Engine

Engine model       Cat® 3306T
Net power – Caterpillar  119 kW  160 hp
- Engine power is measured at 1,900 rpm
- Net flywheel power is the output power at the flywheel after the engine has been configured with fan, air filter, water pump, oil pump, fuel pump, and AC generator.
- Capable of maintaining its rated power up to an elevation of 2,300 m (7,500 ft)

Weight

Operating weight 16,880 kg 37,219 lb
- Operating weight includes: oil, coolant, two-valve hydraulic system, 610 mm (24 in) track shoes, 6S blade, cab without roll-over protection system, air-conditioner/heater, full tank of fuel, and operator with body weight of 80 kg (176 lb).
D6G Series 2 XL Track-Type Bulldozer

Engine
The Cat® 3306 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. Page 4

Power Train
The power train designed and manufactured by Caterpillar provides the D6G 2 XL 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 D6G Series 2 XL has a wide range of uses and has great power, solid and durable parts, and outstanding balance performance. It is suited to tough working conditions. When moving materials, it has the reliability and durability that you expect from Caterpillar® machines.
**Work Tools** √
Work tools and digging tools enable the machine to complete different tasks with greater flexibility and to achieve optimal performance. Page 7

**Operator 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 help you achieve smooth operation of your vehicle fleet and maximum returns on your equipment investment. Page 10
**Engine**

*The Cat® 3306 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.

**Can Be Rebuilt** 3306 engines can be rebuilt. Thus, they have long and reliable 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 fuel injection and thus maintains good productivity per unit of fuel. Optimal weight-horsepower ratio can minimize cycle times and thus provide both a greater blade 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 D6G 2 XL 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 modulating/regulating 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 7 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 can have life-time lubrication. They are easy to maintain and can be rebuilt for greater value. An arch-shaped cover firmly connects the rollers and guide wheels to the suspension.

All guide wheels, rollers, and top rollers have lifetime lubrication. There is no need for periodic maintenance.

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

Fenders. Front and rear fenders 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 system as a system.
**Work Tools**

Work tools and digging tools enable the machine to complete different tasks with greater flexibility 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. Heavy-load scraper boards, 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. Equipped with high-cutting-capacity blades, kW/m (hp/ft) [sic], 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 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. Blade edges are made from DH-3™ steel. They can extend service when hard materials are being handled.
Operator Station
The design of the operator 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.

Bulldozer Control Device. The bulldozer 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 AC generator 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 positive-pressure 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 vehicle fleet and maximum returns on your equipment investment.

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.

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.

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 have almost all the 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 money, you will also enjoy the same warranty and reliability of a new part, and thus you will reduce operating costs even further. 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

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine model</td>
<td>Cat® 3306T</td>
<td></td>
</tr>
<tr>
<td>Flywheel power</td>
<td>119 kW</td>
<td>160 hp</td>
</tr>
<tr>
<td>Maximum flywheel power</td>
<td>131 kW</td>
<td>175 hp</td>
</tr>
<tr>
<td>Net power – Caterpillar</td>
<td>119 kW</td>
<td>160 hp</td>
</tr>
<tr>
<td>Net power – ISO 9249</td>
<td>119 kW</td>
<td>160 hp</td>
</tr>
<tr>
<td>Net power – SAE J1349</td>
<td>119 kW</td>
<td>160 hp</td>
</tr>
<tr>
<td>Net power – EU 80/1269</td>
<td>119 kW</td>
<td>160 hp</td>
</tr>
<tr>
<td>Bore</td>
<td>121 mm</td>
<td>4.75 in</td>
</tr>
<tr>
<td>Stroke</td>
<td>152 mm</td>
<td>6 in</td>
</tr>
<tr>
<td>Displacement</td>
<td>10.5 l</td>
<td>638 in³</td>
</tr>
</tbody>
</table>

- Engine power is measured at 1,900 rpm.
- Net flywheel power is the output power at the flywheel after the engine has been configured with fan, air filter, water pump, oil pump, fuel pump, and AC generator.
- Capable of maintaining its rated power up to an elevation of 2,300 m (7,500 ft)
- When operating under standard air conditions of 25 °C (77 °F) and dry barometric pressure of 99 kPa (29.32 in Hg), the diesel that was used had a specific gravity of 35º API at 30 ºC (86 ºF).

### Gearbox

<table>
<thead>
<tr>
<th>Gear Type</th>
<th>Speed (km/h)</th>
<th>Speed (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward gear 1</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>Forward gear 2</td>
<td>6.9</td>
<td>4.3</td>
</tr>
<tr>
<td>Forward gear 3</td>
<td>10.8</td>
<td>6.7</td>
</tr>
<tr>
<td>Reverse gear 1</td>
<td>4.8</td>
<td>3</td>
</tr>
<tr>
<td>Reverse gear 2</td>
<td>8.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Reverse gear 3</td>
<td>12.9</td>
<td>8</td>
</tr>
</tbody>
</table>

- Planetary transmission using 381 mm (15 in) diameter, high-torque-capacity, oil-immersion-type clutch.
- The specialized modulator-regulator valve can quickly change speeds and direction.
- Single-stage torque converter is matched with an output torque divider that combines smooth operation with economy.
- The torque converter lubricating oil is cooled by the engine system.

### Service Refill Capacity

<table>
<thead>
<tr>
<th>Component</th>
<th>Capacity (L)</th>
<th>Capacity (gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel tank</td>
<td>320</td>
<td>84</td>
</tr>
<tr>
<td>Cooling system</td>
<td>39</td>
<td>10.3</td>
</tr>
<tr>
<td>Engine crankcase</td>
<td>27</td>
<td>7.3</td>
</tr>
<tr>
<td>Drive train</td>
<td>93</td>
<td>24.5</td>
</tr>
<tr>
<td>Final drive (each side)</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>Hydraulic tank</td>
<td>47</td>
<td>12.4</td>
</tr>
</tbody>
</table>

### Weight

<table>
<thead>
<tr>
<th>Type</th>
<th>Weight (kg)</th>
<th>Weight (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating weight</td>
<td>16,880</td>
<td>37,219</td>
</tr>
<tr>
<td>Shipping weight</td>
<td>13,840</td>
<td>30,519</td>
</tr>
</tbody>
</table>
- Operating weight includes: oil, coolant, two-valve hydraulic control system, 610 mm (24 in) track shoes, 6S blade, cab without ROPS, air-conditioner/heater, full tank of fuel, AC, 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.

### Dimensions

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground clearance</td>
<td>310 mm</td>
<td>12.2 in</td>
</tr>
<tr>
<td>Width not including blade</td>
<td>2,440 mm</td>
<td>96.1 in</td>
</tr>
<tr>
<td>Total length of basic bulldozer (without towing frame)</td>
<td>3,937 mm</td>
<td>155 ft</td>
</tr>
</tbody>
</table>

### Undercarriage

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of track shoe</td>
<td>Medium load (single-grouser)</td>
<td></td>
</tr>
<tr>
<td>Track shoe width</td>
<td>560 mm</td>
<td>22 in</td>
</tr>
<tr>
<td>Optional track shoe width</td>
<td>610 mm</td>
<td>24 in</td>
</tr>
<tr>
<td>Number of track shoes, each side</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Grouser height</td>
<td>61 mm</td>
<td>2.4 in</td>
</tr>
<tr>
<td>Track gauge</td>
<td>1,880 mm</td>
<td>74 in</td>
</tr>
<tr>
<td>Track on ground</td>
<td>2,667 mm</td>
<td>105 in</td>
</tr>
<tr>
<td>Track rollers, each side</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Top rollers, each side</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

### Blade

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SU blade width</td>
<td>3.8 mm</td>
<td>4 ft 12 in</td>
</tr>
<tr>
<td>S blade capacity</td>
<td>3.27 m³</td>
<td>4.28 yd³</td>
</tr>
<tr>
<td>A blade capacity</td>
<td>2.4 m³</td>
<td>3.14 yd³</td>
</tr>
</tbody>
</table>

*Blade capacity measured according to method recommended by ISO 9246.

### Ripper

<table>
<thead>
<tr>
<th></th>
<th>Fixed parallelogram</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of shank pockets</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Overall beam width</td>
<td>2,128 mm</td>
<td>83.8 in</td>
</tr>
<tr>
<td>Maximum rip depth</td>
<td>530 mm</td>
<td>21 in</td>
</tr>
<tr>
<td>Single-shank weight</td>
<td>1,309 kg</td>
<td>2,880 lb</td>
</tr>
<tr>
<td>Each additional shank</td>
<td>64 kg</td>
<td>141 lb</td>
</tr>
</tbody>
</table>
**Dimensions**

All dimensions are approximate.

<table>
<thead>
<tr>
<th></th>
<th>Total length</th>
<th>Height to top of cab without ROPS</th>
<th>Height to top of fuel tank</th>
<th>Height to top of exhaust pipe</th>
<th>Height to top of radiator</th>
<th>Height to bulldozer trunnion</th>
<th>Distance from tail-end of bulldozer to bulldozer trunnion</th>
<th>Rear clearance of bulldozer rear</th>
<th>Total width (including 560 mm (22 in) standard shoes)</th>
<th>Ground clearance (SAE J894)</th>
<th>Track gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3,937 mm</td>
<td>3,057 mm</td>
<td>2,088 mm</td>
<td>3,014 mm</td>
<td>1,915 mm</td>
<td>375 mm</td>
<td>1,520 mm</td>
<td>360 mm</td>
<td>2,440 mm</td>
<td>310 mm</td>
<td>1,880 mm</td>
</tr>
<tr>
<td>2</td>
<td>155.0 in</td>
<td>120.4 in</td>
<td>82.2 in</td>
<td>118.7 in</td>
<td>75.4 in</td>
<td>14.8 in</td>
<td>59.8 in</td>
<td>14.2 in</td>
<td>96.1 in</td>
<td>12.2 in</td>
<td>74.0 in</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Tool</th>
<th>Length (mm)</th>
<th>Length (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angle blade</td>
<td>1,212</td>
<td>47.7</td>
</tr>
<tr>
<td>Straight tilt blade</td>
<td>1,133</td>
<td>46.6</td>
</tr>
<tr>
<td>SU tilt blade</td>
<td>1,359</td>
<td>53.5</td>
</tr>
<tr>
<td>No. 6 ripper</td>
<td>1,070</td>
<td>42.1</td>
</tr>
</tbody>
</table>
**Standard Equipment**

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

Electrical equipment
- 35-amp AC generator
- Maintenance-free batteries—2
- Clock

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

Drive train
- Dual deceleration final drive
- Cat® 3306 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
- 7-roller track roller frame
- 560 mm (22 in) single-grouser seal and lubricated track
  - (D6G Series 2 XL)
- Hydraulic track regulator
- Balance beam
- Toothed drive sprocket

Other standard equipment
- Crankcase cover for extreme use conditions
- Hinged radiator cover
- 320 liter (84 gal) fuel tank
- Front traction device and rear-towing device
- Cap locks (fuel tank, hydraulic tank, fuel exhaust cap)
**Optional Equipment**

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

- Lighting assembly
  - Two headlights
  - Two tail lights
- Horn
- Reverse alarm
- Strengthened water-tank radiator with punched-hole protective cover
- Routine engine cover
- Enhanced engine cover
- Protection devices
  - Instrument panel protection device (used on ceiling)
  - Track guide guards (center)
  - Full-length track roller frame
  - Fuel tank
- 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 towing frame
- Heater
- Air conditioner
D6G Series 2 XL Track-Type Bulldozer

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Machines shown in the drawings might include auxiliary equipment.
Please contact a Caterpillar dealer regarding available options.

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