



CATERPILLAR

D6C
LGP Tractor*

*Low Ground Pressure Tractor



Summary of features

- **Low ground contact pressure** . . . 4.2 psi (29 kPa) with bulldozer . . . 3.5 psi (24.1 kPa) without bulldozer.
- **High ground clearance** of 12.21" (310 mm).
- **140 flywheel horsepower (104 kW)** Cat Model 3306 Diesel Engine with individual adjustment-free injection pumps and valves.
- **Cat power shift transmission** with 3 speeds forward, 3 reverse . . . single-lever shift control.
- **Sealed Track** . . . with hardened-steel discs that form a metal-to-metal seal to hold out abrasive particles . . . extends pin and bushing life.
- **Exclusive Cat LGP shoes** (optional) self-clean in sticky material.



Caterpillar engine

Flywheel horsepower @ 2000 RPM 140
Kilowatts 104
(Kilowatt (kW) is the International System of Units equivalent of horsepower.)

The net power at the flywheel of the vehicle engine operating under SAE standard ambient temperature and baro-

metric conditions, 85° F. (29° C) and 29.38" Hg (99 kPa), using 35 API gravity fuel oil at 60° F. (15.6° C). Vehicle engine equipment includes blower fan, air cleaner, water pump, lubricating oil pump, fuel pump, muffler and alternator. Engine will maintain specified flywheel power up to 10,000 ft. (3000 m) altitude.

Cat 4-stroke-cycle diesel Model 3306 with six cylinders, 4.75" (121 mm) bore, 6" (152 mm) stroke and 638 cu. in. (10.5 litres) displacement.

Turbocharged. Precombustion chamber fuel system with individual adjustment-free injection pumps and valves. Valve rotators provide even heat distribution.

Cam-ground and tapered aluminum alloy pistons with 3-ring design. Steel-backed aluminum bearings, Hi-Electro hardened crankshaft journals. Pressure lubrication with full-flow filtered oil. Dry-type air cleaner with primary and safety elements.

Uses economical No. 2 fuel oil (ASTM Specification D396), often called No. 2 furnace or burner oil, with a minimum cetane rating of 35. Expensive premium quality diesel fuel can be used but is not required.

Two 24-volt direct electric starting systems — standard or optional low temperature. Glow plugs for preheating precombustion chambers.

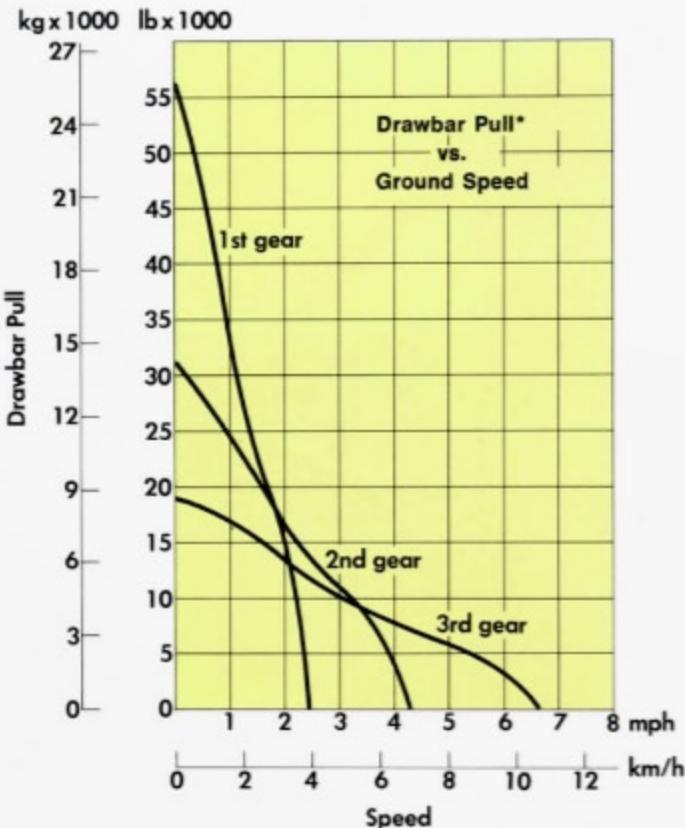
1 kPa = 0.01 bar.

**transmission**

Planetary-type power shift with 15" (381 mm) diameter, high-torque-capacity oil clutches. Special modulation system permits unrestricted speed and direction changes under full load.

Single-stage torque converter with output torque divider combines smoothness of power shift and economy of direct drive. Connected to transmission by double universal joint for unit removal. Oil-to-air heat exchanger cools the torque converter oil.

Gear	Forward Speed		Reverse Speed	
	MPH	(km/h)	MPH	(km/h)
1	0.2-5	(4.0)	0.3-0	(4.8)
2	0.4-3	(6.9)	0.5-2	(8.4)
3	0.6-7	(10.8)	0.8-0	(12.9)



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

**steering**

Hydraulically actuated, multiple-disc oil clutches require no adjustment. Oil-cooled contracting band brakes. Clutch and brake assemblies can be serviced as a unit.

**final drives**

Crown-shaved, double-reduction final drive gears. Duo-Cone® floating ring seals. Sprockets with bolt-on, replaceable rim segments.

**track roller frame**

Reinforced box-section construction. Outside-mounted carrier rollers. Lifetime-Lubricated rollers and idlers. Adjustable two-position idler. Number of rollers (each side) 7. Oscillation at front idler 20.9" (530 mm)



Sealed Track, with hardened-steel discs that form a metal-to-metal seal, extends pin and bushing life and reduces wear on links and rollers. Center and end track-guiding guards and hydraulic track adjusters are standard.

Number of shoes (each side) 41. Width of standard shoe 36" (910 mm). Length of track on ground 113.38" (2880 mm). Ground contact area 8,163 sq. in. (52 670 cm²)

**ground contact pressure**

With bulldozer and hydraulic control 4.2 psi (29 kPa). Without bulldozer 3.5 psi (24.1 kPa)

**service refill capacities**

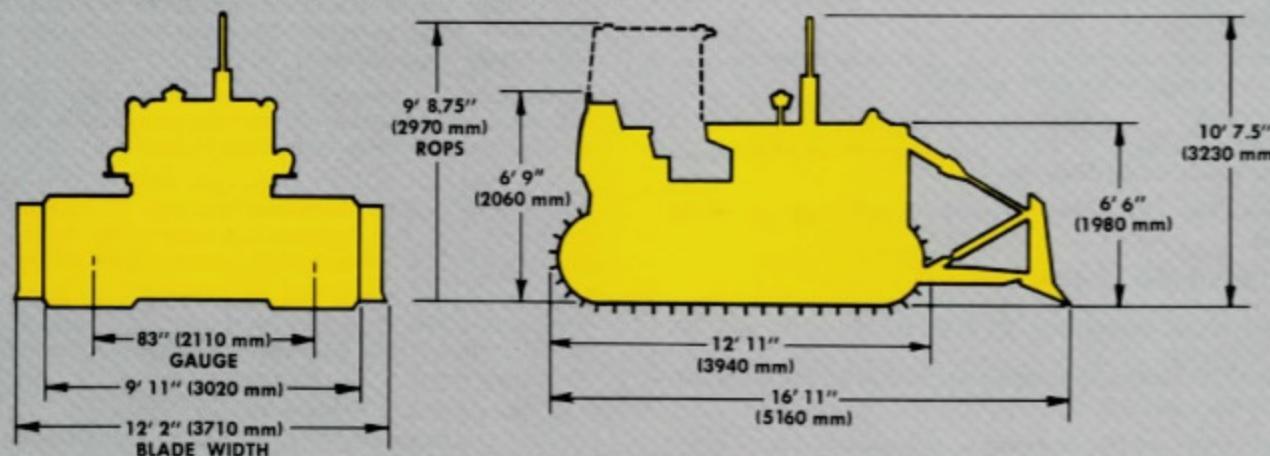
	U.S. Gallons	(litres)
Fuel tank	78	(295)
Cooling system	10.25	(38.8)
Engine crankcase	7.25	(27.4)
Transmission, bevel gear and steering clutches	24.5	(93)
Final drives (each)	5.33	(20.2)

**weight (approximate)**

Shipping (includes coolant, lubricants, 5% fuel and ROPS mounting) 30,580 lb. (13 870 kg). With bulldozer and hydraulic control 35,980 lb. (16 320 kg)

**dimensions**

Ground clearance from ground face of shoe (per SAE J894) 12.21" (310 mm)





standard equipment

24-volt direct electric starting. 19-amp alternator. Backup alarm. Blower fan. Fuel priming pump. Muffler. Decelerator. Power shift transmission. 7-roller track frame. Hydraulic track adjusters. Crank-case guard. Center and end track-guiding guards. Front pull hook. Retrieval hitch. ROPS mounting. Seat belt. 36" (910 mm) grouser tracks (41-section).



optional equipment

(with approximate installed weights)

Air conditioner	296 lb. (134 kg)
Compressor only	54 lb. (24 kg)
Alternator, 50-amp	10 lb. (5 kg)
Cab, ROPS	1,300 lb. (590 kg)
Canopy, ROPS	1,090 lb. (494 kg)
Defroster, fan	6 lb. (3 kg)
Drawbar, rigid	176 lb. (80 kg)
Engine enclosure	187 lb. (85 kg)
Fan, reversible	15 lb. (7 kg)
Guards:	
Crankcase, extreme service	225 lb. (102 kg)
Precleaner	9 lb. (4 kg)
Radiator, hinged:	
Heavy duty	57 lb. (26 kg)
Normal service	10 lb. (5 kg)
Track roller	267 lb. (121 kg)
Heaters:	
Cab	55 lb. (25 kg)
Engine coolant	3 lb. (1 kg)
Hour meter, electric	5 lb. (2 kg)
Lighting system, 4 lights	28 lb. (13 kg)
Precleaner with prescreener	15 lb. (7 kg)
Rain cap	2 lb. (1 kg)
Seat, shock dampening	57 lb. (26 kg)
Tool kit	15 lb. (7 kg)
Track, pair, 36.5" (930 mm)	
self-cleaning shoes	204 lb. (93 kg)
Vandalism protection:	
Instrument panel guard	4 lb. (2 kg)
Cap locks for:	
Fuel tank	2 lb. (1 kg)
Hydraulic tank	3 lb. (1 kg)
Oil filler	2 lb. (1 kg)
Radiator	8 lb. (4 kg)
Windshield wiper	4 lb. (2 kg)



bulldozer

(Complete 6S Bulldozer consists of blade, push arms, braces, trunnions, lift cylinders and brackets.)

Blade:

Length	12'2" (3710 mm)
Height	40.75" (1040 mm)
Ground clearance	42.4" (1080 mm)
Maximum drop below ground	21.6" (550 mm)
Lift speed (at rated engine RPM)	1.69 fps (0.52 m/sec)
Construction	Multiple box section
Moldboard material	Heat-treated steel

Cutting edges (3), reversible:

Length (2)	25.88" (660 mm)
(1)	63.75" (1620 mm)
Width x thickness	8" x 0.75" (203 x 19 mm)

End bits (2), rolled section:

Length	14.74" (379 mm)
Width x thickness	8" x 0.75" (203 x 19 mm)

Lift cylinders (2), double acting:

Bore x stroke	4" x 41.19" (102 x 1050 mm)
Installed weight, approximate	3,380 lb. (1530 kg)



hydraulic arrangement

(Complete hydraulic control consists of pump, tank, valves, lines and linkage.)

Control function:

Single valve	Bulldozer
Double valve	Bulldozer and tilt cylinder

Pump:

Output @ 1000 psi (6900 kPa)	39 gpm (148 litres /min)
RPM @ rated engine speed	1900

Relief valve setting	2250 psi (15 520 kPa)
Drive (constant power)	Geared from auxiliary drive

Control valve, spool type, positions:

Internal valve (bulldozer)	Raise, hold, lower, float
Internal valve (tilt cylinder)	Raise, hold, lower

Reservoir:

Mounting	Dash
Filter	Full flow

Tank capacity (total system)	19.25 U.S. gallons (73 litres)
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Installed weight, approximate:

Single valve	403 lb. (183 kg)
Double valve	467 lb. (212 kg)