# D6R
## Track-Type Tractor

CAT®


## Standard, XL, XR & LGP

| Cat® 3306 turbocharged diesel engine at flywheel power | | |
|---|---|---|
| Standard | 123 kW | 165 HP |
| XL/XR arrangements | 130 kW | 175HP |
| LGP arrangement | 138 kW | 185 HP |
| **Operating weight (power shift model)** | | |
| Standard arrangement | 18 000 kg | 39,700 lb |
| XL arrangement | 19 000 kg | 41,900 lb |
| XR arrangement | 18 300 kg | 40,400 lb |
| LGP arrangement | 20 500 kg | 45,200 lb |

| Blade capacity, up to: | | |
|---|---|---|
| Straight | 3.89 $m^3$ | 5.09 $yd^3$ |
| Semi-Universal | 5.61 $m^3$ | 7.34 $yd^3$ |
| Angle (std/XR) | 3.18 $m^3$ | 4.16 $yd^3$ |
| Angle (XL) | 3.93 $m^3$ | 5.14 $yd^3$ |
| Straight (LGP) | 3.70 $m^3$ | 4.83 $yd^3$ |

# D6R Track-Type Tractor

*The D6R's power, response and control deliver more production at lower cost-per-yard.*

**Power Train**
The reliable Caterpillar® 3306 turbocharged diesel engine has large displacement and high torque rise. A planetary power shift transmission permits fast speed and direction changes. **pg.4**

**Torque Divider**
An exclusive Caterpillar designed torque divider allows the engine to respond quickly to varying work loads. **pg. 5**

**Cooling System**
✔ *The Advanced Modular Cooling System (AMOCS)* combines a more efficient cooling system with easier servicing. AMOCS allows the machine to be operated in the most demanding environment. **pg. 5**

***Engineered for demanding work.*** *The D6R's durable construction is made for tough working conditions. It keeps material moving with the reliability and low operating costs you expect from Cat machines.*

### Undercarriage
The elevated sprocket moves the final drives above the work area, isolating them from ground impacts. The different undercarriage configuration allows you to match the tractor to the working conditions. **pg.6**

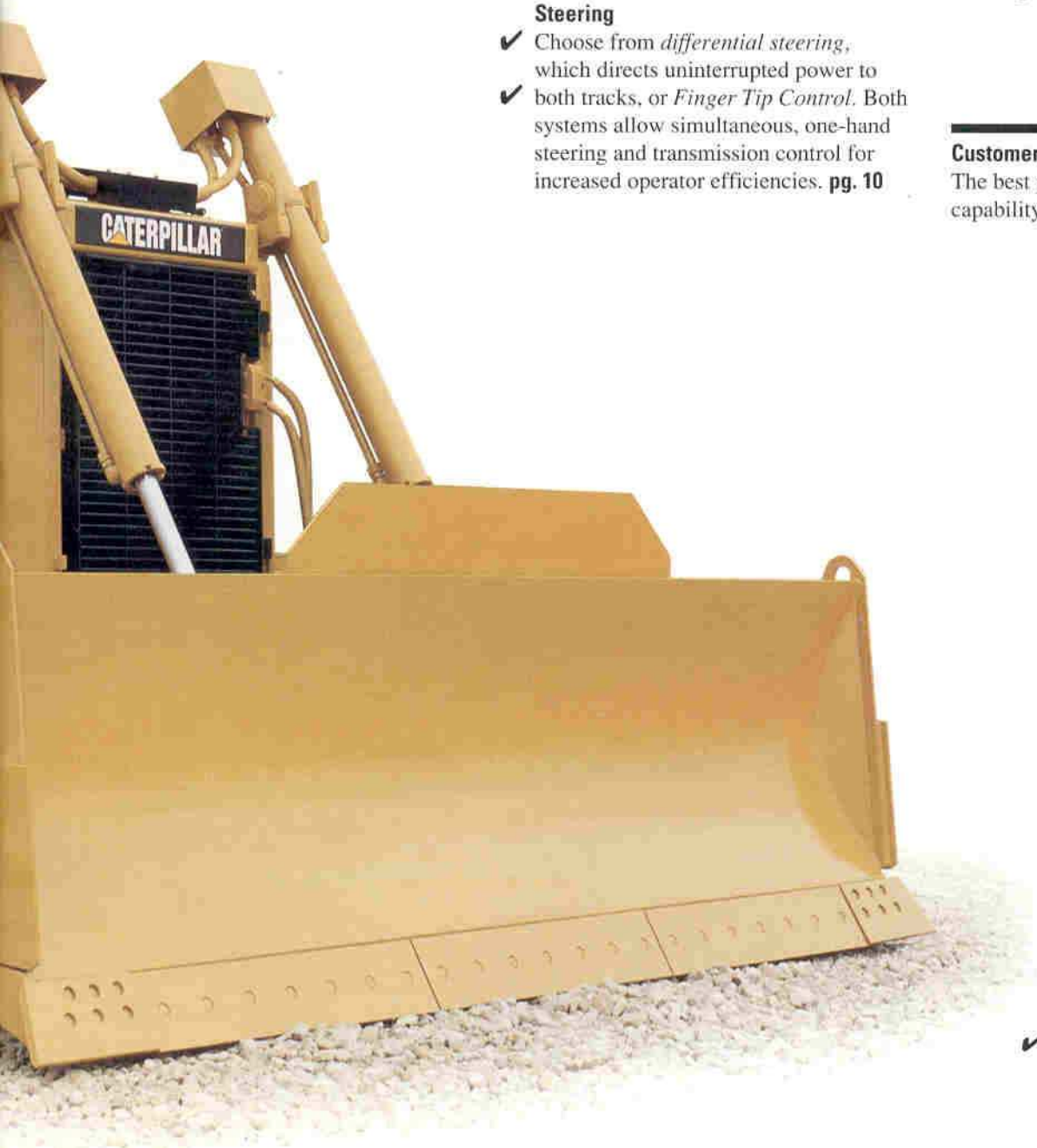
### Operator's Station
✔ The *comfortable operator's station* provides excellent viewing area to the blade and rear of the machine for maximum operator productivity. Controls are low-effort and easy to reach. Cat Contour Series Seat provides proper support and automotive comfort. The Caterpillar Monitoring System has easy-to-read gauges, which constantly inform the operator of key machine functions. **pg. 8-9**

### Steering
✔ Choose from *differential steering*,
✔ which directs uninterrupted power to both tracks, or *Finger Tip Control.* Both systems allow simultaneous, one-hand steering and transmission control for increased operator efficiencies. **pg. 10**

### Work Tools
The variety of bulldozer blades, rippers and winches allow you to customize the D6R to match your specific application. **pg.11**

### Serviceability
Major modular components are designed for excellent serviceability and allow fast in-field component exchange. **pg.12**

### Customer Service
The best parts availability and service capability. **pg 12**




✔ *New feature*

# Power Train

*Reliable...durable...efficient!*

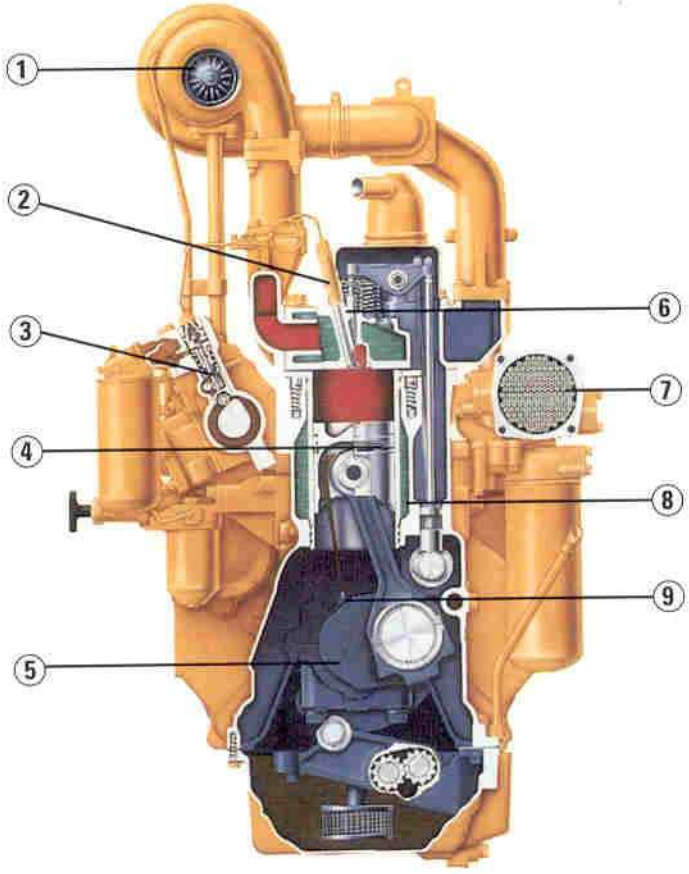
**Turbocharged 3306 diesel engine** delivers plenty of power for quick response, big loads.

**Large displacement,** high torque rise and low RPM rating for low stress, long life.

**High torque rise** offers superior lugging capabilities— keep moving through tough spots without downshifting.

**Direct fuel injection** precisely meters fuel for maximum productivity per unit of fuel.

**Good weight-to-horsepower ratio** — faster loading, bigger loads, shorter cycle times.




**1 Turbocharger**

**2 Nozzle assemblies**

**3 Cat fuel injection system**

**4 Aluminum alloy piston**

**5 Forged crankshaft**

**6 Valves (intake, exhaust)**

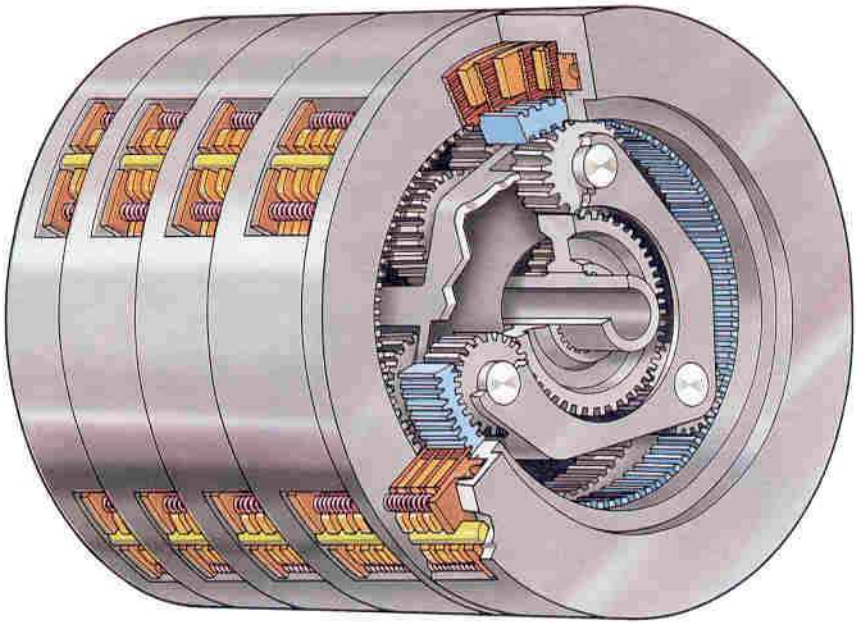
**7 Oil cooler**

**8 Cylinder, full-length, water-cooled**

**9 Cooling jets**

**Planetary Power Shift Transmission** has 3-speeds forward and 3-speeds reverse and utilizes large diameter, high-capacity, oil-cooled clutches.

- Modulation system permits fast speed and direction changes.
- Modular transmission and bevel gear slide into rear case for servicing ease, even with ripper installed.
- Oil-to-water cooler for maximum cooling capacity.
- Forced oil flow lubricates and cools clutch packs to provide maximum clutch life.



**Torque Divider.** A single-stage torque converter with output torque divider sends 70% of engine torque through the converter, 30% through a direct drive shaft for greater driveline efficiency and higher torque multiplication.

**The torque converter shields the driveline** from sudden torque shocks and vibration.

**1 Ring gear**

**2 Flywheel**

**3 Sun gear**

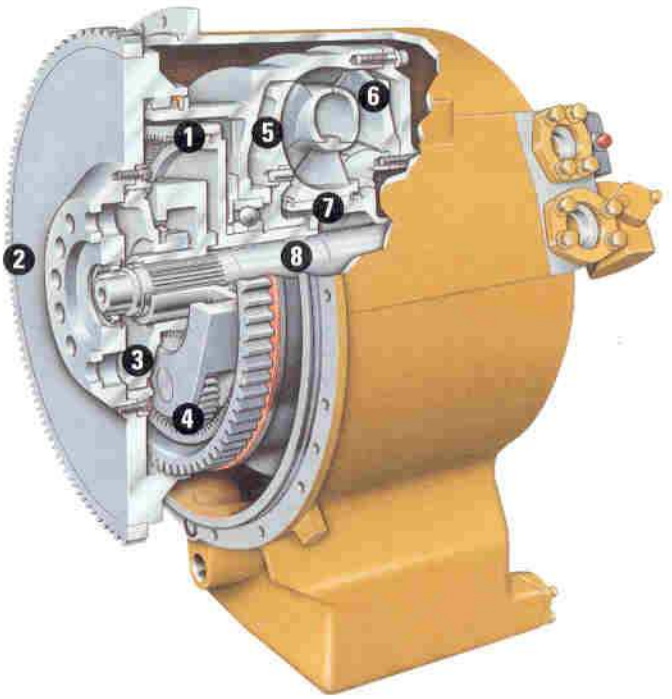
**4 Planet gear**

**5 Turbine**

**6 Impeller**

**7 Stator**

**8 Output shaft**




**Advanced Modular cooling system (AMOCS)** utilizes an exclusive two pass cooling system and increased cooling surface area to provide a more efficient heat transfer system than conventional systems.

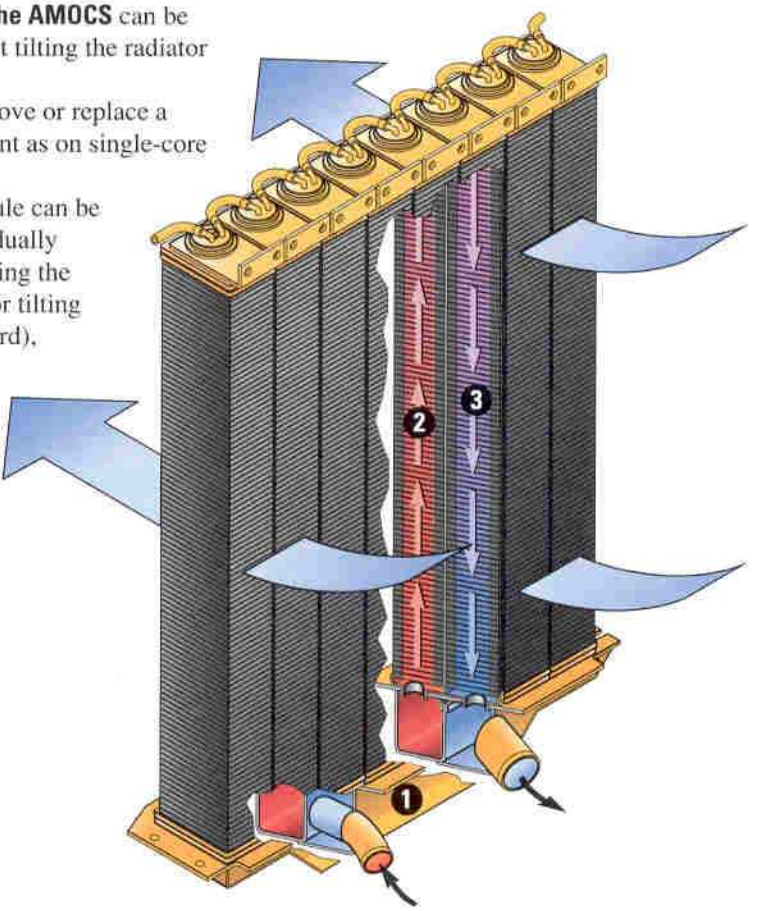
**Two pass cooling system** circulates coolant from the sectioned bottom tank (1) up through one side (2) of the cooling element and down through the other side (3) returning it to the bottom tank.

**The cooling elements** are individual core modules that are connected to a sectioned bottom tank. There is no top tank to remove.

- 9 steel fins per inch.
- Brass tube construction within each core.

**The servicing of the AMOCS** can be performed without tilting the radiator guard.

- No need to remove or replace a major component as on single-core radiators.
- Each core module can be replaced individually (without removing the entire radiator or tilting the radiator guard), saving considerable cost and repair time.



## Elevated Sprocket Undercarriage

*The Caterpillar elevated sprocket undercarriage arrangements allow optimized balance for the best possible performance in each application.*


**Final drives and associated power train components** raised above the work area — isolating them from ground-induced impact loads, as well as implement and roller frame alignment loads — extending power train component life.

**Sprocket position** keeps sprocket teeth, bushings and final drives away from the abrasive materials and moisture — resulting in longer final drive gear and seal life.

**High flange improved track rollers** (optional) combined with center or full length roller guard attachments greatly improve track guiding for demanding side slope or impact conditions.

**Rotating Bushing Track** (optional) is sealed and lubricated system which includes four track seals per joint, non-restrained floating bushings, longer track pins, redesigned track links (wider pin boss and bushing strap, and taller rail) and a unique pin retention system. Because the bushings rotate, relative motion between the bushings and the sprocket teeth is virtually eliminated. The minimal wear that does occur is evenly distributed around the bushings. Therefore, no bushing turn is required, and sprocket segment wear is dramatically reduced. In effect, RBT does an ongoing bushing turn as the machine works.

**Standard arrangement**

- A general purpose undercarriage that performs well in many applications with firm underfoot conditions.

**XL arrangement**

- Delivers unmatched performance in general dozing applications.
- More track to the front provides a balanced platform for superior traction, blade control and stability for finish grading.
- Carrier roller for improved fine dozing performance.

**XR arrangement**

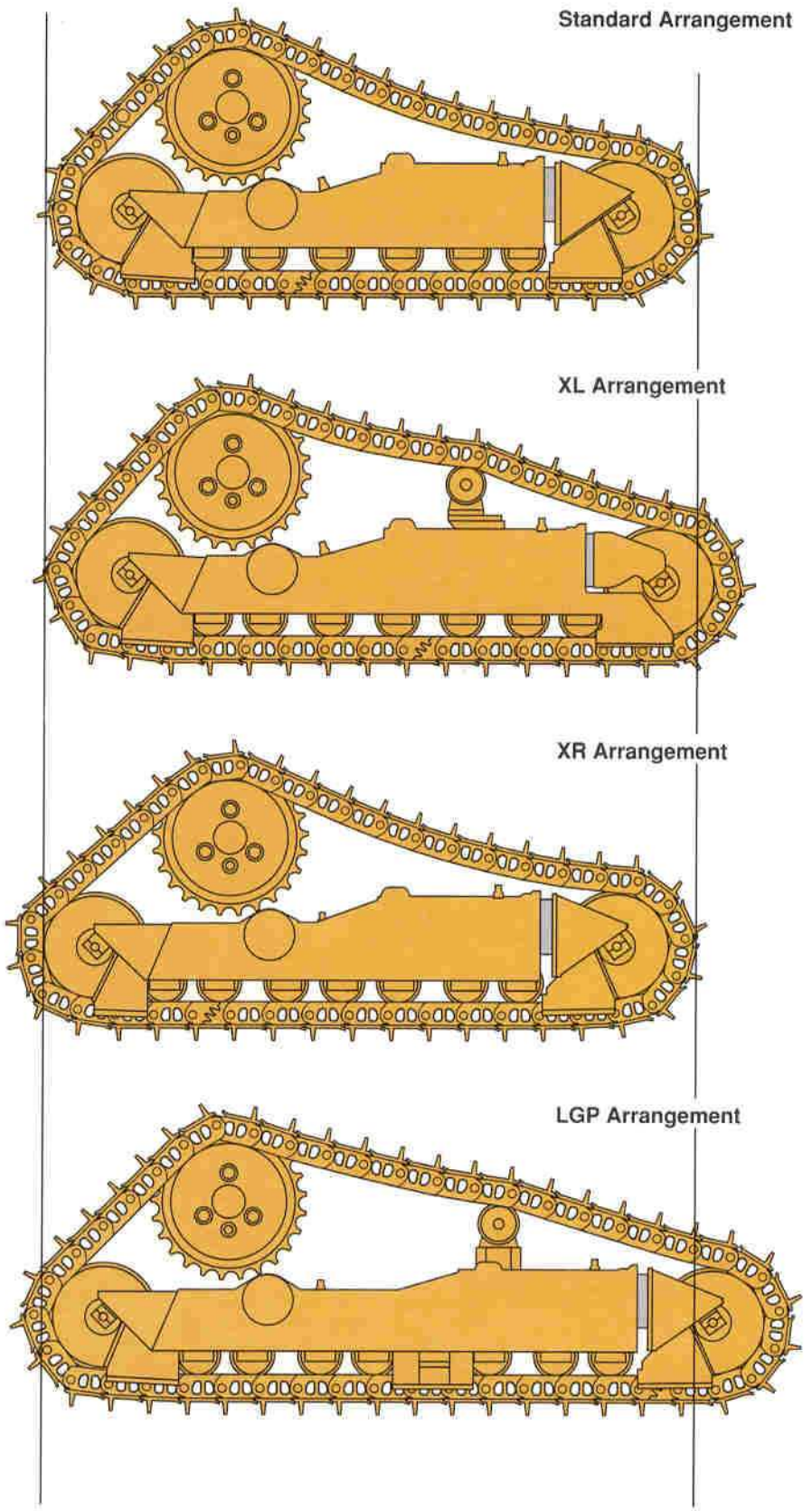
- XR undercarriage is built to excel in drawbar, skidding, and ripping applications.
- With more track to the rear, the tractor's weight is positioned forward, which increases traction and stability for drawbar applications.

**LGP arrangement**

- LGP undercarriage is designed to work in soft and spongy conditions.
- Wide track shoes and long track frame increases track contact area, reducing ground pressure for excellent flotation in swampy conditions.

**Heavy duty track link**

- Standard on all D6R configurations.
- Increased durability of link assembly. Components will provide improved strength and greater retention between the link, pin and bushing offering:
  - Improved sealability.
  - Increased link and roller system wear life.
- Track shoes.
  Choice of moderate service or extreme service shoes in a variety of widths allows you to further tailor the tractor to meet your requirements.
  - Self-cleaning shoes are available for the LGP arrangement.



## Operator's Station

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

**Operator's station** provides excellent viewing area to blade and rear of machine for maximum operator productivity. Several enhancements have been added to the cab to improve operator comfort, reduce fatigue, increase productivity, and reduce interior sound levels.

**Easy-to-reach, low-effort controls** provide sure, precise steering and dozer control for less operator fatigue.

**1 Differential steering's** dual twist tiller provides excellent maneuverability and one-handed control.

**2 Finger Tip Controls** are easily accessible, and allow exceptional one-handed maneuverability

**3 Instrument panel** includes standard gauge group with fuel gauge and computerized Caterpillar Monitoring System for monitoring critical machine functions. The Caterpillar Monitoring System includes a switchable digital display so that the operator can scroll through displays for gear selection, hour meter, diagnostic codes and other vital information.

**Isolation-mounted cab** (optional) with air pressurizer and heater reduces noise and vibration for shift-long comfort.


**Cab, storage compartment and cup holder** — for added operator convenience.

**4 Caterpillar Contour Series Seat** — ergonomically designed and fully adjustable for maximum comfort.

- Backrest centerline conforms to the operator's spinal curve and also has a transverse curve to provide additional side-to-side support.
- Fully adjustable seat allows the operator to position for maximum comfort.
- Retractable 75 mm (3") wide seatbelt for positive, comfortable restraint.

**Radio installation group** (standard with cab).

- Includes mounting brackets, AM/FM antenna and speakers.
- AM/FM stereo cassette radio, optional.

**Sound levels** have been reduced by:

- Incorporating acoustical materials to cab interior trim components to absorb and block sound transmission and improve appearance and comfort.
- Redesigning the cab mount system to reduce structurally transmitted noise.
- Modifying Heating/Ventilating/Air Conditioning (HVAC) system to significantly reduce interior sound levels while maintaining performance level.
- Adding rubber boots to the implement controls for improved acoustical and environmental sealing.

**Other improvements** include:

- Standard hydraulic oil temperature gauge.
- Storage for lunch box, cup and insulated bottle with the acoustical interior.
- Door and post covers to improve appearance.
- Adjustable armrests.
- Kneepads for side slope operations.
- Larger storage box for personal items.
- Window slides provide better sealing.
- Vinyl/foam floor covers have been enlarged to cover the complete floor area, bottom of the left and right control consoles and seat well.

## Steering Systems

*Choice of Differential Steering or Finger Tip Control for steering and transmission enable fast cycle times, excellent maneuverability and operator comfort.*

**Differential Steering** maintains uninterrupted power to both tracks during turns through a hydraulically actuated planetary differential, and allows simultaneous one-hand steering and transmission control. Automatic shifting features and easier upshifts and downshifts increase operator productivity and reduce operator fatigue.

- Turns accomplished by speeding up one track while equally slowing the other — speed difference turns tractor.
- Operator maintains smooth, precise turning with one lever.
- Provides excellent steering control in tight areas, near structures, or when following grade stakes.
- Greater load, power and speed control where the underfooting is soft or sloppy, because both tracks drive to maintain traction.
- Faster cycles due to quick forward/reverse response, steering/directional control.

**Finger Tip Control** allows simultaneous, one-hand steering and transmission control. Automatic shifting features and reduced lever efforts provide easier upshift and downshift, increase operator comfort, reduce fatigue and shorten cycle times.

- Padded armrest and ergonomic, molded hand grip.
- Low-effort finger tip levers for steering.
- Touch-shift buttons for upshift and downshift.
- Rotational directional control for forward, neutral and reverse.
- Horizontal and vertical adjustments for operator comfort.
- Parking brake switch electronically locks electronic clutch and brake steering.

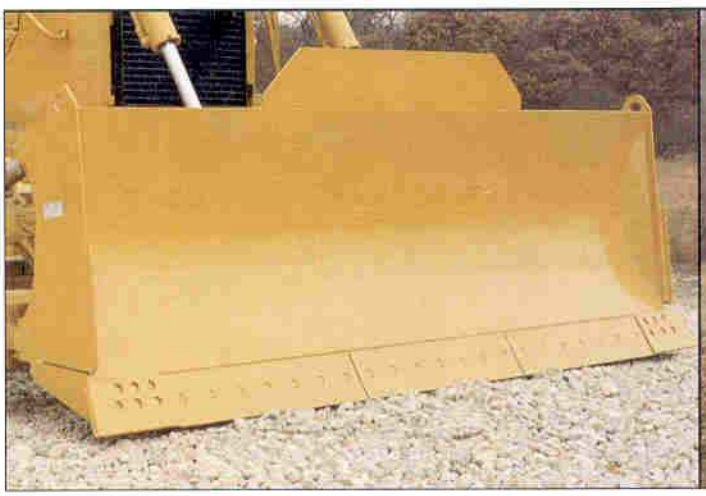
**Automatic shifting features.**

Bi-Directional Auto Shift allows the operator to preselect a forward and reverse gear for directional changes.

Auto-kickdown automatically downshifts the transmission when the engine lugs down to a predetermined RPM level.

## Work Tools

*Caterpillar work tools include a choice of dozers, rippers and winches designed for efficient, high production.*



**Blades**

- Choice of S, SU and A blades for optimum production.
- High blade heel clearance and sharp cutting edge angle (S, SU blades) — penetrates tough material easily.
- Cat moldboard profile on SU blades loads easily, retains load.
- L-shaped push arms (S, SU) allow blades to be mounted closer to front of unit...higher penetration forces for larger blade loads and excellent maneuverability.
- The A blade is mounted to a C-frame, using a pinned connection — permits blade angling and tilting, left or right.

**Ripper**

- Multi-shank parallelogram ripper lets you choose up to three shanks, depending on job conditions.
- Caterpillar design allows the operator to see the ripper tip — provides ample throat clearance, high penetration and pryout forces.
- Some application restrictions apply on LGP machines equipped with a ripper.

**Winch**

- Single lever control actuates both clutch and brake functions to improve operator efficiency. A separate lever is used for freespool operation.
- Input clutches on PTO shaft reduce engine horsepower losses, provide fuel efficiency and economy.
- Clutch engagement and brake release are automatically synchronized for smooth operation.
- Winch components can be serviced with winch mounted on tractor.

## Load Sensing Hydraulics

*Adjusts implement and hydraulic power to increase both operator and machine efficiency.*

**Load-sensing hydraulics** utilize a feedback loop from the implement valve to the implement pump to continually monitor the hydraulic power requirements of the implement.

**During normal blade or ripper corrections** the hydraulic pump's flow and pressure output are regulated to only what is needed.

**Lower pump requirements** can reduce engine power requirements for the hydraulics making, more drawbar power available for increased machine production, higher operator efficiency and increased fuel efficiency.

## Service

*The Cat elevated sprocket tractor's modular design concept moves a generation ahead in simplified service and repair.*

**Major components** are easily accessible, removable as single units.

**Modular design** permits fast removal and installation.

**Pre-testing modular components** before installation or after repair assures quality.

**Grouped service points,** easy access to service areas make routine checks fast, convenient.

**Diagnostic connector** for special dealer tool enables fast troubleshooting of starting and charging problems.

**Quick, easy service access** and inspection.

**Ecology drains** provide an environmentally safer method to drain fluids. They are included on the radiator, engine and hydraulic tank; optional for the transmission, bevel gear case and torque converter.

## Total Customer Support

*Unmatched in the industry!*

**Services.** Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement, to help you get the best return on your investment.

**Product support.** You will find nearly all parts at our dealer parts counter. Cat dealers utilize a world-wide computer network to find in-stock parts to minimize machine down time. Save money with remanufactured parts. You receive the same warranty and reliability as new products at cost savings of 40 to 70 percent.

**Service Capability.** Whether in the dealer's fully equipped shop or in the field, you will get trained service technicians using the latest technology and tools.

**Selection.** Make detailed comparisons of the machines you are considering before you buy. How long do components last? What is the cost of preventive maintenance? What is the true cost of lost production? Your Cat dealer can give you precise answers to these questions.

**Purchase.** Look past initial price. Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

**Operation.** Improving operating techniques can boost your profits. Your Cat dealer has training videotapes, literature and other ideas to help you increase productivity.

**Maintenance.** More and more equipment buyers are planning for effective maintenance before buying equipment. Choose from your dealer's wide range of maintenance services at the time you purchase your machine. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling and Technical Analysis help you avoid unscheduled repairs.

**Replacement.** Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.

# Engine

Four-stroke cycle, six cylinder 3306 turbocharged diesel engine.

| Standard arrangement Ratings at 1900* RPM | kW | HP |
|---|---|---|
| Gross power | 133 | 179 |
| Net power | 123 | 165 |

The following ratings apply at 1900 RPM when tested under the specific standard conditions for the specified standard:

| NET POWER | kW | HP | PS |
|---|---|---|---|
| Caterpillar | 123 | 165 | — |
| ISO 9249 | 123 | 165 | — |
| EEC 80/1269 | 123 | 165 | — |
| SAE J1349 | 122 | 163 | — |
| DIN 70020 | — | — | 171 |

| Dimensions | | |
|---|---|---|
| Bore | 121 mm | 4.75 in |
| Stroke | 152 mm | 6.0 in |
| Displacement | 10.5 liters | 638 cu in |

***Power rating conditions**

- based on standard air conditions of 25°C (77°F) and 99 kPA (29.32 in Hg) dry barometer
- used 35° API gravity fuel having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 30°C (86°F) [ref. a fuel density of 838.9 g/L (7.001 lb/U.S. gal)]
- net power advertised is the power available at the flywheel when engine is equipped with fan, air cleaner, muffler and alternator
- no derating required up to:
  - 2300 m (7500 ft) altitude for standard arrangement
  - 2100 m (7000 ft) altitude for XL and XR arrangement (EEC)
  - 1600 m (5400 ft) altitude for LGP arrangement (EEC)
- meets 1996 CARB and EPA requirements, 1996 JMOC requirements, and anticipated 1998 EEC requirements

| XL and XR arrangements Ratings at 1900* RPM | kW | HP |
|---|---|---|
| Gross power | 141 | 189 |
| Net power | 130 | 175 |

The following ratings apply at 1900 RPM when tested under the specific standard conditions for the specified standard:

| NET POWER | kW | HP | PS |
|---|---|---|---|
| Caterpillar | 130 | 175 | — |
| ISO 9249 | 130 | 175 | — |
| EEC 80/1269 | 130 | 175 | — |
| SAE J1349 | 129 | 173 | — |
| DIN 70020 | — | — | 181 |

| Dimensions | | |
|---|---|---|
| Bore | 121 mm | 4.75 in |
| Stroke | 152 mm | 6.0 in |
| Displacement | 10.5 liters | 638 cu in |

**Features**

- direct injection fuel system with individual adjustment-free unit injectors
- 3-ring aluminum alloy pistons
- heat resistant sil-chrome steel intake and stellite-faced exhaust valves
- one-piece cylinder head designed with cast intake manifold
- direct electric 24-volt starting and charging system
- two 12-volt, 100 amp-hour, 750 CCA, maintenance-free batteries
- 70-amp alternator
- dry-type, radial-seal air cleaner with primary and secondary elements

# Transmission

Three-speed planetary auto shift, remotely mounted from engine.

| Speeds with power shift transmission approximate | | km/h | MPH |
|---|---|---|---|
| Forward | 1 | 3.9 | 2.4 |
| | 2 | 6.8 | 4.2 |
| | 3 | 11.9 | 7.4 |
| Reverse | 1 | 4.8 | 3.0 |
| | 2 | 8.7 | 5.4 |
| | 3 | 15.3 | 9.5 |

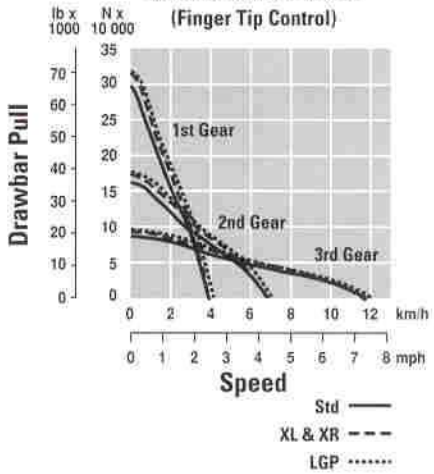
| LGP arrangements Ratings at 1900* RPM | kW | HP |
|---|---|---|
| Gross power | 148 | 199 |
| Net power | 138 | 185 |

The following ratings apply at 1900 RPM when tested under the specific standard conditions for the specified standard:

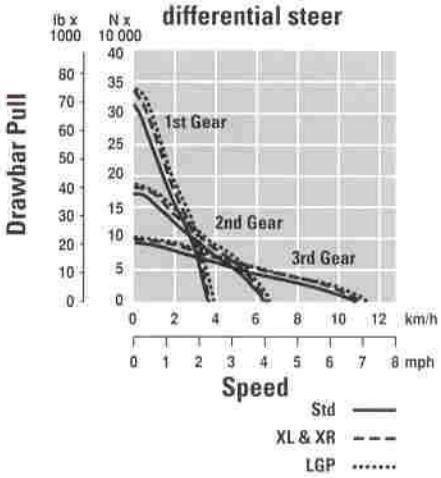
| NET POWER | kW | HP | PS |
|---|---|---|---|
| Caterpillar | 138 | 185 | — |
| ISO 9249 | 138 | 185 | — |
| EEC 80/1269 | 138 | 185 | — |
| SAE J1349 | 137 | 183 | — |
| DIN 70020 | — | — | 191 |

| Dimensions | | |
|---|---|---|
| Bore | 121 mm | 4.75 in |
| Stroke | 152 mm | 6.0 in |
| Displacement | 10.5 liters | 638 cu in |

**Power shift with steering clutches and brakes (Finger Tip Control)**




**Power shift with differential steer**



## Hydraulic Controls

Load-sensing, variable displacement piston pump.

| | | |
|---|---|---|
| Pump capacity at 6895 kPa/69 bar /1000 psi | | |
| RPM at rated engine speed | 2019 | |
| Steering clutches and brakes model | 190 liters/min | 50.2 gpm |
| Differential steer model | 196 liters/min | 51.8 gpm |
| Tilt cylinder flow | 80 liters/min | 21.1 gpm |
| Main relief valve settings | | |
| Differential steer model | 42 000 kPa/420 bar | 6090 psi |
| Steering clutches and brakes model | 19 305 kPa/193 bar | 2800 psi |
| Implement circuit pressures | | |
| Bulldozer lift | 19 305 kPa/193 bar | 2800 psi |
| Bulldozer tilt | 19 305 kPa/193 bar | 2800 psi |
| Ripper | 19 305 kPa/193 bar | 2800 psi |
| Drive | geared from engine flywheel | |

Control positions
- lift cylinders — raise, hold, lower, float
- tilt cylinder — left, right, hold
- angle cylinders — left, right, hold
- ripper cylinder — raise, hold, lower

## Steering and Braking

Choice of Finger Tip Control or Differential Steering
System meets SAE J1026 APR90.

**Features — Finger Tip Control**
- Finger Tip Control of transmission and steering clutches and brakes
- oil-cooled, electro-hydraulically actuated multiple-disc steering clutches and brakes
- single brake pedal brakes both tracks without disengaging steering clutches
- electro-hydraulically actuated, spring applied parking brake

**Features — Differential Steering**
- twist-grip tiller bar controls transmission and steering
- electro-hydraulically actuated planetary differential delivers uninterrupted power to both tracks while turning
- ability to counter-rotate tracks with transmission in neutral
- single brake pedal brakes both tracks
- electro-hydraulically actuated, spring applied parking brake

## Cab

Caterpillar cab and Rollover Protective Structure (ROPS).
ROPS canopy required in U.S.A.

**Features**
- meets OSHA and MSHA limits for operator and sound exposure with doors and windows closed (according to ANSI/SAE J1166 JUL87)
- ROPS meets the following criteria:
  - SAE J395
  - SAE J1040 APR88
  - ISO 3471-1 1986
  - ISO 3471-1 1994
- also meets the following criteria for Falling Objects Protective Structure:
  - SAE J231 JAN81
  - ISO 3449 1992 Level II

**Note**
When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 MAY90, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture. The operator sound pressure level is 79 dB(A) when measured per ISO 6394 and 81 dB(A) when measured per ISO 6396.

## Heavy Duty Sealed and Lubricated Track

Heavy duty design for superior track life.

**Features**
- improved sealability and link rail wear life
- wider bushing strap provides improved bushing retention and resistance to bore stretching and cracking
- wider pin boss and longer pin improves pin-to-link retention
- more rail material increases link and roller system wear life
- extends undercarriage maintenance intervals
- reduces overall undercarriage operating costs

## Service Refill Capacities

| | Liters | Gallons |
|---|---|---|
| Fuel tank | 383 | 101 |
| Crankcase | 27.5 | 7.3 |
| Transmission, bevel gear and steering clutch (includes torque converter) | 155 | 41 |
| Final drives (each side) | 13.5 | 3.6 |
| Cooling system | 74 | 19.5 |
| Hydraulic System (tank only) | 76 | 20 |

## Pivot Shaft and Equalizer Bar

Pivot shaft and pinned equalizer bar oscillation system.

**Features**

- pivot shaft transmits ground impact loads directly to main frame
- protects power train components
- pinned equalizer bar keeps track roller frame in proper alignment
- system provides smooth machine underside

## Final Drive

Single reduction final drives.

**Features**

- isolated from ground-impact and blade-induced loads
- modular design reduces removal and installation time
- segmented sprocket simplifies replacement

## Track Roller Frame

Tubular design resists torsional loads.

**Features**

- Lifetime Lubricated rollers and idlers are directly mounted to roller frame
- oscillating roller frames attach to tractor by pivot shaft and pinned equalizer bar
- large pivot bushings operate in an oil reservoir
- equalizer bar saddle connection is low-friction bushing with remote lube line
- recoil system fully sealed and lubricated

| | Standard | | XL | | XR | | LGP | |
|---|---|---|---|---|---|---|---|---|
| Oscillation: | | | | | | | | |
| front and rear idlers at gauge line | 272 mm | 10.7" | 291 mm | 11.5" | 284 mm | 11.2" | 334 mm | 13.1" |
| at pivot shaft | ±3.0° | | ±3.0° | | ±3.0° | | ±2.9° | |
| Number of rollers (each side) | 6 | | 7 | | 7 | | 8 | |
| Number of shoes (each side) | 39 | | 41 | | 40 | | 45 | |
| Width of: | | | | | | | | |
| standard shoes | 560 mm | 22" | 560 mm | 22" | 560 mm | 22" | 915 mm | 36" |
| optional shoes | 610 mm | 24" | 610 mm | 24" | 610 mm | 24" | 760 mm | 30" |
| extreme service | 510 mm | 20" | 510 mm | 20" | 510 mm | 20" | — | |
| | 560 mm | 22" | 560 mm | 22" | 560 mm | 22" | — | |
| self-cleaning | — | — | — | — | — | — | 1000 mm | 39" |
| Length of track on ground | 2610 mm | 102.7" | 2821 mm | 111.1" | 2754 mm | 108.4" | 3243 mm | 127.7" |
| Track gauge | 1880 mm | 74" | 1880 mm | 74" | 1880 mm | 74" | 2225 mm | 88" |
| Ground contact area with: | | | | | | | | |
| 560 mm (22") shoes | 2.92 $m^2$ | 4518 $in^2$ | 3.16 $m^2$ | 4888 $in^2$ | 3.08 $m^2$ | 4770 $in^2$ | — | |
| 610 mm (24") shoes | 3.18 $m^2$ | 4930 $in^2$ | 3.44 $m^2$ | 5332 $in^2$ | 3.36 $m^2$ | 5203 $in^2$ | — | |
| 760 mm (30") shoes | — | | — | | — | | 4.93 $m^2$ | 7662 $in^2$ |
| 915 mm (36") shoes | — | | — | | — | | 5.93 $m^2$ | 9194 $in^2$ |
| self cleaning 1000 mm (39") | — | | — | | — | | 6.49 $m^2$ | 9961 $in^2$ |
| Ground pressure: | | | | | | | | |
| 560 mm (22") shoes | .62 $kg/cm^2$ | 8.82 psi | .60 $kg/cm^2$ | 8.60 psi | .60 $kg/cm^2$ | 8.68 psi | — | |
| 610 mm (24") shoes | .57 $kg/cm^2$ | 8.14 psi | .56 $kg/cm^2$ | 7.93 psi | .56 $kg/cm^2$ | 8.01 psi | — | |
| 760 mm (30") shoes | — | | — | | — | | .41$kg/cm^2$ | 5.80 psi |
| 915 mm (36") shoes | — | | — | | — | | .35$kg/cm^2$ | 4.94 psi |
| self cleaning 1000 mm (39") | — | | — | | — | | .32$kg/cm^2$ | 4.55 psi |

## Weight (approximate)

**Shipping weight**
Includes two-valve hydraulic control, lubricants, coolant, ROPS canopy and 10% fuel.

| | Standard | | XL | | XR | | LGP | |
|---|---|---|---|---|---|---|---|---|
| Power shift with Finger Tip Control | 14 800 kg | 32,600 lb | 15 500 kg | 34,200 lb | 15 000 kg | 33,100 lb | 17 200 kg | 37,900 lb |
| Power shift with differential steering | 15 100 kg | 33,200 lb | 15 700 kg | 34,600 lb | 15 200 kg | 33,560 lb | 17 400 kg | 38,300 lb |

**Operating weight**
Includes above plus blade with tilt cylinder, shoes, drawbar, operator and full fuel tank.

| Attached blade | Standard with 6S | | XL with 6SU | | XR with 6A | | LGP with 6S | |
|---|---|---|---|---|---|---|---|---|
| Power shift with Finger Tip Control | 18 000 kg | 39,700 lb | 19 000 kg | 41,900 lb | 18 300 kg | 40,400 lb | 20 500 kg | 45,200 lb |
| Power shift with differential steering | 18 200 kg | 40,100 lb | 19 200 kg | 42,300 lb | 18 500 kg | 40,800 lb | 20 700 kg | 45,600 lb |

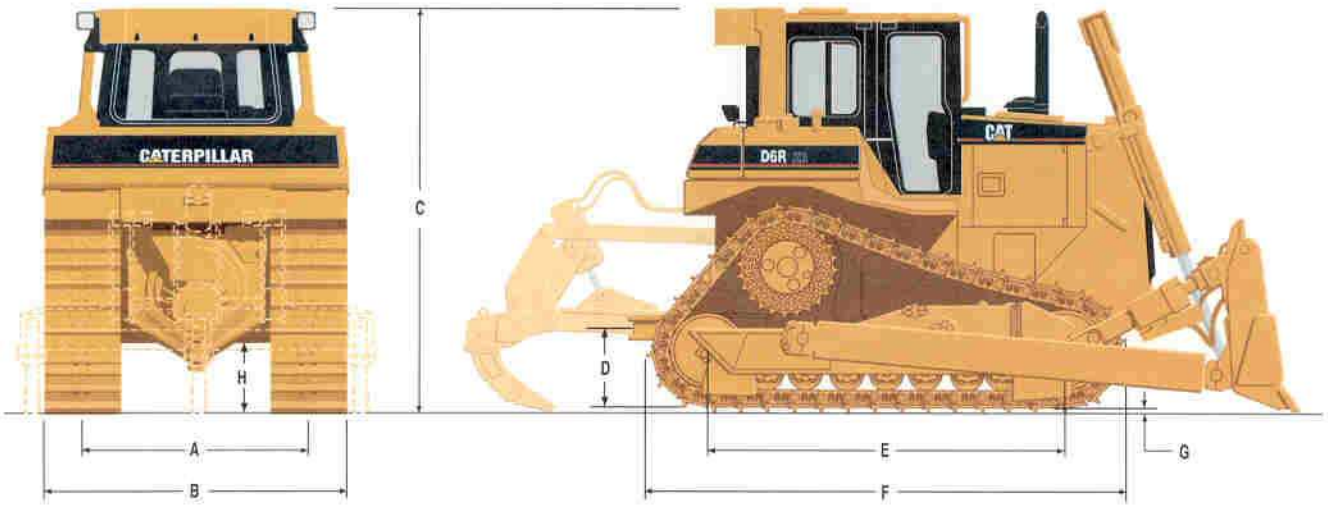
## Bulldozer Specifications

| Blade | Blade Capacity (SAE J1265) | | Blade Width (over end bits) | | Blade Height | | Digging Depth | | Ground Clearance | | Maximum Tilt | | Weight (without hyd. controls) | | Total Operating Weight* (with blade) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $m^3$ | $yd^3$ | mm | ft. in. | mm | in. | mm | in. | mm | in. | mm | in. | kg | lb | kg | lb |
| 6S, Std/XR: | 3.89 | 5.09 | 3360 | 11'0" | 1257 | 49.5" | 473 | 18.6" | 1104 | 43.5" | 765 | 30.1" | 2599 | 5731 | 18 000[1] | 39,700[1] |
| 6SU, Std/XR: | 5.61 | 7.34 | 3260 | 10'8" | 1412 | 55.6" | 473 | 18.6" | 1104 | 43.5" | 743 | 29.3" | 2699 | 5951 | 18 100[1] | 39,900[1] |
| 6A, Std/XR: | | | | | | | | | | | | | | | | |
| Straight | 3.18 | 4.16 | 4166 | 13'8" | 1034 | 40.7" | 506 | 19.9 | 1142 | 45.0" | 408 | 16.1" | 2727 | 6013 | 18 100[1] | 39,900[1] |
| Angled 25° | — | — | 3785 | 12'5" | — | — | — | — | — | — | — | — | — | — | — | — |
| 6SU XL | 5.61 | 7.34 | 3260 | 10'8" | 1411 | 55.6" | 459 | 18.1" | 1195 | 47.0" | 743 | 29.3" | 2973 | 6555 | 19 000 | 41,900 |
| 6A XL: | | | | | | | | | | | | | | | | |
| Straight | 3.93 | 5.14 | 4165 | 13'8" | 1155 | 45.5" | 524 | 20.6" | 1205 | 47.5" | 408 | 16.1" | 3109 | 6855 | 19 150 | 42,200 |
| Angled 25° | — | — | 3778 | 12'5" | — | — | — | — | — | — | — | — | — | — | — | — |
| 6S LGP | 3.70 | 4.83 | 3990 | 13'1" | 1101 | 43.3" | 655 | 25.8" | 1083 | 42.6" | 701 | 27.6" | 2801 | 6176 | 20 500 | 45,200 |

*Operating weight includes power shift (steering clutches and brakes) arrangement, lubricants, coolant, full fuel tank, 2 valve hydraulic controls, blade with tilt cylinder, ROPS canopy, drawbar, standard shoe.
[1]Operating weight of standard arrangement with blade.

# Dimensions

(approximate)




**Tractor Dimensions**

| | Standard | | XL | | XR | | LGP | |
|---|---|---|---|---|---|---|---|---|
| A. Track gauge | 1880 mm | 74" | 1880 mm | 74" | 1880 mm | 74" | 2225 mm | 88" |
| B. Width of tractor | | | | | | | | |
| Over trunnions | 2640 mm | 8' 8" | 2640 mm | 8' 8" | 2640 mm | 8' 8" | 3428 mm | 11' 3" |
| Without trunnions (std. shoe width) | 2440 mm | 8' 0" | 2440 mm | 8' 0" | 2440 mm | 8' 0" | 3140 mm | 10' 4" |
| C. Machine height from tip of grouser: | | | | | | | | |
| Stack | 3094 mm | 10' 1.8" | 3094 mm | 10' 1.8" | 3094 mm | 10' 1.8" | 3144 mm | 10' 3.8" |
| ROPS | 3195 mm | 10' 5.8" | 3195 mm | 10' 5.8" | 3195 mm | 10' 5.8" | 3245 mm | 10' 7.8" |
| D. Drawbar height (center of clevis) from ground face of shoe | 511 mm | 20.1" | 511 mm | 20.1" | 511 mm | 20.1" | 567 mm | 22.3" |
| E. Length of track on ground | 2610 mm | 102.7" | 2821 mm | 111.1" | 2754 mm | 108.4" | 3243 mm | 127.7" |
| F. Length of basic tractor (with drawbar) | 4069 mm | 13' 4" | 4069 mm | 13' 4" | 4217 mm | 13' 10" | 4493 mm | 14' 9" |
| With the following attachments, add to basic tractor length: | | | | | | | | |
| Ripper (with tip at ground line) | 1186 mm | 46.7" | 1186 mm | 46.7" | 1038 mm | 40.9" | — | |
| Winch | 300 mm | 11.8" | 300 mm | 11.8" | 146 mm | 5.7" | 146 mm | 5.7" |
| SU blade | 1235 mm | 48.6" | 1472 mm | 58" | 1235 mm | 48.6" | — | |
| S blade | 1043 mm | 41.1" | — | | 1043 mm | 41.1" | 1218 mm | 48" |
| A blade | 1147 mm | 45.2" | 1349 mm | 53.1" | 1147 mm | 45.2" | — | |
| G. Height of grouser | 65 mm | 2.6" | 65 mm | 2.6" | 65 mm | 2.6" | 65 mm | 2.6" |
| H. Ground clearance | 383 mm | 15.1" | 383 mm | 15.1" | 383 mm | 15.1" | 433 mm | 17'1" |

## Winch

Rugged PA56 winch with freespool.*

**Features**

- hydraulically actuated multiple-disc wet clutch and brake
- single lever control of clutch and brake functions
- separate lever for freespool operation

| | | |
|---|---|---|
| Weight | 1135 kg | 2503 lb |
| Winch length | 1200 mm | 47.2" |
| Winch case width | 975 mm | 38.3" |
| Flange diameter | 330 mm | 13.0" |
| Drum width | 254 mm | 10.0" |
| Drum diameter | 260 mm | 10.25" |
| Cable size: | | |
| Recommended | 22 mm | 0.88" |
| Optional | 25 mm | 1.0" |
| Drum capacity: | | |
| Recommended cable | 88 m | 290' |
| Optional cable | 67 m | 220' |
| Oil capacity | 67 L | 17.7 gal |
| Cable/ferrule sizes (OD x length) 54 mm x 67 mm | | 2.10" x 2.63" |

*PA56 winch is manufactured for Caterpillar by PACCAR Inc.

## Ripper

Multi-shank parallelogram design lets you choose one, two or three shanks to match the job conditions.

| | | |
|---|---|---|
| Beam width | 2202 mm | 86.7" |
| Beam cross section | 216 mm x 254 mm | 8.5" x 10" |
| Maximum penetration | 500 mm | 19.7" |
| Maximum clearance raised (shank tip) | 511 mm | 20.1" |
| Number of pockets | 3 | |
| Maximum penetration force | 6603 kg | 14,557 lb |
| Maximum pryout force | 9134 kg | 20,137 lb |
| Weight | | |
| With one shank | 1606 kg | 3541 lb |
| Each additional shank | 74 kg | 163 lb |

## Standard Equipment

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

Advanced Modular Cooling System (AMOCS)
Air cleaner with precleaner
Alternator, 70-amp
Arm rests, adjustable
Automatic shifting features:
  Auto-kickdown (auto-downshift)
  Auto shift (2R-1F, 2F-2R)
Back up alarm
Blower fan
Caplocks
Carrier Roller (XL and LGP models)
Caterpillar Monitoring System
Center track guiding guards (LGP)
Cooler, hydraulic oil (differential steer models)
Crankcase guard
Decelerator
Direct electric starting, 24-volt
Dust ejector
Ecology drains (engine oil & coolant, hydraulic oil, fuel tank sediment)
End guiding guards
3306 DIT low emissions engine
Ether starting aid
Electronic power shift transmission
Front pull device
Gauge package, temperature
  Coolant
  Transmission oil
Hinged radiator grill
Horn
Hydraulic track adjusters
Hydraulic, two-valve, lift and tilt
Instrument panel guard
Lifetime lubricated track rollers and idlers
Load-sensing hydraulic system
Muffler
Rearview mirror
ROPS canopy
Seat belt
Steering system:
  Differential Steering or
  Finger Tip Control
Seat, vinyl, suspension, with adjustable armrest and (contour series)
Track, Heavy Duty Sealed and Lubricated:
  Standard arrangement
  560mm (22"), 39-section
  XL arrangement
  560mm (22"), 41-section
  XR arrangement
  560mm (22"), 40-section
  LGP arrangement,
  915mm (36"), 45-section
Vandalism covers and locks

# Optional Equipment

(with approximate change in operating weights*)

| | Kg | Lb |
|---|---|---|
| Air conditioner | 57 | 125 |
| Arm rest adjustment, electric (for Finger Tip Control models) | 0 | 0 |
| Batteries, heavy duty | 60 | 132 |
| Bulldozers | (see page 16 for weights) | |
| Cab, ROPS (Sound suppressed, includes air pressurizer, heater, cloth contour series seat, seat belt, radio mounting and speakers, front and rear windshield wipers and washers, air filter, rearview mirror and key locks | 363 | 800 |
| Canopy, ROPS, removed (standard in U.S.A.) | -383 | -845 |
| Differential Steering System (listed for weight) | 401 | 884 |
| Drawbar: | | |
| Rigid, for use with Std/XL | 106 | 234 |
| Rigid, for use with XR/LGP | 116 | 256 |
| Ecology drains (transmission, torque converter, main case) | 3 | 7 |
| Engine coolant heater | 1 | 3 |
| Engine enclosure (with perforated side panels) | | |
| Normal duty | 44 | 97 |
| Heavy duty | 63 | 139 |
| Fan, reversible | 7 | 15 |
| Guards: | | |
| Bottom, heavy duty | 64 | 140 |
| Bottom, extreme duty | 142 | 312 |
| Fuel tank | 129 | 284 |
| Precleaner | 10 | 22 |
| Grill, heavy duty, louver | 30 | 66 |
| Grill, heavy duty, punched hole | 24 | 53 |
| Radiator chin, heavy duty | 13 | 29 |
| Rear, heavy duty | 43 | 95 |
| Track guiding, center only: | | |
| Standard, XL and XR | 52 | 114 |
| Track roller guards, full length: | | |
| Standard | 156 | 343 |
| XL | 183 | 404 |
| XR | 172 | 380 |
| LGP | 154 | 339 |
| High-flange track roller guiding arrangement | | |
| Standard | 34 | 75 |
| XL and XR | 38 | 84 |
| LGP | 43 | 95 |
| Hook, heavy duty, front pull | 12 | 26 |
| Hydraulic controls, third valve (additional valve for ripper) | 37 | 81 |
| Lighting system, four Halogen lights | 13 | 29 |
| Prescreener | 3 | 6 |
| Radiator core protector grid | 22 | 49 |
| Ripper, includes one tooth | 1564 | 3449 |
| Screen, rear, for cab or canopy | 59 | 130 |
| Seat, vinyl, suspension-low back | -6 | -13 |
| Sweeps, logging, canopy or cab | 354 | 779 |
| Tilt cylinders, dual hydraulic, for angle dozers | 152 | 335 |
| Tracks, pair, Heavy Duty Sealed and Lubricated: | | |
| Standard roller frame only (39 section) | | |
| 560 mm (22") MS/RBT | -61 | -136 |
| 610 mm (24") MS/RBT | 64 | 142 |
| 510 mm (20") ES/HD | 201 | 444 |
| 560 mm (22") ES/HD | 358 | 790 |
| 610 mm (24") MS/HD | 125 | 275 |
| XL roller frame only (41 section) | | |
| 560 mm (22") MS/RBT | -64 | -142 |
| 610 mm (24") MS/RBT | 67 | 147 |
| 510 mm (20") ES/HD | 212 | 467 |
| 560 mm (22") ES/HD | 377 | 830 |
| 610 mm (24") MS/HD | 131 | 289 |
| XR roller frame only (40 section) | | |
| 510 mm (20") ES/HD | 207 | 455 |
| 560 mm (22") ES/HD | 367 | 810 |
| 610 mm (24") MS/HD | 128 | 282 |
| LGP roller frame only (45 section) | | |
| 760 mm (30") MS/HD | -446 | -984 |
| 760 mm (30") MS/RBT | -518 | -1143 |
| 915 mm (36") MS/RBT | -72 | -159 |
| 1000 mm (39") Self Cleaning/HD | -43 | -95 |
| Winch | 1135 | 2503 |
| Winch fairlead — three roller | 293 | 645 |
| Winch fairlead — four roller | 320 | 705 |

*Specifications are converted from British to metric measure and rounded.

ES=Extreme service shoes, MS=Moderate service shoes, HD=Heavy duty link track, RBT = Rotating bushing track.