

JOHN DEERE
WORLDWIDE COMMERCIAL & CONSUMER
EQUIPMENT DIVISION

Lightweight Fairway Mower
7500, 7700, 8500, 8700, 8800

OMTCU22020 L7

OPERATOR'S MANUAL



JOHN DEERE

⚠ 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.

California Proposition 65 Warning

North American Version
Litho in U.S.A.

INTRODUCTION

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.

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 to 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 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.

Special Messages

Your manual contains special messages to bring attention to potential safety concerns, 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.

PRODUCT IDENTIFICATION

Record Identification Numbers

Lightweight Fairway Mowers

7500 PIN (000001-)

7700 PIN (000001-)

8500 PIN (000001-)

8700 PIN (000001-)

8800 PIN (000001-)

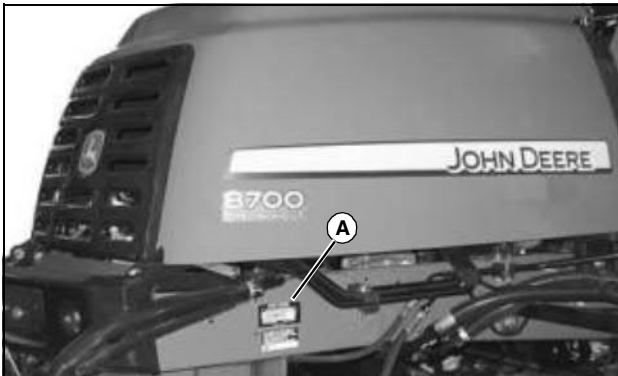
If you need to contact an Authorized Service Center for information on servicing, always provide the product model and serial number.

You will need to locate the model and serial number for the machine and for the engine of your machine and record the information in the spaces provided below.

DATE OF PURCHASE:

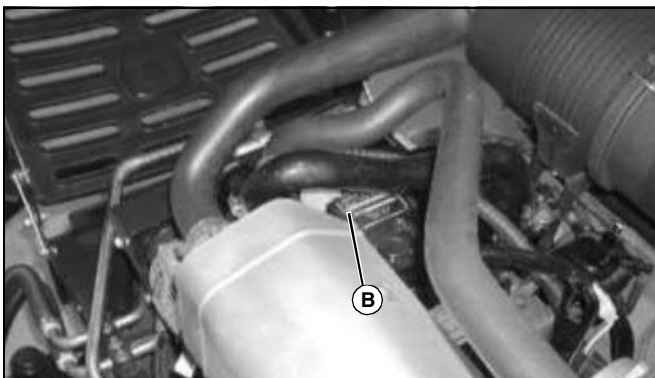
DEALER NAME:

DEALER PHONE:



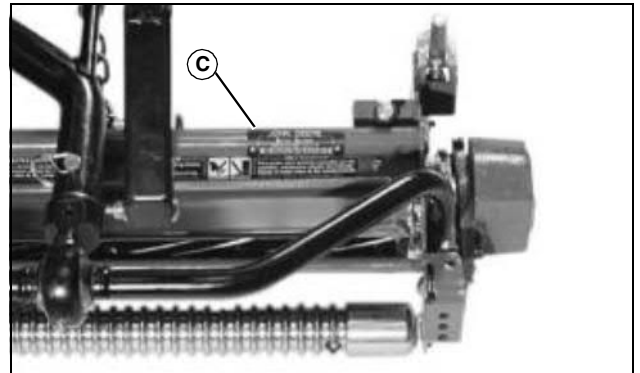
MX24806

PRODUCT IDENTIFICATION NUMBER (A):



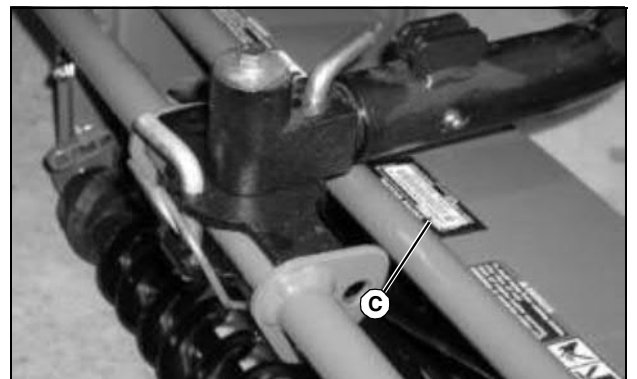
MX18579

ENGINE SERIAL NUMBER (B):



M84563

Picture Note: 2500M reel mower serial number location.



MX18036

Picture Note: 22 ESP reel mower serial number location.

CUTTING UNITS SERIAL NUMBERS (C):

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>

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Consumer Equipment Division
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OMTCU22020 L7 - English

SAFETY LABELS



Understanding The Machine Safety Labels

The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

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

Identifying Appropriate Safety Labels

Some machine safety labels are intended for reel cutting units and others for rotary deck units.

CAUTION



TCU23845

HELP AVOID INJURY

- Read operator's manual.
- Do not operate the machine without guards, shields, and safety devices in place and working.
- Do not operate the machine when children and/or others are around.
- Do not operate the machine unless you are trained.

SAFETY LABELS

- Look behind before backing.
- Keep people a safe distance away.
- Stay clear of power driven parts.
- Do not operate where machine could tip.
- Never carry riders.
- Before leaving machine
 - Stop engine
 - Set park brake
 - Remove key

Danger



M131739

- To avoid injury from rotating blades, stay clear of reel.
- Shut off engine before servicing, lubricating or removing cutting unit.

DANGER



M131739

- To avoid injury from rotating blades, stay clear of deck edge.

Danger



TCU20639

- Do not operate mower without deflector attached.

WARNING

USE SEAT BELT



MT4391

- To avoid injury from crushing, always wear seat belt. Do not jump from machine.

DANGER



MX18547

EXPLOSIVE GASES

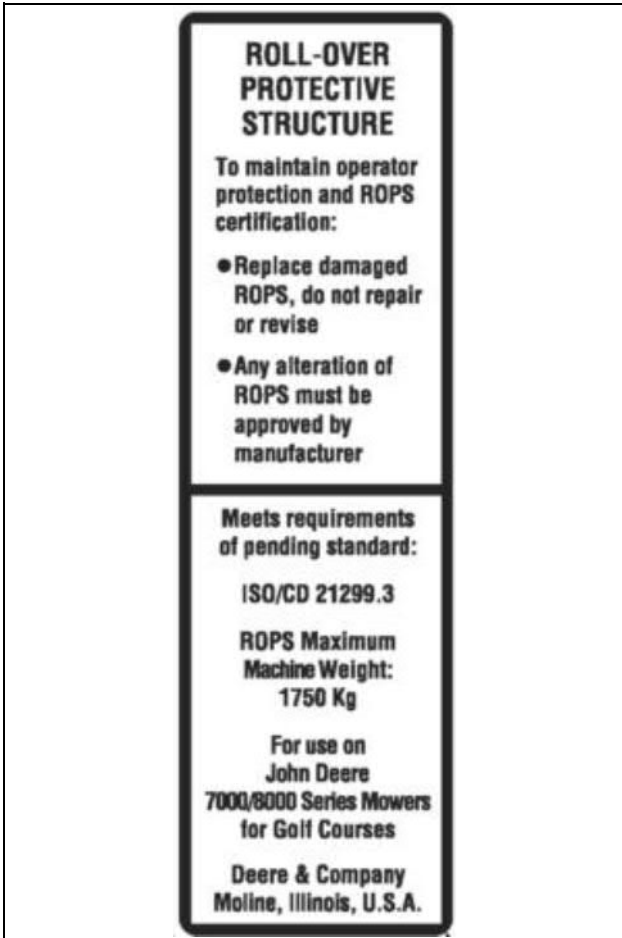
Cigarettes, flames or sparks could cause the battery to explode. Always shield eyes and face from battery. Do not charge or use cables or adjust poor connections without proper instructions and training. Keep vent caps tight and level.

POISON CAUSES SEVERE BURNS

Contains sulfuric acid. Avoid contact with skin, eyes or clothing. In event of an accident, flush with water and call a physician immediately. Keep out of reach of children.

SAFETY LABELS

ROLL-OVER PROTECTIVE STRUCTURE



TCU23996

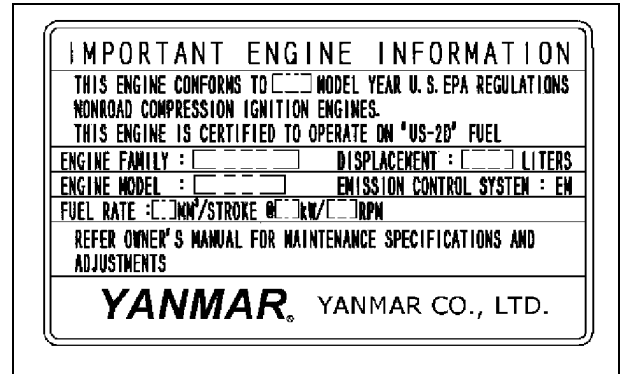
To maintain operator protection and ROPS certification:

- Replace damaged ROPS, do not repair or revise
- Any alteration of ROPS must be approved by manufacturer

Meets requirements of pending standard:

- ISO/CD 21299.3:
- ROPS Maximum Machine Weight: 1750Kg
- For use on John Deere 7000/8000 Series Mowers for Golf Courses
- Deere & Company Moline, Illinois, U.S.A.

Emission Control System Certification Label



CAUTION: Avoid injury! Statutes providing severe penalties for tampering with emissions controls may apply at the user's location.

The emissions warranty described in the warranty section applies only to those engines marketed by John Deere that have been certified by the United States Environmental Protection Agency (EPA) and/or California Air Resources Board (CARB); and used in the United States in non-road mobile (self-propelled or portable/transportable¹) equipment. The presence of an emissions label like the one shown signifies that the engine has been certified with the EPA and/or CARB. The EPA and CARB warranties only apply to new engines having the certification label affixed to the engine and sold as stated above in the geographic areas governed by the regulating agencies.

NOTE: The hp/kW rating on the engine emissions certification label specifies the gross engine hp/kW, which is flywheel power without fan. In most applications this will not be the same rating as the advertised vehicle hp/kW rating.

Certification

Your product has been tested and evaluated by the manufacturer and conforms with American National Standard B-71.4, Safety Specifications for commercial turf care equipment.

¹.Equipment moved at least once every 12 months.

SAFETY

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.

Preparation

- Evaluate the terrain to determine what accessories and attachments are needed to properly and safely perform the job. Only use accessories and attachments approved by the manufacturer.
- Wear appropriate clothing including hard hat, safety glasses and hearing protection. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Inspect the area where the equipment is to be used and remove all objects such as rocks, toys and wire which can be thrown by the machine.
- Use extra care when handling gasoline and other fuels. They are flammable and vapors are explosive.
 - a. Use only an approved container.
 - b. Never remove gas cap or add fuel when engine is running. Do not smoke.
 - c. Never refuel or drain the machine indoors.
- Check that the operator's presence controls, safety switches and shields are attached and functioning properly. Do not operate unless they are functioning properly.

Operating Safely

- Never run an engine in an enclosed area where dangerous carbon monoxide fumes can collect.
- Only operate in good light, keeping away from holes and hidden hazards.
- Be sure all drives are in neutral and parking brake is

engaged before starting engine. Only start engine from the operator's position. Use seat belts if provided.

- Slow down and use extra care on hillsides. Be sure to travel in the recommended direction on hillsides. For this machine, drive up and down hillsides, not across. Turf conditions can affect the machine's stability. Use caution while operating near drop-offs.
- Slow down and use caution when making turns and when changing directions on slopes.
- Never raise cutting units with reels rotating or deck with the blades running.
- Never operate without PTO shield (with mower decks) or other guards securely in place. Be sure all interlocks are attached, adjusted properly, and functioning properly.
- If equipped with a mower deck, never operate with the discharge deflector raised, removed or altered, unless using a grasscatcher. Do not operate mower without discharge chute or entire grasscatcher in place.
- Do not change the engine governor setting or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.
- Stop on level ground, lower implements, disengage drives, engage parking brake, and shut off engine before leaving the operator's position for any reason including emptying the grasscatchers, clearing blockages or unclogging discharge chutes.
- Stop equipment and inspect blades or reels after striking objects or if an abnormal vibration occurs. Make necessary repairs before resuming operations.
- Keep hands and feet away from the cutting units.
- Look behind and down before backing up to be sure of a clear path.
- Never carry passengers and keep pets and bystanders away.
- Slow down and use caution when making turns and crossing roads and sidewalks. Stop blades or reels if not mowing. Watch for traffic when operating near or crossing roadways.
- If equipped with a mower deck, be aware of the mower discharge direction and do not point it at anyone.
- Do not operate the machine while under the influence of alcohol or drugs.
- Use care when loading or unloading the machine into or off of a trailer or truck.
- Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- Inspect machine before you operate. Be sure hardware is tight. Repair or replace damaged, badly worn, or missing parts. Be sure guards and shields are in good condition

SAFETY

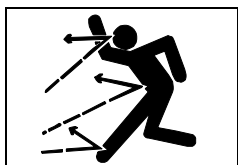
and fastened in place. Make any necessary adjustments before you operate.

- If equipped with a mower deck, before using, always visually inspect to see that the blades, blade bolts and the mower assembly are not worn and damaged. Replace worn and damaged blades and bolts in sets to preserve balance.
- Keep safety labels visible when installing accessories and attachments.
- Do not wear radio or music headphones. Safe service and operation require your full attention.
- When machine is left unattended, stored, or parked, lower the cutting units or mower deck unless a positive mechanical lock is used.

Using a Spark Arrestor

The engine in this machine is not equipped with a spark arrestor muffler. It is a violation of California Public Resource Code Section 4442 to use or operate this engine on or near any forest-covered, brush-covered or grass-covered land unless the exhaust system is equipped with a spark arrestor meeting any applicable local or state laws. Other states or federal areas 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.



Checking Mowing Area

- Clear mowing area of objects that might be thrown. Keep people and pets out of mowing area.

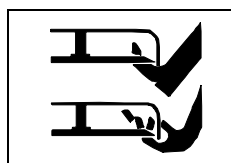
• Low-hanging branches and similar obstacles can injure the operator or interfere with mowing operation. Before mowing, identify potential obstacles such as low-hanging branches, and trim or remove those obstacles.

- Study mowing area. Set up a safe mowing pattern. Do not mow where traction or stability is doubtful.
- Test drive area with mower lowered but not running. Slow down when you travel over rough ground.

Parking Safely

1. Stop machine on a level surface, not on a slope.
2. Disengage mower blades or any other attachments.
3. Lower attachments to the ground.

4. Lock the park brake.
5. Stop the engine.
6. Remove the key.
7. Wait for engine and all moving parts to stop before you leave the operator's seat.
8. Close fuel shut-off valve, if your machine is equipped.
9. Disconnect the negative battery cable or remove the spark plug wire(s) (for gasoline engines) before servicing the machine.



Rotating Blades are Dangerous

HELP PREVENT SERIOUS OR FATAL ACCIDENTS:

- Rotating blades can cut off arms and legs, and throw objects. Failure to observe safety instructions could result in serious injury or death.
- Keep hands, feet and clothing away from mower deck when engine is running.
- Be alert at all times, drive forward carefully. People, especially children can move quickly into the mowing area before you know it.
- Do not mow in reverse.
- Shut off blades when you are not mowing.
- Park machine safely before leaving the operator station for any reason including emptying the catchers or unplugging the chute.



Avoid Injury From Contacting Blades

- Rotating cutting cylinders can cut off arms and legs, and throw objects. Failure to observe safety instructions could result in serious injury or death.
- Keep hands, feet and clothing away from rotating cutting cylinders when engine is running.
- Be alert at all times, drive forward carefully. People, especially children can move quickly into the mowing area before you know it.
- Before backing up, stop cutting cylinders and look down and behind the machine carefully, especially for children.
- Do not mow in reverse.
- Shut off cutting cylinders when you are not mowing.
- Park machine safely before leaving the operator's station

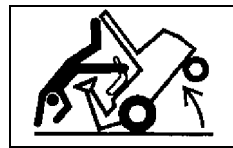
SAFETY

for any reason including emptying the grasscatchers.

- Keep all parts of the body away from the cutting edges. Residual hydraulic pressure in the system can cause cutting cylinder rotation when the blockage is released.
- Use a long-handled brush when applying reel-sharpening compound.
- Keep bystanders away from cutting units when adjusting or servicing.
- Always wear gloves when manually rotating reel. Manually rotating one reel can cause another reel to rotate.

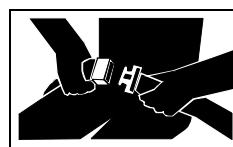
Protect Children

- Death or serious injury can occur when young children associate having fun with a lawn mowing machine simply because someone has given them a ride on a machine.
- Children are attracted to lawn mowing machines and mowing activities. They don't understand the dangers of rotating blades or the fact that the operator is unaware of their presence.
- Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.
- Tragic accidents with children can occur if the operator is not alert to the presence of children, especially when a child approaches a machine from behind. Before and while backing up, stop mower blades and look down and behind the machine carefully, especially for children.
- Never carry children on a machine or attachment, even with the blades off. Do not tow children in a cart or trailer. They can fall off and be seriously injured or interfere with safe machine operation.
- Never use the machine as a recreational vehicle or to entertain children.
- Never allow children or an untrained person operate the machine. Instruct all operators not to give children a ride on the machine or in an attachment.
- Keep children indoors, out of the mowing area, and in the watchful eye of a responsible adult, other than the operator, when a mower is being operated.
- Stay alert to the presence of children. Never assume that children will remain where you last saw them. Turn the machine off if a child enters the work area.



Avoid Tipping

- Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution.
- If you feel uneasy on a hillside, do not mow it.
- Mow up and down slopes, not across.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Choose a low ground speed so you will not have to stop or shift while on a slope.
- Do not mow or operate machine on wet grass. Tires may lose traction. Tires may lose traction on slopes even though the brakes are functioning properly.
- Avoid starting, stopping or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly, straight down the slope.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.
- Use extra care while operating machine with grasscatchers or other attachments, they can affect stability of the machine. Do not use on steep slopes.
- Do not mow near drop-offs, ditches, embankments, or bodies of water. The machine could suddenly roll over if a wheel goes over the edge or the edge caves in. Leave a safety area between the machine and any hazard.
- Follow the manufacturer's recommendations for wheel weights or counterweights for added stability when operating on slopes or using front or rear mounted attachments. Remove weights when not required.
- Drive machine very slowly and avoid quick stops when attachment is removed.
- Transport machine with cutting units lowered to improve stability.



Use Seat Belt Properly

- Use a seat belt when you operate with a Roll-Over Protective Structure (ROPS) to minimize chance of injury from an accident, such as an overturn.
- Never modify, disassemble or attempt to repair the seat belt.
- Replace entire seat belt if mounting hardware, buckle,

SAFETY

belt, or retractor show signs of damage.

- Inspect seat belt and mounting hardware at least once a year. Look for signs of loose hardware or belt damage, such as cuts, fraying, extreme or unusual wear, discoloration, or abrasion. Replace only with John Deere-approved replacement parts.
- Layers of heavy clothing can interfere with proper positioning of the seat belt and can reduce the effectiveness of the seat belt.

Keep ROPS Installed Properly

- Never operate the machine without the ROPS installed.
- Make certain all parts of the ROPS are installed correctly if the ROPS structure is loosened or removed for any reason. All ROPS hardware should be tightened to the proper torque per manufacturer's recommendations.
- Any alteration of the ROPS must be approved by the manufacturer. The protection provided by the ROPS will be impaired if the ROPS is subjected to structural damage, is involved in an overturn incident, or is in any way altered by welding, bending, drilling, or cutting.
- The seat is part of the ROPS safety zone. Replace only with John Deere-approved seat.
- Never attempt to repair a damaged or altered ROPS. It must be replaced to maintain the manufacturer's certification of the structure.

Keep Riders Off

- Only allow the operator on the machine. Keep riders off.
- Riders on the machine or attachment may be struck by foreign objects or thrown off the machine causing serious injury.
- Riders obstruct the operator's view resulting in the machine being operated in an unsafe manner.

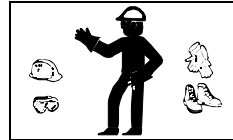
Driving Safely on Public Roads

Avoid personal injury or death resulting from a collision with another vehicle on public roads:

- Use safety lights and devices. Slow moving machines when driven on public roads are hard to see, especially at night.
- Whenever driving on public roads, use flashing warning lights and turn signals according to local regulations. Extra flashing warning lights may need to be installed.

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.



Wear Appropriate Clothing

- Always wear safety goggles, or safety glasses with side shields, and a hard hat when operating the machine.
- Wear close fitting clothing and safety equipment appropriate for the job.
- While mowing, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
- Wear a suitable protective device such as earplugs. Loud noise can cause impairment or loss of hearing.



Maintenance and Storage

- Never operate machine in a closed area where dangerous carbon monoxide fumes can collect.
- Disengage drives, lower implement, lock parking brake, stop engine and remove key or disconnect spark plug (for gas engines). Wait for all movement to stop before adjusting, cleaning or repairing.
- Clean grass and debris from cutting units, drives, mufflers, and engine to help prevent fires. Clean up oil or fuel spillage.
- Let engine cool before storing and do not store near flame.
- Shut off fuel while storing or transporting. Do not store fuel near flames or drain indoors.
- Park machine on level ground. Never allow untrained personnel to service machine. Understand service procedure before doing work.
- Use jack stands or lock service latches to support components when required. Securely support any machine elements that must be raised for service work.
- Before servicing machine or attachment, carefully release pressure from any components with stored energy, such as hydraulic components or springs.

SAFETY

- Release hydraulic pressure by lowering attachment or cutting units to the ground or to a mechanical stop and move hydraulic control levers back and forth.
- Disconnect battery or remove spark plug (for gas engines) before making any repairs. Disconnect the negative terminal first and the positive last. Reconnect positive first and negative last.
- If equipped with mower decks, use care when checking blades. Wrap the blades or wear gloves, and use caution when servicing them. Only replace blades. Never straighten or weld them.
- If equipped with reel mowers, use care when checking reels. Wear gloves, and use caution when servicing them.
- Keep hands, feet, clothing, jewelry and long hair away from moving parts. If possible, do not make adjustments with the engine running.
- Charge batteries in an open well ventilated area, away from spark and flames. Unplug charger before connecting or disconnecting from battery. Wear protective clothing and use insulated tools.
- Keep all parts in good working condition and all hardware tightened. Replace all worn or damaged decals.
- If equipped with mower decks, check grasscatcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary. Grasscatcher components are subject to wear, damage, and deterioration which could expose moving parts or allow objects to be thrown.
- If equipped with mower decks, keep all nuts and bolts tight, especially blade attachment bolts, to be sure the equipment is in safe working condition.
- Check brake operation frequently. Adjust and service as required.
- On multi-bladed machines, take care as rotating one blade or reel can cause other blades or reels to rotate.
- If equipped with reel mowers, be careful during adjustment of the machine to prevent entrapment of the fingers between moving blades and fixed parts of the machine.



Avoid High Pressure Fluids

- Hydraulic hoses and lines can fail due to physical damage, kinks, age, and exposure. Check hoses and lines regularly. Replace damaged hoses and lines.
- Hydraulic fluid connections can loosen due to physical damage and vibration. Check connections regularly. Tighten loose connections.

- Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.
- Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.
- If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A. Information may be obtained in the United States and Canada only by calling 1-800-822-8262.

Prevent Fires

- Machine fires and structure fires can occur if a machine is stored before allowing it to cool, or if debris is not removed from around the engine and muffler, or if stored near combustible materials.
- Remove grass and debris from engine compartment and muffler area, before and after operating machine, especially after mowing or mulching in dry conditions.
- Empty the grasscatcher completely before storing.
- Always shut off fuel when storing or transporting machine, if the machine has a fuel shutoff.
- Do not store machine near an open flame or source of ignition, such as a water heater or furnace.
- Check fuel lines, tank, cap, and fittings frequently for cracks or leaks. Replace if necessary.

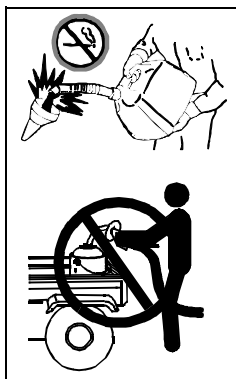


Tire Safety

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.

SAFETY



Handling Fuel Safely

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.

and batteries, can harm the environment and people:

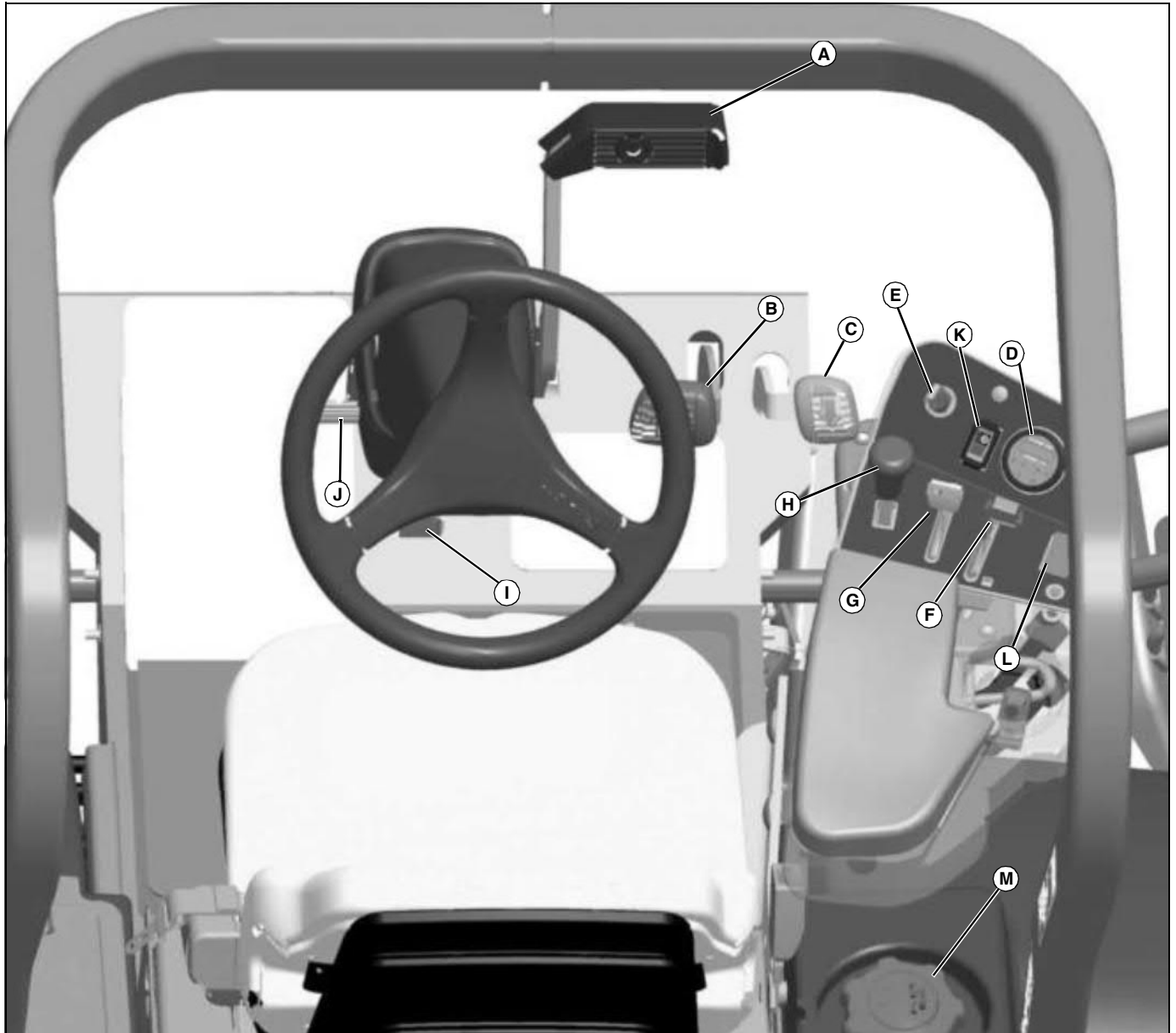
- Do not use beverage containers for waste fluids - someone may drink from them.
- See your local Recycling Center or authorized dealer to learn how to recycle or get rid of waste products.
- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, 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.

Handling Waste Product and Chemicals

Waste products, such as, used oil, fuel, coolant, brake fluid,

OPERATING CONTROLS

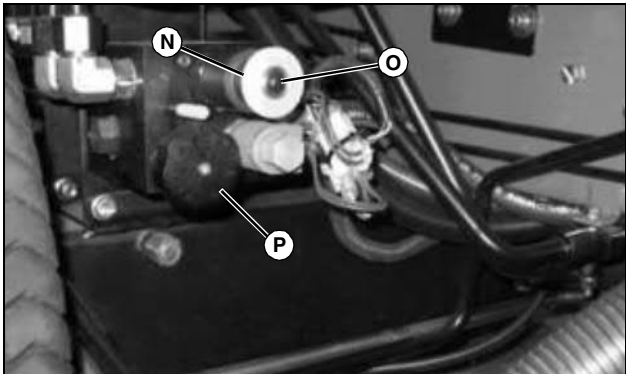
Operating Controls



MX24807

Key	Description	Key	Description
A	Park Brake Pedal/Emergency Brake	H	Raise-Lower Lever
B	Forward Travel Pedal	I	Park Brake Lock
C	Reverse Travel Pedal	J	Tilt Steering Adjustment Lever
D	Indicator Light/Hourmeter Module	K	Headlight Switch
E	Key Switch	L	Cruise Switch (Optional)
F	Throttle Control Lever	M	Fuel Fill Cap
G	Mow-Transport Lever		

OPERATING CONTROLS



MX24881

Picture Note: Reel knobs are located under the left fender.

Key	Description
N	Forward-Reverse Knob
O	Release Button
P	Speed Control Knob

OPERATING - MACHINE

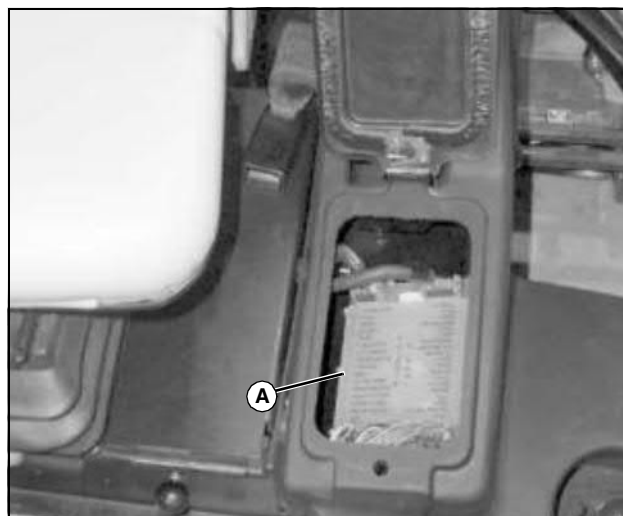
Daily Operating Checklist

- Test safety systems.
- Check brake pedal operation, adjust if necessary
- Check and adjust tire pressure.
- Check fuel level.
- Check and adjust coolant level.
- Check and adjust engine oil level.
- Check and adjust hydraulic oil level.
- Clean intake screen.
- Remove grass and debris from machine.
- Remove grass and debris from engine compartment and muffler area, before and after operating machine.
- Check hoses.
- Check around hose fittings for leaks.
- Check air restriction Indicator.
- Check speed control.
- Reel Cutting Units:
 - Check reels and bed knives for sharpness and nicks.
 - Check reel-to-bedknife settings.
- Rotary Cutting Units:
 - Check blades for sharpness and nicks.
 - Check and adjust blade bolt torque.
- Check cutting height.
- Grease (after washing):
 - Front and rear rollers (20 places) (2500M and 22 ESP).
 - Rear rollers (10 places) (rotary)
 - Reels on cutting units (10 places).
 - Optional rear roller power brush (10 places)
 - Optional FTC (10 places)

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 fuel on machine. Fuel may damage surface. Wipe up spilled fuel immediately.
- Prolonged exposure to sunlight will damage the hood surface.

Electronic Control Module



MC20177

This machine is equipped with an electronic control module (A). The module controls and monitors all safety interlock functions and the engine air preheater function.

Safety Interlock Diagnostic Codes

The Sit On Seat (SOS) diagnostic feature alerts the operator when an attempt is made to start the machine when one or more safety interlock switches are not in the correct position for starting.

The following diagnostic codes are displayed by the flashing of the status LED on the electronic control module and the air pre heater lamp on the control arm.

NOTE: The code will cycle continuously with a two-second pause between display cycles.

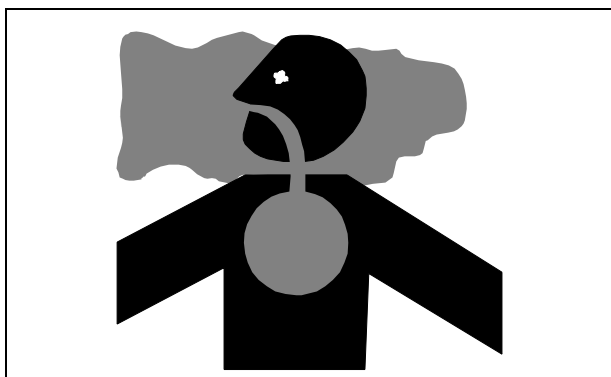
Only one code can be displayed at a time. Repeat check procedure after repairs have been completed.

- **Code 1-2** (One pulse followed by a short pause followed by two pulses.) Indicates that the brake switch is not activated and/or forward/reverse pedals are not in the NEUTRAL position during an attempted start.
- **Code 1-3** (One pulse followed by a short pause followed by three pulses.) Indicates that the Mow / Transport lever is in the MOW position during an attempted start.
- **Code 2-2** (Two pulses followed by a short pause followed by two pulses.) Indicates hydraulic oil is in an over-temperature condition.

If any codes are flashing other than the ones described above, see your John Deere dealer.

OPERATING - MACHINE

Testing Safety Systems



CAUTION: Avoid injury! 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.**

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.

Testing Neutral Safety System - Starting Engine

Testing Seat Switch - Operator ON Seat

1. Sit on seat.
2. Depress park brake pedal, or lock park brake.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.

4. Move the mow-transport lever to the transport position.
5. Turn key switch to start position.

Result: Starter should crank engine. If not, there is a problem with the safety interlock circuit.

Testing Seat Switch - Operator OFF Seat

1. Operator not on seat.
2. Depress park brake pedal and lock park brake.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.
4. Move the mow-transport lever to the transport position.
5. Turn key switch to start position.

Result: Starter should crank engine. If not, there is a problem with the safety interlock circuit.

Testing Brake Switch

1. Sit on seat.
2. Unlock park brake and release park brake pedal.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.
4. Move the mow-transport lever to the transport position.
5. Turn key switch to start position.

Result: Starter should not crank engine. If starter cranks engine, there is a problem with the safety interlock circuit.

Testing Forward Hydrostatic Pedal

1. Sit on seat.
2. Depress park brake pedal and lock park brake.
3. Move the mow-transport lever to the transport position.
4. Press down on forward hydrostatic pedal approximately 15 mm (0.6 in.).
5. Turn key switch to start position.

Result: Starter should not crank engine. If starter cranks engine, there is a problem with the safety interlock circuit.

Testing Reverse Hydrostatic Pedal

1. Sit on seat.
2. Depress park brake pedal and lock park brake.
3. Move the mow-transport lever to the transport position.
4. Press down on reverse hydrostatic pedal approximately 15 mm (0.6 in.).
5. Turn key switch to start position.

Result: Starter should not crank engine. If starter cranks engine, there is a problem with the safety interlock circuit.



Suggest:

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OPERATING - MACHINE

Testing Mow-Transport lever

1. Sit on seat.
2. Depress park brake pedal, or lock park brake.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.
4. Move the mow-transport lever up into the mow position.
5. Turn key to start position.

Result: Starter should not crank engine. If starter cranks engine, there is a problem with the safety interlock circuit.

Testing Neutral Safety System - Engine Running

Testing Seat Switch

Test #1

1. Sit on seat.
2. Depress park brake pedal and lock park brake.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.
4. Pull the mow-transport lever switch down into the off position.
5. Start engine.
6. Rise up off seat, but do not get off machine.

Result: Engine should continue to run. If engine stops, there is a problem with the safety interlock circuit.

Test #2

1. Sit on seat.
2. Depress park brake pedal and lock park brake.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.
4. Move the mow-transport lever to the transport position.
5. Start engine.
6. Unlock park brake and release park brake pedal.
7. Rise up off seat, but do not get off machine.

Result: Engine must stop within 2 seconds. If engine does not stop within 2 seconds, there is a problem with the safety interlock circuit.

Test #3

1. Sit on seat.
2. Depress park brake pedal and lock park brake.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.
4. Move the mow-transport lever to the transport position.

5. Start engine.
6. Lower cutting units to ground.
7. Move the mow-transport lever to the mow position.
8. Rise up off seat, but do not get off machine.

Result: Engine must stop within 2 seconds. If engine does not stop within 2 seconds, there is a problem with the safety interlock circuit.

Testing Brake Switch

1. Sit on seat.
2. Depress park brake pedal and lock park brake.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.
4. Move the mow-transport lever to transport position.
5. Start engine.
6. Unlock park brake and release park brake pedal.
7. Move mow-transport lever to the mow position.
8. Lower cutting units to ground. Cutting units should begin to rotate.
9. Press down on the brake pedal.

Result: The cutting units should stop and remain stopped. If cutting units do not stop, there is a problem with the safety interlock circuit.

Testing Forward Hydrostatic Pedal

1. Sit on seat.
2. Depress park brake pedal and lock park brake.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.
4. Move the mow-transport lever to the mow position.
5. Start engine.
6. Push down on forward hydrostatic pedal approximately 15 mm (0.6 in.).

Result: Engine must stop. If engine does not stop, there is a problem with the safety interlock circuit.

Testing Reverse Hydrostatic Pedal

1. Sit on seat.
2. Depress park brake pedal and lock park brake.
3. Make sure hydrostatic forward and reverse pedals are in neutral position.
4. Move the mow-transport lever to the transport position.
5. Start engine.
6. Push down on reverse hydrostatic pedal approximately 15 mm (0.6 in.).

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