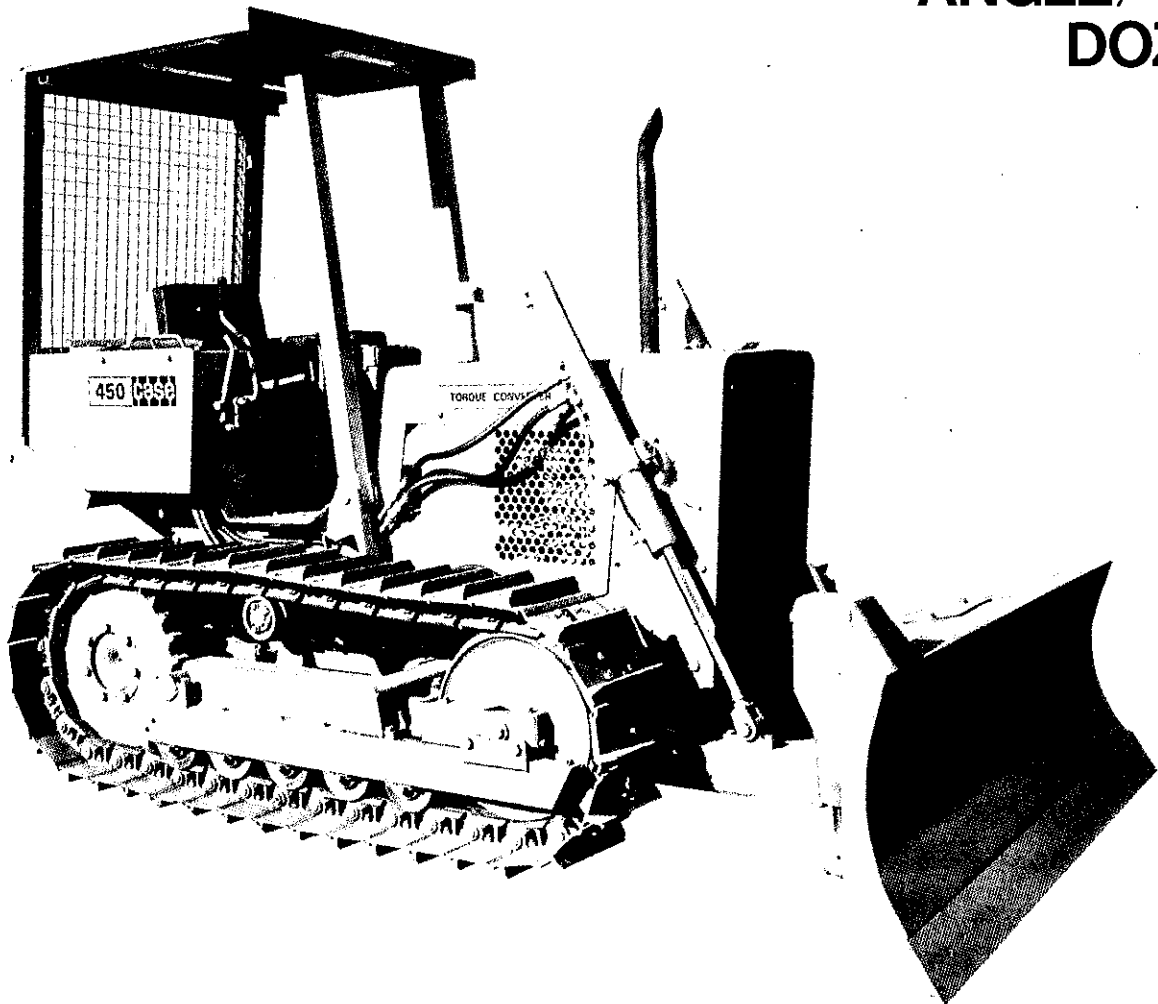




450 HYDRAULIC ANGLE/TILT DOZER



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51 NET FLYWHEEL HORSEPOWER

Four-cylinder, 188 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

J I Case
A Tenneco Company



450 SPECIFICATIONS

ENGINE

Case Model G188D, 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	57 @ 2000 rpm
(2) SAE net	51 @ 2000 rpm
Displacement	188 cu. in. (3,1 lit)
Number cylinders	4
Bore and stroke	3 ¹³ / ₁₆ " × 4 ¹ / ₈ " (97 mm × 105 mm)
Compression ratio	17.5:1
Torque, maximum, lbs.-ft. (kg-m)	
Sea level, 60° F	156 @ 1400 rpm (21,6 @ 1400 tr/mn)
500' (152 m) altitude, 85° F	150 @ 1400 rpm (20,7 @ 1400 tr/mn)

(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, generator, air cleaner, fan and muffler. Corrected to 500' (152 m) altitude with .38" (9,5 mm) Hg vapor pressure 29.38" (746 mm) Hg observed barometer and 85° F (29° C) air (per SAE J816).

TORQUE CONVERTER

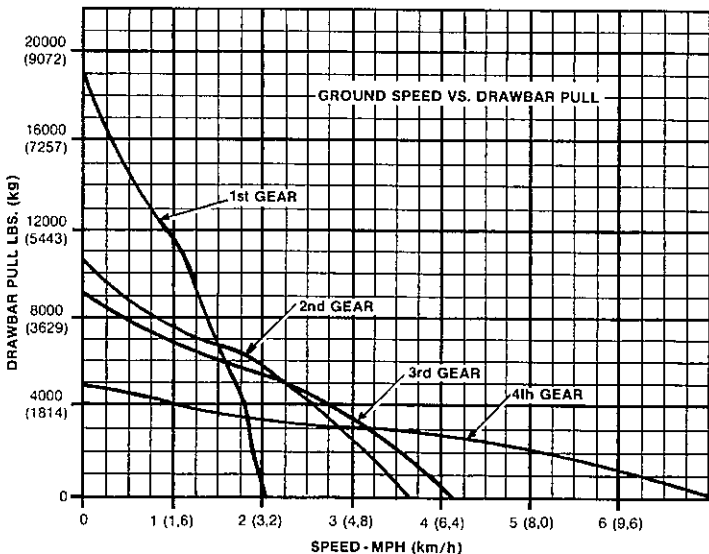
Single stage, hydrokinetic type, 11" (279 mm) diameter with 2.1:1 ratio.

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)	3.7	(6,0)	4.3	(6,9)	7.2	(11,6)
Reverse	2.3	(3,7)	4.1	(6,6)	4.7	(7,6)	7.9	(12,7)



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 ²) (16" shoes) 2192 sq. in. (1,41 m ²)
Height of grouser	1.8" (45,7 mm)
Track shoe widths available:	12" (305 mm) 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 @ 1650 psi (79,5 lit/min @ 2000 tr/min @ 116 kg/cm²)

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

System relief pressure: 1650 psi @ 21 gpm (116 kg/cm² @ 79,5 lit/min).

Cylinders:

Lift: (2)	2.5" dia. × 27.375" stroke × 1.25" rod (63,5 mm dia. × 695 mm stroke × 31,8 mm rod)
Angle: (2)	4" dia. × 8.3125" stroke × 2" rod (102 mm dia. × 211 mm stroke × 50,8 mm rod)
Tilt: (1)	3.5" dia. × 8" stroke × 2" rod (88,9 mm dia. × 203 mm stroke × 50,8 mm rod)

SERVICE REFILL CAPACITIES

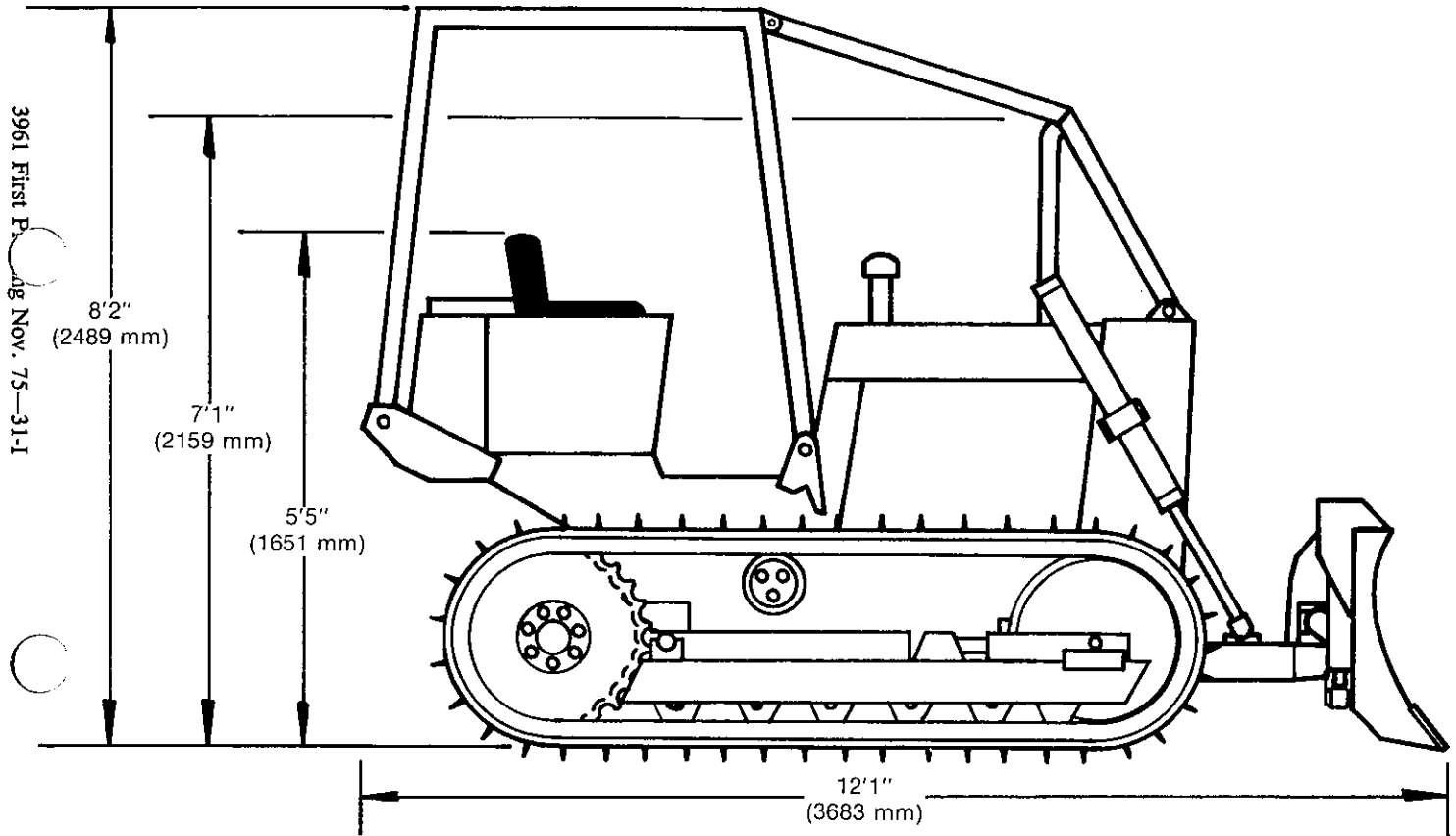
	U.S. Gals.	(liters)
Fuel tank	20	(75,7)
Engine crankcase (with filter)	1.75	(6,6)
Hydraulic system	7.5	(28,4)
Transmission and torque converter	8	(30,3)
Final drives (each side)	1.5	(5,7)
Cooling system	5.25	(19,9)

OPERATING DIMENSIONS

Ground clearance (at drawbar) 12" (305 mm)
 Turning clearance circle (pivot turn) ... 18'2" (5537 mm)
 Overall width (at track, 16" shoes) 68" (1727 mm)
 Height dimensions taken from bottom face of shoe.

Overall Lengths:

Dozer with ripper raised 14'½" (4280 mm)
 Dozer with winch 13'3½" (4051 mm)



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DOZER SPECIFICATIONS

Dozer, hydraulic Angle/Tilt

Boldboard
 Width 88" (2235 mm)
 Height 28" (711 mm)
 Lift above ground 33.5" (850 mm)
 Drop below ground 17.4" (441 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 ½" (12.7 mm)

Cast Heavy Duty

Length 14.5" (368 mm)
 Width 7.4" (188 mm)
 Thickness ½" (12.7 mm)

Cutting Edge (Reversible)

Length 64" (1626 mm)
 Width 6" (152.4 mm)
 Thickness ½" (12.7 mm)
Maximum track shoe allowable .. 16" (406 mm)

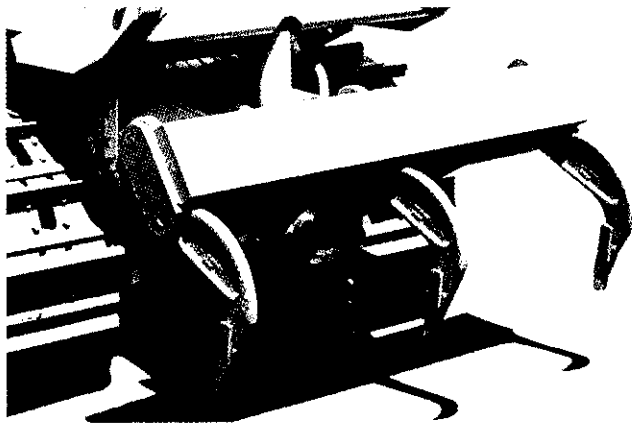
Tractor dozer dimensions

Overall length
 (blade straight) 12'1" (3683 mm)
 (blade angled) 13'7" (4140 mm)
 Overall width
 (blade straight) 88" (2235 mm)
 (blade angled) 79" (2007 mm)

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

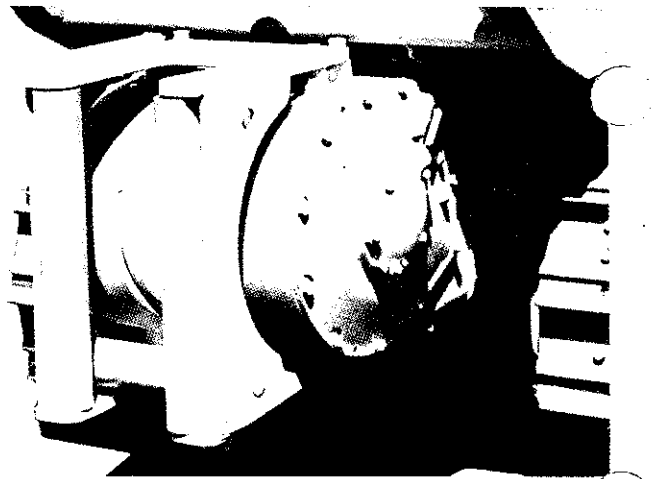
OPTIONAL EQUIPMENT

	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.
Front idler rock guards	84	38,1
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	24	11



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)



WINCH

Type	Gearmatic #19
Winch drive	Mechanical
Control	Hydraulic
Cable drum capacity	½" (12,7 mm) 362' (110 m) ⅝" (15,9 mm) 238' (72,5 m)
Drum rotation	Overwind
Drum diameter	8.5" (216 mm)
Rated line pull	21,300 lbs. (9662 kg)
Weight	1111 lbs. (504 kg)

STANDARD EQUIPMENT

Dry air cleaner with service indicator. Generator 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. Engine preheater. ROPS canopy mounting brackets.

NOTE: All specifications are stated in accordance with IEMC or SAE standards 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: