

JOHN DEERE
WORLDWIDE COMMERCIAL & CONSUMER
EQUIPMENT DIVISION

Commercial Walk Behind Mower
7H17 and 7H19

OMTCU18370 C4

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.

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.

Attachments for Your Machine

There's 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 or 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's a John Deere attachment or kit to fill every need.

PRODUCT IDENTIFICATION

Record Identification Numbers

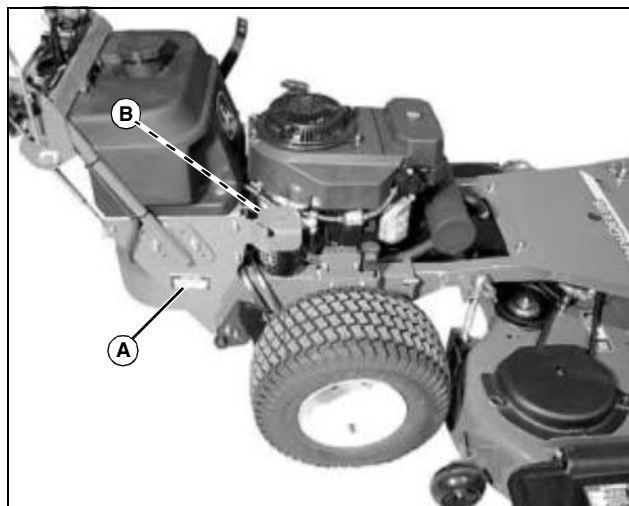
7H17 PIN (010001-)

7H19 PIN (010001-)

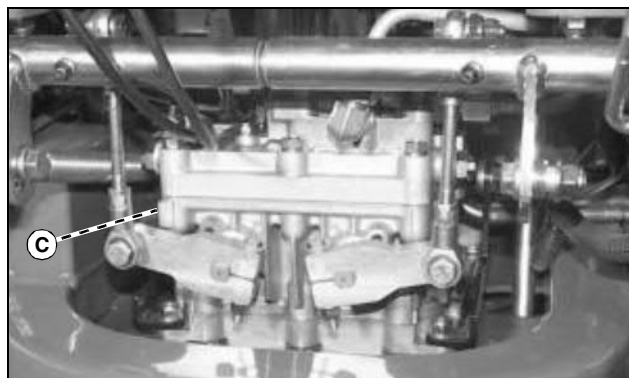
If you need to contact an Authorized Service Center for information on servicing, always provide the product model and serial number.

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.

HYDRAULIC PUMP NUMBER (C):



MX31726



MX32170

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

PRODUCT IDENTIFICATION NUMBER (A):

ENGINE SERIAL NUMBER (B):

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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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OMTCU18370 C4 - English

SAFETY LABELS

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.

DANGER



MX31724 M131739

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

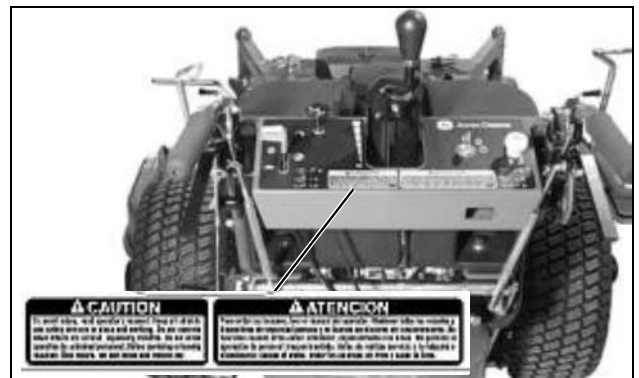
DANGER



MX31725 M131748

To avoid injury from rotating blades and thrown objects, stay clear of deck edge and keep others away. Do not mow without discharge chute or entire grass catcher in place.

CAUTION

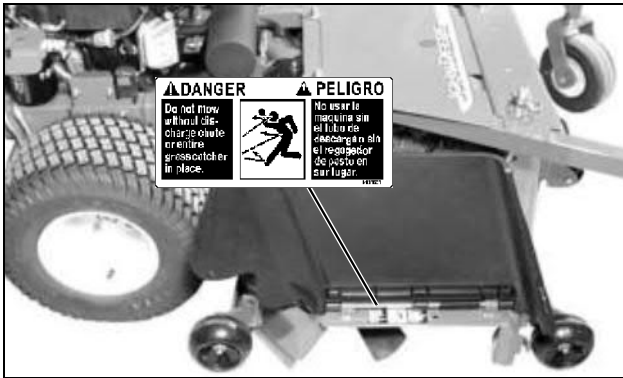


MX31722 TCU18153

To avoid injury, read operator's manual. Keep all shields and safety devices in place and working. Do not operate when others are around, especially children. Do not allow operation by untrained personnel. Before servicing or leaving machine: Stop engine, set park brake and remove key.

SAFETY LABELS

DANGER



MX31723 M137637

Do not mow without discharge chute or entire grass catcher in place.

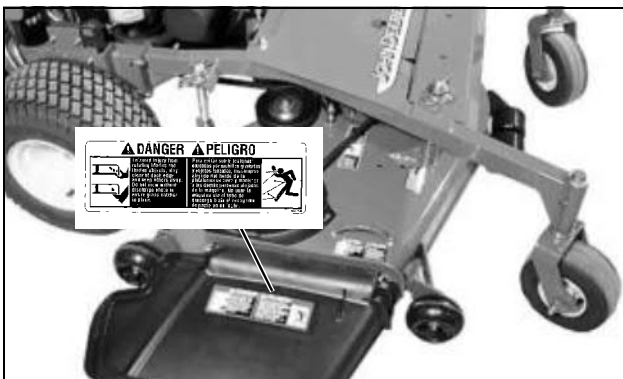
WARNING



MX31725 TCU51051

- To avoid injury from rotating belts, keep all shields and guards in place.

DANGER



MX31725 M131748

To avoid injury from rotating blades and thrown objects, stay clear of deck edge and keep others away. Do not mow without discharge chute or entire grass catcher in place.

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

SAFETY LABELS

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

Canadian Electromagnetic Compatibility (EMC) Compliance

This spark ignition system complies with Canadian ICES-002.

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.

SAFETY

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 untrained adults.
- Do not let children operate the machine. Local regulations may restrict the age of the operator.
- 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.

Operating Safely

- Only allow responsible adults, who are familiar with the instructions to operate the machine. Local restrictions may restrict the age of the operator.
- Inspect machine before you operate. Be sure hardware is tight. Repair or replace damaged, badly worn, or missing parts. Replace faulty silencers. Be sure guards and shields are in good condition and fastened in place. Make any necessary adjustments before you operate.
- 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.
- Be sure all drives are in neutral and parking brake is locked before starting engine. Stand as far away from the discharge chute as possible with feet well away from the underside of the deck to start machine.
- Do not change the engine governor settings or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.
- Do not operate mower without discharge chute or entire grass catcher in place. Never operate with the discharge deflector raised, removed, or altered, unless using a grass catcher.

- Check park brake before you operate. Adjust or service park brake as necessary.
- Stop machine if anyone enters the area.
- If you hit an object or if abnormal vibration occurs, stop the machine and inspect it. Make repairs before you operate. Keep machine and attachments properly maintained and in good working order.
- Be aware of the mower discharge direction and make sure that no one is in the path of the discharge direction.
- Do not leave machine unattended when it is running.
- Only operate during daylight or with good artificial light.
- Stop the blades rotating before crossing surfaces other than grass.
- Use only accessories and attachments approved by the manufacturer of the machine. Keep safety labels visible when installing accessories and attachments.
- Do not operate machine if you are under the influence of drugs or alcohol.
- Check before each use that operator presence controls are functioning correctly. Test safety systems. Do not operate unless they are functioning correctly.
- Never raise mower decks when blades are running.
- 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.
- Do not wear radio or music headphones. Safe service and operation requires your full attention.
- Reduce the throttle setting during engine run-out and, if the engine is provided with a fuel shut-off valve, turn the fuel off at the conclusion of mowing.
- Do not hang or secure any item to the control console. The operator's station should always remain unobstructed.
- Do not pull mower backwards while the blades are rotating. Use the reverse gear to move the machine in reverse.
- Use extra care when loading or unloading the machine into a trailer or a truck.

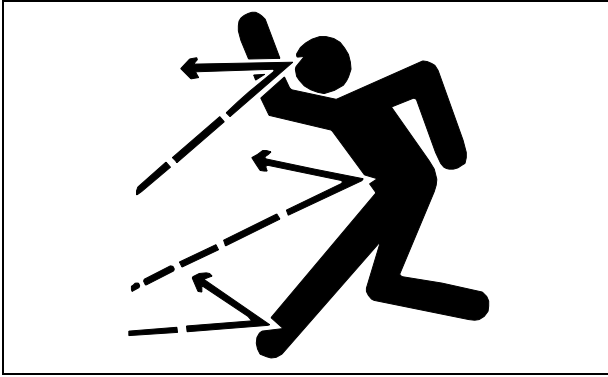
Using a Spark Arrestor

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.

SAFETY

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



MIF

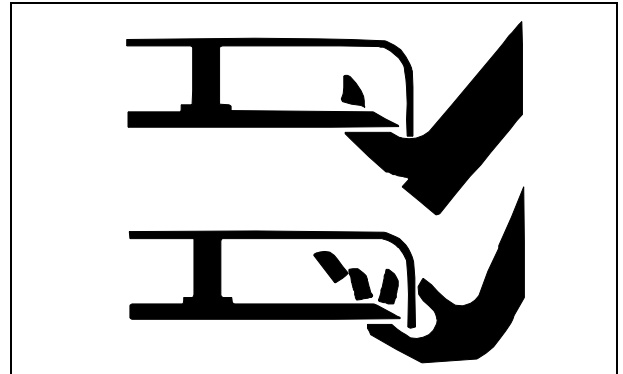
- Evaluate the terrain to determine what accessories and attachments are needed to properly and safely perform the job.
- Clear mowing area of objects that might be thrown. Keep people and pets out of mowing area.
- Low-hanging branches and similar obstacles can injure the operator or interfere with 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.
3. Lock the park brake.
4. Stop the engine.
5. Remove the key.
6. Wait for engine and all moving parts to stop before you leave the operator's station.
7. Close fuel shut-off valve, if your machine is equipped.
8. Remove the spark plug wire (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.
- Before backing up, stop mower blades or attachments and look down and behind the machine carefully, especially for children.
- Do not mow in reverse.
- Shut off blades when you are not mowing.
- Park machine safely before leaving the operator's station for any reason including emptying the catchers or unplugging the chute.

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.
- Young 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.
- 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 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. They can fall off and be seriously injured or interfere with safe machine operation.

SAFETY

- Never use the machine as a recreational vehicle or to entertain children.
- Do not let 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 under the watchful eye of a responsible adult 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.

Operating Safely on Slopes

- Slopes are a major factor related to slip and fall accidents which can result in severe injury. All slopes require extra caution. If you feel uneasy on a slope, do not mow it.
- Mow across the face of slope, never up and down. Use extreme caution when changing direction on slopes.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction.
- Use a slow speed when operating on a slope. Choose a low gear or speed so that you will not have to stop or shift while on the slope.
- Tires may lose traction on slopes even though the brakes are functioning properly.
- Do not turn on slopes unless necessary. Turn slowly and turn downhill. Do not shift to neutral and coast downhill.
- Stay alert for holes and other hidden hazards in the terrain. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Keep away from drop-offs, ditches, embankments, as well as ponds and other bodies of water. The operator could lose footing or balance. The machine could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- Follow the manufacturer's recommendations for counterweights for added stability when operating on slopes. Remove weights when not required.
- Be sure of your footing while using pedestrian controlled equipment, especially when backing up. Walk, don't run. Never operate on wet grass. Reduced footing could cause slipping.

Keep Riders Off

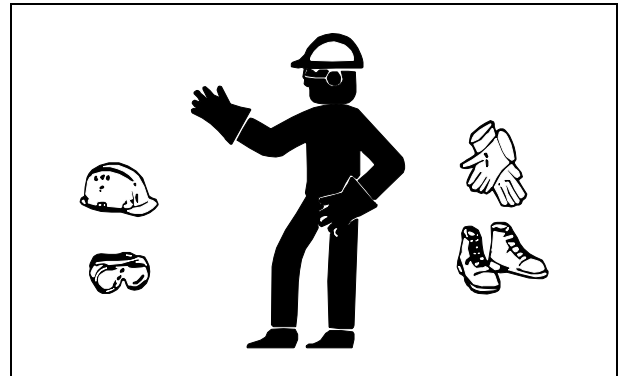
- Only allow the operator on the machine. Keep riders off.

- 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.

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



MIF

- 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.

SAFETY

Practice Safe Maintenance



MIF

- Only qualified, trained adults should service this machine.
- Understand service procedure before doing work. Keep area clean and dry.
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.
- Never lubricate, service, or adjust machine while it is moving. Wait for all movement to stop on machine before adjusting, cleaning or repairing.
- Keep safety devices in place and in working condition. Keep hardware tight.
- On multi-bladed machines, take care as rotating one blade can cause other blades to rotate.
- Keep hands, feet, clothing, jewelry, and long hair away from any moving parts, to prevent them from getting caught.
- Before cleaning or servicing machine, disengage all power and stop the engine. Lock park brake and remove the key. Let machine cool.
- Remove spark plug wire (for gasoline engines) before making any repairs.
- Before servicing machine, carefully release pressure from any components with stored energy, such as hydraulic components and springs.
- Keep all nuts and bolts tightened, especially blade attachment bolts.
- Securely support any machine elements that must be raised for service work. Use jack stands or lock service latches to support components when needed.
- Never run engine unless park brake is locked.
- Use care when checking blades. Wrap blades or wear gloves and use caution when servicing them. Only replace blades. Never straighten or weld them.
- 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.

- Grass catcher components are subject to wear, damage, and deterioration which could expose moving parts or allow objects to be thrown. Check components frequently and replace with manufacturer's recommended parts when necessary.
- Do not modify machine or safety devices. Unauthorized modifications may impair its function and safety.
- Check park brake operation frequently. Adjust and service as needed.

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

- Keep mower free of grass, leaves, or other debris build-up. To reduce fire hazard, keep engine, engine compartment, and area around battery free of grass, leaves, or excessive grease.
- Remove grass and debris from engine compartment and muffler area, before and after operating machine, especially after mowing or mulching in dry conditions.
- Clean up oil or fuel spillage.
- Allow engine to cool before storing in any enclosure.
- 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

SAFETY

building where fumes may reach an open flame or spark.

- Always shut off fuel when storing or transporting machine, if the machine has a fuel shutoff.

Tire Safety

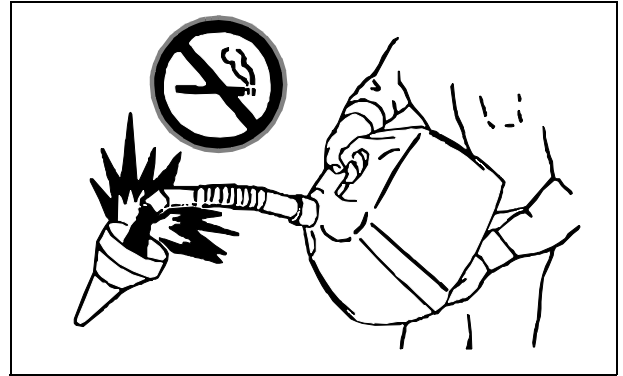


Explosive separation of a tire and rim parts can cause serious injury or death:

- 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.

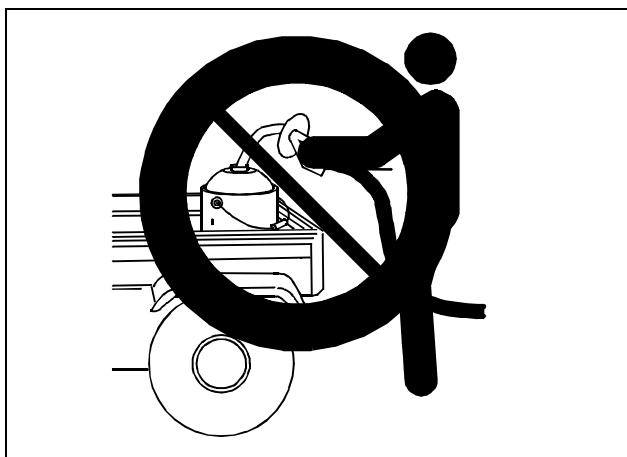
Handling Fuel Safely

Fuel and fuel vapors are highly flammable and explosive:



- Use extra care when handling gasoline and other fuels.
- Use only an approved container.
- Never remove gas cap or add fuel with the engine running. Allow the engine to cool before refueling. Do not smoke.
- Never refuel or drain the machine indoors. Move machine outdoors and provide adequate ventilation.
- Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- Replace all fuel tank and container caps securely.
- Prevent fires. Clean up spilled fuel immediately. If fuel is spilled on clothing, change clothing immediately. Do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.
- 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.

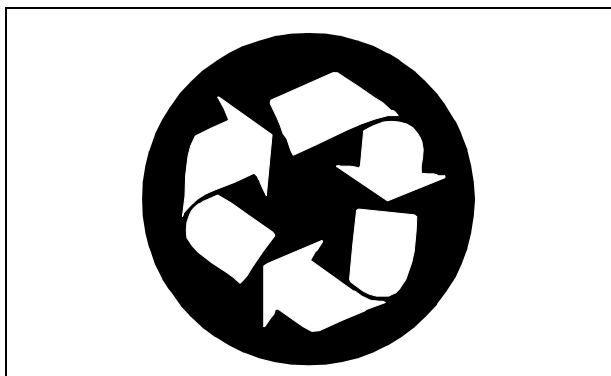
SAFETY



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.

- Static electric discharge can ignite gasoline vapors in an ungrounded fuel container. Remove the fuel container from the bed of a machine or trailer or the trunk of a car and place on the ground away from the machine before filling. Keep nozzle in contact with container opening while filling. Do not use a nozzle lock-open device.
- 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.

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,

OPERATING

Daily Operating Checklist

- ☐ Test safety systems.
- ☐ Check tire pressure.
- ☐ Check fuel level.
- ☐ Check engine oil level.
- ☐ Remove grass and debris from engine compartment and muffler area, before and after operating machine.
- ☐ Clean air intake screen.
- ☐ Check area below machine for leaks.
- ☐ Check all necessary guards and shields are in place.
- ☐ Check mower deck level, cutting height and blades.
- ☐ Check mower and drive belts.
- ☐ Check steering controls and park brake linkage for damage.

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.

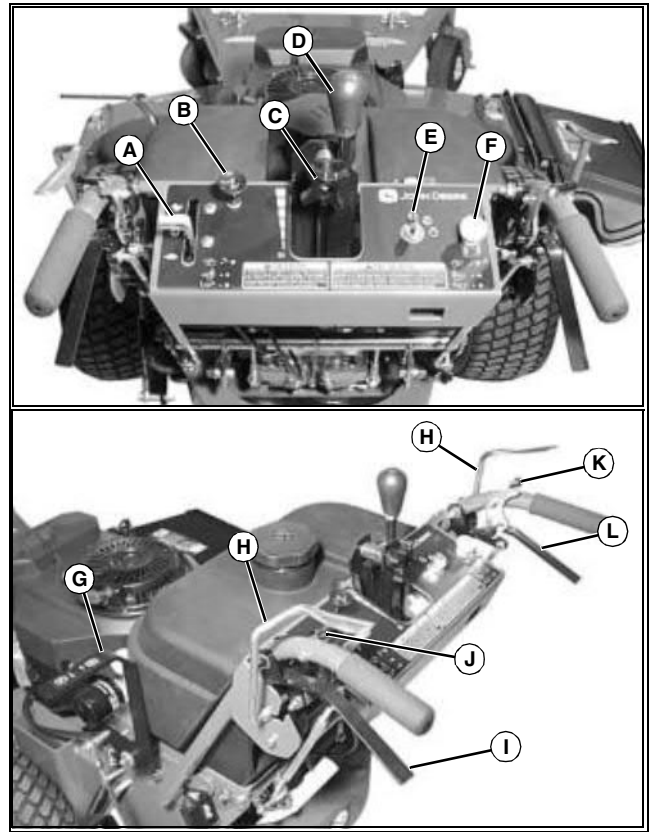
Recommended Accessories

Weight Kits

- Front weights are available for use on the Commercial Walk Behind Mower in hilly conditions. Use of weights will improve stability on slopes.
 - 7H19 - (1) front weight
 - 7H17 - (2) front weights
- Rear weights are available for both the 7H19 and 7H17 when using attachments such as baggers.

See your John Deere Dealer for more information.

Operator Station Controls

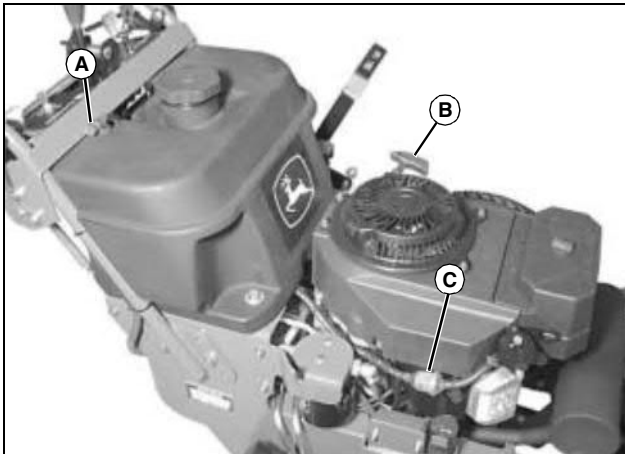


MX31727, MX31755

- A - Throttle Lever**
- B - Choke**
- C - Tracking Adjustment Knob**
- D - Speed Control Lever**
- E - Key Switch**
- F - PTO Switch Knob**
- G - Park Brake Lock Lever**
- H - Operator Presence Bail**
- I - LH Steering Control Lever**
- J - LH Neutral Lock**
- K - RH Neutral Lock**
- L - RH Steering Control Lever**

OPERATING

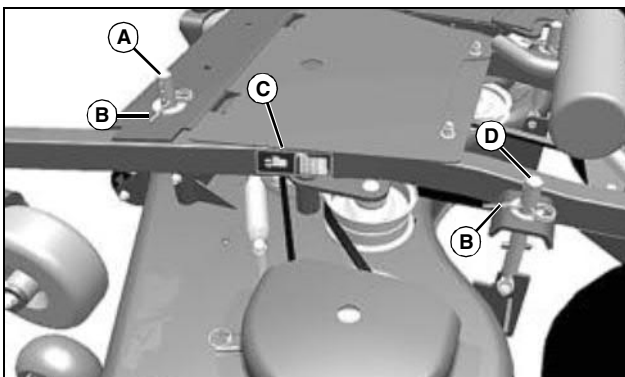
Engine Controls



MX31757

- A - Fuel Shutoff Valve**
- B - Starter Handle**
- C - Fuel Filter**

Mower Deck Height Controls

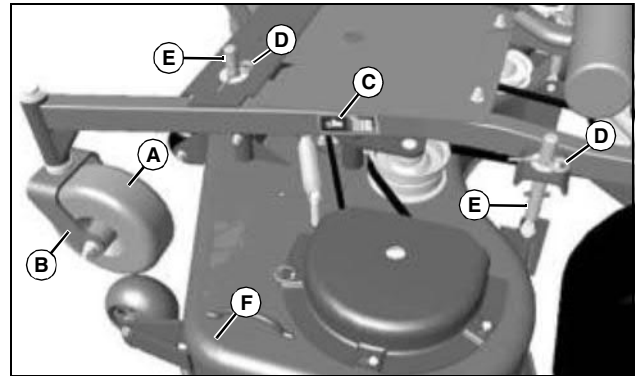


MX31759

Picture Note: Left side shown.

- A - Front Deck Suspension Pin**
- B - Height Adjustment Locking Pin**
- C - Cutting Height Adjustment Label**
- D - Rear Deck Suspension Pin**

Adjusting Mower Deck Cutting Height



MX31989

The mower deck height adjustment consists of seven different cutting heights. The seven cutting heights range from 38-114mm (1-1/2 - 4-1/2 in.) when front castor wheel (A) is located in lower mounting hole in the yoke (B), as shown.

The cutting height label (C) indicates the proper hole placement.

To change mower deck cutting height:



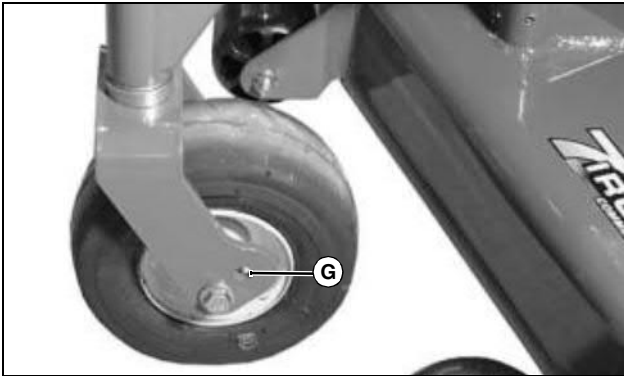
CAUTION: Avoid injury! Rotating parts can catch fingers, loose clothing, or long hair. Wait for engine and all moving parts to stop before leaving operator's station to adjust or service machine.

NOTE: To maintain a level mower deck, both sides, front, and rear of the deck must be adjusted equally.

1. Park machine safely. (See Parking Safely in the SAFETY section.)
2. Pull out height adjustment locking pins (D) from both suspension pins (E).
3. Lift or lower mower deck using handle (F) to the desired mower deck height as shown on the decal. A handle is located on each side of the mower deck.
4. Replace locking pins into appropriate holes in deck suspension pins.
5. Repeat procedure for other side of deck.

OPERATING

To Change Caster Wheel Height:

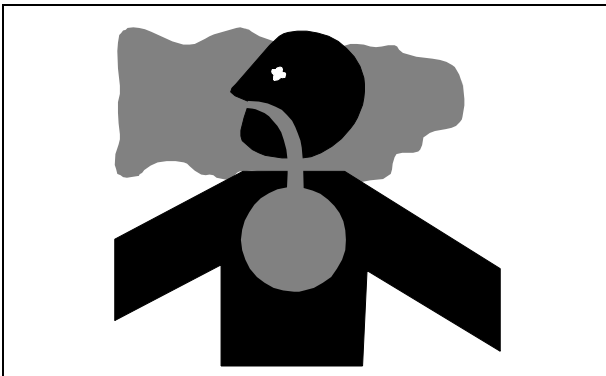


MX31990

To obtain a cutting height adjustment of less than 38mm (1-1/2 in.), it is necessary to put the caster wheel in the higher hole position (G). Moving the caster wheel to the higher hole position will lower the front of the deck by 13mm (1/2 in.) and allow a cutting height adjustment range of 25.4 to 101.6mm ((1 to 4 in.).

To obtain a 6.5mm (1/4 in.) cutting height adjustment, 6.5mm (1/4 in.) thick washers were provided with the machine. The washers must be added to all four deck suspension pins to insure proper level on the mower deck.

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 PTO Switch

1. Start engine.
2. Release operator presence levers.
3. Pull PTO switch knob up to engage PTO.

Result: The engine must stop.

Testing Park Brake Switch

1. Start engine.
2. Lock park brake.
3. Engage an operator presence lever.
4. Push speed control lever forward out of the neutral position.

Result: The engine must stop.

Testing Neutral Switch (Start)

1. Lock park brake.

OPERATING

2. Push PTO switch knob down to disengage.
3. Push speed control lever forward, out of the neutral position.
4. Pull starter handle to try and start engine.

Result: The engine must not start.

Testing Neutral Switch (Run)

1. Start engine.
2. Push PTO switch knob down to disengage.
3. Release operator presence levers.
4. Push speed control lever forward, out of the neutral position.

Result: The engine must stop.

Testing Operator Presence Switches

1. Start engine.
2. Push throttle to the 1/2 position.
3. Engage an operator presence lever.
4. Pull PTO switch knob up to engage PTO.
5. Release operator presence lever.

Result: The engine must stop when an operator presence lever is not engaged with the PTO engaged.

Repeat procedure using other operator presence lever.

Testing Park Brake

1. Inflate tires to correct pressures.
2. Stop machine on a 17° slope (30% grade). Stop engine and lock park brake.

Result: Park brake must hold the machine stationary. Machine should move no more than 61 cm (24 in.) in one hour. If machine moves more than that, brake needs to be adjusted. (See Adjusting Park Brake).

Using Park Brake

NOTE: With the engine running, the park brake must be unlocked before moving the speed control lever forward from the neutral position. The park brake must also be unlocked before traveling in reverse.

Locking Park Brake

1. Move speed control lever to the neutral position.



MX31984

Picture Note: Park brake lever shown in unlocked position.

2. Pull park brake hand lever (A) all the way to the rear.

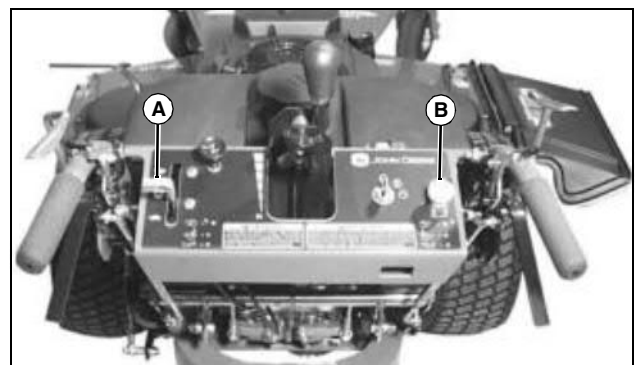
Unlocking Park Brake

- Lift the park brake hand lever (A) and move it fully forward to release.

Using PTO

NOTE: Prior to engaging the PTO, an operator presence lever must be engaged.

Engage PTO:



MX31983

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

Disengage PTO:

1. Push PTO switch knob (B) down.



Suggest:

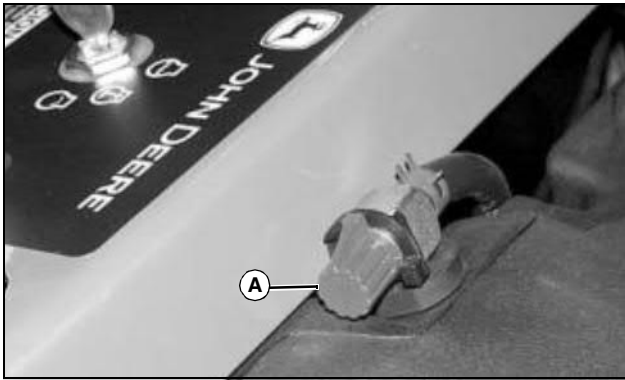
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Thank you so much for reading

OPERATING

Using Fuel Shut-Off Valve



MX31986

Picture Note: Valve shown in open/on position.

Move the fuel shut-off valve (A) to the on position for normal operation. Move the valve to the off position when the machine is not in use, and during transport.

Using Throttle



MX31727

- Push throttle lever (A) forward to the fast position (B) when mowing.
- Move throttle lever to the fast position (B) when starting and warming the engine.
- Pull throttle lever backward to the slow position (C) to idle engine. Do not run engine at slow idle any longer than necessary.

Starting Engine

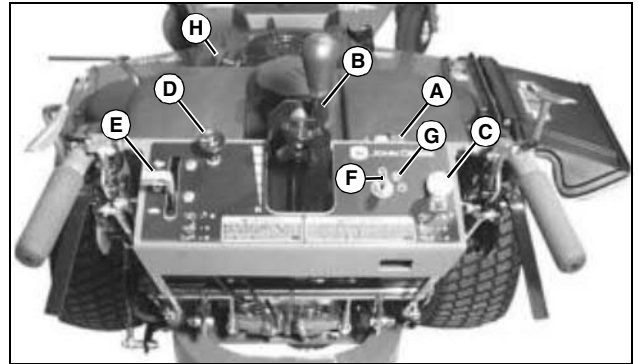


CAUTION: Avoid injury! Engine exhaust fumes contain carbon monoxide and can cause serious illness or death.

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.



MX31983

1. Open fuel shut-off valve (A).
2. Move speed control lever (B) to neutral position.
3. Check PTO switch knob (C). It must be down (OFF) for machine to start.
4. Set choke:
 - If engine is cold, pull choke knob (D) up to on position.
 - If engine is at operating temperature, choke should be in down (off) position. If necessary, pull choke knob up part way to start.
5. Set throttle lever:
 - If the engine is cold, push throttle lever (E) forward to the full open position.
 - If the engine is at operating temperature, push throttle forward to the full open position.
6. Turn key on (first position).
7. Pull starter handle (H) slowly until slack is removed, then pull hard to cycle engine. Repeat as necessary until engine starts, then let starter handle return slowly. Do not let go of handle and let it snap back to starter.

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