



D3C SERIES II

TRACK-TYPE TRACTOR

- **Power Angling and Tilt Blade** — large capacity, improved hydraulics and box-section durability for aggressive dozer performance. Manually adjustable pitch to meet changing applications or materials.
- **Durable undercarriage** — large component size for improved wear life. Sealed and Lubricated Track is standard, eliminating internal pin and bushing wear.
- **Transmission** — Caterpillar planetary power shift transmission and torque converter for fast speed and directional changes under load.
- **Operator's compartment** — designed to maximize operator comfort and productivity, excellent visibility, single- or dual-lever dozer control, new dash with fuel gauge, lever- or pedal-steer options, new seat with adjustable arm rest.
- **Total Customer Support System** — Support that continues long after the initial sale.

Cat 3204 NA diesel engine

Gross power 57 kW/76 HP
Flywheel power 52 kW/70 HP

Operating weight

Standard machine 7001 kg/15,435 lb
LGP arrangement 7788 kg/17,170 lb

Blade capacity

Standard machine 1.26 m³/1.65 yd³
LGP arrangement 1.27 m³/1.67 yd³

Featured machines may include additional equipment applicable only for special applications. See your authorized Caterpillar dealer for available options.



FEATURES

Power Train Components designed to give performance and reliability.

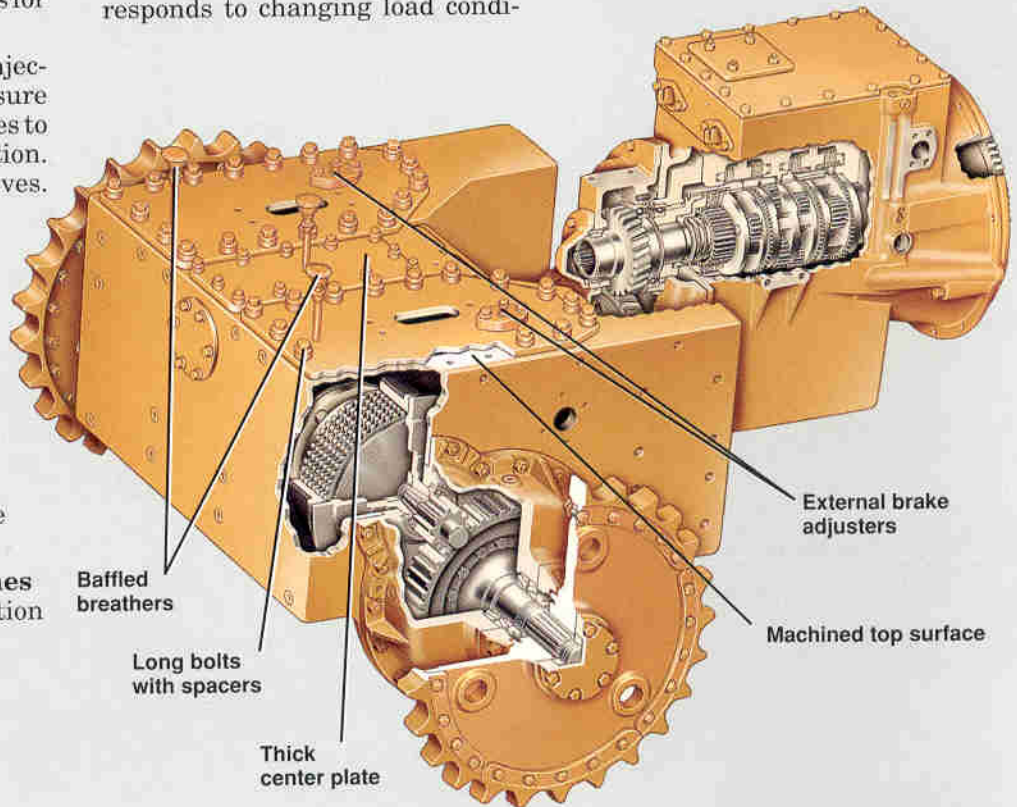
Cat 3204 Engine

- **Large displacement** results in lower pressures in the cylinders for longer engine life.
- **Scroll fuel system** — Cat injection system utilizes high pressure and specialized injection nozzles to provide efficient fuel combustion. Adjustment free pump and valves.

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. The converter responds to changing load conditions for reduced shifting, while cushioning the drive train from shock loads.



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

- **Standard single-lever dozer control** actuates raise, lower and tilt angles. Two-lever control optional.
- **Matched hydraulic valves** and improved hydraulic control reduces lever effort and improves 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 changed manually, 4° back / 2° forward, by the operator.



- **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.

Undercarriage

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

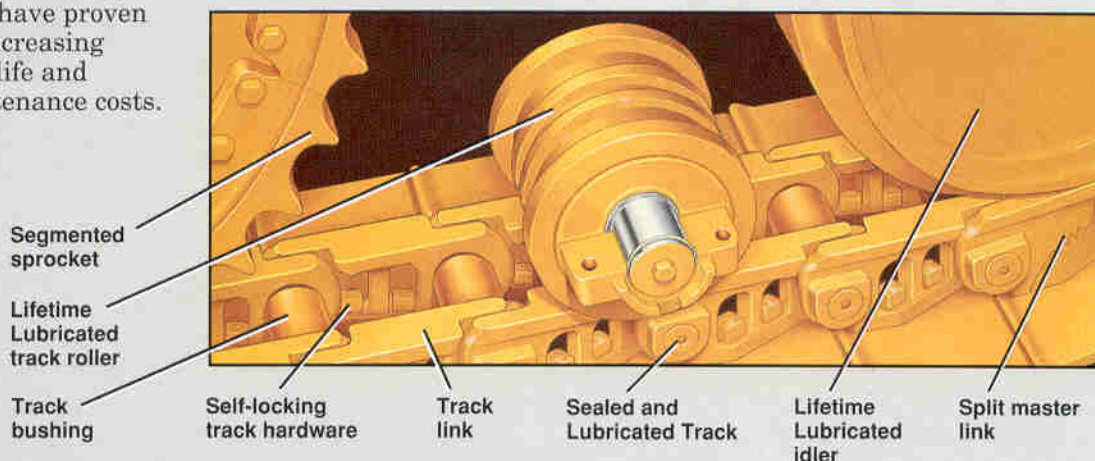
- **Box-section track roller frames** resist bending and twisting for excellent structural integrity and roller frame alignment.
- **Sealed and Lubricated Track** eliminates internal pin and bushing wear for longer undercarriage life.
- **C-Series undercarriage** improvements have proven successful in increasing undercarriage life and reducing maintenance costs.

In extremely abrasive and high impact conditions, the machine benefits from:

- Larger links.
- Added bushing material and hardened depth.
- Increased hardened depth on idler.
- Segmented sprockets.

- Replaceable end guiding wear strips.

- **D3C 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.



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 wider 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 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", are standard.



- Self-cleaning shoes, 635 mm/25", available for improved performance in cohesive material and reduced build-up between shoes.

FEATURES

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 optional suspension seat provide increased operator comfort.
- **Excellent visibility** for optimum operator performance and comfort.



- **Standard gauge package** includes fuel, coolant temperature, engine oil pressure and transmission oil temperature gauges.
- **Optional cab with sound suppression** improves operator environment.
- **Walk-through operator compartment** provides easy entry and exit.



Serviceability

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

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



Total Customer Support

Support that continues long after the initial sale.

- **There's strength** in numbers with over 570 Cat dealer stores in North America interconnected with each other and Caterpillar through powerful computer systems.
 - Many North American Cat dealers can locate and trade new machine inventory with each other to quickly satisfy a customer's need.
 - Downtime is reduced by having service articles and important repair recommendations from Caterpillar on line at most North American Cat dealerships.
- **The Dealer Used Equipment System (DUES)** links participating Cat dealers together in a nationwide network.
- Cat dealers can list and locate any available used equipment and attachments almost anywhere within North America and Europe.
- Dealers can advertise and sell their customer's used equipment on consignment nationwide.
- **Parts availability** — Most Cat parts are immediately available off the shelf. Dealer parts availability is backed 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 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** and remanufactured parts for quick repairs — low-cost components assure maximum, cost-effective uptime.
- **Literature support** — Easy-to-use operation and maintenance guide helps you get the full value out of your equipment investment.

SPECIFICATIONS



Caterpillar Engine

Gross power (PS) @ 2400 RPM 57 kW/**76 HP**
 Flywheel power (PS) @ 2400 RPM 52 kW/**70 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 JUN85 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 2300 m / 7500 ft. altitude.

These additional ratings also apply at 2400 RPM

	kW	HP
ISO 1585	52	70
ISO 3046-1	57	76
EEC 80/1269	52	70
DIN 6271/1 (Gross)	57	76
DIN 6271/1 (Flywheel)	52	70

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-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.

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



Steering and Braking

(Braking system meets SAE J1026 JUN82 recommended practice.)

Spring-actuated, hydraulically released, multiple-disc dry clutches and self-energizing brake band. Optional oil-cooled steering clutches and brakes are available.

Series II two-pedal design allows operator to depress both pedals at the same time to brake both tracks together.

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, one reverse or 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 speeds at rated engine RPM:

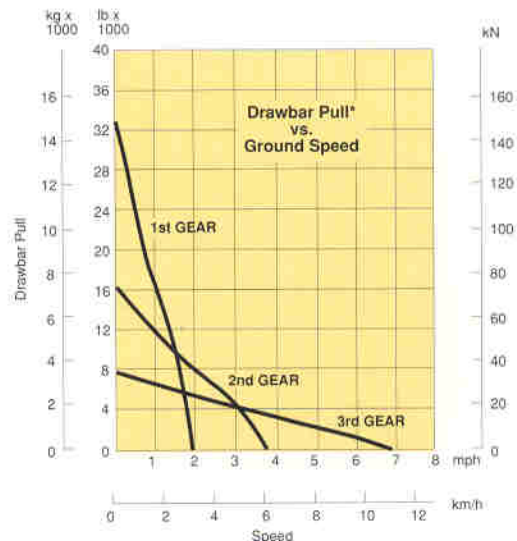
Three forward, one reverse transmission

	1st	2nd	3rd
Forward Km/h	3.1	5.6	11.4
MPH.	1.9	3.5	7.1
Reverse Km/h	—	5.1	—
MPH.	—	3.2	—

Three forward, three reverse transmission

	1st	2nd	3rd
Forward Km/h	3.1	5.9	10.7
MPH.	1.9	3.7	6.7
Reverse Km/h	3.3	6.3	11.4
MPH.	2.0	3.9	7.1

Drawbar Pull vs. Ground Speed



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



Sealed and Lubricated Track

Sealed and Lubricated Track surrounds the track pin with lubricant to eliminate internal pin and bushing wear. Lubricant is held in place by a sealing arrangement consisting of a polyurethane seal, a rubber load ring and a thrust ring. Additional lubricant is contained in a reservoir drilled into the track pin. Extends undercarriage maintenance intervals and reduces costs. Hydraulic track adjusters and two-piece master link standard.



Track Roller Frame

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

	Standard	LGP
Number of rollers (each side)	5	5
Number of shoes (each side)	37	39
Width of standard shoe (single grouser)	356 mm/14"	635 mm/25"
optional shoe	406 mm/16"	—
optional shoe (self cleaning)	—	635 mm/25"
Length of track on ground	1902 mm/74.9"	2055 mm/80.9"
Gauge	1420 mm/56"	1650 mm/65"
Ground contact area with standard shoe		
356 mm/14"	1.35 m ² /2097 in ²	2.6 m ² /4051 in ²
optional shoes		
406 mm/16"	1.54 m ² /2394 in ²	—
635 mm/25"	—	2.61 m ² /4045 in ²
Ground pressure standard shoe		
356 mm/14"	49.7 kPa/.50 bar/7.2 psi	28.3 kPa/.28bar/4.1 psi
optional shoes		
406 mm/16"	44.44 kPa/.44 bar/6.45 psi	—
635 mm/25"	—	29.2 kPa/.29bar/4.24 psi



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.)



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 (attachment) 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 (constant power) ... 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 cylinder Raise, hold, lower



Weight (approximate)

	Standard	LGP
Shipping weight with coolant, lubricants and 10% fuel	5566 kg/ 12,270 lb*	6168 kg/ 13,598 lb**
Operating (includes coolant, lubricants; full fuel tank; operator; ROPS canopy; PAT dozer; three-speed forward, three reverse transmission; 356 mm/14" track	7001 kg/ 15,435 lb*	7788 kg/ 17,170 lb**

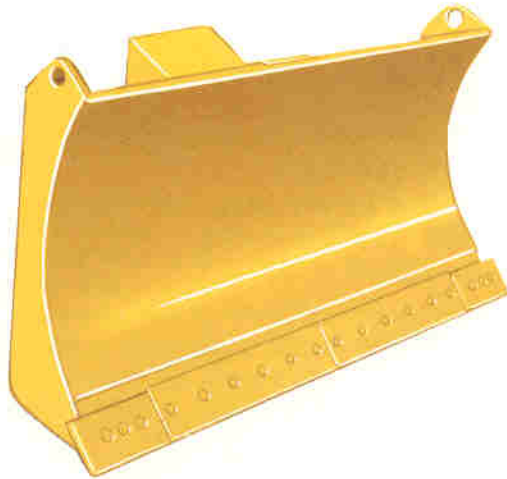
* With three-speed forward/one reverse transmission, deduct 166 kg/**367 lb**.

With direct drive transmission, deduct 44 kg/97 lb** from LGP weight.



Service Refill Capacities

	Liters	U.S. Gallons
Fuel tank	121	31.9
Cooling system	20	5.3
Crankcase	12	3.2
Transmission: 3 forward, 1 reverse	19	5
3 forward, 3 reverse	28	7.4
Bevel gear case	15	4
Final drives (each) Standard	8	2.1
LGP	12	3.2
Hydraulic tank	57	15



Power Angling and Tilt 3P Dozer makes it easy to grade, backfill ditches, landscape or spread fill. You can angle it 25° left or right. Tilt it 8-1/2°. A single lever actuates raise, lower and tilt angles of the dozer blade. 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.

Manually adjustable pitch — 4° back, 2° forward.

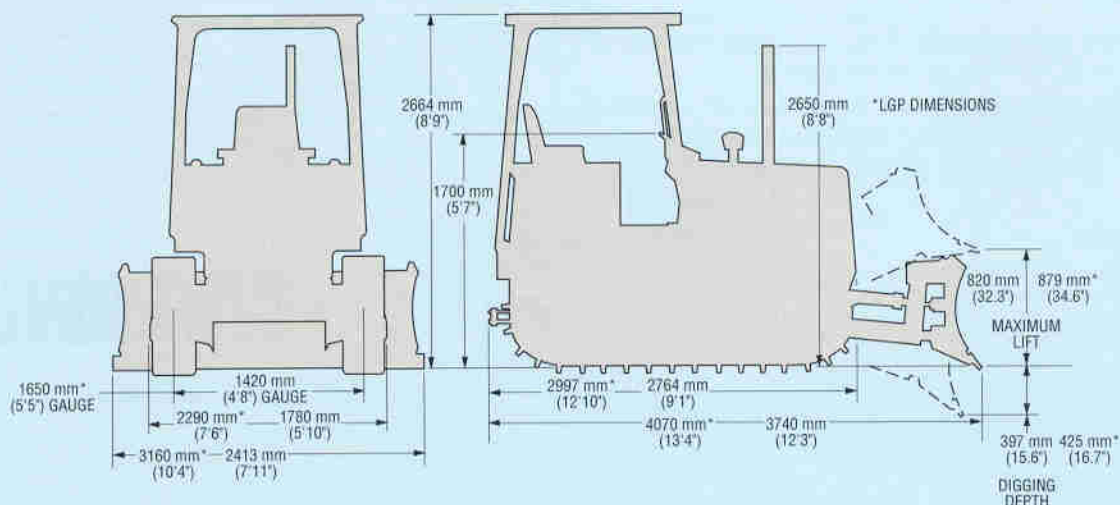
Bulldozer Specifications

	Blade	Capacity		Overall Length (tractor w/bulldozer)		Overall Width (tractor w/bulldozer)		Height	Digging Depth	Lift Height	Maximum Tilt	Weight (without hydraulic controls)			
		m ³	yd ³	mm	ft	mm	ft					mm	in	mm	in
Standard (PAT)	Straight	1.26	1.65	3740	12'3"	2413	7'11"	840	33"	397	15.6"	820	32.3"	1074	2368
	Angled 25°			4230	13'10"	2240	7'4"								
LGP (PAT)	Straight	1.27	1.67	4070	13'4"	3160	10'4"	749	29.5"	425	16.7"	879	34.6"	1213	2669
	Angled 25°			4700	15'5"	2850	9'4"								
LGP (Straight)	Straight	1.20	1.57	3890	12'9"	2800	9'2"	739	29.1"	351	13.8"	792	31.2"	1089	2400
	Tilt														



Dimensions (approximate)

Ground clearance 294 mm/11.6" Width without blade (standard) 1780 mm/5'10"
 For shipping dimensions, add 51 mm/2" vertical Width without blade (LGP) 2290 mm/7'6"
 dimensions to allow for grouser height.





Standard Equipment

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

Air cleaner, dry-type.	Muffler.	Standard, 37-section.
Alternator, 40-amp.	Pedal steering, two.	LGP, 39-section.
Blower fan.	Pull hook, front.	Shoes, single grouser:
Crankcase guard.	Radiator grill, hinged.	Standard, 356 mm/14" (37)
Decelerator.	Precleaner.	LGP, 635 mm/25" (39)
Direct-electric, 12-volt starting.	Retrieval hitch.	Transmission, power shift, with
Engine enclosure.	Static seat, with seat belt.	choice of:
Gauges, four dash mounted,	Segmented sprocket.	Three speeds forward, one
including fuel.	Track:	reverse.
Horn.	Adjusters, hydraulic.	Three speeds forward, three
Hydraulic controls, 3 valves,	Roller frame, 5 roller (Standard).	reverse.
single lever dozer control.	Sealed and Lubricated, two-piece	Vandalism protection group.
Instrument panel lights.	master links.	
Lifetime Lubricated rollers and		
idlers.		



Optional equipment

(with approximate change in operating weight)

	Kg	Lb		Kg	Lb
Back up alarm, required in U.S.A. ..	2	4	Hydraulic arrangements:		
Battery, heavy-duty	2.3	5	4 valves (two lever dozer control) .	10	22
Bulldozers:			2 valves (LGP only)	9	-19
Power Angle and Tilt, inside			Lighting system — 2 front, 1 rear ..	9	20
mounted arms, 1.26 m ³ /1.65 yd ³ ,			Pump, fuel priming45	1
standard machine	1074	2368	Radiators:		
1.27 m ³ /1.67 yd ³ ,			High capacity, copper core	11	25
LGP machine	1213	2669	Rear power take-off drive	18	39
Power Tilt Straight, outside			Ripper (includes 3 teeth and		
mounted arms, 1.20 m ³ /1.57 yd ³ ,			hydraulic cylinder)	250	551
LGP machine	1089	2400	Ripper teeth, additional, each	4.5	10
Cab, ROPS and mounting, includes			Rock deflector	14	30
air pressurizer, air filter, heater,			Screens (for use with ROPS canopy):		
front and rear windshield wipers			Rear	50	110
and washers, rearview mirror,			Side	67	148
key locks and 75 amp alternator ..	622	1372	Steering, hand clutch/brake (dry)....	6	14
Canopy, ROPS and mounting,			(oil cooled) ...	86	190
includes rearview mirror	377	831	Steering, oil-cooled brake/clutch	82	180
Counterweights:			Suspension seat	2.3	5
Front mounted	454	1000	Sweep, logging	71	156
Idler mounted	136	300	Tracks, pair, Sealed and Lubricated		
Drawbar, swinging	59	130	37-section:		
Engine coolant heater	1.4	3	406 mm/16" single grouser	59	130
Ether starting aid	2.7	6	39-section (LGP):		
Guards:			635 mm/25" self-cleaning	202	446
Radiator, hinged, heavy-duty	7	16	Winch, model 53	433	955
Track guiding, center	65	143			

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 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 System

- **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 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.
- **Exchange components for quick repairs** — choose remanufactured products or rebuilt components for maximum availability and lower costs.
- **Literature Support** — easy-to-use operation and maintenance guide helps 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 D3C Series II to your special application.

The Caterpillar logo consists of the word "CATERPILLAR" in a bold, sans-serif font. A yellow triangle is positioned under the letter "A". A registered trademark symbol (®) is located at the top right of the word.