

4055

(003397-)

4255

(003934-)

4455

(006676-)

Tractors

John Deere Waterloo Works

OMAR110015 Issue K0

**(Mark old manual OMRW25629K9 for
machines up to Serial No. above.)**

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

MEASUREMENTS in this manual are U.S. customary units and their metric equivalents.

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

WRITE PRODUCT IDENTIFICATION NUMBERS in the Identification Numbers 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. If this manual is kept on the machine, also 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 supplied with your machine may not apply outside the U.S.



RW17680
-UN-30OCT89

Contents

	Page		Page
Safety	05-1	QUAD-RANGE™ Transmission	45-6
Safety Signs	10-1	Mechanical Front-Wheel Drive (MFWD)	45-10
Controls and Instruments		Rockshaft and 3-Point Hitch	
Control Location	15-1	Component Identification	50-1
Instrument Identification	15-2	Rockshaft Control Lever	50-1
Indicators Description	15-3	Rockshaft Selector Lever	50-3
Tachometer	15-5	Rate-of-Drop	50-5
Performance Monitor	15-8	Sway Blocks	50-5
Radar Sensor	15-14	Hitch	50-6
		Connecting Implement	50-10
		Hi-Crop Hitch	50-15
Lighting and Signals		Remote Hydraulic Cylinders	
Switch	20-1	Hose Tips	55-1
Lamps	20-1	Identifying SCV	55-1
Electrical Outlets	20-3	Connecting Cylinder Hoses	55-2
		Operating SCV	55-4
Operator's Station		Setting Remote Cylinder Stroke	55-6
SOUND-GARD® Body Temperature		Disconnecting Cylinder Hoses	55-7
Controls	25-1	Adjusting SCV Linkage	55-8
Window Wipers and Washers	25-2		
Windows	25-3	Drawbar and PTO	
Radio	25-4	Drawbar Adjustments	60-1
Seat	25-7	Power Take-Off (PTO)	60-4
Steering Wheel	25-11		
Engine Break-in	30-1	Ballast	
Prestarting Checks	35-1	Importance of Ballast	65-1
		Measuring Wheel Slip	65-2
Operating the Engine		Rear Ballast	65-4
Start-up Procedure	40-1	Front Ballast	65-7
Cold Weather Starting	40-5	Installing QUICK-TATCH™ Weights	65-10
Starting Aids	40-7		
Warm-Up and Operation	40-9	Wheels, Tires and Treads	
Stopping the Engine	40-12	Wheel Tightening	70-1
		Front Wheel Spacing	70-4
Operating the Tractor		Toe-in	70-6
Brakes	45-1	Toe-in (MFWD)	70-8
Differential Lock	45-2	Rear Wheel Spacing	70-10
Power Shift Transmission	45-3	Tire Pressures	70-27

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.

OMAR110015 K0-19-14NOV90

COPYRIGHT© 1990
DEERE & COMPANY
Moline, Illinois
All rights reserved
A John Deere ILLUSTRATION™ Manual

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>

Contents

	Page		Page
MFWD Wheel Spacing	70-28	Cooling System	130-13
Front Fender Adjustment	70-32	Electrical	130-18
Transporting		Fuses	130-23
Driving	75-1	Lighting	130-25
Carrier	75-4	Brakes	130-31
Towing	75-4	Tires	130-32
		Heating and Air Conditioner	130-35
		ROPS	130-39
Fuels, Lubricants and Coolants		Storage	
Fuel	80-1	Placing Tractor in Long-Term Storage	135-1
Engine Oil	80-4	Short-Term Idle Periods	135-4
Engine Coolant	80-5	Removing Tractor From Storage	135-5
Transmission-Hydraulic Oil	80-6		
Lubricants	80-7	Crime Prevention Tips	140-1
Lubrication and Maintenance		Specifications	
First 100 Hours	85-2	General	145-1
Lubrication and Maintenance/10 Hour	90-1	Ground Speeds	145-5
Lubrication and Maintenance/250 Hour	95-1	Identification Numbers	150-1
Lubrication and Maintenance/750 Hour	100-1	Daily Maintenance	155-1
Lubrication and Maintenance/1500 Hour	105-1	Lubrication and Maintenance Records	160-1
Lubrication and Maintenance/Annual	110-1	Index	
Lubrication and Maintenance/2 Year	115-1		
Lubrication and Maintenance/As Required	120-1		
Troubleshooting			
Engine	125-1		
Transmission	125-4		
Hydraulic System	125-5		
Brakes	125-5		
Rockshaft 3-Point Hitch	125-6		
Remote Hydraulic Cylinders	125-7		
Electrical	125-8		
SOUND-GARD Body	125-10		
Service			
Access	130-1		
Air Cleaner	130-4		
Belts	130-7		
Fuel System	130-10		

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 -19-04JUN90

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 -19-04JUN90

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 -19-04JUN90

TS201 -UN-23AUG88



STAY CLEAR OF MOVING TRACTOR

Always place 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. Some movement may occur as engine starts.

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.



-UN-23AUG88

TS213

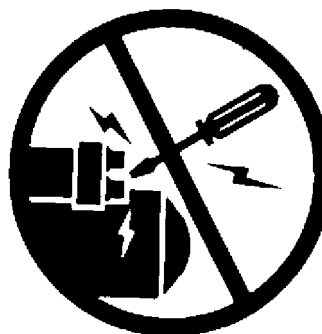
RX.STAY,CLEAR -19-25JUL89

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.



-UN-11JAN69

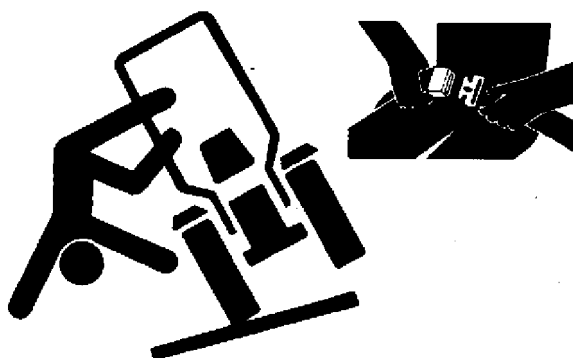
TS177

DX.BYPAS1 -19-04JUN90

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.



-UN-23AUG88

TS205

DX.ROPS1 -19-24AUG90



OPERATE TRACTOR SAFELY

Features designed into your tractor make operation safer and let it perform a wide variety of jobs. Use your tractor only for specific jobs it was designed to perform: implement carrier, load mover, remote power source, or transport unit—not a recreational vehicle.

Careless use or misuse 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 upsets
- Improper starting procedures
- Crushing and pinching during hitching
- Collisions with other motor vehicles
- Getting entangled in PTO shafts
- Falls from tractors



RX,HAZARD,S -19-01NOV90

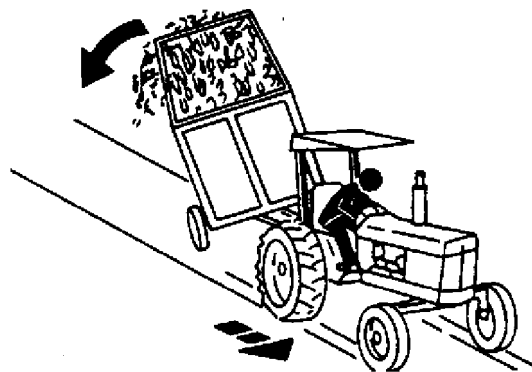
TS276 -UN-23AUG88

SHIFT TO LOW GEAR ON HILLS

Shift to a low gear before descending a steep hill to improve your control of the tractor with little or no braking. Use engine braking to reduce speed before applying tractor brakes. Run-away tractors often tip over. Never coast downhill.

When driving on icy, wet, or graveled surfaces, reduce speed and be sure tractor is properly ballasted to avoid skidding and loss of steering control. For best control, engage front-wheel drive, if equipped, by using “ON” mode, rather than “AUTO” mode, for four-wheel braking.

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



RX,DRIVE,SAFE -19-13NOV90

TS216 -UN-23AUG88



USE CAUTION ON HILLSIDES

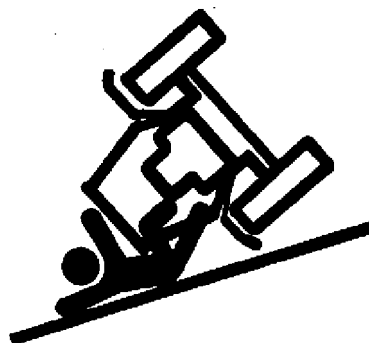
Avoid holes, ditches, and obstructions which may cause the tractor to tip, especially on hillsides. Avoid sharp, uphill turns.

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.

Front-wheel drive 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.

Be especially careful when using single wheels. Danger of overturn increases greatly with narrow tread, 60 in. (1524 mm), at high speed.



RW13093 -UN-07DEC88

RX,HILL,SIDE1 -19-19OCT88



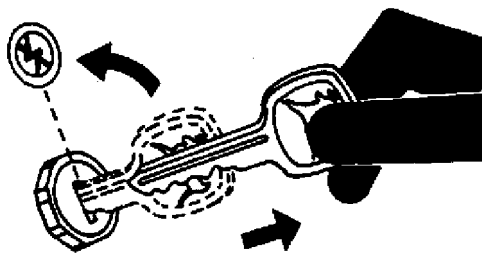
STOPPING AND PARKING TRACTOR

Your ability to stop your tractor and park it safely is just as important as being able to get it underway safely.

Tractor upsets, 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 highways
- Pull over to side of highway before stopping, if possible
- Slow down before braking
- Pump brakes when stopping on slippery surfaces like ice, snow, mud, or loose gravel
- Be careful when towing and stopping heavy loads
- Shift to park or set parking brake
- Lower all equipment when leaving tractor
- Turn off all electrical switches and remove key



-UN-24MAY69

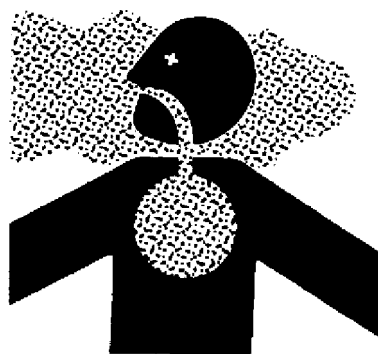
TS230

RX,STOP,PARK -19-05NOV90

WORK IN VENTILATED AREA

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open the doors and get outside air into the area.



-UN-23AUG88

TS220

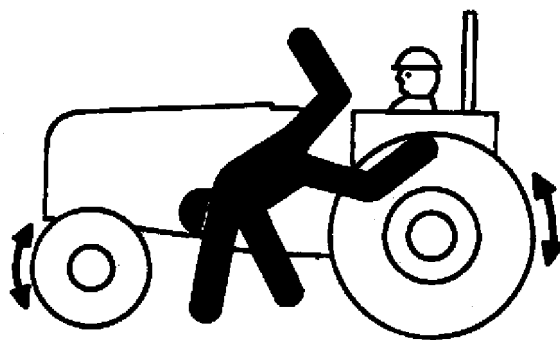
DX,AIR -19-04JUN90



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.

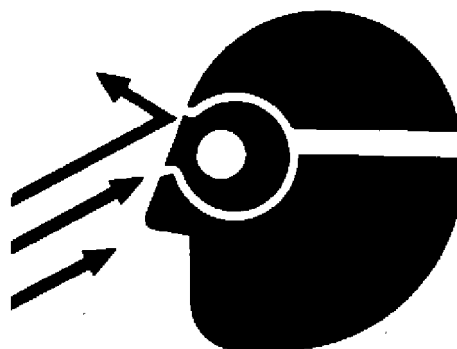


DX,RIDER -19-04JUN90

TS290
-UN-23AUG88

OPERATE RADAR UNIT SAFELY

Radar ground speed sensor emits a very low intensity microwave signal. It will not cause any ill effects during normal use. Although intensity is low, DO NOT look directly into face of sensor while in operation, to avoid any possible eye damage.



RX,SAFTY,RADR1 -19-10NOV88

TS266
-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 -19-04JUN90

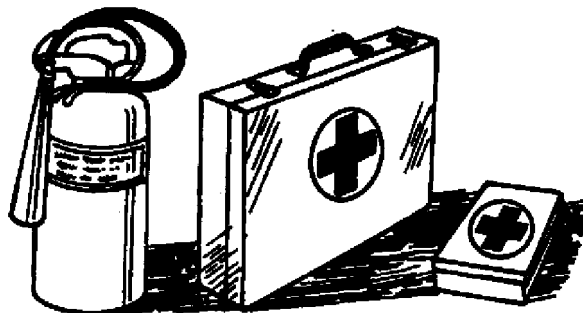
TS202
-UN-23AUG88

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 -19-04JUN90

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 -19-04JUN90

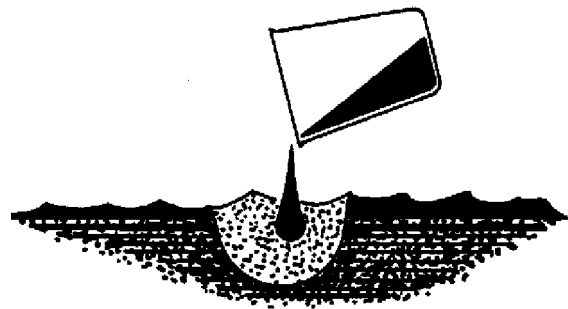
T6089AU -UN-23MAR89

DISPOSE OF FLUIDS PROPERLY

Improperly disposing of fluids can harm the environment and ecology. Before draining any fluids, find out the proper way to dispose of waste from your local environmental agency.

Use proper containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

DO NOT pour oil into the ground, down a drain, or into a stream, pond, or lake. Observe relevant environmental protection regulations when disposing of oil, fuel, coolant, brake fluid, filters, batteries, and other harmful waste.



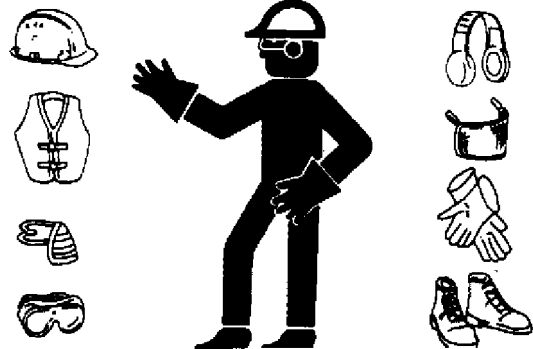
DX,DRAIN -19-05JUN90

TS222 -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 -19-10SEP90

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.



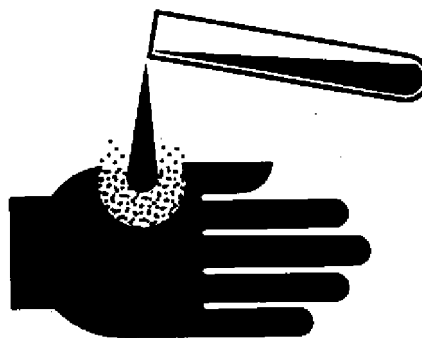
DX.NOISE -19-04JUN90

TS207
-UN-23AUG88

HANDLE CHEMICALS PROPERLY

Know hazards of fertilizers, insecticides, herbicides, and other chemicals you use during tillage and planting operations. Avoid any contact with dust, spray mixes, and vapors, especially from deadly organic phosphates, which are fast-acting nerve poisons.

SOUND-GARD body air filters 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.



RX.HANDLE.CHEM -19-10NOV88

TS272
-UN-23AUG88

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 -19-04JUN90

TS198
-UN-23AUG88

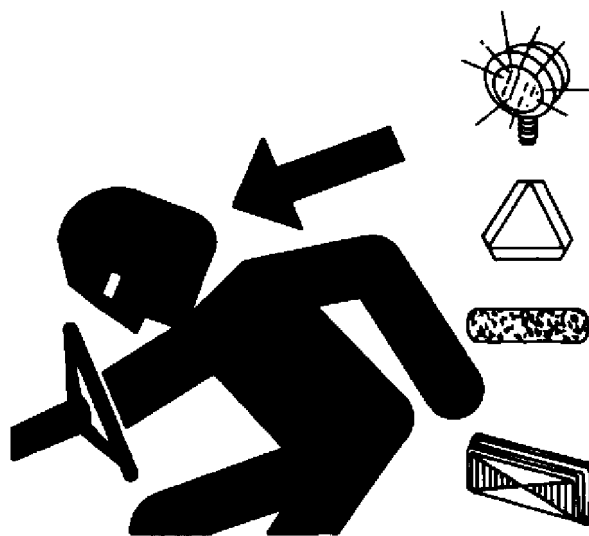


USE SAFETY LIGHTS AND DEVICES

Slow moving tractors, self-propelled equipment and towed implements or attachments can create a hazard when driven on public roads. They are difficult to see, especially at night. Avoid personal injury or death resulting from collision with a vehicle.

Flashing warning lights and turn signals are recommended whenever driving on public roads. To increase visibility, use the lights and devices provided with your machine. For some equipment, install extra flashing warning lights.

Keep safety items in good condition. Replace missing or damaged items. An implement safety lighting kit is available from your John Deere dealer.



DX,FLASH -19-04JUN90

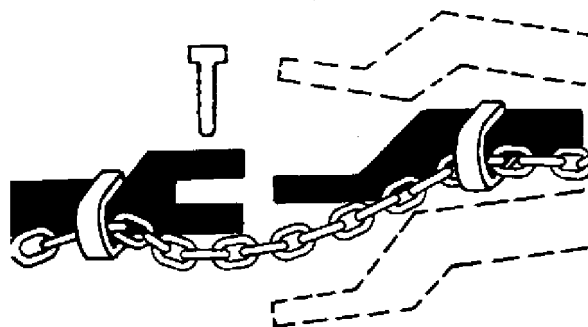
TS951 -UN-12APR90

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.



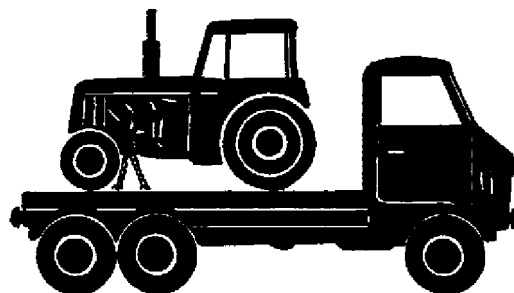
DX,CHAIN -19-04JUN90

TS217 -UN-23AUG88

TRANSPORT TRACTOR SAFELY

The best method for transporting a disabled tractor is to haul it on a flatbed carrier. Chain tractor to carrier securely. Do not chain around mechanical front-wheel drive shaft or axle housing.

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



RX,HAUL,IT2 -19-26JUL89

RW13090 -UN-07DEC88

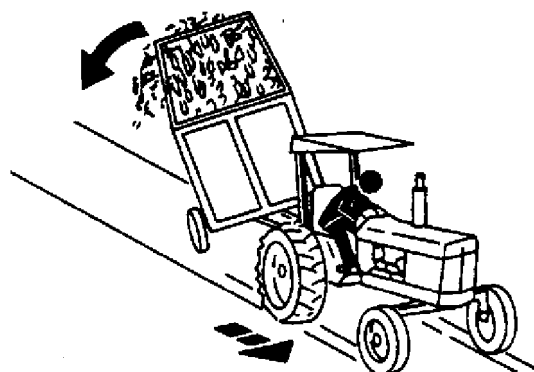


REDUCE SPEED WHEN TOWING LOADS

Braking to stop towed loads from transport speeds can cause the towed load to swerve and upset. Reduce speed if towed load weighs more than the tractor and is not equipped with brakes.

Follow recommended speed-weight ratio guidelines:

- Maximum speed is 20 mph (32 km/h) when towing load equal to or less in weight than the tractor.
- Reduce speed to 10 mph (16 km/h) when towing load up to double the tractor weight.
- Do not tow loads exceeding double the tractor weight.
- Use additional caution when towing loads under adverse surface conditions, when turning, and on inclines.



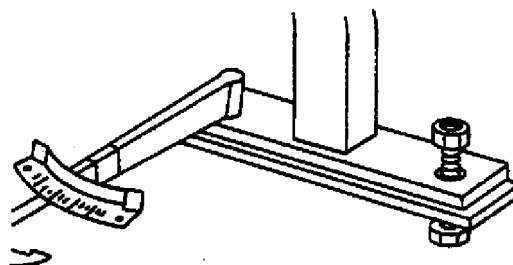
DX,TOW -19-04JUN90

TS216 -UN-23AUG88

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 -19-04JUN90

TS212 -UN-23AUG88



PRACTICE SAFE MAINTENANCE

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate or service machine while it is moving. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

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.

Disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.



DX,SERV -19-04JUN90

TS218 -UN-23AUG88

REMOVE PAINT BEFORE WELDING OR HEATING

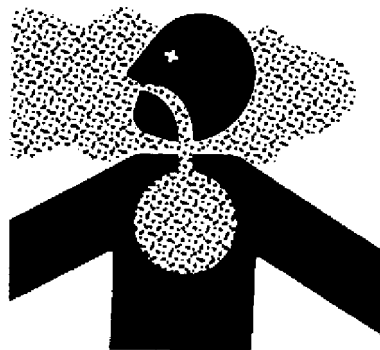
Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Do all work outside or in a well ventilated area. Dispose of paint and solvent properly.

Remove paint before welding or heating:

- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.



DX,PAINT -19-04JUN90

TS220 -UN-23AUG88



AVOID HEATING NEAR PRESSURIZED FLUID LINES

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can be accidentally cut when heat goes beyond the immediate flame area.



DX,TORCH -19-05OCT90

TS953 -UN-15MAY90

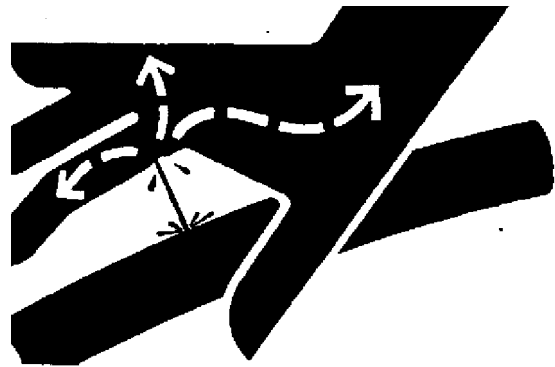
AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury may call the Deere & Company Medical Department in Moline, Illinois, or other knowledgeable medical source.



DX,FLUID,NA -19-11JUN90

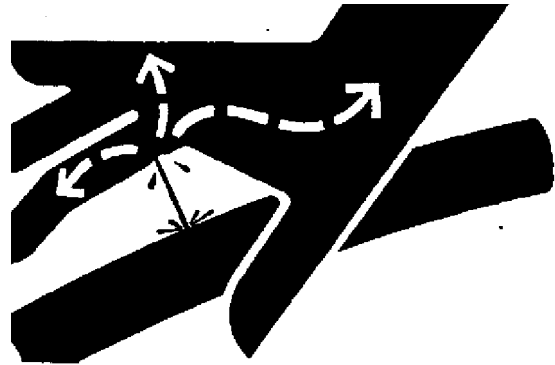
X9811 -UN-23AUG88



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.



RX,BRAKE,FIX -19-26JUL89

-UN-23AUG88
X9811

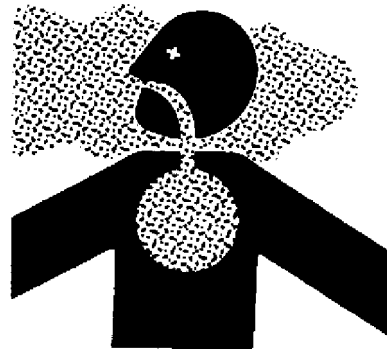
AVOID HARMFUL ASBESTOS DUST

Avoid breathing dust that may be generated when handling components containing asbestos fibers. Inhaled asbestos fibers may cause lung cancer.

Components in products that may contain asbestos fibers are brake pads, brake band and lining assemblies, clutch plates, and some gaskets. The asbestos used in these components is usually found in a resin or sealed in some way. Normal handling is not hazardous as long as airborne dust containing asbestos is not generated.

Avoid creating dust. Never use compressed air for cleaning. Avoid brushing or grinding of asbestos containing materials. When servicing, wear an approved respirator. A special vacuum cleaner is recommended to clean asbestos. If not available, wet the asbestos containing materials with a mist of oil or water.

Keep bystanders away from the area.



DX,DUST -19-27AUG90

-UN-23AUG88
TS220



Suggest:

If the above button click is invalid.

Please download this document

first, and then click the above link

to download the complete manual.

Thank you so much for reading



SERVICE COOLING SYSTEM SAFELY

Explosive release of fluids from pressurized cooling system can cause serious burns.

Shut off engine. Only remove filler cap when cool enough to touch with bare hands. Slowly loosen cap to first stop to relieve pressure before removing completely.



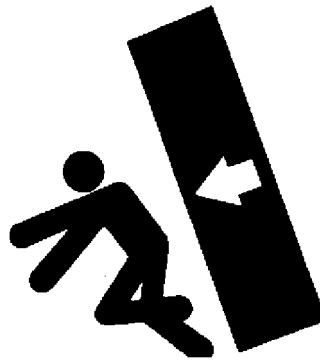
DX,RCAP -19-04JUN90

TS281 -UN-23AUG88

STORE ATTACHMENTS SAFELY

Stored attachments such as dual wheels, cage wheels, and loaders can fall and cause serious injury or death.

Securely store attachments and implements to prevent falling. Keep playing children and bystanders away from storage area.



DX,STORE -19-04JUN90

TS219 -UN-23AUG88

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>