

# **7610, 7710, and 7810 Tractors**

**John Deere Waterloo Works**  
**OMAR162172 Issue F9**  
**(This manual replaces OMAR162172 K8)**  
Export Edition  
LITHO IN U.S.A.  
ENGLISH

# Introduction

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 in the direction the implement will travel when going forward.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Specification section. Accurately record all the numbers to help in tracing the machine should

it be stolen. Your dealer also needs these numbers when you order parts. File the identification numbers in a secure place off the machine.

WARRANTY is provided as part of John Deere's support program for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate which you should have received from your dealer.

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. 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 applicable to your machine may not apply outside the U.S.



RW65813  
-JUN-21JUN96

RX7010EXP,IFC -19-05AUG96



**John Deere Waterloo Works**

Deere Customer:

Congratulations on the purchase of your John Deere tractor and, if you are a new customer, welcome to the John Deere family. We believe you will find your new tractor meets your expectations.

Of course, the tractor is just one aspect of the John Deere ownership experience. A great deal of your satisfaction also depends on the performance of the people who represent the care and service of John Deere products. From your dealer sales representative, to the service department, to the parts department, the people of John Deere will strive to make your ownership experience truly exceptional.

This operator's manual provides information for the safe operation of your tractor. Recommendations for service and maintenance are also included.

The Technical Publications Group, and the entire team at John Deere Waterloo Works, would like to confirm our commitment to your satisfaction. Our goal is to assure your John Deere tractor brings you many years of satisfactory service.

Technical Publications  
John Deere Waterloo Works

# Contents

	Page		Page
<b>Safety</b> .....	05-1	Emissions .....	30-1
<b>Safety Signs</b> .....	10-1	Starting the Engine .....	30-2
<b>Controls and Instruments</b>		Restarting the Engine .....	30-3
Command Console .....	15-1	Stopping the Engine .....	30-4
Function Indicators .....	15-2	Cold Weather Starting .....	30-4
Single Lever Control .....	15-2	Starting Fluid .....	30-6
Control Console .....	15-3	Auxiliary Heaters .....	30-7
Instrument Panels		Booster Battery .....	30-8
Analog .....	15-4	<b>Operating the Tractor</b>	
Digital .....	15-6	Foldable ROPS .....	35-1
Display Functions .....	15-8	Avoid Pesticides .....	35-2
Calibrating Tire Size-With Radar .....	15-9	Transmission .....	35-4
Performance Monitor .....	15-11	Creeper .....	35-7
<b>Lights</b>		Headland Management .....	35-8
Operating Lights		Reverser .....	35-9
Open Station .....	20-1	Mechanical Front-Wheel Drive .....	35-11
Cab .....	20-2	Triple Link Suspension .....	35-12
Hazard .....	20-3	Differential Lock .....	35-13
Turn Signals, Horn, and Head Lights .....	20-3	Brakes .....	35-13
Extremity Lights .....	20-4	<b>Hitch</b>	
Seven-Terminal Outlet .....	20-5	Components and Controls .....	40-1
<b>Operator Station</b>		Hitch Operation .....	40-1
Seats .....	25-1	External Raise/Lower Switch .....	40-6
Steps .....	25-3	Sway Blocks .....	40-6
Heater/Air Conditioner .....	25-4	Attaching and Detaching Implements .....	40-7
Windshield Wiper .....	25-5	Lift Links .....	40-11
Steering Wheel .....	25-5	Hitch Conversion .....	40-12
Radio .....	25-5	<b>Remote Hydraulic Cylinders</b>	
Clock .....	25-6	Cylinder Hoses .....	45-1
Cassette .....	25-7	SCV Operation .....	45-2
Mobile Radio and Antenna .....	25-8	Detent Relief Setting .....	45-6
Accessory Electrical Outlet .....	25-9	Relief Valve Manual Lowering .....	45-6
Power Strip .....	25-9	Low-Pressure Return Circuit .....	45-7
<b>Operating the Engine</b>		Hydraulic Motor Return .....	45-8
Pre-starting Checks .....	30-1	Power Beyond .....	45-9
		Remote Cylinders .....	45-11

Continued on next page

*All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.*

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Contents

	Page		Page
<b>Drawbar and PTO</b>			
Drawbar . . . . .	50-1	Batteries . . . . .	80-3
PTO . . . . .	50-3	High-Pressure Washers . . . . .	80-3
<b>Optimum Performance/Ballast</b>			
Guidelines . . . . .	55-1	Compressed Air . . . . .	80-3
Measuring Wheel Slip . . . . .	55-5	Service Implements . . . . .	80-4
Determining Ballast . . . . .	55-6	Service Interval Charts . . . . .	80-5
Liquid Weight . . . . .	55-8	<b>Service/Daily or Every 10 Hours</b>	
Rear Cast Iron Weights . . . . .	55-10	Engine Oil . . . . .	85-1
Loader Rear Ballast . . . . .	55-11	Water Separator . . . . .	85-1
Implement Codes . . . . .	55-12	Coolant . . . . .	85-2
Quik-Tatch™ Weights . . . . .	55-15	Transmission-Hydraulic Oil . . . . .	85-2
<b>Wheels, Tires, and Treads</b>			
Guidelines . . . . .	60-1	Rear Axle Bearings . . . . .	85-3
Inflation Pressures . . . . .	60-2	Front Wheel Bearings . . . . .	85-3
Tire Combinations . . . . .	60-9	Front Axle . . . . .	85-4
Wheel and Axle Bolts . . . . .	60-10	MFWD Axle . . . . .	85-5
Front Axle and Tread Settings . . . . .	60-12	Triple Link Suspension . . . . .	85-6
Toe-In . . . . .	60-14	Hitch and Lift Links . . . . .	85-7
MFWD Tread Settings . . . . .	60-16	Front PTO Shaft . . . . .	85-7
Steering Stops . . . . .	60-17	Tires . . . . .	85-7
Fenders . . . . .	60-22	<b>Service/250 Hours</b>	
<b>Transport</b>			
Driving . . . . .	65-1	Engine Oil and Filter . . . . .	90-1
Towing Loads . . . . .	65-2	Fuel Tank Sump . . . . .	90-1
Towing Tractor . . . . .	65-4	Wheel Bolts . . . . .	90-2
Mired Machine . . . . .	65-6	Front or MFWD Axle . . . . .	90-2
<b>Fuels, Lubricants, and Coolant</b>			
Fuel . . . . .	70-1	Triple Link Suspension . . . . .	90-2
Engine Oil . . . . .	70-3	MFWD Housing and Wheel Hub Oil . . . . .	90-3
Engine Coolant . . . . .	70-5	Triple Link Suspension Oil . . . . .	90-4
Transmission-Hydraulic Oil . . . . .	70-8	Fire Extinguisher . . . . .	90-4
MFWD		Front PTO Shaft . . . . .	90-5
Axle Housing Oil . . . . .	70-9	Front PTO Housing Oil Level . . . . .	90-5
Axle Wheel Hub Oil . . . . .	70-10	Batteries . . . . .	90-5
Grease . . . . .	70-10	Neutral Start System . . . . .	90-7
<b>Break-In Period</b>			
Engine . . . . .	75-1	Cab Air Filters . . . . .	90-8
Wheel and Axle Bolts . . . . .	75-2	Manual Brakes . . . . .	90-9
<b>Service</b>			
Service Chart Reference . . . . .	80-1	<b>Service/750 Hours</b>	
Side Shields . . . . .	80-1	Transmission Filter . . . . .	95-1
Hood . . . . .	80-2	Hydraulic Filter . . . . .	95-1
		Rear Axle Bearings . . . . .	95-2
		Air Intake . . . . .	95-2
		Engine Idle Speeds . . . . .	95-2
		Coolant Conditioner . . . . .	95-3
		Fuel Tank Vent Filter . . . . .	95-3
		<b>Service/1500 Hours</b>	
		Transmission-Hydraulic Oil . . . . .	100-1
		Hydraulic Oil Suction Screen . . . . .	100-1
		MFWD Hub and Axle Housing Oil . . . . .	100-2
		Triple Link Suspension Oil . . . . .	100-3

Continued on next page

Contents

	Page		Page
Draft Link Support Shaft Bushing . . . . .	100-3	<b>Specifications</b>	
Belt Tensioner . . . . .	100-4	Specifications . . . . .	135-1
Front Wheel Bearings . . . . .	100-4	Ground Speeds . . . . .	135-5
Front PTO Housing Oil . . . . .	100-4	<b>Identification Numbers</b> . . . . .	140-1
<b>Service/2000 Hours</b>		<b>Lubrication and Maintenance Charts</b> . . . . .	145-1
Engine Valve Clearance . . . . .	105-1	<b>Glossary</b> . . . . .	150-1
<b>Service/Annual</b>		<b>Index</b>	
Air Cleaner . . . . .	110-1		
Cab Air Filter . . . . .	110-1		
PTO shaft . . . . .	110-2		
<b>Service/Two Years</b>			
Cooling System Flush-Thermostats Check . . . . .	115-1		
<b>Service/As Required</b>			
Transmission Filter . . . . .	120-1		
Hydraulic Filter . . . . .	120-1		
Fuel Prefilter . . . . .	120-2		
Fuel Filter . . . . .	120-2		
Fuel System . . . . .	120-3		
Brakes . . . . .	120-6		
Engine Compartment . . . . .	120-6		
Grille Screens, Radiator, and Condenser . . . . .	120-7		
Air Pre-Cleaner . . . . .	120-7		
Air Cleaner . . . . .	120-7		
Fan Belt . . . . .	120-9		
Front Lights . . . . .	120-10		
Head Lights . . . . .	120-10		
Light Replacement . . . . .	120-11		
Fuses and Relays . . . . .	120-14		
Air Conditioner . . . . .	120-17		
Alternator Replacement . . . . .	120-18		
<b>Troubleshooting</b>			
Engine . . . . .	125-1		
Transmission . . . . .	125-4		
Hydraulic System . . . . .	125-5		
Brakes . . . . .	125-5		
Hitch . . . . .	125-6		
Selective Control Valves . . . . .	125-8		
Electrical System . . . . .	125-9		
Operator Enclosure . . . . .	125-11		
Tractor Operation . . . . .	125-12		
<b>Storage</b> . . . . .	130-1		

# Safety

## RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



DX,ALERT -19-29SEP98

T81389 -UN-07DEC68

## UNDERSTAND SIGNAL WORDS

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.



DX,SIGNAL -19-03MAR93

TS187 -19-30SEP88

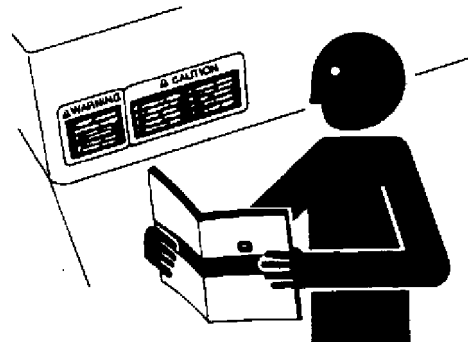
## FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.



DX,READ -19-03MAR93

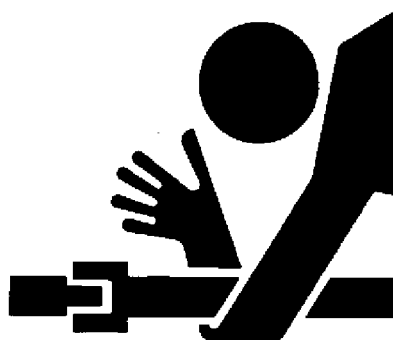
TS201 -UN-23AUG88



## OPERATING THE TRACTOR SAFELY



TS213 -JUN-23AUG88



TS276 -JUN-23AUG88

Careless use of the tractor can result in unnecessary accidents. Be alert to hazards of tractor operation. Understand causes of accidents and take every precaution to avoid them. Most common accidents are caused from:

- Tractor roll-over
- Improper starting procedures
- Crushing and pinching during hitching
- Collisions with other motor vehicles
- Entanglement in PTO shafts
- Falling from tractor

Avoid accidents by taking the following precautions:

- Put transmission in PARK 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.
- Never try to get on or off a moving tractor.
- When tractor is left unattended, place in PARK, lower implements to the ground, stop the engine, and remove the key.
- Never go near an operating PTO or an operating implement.
- Always fasten your seat belt in a ROPS equipped tractor.

RX,HAZARD,S -19-20DEC95



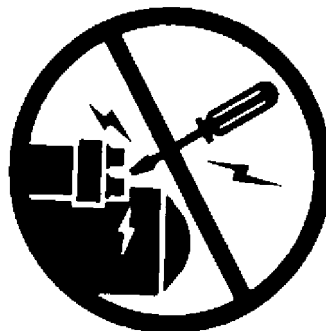


## PREVENT MACHINE RUNAWAY

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 bypassed.

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



DX,BYPAS1 -19-29SEP98

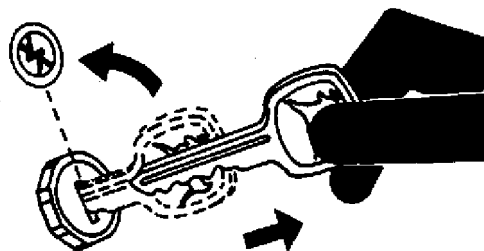
TS177 -UN-11JAN89

## STOPPING AND PARKING TRACTOR

Tractor roll-over, collisions, runaway tractors, and people being crushed under machines and implements can happen when operators ignore safety.

To avoid these accidents, take some precautions:

- Signal before stopping, turning, or slowing down on public roads
- Pull over to side of road before stopping
- Slow down before braking
- Pump brakes when stopping on slippery surfaces
- Be careful when towing and stopping heavy loads
- Shift to park or apply parking brake
- Lower all equipment when leaving tractor
- Remove key



RX,STOP,PARK -19-21SEP92

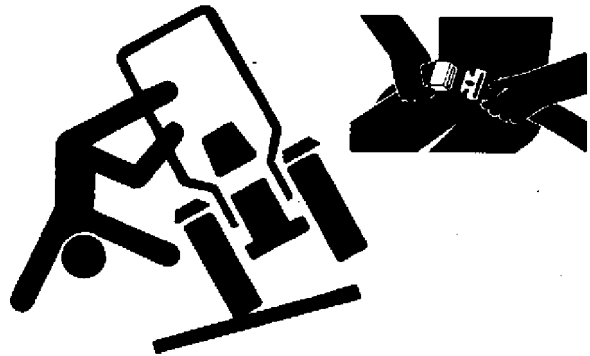
TS230 -UN-24MAY89



## USE ROPS AND SEAT BELT PROPERLY

If this tractor is equipped with a foldable ROPS, keep the ROPS in the fully extended and locked position. If the tractor is ever operated with ROPS folded (e.g., to enter a low building), drive with extreme caution. Do NOT use seat belt with the ROPS folded.

Return the ROPS to the raised, fully extended and locked position as soon as the tractor is operated under normal conditions. Always fasten your seat belt when the ROPS is fully extended and locked.



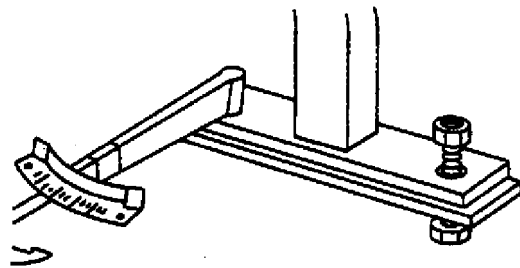
DX,FOLDROPS -19-16APR92

-UN-23AUG88  
TS205

## 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 by welding, bending, drilling, or cutting. A damaged ROPS should be replaced, not reused.



DX,ROPS3 -19-03MAR93

-UN-23AUG88  
TS212

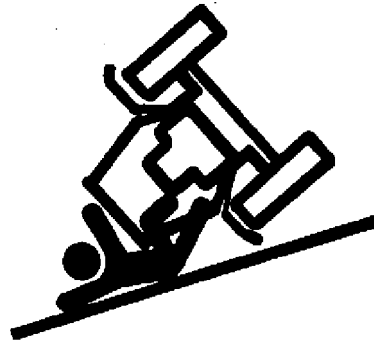


## USE CAUTION ON HILLSIDES

Avoid holes, ditches, and obstructions which may cause tractor roll-over, especially on hillsides. Avoid sharp turns on hills.

Never drive near the edge of a gully or steep embankment.

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



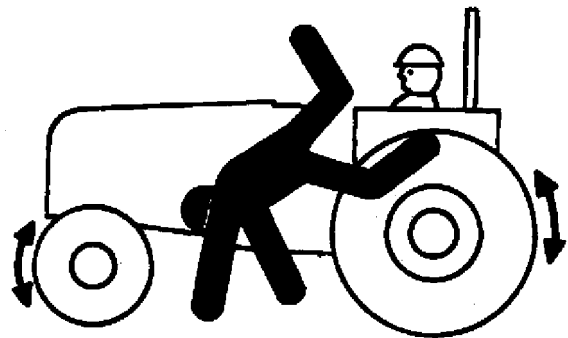
RX,HILL,SIDE1 -19-22SEP92

RW13093 -UN-07DEC88

## KEEP RIDERS OFF MACHINE

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

Riders on 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.



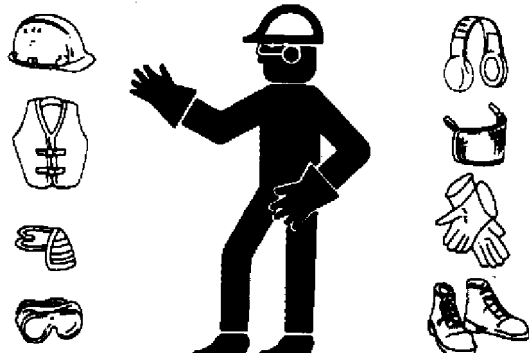
DX,RIDER -19-03MAR93

TS290 -UN-23AUG88

## WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



DX,WEAR2 -19-03MAR93

TS206 -UN-23AUG88



## PROTECT AGAINST NOISE

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

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



DX,NOISE -19-03MAR93

TS207  
-UN-23AUG88

## HANDLE FUEL SAFELY—AVOID FIRES

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.



DX,FIRE1 -19-03MAR93

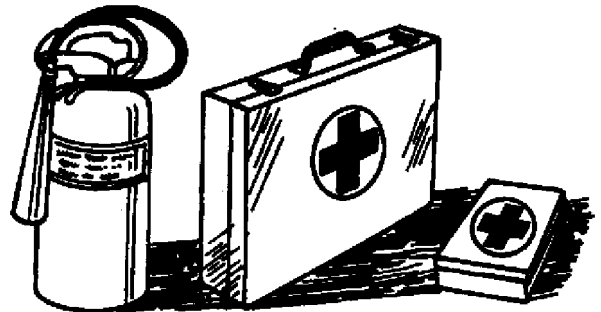
TS202  
-UN-23AUG88

## PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



DX,FIRE2 -19-03MAR93

TS291  
-UN-23AUG88



## HANDLE STARTING FLUID SAFELY

Starting fluid is highly flammable.

Keep all sparks and flame away when using it. Keep starting fluid away from batteries and cables.

To prevent accidental discharge when storing the pressurized can, keep the cap on the container, and store in a cool, protected location.

Do not incinerate or puncture a starting fluid container.



DX,FIRE3 -19-16APR92

TS1356 -UN-18MAR92

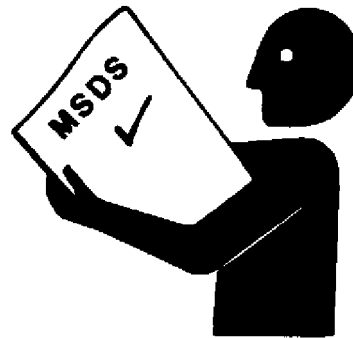
## HANDLE CHEMICAL PRODUCTS SAFELY

Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with John Deere equipment include such items as lubricants, coolants, paints, and adhesives.

A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.

Check the MSDS before you start any job using a hazardous chemical. That way you will know exactly what the risks are and how to do the job safely. Then follow procedures and recommended equipment.

(See your John Deere dealer for MSDS's on chemical products used with John Deere equipment.)



DX,MSDS,NA -19-03MAR93

TS1132 -UN-26NOV90

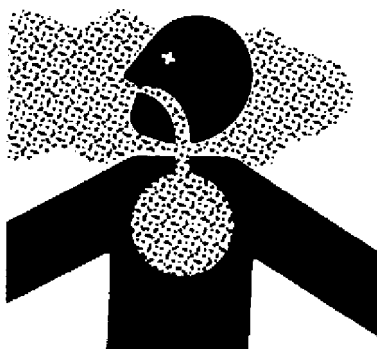


## AVOID CONTACT WITH PESTICIDES

This enclosed cab does not protect against inhaling harmful pesticides. If pesticide use instructions require respiratory protection, wear an appropriate respirator inside the cab.

Before leaving the cab, wear personal protective equipment as required by the pesticide use instructions. When re-entering the cab, remove protective equipment and store either outside the cab in a closed box or some other type of sealable container or inside the cab in a pesticide resistant container, such as a plastic bag.

Clean your shoes or boots to remove soil or other contaminated particles prior to entering the cab.



DX,CABS -19-03MAR93

-UN-23AUG68

TS220

-UN-23AUG68

TS272

## STAY CLEAR OF ROTATING DRIVELINES

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Wear close fitting clothing. Stop the engine and be sure PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.



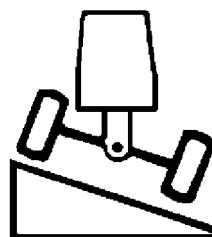
DX,PTO -19-12SEP95

-UN-22AUG95

TS1644

## CHECK CLEARANCES

Check clearances at extreme steering oscillation conditions if implements are attached to the side frames when using triple link suspension (suspended front axle).



RX,CLEARANCE -19-06JUL98

-UN-07JUL98

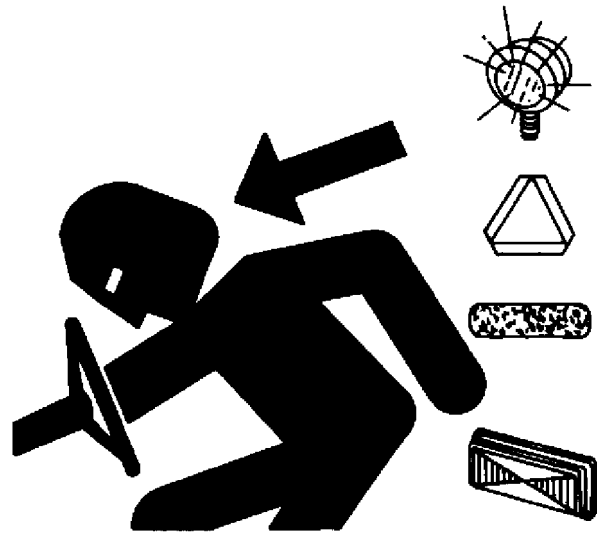
RW56606



## USE SAFETY LIGHTS AND DEVICES

Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use hand signals or turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible and in good working order. Replace or repair lighting and marking that has been damaged or lost.



DX,FLASH -19-04FEB99

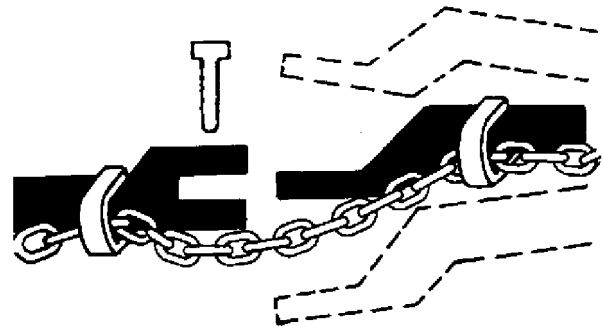
TSS951 -UN-12APR90

## USE A SAFETY CHAIN

A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

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. Do not use safety chain for towing.



DX,CHAIN -19-03MAR93

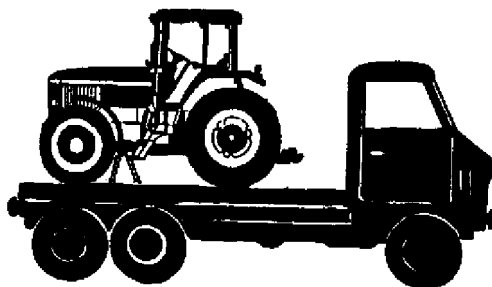
TSS217 -UN-23AUG88



## TRANSPORT TRACTOR SAFELY

Transport a disabled tractor on a flatbed carrier. Securely chain tractor to carrier.

If towing a tractor, never tow faster than 16 km/h (10 mph) with front or rear wheels raised or faster than 8 km/h (5 mph) with all wheels on the ground. Have an operator steer and brake tractor.



RW22056 -UN-04DEC92

RX,HAUL,IT1 -19-15FEB99

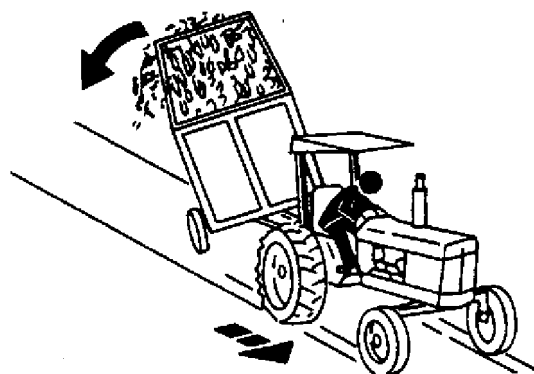
## TOW LOADS SAFELY

Stopping distance increases with speed and weight of towed loads, and on slopes. Towed loads with or without brakes that are too heavy for the tractor or are towed too fast can cause loss of control. Consider the total weight of the equipment and its load.

Observe these recommended maximum road speeds, or local speed limits which may be lower:

- If towed equipment does not have brakes, do not travel more than 32 km/h (20 mph) and do not tow loads more than 1.5 times the tractor weight.
- If towed equipment has brakes, do not travel more than 40 km/h (25 mph) and do not tow loads more than 4.5 times the tractor weight.

Ensure the load does not exceed the recommended weight ratio. Add ballast to recommended maximum for tractor, lighten the load, or get a heavier towing unit. The tractor must be heavy and powerful enough with adequate braking power for the towed load. Use additional caution when towing loads under adverse surface conditions, when turning, and on inclines.



T5216 -UN-23AUG88

DX,TOW -19-02OCT95



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