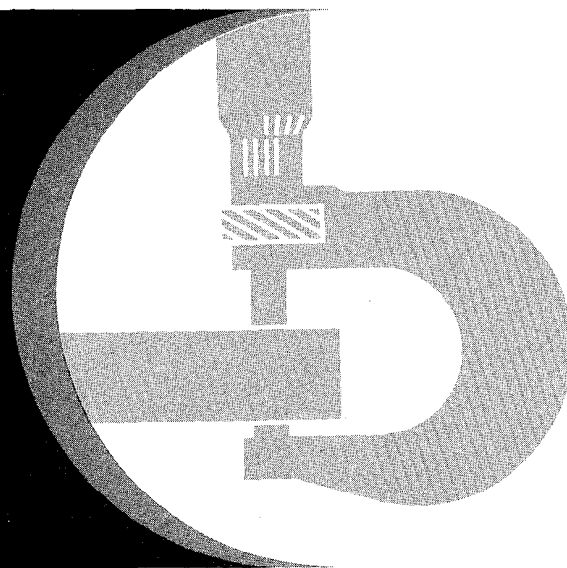


**John Deere  
450C  
Crawler**



**TECHNICAL MANUAL**

**TM1102**  
LITHO IN U.S.A.

**JD450-C CRAWLER****Technical Manual  
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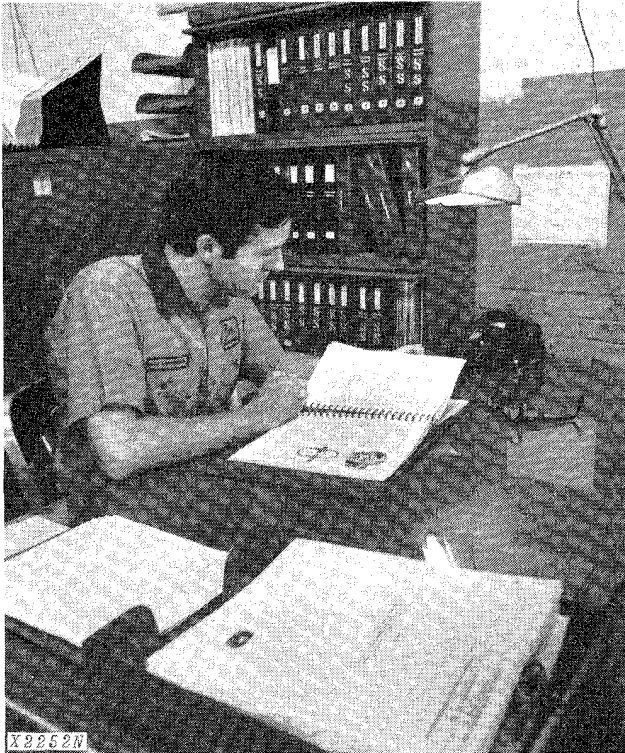
*The specifications and design information contained in this manual were correct at the time it was printed. It is John Deere's policy to continually improve and update our machines. Therefore, the specifications and design information are subject to change without notice.*

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## INTRODUCTION



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 failure and their causes. FOS Manuals are for training new personnel and for reference by experienced personnel.



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 mechanic.



Use Technical Manuals for Actual Service

This technical manual was planned and written for you—an experienced mechanic. 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" and "Maintenance Without Accident".
- Section 10 - General specifications and services.
- Sections 20 through 60 - Removal, repair, testing (components removed), installation, and adjustment.
- Section 70 - 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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Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.


The full manual is available for immediate download.

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## MAINTENANCE WITHOUT ACCIDENT WORK SAFELY



T27999N

 This safety alert symbol identifies important safety messages in this manual and on the crawler. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

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



T27501N

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

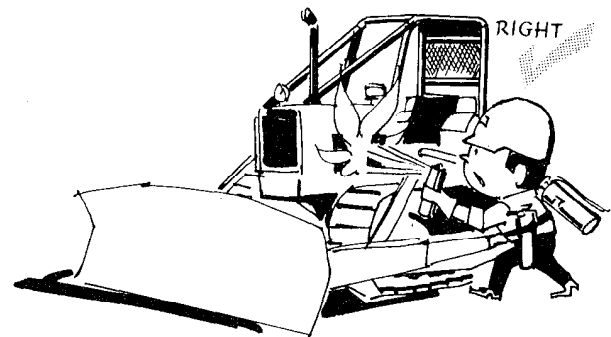
For instance, you may need: Hard hat, safety shoes, safety goggles, heavy gloves, reflector vests, ear protectors, respirators.

Litho in U.S.A.



T27502N

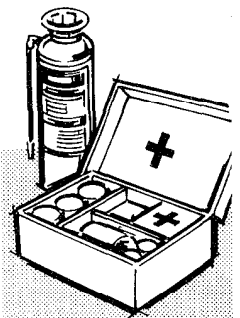
**ALWAYS AVOID** loose clothing or any accessory—flopping cuffs, dangling neckties and scarves, or rings and wrist watches—that can catch in moving parts and put you out of work.



T31961

### 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 assistance. In an emergency, split-second action is the key to safety.



T27504N

## MAINTENANCE WITHOUT ACCIDENT

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

### AVOID FIRE HAZARDS—

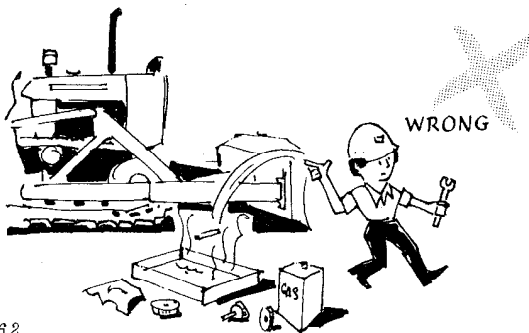
#### Fuel is Dangerous!

Don't smoke while refueling.

Don't smoke while handling highly flammable material.

Shut off engine when refueling.

Use care in refueling if the engine is hot.



T31962

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.

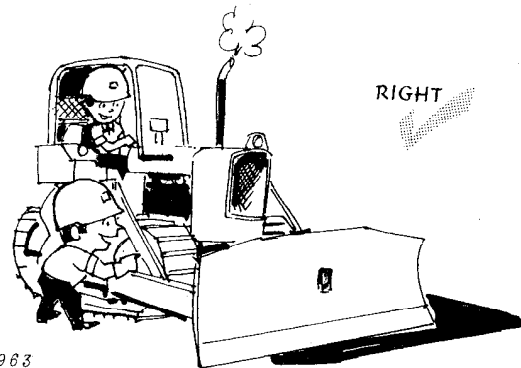
**KNOW WHERE FIRE EXTINGUISHERS ARE KEPT!**

Litho in U.S.A.

### UNDER ALL MAINTENANCE CONDITIONS—

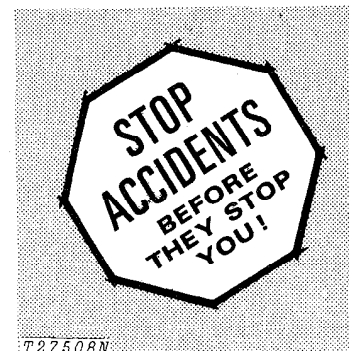
Do not perform any work on the equipment unless authorized to do so. Then be sure you know what you're doing. Follow recommended procedures.

Never service the equipment while it is being operated.



T31963

Avoid working on equipment with the engine running. If it is necessary to make checks with the engine running, **ALWAYS USE TWO SERVICE TECHNICIANS**—one, the operator, at the controls, the other checking within sight of the operator. Also, put the transmission in neutral, set the brake lock, and apply any safety locks provided. **KEEP HANDS AWAY FROM MOVING PARTS.**

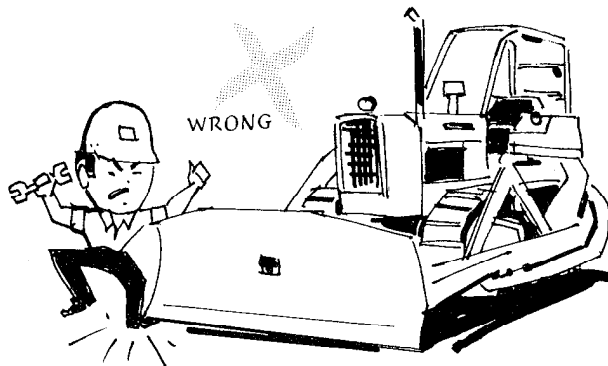


T27508N

## MAINTENANCE WITHOUT ACCIDENT

Before servicing, adjusting, or repairing crawlers which have attachments such as dozers, blades, etc.—**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.



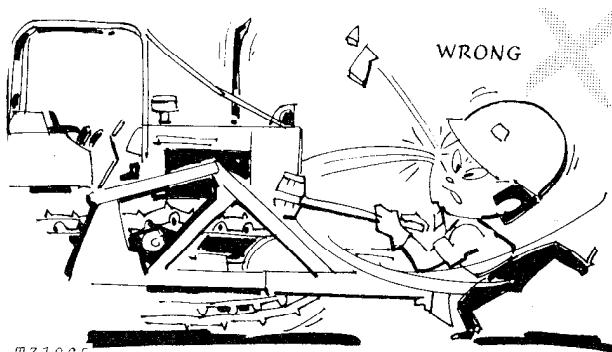
T31964

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

If the machine 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.



T31965

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

Make sure the maintenance area is adequately vented.

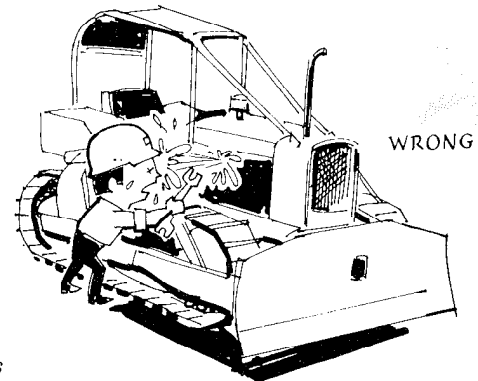
Keep maintenance area **CLEAN AND DRY**. Oily and wet floors are slippery; greasy rags are a fire hazard; wet spots are dangerous when working with electrical equipment.

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 equipment.

Lower mounted equipment and tools to the ground *carefully*.



T31966

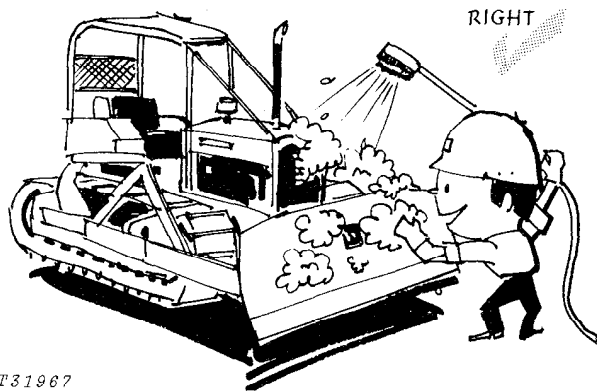
Engine coolant gets hot! Don't remove the radiator cap until coolant temperature is below the boiling point. Then turn cap slightly to relieve pressure before removing.

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

Don't forget a hydraulic system may be pressurized! To relieve pressure, stop engine and lower boom. Operate hydraulic control levers until system fails to respond.

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

## MAINTENANCE WITHOUT ACCIDENT



T31967

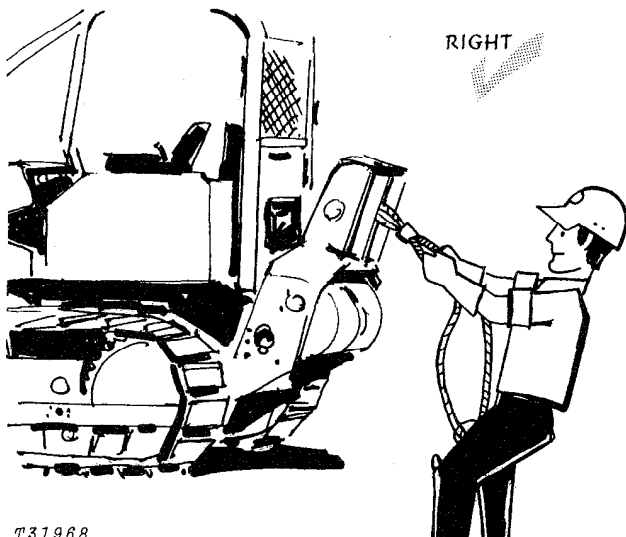
Keep ALL equipment free of dirt and oil. This attention will minimize fire hazards and facilitate spotting of loose or defective parts.

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

### ADJUSTING PRECAUTIONS

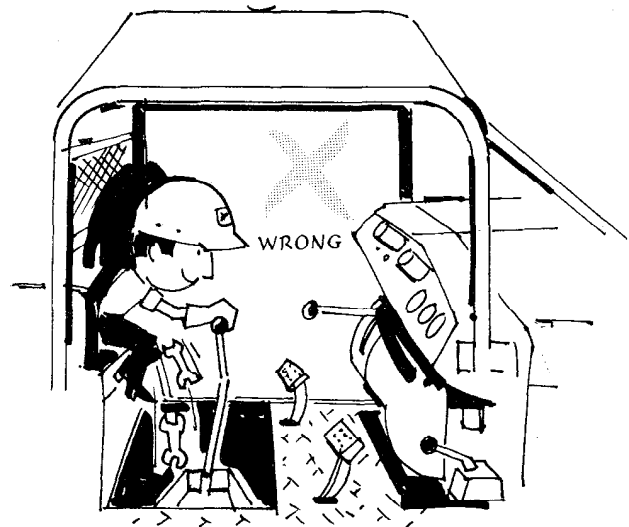
#### ... for Operating Adjustments

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



T31968

**Always wear gloves when handling cable.**

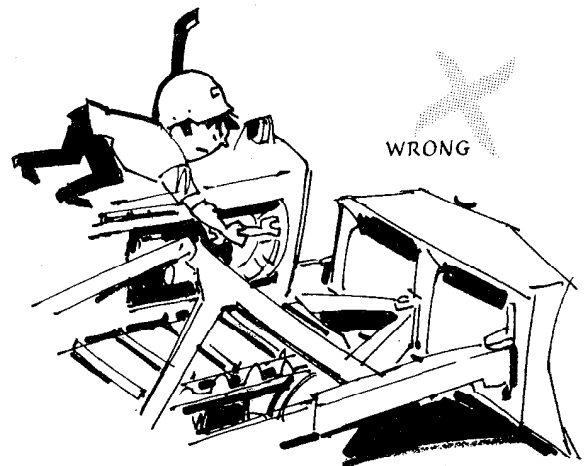


T31969

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 adjust the fuel system while the machine is in motion.



T31970

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

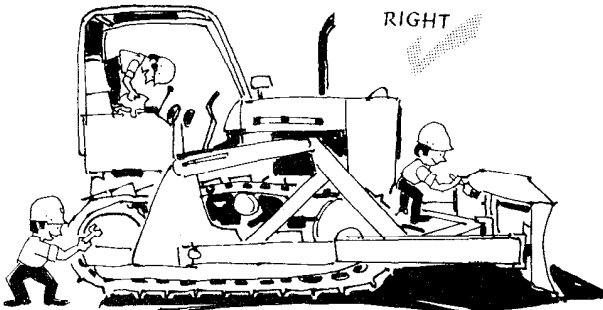
## MAINTENANCE WITHOUT ACCIDENT

### PRECAUTIONS DURING REPAIR

Before working on the engine fuel system—close fuel shutoff valve.

Before working on hydraulic system—make sure engine is not running and the system pressure is relieved by working the control levers in all directions with the engine shut off.

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

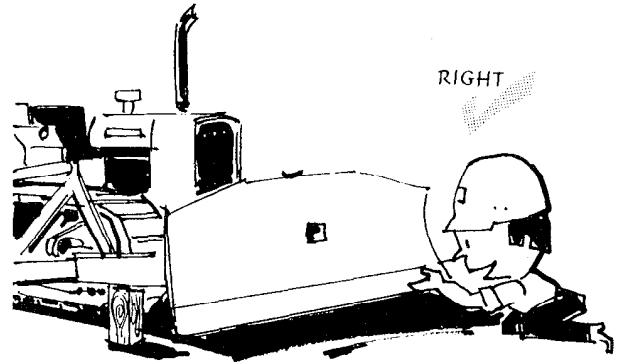


T31971

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

When changing cutting edges on blade—

Stop the engine and securely block the blade.



T31972

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

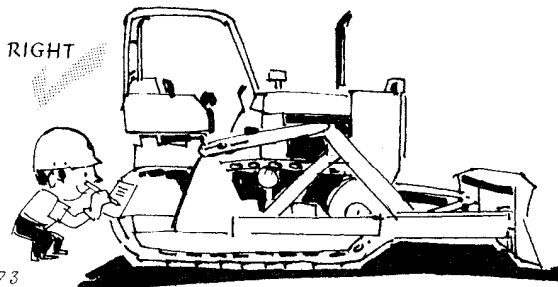
## MAINTENANCE WITHOUT ACCIDENT

### KNOW EQUIPMENT IS READY!

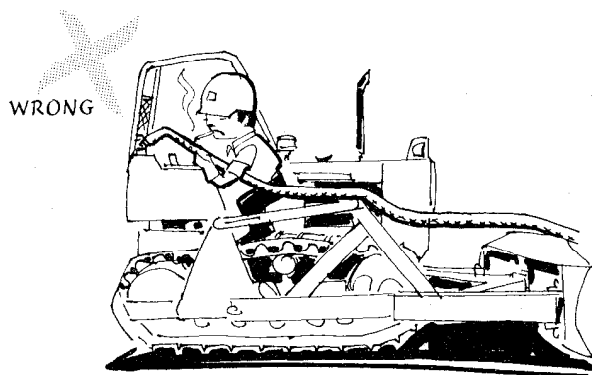
Check guards, canopies, safety bars—all protective devices installed on the crawler. Every one should be in place and secure.

### CHECK IT OUT!

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

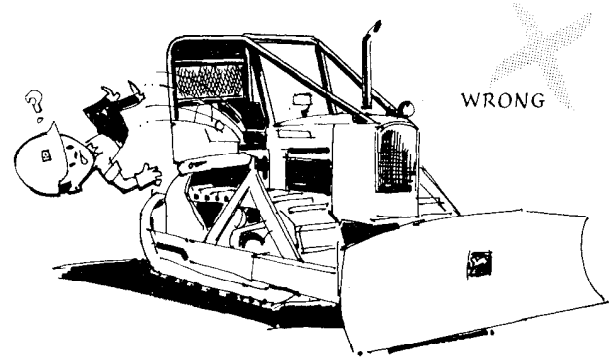


Carefully inspect equipment for visual defects—leaks in fuel, lubrication, and hydraulic systems. Do not search for pressurized fluid leaks with your hands. Use cardboard or wood to search for leaks.



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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# Section 10 GENERAL

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## Group 5

# GENERAL MACHINE SPECIFICATIONS

*(Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with ICED and SAE standards. Except where otherwise noted, these specifications are based on a unit equipped with [1-1/4 cu. yd. (0.96 m<sup>3</sup>) digging bucket w/teeth (loader)], diesel engine, roll-over protective structure and standard equipment.)*

Power		
(@ 2,500 engine rpm):	<b>SAE</b>	<b>DIN</b>
Gross	70 hp	
Net	65 hp	65.9 PS
Drawbar (Dozers)	48.6 hp	49.3 PS

*Net engine flywheel power 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 standard 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, 4-cylinder, turbocharged diesel, 4-stroke cycle

Bore and stroke	4.02 x 4.33 in. (102 x 110 mm)
Piston displacement	219 cu. in. (3 588 cm <sup>3</sup> )
Compression ratio	16.2 to 1
Maximum torque (@ 1,400 rpm)	164.5 lb-ft (22.74 kg-m)

NACC or AMA (U.S. Tax) horsepower	23.84
Lubrication	Pressure system with full-flow filter
Main bearings	5
Cooling	Pressurized with thermostat and fixed bypass
Fan	Blower
Air cleaner with restriction indicator	Dry
Electrical System	12-volt with alternator
Battery	Reserve capacity: 180 minutes

### TRANSMISSION:

H-L-R: 4 gears with high, low and reverse ranges shifted hydraulically without clutching in each range.

CLUTCH ..... 11-in. (279 mm) single-disk

### STEERING:

Steering clutches and brakes are controlled by a single lever for each track. A pedal provides braking, and lock-down for parking.

Clutches ..... Oil-cooled, hydraulically-actuated, multiple-disk, 11-in. (279 mm) disk; 16 friction surfaces per clutch

Brakes .... Self-adjusting, self-energizing, oil-cooled contracting band with bonded lining.

Gear:	Travel Speeds:		Max. Drawbar Pull (Dozer) (with adequate weight and traction)	
	mph	km/h	lb.	kg
1st Gear				
Low	1.3	2.1	18,050	8 188
High	1.8	2.9	12,600	5 715
Reverse	1.7	2.7		
2nd Gear				
Low	2.0	3.2	10,050	4 559
High	2.8	4.5	7,050	3 197
Reverse	2.7	4.3		
3rd Gear				
Low	3.0	4.8	6,400	2 903
High	4.3	6.9	4,250	1 928
Reverse	4.1	6.6		
4th Gear				
Low	4.7	7.6	3,500	1 588
High	6.7	10.8	2,350	1 066
Reverse	6.4	10.3		

**DOZER HYDRAULIC SYSTEM:**

6405 Control ..... Single "T-bar", triple hydraulic system  
 6410 and 6415 Control ..... Single-lever, double hydraulic system  
 Pump ..... Gear, 15 or 23 gpm (57 or 87 Lpm)  
 Pressure ..... 1,750 psi (123.0 kg/cm<sup>2</sup>)

**LOADER HYDRAULIC SYSTEM:**

Control ..... Single-lever, triple hydraulic system  
 Pump ..... Gear, 28 gpm (106 Lpm)  
 Pressure ..... 2,250 psi (158.2 kg/cm<sup>2</sup>)  
 Oil lines ..... Seamless steel tubing; double-wire-braid hose  
 Filter ..... Micronic in return line

**LOADER HYDRAULIC CYLINDERS:**

	Bore	Stroke
Boom, two ..	4.25-in. (108 mm)	28.25-in. (718 mm)
Bucket, two ..	3.5-in. (89 mm)	31.1-in. (790 mm)
Cylinder rods ..	Ground, heat-treated, chrome-plated, polished	
Boom cylinder rods ..	2.25-in. (57 mm) dia.	
Bucket cylinder rods ..	1.75-in. (44 mm) dia.	

**BULLDOZER HYDRAULIC CYLINDERS:**

	Bore	Stroke
Lift, two ..	3.5-in. (89 mm)	15-in. (381 mm)
Angle, two ..	3.5-in. (89 mm)	13.375-in. (343 mm)
Tilt, one ..	3.5-in. (89 mm)	3-in. (76 mm)
Cylinder rods ..	Ground, heat-treated, chrome-plated, polished	
Cylinder pivot pins ..	Hardened steel (replaceable bushings)	

Tracks (5-roller track frames with rock guards:)  
 Grouser (Dozer) ..... 16-in. (406 mm)  
 Triple semi-grouser open-center (loader) ..... 14-in. (356 mm)  
 Track shoes, each side (Dozer) ..... 36  
 Track shoes, each side (Loader) ..... 37  
 Ground contact area (Dozer) ..... 2,328 sq. in. (15 019 cm<sup>2</sup>)  
 Ground contact area (Loader) ..... 2,128 sq. in. (13 729 cm<sup>2</sup>)  
 Ground pressure (Dozer) .... 6.1 psi (0.429 kg/cm<sup>2</sup>)  
 Ground pressure (Loader) ... 7.8 psi (0.548 kg/cm<sup>2</sup>)  
 Length of track on ground (Dozer) 72.75 in. (1.85 m)  
 Length of track on ground (Loader) .. 76 in. (1.93 m)  
 Track gauge ..... 52 in. (1.32 m)  
 Carrier roller ..... 1  
 Adjustment ..... Hydraulic  
 Clearance at rear crossbar ..... 14.25 in. (362 mm)

Blade: Reinforced, box-welded  
 Cutting edge ..... 3-piece, reversible, replaceable  
 Center section ..... 0.625 in. (61 mm)  
 End bits, cast steel ..... 0.75 in. (19 mm)

C-Frame ..... Reinforced, box-welded

**LOADER SPECIFICATIONS**

	SAE Heaped Capacity	Width
Buckets:		
Digging	1-1/4 cu. yd. (0.96 m <sup>3</sup> )	72.25 in. (1.84 m)
Multipurpose	1-1/4 cu. yd. (0.96 m <sup>3</sup> )	73 in. (1.85 m)

**Operating Information:**

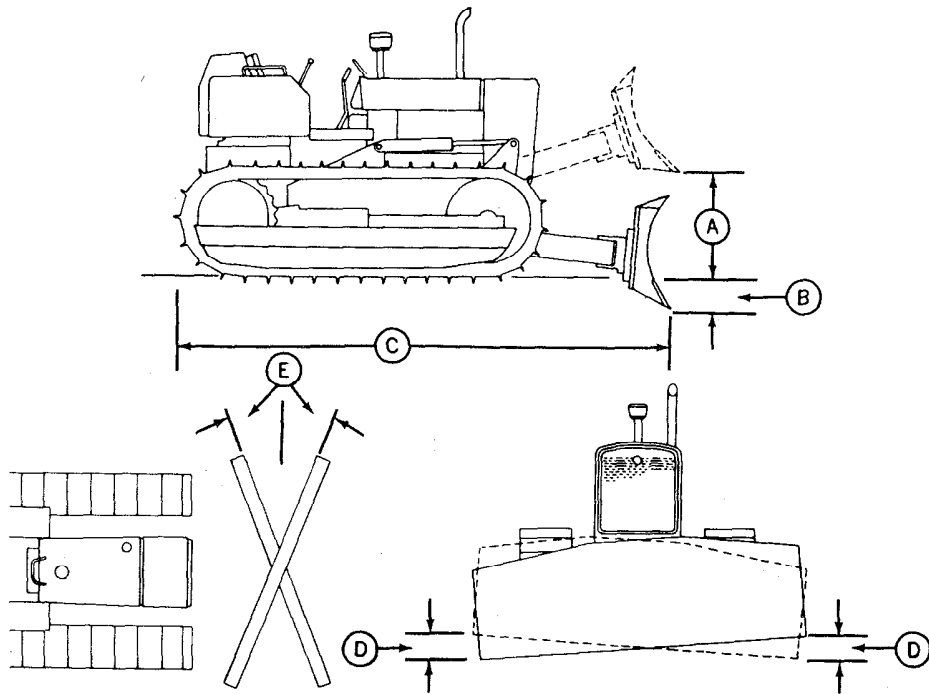
Breakout force ..... 14,360 lb. (6 513 kg)  
 SAE tipping load ..... 9,200 lb. (4 173 kg)  
 Maximum dumping angle ..... 50 deg.  
 Raising time ..... 7.0 sec.  
 Dumping time ..... 1.6 sec.  
 Lowering time ..... 4.0 sec.

Loader SAE operating weight 16,700 lb. (7 582 kg)  
 SAE operating weight (6405) ..... 14,230 lb. (6 455 kg)  
 SAE operating weight (6410) ..... 14,170 lb. (6 428 kg)  
 SAE operating weight (6415) ..... 14,650 lb. (6 645 kg)

*NOTE: The 6405, 6410, and 6415 Bulldozers fit all JD450-Series Crawlers.*

CAPACITIES	U.S.	Litres	SPECIAL EQUIPMENT:
Cooling system .....	4 gal.	15.1	PTO (1,000 rpm)
Fuel tank .....	31 gal.	117.3	Upper and lower front idler shields
Crankcase including filter ...	9 qt.	8.5	Spark arresting muffler
Transmission .....	8 gal.	30.3	16-in. (406 mm) open-center grouser shoes (dozer)
Final drive (each) .....	6.25 qt.	5.9	18-in. (457 mm) open-center grouser shoes (dozer)
Hydraulic reservoir (loader) .	7 gal.	26.5	Auxiliary hydraulic system with breakaway couplings (dozer)
Hydraulic reservoir (dozer) ..	6.4 gal.	24.5	Swinging drawbar (dozer)
Hydraulic system (loader) ..	13 gal.	49.2	Remote hydraulic cylinder (dozer)
Hydraulic system (6410 and 6415) .....	10 gal.	37.8	Radiator sand shield (dozer)
Hydraulic system (6405) .....	12.25 gal.	46.4	Cab (includes ROPS)
Steering clutch housing			Winch drive
(each side) .....	28 qt.	26.5	Two batteries
			Rear counterweight for multi-purpose bucket or log loader (loader)
			Limb risers with overhead exhaust
			18-in. (457) grouser shoes (dozer)
			ROPS with canopy and seat
			Cast steel end bits
<b>ADDITIONAL STANDARD EQUIPMENT:</b>			
Front and rear bottom guard			
Front hitch			
Deluxe cushion seat with arm rests			
Key switch with push button safety start			
Electric hour meter			
Cigar lighter			
Vandal protection			
Bottom guard counterweight with fixed drawbar (loader)			
Radiator sand shield (loader)			
Sprocket weights (loader)			
Lights			
Trash-resistant radiator			
Outer sprocket shields (dozer)			
Transistorized voltage regulator			
Tachometer			
Cold weather starting aid			
Horn			
Master electrical disconnect switch			
Engine side shields			
Front idler shield (loader)			
Return to dig (loader)			
Boom safety lock bar			

### JD450-C CRAWLER BULLDOZER DIMENSIONS



T32855

A - 6405	.....	3 ft. 1.4 in. (949 mm)
6410	.....	4 ft. (1.22 m)
6415	.....	3 ft. 5.0 in. (1.04 m)
B - 6405	.....	1 ft. 0.6 in. (321 mm)
6410	.....	1 ft. 0.5 in. (317 mm)
6415	.....	1 ft. 1 in. (330 mm)
C - 6405	.....	11 ft. 10 in. (3.6 m)
6410	.....	12 ft. 4.5 in. (3.8 m)
6415	.....	11 ft. 5.0 in. (3.5 m)

D - 6415	.....	11.5 in. (292 mm)
6405, 6410	.....	11.0 in. (279 mm)

E - 6405, 6410 ..... 25 deg.

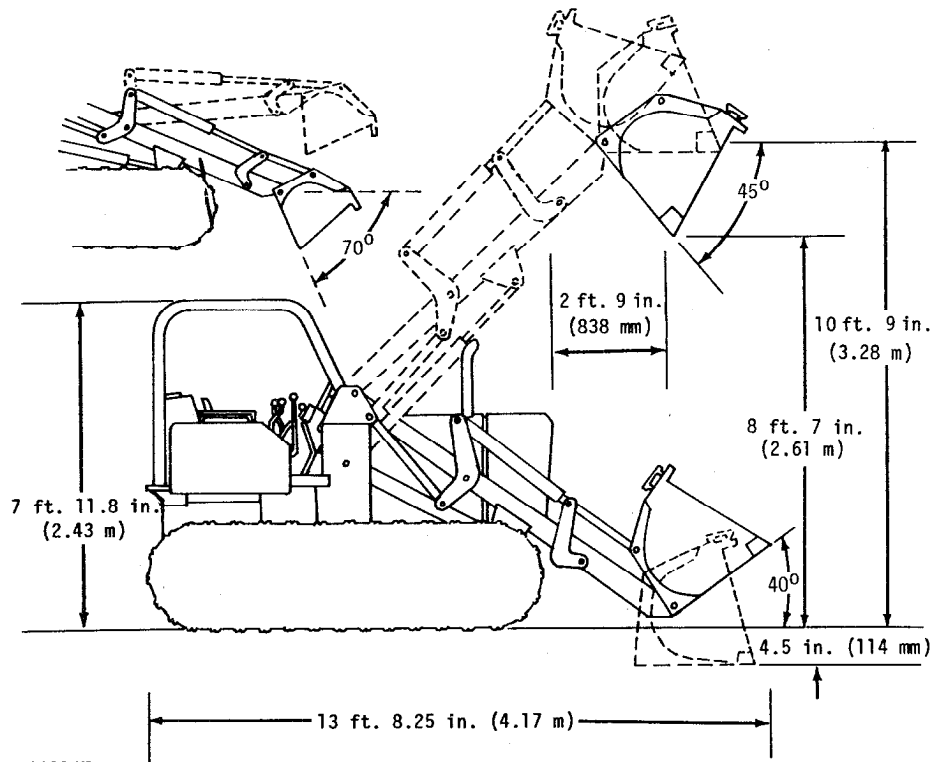
**Blade length**

6415	.....	96.0 in. (2.4 m)
6410	.....	106.0 in. (2.7 m)
6405	.....	90 in. (2.3 m)

**Blade height**

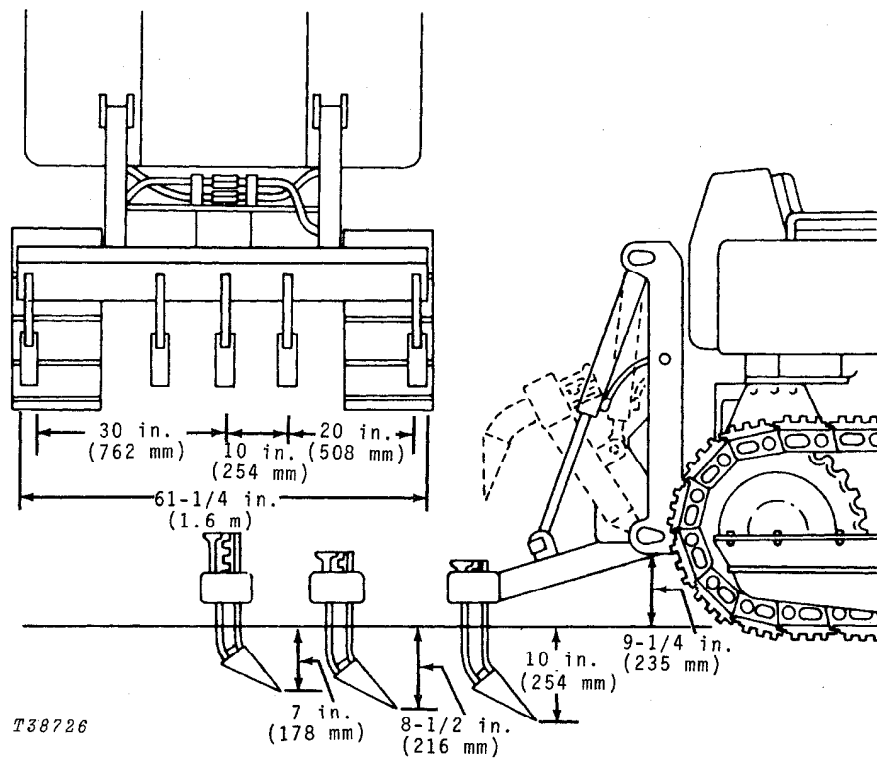
6405, 6410, 6415	.....	2 ft. 8 in. (813 mm)
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### JD450-C CRAWLER LOADER DIMENSIONS



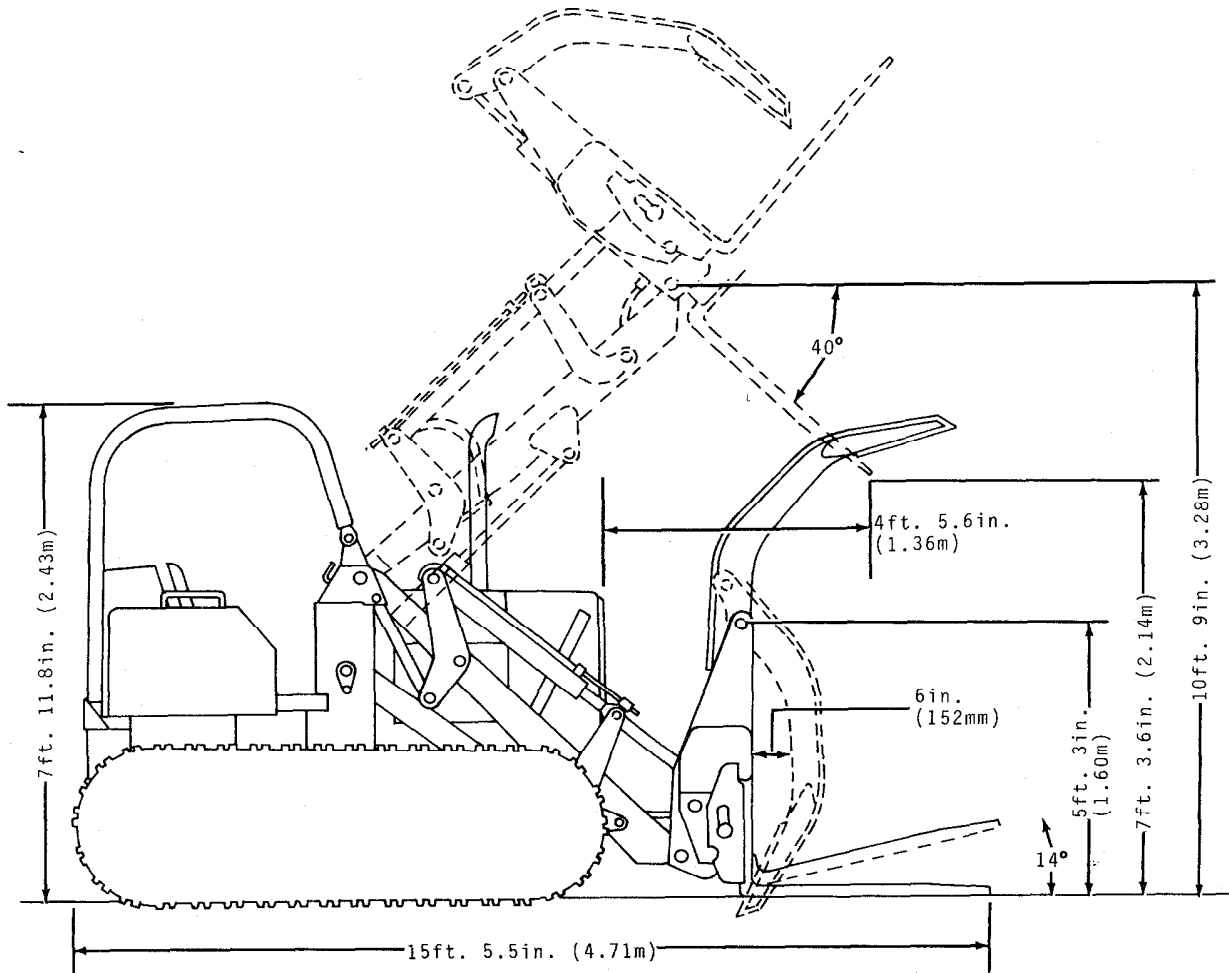
T66024N

### 3110 RIPPER DIMENSIONS



Width (overall)	66 inches (1.7 m)
Working width (max.)	61-1/4 inches (1.6 m)
Penetration (adjustable)	7, 8-1/2, 10 inches (178, 216 and 254 mm)
Cylinders	Double-Acting
Bore	2-1/2 inches (63.5 mm)
Stroke	15 inches (381 mm)
Cylinder rods	Ground, chrome plated, heat-treated, polished
Control	Single lever for lift and down-pressure
Construction:	
Frame	Welded box-angle; 6 x 8.25 in. (152 x 210 mm)
Shanks	Forged, heat-treated steel with replaceable points
Ground clearance at frame	9-1/4 inches (235 mm)
Weight with three teeth	685 pounds (311 kg)

### LUMBER FORK (WITH CLAMP) DIMENSIONS



T57922N

**Operating Data:**

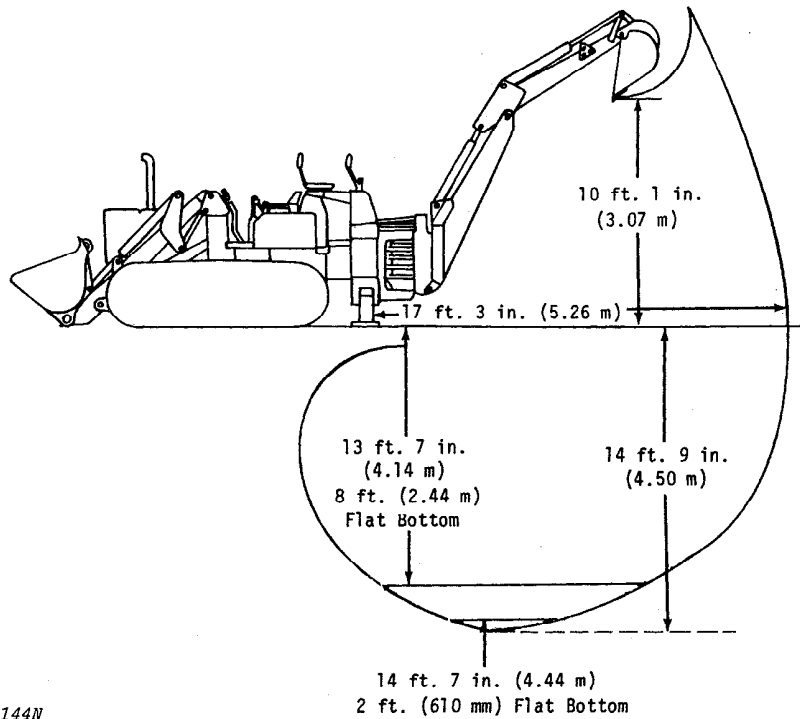
Lift capacity, full height, measured at 24 in. (610 mm) from heel of fork, with load centered:

Without clamp .....	7,750 lb. (3515 kg)
With clamp .....	6,410 lb. (2905 kg)
Maximum diameter with clamp closed .....	6 in. (152 mm)
Length of tines (heel-to-toe) .....	4 ft. (1.22 m)
Tine spacing with clamp .....	65.45 in. (1662 mm)
Tine spacing (center-to-center), adjustable, without clamp .....	15 in. (381 mm)
	21.5 in. (546 mm)
	43 in. (1.09 m)
	58 in. (1.47 m)
	70 in. (1.78 m)

**Rollback at ground level:**

Without clamp .....	19 deg.
With clamp .....	14 deg.

### 9300 BACKHOE DIMENSIONS



T66144N

**Operating Information:**

**Digging Depth (ICED):**

Maximum .....	14 ft. 9 in. (4.50 m)
2-ft. (610 mm) flat bottom .....	14 ft. 7 in. (4.44 m)
8-ft. (2.44 m) flat bottom .....	13 ft. 7 in. (4.14 m)
Swing arc .....	180 deg.

Digging force (bucket cylinder), ICED .....	9226 lb. (41.35 kN) (4 185 kg)
Digging force, crowd cylinder .....	5835 lb. (26.15 kN) (2 647 kg)
Reach from center of swing mast, ICED .....	17 ft. 3 in. (5.26 m)
Loading height, ICED .....	10 ft. 1 in. (3.07 m)
Transport height .....	11 ft. 1 in. (3.38 m)

**Hydraulic System**

Pressure .....	2250 psi (155.1 bar) (158.2 kg/cm <sup>2</sup> )
Pump .....	28 gpm (106 L/min) @ 2500 engine rpm

**Hydraulic Cylinders:**

	Bore	Stroke	Rod Diameter
Boom .....	4.5-in. (114 mm)	34-in. (864 mm)	2.25-in. (57 mm)
Crowd .....	4-in. (102 mm)	33-in. (838 mm)	2-in. (51 mm)
Bucket .....	3.5-in. (89 mm)	27.37-in. (695 mm)	2.25-in. (57 mm)
Stabilizer .....	4-in. (102 mm)	16.62-in. (422 mm)	2-in. (51 mm)

Swing cylinder Rotary vane-type; built-in automatic swing cushion  
Cylinder rods..... Ground, heat-treated, chrome-plated, polished

**Stabilizer Width:**

Transport position .....	7 ft. 3 in. (2.21 m)
Operating position (overall) .....	10 ft. 6 in. (3.20 m)
Operating position (ICED) .....	9 ft. 1 in. (2.77 m)

**Buckets:**

	Width		Struck Capacity	
	in.	mm	cu. ft.	m <sup>3</sup>
Standard	12	305	2.5	0.071
	16	406	3.6	0.102
	18	457	4.4	0.125
	24	610	6.0	0.170
	30	762	7.6	0.215
Heavy-duty	36	914	7.2	0.204
	18	457	4.4	0.125
	24	610	6.0	0.170
Ejector	30	762	7.6	0.215
	24	610	4.2	0.119

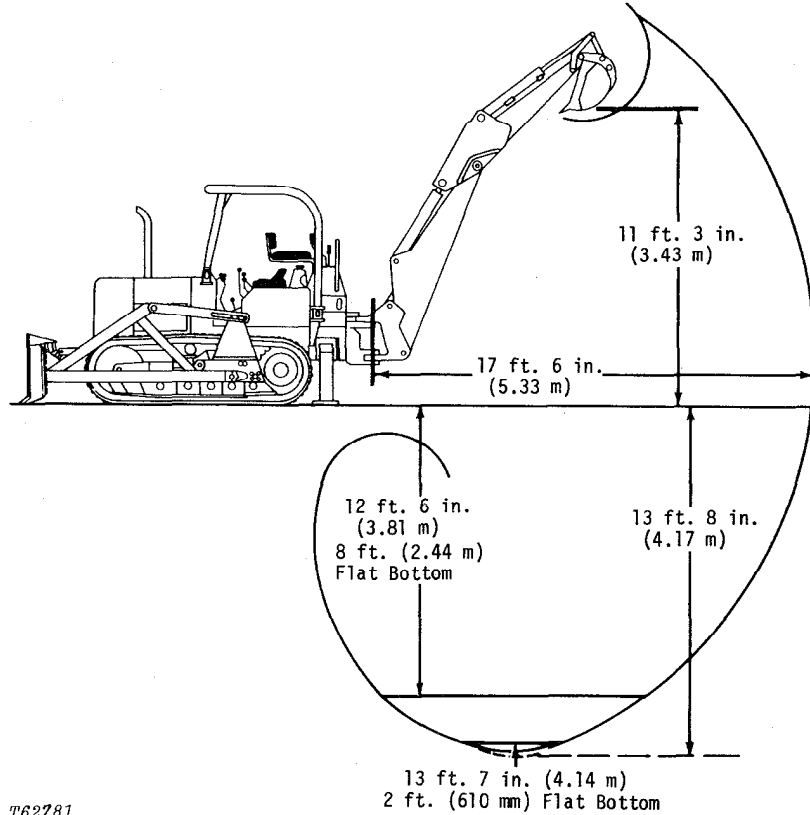
**Attachments:**

Ripper tooth replaces backhoe bucket. Cast steel, 225 lb. (102 kg) tooth has hardened replaceable tip. Bolt-on rubber street pads for stabilizer pads.

**Shipping Weight:**

Exclusive of mounting parts, bucket, and front counterweights ..... 3200 lb. (1 452 kg)

### 9550 BACKHOE DIMENSIONS



T62781

**Operating Information:**

**Digging Depth (ICED):**

Maximum	13 ft. 8 in. (4.17 m)
2-ft. (610 mm) flat bottom	13 ft. 7 in. (4.14 m)
8-ft. (2.44 m) flat bottom	12 ft. 6 in. (3.81 m)
Swing arc	180 deg.
Digging force, ICED	7093 lb. (31.79 kN) (3 217 kg)
Digging force, crowd cylinder	4019 lb. (18.01 kN) (1 823 kg)
Reach from center of swing mast, ICED	17 ft. 6 in. (5.33 m)
Loading height, ICED	11 ft. 3 in. (3.43 m)
Transport height	10 ft. 11 in. (3.32 m)

**Hydraulic System: Open-Center**

Pressure	2250 psi (155.1 bar) (165.2 kg/cm <sup>2</sup> )
Pump	23 gpm (87 L/min) @ 2500 engine rpm

**Hydraulic Cylinders:**

	Bore	Stroke	Rod Diameter
Boom	4-in. (102 mm)	32.28-in. (822 mm)	2-in. (51 mm)
Crowd	3.5-in. (89 mm)	31.25-in. (794 mm)	1.75-in. (44 mm)
Bucket	3-in. (76 mm)	26.5-in. (673 mm)	1.75-in. (44 mm)
Swing	3.5-in. (89 mm)	8.88-in. (226 mm)	1.75-in. (44 mm)
Stabilizer	3.5-in. (89 mm)	15.5-in. (394 mm)	1.75-in. (44 mm)
Cylinder rods	Ground, heat-treated, chrome-plated, polished		

**Stabilizer Width:**

Transport position	6 ft. 8 in. (2.03 m)
Operating position (overall)	9 ft. 8 in. (2.95 m)
Operating position (ICED)	8 ft. 6 in. (2.59 m)

Buckets:	Width		Struck Capacity	
	in.	mm	cu. ft.	m <sup>3</sup>
Standard	12	305	1.6	0.045
	16	406	2.6	0.074
	18	457	3.6	0.102
	24	610	4.8	0.136
	30	762	6.0	0.170
Heavy-duty	36	914	7.2	0.204
	18	457	3.6	0.102
Cemetery special	24	610	4.8	0.136
	36	914	7.2	0.204
Ejector	24	610	4.2	0.119

**Attachments:**

Ripper tooth replaces backhoe bucket. Cast steel, 225 lb. (102 kg) tooth has hardened replaceable tip. Bolt-on rubber street pads for stabilizer pads.

**Shipping Weight:**

W/mounting parts, w/o bucket ..... 2683 lb. (1 217 kg)

## Group 10

# PREDELIVERY, DELIVERY, AND AFTER-SALE SERVICES

### TEMPORARY STORAGE

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

For long term storage (over 30 days) information, consult your JD450-C operator's manual.

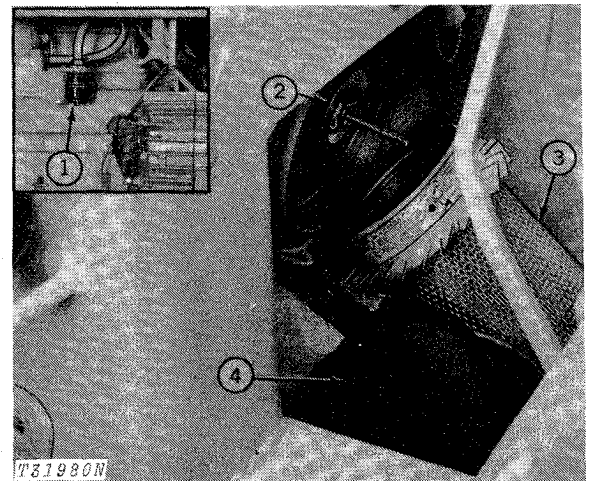
1. Check battery electrolyte level and charge the battery, if necessary.
2. Check the level of coolant in the radiator. The coolant should be maintained at a level midway between the radiator core and filler neck.
3. Fill the fuel tank.
4. Check crankcase oil level. Oil should be at top mark of dipstick after machine has been shut down for 10 minutes.
5. Relieve hydraulic pressure by stopping engine, lowering all equipment and operating control levers until system fails to respond.

### 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.

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

#### 1. Air Cleaner



- |                         |                  |
|-------------------------|------------------|
| 1—Restriction Indicator | 3—Filter Element |
| 2—Safety Filter Element | 4—Baffle         |

Fig. 1-Air Cleaner

Check air filter restriction indicator. If red signal locks in full view, remove air filter and clean.

Air filter checked

Yes No

## 2. Fuel Filter

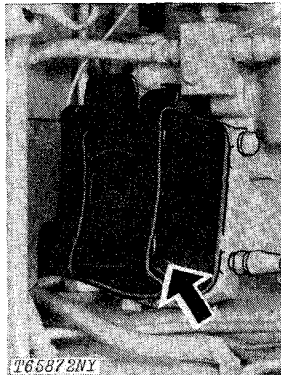


Fig. 2-Fuel Filter

Check fuel filter for sediment and drain, if necessary.

Sediment present in filter Yes No

## 3. Battery

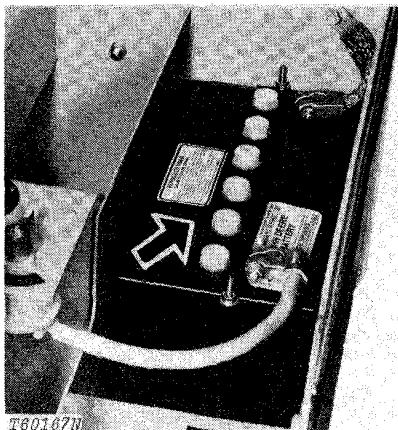


Fig. 3-Battery

Check battery electrolyte level. If distilled water is not available, use clean soft water. Avoid use of hard water. Remove foreign material from top of battery and coat terminals with petroleum jelly. Check vent holes in battery caps.

**IMPORTANT: Never add water to battery in freezing weather unless engine is to be run 2 or 3 hours to assure mixing of water and electrolyte.**

Check battery connections.

Punch date code on battery.

Water added Yes No

Battery connections checked Yes No

Litho in U.S.A.

## 4. Fuel Tank

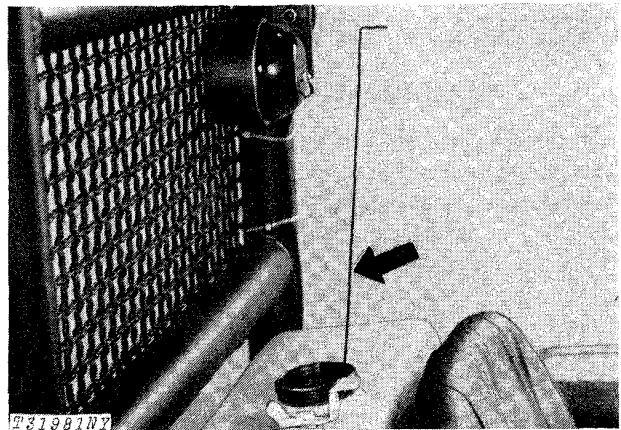


Fig. 4-Fuel Tank

Check the fuel tank level. If fuel level is low, add sufficient fuel to fill the fuel tank. Fuel tank capacity is 31 gals. (117.5 L).

Fuel tank level Full 1/2-Full Empty

## 5. Radiator

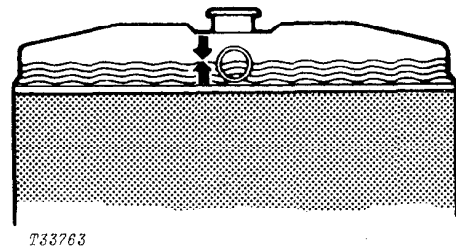


Fig. 5-Radiator Filler Cap

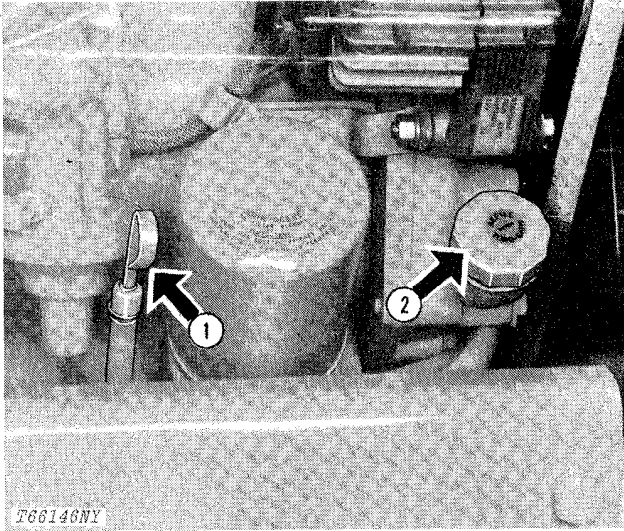
**CAUTION:** Do not remove radiator filler cap until the coolant temperature is below its boiling point. Then loosen cap slowly to the stop to relieve any excess pressure before removing cap completely.

Check the level of coolant in the radiator. Coolant should be maintained at a level midway between the radiator core and filler neck. Add permanent type anti-freeze if cold weather is expected.

Radiator coolant level checked Yes No

Coolant or antifreeze added Yes No

## 6. Crankcase Oil Level



1—Dipstick

2—Oil Filler Cap

Fig. 6-Crankcase Oil Level

Check crankcase oil level with unit on level ground. If oil level is at or below bottom mark on dipstick, add sufficient oil of the proper viscosity and type specified on page 10-15-3 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	Yes	No

## 7. Alternator-Fan Belt Tension

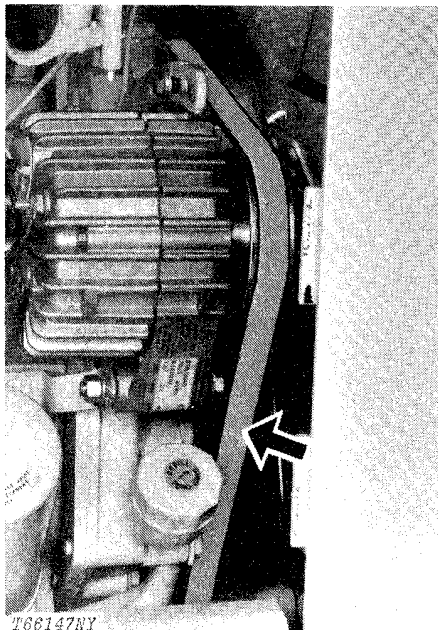


Fig. 7-Alternator-Fan Belt

Check alternator-fan belt tension. If tension tester is used, a force of 20 lbs. (9 kg) on the belt midway between the pulleys should deflect the belt 3/4 inch (19 mm). If strand tension gauge is used, tighten alternator-fan belt to 90 lbs. (40 kg) strand tension. Loosen the alternator bracket and adjusting cap screws and apply outward force to the FRONT alternator frame.

**IMPORTANT:** Apply outward force on FRONT of alternator housing only.

**NOTE:** Recheck belt tension after adjustment. DO NOT OVERTIGHTEN.

Belt tension \_\_\_\_\_ lbs (kg) tension  
 \_\_\_\_\_ inch (mm) flex

## 8. Air Intake Hose

Check clamps on hose which connects air cleaner and engine. Tighten hose clamps where necessary to prevent dirt from entering engine. Inspect hose for cracks.

Air intake hose checked	Yes	No
Loose connections	Yes	No

## 9. Hydraulic Reservoir Oil Level



Fig. 8-Oil Level Window and Latch

Check oil level with crawler on level surface with blade or bucket rolled back on ground, ripper or backhoe in transport position. Maintain level halfway up on oil level window.



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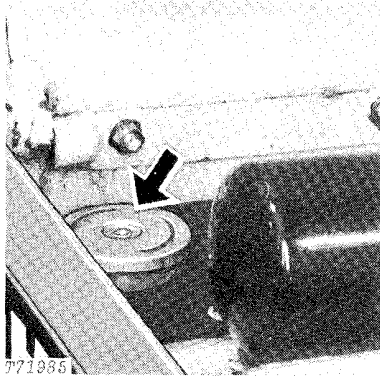


Fig. 8a-Reservoir Filler Cap

If oil level is low, add oil specified on page 10-15-3.

**IMPORTANT:** The hydraulic reservoir is completely closed and pressurized. Slowly remove the filler cap to relieve the reservoir pressure. When replacing the filler cap be sure it is screwed down tight and the gasket is in good condition.

Oil level checked Yes No  
 Oil added, if any \_\_\_\_\_ qts. (L)

### 10. Pre-Cleaner

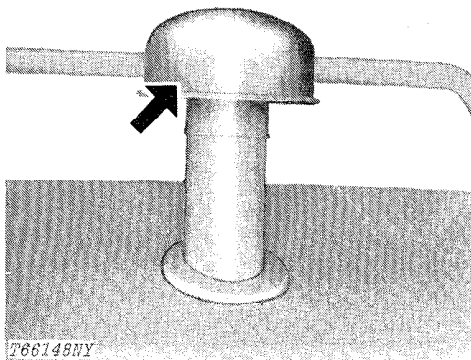


Fig. 9-Pre-Cleaner

Check the pre-cleaner and empty if necessary.

Pre-cleaner cleaned out Yes No

### 11. Transmission Oil Level

The oil level should be between the marks on the dipstick with threads resting on filler tube and the engine off. Add oil specified on page 10-15-3 or an equivalent to bring oil to this level.

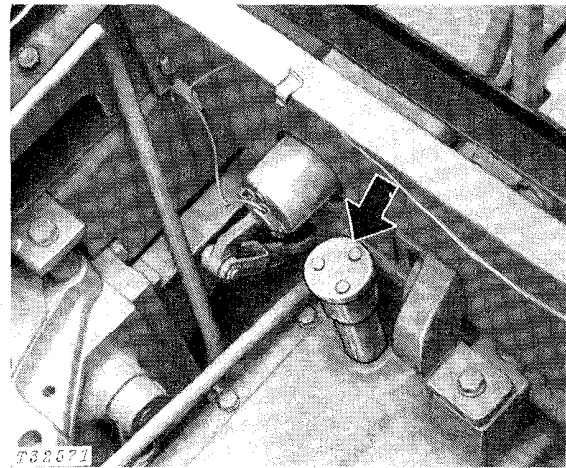
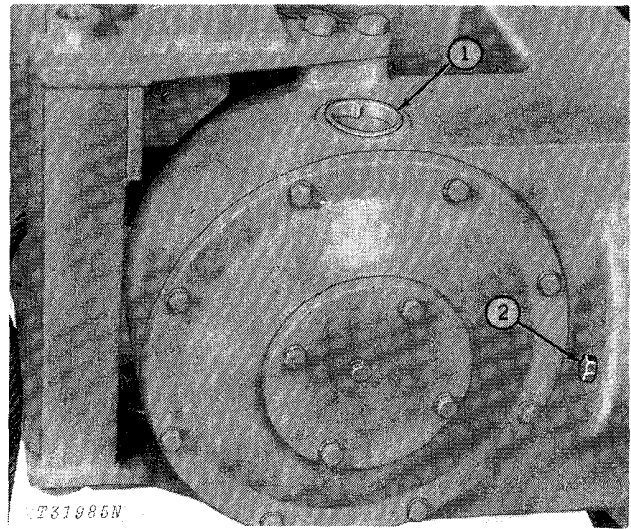


Fig. 10-Transmission Oil Dipstick

Oil level checked Yes No  
 Oil added, if any \_\_\_\_\_ qts. (L)

### 12. Winch Housing Oil Level



1—Filler Plug

2—Oil Level Plug

Fig. 11-Winch Oil Level

Check the oil level of the winch housing by removing the oil level plug. If necessary, remove filler plug and add oil specified on page 10-15-3 until oil is to level of oil level hole.

Oil level checked Yes No  
 Oil added, if any \_\_\_\_\_ qts. (L)

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