

**JOHN DEERE**  
**WORLDWIDE COMMERCIAL & CONSUMER**  
**EQUIPMENT DIVISION**

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**Lawn Tractors**  
**LTR155 and LTR166**

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**OPERATOR'S MANUAL**



**OMM142397 J9**

Export Version  
Litho in U.S.A.

# INTRODUCTION

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## Read This Manual

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage. This manual and safety signs on your machine may also be available in other languages (see your John Deere dealer to order).

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT-HAND AND LEFT-HAND sides are determined by facing the direction of forward travel.

SETTING FUEL DELIVERY BEYOND PUBLISHED factory specifications or otherwise overpowering will result in loss of warranty protection for this machine.

BEFORE DELIVERING THIS MACHINE, your dealer performed a pre-delivery inspection to ensure best performance.

THIS TRACTOR AND GRASS COLLECTOR ARE DESIGNED SOLELY for use in customary lawn mowing operations and collection of grass, for park and amenity area maintenance and for winter work or similar operation ("INTENDED USE"). Use in any other way is considered as contrary to the intended use.

The manufacturer accepts no liability for damage or injury resulting from this misuse, and these risks must be borne solely by the user. Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements for the intended use.

THIS TRACTOR AND GRASS COLLECTOR SHOULD BE OPERATED, serviced and repaired only by persons familiar with all its particular characteristics and acquainted with the relevant safety rules (accident prevention). The accident prevention regulations, all other generally recognized regulations on safety and occupational medicine and the road traffic regulations must be observed at all times.

Any arbitrary modifications carried out on this tractor will relieve the manufacturer of all liability for any resulting damage or injury.

# PRODUCT IDENTIFICATION

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## Record Identification Numbers

### Lawn Tractors

LTR155 & LTR166 PIN No. (020001 - )

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 serial number for the machine and for the engine. Record the information in the spaces provided below.

DATE OF PURCHASE:

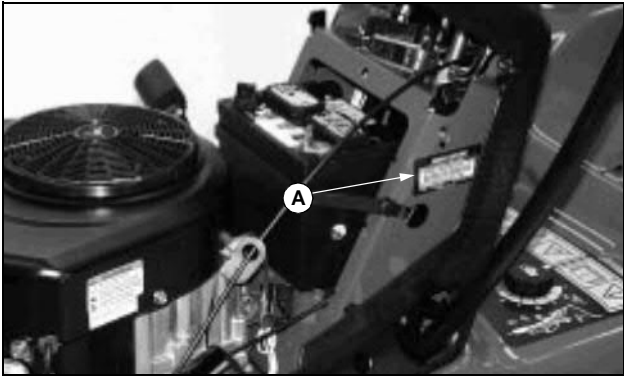
\_\_\_\_\_

DEALER NAME:

\_\_\_\_\_

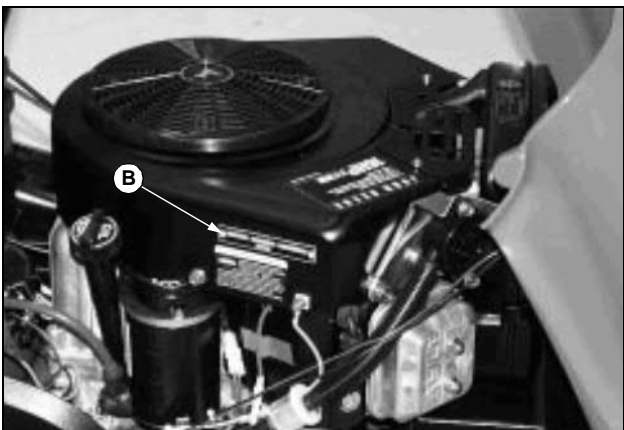
DEALER PHONE:

\_\_\_\_\_



PRODUCT IDENTIFICATION NUMBER (A):

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ENGINE SERIAL NUMBER (B):

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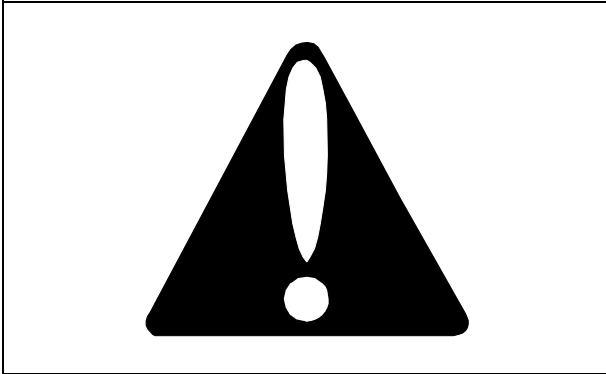
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OMm142397 J9 - English

# SAFETY

## Pictorial Safety Signs



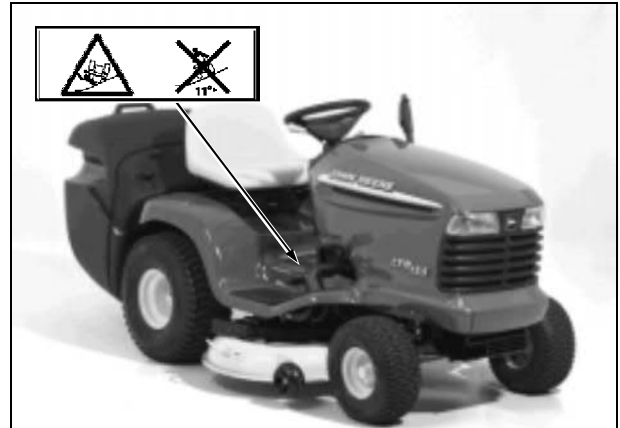
At several important places on this machine safety signs are affixed intended to signify potential danger. The hazard is identified by a pictorial in a warning triangle T. An adjacent pictorial provides information how to avoid personal injury. These safety signs, their placement on the machine and a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

## Read Operators Manual



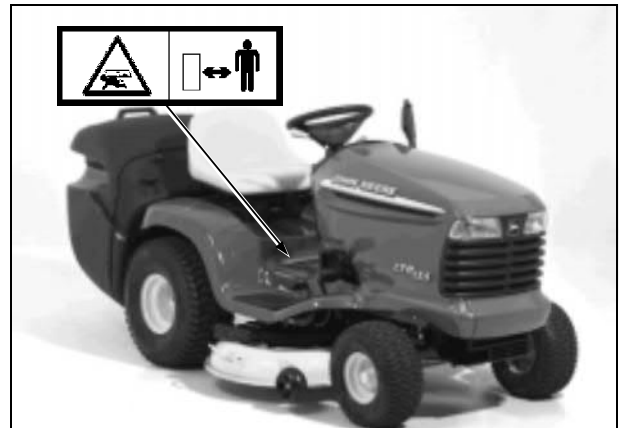
This operator's manual contains important information necessary for safe machine operation. Observe all safety rules to avoid accidents.

## Avoid Injury From Tipping



DO NOT drive where tractor could slip or tip. DO NOT drive on a slope with more than a 11° (19%) incline.

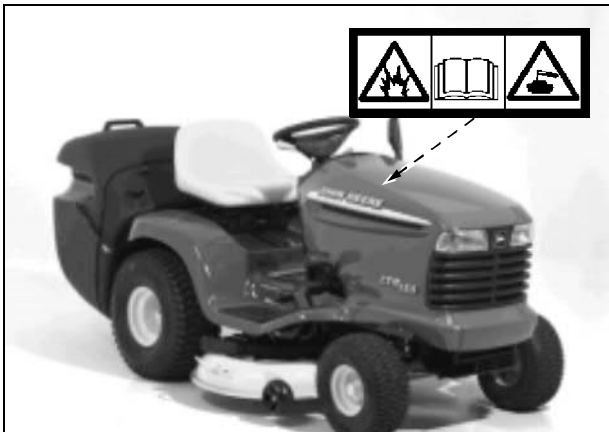
## Keep Children Away From Mower



Make sure that children stay clear of mower at all times when the engine is running.

# SAFETY

## Avoid Injury From Battery Gases and Acids



Batteries contain explosive gases and sulfuric acid. Use extreme caution when handling battery.

## Avoid Injury From Loaded Spring

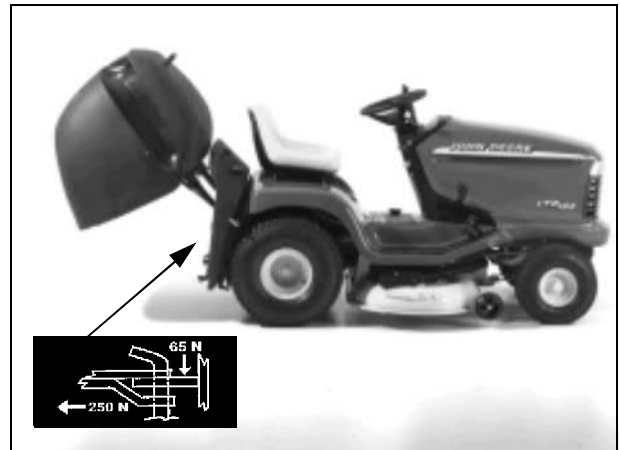


**Picture Note:** Decal is located on left-hand side of tractor frame.

Lock lift lever forward before changing attachment.

Read Operator's Manual thoroughly before changing attachment.

## Drawbar Load

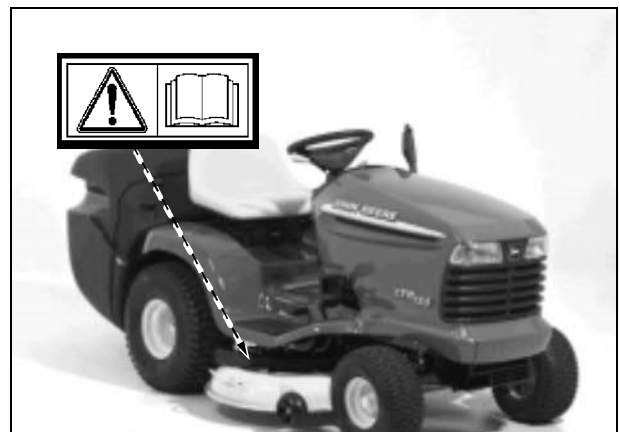


**Picture Note:** Located under Grass Collector, next to hitch plate.

DO NOT exceed the following recommended drawbar loads.

- Horizontal 250 N (56 lb)
- Vertical 65 N (15 lb)

## Caution Read Operators Manual

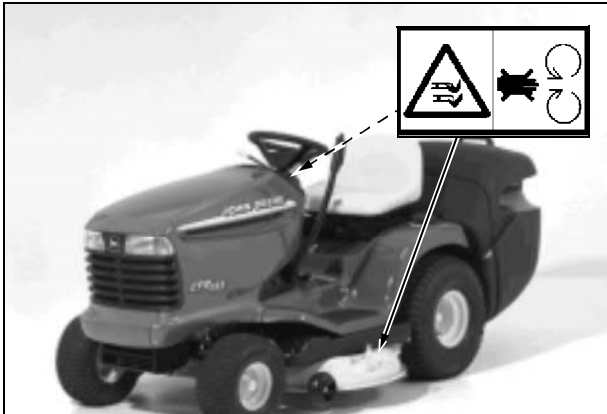


**Picture Note:** Located on Idler Arm of Mower Deck

This operator's manual contains important information necessary for safe machine operation. Observe all safety rules to avoid accidents.

# SAFETY

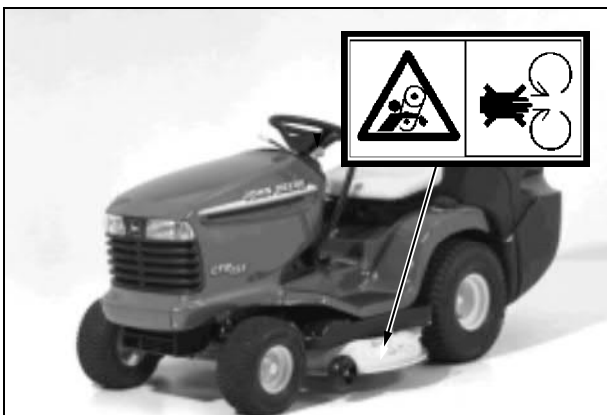
## Avoid Injury From Rotating Blades



Picture Note: Two decals, one on each side of deck.

DO NOT put hands or feet under or into mower when engine is running.

## Avoid Injury From Getting Caught in Belt



Picture Note: Decal appears on left side of deck.

DO NOT operate mower without shields in place.  
Stay clear of belts.

## WARNING

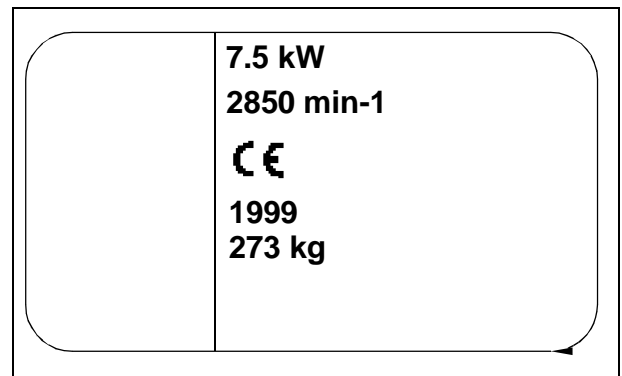


Picture Note: Label is located on Left-Hand Side of Briggs and Stratton Engine

- Read and follow Operating Instructions before running engine.
- Gasoline is flammable. Allow engine to cool at least 2 minutes before refueling.
- Engines emit carbon monoxide, DO NOT run in enclosed area.

## Sound Labels

This label on your tractor indicates that this model has been certified and is in compliance with European Directive 89/394EEC Standards.

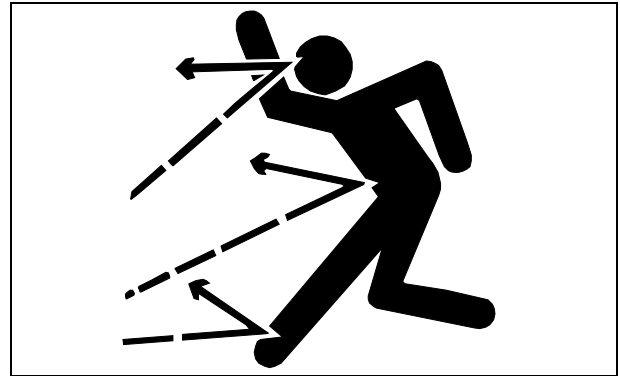


This label on your mower indicates that this model has been certified and is in compliance with European Directive 84/538EEC Standards.

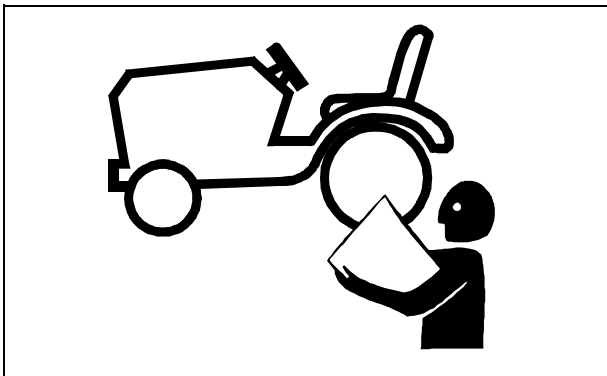
# SAFETY



## Checking Mowing Area



## 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.
- Check brake action before you operate. Adjust or service brakes as necessary.
- Stop machine if anyone enters the area.
- If you hit an object, stop the machine and inspect it. 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.
- Be careful of traffic when operating near or crossing roadways.
- Do not wear radio or music headphones while operating the machine. Safe operation requires your full attention.
- Older adults are involved in a large percentage of riding mower accidents involving injury. These operators should evaluate their ability to operate a mower safely enough to protect the operator and others from serious injury.

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

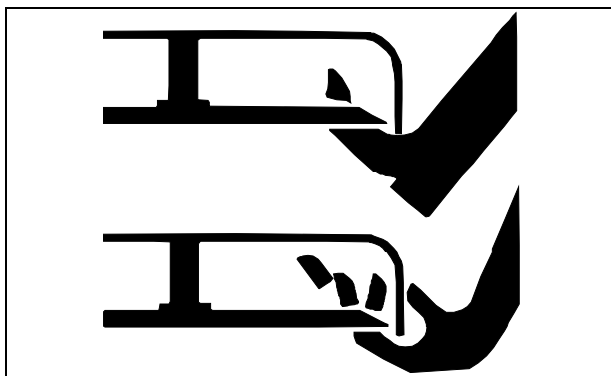
1. Stop machine on a level surface, not on a slope.
2. Disengage mower blades.
3. Lower attachments to the ground.
4. Lock the park brake.
5. Stop the engine.
6. Remove the key.
7. Wait for engine and all moving parts to stop before you leave the operator's seat.



# SAFETY

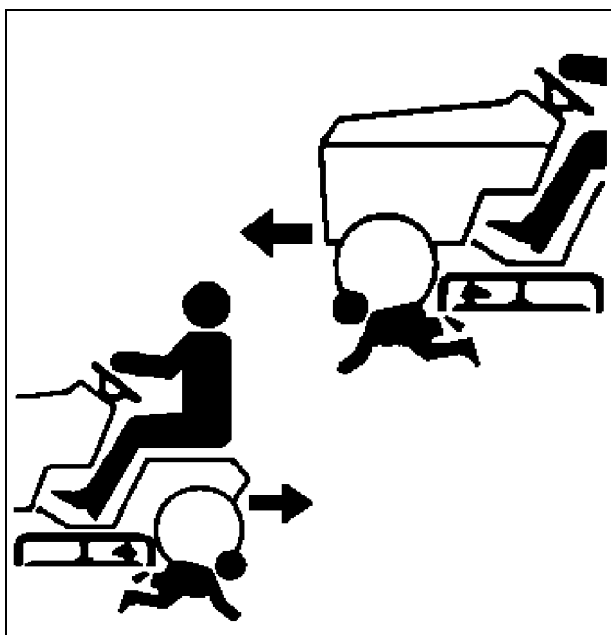
## Rotating Blades are Dangerous

### HELP PREVENT SERIOUS OR FATAL ACCIDENTS:



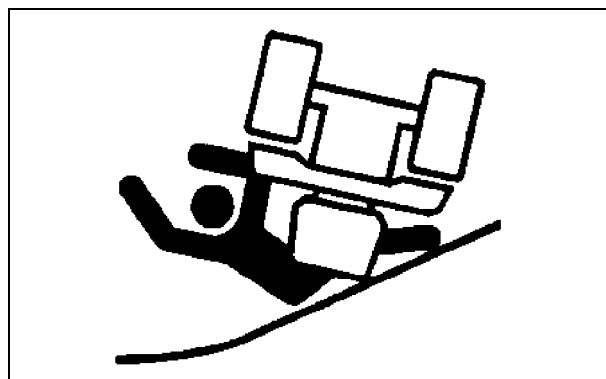
- Rotating blades can cut off arms and legs.
- Keep hands, feet and clothing away from mower deck when engine is running.
- Be alert at all times, drive forward carefully. People, especially children can move quickly into the mowing area before you know it.
- Before backing up, shut off PTO and look behind the machine carefully, especially for children.
- Do not mow in reverse.
- Shut off blades when you are not mowing.
- Do not operate machine if you are under the influence of drugs or alcohol.
- Park machine safely before inspecting or unplugging mower or bagger.

### 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 indoors when you are mowing. Turn the 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 any attachment or machine even with the blades off. Do not tow children in a cart or trailer.

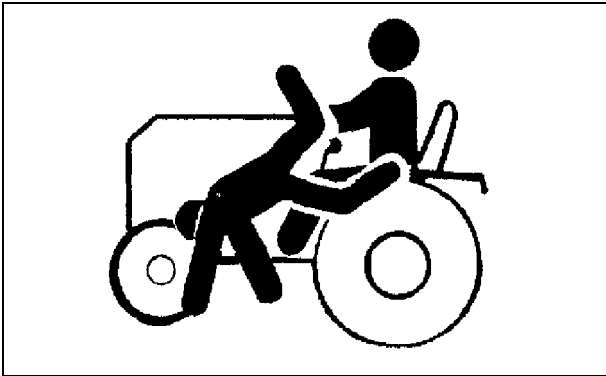
## Avoid Tipping



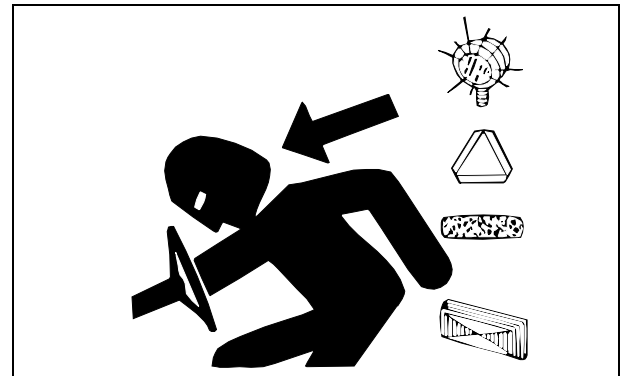
- Do not drive where machine could slip or tip.
- Stay alert for holes and other hidden hazards in the terrain.
- Keep away from drop-offs.
- Slow down before you make a sharp turn or operate on a slope.
- Limit loads to those you can safely control. Use only approved hitches when pulling loads or using heavy equipment. Use counterweights or wheel weights as required in this manual or your attachment manual.
- Use wheel weights for added stability when operating on slopes or using rear mounted attachments.
- Drive up and down a hill - not across. Be careful when you change direction on a slope.
- Do not stop when going up hill or down hill. If machine stops going up hill, disengage mower blades and back down slowly.
- Mowing when grass is wet can cause reduced traction and sliding.
- Do not try to stabilize the machine by putting your foot on the ground.

# SAFETY

## Keep Riders Off

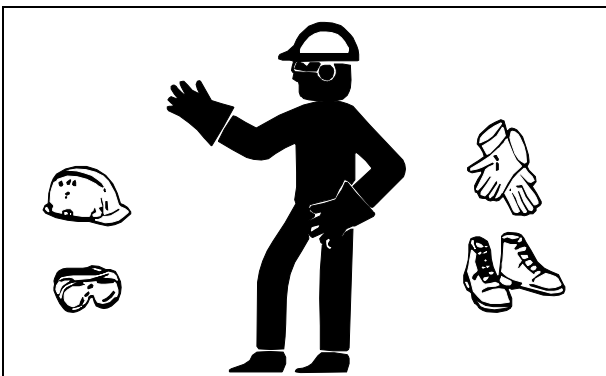


- Only allow the operator on the machine. Keep riders off.
- Riders on the machine or attachment may be struck by foreign objects or thrown off the machine causing serious injury.
- Riders obstruct the operator's view resulting in the machine being operated in an unsafe manner.



- 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.

## Wear Appropriate Clothing



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

## Driving Safely on Public Roads

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

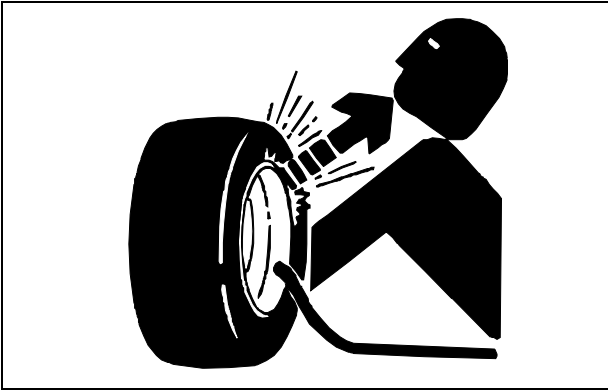


- Understand service procedure before doing work. Keep area clean and dry.
- Never lubricate, service, or adjust machine while it is moving. Keep safety devices in place and in working condition. Keep hardware tight.
- Keep hands, feet, clothing, jewelry, and long hair away from any moving parts, to prevent them from getting caught.
- Lower attachments to the ground before servicing machine. Disengage all power and stop the engine. Lock park brake and remove the key. Let machine cool.
- Securely support any machine elements that must be raised for service work.
- Never run engine unless park brake is locked.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

# SAFETY

- Disconnect battery negative (-) cable before making adjustments on electrical systems or welding on machine.
- Do not modify machine. Unauthorized modifications may impair its function and safety.
- Do not wear radio or music headphones while servicing the machine. Safe service requires your full attention.

## Tire Safety

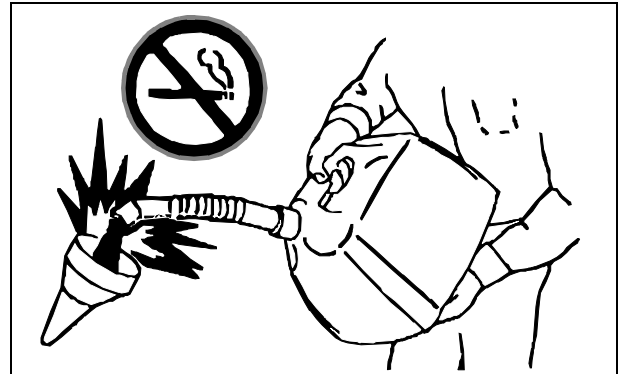


Explosive separation of a tire and rim parts can cause serious injury or death:

- 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:



- DO NOT refuel machine while you smoke, when machine is near an open flame or sparks, or when engine is running. STOP engine.
- Fill fuel tank outdoors.
- Prevent fires: clean oil, grease and dirt from machine. 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.
- 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.

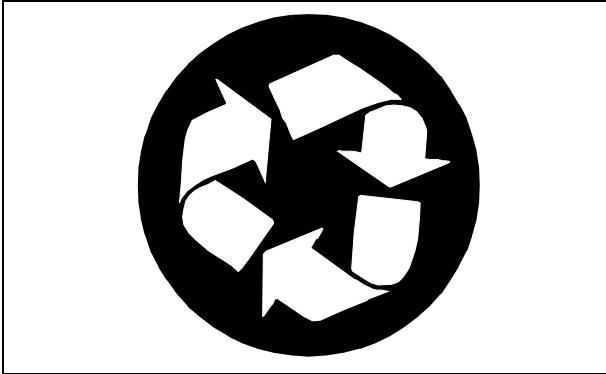


- When practical, remove equipment from trailers or truck beds and refuel them on the ground. If this is not possible, use a portable, plastic fuel container to refuel equipment on a truck bed or trailer.
- DO NOT use METHANOL gasoline. METHANOL is harmful to the environment and to your health.

# SAFETY

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## 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 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.

# OPERATING

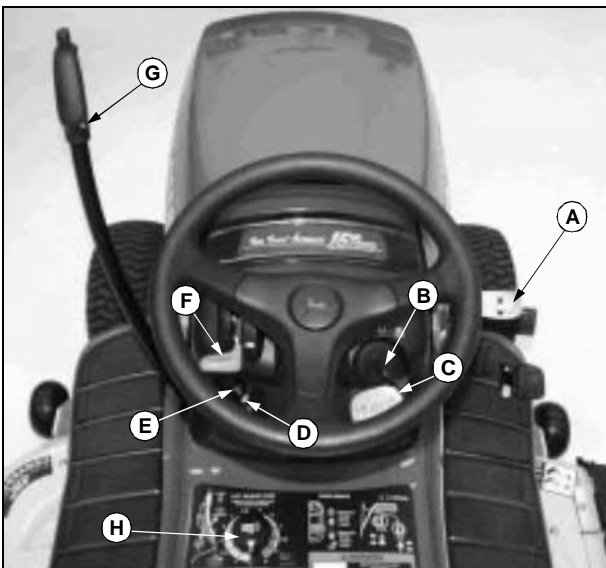
## Daily Operating Checklist

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

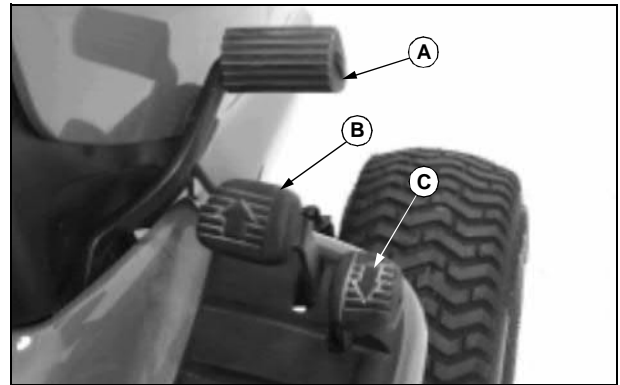
## Avoid Damage to Plastic and Painted Surfaces

- 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

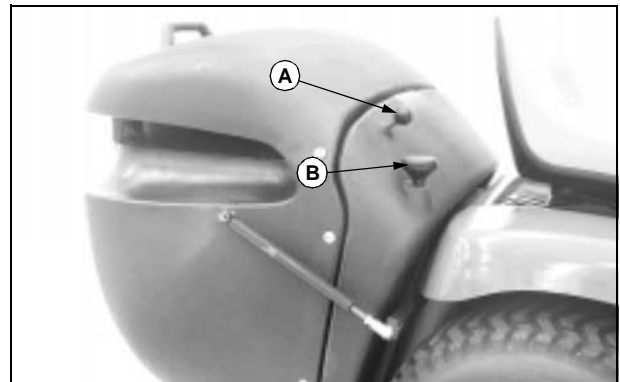


- A - Mower Engagement Lever**
- B - Key Switch**
- C - Park Brake Lever**
- D - Reverse Implement Option (RIO) Switch**
- E - Choke Knob (LTR166 Only)**
- F - Throttle Lever**
- G - Lift Lever**
- H - Mower Height Control Knob**



- A - Brake Pedal**
- B - Forward Travel Pedal**
- C - Reverse Travel Pedal**

## Miscellaneous Controls

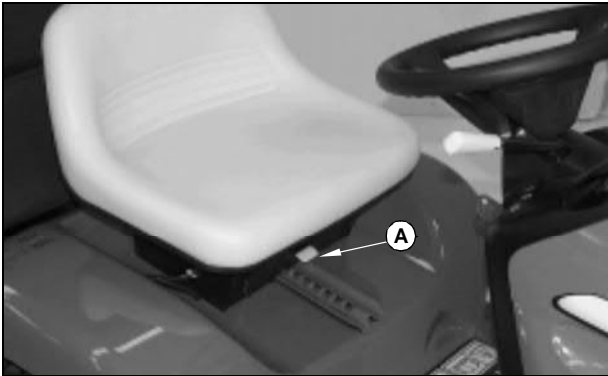


- A - Bucket Removal Knob**
- B - Push to Open Bucket Knob**

# OPERATING

## Adjusting Seat

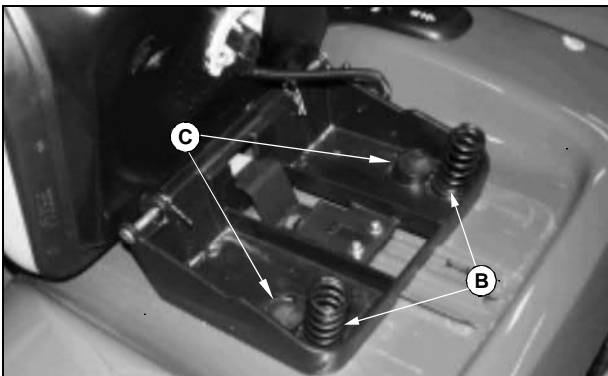
To adjust seat position:



1. Pull lever (A) up, out of locked position.
2. Slide seat forward or rearward to desired position.
3. Release lever.

To adjust seat for ride comfort:

Lift seat, unscrew and move springs to desired position as follows:



- Install both springs into front position (C) for softest ride.
- Install both springs into rear position (B) for firm ride.
- Install springs in all four positions (B and C) for the firmest ride. (Order additional springs from your John Deere dealer.)

## Adjusting Cutting Height

**NOTE:** Lift lever should be in transport position before turning cutting height knob.

Cutting height can be adjusted from approximately 25–100 mm (1–4 in). When lift lever is in transport position, cutting height is approximately 100 mm (4 in).

1. Put lift lever in transport position.



2. Turn cutting height knob (A) to desired cutting height. Mower will be at that cutting height when it is lowered.
3. Adjust mower wheels.

## Adjusting Mower Deck Wheels



**CAUTION:** Avoid injury! Rotating blades are dangerous. Before adjusting or servicing mower:

- Disconnect spark plug wire(s) to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.

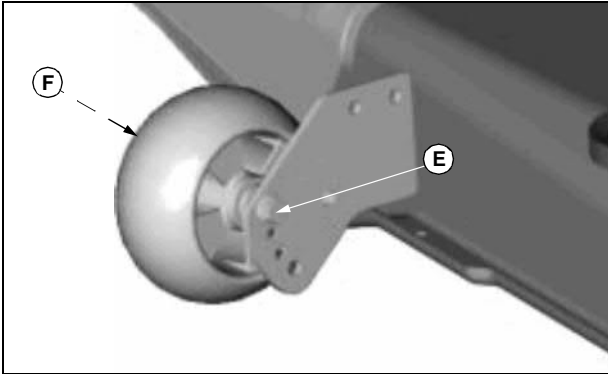
**IMPORTANT:** Avoid damage! The mower deck can be damaged if mower wheels are adjusted wrong:

- Wheels must not ride on ground supporting mower weight.
- Check wheel adjustment each time cutting height is changed.

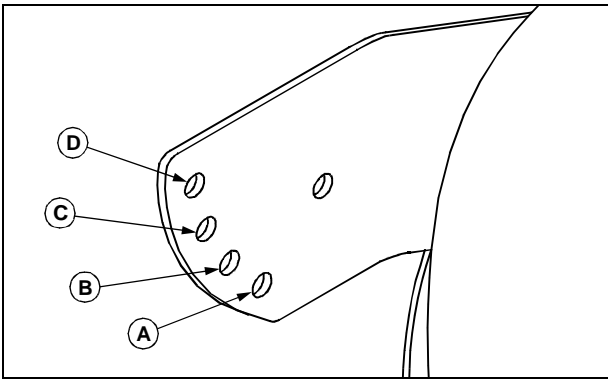
1. Park machine safely on a level surface. (See Parking Safely in the Safety Section.)
2. Inflate tires to the correct pressure.
3. Move lift lever to the transport position and adjust cutting height.
4. Move lift lever to the mowing position.

# OPERATING

**NOTE: Bottom of wheels should be approximately 3-13 mm (1/8-1/2 in.) from the ground.**



5. Check mower wheel position. Remove bolt (E) and nut (F) on wheels and move wheels to proper hole.



6. Install bolts and nuts and tighten to 34 N•m (25 lb-ft).

Hole	42 Rear Discharge
A	64 mm (2.5-in.) and above
B	51 mm (2-in.)
C	38 mm (1.5-in.)
D	25 mm (1-in.)

## Adjusting Mower Level (Side-to-Side)



**CAUTION: Avoid injury! Rotating blades are dangerous. Before adjusting or servicing mower:**

- Disconnect spark plug wire(s) to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.

**NOTE: Mower wheels should not contact the ground when leveling the deck.**

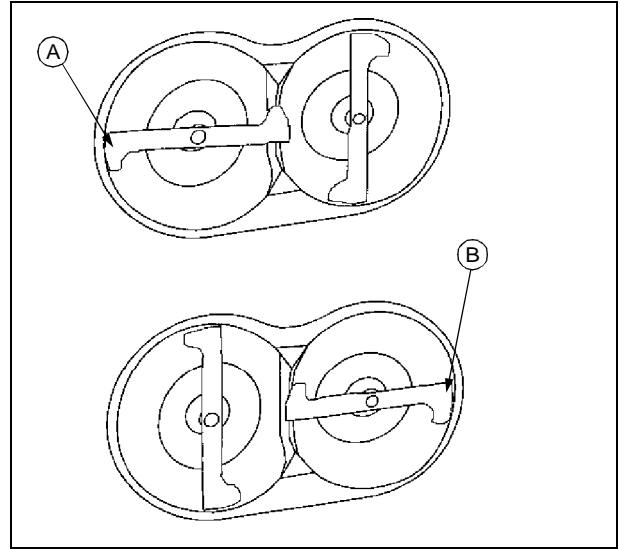
1. Park machine safely on a level surface. (See Parking

Safely in the Safety Section.)

2. Inflate tires to the correct pressure.
3. Adjust cutting height to 50 mm (2 in).
4. Put lift lever in mowing position.

**NOTE: The difference between blade measurements must not be more than 3 mm (1/8 in).**

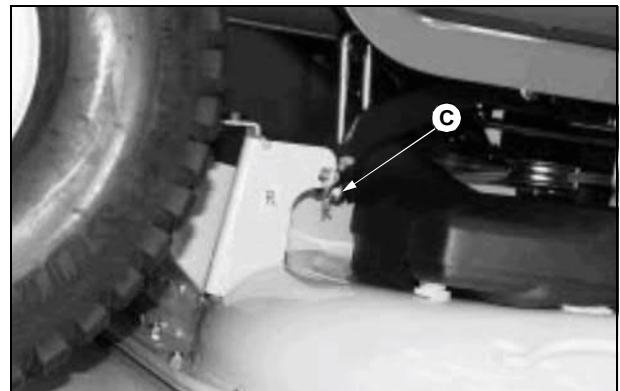
5. Position mower blades as follows and measure from each outside blade tip to the level surface:



- Turn blade (A) as shown. Take measurement. Rotate blades 90° so that blade (B) is positioned as shown. Take measurement.

**NOTE: Cutting height can closely match knob setting by adjusting lift links on both sides of deck.**

**Deck will not lock in Transport position if adjusted too high.**



6. Adjust lift links by turning nut (C) clockwise to raise right side of mower, counterclockwise to lower right side of mower.

**Thank you very much  
for your reading.**

**Please click here and go  
back to the website.**

**Then, you can  
download the complete  
manual instantly.**

**No waiting.**