

D7G Series CAT
2
Track-Type Bulldozer



Engine

Engine model Cat® 3306 DITA

Net power – Caterpillar 150 kW 202 hp

- Engine power is measured at 2,000 rpm
- Net flywheel power is the output power at the flywheel after the engine has been configured with fan, air filter, water pump, and alternator.
- Capable of maintaining its rated power up to an elevation of 4,100 m (13,450 ft)

Weight

Operating weight 20,580 kg 45,381 lb

- Operating weight includes: oil, coolant, two-valve hydraulic system, 560 mm (22 in) track shoes, 7S blade, cab without roll-over protection system, air-conditioner, full tank of fuel, and operator with body weight of 80 kg (176 lb).

D7G SERIES 2 Track-Type Bulldozer

Engine

The Cat® 3306 DITA engine makes use of direct fuel-injection technology to control fuel consumption, and it allows operation at lower rpm's, thus reducing stress and extending service life.

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Power Train

The power train designed and manufactured by Caterpillar provides the D7G SERIES 2 with good adaptability and optimal performance and reliability. **Page 5**

Undercarriage

The design of the Caterpillar® undercarriage system ensures optimal mechanical balance, superior performance, and outstanding parts service life. **Page 6**

Especially designed for the toughest work environments. The D7G SERIES 2's design enables it to produce under all kinds of work conditions. It has the reliability and durability in moving materials that you expect from Cat® machines.



Work Tools

Work tools and digging tools give the machine the flexibility to complete different tasks and to achieve optimal performance. **Page 7**

Operator's Station

The design of the operator station takes into account optimal comfort and maximum productivity. **Page 8**

Convenient Maintenance and Comprehensive Customer Support Service

The most durable machines provided by the most trustworthy distributors. World-class product support services. The trained experts of the Cat® distributor network can help you achieve smooth operation of your entire vehicle fleet and maximum returns on your equipment investment. **Page 10**

√ New feature

Engine

The Cat® 3306 DITA engine makes use of direct fuel-injection technology to control fuel consumption and allows operation at lower rpm's, thus reducing stress and extending service life.



Aluminum Pistons The 3306 makes use of oval, tapered cast aluminum alloy pistons fitted with three piston rings. These pistons reduce friction, lower heat build up, and provide outstanding engine oil control. The crankshaft journal has undergone hardening treatment, and the aluminum bearings have steel backing. High fatigue-strength aluminum alloy bearing surfaces not only can withstand high-impact loads during crankshaft revolutions, but also can adapt to normal crankshaft journal wear and tear.

Air Valves Air valves have hardened cobalt-chromium-tungsten alloy surfaces, and air valve hardness is increased with solid aluminum-steel alloy, which helps to extend service life.

Rebuildable The 3306 can be rebuilt. Thus, they have very long service lives.

3306 Diesel Engine. The Caterpillar® 3306 engine is a 6-cylinder, 4-stroke diesel engine. Large displacement permits lower engine rpm, which means less stress and longer engine service life.

Direct Fuel Injection. The 3306 controls fuel consumption through direct injection technology and thus maintains good productivity per unit of fuel. Optimal weight-horsepower ratio can minimize cycle times and thus provide both a greater moldboard load capacity and shorter load times.

Injection nozzles will not become plugged and do not require adjustment.

Power Train

The power train designed and manufactured by Caterpillar provides the D7G SERIES 2 with good adaptability and optimal performance and reliability.



Torque Divider. The torque divider configuration is exclusively Caterpillar's. During lower engine loads, for example when backfilling ditches or spreading materials, it not only has direct-drive efficiency, but also is able to achieve large torque multiplication for loads.



Power-Shift Gearbox.

Three forward gears and three reverse gears. Uses large-diameter, high-capacity, oil-cooled clutch.

- The modulator-regulator system can quickly change speeds and direction.

- The oil-water cooler boosts cooling capability.
- Forced oil flow lubricates and cools clutch assembly. Can extend clutch service life.

Undercarriage

The design of the Caterpillar undercarriage system ensures optimal mechanical balance, superior performance, and outstanding parts service life.



Roller Frame. Track roller frames are strengthened box-section structures. Each side is fitted with 6 life-time lubricated track rollers, and there are top rollers mounted on the outside, two on each side.

Rollers and Guide Wheels. These have symmetrical Duo-Cone seals, with a long seal service life, that prevent loss of lubricating oil and keep dust from penetrating. Rings with toric surfaces can maintain performance over a broad temperature range. Rollers and guide wheels both are easy to service and can be rebuilt for greater value. An arch-shaped cover firmly connects the rollers and guide wheels to the suspension. All guide wheels, track rollers, and top rollers have life-time lubrication and do not require periodic maintenance.

Shoes. Track shoes have various specifications for different working conditions.

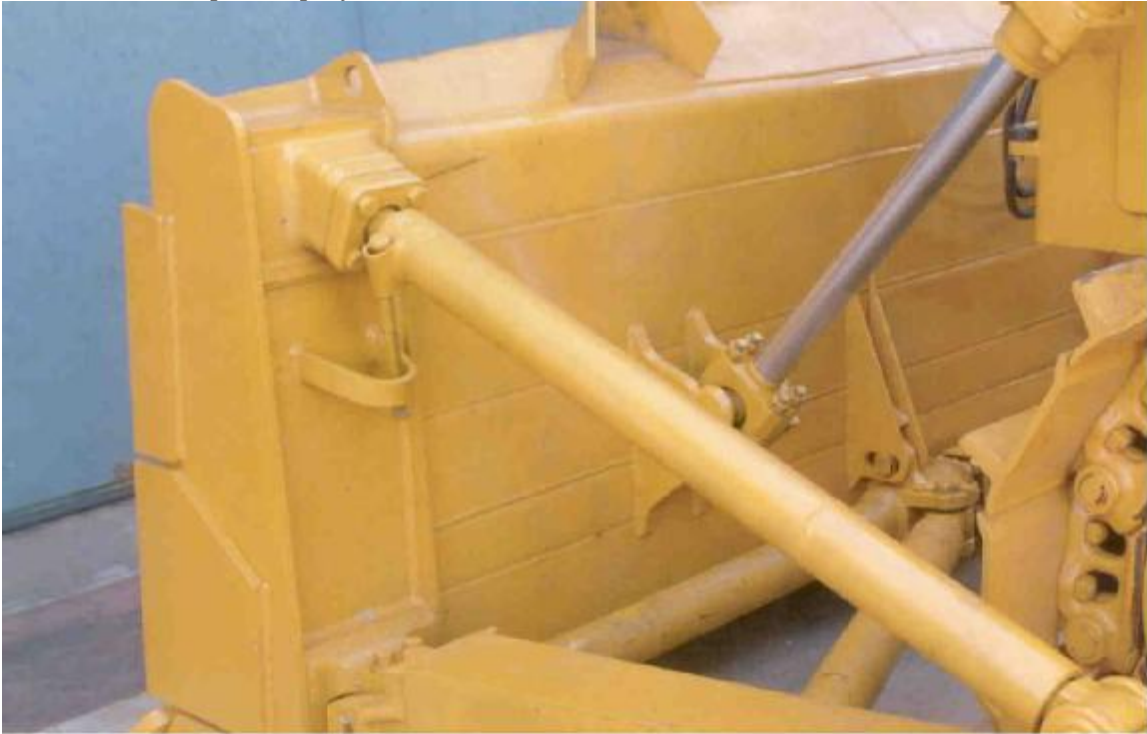
Guards. Front and rear guards are standard equipment.



Sealed and Lubricated Tracks. There is a thin layer of lubricating oil between the pins and the pin bushings, and the lubricating oil is maintained by polyurethane sealing elements. It can reduce wear and tear on the internal pin bushings and pins. This extends the service life of the undercarriage as a system.

Work Tools

Work tools and digging tools give the machine the flexibility to complete different tasks and to achieve optimal performance.



Dozer Blades. All dozer blades have a solid, box-section design to prevent twisting and deformation. Dozer blades are made from Caterpillar DH-2™ steel, which has extremely high tensile strength and can cope with the toughest work conditions. A heavy-load scraper board structure, hardened mounting bolts, and blades and edge blades increase strength and durability.

Straight Blades. Straight blades can handle all sorts of materials, including heavy-load materials. With high-cutting-capacity blade kW/m (hp/ft), they can achieve tremendous penetrating power.

Angled Blades. Angled blades can be set in at vertical and can also be set at 25 degrees from either side. They thus constitute a multifunctional choice.

SU Blades. SU Blades are suited to formidable tasks in which bucket capacity is more important than penetrating power. The blade wing design ensures that the dozer blade has outstanding load maintenance capability and penetrating power during materials compacting and trimming work.

Multi-Shank Rippers. Multi-shank rippers can quickly penetrate hard materials and thoroughly break them up. Can be used on a variety of materials.

Blades and Edge Blades. Blades are made from DH-2 steel. Edge blades are made from DH-3™ steel. They can extend service life when hard materials are being handled.

Operator's Station

The design of the operator's station takes into account optimal comfort and maximum productivity.





Steering Control Device. The device for steering and operating the gearbox is located to the left of the operator. Operation is comfortable and easy.

Dozer Blade Control Device. The dozer blade control device is located to the right of the operator.



Direct Control Area.

The work area of the operator makes use of a direct design that provides a comfortable operating environment and easy-to-reach controls.



Seat. The comfortable suspension seat can be adjusted backwards and forwards for greater operator comfort. Armrests provide comfort for all-weather operation. 76 mm (3 in) wide seat belt is standard equipment.



Monitoring System. The machine monitoring system helps to track the following machine systems:

- Fuel level
- Coolant temperature
- Gearbox/torque converter temperature
- Hours of operation
- Air filter maintenance indicator
- Engine oil pressure and alternator are monitored by means of an alarm indicator and an audible alarm system.



Brake Pedal. Single brake pedal simplifies operation by braking tracks on both sides.

Air Conditioning. Optional air conditioning comes with sensibly located vents and can provide a comfortable working environment under various weather conditions.

Cab. Optional cab has a pressurized seal design to keep dust from entering. Three-speed ventilation fans are standard equipment.

Convenient Maintenance and Comprehensive Customer Support Service

The most durable machines provided by the most trustworthy distributors. World-class product support services. The trained experts of the Cat® distributor network help you achieve smooth operation of your entire vehicle fleet and maximum returns on your equipment investment.



Ease of Maintenance.

Downtime required for maintenance and repair is minimized. There are large openings on both sides of the machine for easy access to the main maintenance and repair points.

Machine Selection. Before making a purchase, you should make detailed comparisons of the machines you intend to purchase. How long do the parts last? How much are preventive maintenance costs? How much will the actual cost from lost production be? Caterpillar dealers will provide detailed answers to these very important questions.

Purchase. Consider available sources of funding and daily operating costs. At this point, you should also pay attention to dealer maintenance services that might be included in the machine cost to reduce equipment operating costs in the long run.

Product Support Service. Prepare an effective maintenance plan before you purchase equipment. When buying a machine, please select the particular maintenance services, such as customer tracking service (CTS), S.O.S. analysis, technical analysis, and assured maintenance contract, from the dealer's broad range of maintenance services so that your machine will have the longest service life and optimal performance.

Parts Plan. The parts counters of Caterpillar dealers provide almost all parts. Caterpillar dealers reduce downtime by locating in-stock parts through a global computer network. Please ask your Caterpillar dealer about exchange procedures for important parts. This can shorten maintenance time and lower costs.

Rebuilt Parts. Authentic rebuilt Caterpillar parts save you money. While saving 40%-70% on costs, you will also enjoy the same warranty and reliability of a new part. Parts can be provided for the power train, the engine, and the hydraulic system.

Operation. Improvement in operating skills can bring economic benefits. Caterpillar dealers provide training videos, written materials, and other programs to help you improve productivity.

Engine

Engine model	Cat® 3306 DITA	
Flywheel power	150 kW	202 hp
Maximum flywheel power	164 kW	220 hp
Net power – Caterpillar	150 kW	202 hp
Net power – ISO 9249	150 kW	202 hp
Net power – SAE J1349	150 kW	202 hp
Net power – EU 80/1269	150 kW	202 hp
Bore	121 mm	4.75 in
Stroke	152 mm	6 in
Displacement	10.5 L	638 in ³

- Engine power is measured at 2,000 rpm.
- Net flywheel power is the output power at the flywheel after the engine has been configured with fan, air filter, water pump, and alternator.
- Capable of maintaining its rated power up to an elevation of 4,100 m (13,450 ft)

Gearbox

Forward gear 1	3.9 km/h	2.3 mph
Forward gear 2	6.9 km/h	4.3 mph
Forward gear 3	9.9 km/h	6.2 mph
Reverse gear 1	4.5 km/h	2.8 mph
Reverse gear 2	8.4 km/h	5.2 mph
Reverse gear 3	12.7 km/h	7.9 mph

Service Refill Capacity

Fuel tank	415 L	110 gal
Cooling system	45.4 L	11.2 gal
Engine crankcase	27 L	7.3 gal
Final drive (each side)	34 L	9 gal
Hydraulic tank	102 L	27 gal
Gearbox, bevel gear housing, steering clutch housing, and torque converter	70 L	18.5 gal

Weight

Operating weight	20,580 kg	45,381 lb
Shipping weight	15,650 kg	34,510 lb

- Operating weight includes: oil, coolant, two-valve hydraulic system, 560 mm (22 in) track shoes, 7S blade, cab without ROPS, air-conditioner, full tank of fuel, and operator with body weight of 80 kg (176 lb).
- Shipping weight includes: Lubricating oil, coolant, one-valve hydraulic control system, 610 mm (24 in) track shoes, and 5% diesel.

Undercarriage

Type of track shoe	Medium load (single-grouser)	
Track shoe width	560 mm	22 in
Optional track shoe width	510 mm	20 in
Number of track shoes, each side	38	
Grouser height	70 mm	2.7 in
Track on ground	2,720 mm	107 in
Area of ground contact	3.05 m ²	4,708 in ²

Dozer Blades

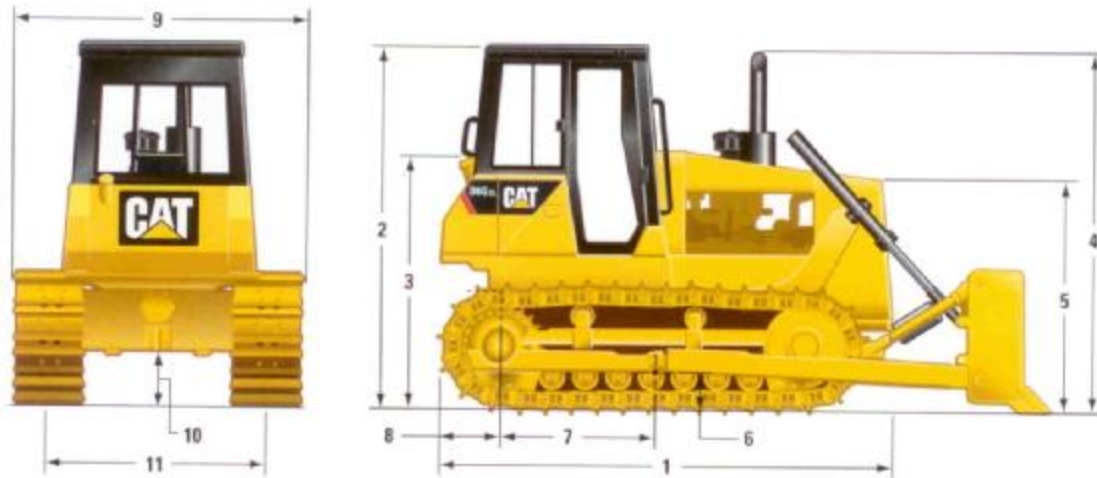
SU blade capacity	5.75 m ³	7.53 yd ³
S blade capacity	4.2 m ³	5.5 yd ³
A blade capacity	2.9 m ³	3.8 yd ³

Ripper

Type	Fixed parallelogram	
Number of shank pockets	3	
Overall beam width	2,210 mm	87 in
Maximum lift height (teeth down, secured with pins in base holes)	490 mm	19 in
Maximum rip depth	510 mm	20 in

Dimensions

All dimensions are approximate.



1 Total length	4,198 mm	165.3 in
2 Height to top of cab without ROPS	3,294 mm	129.7 in
3 Height to top of fuel tank	2,334 mm	91.9 in
4 Height to top of exhaust pipe	2,942 mm	115.8 in
5 Height to top of radiator	2,120 mm	83.5 in
6 Height to bulldozer trunnion	481 mm	18.9 in
7 Distance from sprocket to bulldozer trunnion	1,124 mm	44.2 in
8 Distance from sprocket to rear of bulldozer	360 mm	14.2 in
9 Total width (including 560 mm (22 in) standard shoes)	2,560 mm	100.8 in
10 Ground clearance (SAE J894)	349 mm	13.7 in
11 Track gauge	1,981 mm	78.0 in

If the following work tools are added, then add to the total length (1) the following measurements:

Angle blade	1,300 mm	51.2 in
Straight tilt blade	1,090 mm	42.9 in
No. 7 ripper	1,650 mm	65.0 in
PA57G winch	973 mm	38.3 in
SU blade	1,270 mm	50.0 in

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Standard Equipment

Standard equipment may vary. For detailed information, please consult a Caterpillar dealer.

Electrical equipment

- 35-amp alternator
- High-CCA current-large capacity batteries—2
- Clock
- Horn

Operator environment

- Deceleration device
- Gauges
 - Fuel level
 - Gearbox/torque converter lubricant temperature
 - Engine coolant temperature
 - Amperemeter (light)
 - Engine oil pressure (light and sound)
- Manual throttle device
- Suspension seat—vinyl covered
- Seat belt
- Single brake pedal

Drive train

- Dual deceleration final drive
- Cat® 3306 DITA diesel engine, equipped with 24-volt starter
- Fuel injection pump—Manual
- Fuel/water separator
- Air filter, with pre-filter
- Ventilation fan
- Muffler (elbow)
- Power-shift gearbox (3 forward, 3 reverse)

Undercarriage

- End track guide guards
- 6-roller track roller frame
- 560 mm (22 in) single-grouser seal and lubricated track
- Hydraulic track regulator
- Balance beam
- Toothed drive sprocket

Other standard equipment

- Crankcase cover
- Hinged radiator cover
- 415 L (110 gal) fuel tank
- Front traction device and rear-towing device
- Cap locks (fuel tank, hydraulic tank, fuel exhaust cap, seat frame)

Optional Equipment

Optional equipment may vary. For detailed information, please consult your Caterpillar dealer.

Lighting assembly

- Two headlights

- Two tail lights

Reverse alarm

Strengthened water-tank radiator with punched-hole protective cover

Routine engine cover

engine cover

Protection devices

- Instrument panel protection device (used on ceiling)

- Track guide guards (center)

- Full-length track roller frame

- Crankcase for extreme use conditions

- Fuel tank

- Hydraulic tank

- Heavy hinged radiator

Operator canopy without ROPS

Cab without ROPS

Prefilter with filter mesh

610 mm (24 in) single-grouser sealed-lubrication track

Angle blade

Straight tilt blade

SU tilt blade

Hydraulic system

- One valve

- Two valves

- Three valves

Multi-shank ripper

Steel drawbar

Heater

Air conditioner

Ether supplementary start device

Heavy start motor