

JOHN DEERE
WORLDWIDE COMMERCIAL & CONSUMER
EQUIPMENT DIVISION

Z-Trak ®Front Mower
F687

OMTCU15769 K1

OPERATOR'S MANUAL



JOHN DEERE

⚠ WARNING: The Engine Exhaust
from this product contains chemicals known
to the State of California to cause cancer,
birth defects or 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.

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.

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.

This manual and safety signs on your machine may also be available in other languages (see your John Deere 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 arrow (----->), 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.

PRODUCT IDENTIFICATION

Record Identification Numbers

Z-Trak Front Mower

F687 PIN (010001-)

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:



MX7914

ENGINE SERIAL NUMBER (B):



MX7913A

PRODUCT IDENTIFICATION NUMBER (A):

<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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OMTCU15769 K1 - English

SAFETY

Understanding The Machine Safety Labels



Safety-Alert Symbol

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.

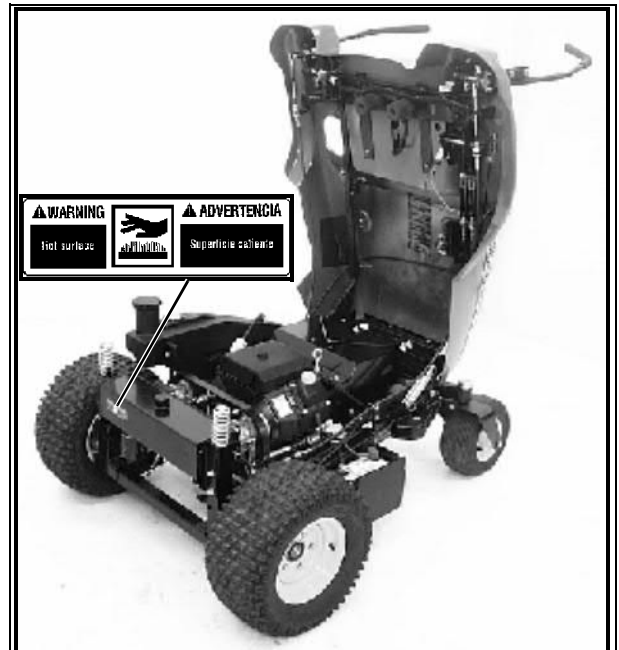
WARNING



MX7915

To avoid injury from tipover, do not operate machine without attachment.

WARNING



MX7916A, MX7918A

Picture Note: Warning, HOT, also molded into the muffler heat shield.

HOT SURFACE

SAFETY

DANGER/POISON



MX7917A

SHIELD EYES: Explosive gases can cause blindness or injury.

No sparks, flames, smoking.

Sulfuric acid can cause blindness or severe burns.

Flush eyes immediately with water. Get medical help fast.

Keep out of reach of children. Do not tip. Do not open battery.

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 Commercial and Consumer Equipment 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.

Emission Compliance Period

If your engine has the emission compliance category listed on the emission control system certification or air index label, this indicates the number of operating hours for which the engine has been certified to meet EPA and/or CARB emission requirements. The following table provides the engine compliance period in hours associated with the category found on the certification label.

Agency	Category	Hours
EPA	C	250
EPA	B	500
EPA	A	1000
CARB	Moderate	125
CARB	Intermediate	250
CARB	Extended	500

Certification

Your product has been certified by an independent laboratory for compliance with American National Standard B-71.4, "Safety Specifications" for commercial turf care equipment.

Operator Training Required

- The owner of the machine is responsible for training the users and mechanics of the machine.
- The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people, or property.
- Do not allow operation or service of the machine by children or untrained adults.
- Read the operator's manual and study the safety and operation sections before operating the machine.
- If the operator of the machine cannot read or understand this manual, it is the machine's owner responsibility to explain this material to the operator. This publication is available in other languages.
- Operate the machine in an open, unobstructed area under the direction of an experienced operator.
- Learn the use of all controls.
- Operator experience is required to learn the moving, stopping, turning and other operating characteristics of the machine.

SAFETY

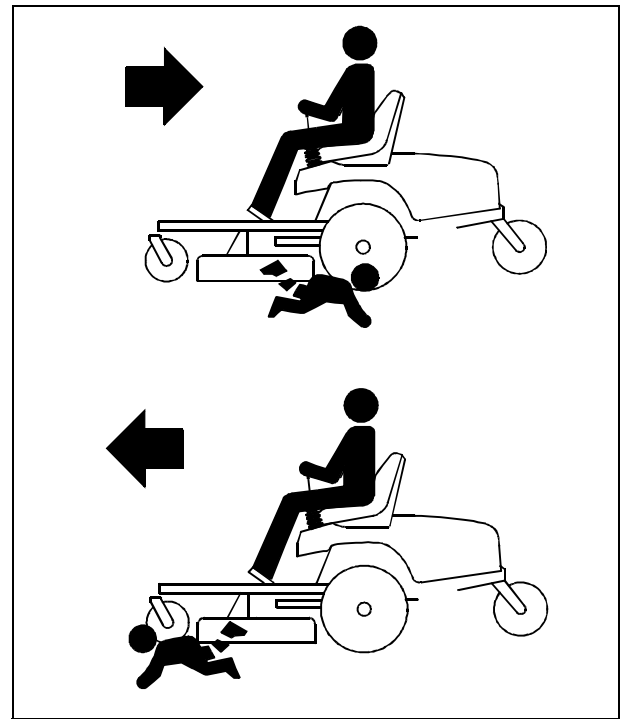
Operating Safely

- 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 and fastened in place. Make any necessary adjustments before you operate.
- Do not operate mower without discharge chute or entire grass catcher in place.
- Check before each use that operator presence controls are functioning correctly. Test safety systems. Do not operate unless they are functioning correctly.
- Do not change the engine governor setting or overspeed the engine.
- Check brake action before you operate. Adjust or service brakes as necessary.
- Stop machine if anyone enters the area.
- Never raise mower decks when blades are running.
- If you hit an object, stop and inspect the machine. Make repairs before you operate. Keep machine and attachments properly maintained and in good working order.
- Do not leave machine unattended when it is running.
- Only operate during daylight or with good artificial light.
- Slow down and be careful of traffic when operating near or crossing roadways. Stop blades before crossing roads or sidewalks. Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- Be aware of the mower discharge direction and make sure that no one is in the path of the discharge direction.
- Use only accessories and attachments approved by the manufacturer of the machine.

Parking Safely

1. Stop machine on a level surface, not on a slope.
2. Disengage PTO.
3. Lower attachments to the ground.
4. Lock park brake.
5. Stop engine.
6. Remove key.
7. Wait for engine and all moving parts to stop before you leave the operator's station.

Rotating Blades are Dangerous - Protect Children and Prevent Accidents



MIF

Protect Children:

- Never assume that children will remain where you last saw them. Children are attracted to mowing activity, stay alert to the presence of children.
- Keep children in the house when you are operating the machine.
- Turn machine off if a child enters the mowing area.
- Use extra care when you come to blind corners, shrubs, trees, or other objects that may block your vision.
- Do not let children or an untrained person operate the machine.
- Do not carry or let children ride on machine or any attachment. Do not tow children in a cart or trailer.

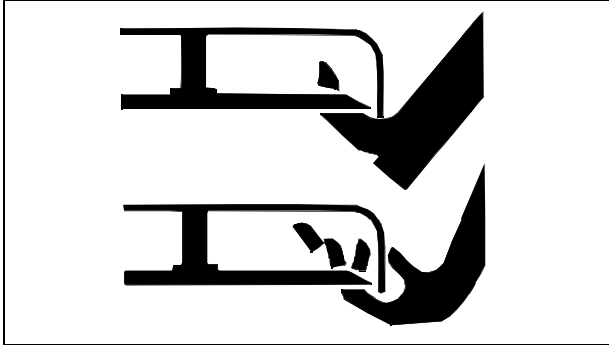
Help Prevent Serious Or Fatal Accidents:

- Be alert at all times, drive forward carefully. People especially children can move quickly into the mowing area before you know it.
- Back carefully. Shut off PTO and look behind the machine carefully, especially for children, before you back up.
- Do not mow in reverse unless it is absolutely necessary.
- Shut off PTO when you are not mowing.
- Do not operate machine if you are under the influence of

SAFETY

drugs or alcohol.

Avoid Injury From Contacting Blades

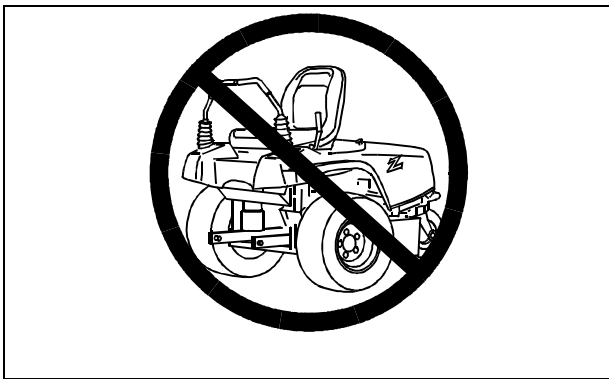


MIF

Before you unplug or adjust machine:

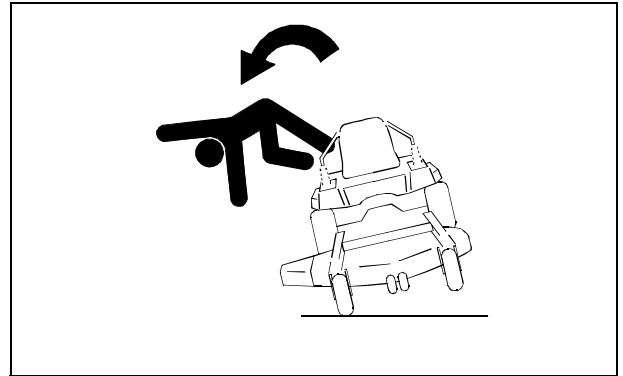
- Stop the engine.
- Remove key.
- Wait for blades to STOP.
- Keep hands, feet and clothing away from blades when engine is running.

Avoid Tipping



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- Do not operate machine without front attachment installed.



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- Do not drive where machine could slip or tip.
- Stay alert for holes, loose terrain, wet or slippery surfaces and other hidden hazards in the terrain.
- Keep away from drop-offs.
- Slow down before you make a sharp turn or operate on a slope.
- **Mow across a hill—not up and down.** Be careful when you change direction on a slope.
- Do not stop when going up or down a hill. If machine stops going up hill, stop PTO and back down slowly.
- Do not mow wet grass. Reduced traction could cause sliding.

Operate Mower Safely on Slopes

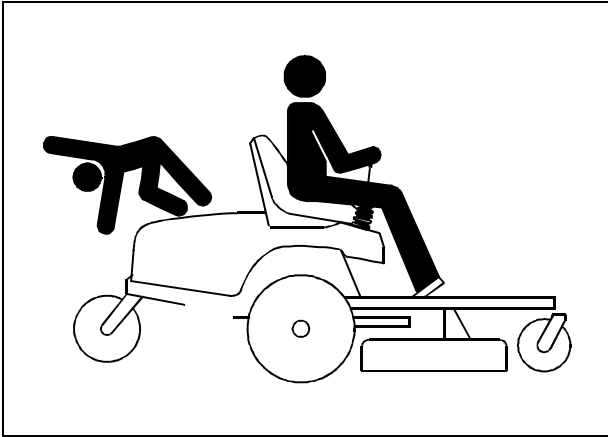
Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. All slopes require extra caution. If an operator is uneasy mowing on a specific slope, do not mow it.

- Mow across slopes—not up and down.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn this machine. Tall grass can hide obstacles.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the mower blades and proceed slowly and gradually down the slope.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- Do not mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a ditch, or if an edge caves in.
- Do not mow on wet grass. Reduced traction could cause sliding.

SAFETY

- Do not try to stabilize this machine by putting your foot on the ground.

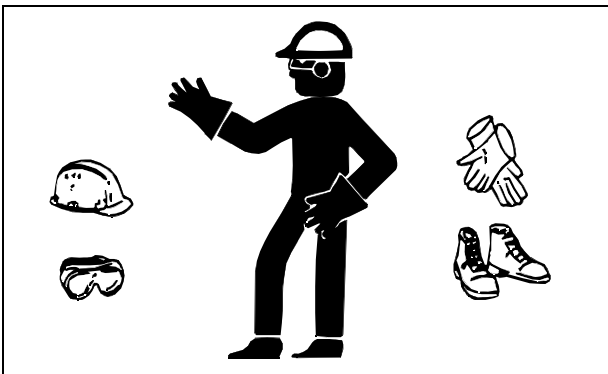
Keep Riders Off



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

Wear Appropriate Clothing



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- Wear close fitting clothing and safety equipment appropriate for the job.
- Loud noise can cause impairment or loss of hearing, wear a suitable protective device such as earplugs.
- Do not wear radio or music headphones while servicing the machine. Safe service requires your full attention.

Check Wheel Bolts

- A serious accident could occur causing serious injury if wheel bolts are not tight.
- Check wheel bolt tightness after first five hours of operation and every 50 hours thereafter.

Practice Safe Maintenance



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- 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 hardware tight.
- To prevent them from getting caught, keep hands, feet, clothing, jewelry, and long hair away from any moving parts.
- Before servicing machine, disengage all power and stop the engine. Let engine cool.
- Securely support any machine elements that must be raised for service work.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.
- Unauthorized modifications to the machine may impair its function and safety.

SAFETY

Stay Clear of Rotating Drivelines

1-800-822-8262.



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Entanglement in rotating driveline can cause serious injury or death:

- Wear close fitting clothing.
- Stop the engine and be sure PTO driveline is stopped before getting near it.

Avoid High Pressure Fluids

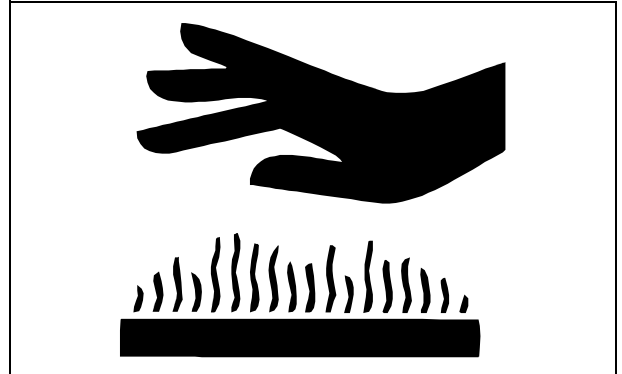
- Hydraulic hoses can fail due to physical damage, kinks, age, and exposure. Check hoses regularly. Replace damaged hoses.



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- 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

Prevent Fires



MIF

- Never remove fuel cap, or add fuel with engine running or hot. Allow engine to cool for several minutes.
- Never store equipment with fuel in the tank inside a building where fumes may reach an open flame or spark.
- Allow engine to cool before storing in any enclosure.
- To reduce fire hazard, keep engine free of grass, leaves, or excessive grease.

SAFETY

Tire Safety

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

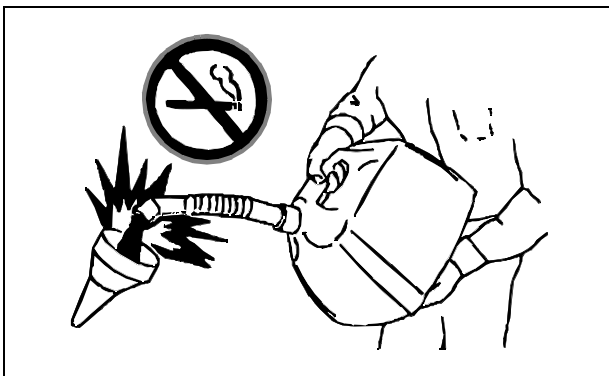


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- Do not attempt to mount a tire without the proper equipment and experience to perform the job.
- Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The 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.

Handling Fuel Safely

Fuel and fuel vapors are highly flammable:



MIF

- Do not refuel machine while you smoke, when machine is near an open flame or sparks, or when engine is running. Stop engine and allow to cool before filling.

- Never remove the fuel cap or add fuel with the engine running.
- Never fill fuel tank or drain fuel from a machine in an enclosed area. Fill fuel tank outdoors.
- Prevent fires. Clean up spilled fuel immediately.
- Do not store machine with fuel in tank in a building where fumes may reach an open flame or spark.
- Prevent fire and explosion caused by static electric discharge. 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.

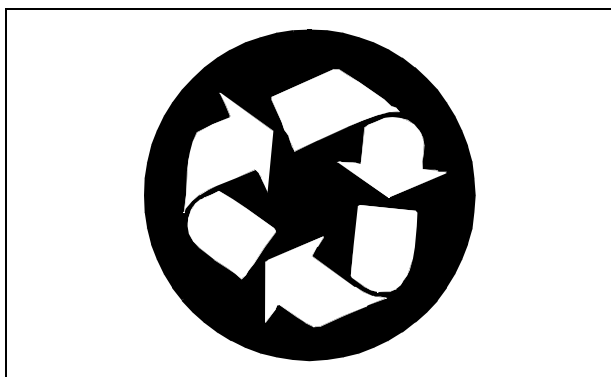


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- Static electric discharge can ignite gasoline vapors in an ungrounded fuel container. Remove the fuel container from the bed of a vehicle or the trunk of a car and place on the ground away from the vehicle before filling. Keep nozzle in contact with container opening while filling.
- When practical, remove equipment from trailers or truck beds and refuel them on the ground. If this is not possible, use a portable, plastic fuel container to refuel equipment on a truck bed or trailer.
- For gasoline engines, do not use gas with methanol. Methanol is harmful to your health and to the environment.

SAFETY

Handling Waste Product and Chemicals

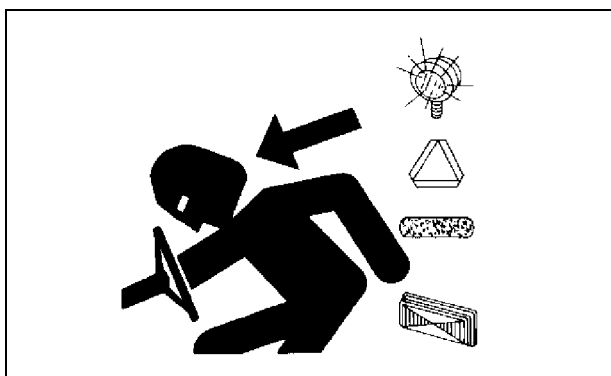


MIF

- 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 John Deere 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.

Transport Safely

- Use safety lights and devices. Slow moving machines when driven on public roads are hard to see, especially at night. Avoid personal injury or death resulting from a collision with a vehicle.



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- Flashing warning lights are recommended whenever driving on public roads to increase visibility. Extra flashing warning lights may need to be installed.
- A safety lighting kit is available from your John Deere dealer.

OPERATING

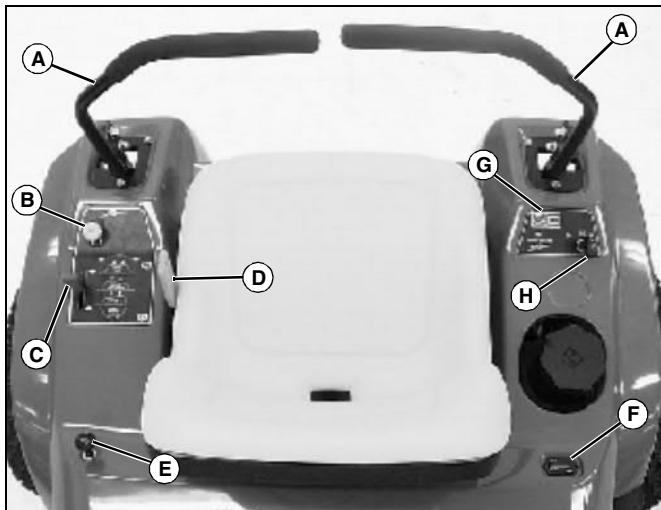
Daily Operating Checklist

- ☐ Test safety systems.
- ☐ Check tire pressure.
- ☐ Check fuel level.
- ☐ Check engine oil level.
- ☐ Check hydraulic oil level.
- ☐ Remove grass and debris from machine.
- ☐ Clean air intake screen.
- ☐ Clean engine oil cooling fins.
- ☐ Check area below machine for leaks.

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.

Operator Station Controls

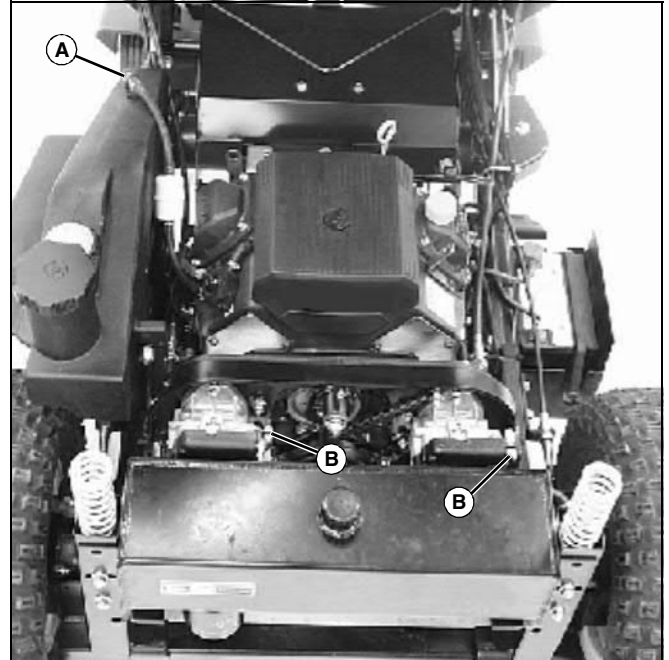


MX7922

- A - Control Levers**
- B - PTO Switch**
- C - Throttle Lever**
- D - Park Brake Lever**
- E - Choke**
- F - Hour Meter**
- G - Indicator Lights**

H - Key Switch

Miscellaneous Controls



MX7921

- A - Fuel Shut-Off Valve**
- B - Free-Wheeling Levers**



MX7919

- A - Seat Adjustment Lever**

OPERATING

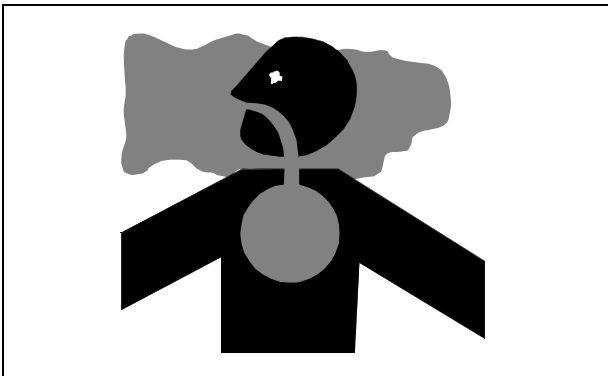
Adjusting Seat



MX7923

1. Sit on the operator's seat.
2. Push and hold lever (A) to the left.
3. Slide seat forward or backward to desired position.
4. Release lever.

Testing the Safety Interlock System



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

Move the vehicle 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.

NOTE: This unit is equipped with a electronic safety interlock. Engine will not start unless the PTO switch is in the disengaged position, the control levers are in the swing-out neutral position and the park brake lever is in the park position.

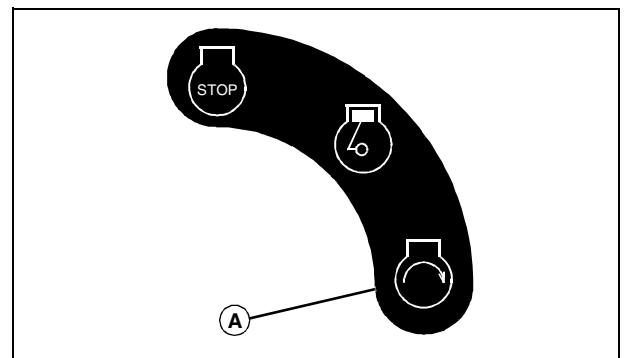
Use the following checkout procedure to check for normal operation of machine.

If there is a malfunction during one of these procedures, Do not operate machine. See your John Deere dealer for service.

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

Testing PTO Safety Switch

1. Sit on the operator's seat with the control levers in the swing-out neutral position.
2. Lock park brake.
3. Pull PTO switch up to the engaged position.



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4. Turn key switch to the start position (A).

Result: Engine must not crank.

OPERATING

Testing Seat Safety Switch

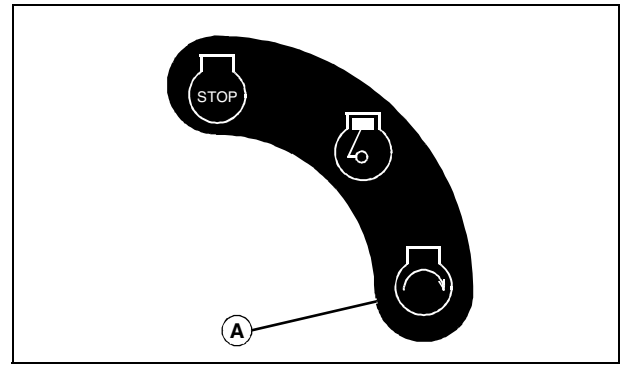
1. Start the engine.
2. Unlock the park brake.



CAUTION: Avoid injury! Before engaging mower, clear area of bystanders, especially children.

3. Pull PTO switch up to engaged position.
4. Raise slightly off the seat.

Result: Engine must stop.



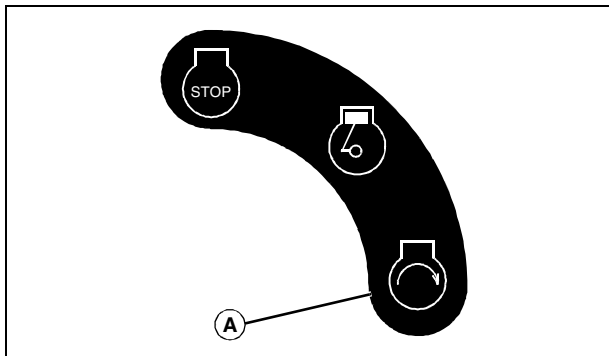
MIF

4. Turn key switch to the start position (A).

Result: Engine must not crank.

Testing Neutral Safety Switch

1. Move both control levers inward to the centered neutral position.
2. Lock the park brake.
3. Push PTO switch down to disengaged position.

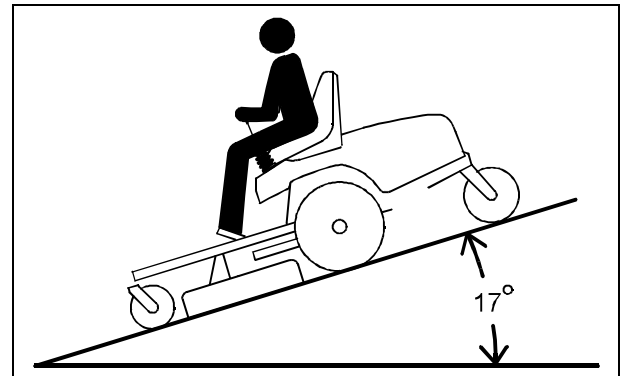


MIF

4. Turn key switch to the start position (A).

Result: Engine must not crank.

Testing Park Brake



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1. Stop front mower on a maximum 17° slope. Stop the engine and lock the park brake.

Result: Park brake must hold the machine stationary. (ANSI standards permit movement of no more than 61cm (24 in.) in one hour.) If machine moves more than that, brakes need to be adjusted. See your John Deere Dealer.

Testing Park Brake Safety Switch

1. Sit on the operator's seat with the control levers in the swing-out neutral position.
2. Push PTO switch down to disengaged position.
3. Unlock the park brake.

Starting the Engine



CAUTION: Avoid injury!

- If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.
- If an exhaust pipe extension is not available, open the doors and get outside air into the area.

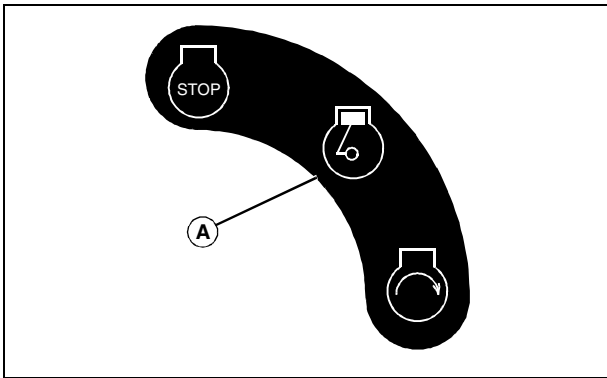
1. Raise cowling.

OPERATING

2. Open the fuel shut-off valve.
3. Lower cowl.
4. Move both control levers to the swing-out neutral position.
5. Sit on the operator's seat.
6. Lock the park brake.

NOTE: Check position of machine PTO switch. Switch knob must be pushed down to the off position to start engine.

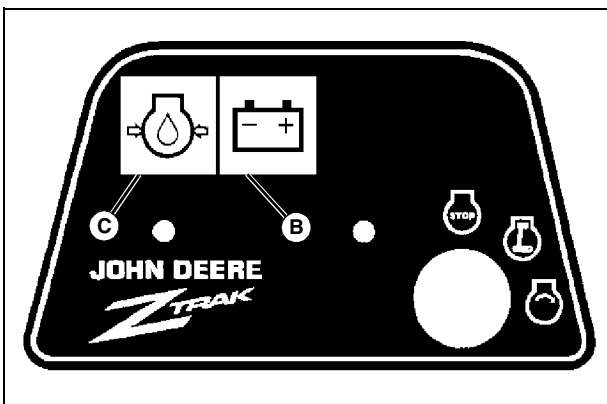
7. Move throttle lever to set engine speed:
 - **Cold engine:** set throttle lever at 1/2 to 3/4 fast position.
 - **Warm / Hot engine:** set throttle lever in the fast position.
8. Position choke knob:
 - Cold engine: Pull knob up to the choke position.
 - Warm/Hot engine: If necessary, pull up knob to choke position.



MIF

9. Turn key switch to the run position (A).

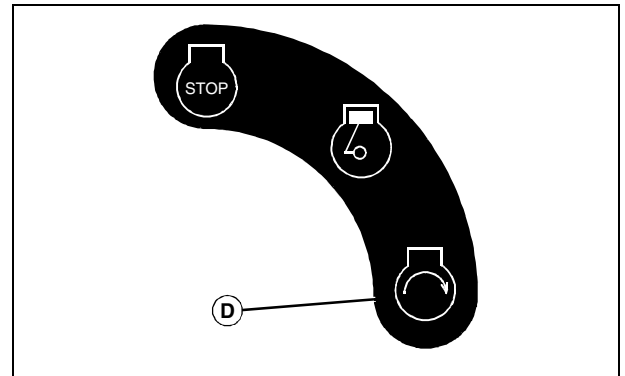
NOTE: The battery indicator light (B) may illuminate if battery voltage is low.



M93937

10. Check that the engine oil pressure indicator light (C)

illuminates.



MIF

11. Turn key switch to the start position (D). Release key when the engine starts.

12. With engine started:

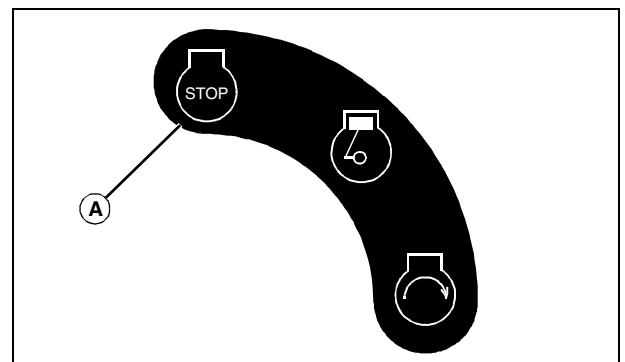
- Push choke knob to the off position.
- Move throttle lever to the desired engine speed.

Stopping the Engine

IMPORTANT: Avoid damage! To help prevent engine backfiring, throttle lever should be set at the 1/2 to fast position prior to stopping the engine.

Do not stop engine when mower is on a slope. Oil may run through valve train into carburetor and muffler.

1. Move control levers to the swing-out neutral position.
2. Move throttle lever to a 1/2 - fast position.

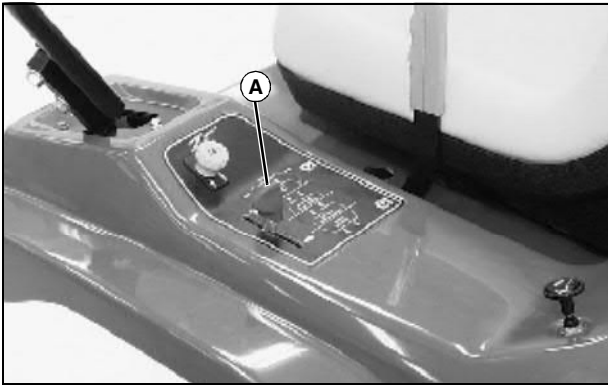


MIF

3. Turn key switch to stop position (A).
4. Lock the park brake.
5. Remove key.

OPERATING

Using the Throttle Lever



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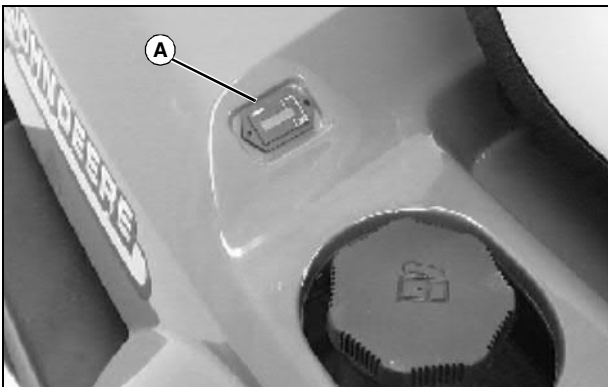
Push lever (A) all the way forward to fast position. Use this position when you mow.

Pull lever (A) to rear to slow position. Do not run engine at slow idle any longer than necessary.

Move lever (A) to the 1/2 to full fast position when stopping the engine.

Using the Hour Meter

NOTE: The machine is equipped with an electric start. The hour meter digital display will not illuminate or operate with the key switch in the stop position. The hour meter digital display will illuminate and continue to operate when the key switch is left in the run position.



MX7929A

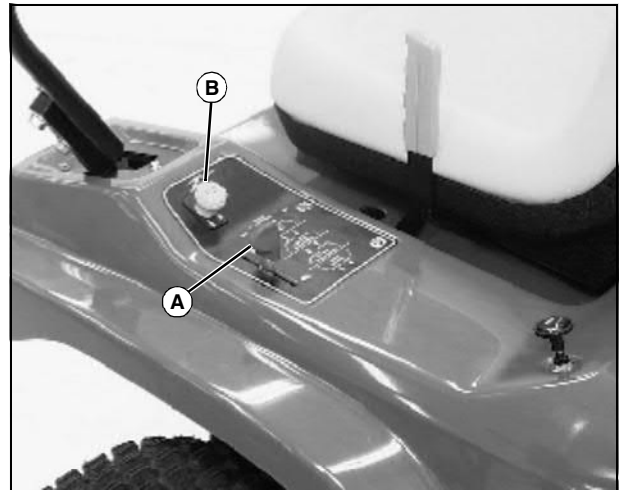
The hour meter (A) shows number of hours the machine has run.

The service interval chart gives necessary service intervals.

Use the hour meter and service interval chart to determine when machine will need service.

Using the PTO Switch Knob

Engage PTO:



MX7924

1. Move throttle lever (A) to the 1/2 to 3/4 fast position.
2. Pull PTO knob (B) up.
3. Move throttle lever (A) forward to the fast position for mowing.

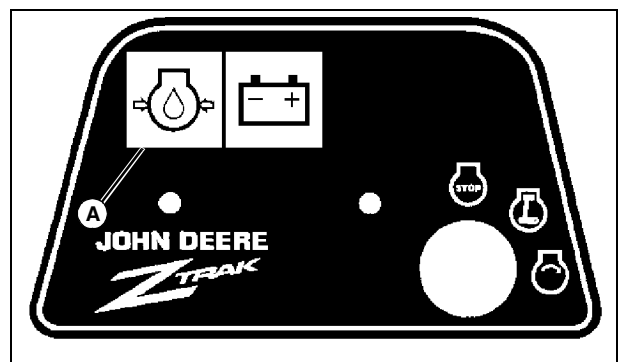
Disengage PTO:

- Push PTO knob (B) down.

Check Indicator Lights

Oil Pressure Indicator

IMPORTANT: Avoid damage! If the indicator lights red when the engine is running, stop the engine immediately or the engine may be seriously damaged from lack of lubrication.



M93937

- The red indicator light (A) means the oil is low and/or the oil pressure is low.



Suggest:

If the above button click is invalid.

Please download this document first, and then click the above link to download the complete manual.

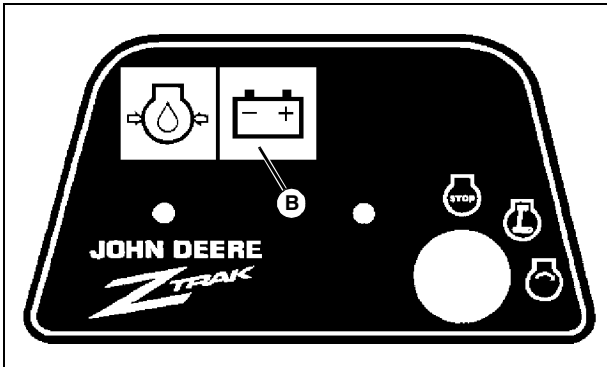
Thank you so much for reading

OPERATING

- The indicator should illuminate when the key switch is turned to the run position.
- The light should go out when the engine starts.

Battery Indicator

IMPORTANT: Avoid damage! If the indicator lights yellow when the engine is running, stop the engine. Find and correct the cause or the battery will lose power.



M93937

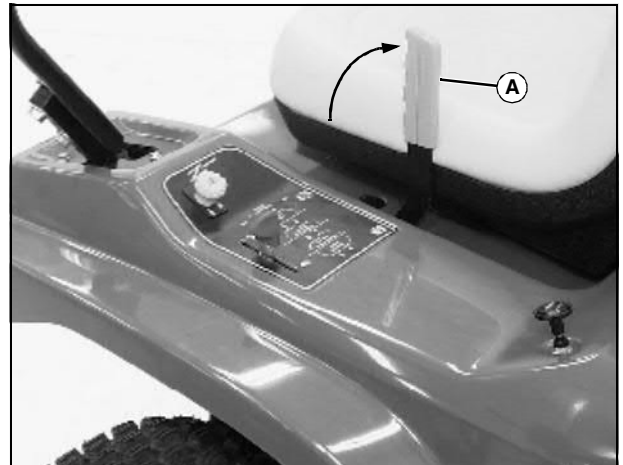
- The yellow indicator light (B) means the battery is not getting enough charge from the alternator.
- If the battery voltage is low enough, the light will illuminate.
- If the battery is fully charged, the light will not come on.

Using the Park Brake Lever



CAUTION: Avoid injury! If the engine should stop while operating on an incline, the front mower will free wheel. If this should occur, lock the park brake, start the engine, release brake and resume operation.

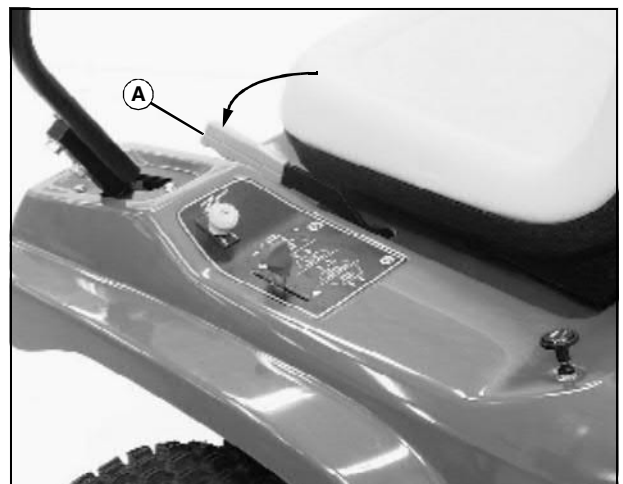
Lock park brake or use as emergency stop:



MX7924

1. Raise park brake lever (A) to lock park brake.

Unlock park brake:



MX7925

- Lower park brake lever (A) to unlock park brake.

Using Free-Wheeling Levers

IMPORTANT: Avoid damage! Prevent transmission damage. Do not tow the machine, push machine by hand only.

When the machine needs to be moved without starting the engine, use the free-wheeling levers.

1. Park machine safely. (See Parking Safely in the Safety section.)
2. Raise cowling.

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