

**CTS**  
**Combines**  
(From Serial No. 677551)

**John Deere Werke Zweibrücken**  
**OMZ92677 Issue M8**

**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 the 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 20 to 50 hours, schedule an after-sale inspection with your dealer to ensure best performance.

THIS COMBINE 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 COMBINE 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 combine will relieve the manufacturer of all liability for any resulting damage or injury.

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Dimensions . . . . .	140-7		
<b>Serial Numbers</b>			
Type plates . . . . .	145-1		
Product identification number . . . . .	145-1		
Engine serial number . . . . .	145-2		
Hydrostatic drive unit pump serial number . . . . .	145-2		
Hydrostatic drive unit motor serial number . . . . .	145-2		
Four wheel drive motor serial number . . . . .	145-2		
Engine gearcase serial number . . . . .	145-3		



# Identification Views



H51098  
-UN-21DEC97

*CTS combine*

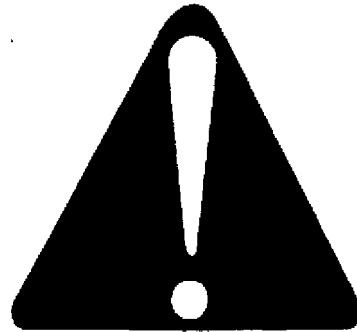
ZX\_OMCTS 011841-19-01SEP98

# 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

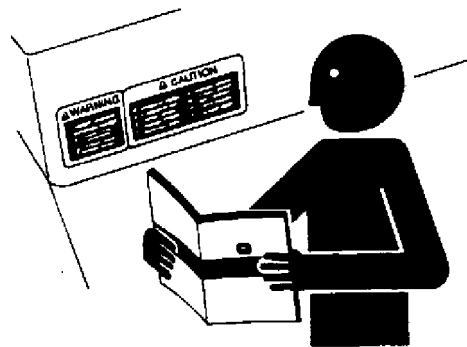
## FOLLOW SAFETY INSTRUCTIONS

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

T8201 -UN-23AUG88



## OBSERVE ROAD TRAFFIC REGULATIONS

Always observe local road traffic regulations when using public roads.



H28930 -UN-30JUN89

FX,ROAD -19-01MAY91

## CHECK MACHINE SAFETY

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

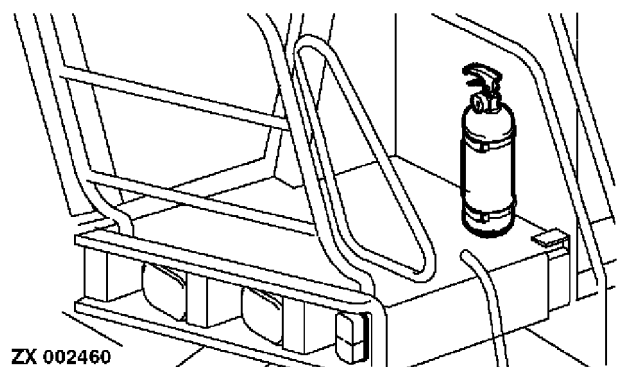
FX,READY -19-28FEB91

## FIRE EXTINGUISHER

A 6 kg (13 lb) general purpose fire extinguisher meeting local legal requirements has to be installed on the left-hand side of the operator's platform.

Maintain fire extinguisher to keep it in operational condition.

Keep the engine clean and free of dust, chaff and straw to prevent the possibility of a fire.



ZX 002460

ZX002460 -UN-16JUN95

ZX,FIREXZCO -19-27MAY94



**CAUTION:** 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,BYPAS -19-26JAN90

## DRIVING THE COMBINE

Operate machine only when all guards are correctly installed.

Before moving away, always check immediate vicinity of machine (e.g. for children). Ensure adequate visibility. Use the horn as a warning immediately before moving away.

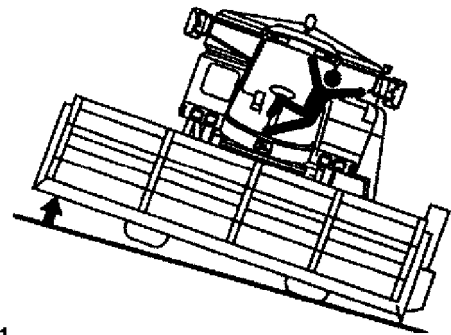
Always adapt ground speed to road or field conditions. Avoid making sharp turns when driving up or down slopes or when driving across a slope. Be especially careful when turning on slopes with full grain tank.

Attach harvesting units and other implements to combine with extreme care.

When making turns, always take into consideration the width of the attachment and the fact that the rear end of the combine swings out. Attachments and ground conditions affect the driving characteristics of the combine.

Reduce ground speed when driving on slopes or over uneven ground and before making sharp turns. Before descending a steep hill, shift to a lower gear.

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



ZX002461

ZX002461 -UN-16JUN95

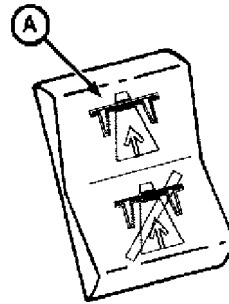
ZX,DRIVEXZCO -19-27JAN92



## ROAD SAFETY SWITCH

**IMPORTANT:** Before driving combine on public roads, make sure that road safety switch is in road position (A). Also move harvesting unit and unloading auger to transport position and close grain tank covers.

This ensures that all hydraulic functions — with exception of the steering system — are not working.



-UN-21DEC97

H51100

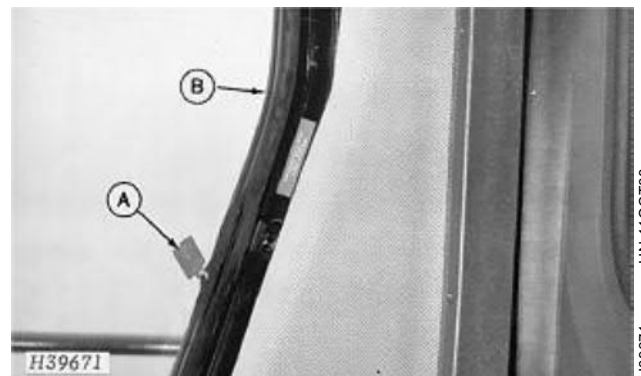
ZX, SWITCHCTS -19-01SEP98

## EMERGENCY EXIT

Pull tab (A) to begin removal of rubber rope (B).

Continue to pull until rope is removed from around window. The window can now be pushed out and allowed to fall free.

See your John Deere dealer for window replacement.



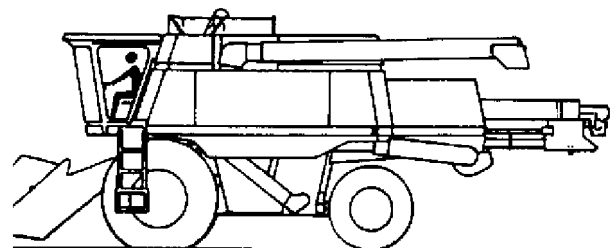
H39671

-UN-11OCT88  
H39671

OM, CTSOS, L -19-03JUN94

## TRANSPORT COMBINE SAFELY

Never drive the combine with the module in the service position.



H44071

-UN-05JAN92  
H44071

OM, CTSSA, A -19-23JAN92

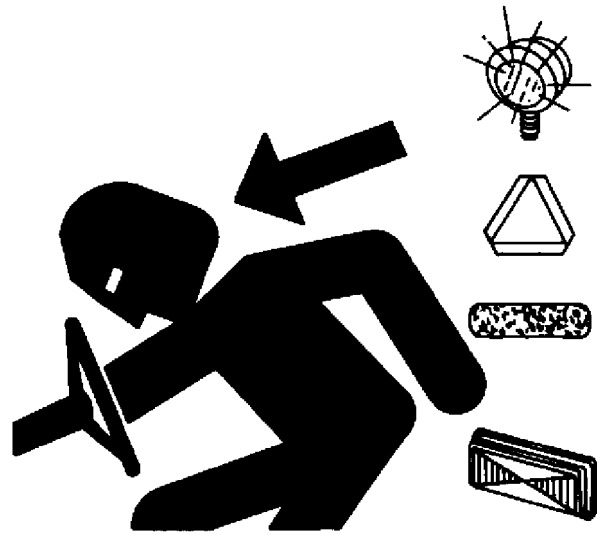


## USE SAFETY LIGHTS AND DEVICES

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

If legally permitted, use flashing warning lights or rotary beacons whenever driving on public roads. To increase visibility, use the lights and devices provided with your machine. For some equipment, install additional 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.



TS951 -UN-12APR90

ZX,FLASH -19-01OCT91

## RIDERS

Only allow the operator and one rider on the machine.

Other riders are subject to injury such as being thrown off the machine and obstruct the operator's view resulting in the machine being operated in an unsafe manner.

One rider is permitted, since the machine is equipped with a factory-approved passenger seat.



TS253 -UN-23AUG88

ZX,PASSENGER -19-02OCT91

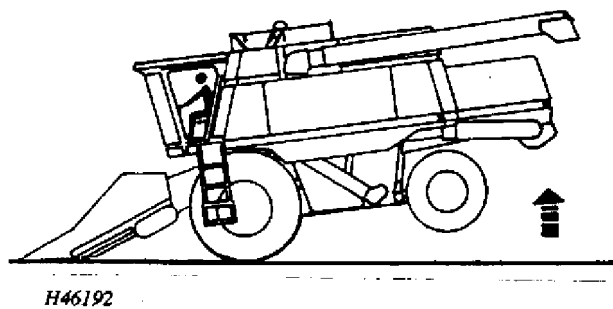


## BALLASTING FOR SAFE GROUND CONTACT

Operating, steering and braking performance of combine can be considerably affected by heavy front end attachments which alter the center of gravity of the combine.

To maintain the necessary ground contact, ballast the combine at the rear end as necessary.

Observe the maximum permissible axle loads and total weights.



H46192

-UN-15APR94

H46192

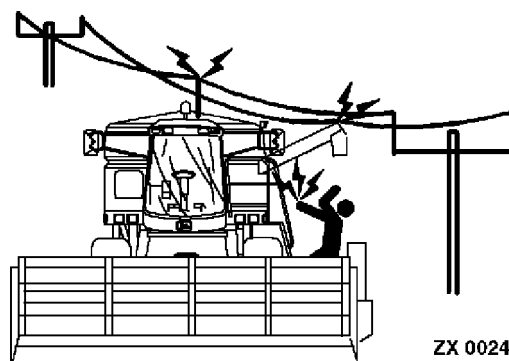
H01.9000SA,G -19-03JUN94

## RADIO AERIAL

If radio aerial is not secured in its transport position before driving on public roads, it may come into contact with low-hanging electrical cables. This would result in the operator suffering a severe electrical shock.

To avoid electrical shock, no portion of the machine should be higher than 4 m.

Before transporting machine, bend aerial or remove it.



ZX 002464

-UN-16JUN95

ZX002464

ZX,ANTENNAZCO -19-27JAN92



## PARKING AND LEAVING THE COMBINE

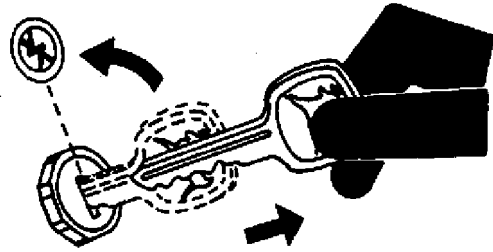
Lower harvesting unit to the ground.

Before leaving the combine, disengage harvesting unit and separator. Shut off engine and move gear shift lever to neutral. Apply parking brake, remove key and lock the operator's cab. Position chock blocks.

*NOTE: Use only chock blocks provided with the machine.*

Never leave combine unattended as long as engine is running.

Never leave the operator's cab when driving.



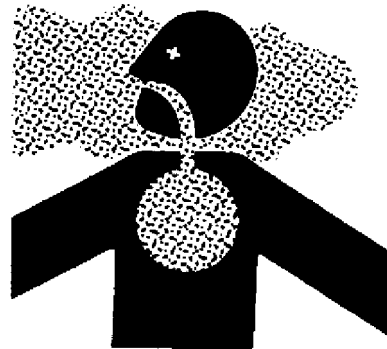
ZX,PARKXZCO -19-13APR92

-UN-24MAY69  
TS230

## 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.



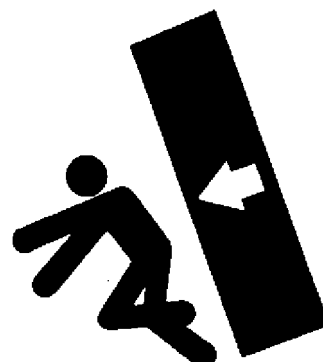
DX,AIR -19-04JUN90

-UN-23AUG88  
TS220

## 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

-UN-23AUG88  
TS219





## 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

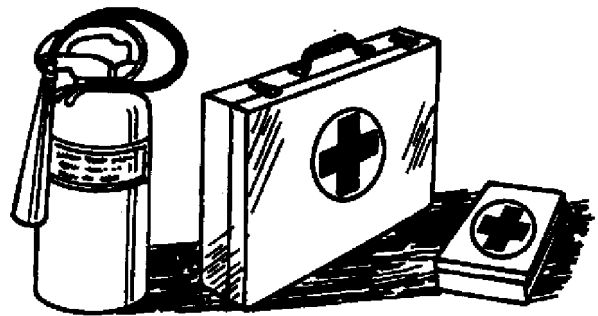
TS202  
-UN-23AUG88

## 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



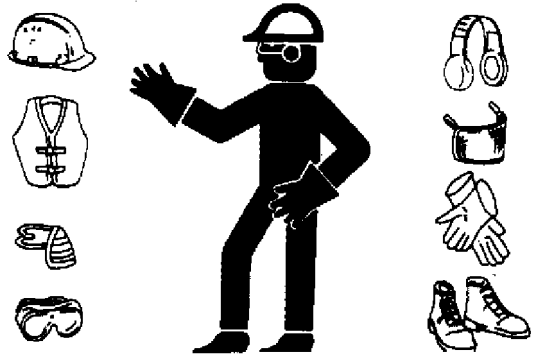
## WEAR PROTECTIVE CLOTHING

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

## STAY CLEAR OF HARVESTING UNITS

Cutterbar, auger, reel and feed rolls cannot be completely shielded due to their function. Stay clear of these moving elements during operation. Always disengage main clutch, shut off engine and remove key before servicing or unclogging machine.



ES 118 704

FX,CUT -19-21DEC90

ES118704 -UN-21MAR95

## KEEP HANDS AWAY FROM KNIVES

Never attempt to clear obstructions in front of or on header unless separator is disengaged, engine shut off and key removed.

Everyone must be clear of the combine before starting the engine



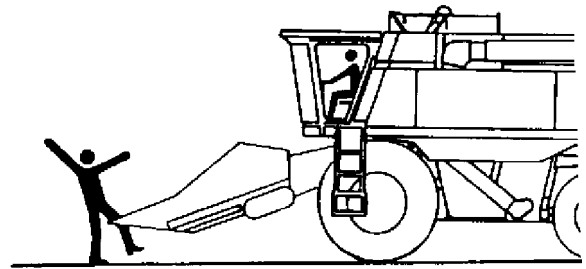
H01,9000SA,D -19-20MAR90

TS254 -UN-23AUG88



## TRANSPORT COMBINE WITH HEADER SAFELY

Before driving combine on public roads, raise the header. It must not, however, obstruct operator's view of the road.



H46194

H01,9000SA,F -19-03JUN94

-UN-15APR94  
H46194

## AVOID CONTACT WITH MOVING PARTS

Keep hands, feet and clothing away from power driven parts. Never clean, lubricate or adjust machine when it is running.



H01,9000SA,E -19-15JUN90

-UN-23AUG88  
TS256

## CLEANING THE GRAIN TANK AND REMOVAL OF BLOCKAGES

Avoid serious injury or death from entanglement in the grain tank cross augers. For functional purposes the cross augers cannot be completely covered. Do not enter the grain tank when the engine is running. Before entering the tank to clean out residual grain always shutoff the engine and remove the key.

If the grain bridges and fails to flow into the cross augers, shut off the engine, remove the key and open the grain tank cover. From a position on the engine compartment door, use a rod, broom or shovel to break the bridge and restore grain flow.



HX,CTSESA,B1 -19-06JAN98

-UN-23AUG88  
TS256



## 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

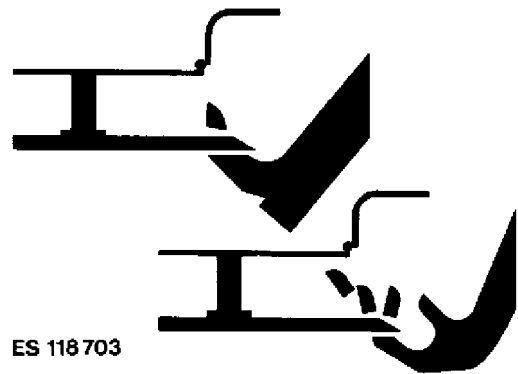
TS1644 -UN-22AUG95

## GUARDS AND SHIELDS

Keep guards and shields in place at all times. Ensure that they are serviceable and installed correctly.

Always disengage main clutch, shut off engine and remove key before removing any guards or shields.

Keep hands, feet and clothing away from moving parts.



ES 118703

FX,DEVICE -19-04DEC90

ES118703 -UN-21MAR95

## 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

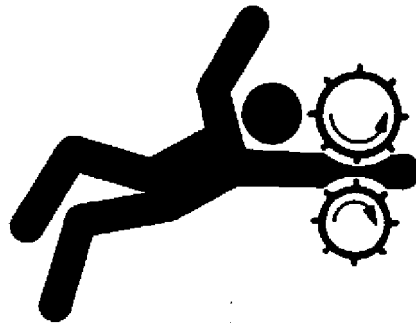
TS218 -UN-23AUG88



## SERVICE MACHINES SAFELY

Tie long hair behind your head. Do not wear a necktie, scarf, loose clothing, or necklace when you work near machine tools or moving parts. If these items were to get caught, severe injury could result.

Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



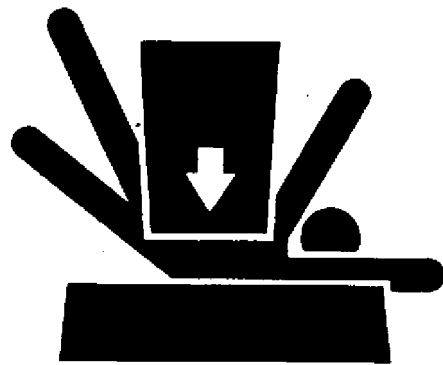
DX.LOOSE -19-04JUN90

TS228 -UN-23AUG88

## 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.

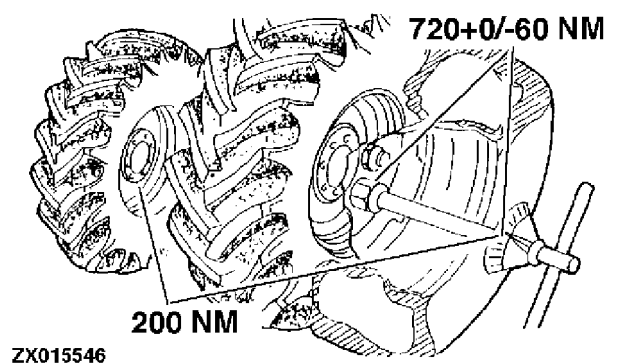


DX.LOWER -19-04JUN90

TS229 -UN-23AUG88

## RETORQUE WHEEL NUTS

Retorque wheel nuts as specified in Sections "Wheels, Axles and Additional Weights" and "Lubrication Charts, Periodic Service". Failure to do this could result in a wheel falling off during operation, causing the machine to tip over with serious injury to the operator and extensive damage to the machine.



ZX.CTSNUTS -19-01SEP98

ZX015546 -UN-14SEP98



## REMOVE PAINT BEFORE WELDING OR HEATING

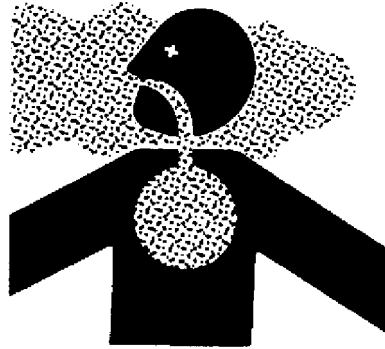
Avoid potentially toxic fumes and dust.

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

TS220 -UN-23AUG68

## 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



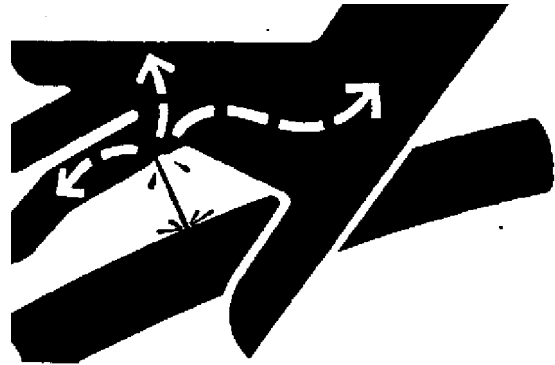
## AVOID HIGH-PRESSURE FLUIDS

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.



X9811 -UN-23AUG88

DX,FLUID -19-03MAR93

## PREVENT BATTERY EXPLOSIONS

Keep sparks, lighted matches, and open flame away from the top of battery. Battery gas can explode.

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

Do not charge a frozen battery; it may explode. Warm battery to 16°C (60°F).



TS204 -UN-23AUG88

DX,SPARKS -19-03MAR93



## 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:

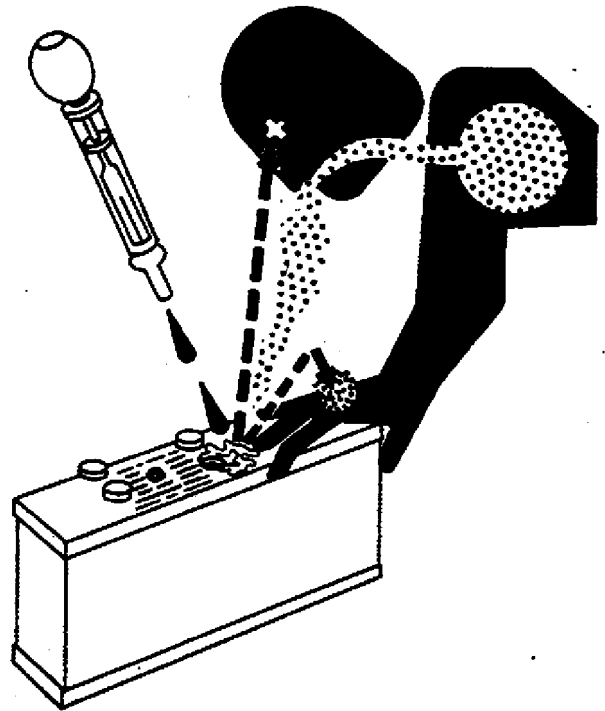
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

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.



DX,POISON -19-21APR93

TSS203 -UN-23AUG88





## SERVICE TIRES SAFELY

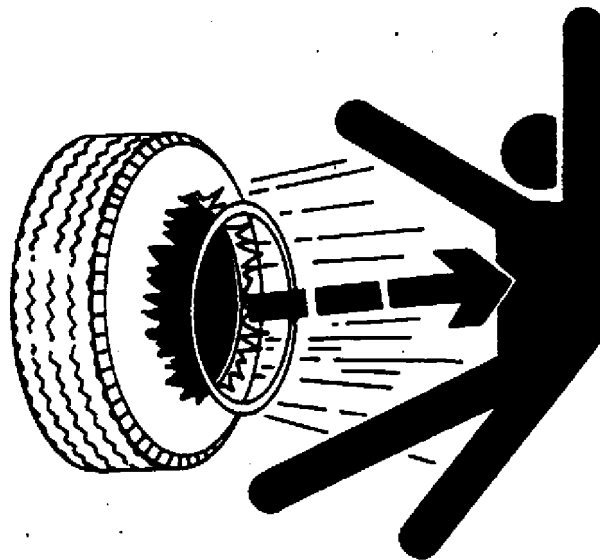
Explosive separation of a tire and rim parts can cause serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check wheels for low pressure, cuts, bubbles, damaged rims or missing lug bolts and nuts.



DX,RIM -19-24AUG90

TS211 -UN-23AUG88

## DISPOSE OF WASTE PROPERLY

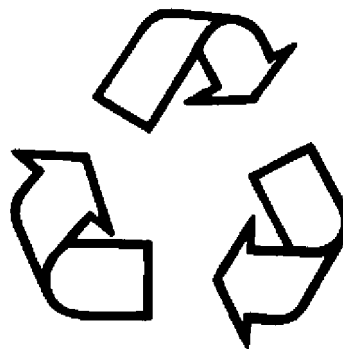
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with John Deere equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

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

Do not pour waste onto the ground, down a drain, or into any water source.

Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.

Inquire on the proper way to recycle or dispose of waste from your local environmental or recycling center, or from your John Deere dealer.



DX,DRAIN -19-03MAR93

TS1133 -UN-26NOV90



## 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

## REMOVE ACCUMULATED CROP DEBRIS

The build up of chaff and crop debris in the engine compartment, on the engine, and near moving parts is a fire hazard. Check and clean these areas frequently. Before performing any inspection or service, shut off the engine, set the parking brake and remove the key.



HX,9010SA,B -19-23AUG97

TS227 -UN-23AUG88

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