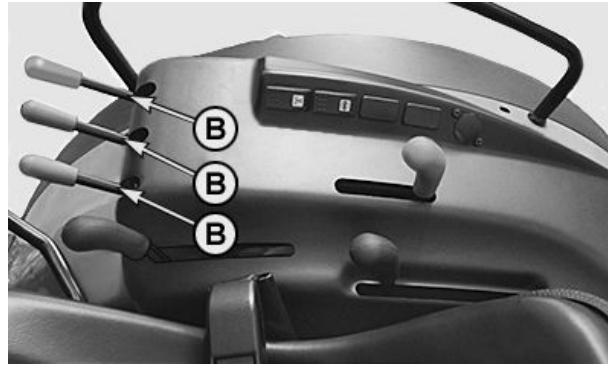
5GV, 5GN and 5GF

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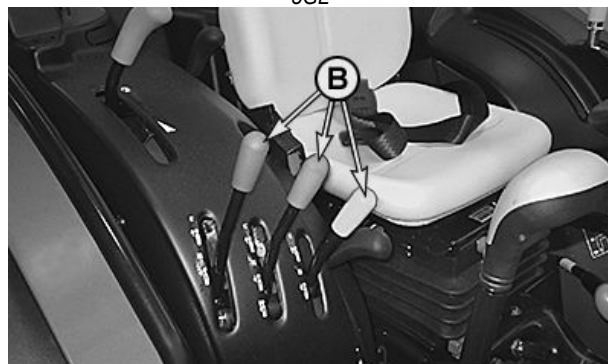
OULXBER,00024D7 -19-04NOV14-2/8

4. Set selective control valve levers (B) to neutral position.

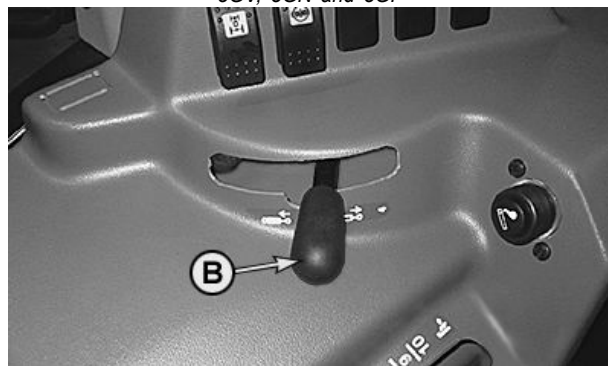
NOTE: All SCV levers are equipped with a lever lock to keep the controls in neutral position.



AGCPTJD0332 —UN—10JUL13



AGCPDAJD0004 —UN—24OCT14



AGCPDAJD0006 —UN—24OCT14

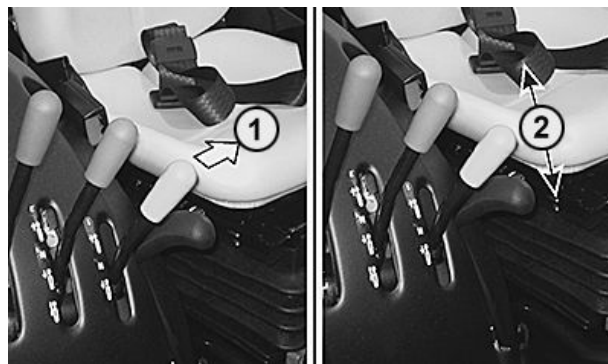
5GV, 5GN and 5GF with 4th SCV

OULXBER,00024D7 -19-04NOV14-3/8

5. To activate the SCV proceed as follows:

1 - Pull levers to driver direction

2 - Keeping lever pulled activate the SCV moving lever forward or backward according to desired action.



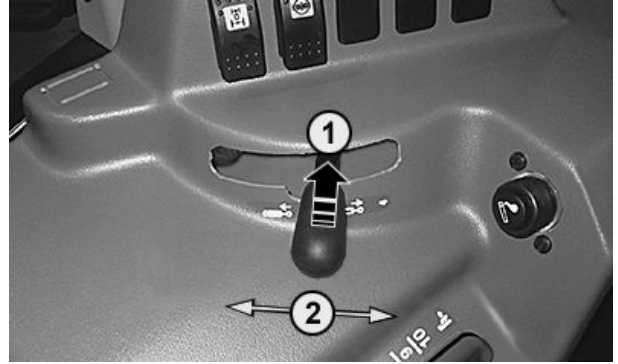
AGCPDAJD0005 —UN—24OCT14

Continued on next page

OULXBER,00024D7 -19-04NOV14-4/8

6. If equipped, activate 4th SCV as follows:

Pull and hold lever upward (1) and move it forward or backward (2) accordingly to the desired action.



AGCPDAJD0007 —UN—24OCT14

OULXBER,00024D7 -19-04NOV14-5/8

7. Move hand throttle lever (C) to a medium speed setting (first third of lever travel).



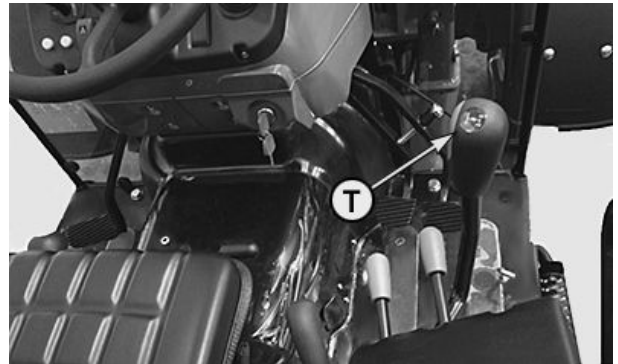
AGCPTJD0333 —UN—10JUL13

OULXBER,00024D7 -19-04NOV14-6/8

8. Always **engage parking brake** and put the gear-shift lever (T) in NEUTRAL position before starting the tractor. Otherwise the tractor may move slightly even with the reverse drive lever in neutral position.

CAUTION: On tractors with 24/12 speed transmission, always engage park brake and put the gear shift lever in neutral position before restarting the tractor. Otherwise the tractor may move slightly even with the reverse drive lever in neutral position.

IMPORTANT: On tractors with 24/12 speed transmission, first move reverse drive lever to neutral position and then to the desired travel direction in order to move the tractor.



AGCPTJD0334 —UN—10JUL13

Continued on next page

OULXBER,00024D7 -19-04NOV14-7/8

9.

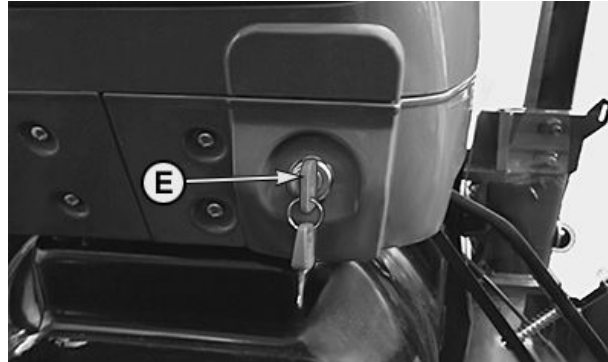
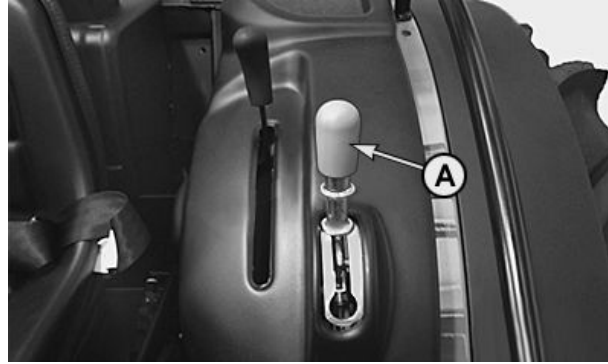
NOTE: The engine will not start if PTO clutch lever (A) is in engaged position.

Turn key in key (E) clockwise to end position. Release key as soon as engine starts.

IMPORTANT: DO NOT operate starting motor more than 20 seconds at a time. If engine does not start, turn the key to the ZERO position and wait at least one minute for the starting motor to cool before trying again.

Do not adjust hand throttle lever. Run engine for a few minutes. At temperatures below 0 °C (32 °F), extend warm-up period accordingly.

CAUTION: Never operate the engine in a closed building. Make sure there is plenty of ventilation.
Danger of asphyxiation!



AGCPTJD0335 —UN—10JUL13

AGCPTJD0336 —UN—10JUL13

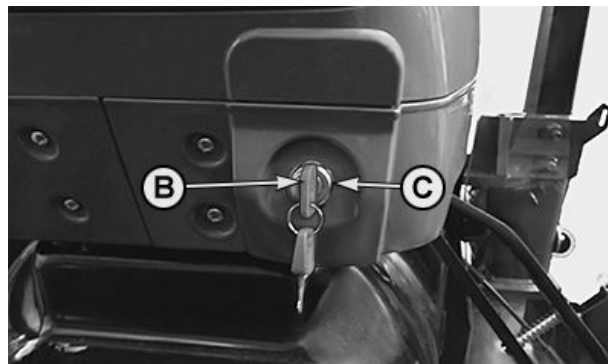
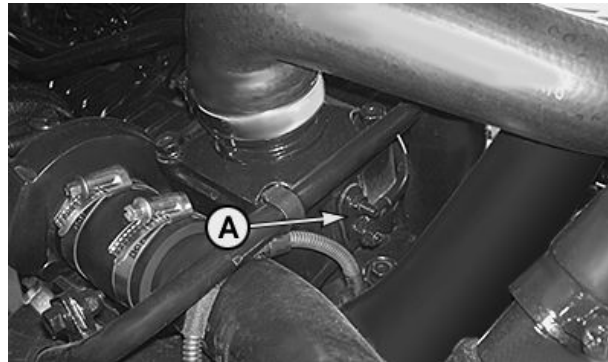
OULXBER,00024D7 -19-04NOV14-8/8

Cold Weather Starting Procedure Using Intake Air Heater System

CAUTION: DO NOT use starting fluid on a tractor equipped with an intake air heater system (ask your John Deere dealer for a complete list of other starting aids available).

The tractors are equipped with an intake air heater system. An electric heating element (A) warms up the intake air.

1. Activate the intake air heater system by pushing in the ignition switch (C) with the ignition key (B). Hold the key in for 10 to 15 seconds with temperatures down to -18° C (0° F), for 30 seconds with temperatures down to -23° C (-10° F) and up to 45 seconds with temperatures below -23° C (-10° F).
2. Turn ignition switch (C) clockwise and start engine.
3. If engine runs rough, activate the intake air heater system by pressing in the key until engine runs smoothly.



AGCPTJD0337 —UN—10JUL13

AGCPTJD0338 —UN—10JUL13

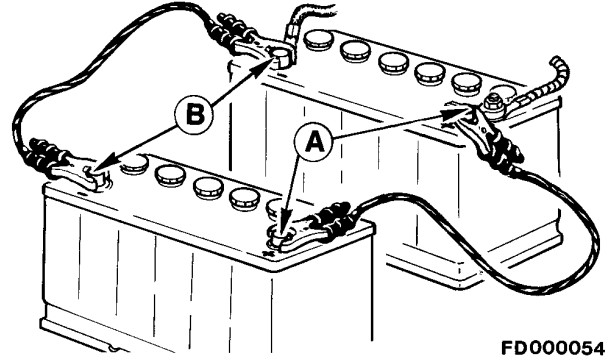
OULXBER,0002250 -19-23OCT13-1/1

Start With a Booster Battery

CAUTION: Gas given off by batteries is highly explosive. Keep sparks and naked flames away from batteries. Be sure polarity is correct before making connections: ground cable to negative pole and starter cable to positive pole of battery.

Reversed polarity will damage the electrical system. Always connect positive cable first and then negative cable!

Connections to allow an additional 12-volt battery to be brought into the circuit represent an effective aid to starting. Connect positive poles (A) of battery before connecting negative poles (B).



FD000054

FD000054 —UN—26JAN95

OULXBER,00020A2 -19-10MAY13-1/1

Start the Engine With a Slave Battery

CAUTION: It is permissible to start a tractor with a slave battery only if that tractor is equipped with jump-start connections authorized by John Deere™. If a tractor is not equipped with connections for jump-starting with a slave battery, then the discharged or defective battery must be replaced with a battery that is sufficiently charged. Have this work performed by your John Deere™ dealer.

CAUTION: Danger of injury, danger of explosion! Take safety precautions, see Handling Batteries Safely in Section 05.

CAUTION: Be sure polarity is correct before making connections.

CONNECT: Connect positive cable (+) first and then negative cable (—). **DISCONNECT:** Disconnect negative cable (—) first and then

positive cable (+). Reversed polarity will damage the electrical system.

IMPORTANT: Cables used for jump-starting must be connected only to the (+) and (—) terminals provided for this purpose.

For jump-starting, use cables that cannot be incorrectly connected (to avoid reversed polarity) and have an approx. 70 mm² cross-section; in addition, the terminals must be insulated.

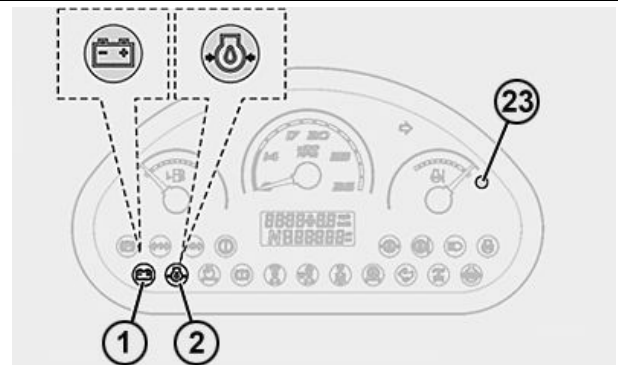
IMPORTANT: If the engine is to be started using a slave battery or run for a short time without battery, do not raise engine speed above 1000 rpm. Furthermore, use additional current (lights) while engine is running.

IMPORTANT: With battery disconnected, insulate the positive battery cable (+) properly to protect the alternator from damage. See also Important Instructions Regarding Alternator in Section 85.

OULXBER,00020A3 -19-08JAN14-1/1

Observe Instruments After Starting the Engine

IMPORTANT: If alternator indicator light (1) or engine oil pressure indicator light (2) fails to go out or coolant temperature gauge (23) indicates hot, stop engine and determine the cause.



AGCPTJD0339 —UN—04NOV13

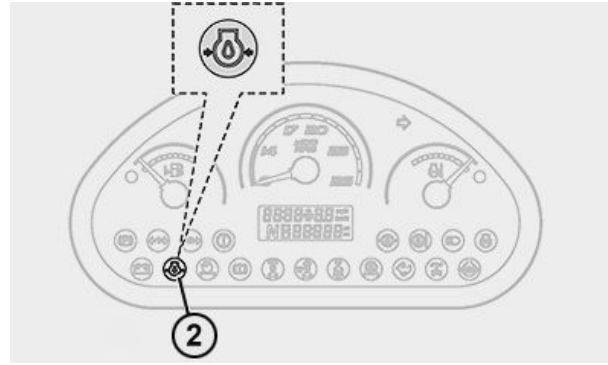
OULXBER,0002251 -19-23OCT13-1/1

Engine Oil Pressure Indicator Light

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

Engine oil pressure indicator light (2) will glow if engine oil pressure is low. Indicator light should glow when key is turned to engage starting motor and go out when engine starts.

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



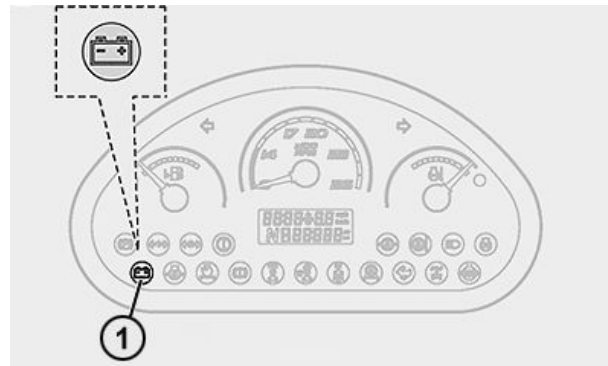
AGCPTJD0340—UN—15JUL13

OULXBER.0002252 -19-23OCT13-1/1

Alternator Indicator Light

The alternator indicator light (1) will glow when alternator output is low. Indicator light should glow when key is turned to engage starting motor and go out when engine starts.

If indicator light glows longer than 5 seconds under normal operating conditions, stop engine and check for cause. If loose or broken fan belt is not the cause, see your John Deere™ dealer.

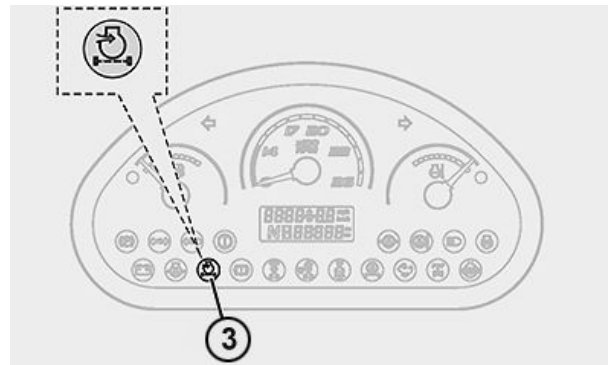


AGCPTJD0341—UN—15JUL13

OULXBER.0002253 -19-04NOV13-1/1

Air Cleaner Indicator Light

The air cleaner indicator light (3) comes on when the air cleaner is restricted. Replace air cleaner as soon as possible.



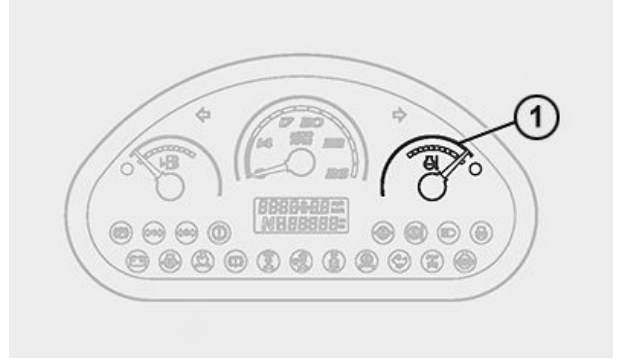
AGCPTJD0342—UN—15JUL13

OULXBER.0002254 -19-23OCT13-1/1

Coolant Temperature Gauge

The needle on the coolant temperature gauge (1) rises as engine warms up. If needle reaches red zone, stop engine and determine the cause.

Check coolant level in coolant expansion tank and radiator when engine cools. Also check grille, radiator and radiator screen for plugging. Check fan belt tension. If problem is not corrected, see your John Deere™ dealer.



AGCPTJD0343 —UN—15JUL13

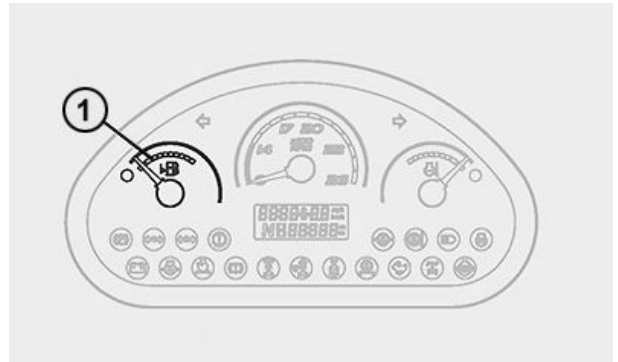
OULXBER,0002256 -19-23OCT13-1/1

Observe Fuel Level

IMPORTANT: Use diesel fuel only. Refer to Section Fuel, Lubricants and Coolant for fuel specifications.

Refuel before fuel gauge (1) reaches empty mark.

Should tractor run out of fuel and not start in several tries, air must be bled from fuel system. See Bleed Fuel System in Section 130, Service - As Required.



AGCPTJD0344 —UN—15JUL13

OULXBER,0002257 -19-23OCT13-1/1

Change Engine Speeds

To increase speed, push hand throttle (F) forward.



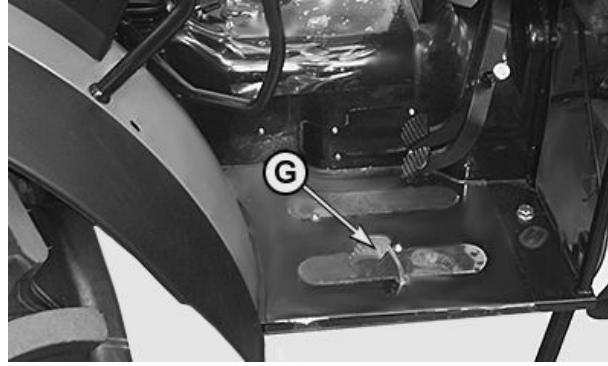
Hand Throttle, all models.

AGCPTJD0345 —UN—10JUL13

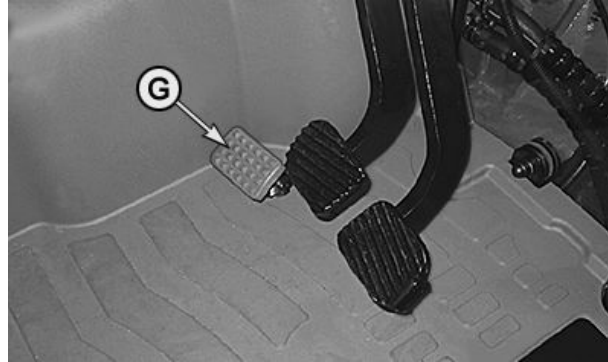
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OULXBER,00024F4 -19-24OCT14-1/2

To increase engine speed temporarily above hand throttle setting, depress foot throttle (G).



Foot Throttle, 5GL.



Foot Throttle, 5GV, 5GN and 5GF.

AGCPTJD0346 —UN—16JAN14

AGCPDAJD0008 —UN—24OCT14

OULXBER,00024F4 -19-24OCT14-2/2

Warm Up the Engine

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

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

NOTE: If hydraulic functions are slow, refer to *Cold-Weather Operation in Section 50, Hitch.*



AGCPTJD0347 —UN—15JUL13

OULXBER,0002259 -19-23OCT13-1/1

Restart a Stalled Engine

Should the engine stall when operating under load, restart it immediately to prevent abnormal heat build up and

continue with normal operation or operate at slow idle for 1 or 2 minutes before stopping.

OULXBER,00020AC -19-10MAY13-1/1

Engines with Turbocharger

IMPORTANT: If the engine stalls when in operation, restart it **IMMEDIATELY**. This will prevent the turbocharger from overheating.

Most damage to the turbocharger is caused by not following the correct procedure when starting and shutting off the engine. After starting and before shutting off, idle the engine without load for at least 30 seconds.

OULXBER,00020AD -19-10MAY13-1/1

Avoid Idling the Engine

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

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



OULXBER,000225A -19-23OCT13-1/1

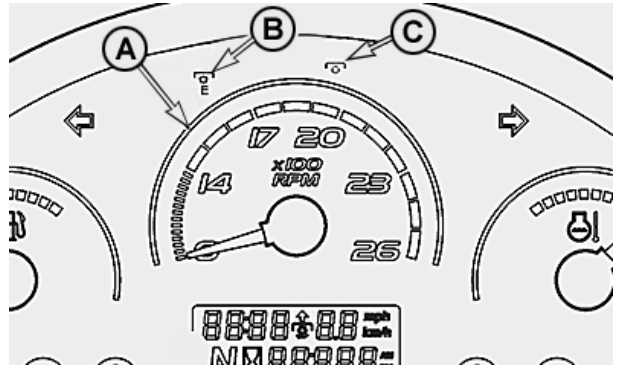
AGCPTJD0347 —UN—15JUL13

Speedometer, Revolution Counter and Hour Meter

Revolution counter (A) shows engine rpm, read in hundreds.

For standard 540 rpm PTO speed, increase engine speed until needle is aligned with 1938 rpm mark (C).

For 540E PTO operation, increase engine speed until needle is aligned with 1648 rpm mark (B).



OULXBER,00024F5 -19-24OCT14-1/1

AGCPTJD0630 —UN—27OCT14

Observe Engine Work and Idle Speeds

Low idle speed should be 825 to 875 rpm. At light or no load, full throttle speed will increase to 2460 - 2510 rpm.

Engine rated speed is 2300 rpm.

Normal operating speed is 1200 to 2300 rpm. Within these limits engine can be put under full load.

OULXBER,00020AF -19-10MAY13-1/1

Stop the Engine

CAUTION: Lower mounted implements or equipment to the ground before leaving the tractor.

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

1. Pull hand throttle (F) back to slow idle position. Allow engine to idle for 1 to 2 minutes.
2. Turn key switch to the "OFF" position.

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



OULXBER,000225B -19-23OCT13-1/1

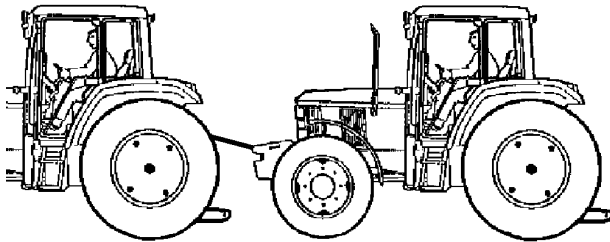
AGCPTJD0353 —UN—10JUL13

Park the Tractor

Apply the park brake when parking or operating the tractor from a stationary position.

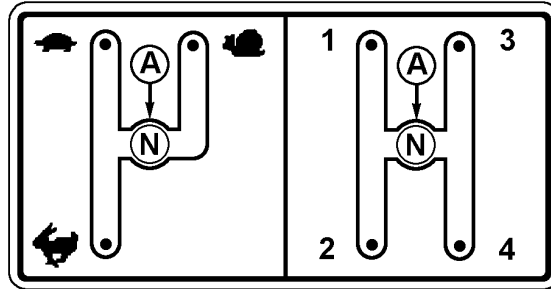
OULXBER,00020B2 -19-10MAY13-1/1

Tow the Tractor



AT1277

AT1277 —UN—12JUN01



AT1289

AT1289 —UN—05JUL01

A—Towing position

A disabled tractor is best transported on a flatbed carrier. See information given in Section 75, Transport.

CAUTION: Never tow the tractor at a speed greater than 10 km/h (6.2 mph).

Shift the gear-shift lever to neutral position (A) and the range-shift lever to the neutral position (A).

IMPORTANT: On tractors with front-wheel drive, switch off front-wheel drive if the engine is running.

OULXBER,00020B3 -19-10MAY13-1/1

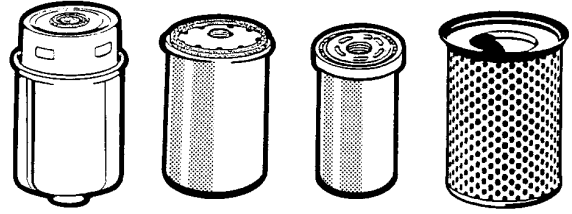
Operating the Tractor

Reduce Fuel Consumption

Service Correctly

Replace air cleaner element and fuel, engine oil and transmission/hydraulic filter elements at specified service intervals (see "Service" section).

Use only John Deere filters!

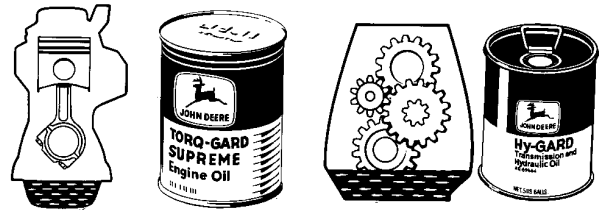


LX007829

LX007829 —UN—15AUG94

OULXBER,000200D -19-31JAN13-1/7

Use recommended oils and lubricants only (see Fuel, Lubricants, Hydraulic Oil and Coolant section).

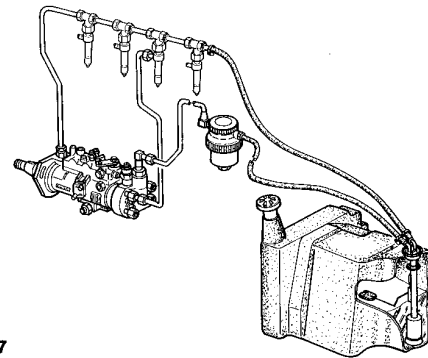


L103 642

L103642 —UN—15AUG94

OULXBER,000200D -19-31JAN13-2/7

Have the fuel system checked regularly by your John Deere dealer.



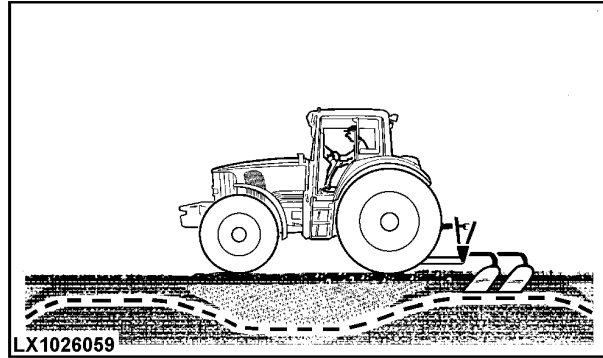
LX000347

LX000347 —UN—15AUG94

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OULXBER,000200D -19-31JAN13-3/7

Have function of hitch control checked regularly by your John Deere dealer.



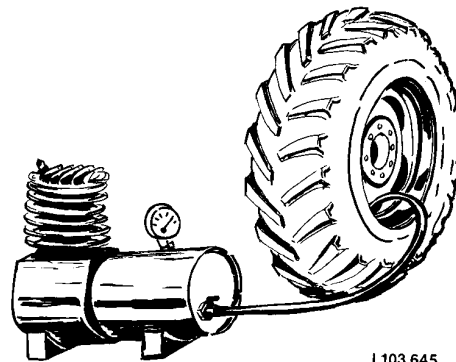
LX1026059

LX1026059 —UN—18MAY01

OULXBER,000200D -19-31JAN13-4/7

Drive with Correct Tire Pressures

Adapt tire pressures to type of work and ground conditions (consult your John Deere dealer or local tire agent).



L103 645

L103645 —UN—15AUG94

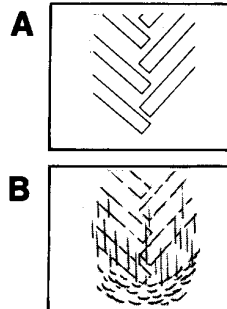
OULXBER,000200D -19-31JAN13-5/7

Choose Correct Ballast

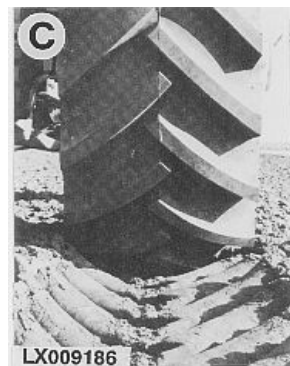
Choose ballast to obtain 10 to 15 % wheel slip. Use no more ballast than necessary, reduce ballast for light work.

A—Too much ballast
B—Too little ballast

C—Correct ballast



LX009185



LX009186

LX009185 —UN—01SEP94

LX009186 —UN—01SEP94

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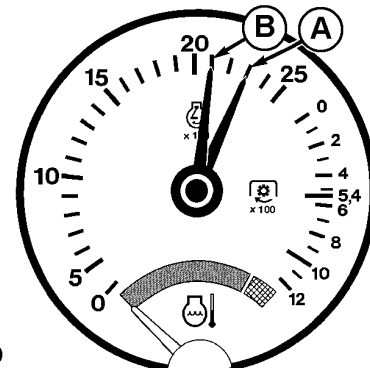
OULXBER,000200D -19-31JAN13-6/7

Select Correct Gear

Always drive in the highest possible gear with reduced engine speed.

Choose a gear so that engine speed (A) with engine not under load drops 150 to 250 rpm when the tractor is operating and the engine is under load (B).

NOTE: For light work, reduce engine speed below 2000 rpm. Select a gear so that engine speed drops 200 to 300 rpm when operating.



LX1017710

LX1017710 —UN—01OCT97

OULXBER,000200D -19-31JAN13-7/7

Operator Training Required

- Read this manual carefully before operating tractor.
- Operate tractor in an open, unobstructed area under direction of an experienced operator.
- Learn use of all controls.

OULXBER,000200E -19-31JAN13-1/1

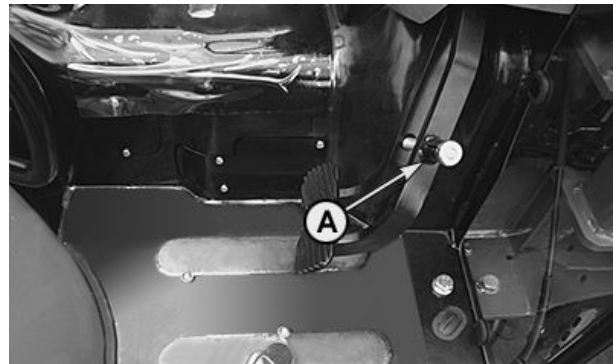
Driving Tractor on Public Roads

CAUTION: When driving on a public road, use accessory lights and devices for adequate warning to operators of other vehicles. Check local governmental regulations. Various safety devices are available from your John Deere dealer. Keep safety items in good condition. Replace missing or damaged items.

NEVER operate rear facing work light when transporting tractor. A clear bright light at the rear of the tractor could confuse drivers of other vehicles as they approach from the rear.

Before operating tractor on a road, lock brake pedals together. Use brake lightly and cautiously at transport speeds.

IMPORTANT: Refer to Section Lights for detailed descriptions of lighting operations and functions.



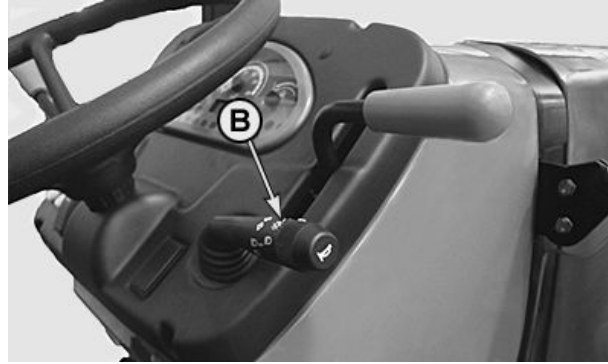
1. Couple brake pedals together using locking pin (A). Avoid hard applications of brakes. Reduce speed if towed load weighs more than the tractor and is not equipped with brakes (refer to implement operator's manual for recommended transport speeds).

AGOPTJD0354 —UN—10JUL13

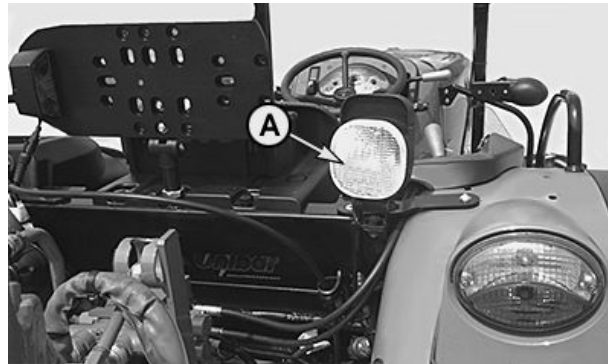
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OULXBER,0002122GL -19-19JUL13-1/3

2. Turn the light switch (B) to the full beam headlights or the low beam headlights position. Never use rear work lights (A). Always dim headlights before meeting another vehicle. Keep headlights properly adjusted.
3. Use turn signals when turning. Be sure to return turn signal switch to center position after turning.



AGCPTJD0355 —UN—11JUL13



AGCPTJD0356 —UN—11JUL13

OULXBER,0002122GL -19-19JUL13-2/3

4. Disengage front-wheel drive using switch (B). Driving on hard surfaces with front-wheel drive engaged will result in excessive wear of front tires.
5. Do not engage the differential lock. See Use Differential Lock in this Section.
6. Drive slowly enough to maintain control at all times. Slow down for hillsides, rough ground, and sharp turns, especially when transporting heavy, rear mounted equipment.
7. Before going down a hill, shift to a gear low enough to control speed without using brakes. Never coast downhill.
8. When driving 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 tractor has proper ballast.
9. Use additional caution when transporting towed loads under adverse surface conditions and when turning or



AGCPTJD0357 —UN—11JUL13

braking on inclines. Be sure wheel tread is adjusted wide to provide maximum stability.

OULXBER,0002122GL -19-19JUL13-3/3

Chock Block

Place chock block in front of or behind rear wheel, when parking the tractor on sloping ground.



L102664

L102664 —UN—03JAN95

OULXBER,0002010 -19-31JAN13-1/1

Shifting Transmission

Range, Gear, Mechanical Splitter and Electrohydraulic Hi-Lo Shifts:

IMPORTANT: To prevent unnecessary wear, never "ride" the clutch by resting a foot on the pedal.

To prevent transmission damage, do not make range shifts on-the-go.

Depress clutch pedal (A) and stop tractor before shifting the range shift lever (B) and reverse drive lever (E).

Depress clutch pedal (A) before shifting the gear shift lever (D). Gears (1), (2), (3) and (4) can be shifted on-the-go.

Depress clutch pedal (A) before shifting the mechanical Hi-Lo shift lever (C). The mechanical Hi-Lo can be shifted on-the-go.

Release clutch pedal gradually to take up load smoothly.



AGCPTJD0358 —UN—11JUL13



AGCPTJD0359 —UN—11JUL13

Continued on next page

OULXBER,0002542 -19-04NOV14-1/4

Reverse Drive Lever

The reverse drive lever (T) has three positions:

- Forward
- Neutral
- Reverse

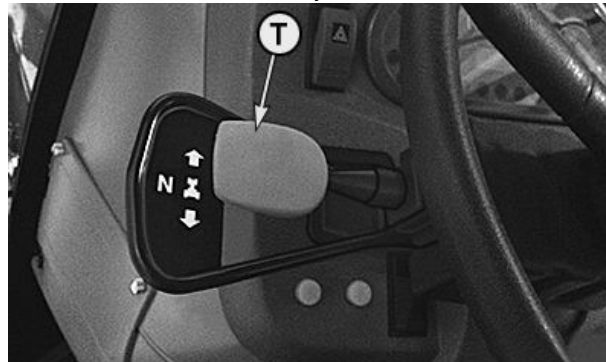
With clutch pedal depressed, push lever (T) forward from neutral to select forward travel or pull back from neutral to select reverse travel.

NOTE: The 24/12 speed transmission can be operated without depressing the clutch.

For further information see *Shifting Transmission – 24/12 Speed Transmission* in this Section



Mechanically actuated



Electrically actuated

AGCPTJD0360 —UN—11JUL13

AGCPTJD0625 —UN—27OCT14

OULXBER,0002542 -19-04NOV14-2/4

Shifting Transmission - 24/12 Speed Transmission

To prevent transmission damage, do not make range shifts on-the-go.

Depress clutch pedal and stop tractor before shifting the range shift lever. If oil temperature is very low shift ranges only with gear shift lever in neutral position.

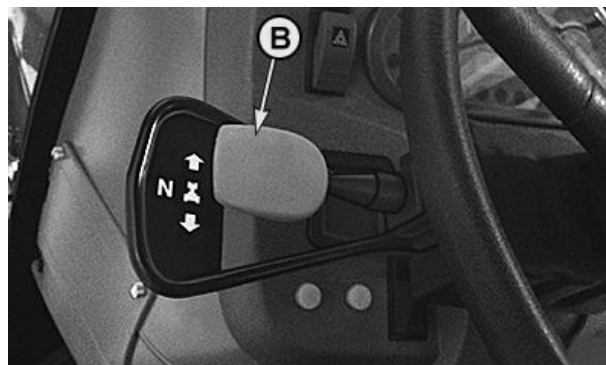
The reverse drive lever (B) has three positions:

- Forward
- Neutral
- Reverse

The reverse drive lever (B) and the gear shift lever can be shifted on-the-go without depressing the clutch pedal.

Push reverse drive lever (B) forward from neutral to select forward travel or pull back from neutral to select reverse travel.

CAUTION: If a range and a gear is selected with the engine running and the reverse drive lever is not in neutral position the tractor will start moving.



On tractors with 24/12 speed transmission, always engage park brake and put the gear lever in "NEUTRAL" position before restarting the tractor.

AGCPTJD0628 —UN—27OCT14

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OULXBER,0002542 -19-04NOV14-3/4

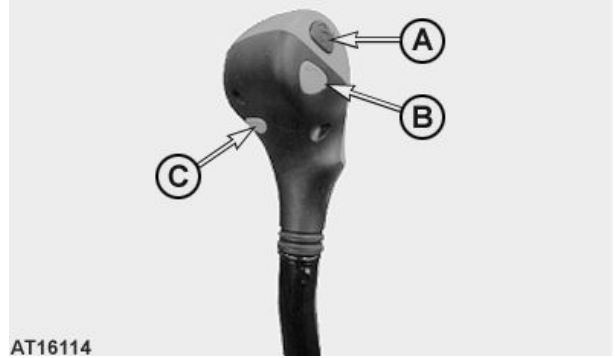
Electrohydraulic Hi-Lo Transmission¹

The "Hi" or "Lo" speed is activated by operating switch (A) or (B), located on the gear lever.

When pushing the switch (C) the clutch is disengaged, the gears can be shifted up or down. After releasing the switch (C), the clutch is engaged.

A—High Speed
B—Low Speed

C—Declutch Switch (Tractors with 24/12 Speed Transmission Only)



AT16114

AT16114 —UN—03AUG07

¹if equipped.

OULXBER,0002542 -19-04NOV14-4/4

Operate Transmission Shift Levers

The transmission gear shift lever (D) operates in an H-pattern.

- Center position is neutral.
- Move the lever from neutral to the left and forward to select the first gear.
- Move the lever from neutral to the left and rearward to select the second gear.
- Move the lever from neutral to the right and forward to select the third gear.
- Move the lever from neutral to the right and rearward to select the fourth gear.



AGCPTJD0359 —UN—11JUL13

Range Shifting

The transmission range lever (B) has three positions:

- Forward is low range.

- Rearward is high range.
- To the right and forward is creeper.

OULXBER,0002543 -19-04NOV14-1/1

Mechanical Hi-Lo Transmission

The mechanical Hi-Lo transmission is available as an option for the 24/24 speed transmission.

With clutch pedal depressed, the mechanical Hi-Lo transmission can be shifted in any gear and on-the-go from low speed to high speed and vice versa, using lever (C).

- Lever forward is high speed
- Lever rearward is low speed



AGCPTJD0362 —UN—11JUL13

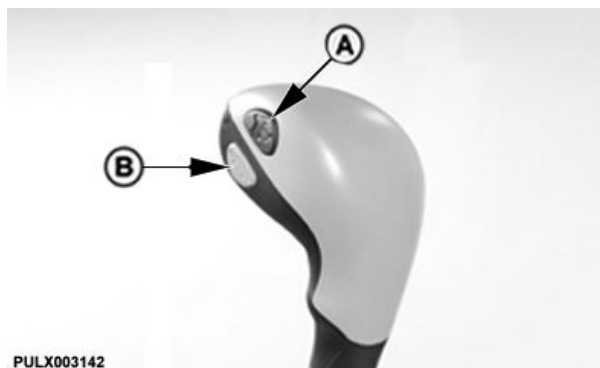
OULXBER,00024F6 -19-24OCT14-1/1

Electro-Hydraulic Hi-Lo Transmission

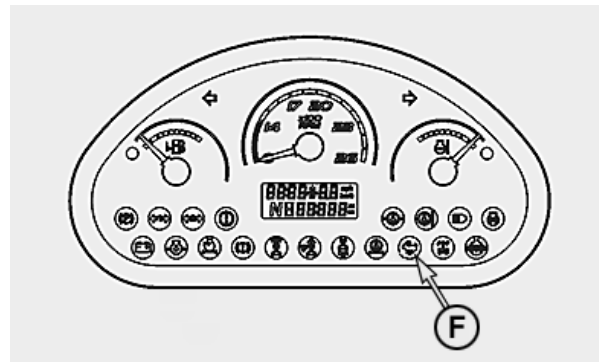
The electro-hydraulic Hi-Lo transmission is available as an option for the 24/24 speed transmission. The electro-hydraulic Hi-Lo transmission can be shifted in any gear, on-the-go and under load, without using the clutch from low speed to high speed and vice versa, using switches (A) and (B) located on the gear shift lever. When "Hi" speed is selected the indicator light (F) at the dashboard lights up.

A—High speed
B—Low speed

C—Indicator light



PULX003142



OULXBER,00024F7 -19-24OCT14-1/1

PULX003142 —UN—17MAR09

AGCPTJD0629 —UN—27OCT14

Use Caution on Slopes, Uneven Terrain, and Rough Ground

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.

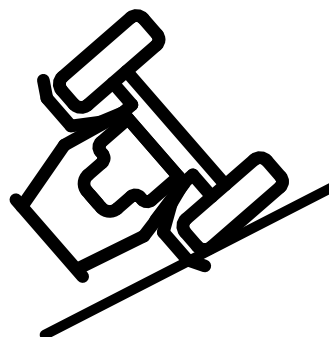
Danger of overturn increases greatly with narrow tread setting, at high speed.

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.

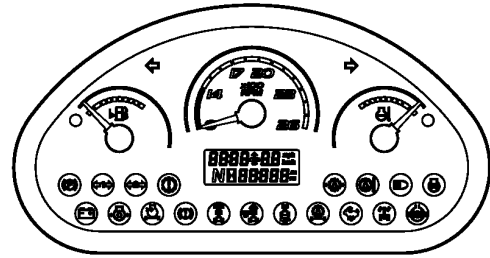
DX,WW,SLOPE -19-28FEB17-1/1

RXA0103437 —UN—01JUL09

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 1500 rpm and 2300 rated engine 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.



AGOPTJD0363 —UN—15JUL13

OULXBER,0002125GL -19-19JUL13-1/1

Travel Speeds

Travel Speeds, 40 km/h (25 mph) - 24/24 Speed Transmission (5GL Tractors)

Travel Speeds, 40 km/h (25 mph) - 24/24 Speed Transmission (5GL Tractors)								
RANGE	GEAR	HI-LO	Tractor travel speed at engine speed of 2300 rpm.					
			Rear tire index radius (SRI)					
			575 mm (22.63 in.)		500 mm (19.68 in.)		525 mm (20.66 in.)	
			km/h	mph	km/h	mph	km/h	mph
I	1	LO	0.5	0.3	0.5	0.3	0.5	0.3
	1	HI	0.6	0.4	0.6	0.4	0.6	0.4
	2	LO	0.8	0.5	0.7	0.4	0.7	0.5
	2	HI	0.9	0.6	0.8	0.5	0.8	0.5
	3	LO	1.1	0.7	1.0	0.6	1.0	0.7
	3	HI	1.3	0.9	1.2	0.7	1.2	0.8
	4	LO	1.6	1.0	1.4	0.9	1.5	1.0
	4	HI	1.9	1.2	1.7	1.1	1.8	1.1
II	1	LO	2.5	1.6	2.1	1.4	2.2	1.4
	1	HI	2.9	1.8	2.5	1.6	2.6	1.7
	2	LO	3.5	2.3	3.1	2.0	3.2	2.1
	2	HI	4.1	2.6	3.6	2.3	3.8	2.4
	3	LO	5.2	3.3	4.5	2.9	4.7	3.0
	3	HI	6.1	3.9	5.3	3.4	5.5	3.6
	4	LO	7.5	4.8	6.5	4.2	6.8	4.4
	4	HI	8.8	5.6	7.6	4.9	8.0	5.1
III	1	LO	10.8	6.9	9.4	6.0	9.9	6.3
	1	HI	12.7	8.1	11.1	7.1	11.6	7.4
	2	LO	15.6	10.0	13.5	8.7	14.2	9.1
	2	HI	18.2	11.7	15.9	10.2	16.7	10.7
	3	LO	22.8	14.6	19.9	12.7	20.9	13.4
	3	HI	26.8	17.1	23.3	14.9	24.5	15.7
	4	LO	33.0	21.1	28.7	18.4	30.1	19.3
	4	HI	38.7	24.8	33.7	21.6	35.4	22.6
			MAXIMUM VELOCITY IN REVERSE GEAR					
			km/h	mph	km/h	mph	km/h	mph
			28.9	18.5	25.1	16.1	26.4	16.9

Travel Speeds, 30 km/h (18,5 mph) - 12/12 Speed Transmission (5100GN – 5100GF with NEF engine)

Travel Speeds, 30 km/h (18,5 mph) - 12/12 Speed Transmission (5100GN – 5100GF with NEF engine)									
RANGE	GEARS	Tractor travel speed at engine speed of 2200 rpm.							
		4WD 30 km/h				2WD			
		SRI 650 mm (25,59 in.)		SRI 550 mm (21,65 in.)		SRI 650 mm (25,59 in.)		SRI 550 mm (21,65 in.)	
		km/h	mph	km/h	mph	km/h	mph	km/h	mph
I	1	1.4	0.9	1.2	0.8	1.4	0.9	1.2	0.8
	2	2.1	1.3	1.8	1.1	2.1	1.3	1.8	1.1
	3	3.0	1.9	2.5	1.6	3.0	1.9	2.5	1.6
	4	4.3	2.8	3.7	2.3	4.3	2.8	3.7	2.3
II	1	3.6	2.3	3.0	1.9	3.6	2.3	3.0	1.9
	2	5.2	3.3	4.4	2.8	5.2	3.3	4.4	2.8
	3	7.5	4.8	6.4	4.1	7.5	4.8	6.4	4.1
	4	10.9	7.0	9.2	5.9	10.9	7.0	9.2	5.9

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OULXBER,00024F8 -19-04NOV14-1/5

Operating the Tractor

III	1	9.6	6.1	8.1	5.2	9.6	6.1	8.1	5.2
	2	14.0	8.9	11.8	7.6	14.0	8.9	11.8	7.6
	3	20.2	12.9	17.1	10.9	20.2	12.9	17.1	10.9
	4	29.2	18.7	24.7	15.8	29.2	18.7	24.7	15.8
		MAXIMUM VELOCITY IN REVERSE GEAR							
		[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
		24.8	15.9	21.0	13.5	24.8	15.9	21.0	13.5

Travel Speeds, 30 km/h (18,5 mph) - 12/12 Speed Transmission (5075GV – 5086GV – 5075GN – 5085GN – 5075GF – 5085GF with F5C engine)

Travel Speeds, 30 km/h (18,5 mph) - 12/12 Speed Transmission (5075GV – 5086GV – 5075GN – 5085GN – 5075GF – 5085GF with F5C engine)									
Range	Gears	Travel speed at engine speed of 2300 rpm							
		4WD 30 km/h				2WD			
		SRI 650 mm (25,59 in.)		SRI 550 mm (21,65 in.)		SRI 650 mm (25,59 in.)		SRI 550 mm (21,65 in.)	
		[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
I	1	1.5	1.0	1.3	0.8	1.5	1.0	1.3	0.8
	2	2.2	1.4	1.8	1.2	2.2	1.4	1.8	1.2
	3	3.1	2.0	2.6	1.7	3.1	2.0	2.6	1.7
	4	4.5	2.9	3.8	2.5	4.5	2.9	3.8	2.5
II	1	3.7	2.4	3.2	2.0	3.7	2.4	3.2	2.0
	2	5.4	3.5	4.6	2.9	5.4	3.5	4.6	2.9
	3	7.9	5.0	6.7	4.3	7.9	5.0	6.7	4.3
	4	11.4	7.3	9.6	6.2	11.4	7.3	9.6	6.2
III	1	10.0	6.4	8.5	5.4	10.0	6.4	8.5	5.4
	2	14.6	9.3	12.3	7.9	14.6	9.3	12.3	7.9
	3	21.1	13.5	17.9	11.4	21.1	13.5	17.9	11.4
	4	30.6	19.6	25.9	16.5	30.6	19.6	25.9	16.5
		MAXIMUM VELOCITY IN REVERSE GEAR							
		[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
		26.0	16.6	22.0	14.1	26.0	16.6	22.0	14.1

Travel Speeds, 40 km/h (25 mph) - 24/24 Speed Transmission - synchro rev/ synchro Hi-Lo – synchro rev/power Hi-Lo (5100GN – 5100GF with NEF engine)

Travel Speeds, 40 km/h (25 mph) - 24/24 Speed Transmission - synchro rev/ synchro Hi-Lo – synchro rev/power H-L (5100GN – 5100GF with NEF engine)												
RANGE	GEARS	HI/LO	Travel Speed at engine speed of 2200 rpm									
			SRI 650 mm (25,59 in.)		SRI 625 mm (24,60 in.)		SRI 600 mm (23,62 in.)		SRI 550 mm (21,65 in.)		SRI 525 mm (20,66 in.)	
			[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
I	1	LO	0.5	0.3	0.5	0.3	0.5	0.3	0.4	0.3	0.4	0.3
	1	HI	0.6	0.4	0.6	0.4	0.6	0.4	0.5	0.3	0.5	0.3
	2	LO	0.7	0.5	0.7	0.5	0.7	0.4	0.6	0.4	0.6	0.4
	2	HI	0.9	0.6	0.8	0.5	0.8	0.5	0.7	0.5	0.7	0.5
	3	LO	1.1	0.7	1.0	0.7	1.0	0.6	0.9	0.6	0.9	0.6
	3	HI	1.3	0.8	1.2	0.8	1.2	0.7	1.1	0.7	1.0	0.7
	4	LO	1.6	1.0	1.5	1.0	1.4	0.9	1.3	0.8	1.3	0.8
	4	HI	1.8	1.2	1.8	1.1	1.7	1.1	1.5	1.0	1.5	0.9

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Operating the Tractor

II	1	LO	2.3	1.5	2.2	1.4	2.2	1.4	2.0	1.3	1.9	1.2
	1	HI	2.7	1.8	2.6	1.7	2.5	1.6	2.3	1.5	2.2	1.4
	2	LO	3.4	2.2	3.3	2.1	3.1	2.0	2.9	1.8	2.7	1.8
	2	HI	4.0	2.6	3.8	2.5	3.7	2.4	3.4	2.2	3.2	2.1
	3	LO	4.9	3.1	4.7	3.0	4.5	2.9	4.2	2.7	4.0	2.5
	3	HI	5.8	3.7	5.5	3.5	5.3	3.4	4.9	3.1	4.7	3.0
	4	LO	7.1	4.5	6.8	4.4	6.6	4.2	6.0	3.9	5.7	3.7
	4	HI	8.3	5.3	8.0	5.1	7.7	4.9	7.1	4.5	6.7	4.3
III	1	LO	10.3	6.6	9.9	6.3	9.5	6.1	8.7	5.6	8.3	5.3
	1	HI	12.0	7.7	11.6	7.4	11.1	7.1	10.2	6.5	9.7	6.2
	2	LO	15.0	9.6	14.4	9.2	13.8	8.8	12.7	8.1	12.1	7.7
	2	HI	17.6	11.2	16.9	10.8	16.2	10.4	14.9	9.5	14.2	9.1
	3	LO	21.7	13.9	20.8	13.3	20.0	12.8	18.3	11.7	17.5	11.2
	3	HI	25.4	16.3	24.4	15.6	23.5	15.0	21.5	13.8	20.5	13.1
	4	LO	31.4	20.1	30.2	19.3	29.0	18.5	26.5	17.0	25.3	16.2
	4	HI	36.8	23.5	35.4	22.6	34.0	21.7	31.1	19.9	29.7	19.0
			MAXIMUM VELOCITY IN REVERSE GEAR									
			[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
			31.3	20.0	30.1	19.2	28.9	18.5	26.5	16.9	25.3	16.2

Travel Speeds, 40 km/h (25 mph) - 24/24 Speed Transmission - synchro reverser/synchro Hi-Lo – synchro reverser/power Hi-Lo (5075GV – 5086GV – 5075GN – 5085GN – 5075GF – 5085GF with F5C engine)

Travel Speeds, 40 km/h (25 mph) - 24/24 Speed Transmission - synchro reverser/synchro Hi-Lo – synchro reverser/power Hi-Lo (5075GV – 5086GV – 5075GN – 5085GN – 5075GF – 5085GF with F5C engine)												
RANGE	GEARS	HI/LO	Travel Speed at engine speed of 2300 rpm									
			SRI 650 mm (25,59 in.)		SRI 625 mm (24,60 in.)		SRI 600 mm (23,62 in.)		SRI 550 mm (21,65 in.)		SRI 525 mm (20,66 in.)	
			[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
I	1	LO	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.4	0.3
	1	HI	0.6	0.4	0.6	0.4	0.6	0.4	0.5	0.3	0.5	0.3
	2	LO	0.8	0.5	0.7	0.5	0.7	0.5	0.7	0.4	0.6	0.4
	2	HI	0.9	0.6	0.9	0.6	0.8	0.5	0.8	0.5	0.7	0.5
	3	LO	1.1	0.7	1.1	0.7	1.0	0.7	1.0	0.6	0.9	0.6
	3	HI	1.3	0.8	1.3	0.8	1.2	0.8	1.1	0.7	1.1	0.7
	4	LO	1.6	1.0	1.6	1.0	1.5	1.0	1.4	0.9	1.3	0.8
	4	HI	1.9	1.2	1.8	1.2	1.8	1.1	1.6	1.0	1.5	1.0
II	1	LO	2.4	1.6	2.3	1.5	2.2	1.4	2.1	1.3	2.0	1.3
	1	HI	2.9	1.8	2.7	1.8	2.6	1.7	2.4	1.5	2.3	1.5
	2	LO	3.6	2.3	3.4	2.2	3.3	2.1	3.0	1.9	2.9	1.8
	2	HI	4.2	2.7	4.0	2.6	3.8	2.5	3.5	2.3	3.4	2.2
	3	LO	5.1	3.3	4.9	3.2	4.7	3.0	4.3	2.8	4.1	2.7
	3	HI	6.0	3.9	5.8	3.7	5.6	3.6	5.1	3.3	4.9	3.1
	4	LO	7.4	4.8	7.1	4.6	6.9	4.4	6.3	4.0	6.0	3.8
	4	HI	8.7	5.6	8.4	5.4	8.0	5.2	7.4	4.7	7.0	4.5
III	1	LO	10.7	6.9	10.3	6.6	9.9	6.3	9.1	5.8	8.7	5.6
	1	HI	12.6	8.1	12.1	7.7	11.6	7.4	10.7	6.8	10.2	6.5
	2	LO	15.7	10.0	15.1	9.6	14.5	9.3	13.3	8.5	12.6	8.1
	2	HI	18.4	11.8	17.7	11.3	17.0	10.9	15.5	10.0	14.8	9.5
	3	LO	22.6	14.5	21.8	13.9	20.9	13.4	19.2	12.3	18.3	11.7
	3	HI	26.6	17.0	25.5	16.4	24.5	15.7	22.5	14.4	21.5	13.7
	4	LO	32.8	21.0	31.5	20.2	30.3	19.4	27.7	17.8	26.5	17.0
	4	HI	38.5	24.6	37.0	23.7	35.5	22.7	32.5	20.8	31.1	19.9

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OULXBER,00024F8 -19-04NOV14-3/5

	MAXIMUM VELOCITY IN REVERSE GEAR									
	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
	32.7	20.9	31.4	20.1	30.2	19.3	27.7	17.7	26.4	16.9

Travel Speeds, 40 km/h (25 mph) - 24/12 Speed Transmission - (5100GN – 5100GF with NEF engine)

Travel Speeds, 40 km/h (25 mph) - 24/12 Speed Transmission - (5100GN – 5100GF with NEF engine)												
Range	Gears	HI/LO	Travel Speed at engine speed of 2200 rpm									
			SRI 650 mm (25,59 in.)		SRI 625 mm (24,60 in.)		SRI 600 mm (23,62 in.)		SRI 550 mm (21,65 in.)		SRI 525 mm (20,66 in.)	
			[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
I	1	LO	0.5	0.3	0.5	0.3	0.5	0.3	0.4	0.3	0.4	0.3
	1	HI	0.6	0.4	0.6	0.4	0.6	0.4	0.5	0.3	0.5	0.3
	2	LO	0.7	0.5	0.7	0.5	0.7	0.4	0.6	0.4	0.6	0.4
	2	HI	0.9	0.6	0.8	0.5	0.8	0.5	0.7	0.5	0.7	0.5
	3	LO	1.1	0.7	1.0	0.7	1.0	0.6	0.9	0.6	0.9	0.6
	3	HI	1.3	0.8	1.2	0.8	1.2	0.7	1.1	0.7	1.0	0.7
	4	LO	1.6	1.0	1.5	1.0	1.4	0.9	1.3	0.8	1.3	0.8
	4	HI	1.8	1.2	1.8	1.1	1.7	1.1	1.5	1.0	1.5	0.9
II	1	LO	2.3	1.5	2.2	1.4	2.2	1.4	2.0	1.3	1.9	1.2
	1	HI	2.7	1.8	2.6	1.7	2.5	1.6	2.3	1.5	2.2	1.4
	2	LO	3.4	2.2	3.3	2.1	3.1	2.0	2.9	1.8	2.7	1.8
	2	HI	4.0	2.6	3.8	2.5	3.7	2.4	3.4	2.2	3.2	2.1
	3	LO	4.9	3.1	4.7	3.0	4.5	2.9	4.2	2.7	4.0	2.5
	3	HI	5.8	3.7	5.5	3.5	5.3	3.4	4.9	3.1	4.7	3.0
	4	LO	7.1	4.5	6.8	4.4	6.6	4.2	6.0	3.9	5.7	3.7
	4	HI	8.3	5.3	8.0	5.1	7.7	4.9	7.1	4.5	6.7	4.3
III	1	LO	10.3	6.6	9.9	6.3	9.5	6.1	8.7	5.6	8.3	5.3
	1	HI	12.0	7.7	11.6	7.4	11.1	7.1	10.2	6.5	9.7	6.2
	2	LO	15.0	9.6	14.4	9.2	13.8	8.8	12.7	8.1	12.1	7.7
	2	HI	17.6	11.2	16.9	10.8	16.2	10.4	14.9	9.5	14.2	9.1
	3	LO	21.7	13.9	20.8	13.3	20.0	12.8	18.3	11.7	17.5	11.2
	3	HI	25.4	16.3	24.4	15.6	23.5	15.0	21.5	13.8	20.5	13.1
	4	LO	31.4	20.1	30.2	19.3	29.0	18.5	26.5	17.0	25.3	16.2
	4	HI	36.8	23.5	35.4	22.6	34.0	21.7	31.1	19.9	29.7	19.0
	MAXIMUM VELOCITY IN REVERSE GEAR											
	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
	34.1	21.8	32.8	21.0	31.5	20.1	28.8	18.5	27.5	17.6		

Travel Speeds, 40 km/h (25 mph) - 24/12 Speed Transmission - (5075GV – 5086GV – 5075GN – 5085GN – 5075GF – 5085GF with F5C engine)

Travel Speeds, 40 km/h (25 mph) - 24/12 Speed Transmission - (5075GV – 5086GV – 5075GN – 5085GN – 5075GF – 5085GF with F5C engine)												
RANGE	GEARS	HI/LO	Travel Speed at engine speed of 2300 rpm									
			SRI 650 mm (25,59 in.)		SRI 625 mm (24,60 in.)		SRI 600 mm (23,62 in.)		SRI 550 mm (21,65 in.)		SRI 525 mm (20,66 in.)	
			[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
I	1	LO	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.4	0.3
	1	HI	0.6	0.4	0.6	0.4	0.6	0.4	0.5	0.3	0.5	0.3
	2	LO	0.8	0.5	0.7	0.5	0.7	0.5	0.7	0.4	0.6	0.4
	2	HI	0.9	0.6	0.9	0.6	0.8	0.5	0.8	0.5	0.7	0.5
	3	LO	1.1	0.7	1.1	0.7	1.0	0.7	1.0	0.6	0.9	0.6
	3	HI	1.3	0.8	1.3	0.8	1.2	0.8	1.1	0.7	1.1	0.7
	4	LO	1.6	1.0	1.6	1.0	1.5	1.0	1.4	0.9	1.3	0.8
	4	HI	1.9	1.2	1.8	1.2	1.8	1.1	1.6	1.0	1.5	1.0

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OULXBER,00024F8 -19-04NOV14-4/5

II	1	LO	2.4	1.6	2.3	1.5	2.2	1.4	2.1	1.3	2.0	1.3
	1	HI	2.9	1.8	2.7	1.8	2.6	1.7	2.4	1.5	2.3	1.5
	2	LO	3.6	2.3	3.4	2.2	3.3	2.1	3.0	1.9	2.9	1.8
	2	HI	4.2	2.7	4.0	2.6	3.8	2.5	3.5	2.3	3.4	2.2
	3	LO	5.1	3.3	4.9	3.2	4.7	3.0	4.3	2.8	4.1	2.7
	3	HI	6.0	3.9	5.8	3.7	5.6	3.6	5.1	3.3	4.9	3.1
	4	LO	7.4	4.8	7.1	4.6	6.9	4.4	6.3	4.0	6.0	3.8
	4	HI	8.7	5.6	8.4	5.4	8.0	5.2	7.4	4.7	7.0	4.5
III	1	LO	10.7	6.9	10.3	6.6	9.9	6.3	9.1	5.8	8.7	5.6
	1	HI	12.6	8.1	12.1	7.7	11.6	7.4	10.7	6.8	10.2	6.5
	2	LO	15.7	10.0	15.1	9.6	14.5	9.3	13.3	8.5	12.6	8.1
	2	HI	18.4	11.8	17.7	11.3	17.0	10.9	15.5	10.0	14.8	9.5
	3	LO	22.6	14.5	21.8	13.9	20.9	13.4	19.2	12.3	18.3	11.7
	3	HI	26.6	17.0	25.5	16.4	24.5	15.7	22.5	14.4	21.5	13.7
	4	LO	32.8	21.0	31.5	20.2	30.3	19.4	27.7	17.8	26.5	17.0
	4	HI	38.5	24.6	37.0	23.7	35.5	22.7	32.5	20.8	31.1	19.9
			MAXIMUM VELOCITY IN REVERSE GEAR									
			[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]	[km/h]	[mph]
			35.6	22.8	34.3	21.9	32.9	21.0	30.1	19.3	28.8	18.4

OULXBER,00024F8 -19-04NOV14-5/5

Use Brakes

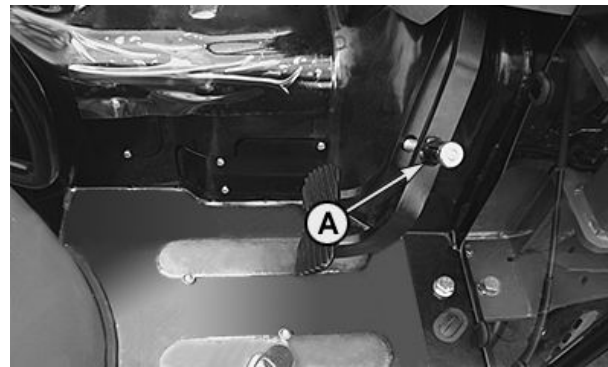
CAUTION: Before driving the tractor on a public road, lock brake pedals together using locking pin (A). Use brake lightly and cautiously at transport speeds.

When negotiating sharp turns, use individual brake to assist steering. Disengage brake pedal locking pin (A) and depress only one brake pedal.

To stop tractor, depress both brake pedals.

IMPORTANT: To prevent unnecessary wear, never "ride" the brakes by resting a foot on the pedals.

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



AGCPTJD0354 —UN—10JUL13

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

OULXBER,0002126GL -19-19JUL13-1/1

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.

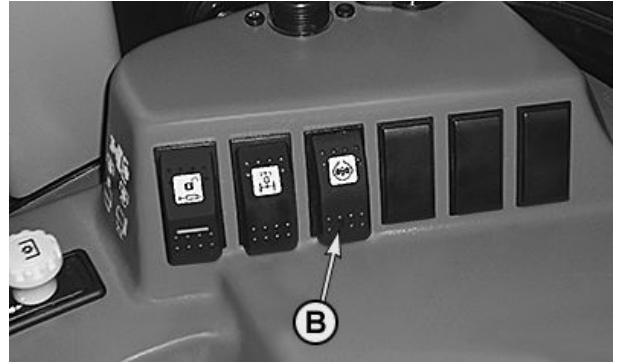
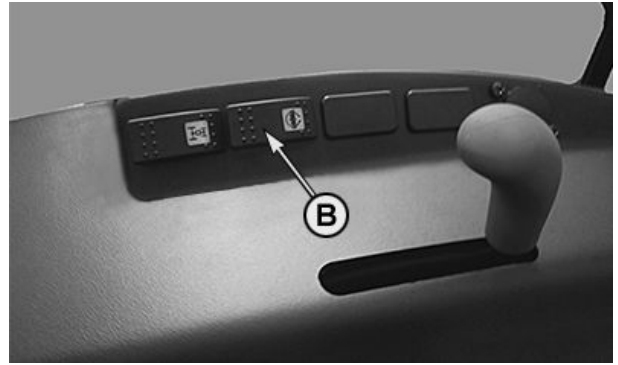
When one wheel starts to lose traction, engage differential lock using the switch (B).

IMPORTANT: The electro-hydraulic differential lock disengages automatically when an individual brake pedal is pressed and engages again after the pedal has been released. To disengage the differential lock, press switch (B) again.

When tractor speed exceeds 20 km/h (12 mph), the electro-hydraulic differential lock will disengage automatically.

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, then slip again, hold pedal in the engaged position.



5V, 5N & 5F tractors

AGCPTJD0365—UN—11JUL13

AGCPTJD0626—UN—27OCT14

OULXBER,00024F9 -19-28OCT14-1/1

Operate Front-Wheel Drive

Use front-wheel drive as required for better traction.

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

When driving on icy, wet or graveled surfaces, reduce speed and make sure that tractor is properly ballasted to avoid skidding and loss of steering control. For best control, engage front-wheel drive (if equipped).

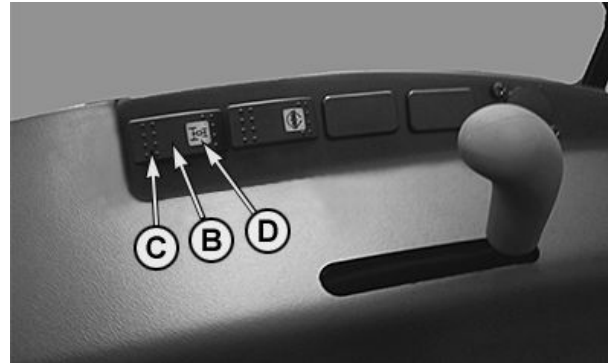
IMPORTANT: To extend tire life, engage front-wheel drive only when needed. DO NOT engage front-wheel drive when driving at high speed on public roads.

IMPORTANT: The front-wheel drive can be engaged and disengaged in all gears (forward and reverse), on-the-go and under load without using the clutch. Anticipate the need for front-wheel drive, make sure neither rear wheel is slipping then engage or disengage when minimum torque is being used and the tractor is moving slowly.

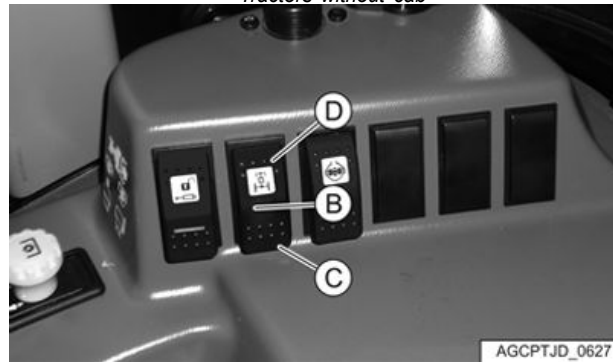
Press the front-wheel drive switch (B) in position (C) to engage and in position (D) to disengage front-wheel drive. Indicator light (3) will glow when front-wheel drive is engaged.

NOTE: When the brakes are applied, front-wheel drive cuts in automatically regardless of the position selected at the front-wheel drive switch. In this case the indicator light (3) does not come on.

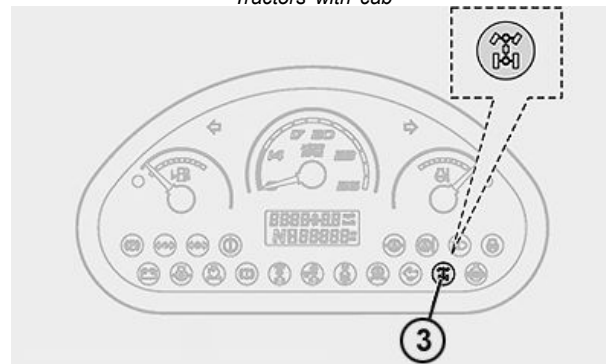
Keeping pressed the switch (B) longer than 3 sec, allows the front-wheel drive to be engaged permanently, independently from vehicle speed and brakes usage. In this case the message "4WD ON" appears on the digital display for about 3 seconds; the indicator (3) will glow until front-wheels drive will be disengaged.



Tractors without cab



Tractors with cab



B—Front-Wheel Drive Switch
C—Switching ON the Front-Wheel Drive

D—Switching OFF the Front-Wheel Drive
3— Front-Wheel Drive Indicator Light

OULXBER,00024FA -19-02OCT15-1/1

AGCPTJD0386 —UN—11JUL13

AGCPTJD0627 —UN—19JAN15

AGCPTJD0367 —UN—15JUL13

Stop the Tractor

⚠ CAUTION: Always engage park brake before dismounting tractor. Leaving transmission in gear with engine stopped, without engaging park brake, DOES NOT prevent tractor from moving.

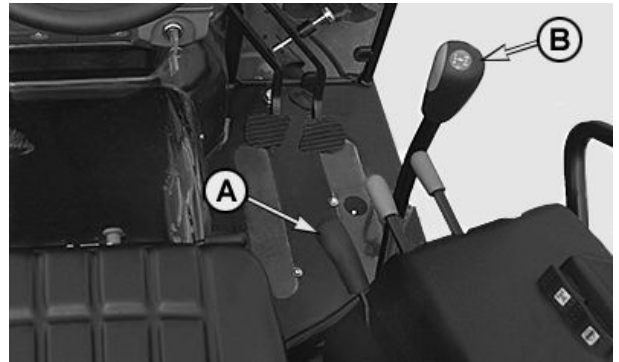
1. Stop tractor using brakes.
2. Place reverse drive lever (T) in neutral position.



AGCPTJD0360 —UN—11JUL13

OULXBER,000225E -19-04NOV13-1/3

3. Place gear shift lever (B) in neutral position.
4. Lower equipment to the ground using hitch control lever (A).

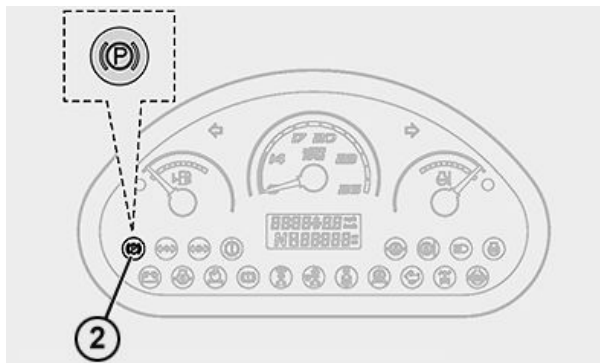


AGCPTJD0369 —UN—11JUL13

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OULXBER,000225E -19-04NOV13-2/3

5. Pull lever (A) up to engage park brake. Lever will lock in raised position and park brake indicator light (2) will glow.



AGCPTJD0370 —UN—11JUL13

AGCPTJD0371 —UN—15JUL13

OULXBER,000225E -19-04NOV13-3/3

Hydraulic Trailer Brakes

Remove cap from trailer brake coupler (A) and connect pressure hose, making sure connections are absolutely clean.

Depress brake pedals to operate hydraulic trailer brake. The braking effect depends on pressure applied to the brake pedals.

CAUTION: Never exceed a speed of 25 km/h (15 mph) when travelling with hydraulically braked trailers.

IMPORTANT: To prevent undue wear on the brakes, observe the following points:

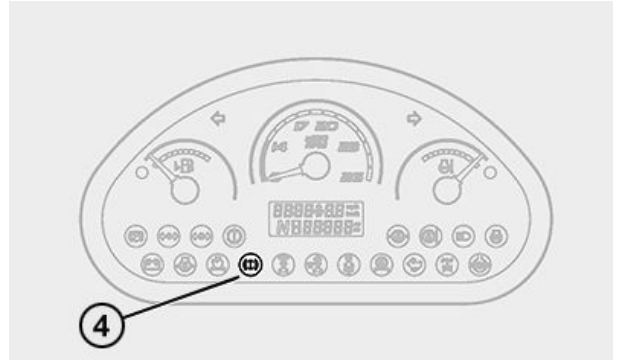
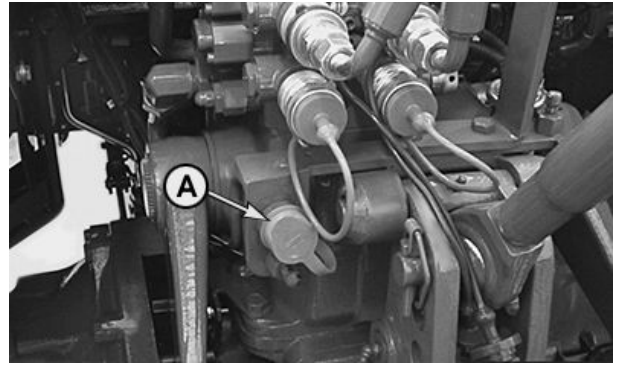
Make sure that the pressure hose is connected.

When driving downhill, select the same gear you would for driving uphill.

Check the hydraulic trailer brake regularly to make sure that it is functioning correctly.

NOTE: The tractor's park brake has no effect on the hydraulic trailer brake. Operate the trailer in accordance with the manufacturer's instructions. This is particularly important when operating the park brake of the trailer.

Indicator light (4) will light up when the oil level in the brake reservoir is low.



AGCPTJD0372—UN—11JUL13

AGCPTJD0373—UN—15JUL13

OULXBER,000225F -19-25OCT13-1/1

Hitch

Maximum Lifting Force

Information on maximum lifting force can be found in the Specifications section.

NOTE: Legal restrictions relating to axle loads and tire load capacity must be complied with. Due to these

legal restrictions, maximum permitted lifting force may be less than the stated value.

OU12401,0001BBF -19-23MAY09-1/1

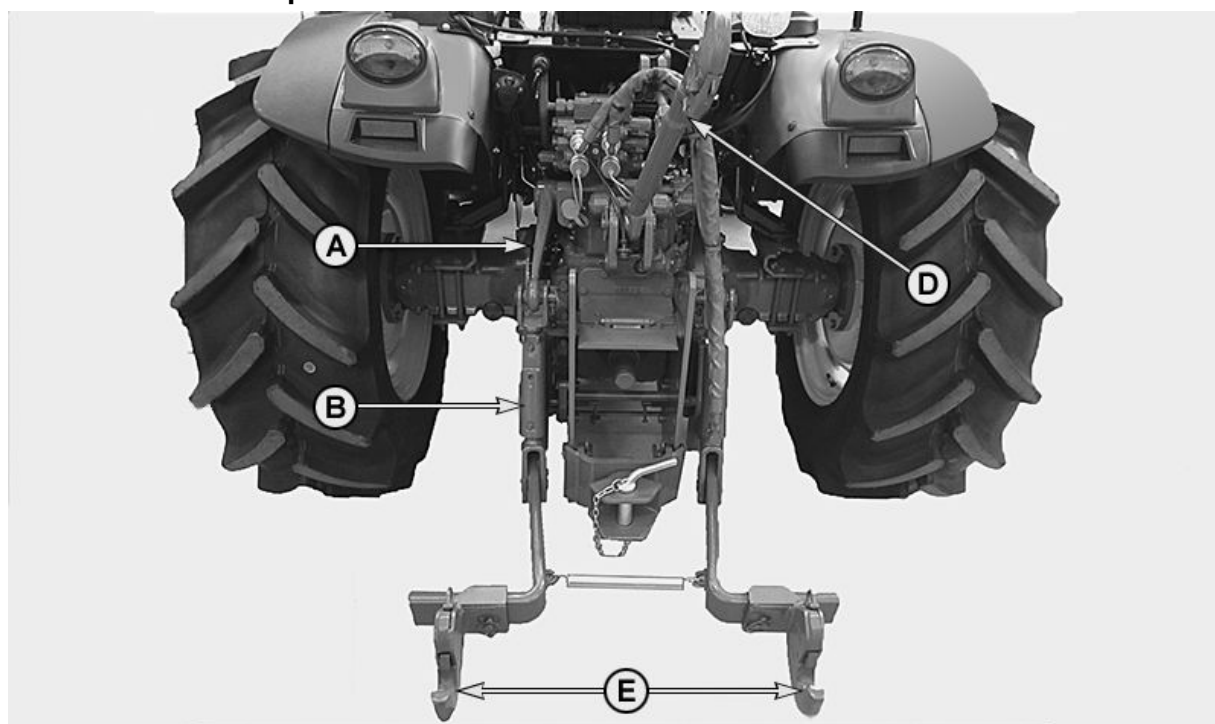
Match Tractor Power to Implement

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.)

AT,5NOM,45 -19-01SEP97-1/1

Three-Point Hitch Components



AGCPTJD0416—UN—15JUL13

A—Lift Arms
B—Lift Links

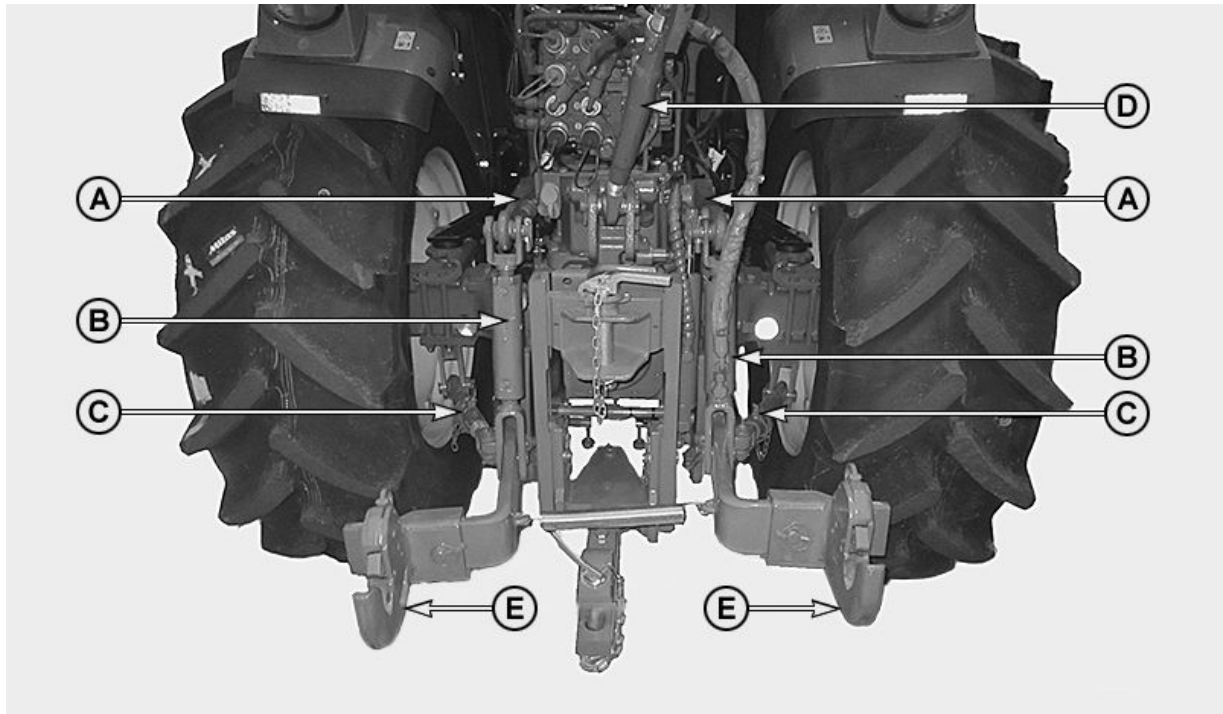
C—Center Link
D—Draft Links

E—Draft Links

5GL, 5GV & 5GN tractors

Continued on next page

OULXBER,00024FB -19-04NOV14-1/2



5GF tractors

A—Lift Arms
B—Lift Links

C—Stabilizing System

D—Center Link
E—Draft Links

OULXBER,00024FB -19-04NOV14-2/2

AGCPTJD0631 —UN—27OCT14

Hitch Control Levers

The hitch position is controlled by two levers, the position control lever (A) and the draft control lever (B).

⚠ CAUTION: To avoid unintentional lowering of the implement during transport, use stop (C) to lock position control lever (A).

During transport and when hitch is not in use, push draft control lever (B) all the way forward.

The position control lever (A) raises the three-point hitch when pulled rearward and lowers the three-point hitch when moved forward. For further information refer to Use the Hitch Position Control in this Section.

The draft control lever (B) controls the three-point hitch position relative to draft loads. For further information refer to Use the Draft Control in this Section.



OULXBER,00024FC -19-28OCT14-1/1

AGCPTJD0632 —UN—27OCT14

Use the Hitch Position Control

CAUTION: To prevent unexpected movement of hitch, move draft control lever (B) to full forward position before attaching an implement.

Move draft control lever (B) forward when you DO NOT want hitch to adjust automatically to draft load, such as attaching implement to tractor.

Use position control lever (A) to control the three-point hitch position. Position control should be used for transporting implements and end-of-field operations.

IMPORTANT: Be careful not to raise implement too far, as this may cause damage to the rear part of the tractor.

CAUTION: To avoid unintentional lowering of the implement during transport, use stop (C) to lock position control lever (A).

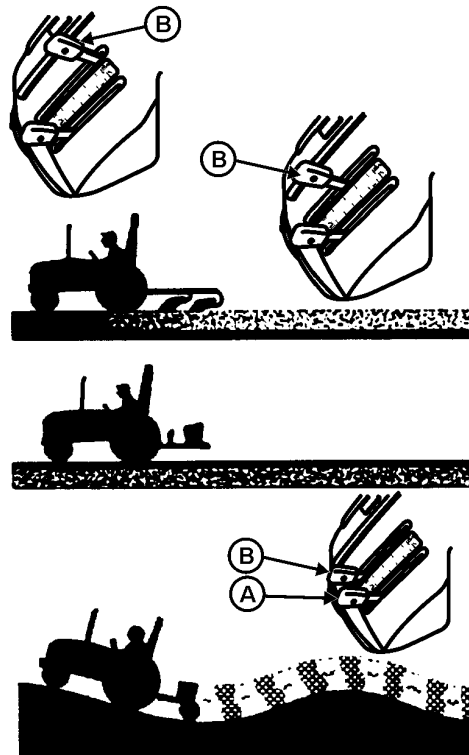
During transport and when hitch is not in use, push draft control lever (B) all the way forward.

CONSTANT DEPTH of implements on level terrain and for non-ground engaging implements such as spreaders or sprayers. Place position control lever (A) at desired depth.

FLOAT operation for implements with skids or depth gauge wheels designed to carry full implement weight. Push both levers (A) and (B) all the way forward so implement can follow the ground contour.



AGCPTJD0632 —UN—27OCT14



PULX001011

PULX001011 —UN—07AUG08

OULXBER,00024FD -19-28OCT14-1/2

POSITION CONTROL LEVER STOP

For convenience, set adjustable depth. Operate implement a few minutes to determine proper height, then unscrew ring nut (D). Move stop up against lever, and lock stop in position by tightening ring nut (D). Hitch will then lower to same position each time lever is pushed forward to stop.



AGCPTJD_0633

AGCPTJD0633 —UN—02NOV15

OULXBER,00024FD -19-28OCT14-2/2

Use the Draft Control

The hitch is equipped with a variable draft control system.

Use draft control when:

- Operating with a fully mounted implement in hilly and swale terrain. The implement will raise 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.

⚠ CAUTION: When hitch is not in use, push draft control lever (B) all the way forward.

Draft control lever (B) controls amount of load required before three-point hitch responds. With lever moved fully forward to the position marked "OFF" (D), there is no draft control. Placing the lever toward the rear position reduces the amount of draft load required to override the position setting set by the position control lever (A) and raise the hitch.

Draft sensitivity ranges can be changed by repositioning the center link. For further information refer to Position the Center Link in this Section.

For draft control operation, initially move position control lever (A) in its fully forward position and the draft control lever (B) in the fully rearward (least draft) position. Then, with the tractor moving, push the draft control lever (B) forward to increase the load to the desired setting.

Pull position control lever (A) rearward to set maximum depth of implement. Set position control lever stop (C) so control lever can be brought back to the same position



each time. The maximum depth will prevent the hitch from lowering all the way when the tractor begins to slip. The position control lever (A) can also be raised slightly to override the draft control setting to help get through slippery spots without getting stuck.

The position control lever (A) can be moved fully rearward to raise the three-point hitch at the end of the field.

OULXBER,00024FE -19-28OCT14-1/1

AGCPTJD0632—UN—27OCT14

AGCPTJD0634—UN—27OCT14

Flow Divider Valve and Flow Regulator Valve

Flow Divider Valve Control:

The tractor may be equipped with a flow divider valve (A), which splits the amount of oil for the SCVs between the double-acting SCVs/hitch (B) and hitch.

With knob (C), this allocation can be adjusted infinitely from 90% for hitch and 10% for double-acting SCVs to 10% for hitch and 90% for double-acting SCVs.

Turn knob (D) clockwise = Up to 90% of oil to SCVs I, II, III and hitch.

Turn knob (C) counterclockwise = Up to 90% of oil to SCVs I, II and III.

Flow Regulator Valve Control:

The tractor may be equipped with a flow regulator valve (D), which splits the amount of oil for the SCVs between the double-acting SCVs/hitch (E) and double-acting SCVs (F).

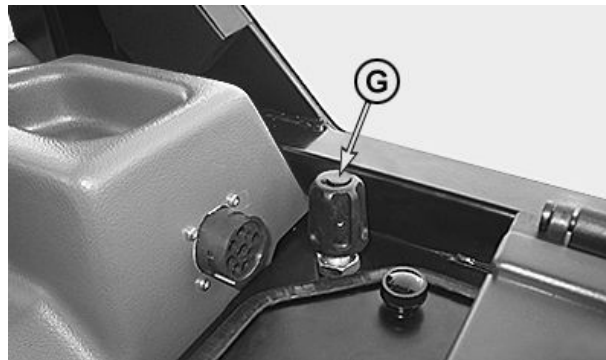
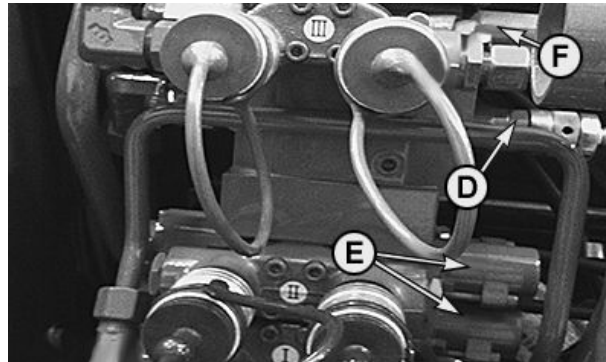
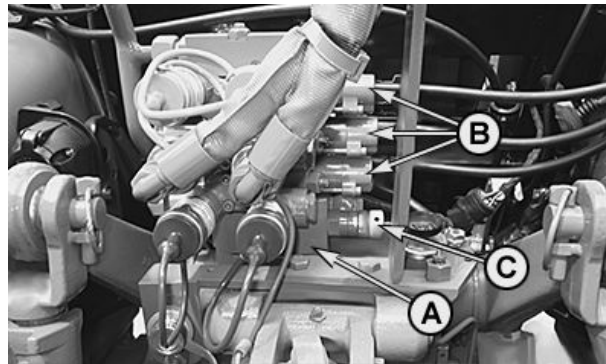
With knob (G), this allocation can be adjusted infinitely from 90% for double-acting SCVs (E) and 10% for double-acting SCV (F) to 10% for double-acting SCVs (E) and 90% for double-acting SCV (F).

Turn knob (G) clockwise = Up to 90% of oil to SCVs I, II or III and hitch.

Turn knob (G) counterclockwise = Up to 90% of oil to SCV III or IV.

NOTE: On tractors equipped with third pump, the flow divider is used only to divide the flow for the SCVs.

A—Flow Divider Valve	E—Double-Acting SCVs/hitch
B—Double-Acting SCVs/hitch	F—Double-Acting SCVs
C—Knob	G—Knob (Cab Version)
D—Flow Divider Valve	



Tractor with cab shown

OULXBER,00024FF -19-28OCT14-1/1

AGCPTJD0419—UN—15JUL13

AGCPTJD0635—UN—29OCT14

AGCPTJD0636—UN—29OCT14

Adjust the Rate-of-Drop

CAUTION: Excessive rate-of-drop may cause damage or injury. Fully lowering the implement should require at least 2 seconds.

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

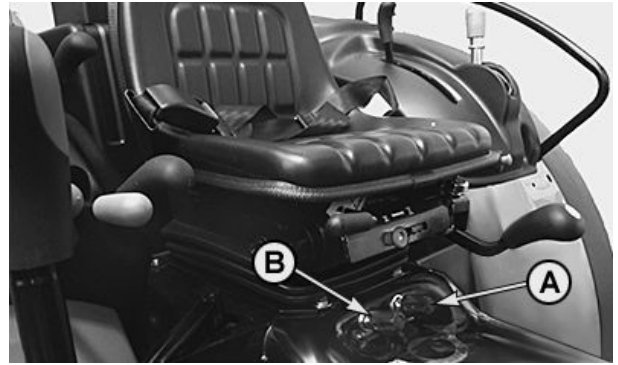
Turn rate-of-drop adjusting knob (A) clockwise to slow down hitch drop; turned all the way to the stop corresponds to lock of hitch (for example for transport). Turn counterclockwise to increase rate-of-drop.

Adjust the Sensitivity

Turn hitch sensitivity adjusting knob (B) clockwise to increase the sensitivity of hitch. Turn counterclockwise to reduce sensitivity.

This adjustment is in addition to the different positioning of center link (see Positioning Center Link in this Section).

In some specific cases the high sensitivity of the hitch may involve vibrations.



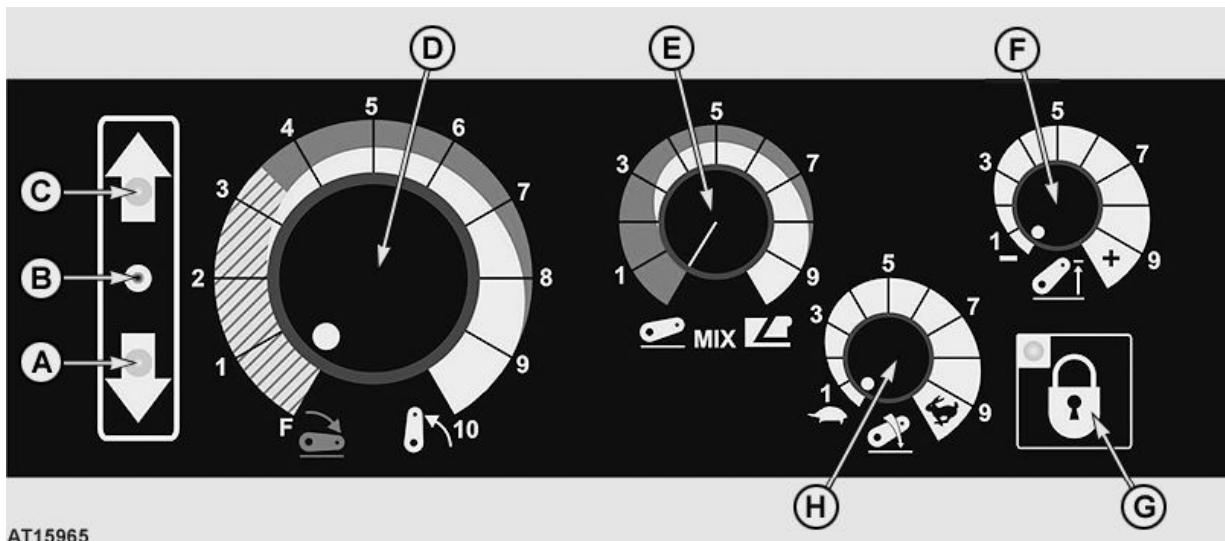
A—Rate-Of-Drop Adjusting Knob

B—Sensitivity Adjusting Knob

To eliminate vibrations, turn knob (B) progressively counterclockwise.

OULXBER,0002262 -19-28OCT13-1/1

Electronic Hitch Sensing II (EHS II)



AT15965

EHS II control panel

A—Hitch movement indicator LED "hitch lowering"
B—Hitch movement indicator LED "hitch stop"

C—Hitch movement indicator LED "hitch raising"
D—Depth control switch
E—Mode control switch

F—Height limit memory switch
G—Transport lock switch (with red LED)
H—Lowering speed control switch

NOTE: A continuous flashing LED (B) indicates that there are Diagnostic Trouble Codes present.

See "Hitch, Diagnostic Trouble Codes" in Section "Troubleshooting".

OULXA64,00019AA -19-08DEC14-1/1

AGCPTJD0420—UN—15JUL13

AT15965—UN—06MAY08

Transporting mounted implements (EHS II)

Use the transport lock switch to prevent unintentional lowering of the implement during transport.

To activate the transport lock, press and hold the switch for more than 5 seconds. The hitch will then raise the implement to the previously adjusted height limit (see "Height Adjustment").

A red LED indicates that the transport lock is activated.

NOTE: The LED begins flashing if a Diagnostic Trouble Code is present. Different flashing sequences are assigned to the Diagnostic Trouble Codes, see Section "Troubleshooting", "E-SCV, Diagnostic Trouble Codes".

CAUTION: Ensure that the height limit is adjusted correctly and that the height limit control is activated (green LED at height limit memory switch).



Transport lock switch
(with red LED)

Otherwise the hitch will lift the implement all the way up which can cause injuries or damage.

OULXA64.00019AB -19-08DEC14-1/1

Depth adjustment (EHS II)

Adjust the desired depth using the depth control switch. For best hitch sensitivity, set the depth control switch to a value between "F" and "3.5".

NOTE: Depth cannot be adjusted beyond the height previously set with the height limit memory switch.



Depth control switch

OULXA64.00019AD -19-09OCT06-1/1

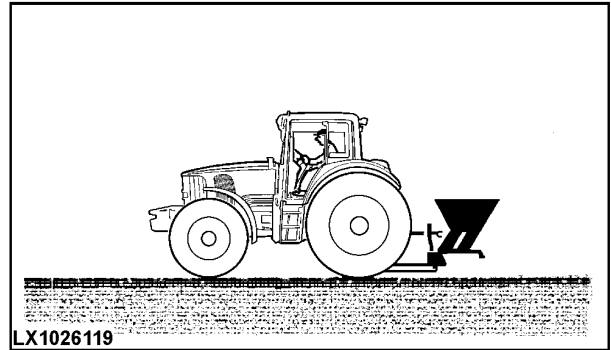
Load/depth adjustment (EHS II)

CAUTION: Before connecting implements to the three-point hitch, load/depth control must be moved to the fully counterclockwise position (depth control) to prevent unintentional raising or lowering of the hitch.

With load/depth control in the fully counterclockwise position, the implement is held at the selected position.



Fix control position



Position control

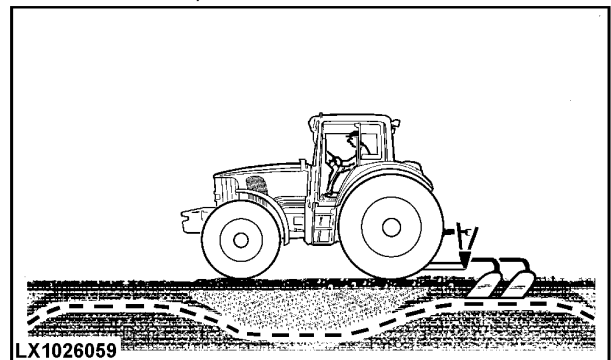
OULXA64,00019AE -19-10OCT06-1/3

LX1026119 —UN—10MAY01

With load/depth control in fully clockwise position, the implement is raised as resistance (soil density) increases and lowered as resistance decreases, thus maintaining the preselected load.



Load control position



Load control

Continued on next page

OULXA64,00019AE -19-10OCT06-2/3

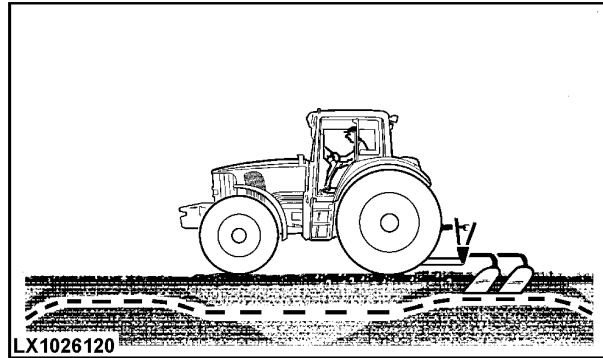
LX1026059 —UN—18MAY01

The "MIX" positions of the load/depth control allow the effects of depth control and/or load control to be infinitely varied as the ground conditions require.



AT15995

Mixed control position



LX1026120

Mixed control

LX1026120 —UN—10MAY01

OULXA64,00019AE -19-10OCT06-3/3

Raise/Lower Switch (EHS II)

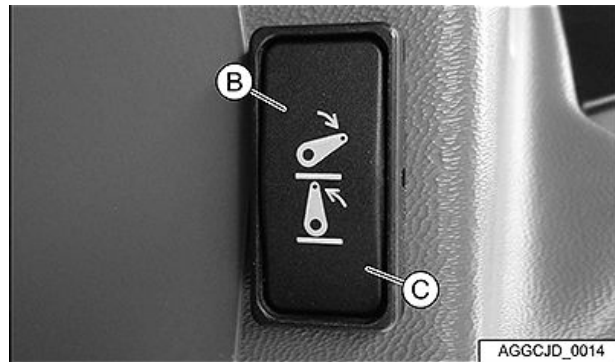
To raise the hitch press the raise symbol (C) on the switch, to lower the hitch press the lower symbol (B). The relevant LED on the EHS control panel lights up.

Whenever it is necessary, the movement of the hitch can be stopped immediately by a short pushing on the raise switch or lower switch.

The switch does not operate when transport lock is activated.

B—Lower

C—Raise



Raise/lower switch

OULXA64,00019B3 -19-01OCT15-1/1

AGGCJD0014 —UN—29SEP15

Hitch Remote Control (EHS II)

Two external buttons (A) and (B) allow the hitch to be operated from outside the cab. Pressing one of these buttons for the first time deactivates the EHS system (hitch does not move).

NOTE: Transport lock switch must be deactivated.

When pressing one of the remote control buttons again, the hitch begins to move in the desired direction and the hitch movement indicator LED (E) goes on or starts flashing. *LED remains flashing after the hitch has stopped, indicates that a diagnostic trouble code is active. See “Hitch, Diagnostic Trouble Codes” in Section “Troubleshooting”.*

NOTE: To reactivate the hitch control via EHS II panel, press the raise/lower switch (C) (lower position) or turn the depth control switch (D) slowly to the left or to the right until the hitch movement indicator LED (E) is OFF or stops flashing.

CAUTION: Stay clear of three-point hitch lift range when operating the remote control. Apply parking brake before lifting the implement.

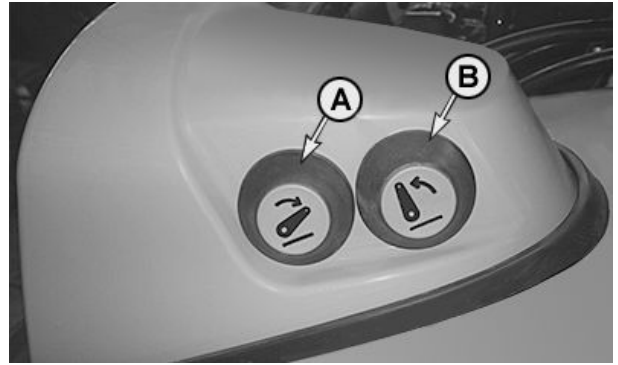
A—Remote control button, raise hitch

B—Remote control button, lower hitch

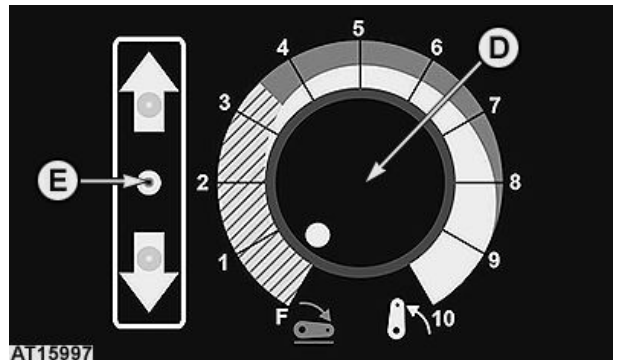
C—Raise/lower switch

D—Depth control switch

E—Hitch movement indicator LED (hitch stop)



Hitch Remote Control, 5V, 5N & 5F (if equipped)



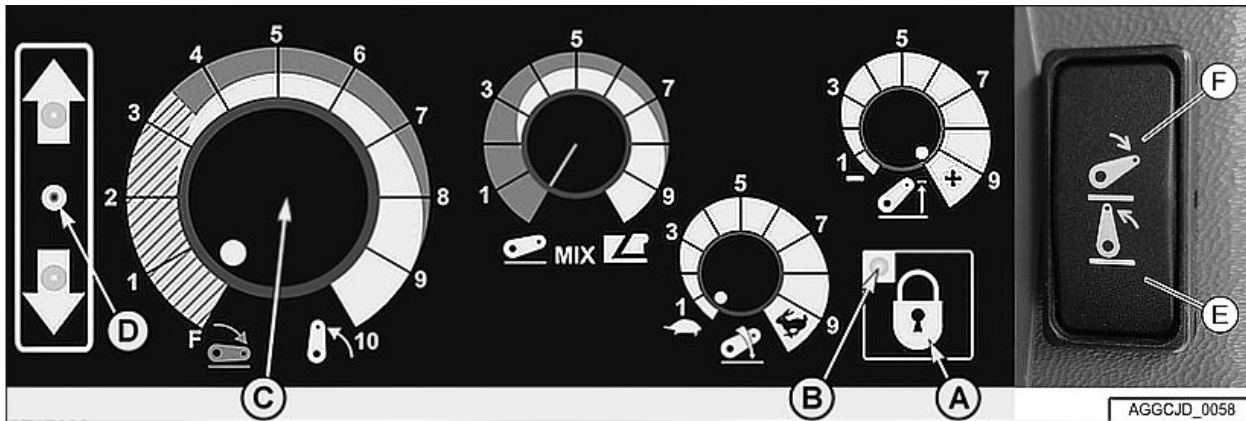
OULXBER,0002500 -19-02OCT06 1/1

AGCPTJD0125—UN—27MAY13

AGGCJD0016—UN—29SEP15

AT15997—UN—10OCT06

Calibrating the EHS II-System



AGGCJD0036—UN—20OCT15

CAUTION: During calibration, the hitch moves over its entire range from fully lowered to fully raised, without reference to the set position values. During calibration, there is no way to influence the movements of the hitch. In an emergency, switch off the ignition.

Preliminary work:

1. For calibration, attach a weight of approx. 50 kg (100 lb) to the draft links.
2. Heat the transmission oil to approx. 40°C (104°F).
3. Raise the hitch as high as it will go.
4. Shut off the engine, switch the ignition OFF and turn all the hitch potentiometers according to the illustration.

Start the automatic calibration process:

1. Start the engine.
2. Press and hold transport lock key (A).
3. At the same time press the raise/lower switch at raise symbol (E).
4. Release the two switches simultaneously.

5. The LED (B) starts to flash.
6. Briefly touch the raise/lower switch two times at lower symbol (F) – the hitch lowers.
7. Wait until the hitch is all the way down, then briefly touch the raise/lower switch at raise symbol (E). The hitch starts to rise.
8. When the hitch has risen as high as it will go, press the transport lock key (A) to end calibration.
9. The control unit returns to its normal operating mode and LED (B) stops flashing.
10. Switch OFF the engine.
11. Restart the engine.
12. Now LED (D) starts to flash because the position setting does not match the actual position of the hitch.
13. To rectify, set depth setting switch (C) to position "10" and slowly turn it to the left until the LED stops flashing.
14. Switch OFF the engine.
15. Start the engine once again and check that the hitch operates correctly.

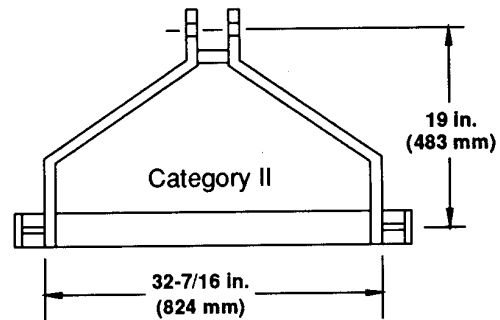
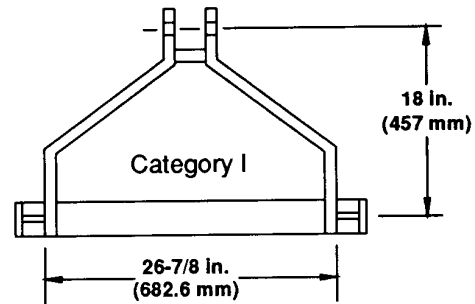
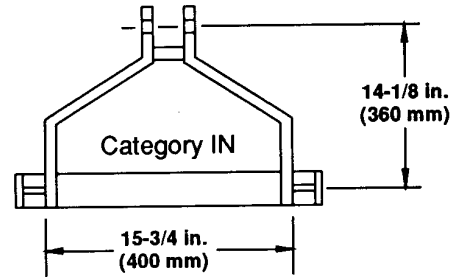
OULXA64,00019A9 -19-19OCT15-1/1

Prepare the Implement

Category IN and I, 3-Point Hitches are narrower and used on smaller implements than Category II implements. Refer to the chart below to identify implement category.

Category II implements should have the top hole of the implement mast located 483 mm (19 in.) above the lower pins. Drill another hole in top mast or extend top mast if necessary.

Hitch Category	Mast Height	Width Between Lower Pins	Pin Sizes	
			Lower	Upper
IN	360 mm (14-1/8 in.)	400 mm (15-3/4 in.)	22 mm (7/8 in.)	19 mm (3/4 in.)
I	457 mm (18 in.)	682.6 mm (26-7/8 in.)	22 mm (7/8 in.)	19 mm (3/4 in.)
II	483 mm (19 in.)	824 mm (32-7/16 in.)	28 mm (1-1/8 in.)	25.4 mm (1 in.)



LV616—19—13JUN94

LV,5400NRH,B9 -19-26AUG13-1/1

Converting Category II Hitch to Category IN or Category I

Tractor center link and draft link ends are sized for Category II implement attaching pins.

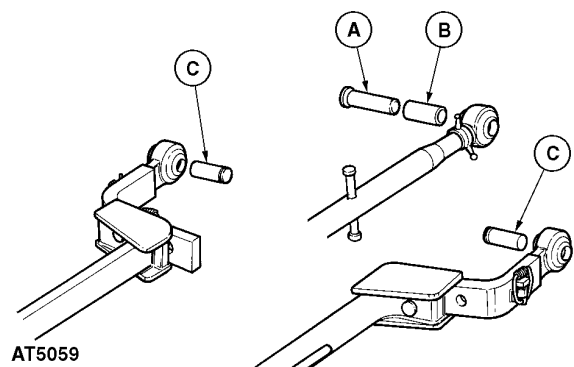
If Category IN or Category I implements are to be used, the Category II hitch can be converted as follows:

Install bushing (B) to reduce diameter of center link end. Smaller implement mast pin (A) is also needed when bushing is installed.

Install bushings (C) in end of draft links.

See your John Deere dealer for parts.

NOTE: Refer to "Positioning Draft Link Ends" in this section for further information on hitch conversions.



AT5059—UN—28AUG97

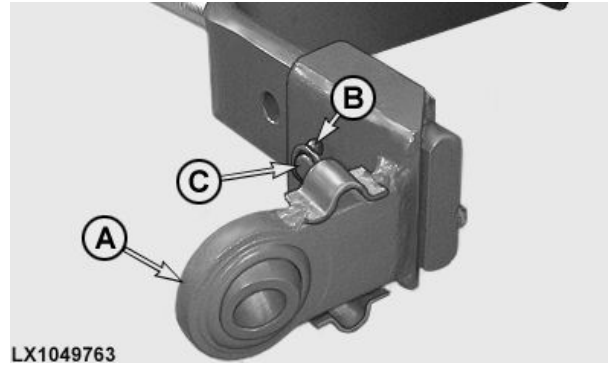
AT,5NOM,51 -19-01SEP97-1/1

Positioning Draft Link Ends

Draft link ends are adjustable for Category IN, I and II implements.

The different positions are obtained by changing the position of the brackets (A) after removing lock pin (B) and pin (C).

Re-install pin (C) and lock pin (B) once the desired setting is obtained.



LX1049763—UN—19JUL10

AT,5NOM,52 -19-19JUL10-1/1

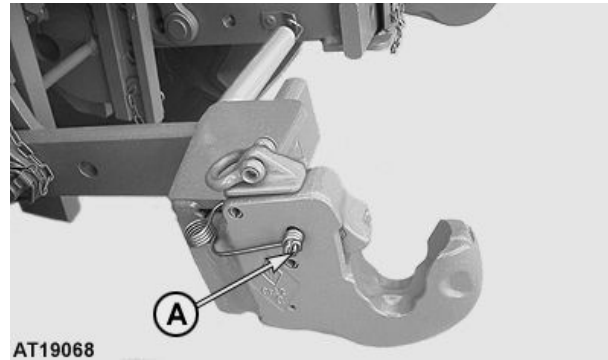
Quick-Coupling (Hook-Type) Draft Links

These draft links are intended for Category I and Category II implements. Implements can be attached to and removed from the draft links without the driver having to leave his seat.

Lock for draft link hooks

CAUTION: When implements with asymmetrical load (e.g. side-mounted mowing unit) are attached and when driving through high-growing bushes and trees (e.g. when working in the forest), the draft links must be secured against opening accidentally.

Use John Deere AL165485 lock parts kit (A) at both of the coupler hooks.



AT19068—UN—20SEP06

A—Lock parts kit

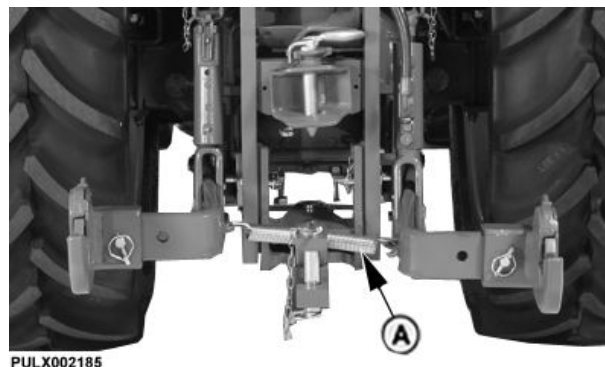
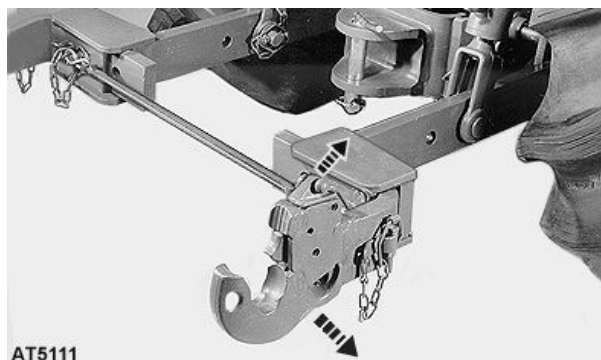
Continued on next page

NR25796,0001775 -19-26MAR09-1/2

Attaching implement

1. Remove adjusting spring rod (A)¹.
2. With draft links lowered, reverse tractor until the coupler hooks are below the implement hitch pins.
3. Slowly raise draft links until pins are engaged in coupler hooks and locked into position.
4. Adjust center link to required length and attach to top attaching point of implement mast.

IMPORTANT: Make absolutely certain that implement is correctly locked to coupler hooks.



¹ If equipped.

NR25796,0001775 -19-26MAR09-2/2

AT5111 —UN—17APR00

PULX002185 —UN—17OCT08

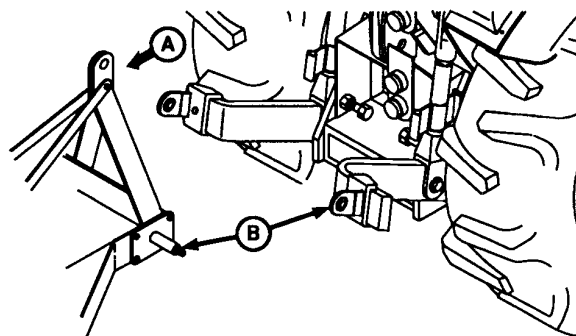
Attach Implements to Three-Point Hitch

1. Be sure drawbar will not interfere with implement. If necessary, move drawbar ahead, or remove it. Check for any other potential interference points.

CAUTION: Do not stand between tractor and implement unless the parking brake is applied firmly.

CAUTION: Prevent unexpected movement of hitch by placing draft sensing lever in the forward or OFF position before attaching implement to hitch.

IMPORTANT: When attaching three-point hitch mounted or drawn implements for the first time, conduct a trial to ensure that implement will not damage cab in any position. With hitch-mounted implements, pay attention to the highest lift position; with drawn implements, be careful when turning sharply.



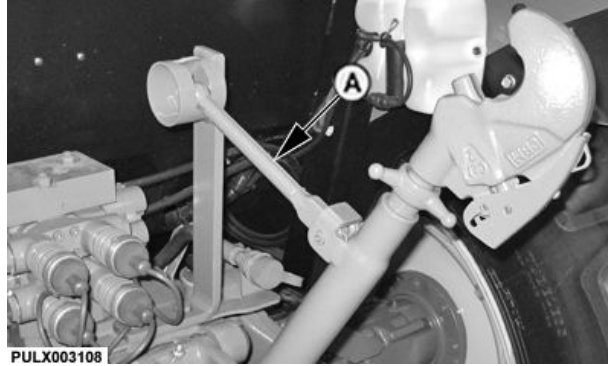
2. Back tractor up to implement (A) so hitch points (B) align. Place transmission levers in neutral, engage park brake and stop engine BEFORE leaving the tractor seat.

Continued on next page

OULXBER,000211FGL -19-19JUL13-1/3

LV734 —UN—25JUN94

3. To remove center link from transport hook, lift center link locking rod (A).
4. Attach center link to implement top mast.
5. Adjust center link and lift links as necessary. See Level the Hitch in this Section.



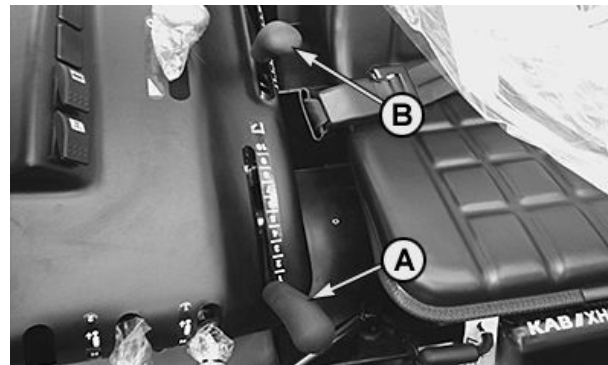
PULX003108

PULX003108 —UN—22JAN09

OULXBER,000211FGL -19-19JUL13-2/3

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

6. Using position control lever (A), lower implement, then raise slowly and check for any point of interference.



AGCPTJD0417 —UN—15JUL13

OULXBER,000211FGL -19-19JUL13-3/3

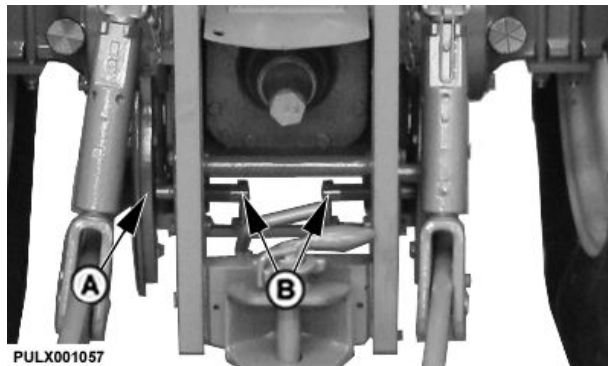
Adjust Sway Blocks

NOTE: Check implement operator's manual for instruction on whether to allow side sway.

Sway blocks (A) are used to limit side sway of draft links. Adjust sway blocks by changing the length of the screws (B) on one side for work outside centered position of the implement.

If attachment (plow, disk) needs side sway in operating position, adjust sway blocks tight to the frame by turning screws (B).

When needed to limit side sway, adjust blocks out away from frame to contact draft links and limit side-to-side motion.



PULX001057

PULX001057 —UN—18AUG08

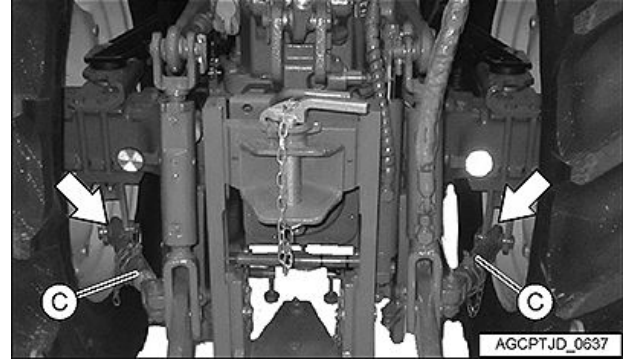
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OULXBER,0002502 -19-28OCT14-1/2

Stabilizer Bars:

The draft links can be stabilized using these stabilizer Bars (C). No tools are required.

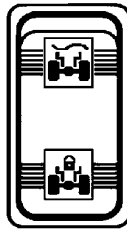
IMPORTANT: Do NOT let the draft links or lift links come into contact with the tires or other tractor components. When draft links are raised (even if no implement is attached), the stabilizer bars must be locked.



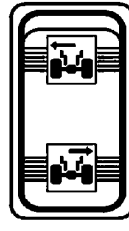
Stabilizer Bars

OULXBER,0002502 -19-28OCT14-2/2

AGCPTJD0637 —UN—02NOV15

3-Point Hitch Leveling System (If Equipped)

(A)



(B)



(C)

LX245324

IMPORTANT: Check implement Operator's Manual for instructions on whether to allow side sway.

The vertical and the horizontal position of implements can be adjusted by the Implement Alignment Valve Assembly. This is a hydraulic option, providing the following functions:

- Electrohydraulic central & lateral adjustment.
- Hydraulic levelling control.

By using the switches (A), (B) & (C), it is possible to set the rear implement in to the desired position:

Functions of Switches			
Switch	Description	Switch Up	Switch Down
A	to block the draft links or set the draft links in floating position	floating	blocked
B	to move the rear draft links on the left side or right side	lateral adjustment LEFT	lateral adjustment RIGHT
C	to extend or retract the hydraulic vertical rod	vertical adjustment of lift link, upward	vertical adjustment of lift link, downward

OULXBER,0002503 -19-02OCT15-1/1

LX245324 —UN—02OCT15

Position the Center Link

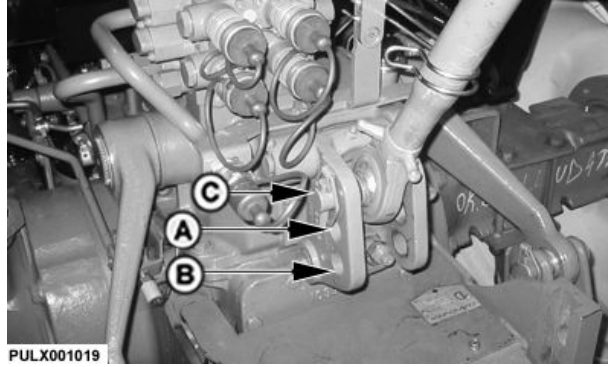
The center link bracket has holes which allow three different positions for attaching the center link. The position effects the draft sensing sensitivity.

Move the center link attachment to holes (A) or (C) if:

- Excessive hitch activity or hunting occurs in draft control operation.
- The rear of the implement raises too much when lifted. The lowest position provides the greatest lifting height and less lifting force and should be used when working with a plow.
- The draft control lever range is too small.

Move the center link attachment to holes (A) or (B) if:

- The hitch response in draft control operation is unsatisfactory and the engine speed drops too far before raising the implement.



PULX001019 —UN—07AUG08

- The rear of the implement droops and drags the ground as the implement is lifted.

NR25796,0001779 -19-16DEC08-1/1

Level the Hitch

1. Lower implement to take weight off hitch.
2. Adjust center link to level implement front to rear:

Unlock locking rod (A). Loosen ring nut (B). Rotate center link body clockwise to lengthen center link or counterclockwise to shorten it.

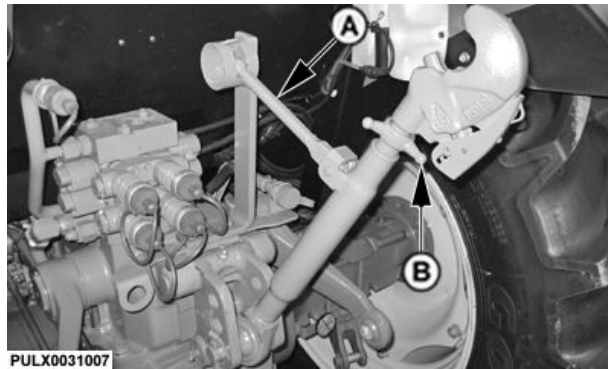
Length of link must be kept within the following limits (measured at the center link ends):

- Minimum length 518 mm (20.4 in.)
- Maximum length 718 mm (28.3 in.)

Depending on the tractor configuration adjust to:

- Minimum length 530 mm (20.87 in.)
- Maximum length 730 mm (28.74 in.)

IMPORTANT: DO NOT deviate from the specified dimensions. Link body threads could be damaged.



PULX003107 —UN—21JAN09

Relock the locking rod (A) if link is not in use.

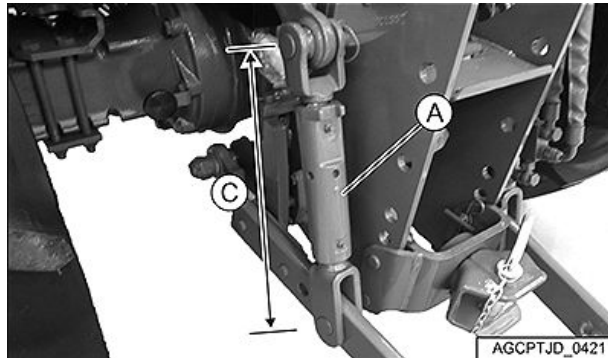
OULXBER,0002260 -19-28OCT14-1/2

3. Adjust right-hand or left-hand link to level implement side to side: Slide up the sleeve (A) then turn it clockwise to raise draft link or counterclockwise to lower it.

After adjustment of lower level align the slot in the sleeve (A) with the pin in the rod to prevent turning of parts during operation.

Length (C) of links must be kept within the following limits:

- Minimum length 430 mm (16.9 in.)
- Maximum length 560 mm (22.1 in.)



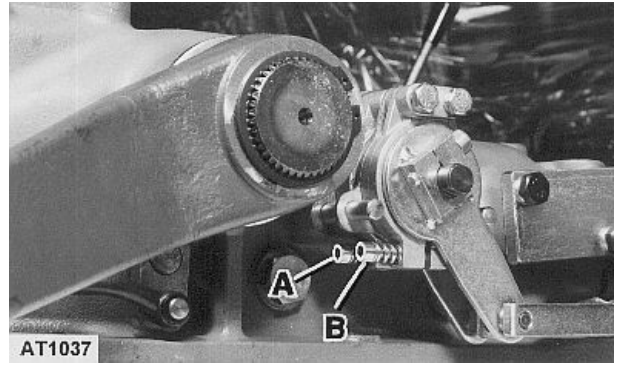
AGCPTJD0421 —UN—02NOV15

OULXBER,0002260 -19-28OCT14-2/2

Adjust Hitch Control Lever Friction

IMPORTANT: Ensure the engine is not running and the hitch is in lowered position.

If hitch position control lever or draft control lever do not stay in set position, increase relevant lever friction by tightening draft control lever screw (B) and/or position control lever screw (A) until the desired friction is obtained.



AT1037 —UN—27NOV96

SS40167,000004D -19-22JAN09-1/1

Cold-Weather Operation

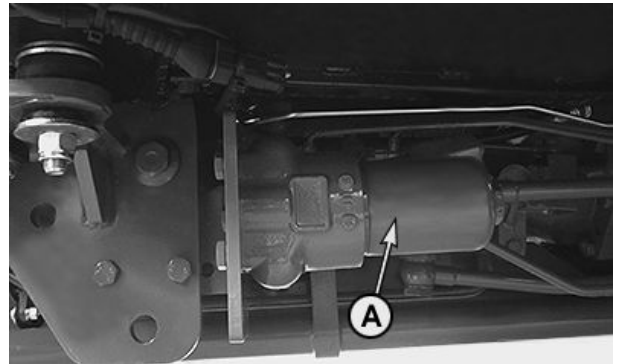
If the oil is cold, hydraulic functions including steering may be slow.

NOTE: Cold oil will not flow easily through the filter screen or hydraulic system filter (A).

Once the oil is warmed up, the hydraulic system (including the steering system) will operate normally again.

IMPORTANT: To prevent damage to the hydraulic pump or relief valve, warm-up time **MUST NOT** be less than 2 to 3 minutes.

1. Start engine and run it at about 1000 rpm.
2. Turn and hold steering wheel in full left or right position.



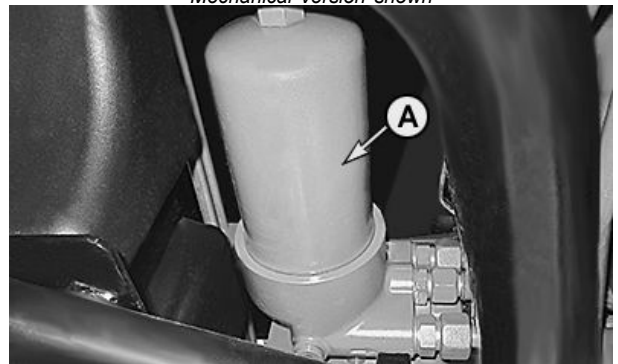
5GL shown

AGCPTJ00422 —UN—15JUL13



Mechanical version shown

AGCPTJ00644 —UN—29OCT14



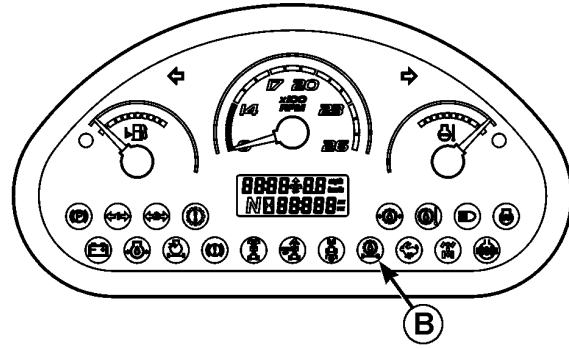
With 24/12 transmission

AGCPTJ00638 —UN—29OCT14

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OULXBER,0002506 -19-29OCT14-1/2

NOTE: On Power Reverser transmission only. If the oil filter is clogged while oil is at normal operating temperature, transmission oil filter indicator light (B) will glow.



AGCPTJD0639 —UN—29OCT14

OULXBER,0002506 -19-29OCT14-2/2

Front-Hitch

Front-hitch, controls:

The front-hitch is operated by control lever (B) which controls the SCV at position II

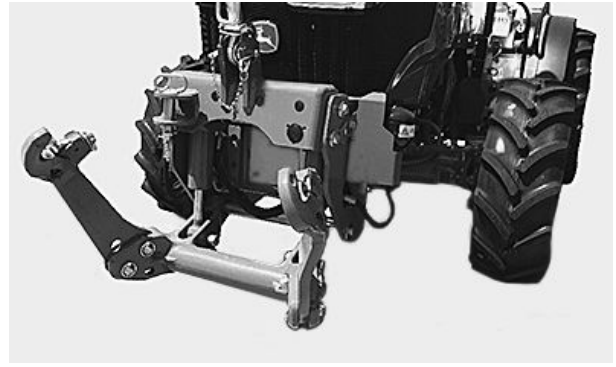
Position of control lever (B)

- (a) front-hitch upward
- (b) front-hitch downward
- (c) neutral, the front-hitch is locked and cannot move
- (d) floating position

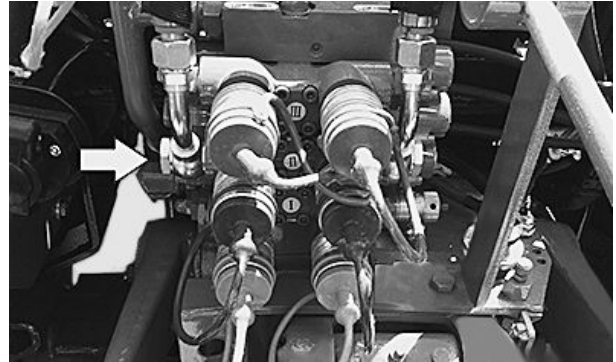
Front-hitch, SCV connection:

SCV type:	SCV position:			
	I	II	III	IV
Mechanical	-	X	-	-
Electro-Hydraulic	X	-	-	-
SCV type:	Front quick coupler position:			
	I	II	III	IV
Mechanical	-	NP*	-	-
Electro-Hydraulic	X	-	-	-

* SCV II - The hydraulic connections are linked directly on the rear SCV's



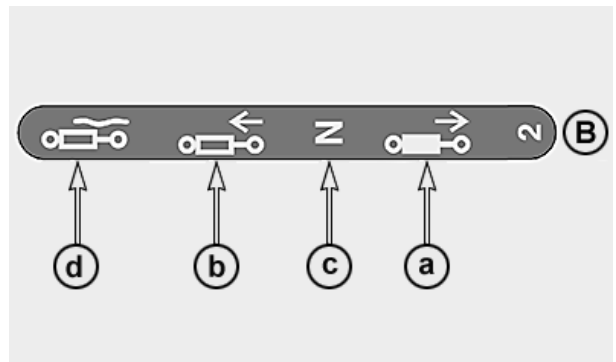
AGCPTJD0657 —UN—29OCT14



AGCPTJD0658 —UN—29OCT14



AGCPTJD0659 —UN—29OCT14



AGCPTJD0660 —UN—29OCT14

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OULXBER,0002505 -19-16OCT15-1/6

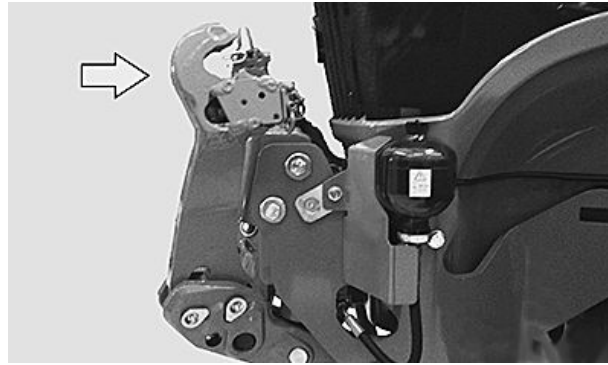
Front-hitch, draft links

The photo shows the draft links in transport position. To change from transport position (A) to operating position (B) proceed as follows on both draft links.

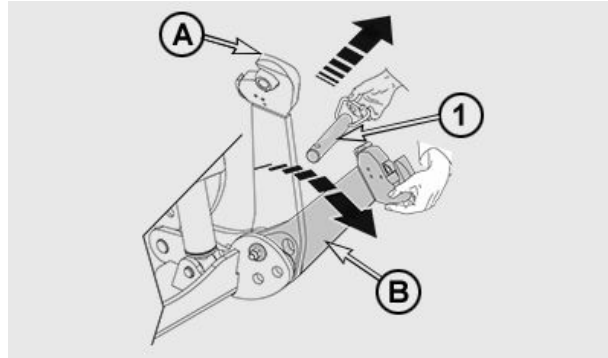
Remove quick-lock pin, then remove pin (1) and lower the lift arm until the bore is aligned with bore for position (C) or (D).

- Insert pin (1) in bore (C) to lock lift arm in operating position
- Insert pin (1) in bore (C) to allow float in operating position

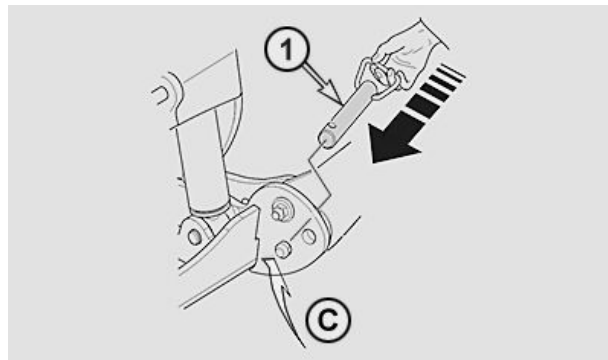
CAUTION: Make sure that pins on both lift arms are secured with quick-lock pins all times.



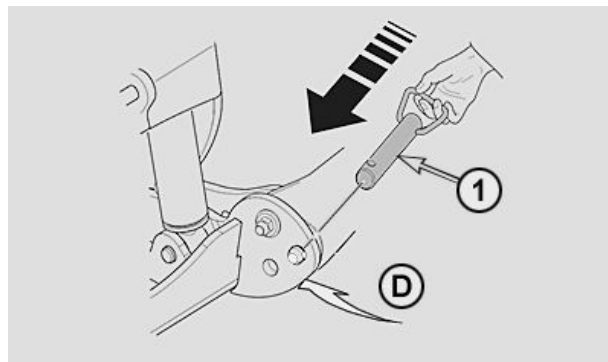
AGCPTJD0661—UN—29OCT14



AGCPDJ0040—UN—13JAN14



AGCPDJ0041—UN—13JAN14



AGCPDJ0042—UN—13JAN14

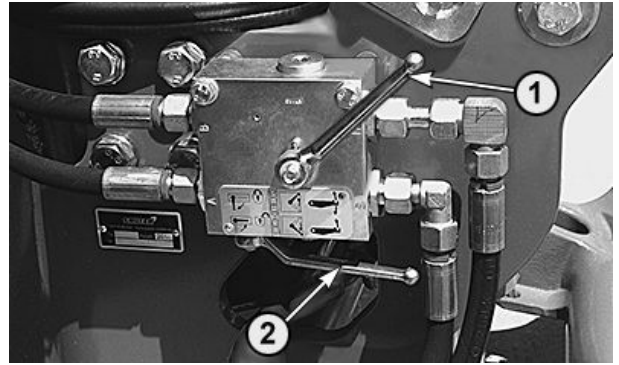
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OULXBER,0002505 -19-16OCT15-2/6

Front-hitch, shut-off valve

Lever (1) - double action/single action

Lever (2) - lock/unlock

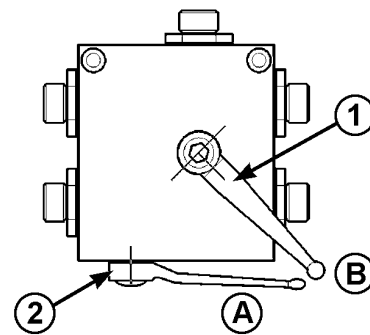


AGCPTJD0698 —UN—29OCT14

OULXBER,0002505 -19-16OCT15-3/6

Setting for single action operation:

Lever (1) in position (B), lever (2) in position (A).

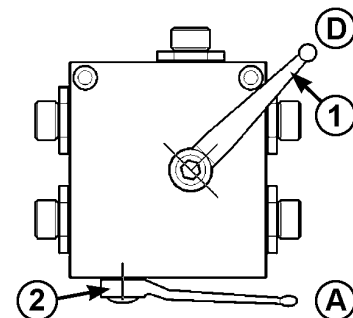


AGCPTJD0662 —UN—29OCT14

OULXBER,0002505 -19-16OCT15-4/6

Setting for double action operation:

Lever (1) in position (D), lever (2) in position (A).



AGCPTJD0663 —UN—29OCT14

Continued on next page

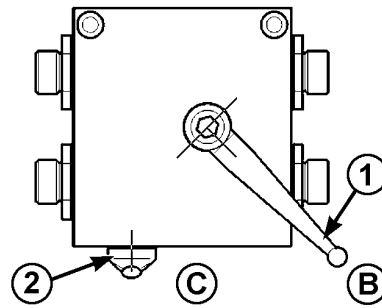
OULXBER,0002505 -19-16OCT15-5/6

Operation of valve must be inhibited when driving on roads always when the front-hitch is not in use.

Setting to lock the valve:

Lever (2) in position (C), lever (1) in position (B).

⚠ CAUTION: : If SCV II is equipped with additional couplers towards the rear (for operation of rear implements), the shut-off valve must be locked before rear implements are operated using SCV II.



AGCPTJD0664 —UN—29OCT14

OULXBER,0002505 -19-16OCT15-6/6

Power Take-Off

PTO Guard

CAUTION: Remove PTO cap (A) only when the PTO is to be used.

As soon as PTO-driven implement is removed, re-install cap over PTO stub shaft.

The master shield (B) can be folded up to allow an implement to be connected, but it must be folded down again afterwards. *There are various versions of PTO guard that are not shown here.*

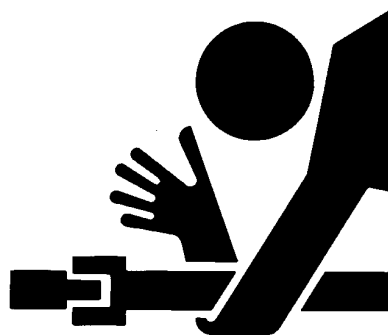
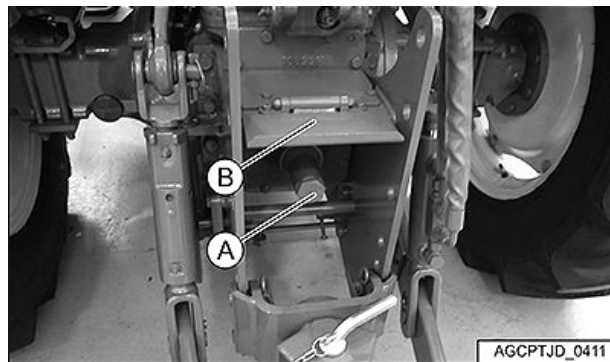
CAUTION: Never operate PTO unless the master shield is in the position shown. Switch off the PTO before raising the implement.

CAUTION: Before using the PTO, the maximum permissible angle of articulation on the telescoping driveline must be ascertained. During operation, there must be no contact between the PTO guard and the telescoping driveline. This is particularly important when turning corners.

With Type 3 PTOs (dia. 45 mm, 20 splines), clearance in the area of the PTO guard may be restricted. Bear this in mind when operating; avoid unnecessary damage.

When connecting the PTO, wear gloves.

CAUTION: Always put a guard (C) on the telescoping driveline and take action to prevent it from turning with the shaft. Do not operate the telescoping driveline unless a guard is installed that covers the PTO shaft completely and does not turn with the shaft.



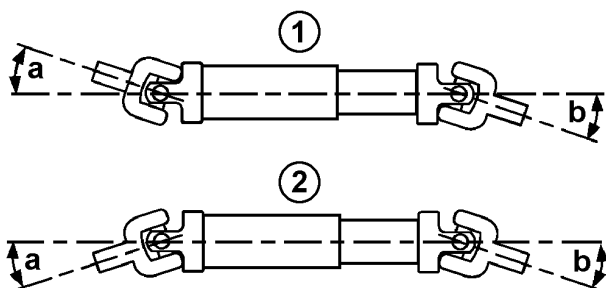
NR25796,00016E5 -19-02DEC15-1/1

AGCPTJD0411 —UN—02NOV15

LX1049906 —UN—18FEB11

TS276 —UN—23AUG88

Operating Instructions



LX1049749

Articulation on Telescoping Driveline

1— Z-shaped layout

2— W-shaped layout

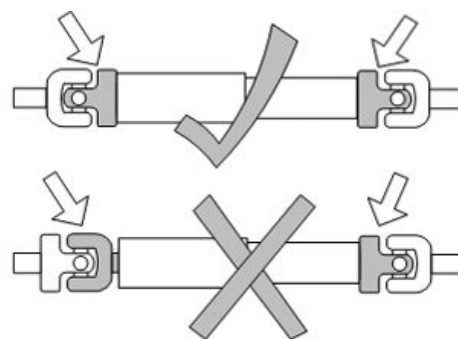
As far as possible, angles (a) and (b) at the universal joints should be the same at both ends of the telescoping driveline.

In applications where this is not the case (e.g. sharp turns with PTO engaged), it is recommended to use a continuous-velocity drive shaft.

NOTE: The two schematic drawings do not show any guards on the telescoping driveline. A guard is mandatory when using telescoping drivelines.

IMPORTANT: Only operating conditions described in the Operator's Manuals of the various implements are permitted. This applies particularly to maximum permissible angle of articulation, to the use of freewheel

LX1049749 —UN—21MAY10



LX1049900

Align Forks Correctly

clutches and overload clutches, and to the prescribed amount of overlap when shaped pipes are pushed together.

IMPORTANT: Before using a PTO-driven implement, take action to ensure that the telescoping driveline is lubricated regularly. Comply with instructions in the Operator's Manual provided by the manufacturer.

IMPORTANT: On multi-component telescoping drivelines, the yokes at each end must be aligned as shown. The yokes at each end must NOT be at 90° to one another (see arrows in illustration on the right).

LX1049900 —UN—22FEB11

OU12401,0000CD6 -19-20DEC11-1/1

Attaching PTO-Driven Implement

CAUTION: Shut off engine and disengage PTO before attaching PTO-driven equipment.

CAUTION: High-inertia implements do not come to a standstill the moment the PTO control lever is shifted to the disengaged position. Do NOT approach the implement while it is "coasting down". Do not work on the implement until it has stopped.

CAUTION: Before attempting to clean, adjust or lubricate a PTO-driven machine, the three-point hitch or u.j. shaft, always make sure the PTO is switched off and stopped, the tractor engine is shut off and the ignition key is removed.

1. Turn key off to stop engine.

2. Attach implement to tractor before connecting PTO drive line. Lock three-point hitch in upward position if it is not to be used.
3. Rotate PTO shield upward for clearance. 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 drive line is locked to PTO shaft. Place PTO shield in downward position.
4. Be sure all shields are in place and in good condition. Never operate PTO unless master shield is properly installed. WITH ENGINE STOPPED, check integral shields on drive line by making sure they rotate freely on shaft. Lubricate or repair as necessary.
5. Check carefully for any interference, make sure three-point hitch is locked in the upward position if it is not used.

OULXA64,0000C75 -19-01JUL04-1/1

Operating the Rear PTO (Mechanical Version)

NOTE: Engine will not start if PTO clutch lever is engaged.

1. Start engine and, using hand throttle lever (F), select correct engine speed for PTO operation.

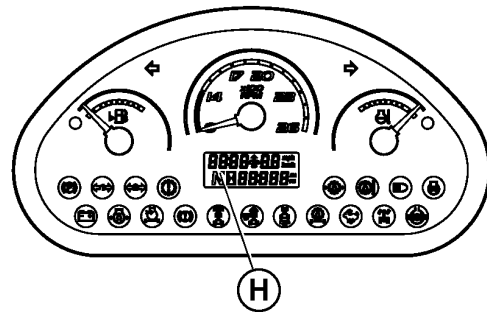
Rated PTO speeds are achieved at the following engine speeds:

540 rpm rear PTO	1938 rpm
540E rpm rear PTO	1648 rpm
1000 rpm rear PTO	1962 rpm

NOTE: Direct reading of PTO rpm value is possible on digital display (H) when the PTO is engaged.



AGCPTJD0345—UN—10JUL13

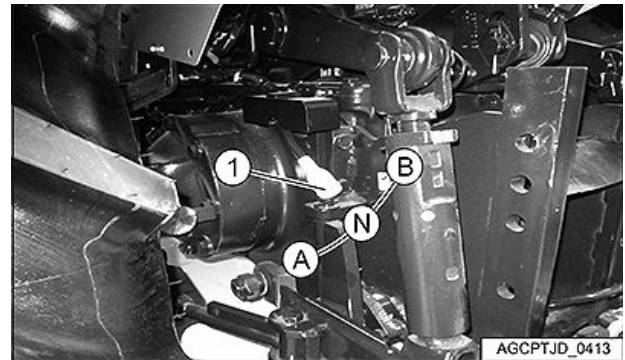


AGCPTJD0412—UN—15JUL13

OULXBER,0002207GL -19-01AUG13-1/3

2. Select the PTO speed if the tractor is equipped with 540 and 540E or 540 and 1000 PTO option. Move lever forward (B) for 540 or rearward (C) for 540E or 1000 operation. Position (A) is neutral. This lever is on left side control console. If dual speed PTO is not provided, this lever will not be installed.

IMPORTANT: The PTO speed selector lever must only be used when no equipment is connected to the PTO.



AGCPTJD0413—UN—02NOV15

Continued on next page

OULXBER,0002207GL -19-01AUG13-2/3

3. Make sure that PTO mode selector lever (A)¹ on the left side is in rear position (PTO operation dependent on engine speed).

4. Move PTO engagement lever (B) forward to engage PTO.

PTO indicator (D) will light up when the PTO is engaged.

CAUTION: Turn key off to stop engine and make sure all mechanisms have stopped before cleaning out machine or making any adjustments to PTO driven implement.

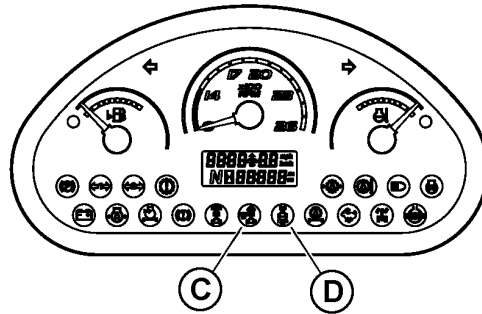
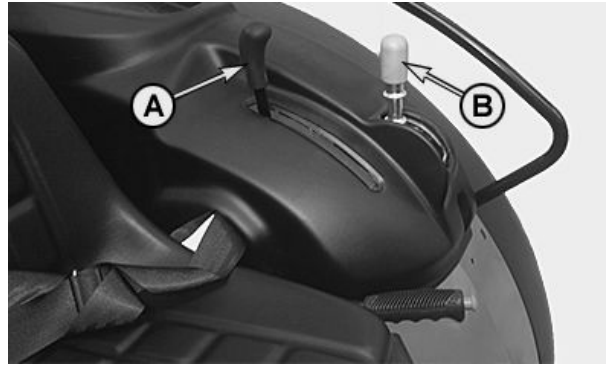
5. Pull lever (B) back to disengage PTO.

For ground speed PTO operation move PTO mode selector lever (A)¹ forward. For this operation the tractor has to be stopped. If coupling is not possible move tractor slowly forward to allow the gears to connect. In this case, PTO engagement is independent from position of PTO engagement lever (B). If ground speed PTO is engaged, the ground speed PTO indicator (C) will glow.

If PTO ground speed mode is activated, the PTO engagement lever (B) has no effect.

CAUTION: Even if PTO engagement lever (B) is in disengaged position, the PTO will turn when moving the tractor.

¹ If equipped.



A—PTO Mode Selector Lever
B—PTO Engagement Lever

C—Ground Speed PTO Indicator
D—PTO Indicator

AGCPTJD0414 —UN—12JUL13

AGCPTJD0415 —UN—15JUL13

OULXBER,0002207GL -19-01AUG13-3/3

Operating the Rear PTO (Electro-Hydraulic Version)

NOTE: The electro-hydraulic rear PTO is available for 24/12 transmission of 5GV, 5GN & 5GF only.

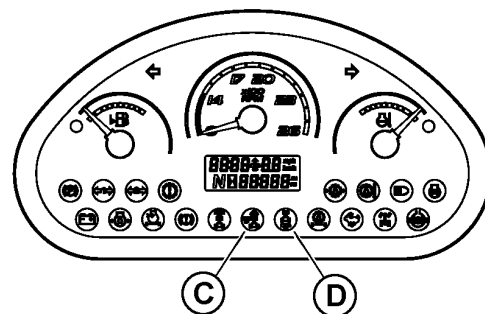
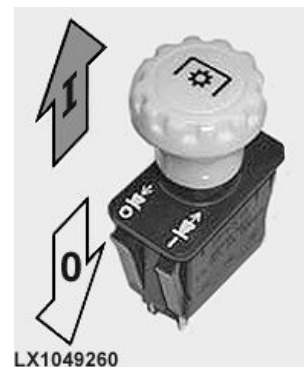
The ground drive PTO is optional.

To engage the PTO, pull switch (A) out and to disengage the PTO, push switch (A) in. Indicator light (D) will come on when the PTO is engaged and go out when the PTO is disengaged. To select ground drive PTO, move PTO selector lever (X) forward and to select independent PTO, move PTO selector lever (X) backward.

- Lever (X) forward = Ground Drive PTO
- Lever (X) backward = Independent PTO

NOTE: The tractor must be stationary to engage ground drive PTO. If engagement is not possible, slowly drive the tractor forward to allow the gears to mesh.

Indicator light (C) will come on when ground drive PTO is engaged and go out when ground drive PTO is disengaged.



OULXBER,0002508 -19-29OCT14-1/1

AGCPTJD0640—UN—29OCT14

AGCPTJD0641—UN—29OCT14

LX1049260—UN—02FEB10

AGCPTJD0415—UN—15JUL13

Select Ground Drive PTO Speeds

CAUTION: Pay attention to the direction in which the PTO stub shaft rotates. The PTO stub shaft changes the direction in which it rotates depending on whether the tractor is travelling forward or reversing. The ground speed PTO remains engaged until lever (B) is moved backward. The ground drive PTO remains active if it is already engaged when the engine is restarted; it starts to rotate as soon as the vehicle moves.

IMPORTANT: The tractor must be stationary to engage ground drive PTO. If engagement is not possible, slowly drive the tractor forward to allow the gears to mesh.

Mechanical version: Pull PTO engagement lever (D) rearward to disengage PTO.

1. Pull PTO engagement lever (A) rearward to disengage PTO.
2. Move PTO mode selector lever forward to engage ground drive PTO.
3. Use PTO speed selector lever to select PTO speed (see table).

Ground Drive PTO Speeds	Number of PTO drive shaft revolutions per one revolution of rear wheels		
Tractor	Speed selector lever at 540	Speed selector lever at 540E	Speed selector lever at 1000
5GL, 40 Km/h	9,1	10,7	16,6
5GV 30 Km/h	11,4	13,4	20,9
5GV 40 Km/h	9,1	10,7	16,6
5GN 30 Km/h	11,4	13,4	20,9
5GN 40 Km/h	9,1	10,7	16,6
5GF 30 Km/h	11,4	13,4	20,9
5GF 40 Km/h	9,1	10,7	16,6

CAUTION: Always comply with implement specifications when selecting the PTO speeds.

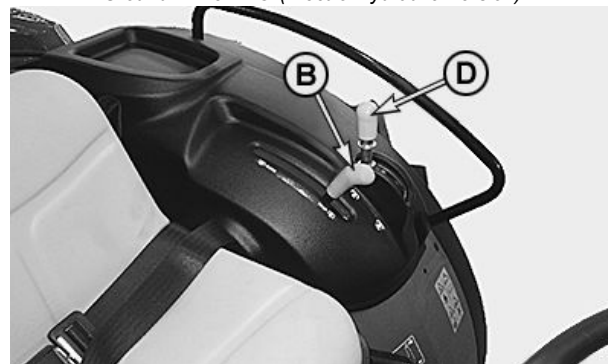
See additional information given in the Operator's Manual of the implement.



PTO Switch



Ground Drive PTO (Electro-Hydraulic Version)



Ground Drive PTO (Mechanical Version)

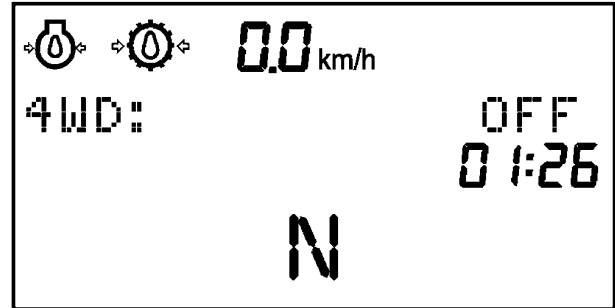
A—PTO Switch
B—PTO Mode Selector Lever

D—PTO Engagement Lever

OULXBER,0002509 -19-29OCT14-1/1

Front PTO

CAUTION: The counterclockwise-rotating front PTO uses a stub shaft with six splines and operates at a rated speed of 1000 rpm (engine speed 2060 rpm).



AGCPTJD0047 —UN—23MAY13

OULXBER,000250A -19-07NOV14-1/2

Operating the front PTO:

CAUTION: Always disengage the PTO when not in use.

High-inertia implements do not come to a standstill the moment a PTO is shifted to the disengaged position. Do NOT approach the implement while it is coasting down. Do not work on the implement until it has stopped.

To switch on the Front PTO, release safety lock and operate the rocker switch (1).

The PTO starts to rotate and switch back light (1) up.

The light (1) is switched ON

The current speeds of the Front PTO is displayed on the digital display (C).

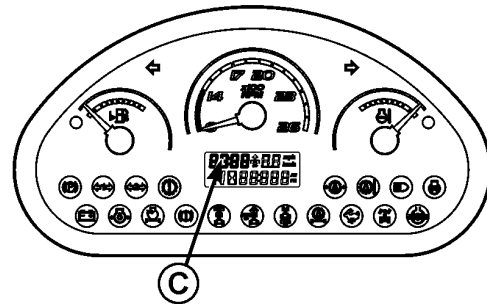
To switch off the Front PTO, press rocker switch (1).

The light (1) is switched OFF.

NOTE: If the engine is shut off while the Front PTO is running in order to restart the Engine the Front PTO must be switch off by pressing rocker switch (1).



AGCPTJD0750 —UN—07NOV14



AGCPTJD0699 —UN—29OCT14

OULXBER,000250A -19-07NOV14-2/2

Ballast

Select Ballast

CAUTION: When determining front and rear axle ballast, ensure that permissible axle loads and the maximum permissible machine weight (including mounted implements) are not exceeded. See Section 150, Specifications.

Comply with local regulations regarding installation and maximum permissible number of weights. In order to maintain steerability, at least 20% of unladen mass must be on the front axle. Unladen mass is the mass of the tractor without

special equipment, attachments, trailer ballast, but with hydraulic oil and lubricants, a full fuel tank and an operator weighing 75 kg (165 lb).

CAUTION: Use suitable lifting tackle/hoists when handling weights.

Safety and performance of your tractor depend on correct ballasting of front axle (front weights) and rear axle (wheel weights, filling tires with liquid ballast, pickup weight).

NR25796,000130B -19-22JAN09-1/1

Ballast Limitations

Ballast is limited by either tire capacity or tractor capacity. Each tire has a recommended carrying capacity which should not be exceeded (see Section 65, Wheels, Tires and Treads).

If a greater traction is needed, a larger single tire should be considered.

In this case the selected tires should be amongst those approved and the front to rear tire combination for front wheel drive version should be such as to maintain the correct front wheel lead.

See your John Deere dealer for information and details.

The maximum ballast weight allowed is:

— Maximum front ballast^a:..... 400 kg (882 lb)

— Maximum rear ballast: 200 kg (441 lb)

^awithout basic weight

IMPORTANT: Under no circumstances must axle and tire capacity be exceeded, see Weights in Section 150, Specifications.

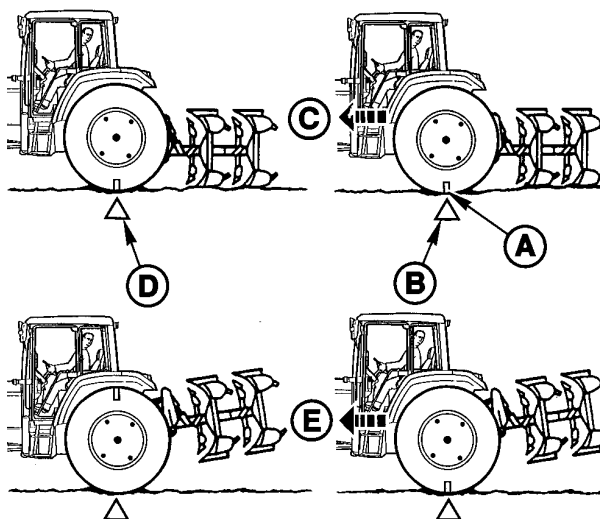
OULXBER,000250B -19-29OCT14-1/1

Measuring Rear Wheel Slip

1. Mark tire (A).
2. Mark starting point on the ground (B).
3. Drive tractor forward with implement lowered until ten revolutions of the rear wheel have been made (C).
4. Again place a marker on the ground (D).
5. Now raise implement and again drive between the two markers on the ground. Note number of revolutions made between the two markers (E).

The number of revolutions gives the following percentage of wheel slip:

- 10.0 revolutions = 0% wheel spin
- 9.5 revolutions = 5% wheel spin
- 9.0 revolutions = 10% wheel spin
- 8.5 revolutions = 15% wheel spin
- 8.0 revolutions = 20% wheel spin
- 7.5 revolutions = 25% wheel spin
- 7.0 revolutions = 30% wheel spin



LX000402 —UN—15AUG94

FD,WEIGHT001218 -19-01SEP98-1/1

Front Weights

One basic weight and additional front weights may be installed on the tractor, if required. See the table for information on the various ballast configurations that may be installed on each tractor type.

On **all tractors**: up to 10 additional weights, 50 kg (110 lb) each, can be installed on the basic weight.

CAUTION: Additional front ballast may be needed for transporting rear mounted implements. When implement is raised, drive slowly over rough ground, regardless of how much ballast is used.

CAUTION: Consider max. permissible axle loads (see Section 150, Specifications).

Tractor >>>	GV		GN		GF		GL	
	kg	lb	kg	lb	kg	lb	kg	lb
Basic weight (a)	65	143	65	143	65	143	65	143
Max. number of weights	6	6	6	6	10	10	10	10
Weight each	kg	lb	kg	lb	kg	lb	kg	lb
	50	110	50	110	50	110	25	55
Total additional weight (b)	300	660	300	660	500	1100	250	550
Total weight (a)+(b)	365	803	365	803	565	1243	315	693

OULXBER,000250C -19-29OCT14-1/1

Installing Front Weights

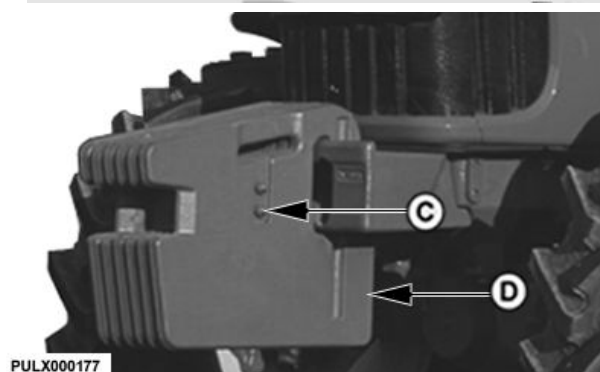
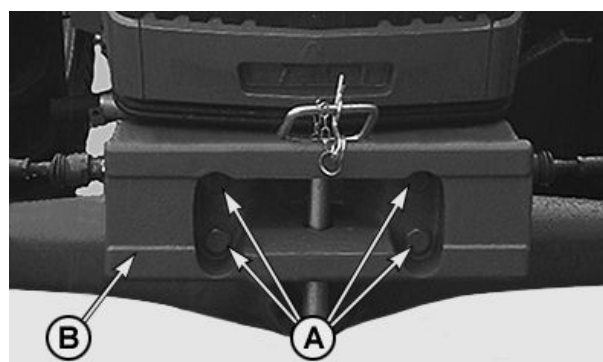
IMPORTANT: Tighten the basic weight attaching screws (A) to 390 N·m (287 lb-ft) and the screws (C) on front weights (D) to 230 N·m (170 lb-ft).

Install the basic weight (B) with screws (A) and place additional weights (D) as required. Secure them with screws (C).

IMPORTANT: When installing six or more front weights, they must be installed to form a jaw.

A—Screw (4 used)
B—Basic weight

C—Screw (2 used)
D—Front weight



PULX000177

AGCPTJD0027 —UN—21MAY13

PULX000177 —UN—04MAR08

OULXBER,00020D2 -19-10JUN13-1/1

Ballasting Two Wheel Drive Tractors

Add ballast 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 that are required for your tractor model.

OULXA64,0000315 -19-26JUN01-1/1

Ballasting Front Wheel Drive Tractors

Ideal tire slippage for front wheel drive tractors is 8-12 percent. To reduce wheel slip to this level, more weight is

needed on the front than without front wheel drive tractors. The ideal weight split is 40 percent front, 60 percent rear, of total tractor weight.

OULXA64,0000316 -19-26JUN01-1/1

With Weight in Three-Point Hitch

NOTE: Keep the three-point hitch raised when driving. This maximizes ground clearance.

 **CAUTION:** When the tractor is parked, always lower the pick-up weight to the ground.

IMPORTANT: Always make sure the tractor is balanced/ballasted properly.

IMPORTANT: Never use the hitch jaw in the front of the pick-up weight for towing loads.

MHM611,12 -19-01MAR00-1/1

Wheels, Tires, and Treads

Service Tires Safely

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

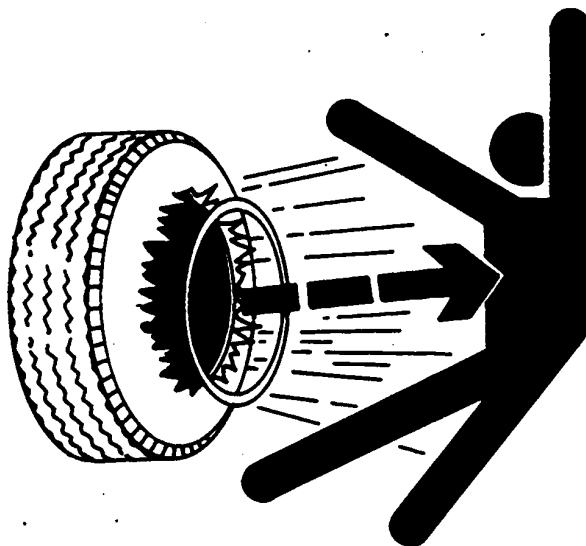
Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure.

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

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

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



TS211 —UN—15APR13

NR25796,000130A -19-25MAR09-1/1

Changing Wheels Safely

Due to the big size and the heavy weight of tractor wheels, pay attention to the following points when changing wheels:

- Before changing wheels, place tractor on firm, level ground.
- Engage park lock* and prevent the tractor from rolling away by putting down chock blocks.
- Remove the ignition key to prevent unauthorized operation.
- When removing rear wheels, prevent front axle oscillation by using wedges.
- When jacking up the tractor, only use the recommended lifting points, see "Jack Up the Tractor - Lifting Points" in Section 85 of this Operator's Manual.
- Use a stable lifting jack with sufficient lifting force. See Specifications and Loads and Weights in Section 150.
- Stop jacking up the tractor when the wheel is completely off the ground.
- Use a suitable wheel dolly, especially when removing a rear wheel. This is available as special tool KJD10581 at your John Deere dealer.
- Support the tractor when a wheel is removed. Support stands are available as special tools JT02043 and JT02044 at your John Deere dealer.
- When installing wheels, make sure that the correct torques are applied, see "Tighten Wheel Bolts and Wheel Weights" in this Operator's Manual.

**If not equipped with park lock, apply park brake instead.*



LX1049987

KJD10581—Wheel Dolly
JT02043—Support Stand, 482
to 736 mm (19 to 29 in.)

JT02044—Support Stand, 863
to 1117 mm (34 to 44 in.)

CAUTION: Do not operate the tractor until the wheel change has been completed.

When changing wheels, make sure that no-one is standing in the danger zone.

When removing a wheel, make sure that the tractor is supported safely.

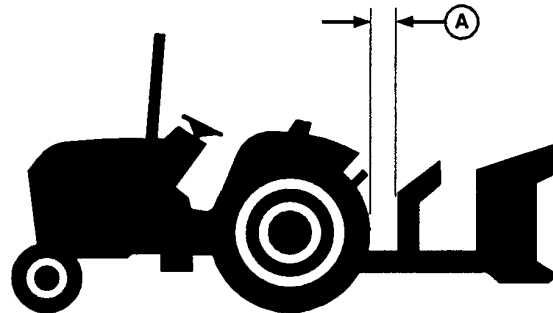
When storing removed wheels, make sure that they cannot fall.

OULXBER,0001B76 -19-20DEC11-1/1

Check Implement-to-Tire 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 is required to provide adequate implement-to-tire clearance.



LV736—UN—25JUN94

LV,5400NWT,B1 -19-30MAY96-1/1

Tighten Wheel Bolts

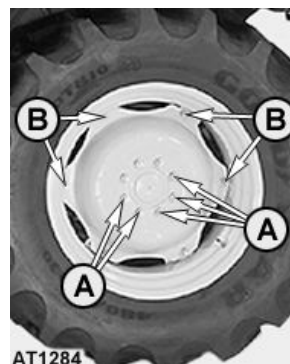
Tighten rear wheel nuts and bolts

IMPORTANT: Check tightness of rim, disk and wheel bolts after 10 hours every time you replace wheels.

Specification

(A)—Torque.....	400 Nm (295 lb-ft)
(B) M18 bolt—Torque.....	280 N·m (207 lb-ft)
(B) M16 bolt—Torque.....	210 N·m 155 lb-ft)

(A) — Disk to axle flange (B) — Rim to disk



AT1284 —UN—13JUN01

OULXBER,0002433 -19-02OCT15-1/3

Tighten front wheel nuts (tractors without front-wheel drive)

IMPORTANT: Check tightness of rim, disk and wheel bolts after 10 hours every time you replace wheels.

Specification

Disk to axle flange (tractors without front wheel drive)—Torque.....	175 Nm (130 lb-ft)



AT1285 —UN—13JUN01

OULXBER,0002433 -19-02OCT15-2/3

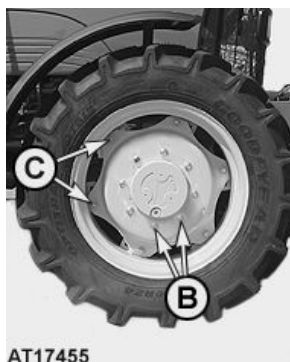
Tighten wheel nuts of front wheel drive axle

IMPORTANT: Check tightness of rim, disk and wheel bolts after 10 hours every time you replace wheels.

Specification

(B), Disk to axle flange—Torque.....	300 Nm (220 lb-ft)
(C) M18 bolt—Torque.....	280 N·m (207 lb-ft)
(V) M16 bolt—Torque.....	210 N·m 155 lb-ft)

(B) — Disk to axle flange (C) — Rim to disk



AT17455 —UN—20JUL07

OULXBER,0002433 -19-02OCT15-3/3

Observe Rear Wheel Tread Width Limitations

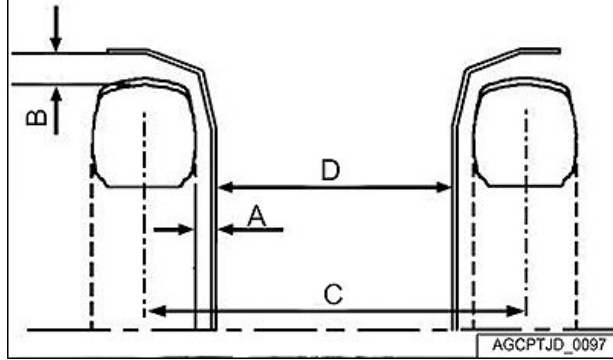
IMPORTANT: When changing rear tires, check clearance (A) and (B) between tires and fenders.

The tires must clear the fenders by at least:

Fixed Width (in mm)			
D			
5GL	5GV	5GN	5GF
600	470	540	620

Tire size	5075GL, 5085GL					
	Minimum value					
	A		B		C	
	mm	in.	mm	in.	mm	in.
380/70 R20	15.0	0.59	39.8	1.57	1131	44.53
360/70 R24	15.0	0.59	65.2	2.57	1027	40.43
380/70 R24	16.2	0.64	44.2	1.74	1140	44.88
440/65 R24	62.0	2.44	34.0	1.34	1191	46.89

Tire size	5075GV, 5085GV					
	Minimum value					
	A		B		C	
	mm	in.	mm	in.	mm	in.
280/85 R28	53.2	2.09	110.6	4.35	879	34.61
320/85 R28	37.7	1.48	76.1	3.00	879	34.61
250/85 R28	30.7	1.21	134.9	5.31	783	30.83
360/70 R24	58.2	2.29	133.0	5.24	956	37.64
340/85 R24	56.2	2.21	113.5	4.47	958	37.72
320/85 R24	20.2	0.80	126.4	4.98	848	33.39
360/70 R28	24.2	0.95	82.6	3.25	875	34.45
340/85 R28	23.7	0.93	61.1	2.41	927	36.50
9.5 R28	23.2	0.91	142.6	5.61	756	29.76



AGCPTJD0097 — UN—02NOV15

Tire size	5075GN, 5085GN					
	Minimum value					
	A		B		C	
	mm	in.	mm	in.	mm	in.
280/85 R28	58.2	2.29	110.7	4.36	959	37.76
320/85 R28	42.7	1.68	76.3	3.00	959	37.76
340/85 R24	61.2	2.41	114.0	4.49	1038	40.87
340/85 R28	21.7	0.85	56.2	2.21	955	37.60
380/70 R24	48.7	1.92	115.0	4.53	1038	40.87
380/85 R28	25.7	1.01	30.0	1.18	1007	39.65
420/70 R28	71.7	2.82	35.3	1.39	1118	44.02

Tire size	5075GF, 5085GF, 5100GF					
	Minimum value					
	A		B		C	
	mm	in.	mm	in.	mm	in.
320/85 R28	15.2	0.60	76.9	3.03	984	38.74
380/70 R24	16.0	0.63	11.4	0.45	1140	44.88
380/70 R28	66.7	2.63	73.0	2.87	1114	43.86
380/85 R28	39.2	1.54	30.0	1.18	1114	43.86
420/70 R24	23.2	0.91	80.3	3.16	1140	44.88
420/70 R28	29.7	1.17	35.4	1.39	1114	43.86
480/65 R24	46.7	1.84	82.1	3.23	1191	46.89
480/65 R28	58.7	2.31	33.1	1.30	1217	47.91

OULXBER,000244B -19-02OCT15-1/1

5GL - Tread Adjustment

5GL Front-Wheel Tread Adjustment

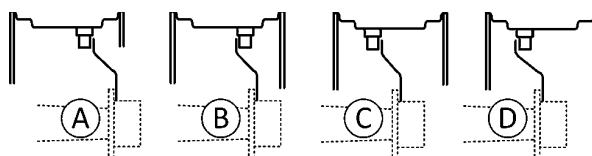
Front wheel tread can be adjusted by re-positioning or reversing the rims or by reversing the wheel disks. In addition, the complete wheel can be installed on the other side of the tractor. The arrow on side wall of tire must point in the direction of forward travel. If front wheels are removed to adjust tread, tighten front wheel attaching

nuts to specified torque. See "Tighten Wheel Bolts" in this Section.

IMPORTANT: Always mount nuts on rim side.

NOTE: The illustration shows the right-hand front wheel. Tread widths are measured at the lowest point of the tires.

LX205085 —UN—14JAN14

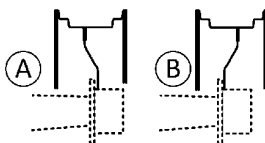


4 Pos. Adjustable Rim (Front-Wheel)

5GL Front-Wheel Tread Settings (with Front-Wheel Drive)						
Front Tires	4 Pos. Adjustable Rim	Unit	Position of Rim and Wheel Disks			
			A	B	C	D
260/70 R16	W8x16"	mm	1257	1333	1297	1373
		in.	49	52	51	54
280/70 R16	W8x16"	mm	1256	1332	1296	1372
		in.	49	52	51	54
280/70 R18	W9x18"	mm	1181	1257	1369	1445
		in.	47	49	54	57

OULXBER,00027D3 -19-05OCT15-1/3

LX211142 —UN—08DEC15



2 Pos. Rim (Front Wheel)

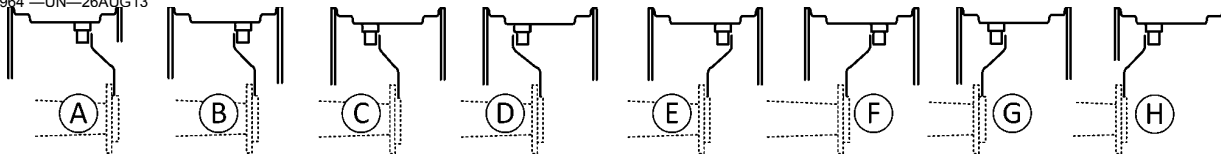
5GL Front-Wheel Tread Settings (with Front-Wheel Drive)				
Front Tires	2 Pos. Rim	Unit	Position of Rim and Wheel Disks	
			A	B
260/70 R16	W8x16"	mm	1263	1367
		in.	50	54
280/70 R16	W8x16"	mm	1262	1366
		in.	50	54
280/70 R18	W9x18"	mm	1217	1413
		in.	48	56

Continued on next page

OULXBER,00027D3 -19-05OCT15-2/3

5GL Rear-Wheel Tread Adjustment

LX203964 —UN—26AUG13



8 Pos. Adjustable Rim

5GL Rear-Wheel Tread Settings										
Rear Tires	8 Pos. Adjustable Rim	Unit	Position of Rim and Wheel Disks							
			A	B	C	D	E	F	G	H
380/70 R20	W11x20"	mm	x	1131	1235	1342	1156	1263	1367	1474
		in.	x	45	49	53	45	50	54	58
360/70 R24	W12x24"	mm	1027	1140	1196	1309	1195	1308	1364	1477
		in.	40	45	47	52	47	51	54	58
380/70 R24	W12x24"	mm	x	1140	1196	1309	1195	1308	1364	1477
		in.	x	45	47	52	47	51	54	58
440/65 R24	W15Lx24"	mm	x	x	x	1191	1313	1426	1478	1591
		in.	x	x	x	47	52	56	58	63

Rear wheel tread can be adjusted by re-positioning or reversing the rims or by reversing the wheel disks. In addition, the complete wheel can be installed on the other side of the tractor. The arrow on side wall of tire must point in the direction of forward travel.

IMPORTANT: Always mount nuts on rim side.

The distance between the side wall of the tire and the fender must not be less than 15 mm (0.6 in.). Distance between edge of tire and fender must not be less than 30 mm (1.18 in.).

NOTE: The illustration shows the right-hand rear wheel. Tread widths are measured at the lowest point of the tires.

After adjustment has been completed tighten wheel retaining bolts to specified torque. See Section 30, Break-In Period. If wheels are removed to adjust tread, tighten wheel retaining bolts or nuts to specified torque. See Tighten Wheel Bolts in this Section.

OULXBER,00027D3 -19-05OCT15-3/3

5GF - Tread Adjustment

5GF Front-Wheel Tread Setting

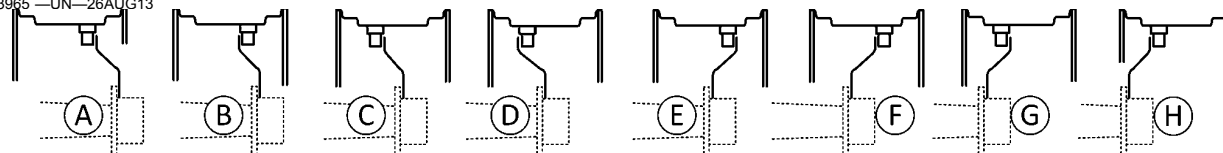
Front wheel tread can be adjusted by re-positioning or reversing the rims or by reversing the wheel disks. In addition, the complete wheel can be installed on the other side of the tractor. The arrow on side wall of tire must point in the direction of forward travel. If front wheels are

removed to adjust tread, tighten front wheel attaching nuts to specified torque. See "Tighten Wheel Bolts" in this Section.

IMPORTANT: Always mount nuts on rim side.

NOTE: The illustration shows the right-hand front wheel. Tread widths are measured at the lowest point of the tires.

LX203965 —UN—26AUG13



5GF Front-Wheel Tread Settings (with Front-Wheel Drive)

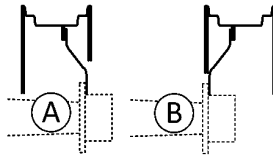
Front Tires	Adjustable Rim	Unit	Position of Rim and Wheel Disks							
			A	B	C	D	E	F	G	H
250/80-16	W8x16"	mm	1256	1332	1296	1372	x	x	x	x
		in.	49	52	51	54	x	x	x	x
250/80-18	W9x18"	mm	1181	1257	1369	1445	x	x	x	x
		in.	46	49	54	57	x	x	x	x
280/70 R18	W9x18"	mm	1181	1257	1369	1445	x	x	x	x
		in.	46	49	54	57	x	x	x	x
280/70 R18	W9x18"	mm	1181	1257	1369	1445	x	x	x	x
		in.	47	49	54	57	x	x	x	x
280/70 R20	W10x20"	mm	x	1129	1233	1343	1280	1389	1493	1603
		in.	x	44	49	53	50	55	59	63
300/70 R20	W10x20"	mm	x	1129	1233	1342	1279	1389	1493	1602
		in.	x	44	49	53	50	55	59	63
320/70 R20	W10x20"	mm	x	x	1232	1341	1279	1388	1492	1601
		in.	x	x	49	53	50	55	59	63
9.5 R20	W8x20"	mm	x	1158	1202	1312	1309	1418	1462	1572
		in.	x	46	47	52	52	56	58	62

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OULXBER,00027D4 -19-05OCT15-1/4

Wheels, Tires, and Treads

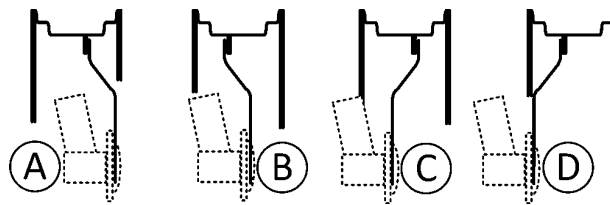
LX245321 —UN—05OCT15



5GF Front-Wheel Tread Settings (with Front-Wheel Drive)				
Front Tires	2 Pos. Rim	Unit	Position of Rim and Wheel Disks	
			A	B
250/80-18	W9x18"	mm	1217	1413
		in.	48	56
280/70 R20	W10x20"	mm	1163	1463
		in.	46	58
300/70 R20	W10x20"	mm	1163	1463
		in.	46	58
320/70 R20	W10x20"	mm	1162	1462
		in.	46	58

OULXBER,00027D4 -19-05OCT15-2/4

LX203966 —UN—26AUG13

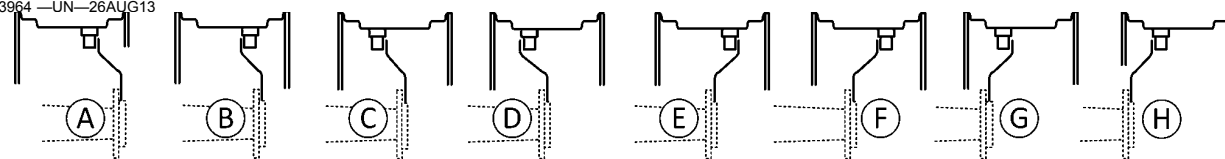


5GF Front-Wheel Tread Settings (without Front-Wheel Drive)						
Front Tires	Rim	Unit	Position of Rim and Wheel Disks			
			A	B	C	D
6.00-16	4.00Ex16" (2 Pos. Rim)	mm	998	x	1196	x
		in.	39	x	47	x
6.50-16	5.50Fx16"	mm	1031	1107	1091	1167
		in.	41	44	43	46
7.50-16	5.50Fx16"	mm	1029	1105	1089	1165
		in.	41	44	43	46

Continued on next page

OULXBER,00027D4 -19-05OCT15-3/4

LX203964 —UN—26AUG13



8 Pos. Adjustable Rim

5GF Rear-Wheel Tread Settings

5GF Rear-Wheel Tread Settings										
Rear Tires	8 Pos. Adjustable Rim	Unit	Position of Rim and Wheel Disks							
			A	B	C	D	E	F	G	H
320/85 R28	W10x28"	mm	x	984	1118	1229	1273	1384	1518	1629
		in.	x	39	44	48	50	54	60	64
340/85 R28	W12x28"	mm	x	x	1114	1225	1277	1388	1514	1625
		in.	x	x	44	48	50	55	60	64
380/70 R24	W12x24"	mm	x	1140	1196	1309	1195	1308	1364	1477
		in.	x	45	47	52	47	51	54	58
380/70 R28	W12x28"	mm	x	x	1114	1225	1277	1388	1514	1625
		in.	x	x	44	48	50	55	60	64
380/85 R28	W12x28"	mm	x	x	1114	1225	1277	1388	1514	1625
		in.	x	x	44	48	50	55	60	64
420/70 R24	W12x24"	mm	x	1140	1196	1309	1195	1308	1364	1477
		in.	x	45	47	52	47	51	54	58
420/70 R28	W12x28"	mm	x	x	1114	1225	1277	1388	1514	1625
		in.	x	x	44	48	50	55	60	64
480/65 R24	W15Lx24"	mm	x	x	x	1191	1313	1426	1478	1591
		in.	x	x	x	47	52	56	58	63
480/65 R28	W15Lx28"	mm	x	x	x	1217	1285	1396	1506	1617
		in.	x	x	x	48	51	55	59	64

Rear wheel tread can be adjusted by re-positioning or reversing the rims or by reversing the wheel disks. In addition, the complete wheel can be installed on the other side of the tractor. The arrow on side wall of tire must point in the direction of forward travel.

IMPORTANT: Always mount nuts on rim side.

The distance between the side wall of the tire and the fender must not be less than 15 mm (0.6 in.). Distance between edge of tire and fender must not be less than 30 mm (1.18 in.).

NOTE: The illustration shows the right-hand rear wheel. Tread widths are measured at the lowest point of the tires.

After adjustment has been completed tighten wheel retaining bolts to specified torque. See Section 30, Break-In Period. If wheels are removed to adjust tread, tighten wheel retaining bolts or nuts to specified torque. See Tighten Wheel Bolts in this Section.

OULXBER,00027D4 -19-05OCT15-4/4

5GN - Tread Adjustment

5GN Front-Wheel Tread Adjustment

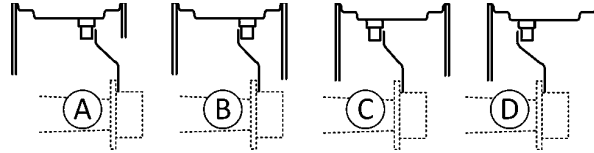
Front wheel tread can be adjusted by re-positioning or reversing the rims or by reversing the wheel disks. In addition, the complete wheel can be installed on the other side of the tractor. The arrow on side wall of tire must point in the direction of forward travel. If front wheels are

removed to adjust tread, tighten front wheel attaching nuts to specified torque. See "Tighten Wheel Bolts" in this Section.

IMPORTANT: Always mount nuts on rim side.

NOTE: The illustration shows the right-hand front wheel. Tread widths are measured at the lowest point of the tires.

LX205085 —UN—14JAN14

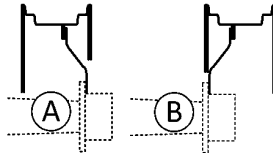


5GN Front-Wheel Tread Settings (with Front-Wheel Drive)

Front Tires	Adjustable Rim	Unit	Position of Rim and Wheel Disks			
			A	B	C	D
260/70 R16	W8x16"	mm	x	x	1036	1112
		in.	x	x	41	44
280/70 R18	W9x18"	mm	x	x	1034	1110
		in.	x	x	41	44
7.50 R16	5.50Fx16"	mm	x	1005	953	1029
		in.	x	40	38	41
7.50 R18	5.50Fx18"	mm	929	1005	949	1025
		in.	37	40	37	40
8.25-16	5.50Fx16"	mm	x	1004	952	1028
		in.	x	40	37	40

OULXBER,00027D5 -19-05OCT15-1/4

LX245321 —UN—05OCT15



5GN Front-Wheel Tread Settings (with Front-Wheel Drive)

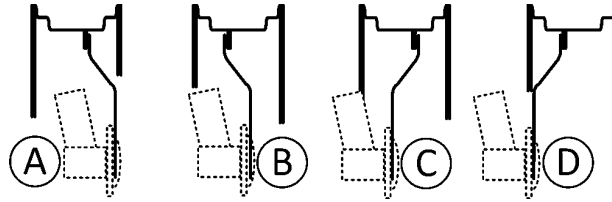
Front Tires	2. Pos. Rim	Unit	Position of Rim and Wheel Disks	
			A	B
7.50 R16	5.50Fx16"	mm	911	1047
		in.	36	41
280/70 R18	W9x18"	mm	x	1060
		in.	x	42
8.25-16	5.50Fx16"	mm	910	1046
		in.	36	41
260/70 R16	W8x16"	mm	x	1088
		in.	x	43

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OULXBER,00027D5 -19-05OCT15-2/4

Wheels, Tires, and Treads

LX203966 —UN—26AUG13



5GN Front-Wheel Tread Settings (without Front-Wheel Drive)

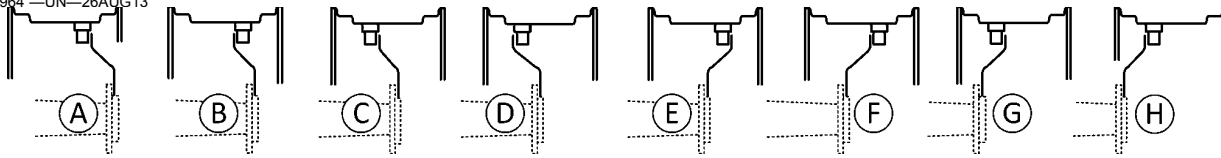
Front Tires	4 Pos. Adjustable Rim	Unit	Position of Rim and Wheel Disks			
			A	B	C	D
6.00-16	4.00Ex16"	mm	776	x	974	x
		in.	31	x	38	x
6.50-16	5.50Fx16"	mm	809	885	869	945
		in.	32	35	34	37
7.50-16	5.50Fx16"	mm	x	883	867	943
		in.	x	35	34	37

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OULXBER,00027D5 -19-05OCT15-3/4

5GN Rear-Wheel Tread Adjustment

LX203964 —UN—26AUG13



8 Pos. Adjustable Rim

5GN Rear-Wheel Tread Settings										
Rear Tires	8 Pos. Adjustable Rim	Unit	Position of Rim and Wheel Disks							
			A	B	C	D	E	F	G	H
280/85 R28	W10x28"	mm	x	x	x	959	1003	1114	1248	1359
		in.	x	x	x	38	39	44	49	54
320/85 R28	W10x28"	mm	x	x	x	959	1003	1114	1248	1359
		in.	x	x	x	38	39	44	49	54
340/85 R24	W12x24"	mm	x	x	x	1039	x	1038	1094	1207
		in.	x	x	x	41	x	41	43	48
340/85 R28	W12x28"	mm	x	x	x	955	1007	1118	1244	1355
		in.	x	x	x	38	40	44	49	53
380/70 R24	W12x24"	mm	x	x	x	1039	x	1038	1094	1207
		in.	x	x	x	41	x	41	43	48
380/85 R28	W12x28"	mm	x	x	x	x	1007	1118	1244	1355
		in.	x	x	x	x	40	44	49	53
420/70 R28	W12x28"	mm	x	x	x	x	x	1118	1244	1355
		in.	x	x	x	x	x	44	49	53

Rear wheel tread can be adjusted by re-positioning or reversing the rims or by reversing the wheel disks. In addition, the complete wheel can be installed on the other side of the tractor. The arrow on side wall of tire must point in the direction of forward travel.

IMPORTANT: Always mount nuts on rim side.

The distance between the side wall of the tire and the fender must not be less than 15 mm (0.6 in.). Distance between edge of tire and fender must not be less than 30 mm (1.18 in.).

NOTE: The illustration shows the right-hand rear wheel. Tread widths are measured at the lowest point of the tires.

After adjustment has been completed tighten wheel retaining bolts to specified torque. See Section 30, Break-In Period. If wheels are removed to adjust tread, tighten wheel retaining bolts or nuts to specified torque. See Tighten Wheel Bolts in this Section.

OULXBER.00027D5 -19-05OCT15-4/4

5GV - Tread Adjustment

5GV Front-Wheel Tread Adjustment

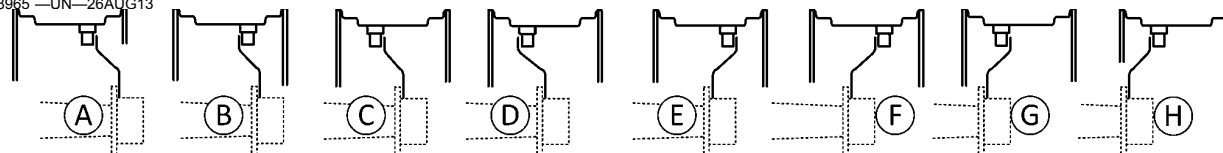
Front wheel tread can be adjusted by re-positioning or reversing the rims or by reversing the wheel disks. In addition, the complete wheel can be installed on the other side of the tractor. The arrow on side wall of tire must point in the direction of forward travel. If front wheels are

removed to adjust tread, tighten front wheel attaching nuts to specified torque. See "Tighten Wheel Bolts" in this Section.

IMPORTANT: Always mount nuts on rim side.

NOTE: The illustration shows the right-hand front wheel. Tread widths are measured at the lowest point of the tires.

LX203965 —UN—26AUG13



5GV Front-Wheel Tread Settings (with Front-Wheel Drive)

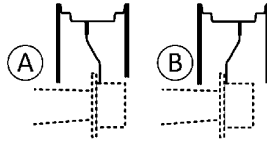
Front-Tires	Adjustable Rim	Unit	Position of Rim and Wheel Disks							
			A	B	C	D	E	F	G	H
6.50-16	4.50Ex16"	mm	838	954	878	994	876	916	916	956
		in.	33	38	35	39	34	36	36	38
7.50 R16	5.50Fx16"	mm	x	940	888	964	x	x	x	x
		in.	x	37	35	38	x	x	x	x
240/70 R16	W8x16"	mm	x	x	972	1048	x	x	x	x
		in.	x	x	38	41	x	x	x	x
10.0/75-15,3	9.00x15.3"	mm	x	x	934	1010	x	x	x	x
		in.	x	x	37	40	x	x	x	x
280/70 R16	W8x16"	mm	x	x	970	1046	x	x	x	x
		in.	x	x	38	41	x	x	x	x
7.50-16	5.50Fx16"	mm	x	940	888	964	x	x	x	x
		in.	x	37	35	38	x	x	x	x
260/70 R16	W8x16"	mm	x	x	971	1047	x	x	x	x
		in.	x	x	38	41	x	x	x	x
8.25-16	5.50Fx16"	mm	x	939	887	963	x	x	x	x
		in.	x	37	35	38	x	x	x	x
260/70 R16	W8x16"	mm	x	x	971	1047	x	x	x	x
		in.	x	x	38	41	x	x	x	x
6.00-16	4.50Ex16"	mm	839	955	879	995	877	917	917	957
		in.	33	38	35	39	35	36	36	38

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OULXBER,00027D6 -19-05OCT15-1/4

Wheels, Tires, and Treads

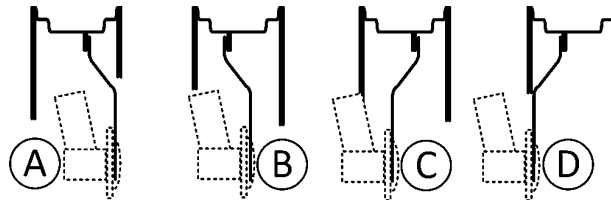
LX211142 —UN—08DEC15



5GV Front-Wheel Tread Settings (with Front-Wheel Drive)				
Front-Tires	2 Pos. Rim	Unit	Position of Rim and Wheel Disks	
			A	B
10.0/75-15,3	9.00x15.3"	mm	x	1012
		in.	x	40
260/70 R16	W8x16"	mm	x	1023
		in.	x	40
280/70 R18	W9x18"	mm	x	995
		in.	x	39
6.00-16	4.50Ex16"	mm	819	1007
		in.	32	40
6.50-16	4.50Ex16"	mm	x	1006
		in.	x	40
7.50 R16	5.50Fx16"	mm	x	982
		in.	x	39
240/70 R16	W8x16"	mm	x	1024
		in.	x	40

OULXBER.00027D6 -19-05OCT15-2/4

LX203966 —UN—26AUG13



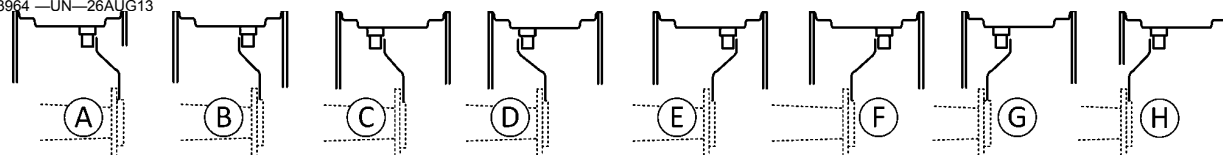
5GV Front-Wheel Tread Settings (without Front-Wheel Drive)						
Front-Tires	Rim	Unit	Position of Rim and Wheel Disks 2WD			
			A	B	C	D
6.00-16	4.00Ex16"	mm	776	x	974	x
		in.	31	x	38	x
6.50-16	5.50Fx16"	mm	809	885	869	945
		in.	32	35	34	37

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OULXBER.00027D6 -19-05OCT15-3/4

5GV Rear-Wheel Tread Adjustment

LX203964 —UN—26AUG13



8 Pos. Adjustable Rim

5GV Rear-Wheel Tread Settings										
Rear-Tires	8 Pos. Adjustable Rim	Unit	Position of Rim and Wheel Disks							
			A	B	C	D	E	F	G	H
280/85 R28	W10x28"	mm	x	x	x	879	923	1034	1168	1279
		in.	x	x	x	35	36	41	46	50
320/85 R28	W10x28"	mm	x	x	x	879	923	1034	1168	1279
		in.	x	x	x	35	36	41	46	50
250/85 R28	W8x28"	mm	x	783	x	826	974	1083	1017	1126
		in.	x	31	x	33	38	43	40	44
360/70 R24	W10x24"	mm	x	x	x	961	x	956	1016	1129
		in.	x	x	x	38	x	38	40	44
340/85 R28	W12x28"	mm	x	x	x	x	927	1038	1164	1275
		in.	x	x	x	x	36	41	46	50
340/85 R24	W12x24"	mm	x	x	x	959	x	958	1014	1127
		in.	x	x	x	38	x	38	40	44
320/85 R24	W10x24"	mm	x	x	848	961	x	956	1016	1129
		in.	x	x	33	38	x	38	40	44
360/70 R28	W12x28"	mm	x	x	x	875	927	1038	1164	1275
		in.	x	x	x	34	36	41	46	50
9.5 R28	W8x28"	mm	x	756	x	853	947	1056	1044	1153
		in.	x	30	x	34	37	42	41	45

Rear wheel tread can be adjusted by re-positioning or reversing the rims or by reversing the wheel disks. In addition, the complete wheel can be installed on the other side of the tractor. The arrow on side wall of tire must point in the direction of forward travel.

IMPORTANT: Always mount nuts on rim side.

The distance between the side wall of the tire and the fender must not be less than 15 mm (0.6 in.). Distance between edge of tire and fender must not be less than 30 mm (1.18 in.).

NOTE: The illustration shows the right-hand rear wheel. Tread widths are measured at the lowest point of the tires.

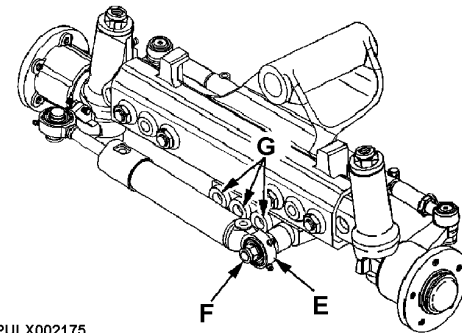
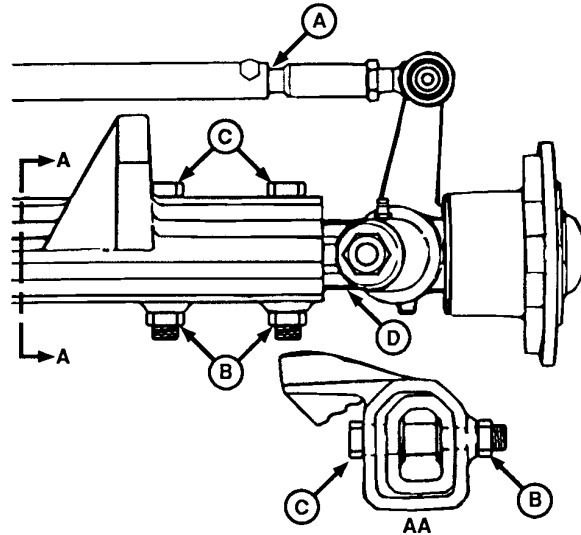
After adjustment has been completed tighten wheel retaining bolts to specified torque. See Section 30, Break-In Period. If wheels are removed to adjust tread, tighten wheel retaining bolts or nuts to specified torque. See Tighten Wheel Bolts in this Section.

OULXBER,00027D6 -19-05OCT15-4/4

Adjusting Front Axle Tread Width

IMPORTANT: DO NOT place jack under engine oil pan.

1. Jack up front end of tractor.
2. When making large tread adjustments it may be necessary to change the tie rod length (A) before or during axle adjustments. See Check Toe-In and Adjust Toe-In in this Section.
3. Change the steering cylinder (E) anchoring position to axle body in relation to the change of tread width using the available holes (G). Tighten lock nut (F) to 250 N·m (184 lb-ft.)
4. Remove nuts (B), cap screws (C) and bushings from front axle (two on each side).
5. Slide axle knees (D) to desired position. Both sides should be adjusted to the same spacing.
6. Reinstall cap screws (C), bushings and nuts (B) on each side. Tighten hardware to 150 N·m (110 lb-ft).
7. Set toe-in. Refer to Check Toe-In and Adjust Toe-In for your axle type in this Section.



PULX002175

LV810 —UN—08JUL94

PULX002175 —UN—16OCT08

NR25796,0001783 -19-22JAN09-1/1

5GL - Tire Combinations

In order to achieve maximum drawbar pull, maintain proper steerability, reduce tire wear and fuel consumption. Comply with the correct tire combinations as shown in the table. If front tires show excessive wear in comparison with rear tires, the front tires must be replaced in order to maintain the predetermined tire ratio.

IMPORTANT: When replacing tires, consult your tire dealer. Never mix worn and new tires, bias and radial tires or tires with different diameters. This reduces tire life time and decreases the overall

tractor performance. Using any tire combination, other than shown in the tire combination chart, will result in premature tire and power train wear.

5GL With Front-Wheel Drive	
Rear Tire	Front Tire
380/70 R20	260/70 R16
360/70 R24	280/70 R16
380/70 R24	280/70 R16
380/70 R24	280/70 R18
440/65 R24	280/70 R18

OULXBER,00027D7 -19-05OCT15-1/1

5GF - Tire Combinations

In order to achieve maximum drawbar pull, maintain proper steerability, reduce tire wear and fuel consumption. Comply with the correct tire combinations as shown in the table. If front tires show excessive wear in comparison with rear tires, the front tires must be replaced in order to maintain the predetermined tire ratio.

IMPORTANT: When replacing tires, consult your tire dealer. Never mix worn and new tires, bias and radial tires or tires with different diameters. This reduces tire life time and decreases the overall tractor performance. Using any tire combination, other than shown in the tire combination chart, will result in premature tire and power train wear.

5GF With Front-Wheel Drive	
Rear Tire	Front Tire
380/70 R24	280/70 R18
380/70 R28	280/70 R20
380/70 R28	250/80-18
380/85 R28	9.5 R20
420/70 R24	280/70 R20
420/70 R24	280/70 R18
420/70 R28	320/70 R20
420/70 R28	300/70 R20
480/65 R24	280/70 R18
480/65 R28	320/70 R20
5GF Without Front-Wheel Drive	
Rear Tire	Front Tire
320/85 R28	6.00-16
340/85 R28	6.50-16
340/85 R28	7.50-16
380/70 R28	7.50-16
380/85 R28	7.50-16

OULXBER,00027D8 -19-05OCT15-1/1

5GN - Tire Combinations

In order to achieve maximum drawbar pull, maintain proper steerability, reduce tire wear and fuel consumption. Comply with the correct tire combinations as shown in the table. If front tires show excessive wear in comparison with rear tires, the front tires must be replaced in order to maintain the predetermined tire ratio.

IMPORTANT: When replacing tires, consult your tire dealer. Never mix worn and new tires, bias and radial tires or tires with different diameters. This reduces tire life time and decreases the overall tractor performance. Using any tire combination, other than shown in the tire combination chart, will result in premature tire and power train wear.

5GN With Front-Wheel Drive	
Rear Tire	Front Tire
320/85 R28	7.50 R16
380/70 R24	260/70 R16
340/85 R28	7.50 R16
340/85 R28	280/70 R18
340/85 R28	8.25-16
380/85 R28	7.50 R18
380/85 R28	280/70 R18
420/70 R28	280/70 R18
280/85 R28	260/70 R16
5GN Without Front-Wheel Drive	
Rear Tire	Front Tire
280/85 R28	6.00-16
320/85 R28	6.00-16
340/85 R24	6.00-16
340/85 R28	6.50-16
340/85 R28	7.50-16

OULXBER,00027D9 -19-05OCT15-1/1

5GV - Tire Combinations

In order to achieve maximum drawbar pull, maintain proper steerability, reduce tire wear and fuel consumption. Comply with the correct tire combinations as shown in the table. If front tires show excessive wear in comparison with rear tires, the front tires must be replaced in order to maintain the predetermined tire ratio.

IMPORTANT: When replacing tires, consult your tire dealer. Never mix worn and new tires, bias and radial tires or tires with different diameters. This reduces tire life time and decreases the overall tractor performance. Using any tire combination, other than shown in the tire combination chart, will result in premature tire and power train wear.

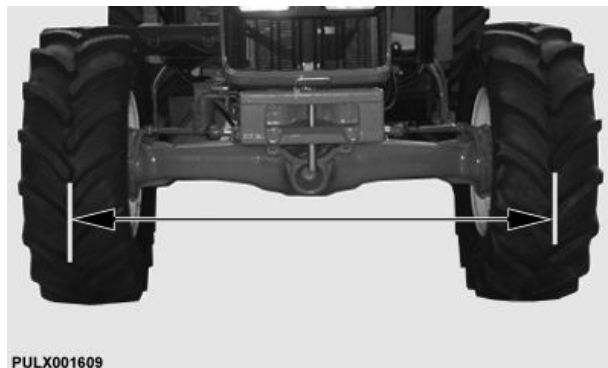
Rear TYRE	Front TYRE
5GV With Front-Wheel Drive	
Rear Tire	Front Tire
280/85 R28	6.50-16
280/85 R28	260/70 R16
250/85 R28	6.50-16
250/85 R28	6.00-16
320/85 R24	6.50-16
320/85 R24	260/70 R16
360/70 R24	240/70 R16
360/70 R28	280/70 R16
320/85 R28	7.50 R16
340/85 R24	6.50-16
340/85 R24	10.0/75-15,3
340/85 R24	260/70 R16
340/85 R28	7.50 R16
340/85 R28	8.25-16
5GV Without Front-Wheel Drive	
Rear Tire	Front Tire
9.5 R28	6.00-16
280/85 R28	6.00-16
360/70 R24	6.00-16
320/85 R28	6.50-16
340/85 R24	6.00-16

OULXBER,00027DA -19-05OCT15-1/1

Check Toe-In

With front-wheel drive axle

1. Disengage front wheel drive and park tractor on smooth, level surface. Steer front wheels straight ahead. Stop engine.
2. Measure distance between centerline of tires at hub level in front of axle, using an outside bar of each tire.
3. Move tractor back about 1 m (3 ft.) so mark is at hub level behind the axle. Again measure distance between tires at same point on tire.
4. Determine the difference between front and rear measurements. If the front measurement is smaller, toe is "in". If the rear is smaller, toe is "out". Toe-in should be less than 2 mm (1/12 in.).



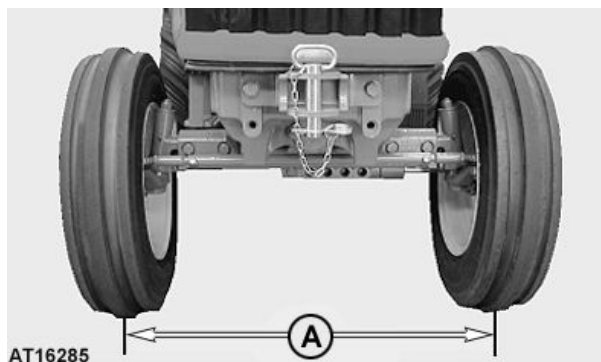
PULX001609—UN—19SEP08

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OULXBER,0002450 -19-08OCT14-1/2

Without front-wheel drive

1. Park machine on level surface.
2. Turn steering wheel so front wheels are in the straight-ahead position. Stop engine.
3. Measure distance (A) between tires at hub level in front of axle. Record measurement and mark the tires.
4. Move tractor back about 1 m (3 ft.), so mark is at hub level behind the axle. Again, measure distance between tires at same point on tire. Record measurement.
5. Determine the difference between front and rear measurements. If the front measurement is smaller, toe is "in". If the rear is smaller, toe is "out".
6. Distance (A) at front of tires must be 3 - 6 mm (1/8 - 1/4 in.) less than distance measured at rear of tires. Adjust toe-in if necessary. See procedure in this Section.



AT16285

AT16285—UN—23JUN03

OULXBER,0002450 -19-08OCT14-2/2

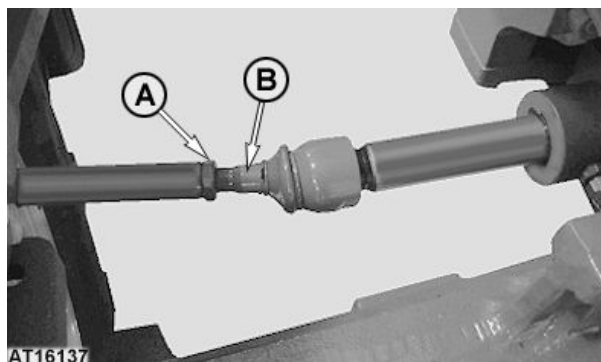
Adjust Toe-In

With front-wheel drive axle

1. Loosen lock nuts (A) on both ends of tie rod.
2. Adjust both sides equally by rotating the inner rod (B) to lengthen or shorten tie rod, as needed to obtain toe-in of less than 2 mm (1/12 in.).

Tie Rod Rotation	Approximate Change in Toe-in
1/8 turn	4 mm (3/16 in.)
1/4 turn	8 mm (3/8 in.)
1/2 turn	16 mm (5/8 in.)

3. Tighten lock nuts (A) after adjustment.



AT16137

AT16137—UN—23JAN03

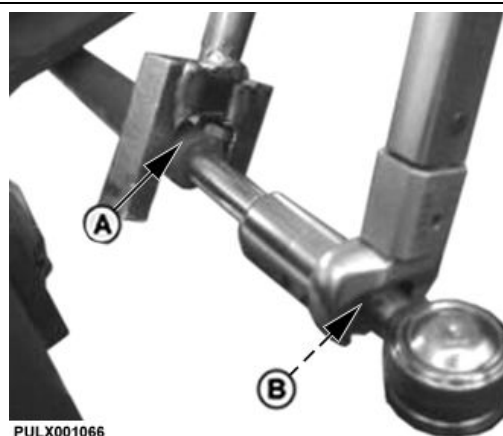
OULXBER,0002451 -19-08OCT14-1/2

Without front-wheel drive

1. Loosen lock nuts (B) on both ends of tie rod.
2. Turn inner tube (A) to lengthen or shorten tie rod until toe-in is 3 - 6 mm (0.12 - 0.24 in.).

Tie Rod Rotation	Approximate Change in Toe-In
1/2 turn	8 mm (0.31 in.)
1 turn	16 mm (0.63 in.)

3. Tighten lock nuts (B) to 140 N•m (103 lb-ft).



PULX001066

PULX001066—UN—18AUG08

OULXBER,0002451 -19-08OCT14-2/2

Steering Angle Adjustment

NOTE: The tractor must be ready for operation when the steering angle is adjusted. Tires, fenders, implements and different types of ballast are factors that affect each tractor differently.

Steering angle must be the same on both sides.

CAUTION: The engine must be shut off when the adjustment is made. **RISK OF CRUSHING!**

1. Lift front of tractor until the front axle can swing to its limits.
2. Support the tractor safely.
3. Move the right side of the axle upwards until it reaches the stop.
4. Turn the steering to full lock in both directions.
5. If necessary, loosen lock nut (B) and adjust steering angle as per specification using screw (A).

Mechanical Front-Wheel Drive Tractors—Specification

Minimum Clearance, Steering Stop	
1—Distance.....	25 mm 1 in.

Two-wheel drive tractors—Specification

Minimum Clearance, Steering Stop	
1—Distance.....	25 mm 1 in.

Minimum Clearance, Steering Stop at Tie Rod	
2—Distance.....	23 mm 0.92 in.

Minimum Clearance, Steering Stop at Steering Cylinder	
2—Distance.....	17 mm 0.68 in.

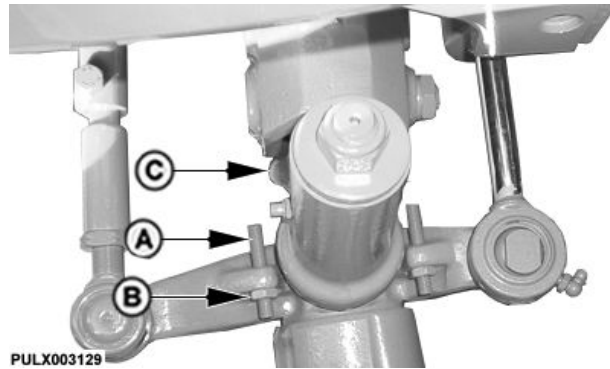
6. Tighten lock nut to specified torque.

Specification

Front axle without front-wheel drive—Torque.....	56 N·m 41 lb-ft
Front axle with front-wheel drive—Torque.....	150 Nm 110 lb-ft

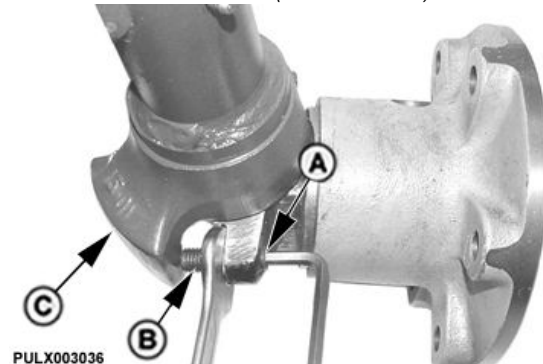
¹F and V, CA128971 axle

²F and V, CA146262 axle



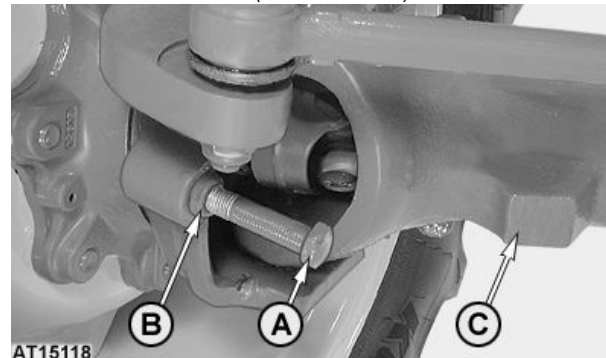
PULX003129

For F and V (CA146262 Axle) Tractors



PULX003036

For F and V (CA128971 Axle) Tractors



AT15118

Front axle with front-wheel drive

A—Adjusting screw
B—Lock nut

C—Stop

7. Repeat this procedure on the left side.

OULXBER.0002452 -19-08OCT14-1/1

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PULX003036 —UN—04FEB09

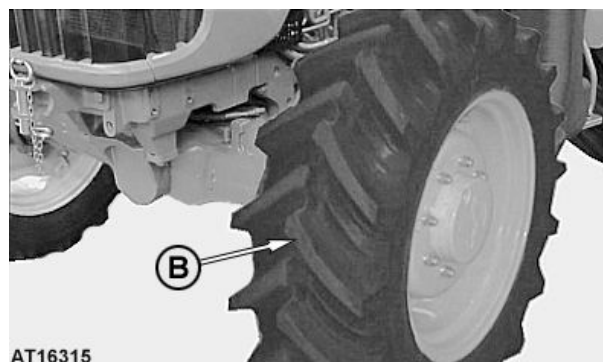
AT15118 —UN—24SEP03

Direction of Tire Rotation

When mounting or changing tires, make sure arrow on flank of tires points in the direction of forward travel (A).

When tractors with front wheel drive are to be used primarily for transport purposes or front loader operation, turn tires against usual rolling direction of tire lugs (B). Tire life is increased by 25 to 30% and better traction is achieved.

Because of reduced traction and tire self-cleaning effects, this arrangement is not recommended for field work under wet conditions.



AT16314—UN—24JUN03

AT16315—UN—18SEP03

OULXA64,0000B99 -19-12MAY03-1/1

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 tractor model, tire size and manufacturer, we recommend that you approach your John Deere dealer or tire company for advice.

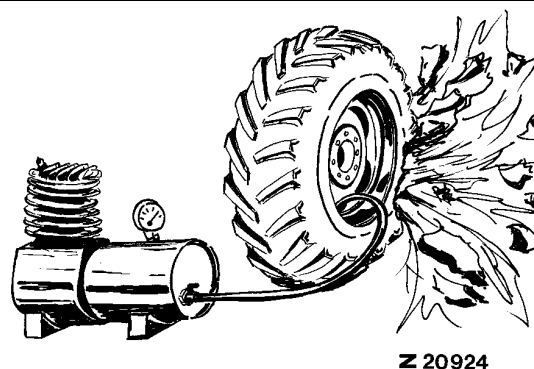
AG,OU12401,170 -19-28MAR00-1/1

Mounting Tires

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do NOT attempt to mount a tire unless you have the proper equipment and experience to perform the job safely. Have it done by your John Deere dealer or a qualified tire repair service.

When seating tire beads on rims, never exceed maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead and reinflate.

Detailed agricultural tire mounting instructions, including the necessary safety precautions, are available from your local tire manufacturer agents.



Z20924—UN—15AUG94

OULXA64,0000C96 -19-31JUL03-1/1

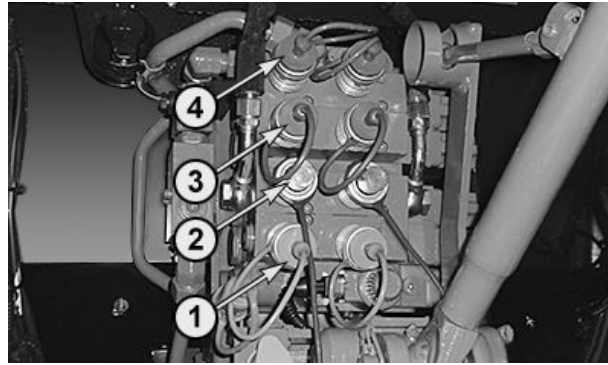
Additional Equipment

E-SCV (optional)

Hydraulic Components

1—E-SCV No. 1
2—E-SCV No. 2

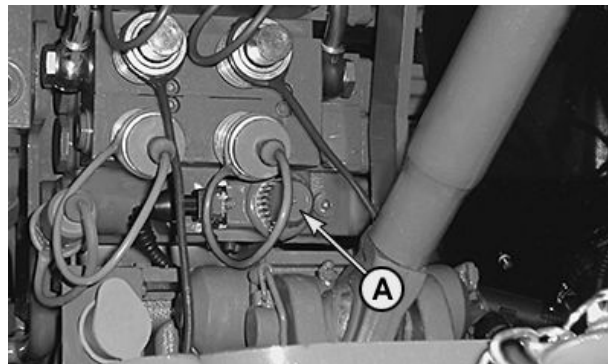
3—E-SCV No. 3
4—E-SCV No. 4



AGCPTJD0565 —UN—18AUG14

OULXBER,0002511 -19-17DEC14-1/15

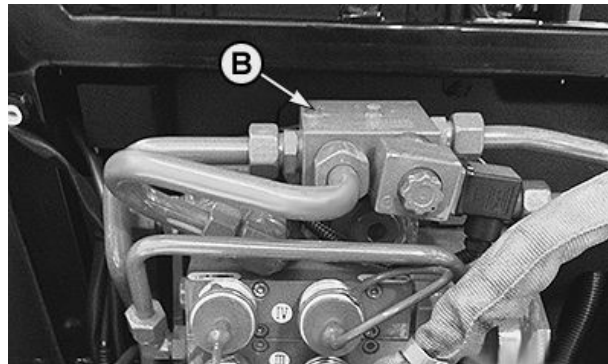
A—E-SCV End Cover Valve



AGCPTJD0566 —UN—18AUG14

OULXBER,0002511 -19-17DEC14-2/15

B—E-SCV Safety Valve



AGCPTJD0686 —UN—01OCT14

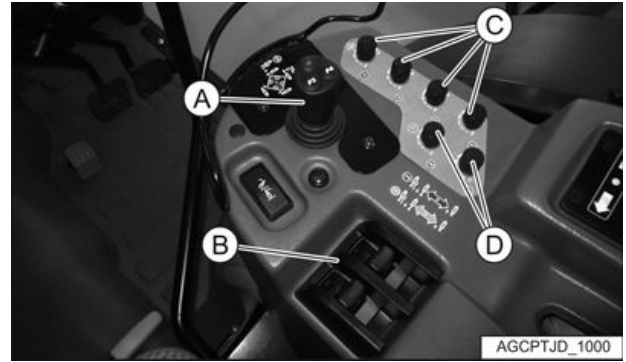
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OULXBER,0002511 -19-17DEC14-3/15

Electric Components

A—Multi-Function Lever
B—E-SCV Levers

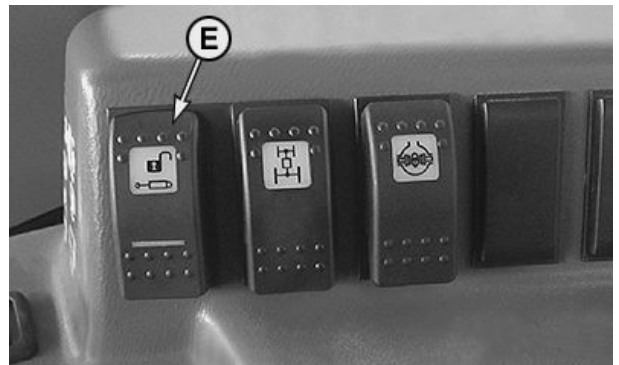
C—E-SCV Flow Regulators
D—Kick-Out Timing Regulators



AGCPTJD1000 —UN—09DEC14

OULXBER,0002511 -19-17DEC14-4/15

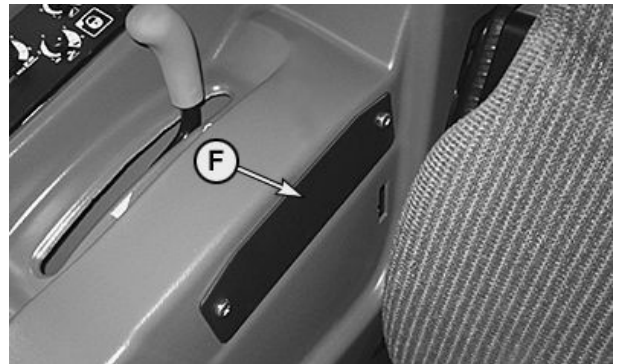
E—Transport Lock Switch



AGCPTJD0675 —UN—01OCT14

OULXBER,0002511 -19-17DEC14-5/15

F—Fuse Box



AGCPTJD0676 —UN—01OCT14

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OULXBER,0002511 -19-17DEC14-6/15

The control unit (TVC) for E-SCVs is located under the RH right side console.

Z—E-SCV Control Unit (TCV)



AGCPTJD0677 —UN—01OCT14

OULXBER,0002511 -19-17DEC14-7/15

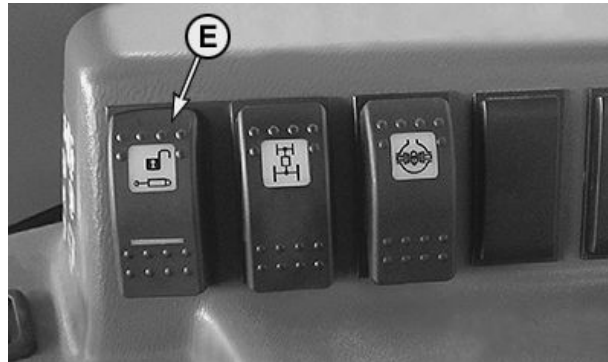
Activating the System

1. Start the engine.
2. Switch on Safety Stop Switch (E) to wake up the system waiting for activation.

NOTE: The backlight of the switch blinks briefly, then it switches off. Multi-function lever and SCV levers are not yet activated.

Transport Lock Switch provides the information to the E-SCV Electronic Control Unit located under the right lever cover for activating the system. At the same time an electrical signal is provided to the electrohydraulic valve located on the Main Valve (base flange) for giving a small amount of oil flow (low pressure) inside the E-SCVs.

NOTE: Transport Lock Switch (E) has a “warning” backlight which advises the operator that a failure occurred.



AGCPTJD0675 —UN—01OCT14

OULXBER,0002511 -19-17DEC14-8/15

3. To activate the system (giving pressure to E-SCVs), press and keep pressed for about 3-5 sec the Activation Switch (G) located on the top of the multi-function lever. When the system is activated, the Activation Switch backlight lights “ON”. The system is now pressurized and ready to be used.

NOTE: After a time-out of 30 seconds of NO ACTION on multi-function lever or SCV levers, the system goes in to stand-by mode (pressure on valves goes off). To resume the system (pressurize again) all that is required is to give an input with the multi-function lever or SCV levers. Pressing button (G) on top of the multi-function lever sends the system back in to its initial waiting mode. The green backlight goes off, and multi-function lever and SCV levers are locked out. If detent position is engaged (multi-function lever or SCV levers locked in this position), or if float



AGCPTJD1001 —UN—09DEC14

position is engaged, time-out is inhibited because pressure is also required in the absence of inputs.

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OULXBER,0002511 -19-17DEC14-9/15

E-SCV Levers

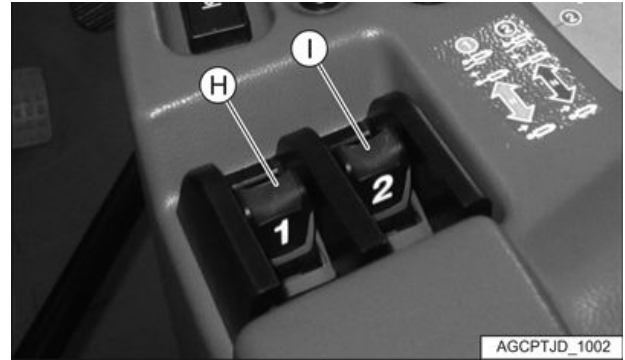
Pressure position

Each linear control has the same operating logic:

- Position (N) = Neutral.
- Positions (B-C) = Supply proportional to the control movement.

H—Lever for E-SCV No. 1

I—Lever for E-SCV No. 2.



AGCPTJD_1002

AGCPTJD1002 —UN—09DEC14

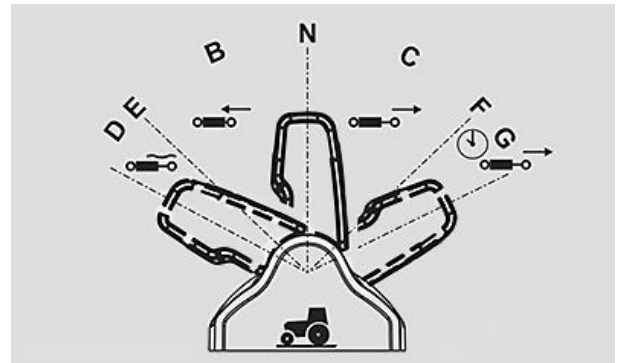
OULXBER,0002511 -19-17DEC14-10/15

Float position

Each linear control has a floating function.

- In float position (D), the pressure connectors are connected to the tank, which enables the hitched implement to follow the contours of the terrain.
- Push the linear control beyond the point of resistance (E) on one of its axes.

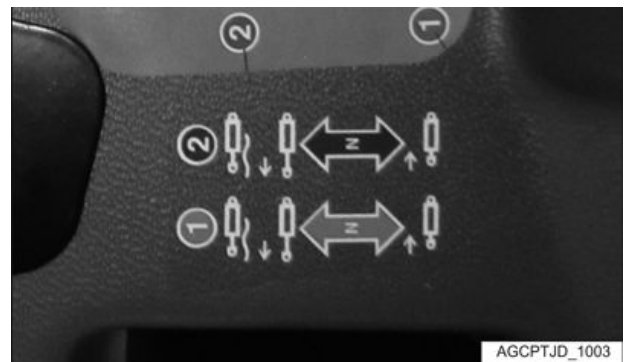
NOTE: The linear control will lock in this position.



AGCPTJD0574 —UN—19AUG14

Hydraulic timer

- To activate the auxiliary electrohydraulic control valve hydraulic timer, push the linear control for the relevant auxiliary electrohydraulic control valve (G) beyond the point of resistance (F).



AGCPTJD_1003

AGCPTJD1003 —UN—09DEC14

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OULXBER,0002511 -19-17DEC14-11/15

Multi Function Lever

The multi function lever controls E-SCVs no. 3 and 4.

The joystick enables 2 auxiliary hydraulic control valves to be activated simultaneously (or independently):

- Moving the lever along longitudinal axis (X) controls auxiliary hydraulic control valve no. 3 (Green).
- Moving the lever along longitudinal axis (Y) controls auxiliary hydraulic control valve no. 4 (Purple).

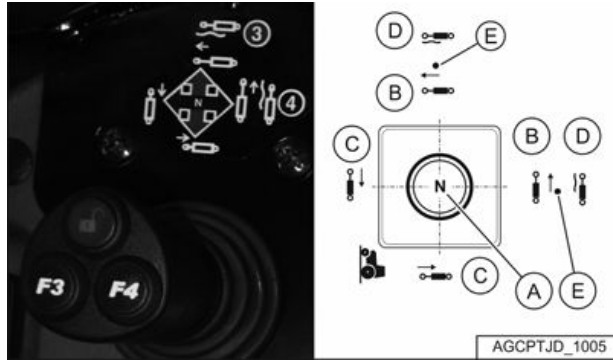
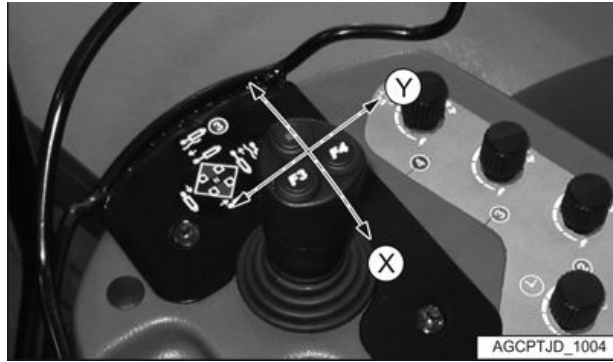
Each axis has the same operating logic:

- Position (A) = Neutral.
- Positions (B-C) = Supply proportional to the control movement.

Floating position:

The multi function lever has a floating function on its 2 axes.

- In the floating position (D), the pressure connectors are connected to the tank.
- This position can be locked.
- Push the multi function lever beyond the point of resistance (E) on one of its axes.
- The multi function lever will lock in this position.
- The multi function lever can be in the floating position on both axes simultaneously.



X—E-SCV No.3

Y—E-SCV No.4

OULXBER,0002511 -19-17DEC14-12/15

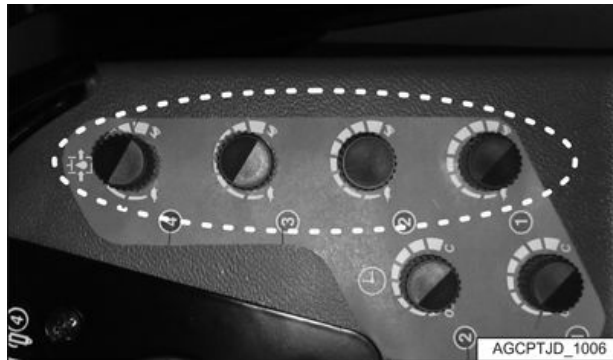
Flow Regulators:

Distributor oil flow can be adjusted by the flow regulators.

Each auxiliary electrohydraulic control valve is fitted with a hydraulic flow controller:

Turn the setting knob in one direction or the other to adjust the flow rate of the auxiliary hydraulic control valve oil:

- Clockwise : Increase hydraulic flow.
- Anticlockwise : Decrease hydraulic flow.



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OULXBER,0002511 -19-17DEC14-13/15

Kick-Out Timing Regulators (For E-SCV Levers Only)

Auxiliary electrohydraulic valves 1 and 2 are fitted with a hydraulic timer:

- Adjustment knob (1): Auxiliary electrohydraulic control valve no. 1.
- Adjustment knob (2): Electrohydraulic control valve no. 2.

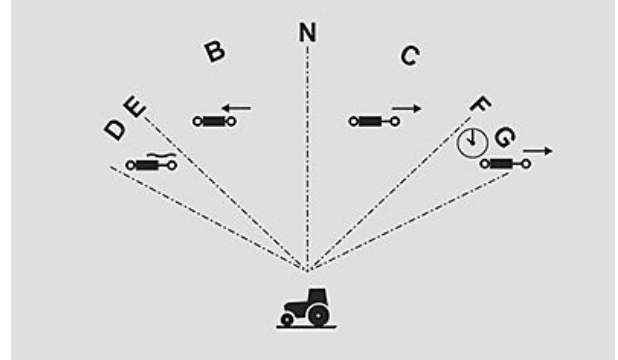
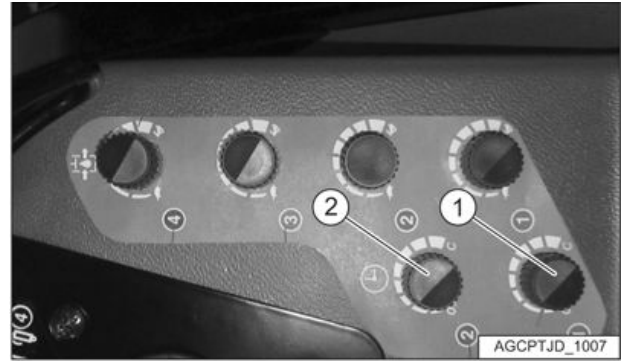
Push the linear control beyond the point of resistance (F) on one of its axes. The linear control will lock in position (G)

The new setting for the timer is active.

Set Up

- Turn the setting knob (1) or (2) in one direction or the other to set the hydraulic timer:
- Clockwise : Increases the hydraulic timer period.
- Anticlockwise : Decreases the hydraulic timer period.

Turn the setting knob (1) or (2) fully clockwise to lock the linear control in position (G) permanently:



OULXBER,0002511 -19-17DEC14-14/15

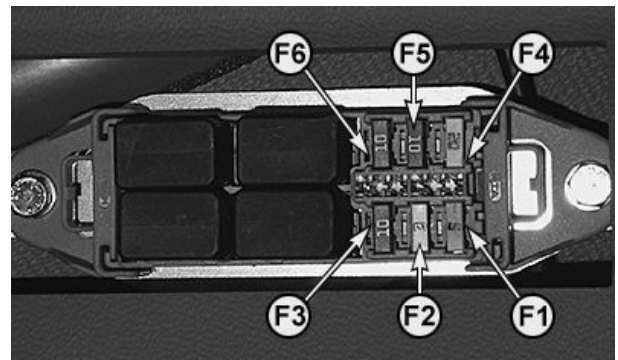
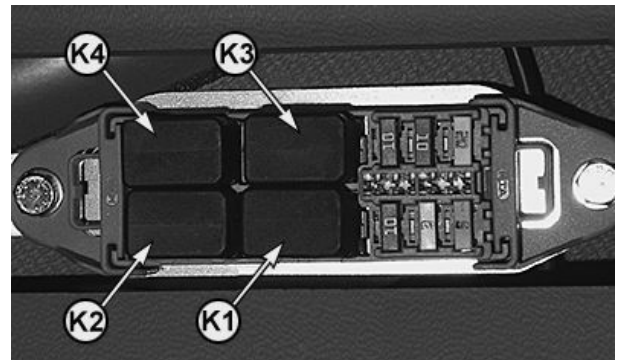
AGCPTJD1007 —UN—09DEC14

AGCPTJD0581 —UN—19AUG14

Relays and Fuses

Relay box is located inside the right lever cover.

K1—(12V 20A) Relay for E-SCV Power Supply	F2—(3A) Fuse for E-SCV Power Supply (+15)
K2—(12V 20A) Relay for E-SCV End Cover Valve Power Supply	F3—(10A) Fuse for E-SCV Valve 1 and 2 Power Supply
K3—(12V 20A) Relay for E-SCV Valve 3 Power Supply	F4—(20A) Fuse for E-SCV Control Unit Power Supply
K4—(12V 20A) Relay for E-SCV Valve 4 Power Supply	F5—(10A) Fuse for E-SCV Valve 3 Power Supply
F1—(5A) Fuse for E-SCV End Cover Relay Power Supply	F6—(10A) Fuse for E-SCV Valve 4 Power Supply



OULXBER,0002511 -19-17DEC14-15/15

AGCPTJD0684 —UN—01OCT14

AGCPTJD0685 —UN—01OCT14

Use Correct Hose Tips

If your tractor is equipped with a selective control valve (SCV), the couplers receptacles accept a standard hose

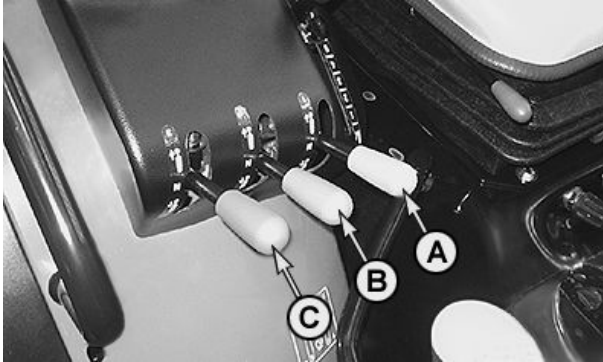
¹International Standards Organization

²Society of Automotive Engineers

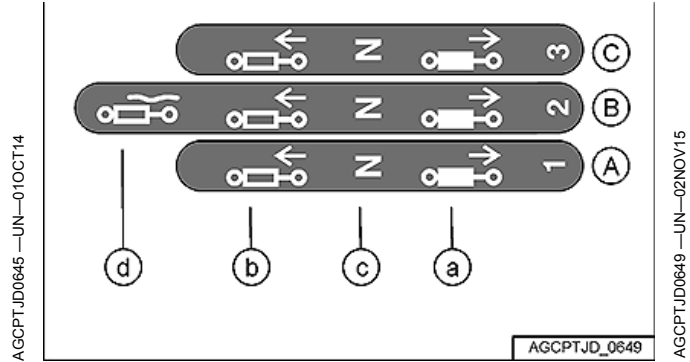
tip as recommended by ISO¹ and SAE². Adapters are available to allow connecting the older John Deere hose tips to the ISO couplers on your tractor.

OULXBER,000202D -19-01FEB13-1/1

Levers for Selective Control Valves

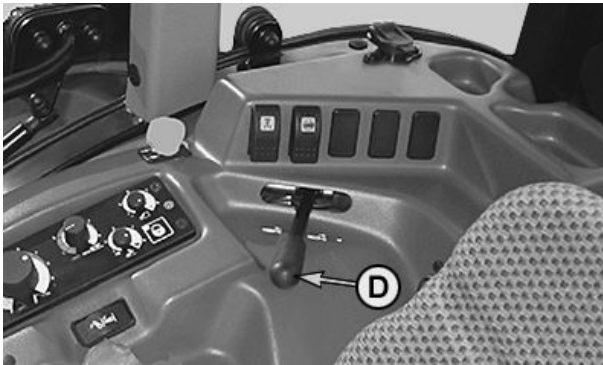


Tractor with 3 SCV's shown

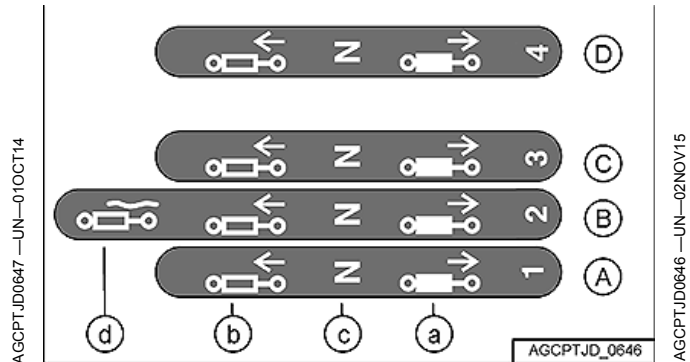


Tractor with 3 SCV's shown

OULXBER,000250E -19-29OCT14-1/3



Tractor with 4 SCV's shown



Tractor with 4 SCV's shown

a—Retract
b—Extend

c—Neutral Position

d—Float Position

The control levers (A, B, C and D) can have up to four settings depending on the configuration identified by the decals.

The remote cylinder retracts when the lever is moved backwards to the "Retract" position.

The remote cylinder extends when the lever is moved forward to the "Extend" position.

The remote cylinder is held in place when the lever is in "Neutral".

When the lever is in the "Float" position (i.e. piston moves freely inside remote cylinder), the mounted implement follows the ground contours.

Continued on next page

OULXBER,000250E -19-29OCT14-2/3

Activation of the mechanical SCV's:

The mechanical SCV's are kept in neutral position (safety condition) by a mechanical detention system.

In order to activate the SCV, pull lever as for direction (1), than move forward or backwards as needed.



AGCPTJD0648 —UN—01OCT14

OULXBER,000250E -19-29OCT14-3/3

Control Lever and Coupler Identification

Standard Version

The tractor can be equipped with:

Three additional double-acting SCVs.

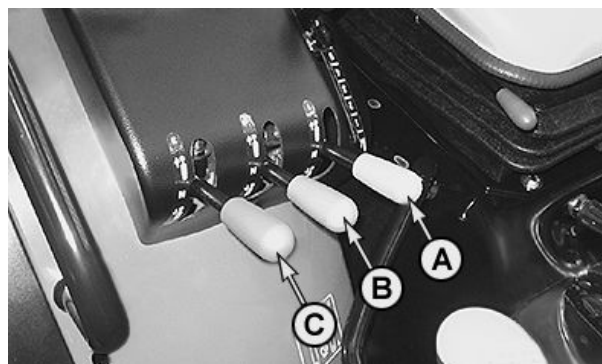
- Fore-and-aft movement of lever (A) operates the couplers (E).
- Fore-and-aft movement of lever (B) operates the couplers (F)*.
- Fore-and-aft movement of lever (C) operates the couplers (G)*.

*if equipped

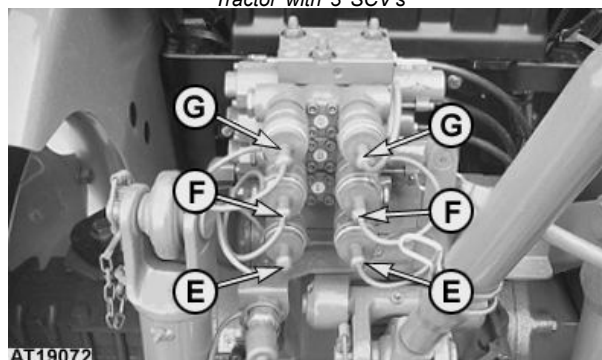
Four additional double-acting SCVs.

- Fore-and-aft movement of lever (A) operates the couplers (E).
- Fore-and-aft movement of lever (B) operates the couplers (F)*.
- Fore-and-aft movement of lever (C) operates the couplers (G)*.
- Fore-and-aft movement of lever (D) operates the couplers (H)*.

*if equipped



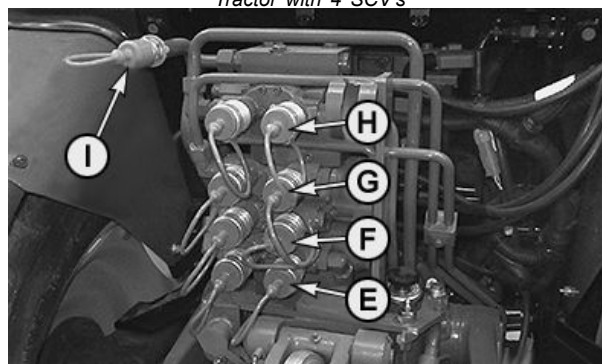
Tractor with 3 SCV's



Tractor with 4 SCV's



Tractor with 4 SCV's



Tractor with 4 SCV's

Continued on next page

OULXBER,000250D -19-29OCT14-1/2

AGCPTJD0645 —UN—01OCT14

AT19072 —UN—20SEP06

AGCPTJD0647 —UN—01OCT14

AGCPTJD0650 —UN—01OCT14

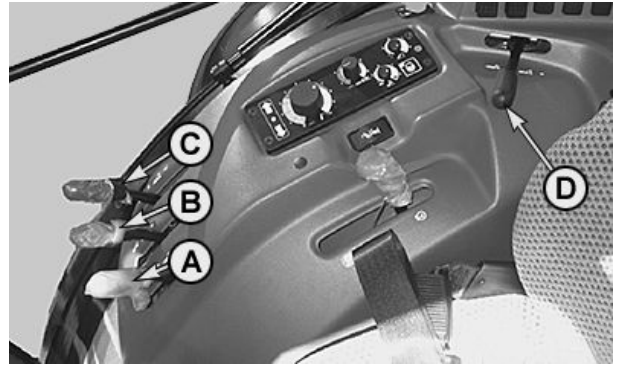
Optional Version

The tractor can be equipped with four additional single/double –acting SCV's and a flow divider valve.

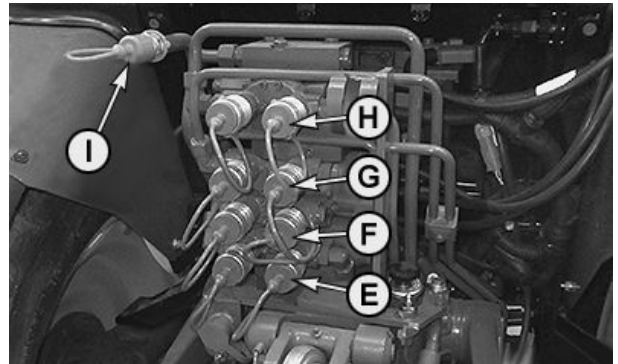
- Fore-and-aft movement of lever (A) operates the rear couplers (E) and the mid-mounted couplers (E1).
- Fore-and-aft movement of lever (B) operates the rear couplers (F) and the mid-mounted couplers (F1).
- Fore-and-aft movement of lever (C) operates the rear couplers (G) and the mid-mounted couplers (G1).
- Fore-and-aft movement of lever (D) operates the rear couplers (H) and the mid-mounted couplers (H1).
- The flow regulator valve splits the amount of oil for the SCVs between the 3rd SCVs/hitch and 4th SCV

NOTE: On tractors equipped with third pump, the flow divider is used only to divide the flow for the SCVs.

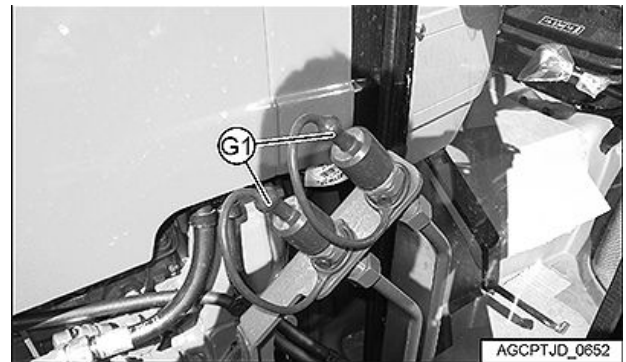
Pressure-free return couplers (I) and (I1) are used to return oil from the equipment (implement) to the tank.



AGCPTJD0651 —UN—01OCT14

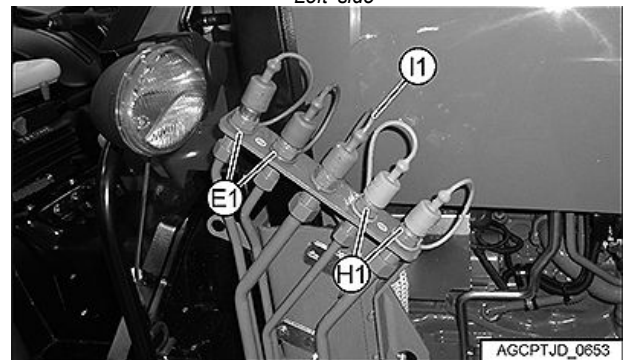


AGCPTJD0650 —UN—01OCT14



AGCPTJD0652 —UN—02NOV15

Left side



AGCPTJD0653 —UN—02NOV15

Right side

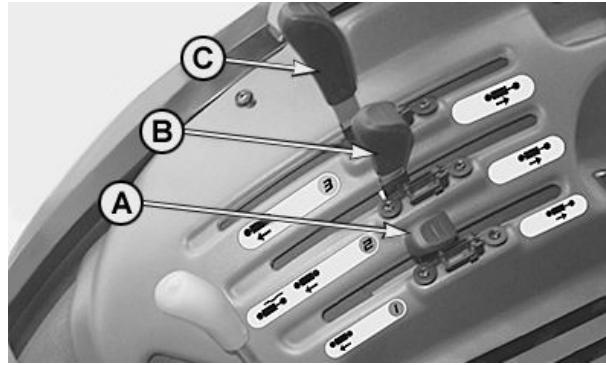
OULXBER,000250D -19-29OCT14-2/2

Duble/Single Acting SCV's Conversion

The spool valves are fitted with a square drive screw (M) for conversion between double and single acting

Unscrew the screw until the mechanical stop is felt.

To use a spool valve in single acting mode, connect the implement's hose to the left hand outlet.



AGCPTJD0085 —UN—21MAY13

OULXBER,000250F -19-29OCT14-1/1

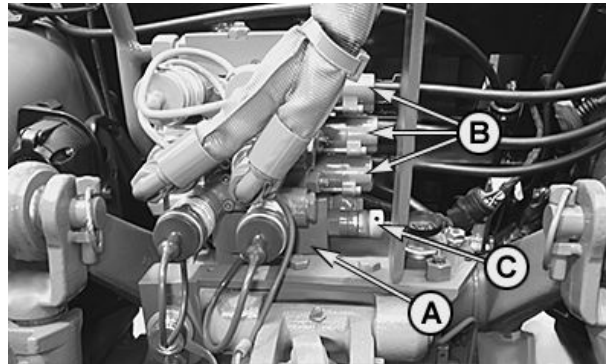
Flow Divider Valve

The tractor may be equipped with a flow divider valve (A), which splits the amount of oil for the SCVs between the double-acting SCVs/hitch (B) and hitch.

With knob (C), this allocation can be adjusted infinitely from 90% for hitch and 10% for double-acting SCVs to 10% for hitch and 90% for double-acting SCVs.

Turn knob (C) clockwise = Up to 90% of oil to hitch.

Turn knob (C) counterclockwise = Up to 90% of oil to SCVs I, II and III.



AGCPTJD0419 —UN—15JUL13

Flow Regulator Valve Control

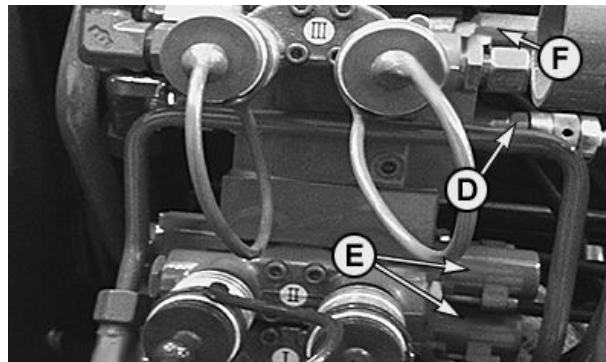
The tractor may be equipped with a flow regulator valve (D), which splits the amount of oil for the SCVs between the double-acting SCVs/hitch (E) and double-acting SCVs (F)

With knob (G), this allocation can be adjusted infinitely from 90% for double-acting SCVs (E) and 10% for double-acting SCV (F) to 10% for double-acting SCVs (E) and 90% for double-acting SCV (F).

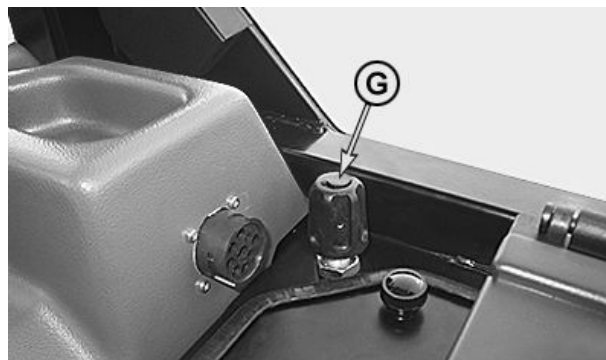
Turn knob (G) clockwise = Up to 90% of oil to SCVs I, II or III and hitch.

Turn knob (G) counterclockwise = Up to 90% of oil to SCV III or IV.

NOTE: On tractors equipped with third pump, the flow divider is used only to divide the flow for the SCVs.



AGCPTJD0635 —UN—29OCT14



AGCPTJD0636 —UN—29OCT14

A—Flow Divider Valve	E—Double-Acting SCVs/hitch
B—Double Acting SCVs/hitch	F—Double-Acting SCVs
C—Adjusting Knob	G—Knob (Cab Version)
D—Flow Divider Valve	

OULXBER,0002510 -19-29OCT14-1/1

Maximum Permissible Oil Withdrawal

To operate large hydraulic cylinders such as those used on tipping trailers, 10 liters (2.6 U.S. gal.) of oil may be drawn from the transmission case through the connecting lines.

This figure applies when the oil in the transmission case is at the minimum mark on the dipstick. If the oil is up to the maximum mark, a further 5 liters (1.3 U.S. gal.) may be withdrawn.

Never perform heavy jobs such as towing, operating a PTO or driving fast when withdrawal results in the oil level dropping below the minimum mark.

HY-GARD is a trademark of Deere & Company.

If required, a further 10 liters (2.6 U.S. gal.) may be added to the transmission case; this increases the amount that may be withdrawn accordingly.

During oil withdrawal, the tractor should not be inclined in any direction by more than 18° (32 %). If the tractor is inclined by more than 18° (32 %), only a correspondingly lower quantity of oil may be withdrawn.

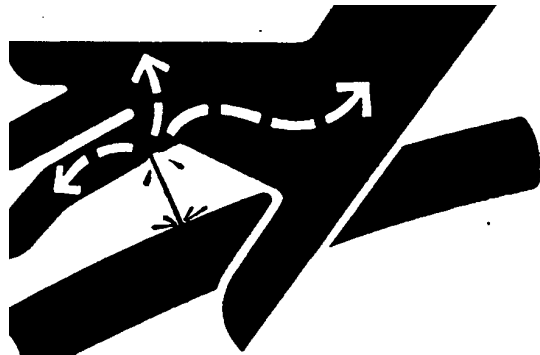
For refilling, use only John Deere HY-GARD® Transmission and Hydraulic Oil or its equivalent.

OULXBER,0002031 -19-01FEB13-1/1

Connecting 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. Protect hands and body from high pressure fluids.

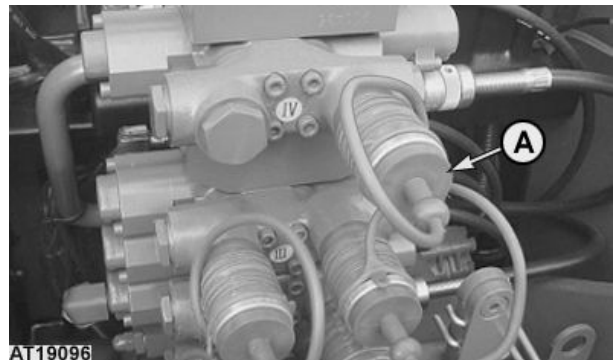
If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical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



X9811 —UN—23AUG88

OULXBER,0002265 -19-28OCT13-1/4

1. Pull dust plugs (A) from couplers.
2. Make sure hose end and coupler receptacles are clean.

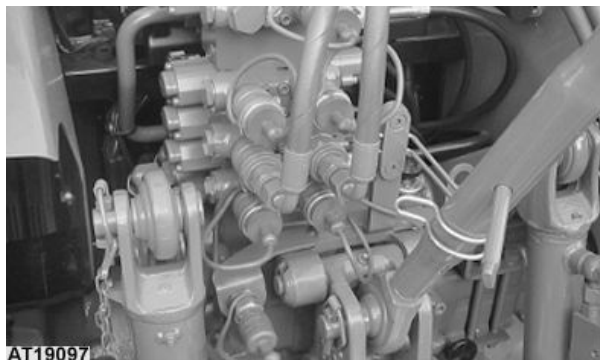


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OULXBER,0002265 -19-28OCT13-2/4

AT19096 —UN—06MAY08

3. Check hoses to see which is used for extending cylinder. This hose must be connected to the couplers in order to extend cylinder when SCV levers are moved rearward or inward.

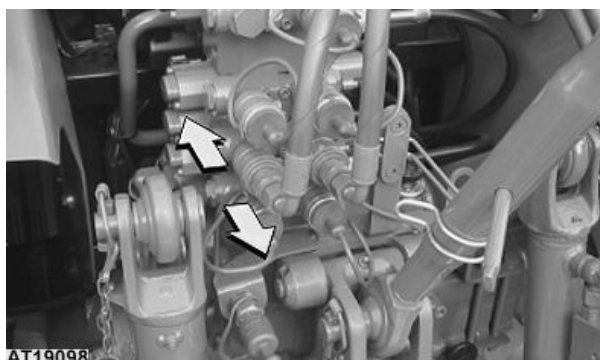


AT19097 —UN—06MAY08

OULXBER,0002265 -19-28OCT13-3/4

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

4. To connect each hose, push hose tip firmly into coupler receptacle.
5. Pull lightly on hose to make sure connection is tight.



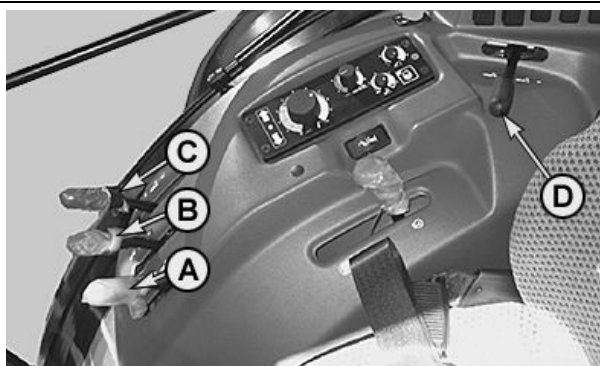
AT19098 —UN—06MAY08

OULXBER,0002265 -19-28OCT13-4/4

Connect Hose Under Pressure

IMPORTANT: Implement must be raised slightly, by pulling back lever (A), (B), (C) or (D) to reset coupler check valves, before it can be moved.

If hoses should accidentally be disconnected from tractor during use, clean hose tip and coupler receptacle. Hoses can be reinstalled as previously described with minimal loss of oil.



AGCPTJD0651 —UN—01OCT14

OULXBER,0002512 -19-30OCT14-1/1

Remote Hydraulic Cylinders

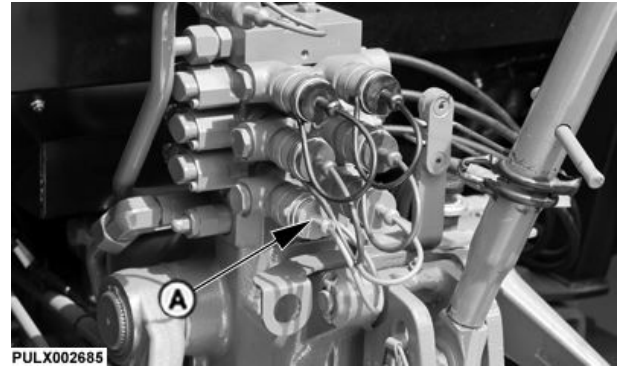
Connecting single-acting cylinder

IMPORTANT: The volume of oil required to extend cylinder must not lower transmission/hydraulic oil level below end of dipstick. Check oil level with cylinder fully extended.

In order for lever to work properly, a single-acting cylinder should be connected only to receptacle (A).

Correcting reversed cylinder response

CAUTION: If cylinder response is reversed, extending when it should retract, reverse cylinder hose connections at coupler.



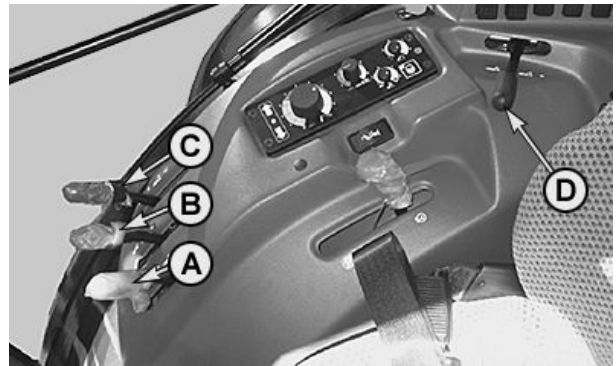
PULX002685

PULX002685—UN—05NOV08

OULXBER,0002514 -19-30OCT14-1/6

Neutral position

Spring pressure returns levers (A), (B), (C) and (D) to a centered position (see arrow). With the control lever in this position, the remote cylinder is hydraulically locked in position.



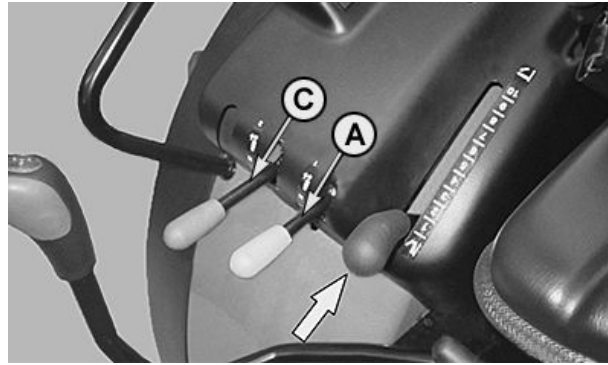
AGCPTJ0651—UN—01OCT14

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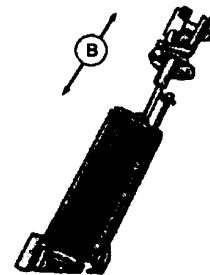
OULXBER,0002514 -19-30OCT14-2/6

Retracting cylinder

Pull lever (A) or (C) from neutral to the rear and hold it against spring pressure. This retracts cylinder (B) (arrow down) connected to SCV I, II or III coupler receptacles.



AGCPTJD0408 —UN—12JUL13

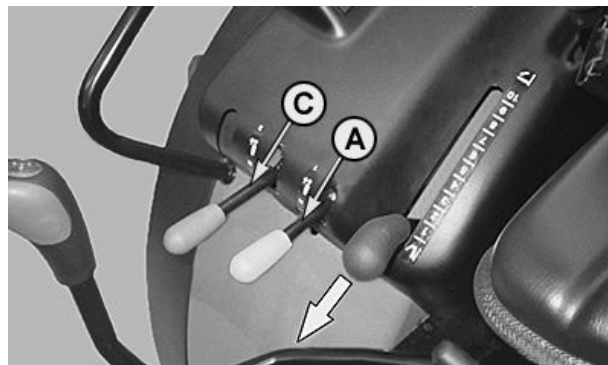


M47774 —UN—31JAN92

OULXBER,0002514 -19-30OCT14-3/6

Extending cylinder

Push lever (A) or (C) from neutral to the front and hold it against spring pressure. This extends cylinder (B) (arrow up) connected to SCV I, II or III coupler receptacles.

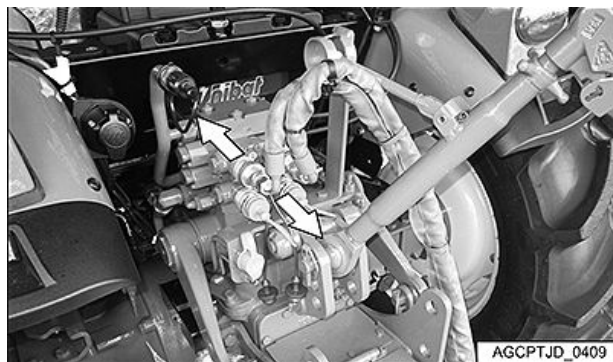


AGCPTJD0425 —UN—15JUL13

OULXBER,0002514 -19-30OCT14-4/6

Disconnecting cylinder hoses

1. If possible, retract remote cylinder as much as possible to protect cylinder rod from damage.
2. With as much hydraulic pressure as possible relieved from hoses, pull hoses from couplers.
3. Make sure dust plugs for receptacles and dust caps for hoses are clean, then reinstall.



AGCPTJD_0409

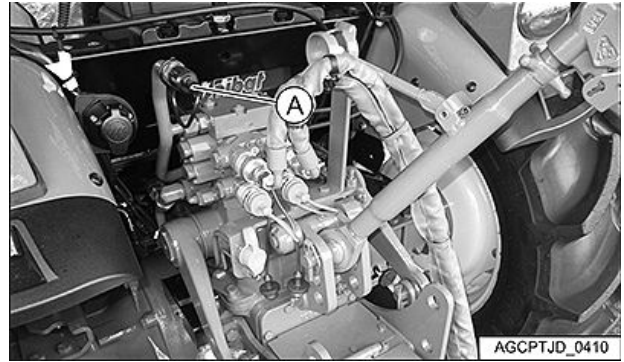
AGCPTJD0409 —UN—02NOV15

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OULXBER,0002514 -19-30OCT14-5/6

Return line to sump

For some applications (front loader for example) it may be necessary to connect the oil return hose to the sump via quick coupler (A).



AGCPTJD0410 —UN—02NOV15

OULXBER,0002514 -19-30OCT14-6/6

Drawbar

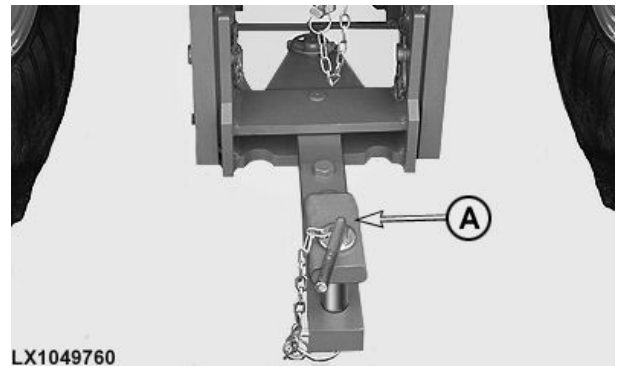
The tractor is equipped with a drawbar with vertical load allowed (A).

For maximum traction and efficiency, drawbar should be positioned in the center, short position (see implement operator's manual for more information).

Maximum permissible static vertical loads and towable drawbar loads are stated in the Specifications section.

NOTE: Have components that are subject to wear checked and replaced (if necessary) by your John Deere dealer (see Service — Every 500 Hours).

NOTE: Towing on public roads with the swinging drawbar set to one side is not permitted!



LX1049760 —UN—15JUL10

OULXBER,00020DC -19-11JUN13-1/1

Height Adjustable Trailer Hitches

These hitches can be adjusted up or down according to the implement height and to obtain clearance for the center link or PTO operation.

Depending on legal requirements in the different countries, hitches of EEC or CUNA type are available.

Adjust sliding hitch height

CAUTION: Use the CUNA hitch system for trailers with pivoting towing eyes only.

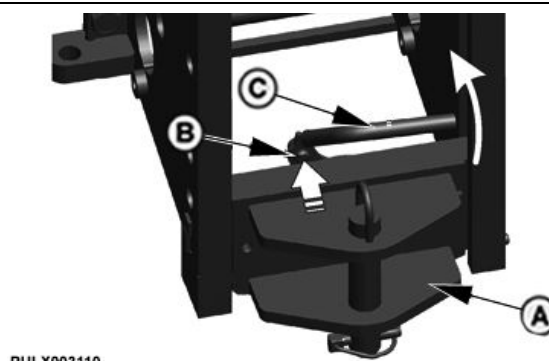
CAUTION: Use the EEC hitch system for trailers with non-pivoting towing eyes only.

1. Support hitch (A) with one hand and with the other hand simultaneously pull pin (B) and release lever (C) to the left.
2. Move hitch (A) to the required position and push the quick release lever (C) to the right and down to lock it.
3. Make sure that the side locking pins have fully engaged in the side support slots.

NOTE: If necessary, hitch (A) can be removed by pulling it out from the top.

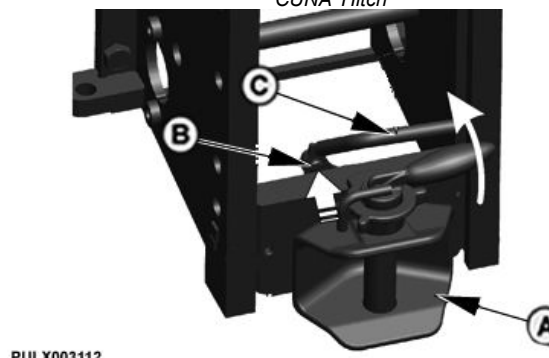
Maximum permissible static vertical loads and towable drawbar loads are stated in the Specifications section.

NOTE: Have components that are subject to wear checked and replaced (if necessary) by your John Deere dealer. See Service — Every 500 Hours.



PULX003110

CUNA Hitch



PULX003112

EEC Hitch

PULX003110 —UN—22JAN09

PULX003112 —UN—22JAN09

OULXBER,00020DD -19-28OCT13-1/1

Pick-Up Hitch

The pick-up hitch is operated using the hitch controls and the release lever (A).

1. Raise draft links to maximum height.
2. Pull and hold release lever (A) (located behind the seat) to unlock the hook.
3. With lever (A) still pulled, lower draft links until the hook is at desired height. Release lever (A).
4. Reverse the tractor to position the hook under the trailer towing eye.
5. Raise draft links to engage hook in trailer towing eye, then continue to raise the hitch until hook (B) engages in its lock position. Lever (A) will return to its home position.
6. Lower the draft links slightly until the trailer weight is supported by the hook.
7. Check that the pick-up hitch is locked correctly. It will **not lower** when the draft links are lowered.

IMPORTANT: If the release lever is hard to operate or the hook does not lock properly (step 5 or step 7 above), have your John Deere dealer check the setting of the lift links (C) or of the pick-up hitch hook.

Pick-up hitch components that are subject to wear must be checked every 250 hours. Replace them if necessary.

CAUTION: Before driving away, make sure the pick-up hitch is fully raised and locked.

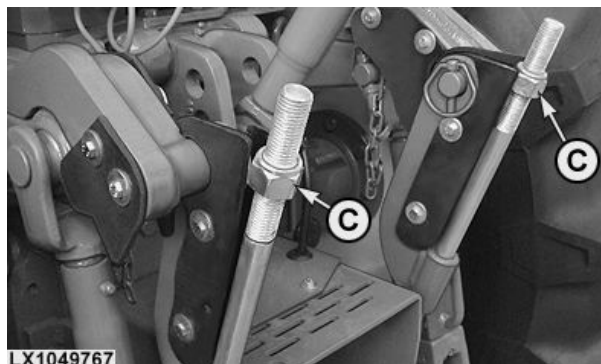
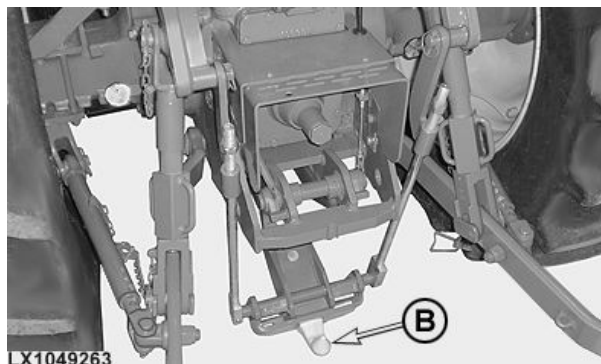
With the pick-up hitch lowered, **NEVER** reach between hook mechanism and transmission housing. Risk of injury!

NOTE: Lubricate the pick-up hitch every 250 hours, see *Service - Every 250 Hours*.

For maximum permissible static vertical loads and towable loads, see *Specifications*.

Drawbar: It is possible to replace the hook of the pick-up hitch with a drawbar. To do this proceed as described above in steps 1, 2 and 3. Then shut off the engine and change hook or drawbar.

Remove the retaining pins of the hook frame and carefully pull out the hook to replace it with the drawbar. To reinstall hook, reverse removal procedure.



A—Release Lever
B—Hook

C—Lift Link Adjusting Nuts

CAUTION: Take care to reinstall all securing pins and inspect the pick-up hitch pivots for obstructions.

Continued on next page

OULXBER,00018B8 -19-06DEC12-1/2

LX1049802 —UN—25AUG10

LX1049263 —UN—08FEB10

LX1049767 —UN—21JUL10

Pick-up hitch decal

Understand all functions before operating the pick-up hitch. Replace pick-up hitch decal if worn and illegible.



AT15048 —UN—25JUN03

OULXBER,00018B8 -19-06DEC12-2/2

Transport

Transporting the Tractor

A disabled tractor is best transported on a flatbed carrier.

Before transporting the tractor on a low truck or flat-bed rail wagon, make sure that the engine hood is secured

and that doors, roof hatch (if equipped) and windows are closed and latched.

OU12401,00009BF -19-01JUL02-1/1

Towing Tractor

CAUTION: NEVER tow tractor faster than 16 km/h (10 mph). Have an operator steer and brake tractor.

When the engine is not running, more force is required to turn the steering wheel and pedal travel is longer (no hydraulic assistance).

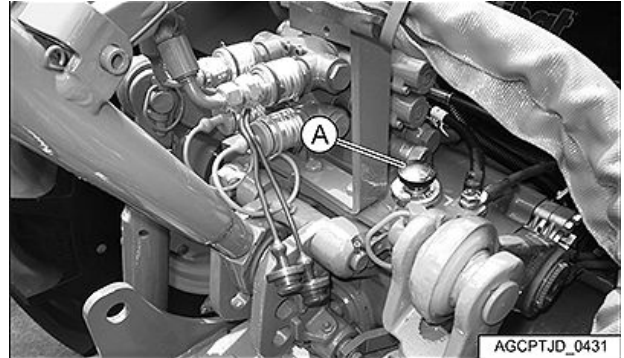
IMPORTANT: To prevent damage to the transmission/hydraulic system, observe the following precautions:

1. Be sure transmission/hydraulic system oil is to the full mark on the dipstick (A). If the tractor is to be towed with the front wheels raised, add 1 liter of oil for each 9 cm (3-1/2 in.) the wheels are raised. DO NOT raise front wheels more than 30 cm (12 in.) above ground.

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

2. Make sure the differential lock is disengaged.
3. Make sure range and gear shift levers are in neutral.

IMPORTANT: If the engine is capable of running, switch off front-wheel drive. If the engine



is not capable of running, disconnect the universal-jointed drive shaft; this prevents excessive wear on the tires.

IMPORTANT: The jaw hitch at the front weights may be used for towing on metalled roads only.

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OULXBER,0002264 -19-28OCT13-1/1

Fuel, Lubricants, Hydraulic Oil and Coolant

Diesel Engine Oil — Tier 3, Stage III

Use oil viscosity based on the expected air temperature range during the period between oil changes.

If John Deere Plus-50™ II engine oil is not available, engine oil meeting one or more of the following may be used:

Oil specifications	Recommended Oil
Premium oils 15W-40 CPI CJ-4 / CI-4 Plus / CI-4	John Deere Plus-50™ II (SAE 15W-40 CJ-4, CI-4, CH-4, SM, SL, SJ)
Premium oils 10W-30 API CJ-4 / CI-4 Plus / CI-4	John Deere Torq-Gard Supreme™ (SAE 10W-30, CI-4; CH-4)

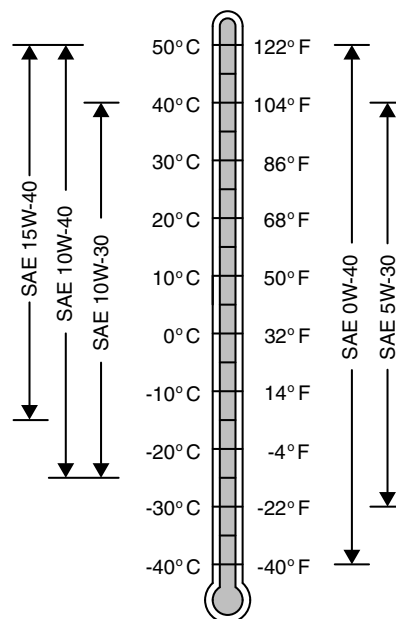
DO NOT use engine oil containing more than 1.0% sulfated ash, 0.12% phosphorus, or 0.4% sulfur.

Multi-viscosity diesel engine oils are preferred.

Diesel fuel quality and fuel sulfur content must comply with all existing emissions regulations for the area in which the engine operates.

IMPORTANT: Use only ultra low sulfur diesel (ULSD) fuel with a maximum sulfur content of 15 mg/kg (15 ppm).

*Plus-50 is a trademark of Deere & Company
Torq-Gard Supreme is a trademark of Deere & Company*



Oil Viscosities for Air Temperature Ranges

TS1691—JUN—18JUL07

OULXBER,0002381 -19-14FEB14-1/1

Engine Oil and Filter Service Intervals

Recommended oil and filter service intervals are based on a combination of oil pan capacity, type of engine oil and filter used, and sulfur content of the diesel fuel. Actual service intervals also depend on operation and maintenance practices.

Use oil analysis to evaluate the condition of the oil and to aid in selection of the proper oil and filter service interval. Contact your John Deere dealer for more information on engine oil analysis.

Change the oil and oil filter at least once every 12 months even if the hours of operation are fewer than the otherwise recommended service interval.

Diesel fuel sulfur content affects engine oil and filter service intervals. Higher fuel sulfur levels reduce oil and filter service intervals.

Use of diesel fuel with sulfur content less than 15 mg/kg (15 ppm) is **REQUIRED**.

IMPORTANT: To avoid engine damage:

- **Reduce oil and filter service intervals by 50% when using BioDiesel blends greater than B20. Oil analysis may allow longer service interval.**
- **Use only approved oil types.**

Engine oil and filter change intervals:	
After the first 100 hours of operation	Drain brake-in oil and refill with recommended engine oil. Replace engine oil filter
Every 250 hours of operation	If Bio-Diesel blends greater than B20 are used or if oils, other as recommended are used.
Every 500 hours of operation	If STANDARD fuel compliant to the EN 590 (2005/55 - 2005/78) is used. The use of additives is discouraged. A fuel known as BIO DIESEL is allowed only if it is compliant with the EN EN 14214 - ASTM 6751 norm, mixed in standard fuel with a maximum percentage of 20%. If recommended oil is used.

OULXBER,0002382 -19-14FEB14-1/1

John Deere Break-In Plus™ Engine Oil

New engines are filled at the factory with John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In Plus™ Engine Oil, as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help seat engine components properly.

During the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and maximum equal to the interval specified for John Deere Plus-50™ II oil.

After engine overhaul, fill the engine with John Deere Break-In Plus™ Engine Oil.

If John Deere Break-In Plus™ Engine Oil is not available, use an SAE 10W-30 viscosity grade diesel engine oil meeting one of the following:

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Plus-50 is a trademark of Deere & Company.

- API Service Category CJ-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E6

If one of these oils is used during the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and a maximum of 250 hours.

IMPORTANT: Do not use any other engine oils during the initial break-in of a new or rebuilt engine.

John Deere Break-In Plus™ Engine Oil can be used for all John Deere diesel engines at all emission certification levels.

After the break-in period, use John Deere Plus-50™ II or other diesel engine oil as recommended in this manual.

OULXBER.0002383 -19-14FEB14-1/1

Transmission and Hydraulic Oil

Use oil viscosity based on the expected air temperature range during the period between oil changes.

The following oils are preferred:

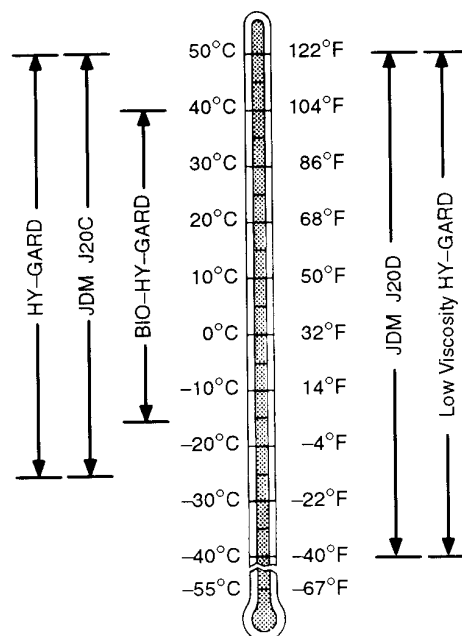
- John Deere HY-GARD™
- John Deere Low Viscosity HY-GARD™

John Deere BIO-HY-GARD™ oil is also recommended.

Other oils may be used if they meet one of the following:

- John Deere Standard JDM J20C
- John Deere Standard JDM J20D

Arctic oils (such as Military Specification MIL-L-46167B) may be used at temperatures below -30°C (-22°F).



HY-GARD is a registered trademark of Deere & Company.
BIO-HY-GARD is a trademark of Deere & Company.

DX, HYOIL2 -19-01DEC94-1/1

TS1625 —UN—12DEC94

Front-Wheel Drive Axle Oil

Use oil with a viscosity based on the expected air temperature range during the period between oil changes.

The following oil is preferred.

John Deere HY-GARD™

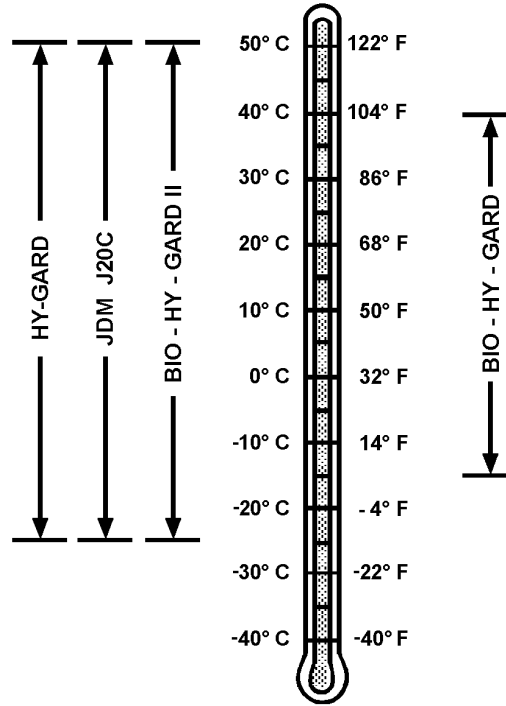
Other oils may be used if they meet the following:

John Deere Standard JDM J20C

Use one of the following oils when a biodegradable fluid is required:

John Deere BIO-HY-GARD II™¹ or BIO-HY-GARD™¹

NOTE: Do NOT use BIO-HY-GARD on braked axles.



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HY-GARD is a trademark of Deere & Company.

BIO-HY-GARD II is a trademark of Deere & Company.

BIO-HY-GARD is a trademark of Deere & Company.

¹BIO-HY-GARD II meets or exceeds the minimum biodegradability of 80 % within 21 days according to CEC L-33-A-93 test method. BIO-HY-GARD meets or exceeds the minimum biodegradability of 80 % within 21 days according to CEC L-33-T-82 test method. These oils should not be mixed with mineral oils because this reduces the biodegradability and makes proper oil recycling impossible.

LX,OILFA1 -19-30APR04-1/1

Multiluber Grease

John Deere Multiluber Grease is recommended.

You may also use SAE Multipurpose Grease meeting NLGI Consistency Number 000.

DX,GREA2 -19-11APR11-1/1

Mixing of Lubricants

In general, avoid mixing different brands or types of oil. Oil manufacturers blend additives in their oils to meet certain specifications and performance requirements.

Mixing different oils can interfere with the proper functioning of these additives and degrade lubricant performance.

Consult your John Deere dealer to obtain specific information and recommendations.

DX,LUBMIX -19-18MAR96-1/1

Lubricant Storage

Your equipment can operate at top efficiency only when clean lubricants are used.

Use clean containers to handle all lubricants.

Store lubricants and containers in an area protected from dust, moisture, and other contamination. Store containers on their side to avoid water and dirt accumulation.

Make certain that all containers are properly marked to identify their contents.

Properly dispose of all old containers and any residual lubricant they may contain.

DX,LUBST -19-11APR11-1/1

Alternative and Synthetic Lubricants

Conditions in certain geographical areas may require lubricant recommendations different from those printed in this manual.

Some John Deere brand coolants and lubricants may not be available in your location.

Consult your John Deere dealer to obtain information and recommendations.

Synthetic lubricants may be used if they meet the performance requirements as shown in this manual.

The temperature limits and service intervals shown in this manual apply to both conventional and synthetic lubricants.

Re-refined base stock products may be used if the finished lubricant meets the performance requirements.

DX,ALTER -19-11APR11-1/1

Diesel Engine Coolant

Preferred Coolants

The following pre-mix engine coolants are preferred:

- John Deere COOL-GARD™ II
- John Deere COOL-GARD II PG

COOL-GARD II pre-mix coolant is available in several concentrations with different freeze protection limits as shown in the following table.

COOL-GARD II pre-mix	Freeze Protection Limit
COOL-GARD II 20/80	-9 °C (16 °F)
COOL-GARD II 30/70	-16 °C (3 °F)
COOL-GARD II 50/50	-37 °C (-34 °F)
COOL-GARD II 55/45	-45 °C (-49 °F)
COOL-GARD II PG 60/40	-49 °C (-56 °F)
COOL-GARD II 60/40	-52 °C (-62 °F)

Not all COOL-GARD II pre-mix products are available in all countries.

Use COOL-GARD II PG when a non-toxic coolant formulation is required.

Additional Recommended Coolants

The following engine coolant is also recommended:

- John Deere COOL-GARD II Concentrate in a 40—60% mixture of concentrate with quality water.

IMPORTANT: When mixing coolant concentrate with water, do not use less than 40% or greater than 60% concentration of coolant. Less than 40% gives inadequate additives for corrosion protection. Greater than 60% can result in coolant gelation and cooling system problems.

COOL-GARD is a trademark of Deere & Company

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
- Coolant concentrate meeting ASTM D6210 requirements in a 40—60% mixture of concentrate with quality water

If coolant meeting one of these specifications is unavailable, use a coolant concentrate or pre-mix coolant that has a minimum of the following chemical and physical properties:

- Provides cylinder liner cavitation protection according to either the John Deere Cavitation Test Method or a fleet study run at or above 60% load capacity
- Is formulated with a nitrite-free additive package
- Protects the cooling system metals (cast iron, aluminum alloys, and copper alloys such as brass) from corrosion

Water Quality

Water quality is important to the performance of the cooling system. Distilled, deionized, or demineralized water is recommended for mixing with ethylene glycol and propylene glycol base engine coolant concentrate.

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.

OULXBER,0002384 -19-19FEB14-1/1

Operating in Warm Temperature Climates

John Deere engines are designed to operate using recommended engine coolants.

Always use a recommended engine coolant, even when operating in geographical areas where freeze protection is not required.

IMPORTANT: Water may be used as coolant in emergency situations only.

Foaming, hot surface aluminum and iron corrosion, scaling, and cavitation occur when water is used as the coolant, even when coolant conditioners are added.

Drain cooling system and refill with recommended engine coolant as soon as possible.

DX,COOL6 -19-15MAY13-1/1

Testing Diesel Engine Coolant

Maintaining adequate concentrations of glycol and inhibiting additives in the coolant is critical to protect the engine and cooling system against freezing, corrosion, and cylinder liner erosion and pitting.

Test the coolant solution at intervals of 12 months or less and whenever excessive coolant is lost through leaks or overheating.

Coolant Test Strips

Coolant test strips are available from your John Deere dealer. These test strips provide a simple, effective method to check the freeze point and additive levels of your engine coolant.

When Using John Deere COOL-GARD II

John Deere COOL-GARD II Premix™, COOL-GARD II PG Premix and COOL-GARD II Concentrate are maintenance free coolants for up to six years or 6000 hours of operation, provided that the cooling system is topped off using only John Deere COOL-GARD II Premix or COOL-GARD II PG premix. Test the coolant condition annually with coolant test strips designed for use with John Deere COOL-GARD II coolants. If the test strip chart indicates that additive is required, add John Deere COOL-GARD II Coolant Extender as directed.

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Add only the recommended concentration of John Deere COOL-GARD II Coolant Extender. DO NOT add more than the recommended amount.

When Using Nitrite-Containing Coolants

Compare the test strip results to the supplemental coolant additive (SCA) chart to determine the amount of inhibiting additives in your coolant and whether more John Deere Liquid Coolant Conditioner should be added.

Add only the recommended concentration of John Deere Liquid Coolant Conditioner. DO NOT add more than the recommended amount.

Coolant Analysis

For a more thorough evaluation of your coolant, perform a coolant analysis. The coolant analysis can provide critical data such as freezing point, antifreeze level, pH, alkalinity, nitrite content (cavitation control additive), molybdate content (rust inhibitor additive), silicate content, corrosion metals, and visual assessment.

Contact your John Deere dealer for more information on coolant analysis.

DX,COOL9 -19-11APR11-1/1

Storing Fuel

If there is a very slow turnover of fuel in the fuel tank or supply tank, it may be necessary to add a fuel

conditioner to prevent water condensation. Contact your John Deere dealer for proper service or maintenance recommendations.

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

Handling and Storing Diesel Fuel

⚠ CAUTION: Reduce the risk of fire. Handle fuel carefully. DO NOT fill the fuel tank when engine is running. DO NOT smoke while you fill the fuel tank or service the fuel system.

Fill the fuel tank at the end of each day's operation to prevent water condensation and freezing during cold weather.

Keep all storage tanks as full as 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 and prevent water condensation. Contact your fuel supplier or John Deere dealer for recommendations.

DX,FUEL4 -19-15FEB13-1/1

Diesel Fuel

Consult your local fuel distributor for properties of the diesel fuel available in your area.

In general, diesel fuels are blended to satisfy the low temperature requirements of the geographical area in which they are marketed.

Diesel fuels specified to EN 590 or ASTM D975 are recommended. Renewable diesel fuel produced by hydrotreating animal fats and vegetable oils is basically identical to petroleum diesel fuel. Renewable diesel that meets EN 590, ASTM D975, or EN 15940 is acceptable for use at all percentage mixture levels.

Required Fuel Properties

In all cases, the fuel shall meet the following properties:

Cetane number of 40 minimum. Cetane number greater than 47 is preferred, especially for temperatures below -20°C (-4°F) or elevations above 1675 m (5500 ft.).

Cold Filter Plugging Point (CFPP) should be at least 5°C (9°F) below the expected lowest temperature or **Cloud Point** below the expected lowest ambient temperature.

Fuel lubricity should pass a maximum scar diameter of 0.52 mm as measured by ASTM D6079 or ISO 12156-1. A maximum scar diameter of 0.45 mm is preferred.

Diesel fuel quality and sulfur content must comply with all existing emissions regulations for the area in which the engine operates. DO NOT use diesel fuel with sulfur content greater than 10 000 mg/kg (10 000 ppm).

E-Diesel fuel

DO NOT use E-Diesel (Diesel fuel and ethanol blend). Use of E-Diesel fuel in any John Deere machine may void the machine warranty.

 **CAUTION: Avoid severe injury or death due to the fire and explosion risk from using E-Diesel fuel.**

Sulfur content for Interim Tier 4, Final Tier 4, Stage III B, and Stage IV Engines

- Use ONLY ultra low sulfur diesel (ULSD) fuel with a maximum of 15 mg/kg (15 ppm) sulfur content.

Sulfur Content for Tier 3 and Stage III A Engines

- Use of diesel fuel with sulfur content less than 1000 mg/kg (1000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content 1000—2000 mg/kg (1000—2000 ppm) REDUCES the oil and filter change interval.
- BEFORE using diesel fuel with sulfur content greater than 2000 mg/kg (2000 ppm), contact your John Deere dealer.

Sulfur Content for Tier 2 and Stage II Engines

- Use of diesel fuel with sulfur content less than 2000 mg/kg (2000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content 2000—5000 mg/kg (2000—5000 ppm) REDUCES the oil and filter change interval.
- BEFORE using diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm), contact your John Deere dealer.

Sulfur Content for Other Engines

- Use of diesel fuel with sulfur content less than 5000 mg/kg (5000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm) REDUCES the oil and filter change interval.

IMPORTANT: Do not mix used diesel engine oil or any other type of lubricating oil with diesel fuel.

Improper fuel additive usage may cause damage on fuel injection equipment of diesel engines.

DX,FUEL1 -19-13JAN16-1/1

Minimizing the Effect of Cold Weather on Diesel Engines

John Deere diesel engines are designed to operate effectively in cold weather.

However, for effective starting and cold-weather operation, a little extra care is necessary. The following information outlines steps that can minimize the effect that cold weather may have on starting and operation of your engine. See your John Deere dealer for additional information and local availability of cold-weather aids.

Use Winter Grade Fuel

When temperatures fall below 0 °C (32 °F), winter grade fuel (No. 1-D in North America) is best suited for cold-weather operation. Winter grade fuel has a lower cloud point and a lower pour point.

Cloud point is the temperature at which wax begins to form in the fuel. This wax causes fuel filters to plug. **Pour point** is the lowest temperature at which movement of the fuel is observed.

NOTE: On average, winter grade diesel fuel has a lower Btu (heat content) rating. Using winter grade fuel may reduce power and fuel efficiency, but should not cause any other engine performance effects. Check the grade of fuel being used before troubleshooting for low-power complaints in cold-weather operation.

Air Intake Heater

An air intake heater is an available option for some engines to aid cold weather starting.

Ether

An ether port on the intake is available to aid cold weather starting.

⚠ CAUTION: Ether is highly flammable. Do not use ether when starting an engine equipped with glow plugs or an air intake heater.

Coolant Heater

An engine block heater (coolant heater) is an available option to aid cold weather starting.

Seasonal Viscosity Oil and Proper Coolant Concentration

Use seasonal grade viscosity engine oil based on the expected air temperature range between oil changes and a proper concentration of low silicate antifreeze as recommended. (See DIESEL ENGINE OIL and ENGINE COOLANT requirements in this section.)

Diesel Fuel Flow Additive

Use John Deere Fuel-Protect Diesel Fuel Conditioner (winter formula), which contains anti-gel chemistry, or equivalent fuel conditioner to treat non-winter grade fuel (No. 2-D in North America) during the cold-weather season. This generally extends operability to about 10 °C (18 °F) below the fuel cloud point. For operability at even lower temperatures, use winter grade fuel.

IMPORTANT: Treat fuel when outside temperature drops below 0 °C (32 °F). For best results, use with untreated fuel. Follow all recommended instructions on label.

BioDiesel

When operating with BioDiesel blends, wax formation can occur at warmer temperatures. Begin using John Deere Fuel-Protect Diesel Fuel Conditioner (winter formula) at 5 °C (41 °F) to treat BioDiesel fuels during the cold-weather season. Use B5 or lower blends at temperatures below 0 °C (32 °F). Use only winter grade petroleum diesel fuel at temperatures below -10 °C (14 °F).

Winterfronts

Use of fabric, cardboard, or solid winterfronts is not recommended with any John Deere engine. Their use can result in excessive engine coolant, oil, and charge air temperatures. This can lead to reduced engine life, loss of power and poor fuel economy. Winterfronts may also put abnormal stress on fan and fan drive components potentially causing premature failures.

If winterfronts are used, they should never totally close off the grill frontal area. Approximately 25% area in the center of the grill should remain open at all times. At no time should the air blockage device be applied directly to the radiator core.

Radiator Shutters

If equipped with a thermostatically controlled radiator shutter system, this system should be regulated in such a way that the shutters are completely open by the time the coolant reaches 93 °C (200 °F) to prevent excessive intake manifold temperatures. Manually controlled systems are not recommended.

If air-to-air aftercooling is used, the shutters must be completely open by the time the intake manifold air temperature reaches the maximum allowable temperature out of the charge air cooler.

For more information, see your John Deere dealer.

DX,FUEL10 -19-15MAY13-1/1

Lubricity of Diesel Fuel

Most diesel fuels manufactured in the United States, Canada, and the European Union have adequate lubricity to ensure proper operation and durability of fuel injection system components. However, diesel fuels manufactured in some areas of the world may lack the necessary lubricity.

IMPORTANT: Make sure the diesel fuel used in your machine demonstrates good lubricity characteristics.

Fuel lubricity should pass a maximum scar diameter of 0.52 mm as measured by ASTM D6079 or ISO 12156-1. A maximum scar diameter of 0.45 mm is preferred.

If fuel of low or unknown lubricity is used, add John Deere Fuel-Protect Diesel Fuel Conditioner (or equivalent) at the specified concentration.

Lubricity of BioDiesel Fuel

Fuel lubricity can improve significantly with BioDiesel blends up to B20 (20% BioDiesel). Further increase in lubricity is limited for BioDiesel blends greater than B20.

DX,FUEL5 -19-07FEB14-1/1

BioDiesel Fuel

BioDiesel fuel is comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats. BioDiesel blends are BioDiesel mixed with petroleum diesel fuel on a volume basis.

Before using fuel containing BioDiesel, review the BioDiesel Use Requirements and Recommendations in this Operator's Manual.

Environmental laws and regulations can encourage or prohibit the use of biofuels. Operators should consult with appropriate governmental authorities prior to using biofuels.

All John Deere Engines with Exhaust Filter (Released 2011 and After)

While 5% blends (B5) are preferred, BioDiesel concentrations up to a 20% blend (B20) in petroleum diesel fuel can be used. BioDiesel blends up to B20 can be used ONLY if the BioDiesel (100% BioDiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

BioDiesel concentrations above B20 can harm the engine's emission control systems and should not be used. Risks include, but are not limited to, more frequent stationary regeneration, soot accumulation, and increased intervals for ash removal.

John Deere approved fuel conditioners, which contain detergent and dispersant additives, are required when using BioDiesel blends from B10—B20, and are recommended when using lower BioDiesel blends.

All John Deere Engines Excluding Exhaust Filter (Primarily Released Prior to 2012)

While 5% blends (B5) are preferred, BioDiesel concentrations up to a 20% blend (B20) in petroleum diesel fuel can be used. BioDiesel blends up to B20 can be used ONLY if the BioDiesel (100% BioDiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

These John Deere engines can operate on BioDiesel blends above B20 (up to 100% BioDiesel). Operate at levels above B20 ONLY if the BioDiesel is permitted by law and meets the EN 14214 specification (primarily available in Europe). Engines operating on BioDiesel blends above B20 might not fully comply with or be permitted by all applicable emissions regulations. Expect up to a 12% reduction in power and an 18% reduction in fuel economy when using 100% BioDiesel.

John Deere approved fuel conditioners, which contain detergent and dispersant additives, are required when using BioDiesel blends from B10—B20, and are recommended when using lower BioDiesel blends.

BioDiesel Use Requirements and Recommendations

The petroleum diesel portion of all BioDiesel blends must meet the requirements of ASTM D975 (US) or EN 590 (EU) commercial standard.

BioDiesel users in the U.S. are strongly encouraged to purchase BioDiesel blends from a BQ-9000 Certified Marketer and sourced from a BQ-9000 Accredited Producer (as certified by the National BioDiesel Board). Certified Marketers and Accredited Producers can be found at the following website: <http://www.bq9000.org>.

BioDiesel contains residual ash. Ash levels exceeding the maximums allowed in either ASTM D6751 or EN14214 can result in more rapid ash loading and require more frequent cleaning of the Exhaust Filter (if present).

The fuel filter can require more frequent replacement, when using BioDiesel fuel, particularly if switching from diesel. Check engine oil level daily prior to starting engine. A rising oil level can indicate fuel dilution of the engine oil. BioDiesel blends up to B20 must be used within 90 days of the date of BioDiesel manufacture. BioDiesel blends above B20 must be used within 45 days from the date of BioDiesel manufacture.

When using BioDiesel blends up to B20, the following must be considered:

- Cold-weather flow degradation
- Stability and storage issues (moisture absorption, microbial growth)
- Possible filter restriction and plugging (usually a problem when first switching to BioDiesel on used engines)
- Possible fuel leakage through seals and hoses (primarily an issue with older engines)
- Possible reduction of service life of engine components

Request a certificate of analysis from your fuel distributor to ensure that the fuel is compliant with the specifications provided in this Operator's Manual.

Consult your John Deere dealer for approved fuel conditioners to improve storage and performance with BioDiesel fuels.

The following must also be considered if using BioDiesel blends above B20:

- Possible coking or blocked injector nozzles, resulting in power loss and engine misfire if John Deere approved fuel conditioners are not used
- Possible crankcase oil dilution (requiring more frequent oil changes)
- Possible lacquering or seizure of internal components
- Possible formation of sludge and sediments
- Possible thermal oxidation of fuel at elevated temperatures
- Possible compatibility issues with other materials (including copper, lead, zinc, tin, brass, and bronze) used in fuel handling equipment

Continued on next page

DX,FUEL7 -19-15MAY13-1/2

- Possible reduction in water separator efficiency
- Possible damage to paint if exposed to BioDiesel
- Possible corrosion of fuel injection equipment
- Possible elastomeric seal and gasket material degradation (primarily an issue with older engines)
- Possible high acid levels within fuel system
- Because BioDiesel blends above B20 contain more ash, using blends above B20 can result in more rapid

ash loading and require more frequent cleaning of the Exhaust Filter (if present)

IMPORTANT: Raw pressed vegetable oils are NOT acceptable for use as fuel in any concentration in John Deere engines. Their use could cause engine failure.

DX,FUEL7 -19-15MAY13-2/2

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 cetane number, fuel type, sulfur content, water content, appearance, suitability for cold weather

operations, bacteria, cloud point, acid number, particulate contamination, and whether the fuel meets specification.

Contact your John Deere dealer for more information on diesel fuel analysis.

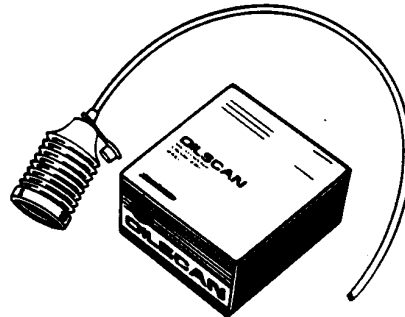
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Oilscan™ and CoolScan™

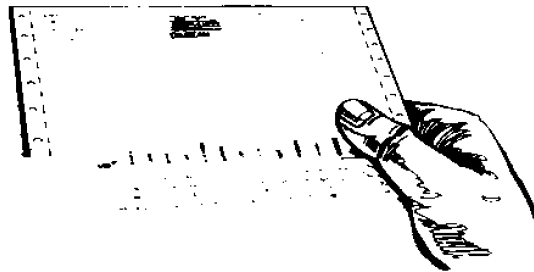
Oilscan™ and CoolScan™ are John Deere sampling programs to help you monitor machine performance and identify potential problems before they cause serious damage.

Oil and coolant samples should be taken from each system before its recommended change interval.

Check with your John Deere dealer for the availability of Oilscan™ and CoolScan™ kits.



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T6829AB—UN—26AUG11

*Oilscan is a trademark of Deere & Company
CoolScan is a trademark of Deere & Company*

DX,OILSCAN -19-13SEP11-1/1

Lubrication and Periodic Service

Lubrication and Periodic Service

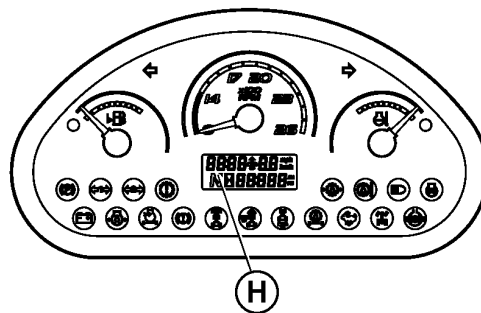
CAUTION: Do not lubricate or adjust the tractor while the engine is running unless recommended to do so.

IMPORTANT: Recommended service intervals are for average conditions. Service **MORE OFTEN** if tractor is operated under adverse conditions.

The intervals at which the various parts should be checked, lubricated, serviced or adjusted are based on the actual hours of operation as shown on the hour meter (H). The hour meter operates whenever the engine is running and shows the accumulated hours of engine operation.

Using hour meter (H) as a guide, perform all services at the hourly intervals indicated on the following pages.

Always check to make sure that the hour meter is serviceable.



After servicing, cleaning or repairing your machine, re-install any safety guards or shields before operating the tractor again.

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When Performing Services

The hood (A) is a protective element.

CAUTION: Never perform any service work near rotating or moving parts. Never remove or open any service doors or other guards when engine is running or hot. No service must be performed on or around the engine with engine running.

Prevent unintentional operation of engine or starting motor when hood is open or guards are removed.



OULXBER,0002268 -19-29OCT13-1/1

AGCPTJD0434—UN—17OCT13

Safe Maintenance and Cleaning

CAUTION: To perform service work at locations that are difficult to reach, it is essential to use suitable platforms or safety ladders.

Particular care is required when performing service work and cleaning jobs at locations that are difficult to reach, e.g. adjusting roof-mounted lights, servicing the cooling system, adjusting the right outside mirror on tractors without a door on the right side and many other similar tasks.

CAUTION: It is NOT permissible to stand on tractor components to perform such tasks unless the tractor components are intended for this purpose. There is a high risk of falling, especially if the tractor components are wet, dirty, or coated with ice.

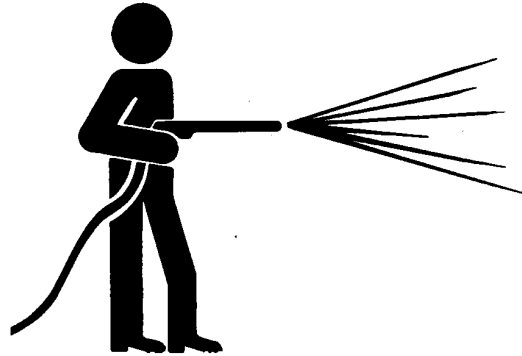


TS249 —UN—23AUG88

OULXBER,0002044 -19-01FEB13-1/1

Using High Pressure Washers

IMPORTANT: Directing pressurized water at electronic/electrical components or connectors, bearings and hydraulic seals, fuel injection pumps or other sensitive parts and components may cause product malfunctions. Reduce pressure, and spray at a 45 to 90° angle.



T6642EJ —UN—18OCT88

OULXBER,0002045 -19-01FEB13-1/1

Use Correct Lubricant

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

OULXBER,0002047 -19-01FEB13-1/1

Service Tractor Safely

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

Do not change engine governor setting or 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 run engine unless the reverse drive 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 the function and/or safety and affect machine life.

OULXBER,0002048 -19-01FEB13-1/1

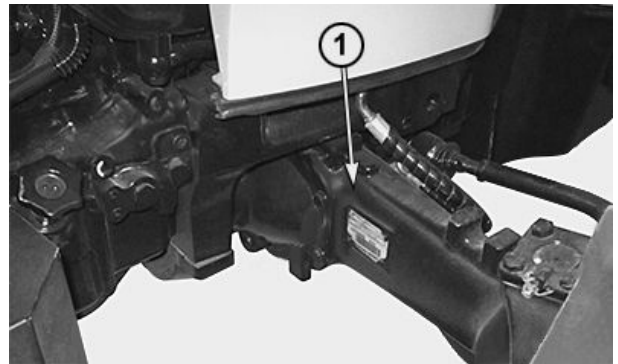
Jack Up the Tractor - Lifting Points

The illustrations show the recommended lifting points for jacking up the tractor. Use a stable lifting jack with sufficient lifting force. See Specifications and Loads and Weights in Section 150.

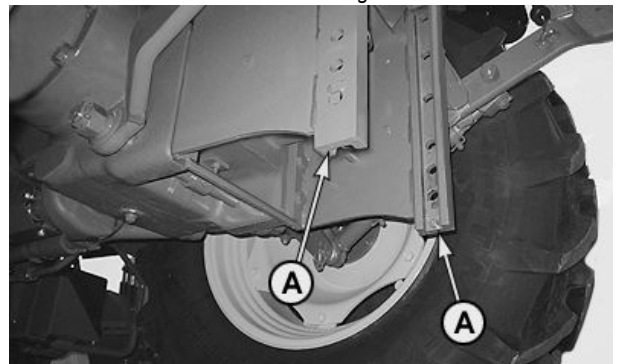
Raise rear of tractor:

1— Wooden Wedges

A—Raise Rear of Tractor



Wooden Wedges



Raise Rear of Tractor

OULXBER,0002269 -19-29OCT13-1/3

AGCPTJD0435 —UN—17OCT13

LX1054833 —UN—21DEC11

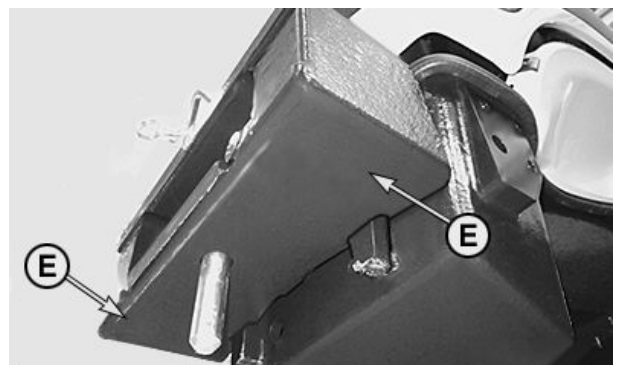
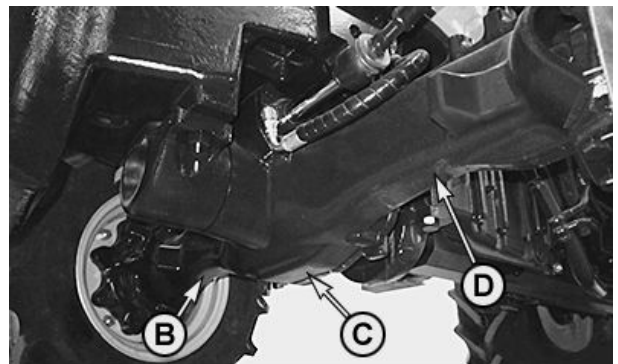
Raise front of tractor:

B—Raise Right End of Axle, e.g. to Remove Right Front Wheel

C—Raise Center of Axle (Use Wooden Wedges to Prevent Axle from Tilting)

D—Raise Left End of Axle, e.g. to Remove Left Front Wheel

E—Raise Front End of Tractor under the Basic Weight

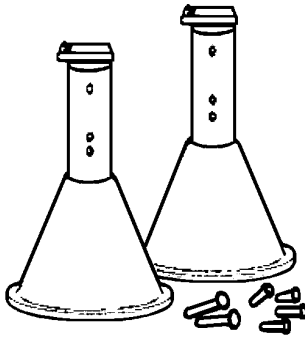


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OULXBER,0002269 -19-29OCT13-2/3

AGCPTJD0436 —UN—17OCT13

AGCPTJD0437 —UN—17OCT13



JT07211

JT02043 und JT02044 Support Stands

JT07211 —UN—14DEC06

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

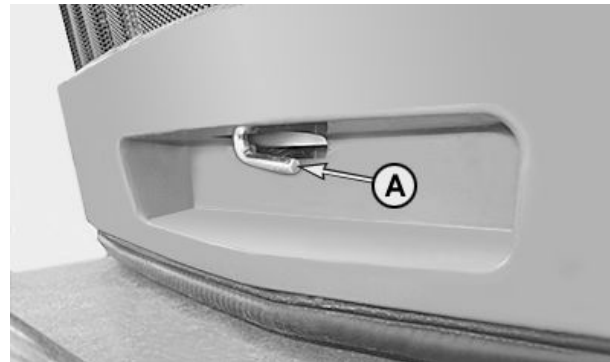
CAUTION: Use approved lifting equipment only.
Jack up tractor on firm, level ground only.
Before doing any further work on the tractor,
first secure it using suitable support stands.

The special John Deere tools shown can be used for this purpose. These support stands are available from your John Deere dealer.

OULXBER,0002269 -19-29OCT13-3/3

Open Hood

Release latch (A) and open the hood.

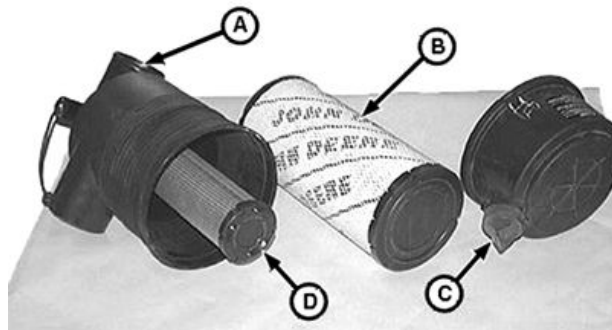


AGCPTJD0088 —UN—21MAY13

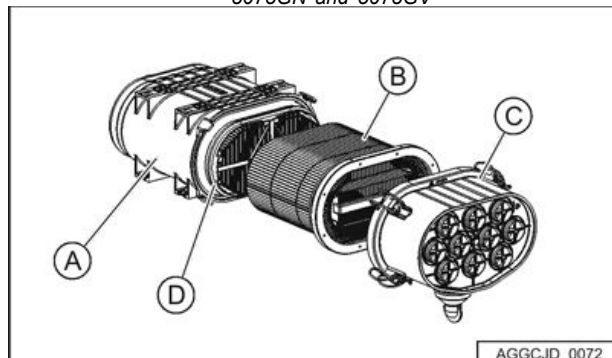
OULXBER,00020EB -19-12JUN13-1/1

Air Intake System Components

Air enters the intake system through the open end of the air cleaner canister (A). A major portion of the dust is separated out by air turbulence action caused by the primary air cleaner element (B) and passed out into the radiator inlet air flow through the dust unloader valve (C). If the primary element becomes plugged, dust is filtered out by the secondary element (D).



5075GN and 5075GV



5090GN, 5090GV, and 5100GN

AGGCJD_0072

OULXBER,000226A -19-11MAR16-1/1

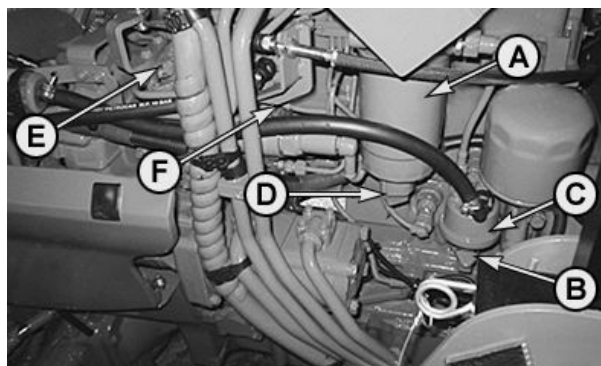
LX205078 —UN—11NOV13

AGGCJD0072 —UN—10MAR16

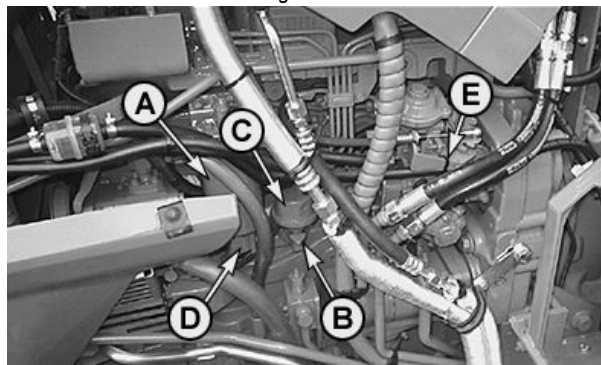
Fuel System Components

A—Fuel filter
B—Priming pump
C—Fuel transfer pump

D—Water separator bowl
E—Fuel injection pump
F—Electric fuel shut-off connector



Engine F5C



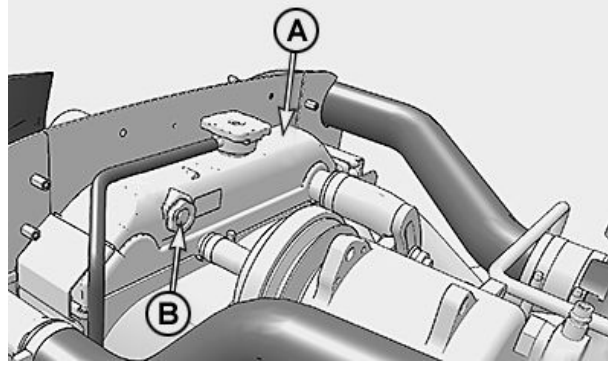
Engine NEF

OULXBER,0002516 -19-30OCT14-1/1

AGCPTJD0439 —UN—17OCT13

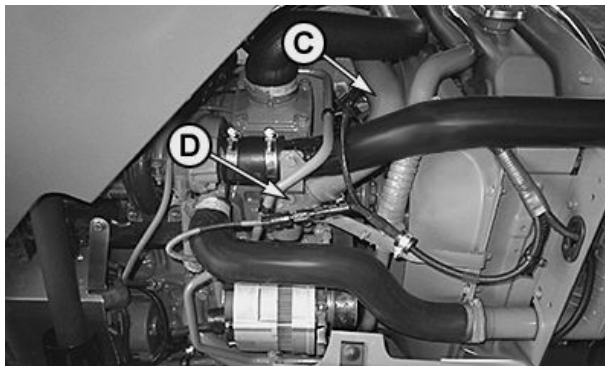
AGCPTJD0689 —UN—02OCT14

Engine Cooling System Components



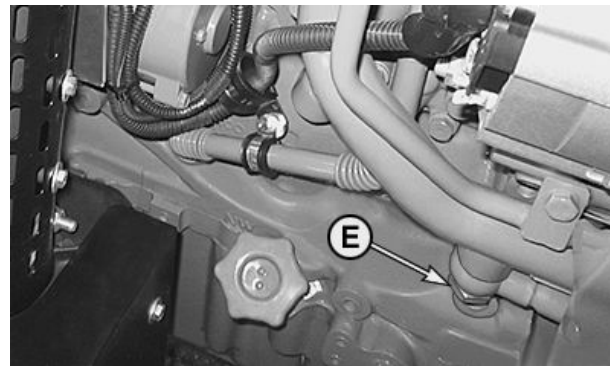
AGCPTJD0673 —UN—01OCT14

OULXBER,0002517 -19-30OCT14-1/2



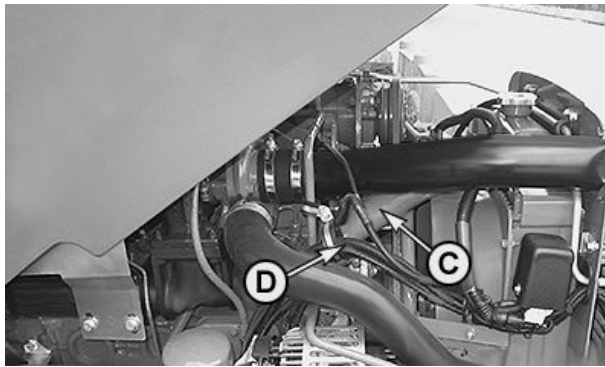
AGCPTJD0687 —UN—02OCT14

Engine F5C



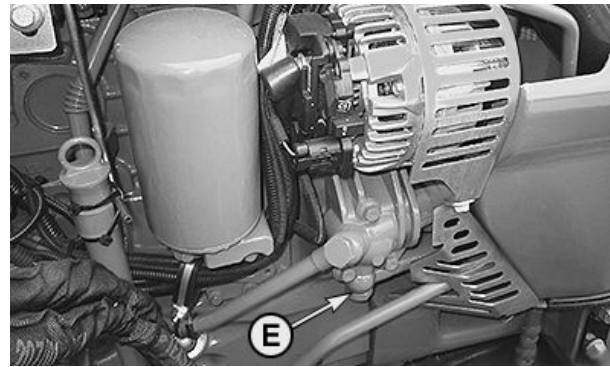
AGCPTJD0688 —UN—02OCT14

Engine F5C



AGCPTJD0703 —UN—02OCT14

Engine NEF



AGCPTJD0700 —UN—01OCT14

Engine NEF

A—Radiator
B—Sight glass

C—Upper Radiator Hose
D—Thermostat Housing

E—Coolant Drain Plug

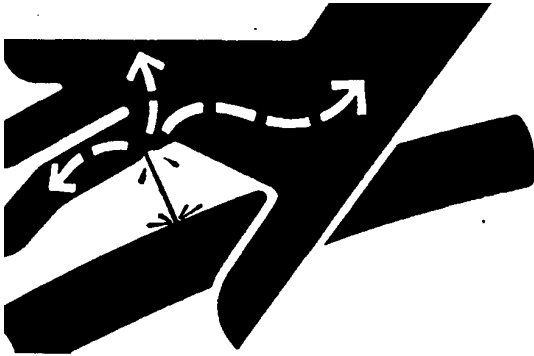
Check coolant level in radiator (A) through the sight glass (B).

CAUTION: Only remove radiator cap when engine is cold. Slowly loosen cap to first stop to relieve pressure before removing completely.

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.

OULXBER,0002517 -19-30OCT14-2/2

Air-Conditioning System



If the cooling effect is intermittent, clean front grille, side panels, radiator and condenser. If necessary, check and clean cab air filter. Should all these procedures not solve the problem and the system still not work properly, the refrigerant level in the system may be low. See your John Deere dealer.

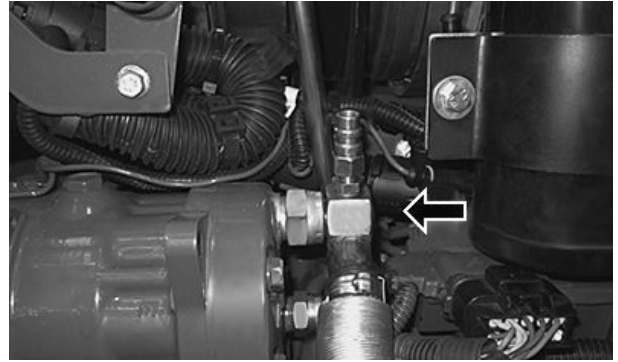
CAUTION: The refrigerant in the system is under pressure. If it escapes it can penetrate the skin or the eyes and it can cause burns.

IMPORTANT: The system is filled with R134a refrigerant. Servicing it requires special procedures and equipment. See your John Deere dealer.

At ambient temperatures below 0 °C (32 °F) operate the compressor by switching on the air conditioning system for 10 to 15 minutes at least once per month. Run the engine at 1500 rpm. This will ensure that the seals in the compressor are lubricated and prevent them from becoming dry and brittle.

IMPORTANT: Frequently check air conditioning components for leaks or damage. Wear

X9811 —UN—23AUG88



AGCPTJD0092 —UN—27MAY13

protective clothing. If air conditioning components are contaminated with oil, this may indicate a refrigerant leak. If there is any doubt, contact your John Deere Dealer.

IMPORTANT: Never open refrigerant lines, as this will allow all the refrigerant to escape.

CAUTION: Refrigerant is harmful to the eyes and skin. If a leak is detected, put on safety glasses and wear protective clothing. Call your John Deere dealer, who has the special equipment required to service and repair the air-conditioning circuit.

NOTE: Cleaning front grille, side panels, radiator and condenser as well as checking and cleaning the cab air filter only may be carried out without the special equipment.

Any service that is required for the air conditioning system has to be performed by your John Deere Dealer. See Section 130, Service as Required.

OULXBER,00020E6 -19-11JUN13-1/1

Observe Electrical Service Precautions

⚠ CAUTION: Keep all sparks and flames away from batteries, as gas given off by electrolyte is explosive. To avoid sparks, connect negative (ground) cable (B) last and disconnect it first. When using a booster battery, follow instructions in Section 40, Operating the Engine.

To avoid shocks and burns, disconnect battery negative (ground) cable (B) before servicing any part of the electrical system, and then remove positive cable (A) if removing battery.

Keep all electrical shields in place.

⚠ CAUTION: Depending on the manufacturers, the arrangement of battery connections may differ.

Pay close attention to the symbols marked on the battery.

To avoid sparks, connect negative (ground) cable last and disconnect it first.



TS204 —UN—15APR13

AGCPTJD0443 —UN—16DEC13

OULXBER,000226D -19-29OCT13-1/1

Battery

Access to the battery (tractors without cab)



AGCPTJD0444 —UN—17OCT13



AGCPTJD0445 —UN—17OCT13

Battery is located at the rear of the tractor, behind the seat. To gain access remove nuts (A) and then remove cover (B).



AGCPTJD0446 —UN—21OCT13

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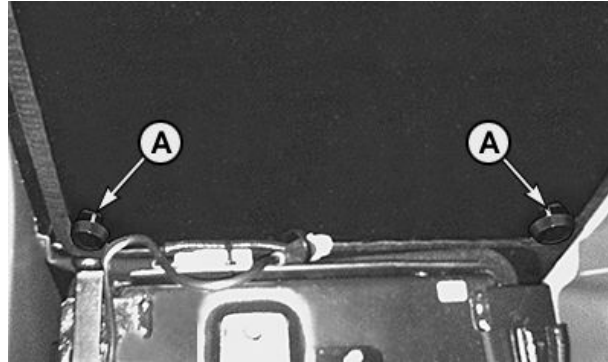
OULXBER,0002518 -19-30OCT14-1/6

Access to the battery (tractors with cab)

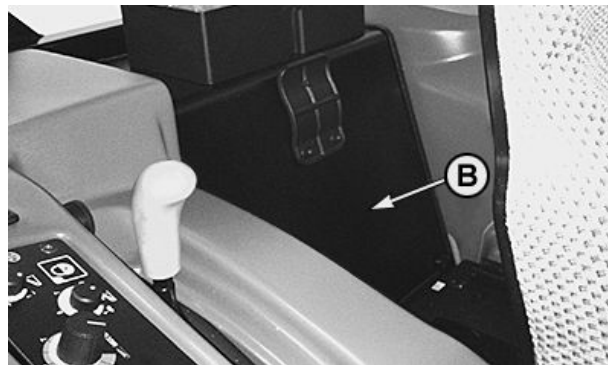
Battery is located at the rear of the tractor, behind the seat. To gain access remove nuts (A) and then remove cover (B).



AGCPTJD0690—UN—02OCT14



AGCPTJD0691—UN—02OCT14



AGCPTJD0692—UN—02OCT14

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OULXBER,0002518 -19-30OCT14-2/6

Clean and Check Battery



Tractor Without Cab Shown

AGCPTJD0447 —UN—21OCT13



Tractor With Cab Shown

AGCPTJD0693 —UN—02OCT14

Wipe battery with a damp cloth. Clean and tighten connections if needed. It is not necessary to check fluid level (maintenance-free battery).

OULXBER,0002518 -19-30OCT14-3/6

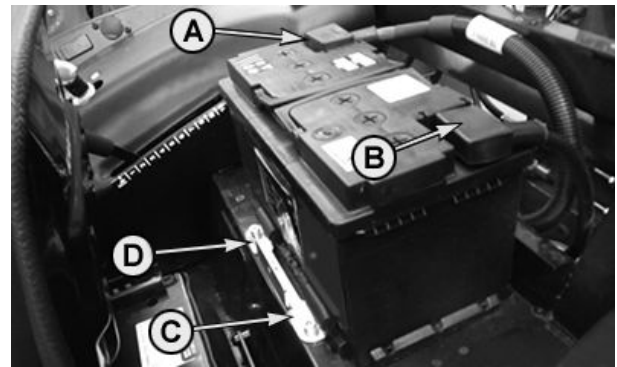
Removal

1. Loosen the nut retaining negative (ground) battery cable (B) and remove the cable connection. Then loosen the nut retaining positive cable (A) and remove the cable connection.

CAUTION: Depending on the manufacturers, the arrangement of battery connections may differ.

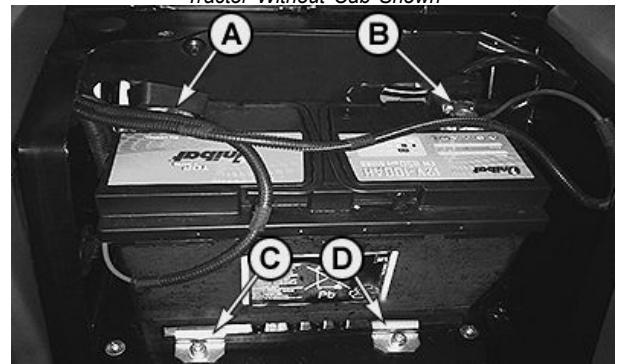
To avoid sparks, connect negative (ground) cable last and disconnect it first.

Pay close attention to the symbols marked on the battery.



Tractor Without Cab Shown

AGCPTJD0448 —UN—21OCT13

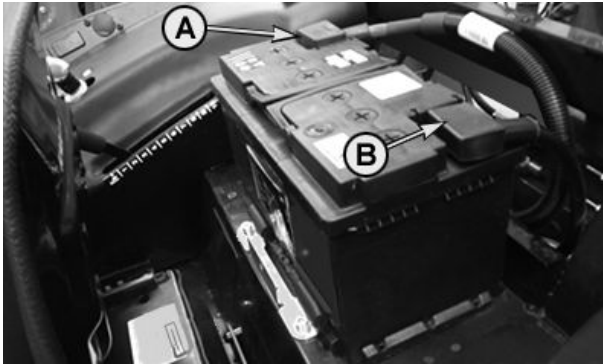


AGCPTJD0694 —UN—02OCT14

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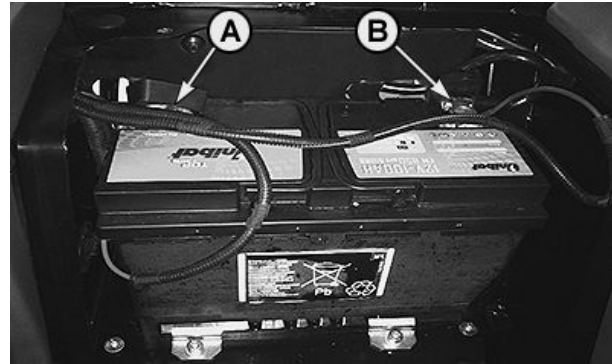
OULXBER,0002518 -19-30OCT14-4/6

Servicing



Tractor Without Cab Shown

AGCPTJD0449 —UN—21OCT13



Tractor With Cab Shown

AGCPTJD0695 —UN—02OCT14

1. Keep battery clean by wiping with a damp cloth. Keep connections (A) and (B) clean and tight.

CAUTION: To avoid sparks, connect negative (ground) cable last and disconnect it first.

Pay close attention to the symbols marked on the battery.

2. Keep battery fully charged, especially during cold weather. If a battery charger is connected, connect the positive lead to the positive battery terminal (A), then connect the negative charger lead to the negative battery terminal (B).

Replacement

CAUTION: To avoid sparks, connect negative (ground) cable last and disconnect it first.

Pay close attention to the symbols marked on the battery.

When replacing battery, use a John Deere battery or equivalent.

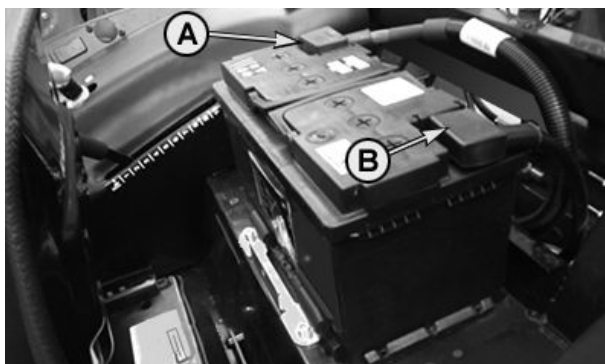
Battery Specifications

12 V, 100 Ah

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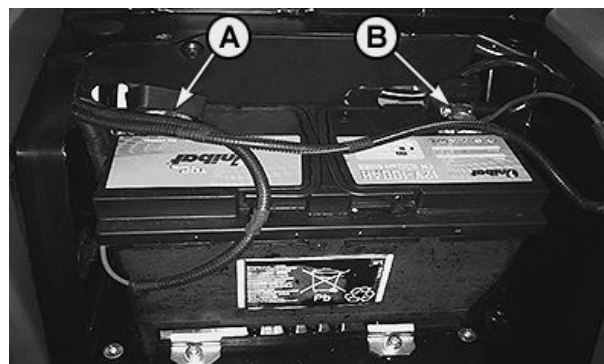
OULXBER,0002518 -19-30OCT14-5/6

Charging



Tractor Without Cab Shown

AGCPTJD0449 —UN—21OCT13



Tractor With Cab Shown

AGCPTJD0695 —UN—02OCT14

Under normal use, it is not necessary to add electrolyte to maintenance-free batteries. Keep battery fully charged, especially during cold weather.

⚠ 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.

1. With charger off, connect positive battery charger lead to positive battery terminal (A), then connect negative charger lead to negative battery terminal (B).
2. Turn charger on and recharge the battery following battery manufacturer's instructions for using charger.
3. To disconnect battery charger, turn charger off. Remove negative charger lead first, followed by positive charger lead.



TS204 —UN—15APR13

OULXBER,0002518 -19-30OCT14-6/6

Bulb Replacement — Safety Instructions

When replacing a bulb, always comply with the following safety instructions:

CAUTION: Always switch the lights off before you change a bulb.

CAUTION: First allow the bulb to cool down (may cause burns).

CAUTION: Wear safety goggles and gloves when changing the bulb.

CAUTION: The bulb is made of glass and contains gas; the bulb is under high pressure, so there is a risk of it shattering.

CAUTION: Do NOT use any bulbs that have fallen on the ground or have scratches on their surface, as there is a risk of them shattering.

CAUTION: Make sure that the bulb is seated correctly in its holder in the light.

CAUTION: Check the light for signs of damage and make sure the seals are seated correctly.

IMPORTANT: Use only bulbs that require 12 volts and are of the same type and wattage as the bulb that is being replaced.

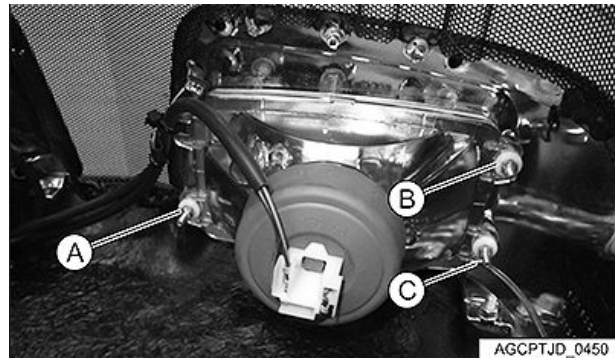
IMPORTANT: Never touch the glass surface of the bulb, hold it only by its base.

IMPORTANT: Use a clean cloth and alcohol to remove any fingerprints from the glass bulb.

OULXBER,00020EA -19-12JUN13-1/1

Adjusting the Head Lights

1. Open the hood.
2. Turn nuts (A) and (B) counterclockwise to adjust the light upward or clockwise to adjust the light downward.
3. To adjust the light towards the inside, turn nut (A) counterclockwise and nuts (B) and (C) clockwise. Always turn nuts (B) and (C) synchronous to the opposite direction nut (A) was turned.
4. To adjust the light towards the outside, turn nut (A) clockwise and nuts (B) and (C) counterclockwise. Always turn nuts (B) and (C) synchronous to the opposite direction nut (A) was turned.
5. Close hood and check the adjustment using a head light tester.



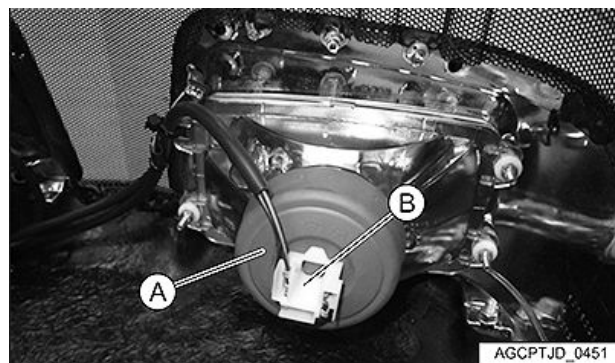
AGCPTJD_0450

AGCPTJD0450 —UN—02NOV15

OULXBER,000226F -19-30OCT13-1/1

Replace Head Light Bulbs

1. Turn OFF ignition.
2. Remove connector (B) from bulb socket.
3. Remove dust protector cap (A).
4. Remove bulb.
5. Install new bulb, protector cap (A) and connector (B).



AGCPTJD_0451

AGCPTJD0451 —UN—02NOV15

OULXBER,0002270 -19-30OCT13-1/1

Replace Clearance-, Brake- and Turn Signal Light Bulbs

1. Turn OFF ignition.
2. Unscrew the two screws and remove lens (A).
3. Push the bulb into the socket against the spring force and turn it to unlock. Release bulb and pull it out of the socket.
4. Slide new bulb into the socket, push it inside against the spring and then turn to lock it.
5. Clean and reinstall the lens (A).



AGGCJD0044 —UN—02NOV15

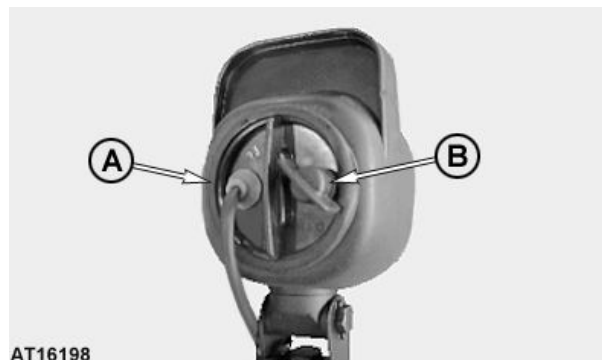
OULXBER,0002271 -19-20JAN16-1/1

Replace Rear Working Light Bulb

1. Turn OFF ignition.
2. Remove cap (B), push the bulb into the socket against the spring force and turn it to unlock. Release bulb and pull it out of the socket.
3. Slide new bulb into the socket, push it inside against the spring and then turn to lock it. Clean lens and install cap (B).

A—Working Light

B—Cap



AT16198 —UN—07FEB03

OULXBER,0002272 -19-30OCT13-1/1

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 tractor model, tire size and manufacturer, we recommend that you approach your John Deere dealer or tire company for advice. The tire pressures shown in the table should therefore be considered as a standard guide only. The tire pressures shown are for field operation. If you are operating 20% or

more on roads, increase tire pressures according to the manufacturer's specifications.

NOTE: Refer to "Maximum Permissible Axle Load in Relation to Tires (Normal Operation)" in Section 150 "Specifications"

Rear wheels	Front wheels
All tires: 160 kPa (1.6 bar; 23 psi)	Tires 260/70-16: 240 kPa (2.4 bar; 35 psi)
	Tires 280/70-16: 160 kPa (1.6 bar; 23 psi)

OULXBER,00022B8 -19-12DEC13-1/1

Service (Daily / Every 10, 250, 500 and 750 Hours)

Service procedure	Perform all tasks marked - In addition carry out the 10 hour service				
	Every 10 hours or daily	After the first 50 hours	Every 250 hours	Every 500 hours	Every 750 hours
Lights - Check that all lights (including headlights) are functioning properly	•				
Fuel system - Drain water and sediment from fuel filter	•				
Engine - Remove any dirt from area surrounding the engine	•				
Engine - Check oil level	•				
Engine - Clean crankcase vent tube	•				
Cooling system/air-conditioning system - Clean the radiator and condenser, fins and screens	•				
Cooling system - Check coolant level	•				
Transmission and hydraulic system - Check the oil level	•				
Air cleaner - Clean the dust unloading valve	•				
Three-point hitch - Lubricate lift links and rockshaft (only when operating in extremely wet and muddy conditions)	•				
Trailer hitch - Lubricate all grease fittings (only when operating in extremely wet and muddy conditions)	•				
Front-wheel drive axle - Lubricate pivot pin and king pins (only when operating in extremely wet and muddy conditions)	•				
Front-wheel drive axle - Lubricate wheel bearings (only when operating in extremely wet and muddy conditions)	•				
Front-wheel drive axle - Lubricate all universal joints including u.j. shaft from transmission to front-wheel drive axle (only when operating in extremely wet and muddy conditions)	•				
Rear axle - Lubricate bearings (only when operating in extremely wet and muddy conditions)	•				
Front PTO - Change oil and replace oil filter		•		•	
Transmission - Replace transmission oil filter, check oil level		•	•	•	•
Engine - Change engine oil				•	
Engine - Change engine oil filter		•		•	
Fuel system - Replace fuel strainer		•		•	
Front PTO - Check oil level			•	•	•
Clutch and Pto clutch - Check free play			•	•	•
Brake system - Check oil level			•	•	•
Brake system - Check free play of park brake and foot brakes			•	•	•
Drawbar - Check torque on attaching screws			•	•	•
Height-adjustable trailer hitch - Check torque on attaching screws			•	•	•
Trailer hitch - Check torque on attaching screws			•	•	•
Steering system - Lubricate tie rod ends			•	•	•
Front loader - Mounting frame, check torque on attaching screws			•	•	•
Wheels - Check torque of wheel and rim bolts			•	•	•
Trailer hitch - Lubricate all grease fittings			•	•	•
Front-wheel drive axle - Lubricate pivot pin and king pins			•	•	•
Front-wheel drive axle - Lubricate wheel bearings			•	•	•
Front-wheel drive axle - Lubricate all universal joints including u.j. shaft from transmission to front-wheel drive axle			•	•	•
Front-wheel drive axle - Check oil level in axle housing and final drive housings			•	•	•
Rear axle - Lubricate bearings			•	•	•
Check neutral start circuit			•	•	•
Alternator drive belt - Check for wear and damages, check belt tension			•	•	•
Fuel system - Replace fuel filter and bleed fuel system				•	
Fuel system - Drain residue from fuel tank				•	
Three-point hitch - Lubricate lift links and rockshaft				•	

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OULXBER,0002519 -19-30OCT14-1/2

Lubrication and Periodic Service

Service procedure	Perform all tasks marked - In addition carry out the 10 hour service				
	Every 10 hours or daily	After the first 50 hours	Every 250 hours	Every 500 hours	Every 750 hours
Air intake hoses - Check connections for leaks				•	
Components of drawbar, and trailer hitches - Check all components for wear; check all components function properly				•	
Check engine speeds, have speeds adjusted by your John Deere Dealer					•
Front axle pivot pins - Let the John Deere dealer check the end play					•
Cab and ROPS - Check torque of mounting bolts and nuts					•

OULXBER,0002519 -19-30OCT14-2/2

Service (Every 1000, 1250, 1500, 2000 Hours and Annually Services)

Service procedure	Perform all tasks marked - In addition carry out the 10 hour service				
	Every 1000 hours	Every 1250 hours	Every 1500 hours	Every 2000 hours	Annually
Transmission - Replace transmission oil filter, check oil level	•	•	•	•	
Engine - Change engine oil	•		•	•	•
Engine - Change engine oil filter	•		•	•	•
Fuel system - Replace fuel strainer				•	
Front PTO - Check oil level	•	•	•	•	
Front PTO - Change oil and replace oil filter	•		•	•	
Clutch and PTO clutch - Check free play	•	•	•	•	
Brake system - Check oil level	•	•	•	•	
Brake system - Check free play of park brake and foot brakes	•	•	•	•	
Drawbar - Check torque on attaching screws	•	•	•	•	
Height-adjustable trailer hitch - Check torque on attaching screws	•	•	•	•	
Trailer hitch - Check torque on attaching screws	•	•	•	•	
Steering system - Lubricate tie rod ends	•	•	•	•	
Front loader - Mounting frame, check torque on attaching screws	•	•	•	•	•
Wheels - Check torque of wheel and rim bolts	•	•	•	•	
Trailer hitch - Lubricate all grease fittings	•	•	•	•	
Front-wheel drive axle - Lubricate pivot pin and king pins	•	•	•	•	
Front-wheel drive axle - Lubricate wheel bearings	•	•	•	•	
Front-wheel drive axle - Lubricate all universal joints including u.j. shaft from transmission to front-wheel drive axle	•	•	•	•	
Front-wheel drive axle - Check oil level in axle housing and final drive housings	•	•	•	•	
Rear axle - Lubricate bearings	•	•	•	•	
Check neutral start circuit	•	•	•	•	
Alternator drive belt - Check for wear and damages, check belt tension	•	•	•	•	
Check condition of water pump	•		•	•	
Fuel system - Replace fuel filter and bleed fuel system	•		•	•	
Fuel system - Drain residue from fuel tank	•		•	•	
Three-point hitch - Lubricate lift links and rockshaft	•		•	•	
Air intake hoses - Check connections for leaks	•		•	•	
Components of drawbar, and trailer hitches - Check all components for wear; check all components function properly	•		•	•	
Check engine speeds, have speeds adjusted by your John Deere Dealer™			•		
Front axle pivot pins - Let the John Deere dealer check the end play			•		
Cab and ROPS - Check torque of mounting bolts and nuts			•		
On F5C engine replace the alternator drive belt	•			•	
On NEF engine check belt tension				•	
On F5C engine check and adjust the engine valve clearance	•			•	
On NEF engine check and adjust the engine valve clearance				•	
Transmission and hydraulic system - Replace suction strainer		•			
Transmission and hydraulic system - Change oil and oil filter		•			
Front-wheel drive axle - Drain oil and refill with fresh oil			•		
Brake system - Have brake system oil changed by your John Deere™ dealer			•		
Air intake system - Replace air cleaner			•		
Inspect seat belt for damage and ensure proper working order					•
Inspect hydraulic hoses					•

OULXBER,000251A -19-30OCT14-1/1

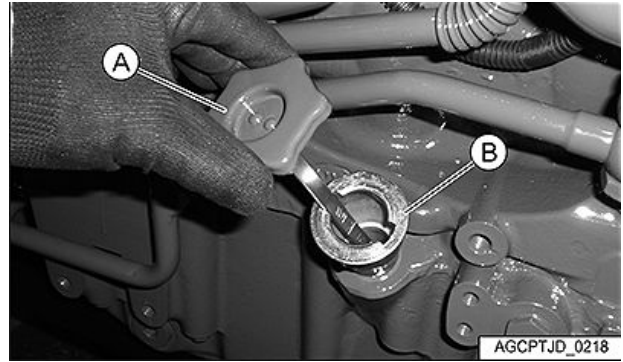
Service — Daily or Every 10 Hours

Check Engine Oil Level (F5C Engine)

Oil level should be between two marks on dipstick (A). DO NOT operate engine when oil level is below low mark on dipstick.

Park tractor on level ground to check engine oil level. Remove dipstick (A), wipe clean and reinsert it fully. Remove and check oil level.

Safe operating range is between the two marks on dipstick (A). Do not operate engine when oil level is below lower mark on dipstick (A). In this case add specified oil through filler neck (B). See Section 80, Fuel, Lubricants, Hydraulic Oil and Coolant.



AGCPTJD_0218

AGCPTJD0218 —UN—02NOV15

OULXBER,000251C -19-30OCT14-1/1

Check Engine Oil Level (NEF Engine)

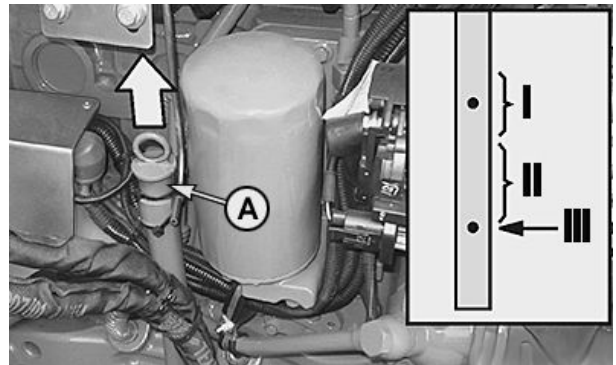
Park tractor on level ground to check engine oil level. Remove dipstick (A) located on the r.h. side of engine. Wipe clean and reinsert dipstick fully. Remove dipstick once again and check oil level.

I = Normal use level

II = Restore level as soon as possible

III = Restore level before restarting engine

Do not start engine if oil level is below minimum level allowed. In this case, top up using suitable oil until reaching correct level. See Section 80, Fuel, Lubricants, Hydraulic Oil and Coolant.



LX211146 —UN—04NOV14

OULXBER,000251B -19-30OCT14-1/1

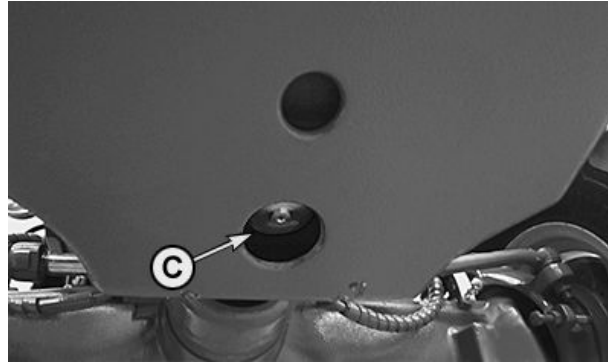
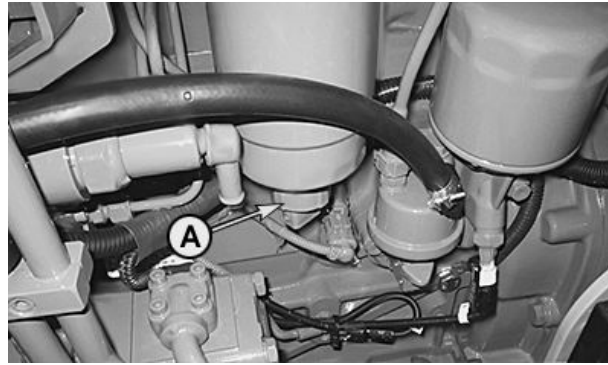
Check the Fuel Filter (F5C Engine)

⚠ CAUTION: Never open the fuel system when engine is hot. Handle fuel with care, it is highly flammable. Do not replace fuel filter while smoking or when near open flame or sparks.

1. Loosen drain screw (A).
2. Retighten drain screw (A) as soon as water and sediment deposits have drained out.

If water was present in fuel filter, open fuel tank drain screw (C), located under the lower fuel tank, to bleed accumulated moisture and sediment from the fuel tank. After draining off any water deposits, retighten drain screw (C) until it is hand-tight.

NOTE: Place a small container under drain screw to catch draining fuel.



AGCPTJD0375 —UN—23OCT13

AGCPTJD0376 —UN—11JUL13

OULXBER,000251E -19-30OCT14-1/1

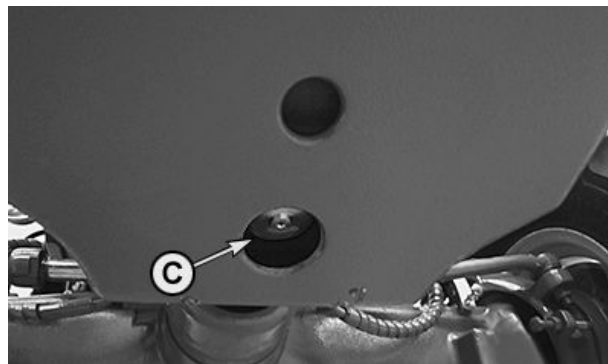
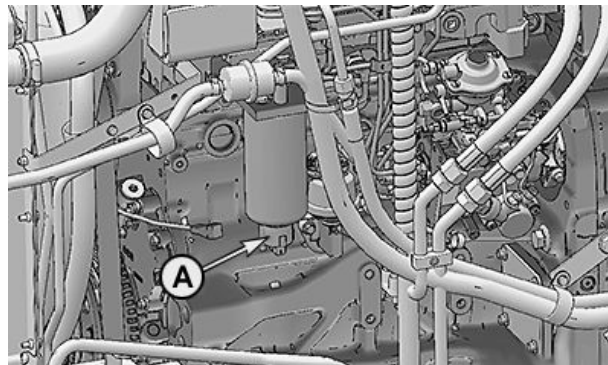
Check the Fuel Filter (NEF Engine)

⚠ CAUTION: Never open the fuel system when engine is hot. Handle fuel with care, it is highly flammable. Do not replace fuel filter while smoking or when near open flame or sparks.

1. Loosen drain screw (A).
2. Retighten drain screw (A) as soon as water and sediment deposits have drained out.

If water was present in fuel filter, open fuel tank drain screw (C), located under the lower fuel tank, to bleed accumulated moisture and sediment from the fuel tank. After draining off any water deposits, retighten drain screw (C) until it is hand-tight.

NOTE: Place a small container under drain screw to catch draining fuel.



LX21147 —UN—04NOV14

AGCPTJD0376 —UN—11JUL13

OULXBER,000251D -19-30OCT14-1/1

Avoid High-Pressure Fluids

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

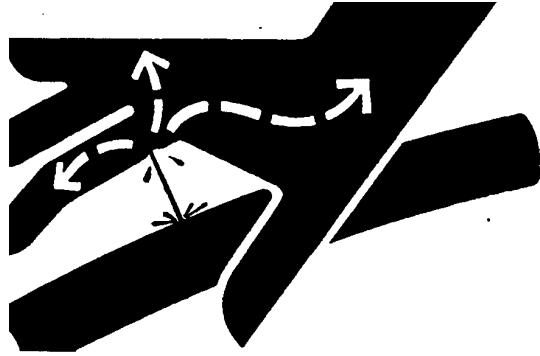
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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

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

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

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within



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

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

X9811 —UN—23AUG88

Fuel Filters

The importance of fuel filtration cannot be overemphasized with modern fuel systems. The combination of increasingly restrictive emission regulations and more efficient engines requires fuel system to operate at much higher pressures. Higher pressures can only be achieved using fuel injection components with very close tolerances. These close

manufacturing tolerances have significantly reduced capacities for debris and water.

John Deere brand fuel filters have been designed and produced specifically for John Deere engines.

To protect the engine from debris and water, always change engine fuel filters as specified in this manual.

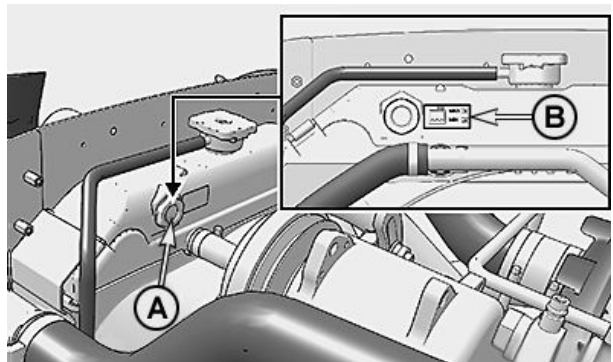
DX,FILT2 -19-14APR11-1/1

Check Coolant Level

CAUTION: Only remove radiator cap when engine is cold. Slowly loosen cap to first stop to relieve pressure before removing completely.

Version with sight glass

Check coolant level in radiator through the sight glass (A). Coolant level with a cold engine should be between the two marks on the decal (B). Add coolant if necessary.



Continued on next page

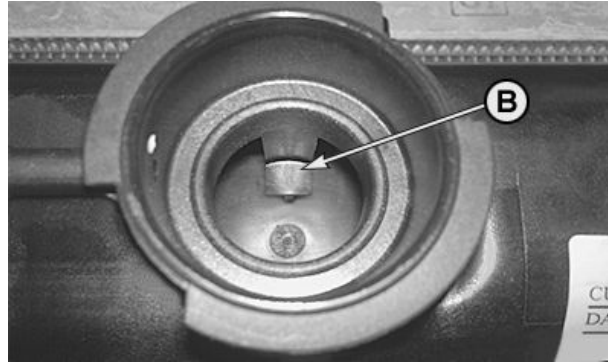
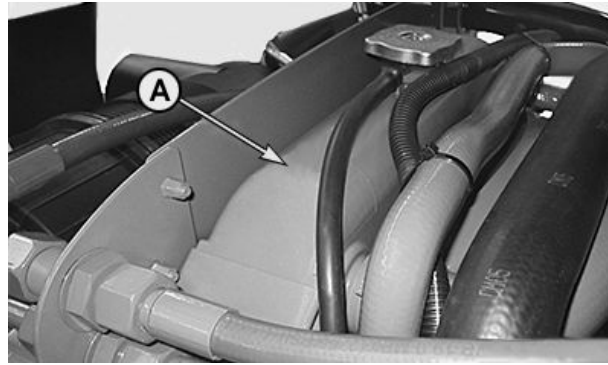
OULXBER,000251F -19-30OCT14-1/2

TS281 —UN—15APR13

AGCPTJD0672 —UN—01OCT14

Version without sight glass

Check coolant level in expansion tank (A). If engine is cold and level is below mark (B), add coolant to bring level to mark (B).



AGCPTJD0374 —UN—11JUL13

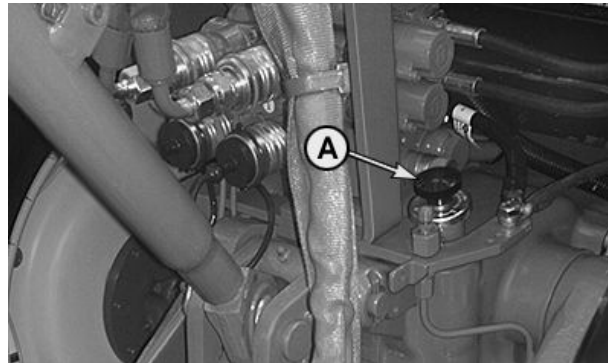
AGCPTJD0024 —UN—04JUN13

OULXBER,000251F -19-30OCT14-2/2

Check Transmission/Hydraulic System Oil Level

IMPORTANT: Check oil level when oil is cold. If possible, check the oil level in the morning after the tractor has been standing overnight.

1. Park tractor so that it is level.
2. Apply park brake (transmission in neutral).
3. Lower draft links and front-mounted implements.
4. Remove dipstick (A) and wipe clean. Fully insert dipstick and remove again. Oil level should be between full mark and end of dipstick.
5. Add specified oil at (A) if level is low, see section Fuel, Lubricants, Hydraulic Oil and Coolant.



AGCPTJD0377 —UN—11JUL13

If using implements that require a greater quantity of oil in the hydraulic circuit, the oil level must be up to mark "XXX".

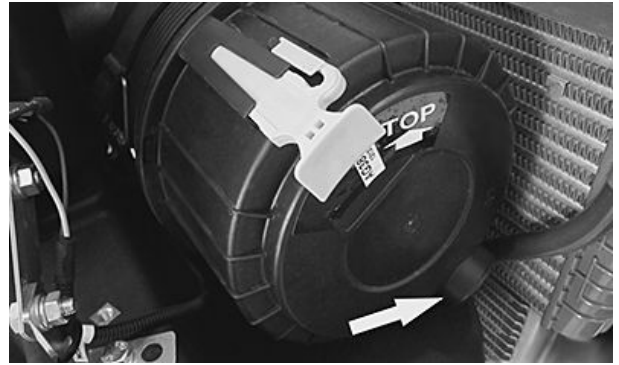
OULXBER,0002229 -19-26AUG13-1/1

Clean the Dust Unloading Valve

IMPORTANT: Never run the engine when the dust unloading valve is removed!

During the harvest, grass and chaff may adversely affect the performance of the dust unloading valve. Remove and clean the dust unloading valve as necessary. Replace damaged valve immediately.

NOTE: In dusty conditions, clean the dust unloading valve every day.



AGCPTJ0532—UN—17DEC13

OULXBER,00022D5GL -19-19DEC13-1/1

Checking on Lights

Check that the lights are operating correctly, especially before driving on public roads.

Comply with all legal regulations.

LX,LICHT 002082 -19-01FEB92-1/1

Other Service Jobs

If the tractor is used in particularly wet and muddy terrain, apply extra lubrication as follows:

- Front axle (tractors without front-wheel drive)
- Front axle and drive shaft (tractors with front-wheel drive)

- Rear axle
- Three-point hitch
- Pick-up hitch
- Wagon hitch

These jobs are described in “Service - Every 250 Hours” and “Service - Every 500 Hours”.

OULXA64,0000CC2 -19-10SEP03-1/1

Service — After the First 50 Hours

Change Engine Oil Filter

IMPORTANT: Change engine oil every 500 hours, if John Deere Premium oil is used and diesel fuel has a sulfur content of less than 0.10% (1000 ppm).

Stop engine and remove ignition-key.

1. Open hood and remove engine oil filter (D).
2. Apply a film of oil on the gasket prior installing the new filter. Hand tighten the oil filter plus 1/2 turn.
3. Close hood, run engine for short time and check for leaks at filter base..
4. Stop engine, remove dipstick (A), wipe clean and reinsert it fully. Remove dipstick once again and check oil level.
5. **On F5C engines:** The oil should be up the XXX mark on the dipstick (A). If necessary, top up with oil.

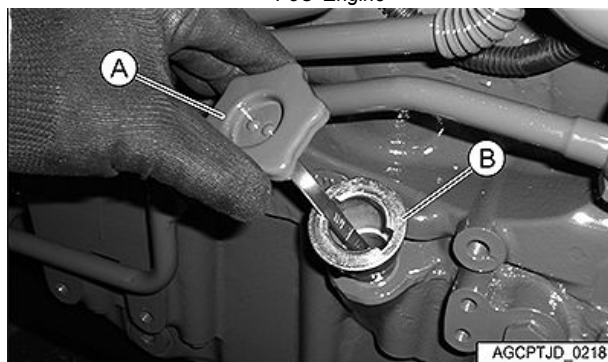
On NEF engines: I = normal oil level, II = restore level as soon as possible, III = restore level before restarting engine.

A—Dipstick
B—Filler neck

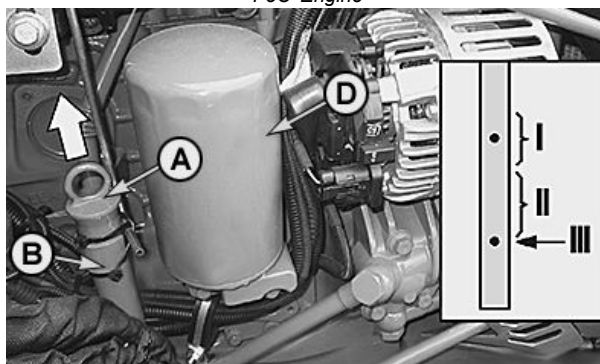
D—Engine oil filter



F5C Engine



F5C Engine



NEF Engine

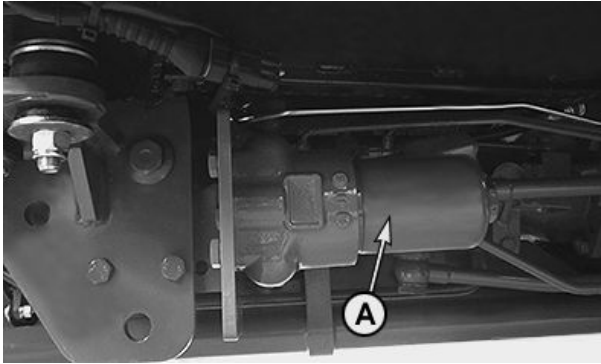
OULXBER,0002520 -19-30OCT14-1/1

AGCPTJD0549 —UN—16DEC13

AGCPTJD0218 —UN—02NOV15

AGCPTJD0697 —UN—29OCT14

Replace Transmission/Hydraulic Oil Filter



AGCPTJD0422 —UN—15JUL13

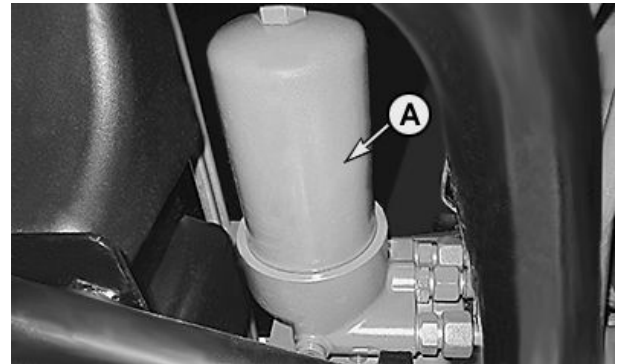
5GL without electro-hydraulic power reverser

1. Remove filter (A). Apply a film of oil to new gasket and install new filter. Hand tighten plus 1/2 turn.
2. Run engine several seconds and check transmission/hydraulic oil level.
3. Add transmission oil if required (see Section 80, Fuel, Lubricants, Hydraulic Oil and Coolant).



AGCPTJD0644 —UN—29OCT14

5GV, 5GN & 5GF without electro-hydraulic power reverser



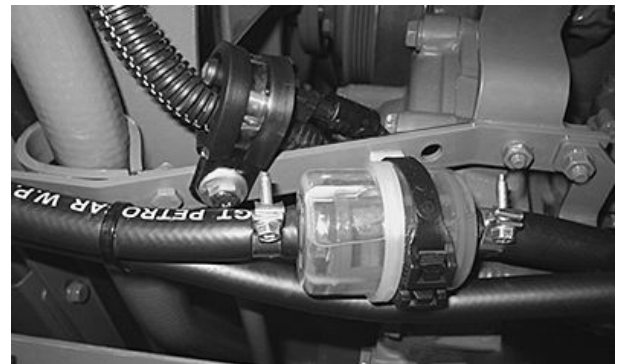
AGCPTJD0638 —UN—29OCT14

5GV, 5GN & 5GF with 24/12 transmission

OULXBER,0002521 -19-30OCT14-1/1

Replace Fuel Strainer

1. Clean area around the strainer, located between cab and main fuel tank.
2. Loosen the clamps to release the used strainer from the pipes.
3. Collect any diesel still in the supply pipe.
4. Take care not to introduce any impurities into the fuel circuit during this operation.
5. Fit the new strainer in place of the old one.
6. Bleed the air from the fuel circuit.



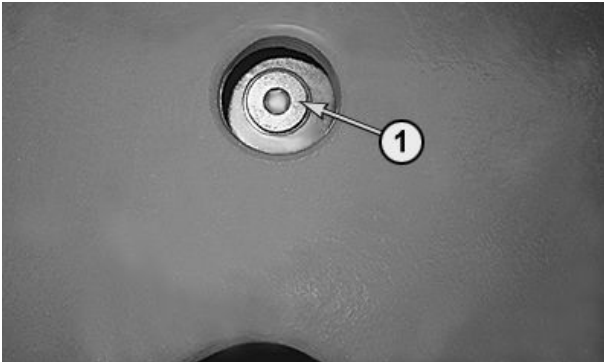
AGCPTJD0652 —UN—16DEC13

OULXBER,00022BF -19-16DEC13-1/1

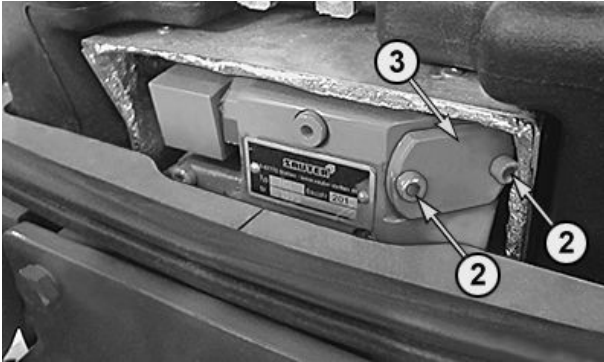
Change Oil and Replace Oil Filter of Front PTO

1. Place the tractor on a flat horizontal surface.
2. Apply the parking brake and stop the engine.
3. Remove key from key switch.
4. Place a suitable recipient under the drain plug (1).
5. Unscrew the cap (4).
6. Once all the oil has drained out, reinstall the plug (1).
7. Unscrew bolts (2) and remove cover (3). Trap oil.
8. Pull out and replace the oil filter.
9. Replace the O-ring .
10. Reinstall assembly by performing the removal operations in reverse order.
11. Fill fresh oil into front PTO by cap (4) to the lip of the aperture
12. Start the engine and let it run for a few minutes.
13. Stop the engine.
14. Check the oil level: It should be up to the lip of the cap (4) and top up if necessary.

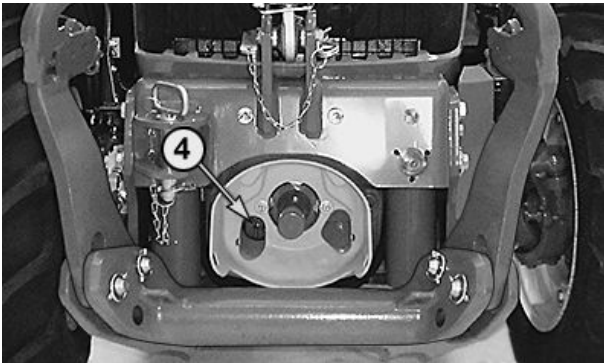
Oil Type	Oil Quantity	Ordering Information
John Deere HD SynTran	0.75 Liter (0.2 U.S.gal.) Always check level as explained in step 14.	TY26391 (22,7 Liter; 6 U.S.gal.) TY26392 (3,8 Liter; 1 U.S.gal.)



AGCPTJD0704—UN—30OCT14



AGCPTJD0705—UN—30OCT14

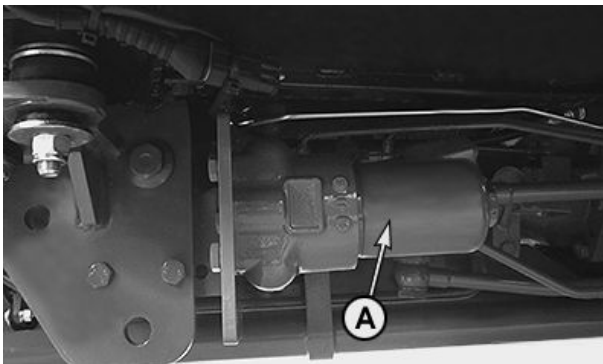


AGCPTJD0706—UN—30OCT14

OULXBER.0002522 -19-31OCT14-1/1

Service — Every 250 Hours

Replace Transmission/Hydraulic Oil Filter



AGCPTJD0422 —UN—15JUL13

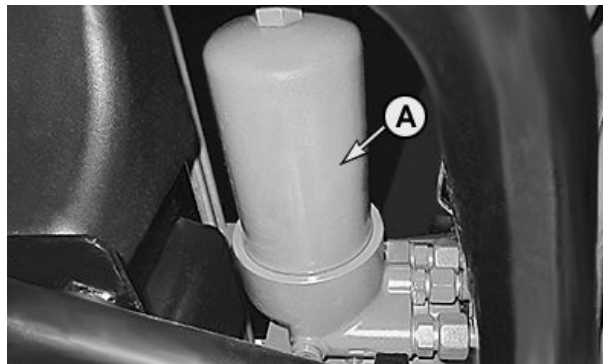
5GL without electro-hydraulic power reverser

1. Remove filter (A). Apply a film of oil to new gasket and install new filter. Hand tighten plus 1/2 turn.
2. Run engine several seconds and check transmission/hydraulic oil level.
3. Add transmission oil if required (see Section 80, Fuel, Lubricants, Hydraulic Oil and Coolant).



AGCPTJD0644 —UN—29OCT14

5GV, 5GN & 5GF without electro-hydraulic power reverser



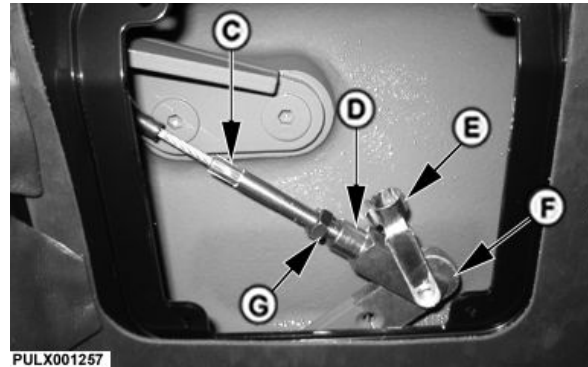
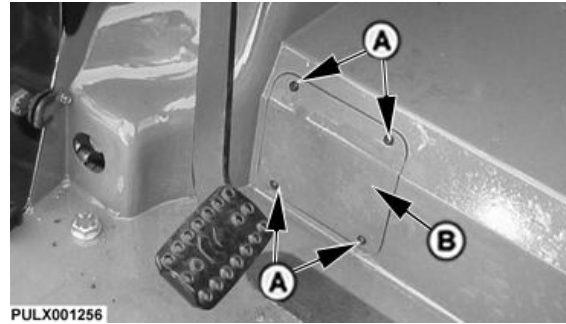
AGCPTJD0638 —UN—29OCT14

5GV, 5GN & 5GF with 24/12 transmission

OULXBER,0002521 -19-30OCT14-1/1

Check Clutch Pedal Free Travel

1. To check and adjust, unscrew screws (A) and remove cover (B).
2. Disconnect the linkage.
3. Move clutch lever (F) all the way up.
4. Turn yoke (D) until the holes in yoke and clutch lever (F) are aligned.
5. Check if pin (E) can be inserted in the holes.
6. Turn yoke (D) counterclockwise by full turns to move clutch lever (F) towards the right.
7. Connect clutch lever (F) and yoke (D) using pin (E) and lock nut.
8. Depress the clutch pedal ten times.
9. Release lock nut on pin (E).
10. Repeat steps 3 through 5.
11. Turn yoke (D) counterclockwise by 2 and a half turns to move clutch lever (F) towards the right.
12. Connect clutch lever (F) and yoke (D) using pin (E) and lock nut.
13. Select a gear and make sure clutch does not drag.
14. Adjustment is complete if step 13 is OK. If not, repeat steps 9 through 13 turning yoke (D) by two turns.



A—Screws
B—Cover
C—Cable
D—Yoke

E—Pin
F—Clutch lever
G—Lock nut

NR25796,000180A -19-23JAN09-1/1

PULX001256 —UN—22JAN09

PULX001257 —UN—22JAN09

Check Brake System Oil Level

The brakes are hydraulically operated by an independent circuit having a separate oil reservoir.

If oil level is low, disconnect connector (B), remove cap (A) and add John Deere low viscosity Hy-Gard JD20D or 10W20 mineral oil.

With key switch ON, the indicator light (C) will light up when the oil level in the brake system is low.

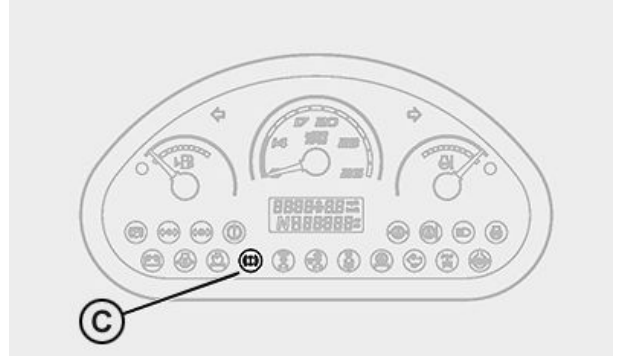
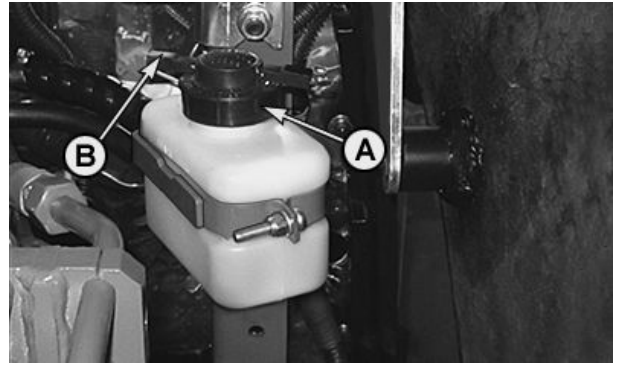
To check electrical system, press on the top of the cap; indicator light (C) must light up.

Check also for leaks in case of low oil level.

CAUTION: Any service of the brake system must be performed by your John Deere Dealer.

A—Cap
B—Connector

C—Indicator Light



OULXBER,00022C1GL -19-16DEC13-1/1

AGCPTJD0540—UN—17DEC13

AGCPTJD0534—UN—17DEC13

Check Brake Operation

Shut off the engine and check that the brakes are operating properly:

1. One at a time, press down on the left and right brake pedals (do this several times to each pedal). Distinct resistance should be noticeable at each of the two pedals. If no resistance can be felt at the pedals, see your John Deere dealer.
2. Check to make sure the pedals do not settle to the end of stroke within 10 seconds after being applied. If leakage exceeds this rate or if one pedal settles faster than the other, see your John Deere dealer.
3. Press both pedals down at the same time. Distinct resistance should occur at both pedals at roughly the same height. If the height at which resistance can be felt differs by more than 51 mm (2 in.), see your John Deere dealer.

IMPORTANT: Any noticeable drift downward from the point of resistance indicates brake leakage. See your John Deere dealer.



Distinct pedal resistance and balance between the left and right pedals are important for emergency braking with the two brakes coupled together.

OULXBER,00022C2GL -19-16DEC13-1/1

AGCPTJD0535—UN—17DEC13

Adjust PTO Clutch Linkage

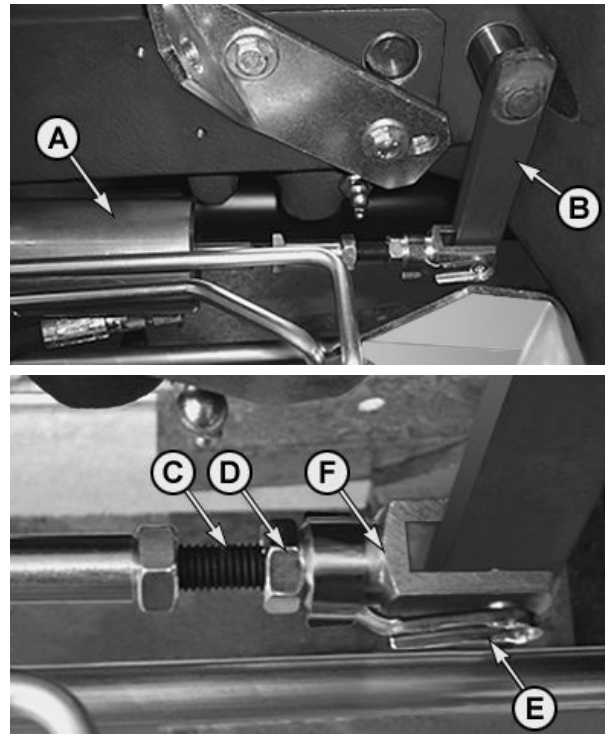
1. Loosen the nut (D).
2. Remove the pin E from the fork (F).
3. Move the PTO lever (B) to the left until it meets the stroke end position (PTO bearing is in contact with the PTO clutch fingers).
4. Keeping the PTO lever (B) in position, turn the fork (F) so that the hole of the fork (F) is aligned with the one of the PTO lever (B).

Starting from this point, turn the fork (F) by 1,5 rotations to extend the rod (C).

5. Match the PTO lever (B) and the fork (F) with the pin (E) and tighten the nut (D).

A—Aktuator
B—Clip pin
C—Lock nut

D—Arm
E—Rod
F—Yoke



AGCPTJD0518 —UN—15/JAN14

AGCPTJD0519 —UN—15/JAN14

OULXBER,00022C3GL -19-21DEC15-1/1

Tighten Wheel Bolts

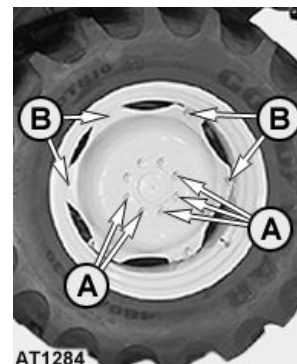
Tighten rear wheel nuts and bolts

IMPORTANT: Check tightness of rim, disk and wheel bolts after 10 hours every time you replace wheels.

Specification

- (A)—Torque..... 400 Nm (295 lb-ft)
(B) M18 bolt—Torque..... 280 N·m (207 lb-ft)
(B) M16 bolt—Torque..... 210 N·m 155 lb-ft)

(A) — Disk to axle flange (B) — Rim to disk



AT1284

AT1284 —UN—13/JUN01

Continued on next page

OULXBER,0002433 -19-02OCT15-1/3

Tighten front wheel nuts (tractors without front-wheel drive)

IMPORTANT: Check tightness of rim, disk and wheel bolts after 10 hours every time you replace wheels.

Specification

Disk to axle flange
(tractors without front
wheel drive)—Torque..... 175 Nm (130 lb-ft)



AT1285

AT1285—UN—13JUN01

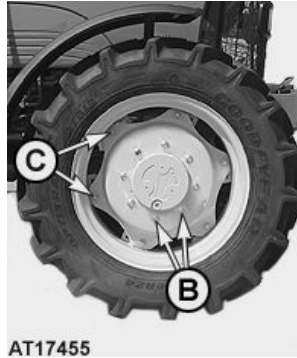
OULXBER,0002433 -19-02OCT15-2/3

Tighten wheel nuts of front wheel drive axle

IMPORTANT: Check tightness of rim, disk and wheel bolts after 10 hours every time you replace wheels.

Specification

(B), Disk to axle
flange—Torque..... 300 Nm (220 lb-ft)
(C) M18 bolt—Torque..... 280 N·m (207 lb-ft)
(V) M16 bolt—Torque..... 210 N·m 155 lb-ft)



AT17455

AT17455—UN—20JUL07

(B) — Disk to axle flange (C) — Rim to disk

OULXBER,0002433 -19-02OCT15-3/3

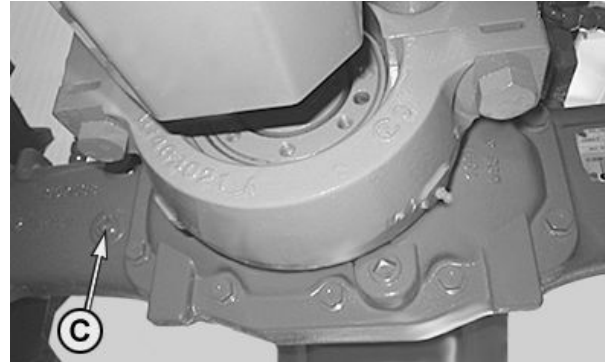
Check Oil Levels of Front Wheel Drive Axle

1. Turn wheel until OIL LEVEL mark (B) on final drives (both sides) is horizontal.
2. Remove level plugs (C). Oil should be level with plug bore.
3. If level is low, add specified oil. See Section 80 Fuel, Lubricants, Hydraulic Oil and Coolant.
4. Re-install level plugs (C) and tighten to 60 N·m (44 lb-ft).

NOTE: Change oil in axle housing and final drives after the first 100 hours of operation. Then replace after every 1500 hours of operation or once every 2 years, whichever occurs first.



LX1032970—UN—03JUL03

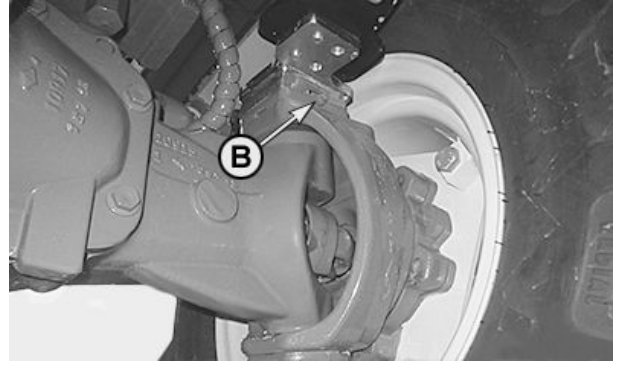


AGOPTJD0557—UN—16DEC13

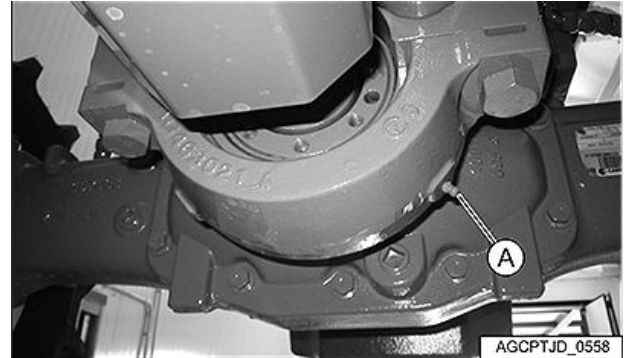
OULXBER,00022C5GL -19-16DEC13-1/1

Lubricate Front Wheel Drive Axle

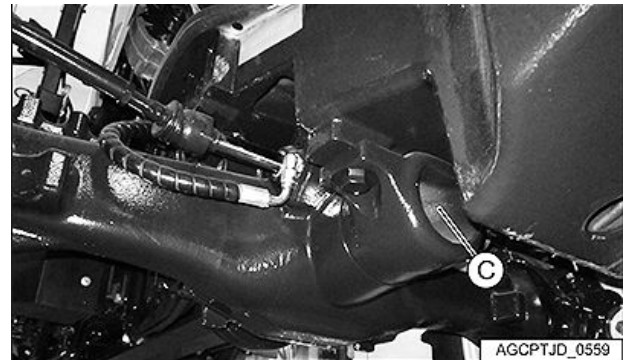
Apply several shots of multipurpose grease to grease fittings (A), (B) and (C).



AGCPTJD0556 —UN—16DEC13



AGCPTJD0558 —UN—02NOV15

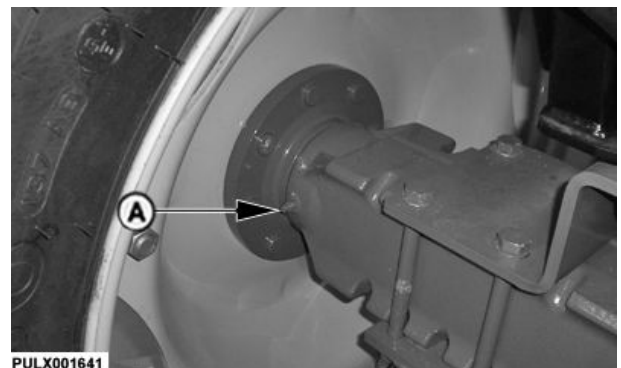


AGCPTJD0559 —UN—02NOV15

OULXBER,00022C6GL -19-16DEC13-1/1

Lubricate Rear Axle Bearings

Lubricate grease fittings (A) for rear axle bearings on both sides with several strokes of multipurpose grease (see Section 80 Fuel, Lubricants, Hydraulic Oil and Coolant).



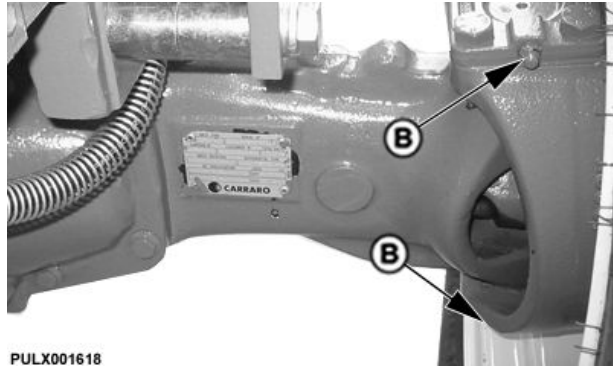
PULX001641

PULX001641 —UN—26SEP08

NR25796,0001816 -19-04NOV08-1/1

Lubricate Front Axle King Pins

On tractors equipped with front wheel drive axle, apply several shots of multipurpose grease to upper and lower front axle king pin fittings (B).

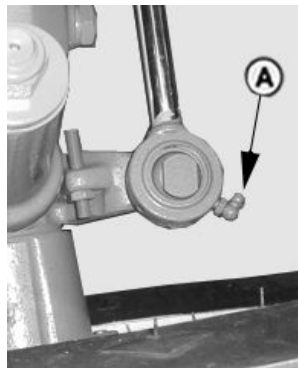


PULX001618

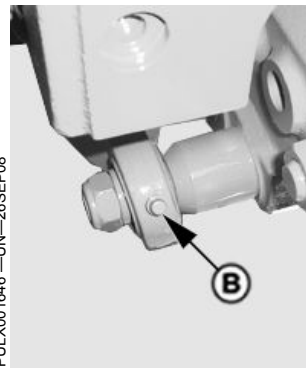
PULX001618 —UN—22SEP08

NR25796,00017E9 -19-26MAR09-1/2

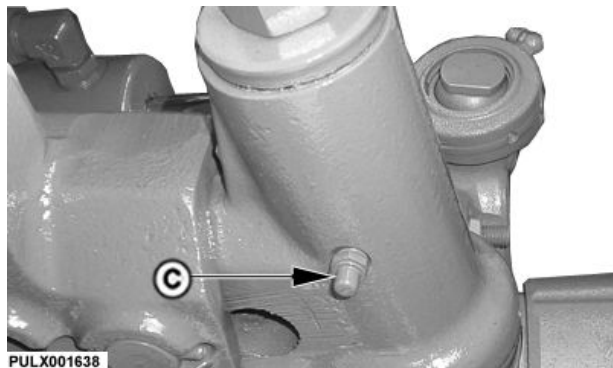
On tractors equipped with adjustable front axle, apply several shots of multipurpose grease to fittings (A) to (C).



PULX001646 —UN—26SEP08



PULX001644 —UN—26SEP08



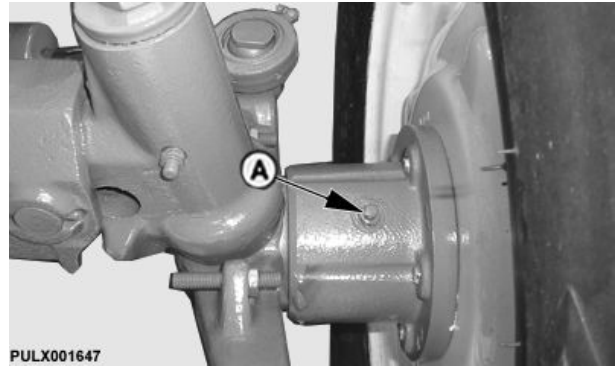
PULX001638

PULX001638 —UN—26SEP08

NR25796,00017E9 -19-26MAR09-2/2

Lubricate Hub Bearings (Tractors without Front Wheel Drive)

Lubricate hub bearings (A) on both sides with several strokes of multipurpose grease.

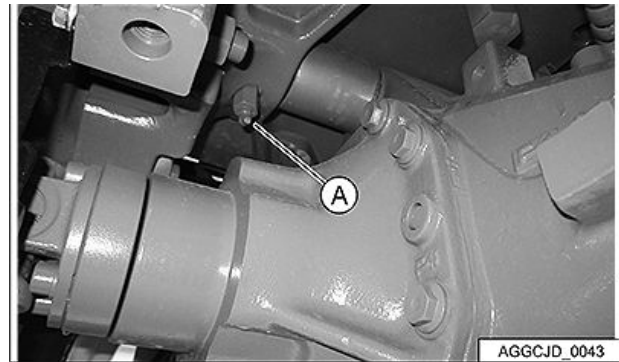


PULX001647 —UN—28SEP08

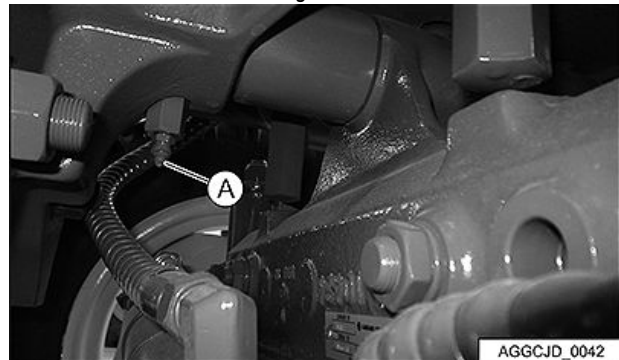
NR25796,00017EA -19-26MAR09-1/1

Lubricate Front Axle Pivot Pin

Lubricate grease fitting (A) for front axle pivot pins with several shots of multipurpose grease (see Section 80 Fuel, Lubricants, Hydraulic Oil and Coolant).



Front Pivot Pin Grease Fitting — Tractors with Front Wheel Drive



Pivot Pin Grease Fitting — Tractors without Front Wheel Drive

AGGCJD0043 —UN—28SEP15

AGGCJD0042 —UN—29SEP15

NR25796,00017EB -19-05OCT15-1/1

Check Drive Belt

CAUTION: Shut off the engine, engage the park brake and remove the key to prevent the engine from starting.

Avoid burns! Wait until the engine has cooled down.

Open hood and observe belt for wear and damages. Let your John Deere™ dealer perform repairs and adjustments.

OULXBER,000223B -19-16DEC13-1/1

Check Neutral Start System

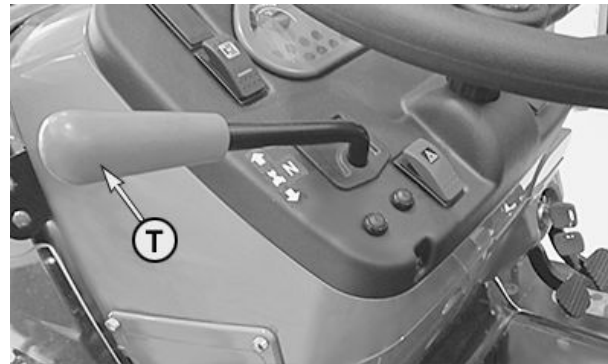
When the key switch is turned, the engine should be cranked only if reverser lever (T) is in neutral position and PTO lever (A) is disengaged.

CAUTION: If starting motor cranks engine in one or both of the following steps, have the neutral start system repaired by your John Deere dealer.

1. Move reverser lever (T) out of neutral and turn the key switch to start position. Starting motor must NOT crank engine.
2. Engage PTO lever (A) and turn the key switch to start position. Starting motor must NOT crank engine.

A—PTO Lever

T—Reverser Lever



AGCPTJD0560 —UN—16DEC13

AGCPTJD0567 —UN—17DEC13

OULXBER,00022C7GL -19-16DEC13-1/1

Clean Cab Air Filters

CAUTION: The cab air filters do not protect against inhaling harmful pesticides. If pesticide use instructions require respiratory protection, wear an appropriate respirator inside the cab.

Every time the engine primary filter element is serviced, also remove the cab air filters (one on each side) and the recirculated air filter, and clean them with compressed air directed from the clean side.

Remove screws (A) and filter cover (B).

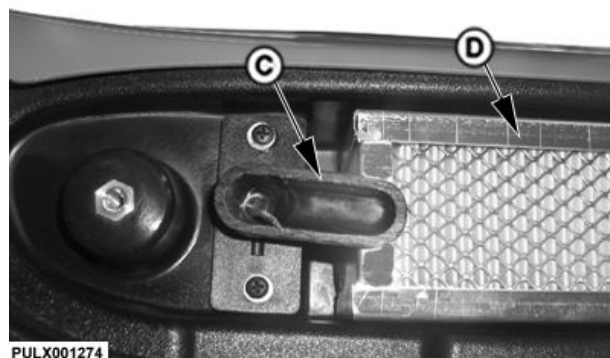
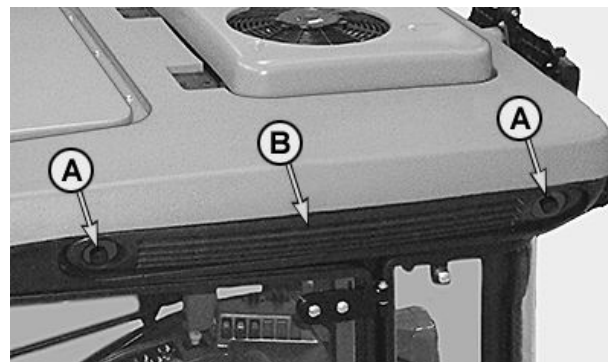
On both ends of the filter, turn lever (C) upwards.

Remove cab air filter element (D).

Replace cab air filters with engine primary filter element (the latest after 1500 hours of operation or 2 years).

A—Screws
B—Cover

C—Lever
D—Filter element



PULX001274

AGCPTJD0702 —UN—30OCT14

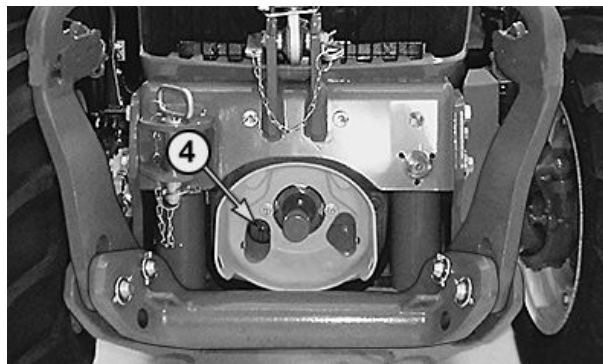
PULX001274 —UN—03SEP08

OULXBER,0002524 -19-30OCT14-1/1

Check Front PTO Oil Level

1. Unscrew the cap (4).
2. Check the oil level: it should be up to the lip of the aperture and top up if necessary.
3. Retighten the cap (4).

Oil Type	Oil Quantity	Ordering Information
John Deere HD SynTran	0.75 Liter (0.2 U.S.gal.) Always check level as explained in step 14.	TY26391 (22,7 Liter; 6 U.S.gal.) TY26392 (3,8 Liter; 1 U.S.gal.)

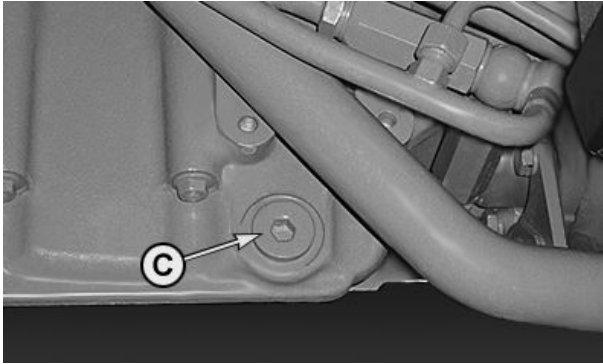


AGCPTJD0706—UN—30OCT14

OULXBER,0002525 -19-30OCT14-1/1

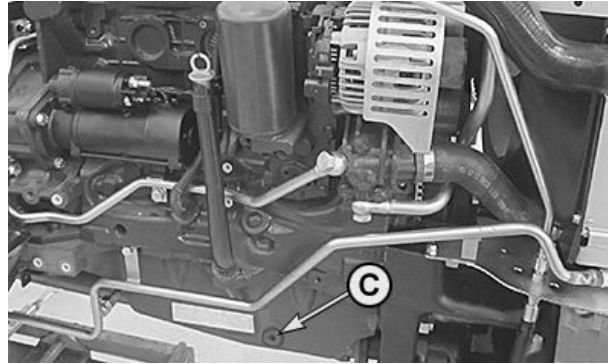
Service — Every 500 Hours

Change Engine Oil and Filter



F5C Engine - Oil Drain Plug (Right Side)

AGCPTJD0512 —UN—27AUG13



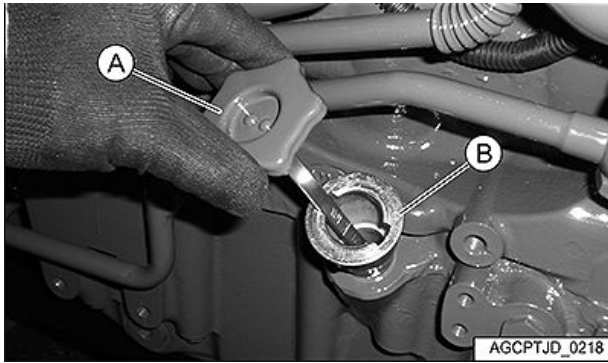
NEF Engine - Oil Drain Plug (Right Side)

AGCPTJD0736 —UN—30OCT14



F5C Engine - Oil Filter

AGCPTJD0549 —UN—16DEC13



Oil Filler Neck

AGCPTJD0218 —UN—02NOV15

IMPORTANT: Change engine oil every 500 hours, if John Deere Premium oil is used and diesel fuel has a sulfur content of less than 0.10% (1000 ppm).

Change oil whenever a seasonal change in temperature makes oil of a different viscosity necessary.

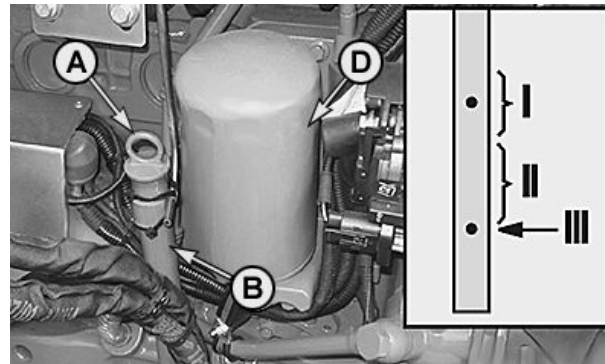
NOTE: Change engine oil once a year or every 500 hours, whichever occurs first.

Drain oil with engine shut off, but with engine oil still warm.

1. Remove oil drain plugs (C) (one right and left side of engine) and drain oil.
2. Replace engine oil filter (D) while changing oil. Apply a film of oil on the new oil filter gasket and install new engine oil filter. Hand tighten plus 1/2 turn.
3. Install drain plugs (C) and tighten.
4. Fill crankcase with fresh oil of proper viscosity at filler neck (B). See Section Fuel, Lubricants, Hydraulic Oil and Coolant.

Specification

F5C engine crankcase,
engine oil—Capacity.....9.5 Liter (10 U.S. qt.)
NEF engine crankcase,
engine oil—Capacity.....12 Liter (12.63 U.S. qt.)



NEF Engine

AGCPTJD0737 —UN—30OCT14

A—Dipstick
B—Filler neck

C—Drain plugs
D—Engine oil filter

5. Run engine for a short time and check for leaks at filter base and drain plug.
6. Wait 15 minutes then recheck oil level.

On F5C engines: The oil should be up the XXX mark on the dipstick (A). If necessary, top up with oil before restarting the engine.

Continued on next page

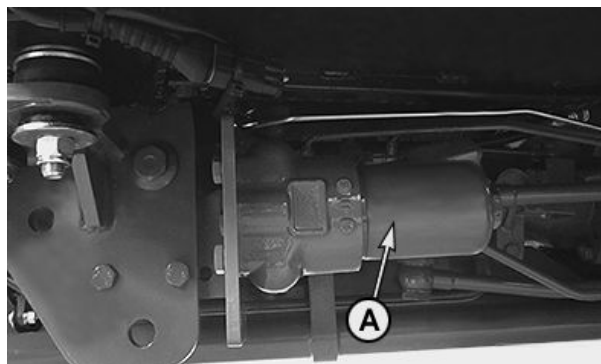
OULXBER,0002526 -19-06NOV14-1/2

On NEF engines: I = normal oil level, II = restore level as soon as possible, III = restore level before restarting the engine.

OULXBER,0002526 -19-06NOV14-2/2

Replace Transmission/Hydraulic Oil Filter

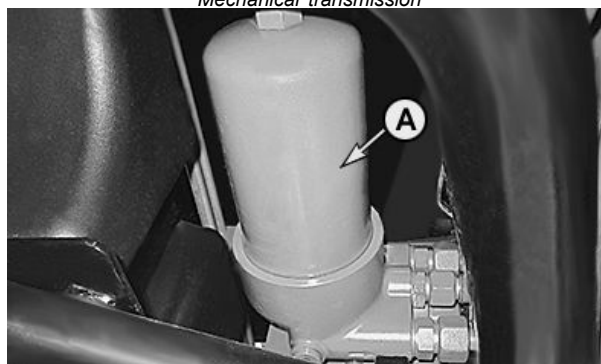
1. Remove filter (A). Apply a film of oil to new gasket and install new filter. Hand tighten plus 1/2 turn.
2. Run engine several seconds and check transmission/hydraulic oil level.
3. Add transmission oil if required (see Section 80, Fuel, Lubricants, Hydraulic Oil and Coolant).



5GL tractors



Mechanical transmission



24/12 transmission

AGCPTJD0422 —UN—15JUL13

AGCPTJD0644 —UN—29OCT14

AGCPTJD0638 —UN—29OCT14

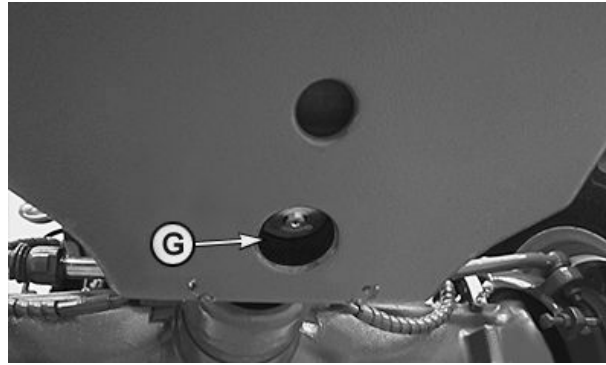
OULXBER,0002527 -19-31OCT14-1/1

Drain Water and Sediment from Fuel Tank

CAUTION: Never open the fuel system when engine is hot. Handle fuel with care, it is highly flammable. Do not replace fuel filter while smoking or when near open flame or sparks.

Open fuel tank drain screw (G) to bleed accumulated moisture and sediment from the fuel tank. Tighten drain screw (G) when clear fuel runs from fitting.

NOTE: Place a small container under drain screw (G) to catch draining fuel.



AGCPTJD0538 —UN—17DEC13

OULXBER,00022C8GL -19-18DEC13-1/1

Replace the Fuel Filter

CAUTION: Never open the fuel system when engine is hot. Handle fuel with care, it is highly flammable. Do not replace fuel filter while smoking or when near open flame or sparks.

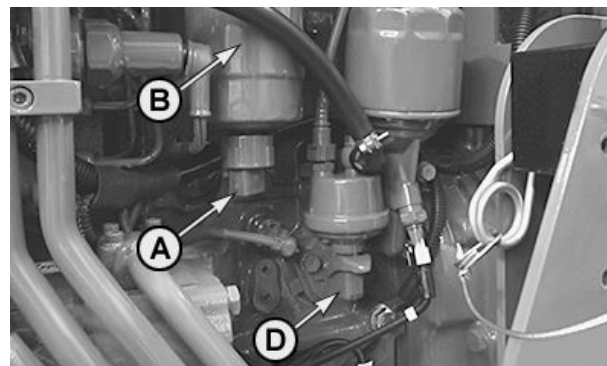
Drain the fuel inside the filter by operating the water release tap (A). Collect the fuel in a container without impurities.

1. Unscrew the cartridge (B).
2. Collect the eventual fuel inside the filtering cartridge.
3. Clean the gasket seat on the support and oil slightly the gasket on the new filtering cartridge.
4. Screw the new fuel filter cartridge on its seat and hand-tighten it. Pay attention that gasket is seated correctly. The specified torque is 18 N·m (13 lb-ft).
5. Loosen the fuel outlet manifold, located on the upper part of the filter (C).
6. Do not allow draining fuel to soil the drive belt or the environment.

NOTE: Place a small container under drain screw to catch draining fuel.

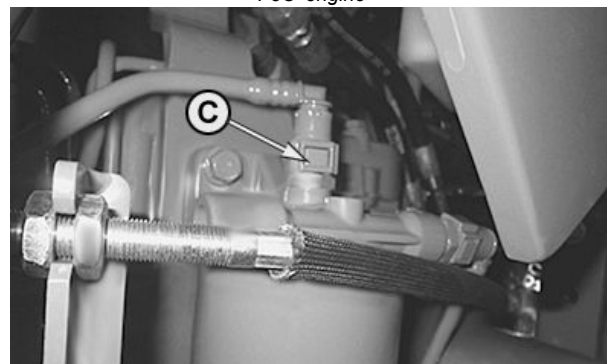
7. Operate the pre-filter hand pump until the diesel coming out is free from any residual air. Alternatively operate the mechanical primary fuel pump (D).
8. Lock the manifold loosened as above to the required torque.
9. Start the engine and run it at minimum speed for a few minutes to eliminate any residual air. Check fuel system for leaks.

NOTE: Should it be necessary to accelerate the bleeding phase, the hand pump can be used during start-up.



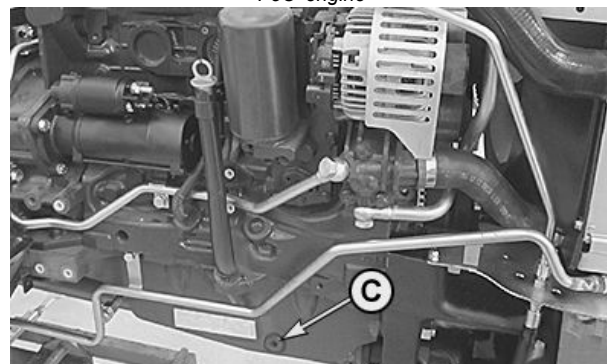
F5C engine

AGCPTJD0561 —UN—16DEC13



F5C engine

AGCPTJD0562 —UN—16DEC13



NEF engine

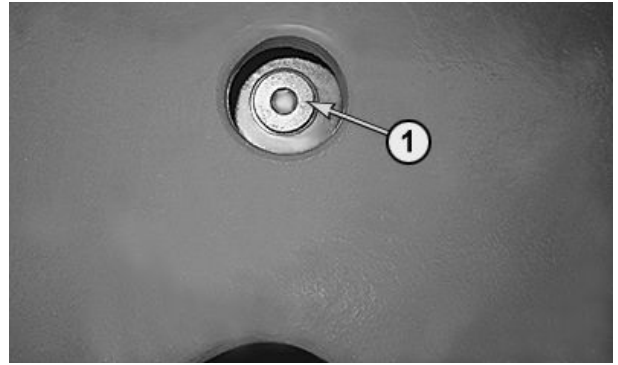
AGCPTJD0736 —UN—30OCT14

OULXBER,0002528 -19-31OCT14-1/1

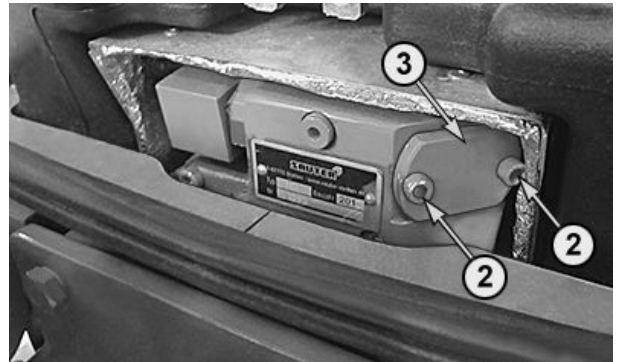
Change Oil and Replace Oil Filter of Front PTO

1. Place the tractor on a flat horizontal surface.
2. Apply the parking brake and stop the engine.
3. Remove key from key switch.
4. Place a suitable recipient under the drain plug (1).
5. Unscrew the cap (4).
6. Once all the oil has drained out, reinstall the plug (1).
7. Unscrew bolts (2) and remove cover (3). Trap oil.
8. Pull out and replace the oil filter.
9. Replace the O-ring .
10. Reinstall assembly by performing the removal operations in reverse order.
11. Fill fresh oil into front PTO by cap (4) to the lip of the aperture
12. Start the engine and let it run for a few minutes.
13. Stop the engine.
14. Check the oil level: It should be up to the lip of the cap (4) and top up if necessary.

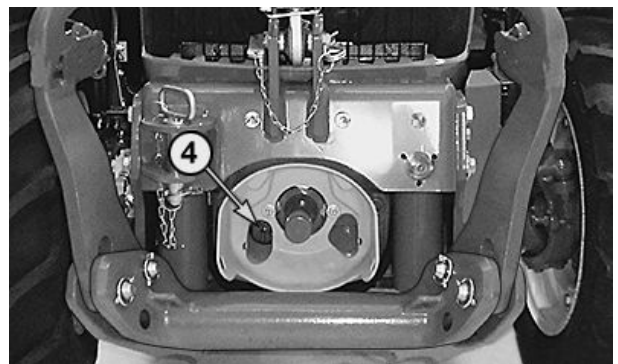
Oil Type	Oil Quantity	Ordering Information
John Deere HD SynTran	0.75 Liter (0.2 U.S.gal.) Always check level as explained in step 14.	TY26391 (22,7 Liter; 6 U.S.gal.) TY26392 (3,8 Liter; 1 U.S.gal.)



AGCPTJD0704—UN—30OCT14



AGCPTJD0705—UN—30OCT14



AGCPTJD0706—UN—30OCT14

OULXBER,0002522 -19-31OCT14-1/1

Avoid High-Pressure Fluids

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

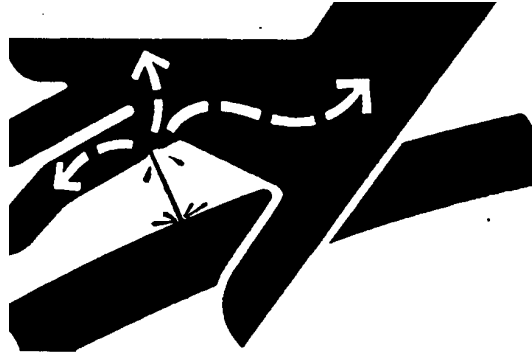
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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

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

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

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within



X9811 — UN — 23AUG88

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 -19-12OCT11-1/1

Fuel Filters

The importance of fuel filtration cannot be overemphasized with modern fuel systems. The combination of increasingly restrictive emission regulations and more efficient engines requires fuel system to operate at much higher pressures. Higher pressures can only be achieved using fuel injection components with very close tolerances. These close

manufacturing tolerances have significantly reduced capacities for debris and water.

John Deere brand fuel filters have been designed and produced specifically for John Deere engines.

To protect the engine from debris and water, always change engine fuel filters as specified in this manual.

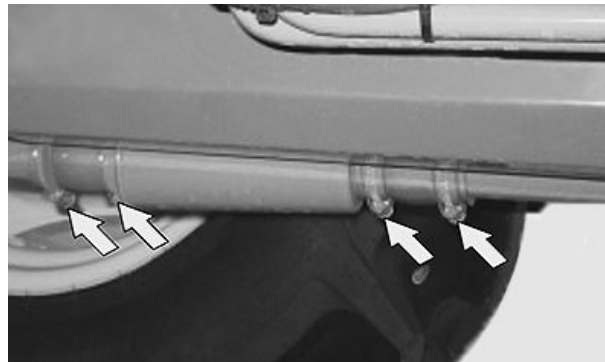
DX,FILT2 -19-14APR11-1/1

Check Hoses and Hose Clamps

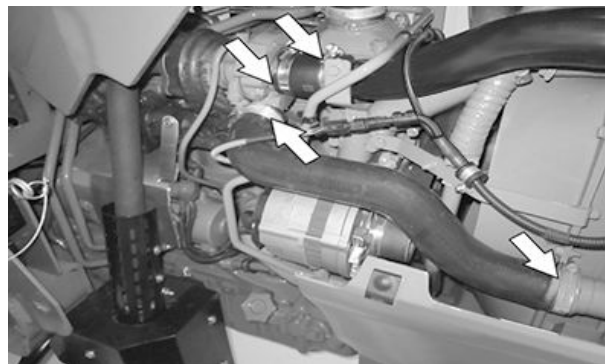
Check hose clamps of the following systems for tightness:

- Air cleaner to engine intake or turbocharger
- Cooling system
- Hydraulic system
- Fuel system

Check all hoses for cracks which could cause leaks or failure. Replace as necessary.



AGCPTJ0541 — UN — 16DEC13



AGCPTJ0563 — UN — 16DEC13

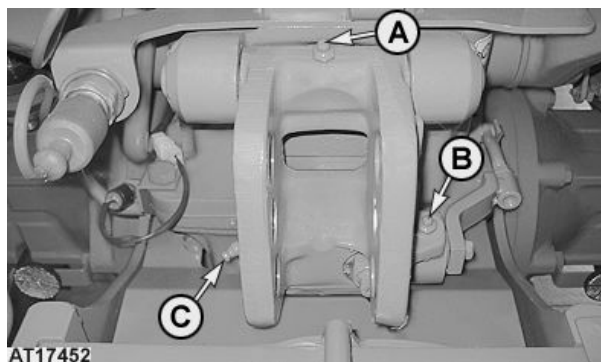
OULXBER,00022CA -19-18DEC13-1/1

Lubricate Center Link Bracket

Lubricate grease fittings (A), (B) and (C) of center link bracket with several strokes of multipurpose grease (see Section 80 "Fuel, Lubricants, Hydraulic Oil and Coolant").

A—Grease fitting
B—Grease fitting

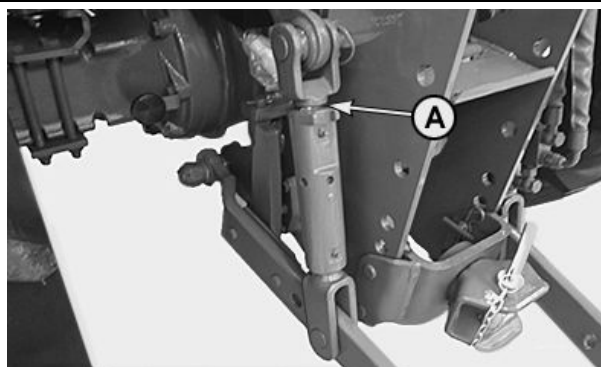
C—Grease fitting



OULXA64,0000BF3 -19-12JUL07-1/1

Lubricate 3-Point Hitch

Lubricate right lift link (A) and left lift link (B) with several strokes of multipurpose grease (see Section 80 Fuel, Lubricants, Hydraulic Oil and Coolant).



OULXBER,00022CBGL -19-18DEC13-1/1

Check Condition of Alternator Drive Belt and Water Pump

Check drive belt and water pump for wear and damages.
Check water pump for leaks.

OULXBER,0002380 -19-14FEB14-1/1

Service — Every 750 Hours

Check Engine Idle Speeds

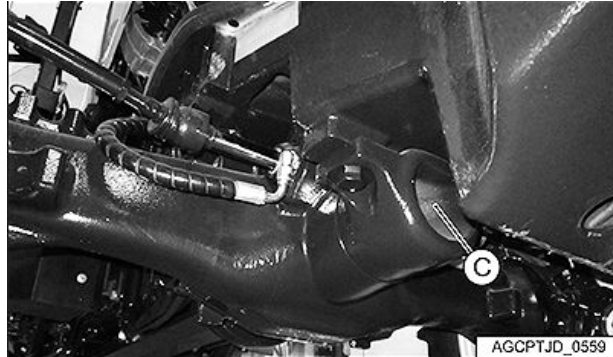
Tractor model	5075 5GV, 5GN,5GF, 5GL	5085 5GV, 5GN,5GF, 5GL	5100 5GN, 5GF
Engine	F5C	F5C	NEF
Engine type	F5AE9484B	F5AE9484G	F4CE9484F
Slow idle	850-900 1/min (rpm)	850-900 1/min (rpm)	800-1000 1/min (rpm)
Fast idle	2550-2600 1/min (rpm)	2550-2600 1/min (rpm)	2350-2480 1/min (rpm)

If idle speeds are not correct, see your John Deere™ dealer.

OULXBER,0002529 -19-31OCT14-1/1

Check Front Axle Pivot Pin

Ask your John Deere dealer to check the front axle pivot pin (C) for correct end play.



OULXBER,00022CDGL -19-18DEC13-1/1

AGCPTJD0559 —UN—02NOV15

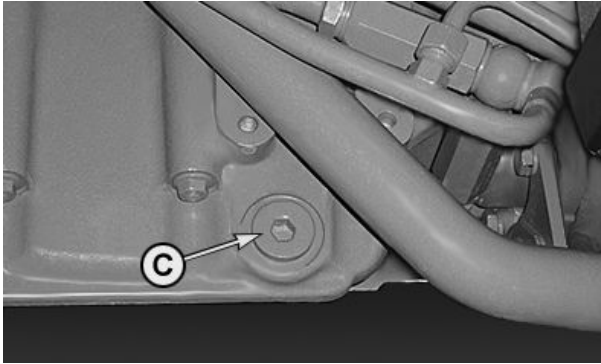
Mounting Bolts of Operator's Cab / Open Station and ROPS

Check mounting bolts for tightness.

OULXA64,0000CCC -19-18AUG03-1/1

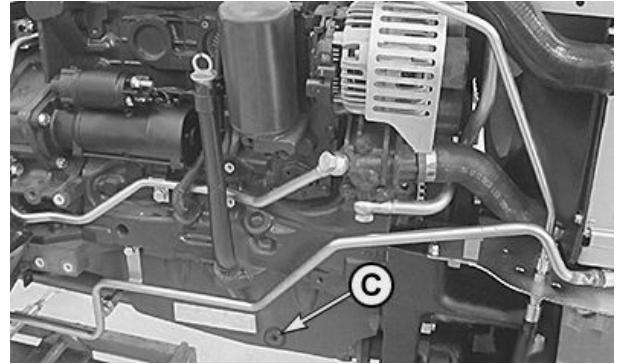
Service — Once Every Year

Change Engine Oil and Filter



F5C Engine - Oil Drain Plug (Right Side)

AGCPTJD0512 —UN—27AUG13



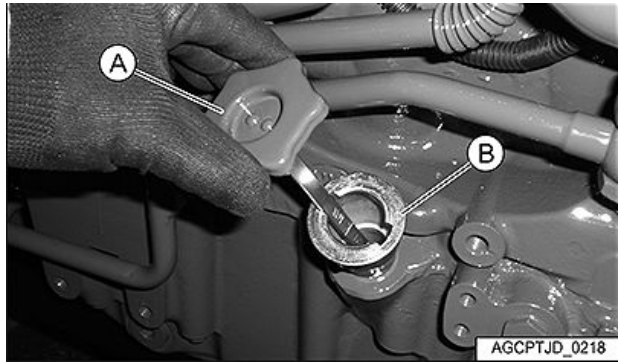
NEF Engine - Oil Drain Plug (Right Side)

AGCPTJD0736 —UN—30OCT14



F5C Engine - Oil Filter

AGCPTJD0549 —UN—16DEC13



Oil Filler Neck

AGCPTJD0218 —UN—02NOV15

IMPORTANT: Change engine oil every 500 hours, if John Deere Premium oil is used and diesel fuel has a sulfur content of less than 0.10% (1000 ppm).

Change oil whenever a seasonal change in temperature makes oil of a different viscosity necessary.

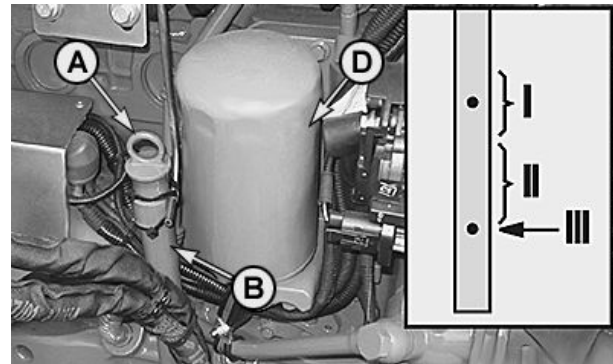
NOTE: Change engine oil once a year or every 500 hours, whichever occurs first.

Drain oil with engine shut off, but with engine oil still warm.

1. Remove oil drain plugs (C) (one right and left side of engine) and drain oil.
2. Replace engine oil filter (D) while changing oil. Apply a film of oil on the new oil filter gasket and install new engine oil filter. Hand tighten plus 1/2 turn.
3. Install drain plugs (C) and tighten.
4. Fill crankcase with fresh oil of proper viscosity at filler neck (B). See Section Fuel, Lubricants, Hydraulic Oil and Coolant.

Specification

F5C engine crankcase,
engine oil—Capacity.....9.5 Liter (10 U.S. qt.)
NEF engine crankcase,
engine oil—Capacity.....12 Liter (12.63 U.S. qt.)



NEF Engine

AGCPTJD0737 —UN—30OCT14

A—Dipstick
B—Filler neck

C—Drain plugs
D—Engine oil filter

5. Run engine for a short time and check for leaks at filter base and drain plug.
6. Wait 15 minutes then recheck oil level.

On F5C engines: The oil should be up the XXX mark on the dipstick (A). If necessary, top up with oil before restarting the engine.

Continued on next page

OULXBER,0002526 -19-06NOV14-1/2

On NEF engines: I = normal oil level, II = restore level as soon as possible, III = restore level before restarting the engine.

OULXBER,0002526 -19-06NOV14-2/2

Checking the Seat Belt (If Equipped)

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 if the belt needs to be changed.

OULXA64,0000CD1 -19-20AUG03-1/1

Check Condition of Diesel Engine Coolant

John Deere COOL-GARD™ II Premix and COOL-GARD II Concentrate are maintenance free coolants for up to 6 years or 6000 hours of operation, provided that the cooling system is topped off using only John Deere COOL-GARD

COOL-GARD is a trademark of Deere & Company

II Premix. Test the coolant condition annually with Coolant Test Strips designed for use with John Deere COOL-GARD II coolants. If the test strip chart indicates that additive is required, add John Deere COOL-GARD II COOLANT EXTENDER as directed.

OULXBER,0001952 -19-09AUG10-1/1

Inspect Hydraulic Hoses

IMPORTANT: Check hydraulic hoses regularly – at least once a year – for leaks, kinks, cuts, tears, rubbing, bulges, corrosion, exposed fabric and other signs of wear and damage.

Replace worn or damaged hoses immediately.

Replacement hoses are available from your John Deere dealer.

OULXBER,0001B73 -19-16DEC11-1/1

Service — Every 1000 Hours

Check Valve Clearance

Ask your John Deere dealer to make engine valve clearance adjustment and inspect fuel injectors.

OULXBER,00022CE -19-18DEC13-1/1

Replace Alternator Drive Belt

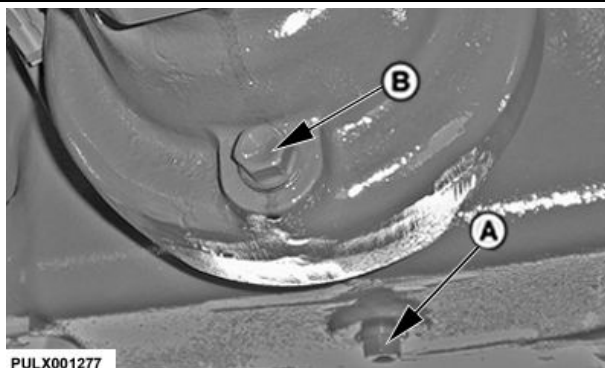
Ask your John Deere dealer to replace the alternator drive belt.

OULXBER,00022CF -19-18DEC13-1/1

Service — Every 1250 Hours

Change Transmission/Hydraulic Oil and Suction Strainer

Remove drain screw (A) from transmission case and drain oil. On tractors equipped with front wheel drive, also remove drain screw (B). Lower hitch to remove trapped oil.



PULX001277 —UN—03SEP08

OULXBER,0002233 -19-27AUG13-1/2

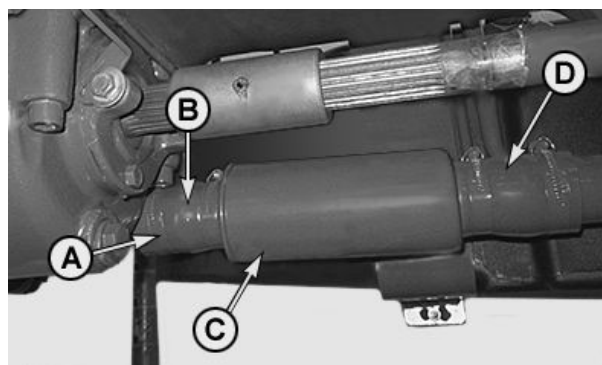
Remove the four clamps (A) and hoses (B) and (D).

Replace strainer (C) with a new one.

Make sure that the arrow on the strainer body points forward.

Re-install the clamps (A).

Fill transmission with specified transmission/hydraulic oil (see section Fuel, Lubricants, Hydraulic Oil and Coolant) as described in Check Transmission/Hydraulic System Oil Level in Section Service — Daily or Every 10 Hours.



OULXBER,0002233 -19-27AUG13-2/2

Service — Every 1500 Hours

Changing Oil in Front-Wheel Drive Axle

Replace oil in axle housing and final drives after the first 100 hours of operation. Then replace after every 1500 hours of operation or once every two years, whichever

occurs first. Always use a transmission oil listed in the “Fuel, Lubricants, Hydraulic Oil and Coolant” section.

Always drain oil while it is still warm, i.e. immediately after a prolonged period of operation.

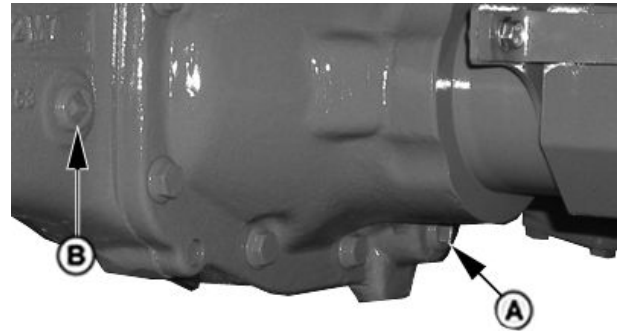
LX,OACH 000414 -19-01MAR94-1/1

Change Oil in Front-Wheel Drive Axle Housing

1. Remove drain plug (A) and drain oil into a suitable container.
2. Re-install drain plug (A) and tighten to 70 N·m (52 lb-ft).
3. Remove oil level/filler plug (B).
4. Refill with John Deere Hy-Gard™, see Section Fuel, Lubricants and Coolant. Oil should be level with plug bore.
5. Re-install plug (B) and tighten to 70 N·m (52 lb-ft).

For capacities, see Specifications.

Hy-Gard is a trademark of Deere & Company



PULX001622

PULX001622 —UN—22SEP08

OULXBER,00022D0GL -19-18DEC13-1/1

Change Oil in Front-Wheel Drive Final Drives

1. Tractor should be positioned on level ground to assure correct oil levels when refilling.
2. Turn wheel until drain plug (C) is at the bottom. Remove drain plug and drain oil into a suitable container.
3. Turn the wheel until “OIL LEVEL” mark (B) is horizontal.
4. Refill with John Deere HY-GARD™, see Section “Fuel, Lubricants and Coolant”. Oil should be level with plug bore.
5. Reinstall drain plug (C) and tighten to 60 N·m (44 lb-ft).

Repeat steps for other side.

IMPORTANT: Recheck oil level after 30 minutes.

Add oil as needed.

HY-GARD is a trademark of Deere & Company



LX1032970

LX1032970 —UN—03JUL03

For capacities, see “Specifications”.

OULXA64,0000DF4 -19-02OCT03-1/1

Change Brake System Oil

CAUTION: Any service of the brake system must be performed by your John Deere Dealer.

OULXA64,0000C00 -19-22MAY03-1/1

Engine Air Cleaner

IMPORTANT: Never run the engine without the primary filter element!

If the air cleaner indicator light glows during operation, remove and clean the primary filter element (C).

The service interval may be extended briefly, e.g. until the next suitable opportunity. Provided the filter is serviced properly, this will not adversely affect its performance.

The primary filter element (C) can be cleaned up to five times. Thereafter, or at the latest after 1500 hours of operation (or 2 years), it must be replaced.

Open the hood and release lock (A). Remove cover (B). Pull the primary filter element (C) out of the filter housing.

Install in reverse order.

Put on cover (B) and engage lock (A).

IMPORTANT: Never close the hood or start the engine unless the filter is locked securely.



AGCPTJD0543 —UN—18DEC13



AGCPTJD0544 —UN—18DEC13

OULXBER,00022D1GL -19-18DEC13-1/1

Turbo Compressor Maintenance

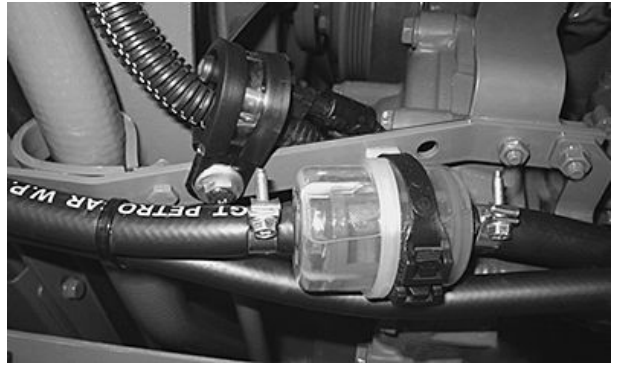
Let your John Deere dealer check the turbo compressor.

OULXBER,000237C -19-19OCT15-1/1

Service — Every 2000 Hours or 2 Years

Replace Fuel Strainer

1. Clean area around the strainer, located between cab and main fuel tank.
2. Loosen the clamps to release the used strainer from the pipes.
3. Collect any diesel still in the supply pipe.
4. Take care not to introduce any impurities into the fuel circuit during this operation.
5. Fit the new strainer in place of the old one.
6. Bleed the air from the fuel circuit.



AGOPTJD0552—UN—16DEC13

OULXBER,00022BF -19-16DEC13-1/1

Change Engine Coolant

Have engine cooling system drained, flushed and refilled by your John Deere™ Dealer.

OULXBER,00022D2 -19-19DEC13-1/1

Service — As Required

Diagnostic Trouble Codes - Operator Information

The most diagnostic trouble codes are stored on the control unit. Some diagnostic trouble codes are displayed

on the digital display automatically. See the table for more information.

OULXBER,0002455 -19-08OCT14-1/1

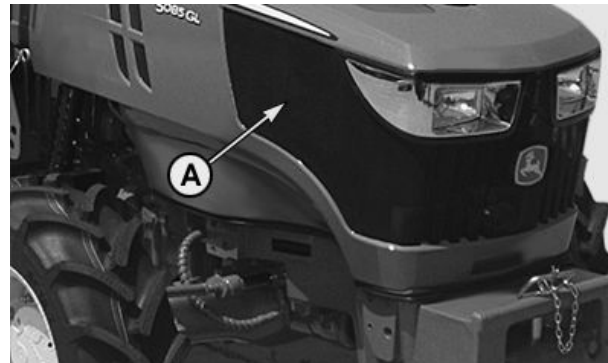
Clean Radiator and Oil Cooler

NOTE: To facilitate the cleaning, remove air-conditioning system condenser. See *Cleaning Air-Conditioning System Condenser* in this Section.

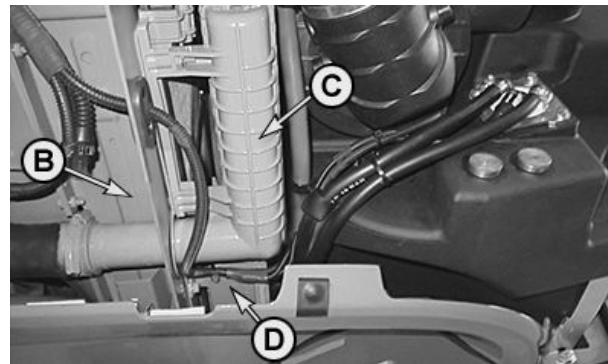
1. Whenever dirt builds up on front grille (A), stop engine and brush clean.
2. Open the hood and see if dirt has built up on charge air cooler (C), radiator (B) and oil cooler (D). If so, remove it using a brush or compressed air.

⚠ CAUTION: Reduce compressed air pressure 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.

3. If a more thorough cleaning is necessary, clean oil cooler (D) from behind with compressed air or water. Straighten any bent fins.



AGCPTJD0545 —UN— 16DEC13



AGCPTJD0563 —UN— 16DEC13

OULXBER,00022D3GL -19-19DEC13-1/1

Adjust PTO Clutch Linkage

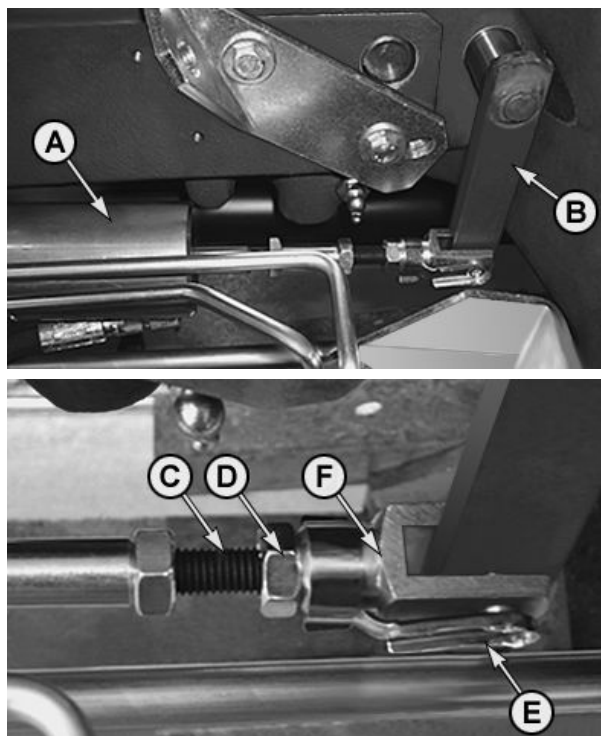
1. Loosen the nut (D).
2. Remove the pin E from the fork (F).
3. Move the PTO lever (B) to the left until it meets the stroke end position (PTO bearing is in contact with the PTO clutch fingers).
4. Keeping the PTO lever (B) in position, turn the fork (F) so that the hole of the fork (F) is aligned with the one of the PTO lever (B).

Starting from this point, turn the fork (F) by 1,5 rotations to extend the rod (C).

5. Match the PTO lever (B) and the fork (F) with the pin (E) and tighten the nut (D).

A—Aktuator
B—Clip pin
C—Lock nut

D—Arm
E—Rod
F—Yoke



OULXBER,00022C3GL -19-21DEC15-1/1

AGCPTJD0518 —UN—15/JAN14

AGCPTJD0519 —UN—15/JAN14

Inspect All Tires

Inspect tires and check inflation pressures. For correct tire pressures refer to “Tire Pressures” in Section 80 “Fuel, Lubricants, Hydraulic Oil and Coolant”.

OULXBER,0002281 -19-04NOV13-1/1

Service Air Cleaner at Regular Intervals

A dual element air cleaner is standard.

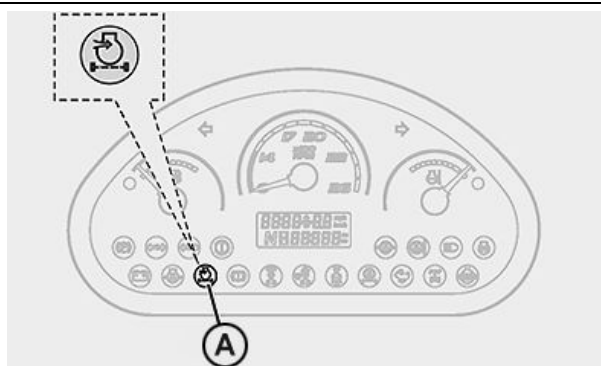
IMPORTANT: Check unloading valve frequently.

Empty as often as needed to keep it from filling with dust. If valve is allowed to fill with dust, air cleaner element will become plugged rapidly.

A dirty element is indicated when the air cleaner restriction light (A) is on. A dirty element can result in loss of power or excessive smoke.

Replace air cleaner elements at least once a year. Primary element should be replaced after having been cleaned five times.

The smaller secondary element should be removed only when being replaced, normally once a year.



OULXBER,00022D4GL -19-19DEC13-1/1

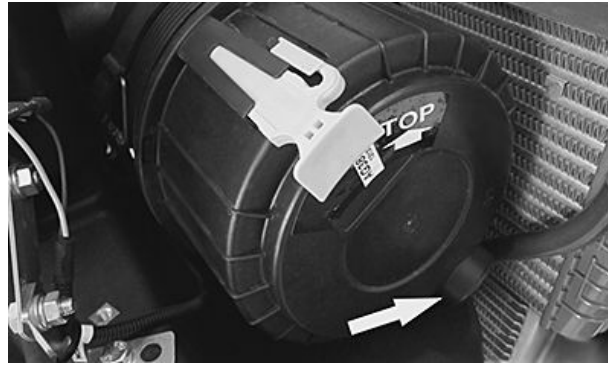
AGCPTJD0546 —UN—17DEC13

Clean the Dust Unloading Valve

IMPORTANT: Never run the engine when the dust unloading valve is removed!

During the harvest, grass and chaff may adversely affect the performance of the dust unloading valve. Remove and clean the dust unloading valve as necessary. Replace damaged valve immediately.

NOTE: In dusty conditions, clean the dust unloading valve every day.



AGCPTJ0532 —UN—17DEC13

OULXBER,00022D5GL -19-19DEC13-1/1

Engine Air Cleaner

IMPORTANT: Never run the engine without the primary filter element!

If the air cleaner indicator light glows during operation, remove and clean the primary filter element (C).

The service interval may be extended briefly, e.g. until the next suitable opportunity. Provided the filter is serviced properly, this will not adversely affect its performance.

The primary filter element (C) can be cleaned up to five times. Thereafter, or at the latest after 1500 hours of operation (or 2 years), it must be replaced.

Open the hood and release lock (A). Remove cover (B). Pull the primary filter element (C) out of the filter housing.

Install in reverse order.

Put on cover (B) and engage lock (A).

IMPORTANT: Never close the hood or start the engine unless the filter is locked securely.



AGCPTJ0543 —UN—16DEC13



AGCPTJ0544 —UN—16DEC13

OULXBER,00022D1GL -19-18DEC13-1/1

Cleaning the Primary Filter Element

When the element must be serviced in the field, tap it on the palm of your hand as a temporary measure.

IMPORTANT: The guide ring must not be damaged or deformed.

When you return to your service area, clean the filter element thoroughly, or replace it with a new one.



AT15076

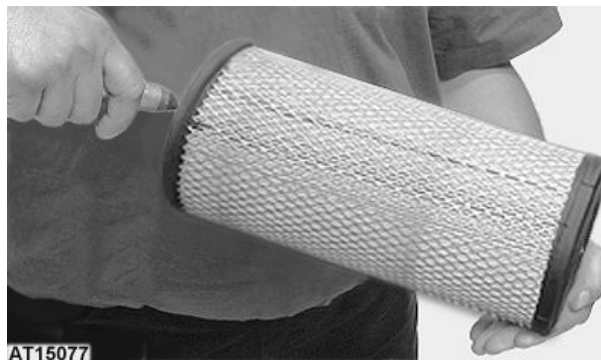
AT15076 —UN—06AUG03

OULXBER,00022D6GL -19-19DEC13-1/1

Cleaning a Dusty Element

If tapping element does not remove dust, blow out the dust with compressed air by inserting nozzle inside the element and blowing from the inside of the filter to the outside. Pressure must not exceed 600 kPa (6 bar; 90 psi).

Replace element if air cleaner indicator light continues glowing after the element has been cleaned.



AT15077

AT15077 —UN—06AUG03

OULXBER,00022D7GL -19-19DEC13-1/1

Secondary (Safety) Element

This filter must be changed if it becomes damaged. Change it at every fifth change of the air filter primary element, and at the latest after 1500 hours of operation.

IMPORTANT: Always replace secondary (safety) filter element, do not attempt to clean it.

INSTALLATION:

Slide a serviced or new primary filter element (rubber seal first) as far as it will go into the filter housing. Put on the cover and close the catches.

IMPORTANT: Never close the hood or start the engine unless the filter is locked securely.



AGCPTJD0647 —UN—16DEC13

OULXBER,00022D8GL -19-19DEC13-1/1

Replace Alternator Drive Belt

Ask your John Deere dealer to replace the alternator drive belt.

OULXBER,00022CF -19-18DEC13-1/1

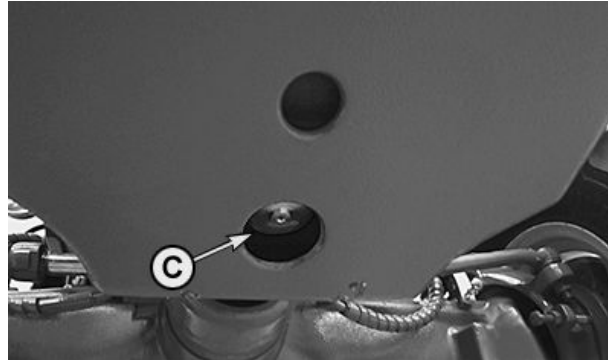
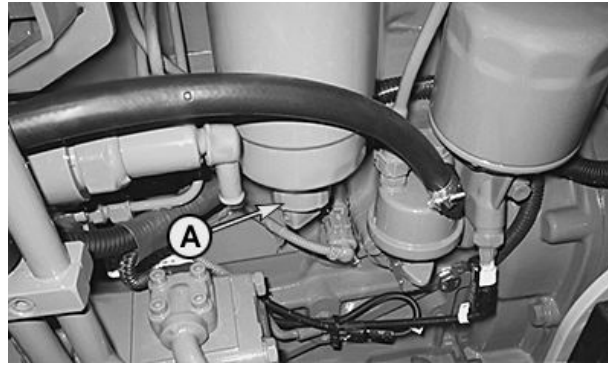
Check the Fuel Filter (F5C Engine)

⚠ CAUTION: Never open the fuel system when engine is hot. Handle fuel with care, it is highly flammable. Do not replace fuel filter while smoking or when near open flame or sparks.

1. Loosen drain screw (A).
2. Retighten drain screw (A) as soon as water and sediment deposits have drained out.

If water was present in fuel filter, open fuel tank drain screw (C), located under the lower fuel tank, to bleed accumulated moisture and sediment from the fuel tank. After draining off any water deposits, retighten drain screw (C) until it is hand-tight.

NOTE: Place a small container under drain screw to catch draining fuel.



AGCPTJD0375 —UN—23OCT13

AGCPTJD0376 —UN—11JUL13

OULXBER,000252C -19-31OCT14-1/1

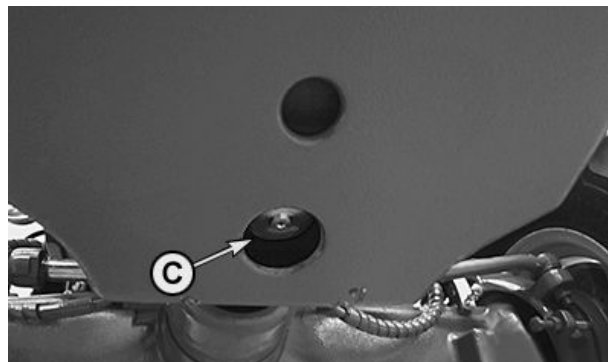
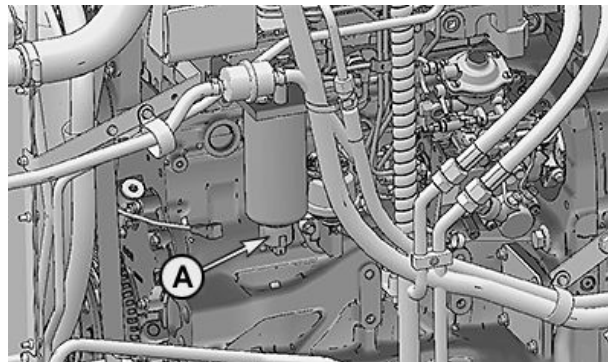
Check the Fuel Filter (NEF Engine)

⚠ CAUTION: Never open the fuel system when engine is hot. Handle fuel with care, it is highly flammable. Do not replace fuel filter while smoking or when near open flame or sparks.

1. Loosen drain screw (A).
2. Retighten drain screw (A) as soon as water and sediment deposits have drained out.

If water was present in fuel filter, open fuel tank drain screw (C), located under the lower fuel tank, to bleed accumulated moisture and sediment from the fuel tank. After draining off any water deposits, retighten drain screw (C) until it is hand-tight.

NOTE: Place a small container under drain screw to catch draining fuel.



LX21147 —UN—04NOV14

AGCPTJD0376 —UN—11JUL13

OULXBER,000252B -19-06NOV14-1/1

Avoid High-Pressure Fluids

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

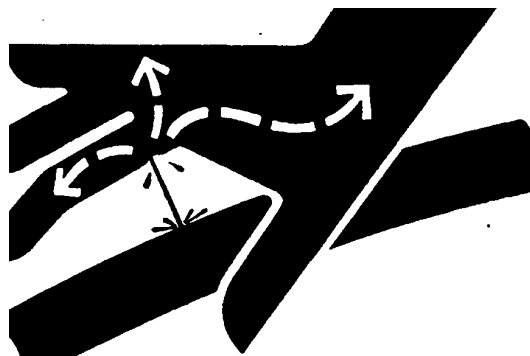
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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

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

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

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within



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

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

X9811 —UN—23AUG88

Fuel Filters

The importance of fuel filtration cannot be overemphasized with modern fuel systems. The combination of increasingly restrictive emission regulations and more efficient engines requires fuel system to operate at much higher pressures. Higher pressures can only be achieved using fuel injection components with very close tolerances. These close

manufacturing tolerances have significantly reduced capacities for debris and water.

John Deere brand fuel filters have been designed and produced specifically for John Deere engines.

To protect the engine from debris and water, always change engine fuel filters as specified in this manual.

DX,FILT2 -19-14APR11-1/1

Lubricate All Lubricating Points

If the tractor has been washed with high-pressure water, lubricate all lubricating points.

OULXBER,000228D -19-04NOV13-1/1

Prevent Battery Explosions

Keep sparks, lighted matches, and open flame away from the top of battery. Battery gas can explode.

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

Do not charge a frozen battery; it may explode. Warm battery to 16°C (60°F).



OULXBER,000228E -19-04NOV13-1/1

TS204 —UN—15APR13

Battery - Checking Specific Gravity

Use an hydrometer to check the specific gravity of the electrolyte in each battery cell.

A fully charged battery should have a specific gravity reading of 1.28. Recharge battery if reading drops below 1.20.

NOTE: In tropical regions, the battery is fully charged when the reading is 1.23.



AGCPTJD0548 —UN—16DEC13

OULXBER,00022DAGL -19-19DEC13-1/1

Starting Motor

If the starting motor fails to operate after the starter switch has been operated, the complete starter system must be thoroughly checked. Check specific gravity of battery with an hydrometer and make sure that none of the cables

are broken or worn through and that none of the cable connections are loose or corroded.

If the above checks fail to improve the operation of the starting motor, see your John Deere dealer.

OULXBER,0002290 -19-04NOV13-1/1

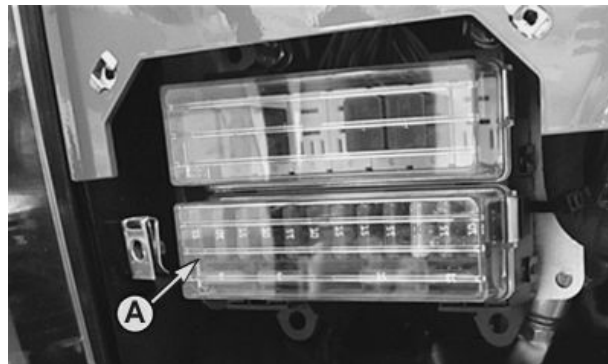
Fuses and Relays

General

IMPORTANT: To prevent damage to the electrical system, **NEVER** use a fuse with a rating higher than the one already installed. If original size fuse will not carry electrical load and continues to blow, have the electrical system checked by your John Deere dealer.

All electrical circuits are protected by fuses. Amperage rating is marked on each fuse.

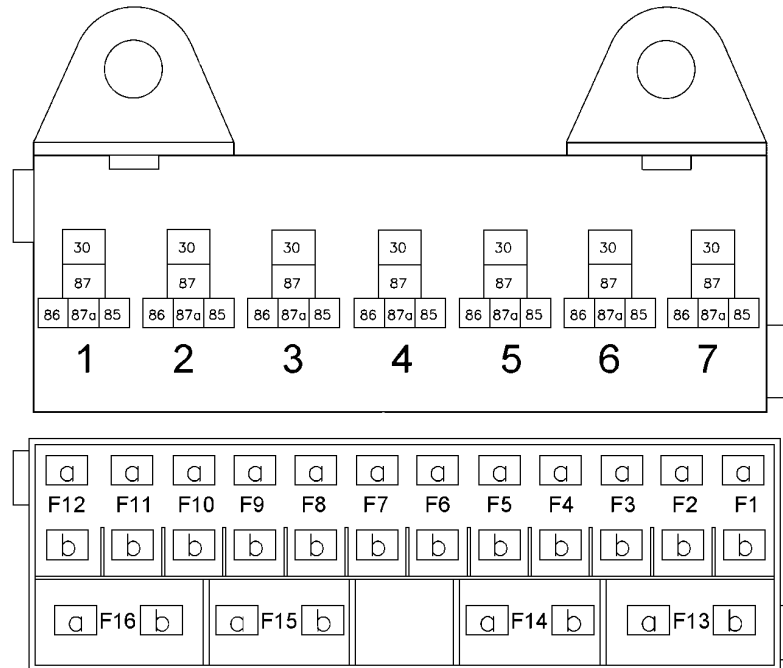
The main fuse box (A) is located inside the l.h. panel of the dash panel.



AGCPTJD0555 —UN—16DEC13

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OULXBER,000252D -19-17NOV14-1/10

Tractors with mechanical transmissions

RELAYS (Tractors with Mechanical Transmissions)	
Relay	Description
K1	High splitter
K2	Low splitter
K3	Trailer brake valve (CUNA)
K4	Not used
K5	H4 low beam
K6	H4 high beam
K7	Not used

Fuses (Tractors with Mechanical Transmissions)		
Position	Type	Function
F1	10 A	Fuel shut-off solenoid valve
F2	15 A	Three-Point hitch leveling system (implement alignment valve assembly), seat air suspension, additional fuel tank
F3	25 A	3-terminal power outlet socket (+15)
F4	15 A	3-terminal power outlet socket (+30), cigarette lighter
F5	15 A	Beacon light, worklight, open operator's station work light
F6	15 A	MFWD valve, MFWD switch, brake pedal switches, brake lights
F7	10 A	Instrument unit +15, radio +15, differential lock valve, differential lock switch, cab connection +15 Indicator light for trailer brake, trailer brake valve, trailer brake valve relay
F8	15 A	Hazard +30, Turn signal lights
F9	10 A	PTO switches, neutral start relay (pin 86), grid heater connection +15, speed sensor
F10	15 A	HAZARD +15, horn, turn signal lights
F11	10 A	Hi-Lo relay, Hi-Lo valve and Hi-Lo switches Switches in gear lever. Turn-signal lights, hazard warning lights
F12	7,5 A	Dashboard +30
F13	15 A	Hi Beam
F14	15 A	Low Beam

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OULXBER.000252D -19-17NOV14-2/10

AGCPTJ0329—UN—27JUN13

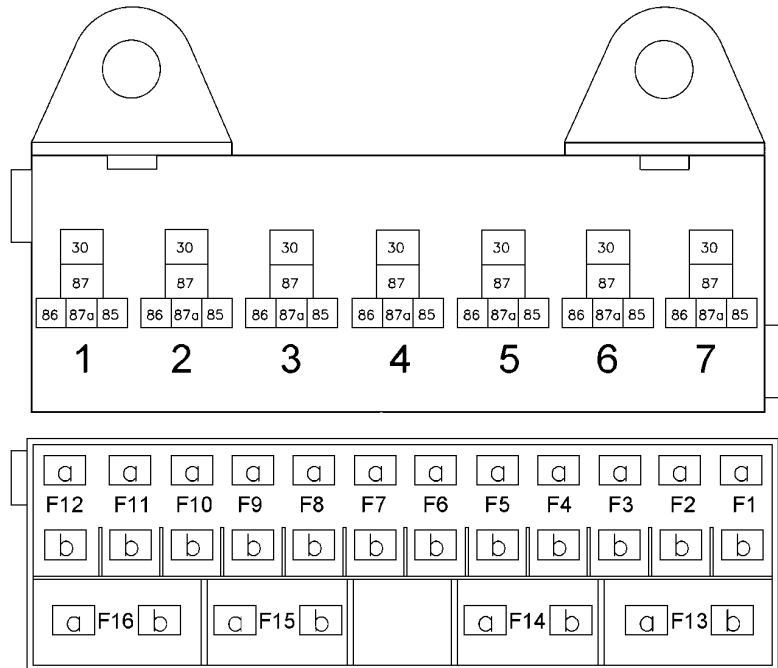
Fuses (Tractors with Mechanical Transmissions)

Position	Type	Function
F15	5 A	Right clearance lights and tail lights
F16	5 A	Left clearance lights and tail lights Dashboard backlight

Continued on next page

OULXBER,000252D -19-17NOV14-3/10

Tractors with 24/24 speed transmissions



Fuses (Tractors with 24/24 Speed Transmissions)

Position	Type	Function
F1	10 A	Fuel shut-off solenoid valve
F2	15 A	Three-Point hitch leveling system (implement alignment valve assembly), hydraulic valve, seat air suspension, additional fuel tank, unload valve
F3	25 A	3-terminal power outlet socket (+15)
F4	15 A	3-terminal power outlet socket (+30), cigarette lighter
F5	15 A	Beacon light, worklight (open operator's station)
F6	15 A	MFWD valve, MFWD switch, brake pedal switches, brake lights
F7	10 A	Instrument unit +15, radio +15, differential lock valve, differential lock switch, cab connection +15 Indicator light for trailer brake, trailer brake valve, trailer brake valve relay
F8	15 A	Hazard +30, turn signal lights
F9	10 A	PTO switches, neutral start relay (pin 86), grid heater connection +15, speed sensor
F10	15 A	HAZARD+15, horn, turn signal lights
F11	10 A	Turn-signal lights, Hazard warning lights Hi-Lo relay, Hi-Lo valve and Hi-Lo switches
F12	7,5 A	Dashboard +30
F13	15 A	Hi Beam
F14	15 A	Low Beam
F15	5 A	Right clearance lights and tail lights
F16	5 A	Left clearance lights and tail lights Dashboard backlight

Continued on next page

OULXBER.000252D -19-17NOV14-4/10

Relays (Tractors with 24/24 Speed Transmissions)

Position	Function
1	High splitter
2	Low splitter
3	Trailer brake valve (ITALY)
4	Interlock
5	H4 low beam
6	H4 high beam
7	PTO speed enabler

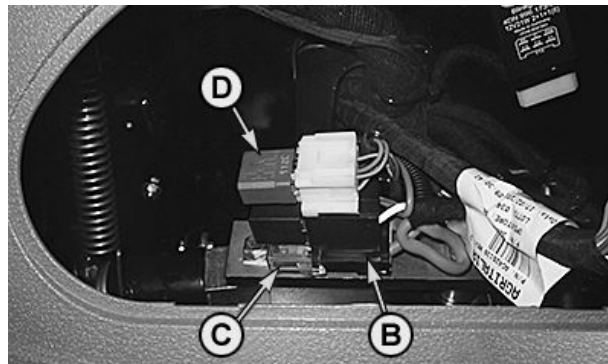
OULXBER,000252D -19-17NOV14-5/10

Relays under the dashboard

Fuses and relays located under the dashboard

Engine fuses and relays

Position	Type	Function
A	Relay	Turn signal
B	Relay 50 A	Starter relay
C	Fuse 50 A	Main harness protection
D	Relay 10 A	Additional fuel tank (if equipped)



AGCPTJD0530 —UN—16DEC13

AGCPTJD0707 —UN—30OCT14

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OULXBER,000252D -19-17NOV14-6/10

Cab fuse box

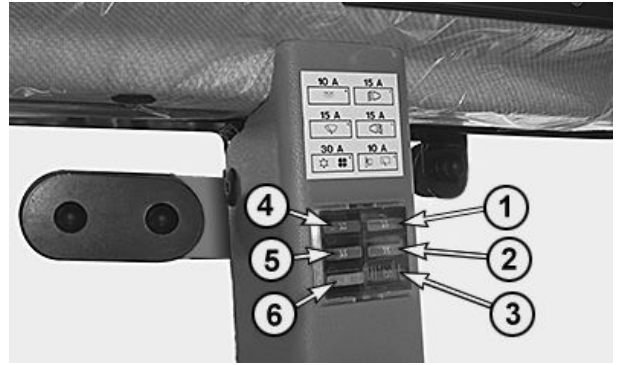
The cab fuses are located in the post on the right-hand side.

Post at the right side of cab

Position	Type	Function
1	15 A	Front work lights
2	15 A	Rear work lights
3	10 A	Radio (+15), rear window wiper
4	10 A	Radio (+30), courtesy light
5	15 A	Windshield wiper, windscreen washer pump
6	30 A	Air conditioning module

Post at the left side of cab

Position	Type	Function
1	20 A	Fan motor
2	20 A	Fan motor



Post at the right side of cab



Post at the left side of cab

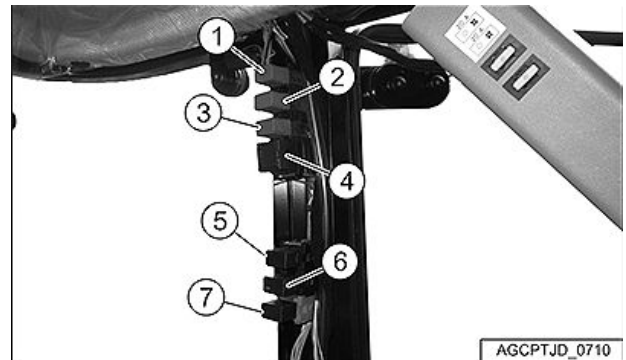
OULXBER,000252D -19-17NOV14-7/10

AGCPTJD0708 —UN—30OCT14

AGCPTJD0709 —UN—02NOV15

Relays in the cab**Relays in the cab**

Position	Type	Function
1	30 A	Front working light
2	30 A	Rear working light
3	20 A	A/C clutch
4	40 A	Power supply
5	20 A	Micro relay fan (series)
6	20 A	Micro relay fan (parallel)
7	15-25 A	Micro relay fan



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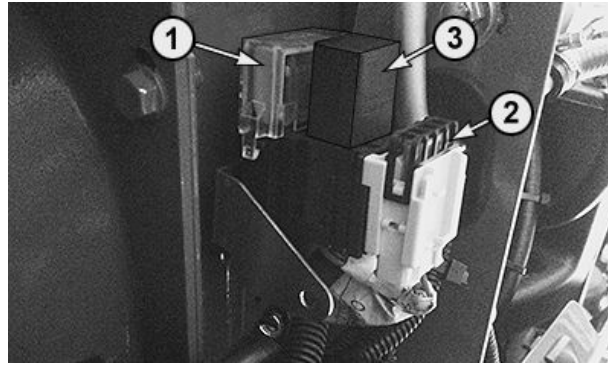
OULXBER,000252D -19-17NOV14-8/10

AGCPTJD0710 —UN—02NOV15

Other fuses and relays

Other fuses and relays are located on the right side of the engine, close to the radiators.

Fuses and relays		
Position	Type	Function
1	70 A	Main fuse for cab wiring circuit
2	5 A	EHS Hitch control unit
3	relay	EHS Hitch control unit

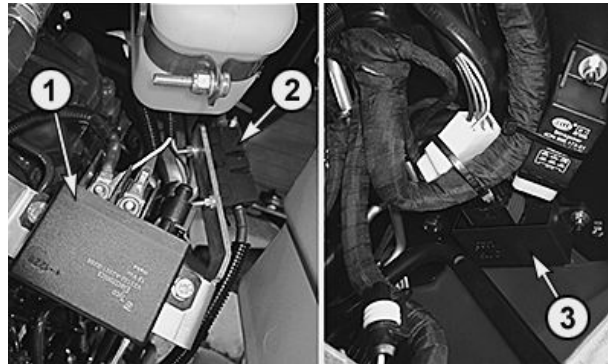


AGCPTJ00711 —UN—30OCT14

OULXBER,000252D -19-17NOV14-9/10

Fuses and relays for intake air heater (optional)

Fuses and relays		
Position	Type	Function
1	relay	Intake air heater (under the bonnet)
2	150 A	Intake air heater (under the bonnet)
3	relay	Intake air heater (under the dashboard)



AGCPTJ00712 —UN—30OCT14

OULXBER,000252D -19-17NOV14-10/10

Troubleshooting

Transmission, Diagnostic Trouble Codes

24/12 Transmission Only>

IMPORTANT: In case of a failure, a **DIAGNOSTIC TROUBLE CODE** is displayed on the digital display. If a diagnostic trouble code is displayed, stop the engine and find the meaning of the code in the table below.

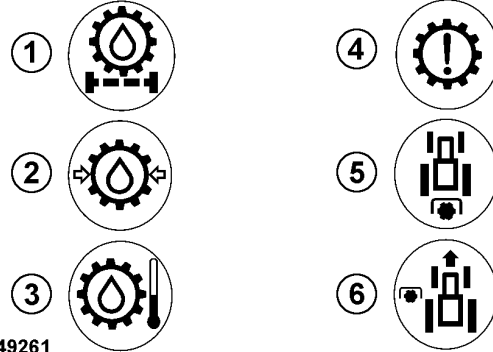
If any other code not shown in the table is displayed, contact your John Deere Dealer.



- 1— Oil Filter Restriction Indicator Light
- 2— Oil Pressure Indicator Light
- 3— Transmission Oil Temperature Indicator Light

- 4— EHM III Warning Light
- 5— PTO Enabling Indicator Light
- 6— Ground Drive PTO Indicator Light

PULX000864



LX1049261

MES-SAGE	Indicator Lights 1, 2, 3, 4, 5 and 6	Diagnostic Trouble Code Number	Diagnostic Trouble Code Name
OIL L	3 is flashing	TCU 000177.01	Transmission Oil Temperature too Low
OIL H	3 is flashing	TCU 000177.00	Transmission Oil Temperature too High
ECU	4 is on continuously	TCU 000629.12	Control Unit Internal Fault
		TCU 000629.14	Control Unit Internal Fault
		TCU 000629.31	Control Unit Internal Fault
Fnr 5	4 is on continuously	TCU 521230.31	Reverse Drive Lever Switch Fault, Neutral, Forward and Reverse Signals Received Simultaneously
StoP	-	TCU 521216.31	INFORMATION FOR OPERATOR: Stop Tractor, System Check in Process
SLIPP	4 is flashing	TCU 000522.31	INFORMATION FOR OPERATOR: Clutch Pedal not Completely Released
FH P1	4 is flashing	TCU 521237.14	Forward High Clutch, Pressure Difference too High
FL P1	4 is flashing	TCU 521238.14	Forward Low Clutch, Pressure Difference too High
RE P1	4 is flashing	TCU 521239.14	Reverse Clutch, Pressure Difference too High
EErr	4 is flashing	TCU 000630.31	Calibration Parameters Saving Fault
CAn	4 is flashing	TCU 000639.31	CAN BUS, High Error Rate
OIL S	4 is flashing	TCU 000177.05	Transmission Oil Temperature Sensor, Signal Voltage too High
		TCU 000177.06	Transmission Oil Temperature Sensor, Signal Voltage too Low
PEd 1	4 is flashing	TCU 524173.01	Clutch Pedal Potentiometer, Value too Low
PEd 2	4 is flashing	TCU 524173.00	Clutch Pedal Potentiometer, Value too High
PEd 3	4 is flashing	TCU 000598.02	Clutch Pedal Potentiometer and Clutch Pedal Switch, Signals Mismatch
FH CO	4 is flashing	TCU 521233.01	Forward High Clutch Solenoid Valve, Feedback Current Not Present with Solenoid Valve Activated
FL CO	4 is flashing	TCU 521234.01	Forward Low Clutch Solenoid Valve, Feedback Current Not Present with Solenoid Valve Activated
rE CO	4 is flashing	TCU 521235.01	Reverse Clutch Solenoid Valve, Feedback Current Not Present with Solenoid Valve Activated
OC L	4 is flashing	TCU 521221.06	Forward Low Clutch, Current too High
FH CH	4 is flashing	TCU 521233.00	Forward High Clutch Solenoid Valve, Feedback Current Present with Solenoid Valve Not Activated

Continued on next page

OULXBER,00026B4 -19-08DEC14-1/3

Troubleshooting

FL CH	4 is flashing	TCU 521234.00	Forward Low Clutch Solenoid Valve, Feedback Current Present with Solenoid Valve Not Activated
rE CH	4 is flashing	TCU 521235.00	Reverse Clutch Solenoid Valve, Feedback Current Present with Solenoid Valve Not Activated
nEU	4 is flashing	TCU 521230.02	Reverse Drive Lever Switch Fault, Neutral and Reverse Signals Received Simultaneously
		TCU 521230.07	Reverse Drive Lever Switch Fault, Neutral and Forward Signals Received Simultaneously
SUP 1	4 is on continuously	TCU 523666.01	Control Unit, Supply Voltage too Low
SUP 2	4 is on continuously	TCU 523666.00	Control Unit, Supply Voltage too High
OC Hr	4 is flashing	TCU 000788.06	Forward High Clutch or Reverse Clutch, Current too High
OC P1	5 is flashing	TCU 003599.06	PTO Shut-Off Solenoid Valve, Current too High
OC P2	-	TCU 003596.06	PTO Mode Indicator Lights, Current too High
OC n	4 is on continuously	TCU 521236.06	Shut-Off Solenoid Valve, Current too High or Shorted to Ground
OC nP	4 is on continuously	TCU 521236.31	Shut-Off Solenoid Valve, Feedback Current too High
SUP 3	4 is on continuously	TCU 003509.01	5-Volt Supply Voltage too High
SUP 4	4 is on continuously	TCU 003509.00	5-Volt Supply Voltage too Low
PEd 5	4 is flashing	TCU 524173.03	Clutch Pedal Potentiometer, Output Voltage too High
		TCU 524173.04	Clutch Pedal Potentiometer, Output Voltage too Low
FH SE	4 is flashing	TCU 521237.03	Forward High Clutch Pressure Sensor, Signal Voltage too High
		TCU 521237.04	Forward High Clutch Pressure Sensor, Signal Voltage too Low
FL SE	4 is flashing	TCU 521238.03	Forward Low Clutch Pressure Sensor, Signal Voltage too High
		TCU 521238.04	Forward Low Clutch Pressure Sensor, Signal Voltage too Low
rE SE	4 is flashing	TCU 521239.03	Reverse Clutch Pressure Sensor, Signal Voltage too High
		TCU 521239.04	Reverse Clutch Pressure Sensor, Signal Voltage too Low
nr SE	4 is flashing	TCU 000127.02	Transmission Oil Pressure Detected with Engine Off
CF SE	4 is flashing	TCU 000126.02	Oil Filter Restricted Sensor, Fault
FH PH	4 is on continuously	TCU 521237.00	Forward High Clutch, Pressure too High
FL PH	4 is on continuously	TCU 521238.00	Forward Low Clutch, Pressure too High
rE PH	4 is on continuously	TCU 521239.00	Reverse Clutch, Pressure too High
nr PH	4 is on continuously	TCU 000127.07	Transmission Oil Pressure Detected with Shut-Off Solenoid Valve Not Activated
-	2 is on continuously	TCU 000127.31	Transmission Oil Pressure too Low
-	1 is flashing	TCU 000126.31	Transmission Oil Filter Restricted
FH PL	4 is flashing	TCU 521237.01	Forward High Clutch, Pressure too Low
FL PL	4 is flashing	TCU 521238.01	Forward Low Clutch, Pressure too Low
rE PL	4 is flashing	TCU 521239.01	Reverse Clutch, Pressure too Low
SPd 1	4 is flashing	TCU 522402.08	Transmission Speed Sensor, Fault
Spd 2	4 is flashing	TCU 522402.02	Transmission Speed Sensor, Signal Faulty
FH CS	4 is flashing	TCU 521222.00	Forward High Clutch, Unexpected Slip
FL CS	4 is flashing	TCU 521221.00	Forward Low Clutch, Unexpected Slip
rE CS	4 is flashing	TCU 522383.00	Reverse Clutch, Unexpected Slip
FL C1	4 is flashing	TCU 521234.31	Forward Low Clutch Solenoid Valve, Measured and Reference Current Mismatch
FL PC	4 is flashing	TCU 521238.31	Forward Low Clutch Solenoid Valve, Fault
Fnr 2	4 is on continuously	TCU 521230.14	Reverse Drive Lever Switch Fault, Forward and Reverse Signals Received Simultaneously
Fnr 6	4 is flashing	TCU 523735.31	Driving Clutch Solenoid Valves Activated with Reverse Drive Lever in Neutral or Clutch Pedal Completely Depressed
OC AL	4 is on continuously	TCU 003593.06	Current too High at All Outputs to Solenoid Valve
Fnr 7	4 is on continuously	TCU 523735.14	Driving Clutch Solenoid Valves Activated without Signal from Reverse Drive Lever
FH C1	4 is flashing	TCU 521233.31	Forward High Clutch Solenoid Valve, Measured and Reference Current Mismatch
FH PC	4 is flashing	TCU 521237.31	Forward High Clutch Solenoid Valve, Fault
PtO 1	-	TCU 521215.16	PTO Pressure Detected with PTO Switched Off
PtO 2	5 and 6 are flashing	TCU 521215.15	PTO Pressure Detected with PTO Solenoid Valve Not Activated
PtO 3	5 is flashing	TCU 521215.18	PTO Pressure Not Detected with PTO Switched On
PtO 4	-	TCU 521215.00	PTO Pressure Detected with PTO Shut-Off Solenoid Valve Not Activated
PtO 5	5 is flashing	TCU 000976.31	PTO Switch Fault
rE C1	4 is flashing	TCU 521235.31	Reverse Clutch Solenoid Valve, Measured and Reference Current Mismatch

Continued on next page

OULXBER,00026B4 -19-08DEC14-2/3

rE PC	4 is flashing	TCU 521239.31	Reverse Clutch Solenoid Valve, Fault
dAtA	4 is on continuously	TCU 000630.02	Calibration Parameters Out of Range

OULXBER,00026B4 -19-08DEC14-3/3

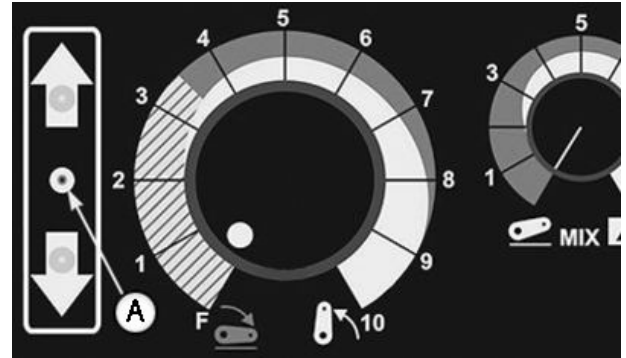
Hitch, Diagnostic Trouble Codes

Hitch Flash Codes

In normal operating conditions the LED (A) comes on to indicate “hitch stop”.

The LED (A) begins flashing if one of the listed diagnostic trouble codes are active.

IMPORTANT: Let your John Deere™ dealer check the system if LED (A) is flashing.



LX211148 —UN—08DEC14

Service ADVISOR Diagnostic Trouble Code Number		Diagnostic Trouble Code Description
EHS	02	Draft Sensor Fault
EHS	04	Electronic Hitch Sensing Control Unit Internal Failure
EHS	08	Electronic Hitch Sensing Control Unit, Supply Voltage too Low
EHS	16	Electronic Hitch Sensing Control Unit, Supply Voltage too High
EHS	32	Lowering Solenoid Valve Fault
EHS	64	Raising Solenoid Valve Fault

OULXBER,00026B6 -19-08DEC14-1/1

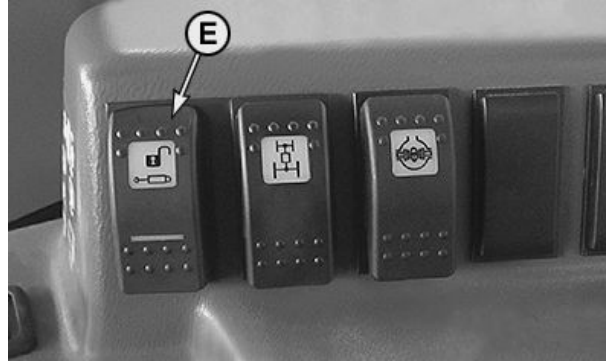
E-SCV, Diagnostic Trouble Codes

E-SCV Flash Codes of LED at Safety Stop Switch (E):

In normal operating conditions the LED comes on to indicate "transport lock activated".

The LED begins flashing if a Diagnostic Trouble Code is present. Different flashing sequences are assigned to the Diagnostic Trouble Codes, see table.

IMPORTANT: Let your John Deere™ dealer check the system if LED is flashing.



AGCPTJD0675—UN—01OCT14

Service ADVISOR Diagnostic Trouble Code Number		1st Flash Sequence (after long pause)	2nd Flash Sequence (after short pause)	Diagnostic Trouble Code Description
TVC	53248	1	1	Potentiometer for E-SCV 4 Oil Flow Rate Fault
TVC	53249	1	2	Multi-Function Lever Fault (E-SCV Valve 4)
TVC	53250	1	4	E-SCV Valve 4 Fault
TVC	53251	2	1	Potentiometer for E-SCV 3 Oil Flow Rate Fault
TVC	53252	2	2	Multi-Function Lever Fault (E-SCV Valve 3)
TVC	53253	2	4	E-SCV Valve 3 Fault
TVC	53254	3	1	Potentiometer for E-SCV 1 Oil Flow Rate Fault
TVC	53255	3	2	E-SCV 1 Control Lever Fault
TVC	53256	3	4	E-SCV Valve 2 Fault
TVC	53257	4	1	Potentiometer for E-SCV 2 Oil Flow Rate Fault
TVC	53258	4	2	E-SCV 2 Control Lever Fault
TVC	53259	4	4	E-SCV Valve 1 Fault
TVC	53260	7	1	E-SCV Transport Lock Switch Fault
TVC	53261	7	2	Control Unit Unswitched Supply Voltage High
TVC	53262	7	3	Control Unit Unswitched Supply Voltage Low
TVC	53263	7	4	Control Unit 5-Volt Supply Fault
TVC	53264	7	5	Safety Valve Fault

OULXBER.00026B5 -19-29SEP15-1/1

Engine Troubleshooting

Symptom	Problem	Solution
Engine hard to start or will not start	Improper starting procedure.	Reviewing starting procedure.
	No fuel.	Check fuel tank.
	Air in fuel system.	Bleed fuel system.
	Hand primer left raised.	Push primer down.
	Cold weather.	Use cold weather starting procedure.
	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.
	Dirty or faulty injectors.	Have John Deere dealer check injectors.
	Injection pump shut-off not reset.	Turn key switch to "OFF" then to "ON".
	Fuel shut-off valve closed.	Open fuel shut-off valve.
Engine knocks	Insufficient oil.	Add oil.
	Injection pump out of time.	See your John Deere dealer.
	Low coolant temperature.	Remove and check thermostat.
	Engine overheating.	See "Engine Overheats".
Engine runs irregularly or stalls frequently	Low coolant temperature.	Remove and check thermostat.
	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, sender and connections.

Continued on next page

AT,5SOM,198 -19-01NOV98-1/4

Symptom	Problem	Solution
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.
	Clogged fuel filter.	Replace filter element.
	Improper type of fuel.	Use proper fuel.
	Overheated engine.	See "Engine Overheats".
	Below normal engine temperature.	Remove and check thermostat.
	Improper valve clearance.	See your John Deere dealer.
	Dirty or faulty injectors.	Have John Deere dealer check injectors.
	Injection pump out of time.	See your John Deere dealer.
	Turbocharger not functioning.	See your John Deere dealer.
	Leaking exhaust manifold gasket.	See your John Deere dealer.
	Implement improperly adjusted.	See implement operator's manual.
	Restricted fuel line.	Clean or replace fuel line.
	Restricted return line.	Clean or replace return line.
Low oil pressure	Improper ballast.	Adjust ballast to load.
	Low oil level.	Add oil.
High oil consumption	Improper type of oil.	Drain, fill crankcase with oil of proper viscosity and quality.
	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.
	Defective turbocharger.	See your John Deere dealer.
Engine emits white smoke	Improper type fuel.	Use proper fuel.
	Low engine temperature.	Warm up engine to normal operating temperature.

Continued on next page

AT,5SOM,198 -19-01NOV98-2/4

Symptom	Problem	Solution
Engine emits black or grey exhaust smoke	Defective thermostat.	Remove and check thermostat.
	Defective injection nozzles.	See your John Deere dealer.
	Engine out of time.	See your John Deere dealer.
	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.
	Engine out of time.	See your John Deere dealer.
	Turbocharger not functioning.	See your John Deere dealer.
	Dirty radiator core, or grille screens.	Remove all trash.
Engine overheats	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, expansion tank, and hoses for loose connection or leaks.
	Faulty radiator cap.	See your John Deere dealer.
	Loose or defective fan belt.	Adjust belt tension; replace belt, if necessary
	Cooling system needs flushing.	Flush cooling system.
	Defective thermostat.	Remove and check thermostat.
	Defective temperature gauge or sender.	See your John Deere dealer.
	Incorrect grade of fuel.	Use proper fuel.
	Improper type of fuel.	Use proper fuel.
High fuel consumption.	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.

Continued on next page

AT,5SOM,198 -19-01NOV98-3/4

Troubleshooting

Symptom	Problem	Solution
	Engine out of time.	See your John Deere dealer.
	Implement improperly adjusted.	See implement operator's manual.
	Low engine temperature.	Check thermostat.
	Excessive ballast.	Adjust ballast to load.
	Defective turbocharger.	See your John Deere dealer.
	Restricted air intake system.	Check system.
	Plugged crankcase vent tube.	Clean vent tube.

AT,5SOM,198 -19-01NOV98-4/4

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.
	Hitch feedback linkage improperly adjusted.	Reset linkage. See your John Deere dealer.
Low transmission pressure.	Hydraulic motor not connected correctly.	See your John Deere dealer.
	Low oil supply.	Fill system with correct oil.
	Clogged transmission-hydraulic oil filter.	Replace filter.

LX,TSIP,BA2 -19-16OCT03-1/1

Brakes Troubleshooting

Symptom	Problem	Solution
No solid pedal feel	Air in system.	See your John Deere dealer.
Pedal settles	Rear brake piston seal leaking.	See your John Deere dealer.
Excessive pedal travel	Air in system.	See your John Deere dealer.
Brakes drag during transport	Brakes out of adjustment.	See your John Deere dealer.

MX,TSIP,DA1 -19-24JUL95-1/1

Rockshaft and Quick-Coupler 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.
	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 knob.
Hitch fails to lift or lifts slowly	Excessive load on hitch.	Reduce load.
	Hitch fails to lift or lifts slowly	Adjust flow divider valve and /or change the allocation.
	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	Transmission-hydraulic filter screen clogged.	Clean or replace screen.
	Lift links too short.	Adjust lift links.
	Lack of penetration.	See implement operator's manual
	Improper setting of limit stop.	Reset position limit.
	Improper setting of draft lever.	See section "Rockshaft and Three-Point Hitch".
Insufficient or no hitch response to draft load	Center link in upper holes.	Move center link to lower holes.
	Draft control lever in "Off" position.	Move lever rearward.
	Lift links too short.	Adjust lift links.
	Flow divider valve closed	Adjust flow divider valve and/or change the allocation
	Lack of penetration.	See implement operator's manual.
	Rate-of-drop too slow.	Adjust rate-of-drop valve.

Continued on next page

OULXA64,00002A7 -19-01JUL04-1/2

Troubleshooting

Symptom	Problem	Solution
Hitch too responsive	Center link in lower holes.	Move center link to upper holes.
	Sensitivity valve set too responsive	Adjust sensitivity valve
Hitch drops too fast	Rate-of-drop set too fast.	Adjust rate-of-drop.

OULXA64,00002A7 -19-01JUL04-2/2

Remote Hydraulic Cylinders Troubleshooting

Symptom	Problem	Solution
Direction of remote cylinder travel is reversed	Improper hose connections.	Reverse hose connections.
Hoses will not couple	Improper hose male tips.	Replace tip with ISO Standard tips.
Remote cylinder will not lift load	Excessive load.	Reduce load.
	Flow divider valve closed.	Adjust flow divider valve.
	Hoses not completely installed.	Attach hoses correctly.
	Incorrect remote cylinder size.	Use correct size cylinder.
Automatic return to neutral position of no. 2 SCV lever does not function and direction of remote cylinder travel is reversed	Improper hose connections.	Reverse hose connections.

OULXA64,00002A8 -19-01JUL04-1/1

Electrical System Troubleshooting

Symptom	Problem	Solution
Battery will not charge	Loose or corroded connections.	Clean and tighten connections.
	Sulfated or worn-out battery.	Replace battery.
	Loose or defective fan belt.	Adjust belt tension or replace belt.
Charging system indicator glows with engine running	Low engine speed.	Increase speed.
	Defective battery.	Replace battery.
	Defective alternator.	See your John Deere dealer.
	Slipping fan belt.	Tighten belt.
Starter inoperative	Gear shift lever in gear.	Move lever to neutral.
	PTO lever in engaged position.	Move PTO lever to disengaged position.
	Low battery output.	Charge or replace battery.
	Blown fuse.	Replace fuse.
Starter cranks slowly	Low battery output.	Charge or replace battery.
	Crankcase oil too heavy.	Use proper viscosity oil.
	Loose or corroded connections.	Clean and tighten loose connections.
Light system does not function; rest of electrical system functions Entire electrical system does not function	Blown fuse.	Replace fuse.
	Faulty battery connection.	Clean and tighten connections.
	Sulfated or worn-out batteries.	Replace battery.
	Blown fuse.	Replace fuse.
Relay(s) sticking or nonfunctional; repeated failures	Diode to protect circuit from arcing has failed.	Replace diode module.

SS40167,000008D -19-20MAR09-1/1

Storage

Storage for Long Period

The following storage preparations are good for long term tractor storage up to one year. When this time is up, run the engine until it reaches operating temperature and operate some hydraulic functions. Afterwards retreat tractor for an extended storage period.

IMPORTANT: Any time your tractor will not be used for over six (6) months, the following recommendations for storing it and removing it from storage will help to minimize corrosion and deterioration.

Change engine oil and replace filter. Change transmission oil and filter. Used oil will not give adequate protection.

Clean air cleaner.

Draining and flushing of cooling system is not necessary if engine is to be stored only for several months. However, for extended storage periods of a year or longer, it is recommended that the cooling system be drained, flushed and refilled. Refill with appropriate coolant.

Fill the fuel tank.

Remove fan/alternator belt, if desired.

Remove and clean battery. Store it in a cool, dry place and keep it fully charged.

Clean the exterior of the tractor with salt-free water and touch up any scratched or chipped painted surfaces with a good quality paint.

Coat all exposed (machined) metal surfaces with grease or corrosion inhibitor if not feasible to paint.

Seal all openings such as the vent tube and exhaust outlet.

Store the machine in a dry, protected place. If the tractor must be stored outside, cover it with a waterproof canvas or other suitable protective material and use a strong waterproof tape.

Block up the tractor so that tires do not touch the ground. Protect tires from heat and sunlight.

Secure clutch pedal in disengaged position.

SS40167,000008E -19-20MAR09-1/1

Remove Tractor from Storage

1. Check tire inflation pressure, see section Lubrication and Periodic Service.
2. Unseal all openings sealed when storing tractor.
3. Install battery.

IMPORTANT: If, on tractors with cab, the air conditioning system compressor has seized, do not run the engine with compressor clutch engaged. Drive belt or compressor damage could be the result.

4. On tractors with cab: Check that compressor pulley moves freely and is not seized.
5. Adjust tension of alternator/fan belt and on tractors with cab, compressor drive belt.
6. Release clutch pedal.
7. Check levels of engine oil, transmission-hydraulic oil, and engine coolant, add if necessary.
8. Drain a small amount of fuel from fuel tank to purge any moisture condensation that has collected.
9. Fill fuel tank.
10. Perform all appropriate 10-hour, 250-hour and 500-hour services as instructed in section Lubrication and Periodic Service.

IMPORTANT: DO NOT operate starting motor more than 20 seconds at a time. Wait at least 2 minutes for starting motor to cool before trying again.

11. Pull hand throttle (F) all the way back, and crank engine until oil pressure rises.



12. Connect wiring lead to fuel injection pump shut-off solenoid.
13. Start engine. Operate engine at slow idle for several minutes. Warm up carefully and check all systems before placing tractor under load.

AGCPTJD0345 —UN—10JUL13

OULXBER,0002275 -19-31OCT13-1/1

Specifications

Engine

Tractor model	5075 5GV, 5GN,5GF, 5GL	5085 5GV, 5GN,5GF, 5GL	5100 5GN, 5GF
Engine	F5C	F5C	NEF
Engine type	F5AE9454KA	F5AE9484G	F4CE9484F
Aspiration	Turbocharged	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled
Power at rated speed (acc. to 97/68 EEC)	55 kW (75 hp)	65 kW (88.4 hp)	74 kW (100 hp)
Maximum torque	310 N•m at 1250 rpm	350 N•m at 1300 rpm	430 N•m at 1250 rpm
Number of cylinders	4	4	4
Bore	99 mm (3.89 in.)	99 mm (3.89 in.)	104 mm (4.09 in.)
Stroke	104 mm (4.09 in.)	104 mm (4.09 in.)	132 mm (5.19 in.)
Displacement	3200 cm3 (195.3 cu.in.)	3200 cm3 (195.3 cu.in.)	4485 cm3 (273.72 cu.in.)
Compression ratio	17 : 1	17 : 1	17,5 : 1
Firing order	1-3-4-2	1-3-4-2	1-3-4-2
Valve Clearance			
— Intake valve clearance	0,25 +/- 0,05	0,25 +/- 0,05	0,25 +/- 0,05
— Exhaust valve clearance	0,50 +/- 0,05	0,50 +/- 0,05	0,50 +/- 0,05
Slow idle	850-900 1/min (rpm)	850-900 1/min (rpm)	800-1000 1/min (rpm)
Fast idle	2550-2600 1/min (rpm)	2550-2600 1/min (rpm)	2350-2480 1/min (rpm)
Rated engine speed	2300 1/min (rpm)	2300 1/min (rpm)	2200 1/min (rpm)
Operating speed range	1200-2300 1/min (rpm)	1200-2300 1/min (rpm)	1200-2200 1/min (rpm)
Engine oil capacity (including oil filter)	9.5 L (2.51 U.S.gal.) U.S.gal. = Liter : 3.785	9.5 L (2.51 U.S.gal.) U.S.gal. = Liter : 3.785	12 L (3.17 U.S.gal.) U.S.gal. = Liter : 3.785
Speed for PTO operation			
— 540 rpm rear PTO	1938 1/min (rpm)	1938 1/min (rpm)	1938 1/min (rpm)
— 540E rpm rear PTO	1648 1/min (rpm)	1648 1/min (rpm)	1648 1/min (rpm)
— 1000 rpm rear PTO	1962 1/min (rpm)	1962 1/min (rpm)	1962 1/min (rpm)

OULXBER,000252E -19-03NOV14-1/1

Transmission

Transmission	Availability
— 12/12 synchronized gears.....	Standard
— 24/24 synchronized gears with mechanical Hi-Lo	Optional
— 24/24 synchronized gears with electro-hydraulic Hi-Lo	Optional
— 24/12 synchronized gears with electro-hydraulic Hi-Lo and declutch switch on gear shift lever.....	Optional
Gear selections	Lever
Shifting	Manual
Final drive	Planetary gear
Clutch	
— 12/12 transmission.....	Dual, dry
— 24/24 transmission.....	Dual, dry
— 24/12 transmission only.....	3 electro-hydraulic wet clutches
— 24/12 transmission only.....	PTO, electro-hydraulic wet clutch

OULXBER,000252F -19-03NOV14-1/1

Specifications

Hydraulic System

Type	Position and draft control
Pump	Tandem gear
Pump displacement	
-Steering	11 cm ³ (0.67 cu.in.)
-Implement	25 cm ³ (1.53 cu.in.)
-Implement (opt) F5C (Not for 5GL model)	11 cm ³ (0.67 cu.in.)
-Implement (opt) NEF (Not for 5GL model)	8 cm ³ (0.49 cu.in.)
Flow rate*	
-Steering F5C	28.9 L/min (7.6 gpm)
-Steering NEF	24.9 L/min (6,55 gpm)
-Implement F5C	64.7 L/min (17.1 gpm)
-Implement NEF	56,5 L/min (14.93 gpm)
-Implement (opt) F5C (Not for 5GL model)	28.9 L/min (7.6 gpm)
-Implement (opt) NEF (Not for 5GL model)	26,0 L/min (6,84 gpm)
Maximum pressure	
-Steering	19000-19500 kPa (190-195 bar; 2756-2683 psi)
-Implement	19000-19500 kPa (190-195 bar; 2756-2683 psi)
-Implement (opt) NEF (3rd hydraulic pump) - (Not for 5GL model)	19000-19500 kPa (190-195 bar; 2756-2683 psi)
Steering system	Hydrostatic power
SCV flow rate (flow rate at 90 % pump efficiency and engine at rated speed)	59 L/min (15.6 gpm)
-Base configuration	10 ±36 L/min (2,64 ±9,52 gpm)
-2 pumps + flow regulator configuration	8 ±40 L/min (2,11 ±10,58 gpm)
-3 pumps + flow regulator configuration	0 ±32 L/min (0 ±8,46 gpm)
*Flow rate at 90% pump efficiency and engine at rated speed	

OULXBER,0002530 -19-03NOV14-1/1

Electrical System

Type	12-volt, negative ground
Battery	12 volts, 100 Ah
Alternator:	
— Tractors with cab	80 A
Starting motor	12 volts, 4.2 kW

OULXBER,0002531 -19-03NOV14-1/1

Capacities

Fuel Tank Capacity						
Tractor models	Tractor without front PTO		Tractor with front PTO		Tractor with auxiliary fuel tank (OPT)	
	L	U.S. gal	L	U.S. gal	L	U.S. gal
5GL	67	17.7	47	12.42	-	-
5GV	74	19.55	52	13.74	-	-
5GN	74	19.55	52	13.74	20	5.28
5GF	74	19.55	52	13.74	20	5.28

Cooling System		
— Tractors without cab		10 L (10.6 U.S. qt.)
— Tractors with cab		12 L (12.72 U.S. qt.)
Crankcase (including filter change)		
F5C		9.5 L (10.04 U.S. qt.)
NEF		12 L (12.72 U.S. qt.)
Transmission/Hydraulic System*		
— 12/212 transmission with front-wheel drive		39 L (10.30 U.S. gal)
— 24/24 transmission without front-wheel drive		37 L (9.77 U.S. gal)
— 24/24 transmission with front-wheel drive		43 L (11.4 U.S. gal)
— 24/12 transmission with front-wheel drive		43 L (11.4 U.S. gal)
Front-Wheel Drive Axle		
5GL		
— final drives, each		0.6 L (0.6 U.S. qt.)
— axle housing		3.5 L (3.7 U.S. qt.)
5GV		
— final drives, each		0.6 L (0.6 U.S. qt.)
— axle housing		4 L (4.24 U.S. qt.)
5GN		
— final drives, each		0.4 L (0.42 U.S. qt.)
— axle housing		3 L (3.18 U.S. qt.)
5GF		
— final drives, each		0.6 L (0.6 U.S. qt.)
— axle housing		3.5 L (3.7 U.S. qt.)
Brake System		
— oil reservoir		0.5 L (0.53 U.S. qt.)
Air Conditioning System		
R134a refrigerant		1.00 Kg
*Oil volume may vary depending on the configuration of the hydraulic system		

OULXBER,0002532 -19-04NOV14-1/1

Specifications

Sound Level

Maximum pass-by noise. Measurement method in accordance with Directive 2009/63/EC

	5GL		5GV		5GN			5GF		
Conditions	5075	5085	5075	5085	5075	5085	5100	5075	5085	5100
In motion dB (A)	84	87	82	82	82	82	84	82	82	84
Stationary dB (A)	80	81	79	81	79	81	81	79	81	81
Engine speed (rpm)	2530	2510	2550	2550	2550	2550	2450	2550	2550	2400

Max. sound level at operator's ear. Measurement method in accordance with Directive 2009/76/EC, Annex II

	5GL	5GV	5GN	5GF
ROPS	86	86	86	86
Cab (open)	-	83	83	83
Cab (closed)	-	82	82	82

OULXBER,0002533 -19-03NOV14-1/1

Fuel System

Type mech. distributor-type injection pump

OULXBER,000212EGL -19-22JUL13-1/1

Brakes

Type	Oil immersed multi disk
Number of disks per side	5
Outer diameter of disks	165 mm (6.5 in.)
Inner diameter of disks	110 mm (4.3 in.)

OULXBER,0002534 -19-03NOV14-1/1

Three-Point Hitch

Three point hitch category - I, II and 1N.

	5GL		5GV		5GN		5GF	
	Kg	lb	Kg	lb	Kg	lb	Kg	lb
Maximum lifting force	2370	5224	2400	5290	2400	5290	2400	5290
Hitch lift capacity at 610 mm	1730	3813	1780	3923	1780	3923	1780	3923
Additional cylinder max lift capacity – ball ends *	-	-	-	-	3040	6700	3040	6700

* optional (3 tons)

OULXBER,0002535 -19-16OCT15-1/1

Specifications

Loads and Weights

Drawbar	EEC	736 daN
Wagon hitch	EEC pin	1275 daN
	EEC sliding	1500 daN
Wagon hitch CUNA	C	1500 daN
	D2	2000 daN
Pickup-hitch	Drawbar	1200 daN
	Hook	2000 daN

NOTE: Traffic regulations in certain countries may restrict the permissible loads and total weight to figures lower than those quoted above.

OULXBER,0002538 -19-04NOV14-1/1

Towable Loads

Depending on how the towed load is braked, the following weights and speeds are permitted:

	Max. weight of load at max travel speed 25 km/h (15.5 mph)							
	5GL		5GV		5GN		5GF	
Trailer brake system	Kg	lb	Kg	lb	Kg	lb	Kg	lb
unbraked	2600	5732	2750	6063	3000	6614	3000	6614
independently braked	6000	13228	6000	13228	6000	13228	6000	13228
overrun brake	8000	17635	8000	17635	8000	17635	8000	17635
hydraulic brake	14000	30865	16000	35274	18000	39683	18000	39683

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

OULXBER,0002539 -19-04NOV14-1/1

Shipping Weights

Shipping weights of tractors without front-wheel drive								
	5GL		5GV		5GN		5GF	
	kg	lb	kg	lb	kg	lb	kg	lb
Front	-	-	975 - 1125	2150 - 2480	975 - 1125	2150 - 2480	1075 - 1300	2370 - 2866
Rear	-	-	1450 - 1625	3197 - 3583	1525 - 1775	3362 - 3913	1600 - 1775	3527 - 3913
Total	-	-	2425 - 2750	5346 - 6063	2500 - 3000	5512 - 6614	2675 - 3075	5897 - 6779
Shipping weights of tractors with front-wheel drive								
	5GL		5GV		5GN		5GF	
	kg	lb	kg	lb	kg	lb	kg	lb
Front	1150 - 1275	2535 - 2811	1075 - 1200	2370 - 2646	1100 - 1325	2205 - 2921	1200 - 1375	2646 - 3031
Rear	1500	3307	1450 - 1625	3197 - 3583	1525 - 1800	3362 - 3968	1600 - 1825	3527 - 4023
Total	2650 - 2775	5842 - 6118	2525 - 2825	5567 - 6228	2625 - 3125	5787 - 6889	2800 - 3200	6173 - 7055

NOTE: Tare weight (according to EEC 74/150) is the unladen weight of tractor in running order, excluding

optional accessories but including coolant, oils, full fuel tank, tools and operator (75 kg; 165 lb).

OULXBER,000253A -19-03NOV14-1/1

Maximum Permissible Axle Loads and Total Weights

Max. permissible load on tractors without front-wheel drive								
	5GL		5GV		5GN		5GF	
	kg	lb	kg	lb	kg	lb	kg	lb
Front	-	-	1800	3968	1800	3968	1800	3968
Rear	-	-	3000	6614	3000	6614	3000	6614
Total	-	-	4100	9039	4200	9259	4200	9259
Total 3 ton	-	-	3500	7716	3500	7716	3500	7716

Max. permissible load on tractors with front-wheel drive								
	5GL		5GV		5GN		5GF	
	kg	lb	kg	lb	kg	lb	kg	lb
Front	1900	4189	2000	4409	2200	4850	2250	4960
Rear	2500	5512	3000	6614	3100	6834	3100	6834
Total*	4200	9259	4100	9039	4400	9700	4400	9700
Total 3 ton	3500	7716	3500	7716	3500	7716	3500	7716

NOTE: The max. permissible total weight is the weight of tractor and equipment allowed for driving on public roads up to 40 km/h (25 mph), without, however, exceeding individual axle and tire capacity.

NOTE: Traffic regulations in certain countries may restrict the permissible axle loads and total weight to figures lower than those quoted above.

* in certain countries limited to 3500 kg; 7716 lb

⚠ CAUTION: Under no circumstances must this weight be exceeded.

IMPORTANT: Comply with maximum load capacity of tires.

OULXBER,000253B -19-03NOV14-1/1

Maximum Permissible Axle Load in Relation to Tires (Normal Operation)

IMPORTANT: The maximum permissible axle load must never be exceeded even though the tire load capacity is higher.

NOTE: The axle loads quoted here for normal operation apply only for travel speeds up to 40 km/h (25 mph) and at recommended inflation pressure.

NOTE: Traffic regulations in certain countries may restrict the permissible axle loads and total weight to figures lower than those quoted in the tables.

NOTE: Maximum tire load capacity depends on the recommended tire pressure. Use of tires with a load capacity exceeding the front-wheel drive axle load capacity allows lowering of the recommended tire pressure without any effect on the permissible front axle load. This can be advantageous when operating in difficult ground conditions. When reducing the tire pressure, refer to load capacity tables and tire pressure recommendations of the relevant tire manufacturers.

5GV Without Front-Wheel Drive											
Maximum permissible front axle load 1800 kg (3968 lb.)											
Maximum permissible rear axle load 3000 kg (6614 lb.)											
Rear Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure		Front Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure	
9.5 R28	109 A8	kg	2060	bar	1.6	6.00-16	8 PR	kg	1340	bar	3.3
		lb.	4542	psi	23			lb.	2954	psi	48
280/85 R28	118 A8	kg	2640	bar	1.6	6.00-16	8 PR	kg	1340	bar	3.3
		lb.	5820	psi	23			lb.	2954	psi	48
360/70 R24	122 A8	kg	3000	bar	1.6	6.00-16	8 PR	kg	1340	bar	3.3
		lb.	6614	psi	23			lb.	2954	psi	48
320/85 R28	124 A8	kg	3200*	bar	1.6	6.50-16	8 PR	kg	1500	bar	4.2
		lb.	7055*	psi	23			lb.	3307	psi	61
340/85 R24	125 A8	kg	3300*	bar	1.6	6.00-16	8 PR	kg	1340	bar	3.3
		lb.	7275*	psi	23			lb.	2954	psi	48
* exceeds the maximum permissible axle load.											
5GV With Front-Wheel Drive											
Maximum permissible front axle load 2000 kg (4409 lb.)											
Maximum permissible rear axle load 3000 kg (6614 lb.)											
Rear Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure		Front Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure	
250/85 R28	112 A8	kg	2240	bar	1.6	6.50-16	99 A8	kg	1550	bar	3.2
		lb.	4938	psi				lb.	3417	psi	46
280/85 R28	118 A8	kg	2640	bar	1.6	260/70 R16	109 A8	kg	2060*	bar	2.4
		lb.	5820	psi				lb.	4542*	psi	35
280/85 R28	118 A8	kg	2640	bar	1.6	6.50-16	99 A8	kg	1550	bar	3.2
		lb.	5820	psi				lb.	3417	psi	46
320/85 R24	122 A8	kg	3000	bar	1.6	6.50-16	99 A8	kg	1550	bar	3.2
		lb.	6614	psi				lb.	3417	psi	46
360/70 R24	122 A8	kg	3000	bar	1.6	240/70 R16	104 A8	kg	1800	bar	2.4
		lb.	6614	psi				lb.	3968	psi	35
360/70 R28	125 A8	kg	3300*	bar	1.6	280/70 R16	112 A8	kg	2240*	bar	2.4
		lb.	7275*	psi				lb.	4938*	psi	35
250/85 R28	112 A8	kg	3200*	bar	1.6	6.00-16	8 PR	kg	1400	bar	4
		lb.	7055*	psi				lb.	3086	psi	58
320/85 R28	124 A8	kg	3200*	bar	1.6	7.50 R16	100 A8	kg	1600	bar	3.2
		lb.	7055*	psi				lb.	3527	psi	46
340/85 R24	125 A8	kg	3300*	bar	1.6	10.0/75-15.3	8 PR	kg	2300*	bar	3
		lb.	7275*	psi				lb.	5071*	psi	44

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340/85 R24	125 A8	kg	3300*	bar	1.6	260/70 R16	109 A8	kg	2060*	bar	2.4
		lb.	7275*	psi				lb.	4542*	psi	35
340/85 R24	125 A8	kg	3300*	bar	1.6	6.50-16	99 A8	kg	1550	bar	3.2
		lb.	7275*	psi				lb.	3417	psi	46
340/85 R28	127 A8	kg	3500*	bar	1.6	7.50 R16	100 A8	kg	1600	bar	3.2
		lb.	7716*	psi				lb.	3527	psi	46
320/85 R24	122 A8	kg	3000	bar	1.6	260/70 R16	109 A8	kg	2060*	bar	2.4
		lb.	6614	psi				lb.	4542*	psi	35
340/85 R28	127 A8	kg	3500*	bar	1.6	8.25-16	8 PR	kg	1800	bar	2.4
		lb.	7716*	psi				lb.	3968	psi	35

* exceeds the maximum permissible axle load.

5GN Without Front-Wheel Drive

Maximum permissible front axle load 1800 kg (3968 lb.)

Maximum permissible rear axle load 3100 kg (6834 lb.)

Rear Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure		Front Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure	
280/85 R28	118 A8	kg	2640	bar	1.6	6.00-16	8 PR	kg	1340	bar	3.3
		lb.	5820	psi	23			lb.	2954	psi	48
320/85 R28	124 A8	kg	3200*	bar	1.6	6.00-16	8 PR	kg	1340	bar	3.3
		lb.	7055*	psi	23			lb.	2954	psi	48
340/85 R24	125 A8	kg	3300*	bar	1.6	6.00-16	8 PR	kg	1340	bar	3.3
		lb.	7275*	psi	23			lb.	2954	psi	48
340/85 R28	127 A8	kg	3500*	bar	1.6	6.50-16	8 PR	kg	1500	bar	4.2
		lb.	7716*	psi	23			lb.	3307	psi	61
340/85 R28	127 A8	kg	3500*	bar	1.6	7.50-16	8 PR	kg	1740	bar	3.7
		lb.	7716*	psi	23			lb.	3836	psi	54

* exceeds the maximum permissible axle load.

5GN With Front-Wheel Drive

Maximum permissible front axle load 2200 kg (4850 lb.)

Maximum permissible rear axle load 3100 kg (6834 lb.)

Rear Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure		Front Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure	
320/85 R28	124 A8	kg	3200*	bar	1.6	7.50 R16	100 A8	kg	1600	bar	3.2
		lb.	7055*	psi	23			lb.	3527	psi	46
380/70 R24	125 A8	kg	3300*	bar	1.6	260/70 R16	109 A8	kg	2060	bar	2.4
		lb.	7275*	psi	23			lb.	4542	psi	35
340/85 R28	127 A8	kg	3500*	bar	1.6	7.50 R16	100 A8	kg	1600	bar	3.2
		lb.	7716*	psi	23			lb.	3527	psi	46
340/85 R28	127 A8	kg	3500*	bar	1.6	280/70 R18	114 A8	kg	2360*	bar	2.4
		lb.	7716*	psi	23			lb.	5203*	psi	35
340/85 R28	127 A8	kg	3500*	bar	1.6	8.25-16	8 PR	kg	1800	bar	2.9
		lb.	7716*	psi	23			lb.	3968	psi	42
420/70 R28	133 A8	kg	4120*	bar	1.6	280/70 R18	114 A8	kg	2360*	bar	2.4
		lb.	9083*	psi	23			lb.	5203*	psi	35
380/85 R28	133 A8	kg	4120*	bar	1.6	7.50 R18	102 A8	kg	1700	bar	3.2
		lb.	9083*	psi	23			lb.	3748	psi	46
380/85 R28	133 A8	kg	4120*	bar	1.6	280/70 R18	114 A8	kg	2360*	bar	2.4
		lb.	9083*	psi	23			lb.	5203*	psi	35
280/85 R28	118 A8	kg	3300*	bar	1.6	260/70 R16	109 A8	kg	2060	bar	2.4
		lb.	7275*	psi	23			lb.	4542	psi	35

* exceeds the maximum permissible axle load.

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Specifications

5GF Without Front-Wheel Drive

Maximum permissible front axle load 1800 kg (3968 lb.)

Maximum permissible rear axle load 3100 kg (6834 lb.)

Rear Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure		Front Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure	
320/85 R28	124 A8	kg	3200*	bar	1.6	6.00-16	8 PR	kg	1340	bar	3.3
		lb.	7055*	psi	23			lb.	2954	psi	48
340/85 R28	127 A8	kg	3500*	bar	1.6	6.50-16	8 PR	kg	1500	bar	4.2
		lb.	7716*	psi	23			lb.	3307	psi	61
340/85 R28	127 A8	kg	3500*	bar	1.6	7.50-16	8 PR	kg	1740	bar	3.7
		lb.	7716*	psi	23			lb.	3836	psi	54
380/70 R28	127 A8	kg	3500*	bar	1.6	7.50-16	8 PR	kg	1740	bar	3.7
		lb.	7716*	psi	23			lb.	3836	psi	54
380/85 R28	133 A8	kg	4120*	bar	1.6	7.50-16	8 PR	kg	1740	bar	3.7
		lb.	9083*	psi	23			lb.	3836	psi	54

* exceeds the maximum permissible axle load.

5GF With Front-Wheel Drive

Maximum permissible front axle load 2250 kg (4960 lb.)

Maximum permissible rear axle load 3100 kg (6834 lb.)

Rear Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure		Front Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure	
380/70 R24	125 A8	kg	3300*	bar	1.6	280/70 R18	114 A8	kg	2360*	bar	2.4
		lb.	7275*	psi	23			lb.	5203*	psi	35
380/70 R28	127 A8	kg	3500*	bar	1.6	280/70 R20	116 A8	kg	2500*	bar	2.4
		lb.	7716*	psi	23			lb.	5512*	psi	35
480/65 R24	136 A8	kg	4480*	bar	1.6	280/70 R18	114 A8	kg	2360*	bar	2.4
		lb.	9877*	psi	23			lb.	5203*	psi	35
420/70 R24	130 A8	kg	3800*	bar	1.6	280/70 R20	116 A8	kg	2500*	bar	2.4
		lb.	8378*	psi	23			lb.	5512*	psi	35
420/70 R28	133 A8	kg	4120*	bar	1.6	300/70 R20	110 A8	kg	2120	bar	3
		lb.	9083*	psi	23			lb.	4674	psi	44
420/70 R28	133 A8	kg	4120*	bar	1.6	320/70 R20	113 A8	kg	2300*	bar	1.6
		lb.	9083*	psi	23			lb.	5071*	psi	23
480/65 R28	139 A8	kg	4860*	bar	1.6	320/70 R20	113 A8	kg	2300*	bar	1.6
		lb.	10714*	psi	23			lb.	5071*	psi	23
380/85 R28	133 A8	kg	4120*	bar	1.6	9.5R20	8 PR	kg	1560	bar	3.2
		lb.	9083*	psi	23			lb.	3439	psi	46
380/70 R28	127 A8	kg	3500*	bar	1.6	250/80-18	8 PR	kg	2430*	bar	3.2
		lb.	7716*	psi	23			lb.	5357*	psi	46
420/70 R24	130 A8	kg	3800*	bar	1.6	280/70 R18	114 A8	kg	2360*	bar	2.4
		lb.	8378*	psi	23			lb.	5203*	psi	35

* exceeds the maximum permissible axle load.

5GL With Front-Wheel Drive

Maximum permissible front axle load 1990 kg (4387 lb.)

Maximum permissible rear axle load 3000 kg (6614 lb.)

Rear Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure		Front Tires	Load Index (LI)	Tire load capacity (value for two tires per axle)		Inflation Pressure	
380/70R20	122 A8	kg	3000	bar	1.6	260/70 R16	109 A8	kg	2060*	bar	2.4
		lb.	6614	psi	23			lb.	4542*	psi	35

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360/70R2 4	122 A8	kg	3000	bar	1.6	280/70 R16	112 A8	kg	2240*	bar	2.4
		lb.	6614	psi	23			lb.	4938*	psi	35
380/70R2 4	125 A8	kg	3000	bar	1.6	280/70 R16	112 A8	kg	2240*	bar	2.4
		lb.	6614	psi	23			lb.	4938*	psi	35
440/65 R24	128 A8	kg	3900*	bar	1.6	280/70 R18	114 A8	kg	2360*	bar	2.4
		lb.	8598*	psi	23			lb.	5203*	psi	35

* exceeds the maximum permissible axle load.

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Load Capacity of Tires With Front Loader

Load capacity with front loader is obtained by multiplying the load capacity of the tire by the percentage given in the table (load capacity varies from tire manufacturer to tire manufacturer).

To obtain precise figures, see the tire manual provided by the tire manufacturer.

Permissible load capacity in percent					
Speed		without front-wheel drive	with front-wheel drive	with front-wheel drive	with front-wheel drive
		PR ^a tires	PR ^a tires	A6 ^a tires	A8 ^b tires
km/h	mph	%	%	%	%
8	5.0	150	140	150	150
15	9.0	—	—	134	134
20	12.5	135	120	123	123
25	15.5	115	107	111	111
30	18.5	100	100	100	107
35	21.5	—	—	95	103
40	25.0	—	—	90	100

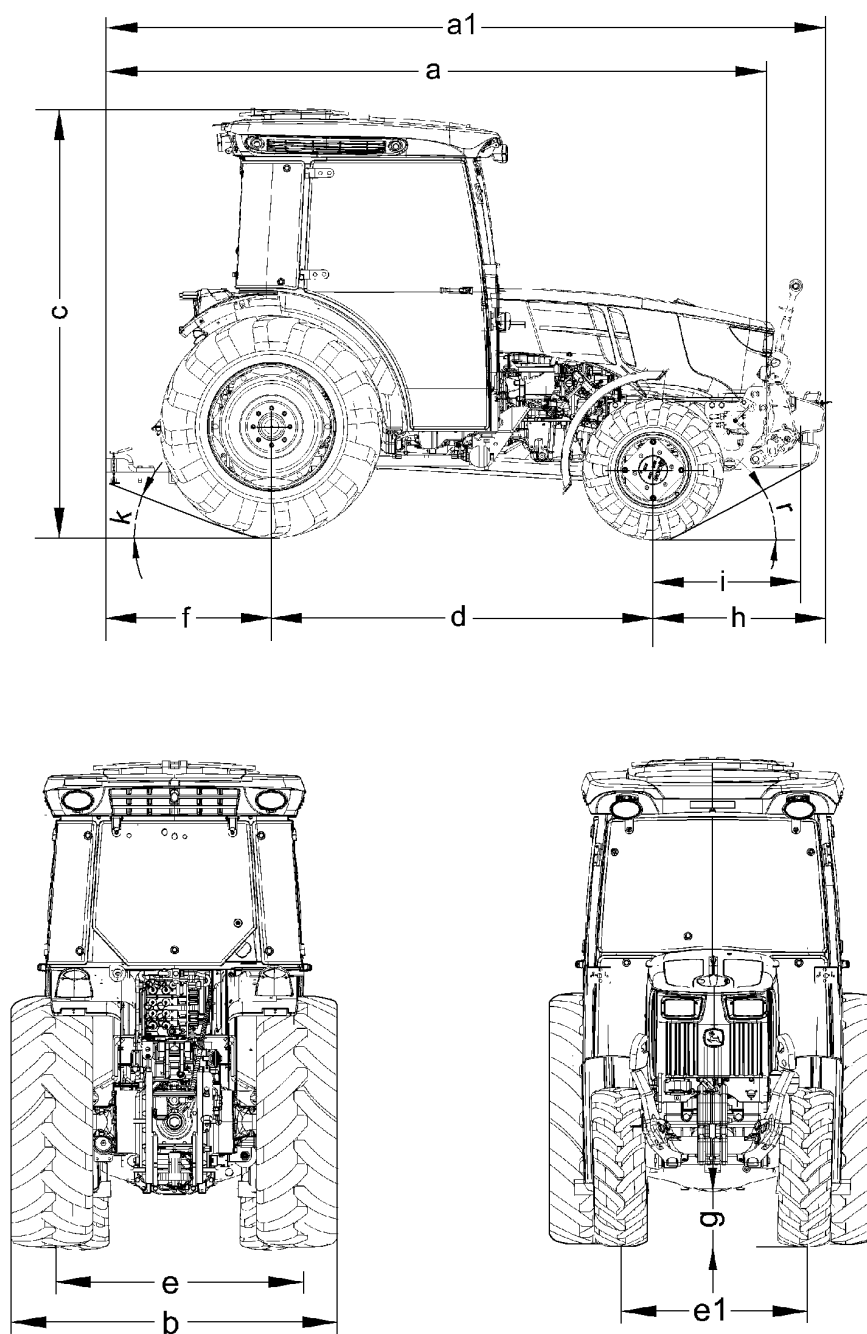
^aTires up to 30 km/h (18.5 mph)

^bTires up to 40 km/h (25 mph)

NOTE: Max. travel speed with front loader is 8 km/h (5 mph). Max. front tread width with front loader is 1.80 m (71 in.).

OULXBER,0002137GL -19-05DEC13-1/1

Dimensions - 5GV, 5GN and 5GF with Cab



AGCPTJD0655 —UN—06NOV14

AGCPTJD0656 —UN—29OCT14

5GV, 5GN, GF and 5GL with Cab All dimensions in mm.		GV		GN		GF	
		F5C		F5C		NEF	
a	2WD	3995	3995	3995	3995	4082	4082
	4WD	3995	3995	3995	3995	4082	4082
a1	2WD	4319	4319	4319	4319	4406	4406
	4WD	4319	4319	4319	4319	4406	4406

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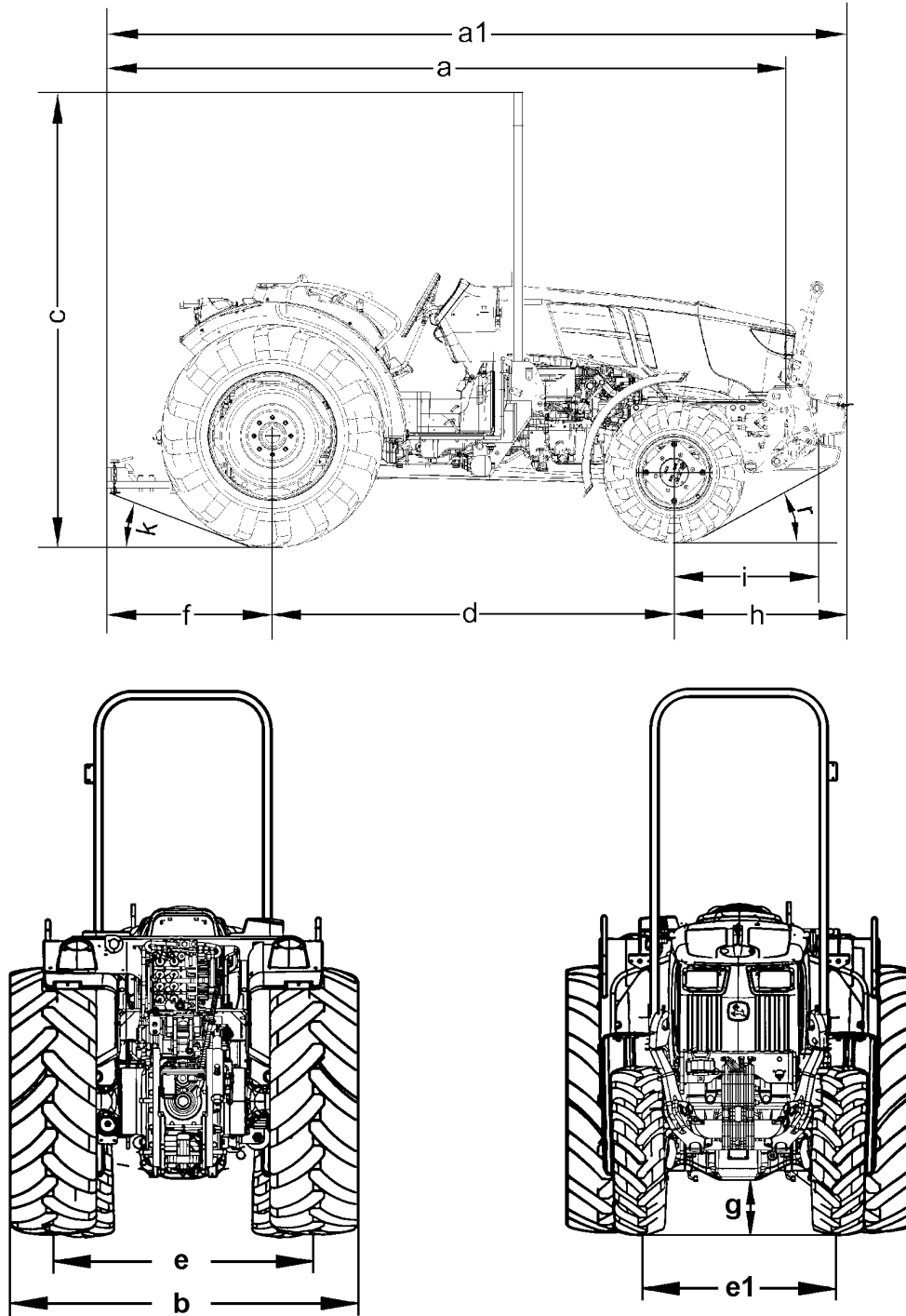
OULXBER.000253D -19-06NOV14-1/2

Specifications

b max	2WD	1642	1785	1785	1958	1958
	4WD	1642	1785	1785	1958	1958
c	2WD	2325	2350	2350	2355	2355
	4WD	2334	2371	2371	2355	2355
d	2WD	2098	2098	2185	2098	2185
	4WD	2098	2098	2185	2074	2161
e1	2WD	776-974	776-974	776-974	998-1382	998-1382
	4WD	825-1048	846-1112	846-1112	1119-1603	1119-1603
e	2WD	848-1279	955-1359	955-1359	984-1629	984-1629
	4WD	848-1279	955-1359	955-1359	984-1629	984-1629
f	2WD	1063	1063	1063	1063	1063
	4WD	1063	1063	1063	1063	1063
g min	2WD	292,26	292	292	292	292
	4WD	227	254	254	241	241
g max	2WD	292,26	322	322	322	322
	4WD	267	289	289	346	346
h	2WD	1163	1163	1163	1163	1163
	4WD	1159	1156	1156	1182	1182
i	2WD	1019	1019	1019	1019	1019
	4WD	1016	1012	1012	1039	1039
r	2WD	20°	20°	20°	20°	20°
	4WD	20°	20°	20°	20°	20°
k	2WD	14°	16°	16°	15°	15°
	4WD	14°	16°	16°	15°	15°
FRONT TYRES	2WD	6.50-16	7.50-16		7.50-16	
	4WD	7.50-16	7.50-18		9.50 R20	
REAR TYRES	2WD	320/85 R28	340/85 R28		380/85 R28	
	4WD	340/85 R28	380/85 R28		380/85 R28	

OULXBER,000253D -19-06NOV14-2/2

Dimensions - 5GV, 5GN, GF and 5GL with ROPS



AGCPTJD0726 —UN—06NOV14

AGCPTJD0427 —UN—24JUL13

Dimensions, 5GV, 5GN and 5GF with ROPS. All dimensions in mm.		GV	GN		GF		GL
		F5C	F5C	NEF	F5C	NEF	F5C
a	2WD	3995	3995	4082	3995	4082	-
	4WD	3995	3995	4082	3995	4082	3840
a1	2WD	4319	4319	4406	4319	4406	-
	4WD	4319	4319	4406	4319	4406	4164

Continued on next page

OULXBER,000253E -19-06NOV14-1/2

Specifications

b max	2WD	1642	1785	1785	1958	1958	-
	4WD	1642	1785	1785	1958	1958	1829
c	2WD	2460	2469	2539	2490	2560	-
	4WD	2469	2490	2560	2490	2560	2420
d	2WD	2098	2098	2185	2098	2185	-
	4WD	2098	2098	2185	2074	2161	2074
e1	2WD	776-974	776-974	776-974	998-1382	998-1382	-
	4WD	825-1048	846-1112	846-1112	1119-1603	1119-1603	1181-1445
e	2WD	848-1279	955-1359	955-1359	984-1629	984-1629	-
	4WD	848-1279	955-1359	955-1359	984-1629	984-1629	1024-1591
f	2WD	1063	1063	1063	1063	1063	-
	4WD	1063	1063	1063	1063	1063	908
g min	2WD	292	292	292	292	292	-
	4WD	227	254	254	241	241	180
g max	2WD	292	322	322	322	322	-
	4WD	267	289	289	346	346	230
h	2WD	1163	1163	1163	1163	1163	-
	4WD	1159	1156	1156	1182	1182	1181
i	2WD	1019	1019	1019	1019	1019	-
	4WD	1016	1012	1012	1039	1039	1042
r	2WD	20°	20°	20°	20°	20°	-
	4WD	19,23°	20,48°	20,48°	20,24°	20,24°	12,71°
k	2WD	14,48°	15,64°	15,64°	14,54°	14,54°	-
	4WD	14,48°	15,64°	15,64°	14,54°	14,54°	15,38°
FRONT TYRES	2WD	6.50-16	7.50-16		7.50-16		-
	4WD	7.50-16	7.50-18		9.50 R20		280/70 R16
REAR TYRES	2WD	320/85 R28	340/85 R28		380/85 R28		-
	4WD	340/85 R28	380/85 R28		380/85 R28		380/70 R24

OULXBER,000253E -19-06NOV14-2/2

Safety Note Regarding the Subsequent Installation of Electrical and Electronic Appliances and/or Components

The machine is equipped with electronic components whose function may be influenced by electromagnetic radiation from other appliances. Such influences may be hazardous, so take the following safety instructions into account:

No tampering with the tractor's on-board electrical system is permitted. Subsequent installation of electrical/electronic appliances in the machine must make use of the sockets and connectors provided for this purpose. In every case, the user must verify whether the installation affects the electronics or other components. This applies particularly to:

- Implement control units/monitors
- Performance monitors
- Audio/video systems, communications systems

In particular, subsequently installed electrical/electronic components must comply with the relevant edition of EMC Directive 89/336/EEC, and be CE marked.

If mobile communication systems (e.g. radio communication, telephone) are to be installed subsequently, the following extra requirements must be met:

- Only devices with an approval complying with the valid national regulation (i.e. BZT approval in Germany) shall be installed;
- The device shall be installed securely;
- Portable or mobile devices may be operated in the vehicle only if connected to a fixed outside antenna;
- Transmitters shall be installed separately from the vehicle's electronics;
- The antenna must be installed in a professional manner, with a good ground connection between the antenna and the vehicle ground.

Wiring, installation and maximum permissible current supply must be as stated in the installation instructions of the machine manufacturer.

OULXBER,000213B -19-19JUL13-1/1

How to Calculate Maximum Permissible Download on Trailer Hitch

Calculation of maximum permissible download at the trailer hitch in relation to Load Index (LI)

- The load index can be read on the sidewall of the tire. If the index is not provided, refer to the tire's load capacity as quoted by the tire manufacturer.
- The load index is quoted in conjunction with a Speed index (SI)
- As a rule, the load capacity of the tire in kg can be derived directly from the LI; see the following table:

LI	kg	LI	kg	LI	kg	LI	kg
90	600	111	1090	132	2000	153	3650
91	615	112	1120	133	2060	154	3750
92	630	113	1150	134	2120	155	3875
93	650	114	1180	135	2180	156	4000
94	670	115	1215	136	2240	157	4125
95	690	116	1250	137	2300	158	4250
96	710	117	1285	138	2360	159	4375
97	730	118	1320	139	2430	160	4500
98	750	119	1360	140	2500	161	4625
99	775	120	1400	141	2575	162	4750
100	800	121	1450	142	2650	163	4875
101	825	122	1500	143	2725	164	5000
102	850	123	1550	144	2800	165	5150
103	875	124	1600	145	2900	166	5300
104	900	125	1650	146	3000	167	5450
105	925	126	1700	147	3075	168	5600
106	950	127	1750	148	3150	169	5800
107	975	128	1800	149	3250	170	6000
108	1000	129	1850	150	3350	171	6150
109	1030	130	1900	151	3450	172	6300
110	1060	131	1950	152	3550	173	6500

As a general rule, SI A8 implies a top speed of 40 km/h (25 mph), while SI B implies a top speed of 50 km/h (31 mph). If the SI is different, the manufacturer's instructions apply.

Calculate maximum trailer hitch download as follows:

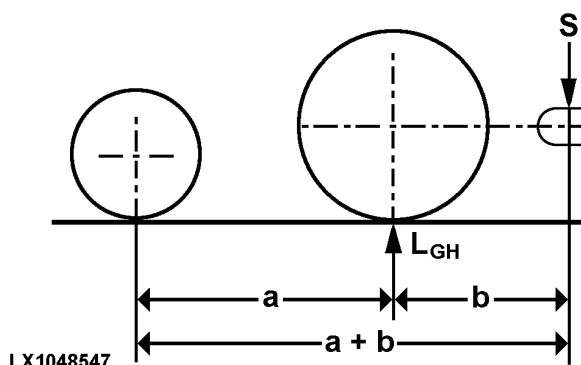
$$S = \frac{(H_{\max} - L_{GH}) * a}{a + b}, \text{ where}$$

$H_{\max}$ = the smaller value from 2*load capacity of a tire on the rear axle and the maximum permissible rear axle load in kg

L_{GH} = the mass in kg acting on the ground through the rear wheels (to be ascertained by weighing)

a = the wheelbase (the horizontal distance between the front and rear axles)

b = the rear overhang (the horizontal distance between the center of the rear axle and center of the hitch point)



Example of how to calculate maximum trailer hitch download:

Given that: Empty mass on rear axle $L_{GH} = 1800$ kg

Wheelbase $a = 2100$ mm

Overhang $b = 600$ mm

Tire marking = 130A8

Maximum permitted speed of tractor = 40 km/h (25 mph)

Permissible rear axle load = 3500 kg

$H_{\max} = 3500$ kg

($1900 \text{ kg} * 2 = 3800 \text{ kg}$, rear axle load = 3500 kg)

$$S = \frac{(3500 \text{ kg} - 1800 \text{ kg}) * 2100 \text{ mm}}{2100 \text{ mm} + 600 \text{ mm}} = 1322 \text{ kg}$$

CAUTION: At least 20% of the vehicle's total unladen mass must be on the front axle.

Trailer hitch download must not exceed the trailer hitch limit specified by the manufacturer.

How to Calculate Permissible Mass

Calculating permissible tractor mass and permissible trailer mass on the basis of the D value

EC-approved, dynamically tested trailer hitches are always provided with a D value. This is calculated as follows:

$$D = \frac{G * A * B}{A + B}, \text{ where}$$

D = D value of hitch

G = Gravitational constant 9.81 m/s²

A = Tractor mass

B = Trailer mass

To calculate trailer mass for a given D value and a given tractor mass, and to calculate tractor mass for a given D value and a given trailer mass, use the following formulas:

$$\text{Tractor mass } A = \frac{D * B}{G * B - D}$$

$$\text{Trailer mass } B = \frac{D * A}{G * A - D}$$

*NOTE: If when calculating A the product of G*B exceeds the D value, or if when calculating B the product of G*A exceeds the D value, then the result of this calculation is negative. Even so, the D value is sufficient for every combination of tractor mass and trailer mass.*

Example of how to calculate permissible trailer mass:

Given that: D value, D = 55 kN = 55000 N

Tractor mass A = 7000 kg

$$B = \frac{55000 \text{ N} * 7000 \text{ kg}}{9.81 \text{ m/s}^2 * 7000 \text{ kg} - 55000 \text{ N}} = 28163 \text{ kg}$$

Pay close attention to permissible towed mass and tractor mass!

OULXBER,000213D -19-19JUL13-1/1

Vibration

All operator's seats approved by John Deere are component type-approved in accordance with 78/764/EEC, 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
- Correctly ballasted tractor
- Correctly adjusted operator's seat
- Correct tire pressure

OULXBER,000193C -19-15JUL10-1/1

Safety Note Regarding the Subsequent Installation of Electrical and Electronic Appliances and/or Components

The machine is equipped with electronic components whose function may be influenced by electromagnetic radiation from other appliances. Such influences may be hazardous. Therefore, observe the following safety instructions:

No tampering with the tractor's on-board electrical system is permitted. Subsequent installation of electrical/electronic appliances in the machine must make use of the sockets and connectors provided for this purpose. In every case, the user must verify whether the installation affects the electronics or other components. This applies particularly to:

- Implement control units/monitors
- Performance monitors
- Audio/video systems, communications systems

In particular, subsequently installed electrical/electronic components must comply with the relevant edition of EMC Directive 2004/108/EC, and be CE marked.

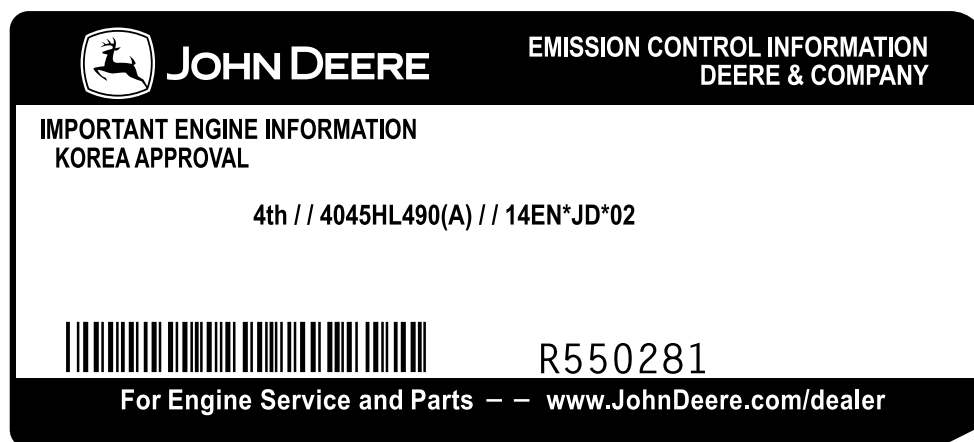
If mobile communication systems (e.g. radio communication, telephone) are to be installed subsequently, the following extra requirements must be met:

- Only devices with an approval complying with the valid national regulation (i.e. BZT approval in Germany) shall be installed
- The device shall be installed securely
- Portable or mobile devices may be operated in the vehicle only if connected to a fixed outside antenna
- Transmitters shall be installed separately from the vehicle's electronics
- The antenna must be installed in a professional manner, with a good ground connection between the antenna and the vehicle ground

Wiring, installation and maximum permissible current supply must be as stated in the installation instructions of the machine manufacturer.

LX,OMTRAK,EMV -19-15JUL11-1/1

Emissions Control System Certification Label (Korea)



RG26993 — UN—09APR15

Engine Emissions Label

DX,EMISSIONS,LABEL,KO -19-09APR15-1/1

Machine Design Life

This machine is designed and manufactured to provide a long life of productive operation, however actual attainable life depends on a number of factors including the severity of working conditions and completion of recommended maintenance. (See the Service section of this manual.)

Periodically inspect and review the machine in conjunction with your John Deere dealer. The review may result in recommendations for service, component repair,

remanufacture or replacement, or, if at the end of life, that the machine be removed from operation. (See separate decommissioning section of this manual for information on disposal and recycling of machine components.)

No machine should be operated if safety-related components are missing or in need of service. All missing or damaged safety-related components, including safety signs, should be repaired or replaced before operating.

DX,MACH,DESIGN,LIFE -19-14SEP15-1/1

Serial Numbers

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. Also, they are needed for law enforcement to trace your tractor if it is ever stolen. ACCURATELY record these characters in the spaces provided.

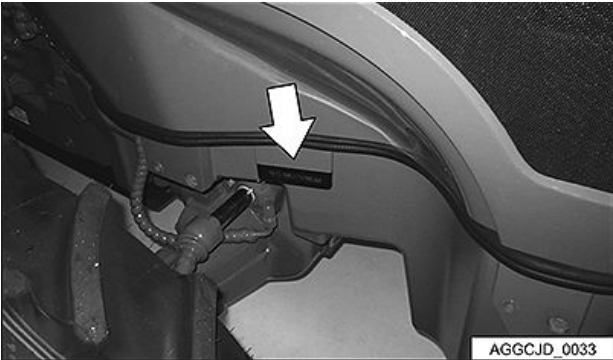
OULXBER,00020EC -19-12JUN13-1/1

Product Identification Number

The 'product identification number is on the right-hand side of the front support.

Product Identification Number (17 Digits)

*																*



AGGCJD0033—UN—29SEP15

OULXBER,00027DC -19-09OCT15-1/3

Product Identification Number Plates

Due to different regulations, in some countries the location and dimensions of the identification plate (A) can vary.



AGGCJD0034—UN—29SEP15

OULXBER,00027DC -19-09OCT15-2/3

Safety Structure Plates

Plate (B) is fixed on the ROPS.



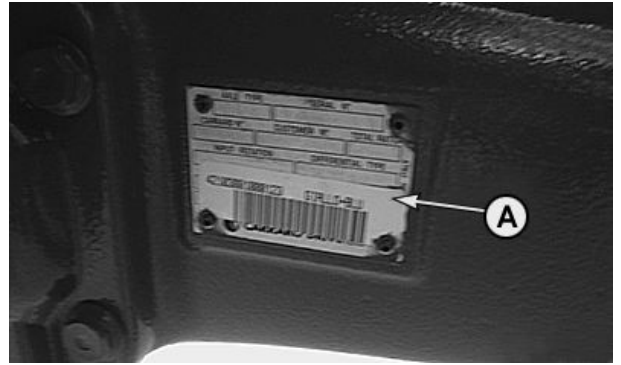
AGGCJD0035—UN—29SEP15

OULXBER,00027DC -19-09OCT15-3/3

Front Wheel Drive Serial Number

The Front Wheel Drive serial number plate (A) is located on the rear side of the right-hand axle housing.

Front Wheel Drive Serial Number _____



AGCPTJD0430—UN—17OCT13

OULXBER,000232F -19-30JAN14-1/1

Serial Numbers

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John Deere Service Keeps You On the Job

John Deere Parts

We help minimize downtime by putting genuine John Deere parts in your hands in a hurry.

That's why we maintain a large and varied inventory—to stay a jump ahead of your needs.



DX,IBC,A -19-04JUN90-1/1

TS100 —UN—23AUG88

The Right Tools

Precision tools and testing equipment enable our Service Department to locate and correct troubles quickly . . . to save you time and money.



DX,IBC,B -19-04JUN90-1/1

TS101 —UN—23AUG88

Well-Trained Technicians

School is never out for John Deere service technicians.

Training schools are held regularly to be sure our personnel know your equipment and how to maintain it.

Result?

Experience you can count on!



DX,IBC,C -19-04JUN90-1/1

TS102 —UN—23AUG88

Prompt Service

Our goal is to provide prompt, efficient care when you want it and where you want it.

We can make repairs at your place or at ours, depending on the circumstances: see us, depend on us.

JOHN DEERE SERVICE SUPERIORITY: We'll be around when you need us.



DX,IBC,D -19-04JUN90-1/1

TS103 —UN—23AUG88

