

Technical Manual

John Deere 762 Scraper

**John Deere Dubuque Works
TM-1135**



Litho in U.S.A.

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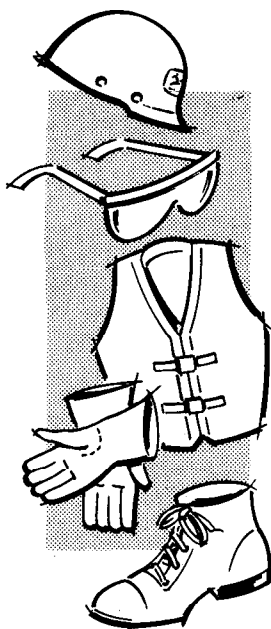
MAINTENANCE WITHOUT ACCIDENT WORK SAFELY



T27999N

 This safety symbol is used for important safety messages. When you see this symbol, follow the safety message to avoid personal injury.

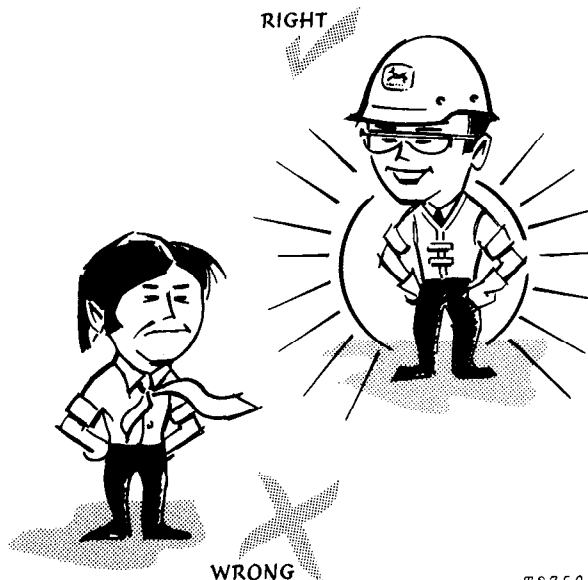
**EVERY EMPLOYER HAS A
SAFETY PROGRAM. KNOW
WHAT IT IS!**



T27501N

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

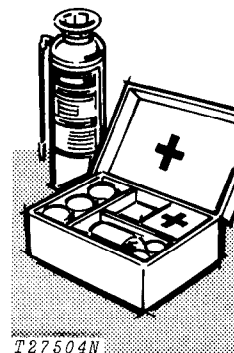
For instance, you may need: Hard hat, safety shoes, safety goggles, heavy gloves, reflector vests, ear protectors, respirator.



BE ALERT!

Plan ahead — work safely — know how to use a first aid kit and a fire extinguisher — and where to get assistance.

T27502N



T27504N

Maintenance Area

Make sure the maintenance area has enough ventilation.

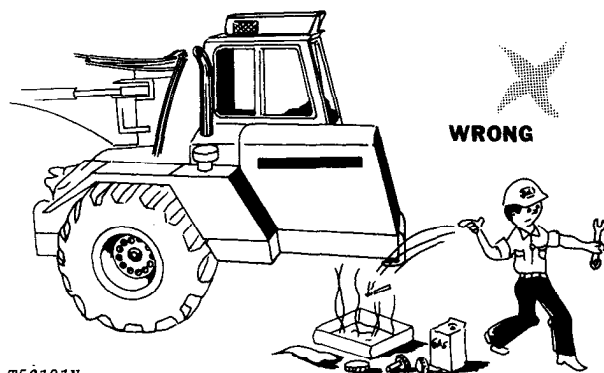
Keep the maintenance area **CLEAN AND DRY**. Oily and wet floors are slippery. Greasy rags are a fire hazard. Wet spots are dangerous when working with electrical equipment.

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

MAINTENANCE WITHOUT ACCIDENT

AVOID FIRE HAZARDS -

Fuel Is Dangerous!



T56191N

Do not smoke while putting fuel in the fuel tank.

Do not smoke while working with material that will start on fire easily.

Stop the engine before filling the fuel tank.

Do not use gasoline or diesel fuel for cleaning parts. Use solvents that will not start on fire.

Battery Gas Is Highly Flammable!

When charging batteries, be sure there is enough ventilation.



T27506N

Do not check the battery charge by putting metal objects across the posts.

Do not let sparks or open flame near batteries.

Do not smoke near battery.

Flame Is Not a Flashlight!

NEVER USE OPEN FLAME AROUND THE MACHINE.

KNOW WHERE FIRE EXTINGUISHERS ARE KEPT!

UNDER ALL MAINTENANCE CONDITIONS -

Do not work on the equipment unless you are approved to do so. Then be sure you know the safe and correct procedure.

Never work on equipment while it is being operated.



T56192N

When the engine is running, avoid working on equipment.

If you must work on the machine with the engine running, ALWAYS USE TWO service technicians. One must be at the controls. The other must be within sight of the operator.

KEEP HANDS AWAY FROM MOVING PARTS.

Put a support under all raised equipment.

Never work under a raised bowl.

Lower the bowl to the ground.

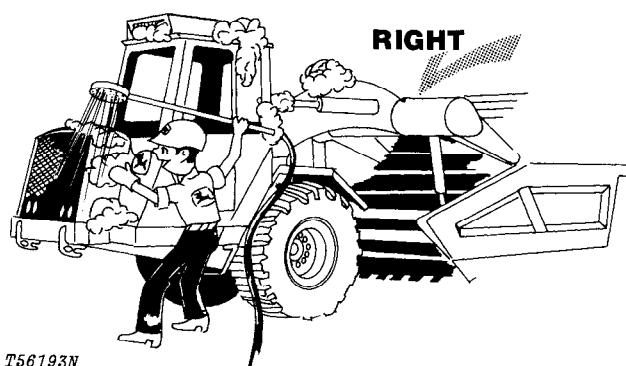
If the machine is on a slope, use blocks to hold it in place.

Do not lift heavy parts by yourself. Use hoisting equipment for this.

TAKE CARE! WATCH OUT FOR OTHER PEOPLE IN THE AREA.

When drilling, grinding, or hammering metal, wear safety glasses.

BE CAREFUL DURING SERVICE AND REPAIR



Keep ALL equipment free of dirt and oil.

Clean oil, grease, mud, ice or snow from the operator's station, steps and hand rails.

When getting the engine ready for storage, remember that inhibitor changes easily into gas and is dangerous. After adding the inhibitor, seal and tape openings. When you are not using the inhibitor, keep the can tightly closed.

Do not remove the radiator cap unless you can hold your hand on the radiator tank. First, loosen the cap slowly to the stop. Then release all pressure in the cooling system before removing the cap.

Check the exhaust system regularly for leaks.

Release hydraulic pressure before working on the hydraulic system. Stop the engine. Lower the bowl to the ground. Move the control levers until the bowl does not move.

When checking hydraulic pressure, be sure to use the correct test gauge.

Before working on the fuel system, close the fuel shutoff valve.

Before working on the electrical system, or making a major overhaul, disconnect the batteries.

KNOW EQUIPMENT IS READY!

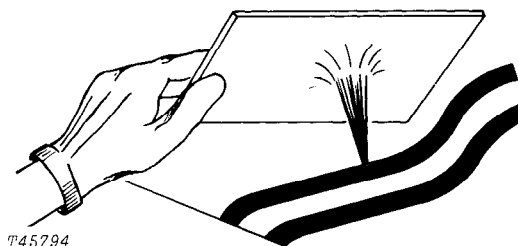
Check all guards, shields, and safety bars. Every one must be in place and tight.

CHECK IT OUT!

- ☐ GUARDS
- ☐ SHIELDS
- ☐ SAFETY BARS
- ☐ ROLL-OVER PROTECTIVE STRUCTURES
- ☐ SEAT BELTS, ETC.



Carefully inspect all systems for leaks.



Use a piece of cardboard or wood, rather than hands, to search for suspected leaks.

Escaping fluid under pressure can penetrate the skin.

If injured by escaping fluid, see a doctor at once.

Group III GENERAL SPECIFICATIONS

(Specifications and design are subject to change without notice. Wherever applicable, specifications are in accordance with SAE Standards. Except where otherwise noted, these specifications are based on a unit equipped with 23.5-25, 16-ply-rating tires and standard equipment.)

Capacity (SAE heaped):

Volume 11 cu. yd. (8.41 m³)

Total weight of payload @

2500 lb/yd³ (1483 kg/m³) . 27,500 lb. (12 474 kg)

Power (@ 2100 engine rpm): SAE DIN

Gross 190 hp (141.7 kW*)

Net 175 hp (130.5 kW) (177.5 PS)

Net engine flywheel power is for an engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, alternator, and muffler. 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 ft. (3 000 m) altitude.

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

Engine: John Deere Turbocharged diesel, 6-cylinder, 4-stroke cycle

Bore and stroke 5.12x5 in. (130x127 mm)

Piston displacement 619 cu. in. (10 144 cm³)

Compression ratio 15.2 to 1

Maximum torque

@1300 rpm 550 lb-ft (746 Nm) (76 kg-m)

NACC or AMA (U.S. Tax) horsepower 62.9

Main bearings 7

Lubrication Pressure system with full flow filter

Cooling Pressurized with thermostat and fixed bypass

Fan Suction

Air cleaner with restriction indicator Dry

Electrical system 24 volt with alternator

Batteries (two) Reserve capacity: 180 minutes

Transmission:

Two-phase, single-stage torque converter with lockup clutch and Power Shift transmission (5 speeds forward - 1 reverse). Stall ratio is 1.82 to 1.

Differential Lock Foot operated, hydraulically actuated

Drive Axle Differential drive; over-all ratio 17.98 to 1; planetary final drives

Brakes: Hydraulic, power actuated. Tractor and scraper brakes are operated simultaneously. An accumulator provides several brake applications after engine is stopped.

Tractor Wet-disk between differential and planetaries.

No adjustment needed.

Scraper Expanding shoe, at wheels.

Parking Manually controlled, expanding shoe, mechanical, on axle input shaft.

Power Steering: Position-responsive with hydraulic follow-up.

Turning circle (180 deg. turn) 30 ft. (9.14 m)

Angle of steer right or left 90 deg.

Tractor Oscillation (total) 27 deg.

Hydraulic Systems:

Main tractor system: Closed-center

System pressure . 2250 psi (155 bar) (158 kg/cm²)

Operates steering, brakes, differential lock and all scraper functions except elevator drive.

Main pump... Variable displacement, constant pressure delivers 34.6 gpm (131 L/min) @ 2100 rpm.

Main charge pump delivers 13 gpm (49 L/min) @ 2142 rpm.

Elevator system... Engine-driven 4.26 cu. in. (69.8 cm³) variable displacement, reversible hydrostatic pump delivers 36.6 gpm (138.5 L/min) @ 2142 rpm.

System pressure 5000 psi (34,500 kPa) (351 kg/cm²)

Filtration All systems are protected by replaceable filters.

Main hydraulic system 10 micron filters

Elevator system 10 micron filters

Transmission 40 micron filters

Engine 25 micron filters

Air cleaner Dry-type with safety element and restriction indicator

Hydraulic Cylinders:	Bore	Stroke
Lift (two)	4.5 in. (114 mm)	18 in. (457 mm)
Sliding floor (one)	5.25 in. (133 mm)	30.1 in. (765 mm)
Ejector gate (two)	2.5 in. (64 mm)	34.8 in. (884 mm)
Steering (two)	3.5 in. (89 mm)	25.89 in. (658 mm)
Piston rods ... Ground, heat-treated, chrome-plated, polished		
Lift and steering cylinders	2 in. (51 mm)	
Sliding floor cylinders	2.25 in. (57 mm)	
Ejector gate cylinders	1.50 in. (38 mm)	

Elevator ... Reversible, hydrostatic-drive with triple gear reduction
 Number of flights 18
 Spacing of flights 12.44 in. (316 mm)
 Width of flights 5 ft. 6.9 in. (1.7 m)
 Speed (variable) 0 to 236 fpm (0 to 72 m/min)
 Length (top to bottom) 9 ft. 6 in. (2.9 m)

Bowl ... Heavy gauge steel with reinforcing and box construction. Sliding floor rides on heat-treated, replaceable rails. Cutting edge retracts with sliding floor. Independent axles are vertically adjustable.

Cutting Edge ... 7 ft. 6 in. (2.29 m) wide; 3 sections, reversible and replaceable, high-carbon steel. Each section is adjustable vertically 2 in. (51 mm).
 Center section ... 0.75x10x54 in. (19x254x1 372 mm)
 End sections ... 0.75x10x18 in. (19x254x457 mm)

Tires:

23.5, 16-ply-rating, E2
 23.5-25, 16-ply-rating, E3
 23.5-25, steel-cord radials

Capacities	U.S. Gallons	Liters
Cooling system	9	34.1
Fuel tank	72	272.5
Engine lubrication, including filter	5.5	20.8
Transmission case and filter	12	45.4
Differential case	5.5	20.8
Hydraulic reservoir	7.5	28.4
Elevator gear case	4.25	16.2

Additional Standard Equipment:

Gauges:	Fenders (tractor and scraper)
Tachometer	Horn
Hour meter	Driving lights
Speedometer	Transmission bottom guard
Oil pressure	Independent, adjustable scraper axles
Coolant temperature	Foot throttle
Transmission pressure	Differential lock
Converter temperature	Vandal protection
Hydrostatic charge pressure	Muffler
Indicators	Reverse warning horn
Turn signal	Central lube system
Alternator	ROPS canopy with seatbelt and tether straps
Brake pressure	Bucket seat
Parking brake	Windshield with wiper
High beam	Regular side cutters
Hydraulic filter	Engine coolant conditioner-filter
Cold weather starting aid	

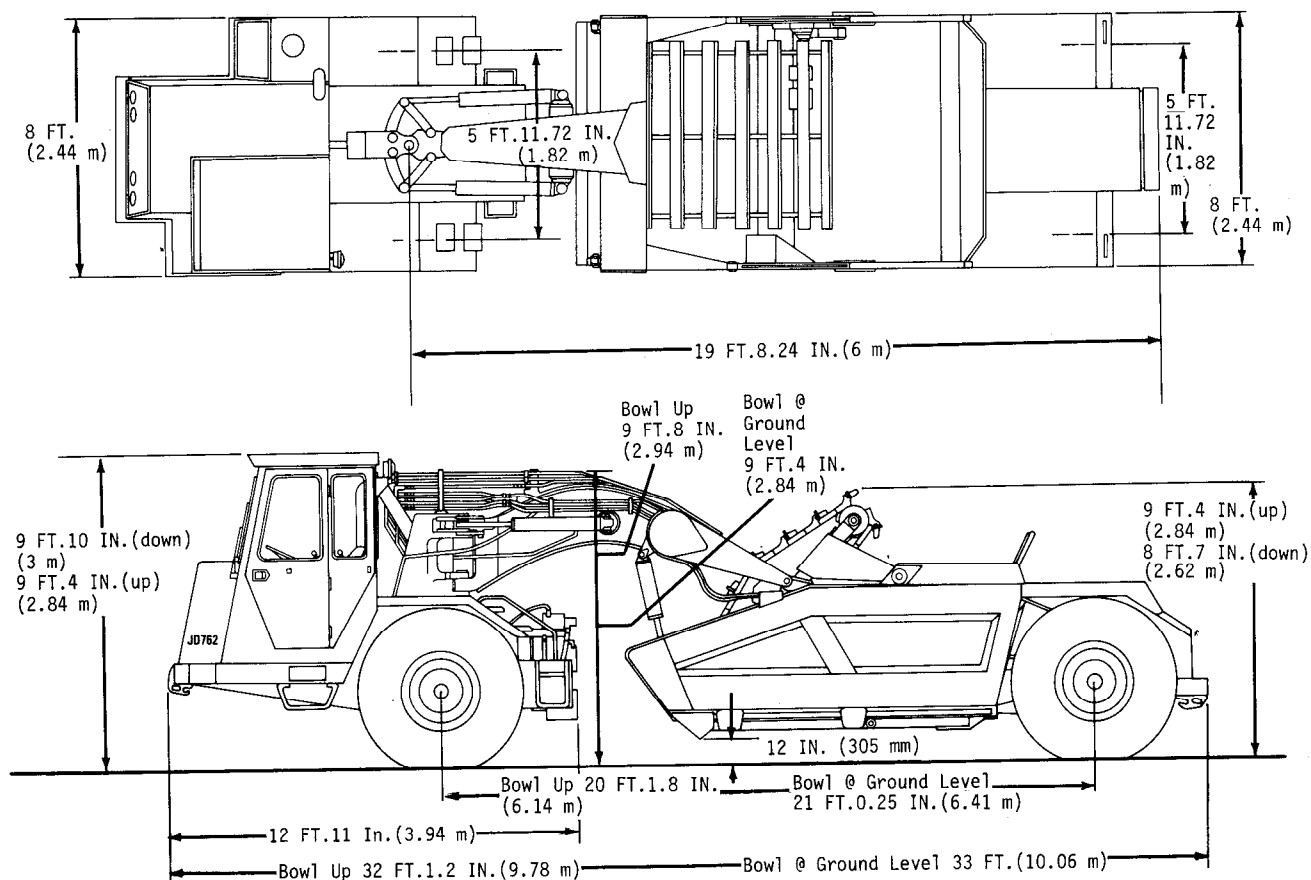
Weight Distribution:

	lb.	kg
Empty: Drive axle	22,310	10 120
Scraper axle	12,140	5 507
Total	34,450	15 627
Loaded: Drive axle	31,110	14 111
Scraper axle	30,840	13 989
Total	61,950	28,100

Special Equipment:

Teeth for cutting edge
 ROPS cab
 Air conditioning
 Cab heater
 Extended side cutters
 Ejector gate spill screen
 Mud flaps for scraper wheels

JD762 SCRAPER DIMENSIONS



T56462N

Group IV PREDELIVERY, DELIVERY, AND AFTER-SALE SERVICES

TEMPORARY STORAGE

After receiving your scraper from the factory and before putting the machine into temporary storage, make the following checks and perform the services:

For information on storage over 30 days, see your JD762 Operator's Manual.

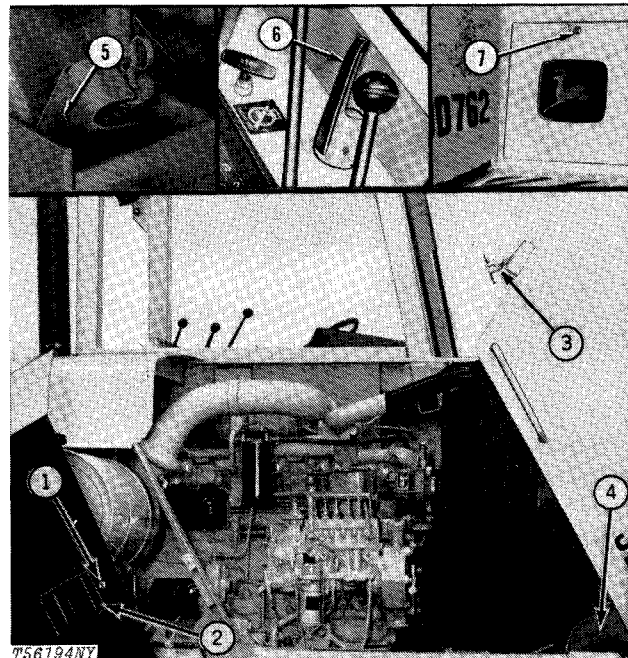
1. Check the battery electrolyte level. Charge the battery, if necessary.
2. Check the level of the coolant in the radiator. The coolant must be in the sight glass when the engine is off and cold.
3. Fill the fuel tank.
4. Check the crankcase oil level. Oil must be between marks on the dipstick after the engine has been stopped for 10 minutes.
5. Release hydraulic pressure by stopping the engine, lowering the bowl, and operating the control levers until the bowl does not move.

PREDELIVERY SERVICE

The service technician must carefully check and service the machine before the dealer delivers it to the customer. When the customer receives a machine that is correctly prepared, the customer is well-satisfied. For these reasons, correct predelivery service is very important to the dealer and the customer.

Use the following list when getting a unit ready for delivery to the customer.

1. Service Equipment



- | | |
|-----------------------------|------------------------------|
| 1—Service Door Lock | 4—Hood Latch |
| 2—Service Door Latch Handle | 5—Transmission Dipstick Lock |
| 3—Rubber Hook | 6—Hood Release Lock |
| | 7—Front Access Door Lock |

Fig. 1-Service Equipment

Use the ignition key to check the operation of the service door lock (1), front access door lock (7), hood release lock (6), and transmission dipstick lock (5). Lubricate if necessary.

Check the operation of the service door latch (2), hood rubber hook (3), and hood latch (4).

Service equipment checked

Yes No

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