

# CAT

# D4C

## TRACK-TYPE TRACTOR

- **Power Angle and Tilt blade** — large capacity, improved hydraulics and box-section durability for aggressive dozer performance.
- **Durable undercarriage** — large component size for improved wear life.
- **Transmission** — Caterpillar planetary power shift transmission and torque converter for fast speed, direction changes under load.
- **Operator's compartment** — designed to maximize operator comfort and productivity.
- **Total Customer Support** — unmatched in the industry.

- **Cat 3204 diesel Engine**
  - Gross power . . . . . 63 kW/84 HP
  - Flywheel power . . . . . 58 kW/78 HP
- **Blade capacity** . . . . . 1.48 m<sup>3</sup>/1.93 yd<sup>3</sup>
- **Operating weight**
  - Standard machine . . . . . 7522 kg/16,582 lb
  - LGP arrangement . . . . . 7874 kg/17,360 lb

Machine shown may have optional equipment.



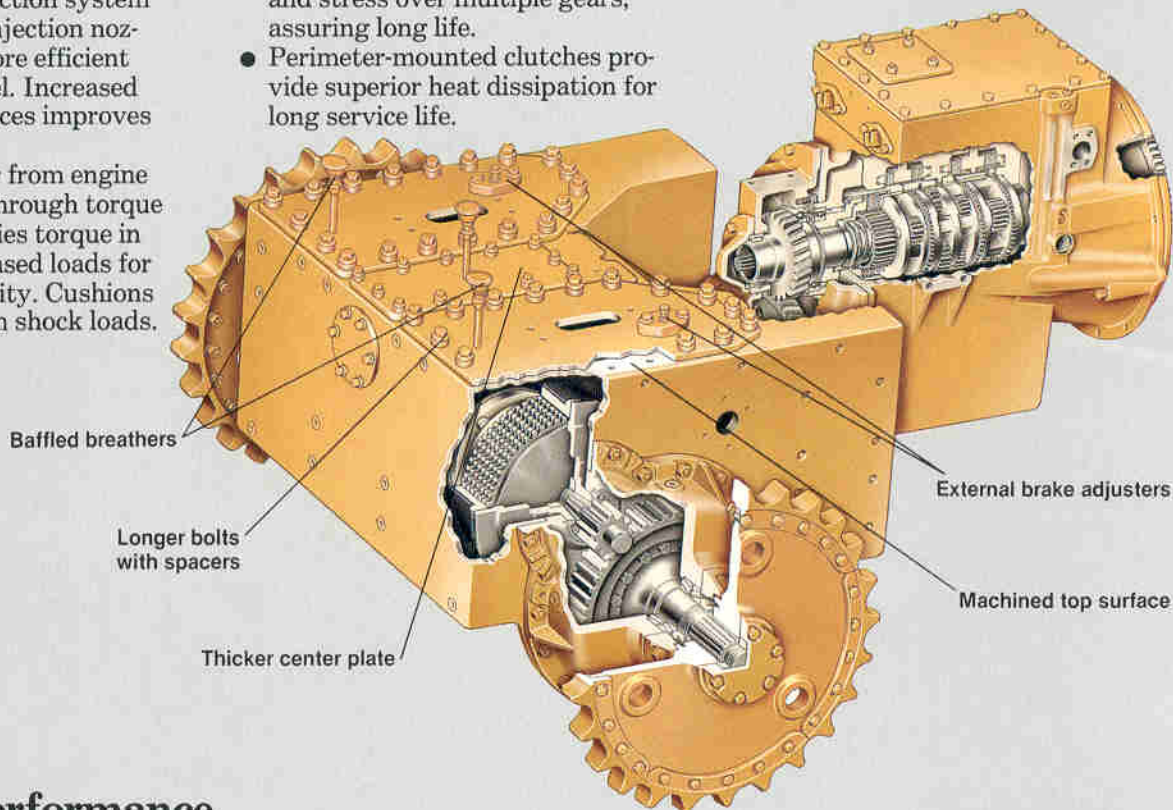
### Power Train

#### Cat 3204 Engine

- High displacement-to-power ratio gives powerful performance and long life.
- Scroll fuel system — high-pressure, fuel injection system utilizes Cat fuel injection nozzles to provide more efficient combustion of fuel. Increased size of nozzle orifices improves spray pattern.
- Transfer of power from engine to transmission through torque converter multiplies torque in response to increased loads for greater productivity. Cushions transmission from shock loads.

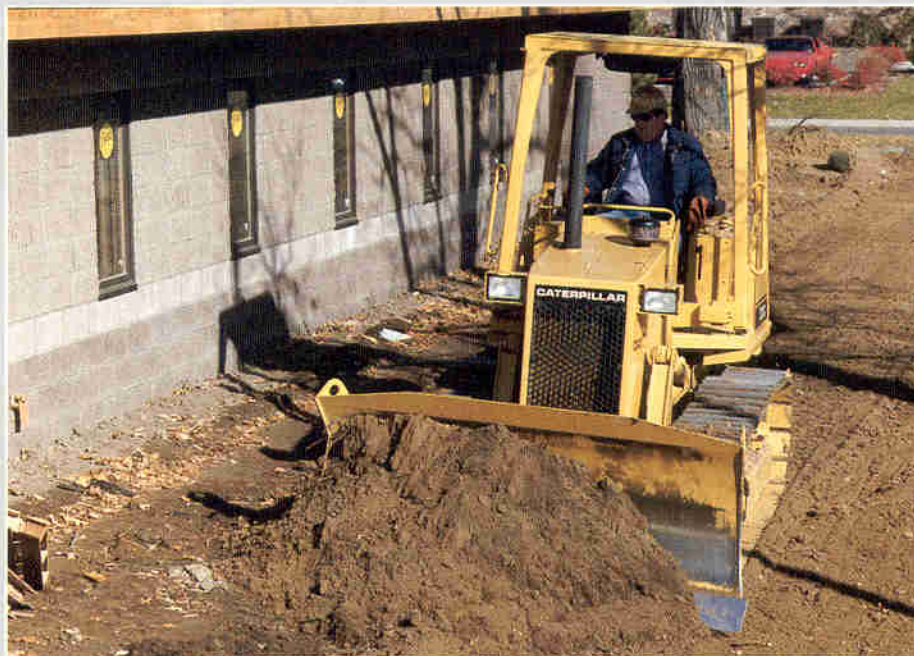
#### Power Shift Transmission

- Fast speed changes.
- Effortless shifting.
- Simple shift pattern.
- Planetary design balances loads and stress over multiple gears, assuring long life.
- Perimeter-mounted clutches provide superior heat dissipation for long service life.



### Dozing Performance

- Increased track on ground provides more traction and excellent dozing platform.
- Precise, well-modulated dozer controls.
- Low lever effort.
- Powerful hydraulics control lift, dig, angle and tilt functions.
- Versatile Power Angle and Tilt blade designed for all types of dozing — from tough land clearing and pioneering to finish grading.
- Mechanism on blade prevents roll-back or forward pitch.
- Large, box-section dozer and C-frame for maximum durability.
- Increased pin hardness provides superior wear life at blade/pin joints.





### Standard Equipment

**NOTE:** Standard and optional equipment may vary. Consult your Caterpillar Dealer for specifics.

Air cleaner, dry-type.	Muffler.	End guiding guards.
Alternator, 40-amp.	Oil-cooled steering brakes and clutches.	Roller frame, 6 rollers (Std.).
Blower fan.	Pedal steering.	Sealed and Lubricated, two-piece master links (39-section).
Crankcase guard.	Precleaner.	Shoes, single grouser (Std.) 406 mm/16" (39) (LGP) 635 mm/25" (39).
Decelerator.	Retrieval hitch.	Transmission, planetary power shift; three speeds forward, three reverse.
Direct electric starting, 12 volt.	Seat, suspension.	Vandalism protection group.
Engine enclosure.	Seat belt (std. with ROPS).	
Horn.	Track:	
Instrument panel lights.	Adjusters, hydraulic.	
Lifetime Lubricated rollers and idlers.		
Mirror, rearview with cab or canopy.		



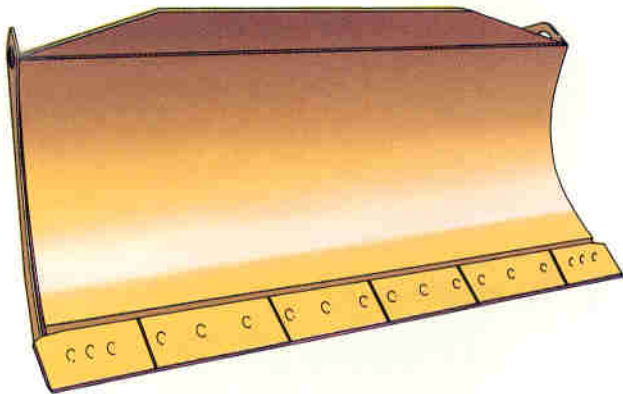
### Optional Equipment

(with approximate change in operating weight.)

	Kg	Lb		Kg	Lb
Back-up alarm, required in U.S.A. . . . .	2	4	Lighting system:		
Battery, heavy-duty . . . . .	2.3	5	3 lights — 2 front, 1 rear . . . . .	9	20
Bulldozer:			Logging sweep . . . . .	71	156
Power Angle and Tilt inside mounted arms . . . . .	992	2187	Precleaner with prescreener . . . . .	2	4
Cab, ROPS and mountings, includes air pressurizer, air filter, heater, front and rear windshield wipers and washers, rearview mirror, key locks, and 75 ampere alternator . . . . .	625	1378	Pull hook . . . . .	7	15
Canopy, ROPS and mountings, includes rearview mirror . . . . .	377	831	Rear power take-off . . . . .	18	39
Cleaner bar . . . . .	14	30	Ripper, includes three teeth, hydraulic cylinder . . . . .	250	551
Counterweight:			Ripper teeth, additional, each . . . . .	4.5	10
Front mounted . . . . .	398	860	Screens, for use with ROPS canopy:		
Idler mounted . . . . .	136	300	Rear . . . . .	50	110
Drawbar, swinging . . . . .	59	130	Side . . . . .	67	148
Fan, suction . . . . .	0	0	Starting aid — ether . . . . .	2.7	6
Guards:			Starting system, low temperature . . . . .	19	41
Radiator, hinged, heavy-duty . . . . .	7	16	Steering, hand clutch/foot brake . . . . .	24	54
Normal service, hinged . . . . .	1.4	3	Track shoes, LGP, 635 mm/25" self-cleaning . . . . .	177	390
Track guiding, center . . . . .	77	159	Winch, model 53 . . . . .	433	955
Hydraulic system:					
3-valve . . . . .	79	175			
4-valve . . . . .	91	200			

**NOTE:** All specification conversions are rounded.

# SPECIFICATIONS



**Power Angling and Tilt 3P Dozer** makes it easy to grade, backfill ditches, landscape or spread fill. It can be angled 25° left or right and tilted ±8-1/2°. All with two simple controls. One lever controls raise, lower and tilt. The other lever angles the blade left or right. Large capacity enhances productivity in spreading and backfilling applications.

Complete bulldozer consists of multiple box-section, heat-treated moldboard, inside-mounted push arms, trunnions, lift cylinders, brackets, DH-2 steel cutting edges and end bits. Hydraulic controls are required but not included with bulldozer.

## Bulldozer Specifications

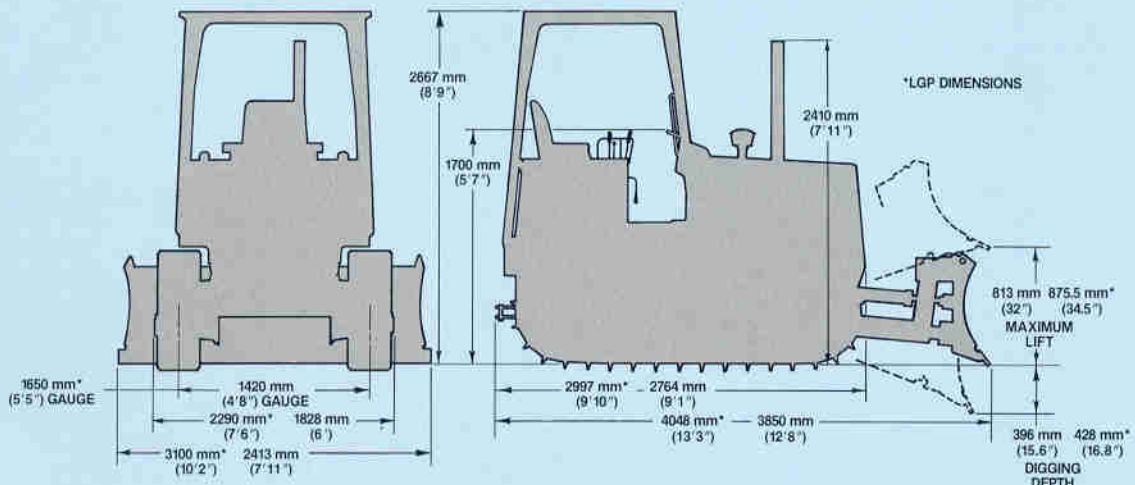
	Blade	Capacity m <sup>3</sup> / yd <sup>3</sup>	Overall Length (tractor w/bulldozer) mm / ft	Overall Width (tractor w/bulldozer) mm / ft	Height mm / in	Digging Depth mm / in	Lift Height mm / in	Maximum Tilt mm / in	Weight (without hydraulic controls) kg / lb
Standard	Straight . . .	1.48/1.93	3850/12'8"	2413/7'11"	928/36.5"	396/15.6"	813/32.0"	357/14.1"	1099/2,423
	Angled 25°		4324/14'2"	2226/7'4"			1109/43.7"		
LGP	Straight . . .	1.54/2.02	4048/13'3"	3100/10'2"	827/32.6"	428/16.8"	875.5/34.5"	460/18.1"	1176/2,592
	Angled 25°		4667/15'4"	2853/9'4"			1120/44.1"		



### Dimensions (approximate)

Ground clearance . . . . . 294 mm/11.6"  
 For shipping dimensions, add 51 mm/2" to vertical dimensions to allow for grouser height.

Width without blade (Std) . . . . . 1828 mm/6'  
 Width without blade (LGP) . . . . . 2290 mm/7'6"





### Hydraulics

Single-section gear pump. System is protected to keep out dirt and includes a full-flow filter. Operating valves are spring-centered, double-spool type. Lines are steel tubing and Cat XT hose and couplings with flared tube connections.

Complete system consists of pump, tank, filter, valves, lines, linkage and actuating levers. Hydraulic systems include:

Three valve . . . . . Power Angle and Tilt bulldozer  
 Four valve . . . . . Power Angle and Tilt bulldozer  
 and rear implement

#### Pump:

Output @ 6895 kPa/69 bar/1000 psi . . . . . 55 liters/min/  
 14.5 gpm  
 RPM @ rated engine speed . . . . . 2640  
 Relief valve setting . . . . . 17 225 kPa/172 bar/2500 psi  
 Drive . . . . . Geared from engine timing gear train

#### Control positions:

Lift cylinders . . . . . Raise, lower, hold, float  
 Tilt cylinder . . . . . Left, right, hold  
 Angle cylinders . . . . . Left, right, hold  
 Ripper cylinders . . . . . Raise, hold, lower



### Sealed and Lubricated Track

Sealed and Lubricated Track reduces internal bushing wear as a maintenance consideration by surrounding the track pin with lubricant. The lubricant is held in place by a sealing arrangement consisting of a polyurethane seal, a rubber load ring and a thrust ring. Two-piece master link and hydraulic track adjusters are standard.

	Standard	LGP
Number of shoes (each side) . . . . .	39	39
Width of standard single grouser shoe . . . . .	406 mm/16"	635 mm/25"
Length of track on ground . . . . .	2055 mm/80.9"	2055 mm/80.9"
Ground contact area with standard shoes . . . . .	1.67 m <sup>2</sup> /2590 in <sup>2</sup>	2.6 m <sup>2</sup> /4051 in <sup>2</sup>
Gauge . . . . .	1420 mm/56"	1650 mm/65"
Ground pressure . . . . .	44.2 kPa/.44 bar/ 6.35 psi	28.9 kPa/.29 bar/ 4.2 psi



### Weight

	Standard	LGP
Shipping weight with coolant, lubricants and 10% fuel . . . . .	5915 kg/13,040 lb	6078 kg/13,400 lb
Operating (includes coolant, lubricants, full fuel tank, operator, ROPS canopy, PAT dozer and hydraulics) . . . . .	7522 kg/16,582 lb	7874 kg/17,360 lb



### Service Refill Capacities

	Liters	U.S. Gallons
Fuel tank . . . . .	116	30.6
Cooling system . . . . .	20	5.3
Crankcase . . . . .	12	3.2
Transmission . . . . .	28	7.4
Bevel gear case . . . . .	15	4
Final drives (each) Std . . . . .	8	2.1
LGP . . . . .	12	3.2
Hydraulic tank . . . . .	57	15
Steering brake/clutch compartment (each) . . . . .	28	7.4

## SPECIFICATIONS



### Caterpillar Engine

Gross power @ 2400 RPM . . . . . 63 kW/84 HP

Flywheel power @ 2400 RPM . . . . . 58 kW/78 HP

(Kilowatts (kW) is the International System of Units equivalent of horsepower.)

*Net power at the flywheel of the vehicle engine is based on SAE J1349 standard conditions of 25°C/77°F and 100 kPa/29.61" Hg. Power is based on using 35° API (15.6°C/60°F) gravity fuel having an LHV of 42 780 kJ/kg/18,390 Btu/lb when used at 29.4°C/85°F and with a density of 838.9 g/L/7.001 lb/U.S. gal. Power rating is adjusted for vehicle equipped with fan, air cleaner, water pump, fuel pump, muffler and lubricating oil pump. No derating is required up to 1500 m/5,000 ft. altitude.*

These additional ratings also apply at 2400 RPM

	kW	HP
ISO 1585 . . . . .	58.2	78.0
ISO 3046-1 . . . . .	57.7	77.4
EEC 80/1269 . . . . .	58.2	78.0
DIN 6271/1 (Gross) . . . . .		85 PS
DIN 6271/1 (Flywheel) . . . . .		79 PS

Caterpillar four-stroke-cycle 3204 diesel Engine with four cylinders, 114 mm/4.5" bore, 127 mm/5.0" stroke and 5.2 liters/318 cu. in. displacement.

Direct-injection fuel system with individual, adjustment-free injection pumps and valves.

Cam-ground and tapered, aluminum-alloy pistons have two rings each. Steel-backed, copper-bonded, aluminum bearings. Hardened crankshaft journals. Pressure lubrication with full-flow filtered and cooled oil. Dry-type air cleaner with primary and secondary elements.

Direct electric, 12-volt starting system with 40-amp alternator.

Decelerator pedal provides increased dozing control and smooth direction and shift changes.



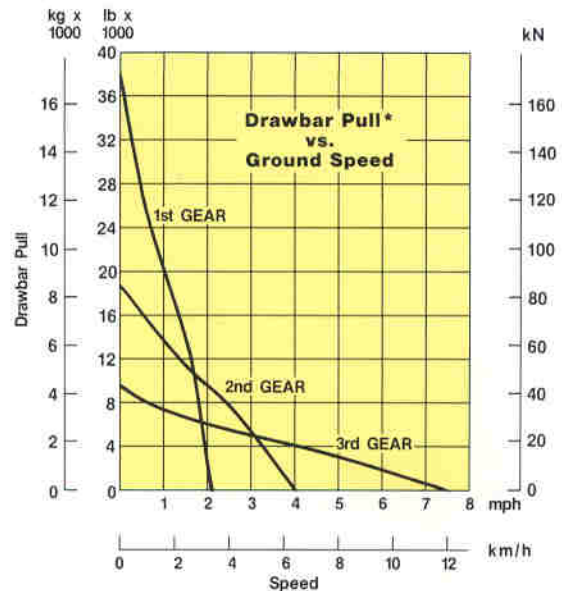
### Transmission

Planetary power shift with three speeds forward, three reverse. High-torque capacity oil clutches permit fast speed and direction changes. Single-stage torque converter integral with power shift transmission.

Travel speed at rated engine RPM:

	1st	2nd	3rd
Forward: Km/h . . . . .	3.2	6.0	11.1
MPH . . . . .	2.0	3.7	6.9
Reverse: Km/h . . . . .	3.4	6.5	11.9
MPH . . . . .	2.1	4.0	7.4

### Drawbar Pull\* vs. Ground Speed



\*Usable pull will depend upon weight and traction of equipped tractor.



### Final Drives

Coarse-pitch, crown-shaved, single-reduction, spur gear final drive.



### Steering and Braking

(Braking system meets SAE J1026 JUN82 recommended practice).

Spring-actuated, hydraulically released, multiple-disc oil-cooled clutches and brakes. Steering and braking controlled by a foot pedal for each track. Third pedal brakes both tracks, locks down for parking.



### Track Roller Frame

Non-oscillating, box-section construction. Lifetime Lubricated rollers and idlers.

Number of rollers (each side) . . . . . 6



### ROPS

(ROPS is required in U.S.A.)

ROPS (Rollover Protective Structures) offered by Caterpillar for this machine meet ROPS criteria: SAE J395, SAE J1040c and ISO 3471-1986. They also meet FOPS (Falling Object Protective Structures) criteria SAE J231 JAN81 and ISO 3449-1984.

Cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 FEB87, meets OSHA and MSHA requirements for operator sound exposure limits in effect at the time of manufacture.

## Serviceability

- No daily grease points. Only two fittings require lubrication at 500 service hours.
- Hinged doors allow easy access for routine maintenance, fast removal and installation of components.
- Convenient, spin-on fluid filters vertically mounted for reduced oil spillage.
- Segmented sprocket — replace worn sprocket teeth without breaking track.
- Fast, easy adjustment of brakes. Adjuster conveniently located under operator seat.



## Total Customer Support

- **Parts availability** — Most Cat parts are immediately available off the shelf. Dealer availability is backed up by Cat's computer-controlled, emergency search system.
- **Service capability** — Whether in the dealer's fully equipped shop or in the field, you'll get trained servicemen using the latest technology and tooling.
- **Machine management services** — Cat dealers help manage equipment investments with:
  - Custom Track Service.
  - Effective preventive maintenance programs.
  - Diagnostic programs like Scheduled Oil Sampling and Technical Analysis.
  - Information to make the most cost-effective repair option decisions.
  - Customer meetings, training for operators and mechanics.

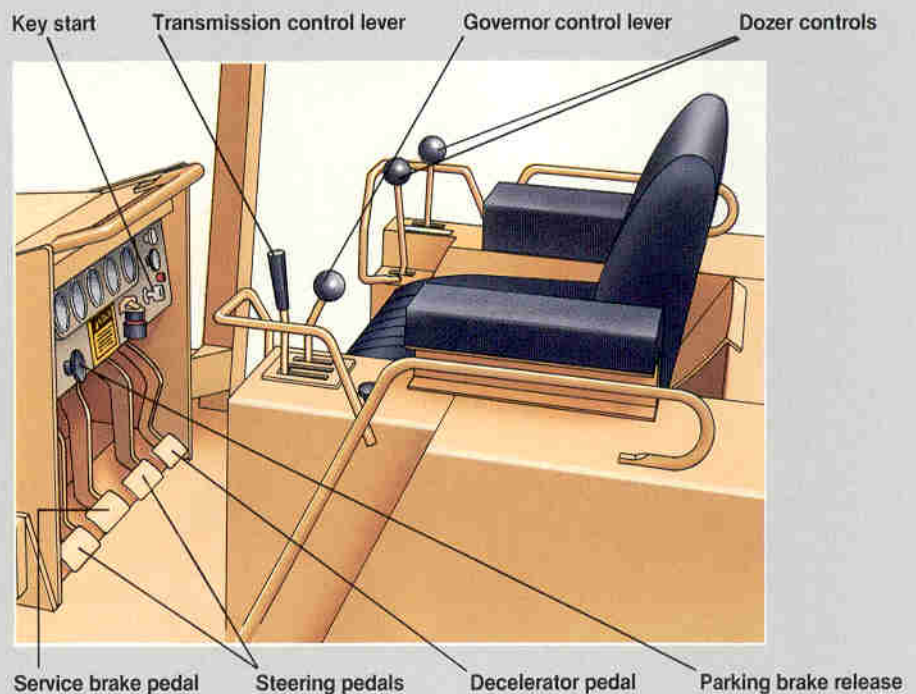


- **Exchange components for quick repairs** — Low-cost components assure maximum, cost-effective uptime.

- **Literature support** — Easy-to-use operation and maintenance guides help you get the full value out of your equipment investment.

# Operator's Compartment

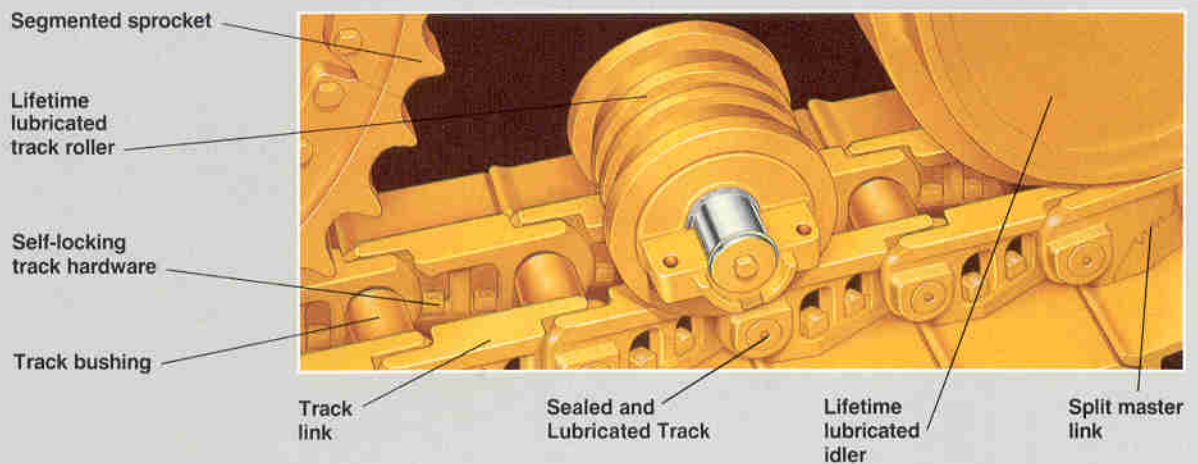
- Walk-through design for easy entry and exit.
- Large arm rests are adjustable for greater operator comfort.
- Controls and levers designed and located for operator comfort and efficiency.
- Decelerator pedal allows precise control of the tractor.
- Pedal steering frees operator's hands for implements and transmission control. Hand lever steering available.
- Low pedal effort for greater operator comfort, efficiency.
- Excellent visibility for optimum operator performance.
- Optional sound-suppressed ROPS cab reduces noise and vibration.





### Undercarriage

- Box-section track roller frames resist bending and twisting for excellent structural integrity and roller frame alignment.
- Sealed and Lubricated Track reduces wear between pin and bushing for long undercarriage life.
- Balanced undercarriage system — components designed to wear as a unit, reducing operating costs.
- Long-lasting components improved to make them even more durable.
  - Additional wear material on bushings and greater hardened depth provides longer service life.
  - Material added to links for increased structural strength.
- Deep-hardened rollers and idlers.
- Shoes have high surface hardness and greater hardened depth for good wear resistance and long life; shoe designed to reduce entry of material into the sprocket root/bushing contact area.



### Low Ground Pressure

- LGP undercarriage is especially designed to work in sloppy conditions, also improves finish dozing and slope capabilities.
- Wide track shoes, long track frame and wide gauge combine to increase track contact area, reduce ground pressure for high flotation and excellent stability.
- End track guiding guards keep tracks aligned and prevent slipping or throwing track in mud and side-slope work. Full-length guards are available for severe side-slope applications.
- Caterpillar LGP track shoes.
  - Single-grouser shoes, made from heat-treated cast steel, 635 mm/25" wide are standard.
  - Self-cleaning shoes available for improved performance in sticky material and vegetation. Packing resistance gives better traction in cohesive material.



## The Competitive Edge

### Performance

- Balanced weight with increased track on ground.
- Precise, well-modulated dozer controls.
- Versatile Power Angle and Tilt blade for increased productivity.
- Planetary power shift transmission provides fast speed changes, effortless shifting, smooth acceleration and reliability.
- High displacement-to-power ratio gives powerful performance and long life.

### Reliability/Durability

- Box-section track roller frames resist bending and twisting.
- Sealed and Lubricated Track reduces wear between pin and bushing.
- Material added to links to increase structural strength.
- Deep-hardened rollers and idlers.
- Shoes with high surface hardness for good wear resistance.
- Shoes designed to reduce entry of material into the sprocket root/bushing contact area.
- Transfer of power from engine to transmission through torque converter cushions transmission from shock loads.

### Maintenance/Repair

- No daily maintenance.
- Hinged doors allow easy access for routine maintenance checks and reduce time to remove and install major components.
- Spin-on fluid filters for servicing convenience with vertical placement for clean changes.
- Reduced number of lubrication points — easily accessible.
- Segmented sprocket for fast, easy replacement of sprocket teeth without breaking track.
- Fast, easy adjustment of brakes with adjuster conveniently located under kickplate below operator seat.

### Operating Ease

- Walk-through design for easy entry and exit.
- Excellent visibility.
- Controls and levers designed and located for operator comfort and efficiency.
- Low pedal effort.
- Decelerator provides more precise control.
- Pedal steering frees operator's hands for transmission and blade control.
- Optional hand lever steering with a foot brake.

### Total Customer Support

- **Parts availability** — most Cat parts on dealer's shelf when you need them — computer-controlled, emergency search system back-up.
- **Service capability** — dealer's shop or fast field service — trained servicemen — latest tooling and technology.
- **Machine management services** — effective preventive maintenance programs, diagnostic programs (Scheduled Oil Sampling, Technical Analysis), cost-effective repair options, customer meetings, operator and mechanic training.
- **Exchange components for quick repairs** — choose remanufactured products or rebuilt components for maximum availability and lower costs.
- **Literature support** — easy-to-use operation, maintenance guides help you get the maximum value out of your equipment investment.
- **Flexible financing** — your dealer can arrange attractive financing on the entire line of Cat equipment. Terms structured to meet your cash flow requirements. See how affordable and easy it is to own Cat equipment.

### Custom Machine Products

- In addition to the standard range of optional equipment, special attachments and machine configurations to suit particular customer applications can be made. Contact your Caterpillar dealer for details on matching the Caterpillar product to your special applications.



*Helping you get more done*