

335, 375, 385, 435 and 535 Round Balers

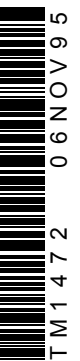


TECHNICAL MANUAL 335, 375, 385, 435 and 535 Round Balers

TM1472 (06NOV95) English

John Deere Ottumwa Works
TM1472 (06NOV95)

LITHO IN U.S.A.
ENGLISH



Introduction

FOREWORD

This manual is written for an experienced technician. Essential tools required in performing certain service work are identified in this manual and are recommended for use.

Live with safety: Read the safety messages in the introduction of this manual and the cautions presented throughout the text of the manual.



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

Technical manuals are divided in two parts: repair and operation and tests. Repair sections tell how to repair the components. Operation and tests sections help you identify the majority of routine failures quickly.

Information is organized in groups for the various components requiring service instruction. At the beginning of each group are summary listings of all applicable essential tools, service equipment and tools, other materials needed to do the job, service parts kits, specifications, wear tolerances, and torque values.

Technical Manuals are concise guides for specific machines. They are on-the-job guides containing only the vital information needed for diagnosis, analysis, testing, and repair.

Fundamental service information is available from other sources covering basic theory of operation, fundamentals of troubleshooting, general maintenance, and basic type of failures and their causes.

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HANDLE FLUIDS SAFELY—AVOID FIRES

When you work around fuel, do not smoke or work near heaters or other fire hazards.

Store flammable fluids away from fire hazards. Do not incinerate or puncture pressurized containers.

Make sure machine is clean of trash, grease, and debris.

Do not store oily rags; they can ignite and burn spontaneously.



DX,FLAME -19-04JUN90

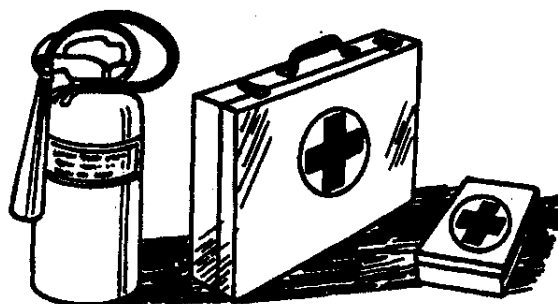
TS227 -UN-23AUG88

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

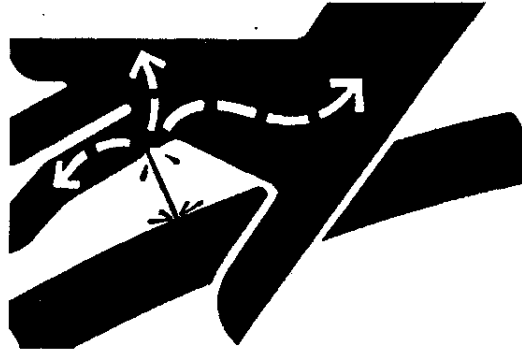
AVOID HIGH-PRESSURE FLUIDS

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.



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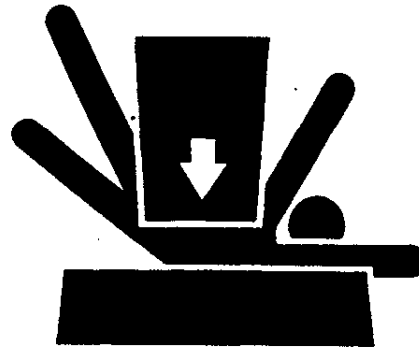
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DX,FLUID -19-03MAR93

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.



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TS229

DX,LOWER -19-04JUN90

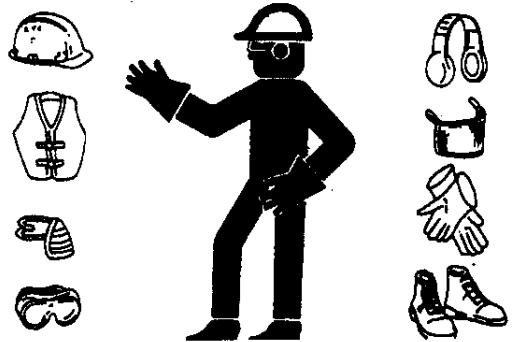
WEAR PROTECTIVE CLOTHING

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.



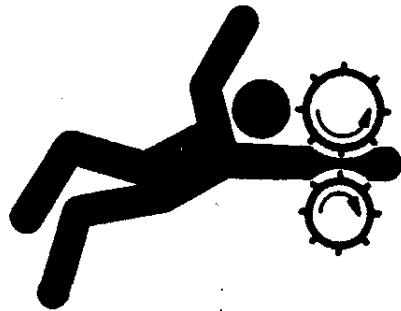
DX,WEAR -19-10SEP90

335
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TS206

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.



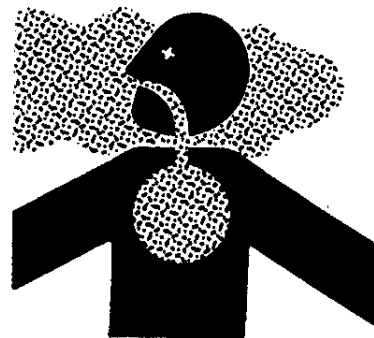
DX,LOOSE -19-04JUN90

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TS228

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.



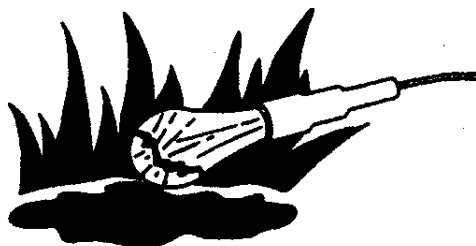
DX,AIR -19-04JUN90

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TS220

ILLUMINATE WORK AREA SAFELY

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Illuminate your work area adequately but safely. Use a portable safety light for working inside or under the machine. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.



DX,LIGHT -19-04JUN90

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TS223

REPLACE SAFETY SIGNS

Replace missing or damaged safety signs. See the machine operator's manual for correct safety sign placement.



DX,SIGNS1 -19-04JUN90

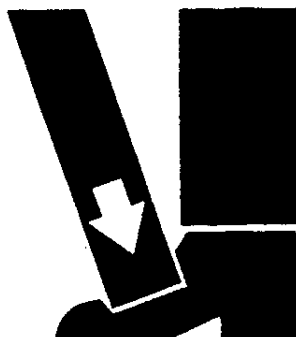
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TS201

USE PROPER LIFTING EQUIPMENT

Lifting heavy components incorrectly can cause severe injury or machine damage.

Follow recommended procedure for removal and installation of components in the manual.



DX,LIFT -19-04JUN90

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TS226

SERVICE TIRES SAFELY

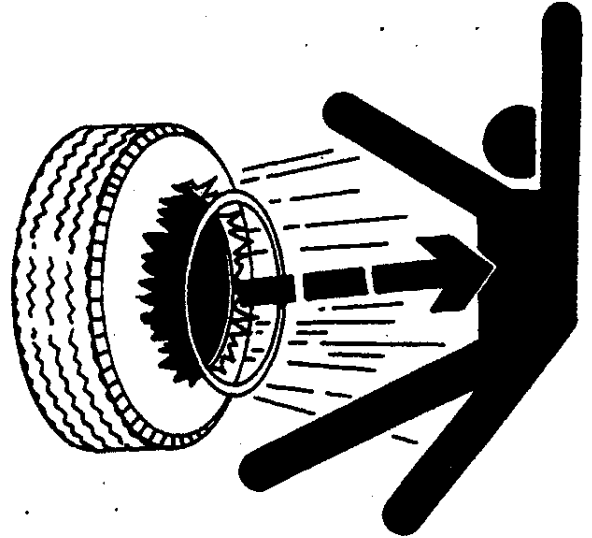
Explosive separation of a tire and rim parts can cause serious injury or death.

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

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TS211

REMOVE PAINT BEFORE WELDING OR HEATING

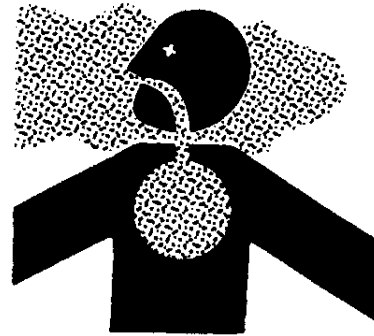
Avoid potentially toxic fumes and dust.

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

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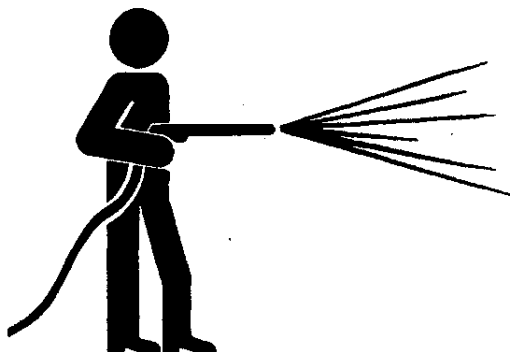
TS220

Safety

WORK IN CLEAN AREA

Before starting a job:

- Clean work area and machine.
- Make sure you have all necessary tools to do your job.
- Have the right parts on hand.
- Read all instructions thoroughly; do not attempt shortcuts.



DX.CLEAN -19-04JUN90

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USE PROPER TOOLS

Use tools appropriate to the work. Makeshift tools and procedures can create safety hazards.

Use power tools only to loosen threaded parts and fasteners.

For loosening and tightening hardware, use the correct size tools. DO NOT use U.S. measurement tools on metric fasteners. Avoid bodily injury caused by slipping wrenches.

Use only service parts meeting John Deere specifications.



DX.REPAIR -19-04JUN90

TS779 -JUN-08NOV89

LIVE WITH SAFETY

Before returning machine to customer, make sure machine is functioning properly, especially the safety systems. Install all guards and shields.



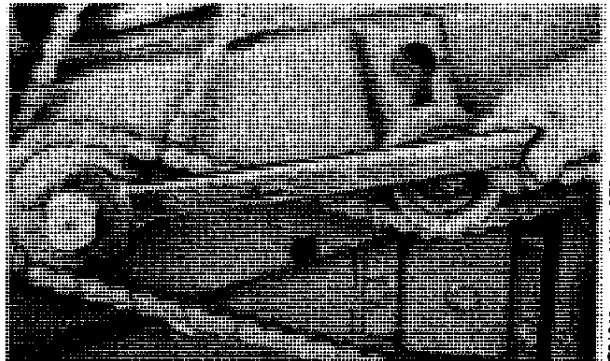
DX,LIVE -19-25SEP92

TS231 -19-07OCT88

SERVICE BALER SAFELY

Use an open-end wrench to turn the hex gear case output shaft to aid in servicing. Never use any type of tool or wrench on shaft while tractor engine is running. Always remove tool from the shaft whenever you are finished using it.

Check driveline shield to ensure it is free to turn. Make necessary repairs if the shield will not turn.



EX,1472,1005,A -19-21JUL89

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OPERATE BALER SAFELY

Keep all shields in place when operating baler.

Do not attempt to pull hay or twine from pickup when baler is running.

Never hand-feed twine or hay into baler.

All machinery should be operated by responsible persons who have been properly instructed and delegated to do so.

Stand clear of baler at all times when machine is operating.

Become familiar with all controls affecting machine functions.

Before servicing, adjusting, or removing material from the baler, always disengage all power and shut off engine.

EX,1472,1005,B -19-21JUL89

PUSH BAR PRECAUTIONS

Bale push bar is activated when gate is opened. Be sure bystanders are clear and there is sufficient clearance behind baler when opening gate.

EX,1472,1005,C -19-21JUL89

Safety

SURFACE WRAP

Be careful when working around the knife. It is sharp.

EX,1472,1005,D -19-24FEB92

DO NOT MODIFY MACHINE

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

EX,1472,1005,E -19-21JUL89

335, 375 AND 385 ROUND BALERS

	335 ROUND BALER	375 ROUND BALER	385 ROUND BALER
Bale:			
Diameter	From 35 to 51-in. (900 to 1295 mm)	From 35 to 51-in. (900 to 1295 mm)	From 35 to 60 in. (889 to 1524 mm)
Width	46.1 in. (1171 mm)	61.6 in. (1565 mm)	46.1 in. (1171 mm)
Weight*	750 lb (340 kg)	1000 lb (454 kg)	1050 lb (477 kg)
* (Depending on crop and moisture content)			
Baler:			
Weight	3210 lb (1445 kg)	3681 lb (1634 kg)	3400 lb (1543 Kg)
Length, Gate Closed	135 in. (3429 mm)	135 in. (3429 mm)	143.4 in. (3643 mm)
Length, Gate Open	174 in. (4420 mm)	174 in. (4420 mm)	178 in. (4523 mm)
Height, Gate Closed	91 in. (2311 mm)	91 in. (2311 mm)	102.2 in. (2597 mm)
Height, Gate Open	112 in. (2845 mm)	112 in. (2845 mm)	127 in. (3229 mm)
Width	89 in. (2261 mm)	112 in. (2845 mm)	89 in. (2261 mm)
Pickup:			
Width (Inside)	46.6 in. (1184 mm)	61.4 in. (1560 mm)	46.6 in. (1184 mm)
Width (On Flare)	55.5 in. (1410 mm)	71 in. (1803 mm)	55.5 in. (1410 mm)
Width (Between Outer Teeth)	44 in. (1118 mm)	60 in. (1524 mm)	44 in. (1118 mm)
Bars	4	4	4
Number of Teeth	72	96	72
Tooth Spacing	2.5 in. (64 mm)	2.5 in. (64 mm)	2.5 in. (64 mm)
Stripper Diameter	10 in. (254 mm)	10 in. (254 mm)	10 in. (254 mm)
Forming Belts:			
Number	6	8	6
Width	7 in. (178 mm)	7 in. (178 mm)	7 in. (178 mm)
Type	3-Ply Combination Nylon Polyester, Diamond Tread, Friction Surface, with Rectangular Hi-Strength splices		
Length	(2) 402.75 in. (10230 mm) (4) 410.24 in. (10420 mm)	(4) 402.75 in. (10230 mm) (4) 410.24 in. (10420 mm)	(2) 461 in. (11709 mm) (4) 466.5 in. (11849 mm)
Twine Wrap:			
Control	Manual	Manual	Manual
Type	Hydraulic	Hydraulic	Hydraulic
Spacing	Operator Controlled w/Visual Indicators	Operator Controlled w/Visual Indicators	Operator Controlled w/Visual Indicators
Bale Forming Indicators (Mechanical - On the Baler):			
Near-Full Bale Indicator	Audible - Adjustable to Bale Size Desired	Audible - Adjustable to Bale Size Desired	Audible - Adjustable to Bale Size Desired
Twine Wrap	Twine Arm Position Indicator Visual Warning	Twine Arm Position Indicator Visual Warning	Twine Arm Position Indicator Visual Warning
Oversize Bale Protection	Audible	Audible	Audible, also visual warning

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