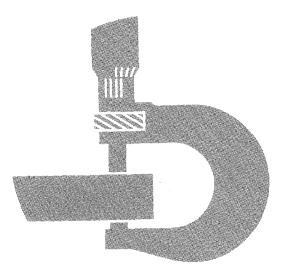
JD844 Loader



TECHNICAL MANUAL

John Deere Dubuque Works TM-1189 (May-86)

Litho in U.S.A.

JD844 LOADER Technical Manual TM-1189 (May-86)

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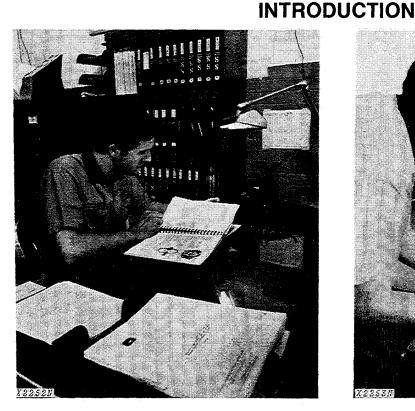
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The specifications and design information contained in this manual were correct at the time it was printed. It is John Deere's policy to continually improve and update our machines. Therefore, the specifications and design information are subject to change without notice. Wherever applicable, specifications and design information are in accordance with SAE and ICED standards.

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Use FOS Manuals for Reference

This technical manual is part of a twin concept of service:

The two kinds of manuals work as a team to give you both the general background and technical details of shop service.

•FOS Manuals—for reference

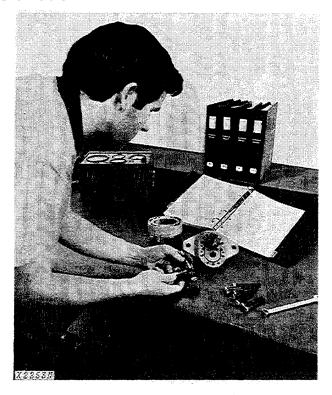
Fundamentals of Service (FOS) Manuals cover basic theory of operation, *fundamentals* of trouble shooting, *general* maintenance, and *basic* types of failures and their causes. FOS Manuals are for training new personnel and for reference by experienced technicians.



When a service technician should refer to a FOS Manual for more information, a FOS symbol like the one at the left is used in the TM to identify the reference.

•Technical Manuals—for actual service

Technical Manuals are concise service guides for a specific machine. Technical manuals are on-the-job guides containing only the vital information needed by an experienced service technician.



Use Technical Manuals for Actual Service

This technical manual was planned and written for you—an experienced service technician. Keep it in `a permanent binder in the shop where it is handy. Refer to it whenever in doubt about correct service procedures or specifications.

Some features of this manual:

- Inside front cover "Table of Contents".
- Section 1 Contents, safety information, general specifications and general services.
- Sections 1 through 31 Removal, repair, testing (components removed), installation, and adjustment.
- Section 90 Detailed explanation of system operation, diagnosis, visual inspection, testing, and adjustments.
- Specifications grouped and illustrated at the end of each section.

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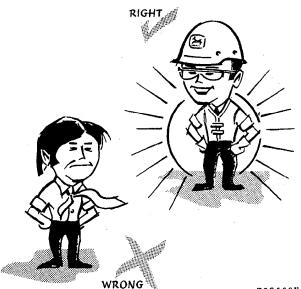
JD844 Loader TM-1189 (Jan-79)

MAINTENANCE WITHOUT ACCIDENT WORK SAFELY



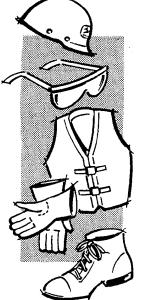
This safety alert symbol is used for important safety messages. When you see this symbol, the possibility of personal injury exists if safety message is not followed.

EVERY EMPLOYER HAS A SAFETY PROGRAM. KNOW WHAT IT IS!



T27502N

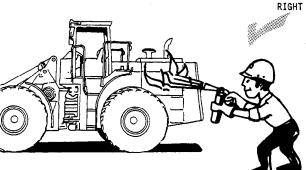
ALWAYS AVOID loose clothing or any accessory-flopping cuffs, dangling neckties and scarves, or rings and wrist watches-that can catch in moving parts and put you out of work.



T27501N

Consult your shop supervisor for specific instructions on a job, and the safety equipment required.

For instance, you may need: Hard hat, safety shoes, safety goggles, heavy gloves, reflector vests, ear protectors, respirators.



T65294N

BE ALERT!

Plan ahead-work safely-avoid accidental damage and injury. If a careless moment does cause an accident or fire, react quickly with the tools and skills at hand-know how to use a first aid kit and a fire extinguisher---and where to get aid and assistance. In an emergency, splitsecond action is the key to safety.



MAINTENANCE WITHOUT ACCIDENT

Specific safety procedures should always be observed, whether servicing or making repairs on the loader. Remember these—in time!—can prevent an injury...or save your life....

AVOID FIRE HAZARDS-

Fuel Is Dangerous!

Don't smoke while refueling.

Don't smoke while handling highly flammable material.

Engine should be shut off when refueling.

Use care in refueling if the engine is hot.



Don't use open pans of gasoline or diesel fuel for cleaning parts. Good commercial, nonflammable solvents are preferred.

Battery Gas Is Highly Flammable!

Provide adequate ventilation when charging batteries.



T27506N

Don't check battery charge by placing metal objects across the posts.

Don't allow sparks or open flame near batteries. Don't smoke near battery.

Flame Is Not a Flashlight!

Never check fuel, battery electrolyte or coolant levels with an open flame.

Never use an open flame to look for leaks anywhere on the equipment.

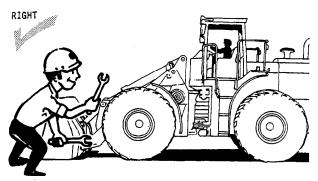
Never use an open flame as a light anywhere on or around the equipment.

KNOW WHERE FIRE EXTINGUISHERS ARE KEPT!

UNDER ALL MAINTENANCE CONDITIONS---

Do not perform any work on the loader unless authorized to do so. Then be sure you understand the services required. Follow recommended procedures.

Never service the equipment while it is being operated.





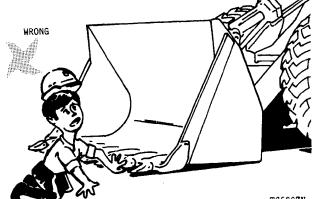
Avoid working on equipment with the engine running. If it is necessary to make checks with the engine running, ALWAYS USE TWO SERVICE TECHNI-CIANS—one, the operator, at the controls, the other checking in view of the operator. Also, put the transmission in neutral, set the brake, and apply any safety locks provided. KEEP HANDS AWAY FROM MOV-ING PARTS.



MAINTENANCE WITHOUT ACCIDENT

Before servicing, adjusting, or repairing loaders which have attachments--LOWER attachments to the ground-or, if necessary to raise them for access to certain parts. SECURELY SUPPORT by external means. DO NOT rely on controls to support or position attachments for maintenance.

Never allow ANYONE to walk under equipment that is raised and not properly blocked.



T65297N

Avoid working directly under raised and blocked equipment unless absolutely necessary.

If the loader is on an incline, block it securely.

Use hoisting equipment for lifting heavy parts. TAKE CARE! WATCH OUT FOR OTHER PEOPLE IN THE VICINITY.

Use extreme caution in removing radiator caps, drain plugs, grease fittings, or hydraulic pressure caps.



Wear safety glasses when drilling, grinding, or hammering metal.

Make sure the maintenance area is adequately vented.

Keep maintenance area CLEAN AND DRY. Oily and wet floors are slippery; greasy rags are a fire hazard; wet spots are dangerous when working with electrical equipment.

Store starting aids in a cool and well-ventilated place, out of the reach of unauthorized personnel.

SERVICING PRECAUTIONS

Stop the engine before cleaning or lubricating the loader.

Lower mounted equipment and tools to the ground carefully.



Engine coolant gets hot! Don't remove the radiator cap until coolant temperature is below the boiling point. Then turn cap slightly to relieve pressure before removing.

Exhaust gases are dangerous! Periodically check exhaust system for excessive leakage.

Don't forget a hydraulic system may be pressurized! To relieve system pressure, stop engine, lower bucket and operate loader control lever and steering wheel and brake pedals until system fails to respond.

When checking hydraulic pressure, be sure to use the correct test gauge for the pressure in the particular system.

The loader is equipped with brake and differential lock accumulators-recharge by using only dry nitrogen. To discharge brake accumulator apply the brake pedal about 30 times. To discharge differential lock accumulator depress differential lock switch.

RIGHT

T65300N

Keep ALL components free of dirt and oil. This attention will minimize fire hazards and facilitate spotting of loose or defective parts.

When preparing engine for storage, remember that inhibitor is volatile and therefore dangerous. Seal and tape openings after adding inhibitor. Keep container tightly closed when not in use.

ADJUSTING PRECAUTIONS

....for Operating Adjustments

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



T49044N

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.

.... for Maintenance Adjustments

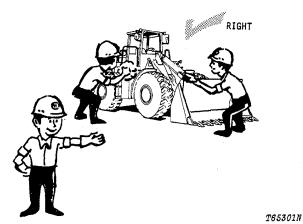


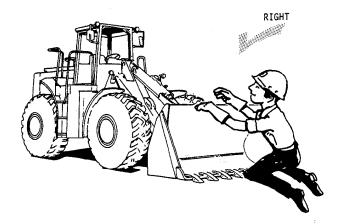
Don't attempt to check belt tension while the engine is running.

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

MAINTENANCE WITHOUT ACCIDENT

PRECAUTIONS DURING REPAIR





T65302N

When changing cutting edges on bucket-

Stop the engine and securely block the bucket.

Never let your bare hands come in contact with sharp edges. WEAR GLOVES.

Keep ALL components free of dirt and oil. This attention will minimize fire hazards and facilitate spotting of loose or defective parts.

Before repairing the electrical system, or performing a major overhaul, make sure the batteries are disconnected. JD844 Loader TM-1189 (Jan-79) 1

MAINTENANCE WITHOUT ACCIDENT

KNOW EQUIPMENT IS READY!

Check guards, canopies, safety bars-all protective devices installed on the loader. Every one should be in place and secure.

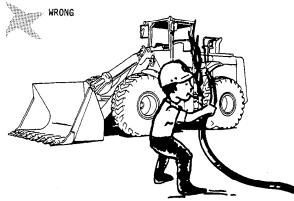
CHECK IT OUT!

- □ GUARDS
- □ CANOPIES
- □ SHIELDS
- □ PROTECTIVE DEVICES
- □ ROLL-OVER PROTECTIVE STRUCTURES
- □ SEAT BELT, ETC.



T65303N

Carefully inspect equipment for visual defectsleaks in fuel, lubrication, and hydraulic systems. Do not search for pressurized fluid leaks with your hands. Use cardboard or wood to search for leaks.



T65304N

Check levels of fuel, coolant, hydraulic fluid, and lubricating oil. If fuel must be added-FIRST, PUT OUT THAT CIGARET.

Check and secure all caps and filler plugs for fuel, oils, radiator, etc.



Be sure to clean any oil, grease or mud accumulation from floor of operator's compartment, stepping points, and grab rails to minimize the danger of slipping.

In freezing weather beware of snow or ice deposits on stepping points, grab rails, and floor.

Remove loose bolts, tools, or other objects from floor of operator's compartment.

Although it is impractical to try to cover every possible maintenance situation, the safety precautions recommended here should serve to develop and promote safe maintenance procedures.

The information contained in this manual is not intended to replace safety codes, insurance requirements, federal, state, and local laws, rules and regulations. In particular, your service area or jobsite activities may be subject to state safety rules and/or federal regulation under the Occupational Safety and Health Act (OSHA). Familiarize yourself with all regulations applicable to your situation in order to avoid possible safety violations.

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Group III GENERAL SPECIFICATIONS

(Specifications and design are subject to change without notice. Wherever applicable, specifications are in accordance with ICED and SAE Standards. Except where otherwise noted, specifications are based on a machine equipped with all standard equipment, 26.5-25, 20-PR, L-3 tires with 3230 lb [1465 kg] of CaCl₂ solution in rear tires, ROPS cab, rear counterweight, full fuel tank, and 175 lb [79.4 kg] operator.)

Power (at 2100 engine rpi	m): SAE	DIN
Gross	. 290 hp (216 kW*)	
Net	. 260 hp (194 kW)	264 PS

*Net engine flywheel horsepower is for an engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, alternator, and muffler. The gross engine power is without fan. Flywheel power ratings are under SAE standard conditions of 500-ft. (150 m) altitude and 85°F (29°C) temperature and DIN 70 020 conditions (non-corrected). No derating is required up to 10,000 feet (3000 m) altitude.

**In the International System of Units (SI), power is expressed in kilowatts (kW).

Engine: John Deere turbocharged diesel, V-8, valvein-head, 4-stroke cycle.

 Bore and stroke
 5.5 x 5 in. (140 x 127 mm)

 Piston displacement
 955 cu. in. (15.652 L)

 Compression ratio
 15.5 to 1

 Maximum torque @ 1,400 rpm
 858 lb-ft

 (1163 Nm) (118.6 kg-m)

 NACC or AMA (U.S. Tax) horsepower
 96.8

 Lubrication
 Pressure system with full-flow filters

 Cooling
 Pressurized with thermostat and controlled

 by-pass
 Fan

 Air cleaner with restriction indicator
 Dry

 Electrical system
 24-volt (24 v) with alternator

 Batteries (4)
 Reserve capacity: 170 minutes

Torque Converter:

Туре	Single stage
Torque multiplication	2.84 to 1
Transmission	Power shift planetary

Forward Speeds	mph	km/h
1	0-4.5	0-7.2
2	0-7.9	0-12.7
3	0-13.3	0-21.4
4	0-23.4	0-37.7

Reverse Speeds

1 0-4.9	0-7.9
2 0-8.8	0-14.2
3 0-14.7	0-23.7

Diffe	renti	ials
Ding	10111	1013.

Front	Conventional or hydraulic lock
Rear	Conventional

Drive Axles...Inboard-mounted planetary gears to each wheel. Front axle fixed. Rear axle oscillates 22degrees total, 17.2 inches (436 mm) vertical travel at center of tire.

Brakes:

Service...Power actuated, 4-wheel, inboard-mounted wet disk. Separate front and rear hydraulic circuits. Foot-operated by either right or left pedal. Selective transmission disconnect with left pedal operation. Emergency braking accumulators.

Parking...Hand-operated park lock on transmission output shaft.

Steering...Full power steering. Automatically actuated emergency steering. Frame articulated 74 degrees by two hydraulic cylinders. Turning radius of 19 ft. 5 in. (5.92 m).

Hydraulic Systems:

Loader and steering functions... Three engine driven vane pumps. Main loader pump delivers 68 gpm (4.3 μ L/s) at 2250 psi (15 514 kPa) (158.2 kg/cm²) and 2100 engine rpm. Main steering pump delivers 42 gpm (2.65 L/s) at 2250 psi (15 514 kPa) (158.2 kg/cm²) and 2100 engine rpm. Swing pump delivers 26.5 gpm (1.67 L/s) at 2250 psi (15 514 kPa) (158.2 kg/cm²) and 2100 engine rpm.

Brakes...Engine-driven gear pump delivers 3.9 gpm (0.25 L/s) at 2100 psi (14 480 kPa) (147.6 kg/cm²) and 2100 engine rpm.

1	General Information	J
III-2	General Specifications	TM-118

JD844 Loader M-1189 (Oct-79)

Hydraulic Cylinders: Bore Stroke Boom, two 7.50 in. (190 mm) 33.58 in. (853 mm) Bucket, one . 7.50 in. (190 mm) 38.86 in. (987 mm) Cylinder rods
Tires: 26.5-25, 20-ply-rating, L-3 26.5-25, 20-ply-rating, L-4 26.5-25, 20-ply-rating, L-5
Wheel Treads: Front and rear
Capacities:U.S.LitersCooling system20 gal.75.7 LFuel tank100 gal.378.5 LCrankcase with filter38 qt.36 LTransmission case and filters55 qt.52 LFront differential33 qt.31.3 LRear differential33 qt.31.3 LLoader hydraulic sump50 gal.189.3 L
Additional Standard Equipment: Deluxe suspension seat Engine side shields Gauges: Transmission oil temperature Transmission oil pressure Fuel Coolant temperature Engine oil pressure Electric hour meter Voltmeter Loader hydraulic system level indicator Key switch Pushbutton safety start Starting aid Cigar lighter Transistorized voltage regulator Vandal protection Horn ROPS cab with 3-in. (76 mm) seat belt, heater, de- froster, pressurizer, front and rear windshield wipers and washers, rear-view mirrors, front and rear work lights, and floor mat Fuel filters Automatic return-to-dig Fixed drawbar Rear bottom guard Hand grips Access ladders, both sides Antifreeze Reverse warning alarm

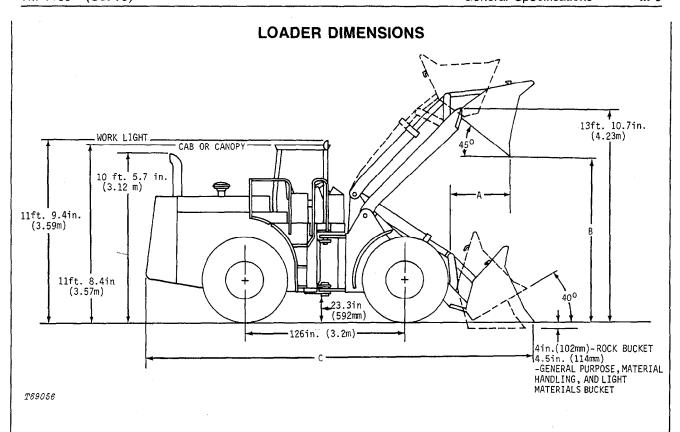
Special Equipment:

ROPS canopy with seat belt, rear-view mirrors and work lights Instrument panel cover with lock Triple-spool hydraulic valve Bucket teeth License plate bracket Auxiliary cutting edges Auxiliary bucket spill guard Air conditioning Fire extinguisher Adjustable boom height control Front locking differential Rear weight

I

L

JD844 Loa	ader
TM-1189	(Oct-79)



If 26.5-25, L4 or L5 tires are used, add 2 inches (50 mm) to all vertical dimensions except digging depth. Digging depth will be 2 inches (50 mm) less.

	DIMENSIONS		
BUCKET CAPACITIES	A	В	С
4-1/2 cu. yd. general pur-	41.5 in.	10 ft. 5.9 in.	26 ft. 1.4 in.
pose bucket (3.44 m ³)	(1.05 m)	(3.20 m)	(7.96 m)
5 cu. yd. general pur-	43.5 in.	10 ft. 4 in.	26 ft. 4.1 in.
pose bucket (3.82 m³)	(1.10 m)	(3.15 m)	(8.03 m)
5-1/2 cu. yd. materials	45 in.	10 ft. 2.4 in.	26 ft. 6.4 in.
handling bucket (4.20 m³)	(1.14 m)	(3.11 m)	(8.09 m)
7 cu. yd. light ma-	50 in.	9 ft. 9.3 in.	27 ft. 1.5 in.
terials bucket (5.35 m³)	(1.27 m)	(2.98 m)	(8.27 m)
4-1/2 cu. yd. spade-nose	48.9 in.	9 ft. 11.1 in.	26 ft. 11 in.
rock bucket (3.44 m ³)	(1.24 m)	(3.03 m)	(8.20 m)

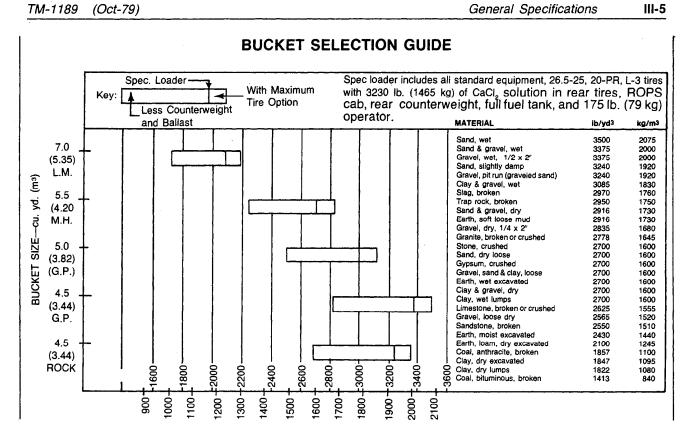
			BUCKET		
OPERATING	General	General	Materials	Light	Spade Nose
INFORMATION	Purpose	Purpose	Handling	Materials	Rock
Capacity, heaped, SAE	4.5 cu. yd.	5.0 cu. yd.	5.5 cu. yd.	7.0 cu. yd.	4.5 cu. yd.
	(3.44 m³)	(3.82 m³)	(4.20 m³)	(5.35 m³)	(3.44 m³)
Capacity, struck, SAE	3.65 cu. yd.	4.12 cu. yd.	4.56 cu. yd.	5.75 cu. yd.	3.65 cu. yd.
	(2.79 m³)	(3.15 m³)	(3.49 m ³)	(4.40 m³)	(2.79 m³)
Bucket width	128 in.	128 in.	128 in.	135 in.	128 in.
	(3.25 m)	(3.25 m)	(3.25 m)	(3.43 m)	(3.25 m)
Bucket weight	3910 lb.	4190 lb.	4320 lb.	4520 lb.	5280 lb.
	(1780 kg)	(1900 kg)	(1960 kg)	(2050 kg)	(2400 kg)
Breakout force, J732C SAE Standard	35,070 lb. (156.0 kN) (15 910 kg)	33,070 lb. (147.1 kN) (15 000 kg)	32,530 lb. (144.7 kN) (14 760 kg)	30,160 lb. (134.2 kN) (13 680 kg)	30,620 łb. (136.2 kN) (13 890 kg)
Tipping load, straight	38,450 lb.	38,040 lb.	37,780 lb.	37,170 lb.	37,180 lb.
	(17 440 kg)	(17 260 kg)	(17 140 kg)	(16 860 kg)	(16 870 kg)
Tipping load,	34,440 lb.	34,030 lb.	33,790 lb.	33,210 lb.	33,170 lb.
Full turn, SAE	(15 620 kg)	(15 440 kg)	(15 330 kg)	(15 060 kg)	(15 040 kg)
Turning clearance circle	45 ft. 7.5 in.	45 ft. 9 in.	45 ft. 10.3 in.	46 ft. 8.9 in.	45 ft. 6.5 in.
	(13.91 m)	(13.94 m)	(13.98 m)	(14.25 m)	(13.88 m)
Loader operating weight	51,620 lb.	51,900 lb.	52,030 lb.	52,230 lb.	52,990 lb.
	(23 410 kg)	(23 540 kg)	(23 600 kg)	(23 690 kg)	(24 040 kg)

LOADER OPERATING INFORMATION

ADJUSTMENTS TO OPERATING WEIGHTS AND TIPPING LOADS:				
Add (+) or deduct (-) lb. (kg) as indicated for loader equipped with:	Loader Operating Weight	Tipping Load, Straight	Tipping Load, Full Turn, SAE	
Less ROPS cab	-900 lb.	800 lb.	–760 lb.	
	(410 kg)	(360 kg)	(350 kg)	
ROPS canopy in lieu of ROPS cab	400 lb.	-360 lb.	340 lb.	
	(180 kg)	(160 kg)	(150 kg)	
Less rear counterweight	900 lb.	–1930 lb.	–1670 lb.	
	(410 kg)	(880 kg)	(760 kg)	
Remove fluid	-3230 lb.	4440 lb.	-3990 lb.	
	(1460 kg)	(2010 kg)	(1810 kg)	
Change to 26.5 L4 tires	+1400 lb.	+960 lb.	+870 lb.	
	(640 kg)	(440 kg)	(400 kg)	
Change to 26.5 L5 tires	+2260 lb.	+1550 lb.	+1400 lb.	
	(1030 kg)	(700 kg)	(640 kg)	

JD844 Loader TM-1189 (Oct-79)

General Information General Specifications I



TEMPORARY STORAGE

After receiving your loader from the factory and before putting the loader into temporary storage, perform the following checks.

1. Check batteries. Charge the batteries, if necessary.

2. Check radiator coolant level. Maintain coolant level midway between radiator core and filler neck.

3. Check crankcase oil level. Oil should be at top mark of dipstick after machine has been shut down for 10 minutes.

4. Relieve hydraulic pressure by stopping engine, lowering bucket and operating loader control lever and steering and brakes until system fails to respond.

Group IV PREDELIVERY, DELIVERY, AND AFTER-SALE SERVICES

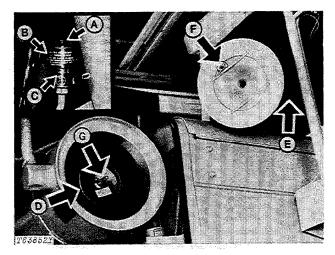
PREDELIVERY SERVICE

Because of the shipping factors involved, plus extra finishing touches that are necessary to promote customer satisfaction, proper predelivery service is of prime importance to the dealer and the customer.

If adjustments are required, procedures are found in the After-Sale section.

Use the following list when preparing a loader for delivery to the customer.

1. Air Cleaner



A—Reset Button B—Restriction Indicator C—Red Signal D—Safety Element E—Primary Element F—Wing Nut G—Stud

Check air filter restriction indicator. If red signal locks in full view, look for restriction or blockage in air intake system.

Air cleaner elements checked	Yes	No
Restriction in system	Yes	No

Fig. 1-Air Cleaner

2. Air Intake Hose

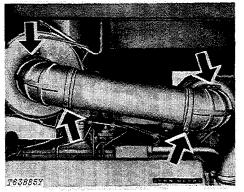


Fig. 2-Air Intake Hose Clamps

Check clamps on hose connecting air cleaner and engine. Tighten four hose clamps. Inspect hose for cracks.

Air intake hose checked	Yes	No
Loose connections	Yes	No

3. Radiator

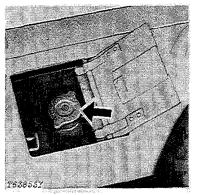


Fig. 3-Radiator Filler Cap

CAUTION: Do not remove radiator filler cap until coolant temperature is below its boiling point. Then loosen cap slowly to the stop to relieve any excess pressure before removing cap completely.

Check coolant level in radiator. Coolant should be maintained at a level midway between the radiator core and filler neck.

The antifreeze-water ratio is approximately 50 percent each. This protects to at least $-37^{\circ}C$ ($-34^{\circ}F$). Radiator coolant level checked Yes No 4. Alternator-Fan-Compressor Belt Tension

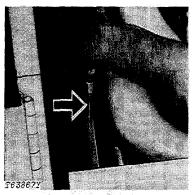


Fig. 4-Belt Tension Gauge

Check alternator belt tension. If belt tension gauge is used, a force of 111 N (25 lb) midway between pulleys should deflect the belt 17.5 mm (11/16 in.).

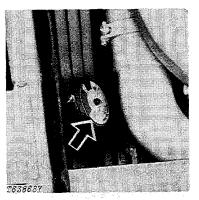


Fig. 5-Strand Tension Gauge

If strand tension gauge is used, it should read 311 N (70 lb) strand tension.

If adjustment is required, see page I-IV-26.



Fig. 6-Belt Tension Gauge

Check fan belt tension. If belt tension gauge is used, a force of 111 N (25 lb) midway between pulleys should deflect the belt 14.3 mm (9/16 in.).

NOTE: Check tension on right side of loader only.

NOTE: Check tension on front belt only.

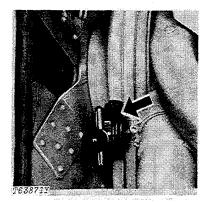


Fig. 7-Strand Tension Gauge

If strand tension gauge is used, it should read 400 N (90 lb) strand tension.

NOTE: Check tension on front belt only.

If adjustment is required, see page I-IV-27.

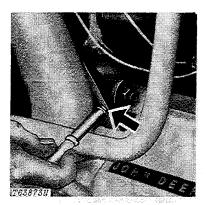


Fig. 8-Belt Tension Gauge

Check compressor belt tension. If belt tension gauge is used, a force of 111 N (25 lb) midway between pulleys should deflect the belt 22.2 mm (7/8 in.).



Fig. 9-Strand Tension Gauge

If strand tension gauge is used, it should read 311 N (70 lb) strand tension.

If adjustment is required, see page I-IV-27.

Alternator belt tension	N (lbs) tension mm (inch) flex
Fan belt tension	N (lbs) tension mm (inch) flex
Compressor belt tension	N (lbs) tension mm (inch) flex
Adjustment required	Yes No

5. Batteries

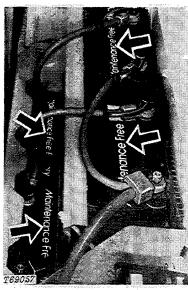


Fig. 10-Batteries

Check terminals and connections.

If terminals are corroded, clean them with a stiff brush.

The cable connector seal should not be pinched between the stud pad and eyelet.

Check torque on eight nuts. Torque should be 15 lb-ft (20 $N{\cdot}m).$

If needed, clean batteries with a damp cloth.

Punch date code on battery.

Water added	
Battery connections checked	

6. Fuel Tank

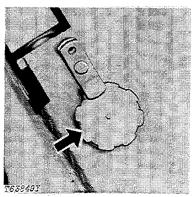


Fig. 11-Fuel Tank

Check fuel gauge. If fuel gauge indicates a low fuel supply, fill the fuel tank. Fuel tank capacity is 485 L (100 gal.).

Fuel tank level Full 1/2 Full Empty

7. Fuel Tank Sump

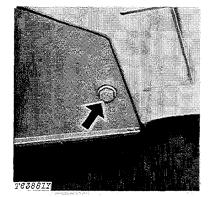


Fig. 12-Fuel Tank Drain Plug

To drain sump:

Yes

Yes

No

No

- 1 Loosen drain plug until fuel drains out hole in plug.
- 2 Allow water and sediment to drain until clean fuel is present.
- 3 Tighten drain plug.

Fuel tank sump checkedYesNoFuel tank sump drainedYesNo

8. Fuel Filters

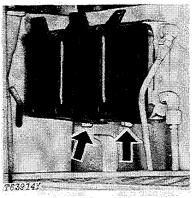


Fig. 13-Drain Plugs

Drain fuel filters as follows:

- 1 Remove drain plugs.
- 2 Allow foreign material to drain.
- 3 Replace drain plugs.

Sediment present in filters

9. Tire Pressure

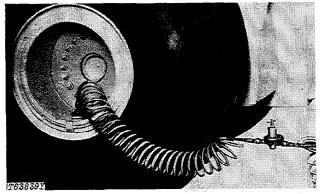


Fig. 14-Correct Tire Filling Procedure

Check air pressure in the tires with an accurate gauge having 0.05 bar (1 psi) graduations.

Tire Size	Туре	Ply Rating	Inflation Pressure
26.5-25	L3	20	3.4 bar (50 psi)
26.5-25	L4	20	3.4 bar (50 psi)
26.5-25	L5	20	3.4 bar (50 psi)

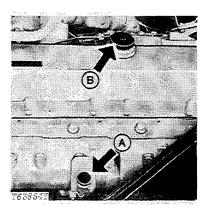
CAUTION: Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious bodily injury. DO NOT attempt to mount a tire unless you have the proper equipment and experience to perform the job safely.

Detailed tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks.

Tire pressure checked

Yes No

10. Engine Crankcase Oil Level



A-Dipstick

Yes

No

B-Oil Filler Cap

Fig. 15-Crankcase Oil Level

Check crankcase oil level with loader on level ground. (Allow a minimum of 10 minutes for the oil to drain down before checking.) If oil level is at or below bottom mark on dipstick, add sufficient oil of the proper viscosity and type specified on page I-V-2 to bring oil level to between marks on dipstick. Do not operate engine with oil level below the bottom mark.

Crankcase oil level checked	Yes	No
Oil added, if any	L	(qts)

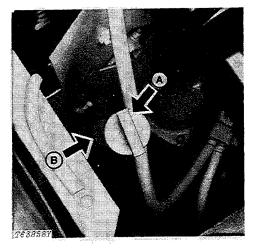
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11. Transmission Oil Level



A-Dipstick

B—Filler Tube

Fig. 16-Transmission Oil Level

- 1 Before starting engine, check oil level. If oil level is 51 mm (2 in.) above full mark, there is sufficient oil in system to start engine. If oil level is low, add oil as specified on I-V-2. Replace dipstick.
- 2 Operate loader until transmission lube pressure gauge shows in the striped zone.
- 3 Idle engine.
- 4 Shift through all gear positions slowly.
- 5 Shift to neutral and apply neutral lock.
- 6 Check oil level with loader on level surface. Maintain level between marks on dipstick.
- 7 If oil level is low, add oil specified on I-V-2. Do not operate with oil level below bottom marks.

Oil level checked	Yes	No
Oil added, if any	L (e	qts)

12. Hydraulic Oil Level

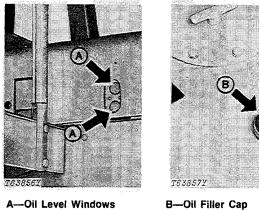


Fig. 17-Hydraulic Oil Level

Check oil level with bucket resting on ground and engine off. Oil level should be between bottom of lower window and center of upper window. If oil is low, add oil as specified on page I-V-2.

NOTE: Clean area around oil filler cap before removing.

CAUTION: The hydraulic reservoir is completely closed and pressurized. Loosen cap slowly to the stop to relieve any excess pressure before removing cap completely.

Oil level checked Oil added, if any

No Yes L (qts)

13. Front and Rear Differential Oil Level

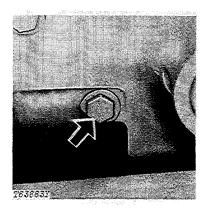


Fig. 18-Front Differential (Oil Level Plug)

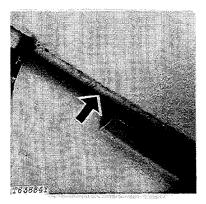


Fig. 19-Rear Differential (Oil Level Plug)

Check oil level in front and rear differential housings. If oil level is below oil level plug, add oil as specified on page I-V-2.

Differential housings oil levels checked	Yes	No
Oil added, if any	L (qts)

14. Engine Speeds

Warm up engine and attach a tachometer in the engine rotation tool hole to check engine speeds.

No load, fast idle speed should be 2250 rpm. Slow idle should be 800 rpm.

If engine speeds need adjustment, proceed as follows: Remove timing cover from flywheel housing.

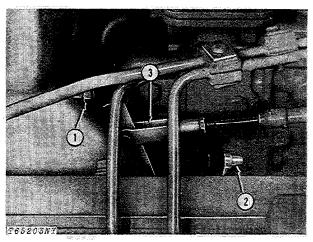
Install Magnetic Pick Up Adapter over timing window in flywheel housing.

Turn flywheel until one gear tooth is centered under the hole in the magnetic pick up adapter.

Turn D01084AA Tachometer/Temperature Reader magnetic pick up clockwise into adapter until magnetic pick up touches gear tooth. Turn magnetic pick up counterclockwise one turn. Tighten lock nut.

Connect power/rpm cable to magnetic pick up. Connect power/rpm cable to junction on tachometer/ temperature reader. Turn thumb dials to 123.

Connect power/rpm cable red clip to battery positive (+) terminal. Connect power/rpm cable black clip to battery negative (-) terminal.



1—Cap (Slow Idle) 2—Plastic Cap (Fast Idle) 3-Yoke

Fig. 20-Idle Screws

Remove cap (1, Fig. 20) from slow idle screw. Break seal wire and remove plastic cap (2) from fast idle screw. Disconnect speed control cable yoke (3) from injection pump throttle lever.

Start engine. Check engine rpm with injection pump throttle lever in slow idle position (to the rear).

Loosen lock nut on slow idle screw. Adjust engine speed to 800 rpm with slow idle stop screw. Tighten lock nut. Install cap.

Move throttle lever to fast idle position (to the front). Check engine rpm.