XUV825E, XUV825M Gator™ Utility Vehicle

(Serial No. 010001 -)

JOHN DEERE

OPERATOR'S MANUAL

Gator™ Utility Vehicle XUV825E, XUV825M

OMUC14272 ISSUE I8 (ENGLISH)

CALIFORNIA

Proposition 65 Warning

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

If this product contains a gasoline engine:

⚠ WARNING

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

The State of California requires the above two warnings.

Additional Proposition 65 Warnings can be found in this manual.

John Deere Horicon Works

North American Edition

PRINTED IN U.S.A.

Thank You for Purchasing a John Deere Product

We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine.

MX00654,000020B-19-10MAY17

Using Your Operator's Manual

This manual is an important part of your machine and should remain with the machine when you sell it.

Reading your operator's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine. Knowing how to operate this machine safely and correctly will allow you to train others who may operate this machine.

If you have an attachment, use the safety and operating information in the attachment operator's manual, along with the machine operator's manual, to operate the attachment safely and correctly.

This manual and safety signs on your machine may also be available in other languages (see your authorized dealer to order).

Sections in your operator's manual are placed in a specific order to help you understand all the safety messages and learn the controls so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions. A convenient index located at the end of this book will help you find needed information quickly.

The machine shown in this manual may differ slightly from your machine, but will be similar enough to help you understand our instructions.

RIGHT-HAND and LEFT-HAND sides are determined by facing in the direction that the machine will travel when going forward. When you see a broken line (------), the item referred to is hidden from view.

Before delivering this machine, your dealer performed a predelivery inspection to ensure best performance.

MX00654,000020C-19-05JUN17

Special Messages

Your manual contains special messages to bring attention to potential safety concerns and machine damage, as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

CAUTION: Avoid injury! This symbol and text highlight potential hazards or death to the operator or bystanders that may occur if the hazards or procedures are ignored.

IMPORTANT: Avoid damage! This text is used to tell the operator of actions or conditions that might result in damage to the machine.

NOTE: General information is given throughout the manual that may help the operator in the operation or service of the machine.

MX00654,000020D-19-05JUN17

Attachments for Your Machine

There is a John Deere attachment or kit to make your new machine perform more tasks or be more versatile, whether your machine is a lawn tractor, compact utility tractor, or a utility vehicle.

You can check out the entire line of attachments for your machine at JohnDeere.com or ask your John Deere dealer. From aerators to electric lift kits to tillers, there is a John Deere attachment or kit to fill every need.

OUMX068,000051C-19-05JUN17

Service Literature

If you would like to purchase a copy of the Parts Catalog or Technical Manual for this machine, visit The John Deere Technical Information Store at:

https://techpubs.deere.com/?cid=VURL_TechInfoStore

or call:

- **U.S. & Canada:** 1-800-522-7448.
- **All Other Regions:** Your John Deere dealer.

TH84124,0000199-19-15AUG17

Parts

We recommend John Deere quality parts and lubricants, available at your John Deere dealer.

When you order parts, your John Deere dealer needs the serial number or product identification number (PIN) for your machine or attachment. These are the numbers that you recorded in the Product Identification section of this manual.

Order Service Parts Online

Visit **http://JDParts.deere.com** for your Internet connection to parts ordering and information.

TC00531,00000E9-19-06MAR15

Contents

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.

Record Identification Numbers

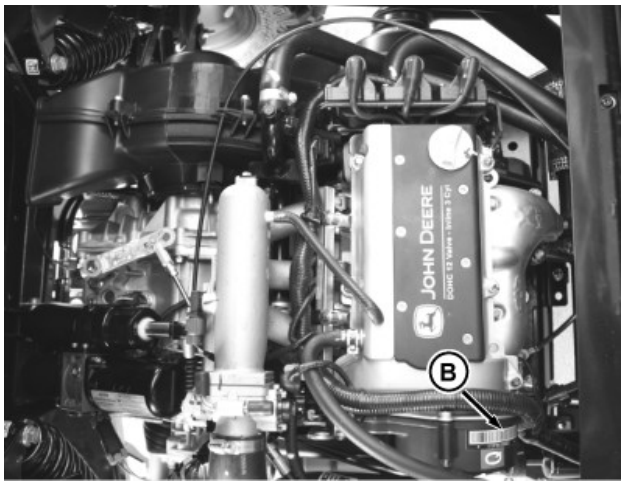
XUV825E, XUV825M

PIN (010001-)

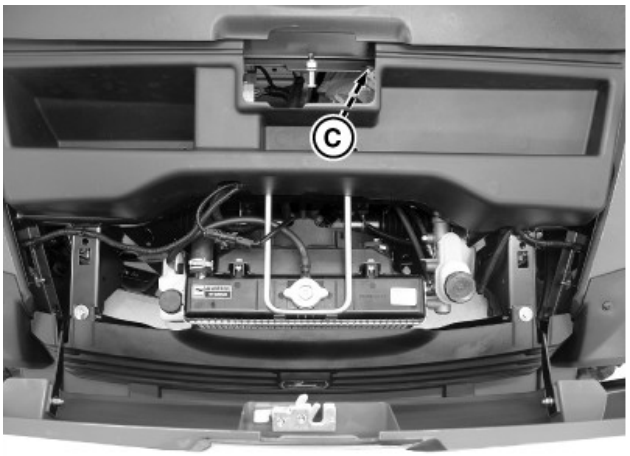
Contact an Authorized Service Center for information on servicing. Always provide the product model and identification numbers.

Locate the identification numbers for the product. Record the information in the spaces provided.

MXT020277—UN—11JUL17



MXT010624—UN—23JUL14



MXT008448—UN—29AUG13

DATE OF PURCHASE:

_____

DEALER NAME:

_____

DEALER PHONE:

_____

PRODUCT IDENTIFICATION NUMBER (A):

_____

ENGINE SERIAL NUMBER (B):

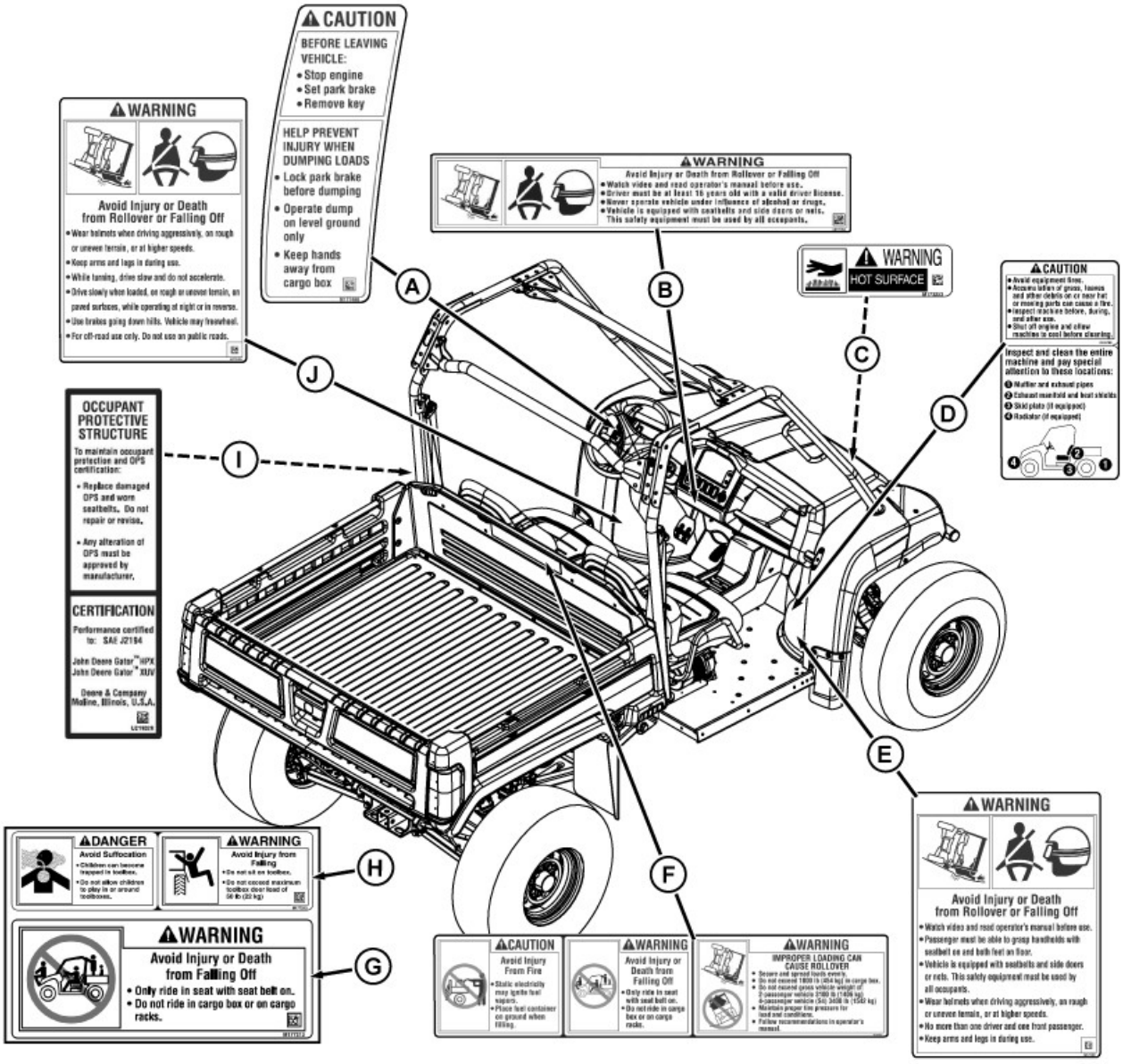
_____

OPTIONAL ELECTRIC POWER ASSIST STEERING (EPAS) SERIAL NUMBER (C):

_____

SB31882,000025D-19-16AUG18

Safety Label Location

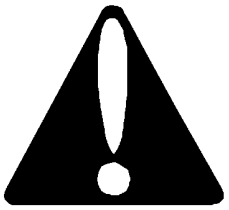


MXT020239—UN—07AUG18

A—CAUTION - M177488
B—WARNING - UC17763
C—WARNING - M173253
D—CAUTION - M165798
E—WARNING - M171201
F—WARNING - M167669
G—WARNING - M177213 (Installed on optional toolbox)
H—WARNING - M177212 (Installed on optional toolbox)
I—Protective Structure Safety and Certification - UC19029
J—WARNING - M171805

OUMX068,00012F3-19-07AUG18

Understanding the Machine Safety Labels



MXAL42363—UN—22MAY13

The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards. DANGER or WARNING safety labels are located near specific hazards.

The operator's manual also explains any potential safety hazards whenever necessary in special safety messages that are identified with the word, CAUTION, and the safety-alert symbol.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with this safety-alert symbol. DANGER identifies the most serious hazards:

- 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.

Replace missing or damaged safety labels. Use this operator's manual for correct safety label placement.

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

French or Spanish Safety Labels and Operator's Manual

Operator's manuals and safety labels with content in French or Spanish are available for this machine through authorized John Deere dealers. See your John Deere dealer.

NOTE: Both text and no-text labels are shown. Your machine is only equipped with one of these types of labels.

MP47322,00F4601-19-21JUN18

CAUTION

MXT020240—UN—22JUN17

BEFORE LEAVING VEHICLE:

- Stop engine
- Set park brake
- Remove key

HELP PREVENT INJURY WHEN DUMPING LOADS

- Lock park brake before dumping
- Operate dump on level ground only
- Keep hands away from cargo box

OUMX068,00012F4-19-22JUN17

WARNING

MXT023346—UN—07AUG18

Avoid Injury or Death from Rollover or Falling Off

- Watch video and read operator's manual before use.
- Driver must be at least 16 years old with a valid driver license.
- Never operate vehicle under influence of alcohol or drugs.
- Vehicle is equipped with seatbelts and side doors or nets. This safety equipment must be used by all occupants.

MX00654,00000AD-19-07AUG18

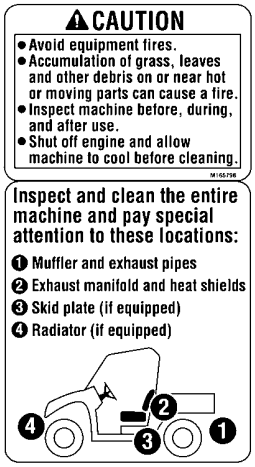
WARNING

MXAL44141—UN—10APR13

HOT SURFACE

MX00654,00000AA-19-14APR16

CAUTION



MXAL44150—UN—10APR13

- Avoid equipment fires.
- Accumulation of grass, leaves and other debris on or near hot or moving parts can cause a fire.
- Inspect machine before, during, and after use.
- Shut off engine and allow machine to cool before cleaning.

Inspect and clean the entire machine and pay special attention to these locations:

1. Muffler and exhaust pipes
2. Exhaust manifold and heat shields
3. Skid plate (if equipped)
4. Radiator (if equipped)

MX00654,00000B1-19-24AUG13

WARNING

M171201—UN—20SEP13

Avoid Injury or Death from Rollover or Falling Off

- Watch video and read operator's manual before use.
- Passenger must be able to grasp handholds with seatbelt on and both feet on floor.
- Vehicle is equipped with seatbelts and side doors or nets. This safety equipment must be used by all occupants.
- Wear helmets when driving aggressively, on rough or uneven terrain, or at higher speeds.
- No more than one driver and one front passenger.
- Keep arms and legs in during use.

MX00654,00000AB-19-26AUG13

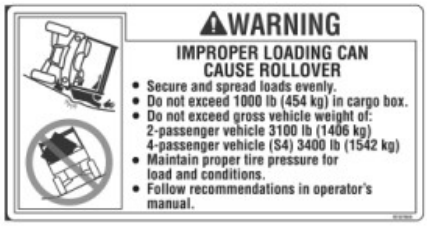
WARNING

Avoid Injury or Death from Falling Off

MXAL44145—UN—10APR13

- Only ride in seat with seat belt on.
- Do not ride in cargo box or on cargo racks.

Improper Loading Can Cause Rollover



MXAL44146—UN—10APR13

- Secure and spread loads evenly.
- Do not exceed 1000 lb (454 kg) in cargo box.
- Do not exceed gross vehicle weight of:
  - 2-passenger vehicle 3100 lb (1406 kg)
  - 4-passenger vehicle (S4) 3400 lb (1542 kg)
- Maintain proper tire pressure for load and conditions.
- Follow recommendations in operator's manual.

Avoid Injury From Fire

MXAL44147—UN—10APR13

- Static electricity may ignite fuel vapors.
- Place fuel container on ground when filling.

MX00654,00000AE-19-24AUG13

WARNING

MXT015589—UN—15SEP15

Avoid Injury or Death from Falling Off

- Only ride in seat with seat belt on.
- Do not ride in cargo box or on cargo racks.

OUO2004,0000CF1-19-17SEP15

DANGER

MXT018932—UN—22NOV16

Avoid Suffocation

- Children can become trapped in toolbox.
- Do not allow children to play in or around toolboxes.

OUMX068,00011DC-19-22NOV16

WARNING

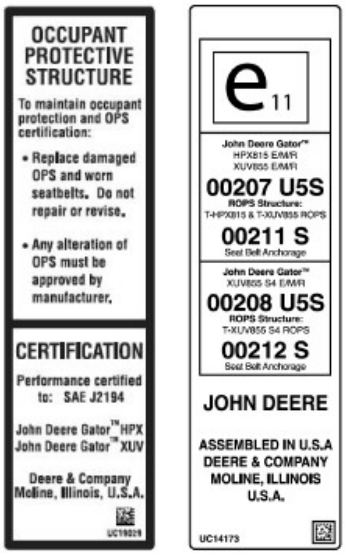
MXT015594—UN—17SEP15

Avoid Injury from Falling

- Do not sit on toolbox.
- Do not exceed maximum toolbox door load of 50 lb (22 kg)

OUO2004,0000CF7-19-17SEP15

Protective Structure Safety and Certification Label



MXT020259—UN—07AUG18

One label is installed on your machine depending upon your region.

OCCUPANT PROTECTIVE STRUCTURE

To maintain occupant protection and OPS certification:

- Replace damaged OPS and worn seat belts. Do not repair or revise.
- Any alteration of OPS must be approved by manufacturer.

CERTIFICATION

Performance certified to: SAE J2194

John Deere Gator™ HPX

John Deere Gator™ XUV

Deere & Company Moline, Illinois, U.S.A.

OUMX068,0001310-19-07AUG18

WARNING

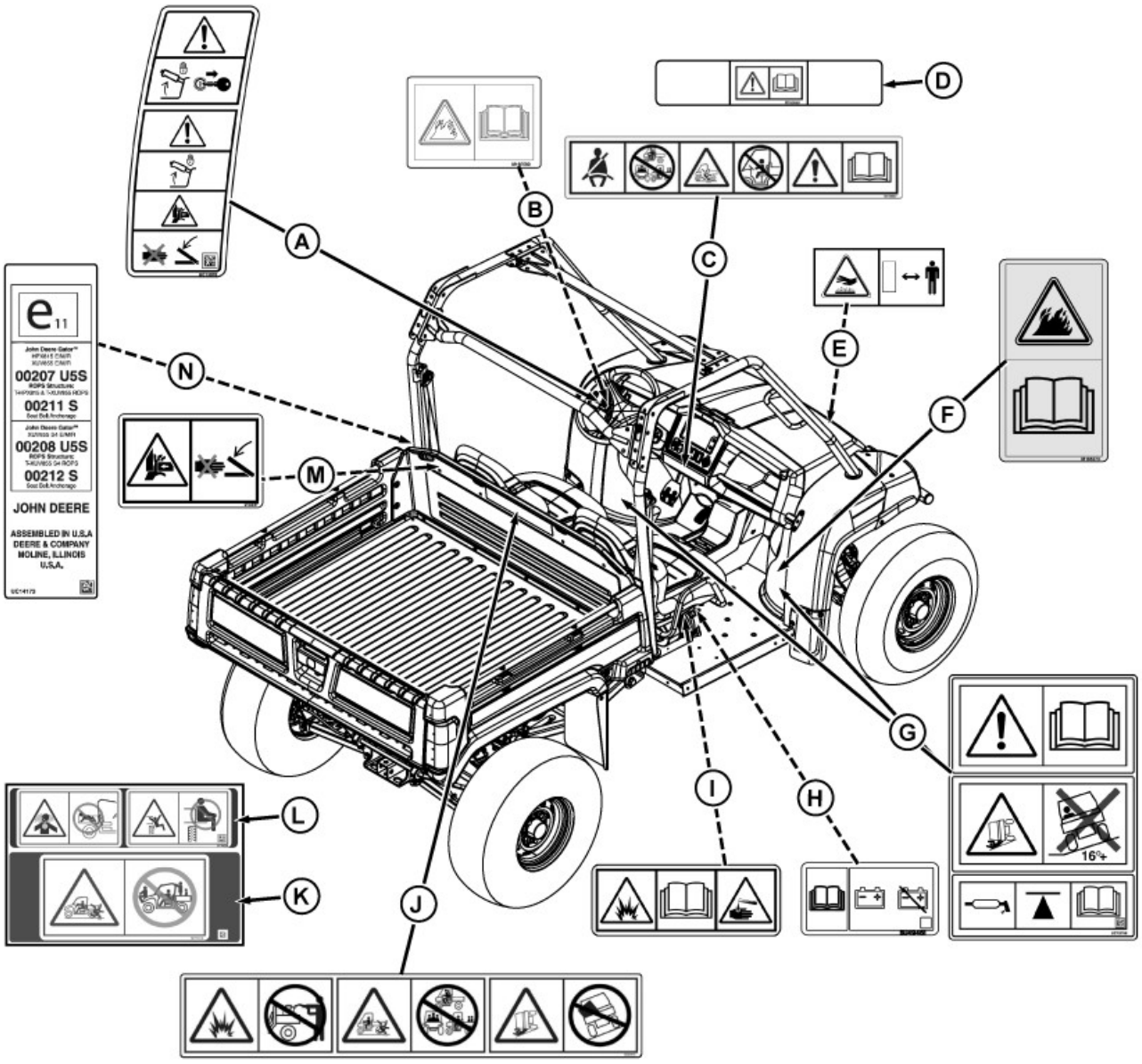
M171805—UN—20SEP13

Avoid Injury or Death from Rollover or Falling Off

- Wear helmets when driving aggressively, on rough or uneven terrain, or at higher speeds.
- Keep arms and legs in during use.
- While turning, drive slow and do not accelerate.
- Drive slowly when loaded, on rough or uneven terrain, on paved surfaces, while operating at night or in reverse.
- Use brakes going down hills. Vehicle may freewheel.
- For off-road use only. Do not use on public roads.

MX00654,00000D2-19-26AUG13

Safety Label Location



MXT020260—UN—11JUL18

Cab and other components may be removed for better viewing.

A—Help Prevent Injury When Dumping Loads - UC13078
B—Avoid Injury From Equipment Fires - M160590
C—Driver and Passenger Safety - M159667
D—Avoid Injury - M160658 (On Optional Front Rack)
E—Hot Surfaces - GX21121
F—Avoid Injury From Equipment Fires - M165273
G—Read Operators Manual, Avoid Tipping - UC12756
H—Read Operators Manual, Service Battery - SU49461
I—Avoid Injury From Battery Gases and Acid - M133159
J—Avoid Injury From Explosion, Riders Can Fall Off and Be Killed, Rollover or Falling Off May Cause Death - M161570
K—Avoid Injury or Death Falling Off - M176918 (Installed on optional toolbox)
L—Avoid Suffocation, Avoid Injury from Falling - M176639 (Installed on optional toolbox)
M—Avoid Injury from Crushing - M120057
N—Protective Structure Safety and Certification - UC14173

OUMX068,0001312-19-24JUL17

Understanding the Machine Safety Labels without Text

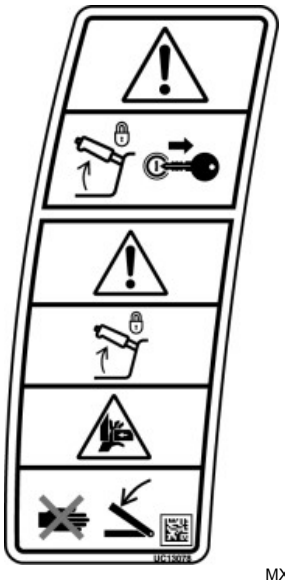
TCT005498—UN—11SEP12

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

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

MX00654,0000389-19-21JUN18

Help Prevent Injury When Dumping Loads



MXT020261—UN—05JUL17

BEFORE LEAVING VEHICLE:

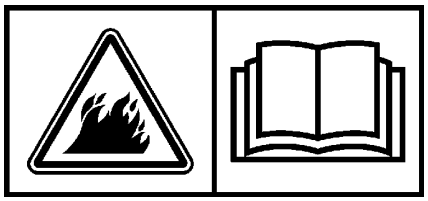
- Stop engine
- Set park brake
- Remove key

HELP PREVENT INJURY WHEN DUMPING LOADS

- Lock park brake before dumping
- Operate dump on level ground only
- Keep hands away from cargo box

OUMX068,0001313-19-05JUL17

Avoid Injury From Equipment Fires

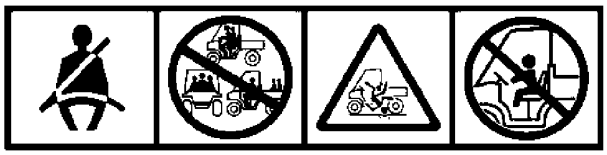


MXT018019—UN—04MAY16

- Avoid equipment fires.
- Accumulation of grass, leaves and debris on or near hot or moving parts can cause a fire.
- Inspect and clean the entire machine before, during and after use.
- Shut off engine and allow machine to cool before cleaning.
- Carefully read Operator's Manual Machine Clean out section for details.

MX00654,0000390-19-19JUN16

Driver and Passenger Safety



MXT008450—UN—27AUG13

Avoid Serious Injury or Death

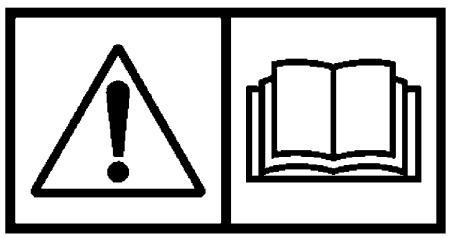
- Driver must be at least 16 years old with a valid driver license.
- No more than one driver and one front passenger.
- Passenger must be able to grasp handholds with seat belt on and both feet on floor.

Young Drivers Increase Chance of Death

- Young drivers may not be able to control vehicle.
- No drivers younger than 16 years old.

MX10673,0000021-19-19JUL17

Read Operator's Manual



MXAL42776—UN—09APR13

- This operator's manual contains important information necessary for safe machine operation.
- Carefully read operator's manual before operating machine or attachment. Observe all safety rules to avoid accidents.

MX00654,000038B-19-15JUN16

Avoid Injury

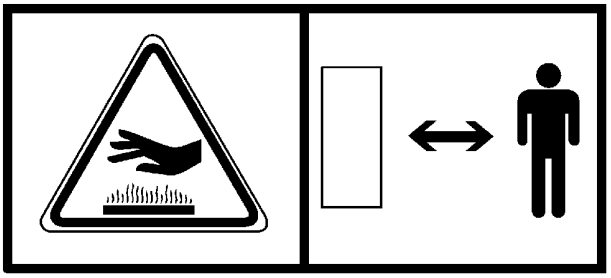
MXT007998—UN—29AUG13

Avoid Injury

To avoid injury, never carry riders. Use for cargo only, do not obstruct driver's view. Secure all loads. Max Capacity 100 lb. (45 kg).

OUO2005,0000164-19-19JAN15

Hot Surfaces

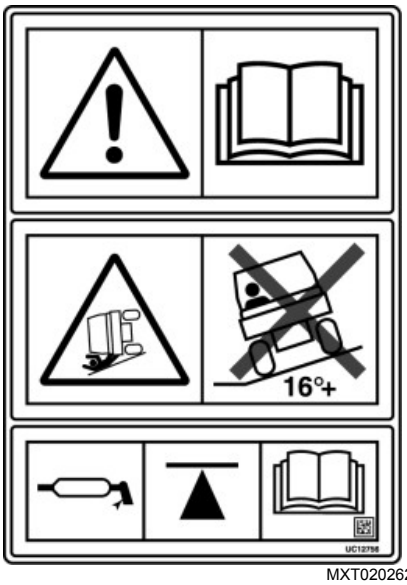


MXT008445—UN—27AUG13

Keep away from hot surfaces.

MX00654,00000D3-19-27AUG13

Avoid Injury from Tipping

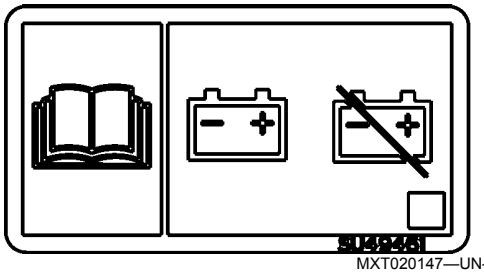


MXT020262—UN—05JUL17

- Read operator's manual.
- Drive slowly when turning.
- Always use brakes going down a slope. Vehicle can takeoff (freewheel) downhill.
- No loads heavier than 1000 lb (454 kg). Spread load evenly. Tie loads down.
- Reduce speed and load, on rough or hilly ground.
- Maintain 14 psi (97 kPa) tire pressure front and rear.
- Do not exceed gross vehicle weight rating 3100 lb (1406 kg). Following loading instructions in operator's manual.
- Jacking Point.

OUMX068,0001314-19-05JUL17

Read Operator's Manual, Service Battery

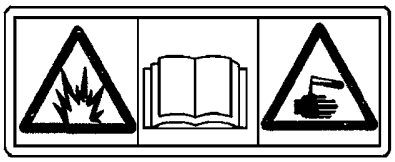


MXT020147—UN—16MAY17

- Read Operator's Manual
- Service Battery

OUMX068,0001296-19-16MAY17

Avoid Injury From Battery Gases and Acid

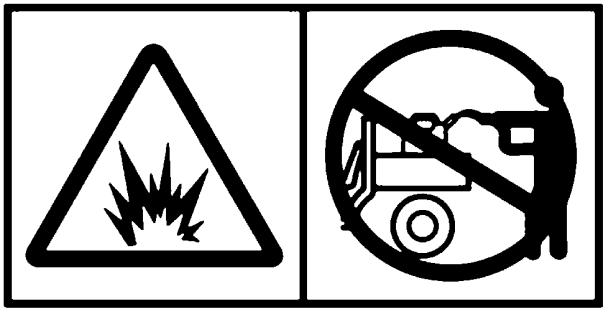


MXT007302—UN—23MAY13

- Shield eyes, explosive gases can cause blindness or injury.
- No sparks, flames, smoking.
- Sulfuric acid can cause blindness or severe burns.
- Keep out of the reach of children.
- Do not tip.
- Keep vent caps tight and level.
- Flush eyes immediately with water. Get medical help fast.

MX00654,0000394-19-21AUG14

Avoid Injury From Explosion



MXT008452—UN—27AUG13

- Do not place gas container inside cargo box bed when filling.
- Place gas container on ground when filling.

MX00654,00000D5-19-27AUG13

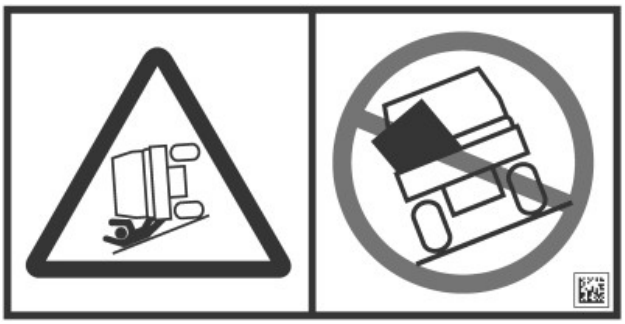
Riders Can Fall Off and Be Killed

MXT008453—UN—20JUL17

- Maximum of one person to a seat.
- No riders in box or anywhere else.

MX00654,00000D6-19-22JUL14

Rollover or Falling Off May Cause Death



MXT008454—UN—20JUL17

- Read operator's manual.
- Drive very slowly when turning.
- Always use brakes going down a slope. Vehicle can takeoff (freewheel) downhill.
- Reduce speed and load on rough or hilly ground.

MX00654,00000D7-19-27AUG13

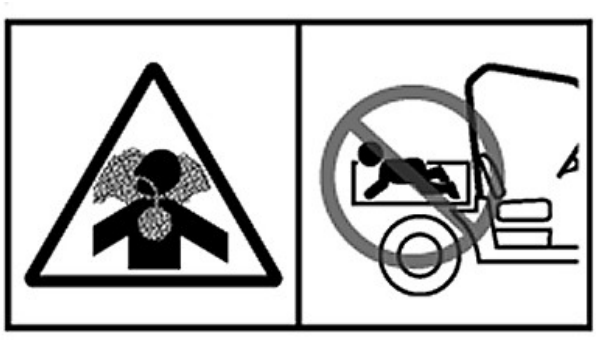
Avoid Injury or Death from Falling Off

MXT015591—UN—15SEP15

- Only ride in seat with seat belt on.
- Do not ride in cargo box or on cargo racks.

OUO2004,0000CF4-19-17SEP15

Avoid Suffocation



MXT015955—UN—17SEP15

- Children can become trapped in toolbox.

- Do not allow children to play in or around toolboxes.

OUO2004,0000CF3-19-17SEP15

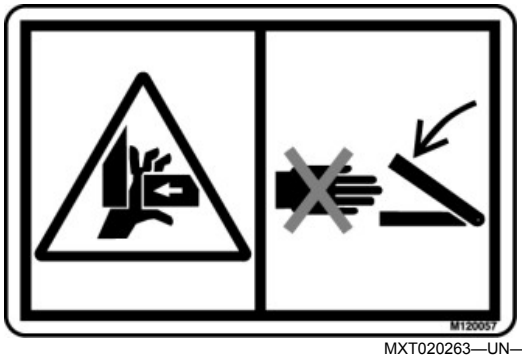
Avoid Injury from Falling

MXT015956—UN—17SEP15

- Do not sit on toolbox.
- Do not exceed maximum toolbox door load of 50 lb (22 kg)

OUO2004,0000CF8-19-17SEP15

Avoid Injury from Crushing



MXT020263—UN—05JUL17

- Avoid crushing injury.
- Keep hands away from cargo box.

OUMX068,0001315-19-05JUL17

Protective Structure Safety and Certification Label

MXT020259—UN—07AUG18

One label is installed on your machine depending upon your region.

OCCUPANT PROTECTIVE STRUCTURE

To maintain occupant protection and OPS certification:

- Replace damaged OPS and worn seat belts. Do not repair or revise.
- Any alteration of OPS must be approved by manufacturer.

CERTIFICATION

Performance certified to: SAE J2194

John Deere Gator™ HPX

John Deere Gator™ XUV

Deere & Company Moline, Illinois, U.S.A.

OUMX068,0001310-19-07AUG18

Supervisor Safety Responsibilities

- Make sure all operators of this machine are thoroughly trained and are familiar with the operator's manual and understand the machine warning labels.
- Be sure to establish any special safety procedures for existing work conditions and train operators in those procedures.
- Supervisors, operators and mechanics should be familiar with and practice the safety standards that apply to this machine.

RH75544,0000159-19-08APR13

Operator Training Required

- Read the operator's manual and other training material. If the operator or mechanic cannot read English, it is the owner's responsibility to explain this material to them. This publication is available in other languages.
- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- All operators and mechanics should be trained. The owner of the machine is responsible for training the users.
- Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator.
- The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people, or property.
- Operate the machine in an open, unobstructed area under the direction of an experienced operator when training.

RH75544,000015A-19-03APR18

Operating Safely

- Read, understand, and follow all instructions in the operator's manual, on the machine, and on the safety video before starting.
- Misuse can lead to accidents, severe bodily injury, or death.
- The utility vehicle's tires are designed for off-road use only. Paved surfaces may seriously affect handling and control of the vehicle. If you must operate on a paved surface, travel slowly and do not make sudden turns or stops.
- Do not operate this vehicle on a frozen body of water. The vehicle could break through the ice, causing injury or even death.
- Go slowly and be extra careful when riding on snow-covered or ice-covered terrain.
- Slow down and be careful of traffic when operating near or crossing roadways. Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- The operator should always make sure that the passenger is aware of correct safety procedures while riding in the utility vehicle.
- Use the correct flags, lights, signs, and reflectors on the vehicle to warn other drivers when operating near roadways. Make sure these features are clean and visible for 152 m (500 ft.).
- The passenger should always use the hand holds.
- On machines with seat belts, to avoid serious injury, always ensure that occupants have safely secured their seat belts prior to starting this vehicle.
- Horseplay can lead to accidents, severe bodily injury, or death. Do not attempt stunts, jumps, or quick acceleration to raise front wheels off the ground. These actions can result in accidents or vehicle overturns.
- Sit on the center of the seat and keep both feet within the foot platform perimeter. Clean foot platform if dirty, and remove any debris from around foot controls.
- Check for debris in engine compartment, especially around exhaust system components.
- Always use both hands for steering.
- Know location of controls and how and what they operate.
- Never operate utility vehicle while standing.
- Never operate utility vehicle with the cargo box raised.
- Check brake action before beginning vehicle operation. Adjust or service the brakes as necessary.
- To provide adequate braking ability and traction, do not tow any attachment or loaded trailer unless the cargo box is fully loaded.
- Do not allow the Gross Vehicle Weight (GVW) to exceed the Gross Vehicle Weight Rating (GVWR) of the vehicle.
- Before shifting into reverse, always check for obstacles or people behind the machine.
- Always back slowly.
- Inspect vehicle before operating. Be sure hardware is tight. Repair or replace damaged, badly worn, or missing parts. Be sure guards and shields are in good condition and fastened in place. Make any necessary adjustments before operating.
- Do not leave vehicle unattended when it is running.
- Operate during daylight or with good artificial light, and if you drive at night, use the lights.
- Do not operate vehicle if under the influence of alcohol or other drugs.
- Avoid sudden starts, stops, or turns.
- Always use a level turn-around area.

- Do not wear radio or music headphones. Safe service and operation require your full attention.

OUMX068,000094A-19-05JUL17

Using a Spark Arrestor

The California Public Resources Code, section 4442.5 provides as follows:

No person shall sell, offer for sale, lease, or rent to any person any internal combustion engine subject to Section 4442 or 4443, and not subject to Section 13005 of the Health and Safety Code, unless the person provides a written notice to the purchaser or bailee, at the time of sale or at the time of entering into the lease or rental contract, stating that it is a violation of Section 4442 or 4443 to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the engine is equipped with a spark arrestor, as defined in Section 4442, maintained in effective working order or the engine is constructed, equipped, and maintained for the prevention of fire pursuant to Section 4443. Cal. Pub. Res. Code 4442.5.

Other states or jurisdictions may have similar laws. A spark arrestor for your machine may be available from your authorized dealer. An installed spark arrestor must be maintained in good working order by the operator.

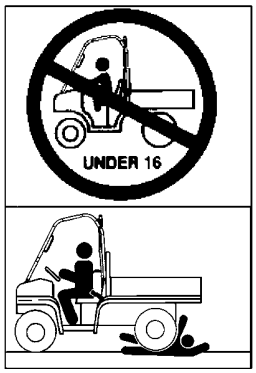
RH75544,000015C-19-08APR13

Parking Safely

1. Stop vehicle on a level surface, not on a slope.
2. Fully lower the cargo box and any attachments on the machine that can be lowered.
3. Fully engage park brake and ensure vehicle is not moving.
4. Stop engine.
5. Remove key.
6. Before you leave the operator's seat, wait for engine and all moving parts to stop.
7. Disconnect the negative battery cable before servicing the machine.

OUMX068,00005F5-19-09AUG18

Protect Children/Small Adults and Prevent Accidents

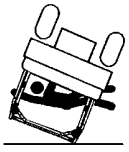


MXAL43278—UN—15MAR13

- This utility vehicle should not be operated by anyone under the age of 16 years.
- This utility vehicle should not be operated by anyone without a valid driver license.
- Young drivers may not be physically able to control the machine or may not be mature enough to make safe driving decisions.
- Do not allow children to ride as a passenger in this vehicle. Children may not be able to sit safely in the passenger seat and use handholds properly. Passengers must be able to grasp handholds with their back against the seat, seat belt on, and both feet on the floor.
- Passenger should always use the handholds while the vehicle is moving.
- Seat belts installed on utility vehicles are not designed to restrain children.
- Never carry passengers, especially children, in the cargo box area. Do not tow children in a cart or trailer.
- Never assume that children remain where you last saw them. Stay alert to the presence of children.
- Before backing or turning, look behind and around the utility vehicle for children.
- Be alert at all times, drive forward and in reverse carefully. People, especially children, can move quickly into an area of operation.
- Use extra care when coming to blind corners, shrubs, trees, or other objects that may block vision.
- Misuse and reckless riding can lead to accidents, severe bodily injury, or death.

OUO2005,0000169-19-16AUG18

Avoid Excessive Speeds



MXAL43279—UN—15MAR13

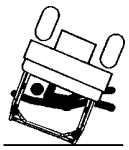
- Always wear an approved helmet when operating the

vehicle in an aggressive manner, on rough or uneven terrain, or at higher speeds.

- Always travel at a speed that is safe and proper for the terrain, visibility and operating conditions, and your experience operating the machine.
- Use caution when operating the machine in reverse. Use a slow speed and do not make sharp turns. Always look behind before backing.
- Never travel at excessive speeds on slopes, either going up or down. Use a slow speed and do not make sharp turns. Become experienced driving the machine on small slopes before driving on larger hills.

MX10673,0000023-19-19JUL17

Avoid Tipping



MXAL43279—UN—15MAR13

Accidents resulting in serious injury or death can occur from tipping the utility vehicle. Observe the following practices to help prevent accidents and always wear an approved helmet when operating the vehicle in an aggressive manner, on rough or uneven terrain, or at higher speeds.

- Drive very slowly when turning. Sharp turns could cause the utility vehicle to tip over.
- Reduce speed and exercise extreme caution on slopes or on rough ground.
- Do not overload vehicle and avoid shifting loads. Reduce load when operating over rough or hilly terrain.
- Do not stop or start suddenly when going uphill or downhill. Be especially cautious when changing direction on slopes.
- Stay alert for holes, rocks, and other hidden hazards in the terrain.
- Keep away from drop-offs, ditches, embankments, as well as ponds and other bodies of water. The machine could suddenly roll over if a wheel goes over the edge of a cliff or ditch or if the edge caves in.
- Keep front wheels straight at crest of hill or going over bumps.
- When descending a hill, remove foot from accelerator pedal and apply brakes to reduce speed and maintain control.
- Do not make unauthorized changes or modifications to the utility vehicle.
- This list of potential overturning hazards is not exhaustive.

MX10673,0000022-19-19JUL17

Use Seat Belts, Nets, and Doors Properly

MXT008507—UN—10JAN17

- This vehicle is equipped with a seat belt interlock feature. This feature limits vehicle travel speed to approximately 24 km/h (15 mph) when the driver's seat belt is not fastened.
- Use a seat belt and doors or nets, if equipped, to minimize chance of injury from an accident, such as an overturn.
- Do not operate machine with any portion of the operator safety system inoperative or removed.
- Inspect seat belts, nets, and doors for proper operation before each machine use.
- Insert metal tab of net, if equipped, into buckle until it clicks, indicating it is latched. Pull back on net to confirm that it is securely latched.
- Layers of heavy clothing can interfere with proper positioning of the seat belt and can reduce the effectiveness of the seat belt.
- Never modify, disassemble, or attempt to repair a seat belt, nets, or doors.
- Inspect seat belts, nets, and doors, if equipped, at least once a year. Look for signs of loose hardware or material damage, such as cuts, fraying, extreme or unusual wear, or abrasion. Replace only with John Deere approved replacement parts.
- Replace entire seat belt if mounting hardware, buckle, belt, or retractor show signs of damage.

OUMX068,00012D5-19-13JUN17

Keep Protective Structure Installed Properly

- Never operate the machine without the Protective Structure installed.
- If the Protective Structure is loosened or removed for any reason, make certain all parts of the Protective Structure are installed correctly. All Protective Structure hardware must be tightened to the proper torque per manufacturer recommendations.
- Any alteration of the Protective Structure must be approved by the manufacturer. The protection provided by the Protective Structure can be impaired if the Protective Structure is subjected to structural damage, is involved in an overturn incident, or is in any way altered by welding, bending, drilling, or cutting.

- Never attempt to repair a damaged or altered Protective Structure. It must be replaced to maintain the manufacturer certification of the structure.

MX00654,00000B6-19-06NOV15

Keep Riders Off Vehicle

MXT008506—UN—10JAN17

- Seating is provided for operator and one adult passenger.
- Never allow riders in the cargo box or other areas where seats are not provided.
- Riders on vehicle are subject to injury such as being struck by foreign objects or being thrown off of the vehicle and severely injured or killed.
- Riders affect the operator's ability to control the vehicle as well as its center of gravity. Also, riders could obstruct the operator's view resulting in the vehicle being operated in an unsafe manner.

MX00654,00000B7-19-28FEB17

Before Driving

1. Perform Daily Operating Checklist in Operating section.
2. Clean foot platform if dirty, and remove any debris from around foot controls. Sit on the center of seat and keep both feet inside foot platform perimeter.
3. Inspect utility vehicle for signs of wear or damage.
4. All safety equipment must be in good condition and fastened in place:
   - Lights
   - Shields
   - Safety start devices
5. Before moving, check around utility vehicle, be sure no one is near it.
6. Inspect mechanical condition of your vehicle before each use to minimize chance of injury or being stranded. Remember, you can ride farther in an hour than you can walk in a day.

   Be sure to check condition of tires and wheels, wheel hardware torque, and maintain proper tire pressure.
7. Securely anchor all loads.

MX00654,00000B8-19-27APR18

Transport Loads Safely

- Be sure load is evenly distributed in cargo box.
- Do not load above load guard.
- Securely anchor all loads in cargo box.
- Reduce cargo box load when operating on rough or hilly terrain.

MX00654,00000B9-19-24AUG13

Using Front Attachments

Remove front attachments such as drawbar hitches, hitch mounted winches, or blades when operating on rough or uneven terrain. Front attachments may contact the ground when operating on rough or uneven terrain which may cause loss of control or rollover.

OUMX068,0000634-19-22SEP16

Towing Loads Safely With Utility Vehicle

- To provide adequate braking ability and traction, the weight of towed load (trailer plus cargo) must never exceed the vehicle payload.
- Do not tow a load that exceeds the maximum allowable towing load for this vehicle, as specified in this operator's manual.
- Stopping distance increases with speed and weight of towed load. Travel slowly and allow extra time and distance to stop.
- Tow load at a speed slow enough to maintain control.
- Excessive towed load can cause loss of traction and loss of control on slopes. Reduce towed weight when operating on slopes.
- Never allow children or others in or on towed equipment.
- Use only approved hitches. Tow only with a machine that has a hitch designed for towing. Do not attach towed equipment except at the approved hitch point.
- Follow the manufacturer's recommendations for weight limits for towed equipment and towing on slopes.
- If you cannot back up a slope with a towed load, the slope is too steep to operate on with the towed load. Reduce the towed load or do not operate.
- Do not turn sharply. Use additional caution when turning or operating under adverse surface conditions. Use care when reversing.
- Do not shift to neutral and coast downhill.
- Secure towed loads before transporting.

OUMX068,000091B-19-25SEP17

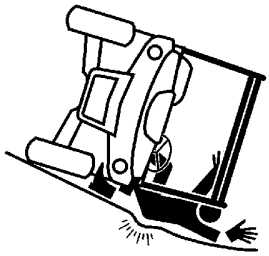
Driving On Rough Terrain

MXAL43282—UN—15MAR13

- Always wear an approved helmet when operating the vehicle in an aggressive manner, on rough or uneven terrain, or at higher speeds.
- Use existing trails. Avoid terrain such as dangerous slopes and impassable swamps. Watch carefully for bumps, holes, ruts, loose terrain, or other obstacles.
- Look ahead at terrain. Know what is coming and be prepared to react. Be alert for hazards.
- Keep front wheels straight at crest of hill or going over bumps.
- Reduce speed according to trail, terrain, and visibility conditions.
- The passenger should always use the hand holds.

MX10673,0000024-19-19JUL17

Climbing or Descending a Hill or Slope

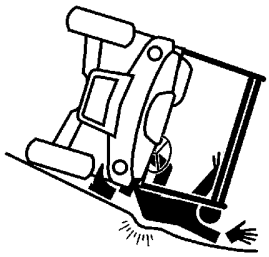


MXT008509—UN—10JAN17

- Always use the brakes when going down slopes. The utility vehicle can speed up (freewheel) going down a slope. Engine or clutch braking effect is minimal.
- Balance loads evenly and secure them. Braking could shift the load and affect vehicle stability.
- Sit on center of seat and keep both feet within foot platform.
- Never drive past the limit of visibility. Slow down near crest of hill until getting a clear view of the other side. Never go over the top of any hill at a high speed. An obstacle, sharp drop, another vehicle or person, could be on the other side of the hill.
- Keep front wheels straight at crest of hill or going over bumps.
- Do not stop or start suddenly when going uphill or downhill. Be especially cautious when changing direction on slopes.
- If vehicle stops or loses power going up a hill, lock park brake to hold vehicle on slope. Maintain direction of travel and release brake slowly. Back straight down hill slowly while maintaining control. Do not turn vehicle sideways. Vehicle is more stable in a straight forward or rearward position.
- Always descend hill or slope at slow speeds and in a controlled manner. When descending a hill, remove foot from accelerator pedal and apply brakes to reduce speed and maintain control.
- The vehicle has a limited amount of engine braking that can assist when going down a hill or slope, but it is highly recommended to remove foot from throttle pedal and to use service brakes during descent as well.
- If the vehicle is freewheeling (engine braking is not engaged), use the service brakes to slow vehicle travel. Do not reengage engine braking (do not depress the throttle pedal) when freewheeling as that may cause the vehicle to skid.

RH75544,0000169-19-28FEB17

Driving Across Slopes



MXT008509—UN—10JAN17

- Reduce speed and use caution on slopes and in sharp turns.
- Stay alert for holes, rocks and other hidden hazards in the terrain.
- When riding on soft terrain, turn front wheels slightly uphill to keep utility vehicle on a straight line across the hill.
- If utility vehicle begins to tip, turn front wheel downhill to gain control before proceeding.

BB87125,0000D48-19-28FEB17

Riding Through Water

- Driving through water can contaminate the power train and electrical systems resulting in long-term vehicle damage.
- Your vehicle is capable of driving through still water in depth equal to the floorboard height.
- Never drive through deep or fast flowing water. The vehicle may become unstable and difficult to control.
- Never cross any body of water where depth may be unknown to the operator.
- If you must ride through water:
  - Cross at a designated route if possible. Choose a course within the waterway where both banks

have a gradual incline. Cross at a point known to be safe.

- Proceed at a slow steady speed to avoid submerged obstacles and slippery rocks.
- Avoid water crossings where the operation of a utility vehicle may cause damage to waterway beds or erode waterway shoreline.

- Stopping ability of vehicles with external brakes may be affected after driving through water. If necessary, apply brakes several times to dry them out.
- If water levels exceed the floorboard height at any time, contact your dealer to have the engine, transmission, differential fluids, and fuel tank checked for contamination.
- If the engine stops during water crossing, do not re-start the engine. Major engine damage can result if the machine is not thoroughly inspected. Take the vehicle to your dealer before starting the engine.
- If you must continue to operate the vehicle prior to dealer inspection, perform the following inspection and service:

a. Move the vehicle to dry land, or at the very least to water below the floorboard.

b. Dry any water present in the air intake. Clean the air filter. Filter replacement is required if water is present.

c. Remove the spark plugs, keeping plug wires away from the spark plug mounting hole to avoid igniting fuel that may be in the cylinder. Turn the engine over several times using the electric start.

d. Dry the spark plugs and reinstall, or replace with new plugs.

e. Attempt to start the engine. If necessary, repeat the drying procedure. If engine does not start after three attemps, discontinue trying.

f. After driving through water when the air temperature is below freezing, clear the brake system of excess water, snow, mud or other material to prevent freezing.

g. If water has been ingested into the clutch enclosure, remove the drain plug to allow water to drain, then reinstall the plug. Run the engine for one minute to dry the drive belt. In Neutral, run engine up to full speed and back down several times to help dry the clutch sheave faces.

h. Take the vehicle to your dealer for service as soon as possible, whether you succeed in starting the engine or not. It is critical that services are performed to the engine, transmission, differential fluids, and fuel tank to check for contamination.

RH75544,000016B-19-02MAY13

Checking Wheel Hardware

- A serious accident could occur causing serious injury if wheel hardware is not tight.
- Check wheel hardware tightness often during the first 100 hours of operation.
- Wheel hardware must be tightened to specified torque using the proper procedure anytime it is loosened.

RH75544,000016C-19-08APR13

Wear Appropriate Clothing

MXAL41935—UN—18FEB13

- Always wear an approved helmet when operating the vehicle in an aggressive manner, on rough or uneven terrain, or at higher speeds.
- Helmets should fit properly and be approved for motorcycle use on standard roadways by the appropriate governing organizations for the region in which the vehicle is being used.
- Wear close fitting clothing and safety equipment appropriate for the job.
- Certain operating conditions may dictate that the operator and any passenger wear appropriate safety equipment while operating the vehicle. Be prepared for any existing and potential conditions before operating machine.
- Local safety or insurance regulations may require additional safety equipment, such as eye protection or a hard hat.
- Always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.

MX00654,00000BD-19-05JUL17

Practice Safe Maintenance

MXAL41933—UN—18FEB13

- Only qualified, trained adults should service this machine.
- Understand service procedure before doing work. Keep area clean and dry.
- Never lubricate, service, or adjust machine while it is moving. Keep safety devices in place and in working condition.
- Keep hands, feet, clothing, jewelry, and long hair

away from any moving parts, to prevent them from getting caught.

- Disconnect battery(ies) or remove spark plug wires (for gasoline engines) before making any repairs.
- Keep all nuts and bolts tightened.
- Securely support any machine elements that must be raised for service work. Lock service latches before working on machine with raised attachments.
- Never run engine unless park brake is locked.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Replace all worn or damaged safety and instruction decals.
- To prevent fires, remove any buildup of grease, oil, or debris from the machine, especially the engine.
- Do not modify machine or safety devices. Unauthorized modifications may impair its function and safety.
- Do not wear radio or music headphones while servicing the machine. Safe service requires your full attention.
- Disconnect battery ground cable(s) (-) on the machine or remove attachment from machine before welding on the machine.

RH75544,000016E-19-08APR13

Prevent Fires

- Please review these recommendations with all operators. See your John Deere dealer with questions.
- Always follow all safety procedures posted on the machine and in this operator's manual. Before carrying out any inspection or cleaning, always shut off engine, set parking brake, and remove ignition key.
- Besides routine maintenance, one of the best ways to keep your John Deere equipment running efficiently and to reduce fire risk is to regularly remove debris buildup from the machine.
- After operating, allow machine to cool in an open area before cleaning or storing. Do not park machine near flammable materials, such as wood, cloth, or chemicals, or near an open flame or other sources of ignition, such as a water heater or furnace.
- Completely remove any combustible materials from equipment before storing by emptying any grass catcher bags, containers, and cargo boxes.
- Debris can accumulate anywhere on the machine, especially on horizontal surfaces. Remove grass and debris completely from engine compartment, muffler area, and from the mower deck or cutting units both before and after operating machine. Additional cleaning may be necessary when mowing or mulching in dry conditions.
- In addition to cleaning machine before using and storing, keeping engine area clean provides the greatest impact on fire prevention. Other areas requiring regular inspection and cleaning include behind wheel rims, wire harness, hose or line routing, mowing attachments, etc. Compressed air, leaf blowers, or high pressured water assists in keeping these areas clean.
- Frequency of these inspections and cleaning will vary depending on a number of factors, including operating conditions, machine configuration, operating speeds, and weather conditions, (particularly dry, hot, and windy conditions). When you are operating in these conditions, inspect and clean these areas frequently throughout the day.
- Excess lubrication or fuel/oil leaks or spills on the machine can also serve as collection sites for debris. Prompt machine repair and oil and fuel clean-up reduces the potential for debris collection.
- Bearing failures or overheating can result in a fire. To reduce this risk, always follow the instructions in the machine operator's manual regarding lubrication intervals and locations. Contact your local dealer if you have any questions about the lubrication intervals or location and if any unusual noises are coming from areas where bearings might be located. Washing the machine while warm may also reduce bearing life and increase potential for premature bearing failure.
- Always shut off fuel when storing or transporting machine, if the machine has a fuel shutoff.
- Check fuel lines, tank, cap, and fittings frequently for cracks or leaks. Replace if necessary.

OUO2005,0000221-19-05JUL17

Do Not Modify Machine

Do not make any unauthorized modifications to the machine in any way.

Modifications can result in making the machine unstable, increasing the possibility of rollover causing severe bodily injury or death.

RH75544,0000170-19-08APR13

Tire Safety

TCAL25965—UN—24MAY12

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

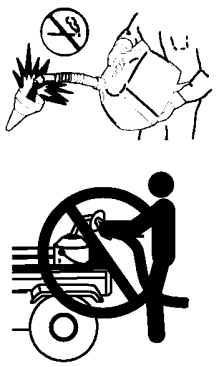
- Do not attempt to mount a tire without the proper equipment and experience to perform the job.
- Always maintain the correct tire pressure. Do not

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

OUO2005,0000222-19-10MAY17

Handling Fuel Safely



MXAL41938—UN—18FEB13

To avoid personal injury or property damage, use extreme care in handling fuel. Fuel is extremely flammable and fuel vapors are explosive:

- Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- Use only an approved fuel container. Use only non-metal, portable fuel containers approved by the Underwriter's Laboratory (U.L.) or the American Society for Testing & Materials (ASTM). If using a funnel, make sure it is plastic and has no screen or filter.
- Never remove the fuel tank cap or add fuel with the engine running. Allow engine to cool before refueling.
- Never add fuel to or drain fuel from the machine indoors. Move machine outdoors and provide adequate ventilation.
- Clean up spilled fuel immediately. If fuel is spilled on clothing, change clothing immediately. If fuel is spilled near machine, do not attempt to start the engine but move the machine away from the area of spillage. Avoid creating any source of ignition until fuel vapors have dissipated.
- Never store the machine or fuel container where there is an open flame, spark, or pilot light such as on a water heater or other appliance.
- Prevent fire and explosion caused by static electric discharge. Static electric discharge can ignite fuel vapors in an ungrounded fuel container.
- Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before fueling.
- Remove fuel-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a fuel dispenser nozzle.
- Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until the fueling is complete. Do not use a nozzle lock-open device.
- Never overfill fuel tank. Replace fuel tank cap and tighten securely.
- Replace all fuel container caps securely after use.
- For gasoline engines, do not use gas with methanol. Methanol is harmful to your health and to the environment.

RH75544,0000172-19-16APR13

Handling Waste Product and Chemicals

Waste products, such as, used oil, fuel, coolant, brake fluid, and batteries, can harm the environment and people:

- Do not use beverage containers for waste fluids - someone may drink from them.
- See your local Recycling Center or authorized dealer to learn how to recycle or get rid of waste products.
- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques. The seller of the chemical products used with your machine is responsible for providing the MSDS for that product.

RH75544,0000173-19-08APR13

Use Electronic Display Properly

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

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

To prevent injury while operating the machine:

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

Pay attention to the machine and surrounding environment.

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

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

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

GS75158,00019D2-19-18SEP15

General Cleaning Guidelines

Machine must be inspected periodically throughout the day. Buildup of debris must be removed to ensure proper machine function and to reduce the risk of fire. Frequency of these inspections and cleanings will vary depending on a number of factors including operating conditions, machine configuration, operating speeds, and weather conditions. Inspections and cleanings may be required multiple times throughout the day particularly in dry, hot, and windy conditions.

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

Besides proper maintenance the condition of the material being handled is the most significant factor contributing to fires. Dry, light and fluffy materials that can create a dust cloud are the most likely to catch fire. Debris can accumulate in various areas especially on horizontal surfaces. Conditions such as wind speed and direction can change where the material accumulates. Be aware of these changing conditions and adjust your cleaning schedule and practices to ensure proper machine function and to reduce the risk of fire.

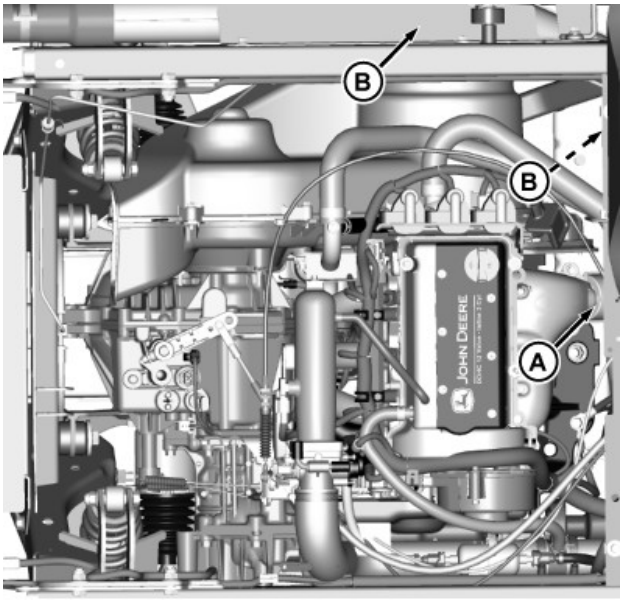
Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always shut OFF engine, set parking brake and remove key.

The entire machine should be inspected, with extra attention given to the areas noted below.

OUMX068,0001043-19-10MAY17

Cleanout Areas

Primary areas that must be inspected and cleaned on the machine include (See Safety Label Section):



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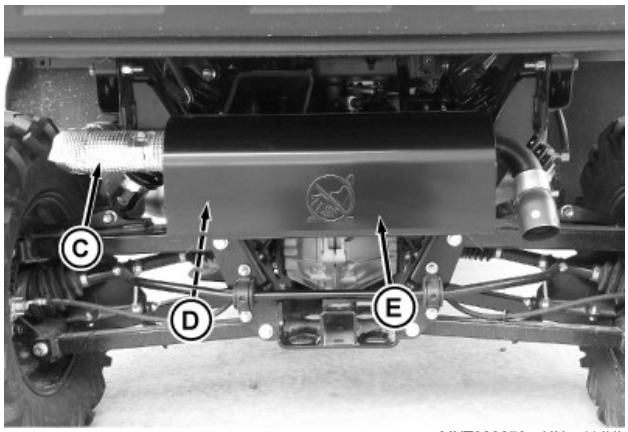
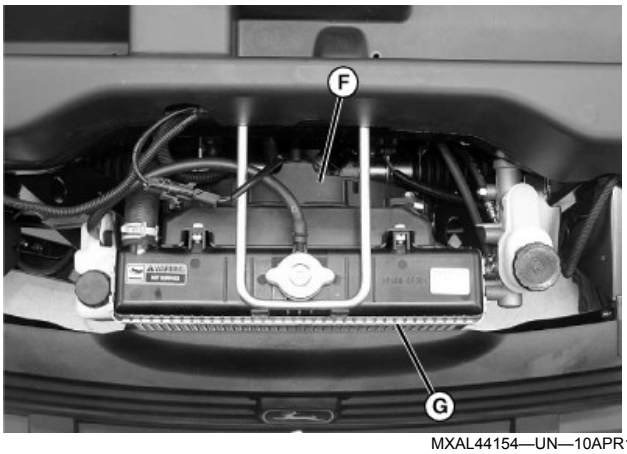


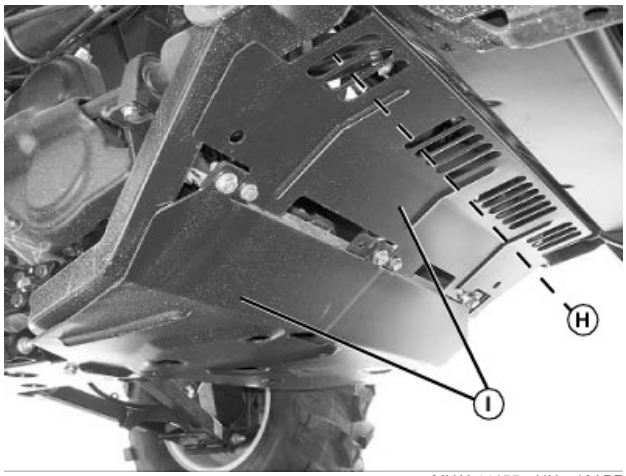
MXT020278—UN—11JUL17

1. Exhaust manifold (A) and shields (B), muffler pipes (C), muffler (D), and muffler shield (E).



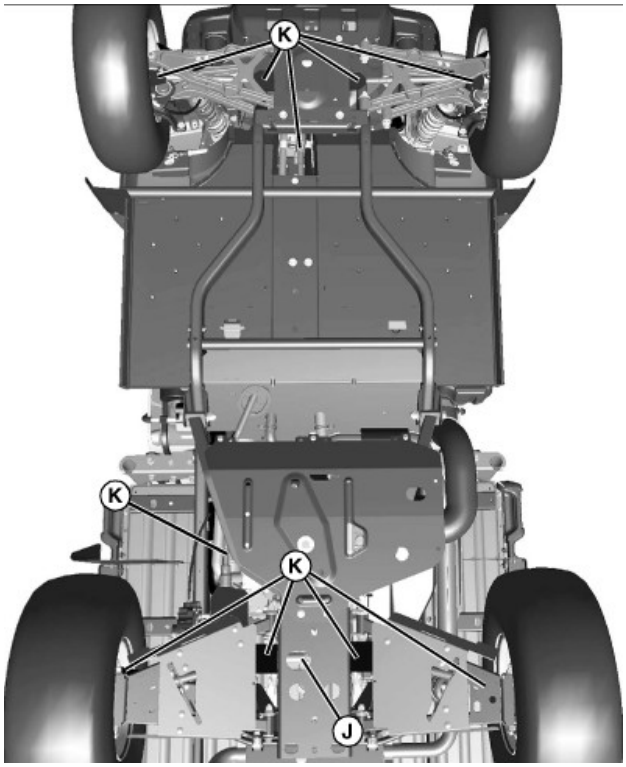
MXAL44154—UN—10APR13

2. Engine intake screens (F), and radiator cooling fins (G).



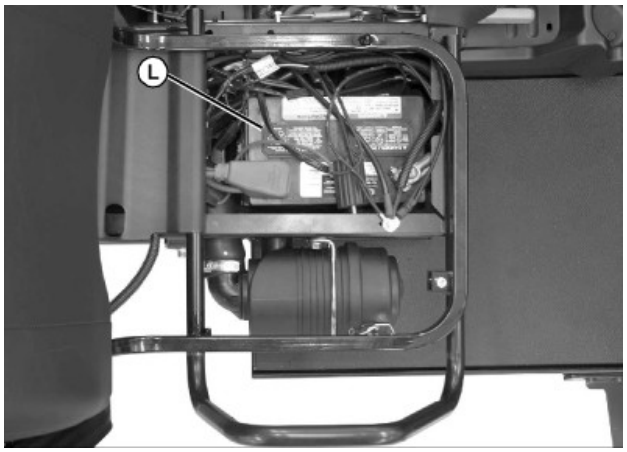
MXAL44155—UN—10APR13

3. Between engine (H) and skid plates (I) (if equipped).



MXAL44156—UN—10APR13

4. On or near transmission (J) and driveline (K).

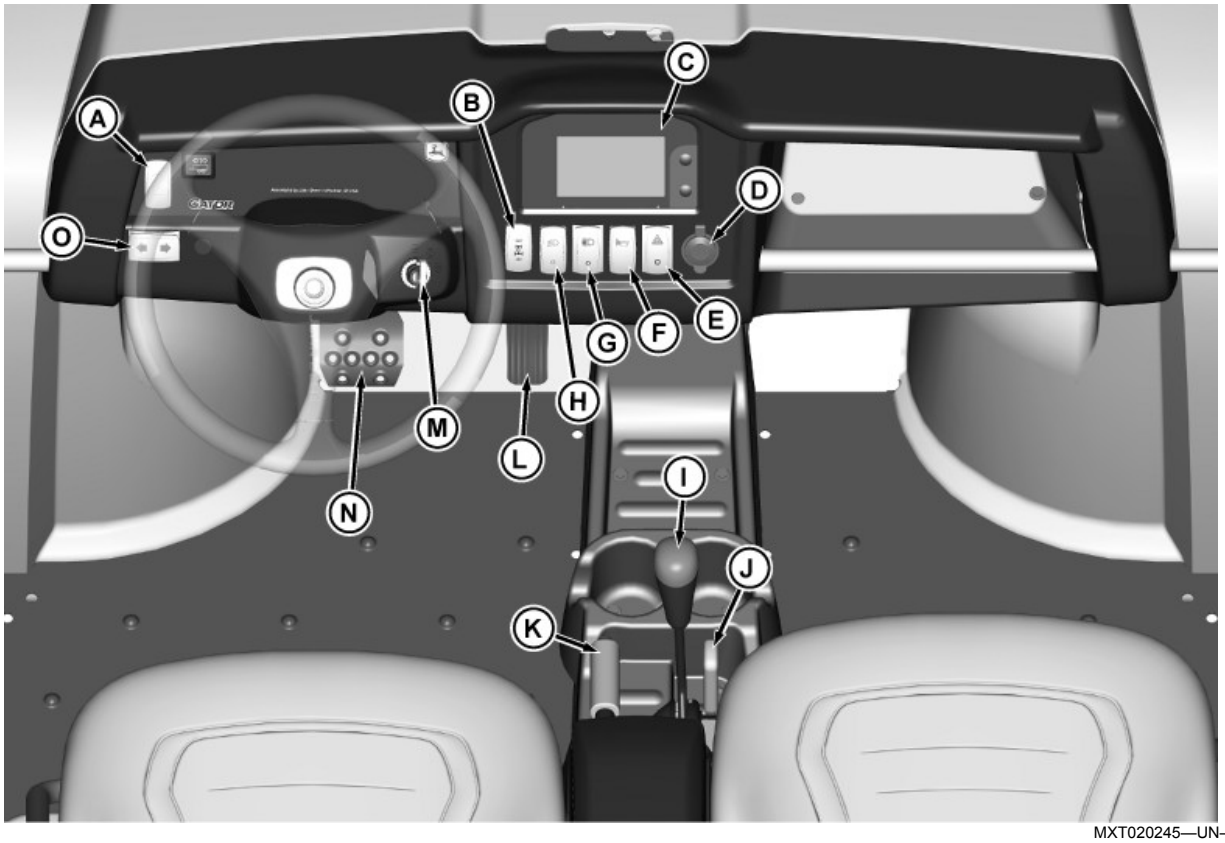


MXAL44157—UN—10APR13

5. Battery (L) and related wiring harnesses.

MX10673,0000013-19-11JUL17

Operator Station Controls



MXT020245—UN—27JUN17

Some controls may not be installed on your machine.

Key	Description
A	Cargo Box Power Lift Switch
B	2WD / 4WD Switch
C	Instrument Cluster Controller
D	12V DC Accessory Outlet
E	Hazard Lights Switch
F	Horn Switch
G	Headlight Switch - High Beam
H	Headlight Switch - Low Beam

Key	Description
I	Transaxle Shift Lever
J	Traction Assist (Differential Lock) Lever
K	Park Brake Lever
L	Accelerator Pedal
M	Ignition Key Switch
N	Brake Pedal
O	Turn Signal Switch

OUMX068,00012F7-19-27JUN17

Daily Operating Checklist

- ☐ Test safety systems.
- ☐ Check tire pressure.
- ☐ Check fuel level.
- ☐ Check engine oil level.
- ☐ Remove grass and debris from engine compartment, muffler area, and front grille, before and after operating machine.
- ☐ Check area below machine for leaks.
- ☐ Check brakes and park brake operation.
- ☐ Inspect driveline CV boots for tears or punctures.
- ☐ Check coolant level.
- ☐ Check brake fluid level.
- ☐ Check air restriction indicator.
- ☐ Tighten any loose hardware.
- ☐ Check seat belt function.

MP47322,00F4837-19-03APR13

Avoid Damage to Plastic and Painted Surfaces

- Do not wipe plastic parts unless rinsed first.
- Insect repellent spray may damage plastic and painted surfaces. Do not spray insect repellent near machine.
- Be careful not to spill brake fluid on machine components. Brake fluid may damage painted surfaces. Wipe up spilled brake fluid immediately.
- Be careful not to spill fuel on machine. Fuel may damage surface. Wipe up spilled fuel immediately.

MX00654,00000C0-19-24AUG13

Using Doors or Nets

CAUTION: Do not operate vehicle with doors or nets removed. Always park vehicle safely before opening door or net to exit.

Do not operate vehicle with doors or nets in the open position. All doors or nets must be closed while the vehicle is in use.

Using Doors

Entering vehicle:

MXT008451—UN—27AUG13

1. Pull handle (A) toward you to unlatch and open door.
2. After entering the vehicle, check to be certain the door is securely latched.

Exiting vehicle:

1. Park vehicle safely.

MXT008449—UN—27AUG13

2. Pull handle (A) toward you to unlatch and open door.
3. After exiting the vehicle, check to be certain the door is securely latched.

Using Nets

Entering vehicle:

1. Move net rearward out of entry and exit area, and enter vehicle.

MXT008444—UN—27AUG13

2. Move net forward and insert metal tab of net into buckle (A) until it latches.
3. After entering the vehicle, check to be certain the net is securely latched.

Exiting vehicle:

1. Park vehicle safely.
2. Push button to release metal tab from buckle (A).
3. Move net rearward out of entry and exit area, and exit vehicle.

MX10673,0000025-19-19JUL17

Using Hand Holds

MXAL44159—UN—10APR13

The dash bar (A), OPS handle (B), and side rail (C) hand holds are provided for passenger balance.

- Use hand holds when entering and exiting the machine.
- When a passenger is present, the passenger must use at least one hand hold at all times while the machine is moving.

MP47322,00F4839-19-03APR13

Using Bench Seat

If a bench seat is installed, it is not adjustable.

See SERVICE MISCELLANEOUS for instructions to install and remove bench seat.

MP47322,00F483A-19-03APR13

Using Bucket Seats

Adjusting Operator Seat

CAUTION: Never adjust seat while machine is moving. Stop machine before adjusting seat to prevent loss of machine control.

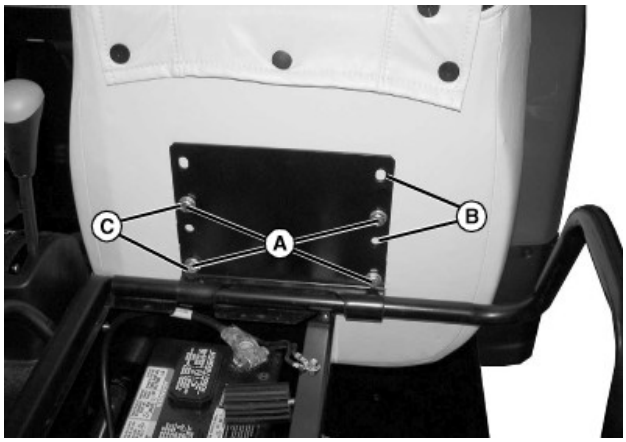
1. Stop machine and move transaxle shift lever to N (neutral) position.
2. Lock park brake.

MXAL44160—UN—10APR13

3. Push lever (A) to the left.
4. Slide seat forward or rearward to desired position.
5. Release lever.

Adjusting Passenger Seat

1. Tip seat forward.



MXAL44161—UN—10APR13

Front position shown.

2. Hold onto seat and remove cap screws (A).
3. Slide seat to the rearward (B) or forward (C) position.
4. Position bottom of seat against bracket and align correct holes with holes in seat.
5. Install original hardware to secure seat.
6. Tighten seat bracket hardware to specification.

Specification

Bracket Hardware—Torque. . . . . 10 N·m (7.4 lb-ft)

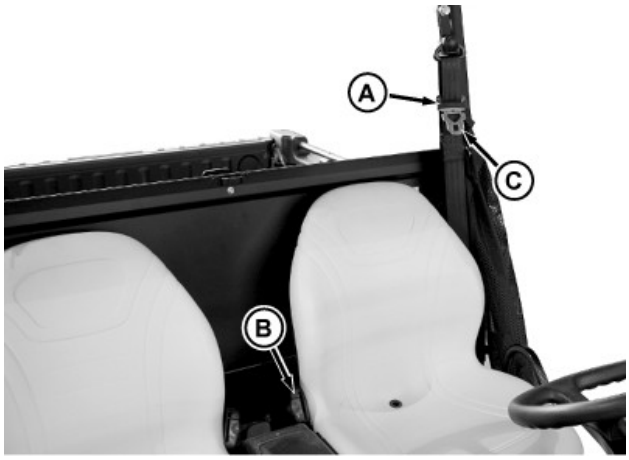
MX10673,0000026-19-19JUL17

Using Seat Belt

NOTE: Shoulder harness is sensitive. An emergency lock device is built into the belt for your protection. To engage harness, pull harness slowly. Attempting to pull too fast or in a jerking motion engages the locking mechanism and the harness does not release.

Periodically inspect seat belts for wear or damage. See Inspecting Seat Belt in SERVICE MISCELLANEOUS.

Fasten Belt



MXT020248—UN—28JUN17

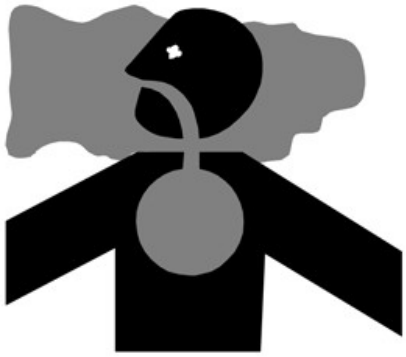
1. Grasp outer seat belt connector (A) from behind seat, pull out and across body to inner connector (B), at inside of seat.
2. Adjust outer connector up or down along the belt for the best fit.
3. Push outer connector lower half (C) firmly into inner connector until it locks.
4. Snug the seat belt across the hips, on top of the thighs.

Release Belt

1. To release seat belt, press red button on inner connector.

OUMX068,0001304-19-28JUN17

Testing Safety Systems



MXAL42804—UN—09APR13

CAUTION: Avoid injury! Engine exhaust fumes contain carbon monoxide and can cause serious illness or death.

Do not run an engine in an enclosed area, such as a garage, even with doors or windows opened.

Move the machine to an outside area before running the engine.

The safety systems installed on your machine should be checked before each machine use. Be sure you have read the machine operator manual and are completely familiar with the operation of the machine before performing these safety system checks.

Use the following checkout procedures to check for normal operation of machine.

If there is a malfunction during one of these procedures, do not operate machine. **See your authorized dealer for service.**

Perform these tests in a clear open area. Keep bystanders away.

MP47322,00F4637-19-26MAY15

Testing the Safety Start System

NOTE: The engine can start with the transaxle in gear. The machine has a brake pedal safety start switch. The brake pedal must be pushed down to start the engine.

1. Sit on the operator's seat.
2. Put key switch in STOP position.
3. Lock park brake.
4. Move transaxle shift lever forward to N (Neutral) position.
5. Turn key switch to START position. Engine should not crank. Turn key switch to STOP position.
6. Push down on brake pedal.
7. Turn key switch to START position. Engine should crank, allowing engine to start.
8. Allow engine to run a few seconds.
9. Turn key switch to STOP position.

MX10673,0000028-19-20JUL17

Using Park Brake

NOTE: The park brake alarm will buzz if the machine is in gear and you try to move in forward or reverse before unlocking the park brake.

CAUTION: Children or bystanders may attempt to move or operate an unattended machine.

Always lock the park brake and remove the key before leaving the machine unattended.

IMPORTANT: Damage to brake will occur if machine travels with brake locked.

Unlock park brake before before beginning machine travel.

Locking the Park Brake:

1. Push down on brake pedal to hold machine in place.
2. Pull up on lever to engage park brake.

Unlocking the Park Brake:

1. Push down on brake pedal to hold machine in place.
2. Pull up on lever.
3. Press center button on lever, and release lever down completely.

MP47322,00F483F-19-03APR13

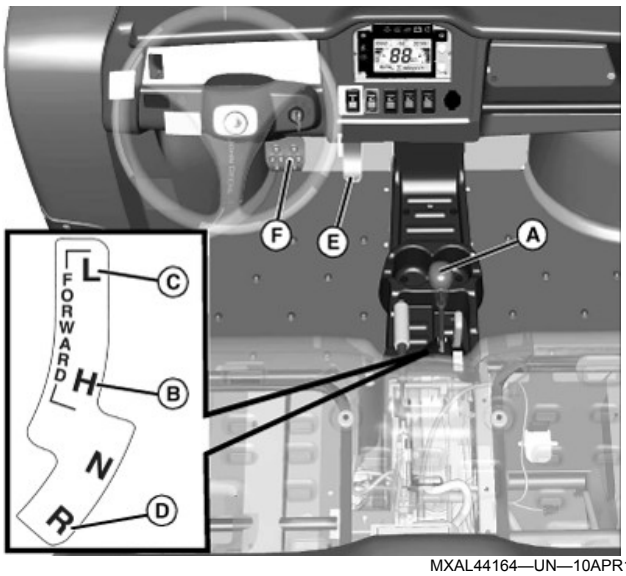
Using Travel Controls

1. Stop machine.
2. Allow engine to come to a low idle speed.

IMPORTANT: Do not shift gears when vehicle is moving or with engine running above low idle speed. Push down brake to stop vehicle motion and engage shift lever with a firm positive action.

Gears may grind when shifting if engine idle speed is set higher than factory specification.

NOTE: Always shift into low range when operating on wet or uneven terrain, or when towing or pushing heavy loads.



MXAL44164—UN—10APR13

3. Select a gear position:

- Forward - Push shift lever (A) forward to either high (B) or low (C) range.
- Reverse - Push shift lever rearward to reverse (D) gear.

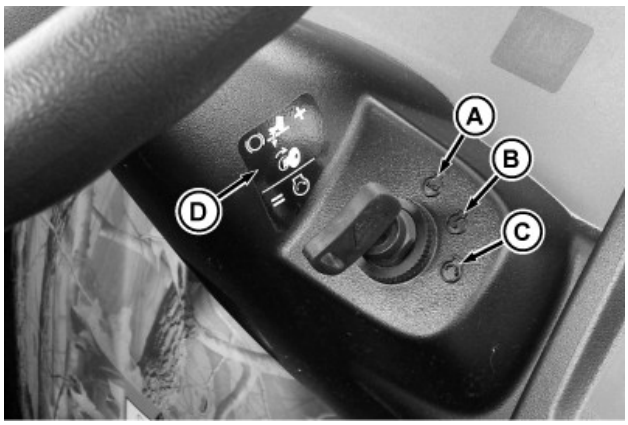
4. Look in the direction the machine will travel.

CAUTION: Reduce speed before braking or turning, when hauling loads, and while operating around obstacles or on hazardous off-road conditions.

5. Push down accelerator pedal (E) slowly and smoothly to begin machine travel.
6. Release accelerator pedal and apply brake pedal (F) evenly and firmly to slow down or stop.

MP47322,00F4840-19-11APR13

Using Ignition Key Switch



MXT020279—UN—11JUL17

A - STOP Position - With key in STOP position, all switched power is off, and engine should not run.

B - RUN Position - Turn key from STOP to this position and all switched power circuits are on.

C - START Position - Turn key to START position to start the engine. Release key after engine has started and it automatically returns to the RUN position. The engine continues to run.

D - Depress the brake pedal and turn the key to the START position to start the engine.

MX10673,0000014-19-11JUL17

Using Headlights

Ignition key switch must be in the RUN position to operate the lights. If the ignition key switch is in the RUN position and the engine is not running, the battery will discharge if the lights are allowed to remain on for an extended period of time.

- Press top of light switch to turn headlights on.

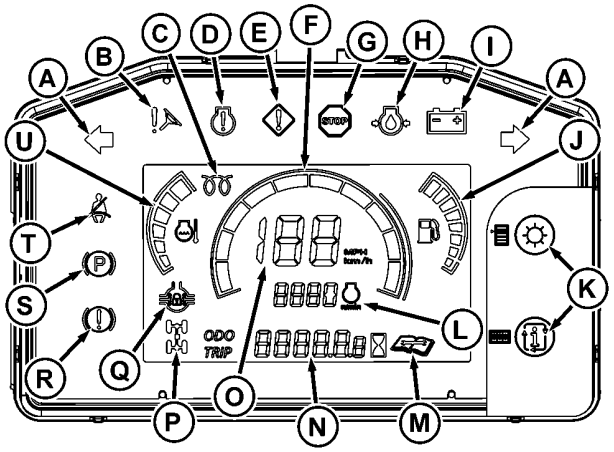
NOTE: Be sure to turn lights off and turn the ignition key switch to STOP position, or lights will discharge battery.

- Press bottom of light switch to turn headlights off.

MP47322,00F4842-19-03APR13

Using Instrument Cluster Controller

NOTE: Depending on the machine model, some functions are not available.



MXT020153—UN—17MAY17

Some indicators may not be displayed on your machine.

NOTE: "Troubleshooting Required" indicates that additional diagnosis is required to isolate the problem. See your Authorized John Deere Dealer for service.

A - Turn Signal Indicator - The left or right signal indicator flashes when turn signal is active.

B - Electric Power Assist Steering (EPAS) Malfunction Indicator - This indicator illuminates or flashes when the EPAS system detects a fault. The level of assist may also be decreased. Troubleshooting required.

C - Glow Plug Indicator - The indicator illuminates while the glow plugs are heating after the key switch is placed in the RUN position. Depending on the temperature, the indicator turns off in approximately 0-10 seconds indicating that the engine can be started.

D - Engine Malfunction Indicator - This indicator illuminates or flashes when an engine fault has been detected. Troubleshooting required.

E - Operator Alert Indicator - This indicator illuminates when a fault has been detected that does not require the machine to be stopped immediately. Troubleshooting required.

F - Speedometer/Engine RPM Gauge - The bar gauge can be set to show engine or wheel speed.

G - Stop Indicator - This indicator illuminates or flashes alerting the operator to a condition that requires immediate attention and to stop the machine. Troubleshooting required.

H - Low Engine Oil Pressure Indicator - This indicator illuminates or flashes when the engine is running and the engine oil pressure is too low. Troubleshooting required.

I - Battery Indicator - This indicator illuminates or flashes when a low or high voltage has been detected. Turn off electrical loads.

J - Fuel Gauge - The bar graph has eight segments representing actual fuel level. Each bar displays approximately 1/8 of a full fuel tank. If there is less than 1/8 of a tank (no bars illuminated) the fuel symbol blinks.

K - Instrument Cluster Controller Buttons - These buttons are used to activate certain instrument cluster controller functions. For detailed instructions, see Using Instrument Cluster Controller Buttons in OPERATING Section.

L - RPM Gauge - This gauge shows a digital readout of the current engine RPM value.

M - System Diagnostic Indicator - This indicator illuminates or flashes for system malfunctions that do not have a specific indicator. Troubleshooting required.

N - Odometer, Trip Meter, Hour Meter Gauge - This indicator shows the accumulated kilometers/miles the machine has traveled, along with a trip meter. The hour meter portion shows the accumulated number of operating hours the engine has run. The hour meter displays operating hours and accumulates and displays operating hours when the engine is running. The hour meter is intended to provide a means of monitoring machine usage for maintenance purposes. Use the hour meter to determine when your machine has reached the recommended service intervals.

O - Speedometer - The speedometer indicates machine speed in km/h or mph.

P - 4WD Indicator - This indicator illuminates when four-wheel drive is enabled.

Q - Differential Lock Indicator - This indicator illuminates when the differential lock is engaged.

R - Brake System Alert Indicator - This indicator illuminates when the brake fluid falls below the acceptable level. Troubleshooting required.

S - Park Brake Indicator - This indicator illuminates when the park brake is partially or fully engaged.

T - Seat Belt Indicator - This indicator illuminates or flashes when the driver seat belt is not secured.

U - Coolant Temperature Gauge - This gauge displays the current engine temperature. If the temperature rises to an overheat condition, the stop indicator (G) illuminates.

Equipment for Non-Road Homologated Machines

X - Denotes which indicators in the instrument cluster are active based on the machine model.

O - Denotes which indicators in the instrument cluster are optional based on the machine model.

Indicators	XUV825	XUV855
Turn Signal	O	O
Electric Power Assist Steering Malfunction	O	O
Glow Plug (Diesel only)		X
Engine Malfunction	X	
4WD	X	X
Differential Lock		
Brake System Alert		
Low Engine Oil Pressure	X	X
Fuel Gauge	X	X
RPM Gauge	X	X
Coolant Temperature Gauge	X	X

Equipment for Road Homologated Machines

X - Denotes which indicators in the instrument cluster are active based on the machine model.

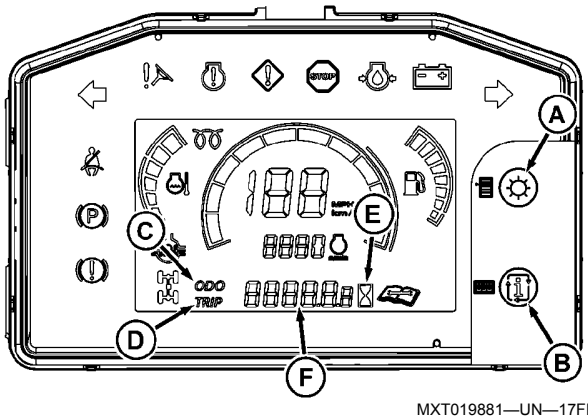
O - Denotes which indicators in the instrument cluster are optional based on the machine model.

Indicators	XUV855
Turn Signal	X
Electric Power Assist Steering Malfunction	O
Glow Plug (Diesel only)	X
Engine Malfunction	
4WD	X
Differential Lock	
Brake System Alert	X
Low Engine Oil Pressure	X
Fuel Gauge	X
RPM Gauge	X
Coolant Temperature Gauge	X

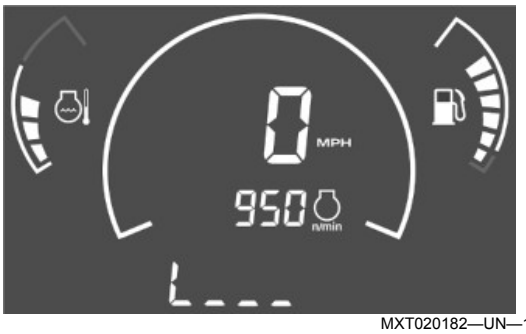
OUMX068,0001305-19-07AUG18

Using Instrument Cluster Controller Buttons

1. Turn the key switch to run position.



MXT019881—UN—17FEB17



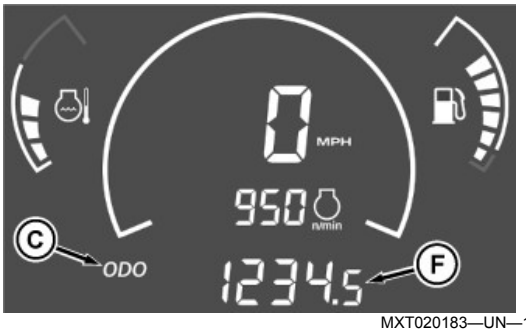
MXT020182—UN—15JUN17

Display Brightness Screen

2. Adjust the display brightness by pressing the select button (A).

Odometer, Trip Meter, and Hour Meter

Toggle between odometer, trip meter, and hour meter Home screens by pressing the cycle button (B).

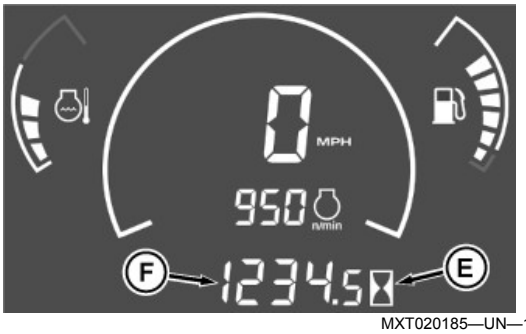


MXT020183—UN—15JUN17

- When “ODO” (C) is displayed, the odometer indicator (F) displays the number of miles or km the machine has moved. (To change between miles or km displayed, see System Settings Menu.)

MXT020184—UN—15JUN17

- When “TRIP” (D) is displayed, the indicator (F) displays the number of miles or km the machine has moved for a certain trip. (To change between miles or km displayed, see System Settings Menu.)



MXT020185—UN—15JUN17

- When the hour meter (E) is illuminated, the indicator (F) displays the number of operating hours the engine has run.

System Settings Menu

To enter the System Settings Menu from the Home screen, press and hold the select button (A) for the required time. Pressing the cycle button (B) toggles through the Tire Size, Display Units, Speed Units, and two Diagnostic Trouble Codes (DTC) menus. (DTC menus are provided for diagnosing a machine malfunction. See your John Deere dealer for service.)

NOTE: If vehicle speed is greater than 4.8 km/h (3 mph), no menu settings are allowed.

NOTE: While in a main or sub menu item, if no button is pressed within the required time, the settings menu returns to the current Home screen. Press and hold the select button for the required time to get back to the settings menus.

Tire Size Selection Menu

MXT019883—UN—17FEB17

14 inch Tire Size Shown

This menu allows the operator to adjust for the tire sizes available. The current setting is displayed on the lower seven segment section when entering the option menu structure.

To enter the tire size menus, press the select button (A). To toggle through and display the tire sizes, press the cycle button (B). The tire size value displayed flashes every 1 second. When the desired tire size is displayed, press the select button. The tire size remains solid on for 1 second, and then the display returns to the Main Menu for this setting.

Display Units Selection Menu

MXT019884—UN—17FEB17

English Display Units Shown

This menu allows the operator to select either English or metric units when applicable. The current setting is displayed on the lower seven segment section when entering the option menu structure.

To enter the display units menus, press the select button (A). To toggle between US/mph and SI/km/h, press the cycle button (B). The display unit text and icon flashes every 1 second. When the desired display unit is displayed, press the select button. The display unit text and icon remains solid on for 1 second, and then the display returns to the Main Menu for this setting.

Engine RPM/Speedometer Gauge Selection Menu

MXT019885—UN—17FEB17

Vehicle Speed Option Shown

This menu allows the operator to change the center bar graph to show a graphical representation of either the vehicle speed or engine rpm. On the Home screen, an icon identifies which option is selected. The current setting is displayed on the lower seven segment section when entering the option menu structure. “CYC” identifies the gauge as being in the engine tachometer mode. The “SP” identifies the gauge as being in the vehicle speedometer mode. Both modes show a graphical approximation of the selected mode.

To enter the engine rpm/speedometer menus, press the select button (A). To toggle between SP/mph and CYC/rpm, press the cycle button (B). The display unit text and icon flashes every 1 second. When the desired display unit is displayed, press the select button. The display unit text and icon remains solid on for 1 second, and then the display returns to the Main Menu for this setting.

OUMX068,000129D-19-20JUL17

Exit Lighting Operation

MXT019886—UN—17FEB17

Countdown Timer

Function

A method for a “soft” shutdown of lighting after the key switch is turned off.

Operation

When the key switch is turned off, certain circuits remain

on. The bar gauge represents a countdown to power removal.

OUMX068,000123B-19-07AUG18

Using Accessory Outlet

Up to three outlets may be installed depending upon your machine model and seat options:

- 10 amp outlet under center armrest
- 10 amp outlet on machine dashboard
- 10 amp outlet behind front passenger seat in front of rear bench seat

CAUTION: Safe operation requires your full attention. Do not wear radio or music headphones while operating machine.

NOTE: Accessory must be rated at given amps for outlet or less.

The accessory plug does not turn off with the key switch. Items connected to the accessory plug will continue to draw power, discharging the battery.

1. Remove 12-volt outlet cover and install accessory cord in outlet.
2. Install cover in outlet after use.

SB31882,0000259-19-11JUL18

Using Turn Signal Switch (If Equipped)

NOTE: Turn signals will continue to flash when the ignition key switch is in the STOP position, discharging the battery.

- Press at left end of turn signal switch to signal a left turn.
- Press at right end of turn signal switch to signal a right turn.
- Press at opposite end of turn signal switch until switch is centered to turn signal light off.

MP47322,00F4847-19-03APR13

Using Hazard Lights (If Equipped)

NOTE: Hazard lights will continue to flash when the ignition key switch is in the STOP position, discharging the battery.

- Press at top of hazard light switch to turn hazard lights on.
- Press at bottom of hazard light switch to turn hazard lights off.

MP47322,00F4848-19-03APR13

Using Front Blade Switch (If Equipped)

- Press at top of front blade switch to raise blade.
- Press at bottom of front blade switch to lower blade.

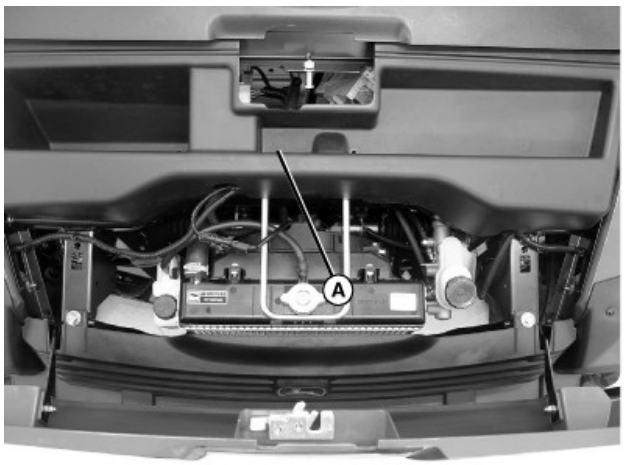
MP47322,00F4849-19-03APR13

Using Storage Areas

Under Machine Hood

CAUTION: Never store flammable, heavy, or loose breakable objects in the storage tray. Always latch hood before operating machine.

IMPORTANT: Do not store items that will not allow the hood to close properly. Properly secure loose or sharp items. These items may damage the storage tray or other items within the tray.



MXAL44169—UN—10APR13

Storage tray (A) is located in front of machine under the hood.

1. Open hood to access the storage tray.
2. Secure all items to prevent damage from movement while operating the machine.
3. Close hood.

MP47322,00F484A-19-03APR13

Starting the Engine

CAUTION: Engine exhaust fumes contain carbon monoxide and can cause serious illness or death.

- **Move the machine to an outside area before running the engine.**
- **Do not run an engine in an enclosed area without adequate ventilation.**
- **Connect a pipe extension to the engine exhaust pipe to direct the exhaust fumes out of the area.**
- **Allow fresh outside air into the work area to clear the exhaust fumes out.**

1. Sit on operator seat. Do not start engine at this time.
2. Push down on accelerator pedal to check free movement of pedal assembly. Release pedal.
3. Verify that transaxle shift lever is in N (Neutral) position.
4. Verify that park brake is locked.

NOTE: The engine can start with the transaxle in gear. The machine has a brake pedal safety start switch. The brake pedal must be pushed down to start the engine.

On some machine models, starter crank protection may engage and you will be unable to crank the engine for approximately ten seconds.

5. Push and hold the brake pedal down to engage the safety start switch.

CAUTION: Do not start engine by shorting across starter terminals. Bypassing normal circuitry will allow vehicle to start in gear.

Do not use starting fluid to aid engine starting.

Never start engine while standing on ground. Start engine only from operator's seat.

6. Turn ignition key switch to the RUN position.
7. Check that indicator lights turn on briefly:
   - All indicators on the instrument panel display.
   - Steering malfunction light (machines with electric power assist).
   - Check that the oil pressure indicator remains on.
   - Other indicators may also remain on while starting.
8. Turn ignition key switch to START position.

IMPORTANT: Starter may be damaged if operated continuously for extended periods of time. Allow starter to cool down after several starting attempts.

9. Release ignition key switch to the RUN position when engine starts.
   - If engine does not start within five seconds, turn ignition key switch to STOP position and wait ten seconds before trying to start again.
   - In very cold conditions, attempt starting engine three times only, then wait 5 minutes before trying again. This will allow time for starter to cool and prevent damage to starter.

IMPORTANT: Do not operate the engine at full throttle or under load until engine has warmed up, or engine damage could occur.

10. Run engine at half speed for 2 or 3 minutes to warm the engine.

MX10673,0000029-19-19JUL17

Stopping Engine

CAUTION: Children or bystanders may attempt to move or operate an unattended machine.

Always lock the park brake and remove the key before leaving the machine unattended.

IMPORTANT: Do not stop engine immediately after hard or extended operation. Keep engine running at low idle for about 2 minutes to prevent heat build-up.

1. Stop machine.
2. Move transaxle shift lever to N (Neutral) position.
3. Lock park brake.
4. Turn ignition key switch to STOP position.
5. Remove key.

MP47322,00F484C-19-03APR13

Emergency Stopping

1. Remove foot from travel pedal or accelerator pedal.
2. Depress brake pedal. Do not release brake pedal until machine has stopped.
3. After machine has stopped, lock the park brake.
4. Turn ignition key switch to STOP position.

MP47322,00F484D-19-03APR13

Using Electric Power Assist Steering (EPAS)

The Steering Malfunction Light indicates there is a malfunction in power assist steering.
The light may go off and on during operation as an indicator that EPAS has been reduced to protect the system.
The fault indication may be cleared automatically when

the fault condition is removed.
The level of assist decreases as the speed increases, with full assist with zero speed. Normal steering operation has the EPAS indicator light off. If the indicator light remains on constantly or flashes continually during operation, contact your John Deere dealer.
Steering effort is adversely affected by low tire air pressure. Always keep tires at recommended air pressure.

SB31882,0000282-19-07AUG18

Using Traction Assist

Traction assist provides better traction when rear wheels start to slip. Engaging the traction assist will cause both rear wheels to turn together at equal speed.

CAUTION: Driving at high speeds with the traction assist engaged may result in loss of steering control. Do not engage traction assist or turn with the traction assist engaged while operating machine at high speeds or on slopes.

Engaging the Traction Assist:

IMPORTANT: Incorrectly engaging traction assist may damage the transaxle.

Reduce speed before engaging or disengaging traction assist.

1. Stop or reduce engine speed to 1/3 throttle or less.
2. Pull traction assist lever up to the locked (vertical) position:
   - Traction assist will remain engaged as long as lever is up (vertical).

Disengaging the Traction Assist

NOTE: To ensure true disengagement of traction assist, you must equalize torque on both axles.

1. Stop or reduce engine speed to 1/3 throttle or less.
2. Drive the vehicle straight ahead at a constant speed.
3. Push lever down to unlocked position.

MP47322,00F484F-19-03APR13

Using Four Wheel Drive

4WD On-Demand enables the front wheels to drive, but torque will not be applied until rear wheels begin to slip.

CAUTION: 4WD On-Demand greatly increases traction and may make dangerously sloped terrain accessible, increasing possibility of a tip-over.

Use extra caution when driving on slopes. Use 4WD On-Demand when driving on slopes to increase traction.

Use 4WD On-Demand when driving on icy, wet or graveled surfaces; reduce speed to avoid skidding and loss of steering control.

IMPORTANT: Engaging 4WD On-Demand when the machine is stopped and the rear wheels are spinning will damage the gears.

- Push in on top of 2WD/4WD switch to enable the 4WD On-Demand system.
- Push in on bottom of switch to disable the system.

CAUTION: Front implements may cause decreased traction at the rear wheels resulting in loss of control. Always operate machine with 4WD On-Demand engaged when front implements are attached.

Tips for operating 4WD On-Demand:

NOTE: Occasionally the 4WD On-Demand system will not disengage after a change in vehicle travel direction. This is known as "wedging." If this does occur, the vehicle will exhibit higher than usual steering efforts and driveline wind-up. To disengage (un-wedge) the system, reverse the direction of vehicle travel.

- Maintain recommended front and rear tire pressures to ensure optimum performance on all surface conditions.
- Disable 4WD On-Demand when driving machine on paved or hard packed surfaces to increase front tire life and reduce drive train wear.

MP47322,00F4850-19-03APR13

Using the Cargo Box

CAUTION: Avoid injury! Seating is provided for the operator and one passenger. Do not allow riders in the cargo box or on the tailgate. Extra riders can fall off and be seriously injured or killed.

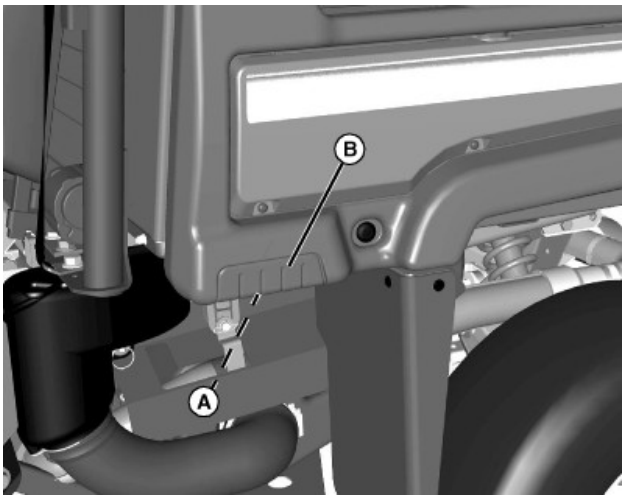
Raising and Lowering with Manual Lift

CAUTION: Avoid injury! Park machine on a level surface and lock park brake before manually raising and securing cargo box in raised position.

A cargo box containing material is heavy.

Empty some or all material until cargo box can safely be raised manually.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Empty cargo box by hand.
3. Disengage cargo box lock if installed.



MXAL44170—UN—10APR13

4. To release pressure against latch (A), push down on cargo box.
5. Release latch by pulling latch towards grip (B) on cargo box. Allow lift cylinder to raise cargo box.

Raising and Lowering with Power Lift

IMPORTANT: Avoid damage! A hydraulic "whine" or squealing sound when cargo box is fully raised or lowered or when box is heavily loaded indicates that the power lift hydraulic overload pressure relief valve has opened, and the power lift can not apply any more force. To prevent unnecessary wear or damage, keep sound to a minimum. Do not operate the power lift actuator beyond full stroke or exceed the cargo box weight capacity.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Disengage cargo box lock if installed.
3. Turn key to RUN position.
4. Raise the cargo box by pressing and holding the top of the cargo box power lift switch. Release switch when box is at desired dump height or when reaching maximum height.

NOTE: Allowing the pressure relief valve to open slightly (whine or squeal) after cargo box is fully lowered, helps keep the cargo box secure and reduce rattling caused by travel vibrations.

5. Lower cargo box by pressing and holding bottom of cargo box power lift switch
6. Turn key to STOP position.

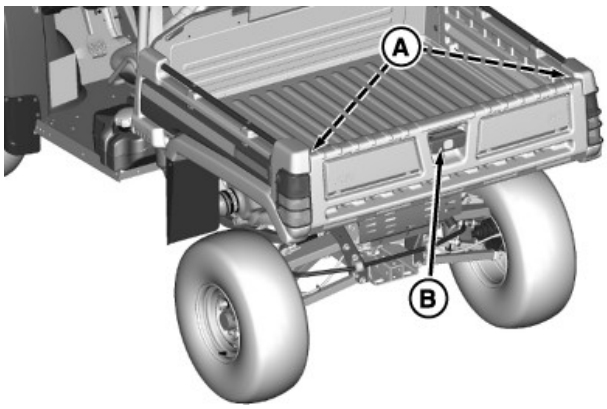
Operating the Tailgate

CAUTION: Avoid injury! Never operate tailgate with one lanyard attached (always use both).

Check condition of lanyards for wear or damage. Replace if cable is kinked or frayed.

IMPORTANT: Avoid damage! Do not attempt to tilt or dump cargo box when lanyards are detached. Tailgate damage from contact with hitch results.

To avoid jamming material in the gap between the cargo box bed and tailgate, keep lanyards attached when loading and unloading loose materials.



MXT011039—UN—09SEP14

1. Check to be sure lanyards (A) are in place to support lowered tailgate.
2. Disconnect lanyards if you want to lower tailgate more than 90 degrees.

IMPORTANT: Avoid damage! Lower tailgate completely to unload cargo box only. Never drive with the tailgate hanging down. Tailgate can contact tires and cause damage.

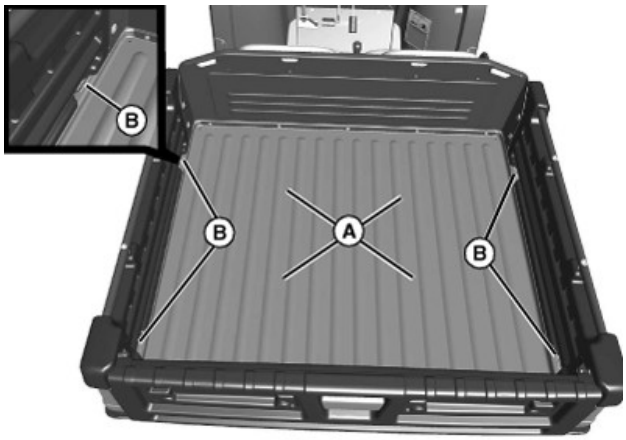
3. Pull back on handle (B) to unlock and lower tailgate.
4. Before raising tailgate, check for stones and debris caught in the gap between the tailgate and cargo box floor.

   To remove debris:

   a. Lock the cargo box in raised position.
   b. Rotate the tailgate slightly to free debris, and brush out the gap.
   c. Lower the cargo box.

5. To raise tailgate, slowly push tailgate upward and lock into closed position.
6. Check to be sure that tailgate is securely locked.

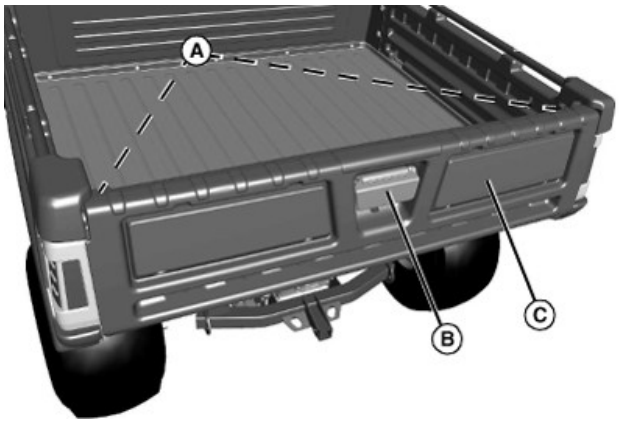
Using Cargo Box Tie Downs



MXAL44173—UN—10APR13

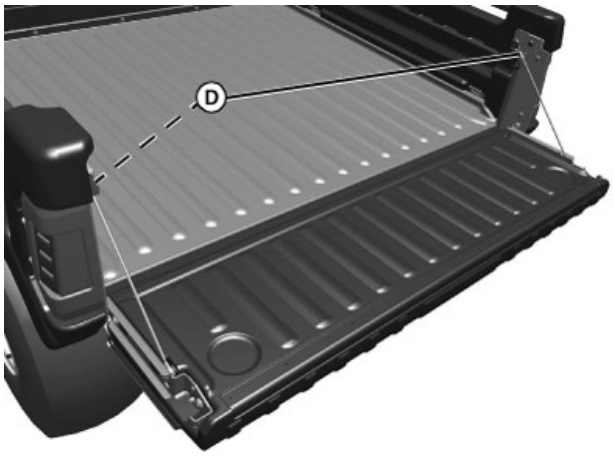
1. Arrange load so the weight is centered over the main cargo area (A).
2. Secure loads to the tie-downs (B) in a safe and secure manner.

Removing the Tailgate



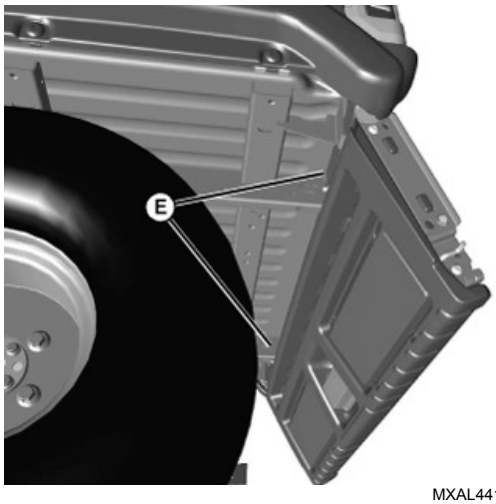
MXAL44174—UN—10APR13

1. Check to be sure lanyards (A) are in place to support lowered tailgate.
2. Pull back on handle (B) to unlock and lower tailgate (C).



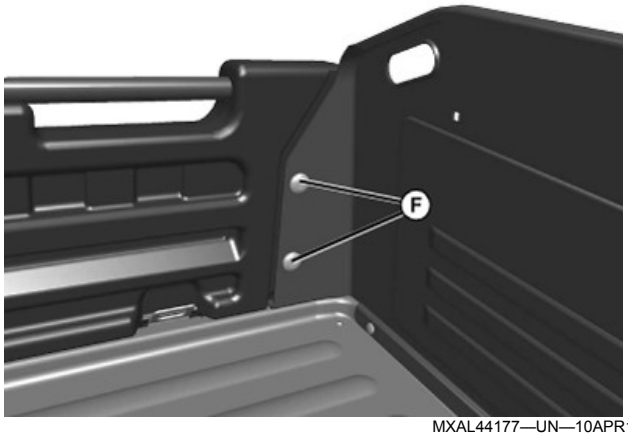
MXAL44175—UN—10APR13

3. Loosen loop (D) on top of lanyards, disconnect from studs on cargo box side, and lower tailgate fully downward.



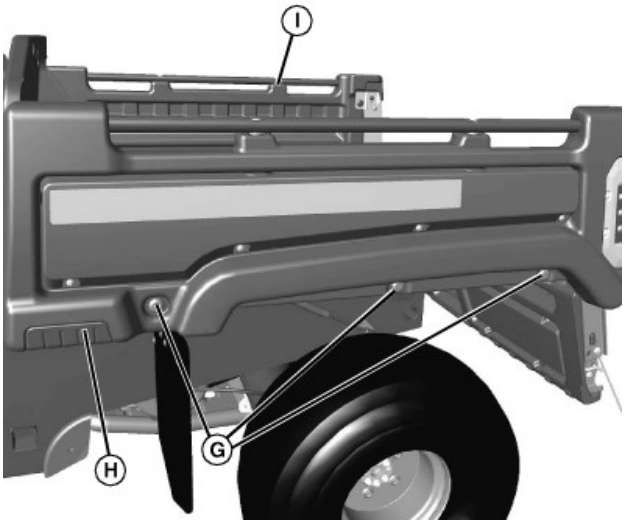
MXAL44176—UN—10APR13

4. Loosen two nuts (E) on rear of floor panel, to allow side panels to be removed.
5. If equipped with tail lights, disconnect the wiring harness and hang the harness in the rear of the box.



MXAL44177—UN—10APR13

6. From behind drivers seat in cargo box, remove two nuts (F).

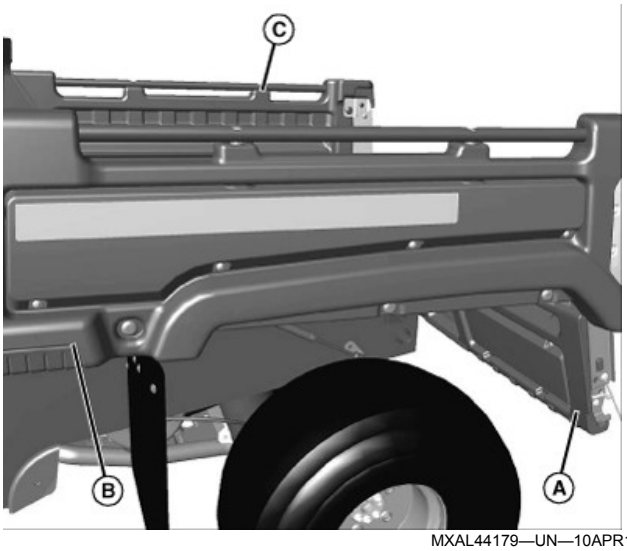


MXAL44178—UN—10APR13

7. Loosen three bolts (G) in left side body panel (H). Do not completely remove bolts from clamp-on nuts.
8. Support the tailgate to avoid bushing damage. Move side body panel slightly outward and remove tailgate from left side body panel and right side body panel (I).
9. Install in reverse order of removal.

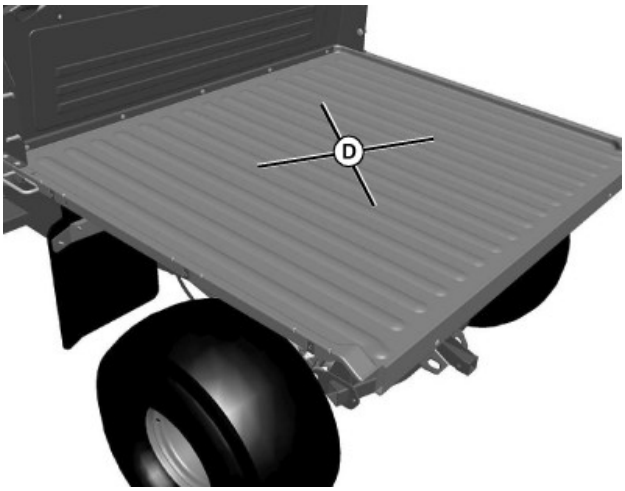
Operating in Flat Bed Mode

CAUTION: Avoid injury! Cargo box load guard protects operator and passenger from shifting loads. Do not remove load guard.



MXAL44179—UN—10APR13

1. To operate machine in flat bed mode, remove tailgate (A) (See Removing the Tailgate).
2. Remove left (B) and right (C) side body panels.



MXAL44180—UN—10APR13

3. Arrange load so the weight is centered over the main cargo area (D).
4. Install tailgate and side panels in reverse order of removal procedure (See Removing the Tailgate).

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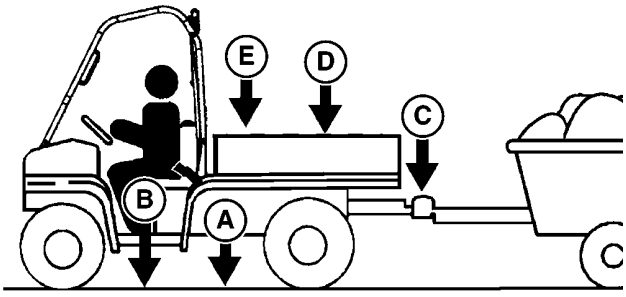
Determining Vehicle Load Capacity

Find weights and capacities for your machine model in the Specifications section.

CAUTION: Avoid injury! Overloading the vehicle or trailer causes loss of control, resulting in serious injury or death.

- **Do not allow the Gross Vehicle Weight (GVW) to exceed the Gross Vehicle Weight Rating (GVWR) of the vehicle.**
- **Remove excess weight before operating vehicle.**



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The picture shows a Protective Structure installed on a two-passenger machine. Some machines do not have a Protective Structure installed as some models are not designed to include it.

Factors in Determining Vehicle Load Capacity

NOTE: Optional equipment, and attachments that are not standard equipment, reduce your cargo box capacity; so they must be included when determining gross vehicle weight.

- **Gross Vehicle Weight (GVW)** is the combination of the empty vehicle weight and payload.
- **Gross Vehicle Weight Rating (GVWR)** is the maximum permissible vehicle weight.
- **Payload** is the weight of all occupants, tongue weight, cargo, attachments, and options that were not standard equipment.

  Payload = B+C+D+E

- **(A) Empty vehicle weight** is the weight of the vehicle (full fluids) without occupants or load or attachments.
- **(B) Occupant load** is the combined weight of the operator and passenger (or passengers).
- **(C) Trailer tongue weight** is the weight measured if the tongue of a loaded trailer was placed on a scale. The tongue weight must be approximately 10% of the total of the trailer weight and the weight of its load.
- **(D) Cargo load** is the weight of the cargo.
- **(E) Attachment and option weight** is the combined weight of all attachments and options that were not standard equipment. For help with this information, contact your John Deere dealer.
- **Vehicle load capacity** is the remaining amount of weight that the vehicle is able to haul.
- **Determine maximum vehicle load capacity:**
  a. Calculate GVW = A+B+C+D+E
  b. Subtract the Gross Vehicle Weight (GVW) from the Gross Vehicle Weight Rating (GVWR).
  c. The weight difference between the two numbers is the vehicle load capacity.

     Vehicle Load Capacity = GVWR-GVW

  d. The Gross Vehicle Weight must be less than or equal to the Gross Vehicle Weight Rating. If GVW exceeds GVWR, remove excess weight from the vehicle before operating.

Example:

The following is for a vehicle with 68 kg (150 lb) of cargo load, a 91 kg (200 lb) operator, 100 kg (220 lb) of attachments. Attachments include a heavy-duty brush guard, Protective Structure poly roof, cargo box power lift kit; towing a trailer with 23 kg (50 lb) of tongue weight.

Find the correct specifications for your machine model in the Specifications section in this manual. To determine your machine capacity, use those numbers.

Key	Description
(A) Empty Vehicle Weight:	553 kg (1220 lb)
(B) Operator Weight:	91 kg (200 lb)
(C) Trailer Tongue Weight:	23 kg (50 lb)
(D) Cargo Load:	68 kg (150 lb)
(E) Attachments and/or Options:	100 kg (220 lb)

GVW = 835 kg (1840 lb)

• 91 kg (200 lb) + 553 kg (1220 lb) + 23 kg (50 lb) + 68 kg (150 lb) + 100 kg (220 lb)

Vehicle Load Capacity = 81 kg (180 lb)

• GVWR 916 kg (2020 lb) less GVW 835 kg (1840 lb)

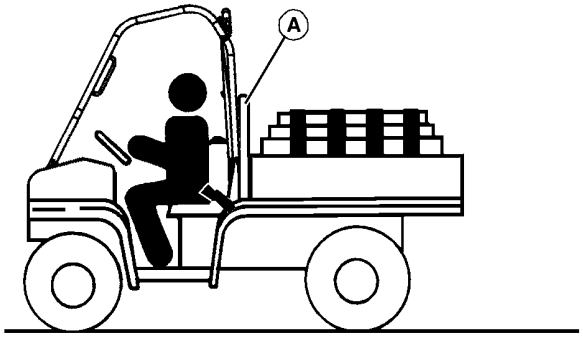
Utilize the remaining vehicle load capacity of 81 kg (180 lb) to haul an additional passenger (or passengers), cargo, trailer tongue, and attachment weight.

MX10673,000008A-19-07JUN18

Loading the Cargo Box

CAUTION: The utility vehicle may become unstable if the cargo box is loaded incorrectly. Avoid loose and shifting loads or uneven loading of material.

- **Do not load above height of load guard.**
- **Securely anchor all loads in cargo box.**
- **Do not load beyond maximum capacity.**



MXAL44182—UN—10APR13

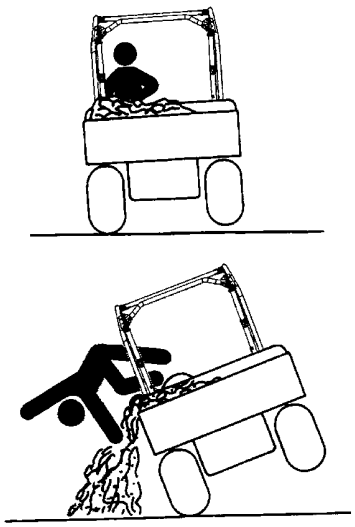
See capacities in SPECIFICATIONS.

Reduce load by half when operating over rough, hilly, or steep terrain. Do not overload vehicle. Limit loads to those that can be safely controlled.

Reduce speed and exercise extreme caution when operating over rough, hilly, or steep terrain.

Securely anchor and evenly distribute loads in cargo box, when loading objects into vehicle. Shifting loads will affect stability.

Do not load above load guard (A).



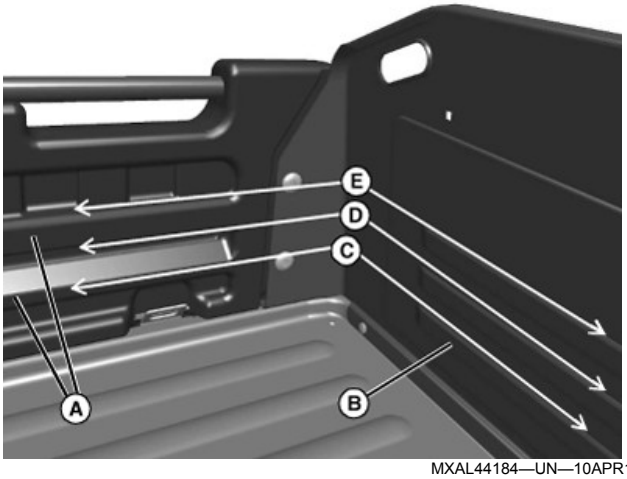
MXAL44183—UN—10APR13

Avoid concentrated loads at rear or side of cargo box to prevent vehicle from tipping over. Be sure load is evenly distributed.

Because there is a big difference in weight between dry and wet sand, the only way of getting true weight of the load you are carrying is by using a scale.

Printed weight is normally on bagged and other material.

Box Volume Capacity



MXAL44184—UN—10APR13

Use rub rails (A) in left and right side panels, and form beads (B) in cargo box front panel to determine cargo box volume.

- 10.1 cm (4 in.) load height (C) = 150 L (5.3 cu ft).
- 15.2 cm (6 in.) load height (D) = 226 L (8 cu ft).
- 20.3 cm (8 in.) load height (E) = 303 L (10.7 cu ft).

NOTE: Use table below to determine height of common cargo box materials.

Do not exceed Gross Vehicle Weight Rating (GVWR).

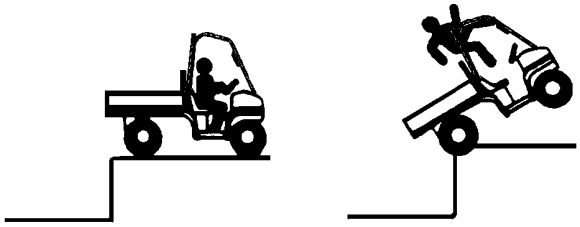
Material	Weight (lbs/cubic foot)	Capacity Height
Asphalt	45	12
Brick	120	6
Cement (Dry)	94	8
Sand (Dry)	100	7
Sand (Damp)	120	6
Sandstone (Broken)	94	8
Concrete (Set/Mix)	135	5
Soil (Dry/Loose)	78	9
Soil (Wet/Packed)	100	7
Clay (Dry/Lump)	67	11
Clay (Wet/Lump)	100	7
Fertilizer	60	12
Gravel (1/4 - 2 in.)	105	7
Turf/Sod	35	12

MX00654,00000D0-19-23JUL17

Emptying Cargo Box

CAUTION: Raising a loaded cargo box changes the center of gravity. Keep vehicle a safe distance from the edge of ravine or drop-off when raising cargo box to empty.

A loaded cargo box can be very heavy. Do not attempt to manually raise a loaded cargo box. Unload cargo box before raising it by hand.



MXAL44185—UN—10APR13

1. Back up vehicle to dump site.
2. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
3. Open tailgate.

IMPORTANT: Stop emptying immediately if overload pressure relief valve opens. Lower cargo box completely and remove excess load by hand before dumping.

4. Raise cargo box to dump load.
5. Lower cargo box when empty.

6. Close tailgate. Do not drive vehicle with cargo box in raised position.

MP47322,00F4854-19-03APR13

Towing Loads

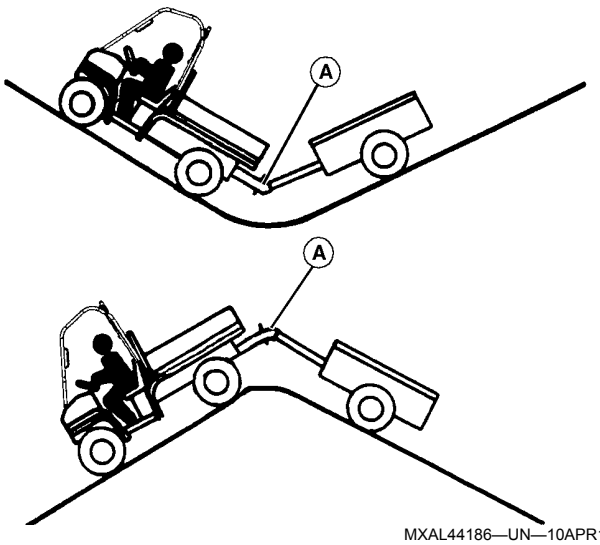
CAUTION: Avoid injury! Excessive towed load can cause loss of traction and loss of control on slopes. Stopping distance increases with speed and weight of towed load.

Do not tow a load that exceeds the maximum allowable towing load for this vehicle, as specified in this operator's manual.

Secure towed loads before transporting.

- To provide adequate braking ability and traction, the weight of the towing vehicle (base vehicle + vehicle payload) should be at least 1.5 times the weight of the towed load (trailer + trailer payload).
- When operating over rough, hilly, or steep terrain and reducing cargo load by half, any towed load should also be reduced accordingly.
- Do not tow a load that exceeds towing capacity listed in SPECIFICATIONS.
- Do not exceed trailer tongue weight listed in SPECIFICATIONS.
- Tow load at a speed slow enough to maintain control.
- Towing heavy loads in high gear will reduce CVT belt life.

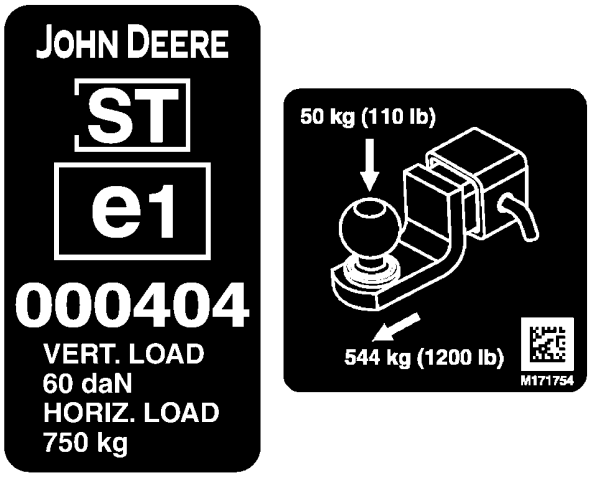
IMPORTANT: Avoid damage! When operating on terrain with extreme angles, use a ball type hitch (A).



MXAL44186—UN—10APR13

- Always use approved hitch and hitch point provided for the utility vehicle. Do NOT modify the hitch or hitch point in any way.

Capacity Label



MXT007935—UN—18JUL13

Labels shown are for reference only. Confirm capacities on labels on your machine.

Your machine may have a hitch capacity label installed near the hitch area. The label indicates vertical and horizontal load capacities.

The vertical load capacity is the maximum down force which can be applied for safe operation. The horizontal load capacity is the total weight of what is being towed which must not be exceeded for safe operation.

MX10673,000008C-19-12SEP17

Using Correct Tires and Inflation

CAUTION: Help prevent severe bodily injury or death, failure to observe these recommendations may result in loss of stability and operator control.

See tire descriptions and inflation pressures for load conditions in SPECIFICATIONS.

Tires

Use of John Deere approved original equipment or optional equipment is recommended. To ensure maximum machine performance and ride quality, do not mix size, type, or placement of tires. Failure to place tires per the guidelines could result in reduced machine performance, diminished traction and poor handling.

Inflation

CAUTION: Explosive separation of tire and rim parts is possible when they are serviced incorrectly:

- **Do not attempt to mount a tire without the proper equipment and experience to perform the job.**

- **Do not inflate the tires above the recommended pressure.**
- **Do not weld or heat a wheel and tire assembly. Heat can cause an increase in air pressure resulting in an explosion. Welding can structurally weaken or deform the wheel.**
- **Do not stand in front or over the tire assembly when inflating. Use a clip-on chuck and extension hose long enough to allow you to stand to one side.**

IMPORTANT: Over inflation may damage tires and diminish ride quality. Under inflation could cause wheel damage when riding over rough terrain.

An accurate low pressure gauge is available at your John Deere dealer.

MP47322,00F4856-19-03APR13

Tire Chains

IMPORTANT: Tire chains are not approved for use on this vehicle.

MP47322,00F4857-19-03APR13

Transporting Machine

Towing the Machine

IMPORTANT: Avoid damage! Never tow the vehicle above 40 km/h (25 mph). Towing a vehicle at speeds above 40 km/h (25 mph) results in transmission damage.

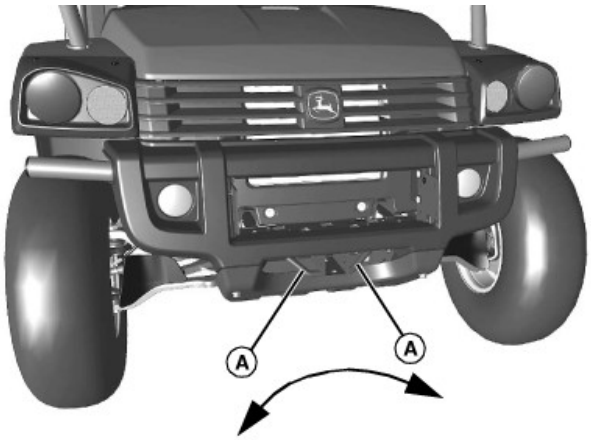
To avoid damage, haul the vehicle in an enclosed trailer. If an open trailer must be used, haul on a heavy-duty trailer or on a full-size truck. Be cautious and travel at reduced speeds.

Optional accessories, such as a windshield, must be removed to avoid sudden unintentional separation from the vehicle.

Never use a car type dolly with the front wheels on the dolly.

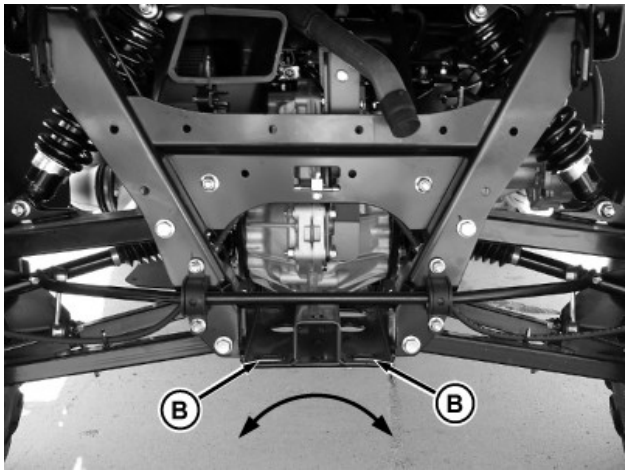
Unlock the park brake and keep transaxle shift lever in neutral (N) position for towing.

Machine Tie Down Locations



MXAL44187—UN—10APR13

- Fasten front of the machine through tie-down points (A) on the front of the machine to trailer with a heavy-duty strap, chain, or cable. Strap must be directed down and outward from machine.

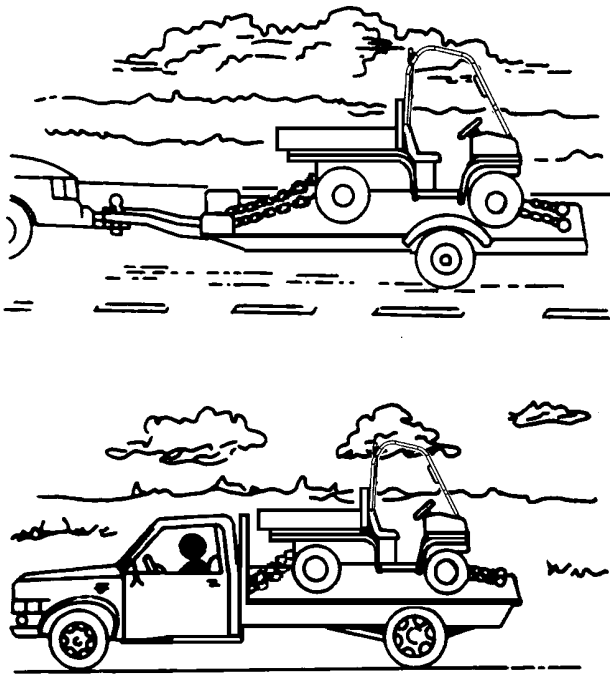


MXT020258—UN—30JUN17

- Fasten rear of the machine through tie-down points (B) on rear of the machine to trailer with a heavy-duty strap, chain, or cable. Strap must be directed down and outward from machine.

Hauling the Machine

NOTE: Space limitations may vary from one truck manufacturer to another. Short bed trucks do not have the necessary length requirement to accommodate the machine.



MXAL44189—UN—10APR13

1. Back machine onto the trailer or truck.
2. Leave transaxle shift lever in forward or reverse gear.
3. Park machine safely. (See Parking Safely in the SAFETY section.)
4. Fasten machine to trailer or truck with straps, chains, or cables.
5. Equip the trailer or truck with all the necessary lights and signs required by local, state, provincial, or federal laws.
6. Remove or secure optional attachments, if equipped.

OUMX068,000130F-19-30JUN17

Attachments and Kits

NOTE: All attachments and kits are not shown. Attachments and kits vary by machine model and may not be available in all regions. Specifications and design are subject to change without notice. See your John Deere dealer for availability in your region.

MX00654,00000E3-19-04SEP13

Cab Classification According to EN15695-1 (for Application of Crop Protection Chemicals and Liquid Fertilizer)

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

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

MXAL44190—UN—10APR13

Label is installed on cab behind passenger seat belt assembly.

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

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

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

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

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

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

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

CAUTION: The cab air filters must be serviced as specified. See Section “Service Miscellaneous” and “Service Intervals” in this Operator's Manual.

CAUTION: Refer to product data sheets and product identification of the crop protection chemicals. These contain important information on how to avoid hazards.

The following requirements must be met to offer best protection:

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

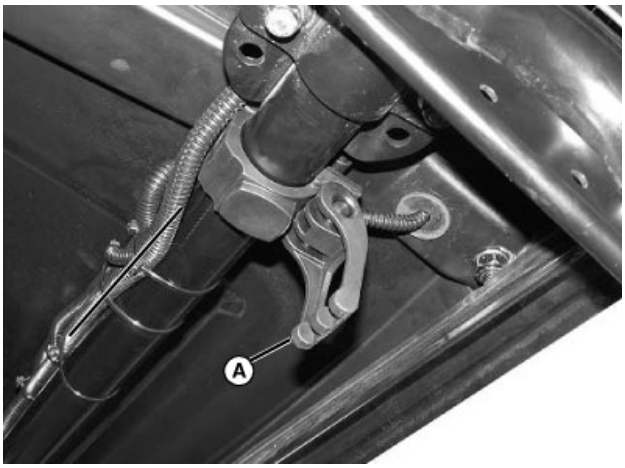
MP47322,00F4859-19-03APR13

Using Quick Clamps

Most optional attachments and kits use quick clamps to attach to the machine.

Using Clamps

1. Check and adjust the tightness of the clamps after the first 30 days of use.
2. If clamps are loose:



MXAL44191—UN—10APR13

a. Open clamp arm lever (A).

b. Increase tension by turning lever (A) one full turn clockwise. Repeat as needed.

c. Lock clamps.

3. If clamps are tight:

a. Open clamp arm lever (A).

b. Decrease tension by turning lever (A) one full turn counter-clockwise. Repeat as needed.

c. Lock all clamps.

MP47322,00F485A-19-12APR13

Light Kits

Adjusting Lights

MXAL44192—UN—10APR13

- Mid-Range Lights: Loosen locknut (A) on bolt and direct light where needed. Tighten locknut to secure in position.

MXAL44193—UN—10APR13

- Hella Lights: Loosen bolt (A) on light and direct light where needed. Tighten bolt to secure in position.

MX10673,000002A-19-15AUG18

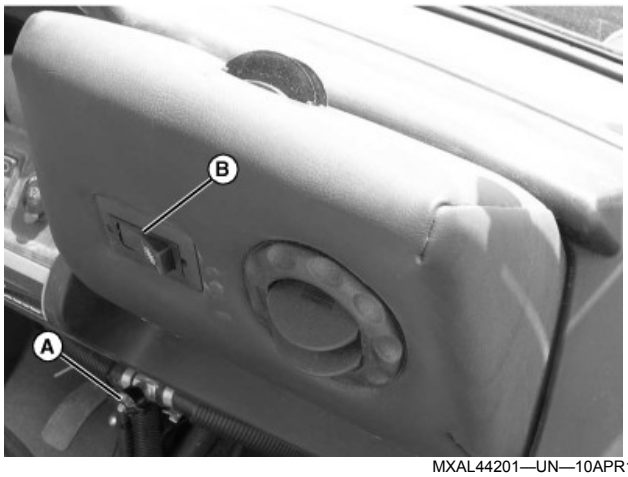
Backup Alarm

Periodically Check Alarm Function

1. Start machine.
2. Move transmission shift lever into Reverse gear and listen for alarm.
3. Contact your John Deere dealer if alarm does not function properly.

MP47322,00F485C-19-03APR13

Cab Heater



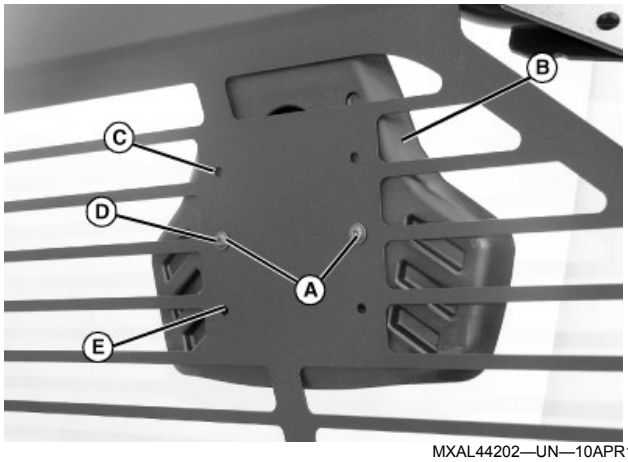
MXAL44201—UN—10APR13

1. Turn valve (A) to red arrow position to open for heat.
2. Push right side of switch (B) to first position for low fan speed or second position for high fan speed.
3. Push left side of switch fully down to turn fan off.
4. Turn valve to blue arrow position to close valve.

MP47322,00F485D-19-03APR13

Occupant Protective Structure (OPS) Rear Screen

Adjusting Headrest Position



MXAL44202—UN—10APR13

Headrest shown in center position.

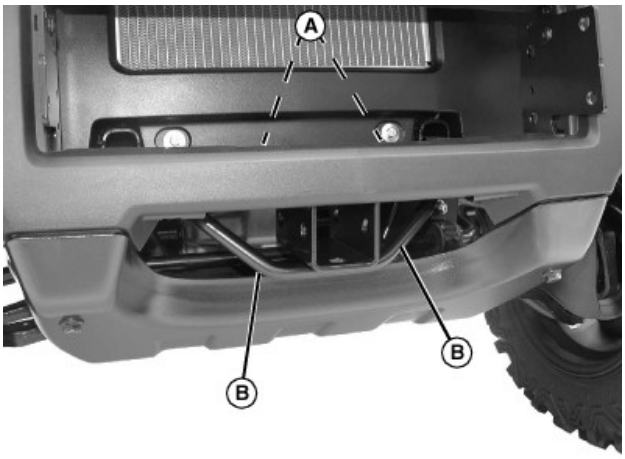
1. Remove two screws (A) and move each headrest (B)

to either top (C), center (D) or bottom (E) position. Secure with two screws.

MP47322,00F485E-19-03APR13

Front Receiver Hitch

Using Hitch



MXAL44203—UN—10APR13

1. Mount front accessories into holes (A) in front receiver hitch.
2. Use rings (B) as needed.

MP47322,00F485F-19-03APR13

Cargobox Toolboxes

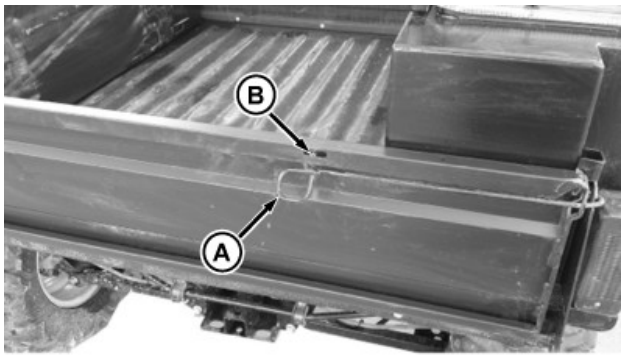
IMPORTANT: Avoid damage! Toolbox lids open to the side may be damaged by contact with objects when operating the machine. Before operating the machine, check to be sure that the toolbox lids are closed and the latches are secure.

MXT015592—UN—15SEP15

Check to be sure toolbox lids which open to the side (A) are closed before operating machine.

Operating the Tailgate

CAUTION: Avoid injury! Riders can fall off and be injured or killed. Do not allow riders in the cargo box or on the tailgate.



MXT015581—UN—14SEP15

1. To unhook rods from slot (B) in tailgate, push in and down on loop (A) of tailgate latch rods.
2. Pull latch rods out and down.

CAUTION: Avoid injury! When raising or lowering tailgate, latch rods can swing outward abruptly towards operator. Stand in center of tailgate and slowly lower or raise tailgate to make sure that latch rods do not contact operator.

MXT015582—UN—17SEP15

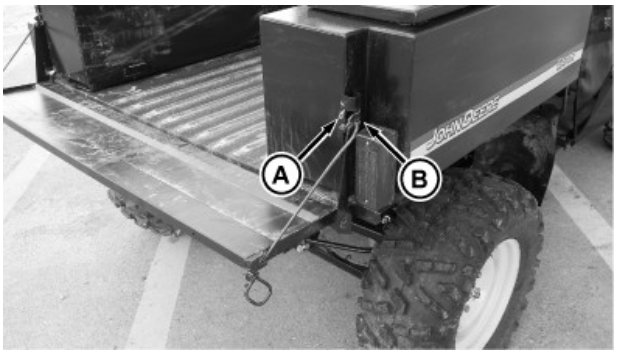
3. Lower tailgate until it rests on ends of latch rods (C).

IMPORTANT: Avoid injury! Lower tailgate completely to unload cargo box only. Never drive with the tailgate hanging down. Tailgate can contact tires and cause damage.

4. To engage rod in slot (B) in tailgate raise tailgate, slowly push tailgate upward. Push inward and upward on loop (A) of latch rod.

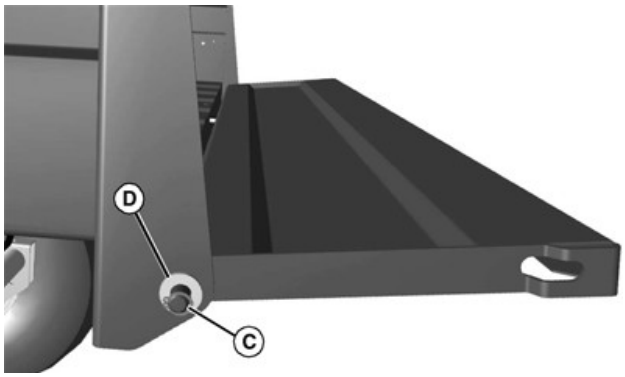
Removing the Tailgate

CAUTION: Avoid injury! Riders can fall off and be injured or killed. Do not allow riders in the cargo box or on the tailgate.



MXT015583—UN—14SEP15

1. Remove and retain rubber hose sleeves from latch rod ends (A).
2. To disengage from slots (B) in cargo box sides, raise tailgate slightly and rotate latch rods.
3. Remove latch rods from sides of tailgate.
4. Support tailgate by hand.



MXAL47430—UN—12APR13

5. Remove retaining ring (C) and bushing (D) from each tailgate rod end.
6. Slide tailgate sideways so tailgate rod end is clear of the cargo box bracket.
7. Pull the detached end of tailgate away from the cargo box enough to clear the cargo box bracket. Allow the tailgate to slide in opposite direction to complete removal.
8. To install, reverse the steps.

OUO2004,0000CF5-19-17SEP15

Using a Trailer

Follow all trailer manufacturers instructions for safe operation.

Follow all instructions in this Operators Manual for attaching optional equipment and towing loads safely.

MP47322,00F4860-19-23JUN15

Servicing Your Machine

IMPORTANT: Operating in extreme conditions may require more frequent service intervals:

- **Engine components may become dirty or plugged when operating in extreme heat, dust or other severe conditions.**
- **Engine oil can degrade if machine is operated constantly at slow or low engine speeds or for frequent short periods of time.**

Please use the following timetables to perform routine maintenance on your machine.

Park the vehicle safely. See Park Safely in the SAFETY Section.

MP47322,00F464B-19-15MAR13

Break In

After First 8 Hours:

- Change engine oil and filter.
- Check and tighten wheel bolts to correct torque.
- Check brake fluid level.
- Check alignment of glass cab doors, if equipped. (See your John Deere dealer for this service.)

OUMX068,000099A-19-08SEP14

Every 50 Hours or Annually

- Check brake fluid level, lines and connections.
- Lubricate drive line.
- Check 4WD front differential oil level.
- Check transaxle oil level.
- Inspect driveline CV boots for tears or punctures.
- Inspect park brake for proper function. (See your John Deere dealer for any adjustments needed.)
- Grease cargo box tailgate strikers.

MX10673,000000A-19-08JUL17

Every 100 Hours or Annually (whichever comes first)

- Change engine oil and filter.

MP47322,00F4867-19-03APR13

Every 200 Hours or Annually (whichever comes first)

- Change spark plugs.
- Change air cleaner element.
- Check air cleaner dust unloading valve.
- Clean radiator.
- Check drive belt condition.
- Inspect and clean primary and secondary clutch.
- Inspect alternator belt.
- Inspect battery. Clean if necessary.
- Check toe-in.
- Check brake pad wear.
- Check park brake oil level.
- Check and tighten wheel bolts to correct torque.
- Check/clean spark arrestor if equipped.
- Check and tighten all hardware.
- Inspect cargo box lanyards.

MX10673,0000016-19-11JUL17

Every 400 Hours or 24 Months (whichever comes first)

- Inspect ball joints for play.
- Inspect suspension bushings for play. (See your John Deere dealer for this service.)
- Inspect wheel bearings for play. (See your John Deere dealer for this service.)
- Inspect timing belt.
- Inspect timing belt idler/bearing.

MX10673,0000017-19-11JUL17

Every 800 Hours or 24 Months (whichever comes first)

- Change transaxle oil.
- Change 4WD front differential oil.
- Replace drive belt.

MP47322,00F486A-19-03APR13

Every 1000 Hours or 24 Months (whichever comes first)

- Flush and refill brake fluid. (See your John Deere dealer for this service.)
- Inspect shocks and struts for leaks.
- Change engine coolant.

MX10673,0000009-19-08JUL17

Grease

IMPORTANT: Avoid damage! Use recommended John Deere greases to avoid component failure and premature wear.

The recommended John Deere greases are effective within an average air temperature range of -29 to 135 degrees C (-20 to 275 degrees F).

If operating outside that temperature range, contact your Servicing dealer for a special-use grease.

The following greases are preferred:

- John Deere Multi-Purpose SD Polyurea Grease
- John Deere Multi-Purpose HD Lithium Complex Grease

If not using any of the preferred greases, be sure to use a general all-purpose grease with an NLGI grade No.2 rating.

Wet or high speed conditions may require use of a special-use grease. Contact your Servicing dealer for information.

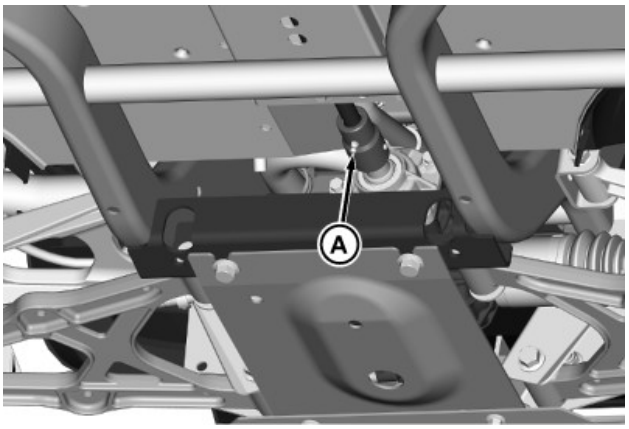
MP47322,00F464D-19-26MAY15

Lubricating Drive Line

NOTE: You may need to move machine by hand for shaft (B) to be rotated to line up grease fitting with the hole in driveshaft cover.

MXAL44204—UN—10APR13

View from right rear side of vehicle - on rear driveshaft.



MXT020296—UN—20JUL17

View from under vehicle - on front driveshaft.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Lubricate two grease fittings (A) on the drive line with one or two shots of grease.

MX10673,000002B-19-23JUL17

Emissions Service Information

A qualified repair shop or person of the owner's choosing may maintain, replace, or repair emission control devices and systems with original or equivalent replacement parts. However, warranty, recall and all other services paid for by John Deere must be performed at an authorized John Deere service center.

Within the warranty period, John Deere will reimburse reasonable service costs incurred at service providers outside the John Deere authorized network only in an unsafe, emergency condition if an authorized John Deere dealer is not available and the failure does not arise from the owner's misuse or failure to perform required maintenance. An emergency situation exists under this section if, after 30 days, the authorized John Deere network is unable to perform the repairs or source replacement parts.

Emission Control System Certification Label

NOTE: Tampering with emission controls and components by unauthorized personnel may result in severe fines or penalties. Emission controls and components can only be adjusted by EPA and/or CARB authorized service centers. Contact your John Deere Retailer concerning emission controls and component questions.

The presence of an emissions label signifies that the engine has been certified with the United States Environmental Protection Agency (EPA) and/or California Air Resources Board (CARB).

The emissions warranty applies only to those engines marketed by John Deere that have been certified by the EPA and/or CARB; and used in the United States and Canada in off-road mobile equipment.

Altitude Adjustment (Gasoline or Propane Converted Engines Only)

If your engine features a carburetor it is calibrated by the engine manufacturer and is not adjustable.

If your engine is operated at altitudes below 610 m (2,000 ft.), a high altitude carburetor jet kit is not required. If your engine is operated at altitudes above 610 m (2,000 ft.), a high altitude carburetor jet kit may be required for proper engine performance and emissions control. Operating the engine with the wrong carburetor configuration at a given altitude may increase the engine's emissions and decrease fuel efficiency and performance.

See a qualified service provider for details on jet kit requirements for your specific product.

TC00531,00000EC-19-28MAR16

Avoid Fumes

CAUTION: Engine exhaust fumes contain carbon monoxide and can cause serious illness or death.

- **Move the machine to an outside area before running the engine.**
- **Do not run an engine in an enclosed area without adequate ventilation.**
- **Connect a pipe extension to the engine exhaust pipe to direct the exhaust fumes out of the area.**
- **Allow fresh outside air into the work area to clear the exhaust fumes out.**

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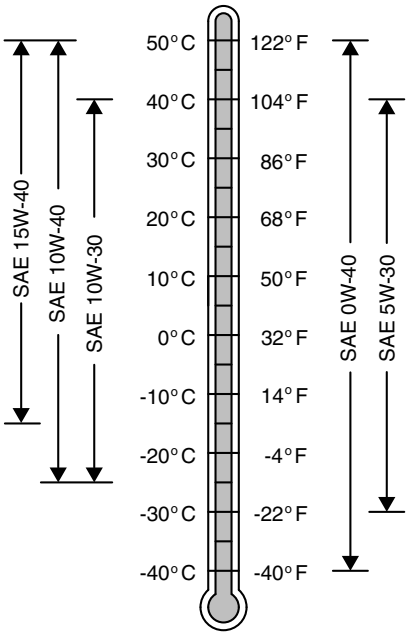
Diesel Engine Oil



TS1691—UN—18JUL07

Oil Viscosities for Air Temperature Ranges

Failure to follow applicable oil standards and drain intervals can result in severe engine damage that might not be covered under warranty. Warranties, including any emissions warranty, are not conditioned on the use of John Deere oils, parts, or service.

Use oil viscosity based on the expected air temperature range during the period between oil changes.

John Deere Plus-50™ II is the recommended engine oil.

If John Deere Plus-50™ II engine oil is not available, engine oil meeting one or more of the following may be used:

Plus-50 is a trademark of Deere & Company

- API Service Category CD or higher
- ACEA Oil Sequence E3 or higher

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: Avoid damage! Use only ultra-low sulfur diesel (ULSD) fuel with a maximum sulfur content of 15 mg/kg (15 ppm).

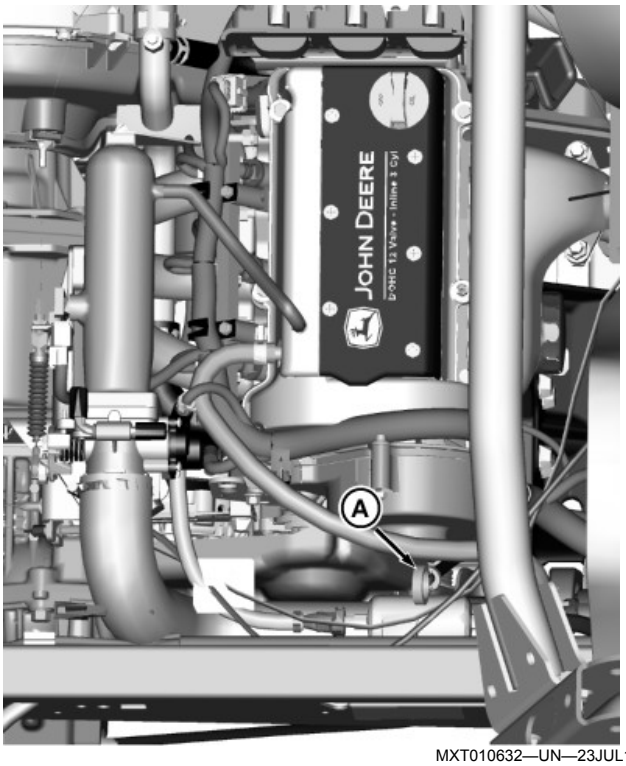
MK71445,000007F-19-14JUN18

Checking Engine Oil Level

IMPORTANT: Failure to check the oil level regularly could lead to serious engine problems if oil level is out of the operating range:

- **Check oil level before operating.**
- **Check oil level when the engine is cold and not running.**
- **Keep oil level between the dipstick marks.**
- **Shut off engine before adding oil.**

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise and secure cargo box.



MXT010632—UN—23JUL14

3. Remove dipstick (A) and wipe it clean.
4. Install dipstick.
5. Remove dipstick.
6. Check oil level:
   - Oil level must be between fill marks on dipstick.
   - If oil level is low, add oil to bring oil level no higher than upper mark on dipstick.
   - If oil level is above upper mark, drain to proper level. Determine cause of this condition and correct.
7. Install dipstick.
8. Lower the cargo box.

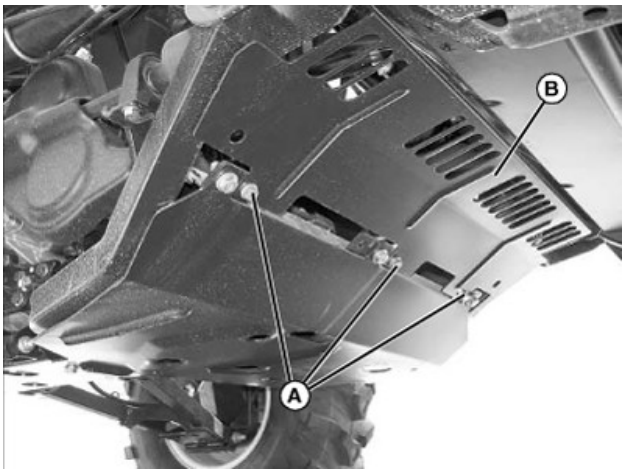
MP47322,00F4871-19-23JUL14

Changing Engine Oil and Filter

IMPORTANT: Change the oil more often if the vehicle is used in extreme conditions:

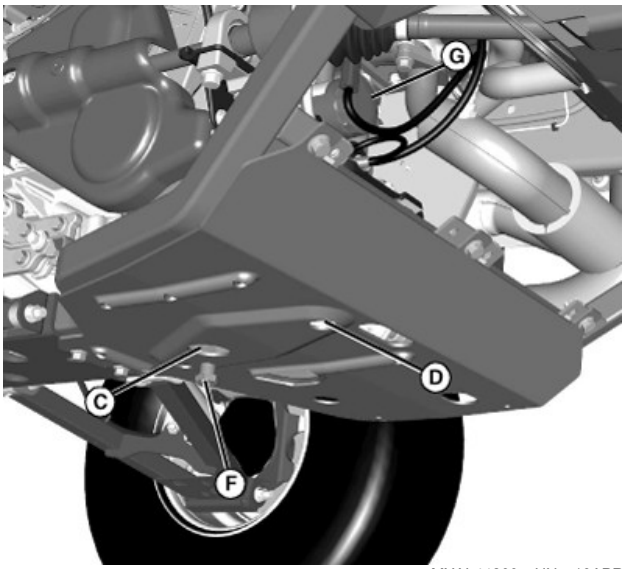
- **Extremely dusty conditions.**
- **Frequent slow or low-speed operation.**
- **Frequent short trips.**

1. Run engine to warm the oil.
2. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
3. Raise and secure cargo box.



MXAL44208—UN—10APR13

4. Remove three bolts (A) and closeout panel (B) from machine.



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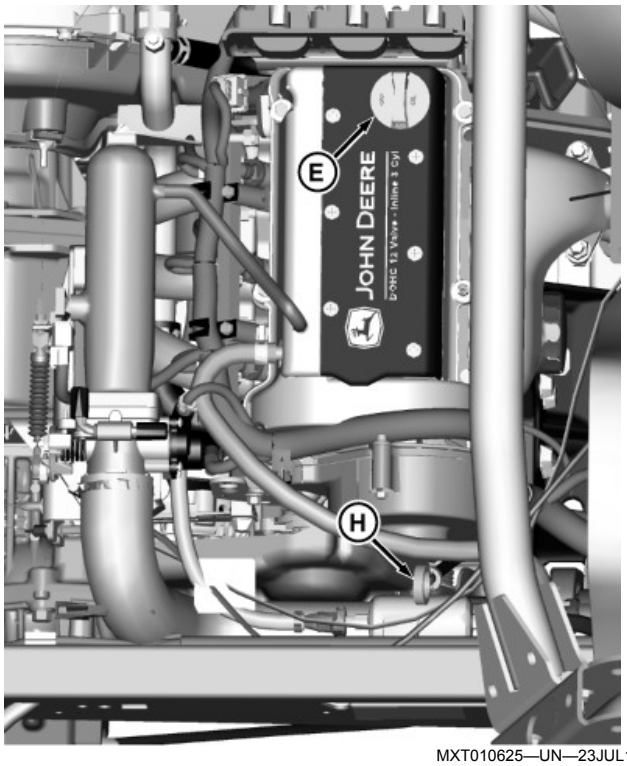


MXT010625—UN—23JUL14

5. Place drain pan under engine drain plug hole (C) and oil filter drain hole (D) in frame.
6. Pull off oil fill cap (E) from filler opening.
7. Remove drain plug (F) and drain oil into oil drain pan. Allow oil to drain completely.
8. Remove and discard oil filter (G) on front of engine. Wipe off filter base on engine.
9. Put a light coat of clean engine oil on gasket of new oil filter.
10. Install new filter until rubber gasket contacts filter base. Tighten filter an additional one-half turn.
11. Install drain plug. Tighten to specification.

Specification

Drain Plug—Torque. . . . . 40 N·m (29 lb-ft)

IMPORTANT: Do not overfill crankcase with oil. Oil capacities given are with engine and crankcase completely dry. Some oil will remain in engine after draining.

12. Add recommended fluid no higher than upper mark on dipstick (H). Do not overfill.
13. Install oil fill cap.
14. Start and run engine at idle to check for leaks. Stop engine. Fix any leaks before operating.
15. Check oil level and add oil if necessary.
16. Install closeout panel with three bolts.

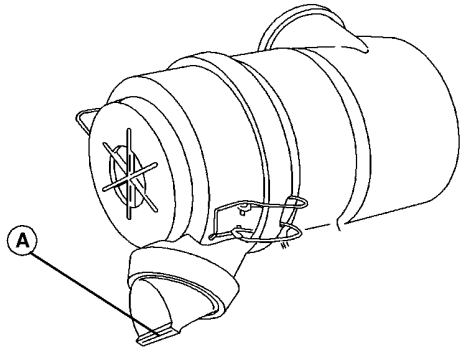
17. Lower the cargo box.

OUO2004,00009FC-19-23JUL14

Cleaning Dust Unloading Valve

IMPORTANT: Do not operate engine without air cleaner element and rubber dust unloading valve installed.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Allow engine to cool.



MXAL44211—UN—10APR13

3. Squeeze dust unloading valve (A) to clean. Remove and replace if damaged.

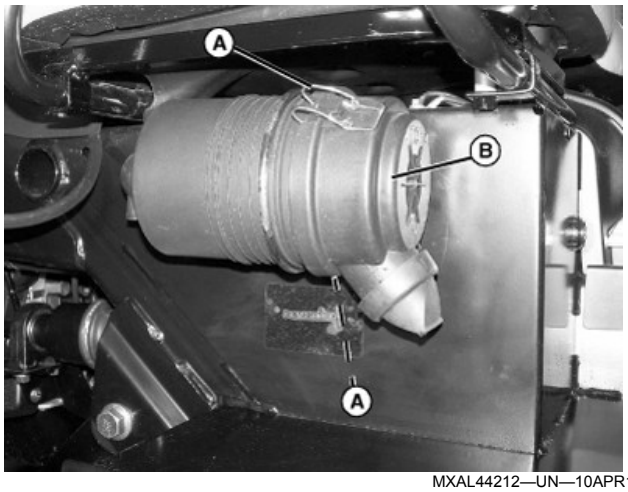
MP47322,00F4873-19-03APR13

Servicing Air Cleaner Element

IMPORTANT: Dirt and debris can enter engine when air cleaner canister is opened. Do not open canister unless required for scheduled service. This will keep contamination of the intake system to a minimum.

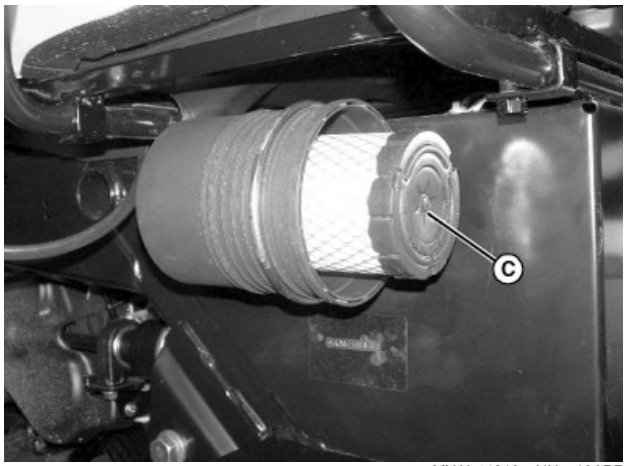
Check filter element more frequently if operating in dusty conditions.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Allow engine to cool.



MXAL44212—UN—10APR13

3. Release latches (A) and remove air cleaner canister cover (B).



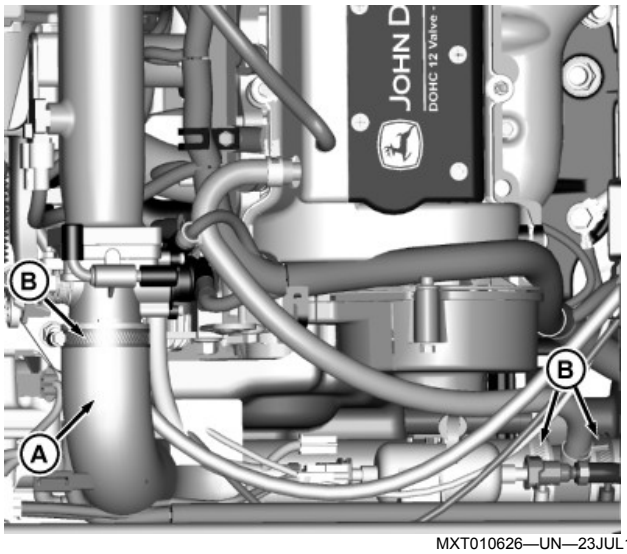
MXAL44213—UN—10APR13

4. Remove and discard filter element (C). Replace with a new filter element.
5. Install air cleaner canister cover with rubber dust unloading valve pointing downward. Check instruction molded into canister cover for proper installation.
6. Hook the canister cover latches.

MP47322,00F4874-19-03APR13

Checking Air Intake, Hoses and Clamps

1. Park the machine safely. (See Parking Safely in the SAFETY section.)
2. Tip or remove seat as needed.
3. Raise and secure cargo box.



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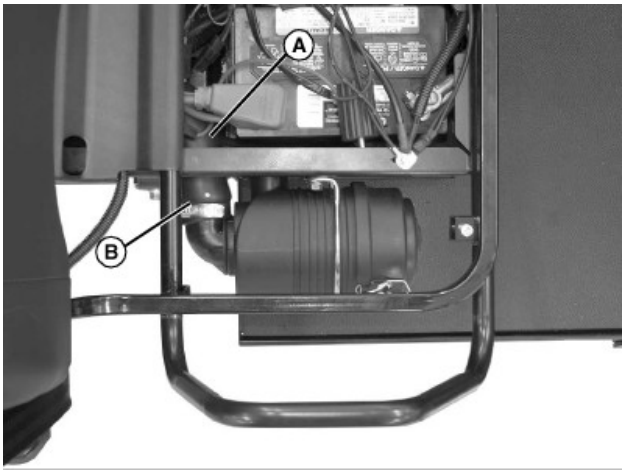


MXAL44215—UN—10APR13

4. Check intake hoses (A) for damage or cracking. Replace if necessary.
5. Check and tighten air intake hose clamps (B) as needed.
6. Lower the cargo box.
7. Tip seat back or install seat.

OUO2004,00009FD-19-23JUL14

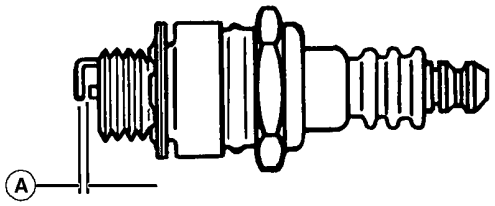
Checking Spark Plug

CAUTION: Touching hot surfaces can burn skin. The engine, components, and fluids will be hot if the engine has been running. Allow the engine to cool before servicing or working near the engine and components.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise and secure cargo box.
3. Disconnect spark plug wire(s).
4. Remove spark plug(s) using appropriate spark plug socket.
5. Inspect spark plug(s) for:
   - Cracked porcelain.
   - Pitted or damaged electrodes.
   - Other wear or damage.
6. Clean spark plug(s) carefully with a wire brush.

NOTE: In Canada, replace with resistor spark plug only.

7. Replace spark plug(s) if necessary.



MXAL44216—UN—10APR13

8. Check and adjust spark plug gap (A):
   - See SPECIFICATIONS for gap distance.
9. Install and tighten spark plug(s). Tighten to specification.

Specification

Spark Plug(s)—Torque. . . . . 25 N·m (18 lb-ft)

10. Install spark plug wire(s).
11. Lower the cargo box.

MP47322,00F4876-19-03APR13

Cleaning Engine Compartment

CAUTION: Avoid injury! Touching hot surfaces can burn skin. The engine, components, and fluids are hot if the engine has been running. Allow the engine to cool before servicing or working near the engine and components.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise and secure cargo box.

CAUTION: Avoid injury! Compressed air can cause debris to fly a long distance.

- **Clear work area of bystanders.**
- **Wear eye protection when using compressed air for cleaning purposes.**

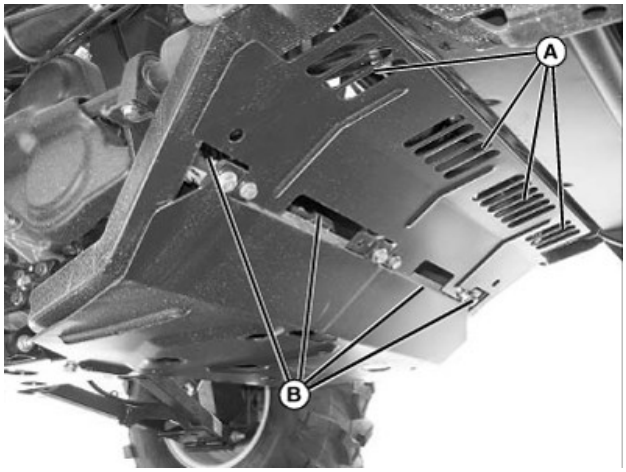
- **Reduce compressed air pressure to specification.**

Specification

Air—Pressure. . . . . 210 kPa (30 psi)

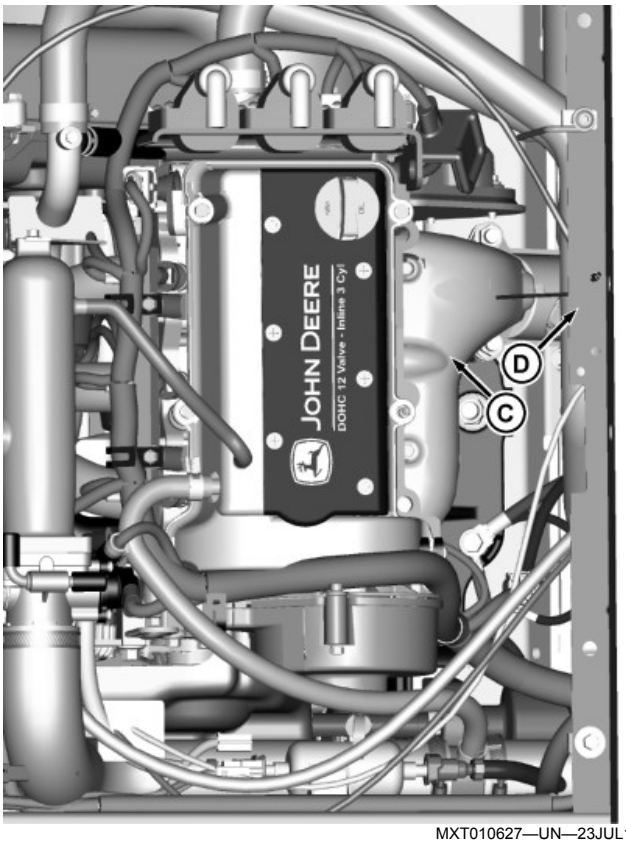
IMPORTANT: Avoid damage! High-pressure water can damage seals, gaskets, and force water into electrical connectors. Use water from a hose or pressure washer with pressures less than 420 kPa (60 psi).

3. Remove any debris in engine compartment, especially around exhaust components.
4. Remove any other debris:



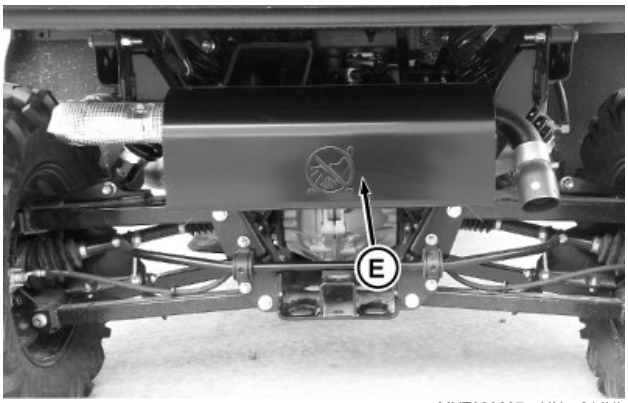
MXAL44219—UN—10APR13

- Keep closeout panel holes (A) and slots (B) clear of any debris.

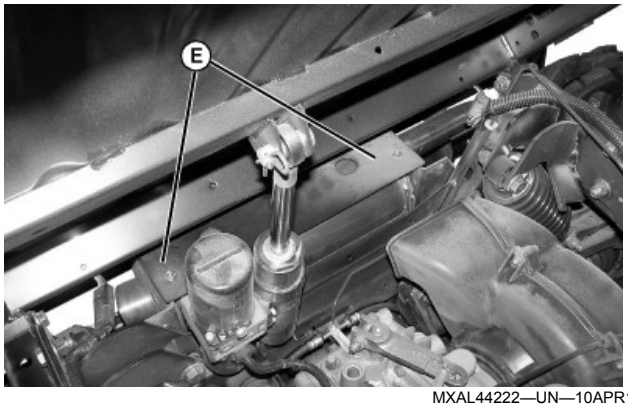


MXT010627—UN—23JUL14

- Keep engine intake manifold (C) and the top of the engine compartment closeout panel (D) clear of any debris.



MXT020297—UN—21JUL17



MXAL44222—UN—10APR13

- Keep front and rear of entire muffler and muffler shield (E) clear of any debris.

5. Check and remove any obstructions around the control cables and linkages.

MX10673,000002D-19-24JUL17

Cleaning Radiator Cooling Fins

CAUTION: Compressed air can cause debris to fly a long distance.

- **Clear work area of bystanders.**
- **Wear eye protection when using compressed air for cleaning purposes.**
- **Reduce compressed air pressure to specification.**

Specification

Air—Pressure. . . . . 210 kPa (30 psi)

IMPORTANT: Cooling fins must be clean to prevent engine from overheating and to allow adequate air intake.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Open hood.

IMPORTANT: High-pressure water or air can damage cooling fins or other engine components. Use water from a hose or reduce compressed air pressure to 210 kPa (30 psi).Turn engine off before cleaning radiator screen and fins.

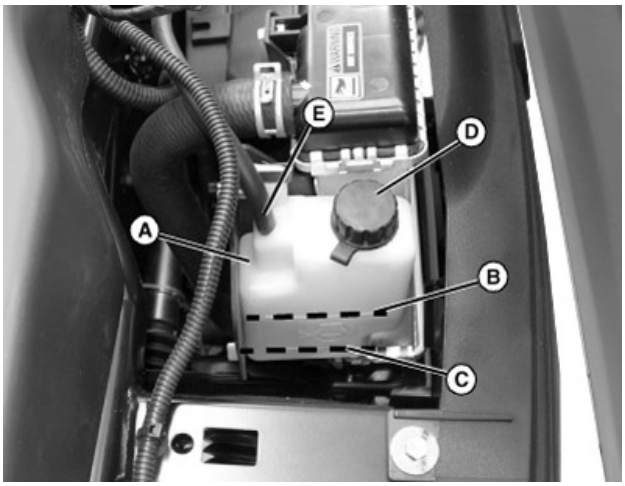
MXAL44223—UN—10APR13

3. Remove all dirt and debris from radiator fins (A) and fan shroud (B) using compressed air or water. Flow of compressed air or water should be from back to front.
4. Close hood.

MP47322,00F4879-19-12APR13

Checking Coolant Level

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Allow engine to cool.
3. Open hood.



MXAL44224—UN—10APR13

4. Check recovery tank (A) coolant level:
   - If engine is warm, coolant level should be between the FULL line (B) and the LOW line (C).
   - If engine is cold, coolant level should be at the LOW line (C) on the recovery tank.
5. Remove recovery tank cap (D) if necessary to add coolant.
6. Add coolant mixture to recovery tank.

IMPORTANT: Installing suction hose incorrectly will not allow coolant into the coolant system. Do not allow bottom of hose to touch bottom of bottle or bend upwards out of coolant.

7. Install and tighten recovery tank cap.
8. Close hood.

MP47322,00F487A-19-03APR13

Service Cooling System Safely

MXAL42730—UN—22MAR13

CAUTION: Avoid injury! The radiator is hot and burns skin. Built-up pressure causes explosive release of coolant when the radiator cap is removed:

- **Shut off the engine and allow to cool.**
- **Do not remove the cap unless the radiator and the engine are cool enough to touch with bare hands.**
- **Slowly loosen the cap to the first stop to release all pressure. Then remove the cap.**

MX00654,0000028-19-25MAR15

Servicing Cooling System

IMPORTANT: Follow all service procedures exactly. If not equipped to perform this work, see your John Deere dealer for service.

Prepare Vehicle

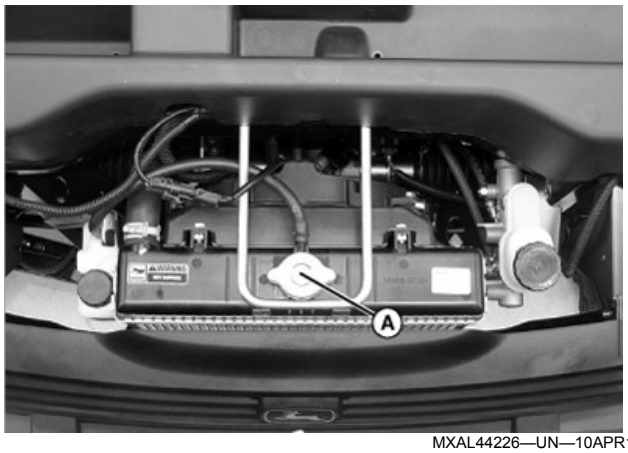
1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise cargo box.
3. Tip seats forward.
4. Open hood.
5. Remove storage tray.
6. When the coolant system service is completed:
   - Install storage tray.
   - Close hood.
   - Tip seats back.
   - Lower cargo box.

Draining Cooling System

1. Make sure engine has cooled completely.

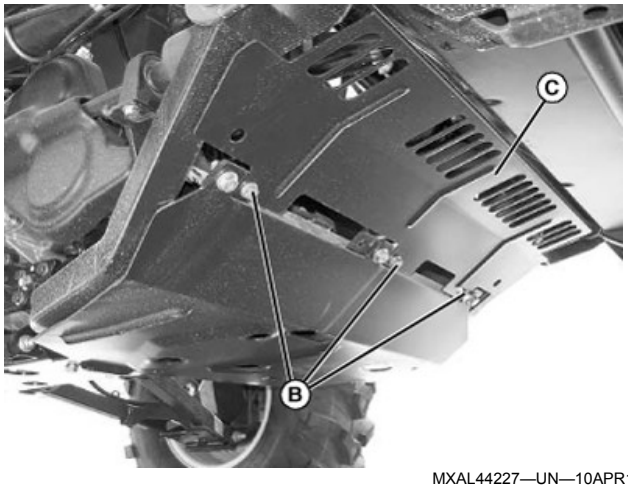
CAUTION: The radiator will be hot and can burn skin. Built-up pressure may cause explosive release of coolant when the radiator cap is removed:

- **Shut off the engine and allow to cool.**
- **Do not remove the cap unless the radiator and the engine are cool enough to touch with bare hands.**
- **Slowly loosen the cap to the first stop to release all pressure. Then remove the cap.**



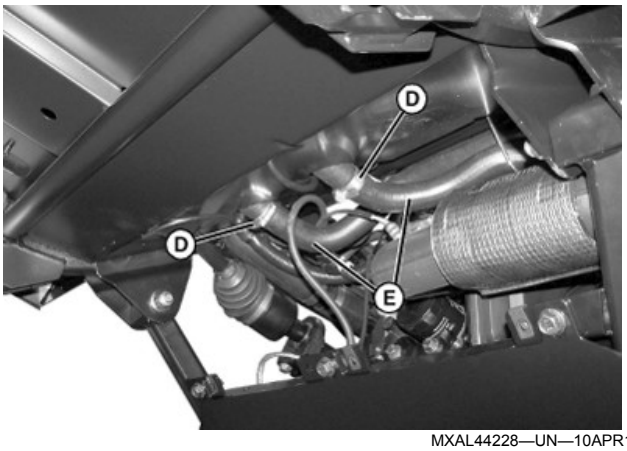
MXAL44226—UN—10APR13

2. Slowly open radiator cap (A) to the first stop to release all pressure.
3. Remove cap after all pressure is released.



MXAL44227—UN—10APR13

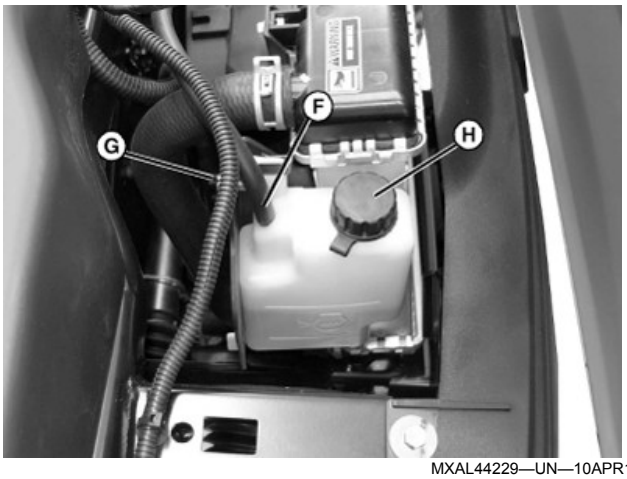
4. Remove three bolts (B) and closeout panel (C) from machine.
5. Place a coolant drain pan under area where closeout panel was removed.



MXAL44228—UN—10APR13

View from under left (driver) side.

6. Loosen hose clamps (D), and disconnect radiator hoses (E) from intermediate tubes.
7. Route radiator hoses over the drain pan and allow coolant to drain into drain pan.
8. Raise front of vehicle to ensure complete drainage of coolant.
9. After all coolant has drained, lower front of vehicle and connect radiator hoses (E).



MXAL44229—UN—10APR13

10. Remove overflow hose (F) from recovery tank.
11. Remove the screw (G) and lift recovery tank out of machine.
12. Remove cap (H) and empty recovery tank into drain pan.
13. Check condition of all hoses. Replace as needed. Check all hose clamps and tighten as needed.
14. Install recovery tank in machine and secure with screw (G).

IMPORTANT: Install overflow hose properly to ensure proper function of the cooling system. Position hose slightly above bottom of reservoir. Do not allow hose to contact bottom of reservoir or bend upwards out of the coolant.

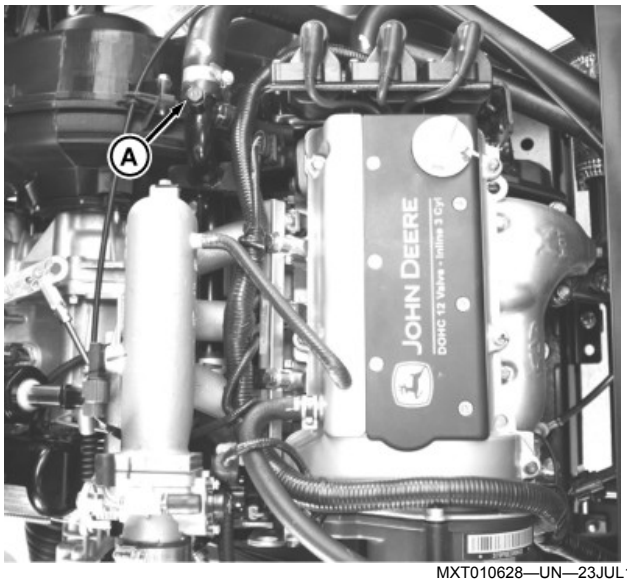
15. Install overflow hose (F) and cap (H).
16. Install closeout panel with three bolts.
17. Fill and bleed cooling system.

Filling and Bleeding Cooling System

IMPORTANT: Using incorrect coolant mixture can damage the radiator:

- **Do not operate engine without coolant or with plain water.**
- **Do not exceed a 50% antifreeze mixture for the coolant.**
- **Use antifreeze approved for use in aluminum engines.**
- **Do not pour coolant or water into radiator when engine is hot.**
- **Do not add Stop Leak or other additives.**

NOTE: John Deere COOL-GARD™ coolant is recommended when adding coolant to the cooling system. Follow the directions on the container for correct mixture ratio.



MXT010628—UN—23JUL14

1. Loosen bleed valve screw (A).
2. Remove radiator cap and add recommended coolant mixture to radiator until coolant runs out of bleed port.
3. Tighten bleed valve screw.
4. Add additional coolant mixture to radiator until coolant runs out of overflow port and into the recovery tank.
5. Install radiator cap.

COOL-GARD is a trademark of Deere & Company

IMPORTANT: Position hose slightly above bottom of recovery tank. Do not allow hose to contact bottom of recovery tank or bend upwards out of the coolant.

6. Remove recovery tank cap and add coolant mixture to recovery tank until it is approximately half full.
7. Install recovery tank cap.

IMPORTANT: If coolant temperature indicator comes on while engine is running, stop engine and add more coolant mixture to radiator.

8. Start and run engine at medium speed until upper and lower radiator hoses have become warm (10 - 15 minutes), indicating thermostat has opened and coolant is circulating.
9. Allow engine to cool.
10. Loosen bleed valve screw and allow air to bubble out until air bubbles are no longer visible at bleed port. Tighten bleed valve screw completely.
11. Remove radiator cap and add recommended coolant mixture to radiator until coolant runs out of overflow port and into the recovery tank.
12. Install radiator cap.
13. Run engine until cooling fan starts, indicating the engine and coolant has reached operating temperature.
14. Stop engine and remove key.
15. Allow engine to cool and suction back any excess coolant from overflow recovery tank. Fill recovery tank as needed to lower line.

Flushing Cooling System

1. Drain cooling system.
2. Prepare a cooling system flushing solution using clean water and John Deere Cooling System Cleaner, John Deere Cooling System Quick Flush, or an equivalent.
3. Fill radiator completely with flushing solution. Install and tighten radiator cap.
4. Start and run engine until it reaches operating temperature.
5. Stop engine.

CAUTION: The radiator will be hot and can burn skin. Built-up pressure may cause explosive release of coolant when the radiator cap is removed:

- **Shut off the engine and allow to cool.**
- **Do not remove the cap unless the radiator and the engine are cool enough to touch with bare hands.**
- **Slowly loosen the cap to the first stop to release all pressure. Then remove the cap.**

6. Turn radiator cap slowly to the stop to release system pressure. Remove radiator cap.
7. Drain cooling system immediately into a container before.
   - Disconnect radiator hoses from engine.
8. After all solution has drained, connect radiator hoses.
9. Remove and clean recovery tank.
10. Install the recovery tank.
11. Fill cooling system with recommended coolant mixture.

OUO2004,00009FF-19-23JUL14

Recommended Engine Coolant

IMPORTANT: Avoid damage! Using incorrect coolant mixture overheats and damages the radiator and engine:

- **Do not operate engine with plain water.**
- **Do not exceed a 50% mixture of coolant and water.**
- **Aluminum engine blocks and radiators require approved ethylene glycol-based coolant.**

The engine cooling system is filled to provide year-round protection against corrosion and cylinder liner pitting. Winter freeze protection is to -37 degrees C (-34 degrees F). If protection at lower temperatures is required, consult your John Deere dealer for recommendations.

The following coolants are preferred:

- John Deere Cool-Gard™ II Premix
- John Deere Cool-Gard™ Premix
- John Deere Cool-Gard™ PG Premix

John Deere Cool-Gard™ II Premix and John Deere Cool-Gard™ Premix are available in a concentration of 50% propylene glycol.

John Deere Cool-Gard™ PG Premix is available in a concentration of 55% propylene glycol.

Additional recommended coolants:

- John Deere Cool-Gard™ II Concentrate in a 40% to 60% mixture of concentrate with water.
- John Deere Cool-Gard™ Concentrate in a 40% to 60% mixture of concentrate with water.

Cool-Gard is a trademark of Deere & Company

If the recommended coolants are unavailable, use an ethylene glycol or propylene glycol base coolant that meets the following specification:

- ASTM D3306 prediluted (50%) coolant.
- ASTM D3306 coolant concentrates in a 40% to 60% mixture of concentrate with water.

Check container label before using to be sure that it has the appropriate specifications for your machine. Use coolant with conditioner or add conditioner to coolant before using.

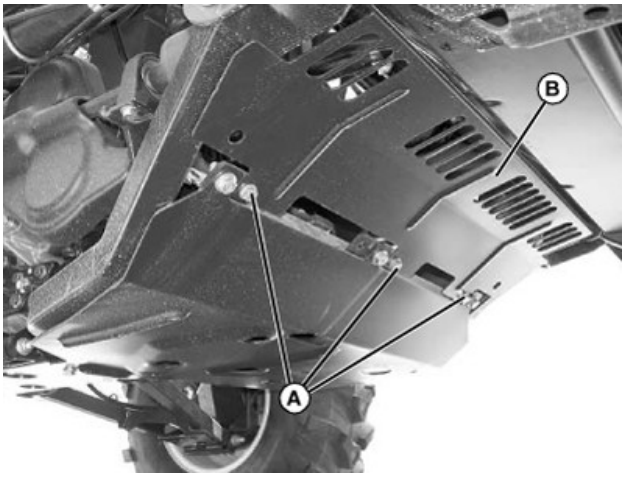
Water Quality

- Water quality is important to the performance of the cooling system. Distilled, deionized, or demineralized water is recommended with ethylene glycol base engine coolant concentrate.

MX00654,0000029-19-25MAR15

Checking Radiator Hoses and Clamps

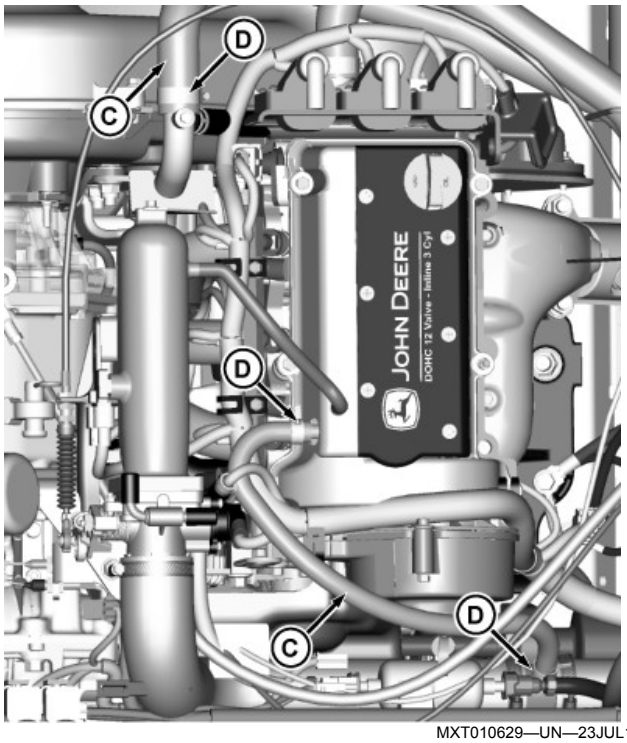
1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise cargo box.
3. Open hood.
4. Remove storage tray.



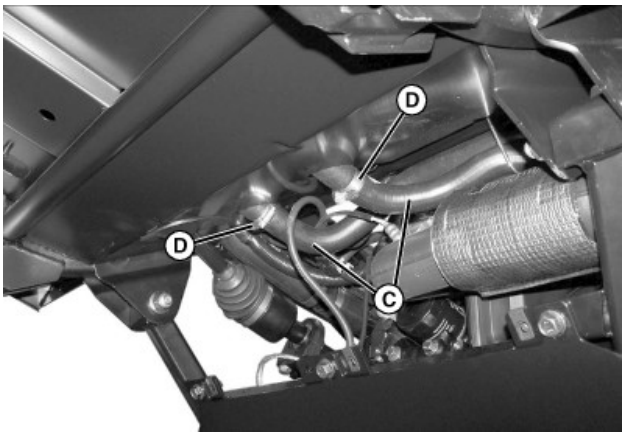
MXAL44231—UN—10APR13

5. Remove three bolts (A) and closeout panel (B) from machine.

NOTE: Visually inspect hoses for cracks and wear. Squeeze hoses to check for deterioration. Hoses should not be hard and brittle, nor soft or swollen.

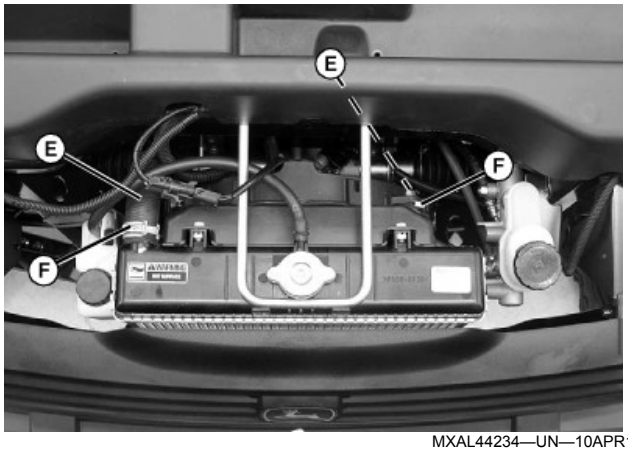


MXT010629—UN—23JUL14



MXAL44233—UN—10APR13

6. Check radiator hoses (C) between intermediate tubes and engine for damage or cracking. Replace if necessary.
7. Check hose clamps (D) and tighten or replace as needed.



MXAL44234—UN—10APR13

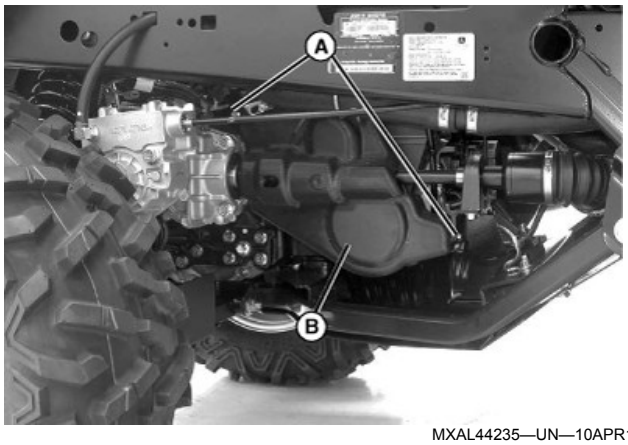
8. Check radiator hose (E) between intermediate tubes and radiator for damage or cracking. Replace if necessary.
9. Check hose clamps (F) and tighten or replace as needed.
10. Install storage tray.
11. Install closeout panel with three bolts.
12. Close hood.
13. Lower cargo box.

OUO2004,0000A00-19-23JUL14

Inspecting Timing Belt

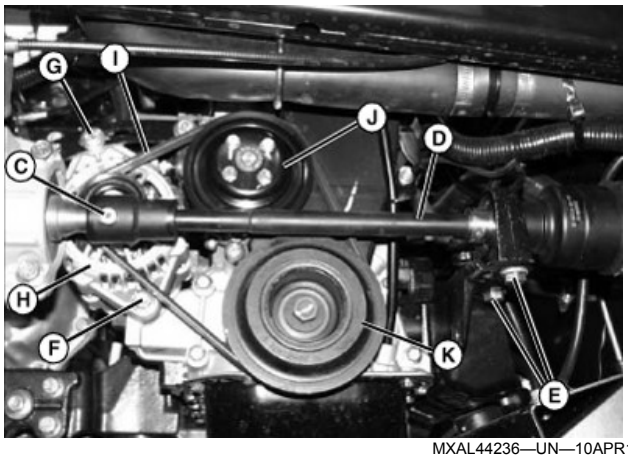
Inspecting Belt

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Disconnect negative (-) battery cable.



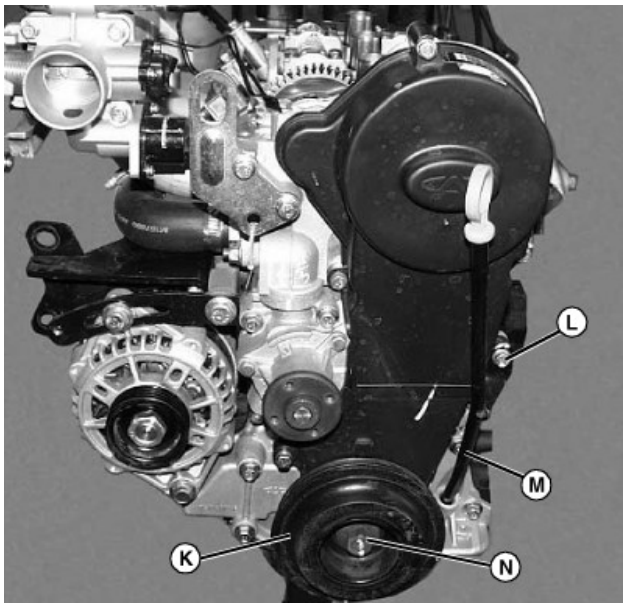
MXAL44235—UN—10APR13

3. Remove two bolts (A) and belt cover (B) from machine.



MXAL44236—UN—10APR13

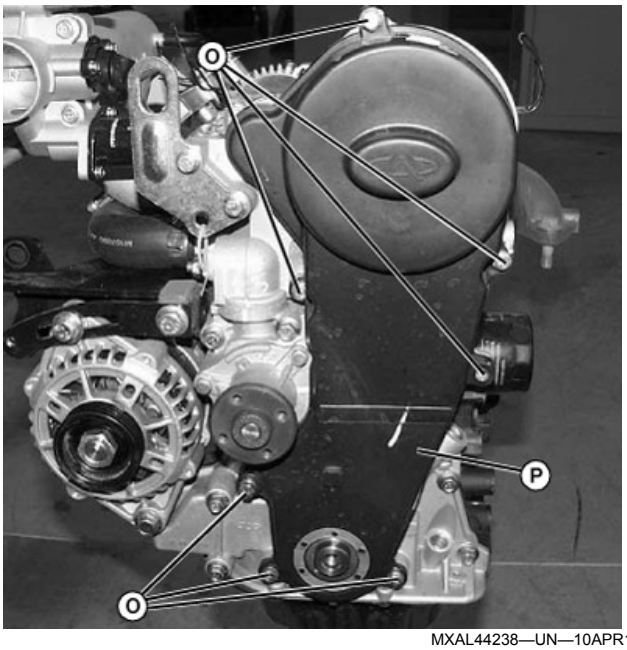
4. Remove bolt (C) and slide coupler forward onto driveshaft (D).
5. Remove two bolts (E) and remove driveshaft.
6. Loosen bolt (F) and bolt (G).
7. Rotate alternator (H) and remove belt (I) from alternator pulley, water pump pulley (J), and crankshaft pulley (K).
8. Remove four bolts and water pump pulley (J).



MXAL44237—UN—10APR13

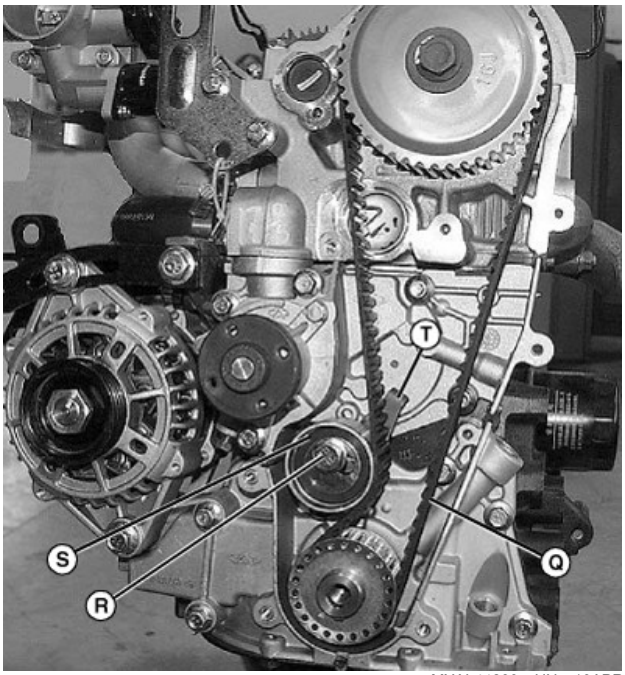
Engine shown removed from machine for better view.

9. Remove bolt (L) and dipstick tube (M).
10. Remove bolt (N) securing crankshaft pulley (K) and remove pulley. Use a puller if necessary.



MXAL44238—UN—10APR13

11. Remove seven bolts (O) and timing belt cover (P).

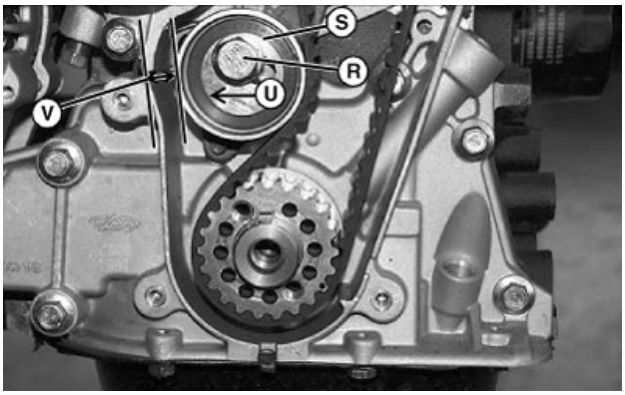


MXAL44239—UN—10APR13

12. Inspect timing belt (Q) for cracks, fraying, wear or damage. If timing belt needs to be replaced, see the technical manual for your machine or see your John Deere Dealer.
13. Inspect tensioner pulley before reinstalling components (see steps below).

Inspecting Tensioner Pulley

IMPORTANT: Do not rotate belt or engine pulleys from the current position. There are timing marks on bottom and top of engine that align critical internal engine components.



MXAL44240—UN—10APR13

1. Loosen bolt (R) on tensioner pulley (S). Push tensioner arm (T) inward slightly to release tensioner pulley tension from timing belt. Rotate tensioner pulley (S) and check for any noise or if it is loose. If it is loose, tighten bolt on tensioner pulley to specification.

Specification

Bolt—Torque. . . . . 25 N·m (18 lb-ft)

2. If tensioner pulley is noisy, remove bolt (R) and remove tensioner pulley (S).
3. Install tensioner and push tensioner arm in direction of arrow (U) until the gap between the tensioner pulley (S) and the bottom of the water pump housing is approximately 5 mm (0.2 in.) (V) as shown.
4. Tighten tensioner bolt (R) to specification.

Specification

Bolt—Torque. . . . . 25 N·m (18 lb-ft)

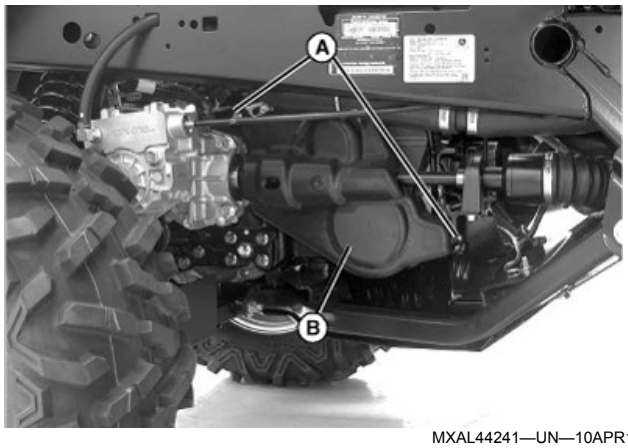
5. Reverse inspecting belt steps to install all components in reverse order of removal.
6. Connect negative (-) battery cable.

MP47322,00F487F-19-03APR13

Inspecting Alternator Belt

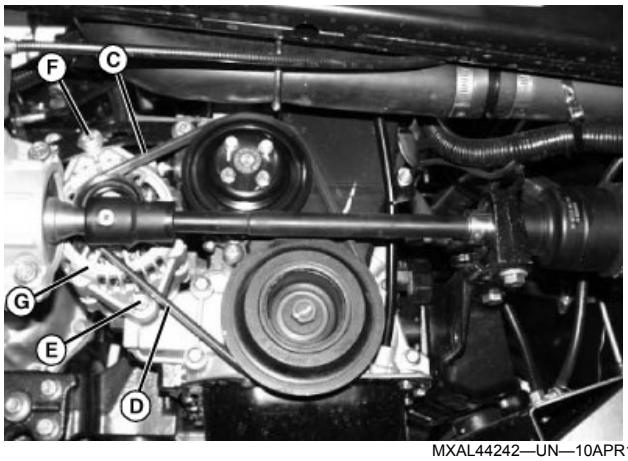
Inspect Belt

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Disconnect negative (-) battery cable.



MXAL44241—UN—10APR13

3. Remove two bolts (A) and belt cover (B) from machine.



MXAL44242—UN—10APR13

4. Inspect belt (C) for wear or damage. Replace if worn or damaged. (See “Replace Belt” for procedure.)
5. Test belt tension at location (D) (half way between alternator and engine pulley). Deflection and force should be to specification.

Specification

Belt—Deflection. . . . . 5 mm (13/64 in.)
Belt —Force. . . . . 89 N (20 lb)

- To adjust belt tension, loosen bolt (E) and bolt (F). Rotate alternator (G) to obtain the specified deflection and force at location (D), and tighten bolt (F). Tighten bolt (E).

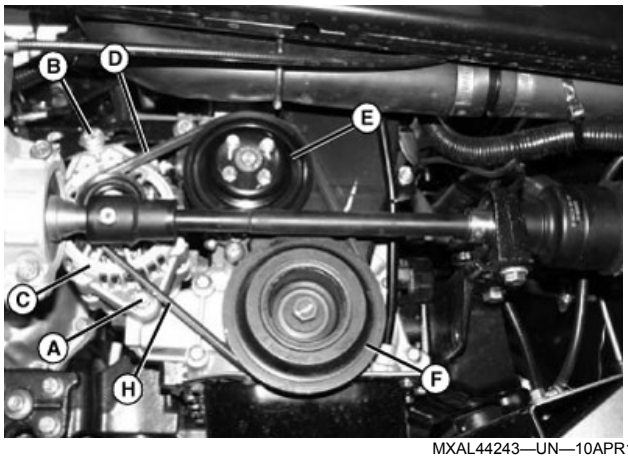
Specification

Belt—Deflection. . . . . 5 mm (13/64 in.)
Belt —Force. . . . . 89 N (20 lb)

6. Install belt cover with bolts.
7. Connect negative (-) battery cable.

Replace Belt

1. Remove belt cover.



MXAL44243—UN—10APR13

2. Loosen bolt (A) and bolt (B).
3. Rotate alternator (C) and remove belt (D) from alternator pulley, water pump pulley (E), and crankshaft pulley (F).
4. Install new belt around all three pulleys. Rotate alternator (C) to obtain specified deflection and force at location (H), and tighten bolt (B). Tighten bolt (A).

Specification

Belt—Deflection. . . . . 5 mm (13/64 in.)
Belt —Force. . . . . 89 N (20 lb)

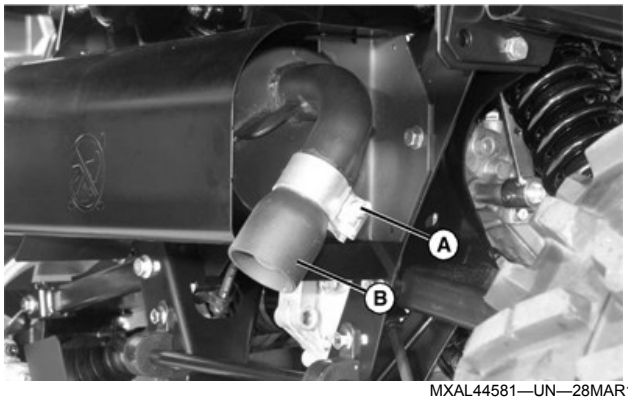
5. Install belt cover with bolts.

MP47322,00F4880-19-03APR13

Checking Spark Arrestor

CAUTION: Avoid injury! Touching hot surfaces can burn skin. The engine, components, and fluids will be hot if the engine has been running. Keep hands and body away from hot surfaces when servicing or working near the engine and components.

1. Park the machine safely. (See Parking Safely in the SAFETY section.)
2. Allow the machine to cool completely.



MXAL44581—UN—28MAR13

3. Loosen nut (A) on clamp securing spark arrestor (B) on muffler exhaust pipe.
4. Remove spark arrestor, making note of direction of arrestor inside of exhaust pipe.

CAUTION: Avoid injury! Compressed air can cause debris to fly a long distance.

- **Clear work area of bystanders.**
- **Wear eye protection when using compressed air for cleaning purposes.**
- **Reduce compressed air pressure to 210 kPa (30 psi).**

5. Make sure deflector screen inside arrestor is not plugged or damaged:
   - If plugged, spray with carburetor/choke cleaner and blow dry with low pressure compressed air.
   - If damaged, replace spark arrestor.
6. Install spark arrestor and tighten nut on clamp to secure.

MX00654,0000145-19-08SEP17

Transaxle Oil

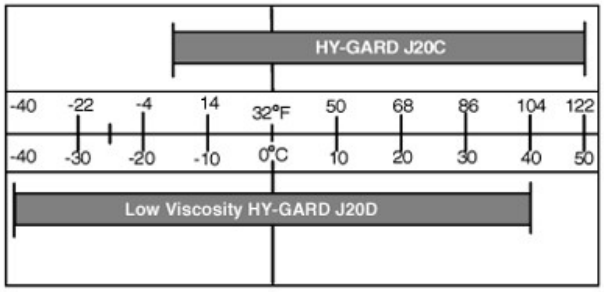
Use the appropriate oil viscosity based on these air temperature ranges. Operating outside of these recommended oil air temperature ranges may cause premature hydrostatic transmission or hydraulic system failures.

IMPORTANT: Mixing of LOW VISCOSITY HY - GARD™ and HY - GARD™ oils is permitted. DO NOT mix any other oils in this transmission. DO NOT use engine oil or "Type F" (Red) Automatic Transmission Fluid in this transmission.

John Deere J20C HY-GARD™ transmission and hydraulic oil is recommended. John Deere J20D Low Viscosity HY-GARD™ transmission and hydraulic oil may be used, if within the specified temperature range.

Other oils may be used if above recommended John Deere oils are not available, provided they meet one of the following specifications:

- John Deere Standard JDM J20C;
- John Deere Standard JDM J20D.



MXAL44246—UN—10APR13
MX00654,00000C5-19-24AUG13

4WD Front Differential Oil

Use the appropriate oil viscosity based on these air temperature ranges. Operating outside of these recommended oil air temperature ranges may cause premature hydrostatic transmission or hydraulic system failures.

IMPORTANT: Mixing of LOW VISCOSITY HY - GARD™ and HY - GARD™ oils is permitted. DO NOT mix any other oils in this transmission. DO NOT use engine oil or "Type F" (Red) Automatic Transmission Fluid in this transmission.

John Deere J20C Low Viscosity HY-GARD™ transmission and hydraulic oil is recommended.

Other oils may be used if above recommended John Deere oils are not available, provided they meet the following specifications:

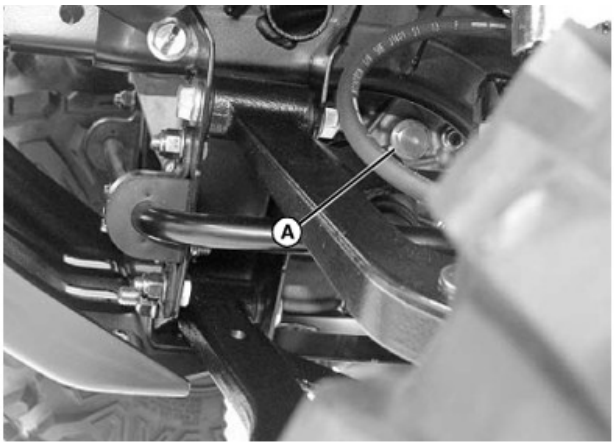
- John Deere Standard JDM J20C.

MX00654,00000C6-19-24AUG13

Checking 4WD Front Differential Oil Level

1. Park machine safely. (See Parking Safely in the SAFETY section.) Allow machine to cool down for at least one hour.

IMPORTANT: Dirt and debris in oil may cause damage to the 4WD differential. Clean area around opening before removing plug.



MXAL44247—UN—10APR13
Fill plug under left front side.

2. Remove fill plug (A) located on left side of 4WD front differential.
3. Oil should be level with the bottom of the fill port. If oil level is low:
   a. Add oil through fill port until level is correct.
   b. Install and tighten fill plug to specification.

Specification

Fill Plug—Torque. . . . . 11 - 40 N·m (8 - 30 lb-ft)

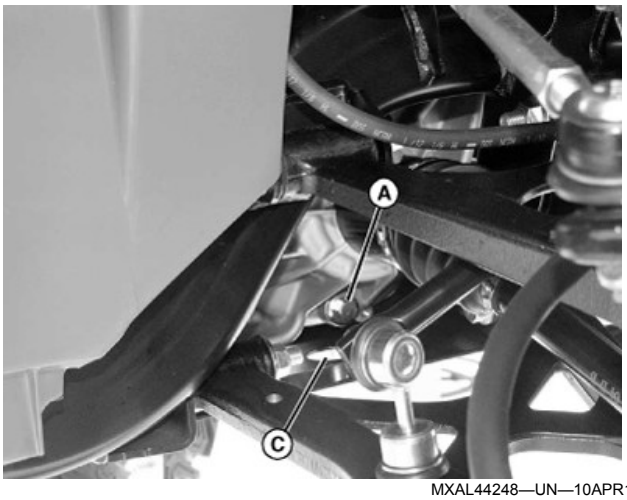
MP47322,00F4884-19-03APR13

Changing 4WD Front Differential Oil

NOTE: It may be necessary to remove front skid plate to access drain plug.

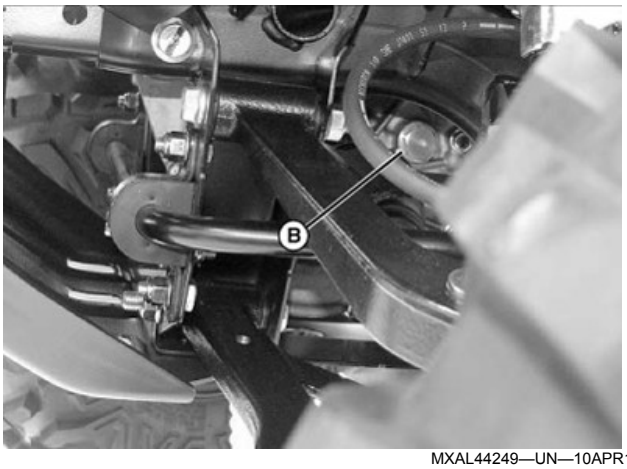
1. Operate machine to warm 4WD front differential oil.
2. Park machine safely. (See Parking Safely in the SAFETY section.)

IMPORTANT: Dirt and debris in oil may cause damage to the 4WD differential. Clean area around opening before removing plug.



MXAL44248—UN—10APR13

Drain plug under right front side.



MXAL44249—UN—10APR13

Fill plug under left front side.

3. Position drain pan under 4WD front differential drain plug (A) at bottom right of housing.
4. Remove fill plug (B) located on left side of 4WD front differential.
5. Remove 4WD front differential drain plug (A) and allow oil to drain through opening (C) in frame and into drain pan.
6. Check washer on drain plug. Replace if missing or in poor condition.
7. Install and tighten drain plug to specification after all oil has drained.

Specification

Drain Plug—Torque. . . . . 7-14 N·m (5-10 lb-ft)

8. Add oil until the level is even with the bottom of the fill port.
9. Install and tighten fill plug to specification.

Specification

Fill Plug—Torque. . . . . 11-40 N·m (8-30 lb-ft)

10. Check 4WD front differential oil level again after the first several hours of operation.

MP47322,00F4885-19-03APR13

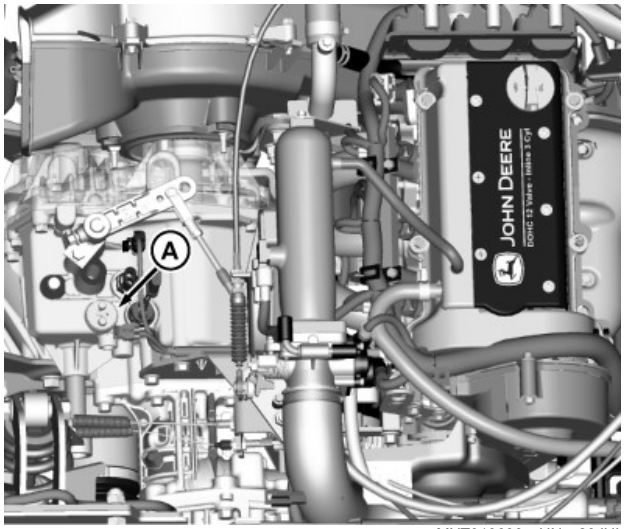
Checking Transaxle Oil Level

IMPORTANT: Hot hydraulic oil will expand and show incorrect oil level. Check oil level:

- **When oil is cold.**
- **With engine not running.**

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise and secure cargo box.

IMPORTANT: Dirt and debris in oil may cause damage to the transaxle. Clean area around opening before removing dipstick.



MXT010630—UN—23JUL14

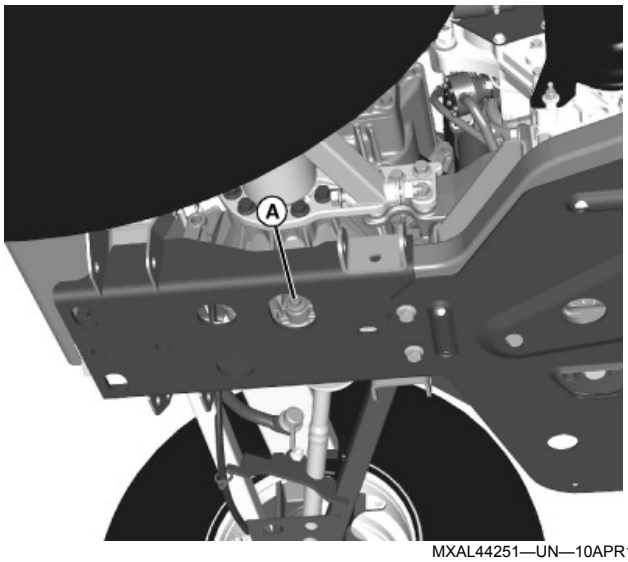
3. Remove dipstick (A) located on the top of the transaxle housing. Wipe dipstick clean.
4. Check oil level by setting dipstick on threads in transaxle case, then removing and checking oil level.
5. Add oil as needed through the dipstick fill hole.
6. Install and tighten dipstick.
7. Lower the cargo box.

OUO2004,0000A01-19-23JUL14

Changing Transaxle Oil

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise and secure cargo box.

IMPORTANT: Dirt and debris in oil may cause damage to the transaxle. Clean area around opening before removing dipstick.



MXAL44251—UN—10APR13

3. Position drain pan under transaxle drain plug (A).
4. Remove plug and drain oil.
5. Check washer on drain plug. Replace if missing or in poor condition.
6. Install and tighten drain plug to specification.

Specification

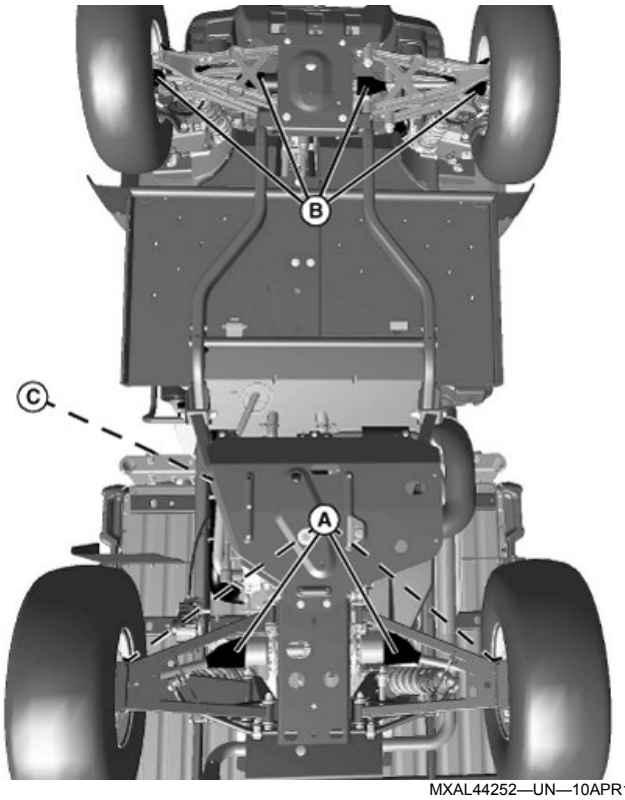
Drain Plug—Torque. . . . . 44 - 54 N·m (32.5 - 39.9 lb-ft)

7. Remove dipstick located on top of transaxle housing. Wipe dipstick clean.
8. Add recommended fluid.
9. Check oil level by setting dipstick on threads in transaxle case, then removing and checking oil level.
10. Wait for two minutes then check oil level. Add oil if necessary.
11. Install dipstick and tighten.
12. Lower the cargo box.

MP47322,00F4887-19-03APR13

Inspecting Driveline CV Boots

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)



MXAL44252—UN—10APR13

Viewed from under the machine.

2. Inspect four rear CV boots (A) for tears or punctures.
3. Inspect four front CV boots (B) for tears or punctures. Repeat for opposite side of machine.
4. Inspect rear drive shaft boot (C) for tears or punctures.
5. If replacement of a boot is necessary, see your John Deere dealer.

MP47322,00F4888-19-03APR13

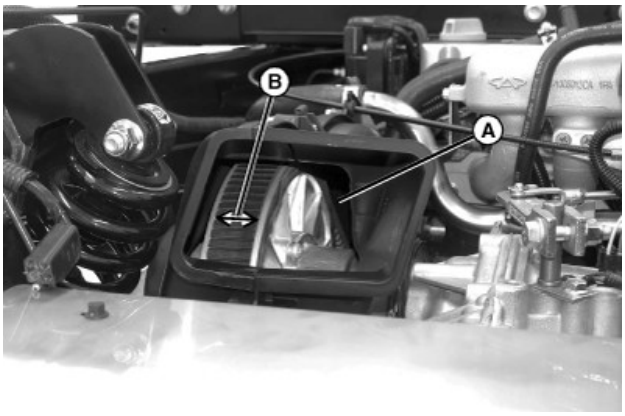
Servicing Drive Belt

Inspecting Drive Belt

CAUTION: Rotating parts can catch fingers, loose clothing, or long hair. Wait for engine and all moving parts to stop before leaving operator's station to adjust or service machine.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise and secure cargo box.

NOTE: Drive belt can be inspected through enclosure exhaust port (A) with out removing clutch enclosure cover.



MXAL44253—UN—10APR13

3. Measure the top surface of the belt width at (B). Replace belt if dimension is less than 29 mm (1.1 in.).
4. Check for debris inside enclosure exhaust port and clean if needed.

Removing Drive Belt

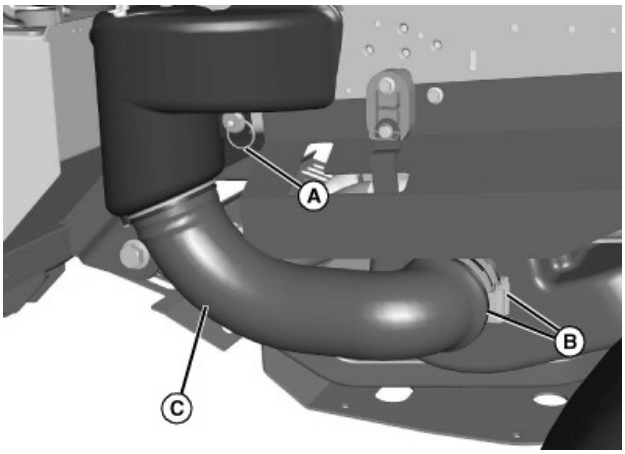
CAUTION: Rotating parts can catch fingers, loose clothing, or long hair. Wait for engine and all moving parts to stop before leaving operator's station to adjust or service machine.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise and secure cargo box.

CAUTION: The machine can fall or slip from an unsafe lifting device or supports.

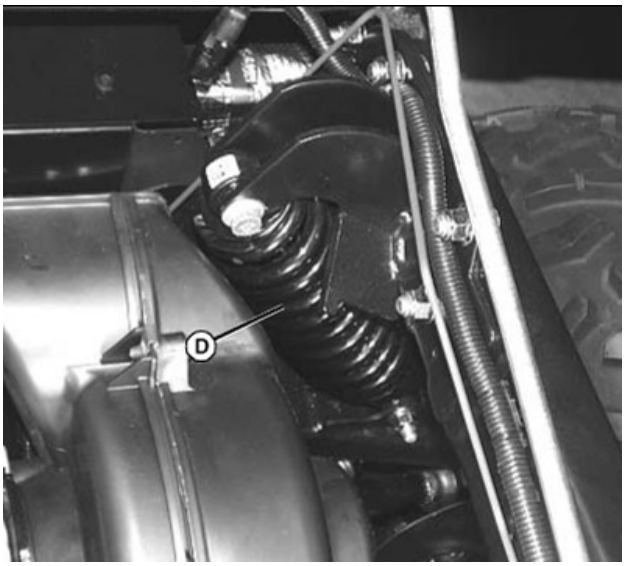
- **Use a safe lifting device rated for the load to be lifted.**
- **Lower machine onto jack stands or other stable supports and block wheels before servicing.**

3. Lift machine and secure so tires are off the ground and suspension hangs freely.



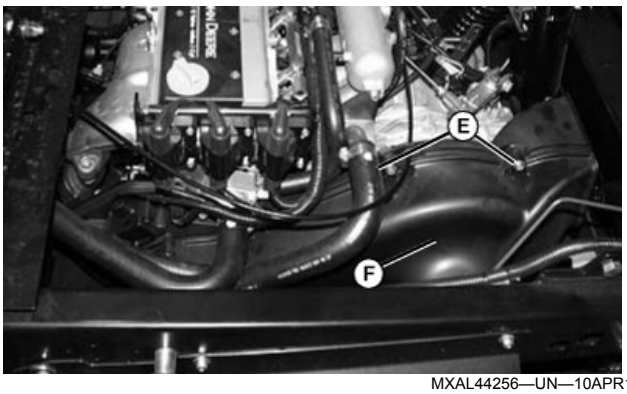
MXAL44254—UN—10APR13

4. Remove ring (A), loosen two clamps (B) and remove air intake hose (C).



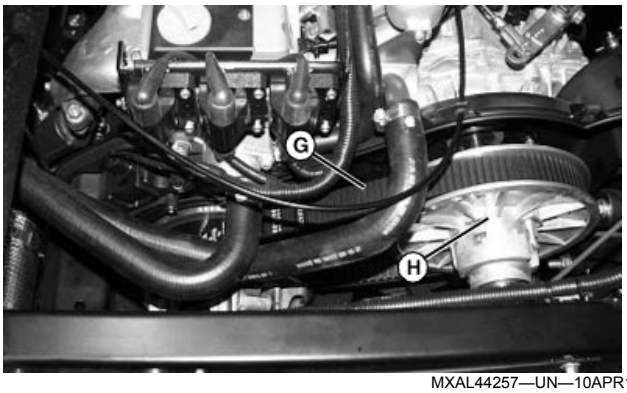
MXAL44255—UN—10APR13

5. Remove left rear shock (D).



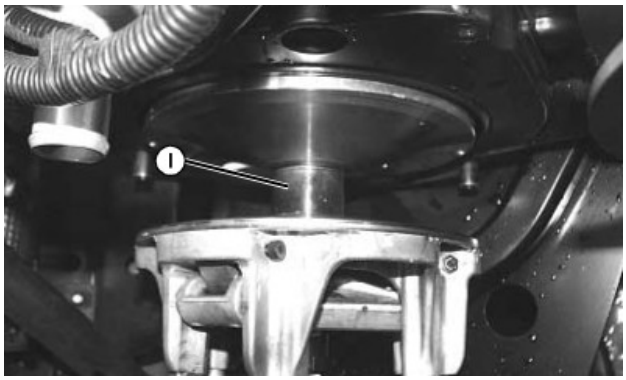
MXAL44256—UN—10APR13

6. Remove eleven bolts around (E) clutch enclosure cover (F). Remove clutch enclosure cover.



MXAL44257—UN—10APR13

7. Lift up on drive belt (G) to make slack.
8. Start drive belt over edge of driven clutch (H) and turn clockwise until drive belt is removed.



MXAL44258—UN—10APR13

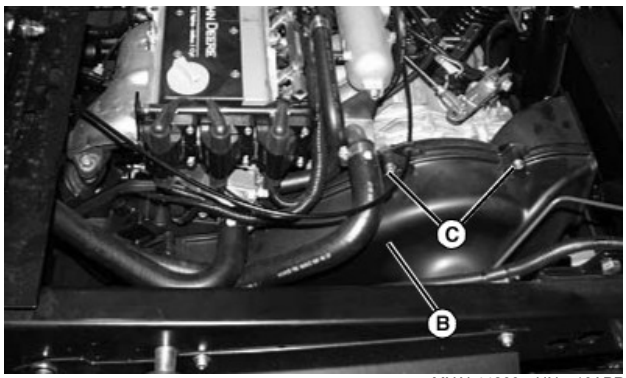
9. Spin idler sleeve bearing (I). Confirm bearing rotates smoothly. If not, contact your John Deere dealer for possible bearing replacement.

Replacing Drive Belt

NOTE: Make sure arrows on drive belt face towards the front of machine.

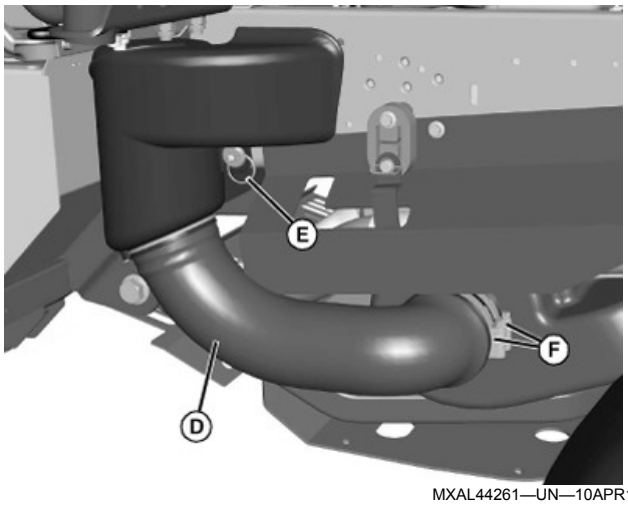
MXAL44259—UN—10APR13

1. Loop belt (A) over drive clutch and around driven clutch, starting at bottom and slide belt into driven clutch while turning.



MXAL44260—UN—10APR13

2. Install clutch enclosure cover (B) and eleven bolts (C).
3. Install left rear shock.



MXAL44261—UN—10APR13

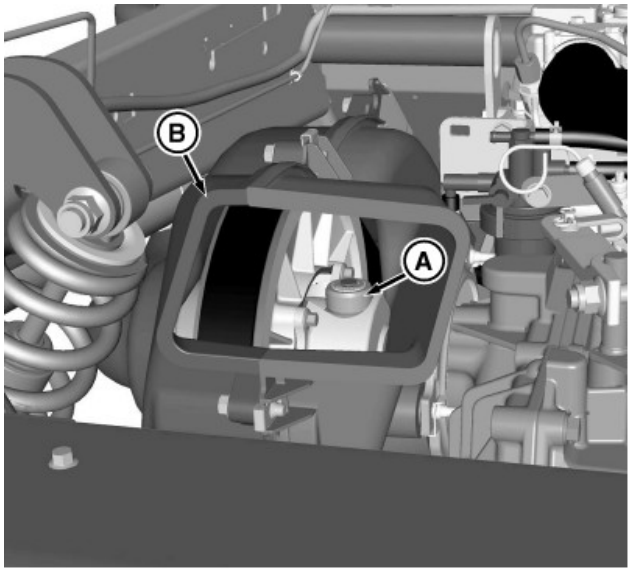
4. Install air intake hose (D), retaining ring (E), tighten two clamps (F).

MP47322,00F4889-19-04APR13

Checking Driven Clutch Rollers

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise and secure cargo box.

NOTE: Clutch rollers can be inspected through enclosure exhaust port (B) without removing clutch enclosure covers.



MXT008468—UN—07SEP13

3. Move machine slightly forward or backward so clutch roller (A) can be seen through the exhaust port (B).
4. Check worn clutch rollers (A):
   a. There should not be any excessive wear, play, or metal-to metal contact.

b. If replacement is necessary, see your John Deere dealer.

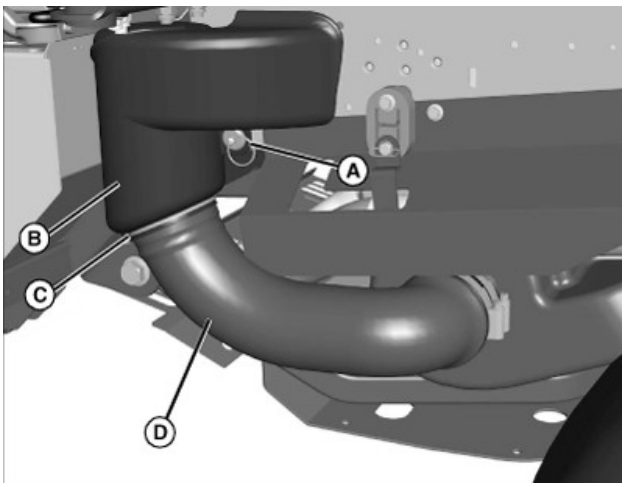
5. Lower the cargo box.

MX00654,0000123-19-18SEP14

Cleaning Primary Drive Clutch and Enclosure

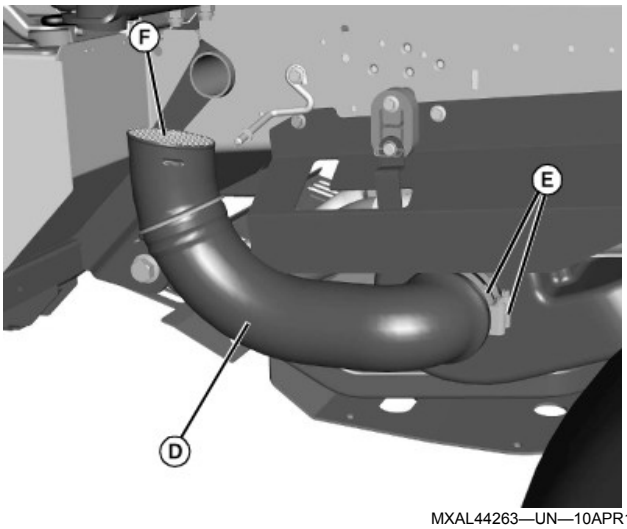
IMPORTANT: Never lubricate any part of the primary drive clutch.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Raise and secure cargo box.



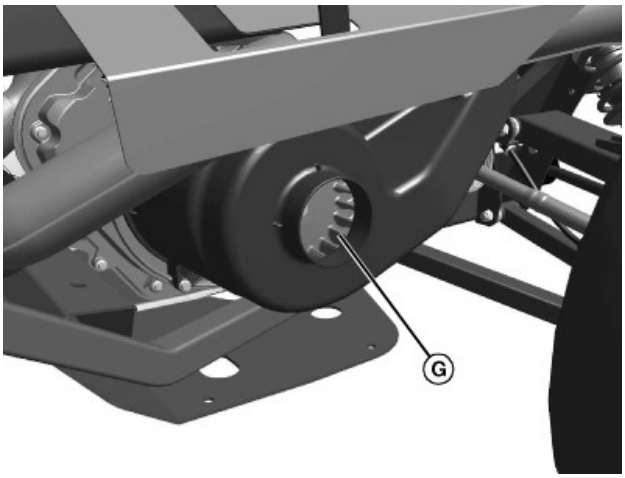
MXAL44262—UN—10APR13

3. On machine left side, remove retaining ring (A), and remove top cover (B) along with rubber seal (C) from air intake hose (D).



MXAL44263—UN—10APR13

4. Loosen hose clamps (E) and pull air intake hose (D) off of outer clutch cover.
5. Clean screen (F) on top of air intake hose.

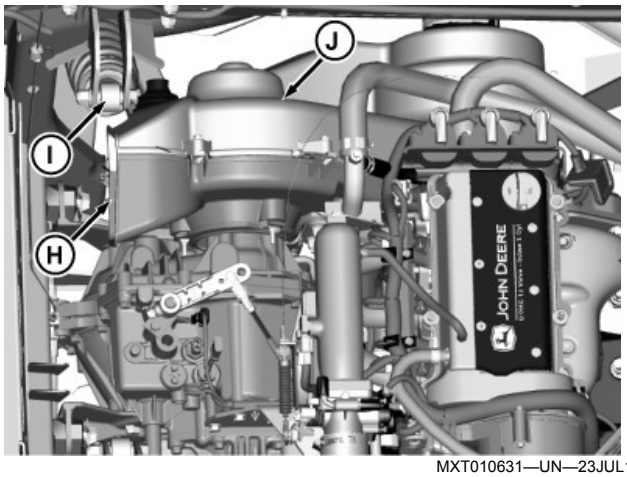


MXAL44264—UN—10APR13

6. Through access hole (G), use compressed air to blow dust and debris out of clutch fan area.

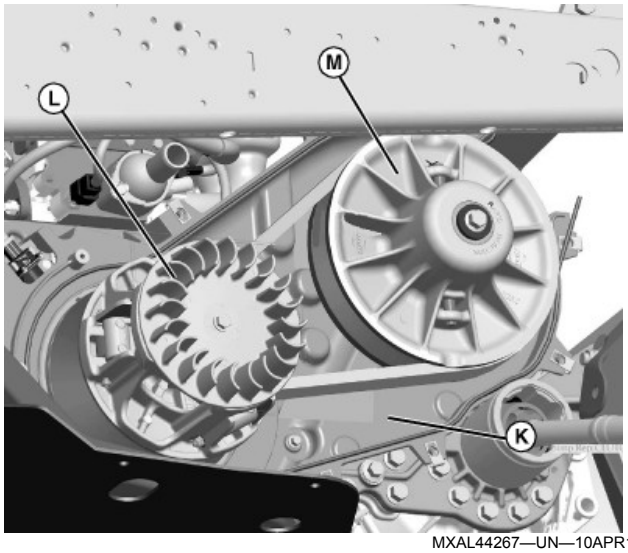
MXAL44265—UN—10APR13

7. Check exhaust port (H) for debris.



MXT010631—UN—23JUL14

8. If debris is found inside exhaust port (H), remove shock (I), eleven bolts and outer clutch enclosure cover (J).



MXAL44267—UN—10APR13

9. Clean inside clutch enclosure cover, clutch enclosure base (K), and around drive (L) and driven clutch (M) assemblies.
10. Install cover.
11. Install shock.
12. Install air intake hose.
13. Lower the cargo box.

OUO2004,0000A02-19-23JUL14

Brake Fluid

The following heavy duty brake fluid is PREFERRED for all drum and disc brakes:

- Brake Fluid - DOT4

  Other brake fluids may be used if they provide the following:

- Conforms to Motor Vehicle Safety Standard No. 116.
- Minimum wet boiling point 155°C (311°F).
- Minimum dry boiling point 230°C (446°F) to prevent vapor lock.

MX00654,00000C7-19-24AUG13

Checking Brake Fluid Level

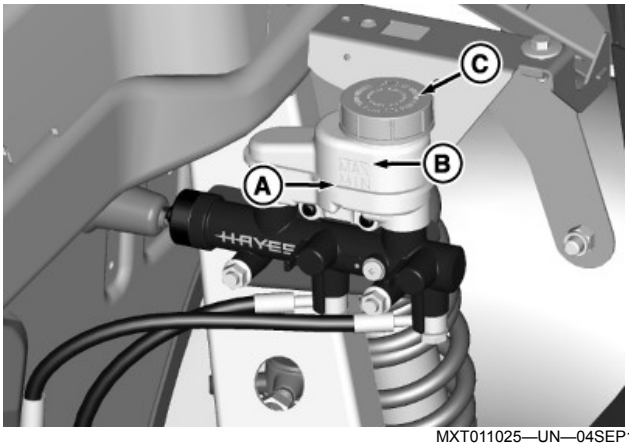
IMPORTANT: Avoid damage! Avoid contamination of the brake fluid. Thoroughly clean area around the filler cap before removing. Do not open the brake fluid reservoir cap unless necessary.

Use extreme care when filling the reservoir. Fluid spilled on painted surfaces causes damage.

Use only brake fluid from a sealed container.

1. Park vehicle safely. (See Parking Safely in the SAFETY section.)
2. Open hood.

NOTE: Do not overfill reservoir. Overfilling causes leakage.



MXT011025—UN—04SEP14

3. Visually check brake fluid reservoir. Brake fluid level must be between “MIN” (A) and “MAX” (B) marks. If fluid is low:
   - Carefully clean area around reservoir cap (C).
   - Remove reservoir cap and add fluid to the “MAX” mark.
4. Install reservoir cap.
5. Close hood.

OUMX068,0000985-19-04SEP14

Checking Brake Pads

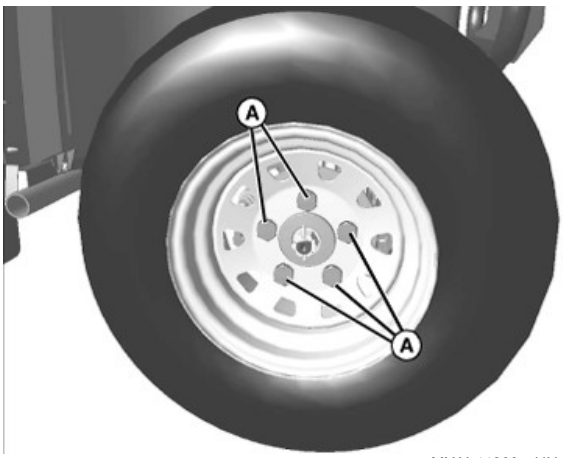
1. Park machine safely. (See Parking Safely in the SAFETY section.)

CAUTION: Avoid injury! The machine can fall or slip from an unsafe lifting device or supports.

- **Use a safe lifting device rated for the load to be lifted.**
- **Lower machine onto jack stands or other stable supports and block wheels before servicing.**

IMPORTANT: Avoid damage! Place jack stands under frame, not under transmission or engine, when raising or supporting machine

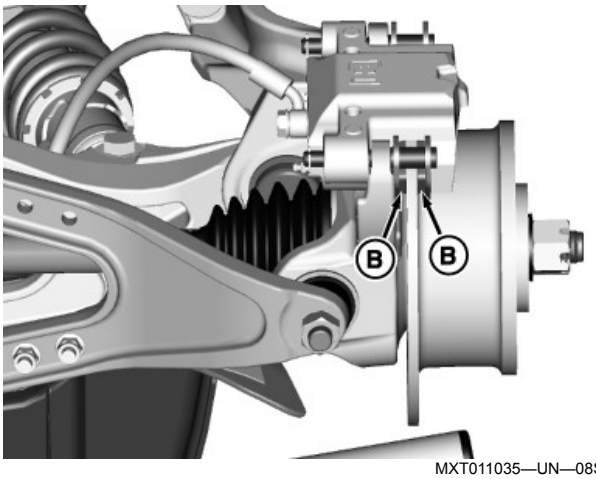
2. Raise machine with a safe lifting device and lower machine onto jack stands or other stable supports. Block wheels remaining on the ground to prevent machine movement



MXAL44269—UN—10APR13

If present, remove cap before removing wheel.

3. Remove the wheel bolts (A).
4. Remove the wheel assembly.



MXT011035—UN—08SEP14

5. Inspect brake pads friction material (B) for wear or damage. Check each pads friction material thickness. Material must not be less than minimum specification. If below specification or brake pad friction material is damaged, see your John Deere dealer for replacement service.

Specification

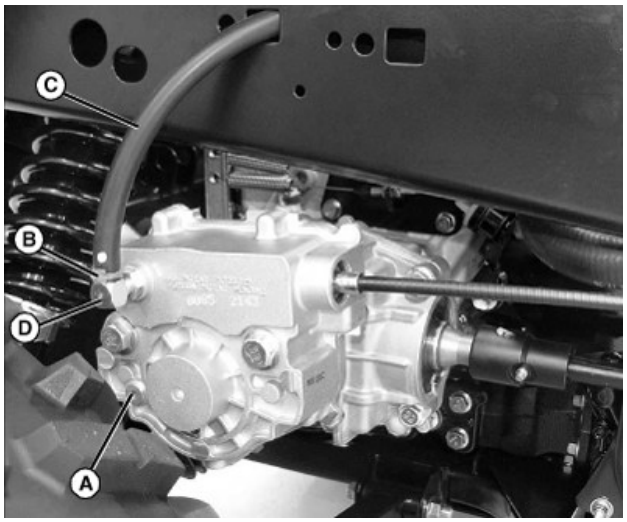
Pad Friction
Material—Thickness. . . . . 1 mm (3/64 in.)

6. Install wheel assembly with valve stem to the outside.
7. Tighten wheel bolts evenly in alternating sequence until snug.
8. Repeat procedure for remaining three wheels.
9. Lower machine to the ground.
10. Tighten wheel bolts to:
    - Standard wheel assembly: 108 N·m (80 lb.-ft.)
    - Sport wheel assembly: 142 N·m (105 lb.-ft.)

OUMX068,0000994-19-08SEP14

Checking Park Brake Fluid

1. Park Machine safely on a level surface. (See “Park Machine Safely” in the SAFETY section.)
2. Raise and secure cargo box.



MXAL44271—UN—10APR13

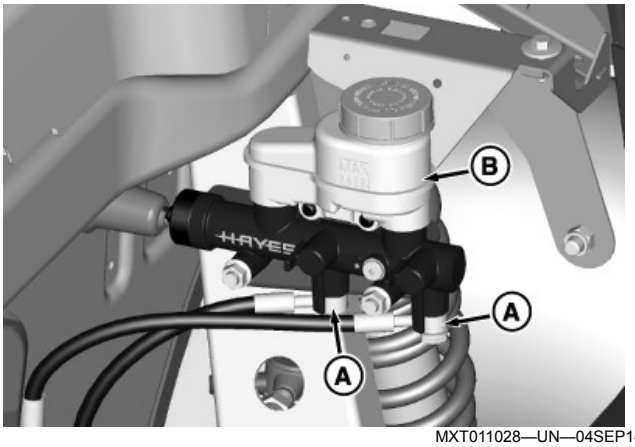
View from right rear side of vehicle.

3. Remove hex socket plug (A) to check lubricant level in park brake housing. Fluid level should be at bottom of plug opening.
4. If not at proper level, loosen clamp (B) and remove hose (C) from fitting (D). Remove fitting (D). Add recommended fluid until at bottom of plug (A) opening. Install plug (A).
5. Install fitting (D), and hose (C) with clamp (B).

MP47322,00F488E-19-03APR13

Checking Brake Lines

1. Park machine safely. (See Parking Safely in the SAFETY section.)
2. Protect any painted surfaces from expelled brake fluid and wipe any areas of excess brake fluid.
3. Open hood.



MXT011028—UN—04SEP14

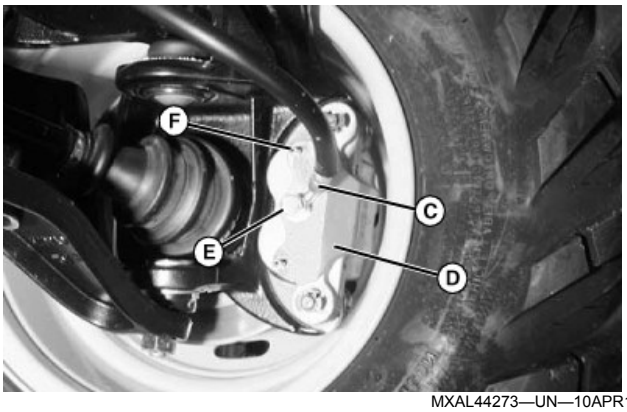
4. Check brake line fittings (A) at bottom of reservoir (B) for leaks.
5. Tighten brake line fitting banjo bolts, as needed, to specification.

Specification

Banjo Bolts—Torque. . . . . 27 N·m (20 lb.-ft.)

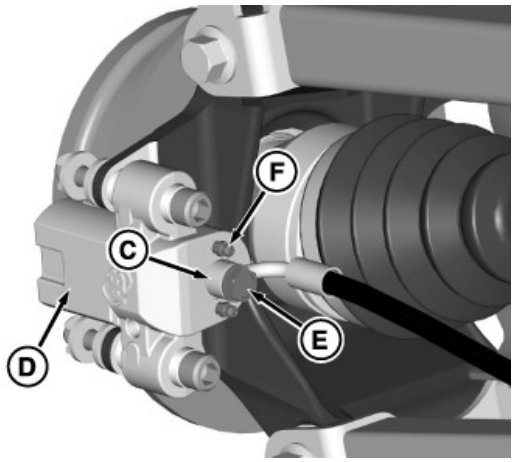
6. Rotate wheels to provide access to brake calipers.

NOTE: Each caliper has two bleeder screws. If bleeding brakes is necessary, use only the upper screw (F) to bleed brake calipers.



MXAL44273—UN—10APR13

Picture Note: Front shown.



MXT011036—UN—08SEP14

Picture Note: Rear shown.

7. Inspect lower brake line fitting (C) on each brake caliper (D) for leaks. Tighten brake line fitting banjo bolt (E), as needed, to specification.

Specification

Banjo Bolt—Torque. . . . . 27 N·m (20 lb.-ft.)

8. Lower hood.
9. Start vehicle and press brake pedal. If leaks are still found, see your John Deere Dealer for service.

OUMX068,0000995-19-08SEP14

Adjusting Park Brake

For proper adjustment of the park brake system, see your John Deere Dealer.

JG81906,0000742-19-01APR13

Electrical

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

MP47322,00F466E-19-15MAR13

Service the Battery Safely

MXAL41890—UN—18FEB13

CAUTION: Avoid injury! Battery electrolyte contains sulfuric acid. It is poisonous and can cause serious burns:

- **Wear eye protection and gloves.**
- **Keep skin protected.**
- **If electrolyte is swallowed, get medical attention immediately.**
- **If electrolyte is splashed into eyes, flush immediately with water for 15-30 minutes and get medical attention.**
- **If electrolyte is splashed onto skin, flush immediately with water and get medical attention if necessary.**

The battery produces a flammable and explosive gas. The battery may explode:

- **Do not smoke near battery.**
- **Wear eye protection and gloves.**
- **Do not allow direct metal contact across battery posts.**
- **Remove negative cable first when disconnecting.**
- **Install negative cable last when connecting.**

OUO1023,000009A-19-26MAY15

Checking the Battery (Sealed Batteries)

NOTE: Do not attempt to open, add fluid or service battery. Any attempt to do so will void warranty.

- Keep battery and terminals clean.
- Keep battery bolts tight.
- Keep small vent holes open.

IMPORTANT: This battery comes fully charged. If the machine is not used by the service expiration date indicated on the battery, charge the battery.

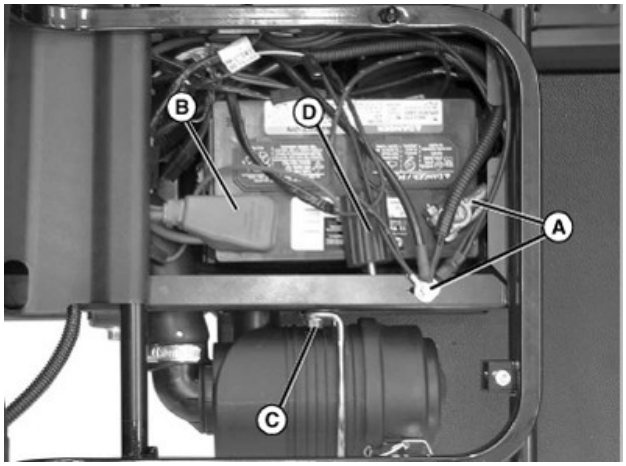
- Recharge, if necessary, at 6-10 amperes for 1 hour.

MP47322,00F4892-19-03APR13

Removing and Installing Battery

Removing

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Tip or remove seat to access battery.



MXAL44275—UN—10APR13

3. Disconnect all black negative cables (A) from battery and frame first.
4. Slide back rubber protective cover (B) and disconnect all red positive cables.
5. Loosen hardware (C) that secures battery hold-down (D) and pivot hold-down away from battery.
6. Lift battery from vehicle.

Installing

1. Install battery into vehicle with negative (-) terminal positioned toward front of vehicle and the battery seated properly in the battery tray.
2. Pivot battery hold-down firmly against battery and tighten retaining hardware to secure.
3. Connect all red positive cables to positive (+) battery terminal first. Tighten the connections.
4. Connect all black negative cables to negative (-) battery terminal. Tighten the connections.

5. Apply general purpose grease or silicone spray to battery terminals to help prevent corrosion.
6. Slide protective cover down the battery positive cable and seat it over the positive (+) terminal.
7. Tip seat down or install seat.

MP47322,00F4893-19-03APR13

Cleaning Battery and Terminals

1. Park machine safely. (See Parking Safely in the SAFETY section.)
2. Disconnect and remove battery.
3. Wash battery with solution of four tablespoons of baking soda to one gallon of water. Be careful not to get the soda solution into the cells.
4. Rinse the battery with plain water and dry.
5. Clean terminals and battery cable ends with wire brush until bright.
6. Install battery.
7. Attach cables to battery terminals, beginning with the positive cable, using washers and nuts.
8. Apply spray lubricant to terminal to prevent corrosion.

MP47322,00F4671-19-15MAR13

Using Booster Battery

CAUTION: Avoid injury! The battery produces a flammable and explosive gas.

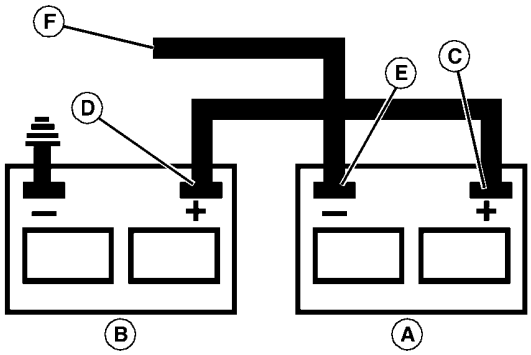
To prevent the battery from exploding:

- **Do not smoke or have open flame near battery.**
- **Wear eye protection and gloves.**
- **Do not jump-start or charge a frozen battery. Warm battery to specification.**

Specification

Battery—Temperature. . . . . 16°C (60°F)

- **Do not connect the negative (-) booster cable to the negative (-) terminal of the discharged battery. Connect at a good ground location away from the discharged battery.**



MXAL42872—UN—09APR13

A—Booster Battery
B—Disabled Vehicle Battery
C—Positive (+) Post
D—Positive (+) Post
E—Negative (-) Post
F—Negative (-) Booster Cable End

1. Connect positive (+) booster cable to booster battery (A) positive (+) post (C).
2. Connect the other end of positive (+) booster cable to the disabled vehicle battery (B) positive (+) post (D).
3. Connect negative (–) booster cable to booster battery negative (–) post (E).

IMPORTANT: Avoid damage! Electric charges from the booster battery damages machine components. Do not install negative booster cable to machine frame. Install only to the engine block.

Install negative booster cable away from moving parts in the engine compartment, such as belts and fan blades.

4. Connect the other end (F) of negative (–) booster cable to a metal part of the disabled machine engine block away from battery.
5. Start the engine of the disabled machine and run machine for several minutes.
6. Carefully disconnect the booster cables in the exact reverse order: negative cable first and then the positive cable.

MP47322,00F4672-19-05JUN15

Replacing Headlight Bulbs

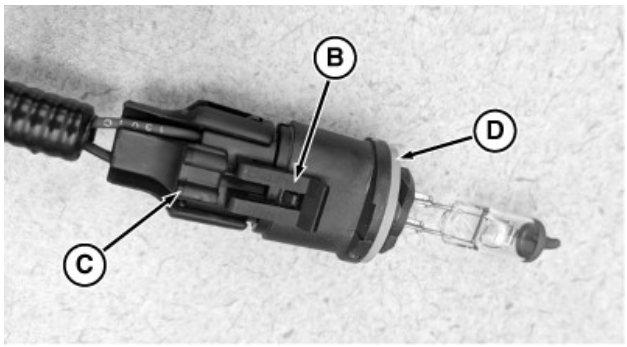
1. Park the vehicle safely. (See Parking Safely in the Safety section.)
2. Locate headlight housing under the front fender.

CAUTION: Halogen light bulb contains gas under pressure. The bulb will shatter when the glass is scratched or dropped. Wear eye protection and handle bulb with care when replacing.

IMPORTANT: Do not touch glass portion of new bulb with bare skin. Contact with oils or dirt reduces bulb life. Handle bulb by the base or with a clean cloth or gloves.

MXT008459—UN—02SEP13

3. Rotate bulb socket (A) 1/8 of a turn counterclockwise and remove the socket from the housing.



MXT023329—UN—11JUL18

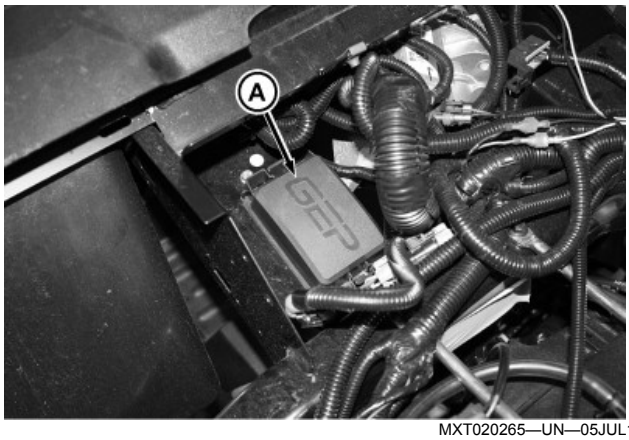
4. Pull outward on tab (B), and disconnect wire connector (C) from socket (D). Discard the bulb/socket assembly.
5. Connect wiring connector to new bulb/socket assembly. Install the assembly into housing and rotate 1/8 turn to lock in place.
6. Test head lamp function.

SB31882,0000257-19-11JUL18

Checking and Replacing Fuses

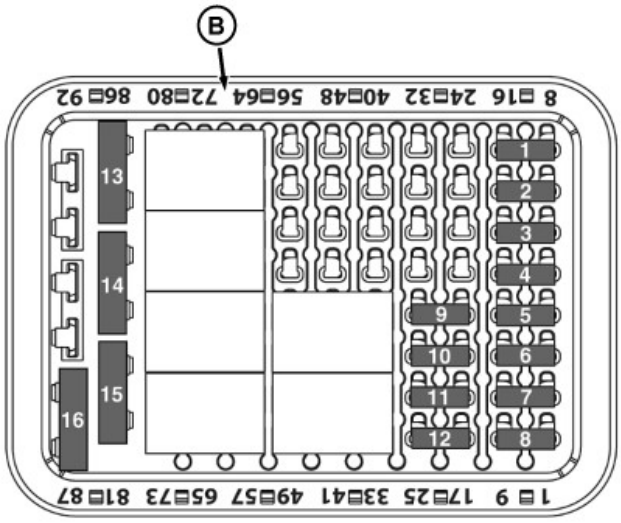
IMPORTANT: Avoid damage! If incorrect replacement fuses are used, the electrical system can be damaged. Replace the bad fuse with a fuse of the same amperage rating.

1. Park the machine safely. (See Parking Safely in the SAFETY section.)
2. Raise hood and remove storage tray.



MXT020265—UN—05JUL17

3. Remove cover (A).



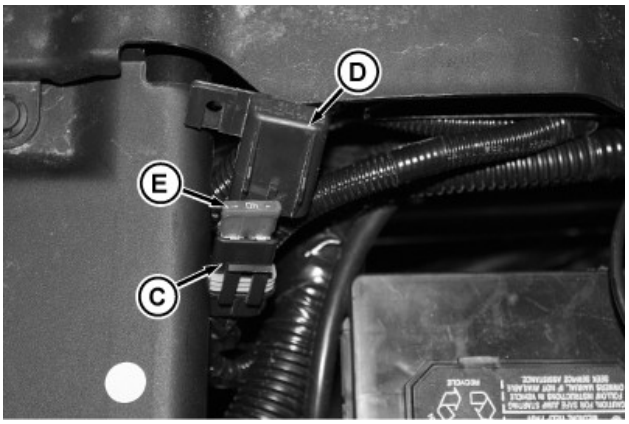
MXT020280—UN—11JUL17

4. Pull fuse from the fuse block (B).
5. Fuse identification:

Position	Circuit	Fuse Size
1	Dash Power Port	10 A
2	Center Power Port	10 A
3	Headlights	10 A
4	Main Engine Relay	20 A
5	Box Lift Switch	10 A
6	Starter	20 A
7	Main Engine	5 A
8	Key Switch	20 A
9	Fuel Pump	20 A
10	Instrument Cluster Control	20 A
11	Service Brake	10 A
12	Key Switch Relay	20 A
13	Front Power	40 A
14	Fan Relay	30 A

Position	Circuit	Fuse Size
15	Spare Fuse	40 A
16	Rear Power	40 A

6. Look for a broken filament in the fuse (See Checking Fuse Filaments in SERVICE MISCELLANEOUS).
7. Push a new fuse of the correct amperage rating into the proper position in the fuse block.
8. Install fuse block cover.
9. Install storage tray and lower hood.
10. Raise the passenger seat.

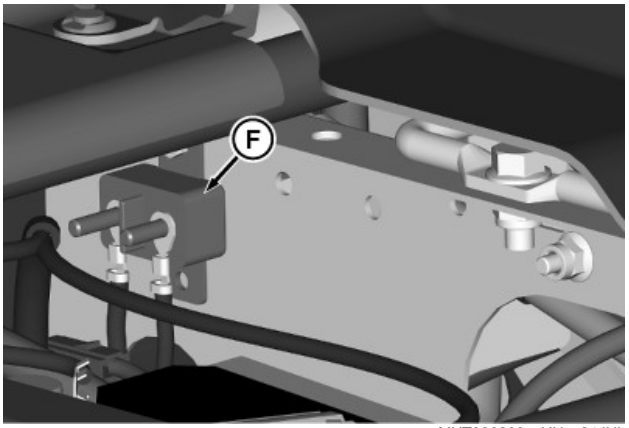


MXT020298—UN—24JUL17

11. Locate fuse holder (C) near the battery.
12. Remove cover (D) and remove fuse (E).
13. Look for a broken filament in the fuse (See Checking Fuse Filaments in SERVICE MISCELLANEOUS).
14. Push a new fuse of the correct amperage rating into the fuse holder:

Position	Circuit	Fuse Size
—	Cab Power	40 A

15. Install cover on the fuse holder.



MXT020299—UN—24JUL17

16. If equipped, locate the Electric Power-Assisted Steering (EPAS) circuit breaker (F) near the battery.

Position	Circuit	Fuse Size
—	Circuit Breaker (EPAS)	50 A

17. Replace the circuit breaker, if needed.
18. Lower the passenger seat.

OUMX068,0001331-19-24JUL17

Using Proper Fuel and Stabilizer

IMPORTANT: Avoid damage! Using stale, contaminated, or improper fuel can result in engine and fuel system damage. Repairs caused by stale, contaminated, or improper fuel are not covered by warranty.

Use regular grade unleaded fuel with an octane rating of 87 octane or higher. Fuel blends containing up to 10% ethanol or up to 15% MTBE reformulated fuel are acceptable. Do not use fuel or additives containing methanol as engine damage can occur.

Always use fresh, clean fuel that is purchased in a quantity that can be used within approximately 30 days. Fuel stabilizer should always be added to the fuel each time fuel is purchased. Add stabilizer before filling the fuel container to insure proper mixing. Such practice helps prevent engine performance problems and allows fuel storage in the machine all year without draining.

Store fuel in plastic containers to reduce condensation. Make sure that the cap on the fuel container is tight to reduce fuel contamination and evaporation. For best fuel storage life, use a self-sealing gas can.

Fuel is blended to give best seasonal performance. To avoid engine performance problems such as hard starting or vapor lock, use in-season fuel. Use fuel during warm weather that was purchased during that season, and use fuel during cold weather that was purchased during that season.

Fuel can become stale in machines with engines that are used seasonally or infrequently during a season. Stale fuel can produce varnish and plug carburetor or EFI components which can affect engine performance.

Keep fuel storage container tightly covered and in a cool area out of direct sunlight. Fuel can break down and degrade if not sealed properly or exposed to sun and heat.

Condensation may collect in the fuel tank because of a variety of operating or environmental conditions and, over time, may affect your machine's operation. Fill machine fuel tank at the end of the day.

MP47322,00F4674-19-26MAY15

Filling Fuel Tank

CAUTION: Avoid injury! Fuel vapors are explosive and flammable:

- **Shut engine off before filling fuel tank.**
- **Allow engine to cool before refueling.**
- **Do not smoke while handling fuel.**
- **Keep fuel away from flames or sparks.**
- **Fill fuel tank outdoors or in ventilated area.**
- **Clean up spilled fuel immediately.**
- **To prevent static electric discharge, use a clean, approved non-metal container.**

IMPORTANT: Avoid damage! Dirt and water in fuel causes engine damage:

- **Clean dirt and debris from the fuel tank opening.**
- **Use clean, fresh, stabilized fuel.**
- **To keep condensation out of the fuel tank, fill the fuel tank at the end of operation each day.**
- **If using a funnel, make sure it is plastic and has no screen or filter.**

To prevent condensation and freezing during cold weather, fill fuel tank at the end of operation each day.

1. Park machine safely. (See Parking Safely in the Safety section.)
2. Allow engine to cool.
3. Remove any trash from area around fuel tank cap.
4. Remove fuel tank cap slowly to allow any pressure built up in tank to escape.
5. Fill fuel tank only to bottom of filler neck. Do not overfill.
6. Install fuel tank cap.
   - Gas models: turn cap until it clicks.

MP47322,00F4675-19-05JUL17

Removing and Installing Wheel Assembly

Removing

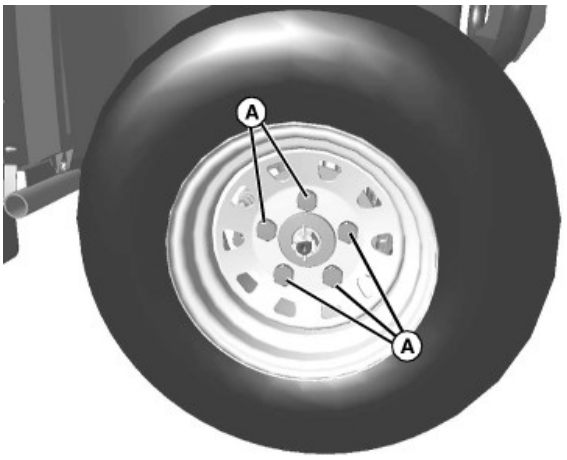
1. Park machine safely. (See Parking Safely in the SAFETY section.)

CAUTION: The machine can fall or slip from an unsafe lifting device or supports.

- **Use a safe lifting device rated for the load to be lifted.**
- **Lower machine onto jack stands or other stable supports and block wheels before servicing.**

IMPORTANT: Place jack stands under frame, not under transmission or engine, when raising or supporting machine.

2. Raise machine with a safe lifting device and lower machine onto jack stands or other stable supports. Block wheels remaining on the ground to prevent machine movement.



MXAL44281—UN—10APR13

Wheel may or may not have a cap to remove when removing the wheel.

3. Remove the wheel bolts (A).
4. Remove the wheel assembly.

CAUTION: Explosive separation of tire and rim parts is possible when they are serviced incorrectly:

- **Do not attempt to mount a tire without the proper equipment and experience to perform the job.**

5. Take wheel assembly to an authorized service dealer for repairs.

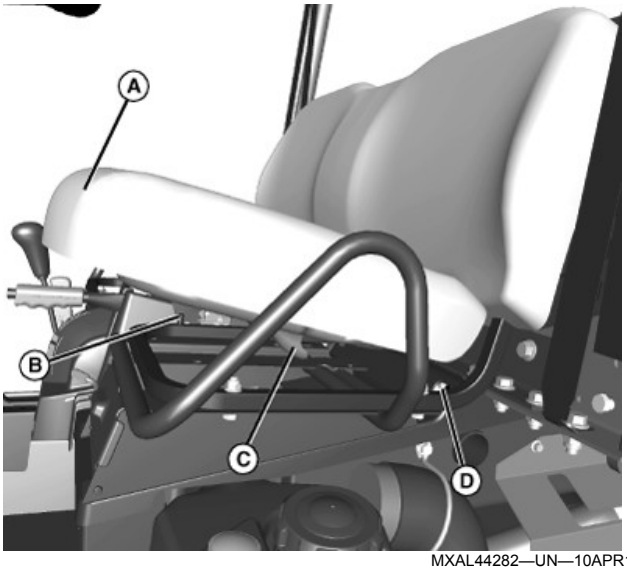
Installing

1. Install wheel assembly with valve stem to the outside.
2. Tighten wheel bolts evenly in alternating sequence until snug.
3. Lower machine completely to the ground.
4. Tighten wheel bolts to:
   - Standard wheel assembly - 108 N·m (80 lb-ft)
   - Sport wheel assembly - 142 N·m (105 lb-ft)
5. If new bolts or wheels are used, tighten wheel bolts again after 8 hours of vehicle use.

MP47322,00F489A-19-03APR13

Removing and Installing Seats

Removing and Installing Front Bench Seat

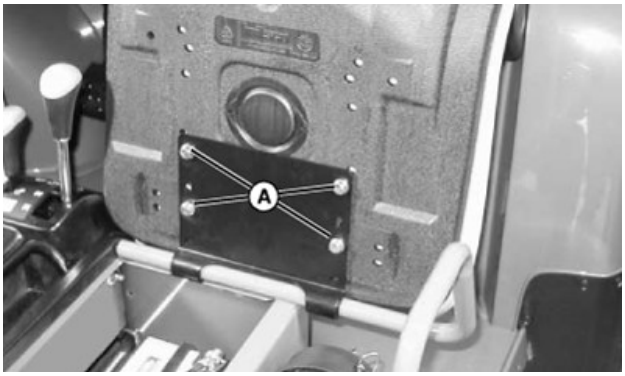


MXAL44282—UN—10APR13

1. Park machine safely. (See Parking Safely in the SAFETY section.)
2. Pull up on front of seat (A) and remove seat from both studs (B) on seat frame.
3. Pull seat forward to remove both seat ears (C) from slots (D) on machine cowling.
4. To install seat, install ears (C) into slots (D) on both sides of machine cowling. Push down on front of seat to secure seat onto studs (B).

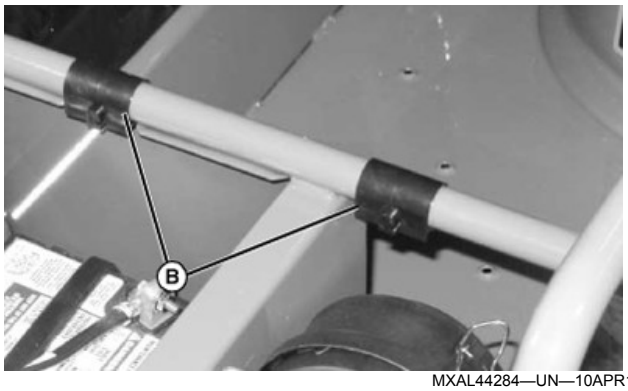
Removing and Installing Bucket Seat

1. Tip seat forward.



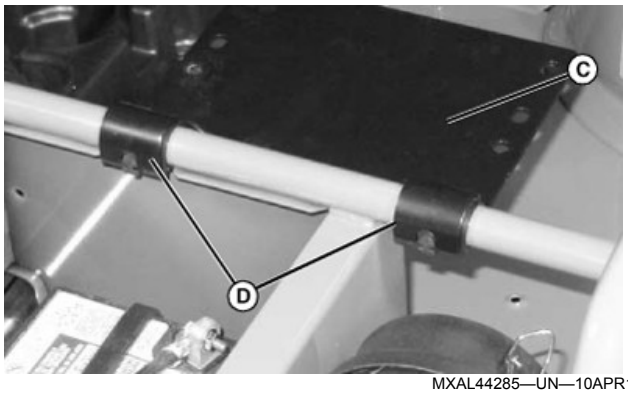
MXAL44283—UN—10APR13

2. Hold onto seat and remove all screws (A).
3. Remove seat and seat bracket from support rail.



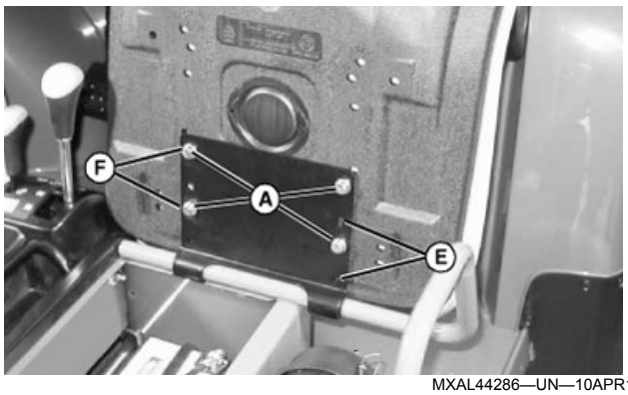
MXAL44284—UN—10APR13

4. To install seat, position seat bushings (B) on support rail so tabs face toward rear of vehicle.



MXAL44285—UN—10APR13

5. Position seat bracket (C) onto support rail so hinges (D) fit around rubber bushing tabs.



MXAL44286—UN—10APR13

Rear position shown.

6. Rotate seat bracket upward. Position bottom of seat against bracket and align correct holes with holes in seat.
7. Slide seat to the forward (E) or rearward (F) position.
8. Install original screws (A) to secure seat.
9. Tighten seat bracket hardware to specification.

Specification

Seat Hardware—Torque. . . . . 10 N·m (7.4 lb-ft)

MP47322,00F489B-19-20JUL17

Lifting Machine

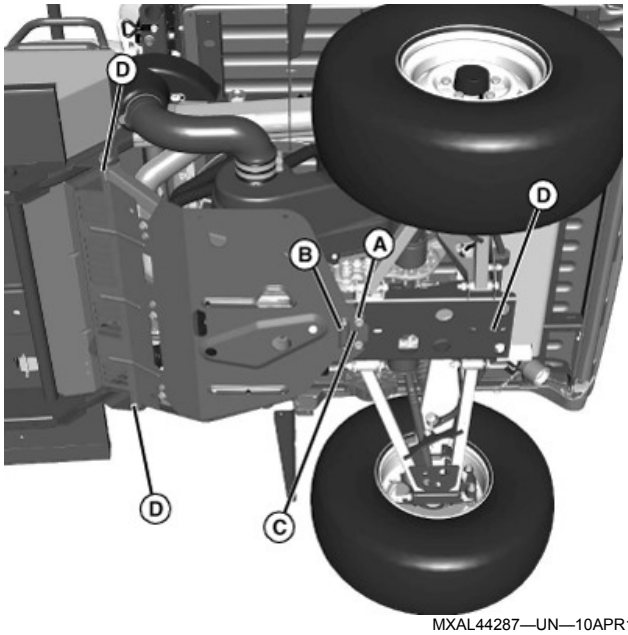
1. Park machine safely. (See Parking Safely in the SAFETY section.)

CAUTION: The machine can fall or slip from an unsafe lifting device or supports.

- **Use a safe lifting device rated for the load to be lifted.**
- **Lower machine onto jack stands or other stable supports and block wheels before servicing.**

IMPORTANT: Be certain to include bolt heads (A) and embossed area (B) inside jack cup to prevent slipping.

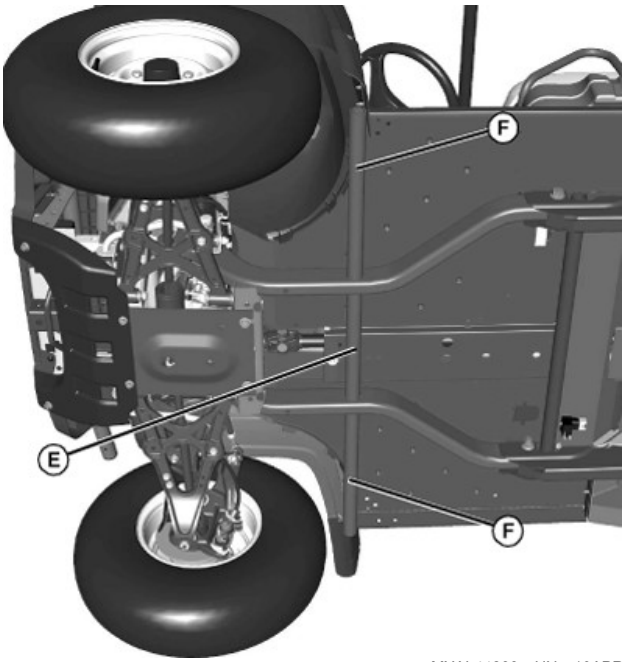
NOTE: Remove all attachments prior to lifting machine.



MXAL44287—UN—10APR13

Your machine model may not be shown, but jack locations are as shown.

2. Safely lift rear of machine frame point (C).
3. Place jack stands or other stable supports under three frame locations (D).
4. If only lifting rear of machine, block front wheels remaining on ground to avoid movement of machine.



MXAL44288—UN—10APR13

Your machine model may not be shown, but jack locations are as shown.

5. Safely lift front of machine at machine frame point (E) or locations (F). Place jack stands or other stable supports under two machine frame locations (F)
6. If only lifting front of machine, block rear wheels remaining on ground to avoid movement of machine.
7. To lower machine, lift front and/or rear of machine, and remove jack stands or supports. Lower machine.

MP47322,00F489C-19-26JUL17

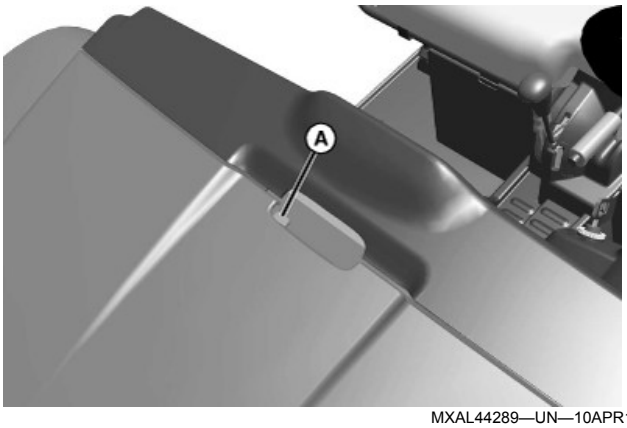
Opening and Closing Hood

Opening Hood

CAUTION: Rotating parts can catch fingers, loose clothing, or long hair. Wait for engine and all moving parts to stop before leaving operator's station to adjust or service machine.

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)

NOTE: On homologated machine models, use a tool like a screwdriver to unlock the latch.



MXAL44289—UN—10APR13

2. Stand in front of machine and grasp hood lift handle.
3. Pull up on hood release handle (A) to unlock latch.
4. When the hood latch is released, pull upward on the hood to pivot to full open position.

Closing Hood

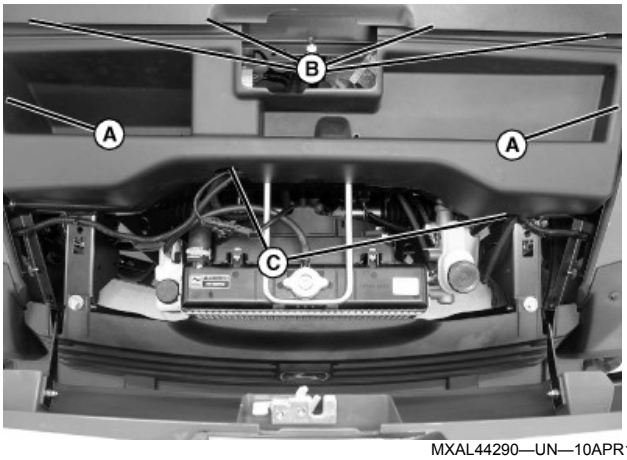
1. Grasp hood lift handle.
2. Pivot hood downward to closed position.
3. Press down on hood to latch hood in closed position.

MP47322,00F489D-19-27JUL17

Removing and Installing Storage Tray

Removing

1. Park the vehicle safely. (See Parking Safely in the SAFETY section.)
2. Open hood.
3. Remove all contents from storage tray.

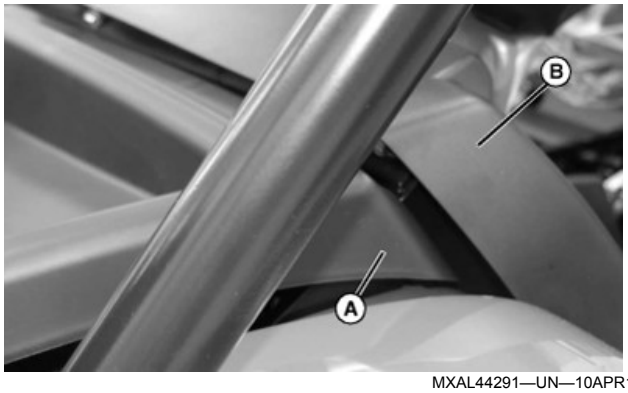


MXAL44290—UN—10APR13

4. Grasp outer edges of the storage tray (A).
5. Flex storage tray to fit past dash panel (B) while lifting the storage tray out of machine.

Installing

1. Position storage tray over frame.



MXAL44291—UN—10APR13

2. Flex storage tray (A) to fit under dash panel (B) while lowering storage tray into position.
3. Check alignment of cables and harnesses with routing notches (C).
4. Secure all items to prevent damage from movement while operating the machine.
5. Close hood.

MP47322,00F489E-19-03APR13

Inspecting Seat Belt

MXAL44292—UN—10APR13

IMPORTANT: Do not bleach or re-dye webbing. Webbing could become severely weakened by this process. Do not use a pressure washer or other automatic washing machine to clean belt or connectors.

- Hand wash webbing (A) with warm water and mild soap. Rinse thoroughly and air dry.
- Inspect outer seat belt connector (B) and inner connector (C) for damage or wear. If assembly does not operate properly or if the webbing is torn or frayed, the seat belt must be replaced.

MP47322,00F489F-19-03APR13

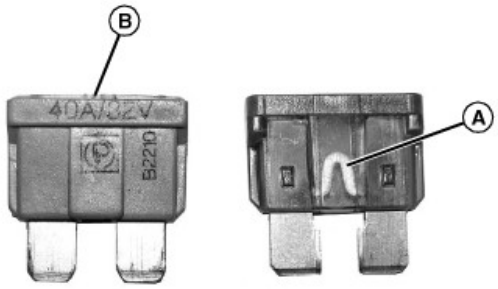
Inspecting Nets or Doors

- Keep nets, doors, and supporting components clean.
- If needed hand wash with garden hose and mild soap.
- Latch and unlatch metal tab of net from buckle during washing for better cleaning. Allow to dry before use.
- Extended machine operation under harsh conditions may require more frequent inspection and cleaning.

OUMX068,00002E5-19-04OCT13

Checking Fuse Filaments

1. Remove fuse.

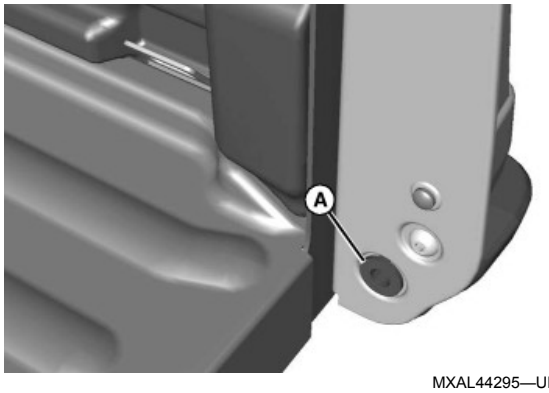


MXAL44294—UN—10APR13

2. Check visually for broken filament:
   - For clear housing fuses, check filament (A).
   - For all other fuses, check filament (B) in top of fuse housing.

MP47322,00F48A1-19-03APR13

Replacing Cargo Box Tailgate Bushings



MXAL44295—UN—10APR13

1. Remove the cargo box tailgate (See Removing the Tailgate in OPERATING).
2. Remove snapfit bushing (A) from both sides of cargo box.
3. Replace bushings and reinstall the tailgate.

MP47322,00F48A2-19-03APR13

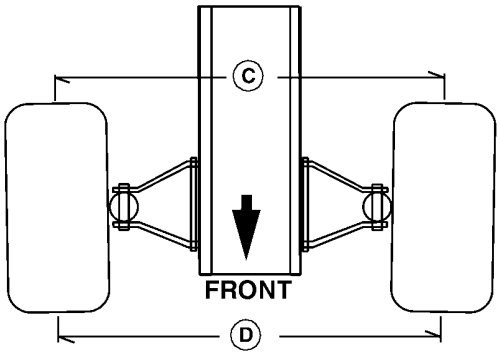
Checking and Adjusting Toe-In

In order to accurately set front wheel toe-in, suspension and steering components must be in good condition. All fasteners must be tightened to specification.

1. Park machine safely. (See Parking Safely in the SAFETY section.)
2. Turn steering wheel so that front tires are in straight-ahead position.
3. Check tire pressure. Adjust to specification if needed (see SPECIFICATIONS).

MXAL44296—UN—10APR13

4. Measure front wheel hub center height (A) from surface.
5. Mark tread centerline (B) and hub center height at front and back of both front tires.



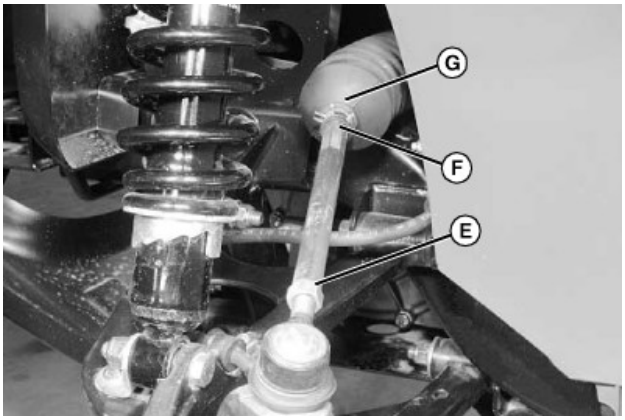
MXAL44297—UN—10APR13

6. Measure distance (C) between tread centerlines at rear of tires at hub height.
7. Measure distance (D) between tread centerlines at front of tires at hub height.
8. Subtract front measurement from rear measurement to determine toe-in.
9. Adjust toe-in if not within specification:

Specification

Tire Centerline—Distance. . . . . 4±3 mm (0.16±0.12 in.)

NOTE: The steering rack rubber boot may turn with the tie rod if the tie rod boot clamp is too tight. If this happens, loosen the boot clamp enough to allow the rubber boot to remain stationary when the tie rod is turned.



MXAL44298—UN—10APR13

Left side shown.

a. Loosen M12 jam nuts (E) on left and right tie rod.
b. Rotate tie rod by placing wrench on hex (F).
c. Loosen boot clamps (G) if necessary to prevent boot rotation with tie rod adjustment.
d. Adjust left and right tie rods equally until toe-in is within specification.
e. Tighten jam nuts to specification.

Specification

Jam Nuts—Torque. . . . . 95 N·m (70 lb-ft)

f. Check that front tires do not contact suspension when turned fully left or right.

MP47322,00F48A3-19-04APR13

Adjusting Suspension (Standard Shocks)

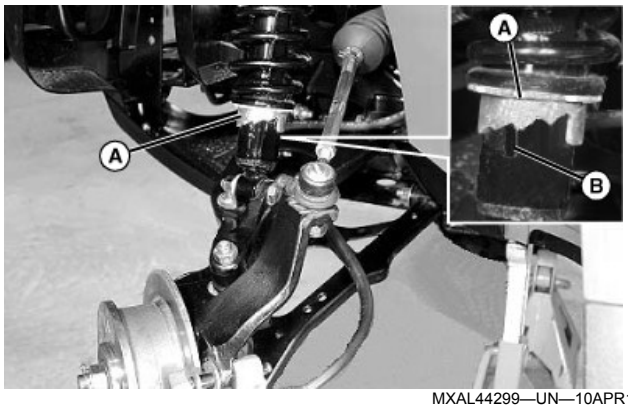
Preload Adjustment

When to Adjust:

- Front preload adjustment - increase preload if operating with front attachment or under heavy load condition.
- Rear preload adjustment - increase preload if operating under heavy load condition.

How to Adjust:

1. Park machine safely (see Parking Safely in the SAFETY Section).
2. Block tire not intended to be lifted off the ground.
3. Raise the machine with a safe lifting device and lower machine onto jack stands or other stable support.



MXAL44299—UN—10APR13

4. Using the supplied spanner wrench, securely engage the adjustable preload collar (A) on shock. Rotate preload collar to desired preload condition making sure to engage detent feature (B) between shock and preload collar.

CAUTION: Be sure both front shock preload collars are set to the same position. Be sure both rear shock preload collars are set to the same position.

5. Repeat this operation on all shocks as needed.

MP47322,00F48A4-19-03APR13

Cleaning Vehicle Surfaces

Cleaning:

Keeping your vehicle clean will maintain its appearance and can also extend the life of various components. Immediately after your vehicle has been exposed to salt water or operated on muddy trails, rough terrain, or in dusty conditions, wash your vehicle. With some precautions, your vehicle can be cleaned much like a sport utility vehicle.

IMPORTANT: Improper care of machine plastic surfaces can damage that surface:

- **Do not wipe plastic surfaces when they are dry. Dry wiping will result in minor surface scratches.**
- **Use a soft, clean cloth (bath towel, diaper, automotive mitt).**
- **Do not use abrasive materials, such as polishing compounds, on plastic surfaces.**

Washing Vehicle:

The recommended and safest way to clean your vehicle is with a garden hose and a pail of mild, soapy water. Use a professional type wash mitten. Clean the upper body first and the lower parts last. Rinse frequently with water and dry with a chamois to prevent water spotting.

1. Rinse hood and entire machine with clean water to remove dirt and dust that may scratch the surface.

IMPORTANT: High pressure may damage vehicle components. It is recommended that your vehicle be washed by hand or with a garden hose using mild soap.

Avoid spraying water with any great force near or into the following places:

- **Clutch enclosure air outlet**
- **Air intake**
- **Electrical connections (including battery compartment)**
- **CV boots**
- **Wheel bearings**
- **Master cylinder**
- **Pillow block bearings**
- **Radiator**
- **Warning labels**
- **Decals**
- **Ignition switch**
- **Instrument panel (gauges and switches)**
- **Breather/tube vents**

2. Wash surface with clean water and a mild liquid automotive washing soap.
3. Immediately after washing, lubricate all grease fittings with grease.
4. Dry thoroughly to avoid water spots.
5. Wax the surface with a liquid automotive wax. Use products that specifically say “contains no abrasives.”

IMPORTANT: Do not use a power buffer to remove wax.

6. Buff applied wax by hand using a clean, soft cloth.

MP47322,00F48A6-19-04APR13

Cleaning and Repairing Metal Surfaces

Cleaning:

Follow automotive practices to care for your vehicle painted metal surfaces. Use a high-quality automotive wax regularly to maintain the factory look of your vehicle’s painted surfaces.

Repairing Minor Scratches (surface scratch):

1. Clean area to be repaired thoroughly.

IMPORTANT: Avoid damage! Do not use rubbing compound on painted surfaces.

2. Use automotive polishing compound to remove surface scratches.
3. Apply wax to entire surface.

Repairing Deep Scratches (bare metal or primer showing):

1. Clean area to be repaired with rubbing alcohol or mineral spirits.
2. Use paint stick with factory-matched colors available from your authorized dealer to fill scratches. Follow directions included on paint stick for use and for drying.
3. Smooth out surface using an automotive polishing compound. Do not use power buffer.
4. Apply wax to surface.

MP47322,00F467A-19-26MAY15

Cleaning Plastic Hood and Body Panel Surfaces

IMPORTANT: Improper care of machine plastic surfaces can damage that surface:

- **Do not wipe plastic surfaces when they are dry. Dry wiping will result in minor surface scratches.**
- **Use a soft, clean cloth (bath towel, diaper, automotive mitt).**
- **Do not use abrasive materials, such as polishing compounds, on plastic surfaces.**

1. Rinse with clean water to remove dirt and dust.
2. Dry thoroughly to avoid water spots.
3. Spray PLEDGE® onto hood and surfaces and leave on for 30 to 60 seconds.
4. Wipe off with cheesecloth to bring out lustre.

MP47322,00F48A8-19-03APR13

Windshield Maintenance

Inspecting Windshield

CAUTION: Avoid injury! If cracks or surface crazing are observed, or viewing through windshield is impaired, replace windshield.

1. Inspect windshield condition.
2. Fill in existing scratches.
3. Polish or wax windows regularly.

Cleaning Windshield

IMPORTANT: Avoid damage! Some cleaning compounds may attack the polycarbonate material, resulting in cracks that weaken the material.

Never use compounds that contain substances such as ammonia, gasoline, lacquer thinner, and turpentine.

Use of abrasive cleaners on windshield may cause damage.

Never use substances such as acetic acid, acetone, benzene, benzyl alcohol, brake fluid, butyric acid, carbon tetrachloride, ethyl ether, methyl alcohol, phenol, sodium sulfide, sodium hydroxide, sodium nitrate, trichloroethylene, toluene, xylene, or petroleum products.

NOTE: The windshield and windscreen are a polycarbonate material which is softer, but stronger than, glass.

The following cleaning agents are compatible with polycarbonate when used according to the manufacturer's recommendations: Formula 409® (without ammonia), Joy®, Ultra Palmolive® Original, Top Job®, Mr. Clean®, and Fantastik®.

1. Rinse as much loose dirt off as possible with warm water and a soft cloth or sponge before washing.
2. Wash with mild soap or detergent and rinse thoroughly with clean water.
3. Cleaning in direct sunlight causes streaking on surface.
4. Thoroughly dry windshield with a chamois or moist sponge to prevent water spots.

Polishing or Waxing Windshield

Minimize scratches and minor abrasions with a mild automobile polish.

Test effectiveness of polish or wax in a small corner of windshield before using on entire windshield.

OUMX068,0000BC0-19-05MAY15

Formula 409 is a trademark of The Clorox Company
Joy is a trademark of Procter & Gamble
Palmolive is a trademark of The Colgate-Palmolive Company
Top Job is a trademark of KIK Custom Products
Mr. Clean is a trademark of Procter & Gamble
Fantastik is a trademark of SC Johnson

Using Troubleshooting Chart

If you are experiencing a problem that is not listed in this chart, see your Technical Manual or authorized dealer for service.

MP47322,00F467B-19-07SEP17

Engine

IF	CHECK
Engine will not start	Battery has low voltage. Loose or corroded battery connections. Blown fuse(s). Spark plug wire(s) is loose or disconnected. Faulty spark plug(s) or coil. No fuel or improper fuel. Plugged fuel filter. Defective starter solenoid. Open-circuit in wiring.
Engine is hard to start	Engine is cold. Plugged fuel filter. Engine oil viscosity too heavy. Spark plug(s) is fouled. Faulty spark plug(s) or wire(s). Loose or corroded electrical connections. Stale or improper fuel.
Engine misses under load	Faulty spark plug(s). Stale or dirty fuel. Plugged fuel filter. Faulty coil or wire.
Engine vapor locks	Poor quality fuel or methanol. Very hot weather conditions and very high loading condition. Fuel tank vent plugged. Dirt in fuel filter.
Engine runs unevenly	Loose electrical connections. Throttle cable sticking. Fuel line or fuel filter plugged. Stale or dirty fuel. Improper fuel. Air cleaner element plugged. Spark plug(s) is fouled.
Engine overheats	Air cleaner element missing or plugged. Engine oil low. Engine operated too long at slow engine speed. Bleed cooling system. Check thermostat. Check water pump. Check coolant level.
Engine loses power	Engine overheating. Too much oil in engine. Faulty spark plug(s). Fuel supply being restricted. Fuel filter plugged Fuel line pinched or kinked. Improper fuel. Air cleaner element plugged.
Engine knocks	Low engine speed. Stale or low octane fuel. Engine overloaded.

MP47322,00F48AB-19-11APR13

Electrical

IF	CHECK
Starter does not work	Loose or corroded connections. Low battery output. Sulfated or worn out battery. Faulty starter.
Starter cranks slowly	Low battery output. Sulfated or worn out battery. Engine oil too heavy. Loose or corroded connections.
Entire electrical system does not work	Blown fuse. Loose or corroded connections. Sulfated or worn out battery.
Dead battery	Shorted starter solenoid. Key switch not turned to STOP position. Component connected to accessory outlet left on with engine off. Turn signal and/or hazard lights left on with engine off. Sulfated or worn out battery. Low engine speed or excessive idling. Battery cables and terminals are dirty. Dead cell in the battery. Faulty charging system. Current draw higher than charging system output. (If several attachments are added and used frequently at the same time with the standard charging system. Especially at low engine speeds.)
Correct indicator light(s) do not come on when checking instrument panel.	Faulty bulb. Faulty wiring. Faulty switch or sensor.
Battery will not take a charge	Dead cell in battery. Loose or corroded connections. Sulfated or worn out battery. Electrolyte level low. Low engine speed or excessive idling. Faulty charging system.
Headlights dim or flicker	Current draw higher than charging system output. (If installed, Electric Power Assist Steering will draw current.)

MP47322,00F48AC-19-11APR13

Brakes

IF	CHECK
Brakes not working correctly	Brake fluid level low - check fluid level. Air in brake system, system not bled properly. Replace worn brake pads. (See your John Deere dealer.)

MP47322,00F48AD-19-11APR13

Cargo Box

IF	CHECK
Tailgate doesn’t latch properly	Bushings worn/damaged - inspect bushings. Strikers not connecting - inspect and lubricate strikers.
Power lift doesn’t operate	No power - check all power connections. Actuator motor overheated - allow actuator to cool.
Power lift actuator rachets/clicks/squeals when operating	Too much weight in box - remove weight or move it rearward in box.

MP47322,00F48AE-19-11APR13

Steering

IF	CHECK
Steering effort feels “heavy”	Current draw higher than charging system output. (If installed, Electric Power Assist Steering will draw current.) Turn off optional equipment. Tire pressure or tread below recommended levels. Toe-in may need adjustment. Electric Power Assist Steering (EPAS) malfunction.

MP47322,00F48AF-19-07AUG18

Troubleshooting DTC’s (XUV825)

SPN	FMI	Level 1 SYSTEM and CONDITION	Level 2 IMPACT and MITIGATION
51	31	CAN Communication Error	Troubleshooting required.
84	0	Wheel Speed System Fault	Unable to accurately determine ground speed. Troubleshooting required.
84	9	Wheel Speed Not Detected	Unable to accurately determine ground speed. Troubleshooting required.
96	2	Fuel Level System Fault	Unable to accurately determine fuel level. Troubleshooting required.
100	1	Engine Oil Pressure Low	Engine damage may occur. Check oil level. Troubleshooting required.
167	3	Charging System Circuit Fault	Troubleshooting required.
167	4	Charging System Circuit Fault	Loss of battery power. Troubleshooting required.
168	0	Charging System Voltage High	Troubleshooting required.
168	1	Charging System Voltage Low	Check battery and battery cable connections. Turn off accessories. Troubleshooting required.
190	0	Engine Speed High	Unable to accurately record engine speed. Troubleshooting required.
190	9	CAN Communication Error	Troubleshooting required.
629	12	Display Unit Fault	Display will not function. Troubleshooting required.
629	13	Display Unit Fault	Display will not function. Troubleshooting required.
639	12	CAN Communication Error	Troubleshooting required.
639	14	CAN Communication Error	Troubleshooting required.
677	3	Starter Relay Circuit Fault	Starter continuously engaged. Troubleshooting required.
677	4	Starter Relay Circuit Fault	Starter will not engage. Troubleshooting required.
920	3	Audible Alarm Circuit Fault	Troubleshooting required.
920	4	Audible Alarm Circuit Fault	Audible alarm will not sound. Troubleshooting required.
1071	3	Cooling System Circuit Fault	Radiator fan stays on. Troubleshooting required.
1071	4	Cooling System Circuit Fault	Radiator fan will not turn on. Machine may overheat. Troubleshooting required.
1859	7	CAN Communication Error	Troubleshooting required.
1859	12	CAN Communication Error	Wheel speed limiting function disabled. Troubleshooting required.
1859	15	Wheel Speed Limit System Fault	Wheel speed limit exceeded. Slow down to proper speed. Troubleshooting required.
1859	16	Wheel Speed Limit System Fault	Wheel speed limit exceeded. Slow down to proper speed. Troubleshooting required.
3353	3	HVAC System Circuit Fault	Troubleshooting required.
3353	4	HVAC System Circuit Fault	HVAC fan speed will not increase. Troubleshooting required.
516182	3	4WD Circuit Fault	4WD continuously engaged. Troubleshooting required.
516182	4	4WD Circuit Fault	4WD will not engage. Troubleshooting required.
517289	7	Service Brake System Fault	Brake performance limited. Check brake fluid level. Troubleshooting required.
520425	7	Communication System Fault CAN Communication Error?	Troubleshooting required.
520426	7	Communication System Fault CAN Communication Error?	Troubleshooting required.
520542	3	Communication System Fault CAN Communication Error?	Troubleshooting required.
520543	4	Communication System Fault CAN Communication Error?	Troubleshooting required.

SPN	FMI	Level 1 SYSTEM and CONDITION	Level 2 IMPACT and MITIGATION
520870	31	Instrument Cluster Control Unit Fault	ICC will not function. Troubleshooting required.
520871	31	Instrument Cluster Control Unit Fault	ICC will not function. Troubleshooting required.
520872	31	Instrument Cluster Control Unit Fault	ICC will not function. Troubleshooting required.
520873	31	Instrument Cluster Control Unit Fault	ICC will not function. Troubleshooting required.
520874	31	Instrument Cluster Control Unit Fault	ICC will not function. Troubleshooting required.
520875	31	Instrument Cluster Control Unit Fault	ICC will not function. Troubleshooting required.
520876	31	Instrument Cluster Control Unit Fault	ICC will not function. Troubleshooting required.
523910	31		
524265	31	Instrument Cluster Control Unit Fault	ICC will not function. Troubleshooting required.

SB31882,0000283-19-07AUG18

Storing Safety

CAUTION: Avoid injury! Fuel vapors are explosive and flammable.

Engine exhaust fumes contain carbon monoxide and cause serious illness or death:

- **Run the engine only long enough to move the machine to or from storage.**
- **If a machine is stored before allowing it to cool, machine fires and structure fires can occur. Fires can occur if debris is not removed from around the engine and muffler, or if stored near combustible materials.**
- **Do not store vehicle with fuel in the tank inside a building where fumes reach an open flame or spark.**
- **Allow the engine to cool before storing the machine in any enclosure.**

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Preparing Machine for Storage

1. Repair any worn or damaged parts. Replace parts if necessary. Tighten loose hardware.
2. Repair scratched or chipped metal surfaces to prevent rust.
3. Remove grass and debris from machine.
4. Wash the machine with low pressure water and apply wax to metal and plastic surfaces.
5. Run machine for five minutes to dry belts and pulleys.
6. Apply light coat of engine oil to pivot and wear points to prevent rust.
7. Lubricate grease points.
8. Check tire pressure.

MX00654,00000C8-19-24AUG13

Preparing Fuel and Engine For Storage

Fuel:

If you have been using “Stabilized Fuel,” add stabilized fuel to tank until the tank is full.

NOTE: Filling the fuel tank reduces the amount of air in the fuel tank and helps reduce deterioration of fuel.

If you are not using “Stabilized Fuel:”

1. Park machine safely in a well-ventilated area. (See Parking Safely in the SAFETY section.)

NOTE: Try to anticipate the last time the machine will be used for the season so very little fuel is left in the fuel tank.

2. Turn on engine and allow to run until it runs out of fuel.
3. For machines equipped with key switch, turn key to off position.

IMPORTANT: Avoid damage! Stale fuel can produce varnish and plug carburetor or injector components and affect engine performance.

- **Add fuel conditioner or stabilizer to fresh fuel before filling tank.**

4. Mix fresh fuel and fuel stabilizer in separate container. Follow stabilizer instructions for mixing.
5. Fill fuel tank with stabilized fuel.
6. Run engine for a few minutes to allow fuel mixture to circulate through carburetor on gas engine or fuel injectors on diesel engine.

Engine:

Engine storage procedure should be used when vehicle is not to be used for longer than 60 days.

1. Change engine oil and filter while engine is warm.
2. Service air filter if necessary.
3. Clean debris from engine air intake screen.
4. On gas engines:
   - Remove spark plugs. Put 30 mL (1 oz.) of clean engine oil in cylinders.
   - Install spark plugs, but do not connect spark plug wires.
   - Crank the engine 5 or 6 times to allow oil to be distributed.
5. Clean the engine and engine compartment.
6. Remove battery.
7. Clean the battery and battery posts. Check the electrolyte level, if your battery is not maintenance free.
8. Close fuel shut-off valve, if your machine is equipped.
9. Store the battery in a cool, dry place where it will not freeze.

NOTE: The stored battery should be recharged every 90 days.

10. Charge the battery.

IMPORTANT: Avoid damage! Prolonged exposure to sunlight could damage the hood surface. Store machine inside or use a cover if stored outside.

11. Store the vehicle in a dry, protected place. If vehicle is stored outside, put a waterproof cover over it.

MP47322,00F4682-19-26MAY15

Removing Machine From Storage

1. Check tire pressure.
2. Check engine oil level.
3. Check battery electrolyte level, if your battery is not maintenance free. Charge battery if necessary.
4. Install battery.
5. On gas engines: Check spark plug gap. Install and tighten plugs to specified torque.
6. Lubricate all grease points.
7. Open fuel shut-off valve, if your machine is equipped.
8. Be sure all shields and guards or deflectors are in place.

MX00654,00000C9-19-24AUG13

Specifications

Engine

Type	4-cycle Gas, Electronic Fuel Injection (EFI)
Cylinders	3
Oil Filter	Spin On Filter
Air Cleaner	Dry replaceable single element with remote intake
Cooling System	Liquid

OUMX068,0000D17-19-31JUL15

Drive Train and Travel Speeds

Type	Continuously Variable Transmission (CVT) with Clutch Enclosure
Gear Ranges	Forward HI and LO - Neutral - Reverse
Travel Speeds:	
Forward HI	71 km/h (44 mph)
Forward LO	43 km/h (27 mph)
Reverse	48 km/h (30 mph)

OUMX068,0000D18-19-31JUL15

Electrical System

Type	12 Volt
Battery Size	480 Cold Cranking Amps @ -18°C (0°F)
Alternator	75 Amp
Spark Plug Gap	0.95 mm (0.04 in.)

MP47322,00F48B6-19-03APR13

Fuel System

Fuel	Gasoline

MP47322,00F48B7-19-24JUL17

Steering and Brakes

Steering	Rack and Pinion
Brakes	Hydraulic Disc

OUMX068,000099C-19-09SEP14

Tires

All tires can carry permissible axle loads.

NOTE: All tire load conditions are not to exceed Gross Vehicle Weight Rating (GVWR).

Front Tires	
CST Terra Hawk	25x9-12
Load Capacity	530 kg (1168 lb)
CST Ancla	26x9-12
Load Capacity	487 kg (1074 lb)
Maxxis Bighorn 2.0	27x9-R14
Load Capacity	472 kg (1041 lb)
Inflation Pressure (All Front Tires)	97 kPa (14 psi)
Rear Tires	
CST Terra Hawk	25x11-12
Load Capacity	630 kg (1389 lb)
Inflation Pressure - Cargo Load Condition 0-318 kg (0-700 lbs)	97 kPa (14 psi)
Inflation Pressure - Cargo Load Condition 318-454 kg (700-1000 lbs)	152 kPa (22 psi)
CST Ancla	26x11-12
Load Capacity	670 kg (1477 lb)
Inflation Pressure - Cargo Load Condition 0-318 kg (0-700 lbs)	97 kPa (14 psi)
Inflation Pressure - Cargo Load Condition 318-454 kg (700-1000 lbs)	124 kPa (18 psi)
Maxxis Bighorn 2.0	27x11-R14
Load Capacity	665 kg (1466 lb)
Inflation Pressure - Cargo Load Condition 0-318 kg (0-700 lbs)	97 kPa (14 psi)
Inflation Pressure - Cargo Load Condition 318-454 kg (700-1000 lbs)	124 kPa (18 psi)

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Capacities

Fuel Tank	26.5 L (7.0 gal)
Crankcase (with filter)	2.2 L (2.3 qt)
4WD Front Differential	.59 L (19.6 oz)
Transaxle	3.8 L (4.0 qt)
Cooling System (Including Recovery Tank)	5.0 L (5.2 qt)
Brake	237 mL (8 oz)

OUMX068,0000D19-19-31JUL15

Dimensions

Width (overall)	1.6 m (62.0 in.)
Length (with bumper)	3.0 m (119.0 in.)
Height (with OPS)	1.9 m (75.0 in.)
Ground Clearance	27.9 cm (11.0 in.)

MP47322,00F48BB-19-05SEP13

Weights

Weight (XUV825E - Empty vehicle with full fluids)	805 kg (1774 lb)
Weight (XUV825M - Empty vehicle with full fluids)	815 kg (1797 lb)
Gross Vehicle Weight Rating (GVWR)	1406 kg (3100 lb)
Payload Capacity XUV825E	601 kg (1326 lb)
Payload Capacity XUV825M	591 kg (1303 lb)

Cargo Box Capacity (Not to exceed GVWR)	454 kg (1000 lb)
Towing Capacity (Not to exceed GVWR)	680 kg (1500 lb)
Maximum Trailer Tongue Weight	68 kg (150 lb)
Maximum Front Axle Load	650 kg (1433 lb)
Maximum Rear Axle Load	1000 kg (2205 lb)

SB31882,000025E-19-13JUL18

Recommended Lubricants

Engine Oil	John Deere PLUS-50™
	John Deere Torq-Gard Supreme™
Grease	John Deere Multi-Purpose HD Lithium Complex Grease
	Grease-Gard™ Premium Plus
Transmission Oil (Transaxle)	John Deere HY-GARD™ (JDM J20C)
Transmission Oil (4WD Front Differential)	John Deere HY-GARD™ (JDM J20C)

(Specifications and design subject to change without notice.)

OUMX068,00009B0-19-11SEP14

Product Warranty

John Deere offers a standard warranty on new John Deere products. For a copy of the product warranty statement or for details on the warranty terms and conditions for products purchased in the United States and Canada, please contact your local John Deere Dealer or utilize the following resources:

United States

Website:

http://www.deere.com/en_US/services_and_support/warranty/warranty.page

Toll Free: 1-800-537-8233

Dealer Locator:

http://dealerlocator.deere.com/servlet/country=US

Canada

Website (English):

http://www.deere.ca/en_CA/services_and_support/service_plans_warranties/service_plans_warranties.page

Website (French):

http://fr.deere.ca/en_CA/services_and_support/service_plans_warranties/service_plans_warranties.page

Toll Free: 1-800-537-8233

Dealer Locator:

http://dealerlocator.deere.com/servlet/country=CA

Emission-related warranties are included in this Operator's Manual, and applicable if required by law or regulation.

For products purchased in a country other than the United States or Canada, please contact your local John Deere dealer for assistance.

MP47322,00F4690-19-09JUL15

EMISSION-RELATED WARRANTY STATEMENT OFF-ROAD UTILITY VEHICLE OVER 25 MPH

YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere off-road utility vehicle qualifies for the additional warranties set forth below, look for the "Vehicle Emission Control Information" label located on the vehicle. If the vehicle is operated in the United States or Canada and the "Vehicle Emissions Control Information" label states: "This vehicle meets U. S. EPA exhaust and evap regulations" refer to the "United States and Canada Emission-Related Warranty Statement." If the vehicle is operated in California, and the label states: "This vehicle meets California regulations" also refer to the "California Evaporative Emissions Control System Warranty Statement."

UNITED STATES AND CANADA EMISSIONS-RELATED WARRANTY STATEMENT

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emissions-related parts and components, is provided separately. If you have a question about your emissions warranty coverage, how to make an emissions warranty claim or how to make arrangements for emissions-related authorized repairs, you should contact your John Deere Turf and Utility retailer, or the John Deere Customer Contact Center at 1-800-537-8233, or email John Deere from https://www.deere.com/en_US/services_and_support/technology-solutions/stellarsupport/answer-center/turf-answer-center.page

JOHN DEERE'S WARRANTY RESPONSIBILITY:

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road utility vehicle engine and equipment, including all parts of its emission-control system was designed, built and equipped so as to conform at the time of sale with 40 CFR Part 1051 and Section 213 of the Clean Air Act and is free from defects in materials and workmanship that would cause the engine to fail to conform with applicable US EPA regulations. The emission-related warranty period for vehicles without an odometer is 30 months from when the engine is placed into service. The emission-related warranty period for vehicles with an odometer is 30 months from when the engine is placed into service, 500 hours or 5000 kilometers, whichever comes first, after the engine and equipment is delivered to the ultimate purchaser.

Where a warrantable condition exists, John Deere will repair or replace, as it elects, any part or component with a defect in materials or workmanship that would increase the engine's emissions of any regulated pollutant within the stated warranty period at no cost to you, including expenses related to diagnosing and repairing or replacing emission-related parts. Coverage under this warranty includes, but is not limited to, the parts listed below (the emissions control system parts) to the extent these parts were present on the engine and equipment purchased. Warranty coverage is subject to the limitations and exclusions set forth herein. Emission-related components include engine parts developed to control emissions related to the following:

I. For exhaust emissions, emission-related components include any engine parts related to the following systems:

1. Air-induction system.
2. Fuel system.
3. Ignition system.
4. Exhaust gas recirculation systems.

II. The following parts are also considered emission-related components for exhaust emissions:

1. Aftertreatment devices.
2. Crankcase ventilation valves.
3. Sensors.
4. Electronic control units.

III. The following parts are considered emission-related components for evaporative emissions:

1. Fuel Tank.
2. Fuel Cap.
3. Fuel Line.
4. Fuel Line Fittings.
5. Clamps*.
6. Pressure Relief Valves*.
7. Control Valves*.
8. Control Solenoids*.
9. Electronic Controls*.
10. Vacuum Control Diaphragms*.
11. Control Cables*.
12. Control Linkages*.
13. Purge Valves.
14. Vapor Hoses.
15. Liquid/Vapor Separator.
16. Carbon Canister.
17. Canister Mounting Brackets.
18. Carburetor Purge Port Connector..
19. Carburetor bowl gaskets

***As related to the evaporative emission control system.**

EMISSION-RELATED WARRANTY EXCLUSIONS:

John Deere may deny emission-related warranty claims for malfunctions or failures caused by:

- Non-performance of maintenance requirements listed in the Operator's Manual.
- The use of the engine / equipment in a manner for which it was not designed.
- Abuse, neglect, improper maintenance or unapproved modifications or alterations.
- Accidents for which John Deere does not have responsibility or by acts of God.

The off-road utility vehicle engine is designed to operate on those fuels specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel can harm the emissions control system of the engine / equipment and is not approved for use.

To the extent permitted by law John Deere is not liable for damage to other engine components caused by a failure of an emission-related part, unless otherwise covered by standard warranty, nor shall it be liable for travel or mileage expenses on emissions warranty service calls.

Limited Liability

a. The liability of John Deere under this Emission–Related Warranty is limited solely to the remedying of defects in materials or workmanship. This warranty does not cover inconvenience or loss of use of the off-road utility vehicle engine and equipment or transportation of the equipment to or from the John Deere Turf and Utility retailer. John Deere shall not be liable for any other expense, loss, or damage, whether direct, incidental, consequential or exemplary arising in connection with the sale or use of or inability to use the off-road utility vehicle engine and equipment for any other purpose.

b. **THIS WARRANTY AND ANY OTHER APPLICABLE JOHN DEERE WARRANTIES ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISIONS OF MATERIAL AND SERVICES AS SPECIFIED HEREIN. WHERE PERMITTED BY LAW, NEITHER JOHN DEERE NOR ANY AUTHORIZED JOHN DEERE ENGINE DISTRIBUTOR, DEALER, OR REPAIR FACILITY OR ANY COMPANY AFFILIATED WITH JOHN DEERE WILL BE LIABLE FOR INCIDENTIAL OR CONSEQUENTIAL DAMAGES.**

c. No dealer is authorized to modify this John Deere and Federal Emission-Related Warranty.

CALIFORNIA EVAPORATIVE EMISSIONS CONTROL WARRANTY STATEMENT

To determine if the John Deere off-highway recreational vehicle qualifies for the additional warranties set forth below, look for the "Vehicle Emission Control Information" label located on the vehicle. If the vehicle is operated in the United States or Canada and the "Vehicle Emissions Control Information" label states: "This vehicle meets U.S. EPA exhaust and evap regulations" refer to the "United States and Canada Emission-Related Warranty Statement." If the vehicle is operated in California, and the label states: "This vehicle meets California regulations" also refer to the "California Evaporative Emissions Control System Warranty Statement."

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and John Deere are pleased to explain the evaporative emissions control system warranty on your 2018 or 2019 off-highway recreational vehicle. In California, new off-highway recreational vehicles must be designed, built, and equipped to meet the State's stringent anti-smog standards. John Deere must warrant the evaporative emissions control system on your off-highway recreational vehicle for the periods of time listed below

provided there has been no abuse, neglect, improper maintenance, or unapproved modification of your off-highway recreational vehicle.

Your evaporative emissions control system may include parts such as the carburetor or fuel-injection system, fuel tank, fuel hoses, carbon canister, and engine computer. Also included may be hoses, belts, connectors and other evaporative emissions-related assemblies. Where a warrantable condition exists, John Deere will repair your off-highway recreational vehicle at no cost to you including diagnosis, parts and labor.

JOHN DEERE'S WARRANTY COVERAGE:

For 2018 and later model year off-highway recreational vehicles, the warranty period for this off-highway recreational vehicle is 30 months, or 2500 miles, or 250 hours, whichever comes first, except for "high-priced" warranty parts [for example: fuel tanks, fuel injectors (if installed), and carburetors (if installed)], which are covered for 60 months, or 5000 miles, or 500 hours, whichever comes first, after the engine and equipment is delivered to the ultimate purchaser.

The following parts are considered emission-related components for evaporative emissions:

1. Fuel Tank**
2. Fuel Cap
3. Fuel Line
4. Fuel Line Fittings
5. Clamps*
6. Pressure Relief Valves*
7. Control Valves*
8. Control Solenoids*
9. Electronic Controls*
10. Vacuum Control Diaphragms*
11. Control Cables*
12. Control Linkages*
13. Purge Valves
14. Vapor Hoses
15. Liquid/Vapor Separator
16. Carbon Canister
17. Canister Mounting Brackets
18. Carburetor Purge Port Connector
19. Carburetor bowl gaskets
20. Carburetor**
21. Fuel Injector**

***As related to the evaporative emission control system.**

****Denotes "high-priced warranty parts.**

If any evaporative emissions-related part on your off-highway recreational vehicle is defective the part will be repaired or replaced by John Deere.

OWNER'S WARRANTY RESPONSIBILITIES:

As the off-highway recreational vehicle owner you are responsible for the performance of the required maintenance listed in your owner's manual. John Deere recommends that you retain all receipts covering maintenance on your off-highway recreational vehicle, but John Deere cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of a scheduled maintenance.

As an owner you are responsible for presenting your off-highway recreational vehicle to a John Deere dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

As an off-highway recreational vehicle owner, you should also be aware that John Deere may deny you warranty coverage if your off-highway recreational vehicle or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you have any questions regarding your warranty rights and responsibilities, you should contact a John Deere Turf and Utility retailer, or the John Deere Customer Contact Center at 1-800-537-8233, or email John Deere from https://www.deere.com/en_US/services_and_support/technology-solutions/stellarsupport/answer-center/turf-answer-center.page or the California Air Resources Board at 9528 Telstar Avenue, El Monte, CA 91731.

ADDITIONAL EVAPORATIVE EMISSIONS CONTROL SYSTEM WARRANTY INFORMATION:

Subject to the conditions and exclusions of the Limited Liability Section below, the warranty on emissions-related parts must function as follows:

(1) Any warranted part which is not scheduled for replacement as part of maintenance in the written instructions (see the "Service Intervals" section of the Operator's manual) must be warranted for the warranty period defined in the Warranty Coverage section above. If any such part fails during the warranty period, it must be repaired or replaced by John Deere according to part 4 of this section. Any such part repaired or replaced under warranty must be fully warranted.

(2) Any warranted part which is scheduled only for regular inspection in the written instructions (see the "Service Intervals" section of the Operator's manual) must be warranted for the Warranty Coverage section above. A statement in such written instructions to the effect of "repair or replace as necessary" must not reduce the period of warranty coverage. Any such part repaired or replaced under warranty must be warranted for the remaining warranty period.

(3) Any warranted part which is scheduled for replacement as part of maintenance in the written instructions (see the "Service Intervals" section of the Operator's manual) must be warranted for the period of time prior to the first scheduled replacement point for

that part. If the part fails before the first scheduled replacement point, the part must be repaired or replaced by John Deere according to part 4 of this section. Any such part repaired or replaced under warranty must be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

(4) Repair or replacement of any warranted part under this warranty must be performed at no charge to the off-highway recreational vehicle owner, at a warranty station, except in the case of a temporary repair when a warranted part or a warranty station is not reasonably available to the off-highway recreational vehicle owner. In the event a temporary repair is permitted under this warranty, repairs may be performed at any available service establishment, or by the owner, using any replacement part. John Deere must reimburse the owner for his or her expenses including diagnostic charges for such temporary repair or replacement, not to exceed John Deere's suggested retail price for all warranted parts replaced and labor charges based on John Deere's recommended time allowance for the warranty repair and the geographically appropriate hourly labor rate.

(5) Warranty services or repairs must be provided at all John Deere dealerships.

(6) The off-highway recreational vehicle owner must not be charged for diagnostic labor which leads to the determination that a warranted part is, in fact, defective, provided that such diagnostic work is performed at a warranty station.

(7) John Deere is liable for damages to other vehicle components proximately caused by a failure, under warranty, of any warranted part.

(8) Throughout the off-highway recreational vehicle's warranty period defined in the Warranty Coverage section above, John Deere must maintain a supply of warranted parts sufficient to meet the expected demand for such parts. The lack of availability of such parts or the incompleteness of repairs within a reasonable time period, not to exceed 30 days from the time the off-highway recreational vehicle is initially presented to the warranty station for repair, will qualify the need for a temporary repair for purposes of part 4 of this section.

(9) Any replacement part designated by John Deere may be used in warranty repairs provided without charge to the off-highway recreational vehicle owner. Such use will not reduce the warranty obligations of John Deere, except that John Deere will not be liable under this Warranty for repair or replacement of any replacement part which is not a warranted part (except as provided under part 7 of this section).

(10) Any add-on or modified part exempted by the Air Resources Board from the prohibitions of section 27156 of the California Vehicle Code may be used on an off-highway recreational vehicle. Such use, in and of itself, will not be grounds for disallowing a warranty claim made under this Warranty. John Deere is not liable under this Warranty to warrant failures of warranted parts caused by the use of an add-on or modified part(s) unless such part(s) are also warranted.

Limited Liability

a. The liability of John Deere under this Evaporative Emissions Control Warranty is limited solely to the remedying of defects in materials or workmanship. This warranty does not cover inconvenience or loss of use of the off-highway recreational vehicle engine and equipment or transportation of the equipment to or from the John Deere Turf and Utility retailer. John Deere shall not be liable for any other expense, loss, or damage, whether direct, incidental, consequential or exemplary arising in connection with the sale or use of or inability to use the off-road utility vehicle engine and equipment for any other purpose.

b. **THIS WARRANTY AND ANY OTHER APPLICABLE JOHN DEERE WARRANTIES ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISIONS OF MATERIAL AND SERVICES AS SPECIFIED HEREIN. WHERE PERMITTED BY LAW, NEITHER JOHN DEERE NOR ANY AUTHORIZED JOHN DEERE ENGINE DISTRIBUTOR, DEALER, OR REPAIR FACILITY OR ANY COMPANY AFFILIATED WITH JOHN DEERE WILL BE LIABLE FOR INCIDENTIAL OR CONSEQUENTIAL DAMAGES.**

c. No dealer is authorized to modify this John Deere and California Evaporative Emissions Control Warranty.

TC00531,00000EE-19-11MAY17

Tire Warranty

John Deere warranty applies for tires available through the John Deere parts system. For tires not available through the John Deere parts system, the tire manufacturer's warranty applicable to your machine may not apply outside the U.S. (See your John Deere dealer for specific information.)

MX00654,0000314-19-21AUG14

Limited Battery Warranty For Factory Installed Batteries

NOTE: Applicable in North America only. For complete machine warranty, reference a copy of the John Deere warranty statement. Contact your John Deere dealer to obtain a copy.

TO SECURE WARRANTY SERVICE

The purchaser must request warranty service from a John Deere dealer authorized to sell John Deere

batteries, and present the battery to the dealer with the top cover plate codes intact.

FREE REPLACEMENT PERIOD

Any new battery which becomes unserviceable (not merely discharged) due to defects in material or workmanship within the FREE REPLACEMENT PERIOD will be replaced free of charge. Installation costs will be covered by warranty if the unserviceable battery was installed by a John Deere factory or dealer and the replacement battery is installed by a John Deere dealer.

PRO RATA ADJUSTMENT (batteries with letter code identification only)

Any new battery which becomes unserviceable (not merely discharged) due to defects in material or workmanship within the Pro Rata Warranty Period will be replaced upon payment of the battery's current list price less a pro rata credit for unused months of service. The applicable adjustment period is determined from the Warranty Code printed at the top of the battery and table below. Installation costs are not covered after the battery warranty period has ended.

THIS WARRANTY DOES NOT COVER

A. Breakage of the container, cover, or terminals.

B. Depreciation or damage caused by lack of reasonable and necessary maintenance or by improper maintenance.

C. Transportation, mailing, or service call charges for warranty service.

D. Batteries that are merely discharged.

LIMITATION OF IMPLIED WARRANTIES AND PURCHASER'S REMEDIES

To the extent permitted by law, neither John Deere nor any company affiliated with it makes any warranties, representations, or promises as to the quality, performance or freedom from defect of the products covered by this warranty. IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TO THE EXTENT APPLICABLE, SHALL BE LIMITED IN DURATION TO THE APPLICABLE ADJUSTMENT PERIOD SET FORTH HERE. THE PURCHASER'S ONLY REMEDIES IN CONNECTION WITH THE BREACH OR PERFORMANCE OF ANY WARRANTY ON JOHN DEERE BATTERIES ARE THOSE SET FORTH HERE. IN NO EVENT WILL THE DEALER, JOHN DEERE OR ANY COMPANY AFFILIATED WITH JOHN DEERE BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. (Note: Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages. So these limitations and exclusions may not apply to you.) This warranty gives you specific legal rights, and you may also have some rights which vary from state to state.

NO DEALER WARRANTY

The selling dealer makes no warranty of its own and the dealer has no authority to make any representation or promise on behalf of John Deere, or to modify the terms or limitations of this warranty in any way.

WARRANTY TERMS TABLE

NOTE: If your battery is not labeled with a warranty code, it is a warranty code 6.

Warranty Code	Free Replacement Period	Pro Rata Warranty Period
A	90 Days	40 Months
B	90 Days	36 Months
C	90 Days	24 Months
D	12 Months	48 Months
E	90 Days	12 Months
F	90 Days	60 Months
G	12 Months	60 Months
H	12 Months	60 Months
6	6 Months	0 Months
12	12 Months	0 Months
18	18 Months	0 Months

OUMX068,0000504-19-10MAY17

John Deere Quality

John Deere equipment is more than just a purchase, it's an investment in quality. That quality goes beyond our equipment to your John Deere dealer's parts and service support. This support is needed to keep you a satisfied customer.

That's why John Deere has initiated a process to handle your questions or problems, should they arise. The following three steps will help guide you through the process.

Step 1

Refer to your operator's manual

A. It has many illustrations and detailed information on the safe and proper operation of your equipment.

B. It gives troubleshooting procedures, and specification information.

C. It gives ordering information for parts catalogs, service and technical manuals.

D. If your questions are not answered in the operator's manual, then go to Step 2.

Step 2

Contact your dealer

A. Your John Deere dealer has the responsibility, authority, and ability to answer questions, resolve problems, and fulfill your parts and service needs.

B. First, discuss your questions or problems with your dealer's trained parts and service staff.

C. If the parts and service people are unable to resolve your problem, see the dealership manager or owner.

D. If your questions or problems are not resolved by the dealer, then go to Step 3.

Step 3

Contact John Deere

A. Your John Deere dealer is the most efficient source in addressing any concern, but if you are not able to resolve your problem after checking your operator's manual and contacting your dealer, contact John Deere for assistance.

B. For prompt, effective service, please have the following ready before you call:

- The name of the dealer with whom you've been working.
- Your equipment model number.
- Number of hours on machine (if applicable).
- Your serial number which you recorded on the inside front cover of this manual.
- If the problem is with an attachment, your attachment identification number.

C. Then call 1-800-537-8233 (United States and Canada) and our advisor will work with your dealer to investigate your concern. If you are outside the United States and Canada, visit the following website:

http://www.deere.com/globalhome/ deerecom/ global_home.page?CC=true

Select your country and then click on the Contact Us link.

SP66632,00043A7-19-10MAY17

Record Service Dates

Oil Change	Oil Filter Change	Lubricate Machine	Air Cleaner Element Check/Clean	Fuel Filter Change	Coolant Change

MX00654,00000CA-19-24AUG13

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