

**4050 (005511- )**  
**4250 (009673- )**  
**4450 (019805- )**  
**TRACTORS**



**JOHN DEERE**

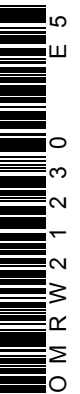
**OPERATORS MANUAL**

4050 (005511- ) 4250 (009673- ) 4450  
(019805- ) TRACTORS

OMRW21230 E5 English

**JOHN DEERE TRACTOR WORKS**  
**OMRW21230 E5**

LITHO IN THE U.S.A.  
ENGLISH



## IMPORTANT WARRANTY INFORMATION

The warranty on this tractor appears on your copy of the purchase order which you should have received from your dealer when making your purchase. This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty.

Warranty and field improvements are a part of John Deere's product support program for customers who operate and maintain their equipment as described in this manual. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.

The tire manufacturer's warranty supplied with your machine may not apply outside the U.S.

## SAFETY



**This safety alert symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.**

## SYMBOLS



Worldwide symbols are used to assist identification and operation. In this manual, an identifying symbol is placed by the instructions like the example at left for the symbol on the engine oil pressure gauge. The cylinder block in the symbol represents the engine, the drop signifies oil, and the arrows indicate pressure. Regardless of the language used in a nation, this symbol means engine oil pressure without translation.

## MEASUREMENTS

This operator's manual contains SI Metric equivalents which follow immediately after the U.S. customary units of measure.

## DIRECTION

"Right-hand" and "left-hand" sides of the tractor are determined by facing in the direction of tractor forward travel.

## PRODUCT IDENTIFICATION NUMBERS

Record the identification number(s) in the space provided following Specifications. Accurately record all of the characters because (should the product be stolen) tracing is sometimes through a computer match of letters and numbers. Also, your dealer needs this information when ordering parts. If you carry your operator's manual on the machine for reference, be sure to also record the identification number(s) on a separate sheet of paper and file it in a secure place not on the machine so you will still have a record in case the machine is stolen.

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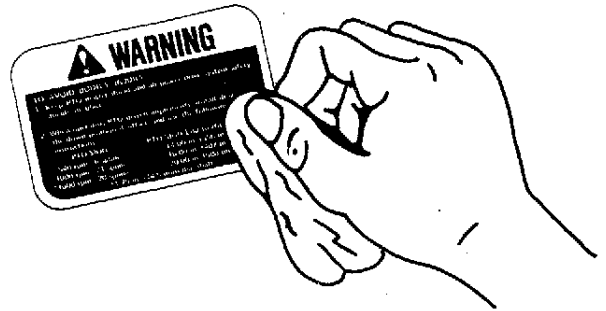
John Deere 4450 Tractor

# Safety Signs

## READ SAFETY SIGNS CAREFULLY

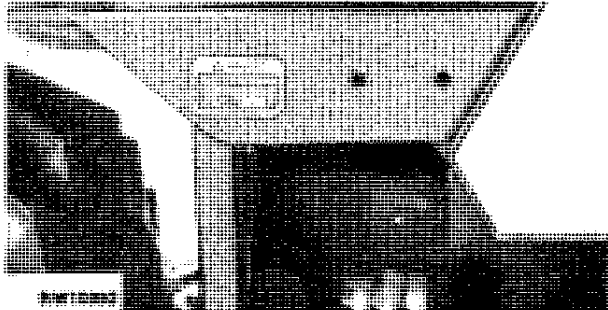
Carefully read and follow all **CAUTION** and **WARNING** safety signs.

Keep safety signs in good condition. Replace missing or damaged safety signs. Order replacement safety signs from your John Deere dealer.



AJ7;RW1094 9 U01;READ SIGN1 200585

## STAY CLEAR OF PTO



## **WARNING**

**TO AVOID BODILY INJURY:**

1. Keep PTO master shield and all power drive system safety shields in place.
2. When operating PTO driven implements, install drawbar in the down position if offset, and use the following drawbar instructions:

PTO Shaft	PTO Shaft End to Hitch Pin Hole
540 rpm - 6 spline	14.00 in. (356 mm)
1000 rpm - 21 spline	16.00 in. (407 mm)
* 1000 rpm - 20 spline	20.00 in. (508 mm)
	* 1.75 in. (44.5 mm) dia. shaft

AJ7;RW1099 2,RW1095 0 U01;READ SIGN8 200585

## PREVENT MACHINE RUNAWAY



RW10993

## **WARNING**

**AVOID POSSIBLE INJURY OR DEATH FROM A MACHINE RUNAWAY.**

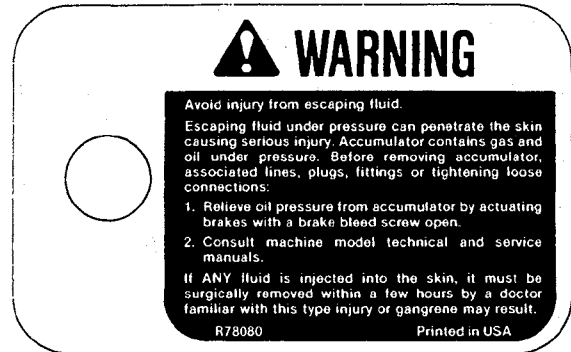
1. Do not start engine by shorting across starter terminals. Machine will start in gear if normal starting circuitry is bypassed.
2. Start engine only from operator's seat with transmission in neutral or park. **NEVER** start engine while standing on ground.

AJ7;RW1099 3,RW1095 1,U01;READ SIGN9 200585

*Safety Signs*

**AVOID HIGH-PRESSURE FLUID**

Safety sign is located on brake accumulator line inside control support on left-hand side.



**WARNING**

Avoid injury from escaping fluid.

Escaping fluid under pressure can penetrate the skin causing serious injury. Accumulator contains gas and oil under pressure. Before removing accumulator, associated lines, plugs, fittings or tightening loose connections:

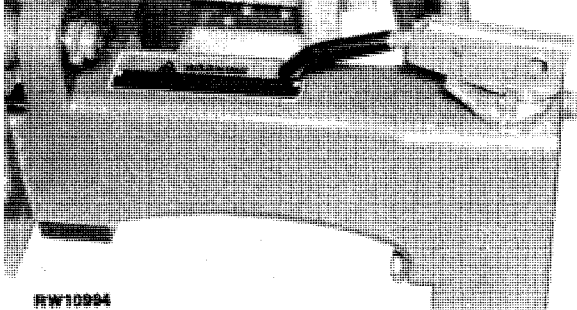
1. Relieve oil pressure from accumulator by actuating brakes with a brake bleed screw open.
2. Consult machine model technical and service manuals.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.


R78080 Printed in USA

AJ7;RW1095 3 U01;READ SIGN5 200585

**COUPLE IMPLEMENT SECURELY**



RW10994

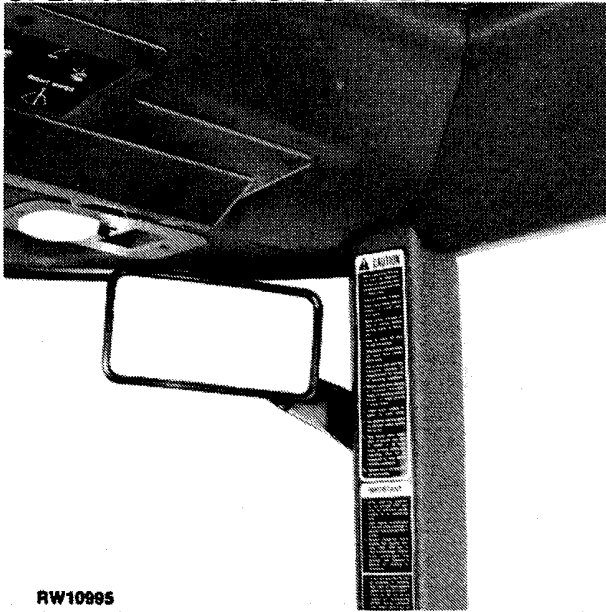


**WARNING**

1. Securely couple implement by pushing sheet metal base of both hand latch controls down against turned up edge of latch rod brackets.
2. Secure draft link attaching pins by tightening retainer screws to 85 lb ft torque.

AJ7;RW1099 4,RW1095 4 U01;READ SIGN10 200585

## OPERATE TRACTOR SAFELY



RW10995

### CAUTION

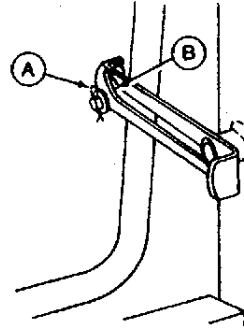
- 1 Before operating this tractor, read the Operator's Manual for complete operating instructions and safety information.
- 2 Keep all shields in place.
- 3 Make certain everyone is clear of machine before starting engine or operation.
- 4 Keep all riders off tractor and equipment.
- 5 Keep hands, feet and clothing away from power driven parts.
- 6 Use of seat belt with this protective structure is recommended for almost all operating conditions.
- 7 Reduce speed when turning or operating around hazards, on rough ground or on steep slopes.
- 8 Be especially careful when using single wheels. Danger of an overturn increases greatly with narrow tread (2 m [80 inches] or less) and high speed.  
For hillside operation, use only dual wheels, front and rear. Avoid sharp uphill turns.
- 9 Use flashing warning lights on highway unless prohibited by law.
- 10 Stop engine, lower implement to ground and shift to PARK before dismounting. Wait for all movement to stop before servicing machinery.
- 11 Remove key if leaving tractor unattended.

AJ7;RW1099 5,RW1095 5 U01;READ SIGN11 200585

# Safety

## EMERGENCY EXIT

Make an emergency exit out the SOUND-GARD® body window by removing quick-lock pins (A) and headed pins (B) from window latches and pushing window wide open.



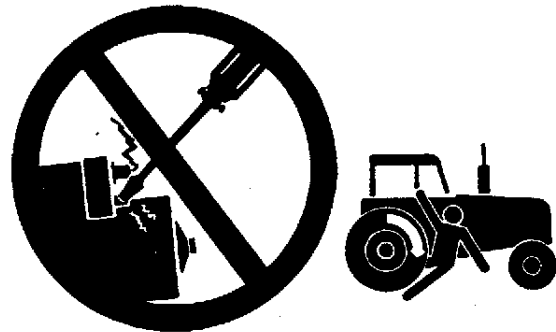
AJ7;RW4420 U01;EXIT 090585

## PREVENT MACHINE RUNAWAY

Avoid possible injury or death from machinery runaway.

Do not start engine by shorting across starter terminals. Machine will start in gear if normal circuitry is by passed.

NEVER start engine while standing on ground. Start engine only from operator's seat, with transmission in neutral or park.



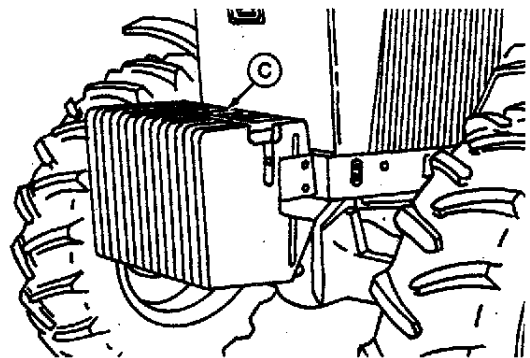
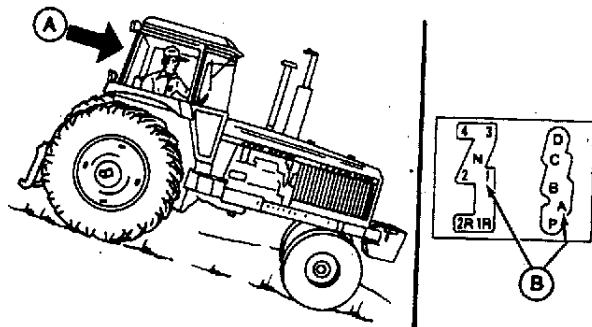
AB6;TS177 053;BYPAS1 210585

## SHIFT TO LOW GEAR ON HILLS

Shift to a low gear (B) before descending a steep hill (A), to improve your control of the tractor with little or no braking. Make sure brake pedals are locked together. Never coast downhill.

When driving on icy or graveled surfaces, reduce speed and be sure tractor is properly ballasted to avoid skidding and loss of steering control.

Additional ballast (C) may be needed for transporting heavy integral implements. When implement is raised, drive slowly over rough ground, regardless of how much ballast is used.



AJ7;RW5692 L,RW5693 L U01;DRIVE SAFE1 090585

### USE CAUTION ON HILLSIDES

Avoid holes, ditches, and obstructions which may cause the tractor to tip - especially on hillsides.

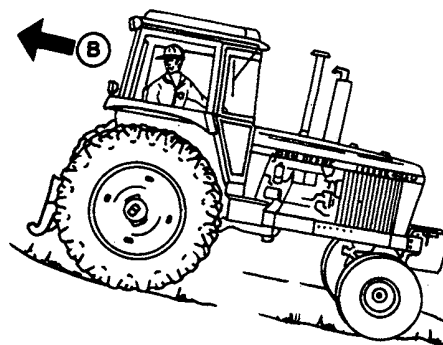
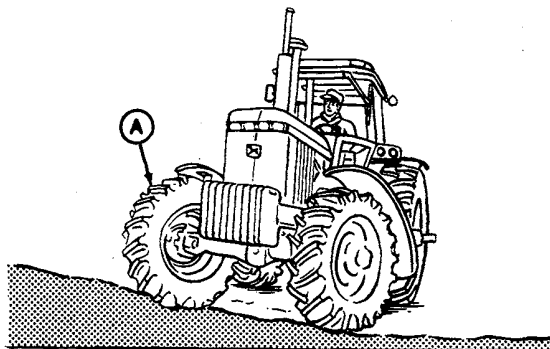
Front-wheel drive (A) greatly increases traction. When this option is used, extra caution is needed on slopes. Compared to 2-wheel drive, a front-wheel drive tractor maintains traction on steeper slopes, increasing the possibility of a tip over.

Never drive near the edge of a gully or steep embankment—it might cave in.

Driving forward out of a ditch or mired condition or up a steep slope could cause tractor to tip over rearward. Back out of these situations if possible (B).

Be especially careful when using single wheels. Danger of overturn increases greatly with narrow tread, 60 in. (1.50 m), at high speed.

Hitch towed loads only to drawbar. When using a chain, take up the slack slowly.

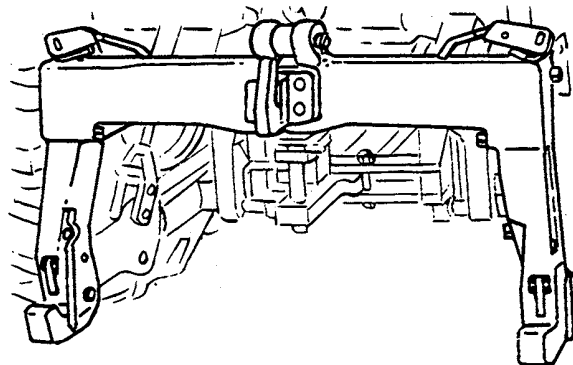


AJ7;RW5689 L,RW5690 L U01;HILL SIDE1 090585

### COUPLE IMPLEMENT SECURELY

Securely couple implement by pushing sheet metal base of both hand latch controls down against turned up edge of latch rod brackets.

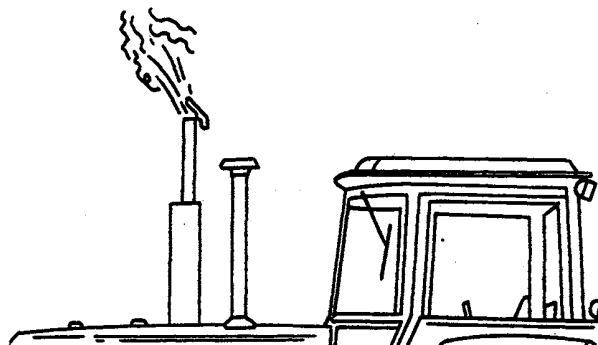
Secure draft link attaching pins by tightening retainer screws to 85 lb-ft (115 N·m).



AJ7;RW1095 6 U01;COUPLE SECURE 200585

### AVOID EXHAUST FUMES

Never run engine in a closed building.



AJ7;RW5703 L U01;AVOID FUMES 090585

### KEEP RIDERS OFF MACHINE

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

Riders on a machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.



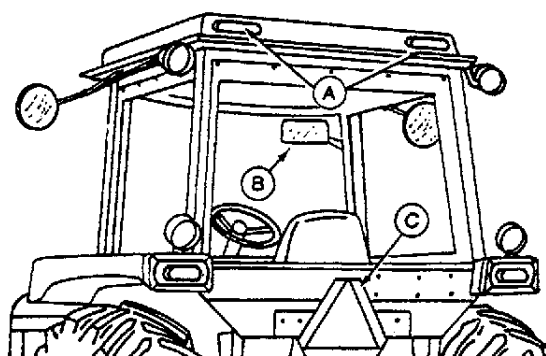
AB6;TS173 053;RIDER 261184

### MAKE TRACTOR VISIBLE ON HIGHWAY

Turn light switch to "H" position. Never use white lights which are visible from the rear. Always dim head lamps before meeting another vehicle. Keep head lamps properly adjusted.

Add SMV emblem, reflectors, and auxiliary lighting to equipment as required for safety and by local regulations.

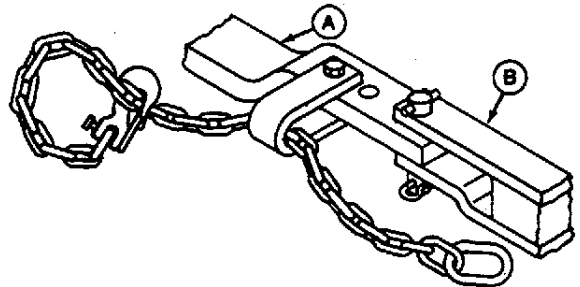
Before operating tractor on highway, be sure flashing warning lamps (A) work properly. Adjust rear view mirror (B), and clean windows and SMV emblem (C).



AJ7;RW1099 0 U01;USE LIGHT1 200585

### USE A SAFETY CHAIN

A safety chain will help control drawn equipment (B) should it accidentally separate from the drawbar (A) while transporting. Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning. See your John Deere dealer for a chain with a strength rating equal to or greater than the gross weight of the towed machine.



AB6;TS163 053;CHAIN 310884

### TRANSPORT TRACTOR SAFELY

The best method for transporting a disabled tractor is to haul it on a flatbed carrier.

If towing a tractor, never tow faster than 20 mph (32 km/h). Have an operator steer and brake tractor.

U01;HAUL IT 090585

### TOW EQUIPMENT PROPERLY

Use caution when towing loads at transport speeds. Reduce speed if towed load weighs more than the tractor and is not equipped with brakes. Avoid hard braking applications. (Consult implement operator's manual for recommended transport speeds.)

Use additional caution when transporting towed loads under adverse surface conditions, when turning, or on inclines.

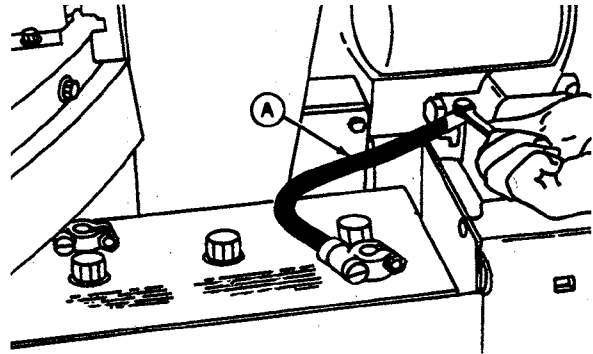
U01;TOW 061284

## AVOID EXPLOSIONS OR FIRE

Keep all sparks and flames away from batteries, as gas given off by electrolyte is explosive. To avoid sparks, connect ground cable (A) last and disconnect it first. When using a booster battery, follow instructions in Operating the Engine section.

Disconnect battery ground cable before working in an area where you might accidentally contact electrical components causing shocks, burns, or damage to electrical system.

Be careful with starting fluid or any type of fuel. Do not refuel the tractor when the engine is hot or running. Never smoke while handling fuel.



A fire extinguisher can be mounted to your tractor. It is available from your John Deere dealer. Be sure to see the owners manual packaged with the extinguisher for operation and service instructions.



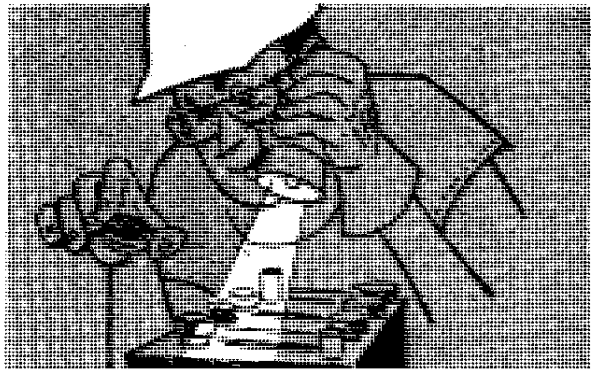
AJ7;RW5701 L,RW5695,RW2389 U01;AVOID FIRE 090585

### PREVENT BATTERY EXPLOSIONS

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (-) battery clamp first and replace it last.



AB6;TS181 053;EXPLO 180485

### AVOID ACID BURNS

Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid the hazard by:

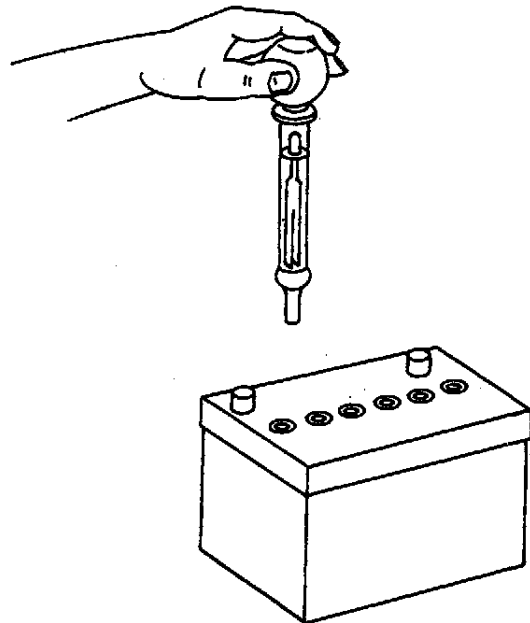
1. Filling batteries in a well ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.

If you spill acid on yourself:

1. Flush your skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush your eyes with water for 10-15 minutes. Get medical attention immediately.

If acid is swallowed:

1. Drink large amounts of water or milk.
2. Then drink milk of magnesia, beaten eggs, or vegetable oil.
3. Get medical attention immediately.



AB6;TS182 053;ACID 180485

### PROTECT AGAINST NOISE

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs (A) or earplugs (B) to protect against objectionable or uncomfortable loud noises.

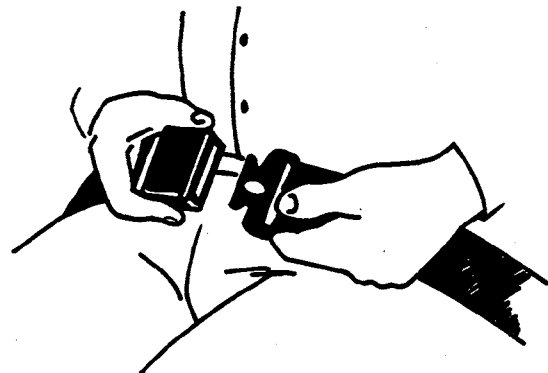


AB6;X7662 053;NOISE 210585

### USE SEAT BELT PROPERLY

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

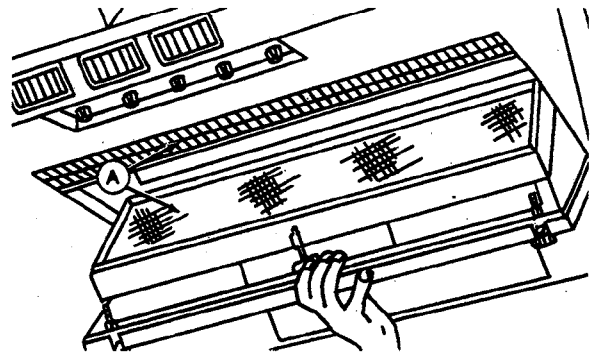
Do not use a seat belt if operating without a ROPS.



AB6;TS175 053;ROPS1 261184

### HANDLE CHEMICALS PROPERLY

SOUND-GARD body air filters (A) are not designed to filter out harmful chemicals. Follow instructions given in the implement operator's manual and those given by the chemical manufacturer when using agricultural chemicals.



AJ7;RW5704 L U01;HANDLE CHEM 090585

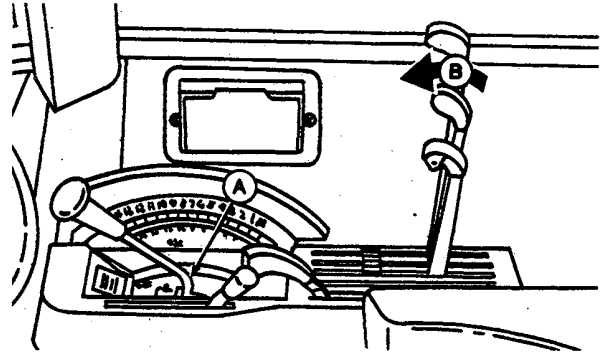
### STAY CLEAR OF MOVING TRACTOR

Always place transmission in PARK (A) before dismounting. Leaving transmission in gear with engine stopped will NOT prevent the tractor from moving.

Be sure everyone is clear of tractor and attached equipment before starting engine. Some movement may occur as engine starts.

Never try to get on or off a moving tractor.

When tractor is left unattended, lower implements to the ground (B), stop the engine, and remove the key.



AJ7;RW5696L U01;STAY CLEAR2 200585

### STAY CLEAR OF PTO

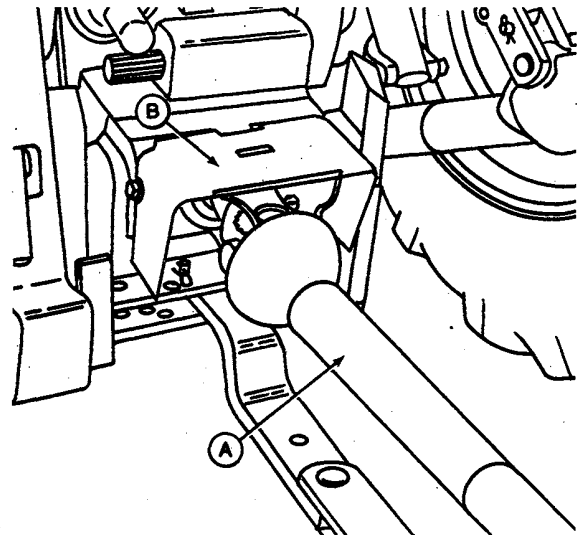
Stop the engine and be sure the PTO drive line (A) has stopped before:

- Connecting or disconnecting implement drive line
- Making adjustments on the implement
- Cleaning out PTO driven equipment

PTO master shield (B) and drive line shield should be in place at all times except for special applications as directed in the implement operator's manual.

Operate PTO at recommended speed.

Avoid loose-fitting or dangling clothing.



AJ7;RW5697 L U01;PTO 2 090585

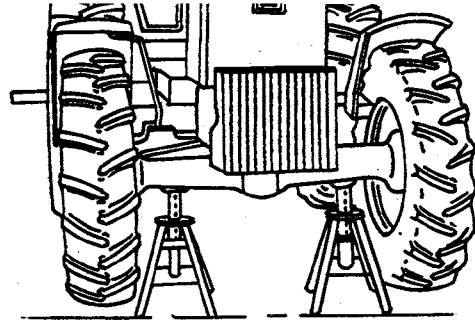
### SERVICE TRACTOR SAFELY

Do not service the tractor while it is in motion or while the engine is running.

If servicing front-wheel drive equipped tractor with rear wheels supported off ground and rotating wheels by engine power, always support front wheels in a similar manner. If front wheels are not raised, loss of electrical power or transmission-hydraulic system pressure will engage front driving wheels and pull rear wheels off support. Under these conditions, the front-drive wheels can engage even with switch in disengaged position.

Reinstall all shields removed during service.

The air conditioning system is pressurized. Improper servicing may cause refrigerant to penetrate eyes and skin or cause burns. Special equipment and procedures are required to service air conditioning system. (See your John Deere dealer.)

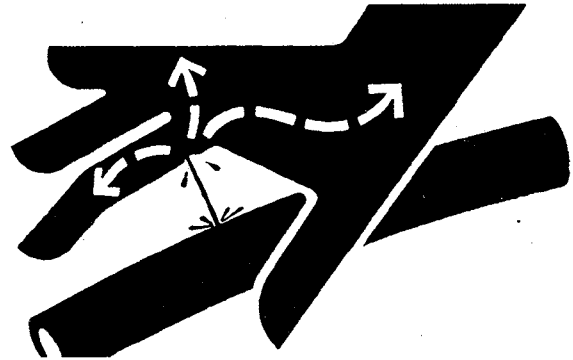


AJ7;RW5700 L U01;WORK SAFE1 090585

### AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks.

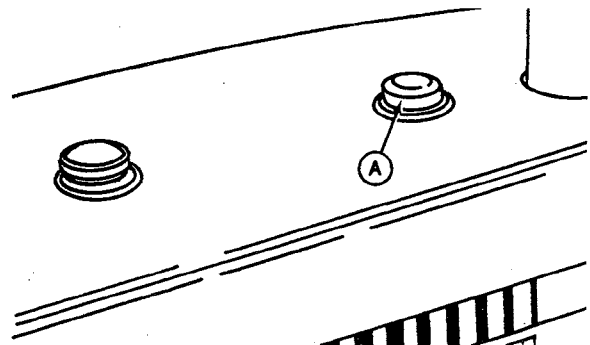
If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.



AB6;X9811 053;FLUID 100584

### SERVICE COOLING SYSTEM SAFELY

Do not remove radiator cap (A) when engine is hot. Shut the engine off and wait until it cools. Then turn the cap slowly to the first stop to relieve pressure before removing it completely.



AJ7;RW5702 L U01;COOL IT 090585

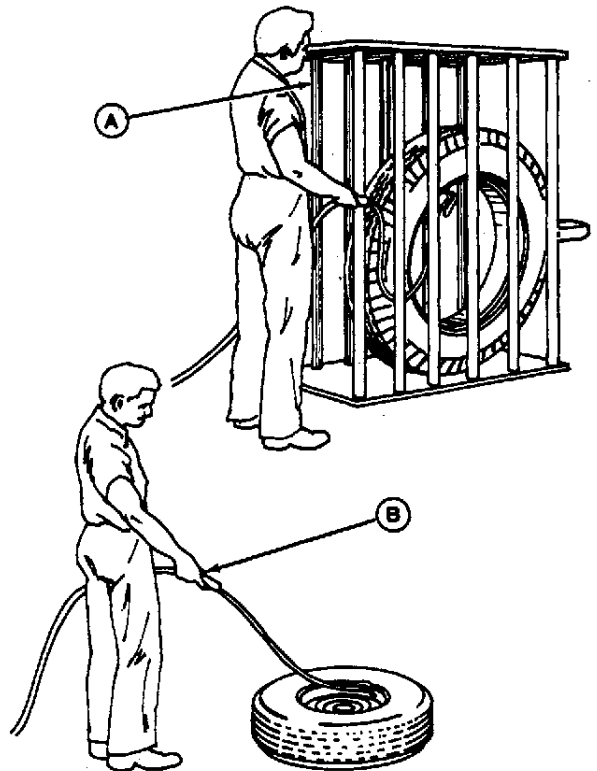
### SERVICE TIRES SAFELY

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your John Deere dealer or a qualified repair service.

When sealing tire beads on rims, never exceed 35 psi (240 kPa) (2.4 bar) or maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead, and reinflate.

Detailed agricultural tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks. Such information is also available from the Rubber Manufacturers Association and from tire manufacturers.

- A—Use a safety cage if available.
- B—Do not stand over tire. Use a clip-on chuck and extension hose.

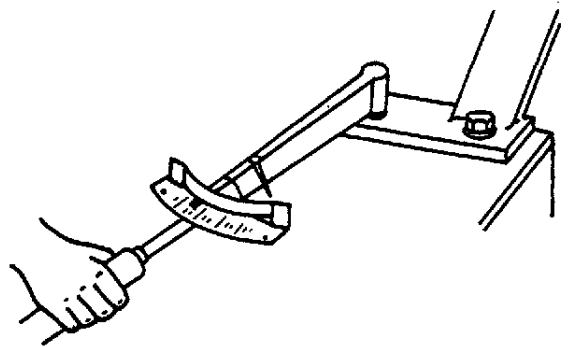


AJ7;TS0123 U01;FIX TIRES 090585

### KEEP ROPS INSTALLED PROPERLY

Make certain all parts are reinstalled correctly if the roll-over protective structure (ROPS) is loosened or removed for any reason. Tighten mounting bolts to proper torque.

The protection offered by ROPS will be impaired if ROPS is subjected to structural damage, is involved in an overturn incident, or is in any way altered. A damaged ROPS should be replaced, not reused.

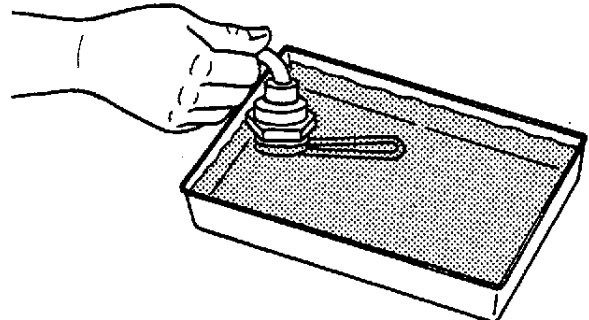


AB6;TS176 053;ROPS3 261184

### TEST COOLANT HEATER IN LIQUID ONLY

Do not plug coolant heater into electrical power unless heating element is immersed in coolant. Sheath could burst and result in personal injury.

Use a heavy-duty grounded cord to connect coolant heater to electrical power.



AB6;TS174 053;HEAT 110584



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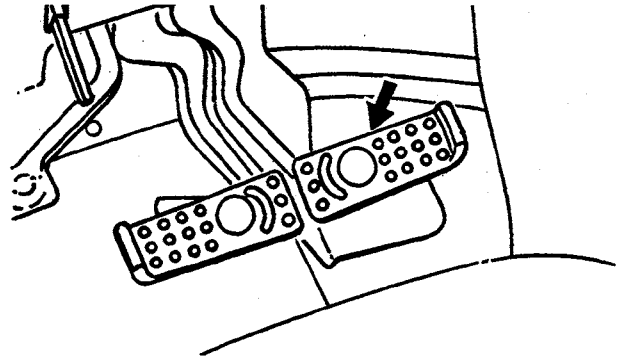
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### SERVICE BRAKE ACCUMULATOR SAFELY

Accumulator contains gas and oil under pressure. To avoid injury from escaping fluid, relieve all pressure from accumulator before disconnecting brake accumulator or brake valve. To do so open bleed screws and pump brake pedal with engine stopped, until pedal easily goes all the way down.

The accumulator is charged with dry nitrogen to a pressure of 500 psi (3450 kPa) (35 bar). If it needs recharging, have job done only by a qualified service person and only with dry nitrogen.

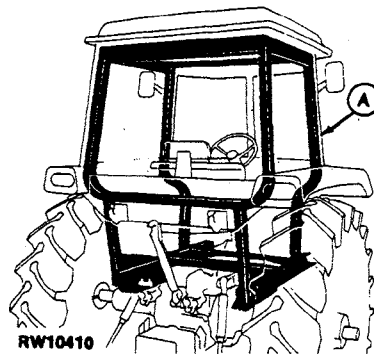


AJ7/RW8630 L U01;FIX BRAKE 090585

### DO NOT MODIFY TRACTOR

Unauthorized modification to the machine may impair the function and/or safety and affect machine life.

Never modify structural members of SOUND-GARD body or ROLL-GARD protective frame (A) by welding, bending, drilling or cutting as this might weaken the structure. If any structural member is damaged, replace the entire structure. Do not attempt repairs.



RW10410

AJ7/RW1041 0 U01;MODIFY RC 090585

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