

# 4100 Compact Utility Tractor with Gear Transmission

Serial No. (010001 - )



## OPERATOR'S MANUAL

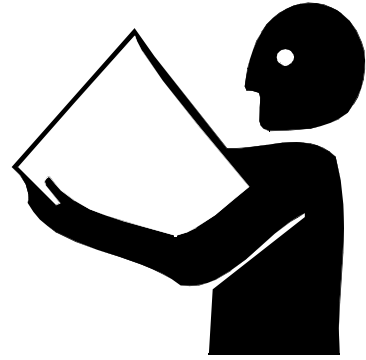
John Deere  
Worldwide Commercial And  
Consumer Products Division  
OMM134595 J7

North American Version  
Litho in U.S.A.  
English

# INTRODUCTION

**THANK YOU** for purchasing a John Deere product.

Read this manual and your attachment manuals thoroughly. Failure to do so could result in personal injury or equipment damage.



**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

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 metric units and their U.S. customary equivalents. 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, it indicates the part it is pointing to is hidden.



Record identification numbers below. Be sure to record all the numbers to help in tracing the machine if it is stolen. You also need to give these numbers to your dealer when you order parts.

**DATE OF PURCHASE:** \_\_\_\_\_

**DEALER NAME:** \_\_\_\_\_

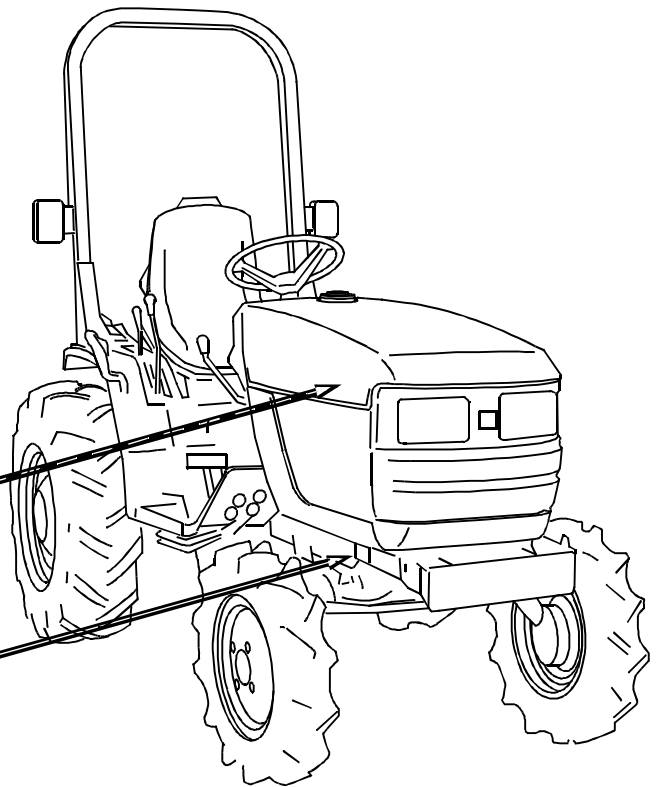
**DEALER PHONE:** \_\_\_\_\_

**Engine Serial Number:**

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**Machine Product Identification Number:**

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# SAFETY SIGNS

## Safety-Alert Symbol

Read and recognize safety information. Be alert to the potential for personal injury when you see this safety-alert symbol.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with this safety-alert symbol. DANGER identifies the most serious hazards. In this manual, the word CAUTION and this symbol call attention to safety messages.



## Machine Safety Labels

### Avoid crushing injuries:

- DO NOT jump if machine tips.
- Use machine seat belt.



### Avoid injury from tipover:

- Drive up and down slopes, not across.
- Avoid sudden stops.
- If machine stops going uphill, stop blades and back down slowly.



## SAFETY SIGNS

### Avoid injury to children:

- STOP mower when children are near.
- DO NOT mow in reverse.
- Look behind machine when backing.
- Never carry riders, especially children.



### Avoid injury to operator and bystanders:

- Read operator's manual before operating this tractor.
- Keep all shields in place.
- Hitch towed loads only to drawbar to avoid rearward upset.
- Make certain everyone is clear of machine before starting engine or operation.
- Keep all riders off tractor and equipment.
- Keep hands, feet and clothing away from power-driven parts.
- Use seat belt. Extend belt completely from any wind-up device before adjusting to fit.
- Reduce speed when turning or applying individual brakes or operating around hazards, on rough ground or steep slopes.
- Couple brake pedals together for road travel.
- Use flashing warning lights on highway unless prohibited by law.
- Stop engine, lower implement to ground, shift to "N" neutral and set park brake securely before dismounting.
- Wait for all movement to stop before servicing machinery.
- Remove key if leaving tractor unattended.



## SAFETY SIGNS

### Operate and service safely:

- To avoid injury, read the operator's manual.
- Keep all shields in place.
- Stop engine, set park brake and remove key before leaving or servicing machine.



### Prevent injury from hot surfaces:

- DO NOT touch engine muffler, it may be hot.



## SAFETY SIGNS

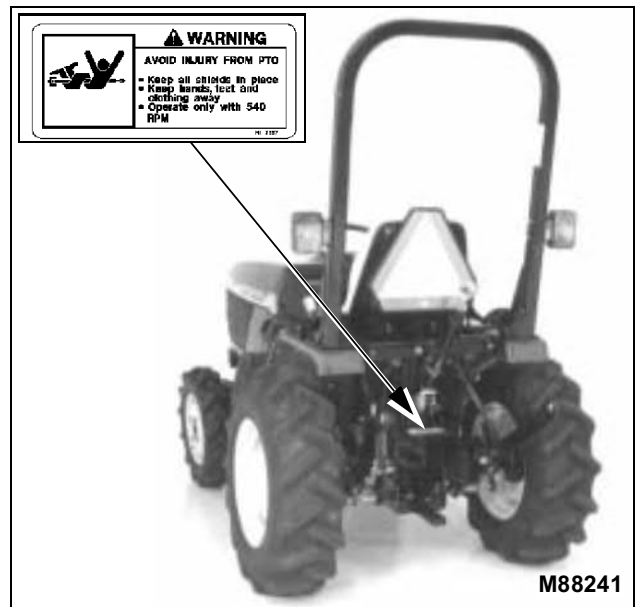
### Avoid injury from battery gases and acids:

- Shield eyes. Explosive battery gases and acid can cause blindness or injury. Flush eyes immediately with water and see medical attention.
- Use extreme caution when handling battery.
- Keep cigarettes, sparks, and flames away from battery.



### Avoid injury from rear rotating driveshaft:

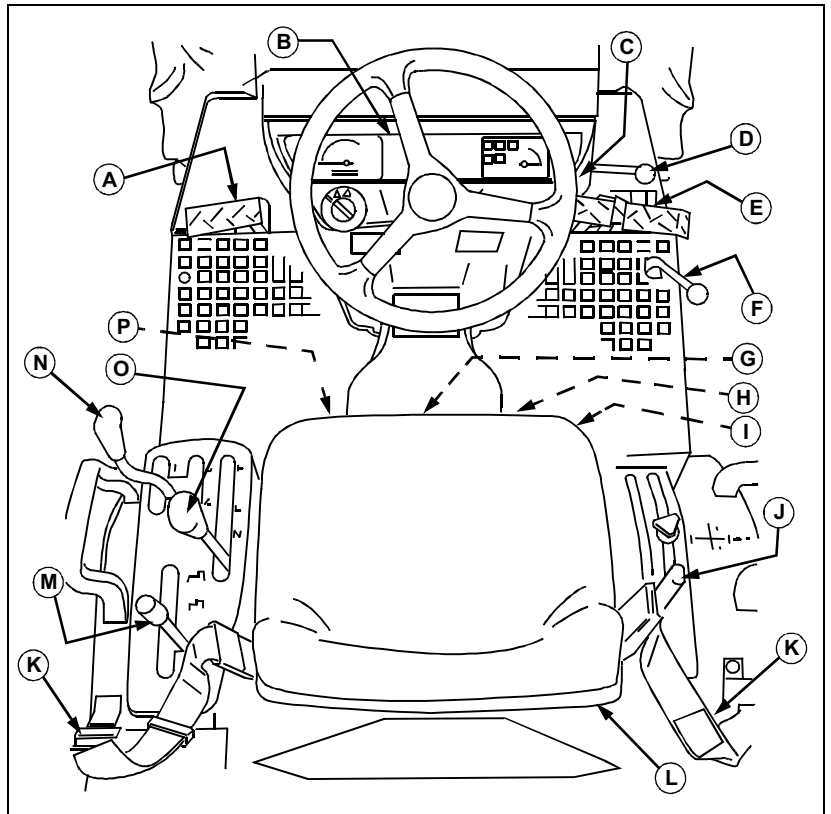
- Keep hands, feet and clothing away from rear rotating driveshaft.
- Keep all shields in place.
- Operate rear driveshaft only at 540 RPM.



# CONTROLS

## Operator Station Controls

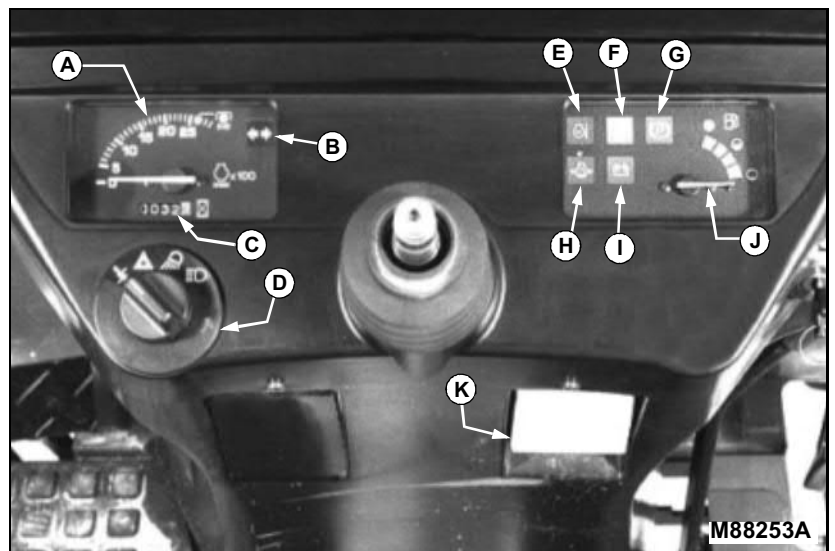
- A - Clutch Pedal
- B - Instrument Panel
- C - Key Switch
- D - Hand Throttle
- E - Brake Pedals
- F - Foot Throttle
- G - Speed of Drop / Lock Valve
- H - Differential Lock Lever
- I - Operator Seat Adjustment Lever
- J - Depth Control Lever
- K - Seat Belt
- L - Operator Seat
- M - Power Take Off (PTO) Lever
- N - Gear Shift Lever
- O - 2-Speed Range and Direction Lever
- P - Four Wheel Drive (4WD) Lever



## Instrument Panel

**NOTE:** Steering wheel removed for clarity of photo.

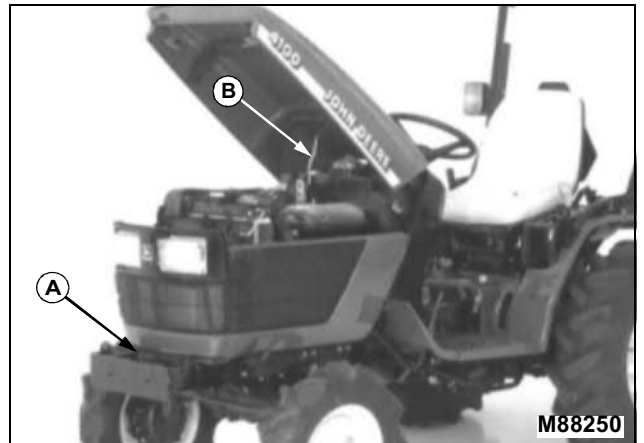
- A - Tachometer
- B - Light - Warning Flasher Lamps
- C - Hour Meter
- D - Light Switch
- E - Light - Engine Coolant Temperature
- F - Light - PTO Engage
- G - Light - Parking Brake Set
- H - Light - Engine Oil Pressure
- I - Light - Battery Low Voltage
- J - Fuel Gauge
- K - Park Brake Lever



# CONTROLS

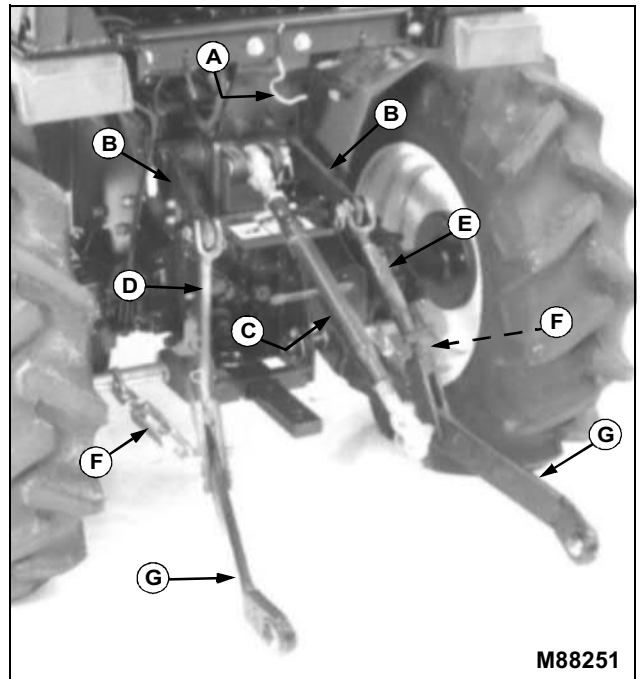
## Hood Controls

- A - Hood Release
- B - Hood Support



## 3-Point Hitch

- A - Center Link Storage Hook
- B - Lift Arms
- C - Center Link
- D - Lift Link - Solid
- E - Lift Link - Adjustable
- F - Sway Links
- G - Draft Links

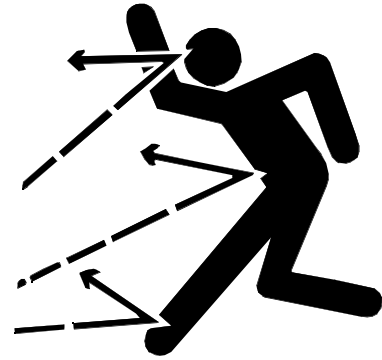


# OPERATING MACHINE

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## Operate Safely

- Check brake action before you operate. Adjust or service brakes as necessary.
- 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.
- Clear work area of objects that might be thrown. Keep people and pets out of the work area. 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.



## Park Safely

- Stop machine on a level surface, not on a slope.
- Disengage PTO.
- Lock brake levers.
- STOP engine.
- Remove key.
- Before you leave the operator's station, wait for engine and all moving parts to STOP.

## OPERATING MACHINE

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### Rotating Blades Are Dangerous - Protect Children And Prevent Accidents

#### 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.

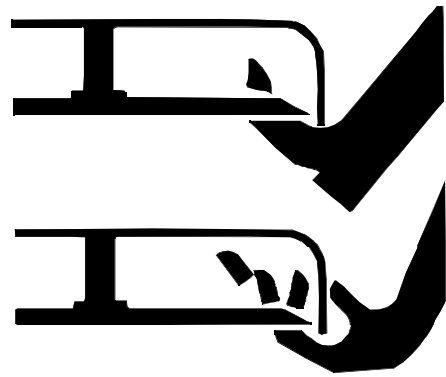
#### HELP PREVENT SERIOUS OR FATAL ACCIDENTS:

- 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 drugs or alcohol.

### Use Seat Belt Properly

Use a seat belt when you operate with a roll-over protective structure (ROPS) or cab to minimize chance of injury from an accident such as an overturn.

Do not use a seat belt if operating without a ROPS or cab.



# OPERATING MACHINE

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## 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.
- When pulling loads or using heavy equipment, use only approved hitches, limit loads to those you can safely control, and use counterweights or wheel weights when required per this manual or your attachment manual.
- 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, STOP PTO and back down slowly.
- DO NOT mow wet grass. Reduced traction could cause sliding.
- DO NOT try to stabilize the machine by putting your foot on the ground.

## Operator Training Required

- Study operating section of this manual before operating the machine.
- Operate 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.

## Keep Riders Off

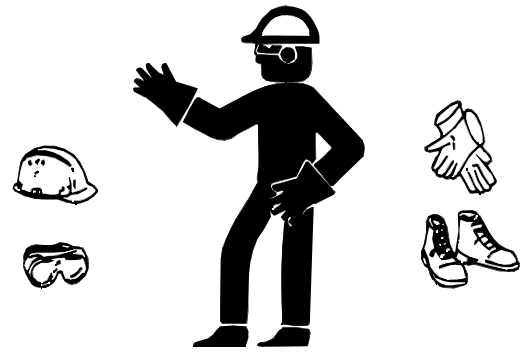
- Only allow the operator on the machine. Keep riders off.
- Riders on the machine or attachment may be struck by foreign objects or thrown off the machine causing serious injury.
- Riders obstruct the operator's view resulting in the machine being operated in an unsafe manner.

# OPERATING MACHINE

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## Wear Appropriate Clothing

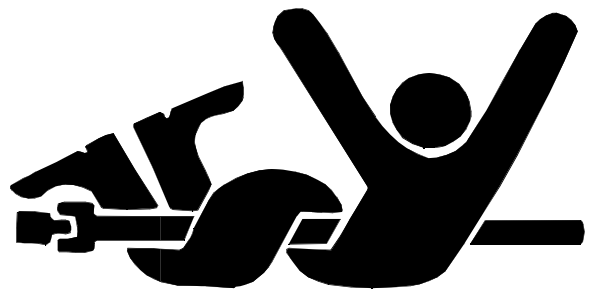
- Wear close fitting clothing and safety equipment appropriate for the job.
- Loud noise can cause impairment or loss of hearing, wear a suitable protective device such as earplugs.



## Stay Clear of Rotating Drivelines

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.

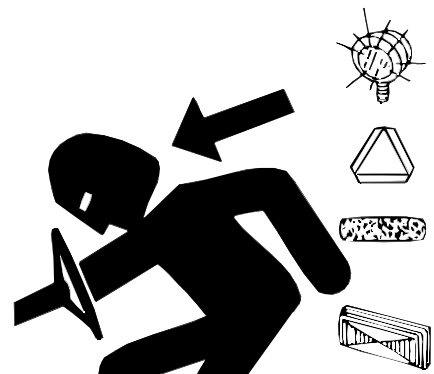


## Check Wheel Bolts

- A serious accident could occur causing serious injury if wheel bolts are not tight.
- Check wheel bolt tightness often during the first 100 hours of operation.

## Transport Safely

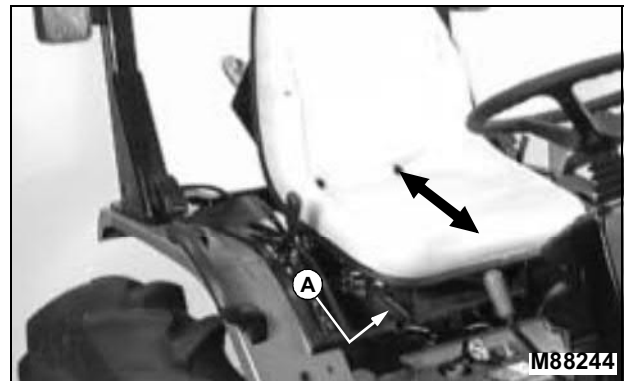
- Use safety lights and devices. Slow moving machines when driven on public roads are hard to see, especially at night. Avoid personal injury or death resulting from a collision with a vehicle.
- Whenever driving on public roads, use flashing warning lights and turn signals according to local regulations. Extra flashing warning lights may need to be installed.



# OPERATING MACHINE

## Adjusting Operator Seat

Before starting engine to drive tractor, move seat positioning lever (A) and slide seat forward or rearward to the most comfortable position. Release lever to lock seat in position. Make sure all controls can be reached.



## Using Seat Belt

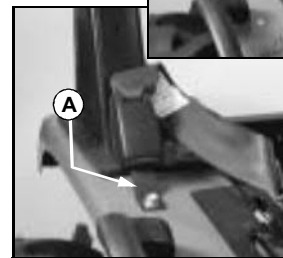
**CAUTION:** Use a seat belt when you operate with a Roll-Over Protective Structure (ROPS) to minimize chance of injury from an accident, such as an overturn.

**Do not use a seat belt if operating without a ROPS.**

Connect both end of the seat belt until they “CLICK” together. Tighten or loosen seat belt until you are firmly held onto the seat.

To release seat belt, “PRESS” the red button.

When seat belts are not being used, place seat belt ends into each fender mounted retainer (A).



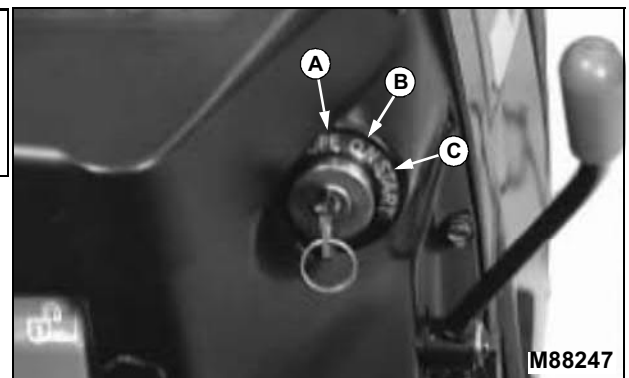
## Using Ignition Switch

**IMPORTANT:** When tractor is not be used or when tractor is being serviced, make sure key switch is in the “OFF” position and the key is removed.

A - “OFF” Position - In this position the engine will not be running.

B - “ON” Position - Move key from “OFF” to this position and the Engine Oil Pressure Light and Battery Charging Light will turn on. You will also hear the engine fuel shut-off solenoid engage with a CLICK.

C - “START” Position - Move key from “ON” to this position and the starter will engage the engine flywheel to start the engine. When the key is released it will automatically return to the “ON” position allowing the engine to run.



# OPERATING MACHINE

## Understanding Instrument Panel - Right Side

**A - Engine Coolant Temperature Light** - This light will turn on when the engine coolant is approaching a dangerously hot temperature. If this light turns on, remove load on tractor immediately. Reduce engine to idle speed and check for something blocking air flow to the radiator and check engine coolant level. If light stays on after cleaning grille, STOP engine.

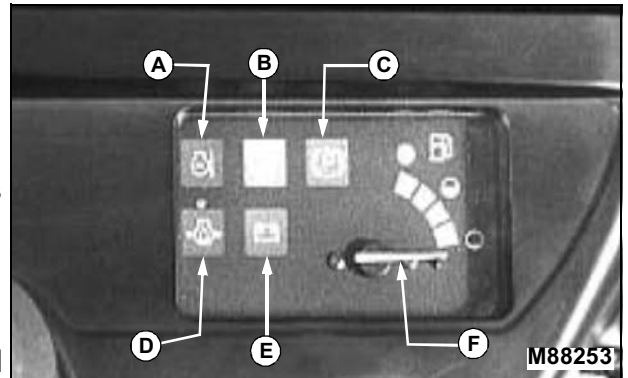
**B - PTO Engaged Light** - This light will turn on when the PTO is engaged.

**C - Parking Brake Set Light** - This light will turn on and flash when the Parking Brake is set.

**D - Engine Oil Pressure Light** - This light will turn on when the ignition key is in the ON position and the engine is not running. If this light turns on while the engine is running, STOP engine. This light will turn on when engine oil pressure is too low. This is an indication that the engine is low on oil.

**E - Battery Charging Light** - This light will turn on when the ignition key is in the ON position and the engine is not running. If this light turns on while the engine is running, move the throttle lever to the full throttle position. Stop the engine if light remains on. This light will turn on when the alternator output is too low.

**F - Fuel Gauge** - Show approximately how much fuel is in the fuel tank. Includes Full marker, Half-Full marker and Empty marker.



# OPERATING MACHINE

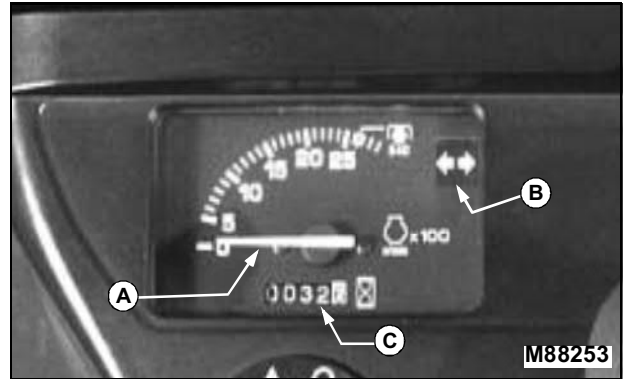
## Understanding Instrument Panel - Left Side

A - **Tachometer** - Shows engine speed. Engine speed is shown in 100's. Example: If indicator is pointing at 20 (20 x 100 = 2000 RPM). Note the special marker labeled "540" with a gear icon - With the indicator pointing at the "540" marker, this is the proper engine speed for the 540 RPM Power Take Off (PTO).

- Slow idle speed.....1025 rpm
- Rated speed..... 2650 rpm
- Fast speed..... 2860 rpm

B - **Warning Flasher Lights ON Light** - This light will turn on and Flash when the Light Switch is turned to the Warning Flasher Lights ON position or Headlights, Taillights and Warning Flasher Lights ON position.

C - **Hour Meter** - Shows the number of used hours the engine has run at 2650 rpm. If engine has run at less than 2650 rpm, the indicated hours are less than the actual running hours. Use the hour meter as a guide when servicing various components of this tractor.

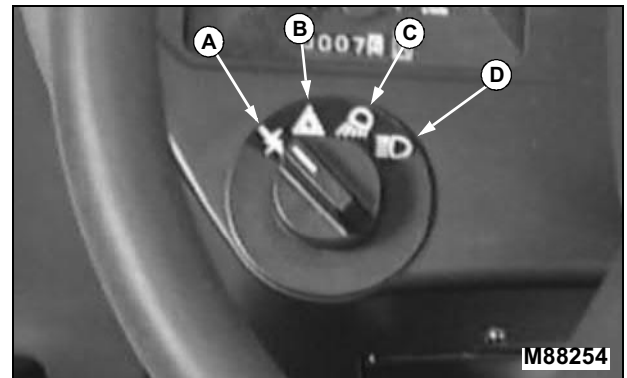


## Using Light Switch

**NOTE:** The light switch will operate only when the ignition key is in the "ON" position.

Rotate switch to the desired position.

- A - All Lights OFF
- B - Warning Flasher Lights ON
- C - Headlights and Taillights ON
- D - Headlights, Taillights and Warning Flasher Lights ON



# OPERATING MACHINE

## Using Throttle

Use the throttle to change engine speeds. Use the throttle in conjunction with the Tachometer (A) to set engine speeds.

This tractor is equipped with a hand throttle (B) and a foot throttle (C). Throttle operation:

### Hand Throttle

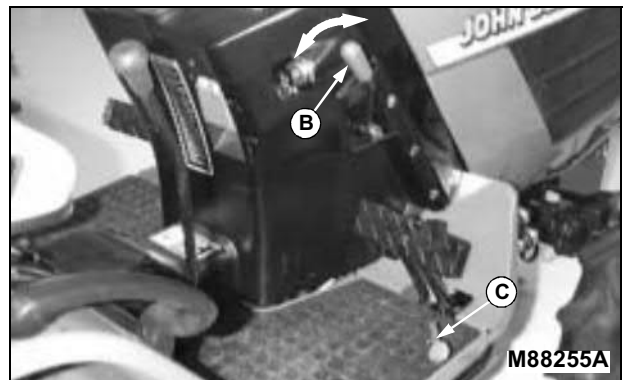
- **Decrease Engine Speed** - Pull throttle lever (B) towards rear of the tractor.
- **Increase Engine Speed** - Push throttle lever (B) towards the front of the tractor.




### Foot Throttle

- Increase engine speed by pushing down on throttle pedal (C). Release throttle pedal and engine speed automatically slows down.

**NOTE:** The foot throttle can be used in conjunction with the hand throttle. Example: Use hand throttle to set engine speed at 2000 rpm - now use foot throttle to increase engine speed to 2860 rpm. Release foot throttle and engine speed will return to hand throttle setting of 2000 rpm.



Engine / Tachometer Speeds:

- Slow Idle Speed.....1025 rpm
- Special Marker "540  "..... 2650 rpm
- Rated Speed..... 2650 rpm
- Fast Speed..... 2860 rpm

# OPERATING MACHINE

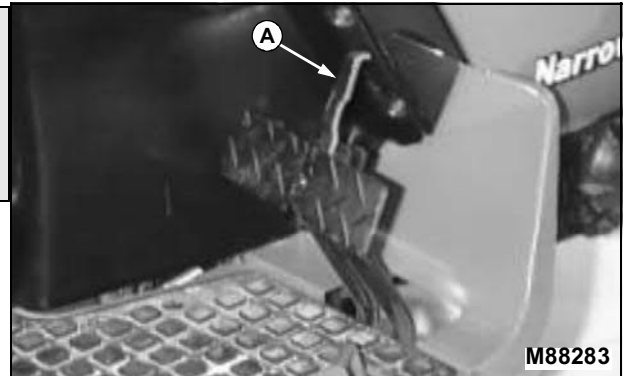
## Using Brakes

### Using Brake Pedals

**CAUTION:** To prevent accidental turning or possible tipping, always connect the left and right brake pedals together so that braking force is applied equally to both sides.

To use the brake pedals as a brake for the tractor, move the brake pedal latch (A) to connect the brake pedals together.

When brake are applied and the tractor pulls to the left or right, this is an indication that the brakes are not adjusted equally. See your John Deere Dealer.



### Using Brake Pedals to Assist In Turning

**CAUTION:** To prevent tipping, do not apply turn brake pedals at high speeds when making a turn; slow down.

**NOTE:** Turn brake pedals can be used for tighter turns. Using turn brake pedals may also avoid unnecessary backing.

Lift the brake pedal latch (A) so that brake pedals work independently from each other.

To make a tighter left turn, push down on turn brake pedal (B).

To make a tighter right turn, push down on turn brake pedal (C).



### Setting The Park Brake

Move brake pedal latch (A) to connect the brake pedals together.

Depress brake pedals (B and C), then lift up on the park brake lever (D).

Release brake pedals. The park brake is now set.

### Releasing The Park Brake

Depress brake pedals (B and C), then push down on park brake lever (D).





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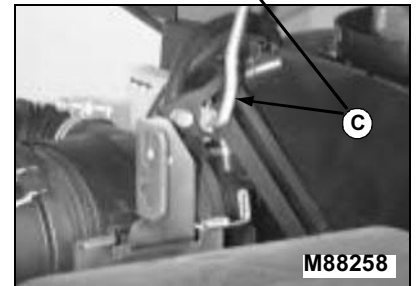
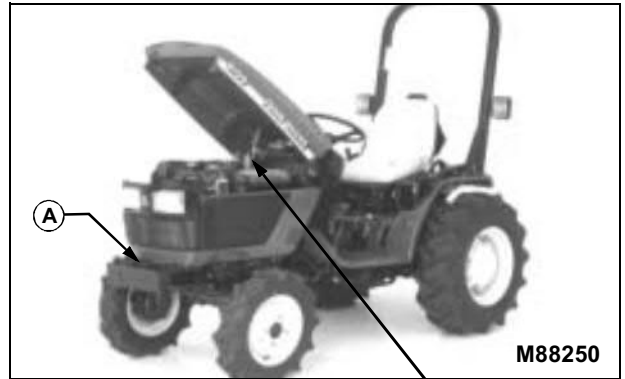
**Thank you so much for reading**

# OPERATING MACHINE

## Opening Hood

**CAUTION:** To prevent injury from moving parts, stop engine and remove ignition key before opening the hood.

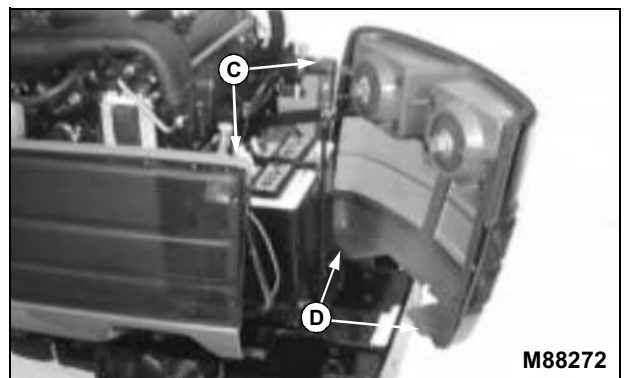
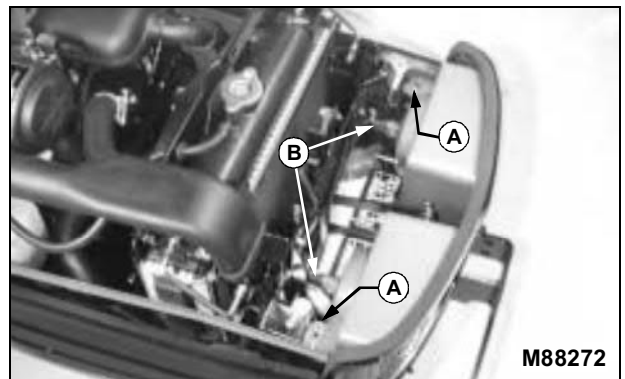
1. Push hood release (A) down to unlock hood.
2. Raise hood and secure with hood support (B).



## Removing Front Grille

1. Open and secure hood.
2. Remove two spring locking pins (A).
3. Disconnect wiring harness (B) from both headlights.
4. Lift grille high enough to clear alignment pins (C) and remove grille.

**NOTE:** The bottom of the grille also has two alignment tabs (D) which set in grooves in the tractor frame.



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