

**6100, 6200,
6300 and 6400
Tractors**

**John Deere Werke Mannheim
OMAL76458 Issue C4**

European Edition
Printed in Germany
ENGLISCH

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 the direction of forward travel.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Specification or 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. File the identification numbers in a secure place off the machine.

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

BEFORE DELIVERING THIS MACHINE, your dealer performed a predelivery inspection. After operating for the first 100 hours, schedule an after-sale inspection with your dealer to ensure best performance.

THIS TRACTOR IS DESIGNED SOLELY for use in customary agricultural or similar operations (“INTENDED USE”).

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

THIS TRACTOR SHOULD BE OPERATED, serviced and repaired only by persons familiar with all its particular characteristics and acquainted with the relevant safety rules (accident prevention).

The accident prevention regulations, all other generally recognized regulations on safety and occupational medicine and the road traffic regulations must be observed at all times.

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

Contents

	Page		Page
Identification Views	00-1	Coolant heater	40-2
Safety	05-1	Booster battery	40-3
Safety Decals	10-1	Fuel preheater	40-3
Controls and Instruments		Towing the tractor	40-4
Vehicle controls	15-1	Parking the tractor	40-4
PTO and creeper control	15-2	Stopping the engine	40-5
Attachment controls	15-2	Operating the Tractor	
Heater and air conditioning controls	15-2	Reduce fuel consumption	45-1
Operating the digital display	15-3	Correct ground travel speed	45-3
Indicator lights	15-4	Travel speeds, SyncroPlus transmission	45-4
Digital display	15-7	Shifting SyncroPlus transmission	45-7
Lights	20-1	Travel speeds, PowrQuad transmission	45-8
Operator's Platform and Cab		Shifting PowrQuad transmission	45-13
Roll-over protective structure	25-1	Engaging creeper transmission	45-14
Seat belt	25-1	Front wheel drive	45-15
Operator's seat	25-4	Differential lock	45-15
Windshield wipers	25-7	Foot brakes	45-15
Blower	25-8	Rockshaft and Three-Point Hitch	
Heater	25-9	Operating the rockshaft	50-1
Air conditioning system	25-9	Three-point hitch	50-12
Steering wheel adjustment	25-10	Draft links	50-12
Door retainer	25-10	Attaching implements	50-14
Roof hatch	25-11	Center link	50-15
Break-In Period		Lift links	50-16
After the first 4 and 8 hours of operation	30-1	Sway blocks	50-17
Within the first 100 hours of operation	30-1	Power Take-Off	
After the first 100 hours of operation	30-2	PTO guard	55-1
Prestarting Checks	35-1	Operating the PTOs	55-2
Operating the Engine		Attaching PTO-driven equipment	55-5
Starting the engine	40-1	Ballast	
Electrical starting aid	40-2	Ballast	60-1
		Measuring rear wheel slip	60-2
		Rear wheel weights	60-2
		Filling tires with liquid ballast	60-4
		Front weights	60-5

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.

OMAL76458 C4-19-01MAR94

COPYRIGHT© 1994
DEERE & COMPANY
European Office Mannheim
All rights reserved
A John Deere ILLUSTRATION® Manual
Previous Editions
Copyright 1993, 1992 Deere & Company

Contents

	Page		Page
Wheel Tread, Tires		Lubricating rear axle	100-1
Front wheel tread adjustment	65-1	Tightening air intake hose clamps	100-2
Rear wheel tread adjustment	65-9		
Tires	65-18	Service / Every 750 Hours	
Tire combinations with front wheel drive	65-20	Checking engine speed	105-1
		Changing transmission oil filters	105-1
Additional Equipment		Service / Every 1500 Hours or 2 Years	
Selective control valves	70-1	Changing coolant	110-1
Couplers	70-4	Changing oil in FWD axle	110-2
Maximum permissible oil withdrawal	70-5	Changing transmission oil	110-3
Remote hydraulic cylinder	70-7		
Swinging drawbar	70-8	Service / As Required	
Trailer hitches	70-8	Air cleaner	115-1
		Secondary (safety) filter	115-3
Transport	75-1	Cab air filters	115-4
		Service - air conditioning system	115-5
Fuel, Lubricants, Hydraulic Oil and Coolant		Adjusting handbrake	115-5
Fuel	80-1	Bleeding foot brakes	115-6
Engine oil	80-2	Fuel filter	115-7
Transmission/hydraulic oil	80-3	Bleeding fuel system	115-8
FWD axle oil	80-4	Operator's seat	115-8
Grease	80-5	Starting motor	115-9
Engine coolant	80-7	Fuses	115-9
		Troubleshooting	
Lubrication and Periodic Service		Hydraulic system	120-1
Opening hood	85-1	Engine	120-2
Removing grille screens	85-2	Electrical system	120-3
Access to battery	85-2		
Alternator	85-3	Storage	
Service intervals	85-5	Storage for a lengthy period	125-1
		Removing tractor from storage	125-2
Service / Daily or Every 10 Hours		Specifications	
Engine crankcase oil level	90-1	Engine	130-1
Checking lights	90-1	PTO power output	130-2
Other service jobs	90-2	Axle loads and weights	130-3
		Electrical system	130-4
Service / Every 250 Hours		Capacities	130-4
Changing engine oil	95-1	Sound level	130-4
Changing engine crankcase filter element	95-1	Tire loading limits	130-5
Checking transmission oil level	95-2		
Battery service	95-2	Serial numbers	135-1
Lubricating front axle	95-3		
Checking oil level in FWD axle	95-4	Lubrication and Maintenance Records	140-1
Three-point hitch	95-4		
Trailer hitch	95-5	Index	
Checking neutral start switch	95-6		
Service / Every 500 Hours			
Changing fuel filter	100-1		

Identification Views



LX.OTYPEN004855-19-01MAR94

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 -19-03MAR93

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

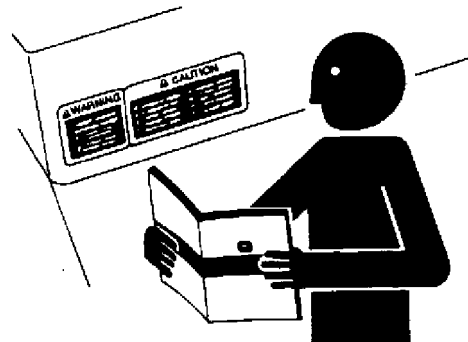
FOLLOW SAFETY INSTRUCTIONS

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

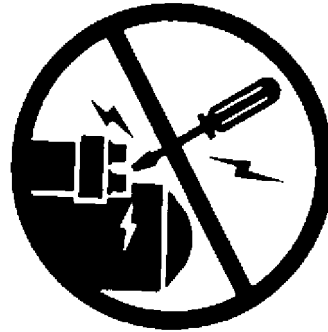


PREVENT MACHINE RUNAWAY

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.



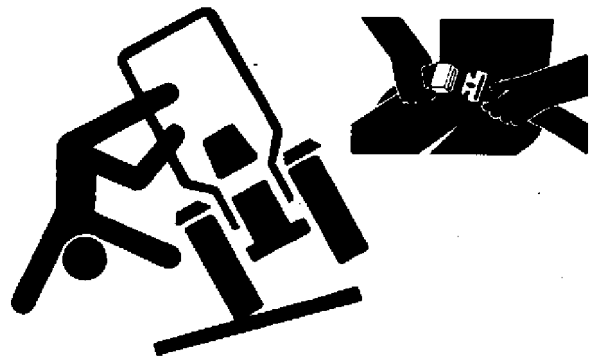
DX,BYPAS1 -19-03MAR93

TS177 -UN-11JAN89

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.



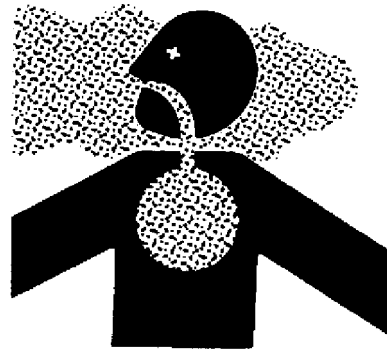
DX,ROPS1 -19-03MAR93

TS205 -UN-23AUG88

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.



DX,AIR -19-04JUN90

TS220 -UN-23AUG88



DRIVING THE TRACTOR SAFELY

Always check the road and general operating safety of the machine before using.

Operate tractor only when all guards are fitted and in their correct position.

Before moving away, always check immediate vicinity of machine (e.g. for children). Ensure adequate visibility.

Always adapt your ground speed to meet the ground conditions. Avoid making sharp turns when driving up or down slopes or when driving across the slope. Do not attempt to turn the machine with the differential lock engaged. When driving down slopes, never depress the clutch and change gear!

Attach implements and trailers to the tractor only using the prescribed drawbars or hitches. Attach trailers and implements correctly. Always ensure that trailers and implements cannot roll away.

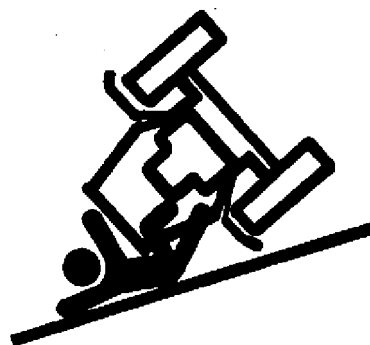
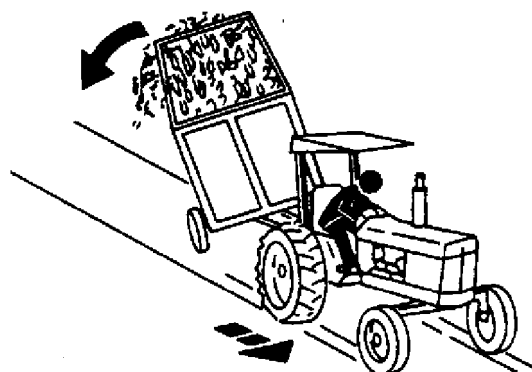
When making turns with towed or mounted implements, always take into consideration the width and inertia of the implement.

Reduce your ground speed when driving the tractor on slopes or over uneven ground and before making sharp turns. Before descending a steep hill, shift to a lower gear. Never coast downhill!

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

Front-wheel drive greatly increases traction. This means that the tractor can be driven on steeper slopes, increasing the possibility of a tip over. Driving forward out of a ditch or up a steep slope could cause tractor to tip over to the rear. Therefore reverse out of these situations whenever possible.

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



-UN-23AUG68

TS216

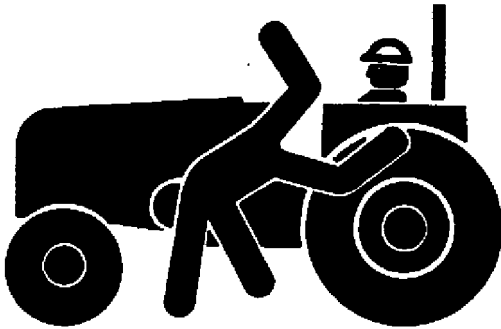
-UN-07DEC88

RW13093

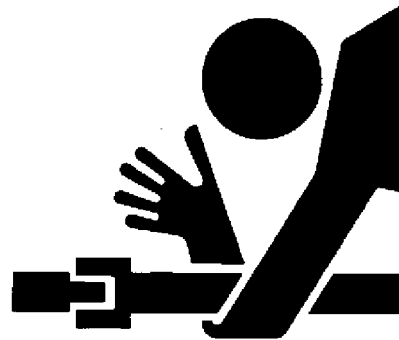
LX,DRIVE -19-01JUN92



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.

RX,HAZARD,S -19-22SEP92

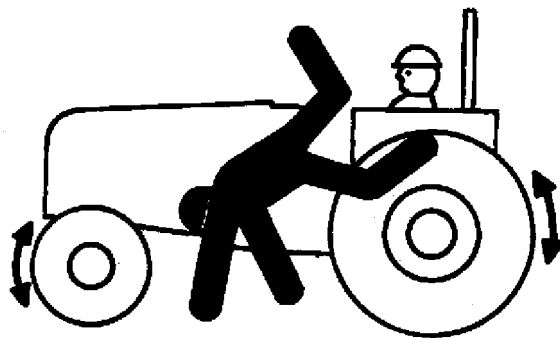


KEEP RIDERS OFF MACHINE

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 the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

On machines equipped with a passenger seat, one rider is permitted.



-UN-23AUG68

TS290

LX,OMITF 002146-19-01FEB92

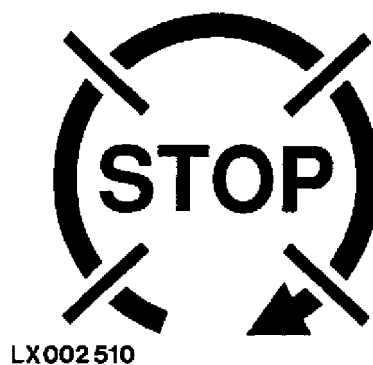
PARKING AND LEAVING THE TRACTOR

Lower mounted implement(s) or equipment to the ground before leaving the tractor.

When leaving the tractor and/or implements, shut off engine, engage range and gear shift levers as well as handbrake or parking lock, remove main switch key and lock the operator's cab (when equipped). Position chock blocks.

Never leave tractor unattended as long as engine is still running.

Never leave the operator's platform/cab when driving.



LX002510

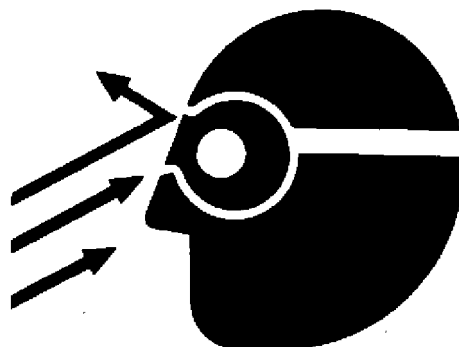
-UN-17JAN95

LX002510

LX,PARK -19-01MAY92

AVOID EYE CONTACT WITH RADAR

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.



-UN-23AUG88

TS266

RX,SAFTY,RADAR1-19-21SEP92



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

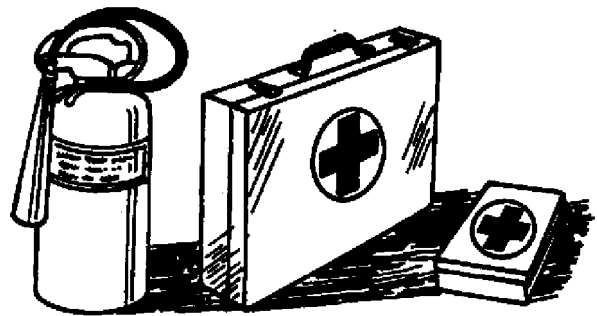
TS202 -UN-23AUG88

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

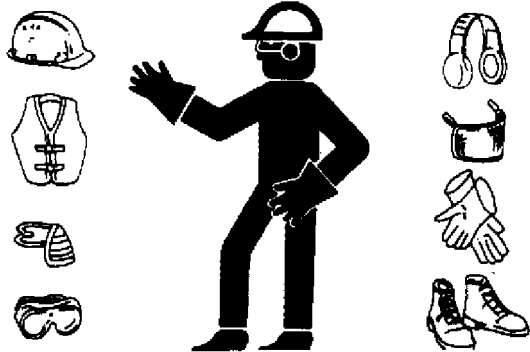
WEAR PROTECTIVE CLOTHING

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

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.

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



DX,WEAR -19-10SEP90

TS206 -UN-23AUG88

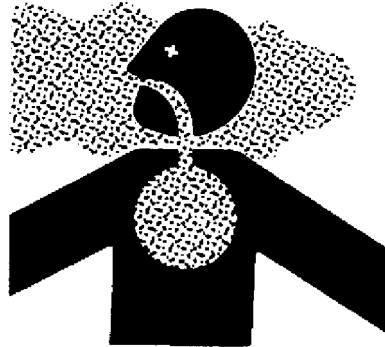


AVOID CONTACT WITH PESTICIDES

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-23AUG88

TS220

-UN-23AUG88

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 -19-03MAR93

-UN-23AUG88

TS198

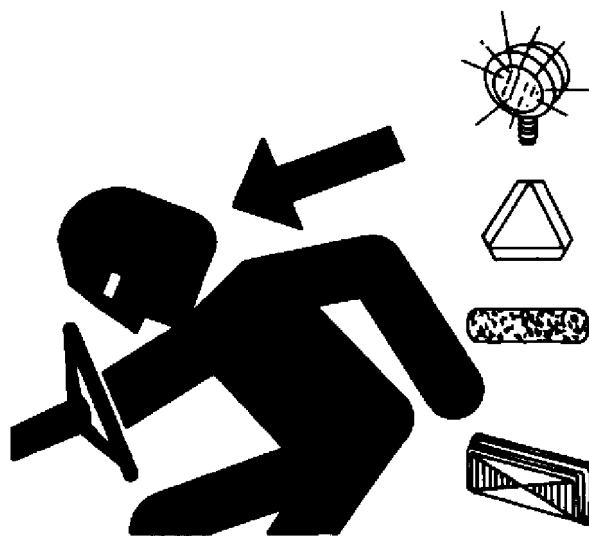


USE SAFETY LIGHTS AND DEVICES

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.

Whenever driving on public roads, use flashing warning lights and turn signal according to local regulation. 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 -19-15MAR93

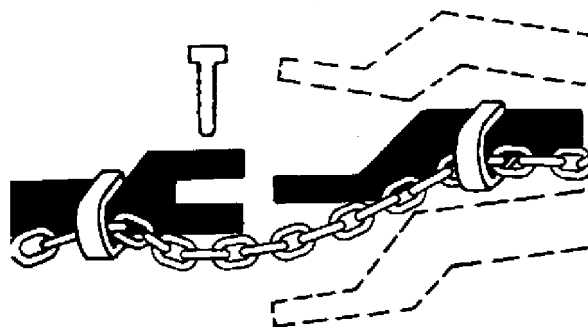
TS951 -UN-12APR90

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.



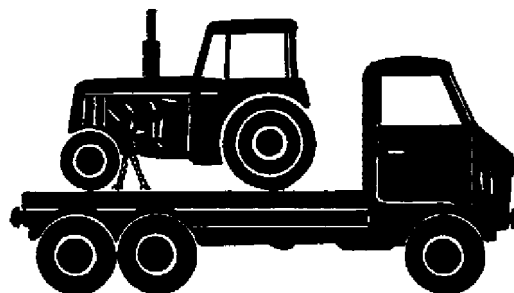
DX,CHAIN -19-03MAR93

TS217 -UN-23AUG88

SAFELY TRANSPORTING THE TRACTOR

A disabled tractor is best transported on a flatbed carrier. Use chains to secure the tractor to the carrier.

Never tow a tractor at a speed greater than 16 km/h (10 mph). An operator must steer and brake the tractor under tow.



LX,OTRANS003525-19-01SEP92

RW13090 -UN-07DEC88

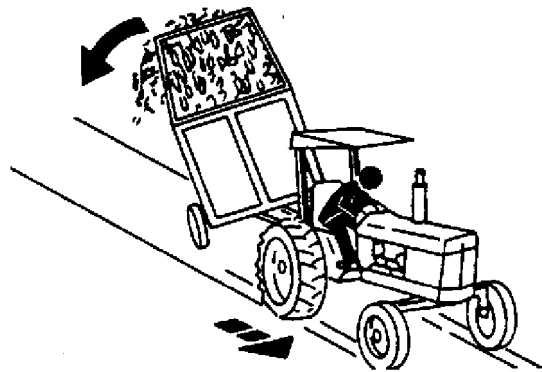


REDUCE SPEED WHEN TOWING LOADS

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 32 km/h (20 mph) when towing load equal to or less in weight than the tractor.
- Reduce speed to 16 km/h (10 mph) 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.



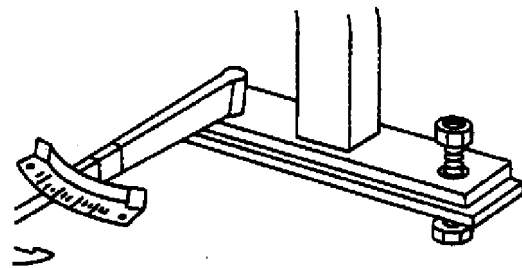
DX,TOW -19-03MAR93

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 -19-03MAR93

TS212 -UN-23AUG88



PRACTICE SAFE MAINTENANCE

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

Never lubricate, service, or adjust 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 -19-03MAR93

-UN-23AUG88

TS218

REMOVE PAINT BEFORE WELDING OR HEATING

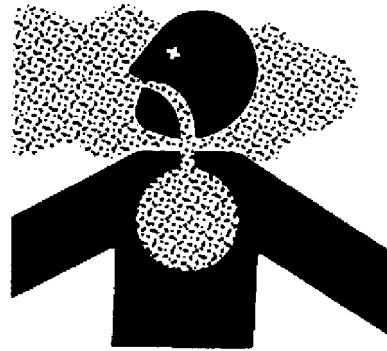
Avoid potentially toxic fumes and dust.

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 -19-03MAR93

-UN-23AUG88

TS220



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 -19-03MAR93

TS953 -UN-15MAY90

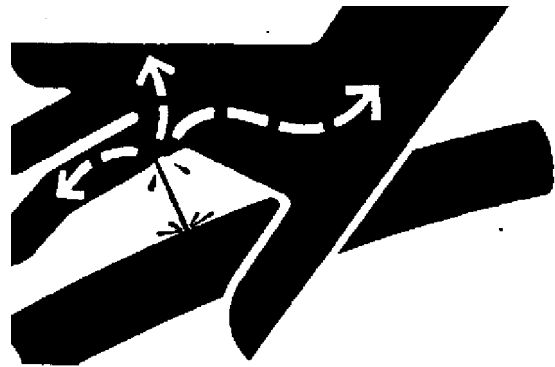
AVOID HIGH-PRESSURE FLUIDS

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 should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.



DX,FLUID -19-03MAR93

X9811 -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 -19-03MAR93

T5219 -UN-23AUG88



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 relieve pressure before removing completely.

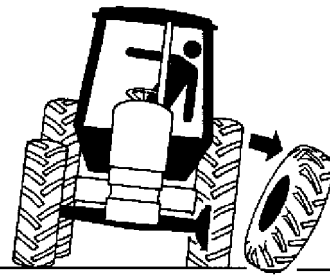


LX,RCAP -19-01MAY91

TS281 -UN-23AUG68

RETIGHTEN WHEEL NUTS

Retighten machine wheel nuts at the intervals specified in section "Break-In Period" and "Service".



L124 516

LX,WHEEL1 -19-01MAY91

L124516 -UN-03JAN95



PREVENT 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:

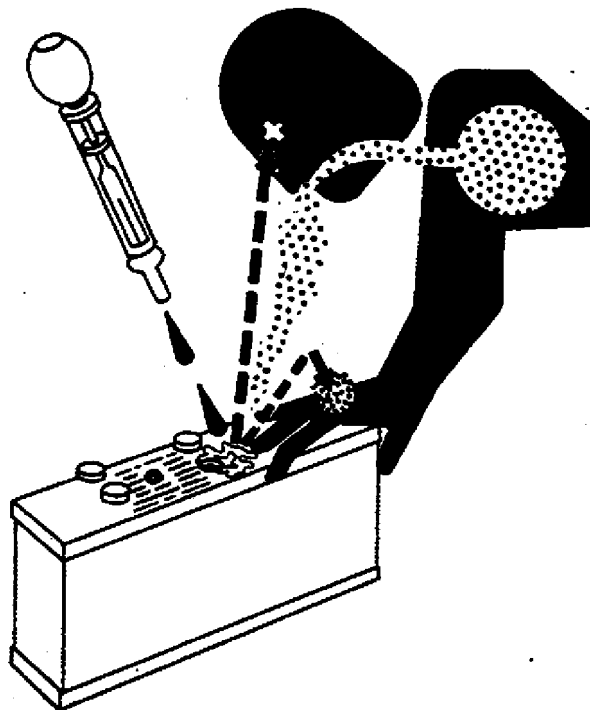
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

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 15—30 minutes. Get medical attention immediately.

If acid is swallowed:

1. Do not induce vomiting.
2. Drink large amounts of water or milk, but do not exceed 2 L (2 quarts).
3. Get medical attention immediately.



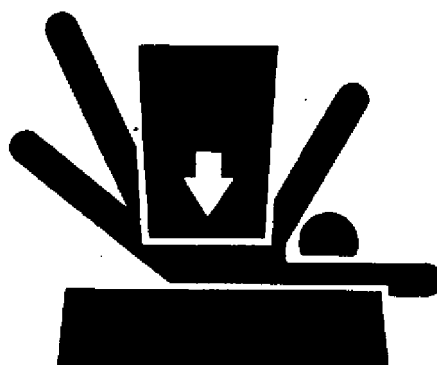
-UN-23AUG88
TS203

DX,POISON -19-21APR93

SUPPORT MACHINE PROPERLY

Always lower the attachment or implement to the ground before you work on the machine. If you must work on a lifted machine or attachment, securely support the machine or attachment.

Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load. Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.



-UN-23AUG88
TS229

DX,LOWER -19-04JUN90

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

You can download the most
perfect and complete manual in
the world immediately.

Our support email:

ebooklibonline@outlook.com