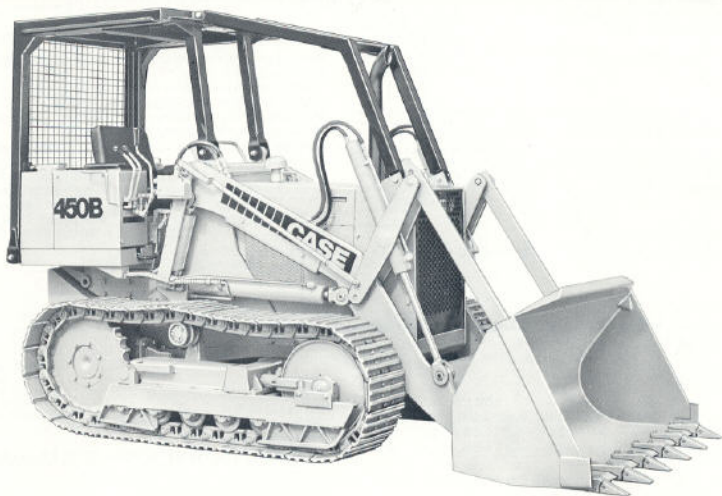


**case**

450B Loader

**53 (39.5 kW) NET FLYWHEEL HORSEPOWER**

Four cylinder, 207 in³ (3392 cm³) Case diesel engine

TORQUE CONVERTER

Increases crowd 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 performance

IN-LINE LOADER LINKAGE

Excellent visibility of work area and bucket

SINGLE LEVER LOADER CONTROL

Low lever effort for easy operation and return-to-dig

SEALED TRACK

Extends pin and bushing life

Unit shown is equipped with non-standard items.

J I Case

A Tenneco Company

700 State Street Racine, WI 53404 U.S.A.



450B 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 dual skirt, three ring design. 12-volt direct electric starting. Dry type, dual element 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 in³ (3392 cm³)

Number of cylinders 4

Bore and stroke 4" × 4.125"
(101.6 mm × 105 mm)

Compression ratio 17:1

Torque, maximum, lbs-ft (Nm)

Sea level, 60°F (15°C) 169 @ 1400 rpm
(229 @ 1400 r/min)

500' (152 m) altitude, 85°F (29°C) 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 (1.3 kPa) vapor pressure 29.36" Hg (99 kPa) observed barometer and 85°F (29°C) air.

TORQUE CONVERTER

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

TRANSMISSION

Constant mesh, four speed powershift with dual range selector. Four speeds forward and 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 actuated disc brakes. Three types of turns: power turns, gradual turns and brake turns.

FINAL DRIVES

Spur and bull gear type, single reduction. One-piece line-bored case.

BRAKES

Hydraulic 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 and drum type idlers are permanently lubricated. Solid disc hunting tooth sprockets and three bar semi-grouser.

Track frame	Rigid
Track rollers (each side)	5
Carrier rollers (each side)	1
Track gauge	52" (1.32 m)
Length of track on ground	68" (1.73 m)
Shoes per track	36
Track shoe widths available	12" (305 mm), 14" (356 mm)
Area, track on ground	12" (305 mm) shoe, 1632 in ² (1.05 m ²) 14" (356 mm) shoe, 1904 in ² (1.23 m ²)

LOADER CONTROLS

Single lever control for bucket lift and dump with positive-hold regenerative "float" position in lift circuit. Positive-hold "rollback" position in dump circuit. Return-to-dig. Hydra-Leveling loader with power linkage mounting of cylinders.

LOADER HYDRAULIC SYSTEM

Pump: gear type, front mounted, direct drive, 21 gpm @ 2000 rpm (80 lit/min @ 2000 r/min).

Control valve: two or three spool valve (depending on equipment).
System relief pressure: 2200 psi (15 170 kPa)

Hydraulic lines: steel tubing with flared fittings and wire-braid high pressure hose with crimped full flow fittings.

Cylinders: double acting with hardened, chrome plated rods.

Lift (2) 3.5" dia × 31.0" stroke, 2.0" rod
(89.9 mm dia × 787 mm stroke, 50.8 mm rod)

Bucket (2) 3.0" dia × 23.56" stroke, 1.5" rod
(76.2 mm dia × 598 mm stroke, 38 mm rod)

Hydra-leveling* (1) 4.0" dia × 7.5" stroke 2.0" rod
(102 mm dia × 190 mm stroke, 50.8 mm rod)

Hydraulic cycle time:

Raised load in bucket	Seconds
Raise	6.3
Dump	1.5
Lower (float down)	4.3

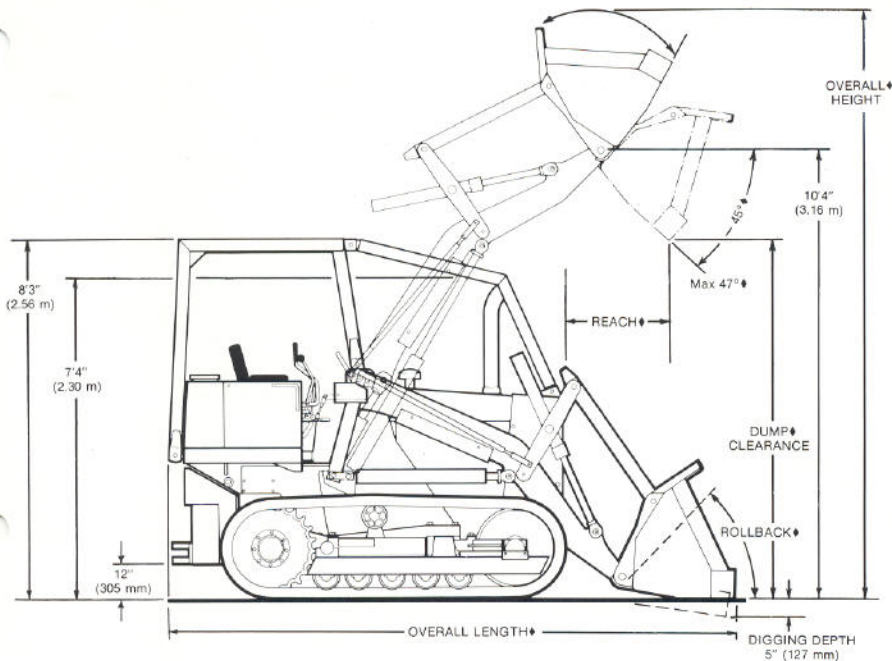
SERVICE REFILL CAPACITIES

	U.S. Gals	Litres
Fuel tank	24.5	92.7
Engine crankcase (with filter)	1.75	6.6
Hydraulic system	8	30.3
Transmission and torque converter	8	30.3
Final drives (each side)	1.5	5.7
Cooling system	4.1	15.6

GENERAL DIMENSIONS

Overall width	
at track, 12" (305 mm) shoes	64" (1.63 m)
Ground clearance	12" (305 mm)
Turning clearance circle	
(pivot turn)	19'10" (6.05 m)
Grading angle	106°
Overall length	
Loader with ripper raised	15'0" (4.57 m)
Loader with winch	13'4" (4.06 m)

OPERATING DIMENSIONS



♦Varies with bucket type.
Refer to Performance Specifications.

PERFORMANCE SPECIFICATIONS

BUCKET TYPE — Capacity
SAE rated nominally heaped

GENERAL PURPOSE
1 yd³ (0.76 m³)

4-IN-1[®]
1 yd³ (0.76 m³)

Struck capacity	.800 yd ³ (0.61 m ³)	.800 yd ³ (0.61 m ³)
Bucket weight (less teeth)	715 lbs (324 kg)	1165 lbs (528 kg)
Bucket width	67.6" (1.72 m)	70.8" (1.80 m)
Breakout force	8160 lbf (36.3 kn)	8500 lbf (37.81 kn)
Maximum lift capacity to full height	5200 lbs (2359 kg)	4620 lbs (2096 kg)
Bucket rollback @ ground line	39°	41°
@ 18" (457 mm) carry	47°	48°
Dump clearance @ full lift — 45° discharge	8.2" (2.49 m)	8.2" (2.49 m)
Reach @ 45° discharge angle, 7' (2.13 m) clearance	3'2" (965 mm)	3'6.5" (1.08 m)
Reach @ full lift, 45° discharge	2'4" (711 mm)	2'8" (813 mm)
Overall length	13.2" (4.01 m)	13.7" (4.14 m)
Overall height	13.7" (4.14 m)	13.7" (4.14 m)
Static tipping load*	9600 lbs (4355 kg)	8800 lbs (3992 kg)
Operating weight (approx.)**	14,525 lbs (6589 kg)	14,975 lbs (6793 kg)

*Operating weight and weight distribution may vary with the addition of optional equipment.

**Includes ROPS, full fuel tank and 170 lb. (77.1 kg) operator.

OPTIONAL EQUIPMENT

	Approximate add-on weight	
	lbs	kg
Backhoe, 14' (4.27 m).....	3425	1554
Bucket teeth	60	27.2
Counterweight*	1600	726
Drawbar	33	15
Grille, heavy duty	11	5
Hook, front pull	10	4.5
Lockout for clutch cutoff.....	5	2.3
Lockup kit	78.5	35.7
Muffler, spark arresting	8.75	4
Noise suppression kit.....	26	11.8
Ripper, three tooth	1270	576
Rock guards	250	113
ROPS, front sweeps	110	49.9
Side shields, engine	56.5	25.7
Track guides, front and rear.....	150	68
Winch.....	1111	504
Winch, arch	555	252
Winch, fairlead (three roller)	284	129
Fourth roller.....	24	10.8

*Included in operating weight.

STANDARD EQUIPMENT

Dry air cleaner with service indicator. Alternator and voltage regulator. Pusher 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. Return-to-dig. Hourmeter. Instrument panel gauges. ROPS canopy with seat belt.

RIPPER

Overall width	57" (1.45 m)
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 — 13.6" (345 mm)
Ripper tips	Replaceable
Hydraulic cylinder	3.0" dia × 10.5" stroke, 1.5" rod
	(76 mm dia × 267 mm stroke, 38 mm rod)
Weight	1270 lbs (576 kg)



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: