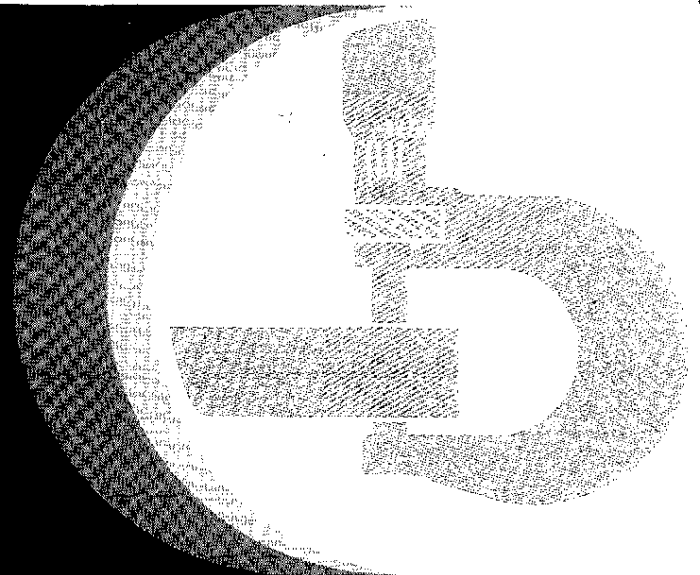


**1350, 1550, 1750,
1850, 1850N, 1950
and 1950N Tractors**



John Deere Werke Mannheim
TM4437(Jan-91)
Printed in Germany (English)

SUMMARY OF MOST IMPORTANT SPECIFICATIONS FOR 1350, 1550, 1750, 1850, 1950 and 1950 N TRACTORS

NOTE: For further specifications, see relevant Technical Manual.

ENGINE

Valve clearance (engine hot or cold):
Intake valves 0.35 mm (0.014 in.)
Exhaust valves 0.45 mm (0.018 in.)

Minimum engine oil pressure at 800 rpm and normal operating temperature 140 kPa (1.4 bar; 20 psi)
Compression 2100 kPa (21 bar; 300 psi)

Maximum difference in pressure between cylinders 350 kPa (3.5 bar; 50 psi)
Maximum blow-by at crankcase vent tube 80 liter/kWh (2.8 cu.ft./kWh)

Minimum pressure of turbocharger in intake manifold at rated engine speed 60 kPa (0.6 bar; 9 psi)

Rocker arm shaft to cylinder head (cap screws dipped in oil)
1st step 85 Nm (65 ft-lb)
2nd step 135 Nm (100 ft-lb) +60°
3rd step 10 Nm (7 ft-lb)

Rocker cover to cylinder head (clipped in oil) 65 - 75 Nm (50 - 55 ft-lb)

Main bearing caps to cylinder block
Flywheel to crankshaft 120 Nm (85 ft-lb)
Front axle carrier to engine (Engines with turbocharger)
Oil pan to front axle carrier (Engines with turbocharger)
Oil pan to clutch housing (Engines with turbocharger)

Clutch housing to engine 230 Nm (170 ft-lb)
Side frames to front axle carrier 230 Nm (170 ft-lb)
Side frames to flywheel housing 230 Nm (170 ft-lb)

FUEL INJECTION NOZZLES
Opening pressure of a new or re-conditioned nozzle with new spring
- Engine without turbocharger

Pressure for setting 22 100 - 22 600 kPa (221 - 226 bar; 3200 - 3280 psi)

Pressure for checking, min. 21 800 kPa (218 bar; 3160 psi)

- Engine with turbocharger

Pressure for setting 25 500 - 26 100 kPa (255 - 261 bar; 3700 - 3780 psi)

Pressure for checking, min. 25 200 kPa (252 bar; 3660 psi)

Opening pressure with used nozzle
- Engine without turbocharger

Pressure for setting 20 700 - 21 250 kPa (207 - 213 bar; 3000 - 3080 psi)

Pressure for checking, min. 19 850 kPa (198 bar; 2880 psi)

- Engine with turbocharger
Pressure for setting 24 1500 - 24 700 kPa (241 - 247 bar; 3500 - 3580 psi)

Pressure for checking, min. 22 950 kPa (230 bar; 3330 psi)

Maximum difference in opening pressure 700 kPa (7 bar; 100 psi)

Fuel injection nozzle to cylinder head 30 Nm (23 ft-lb)

BATTERIES
Cold state testing current
- 55 Ah battery 255 amps.
- 66 Ah battery 300 amps.
- 88 Ah battery 395 amps.

ENGINE SINGLE-STAGE CLUTCH
Thickness of a new disk 10 mm (0.39 in.)
Wear limit 7 mm (0.26 in.)

Maximum permissible warpage of clutch disk 0.5 mm (0.02 in.)
Flywheel to crankshaft 160 Nm (120 ft-lb)
Clutch to flywheel 50 Nm (35 ft-lb)
Clutch pedal free play 25 mm (approx. 1 in.)

ENGINE DUAL-STAGE CLUTCH
Thickness of a new disk
- Engine clutch 9 to 10 mm (0.35 to 0.39 in.)
- PTO clutch 7.5 to 8.5 mm (0.29 to 0.33 in.)

Maximum permissible warpage of clutch disk 0.5 mm (0.02 in.)
Flywheel to crankshaft 160 Nm (120 ft-lb)
Clutch to flywheel 50 Nm (35 ft-lb)
Clutch pedal free play 25 mm (approx. 1 in.)

SUMMARY OF MOST IMPORTANT SPECIFICATIONS FOR 1350, 1550, 1750, 1850 N, 1950 and 1950 N TRACTORS

HI-LO SHIFT UNIT

Operating pressure at 1500 rpm 1050 kPa (10.5 bar; 150 psi)

Operating pressure of automatic shift valve 500 to 700 kPa (5 to 7 bar; 75 to 100 psi)

Hi-Lo shift unit to clutch housing 50 Nm (35 ft-lb)

TRANSMISSION OIL PUMP
Minimum delivery of transmission oil pump at 2000 rpm:
Oil temperature 40°C (100°F)
without Hi-Lo shift unit 34 liters/min. (9 gpm)
with Hi-Lo shift unit 42 liters/min. (11 gpm)
with mid PTO 25 liters/min. (6.5 gpm)

Oil temperature 65°C (150°F)
without Hi-Lo shift unit 30 liters/min. (8 gpm)
with Hi-Lo shift unit 38 liters/min. (10 gpm)
with mid PTO 23 liters/min. (6 gpm)

Minimum flow to hydraulic pump at 2000 rpm with:
Oil temperature 40°C (100°F)
without Hi-Lo shift unit 30 liters/min. (8 gpm)
with Hi-Lo shift unit 36 liters/min. (9.5 gpm)
with mid PTO 23 liters/min. (6 gpm)

Oil temperature 65°C (150°F)
without Hi-Lo shift unit 26 liters/min. (7 gpm)
with Hi-Lo shift unit 32 liters/min. (8.5 gpm)
with mid PTO 21 liters/min. (5.5 gpm)

Difference between delivery of transmission oil pump and flow to hydraulic pump,
- Without Hi-Lo and independent PTO up to 7 liters/min. (1.8 gpm)
- With Hi-Lo and independent PTO up to 15 liters/min. (4 gpm)

Transmission oil pump cap screws 55 Nm (40 ft-lb)
Transmission oil pump to clutch housing 55 Nm (40 ft-lb)

DIFFERENTIAL
Preload of taper roller bearings 0.05 to 0.13 mm (0.002 to 0.005 in.)
Backlash between ring gear and differential drive shaft pinion 0.30 mm (0.012 in.)

FINAL DRIVES
To measured rolling drag torque of final drive housing (before tightening 12-point screw) add:
Final drives to transmission case 120 Nm (85 ft-lb)

INDEPENDENT PTO
Operating pressure at 1500 rpm 1050 KPa (10.5 bar; 150 psi)
Preload of taper roller bearings in bearing quill, heavy duty type (S40 u/min.) 0-0.05 mm (0-0.002 in.)
Drive gear to clutch drum 75 Nm (55 ft-lb)
Bearing quill to transmission case 120 Nm (85 ft-lb)

HI-LO SHIFT UNIT
Operating pressure at 1500 rpm 1050 kPa (10.5 bar; 150 psi)

Operating pressure of automatic shift valve 500 to 700 kPa (5 to 7 bar; 75 to 100 psi)

Hi-Lo shift unit to clutch housing 50 Nm (35 ft-lb)

TRANSMISSION OIL PUMP
Minimum delivery of transmission oil pump at 2000 rpm with:
Oil temperature 40°C (100°F)
without Hi-Lo shift unit 34 liters/min. (9 gpm)
with Hi-Lo shift unit 42 liters/min. (11 gpm)
with mid PTO 25 liters/min. (6.5 gpm)

Oil temperature 65°C (150°F)
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with Hi-Lo shift unit 38 liters/min. (10 gpm)
with mid PTO 23 liters/min. (6 gpm)

Minimum flow to hydraulic pump at 2000 rpm with:
Oil temperature 40°C (100°F)
without Hi-Lo shift unit 30 liters/min. (8 gpm)
with Hi-Lo shift unit 36 liters/min. (9.5 gpm)
with mid PTO 23 liters/min. (6 gpm)

Oil temperature 65°C (150°F)
without Hi-Lo shift unit 26 liters/min. (7 gpm)
with Hi-Lo shift unit 32 liters/min. (8.5 gpm)
with mid PTO 21 liters/min. (5.5 gpm)

Difference between delivery of transmission oil pump and flow to hydraulic pump,
- Without Hi-Lo and independent PTO up to 7 liters/min. (1.8 gpm)
- With Hi-Lo and independent PTO up to 15 liters/min. (4 gpm)

Transmission oil pump cap screws 55 Nm (40 ft-lb)
Transmission oil pump to clutch housing 55 Nm (40 ft-lb)

DIFFERENTIAL
Preload of taper roller bearings 0.05 to 0.13 mm (0.002 to 0.005 in.)
Backlash between ring gear and differential drive shaft pinion 0.30 mm (0.012 in.)

FINAL DRIVES
To measured rolling drag torque of final drive housing (before tightening 12-point screw) add:
Final drives to transmission case 120 Nm (85 ft-lb)

INDEPENDENT PTO
Operating pressure at 1500 rpm 1050 KPa (10.5 bar; 150 psi)
Preload of taper roller bearings in bearing quill, heavy duty type (S40 u/min.) 0-0.05 mm (0-0.002 in.)
Drive gear to clutch drum 75 Nm (55 ft-lb)
Bearing quill to transmission case 120 Nm (85 ft-lb)

SUMMARY OF MOST IMPORTANT SPECIFICATIONS FOR 1350, 1550, 1750, 1850, 1950 and 1950 N TRACTORS

FRONT PTO

Operating pressure at 1500 rpm 1050 kPa
(10.5 bar, 150 psi)
Preload of taper roller bearings 0 to 0.05 mm (0 to 0.002 in.)
Front PTO to front axle carrier 400 Nm (300 ft-lb)

FRONT WHEEL DRIVE

Operating pressure at 1500 rpm 1050 kPa
(10.5 bar, 150 psi)
Disk clutch slips at a torque of: 880 Nm (650 ft-lb)
Front axle to front axle carrier 300 Nm (220 ft-lb)
Front axle axial play 0 - 0.5 mm (0 - 0.02 in.)
Universal-jointed drive shaft to drive hub 35 Nm (25 ft-lb)

BRAKES

Return movement of pressure ring within 15 seconds 0.28 - 0.35 mm
(0.011 - 0.014 in.)

Test pressure for leakage test of pressure ring 300 kPa
(3 bar, 44 psi)

Pressure drop within 10 seconds max. 10 kPa
(0.1 bar, 1.5 psi)

Retraction pin assembly to pressure ring 15 Nm (11 ft-lb)

HYDRAULIC PUMPS

Pump stand-by pressure 19 000 kPa
(190 bar, 2760 psi)

Minimum delivery at 2000 rpm and (170 bar, 2450 psi) operating pressure:

12 cm³ (0.7 cu.in.) pump 19 liters/min. (5 gpm)

23 cm³ (1.4 cu.in.) pump 34 liters/min. (9 gpm)

Axial play of pump shaft Without through drive shaft 0.1 to 0.9 mm
(0.004 to 0.035 in.)

With through drive shaft 0.025 to 0.1 mm
(0.001 to 0.004 in.)

Hydraulic pump to front axle carrier 120 Nm (85 ft-lb)

ROCKSHAFT

Opening pressure of thermal relief valve 24 200 - 31 000 kPa
(242 - 310 bar, 3500 - 4500 psi)

Rockshaft to transmission case 120 Nm (85 ft-lb)

Adjusting Load Control Arm

Turn in control arm adjusting screw until it contacts arm and then back off 1/3 to 1/2 a turn

Adjusting Valve Clearance

Turn adjusting screw clockwise at start of lift by 1/4 a turn

Control lever play between raising and lowering: With MC1 cab

- Up to Tractor Serial No. 637600L* 4 to 10 mm
(0.16 to 0.4 in.)

- From Tractor Serial No. 637601L* 12 to 15 mm
(0.5 to 0.6 in.)

Without cab* 2 to 4 mm
(0.08 to 0.16 in.)

On narrow tread tractors 3 to 6 mm
(0.12 to 0.24 in.)

Adjusting Rockshaft Control Lever

With MC1 cab (up to Tractor Serial No. 637600L) 10 + 6 mm
(0.4 + 0.24 in.)

Clearance from front end position to front edge of rockshaft control lever* 7 to 7.5 mm
(0.28 to 0.30 in.)

With MC1 cab (from Tractor Serial No. 637601L) 12 + 1/-2 mm
(0.47 + 0.04/-0.08 in.)

Front edge of control lever in position Without cab 15 + 10/-5 mm
(0.6 + 0.4/-0.2 in.)

Adjusting commencement of lift with load control

With MC1 cab (up to Tractor Serial No. 637600L) 45 + 6 mm
(1.8 + 0.24 in.)

Clearance from rear end position to rear edge of rockshaft control lever* 2 to 2.5 mm
(0.08 to 0.10 in.)

With MC1 cab (from Tractor Serial No. 637601L) 50 ± 9 mm
(2 ± 0.12 in.)

On narrow tread tractors

Clearance from rear end position to rear edge of rockshaft control lever* 90 + 10/-5 mm
(3.54 + 0.4/-0.2 in.)

* Measured at upper edge of quadrant

SUMMARY OF MOST IMPORTANT SPECIFICATIONS FOR 1350, 1550, 1750, 1850, 1950 N, 1950 and 1950 N TRACTORS

FRONT AXLE

Maximum permissible axial play of knuckle and spindle

Without cab or with MC1 cab (without heater) 0.76 mm (0.03 in.)

With MC1 cab (with heater) 10.0 liters
(2.60 U.S.gal.)

Front axle axial play 0 to 0.4 mm (0 to 0.015 in.)

Axle knees to axle center 400 Nm (300 ft-lb)

Steering arm to knuckle and spindle assy. Standard version 120 Nm (85 ft-lb)

Heavy-duty version 230 Nm (170 ft-lb)

Drag link to bell crank, slotted nut 70 Nm (50 ft-lb)

Without front wheel drive 90 Nm (65 ft-lb)

With front wheel drive 50 Nm (35 ft-lb)

Steel disk to rim 250 Nm (180 ft-lb)

Wheel rim to hub 150 Nm (110 ft-lb)

Without front wheel drive 300 Nm (220 ft-lb)

With front wheel drive 3 to 6 mm
(1/8 to 1/4 in.)

Front wheel toe-in Without front wheel drive 0 to 3 mm
(0 to 1/8 in.)

With front wheel drive 200 Nm (145 ft-lb)

With front wheel drive 250 Nm (185 ft-lb)

Rear wheels to rear axle Cap screw with cone 150 Nm (110 ft-lb)

Cap screw without cone 240 Nm (175 ft-lb)

MC1 CAB

MC1 cab mountings 245 Nm (180 ft-lb)

2-POST ROLL-GUARD

Supports to final drives 230 Nm (170 ft-lb)

Supports to crossmember 230 Nm (170 ft-lb)

4-POST ROLL-GUARD

Roll-guard to fender 120 Nm (85 ft-lb)

Fender to final drive 230 Nm (170 ft-lb)

CAPACITIES

Cooling System

Without cab or with MC1 cab (without heater) 10.0 liters
(2.60 U.S.gal.)

With MC1 cab (with heater) 13.0 liters
(3.40 U.S.gal.)

Crankcase

Initial filling 6.5 liters
(1.70 U.S.gal.)

Oil change and renew filter 6.0 liters
(1.60 U.S.gal.)

Transmission/Hydraulic System

(with oil reservoir and oil cooler)

Initial filling - Synchronized Transmission Without front wheel drive 50.0 liters
(13.20 U.S.gal.)

With front wheel drive 53.0 liters
(14.00 U.S.gal.)

With front PTO 55 liters
(14.5 U.S.gal.)

Oil change and renew filter Without front wheel drive 42.5 liters
(11.20 U.S.gal.)

With front wheel drive 45.5 liters
(12.00 U.S.gal.)

With front PTO 52.5 liters
(13.9 U.S.gal.)

Initial Filling - Collar Shift Transmission Without mid PTO 41.0 liters
(10.80 U.S.gal.)

With mid PTO 36.0 liters
(9.50 U.S.gal.)

Oil change and renew filter Without mid PTO 33.0 liters
(8.70 U.S.gal.)

With mid PTO 28.0 liters
(7.40 U.S.gal.)

Front Wheel Drive

Front axle housing Up to tractor serial no. 621999L 5.3 liters
(1.40 U.S.gal.)

From tractor serial no. 622000L 4.6 liters
(1.20 U.S.gal.)

With narrow tread tractors 3.5 liters
(0.92 U.S.gal.)

Wheel hub, each Up to tractor serial no. 621999L 0.75 liters
(0.20 U.S.gal.)

From tractor serial no. 622000L 0.5 liters
(0.13 U.S.gal.)

**Thanks very much for your reading,
Want to get more information,
Please click here, Then get the complete
manual**

JustClickHere 

NOTE:

**If there is no response to click on the link above,
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click on it.**

**Have any questions please write to me:
admin@servicemanualperfect.com**

**1350, 1550, 1750, 1850, 1850 N,
1950 AND 1950 N TRACTORS
TECHNICAL MANUAL
TM4437 (JUN-90)****SECTION CONTENTS IN GROUPS - REPAIR****10 - GENERAL**

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- 10 - Predelivery, delivery and after-sales inspections
- 15 - Lubrication and service
- 20 - Tune-up
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- 25 - Starting motor
- 30 - Alternator

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INHALT-LB401AE-010389

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- 30 – ISO breakaway couplers
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80 – MISCELLANEOUS







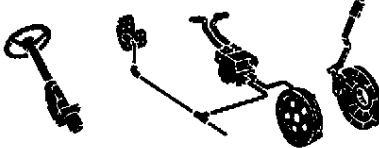



- 05 – Front axle
- 10 – Front and rear wheels
- 15 – AXLA trailer hitch

90 – OPERATOR'S CAB

- 05 – Cab ventilation and heating
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- 10 – Operator's seats
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INHALT-LB402AE-010389

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FX 100 001 19

FX100001 19-LB403AE-010389

SAFETY AND YOU

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.



T 81389

T81389;053;TMSAFE 19 07OCT85

IMPORTANT

The IMPORTANT message identifies potential problems which may cause consequential damage to machine. Following recommended procedure will instruct technician how to avoid problem.

A68;N01;0000 19 U 05NOV82

NOTES

The word NOTE is followed by a statement that identifies a qualification or exception to a previous statement. A "NOTE" may also identify nice-to-know information pertinent to, but not directly related to previous statement.

A68; N01;0000 19 V 05NOV82

OBSERVE SAFETY RULES

Avoid loose clothing that can catch in moving parts and put you out of work.

Wear your safety glasses while on the job.

Avoid working on equipment with the engine running. If it is necessary to make checks with the engine running, ALWAYS USE TWO PEOPLE – with the operator, at the controls, able to see the person doing the checking. Also, put the transmission in neutral, set the brake, and apply safety locks provided. KEEP HANDS AWAY FROM MOVING PARTS.

Keep transmission and brake control units properly adjusted at all times. Before making adjustments, stop engine.

Before removing any housing covers, stop engine. Take all objects from your pockets which could fall into the opened housings. Don't let adjusting wrenches fall into opened housings.

Don't attempt to check belt tension while the engine is running.

Don't adjust the fuel system while the machine is in motion.

Before repairing the electrical system, or performing a major overhaul, make sure the batteries are disconnected.

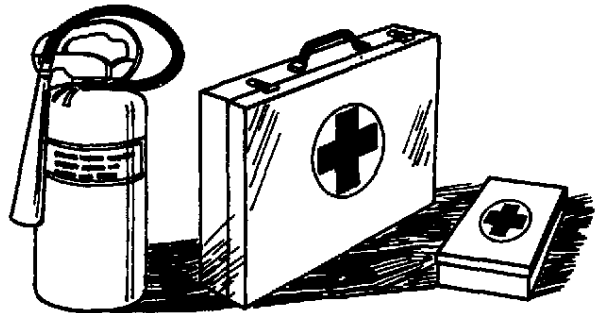
A68; N01;0000 19 S 05NOV82

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.



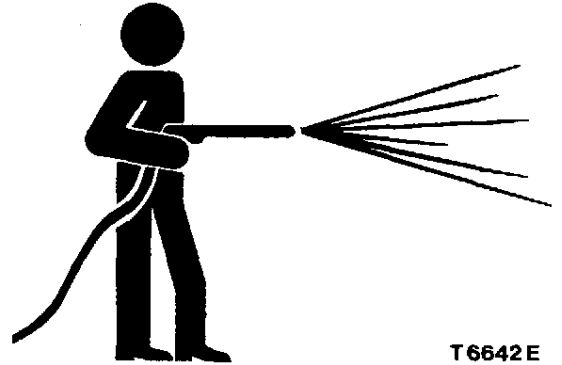
L 114 052

L114052;053;FIR2 19 15MAR89

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.



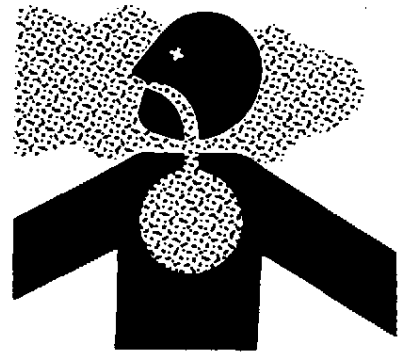
T 6642 E

T6642E;053;CLEAN 19 19JAN88

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.



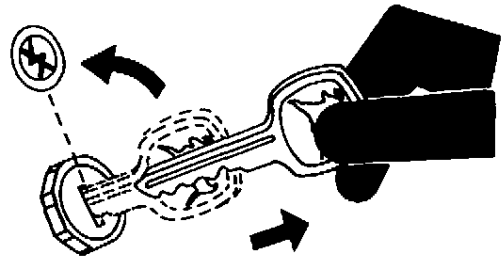
TS 220

TS220;053;AIR 19 05JAN88

PARK MACHINE SAFELY

Before working on the machine:

- Lower all equipment to the ground.
- Stop the engine and remove the key.
- Disconnect the battery ground strap.
- Hang a "DO NOT OPERATE" tag in operator station.



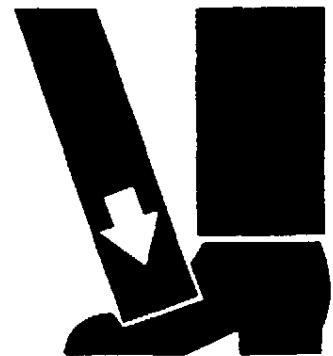
TS 230

TS230;053;PARK 19 05JAN88

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.



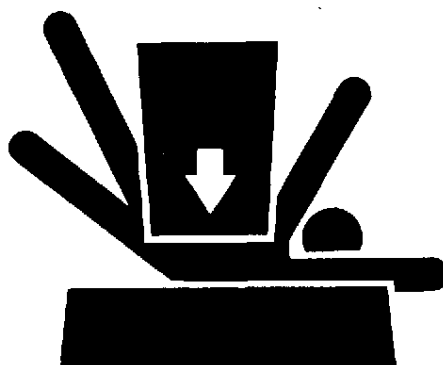
TS 226

TS226;053;LIFT 19 05JAN88

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.

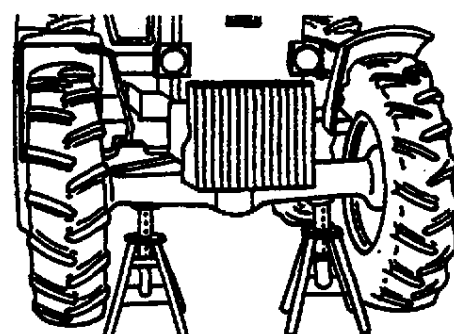


TS 229

TS229;053;LOWER 19 21DEC87

SERVICE FRONT-WHEEL DRIVE TRACTOR SAFELY

When servicing front-wheel drive tractor with the rear wheels supported off the ground and rotating wheels by engine power, always support front wheels in a similar manner. Loss of electrical power or transmission/hydraulic system pressure will engage the front driving wheels, pulling the rear wheels off the support if front wheels are not raised. Under these conditions, front drive wheels can engage even with switch in disengaged position.



L114050

L114050-ESPDAE-140388

PREVENT MACHINE RUNAWAY

Avoid possible injury or death from a machine runaway.

Do not start the 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 the transmission in neutral or "Park".



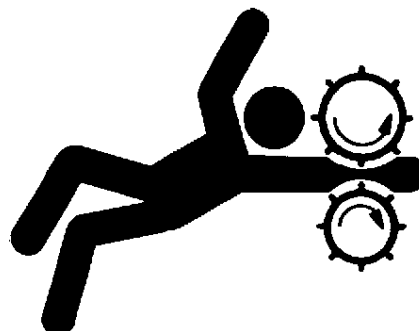
TS177

TS177;053;BYPAS1 19 21MAY85

SERVICE MACHINE 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.



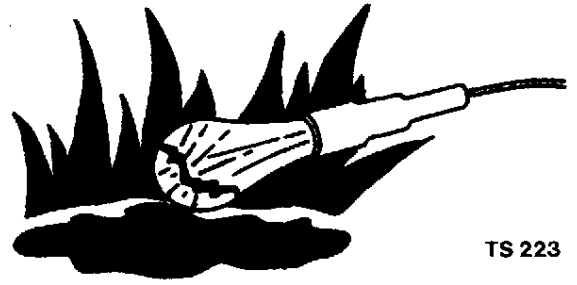
TS 228

TS228;053;LOOSE 19 21DEC87

UNDERSTAND CORRECT SERVICE

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.

Catch draining fuel, oil, or other fluids into suitable containers. Do not use food or beverage containers that may mislead someone into drinking from them. Wipe up spills at once.



TS 223

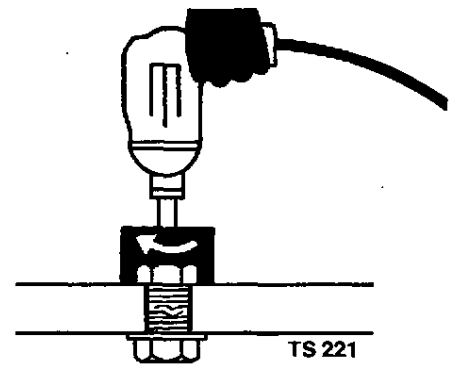
TS223;053;LIGHT 19 23FEB88

USE TOOLS PROPERLY

Use tools appropriate to the work. Makeshift tools, parts, and procedures will not make good repairs.

Use pneumatic and electric tools only to loosen threaded parts and fasteners. Never use such tools to tighten fasteners, especially on light alloy parts.

Use only replacement parts meeting John Deere specifications.



TS 221

TS221;063;REPAIR 19 21DEC87

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.



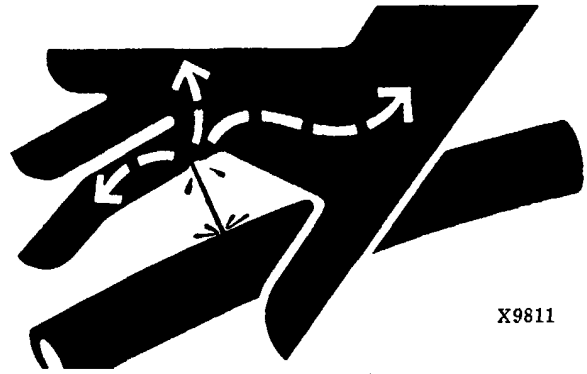
TS 227

TS227;053;FLAME 19 05JAN88

AVOID HIGH-PRESSURE FLUIDS

Escaping fluid (fuel or hydraulic oil) under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard to search for leaks.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type of injury, or gangrene may result.



X9811

X9811;053;FLUID 19 18SEP87

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.

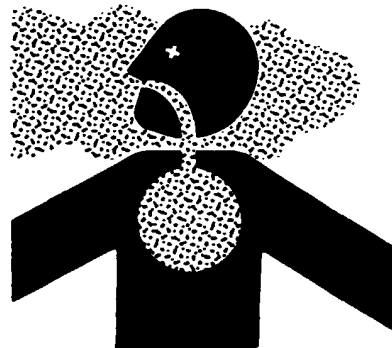
Do all work outside or in a well ventilated area. Dispose of paint and solvent properly.

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.



TS220

TS220-ESPDAE-040690

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 lines or other flammable materials.

Pressurized lines can be accidentally cut when heat goes beyond the immediate flame area. Install fire resisting guards to protect hoses or other materials.



TS 953

TS953-ESPDAE-040690

AVOID HARMFUL ASBESTOS DUST

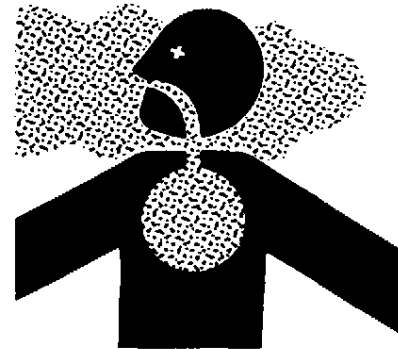
Avoid breathing dust that may be generated when handling components containing asbestos fibers. Inhaled asbestos fibers may cause lung cancer.

Components in John Deere 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.

Please note designations on spare parts.



TS 220



L 114 051

TS220,L114051;053;DUST 19 14APR88

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:

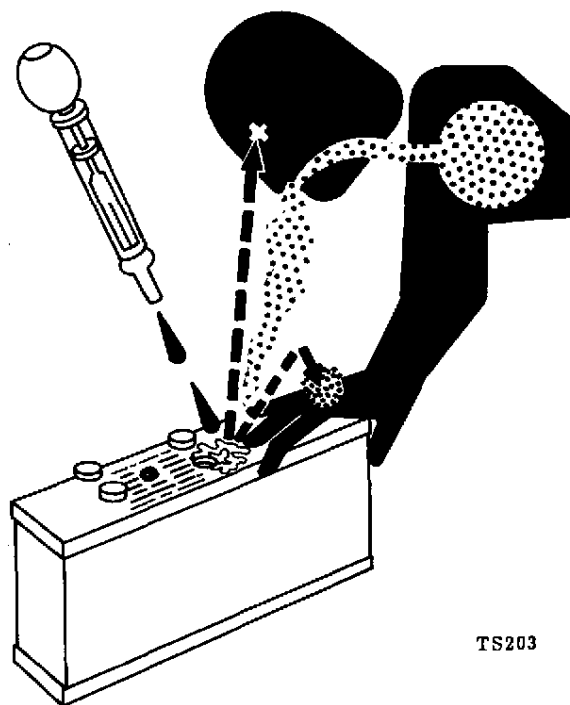
1. Filling the batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

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 10 – 15 minutes.
- Get medical attention immediately.

If acid is swallowed:

1. Drink large amounts of water or milk.
2. Then drink milk of magnesia, beaten eggs or vegetable oil.
3. Get medical attention immediately.



TS203

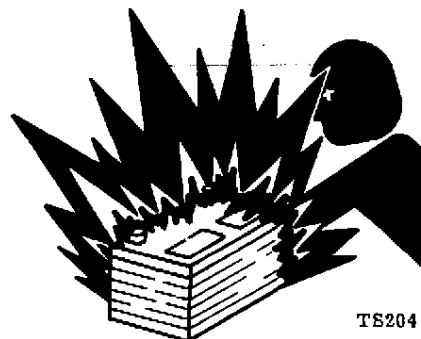
TS203;053;POISON 19 21DEC87

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

TS204;053;SPARKS 19 28JUN88

SERVICE TIRES SAFELY

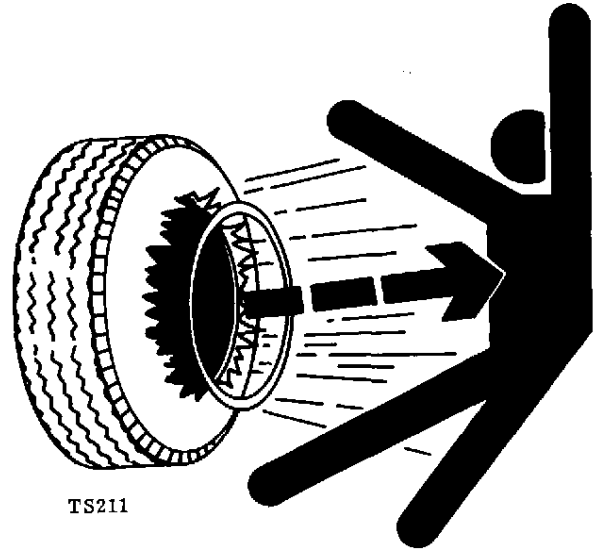
Explosive separation of a tire and rim parts can cause serious injury or death.

Only attempt to mount a tire if you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate tires above the recommended pressure.

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.

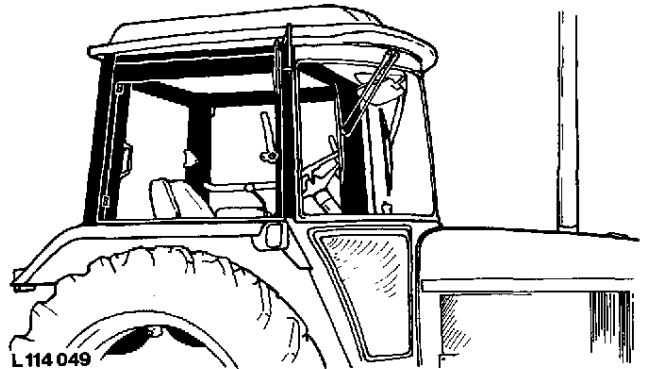


TS211;053;RIM 19 21DEC87

KEEP CAB/ROPS INSTALLED PROPERLY

Make certain all parts are reinstalled correctly if the cab or roll-over protective structure (ROPS) is loosened or removed for any reason. Tighten mounting bolts to specified torque.

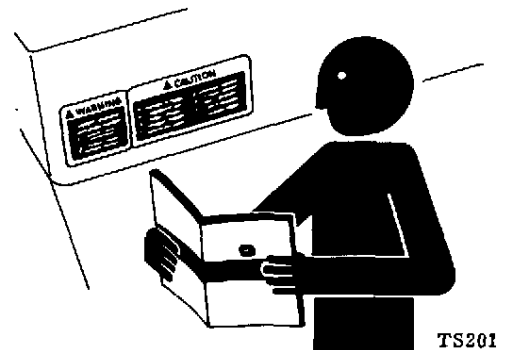
Protection offered by cab or ROPS is impaired if subjected to structural damage, is involved in an overturn incident or is altered in any way by welding, bending, drilling or cutting. A damaged cab or ROPS should be replaced, not reused.



L114049;053;ROPS 19 15MAR89

REPLACE SAFETY SIGNS

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



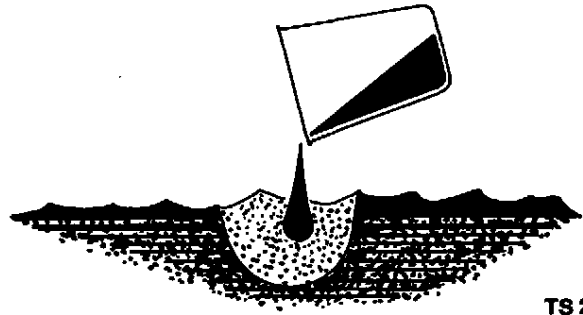
TS201;053;SIGNS 19 22DEC87

OBSERVE ENVIRONMENTAL PROTECTION REGULATIONS

Be mindful of the environment and ecology.

Before draining any fluids, find out the correct way of disposing of them.

Observe the relevant environmental protection regulations when disposing of oil, fuel, coolant, brake fluid, filters and batteries.



TS 222

TS222-ESPDAE-140388

Section 10 GENERAL

05 – SPECIFICATIONS

	1350	1550	1750	1850	1850N	1950	1950N
Specifications	x	x	x	x	x	x	x
– Serial number plates	x	x	x	x	x	x	x
– Product identification number	x	x	x	x	x	x	x
– Engine serial number	x	x	x	x	x	x	x
– Transmission serial number	x	x	x	x	x	x	x
– Front wheel drive axle serial number	x	x	x	x	x	x	x
– MC1 cab serial number		x	x	x		x	
– Model serial numbers	x	x	x	x	x	x	x
– Engine	x	x	x	x	x	x	x
– Engine clutch	x	x	x	x	x	x	x
– Cooling system	x	x	x	x	x	x	x
– Fuel system	x	x	x	x	x	x	x
– Electrical system	x	x	x	x	x	x	x
– Synchronized transmission	x	x	x	x	x	x	x
– Collar shift transmission	x	x	x	x	x		
– Hi-Lo shift unit	x	x	x	x	x	x	x
– Creeper transmission	x	x	x	x	x	x	x
– Differential and final drives	x	x	x	x	x	x	x
– Differential lock	x	x	x	x	x	x	x
– Independent PTO	x	x	x	x	x	x	x
– Continuous-running PTO	x	x	x	x	x		
– Front PTO						x	
– PTO speeds	x	x	x	x	x	x	x
– Front wheel drive		x	x	x	x	x	x
– Power steering		x	x	x	x	x	x
– Manual steering	x	x	x	x	x	x	x
– Foot brakes	x	x	x	x	x	x	x
– Hand brake	x	x	x	x	x	x	x
– Hydraulic system	x	x	x	x	x	x	x
– Rockshaft	x	x	x	x	x	x	x
– Ground travel speeds	x	x	x	x	x	x	x
– Front and rear wheels	x	x	x	x	x	x	x
– Dimensions and weights	x	x	x	x	x	x	x
– Capacities	x	x	x	x	x	x	x
– Standard torques for hardware	x	x	x	x	x	x	x

ALLGEM-LB41001AE-010389

10 – PREDELIVERY, DELIVERY AND AFTER-SALES INSPECTIONS

Special tools	10-1
Specifications	10-1
Capacities	10-2
Torques for hardware	10-3
Predelivery inspection	10-4
Delivery inspection	10-25
After-sales inspection	10-26

1350	1550	1750	1850	1850N	1950	1950N
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x

15 – LUBRICATION AND SERVICE

Capacities and service intervals	15-1
Lubricants and service intervals	15-2
General	15-3
Engine oil	15-3
Transmission/hydraulic oil	15-4
Oil for front wheel drive axle	15-4
EP multi-purpose grease	15-5
Storing lubricants	15-5
Engine coolant	15-6
Checking engine oil level	15-6
Changing engine oil	15-7
Changing engine oil filter	15-7
Checking fuel filter	15-8
Replacing fuel filter	15-8
Replacing coolant	15-9
Checking transmission/hydraulic system oil level	15-10
Changing transmission/hydraulic oil	15-11
Replacing transmission/hydraulic oil filter element	15-12
Replacing hydraulic oil return flow filter	15-12

x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x