

D₅C

TRACK-TYPE TRACTOR

Power Angling and Tilt Blade large capacity, improved hydraulics, durable. Adjustable pitch.

Durable undercarriage - large component size. Sealed and Lubriand bushing wear.

Cat 3204 turbocharged diesel engine Net flywheel power......67.1 kW/90 HP Gross power71 kW/95 HP Operating weight Standard machine8477 kg/18,650 lb LGP arrangement9000 kg/19,800 lb Blade capacity Standard machine1.94 m3/2.52 yd3



Power Train Components designed to give performance and reliability.

Cat 3204 turbocharged engine

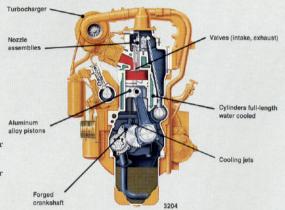
- High torque rise provides lugging force to power train during heavy loads—no need to downshift.
- High displacement-to-power ratio, low RPM for long life and reliability.
- Direct-injection fuel system, adjustment-free pumps and valves for efficient, precise fuel metering.
- Four-stroke-cycle design provides long, effective power strokes, more complete fuel combustion.
- Resilient engine mounting for quieter operation, less vibration.
- Engine oil cooler maintains optimum engine oil temperature to cool engine components and prolong engine and lubricant life.
- Full-length, water-cooled cylinders ensure maximum heat transfer for longer engine life.

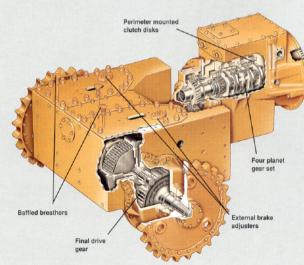
Power Shift Transmission

- Fast speed changes.
- Simple U-shaped 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.

Torque Converter

- Provides torque multiplication for maximum drawbar capability.
- Responds to changing conditions, adjusts to the load.
- Reduced shifting, while cushioning the drive train from shock loads.





Standard Equipment

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

Air cleaner, dry-type.
Alternator, 40-amp.
Blower fan.
Canopy, ROPS and mounting, includes rearview mirror
Contour seat with 3" seat belt.
Crankcase guard.
Decelerator.
Direct-electric, 12-volt starting.
Engine enclosure.
Gauges, four dash mounted, including fuel.
Horn.

Hydraulic controls, 3 valves, single-lever dozer control. Instrument panel lights. Lifetime Lubricated rollers and idlers. Muffler. Oil-cooled steering clutches and brakes. Pedal steering, two. Precleaner. Pull hook, front. Retrieval hitch. Segmented sprocket.

Adjusters, hydraulic.
End guiding guards.
Roller frame, 6 roller (standard).
Sealed and Lubricated, two-piece
master links.
Standard, 37-section.
LGP, 37-section.
Shoes, single grouser:
Standard, 457 mm/18" (37).
LGP, 660 mm/26" (37).
Transmission, planetary power
shift; three speeds forward,
three reverse.
Vandalism protection group.

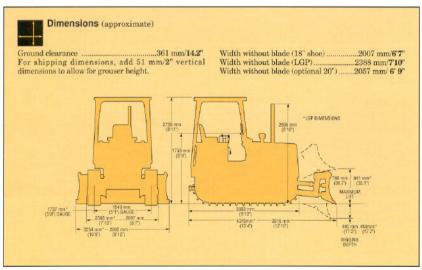
Track:

Optional equipment

(with approximate change in operating weight)

	Kg	Lb		Kg	Lb
Back up alarm, required in U.S.A	2	4	Guards:	9	
Battery, heavy-duty Bulldozers:	2.3	5	Track guiding, center Hydraulic arrangement:	82	191
Power Angle and Tilt, inside			4 valves, 2 lever dozer control	16	36
mounted arms, 1.94 m ³ /2.52 yd ³ ,			Lighting system - 2 front, 1 rear	9	20
standard machine	1138	2510	Pump, fuel priming	.45	1
2.08 m ³ /2.70 yd ³ ,			Rear power take-off drive	18	39
LGP machine	1255	2760	Ripper (includes 3 teeth and	-	
Cab, ROPS and mounting, includes			hydraulic cylinder)	250	551
air pressurizer, air filter, heater,			Ripper teeth, additional, each	4.5	10
front and rear windshield wipers			Screens (for use with ROPS canopy):		
and washers, rearview mirror,			Rear	50	110
key locks and 75 amp alternator	608	1340	Side	67	148
Counterweights:			Steering, hand clutch/brake	7	16
Front mounted option 1	155	342	Track shoes,		
Front mounted option 2	316	695	508 mm/20" single grouser	78	173
Engine coolant heater	1.4	3	Winch, model 53	433	955
Ether starting aid	2.7	6		100	000







Versatile Power Angle and Tilt 5P Dozer makes it easy to grade, backfill ditches, landscape or spread fill. You can angle 25 degrees left or right. Tilt is 8.5". Single lever is standard to raise, lower, angle and tilt. Two-lever controls are available as an option. Manually adjustable pitch — 4 degrees back, 2 degrees forward.

Bulldozer Specifications

	Blade	Capa	acity	Ove Len (trac w/bulle	gth etor	Over Wid (trac w/bulld	th	Hei	ight	378377	ging pth	Li Hei			imum Ut	Weig (with hydra contr	out
		m ³	yd ⁸	mm	ft	mm	ft	mm	in	mm	in	mm	in	mm	in	kg	lb
120 15 15	Straight	1.94	2.52	3915	12'8"	2690	8'10"	930	36.6"	440	17.3"	780	30.7"	373	14.7"	1153 2	,537
Standard	Angled 25°			4380	14'4"	2440	8'0"										
LGP	Straight	2.08	2.70	4070	13'4"	3260	10'8"	840	33.1"	450	17.7"	841	33.1"	480	18.9"	12812	,818
LGF	Angled/Tilt			4720	15'6"	2950	9'8"										

Track Shoes

	Standard	Optional	LGP
Width of shoe	457 mm/18"	508 mm/20"	660 mm/26"
No. of shoes (each side)	37	37	37
Length of track on ground	2145 mm/84.4"	2145 mm/84.4"	2145 mm/84.4"
Gauge	1549 mm/61"	1549 mm/61"	1727 mm/68"
Ground contact area	1.96 m ² /3,038 in ²	2.18 m ² /3,376 in ²	2.83 m ² /4,389 in ²
Ground pressure	42.3 kPa/.42 bar/6.14 psi	38.5 kPa/.38 bar/5.58 psi	31.0 kPa/.31 bar/4.51 psi

The shoe options for the D5C provide several choices to suit any application. The standard shoe is the best for penetration and traction. The 508 mm/20° optional shoe when part of the work may be in soft underfoot conditions. And the LGP 660 mm/26° shoe for continual work in very soft underfoot conditions.

SPECIFICATIONS

ROPS

ROPS Canopy is required in U.S.A.

ROPS (Rollover Protection Structure) offered by Caterpillar for this machine meets ROPS criteria SAE J395, SAE J1040 APR88 and ISO 3471-1986. It also meets FOPS (Falling Object Protective Structure) criteria SAE J231 JAN81 and ISO 3449-1984

Cab

When properly installed and maintained, cab offered by Caterpillar when tested with doors and windows closed according to ANSI/SAE J1166 JUL 87, meets OSHA and MSHA requirements for operator sound exposure limits in effect at the time of manufacture.

(Not compatible with hand lever steer.)

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Hydraulic Controls

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's 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 (standard): Power Angle and Tilt bulldozer Four valve (optional): Power Angle and Tilt bulldozer and rear implement

Pump:

ump.	
Output @ 6895 kPa/69 bar/1000 psi	55 liters/min/
Introduction Inter-	14.5 gpm
RPM @ rated engine speed	2640
Relief valve setting17 225 kPa/17	2 bar/2500 psi
Drive (constant power)Geared from	n engine timing
	gear train

Control positions

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



Weight (approximate)

Standard LGP

lubricants and 10% fuel	6750 kg/	7180 kg
	14,850 lb	15,800 lb
0 0 0 1 1 1 1 1	14,000 10	10,000

Operating (includes coolant,		
lubricants; full fuel tank;		
operator; ROPS canopy;		
PAT dozer	8477 kg/	9000 kg

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Service Refill Capacities

	1.11	U.S.
SALES CONTRACTORS	Liters	Gallons
Fuel tank	167	44
Cooling system	20	5.3
Crankcase	12	3.2
Transmission:	28	7.4
Bevel gear case	15	4
Final drives (each) Standard	10	2.6
LGP	14	3.7
Hydraulic tank	57	15
Steering brake/clutch		
compartment (each)	28	7.4

SPECIFICATIONS



Caterpillar® Engine

Net flywheel power (SAE J1349 JAN90) @ 2400 RPM67.1 kW/90 HP

Gross power (SAE J1995 JAN90)

71 kW/95 HP

@ 2400 RPM ... (Kilowatts (kW) is the International System of Units equivalent of horsepower)

Net power at the flywheel of the machine engine is based on SAE J1349 JAN90 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 hJ/hg (18,390 Btullb) when used at 29.4°C/85°F and with a density of 838.9 g/L (7.001 lb/U.S. gal). Net power rating is adjusted for machine equipped with fan, air cleaner, water pump, fuel pump, muffler and lubricating oil pump. No derating is required up to 2300 m / 7500 ft. altitude .

These additional ratings also apply at 2400 RPM

	Net flywheel			Gross
	kW	HP	kW	HP
ISO 1585	67	90	72	96
ISO 3046-1	67	90	72	96
EEC 80/1269	67	90	72	96
DIN 70020	70	95 PS*	74	101 PS*

^{*} PS is metric horsepower.

Caterpillar four-stroke-cycle, 3204 turbocharged 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, adjustmentfree injection pumps and valves.

Cam-turned 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



Steering and Braking

(Braking system meets SAE J1026 JUN82 recommended practice.)

Oil-cooled, spring-actuated, hydraulically released, multiple-disc clutches and self-energizing brake band.

Two-pedal design standard with optional, dash-mounted hand-lever steering.

Mechanically activated parking brake can lock one or both tracks. Toggle switch on dash, in conjunction with foot pedal(s) depressed, activates parking brake.



Final Drive

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

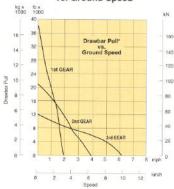
Transmission

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

Travel speeds at rated engine RPM:

	1st	2nd	3rd
Forward Km/h	3.6	6.3	10.0
MPH	2.2	3.9	6.2
Reverse Km/h	4.2	7.5	11.9
MPH	2.6	4.7	7.4

Drawbar Pull vs. Ground Speed



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

Undercarriage

Sealed and Lubricated Track. Three ring seals work in combination to retain lubricant, reducing pin and bushing wear. This reduces maintenance cost in most material conditions. Standard hydraulic track adjusters are protected under roller frame guards. Standard two-piece master link and segmented sprockets reduce maintenance cost and time. Box-section roller frame is non-oscillating to resist torsional stresses providing stability to the undercarriage. Idlers, carrier rollers and rollers are sealed for excellent wear life.

Serviceability Less time spent on maintenance, allows more time for production.

- Split master link simplifies track work.
- Segmented sprocket replace worn sprocket teeth without breaking track.
- Hinged doors allow easy access for routine maintenance and fast removal and installation.
- Grouped service points mean less time spent on maintenance.
- Convenient, spin-on fluid filters vertically mounted for reduced oil spillage.
- Fast, easy adjustment of standard, oil-cooled brakes. Adjuster conveniently located under operator seat.

Total Customer Support

Support that continues long after the initial sale.

- Parts availability Most Cat parts are immediately available off the shelf. Dealer parts availability is backed by Cat's computercontrolled, emergency search system.
- Service capability —Whether in the dealer's fully equipped shop or in the field, you'll get trained service people using the latest technology and tools.
- 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, costeffective uptime.
- Literature support easy-to-use operation and maintenance guide helps you get the full value out of your equipment investment.



Operator's Station

Comfort and convenience designed into the control station for an efficient and productive operator.

- Two steering control choices...two-pedal design is standard and optional hand levers are available to meet individual operator needs.
- Decelerator pedal allows the operator to control engine speed while freeing hands for transmission and dozer controls.
- Single-lever dozer control puts all blade functions on one control for improved efficiency. Two lever control is also available.
- Large adjustable armrests and suspension seat provide increased operator comfort.
- Standard gauge package includes fuel, coolant temperature, engine oil pressure and transmission oil temperature gauges.
- Optional cab with sound suppression improves operator environment.
- Excellent visibility for optimum operator performance and comfort.
- Walk-through operator compartment provides easy entry and exit.



Two pedal steer with decelerator



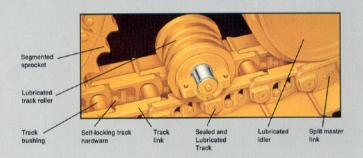
Instrument panel with gauge cluster



Contour suspension seat with adjustable armrests

Undercarriage Caterpillar undercarriage is designed with quality built in for long wear life.

- Box-section track roller frames resist bending and twisting for excellent structural integrity and roller frame alignment,
- Sealed and Lubricated Track eliminates internal pin and bushing wear for longer undercarriage life.
- **■** Undercarriage Components: links, pins bushings, rollers, sprockets, track shoes common with larger 10,886 kg/24,000 lb vehicles. Field proven in various high production applications.
- D5C undercarriage features have become the industry standard with Sealed and Lubricated Track, Lifetime Lubricated idlers and track rollers, split master link and self-locking track hardware. Several shoe options are available to match customer needs (508 mm/ 20" shoe option for lower PSI and increase stability).



Low Ground Pressure

Undercarriage designed for more track surface area on the ground and reduced ground pressure.

- Low Ground Pressure (LGP) undercarriage is designed to work in sloppy conditions and improve finish dozing and sloping capabilities.
- Wide track shoes, long track roller frame and wide track gauge combine to increase track contact area, reduce ground pressure for high flotation and excellent stability.
- End track guiding guards keep track aligned and prevent slipping or throwing track in mud and sideslope work. Full-length guards are available for severe side-slope applications.
- Caterpillar LGP track shoes. Single-grouser shoes, made from heat-treated cast steel, 660 mm/26", are standard.

Cat® Dozer Dozer built for ease of operation and productivity.

- Standard single-lever dozer control actuates raise, lower, tilt and angle functions. Two-lever control optional.
- Matched hydraulic valves and improved hydraulic control reduce lever effort and improve modulation and control.
- Powerful hydraulics provide excellent down force, digging power and blade load control.
- Power Angle and Tilt blade versatility is designed for all types of work from finish grading to production dozing.
- Power Angle and Tilt blade is standard with mechanical pitch adjustment. The blade pitch angle can be manually adjusted, 4° back/2° forward.



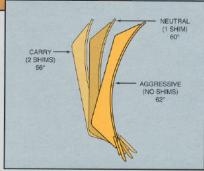
 Lubrication points are located in critical areas where abrasive wear could affect the dozer service life.

 Large, box-section C-frame and four reinforcement cells (box sections) in the blade provide maximum durability.



Adjustable dozer

- Carry position 56° maximum material retention for carry and backfill, less aggressive blade penetration.
- Neutral position 60° multiple application, general purpose dozing.
- Aggressive position 62° maximum blade penetration for work in hard materials.



The Competitive Edge

Performance

- Balanced weight with increased track on ground.
- Precise, well-modulated dozer controls.
- Versatile Power Angle and Tilt blade with adjustable pitch 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 reduced 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.
- · Comfortable contour suspension seat.

Total Customer Support System

- Parts availability most Cat parts on dealer's shelf when you need them — computer-controlled, emergency search system backup.
- Service capability dealer's shop or fast field service — trained service people — latest tools 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.
- Literature Support easy-to-use operation and maintenance manuals help you get the maximum value out of your equipment.
- 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 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 D5C to your special application.

