

# CASE®

## 450 POWER ANGLE/TILT DOZER

### FEATURES

- Power angle/tilt blade and exclusive control system make this the top producer in its class. Can often outwork considerably larger, clutch-and-shift dozers with fixed-position blades by as much as two-to-one. Offers maximum value for the dollar invested.

- Blade hydraulically angles up to 30° right or left, tilts up to 12" to either side. Angling or tilting accomplished right from the operator's seat while the tractor is standing still or on-the-go. Single lever control for blade lift and angle. Eliminates deadheading. Speeds production. Perfect for crowning, ditching, side casting, stumping.

- Exclusive transmission provides one hand power shift, power shuttle, power steer, power turns. Left hand never leaves control console. Right hand is always free to operate dozer blade. Unmatched for ease of operation and maneuverability.

- Torque converter instantly and automatically increases tractor push power as the load demands. No engine lug down. No clutching or shifting.

- 57† hp Case built diesel engine. Develops peak torque at relatively low rpm. Famous for its lugging ability, long life and fuel economy.

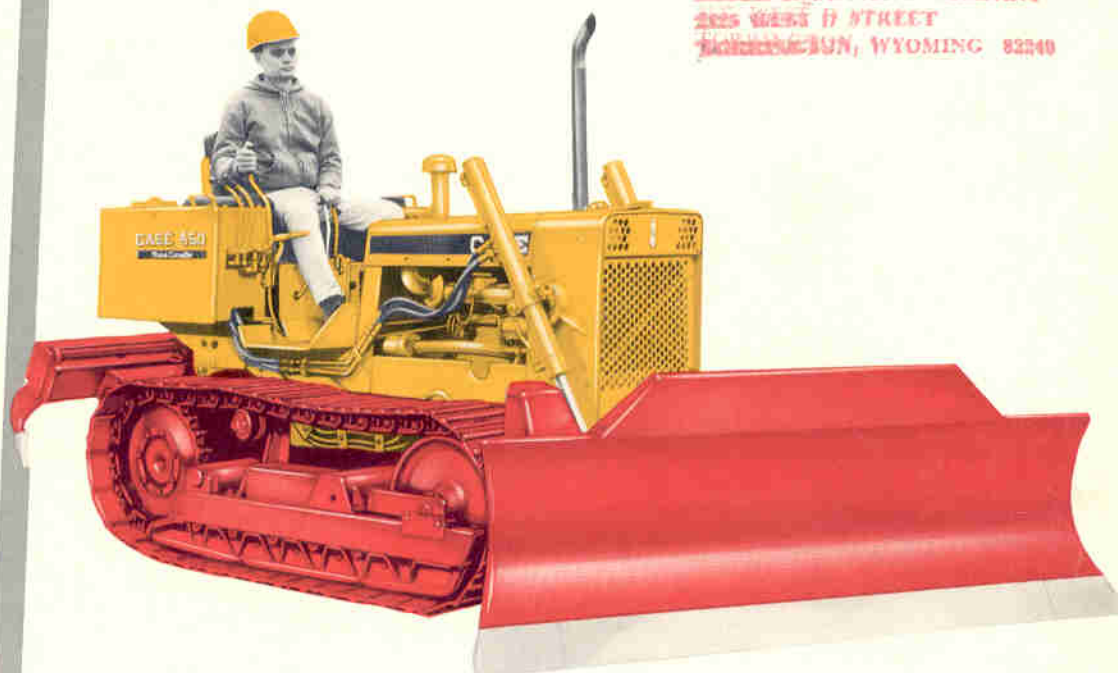
- Hydraulic track adjusters. Few pumps from an ordinary grease gun keeps track tension right. Saves time and effort.

- Permanently lubricated track rollers, carrier rollers and front idlers. Absolutely no servicing required. Operator spends more hours producing with the 450, less on maintenance.

- Backhoes, ripper, winches and other matched equipment available.

- Power angling and tilting dozer blade
- One hand power shift, power shuttle, power steer, power turns
- Torque converter
- Case diesel engine

EAGLE EQUIPMENT COMPANY  
2125 WEST D STREET  
TORRINGTON, WYOMING 82240



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### \*MODEL DESIGNATION

	Pushbeam	Angle	Tilt
Power Angle/Tilt Dozer	Inside	Hydraulic	Hydraulic

### DOZER OPERATING DATA

*Blade dimensions (including integral spillguard)	95 3/8" x 35"
(not including integral spillguard)	95 3/8" x 28"
*Dig depth below ground	18"
*Lift height above ground	32"
*Angle — both directions (hydraulic)	0° to 30°
*Tilt — both directions (hydraulic)	0° to 7° (12")

APPROXIMATE SHIPPING WEIGHT 10,040 lbs.

† See specifications reverse side

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AND WARRANTED BY  
**J. I. CASE CO.**  
Racine, Wisconsin, U.S.A.





# Specifications for **CASE** 450 POWER ANGLE/TILT DOZER

## TRACTOR OPERATING DATA

Drawbar pull, lbs.			
1st (Lo-Lo) .....	21,000	3rd (Lo-Hi) .....	10,000
2nd (Hi-Lo) .....	11,500	4th (Hi-Hi) .....	5500

Above figures are manufacturer's rating. Drawbar pull figures are maximum at converter stall and assume adequate weight and traction.

## \*TRAVEL SPEEDS (mph)

	Forward	Reverse	Forward	Reverse
1st (Lo-Lo) .....	0 to 1.59	0 to 1.75	3rd (Lo-Hi) .....	0 to 3.24
2nd (Hi-Lo) .....	0 to 2.85	0 to 3.14	4th (Hi-Hi) .....	0 to 5.81

## DIMENSIONS (with standard equipment)

Overall height (to top of exhaust stack) .....	85"
* (less exhaust stack) .....	65"
Overall length — blade straight (to rear of drawbar) .....	12'0"
— blade angled (to rear of drawbar) .....	13'10"
Overall width — blade straight .....	7'11 3/4"
— blade angled .....	7'1"
*Ground clearance (at drawbar) .....	12"
*Turning clearance circle — blade straight (pivot turn) .....	18'4"

## ENGINE

Make and model .....	Case G188D
*Fuel .....	diesel, No. 2
Maximum rated horsepower .....	
(1) Gross .....	57.0 @ 2000 rpm
(2) SAE net .....	51.0 @ 2000 rpm
Torque, maximum, lbs. ft. .....	
Sea level, 60°F (gross) .....	155 @ 1300 rpm
*500' altitude, 85°F (SAE net) .....	139 @ 1300 rpm
Torque, governed rpm, lbs. ft. .....	
Sea level, 60°F (gross) .....	150 @ 2000 rpm
*500' altitude, 85°F (SAE net) .....	134.5 @ 2000 rpm
*Cylinders, number (valve-in-head) .....	4
*Bore and stroke .....	3 1/8" x 4 1/2"
*Displacement (cu. in.) .....	188
Compression ratio .....	17.5 to 1
Starting .....	12-volt electric
Batteries (capacity and quantity) .....	155 amp. hrs. (1)
Fuel induction .....	injectors (4)
Fuel supply .....	injection pump
Ignition .....	diesel cycle
Air cleaner .....	dry type
Oil filter type .....	renewable cartridge
Governor .....	mechanical flyweight
Lubrication .....	positive pressure
Cooling system, type .....	pressurized, 7 psi
pump .....	impeller, permanently lubricated bearing

(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" Hg. and 60°F 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 ft. altitude with .38" Hg. vapor pressure (29.38" Hg. observed barometer) and 85°F air (per SAE J816a).

## POWER TRAIN

*Transmission .....	constant mesh, power shift with Hi-Lo range selector; power shuttle
*Steering .....	power turns, gradual turns or standard brake (pivot) turns
*Shuttle (direction reverser) .....	constant mesh, full power
*Torque converter .....	single-stage, hydrokinetic type (2.10 to 1 ratio) mounted to engine through gear tooth drive and connected to transmission through universal joint drive shaft
*Final drives .....	spur and bull gear type

*FUEL TANK (capacity) .....	20 U.S. gals.
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## BRAKES

Heavy-duty 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 is standard.

## CHASSIS CONSTRUCTION

Independent load-carrying main frame consisting of solid steel side members, torque tube and solid steel rear cross member. Provides a shock-absorbing foundation for engine frame, transmission and mounted equipment.

## TRACK ASSEMBLY

Heavy steel channel frames tied together at rear by solid steel cross member and in front by sturdy box section cross member. "Hunting-tooth" sprocket assures even wear, longer bushing life. Solid front idler wheel. All track shoes, pins, bushings and bolts deep hardened for high wear resistance. Hardened-steel track rollers are permanently lubricated. Track shoes overlap, preventing track damage from materials entering the tracks.

## \*TRANSMISSION FILTERS

Ten micron replaceable element on pressure side; 100 wire mesh reusable screen on suction side.

## TRACKS AND TRACK SYSTEM

*Track gauge (standard) .....	50"
*Track shoes (standard) .....	12" grousers
(optional) .....	14"
*Track shoes, types (heat treated) .....	grousers; open-center grousers; semi-grousers; semi-grousers, closed; ice grousers; rubber pads for grousers

*Lower track rollers — permanently lubricated and sealed, with bronze bearings .....	5 each side
*Track carrier rollers — permanently lubricated and sealed, with grey iron bearings .....	1 each side
*Length of track on ground .....	68.5" each side
*Length of track on ground with backhoe .....	68.5" each side
Shoes per track (number) .....	36
(number with backhoe) .....	37
*Area, track on ground (12" shoes) .....	1644 sq. in.
(14" shoes) .....	1918 sq. in.
Ground pressure (12" shoes) .....	6.71 psi
(14" shoes) .....	5.30 psi
Track frame .....	non-oscillating
Track adjustment (standard) .....	hydraulic

## DOZER HYDRAULIC SYSTEM

*Cylinders: Double-acting with hardened and chrome-plated rods to resist damage, increase strength and resist corrosion.	
Lift (2) .....	2 1/2" dia. x 27 3/4" stroke, 1 1/4" rod
Angling (2) .....	4" dia. x 8 1/2" stroke, 2" rod
Tilt (1) .....	3 1/2" dia. x 8" stroke, 2" rod
*Cylinder design and packing: Easy-to-service with threaded end cap. Hardened and chrome-plated rods. Cylinder equipped with two-way, triple seal packing and nylon guide rings for positive action. Nylon wiper rings and self-locking capscrew on rod with polyurethane "U" cup packing. Cylinders have micro-smooth bore for long packing life.	
*Pump: Front-mounted, direct-drive, gear-type. 21 gpm @ 2000 rpm @ 1650 psi with Case Hi-Lo TCH oil.	
Control valve: Three-spool valve. *Relief valve pressure setting — 1650 psi @ 21 gpm. Single lever control for dozer lift, angle and lower with positive-hold regenerative "float" position in lift circuit.	
Hydraulic lines: Steel tubing with flared or brazed fittings and wire-braid, high-pressure hose with crimped, full-flow fittings.	
*Reservoir: Refill capacity — 7 1/2 U.S. gals., with 40 micron replaceable element on pressure side; 100 wire mesh reusable screen on suction side.	

## STANDARD EQUIPMENT

Power Angle/Tilt Dozer complete with hydraulic system and featuring single lever control for lifting and angling. Dozer blade with reversible cutting edge and replaceable cutting tips. Standard 50" gauge tractor with 5 roller track frame and hydraulic track adjusters. Case-built G188D diesel engine. Case-built power shift, power shuttle transmission and neutral safety lock. 12" grousers (heat treated). Upper track carrier rollers (permanently lubricated). Track rollers (permanently lubricated). Solid disc drive sprockets. Solid disc front idlers (permanently lubricated). Underhood muffler. Deflector on exhaust stack. Foot brakes and over center type parking brake. Heavy duty grille with protection for front working lights. Suction fan. Anti-freeze solution to -20°F. 12-volt starter, generator and voltage regulator. Circuit breaker and fuses. Key switch. Light switch. Safety start mechanism with transmission safety lock. Dual front working lights (shock mounted and protected). Swivel mounted rear working light (shock mounted). Instrument panel light. Foot and hand throttles. 1st and 2nd stage fuel filters plus water trap and sediment bowl. Air cleaner (dry type) with service indicator. Weather resistant, upholstered seat and back rest (adjustable fore and aft), arm rests. Heavy duty, industrial swinging drawbar. Torque converter. Tool box tray. Tools. Crankcase guard (except units with backhoe). Rear bottom guard (torque converter and drive shaft). Floor plate extensions. Shields for lower sides of engine compartment. Hourmeter. Torque converter oil pressure gauge. Torque converter oil temperature gauge. Transmission oil pressure gauge. Engine oil pressure gauge. Engine heat indicator gauge. Ammeter. Engine pre-heater. Screen for fuel tank filler neck.

## OPTIONAL LOGGING EQUIPMENT FOR TRACTOR

Ice grousers and open-center grousers. Front pull hook. Winches (Model 9 and Model 19). Fairleads for winch (3 and 4-roller). Drawbar for use with winch. Front counterweight. Spark arresting muffler. Engine side brush screens. Front brush screen. Extension for transmission guard. Pusher fan. Reversible fan. Anti-sand blast radiator. Enclosed generator. \$Log canopy. Track guides (rock guards) front and rear, center. Rear sediment bowl guard.

## OPTIONAL EQUIPMENT FOR TRACTOR

Track shoes offered in a variety of sizes and types (heat treated): open-center grousers; semi-grousers; semi-grousers (closed); ice grousers; rubber pads for grousers. Front pull hook. Winches (Model 9 and Model 19). Fairleads for winch (3 and 4-roller). Drawbar for use with winch. Front counterweight. Spark arresting muffler. Engine side brush screens. Engine side shields. Front brush screen. Extension for transmission guard. Pusher fan. Reversible fan. Anti-sand blast radiator. Enclosed generator. \$Log canopy. Oil bath air cleaner. Pre-cleaner for oil bath air cleaner. Anti-freeze solution to -40°F. Pull behind hydraulics. Lock up kit. Tractor hydraulics for equipment. \$All steel cab. Track guides (rock guards) front and rear, center. Front idler rock guards. Ripper. 14 1/2' backhoe. 16 1/2' Extendahoe. Cast end bits for dozer blade.

\$Equipment approved for use with the 450 Power Angle/Tilt Dozer, but not manufactured or warranted by the J. I. Case Company. See your dealer for complete details on these and other items.

\*These specifications conform to IEMC definitions. IEMC definitions are not established for specifications not preceded by an \*.

## IMPORTANT

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

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