



MODEL 1450B

# Angle/Tilt/Pitch/Dozer

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Case 140 net horsepower (104 kW) diesel

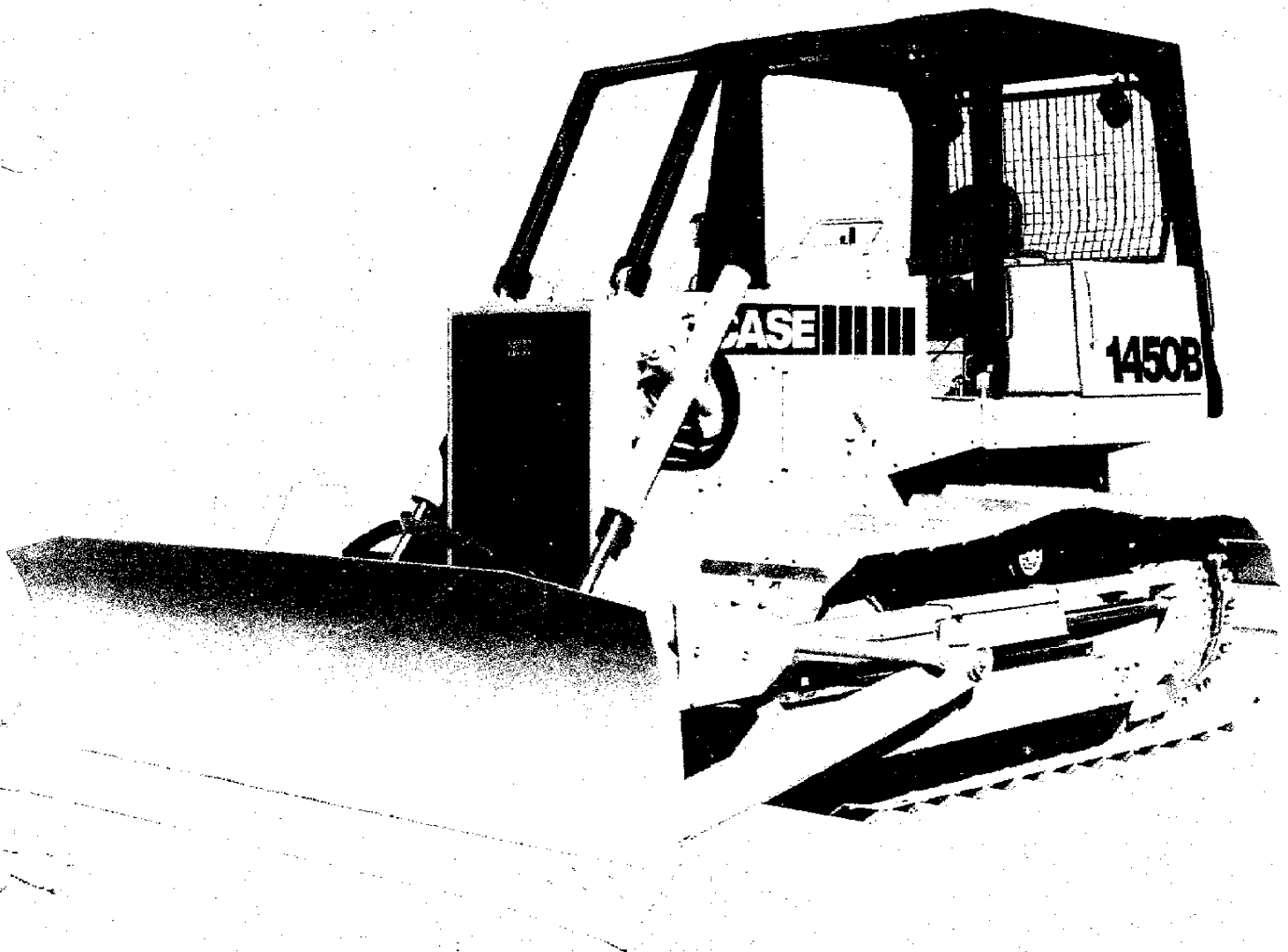
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Hydraulic angle/tilt/pitch blade to match job conditions

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LGP version offers less than 4.5 psi (31 kPa)

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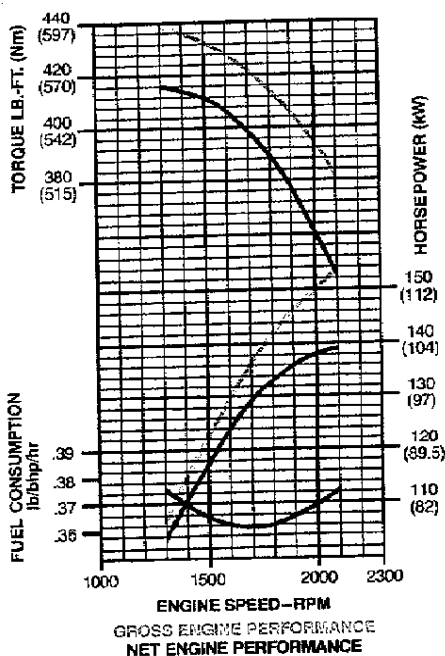


# 1450B BASIC TRACTOR

## ENGINE

Make and model..... Case A504BDT  
 Type of fuel..... No. 2 diesel  
 No. of cylinders..... 6  
 Bore and stroke..... 4.625" x 5"  
 (117.5 mm x 127 mm)  
 Displacement..... 504 in<sup>3</sup> (8259 cm<sup>3</sup>)  
 Compression ratio..... 15.8:1  
 Fuel induction..... Open chamber—  
 direct injection  
 Fuel supply..... Injection pump  
 Air cleaner..... Dry type — dual element  
 with service indicator  
 Oil filter..... Two stage full flow,  
 replaceable spin-on cartridge  
 Lubrication..... Positive pressure  
 Cooling system..... Pressurized 7 psi  
**Horsepower**  
 (1) Gross..... 152 @ 2100 rpm  
 (113 kW @ 2100 r/min)  
 (2) SAE Net..... 140 @ 2100 rpm  
 (104 kW @ 2100 r/min)  
**Max torque ft-lb**  
 (1) Gross..... 437 @ 1525 rpm  
 (592 Nm @ 1525 r/min)  
 (2) SAE Net..... 411 @ 1525 rpm  
 (557 Nm @ 1525 r/min)  
 (1) Gross engine horsepower or torque at flywheel  
 per SAE Standard J270.  
 (2) Net engine horsepower or torque at flywheel per  
 SAE Standard J270.

## POWER CURVE



## ELECTRICAL

System voltage. . 24-volt, negative ground  
 Batteries (2).... 12-volt, low maintenance  
 700 cold cranking amps @ 0°F (-18°C)  
 Alternator..... 42 amp

## STEERING

Steering controlled by independent hydraulic clutches in transmission or by multiple disc power brakes. Four types of turns: power turns, gradual turns, counter-rotation, and brake turns.

## POWER TRAIN

**Transmission:** Constant mesh four speed powershift transmission with modulation permitting directional changes under full throttle. Four forward and four reverse speeds.

**Torque converter:** Single stage, hydrokinetic type, 13" (330 mm) with 2.29:1 ratio.

**Brakes:** Two multiple disc power brakes, oil cooled, independently controlled by power brake pedals for steering. Center pedal for controlled braking. Separate pedal provides braking without disengaging transmission. Hand operated over-center parking brake.

**Final Drives:** Planetary final drive, 8.4 to 1 speed reduction.

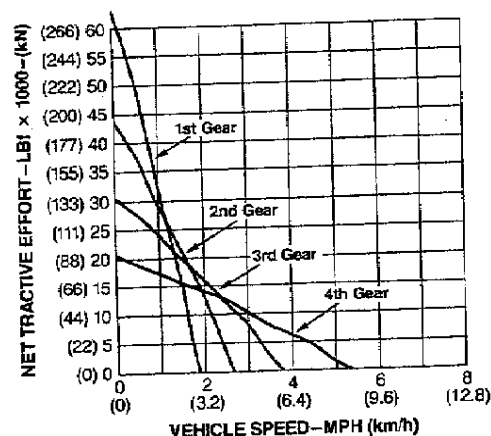
**Filtration:** 10 micron, full flow spin-on replaceable element and tank mounted strainer.

**Cooling:** Side by side anti-sandblast radiator/cooler.

## TRAVEL SPEEDS — MPH (km/h)

Engine at full throttle				
	1st	2nd	3rd	4th
<b>Forward</b>	2.2 (3.5)	3.1 (5.0)	4.4 (7.1)	6.3 (10.1)
<b>Reverse</b>	2.6 (4.2)	3.7 (6.0)	5.3 (8.5)	7.6 (12.2)

## DRAWBAR PULL



# 1450B BASIC TRACTOR

## UNDERCARRIAGE

Sealed track standard; sealed and lubricated track optional. Permanently sealed and lubricated track rollers, carrier rollers, drum-type idlers, hydraulic track adjusters. Segmented hunting tooth sprockets. Reinforced box section track roller frame.

Track frame .....	Oscillating
Track rollers (each side) .....	6
Carrier rollers (each side) .....	1
Track gauge .....	74" (1.88 m)
Length of track on ground ..	94" (2.39 m)
Shoes per track (each side).....	36
Track shoe widths available .....	16", 18", 20", 22", 24"
	(406 mm, 457 mm, 508 mm, 559 mm, 610 mm)

### Area track on ground

16" (406 mm) ...	2774 in <sup>2</sup> (17 897 cm <sup>2</sup> )
18" (457 mm) ...	3121 in <sup>2</sup> (20 135 cm <sup>2</sup> )
20" (508 mm) ..	3468 in <sup>2</sup> (22 374 cm <sup>2</sup> )
22" (559 mm) ...	3815 in <sup>2</sup> (24 613 cm <sup>2</sup> )
24" (610 mm)....	4512 in <sup>2</sup> (29 102 cm <sup>2</sup> )

## GROUND PRESSURE

16" (406 mm) .....	8.8 psi (61 kPa)
18" (457 mm) .....	7.8 psi (54 kPa)
20" (508 mm) .....	7.0 psi (48 kPa)
22" (559 mm).....	6.4 psi (44 kPa)
24" (610 mm) .....	0.0 psi (00 kPa)
Height of track shoe	
Grouser.....	2.36" (60 mm)

## LGP VERSION

Sealed and lubricated track standard. Permanently sealed and lubricated track rollers, carrier rollers, drum-type idlers. Hydraulic track adjusters. Segmented hunting tooth sprockets. Reinforced box section track roller frame.

Track frame .....	Oscillating
Track rollers (each side) .....	7
Carrier rollers (each side).....	2
Track gauge .....	78" (1.98 m)
Length of track on ground....	106" (2.69 m)
Shoes per track (each side).....	39
Track shoe width available 36" (914 mm)	
Area track on ground .....	7632 in <sup>2</sup>
	(49 226 cm <sup>2</sup> )
Ground pressure.....	4.5 psi (31 kPa)
Height of track shoe	
single bar .....	2.36" (60 mm)
pyramid.....	3.0" (76 mm)

## DOZER HYDRAULIC SYSTEM

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

**Pump:** Gear type torque converter mounted, driven from engine, 52 gpm @ 2100 rpm (197 L/min @ 2100 r/min).

**Control valve:** Open center, parallel with pressure compensation.

**System relief pressure.....** 1800 psi  
(12 411 kPa)

## CYLINDERS

### MECH. ANGLE DOZER

**Lift:** (2) ..... 4" dia x 35.6" stroke, 2" rod  
(102 mm dia x 904 mm stroke, 51 mm rod)

### TILT DOZER

**Lift:** (2)..... 4" dia x 37" stroke, 2" rod  
(102 mm dia x 940 mm stroke, 51 mm rod)

**Tilt:** (2) ..... 6" dia x 6.7" stroke, 3" rod  
(152 mm dia x 170 mm stroke, 76 mm rod)

### ANGLE/TILT/PITCH DOZER

**Lift:** (2) ..... 4" dia x 35.6" stroke, 2" rod  
(102 mm dia x 904 mm stroke, 51 mm rod)

**Angle:** (2) ..... 4" dia x 55" stroke, 2" rod  
(102 mm dia x 1.40 m stroke, 51 mm rod)

**Tilt/Pitch**... 5" dia x 4.5" stroke, 2.5" rod  
(127 mm x 114 mm stroke, 64 mm rod)

## SERVICE CAPACITIES

	U.S. Gals	Litres
Fuel tank .....	65	246
Hydraulic system .....	17.5	66.3
Transmission and torque converter .....	15	56.8
Engine crankcase.....	3.75	14.2
Final drives (each side)....	6.25	23.7
Cooling system .....	14	53

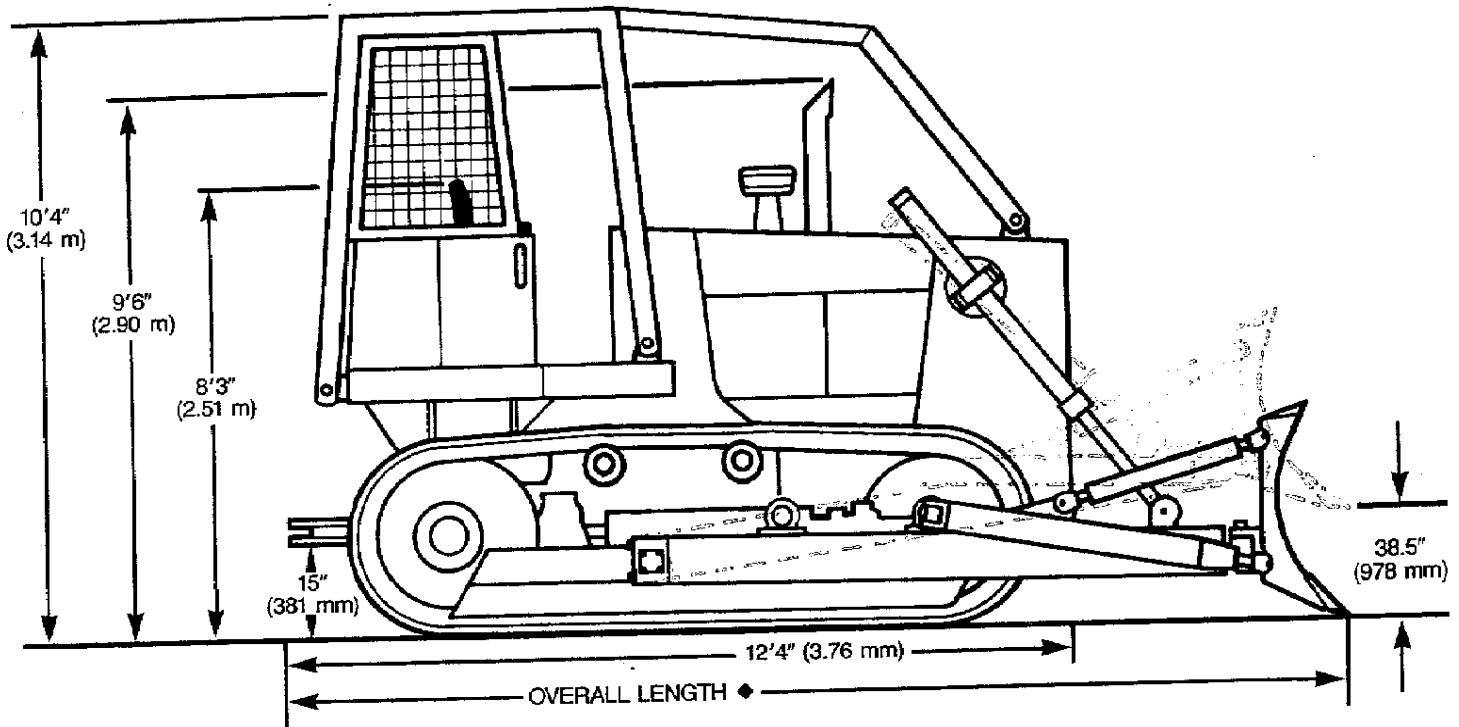
## STANDARD EQUIPMENT

Dry type air cleaner with service indicator  
 • 42-amp alternator and voltage regulator  
 • Reversible fan • Master disconnect switch • Neutral safety start mechanism  
 • Color-coded international symbol gauges • Fuel gauge • Adjustable suspension seat • Over-center parking brake  
 • Permanently lubricated track rollers  
 • Sealed track • Hydraulic track adjusters  
 • Bottom transmission guard • Crankcase guard • Radiator guard • Muffler • ROPS canopy with seat belt • Rear transmission guard • Halogen work lights • Drawbar.

## STANDARD EQUIPMENT—LGP VERSION

Dry type air cleaner with service indicator  
 • 42-amp alternator and voltage regulator  
 • Reversible fan • Master disconnect switch • Neutral safety start mechanism  
 • Color-coded international symbol gauges • Fuel tank • Adjustable suspension seat • Over-center parking brake  
 • Sealed and lubricated track • Permanently lubricated track rollers • Hydraulic track adjusters • Bottom transmission guard • Crankcase guard • Radiator guard • Muffler • ROPS canopy with seat belt • Rear transmission guard • Halogen work lights • Drawbar.

# DIMENSIONAL DATA—MECHANICAL ANGLE DOZER



## MECHANICAL ANGLE DOZER SPECIFICATIONS

### Dozer Blade

Width.....	148" (3.76 m)
Height.....	40" (1.02 m)
Lift above ground.....	38.5" (978 mm)
Drop below ground.....	19.5" (495 mm)
Angle, mechanical —	
both directions.....	0°-25°
Tilt, mechanical —	
both ends.....	15" (381 mm)
Pushbeam.....	Outside

### End Bits (Replaceable)

#### Standard Duty

Length.....	17" (432 mm)
Width.....	8" (203 mm)
Thickness.....	0.88" (22 mm)

### Heavy Duty

Length.....	20" (508 mm)
Width.....	10" (254 mm)
Thickness.....	1" (25 mm)

### Cutting Edge (Reversible)

Length.....	113" (2.87 m)
Width.....	8" (203 mm)
Thickness.....	0.75" (19 mm)

### Maximum track shoe

allowable.....	24" (610 mm)
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### Tractor Dozer Dimensions

◆ Overall length	
with ripper raised.....	19'3" (5.87 m)
with winch.....	18' (5.49 m)
with blade straight.....	16'5" (5.00 m)
with blade angled.....	19'1" (5.82 m)
less "C" frame and blade.....	12'4" (3.76 m)

### Overall width

with blade straight.....	148" (3.76 m)
with blade angled.....	137" (3.48 m)
at track with	
18" (457 mm) shoes.....	92" (2.34 m)
Turning clearance circle,	
counter-rotate turn.....	24' (7.32 m)
Ground clearance.....	15" (381 mm)

### Operating weight

(approx.)*.....	30,370 lbs (13 775 kg)
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\*Includes ROPS, full tank of fuel, 170 lbs (77 kg) operator and 16" (406 mm) shoes.