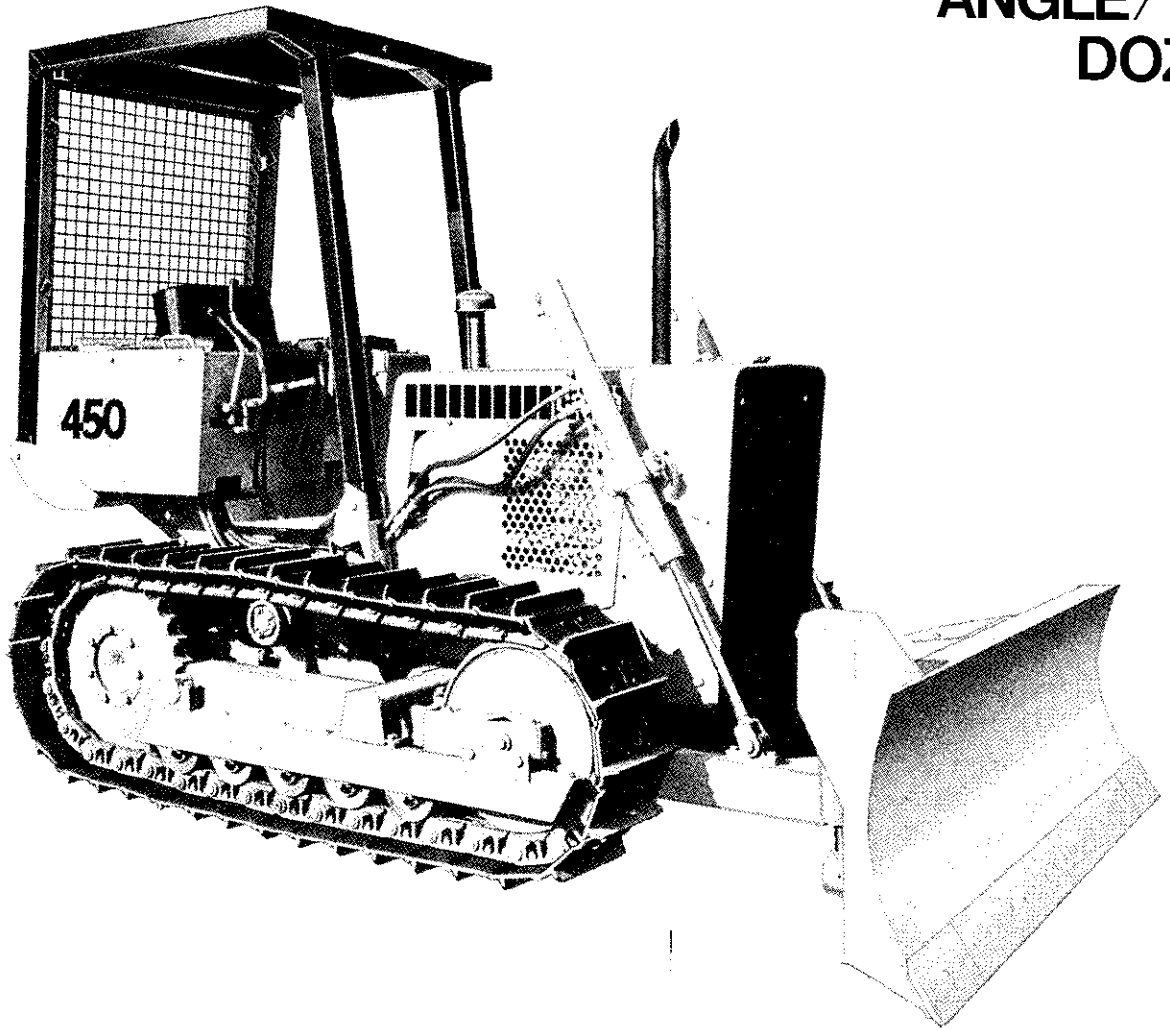




# 450 HYDRAULIC ANGLE/TILT DOZER



## **53 NET FLYWHEEL HORSEPOWER**

Four-cylinder, 207 c.i.d. Case diesel engine

## **TORQUE CONVERTER**

Increases push power and automatically adjusts to load demand

## **TRANSMISSION**

Four speed powershift with torque converter

## **CONTROLLED TRANSMISSION STEERING OR BRAKE STEERING**

Choice of power turns or brake turns for operator convenience and unmatched performance

## **UNDERCARRIAGE**

Sealed track and permanently lubricated track rollers, carrier rollers and idlers

## **ANGLE/TILT DOZER**

Hydraulically angle or tilt the blade to match job conditions

Unit shown is equipped with non-standard items  
Manufactured by JI Case Company, Racine Wisconsin USA

**JI Case**  
A Tenneco Company



# 450 SPECIFICATIONS

## ENGINE

Case Model G207D, 4 cycle, naturally aspirated diesel. Open chamber design. Uses No. 2 diesel fuel. Five main bearings. Positive pressure oil lubrication with full flow filtering and internal cooling. Aluminum alloy pistons with full skirt, 3-ring design. 12-volt direct electric starting. Dry type, two-stage air cleaner with service indicator. Two stage full flow replaceable element fuel filters.

Maximum rated horsepower

(1) Gross	58 @ 2000 rpm
	(43,3 kw @ 2000 r/min)
(2) SAE net	53 @ 2000 rpm
	(39,5 kw @ 2000 r/min)
Displacement	207 cu. in. (3392 cm <sup>3</sup> )
Number cylinders	4
Bore and stroke	4" x 4 1/8"
	(101,6 mm x 105 mm)
Compression ratio	16.5:1
Torque, maximum, lbs.-ft. (Nm)	
Sea level, 60°F	169 @ 1400 rpm
	(229 @ 1400 r/min)
500' (152 m) altitude, 85°F	160 @ 1400 rpm
	(217 @ 1400 r/min)

- (1) Manufacturer's rating of maximum engine horsepower at flywheel when equipped with oil and water pumps. Fuel set at maximum quantity for this application. Corrected to sea level — 29.92" (760 mm) Hg and 60°F (15°C) dry air.
- (2) SAE Net flywheel horsepower of engine as applied to this vehicle when equipped with operating accessories including oil and water pumps, alternator, air cleaner, fan and muffler. Corrected to 500' (152 m) altitude with .38" Hg. (1,3kPa) vapor pressure 29.38" Hg. (99 kPa) observed barometer and 85°F (29°C) air (per SAE J816a).

## TORQUE CONVERTER

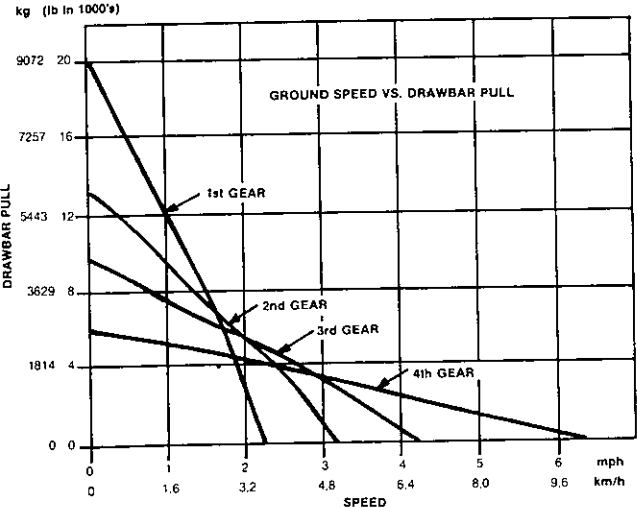
Single stage, hydrokinetic type, 11" (279 mm) diameter with 2.1:1 ratio.

## TRANSMISSION

Constant-mesh, four-speed powershift with Hi-Lo range selector. Four speeds forward, four speeds reverse.

## TRAVEL SPEEDS

	1st		2nd		3rd		4th	
	mph	km/h	mph	km/h	mph	km/h	mph	km/h
Forward	2.1	3,4	3.1	5,0	4.2	6,8	6.2	10,0
Reverse	2.3	3,7	3.3	5,3	4.6	7,4	6.6	10,6



## STEERING

Steering controlled by independent hydraulic clutches in transmission or by hydraulic brakes. Three types of turns: power, gradual and brake turns.

## FINAL DRIVES

Spur and bull gear type, single reduction. One-piece line-bored case with final drive seal guards.

## BRAKES

Hydraulically actuated disc brakes controlled by two foot brake pedals that may be interlocked or used independently; and which neutralize power drive. Hand-operated over center parking brake.

## UNDERCARRIAGE

Sealed track, hydraulic track adjusters. Track rollers, carrier rollers, drum type idlers permanently lubricated. Solid disc hunting tooth sprockets.

Track frame	Rigid
Track rollers (each side)	5
Carrier rollers (each side)	1
Track gauge	52" (1320 mm)
Length of track on ground	68.5" (1740 mm)
Shoes per track (each side)	36
Area, track on ground	(14" shoes) 1918 sq. in. (1,24 m <sup>2</sup> )
	(16" shoes) 2192 sq. in. (1,41 m <sup>2</sup> )
Height of grouser	1.8" (45,7 mm)
Track shoe widths available:	14" (356 mm) 16" (406 mm)

## DOZER HYDRAULIC SYSTEM

Full hydraulic control of moldboard lift, lower, angle and tilt functions. Positive-hold "float" position in lift circuit.

**Pump:** Gear type, front mounted, direct drive. 21 gpm @ 2000 rpm (79,5 lit/min @ 2000 r/min).

**Control valve:** Open center, parallel. Three spool valve.

**System relief pressure:** 1650 psi (116 kg/cm<sup>2</sup>).

## Cylinders:

Lift: (2)	2.5" dia. x 28.0" stroke x 1.25" rod
	(63,5 mm dia. x 711 mm stroke x 31,8 mm rod)
Angle: (2)	4" dia. x 8.3125" stroke x 2" rod
	(102 mm dia. x 211 mm stroke x 50,8 mm rod)
Tilt: (1)	3.5" dia. x 8" stroke x 2" rod
	(88,9 mm dia. x 203 mm stroke x 50,8 mm rod)

## SERVICE REFILL CAPACITIES

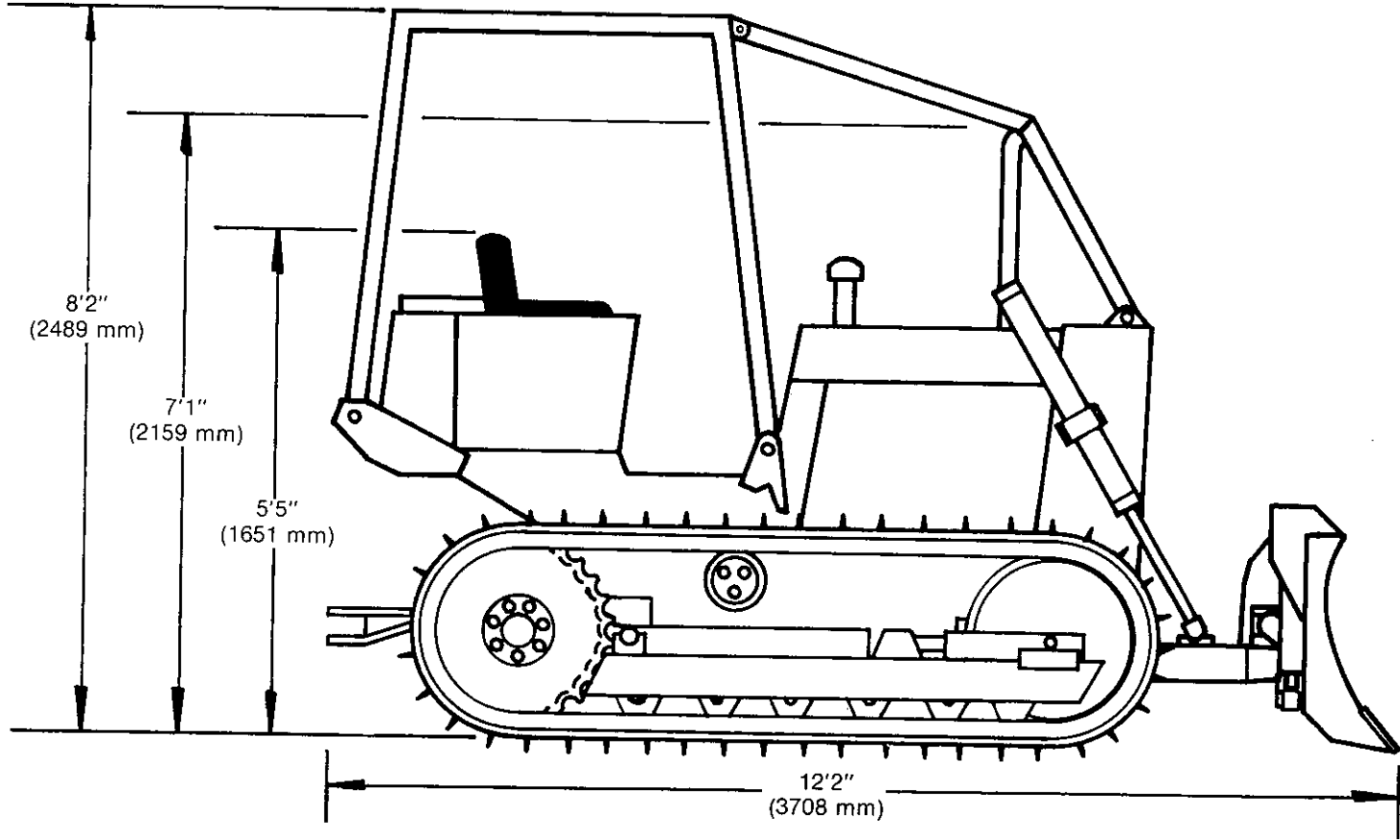
	U.S. Gals.	liters
Fuel tank	20	75,7
Engine crankcase (with filter)	1.75	6,6
Hydraulic system	7.5	28,4
Transmission and torque converter	8	30,3
Final drives (each side)	1.5	5,7
Cooling system	4.1	15,5

# OPERATING DIMENSIONS

## Overall Lengths:

Dozer with ripper raised ..... 14'1/2" (4280 mm)  
 Dozer with winch ..... 12'7" (3835 mm)

Ground clearance (at drawbar) ..... 11" (279 mm)  
 Turning clearance circle (pivot turn) .... 18'5" (5613 mm)  
 Overall width (at track, 16" shoes) ..... 68" (1727 mm)  
 Height dimensions taken from bottom face of shoe.



# DOZER SPECIFICATIONS

Dozer, hydraulic ..... Angle/Tilt

## Moldboard

Width ..... 88" (2235 mm)  
 Height ..... 28" (711 mm)  
 Lift above ground ..... 33.5" (850 mm)  
 Drop below ground ..... 17.3" (439 mm)  
 Angle, hyd. - both directions ..... 0° - 30°  
 Tilt, hyd. - either end ..... 12" (305 mm)  
 Pushbeam ..... Inside

## End Bits (Replaceable)

### Standard Duty

Length ..... 12" (305 mm)  
 Width ..... 6" (152,4 mm)  
 Thickness ..... 1/2" (12,7 mm)

### Cast Heavy Duty

Length ..... 14.5" (368 mm)  
 Width ..... 7.4" (188 mm)  
 Thickness ..... 1/2" (12,7 mm)

## Cutting Edge (Reversible)

Length ..... 64" (1626 mm)  
 Width ..... 6" (152,4 mm)  
 Thickness ..... 1/2" (12,7 mm)  
 Maximum track shoe allowable ..... 16" (406 mm)

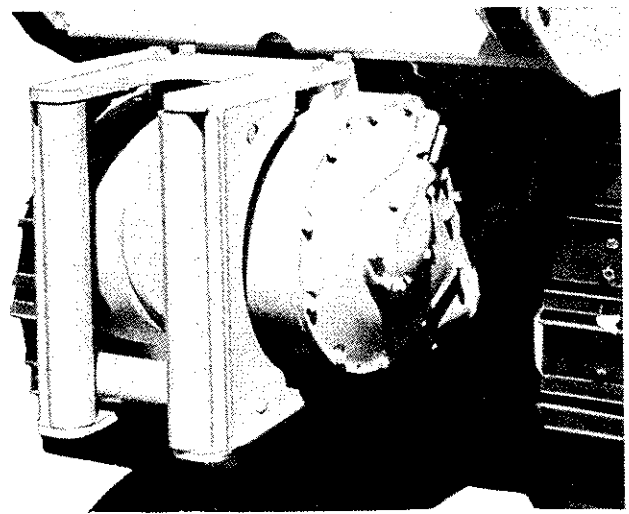
## Tractor dozer dimensions

Overall length (to rear of drawbar)  
 (blade straight) ..... 12'2" (3708 mm)  
 (blade angled) ..... 14' (4267 mm)  
 Overall width  
 (blade straight) ..... 88" (2235 mm)  
 (blade angled) ..... 80" (2032 mm)

Operating weight (approx.) ..... 10,900 lbs. (4944 kg)  
 With ROPS ..... 11,524 lbs. (5227 kg)

# OPTIONAL EQUIPMENT

	Approximate add-on weight	
	lbs.	kg.
Backhoe, 12½'	3200	1452
Extendahoe, 12½' - 15½'	3850	1746
Counterweight, front	1000	454
Drawbar, swinging	60	27,2
Drawbar, for winch	110	49,8
Fan, pusher	n.c.	n.c.
Grille, heavy duty	35	16
Hook, front pull	10	4,5
Lockout for clutch cutoff	10	4,5
Lockup kit	12	5,4
Moldboard end bits (cast)	4	1,8
Muffler, spark arresting	6	2,7
Noise suppression kit	103	46,7
Ripper, three tooth	1270	576
Rock guards	330	150
Roll Over Protective Structure	534	242
ROPS, front sweeps	90	40,8
Side shields, engine	35	16
Transmission guard, rear	58	26,3
Winch	1111	504
Winch, fairlead (3 roller)	200	90,7
Fourth roller for fairlead		11



## WINCH

Type	Gearmatic #19
Winch drive	Mechanical
Control	Hydraulic
Cable drum capacity	½" (12,7 mm) 362' (110 m) 5/8" (15,9 mm) 238' (72,5 m)
Drum rotation	Overwind
Drum diameter	8.5" (216 mm)
Rated line pull	29,600 lbs. (13427 kg)
Weight	1111 lbs. (504 kg)

## STANDARD EQUIPMENT

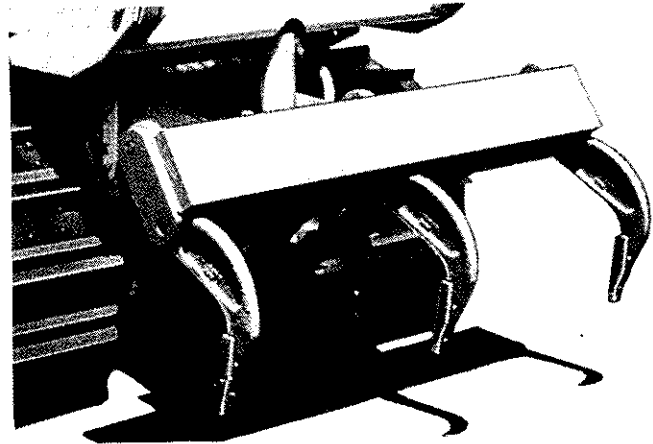
Dry air cleaner with service indicator. Alternator and voltage regulator. Suction fan. Key switch. Neutral safety start mechanism. Adjustable seat. Over-center parking brake. Tool tray. Permanently lubricated track rollers. Sealed track. Hydraulic track adjusters. Torque converter and driveshaft guard. Crankcase guard. Radiator guard. Muffler. Lights, 2 front and 1 rear. Hourmeter. Instrument panel gauges, ROPS canopy mounting brackets.

**NOTE:** All specifications are stated in accordance with ICED Definitions or SAE Standards or Recommended Practices, where applicable.

## IMPORTANT

J I Case Company reserves the right to change these specifications without notice and without incurring any obligation relating to such changes.

**Sold and serviced by:**



## RIPPER

Overall width	57" (1448 mm)
Maximum penetration	13.5" (343 mm)
Ground clearance (at carry)	12" (305 mm)
Number of shanks	3 std. - 5 opt.
Shank spacing	3 - 27" (686 mm) 5 - 13.5" (343 mm)
Ripper tips	Replaceable
Hydraulic cylinder	3" dia. x 10.5" stroke x 1.5" rod (76,2 mm dia. x 268 mm stroke x 38,1 mm rod)
Weight	1270 lbs. (576 kg)