

# D6R

Series III  
Track-Type Tractor



## Cat® C9 Engine with ACERT™ Technology

### Standard

Net Power (ISO 9249) at 1850 rpm	138 kW/188 hp
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### XL/XW/LGP

Net Power (ISO 9249) at 1850 rpm	149 kW/203 hp
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Operating Weight	18 330 to 23 050 kg
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Shipping Weight	14 710 to 19 040 kg
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# D6R Series III Track-Type Tractor

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## Operator's Station

The comfortable operator's station provides an excellent viewing area to the blade and rear of the machine for maximum operator productivity. Controls are low effort and easy to reach. **pg. 4**

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## Engine

- ✓ ACERT Technology works at the point of combustion to optimize engine performance and provide low exhaust emissions. Matched with the torque divider and power shift transmission, it provides years of dependable and efficient service. **pg. 6**

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## Power Train

- ✓ The electronically controlled power shift transmission and differential steering work together with the new C9 ACERT engine for maximum efficiency. **pg. 8**

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## Integrated Electronic Solutions

- ✓ Caterpillar offers technology options such as Product Link and AccuGrade® Control System that provide greater accuracy, higher productivity, lower operating costs and more profitability. **pg. 9**

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## Serviceability

Major components have a modular design for excellent serviceability and fast in-field component exchange. **pg. 14**

*Engineered for demanding work, the D6R Series III is designed to be productive in a variety of applications. It keeps material moving with the reliability and low operating costs you expect from Caterpillar machines.*

✓ *New feature*





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### Structure

A heavy, strong and durable mainframe, strong case steel castings and reinforced frame rails provide durable support to the undercarriage, elevated final drives and other integral frame components. **pg. 11**

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### SystemOne™ Undercarriage

✓ With the elevated sprocket design, the final drives are located above the work area, isolating them from ground induced impacts. The different undercarriage configurations allow the machine to be matched to the application needs. **pg. 10**

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### Work Tools

✓ Caterpillar® offers a variety of work tools to equip your D6R Series III with the versatility needed to accomplish the job quickly and efficiently. **pg. 12**

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### Total Customer Support

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 – helping get the best return on investment.



## Operator's Station

*The D6R Series III operator's station is designed for comfort and ease of operation.*



**Cab.** An isolation-mounted, pressurized cab reduces noise and vibration for operator comfort. The cab is pre-wired for a 12-volt or 24-volt radio, equipped with two speakers, an antenna and a radio mount recessed in the headliner.

**Clear Working View.** The operator has an excellent view to the blade and rear of the machine for maximum productivity. The tapered hood, notched fuel tank and narrow single-shank ripper carriage give the operator a clear line of sight to the front and rear work areas. The large single-pane windows offer excellent viewing to the sides and blade. The low rear window lets the operator see the ripper tip.

**Cat Comfort Series Seat.** The Cat Comfort Series seat has a thick, contoured cushion, rolled down front edge and is adjustable eight-ways for optimal support and comfort. Seat side bolsters restrain side-to-side movement when working on steep grades or side slopes. The operator can feel the terrain and load on the machine through the seat.



**Adjustable Armrests.** Standard, adjustable armrests provide additional comfort for the operator. Adjustment can be performed without the use of any tools.

**In-Dash Instrument Cluster.**

The instrument panel, with easy-to-read gauges and warning lamps, keeps the operator aware of all system information. All gauges and readouts are easily visible in direct sunlight.

**Cat Monitoring System Display.**

The dash mounted instrument cluster provides on-the-go operating information and gives the operator and service technician insight into the machine's operation and maintenance needs. The Caterpillar Monitoring System includes:

- Fuel level gauge
- Hydraulic oil temperature gauge
- Engine coolant temperature gauge
- Power train oil temperature gauge
- Engine oil pressure indicator
- Digital readout
- Transmission gear indicator

**Heating and Air Conditioning.**

Conveniently located air circulation vents evenly distribute airflow within the cab. Controls are easily accessible from the operator seat.

**Power Converter.** The D6R Series III features a 10-amp, 12-volt power converter for the convenient use of radios, wireless phones and laptop computers.

**Work Tool Lock-Out Switch.**

Redesigned from a mechanical rotary switch to an electronic rocker switch, the work tool lock-out valve prevents inadvertent operation of the hydraulic work tool attachments.

**Throttle Rocker Switch.** With the touch of a finger, the rocker switch activates high or low idle. A decelerator pedal gives the operator full control of engine speed when the rocker switch is in the high idle position. Engine speed can be set between high and low idle by simultaneously using the decelerator pedal and holding the Rabbit side of the throttle switch in for three seconds.

**Steering and Transmission Control.**

Differential steering controls the direction and degree of turns, forward-reverse shifting and gear selection in a single control handle which enhances operator comfort. Touch shift buttons on the steering control shifts the electronically controlled powershift transmission. The tiller allows the operator to work precisely in close areas around structures, grade stakes and other machines with the finest modulation in the industry.

**Auto-Shift/Auto-Kickdown.** Auto-shift allows the operator to pre-select a forward and reverse gear for easy, efficient directional changes. Auto-shift settings include first forward to second reverse, second forward to second reverse, and second forward to first reverse. Auto-kickdown allows the transmission to automatically downshift when significant load increases are detected.

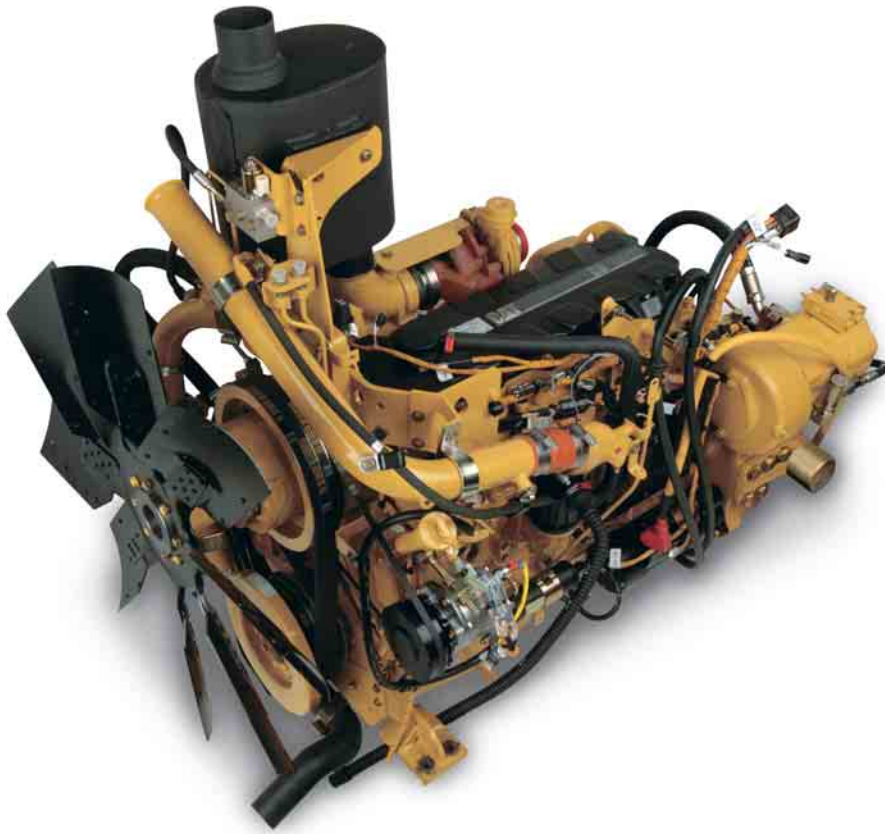


**Dozer Control Lever.** The D6R Series III features ergonomically designed dozer controls with low-effort, pilot-operated hydraulics for added operator comfort, easy operation and precise work tool control. When equipped with a VPAT blade, the blade control allows simultaneous six-way control of the blade with a thumb rocker control to adjust blade angle. The dozer control is changed to an electro-hydraulic control when the AccuGrade® Ready Option is installed.

**Ripper Control Lever.** The ripper control with low-effort pilot-operated hydraulics contributes to operator comfort, easy operation and precise work tool control.

## Engine

*A combination of innovations working at the point of combustion, ACERT Technology optimizes engine performance while meeting emission regulations for off-road applications.*



### **Cat C9 with ACERT Technology.**

The Cat C9 is an 8.8 L displacement, six cylinder, in-line configured engine with hydraulically actuated electronic fuel injection or HEUI™. It uses ACERT Technology, a series of Caterpillar engineered innovations that provide advanced electronic control, precision fuel delivery and refined air management, resulting in outstanding performance and lower emissions. The C9 with ACERT Technology meets European Union Stage IIIA emissions standards.

**Cylinder Block.** Increased block and head material strength minimizes the effect of high cylinder pressure. A strengthened flywheel housing joint reduces leaks. The sculpted heavy-duty design reduces sound and vibration levels. The mid-supported liner has fewer sealing joints for a reduced risk of leaks. The integral oil cooler reduces engine width, weight and potential leaks while improving coolant and oil flow.

**Cylinder Head.** A new cross-flow air design with four valves per cylinder and updated port geometry dramatically improve airflow and engine breathability. The cylinder head block features a robust six-bolt design for an improved seal between the head and block at the fire ring which prevents combustion gas leaks. It also minimizes bore/liner distortion. The improved intake port geometry provides a smoother transition and less flow restrictions.

### **Fractured-Split Connecting Rods.**

The new fractured-split connecting rods are designed to create near-perfect joint alignment, maximizing rod bearing life. This, in combination with a high efficiency oil filter, ensures long engine life.

**ADEM A4™ Engine Controller.** The air-cooled ADEM A4 controller is the brain of the engine and contains the engine's control software. It regulates fuel delivery, airflow and other engine functions. In addition, it directs the HEUI injectors to deliver multiple injections of fuel during the engine's compression stroke.

**Fuel Delivery.** Multiple injection fuel delivery involves a high degree of precision. Precisely controlling the combustion cycle lowers combustion chamber temperatures, which lowers emissions and optimizes fuel economy. This translates into more work output per unit of fuel.

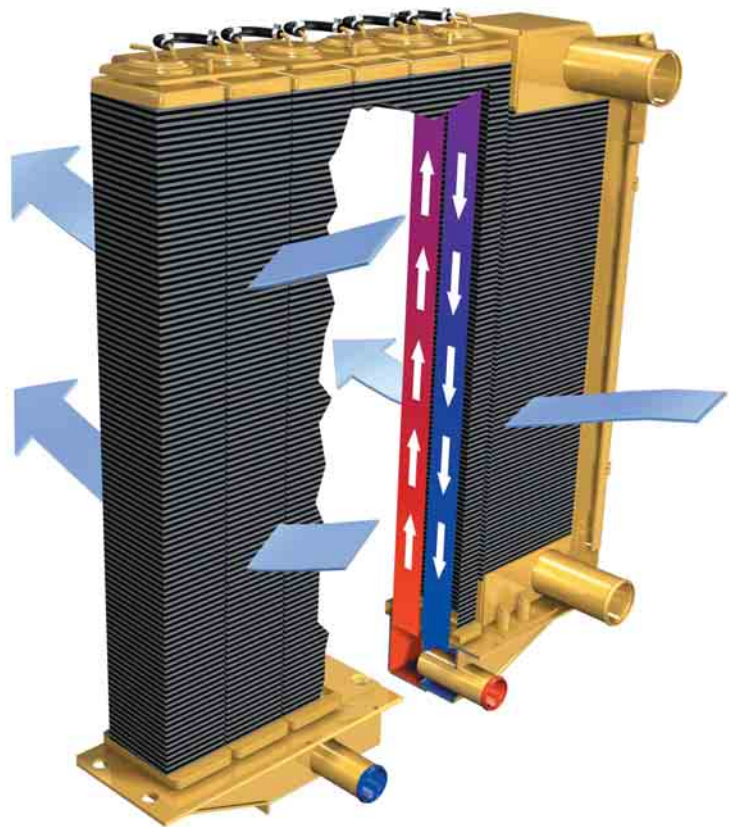
**HEUI Fuel System.** The HEUI fuel system is highly evolved, with a proven record of reliability. HEUI uses the technical advancement of an electronic control system with the flexibility of hydraulically controlled unit fuel injection. The system excels in its ability to control injection pressure over the entire engine operating speed range. These features allow the C9 to have complete control over injection timing, duration, and pressure.

**Air-to-Air Aftercooler.** The air-to-air aftercooler (ATAAC) brings cool air to the engine which increases life and lowers emissions. In addition, the ATAAC, together with the tight tolerance combustion chamber components, maximizes fuel efficiency.

**Wastegate Turbocharger.** The wastegate allows high-volume exhaust to be routed around the turbocharger to the exhaust piping to prevent wheel spin overspeed at high rpm but low load conditions.

**Service.** The new C9 engine offers easier maintenance and repair through monitoring key functions and logging critical indicators. Electronic diagnostic access is possible with a single tool, the Cat Electronic Technician.

**Advanced Modular Cooling System (AMOCS).** Using a two pass system, the AMOCS radiator provides more efficient heat exchange and improved cooling capacity over the D6R Series II. The coolant is routed from a sectioned bottom tank up the front side, over the top of the core and down the engine side of the core to the bottom tank. This flow pattern allows the coolant to pass through the radiator twice for better cooling.



**Serviceability.** This modular core design permits removal of a single core without removing the entire radiator so repair costs and downtime are reduced. The top tank, side channels and one sealing surface makes AMOCS more reliable and easier to service. A site gauge allows for quick service checks.

**Leak Protection.** To reduce the potential for coolant leaks, brass tubes are welded to a large, thick header to improve the strength of the tube-to-header joint. In conditions where abrasive materials can be airborne, the attachment sand blast grid should be used to prevent core damage.

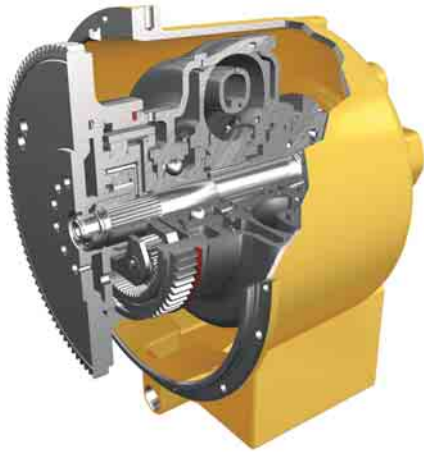
**Sand Blast Grid.** In an application where airborne debris is prevalent, radiator core protection is a concern. To extend radiator life in harsh applications, a sand blast grid is available as an option to deflect the damaging debris the engine fan propels at the radiator.

**On-Demand Fan Option.** Based primarily on ambient air temperature, the optional demand fan can improve productivity up to three percent and reduce fuel consumption up to four percent since the demand fan will only run at a speed needed to meet the cooling requirements of the machine. As cooling requirements increase above 24° C, the demand fan performance converges towards that of the standard fan so lesser benefit is achieved.



## Power Train

*The power shift transmission and differential steering work in tandem with the new C9 engine to deliver the outstanding power and reliability expected from Caterpillar.*



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

The D6R Series III torque divider provides:

- High reliability
- Low dynamic torque
- Optimum combination of operator efficiency and driveline reliability
- Components designed to absorb full engine power

**Operating Efficiency and Driveline Reliability.** The D6R Series III torque divider attains the best combination of operating efficiency and driveline reliability. It acts as a hydrodynamic component between the engine and transmission to reduce dozing shock loads to the transmission and final drives.

### Planetary Power Shift Transmission.

The D6R Series III planetary power shift transmission includes three speeds forward and three speeds reverse and utilizes large diameter, high capacity, oil-cooled clutches. These clutches provide higher torque capacity and increased service life. The planetary power shift transmission offers several key features and benefits, including:

- Electronically controlled modulation system that allows fast, smooth speed and direction changes
- Modular transmission and differential slide into rear case for servicing ease, even when a ripper is installed

### Differential Steering System.

Differential steering maintains power to both tracks while turning. The tractor turns when one track speeds up and the other slows down an equal amount.

The operator can steer and control the transmission simultaneously, which can reduce cycle times in some applications. The differential steering tiller bar has touch shift buttons for upshifts and downshifts. The tiller bar itself is easily rotated forward or reverse to change the respective tractor direction. It is moved forward to steer the tractor to the left and pulled back to move right. Low tiller bar efforts assure operator comfort during long shifts. Large blade loads can be maneuvered around buildings, bridge abutments, trees or other obstacles. Steering modulation is also optimized for precise control in these applications. Greater load capacity, power and speed control are possible in soft underfoot conditions on steep slopes because both tracks are powered during turns.



**Elevated Final Drive.** Elevated final drives are isolated from ground and work tool-induced impact loads for extended power train life. The modular design ensures quick and easy service when required.

### Load Compensating Shifting.

With load compensating shifting, clutch engagement timing automatically adjusts according to the load factor. This allows improved tractor performance and operator comfort during speed changes and reduces the amount of energy dissipated through the clutches to help extend transmission component life.



## Integrated Electronic Solutions

*Caterpillar technology offers customers new opportunities for efficiency and profitability.*



### **AccuGrade Control System.**

The AccuGrade System allows operators to grade and fill with increased accuracy without the use of traditional stakes or grade checkers. Using advanced laser or Global Positioning System (GPS) technology, machine-mounted components and an off-board transmitter, the AccuGrade System significantly improves the productivity and accuracy of grading equipment by as much as 50 percent over conventional methods.



### **AccuGrade System Cost Savings.**

Grade is reached in fewer passes so owning and operating costs are reduced. Fewer grade stakes are required and re-staking is virtually eliminated, realizing a 90 percent cost savings. Higher accuracy means savings in imported material. Productivity is increased up to 50 percent and can be maintained all day so more jobs can be scheduled with more scheduling flexibility.

### **Cat Machine Security System (MSS).**

MSS uses electronically coded keys selected by the customer to limit usage by individuals or time parameters. MSS deters theft, vandalism and unauthorized usage. Each machine system can store up to 255 keys and each key can be used on as many machines as desired. MSS can be controlled by a Personal Data Assistant. Field installation is available.

## SystemOne Undercarriage

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



**SystemOne Undercarriage.** The exclusive SystemOne Undercarriage is designed for reliability and durability by greatly increasing undercarriage life and reducing owning and operating costs.

### Undercarriage Configuration

		STD	XL	XL VPAT	XW	XW VPAT	LGP	LGP VPAT
D6R III	mm	1880	1880	2134	2032	2286	2286	2286
D6R II	mm	1880	1880	1880	2032	2032	2225	2225



**Center Tread Idler.** The SystemOne Undercarriage uses center tread idlers which coupled with new, taller flange rollers, improve guiding and eliminate link scalloping. The center tread idler will increase system life 50 percent or more in most applications since they will last as long as two link assemblies. In combination with the rotating bushing design, the center tread idlers and sprocket segments can be reused through at least two undercarriage lives.



**Roller Design.** The SystemOne™ roller has a taller flange to improve track guiding, especially in side-sloping applications. Advanced features and reduced piece parts enhance the rollers which help eliminate any flexing in the collars and avoid oil loss. The roller is maintenance-free and serviced as a group only. To achieve total balanced wear, carrier rollers with increased wear life are also used.



**Master Link.** A unique feature of the SystemOne Undercarriage is that, unlike traditional undercarriage, a master style link is not required. This improves track reliability and durability. The unique straight link design allows the track to be taken apart at any joint by using the proper Caterpillar tooling to press the link on or off.

A clamp-style master link is available but not recommended for high impact conditions or machines using wide shoes in these types of applications.

**Shoe Selection.** Shoe selection is still key to maintaining the proper flotation while using the narrowest shoe possible. There are several sizes in both moderate and extreme service available.

### Sealed Cartridge-Style Joints.

The all-new cartridge design is factory assembled and sealed for life. A new revolutionary sealing system, synthetic oil, a factory set face load and a newly developed retention system that eliminates endplay are all new features.

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## Structure

*The D6R Series III frame is built to absorb high impact shock loads and twisting forces.*

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**Track Gauge.** Wider gauges for the D6R III ensure overall better performance on slopes and make the tractor easier to turn in a variety of applications. Additionally, the gauge changes allow for wider straight shoes on all configurations except LGP VPAT.

**Primary Track Guiding.** SystemOne track primary track guiding is greatly improved over conventional track guiding. New SystemOne single flange track rollers have a 40 percent increase in flange height which increases roller flange side surface area to greatly improve track retention in the rollers. Only the tall, single flange rollers are offered with SystemOne undercarriage.

**Secondary Track Guiding.** SystemOne secondary track guiding is improved. The straight track link design eliminates the conventional link pin boss. The fixed track frame guiding surfaces guide directly on the hardened link side rail. The fixed guide wear surfaces are specifically profiled to match the SystemOne track link side rail geometry.



**Frame and Castings.** The D6R III frame is built to absorb high impact shock loads and twisting forces. The frame has a reinforced saddle and a welded front cross-member that add strength to the frame to better handle lateral and twisting forces. Steel castings augment the strength of the main case.

**VPAT Frame.** The D6R III VPAT frame has solid side rails to provide a stronger structure. The trunnion joint is located in the saddle to allow the dozer side loads to go into the mainframe instead of through the radiator guard. The reinforced saddle accommodates additional loads through the frame.

**Pivot Shaft.** The pivot shaft is bolted to the mainframe and connects to the rear roller frames to allow independent oscillation. The pivot shaft distributes impact loads through the case. This design eliminates alignment problems and the need for diagonal braces on the roller frames.

**Equalizer Bar.** The pinned equalizer bar gives the roller frames the ability to oscillate up or down independently to better match ground contours while providing maximum traction and operator comfort. The redesigned equalizer bar features bolted end pins to offer longer life and reduce downtime. This design also allows for improved serviceability and reliability.



## Work Tools

*Cat D6R Series III work tools are designed to provide flexibility to match the machine to the job.*



**Cat Blades.** All blades feature a strong box-section design that resists twisting and cracking. Blades are made of Cat DH-2™ steel that has high tensile strength and stands up to the most severe applications. Heavy moldboard construction and hardened bolt-on cutting edges and end bits add strength and durability.

**Semi-Universal.** The Semi-Universal blade is built for tough applications where penetration and capacity is important. The blade wings are designed for superior load retention and penetration in tightly packed materials.

**Straight Blade.** The S-blade provides good versatility. Since it has less blade capacity, it can handle heavier materials than a larger blade.

**Angle Blade.** The angle blade is secured by outside-mounted pusharms using a pinned connection that allows blade angling and tilting, left or right. Blade angle is changed manually and blade tilt is changed hydraulically.

### **Variable Pitch Angle Tilt (VPAT) Blade.**

The Variable Pitch Angle Tilt (VPAT) blade allows the operator to hydraulically adjust the blade lift, angle and tilt simultaneously using the ergonomically designed blade control. The operator can also manually adjust blade pitch. The versatility of the VPAT blade gives the D6R III the ability to take on a variety of applications such as finish grading, spreading material, side casting, V-ditching and backfilling. The VPAT blade is available on the XL, XW and LGP configurations and requires either a counterweight or a rear work tool attachment for optimal machine balance.

The new D6R III VPAT blade offers several improvements over the Series II design:

- Manually adjustable blade pitch
- Better cutting edge visibility from operator station
- Improved tilt and angle cylinder lines routing and guarding
- Improved structural durability
- No wear plates required on the radiator guard or main frame

### **Site Preparation Arrangements.**

The Ripper Package and Drawbar Package are configured to optimize the performance of the D6R Series III in light to medium duty dozing applications common to site preparation jobs.

Answering a need for a maneuverable tractor with the ability to cut and finish grades, the D6R III gives operators the stability needed when working on slopes. When coupled with the VPAT blade, the D6R III allows for more efficient rough and finish grade in applications such as golf course development and house pad construction.

**L-Shaped Push Arms.** L-shaped push arms bring the blade closer to the machine than diagonal brace designs, providing excellent maneuverability, machine balance and blade penetration. The L-shaped design provides solid lateral stability throughout the life of the machine and better cylinder positions for constant pryout independent of blade height.

**Cutting Edges and End Bits.** High-tensile strength Cat DH-2™ steel cutting edges resist torsional bending and distortion in tough applications. End bits are DH-3™ to provide maximum service life in tough materials.

**Load Sensing Hydraulics.** Field-proven, load-sensing, pilot controlled hydraulics respond to operating requirements by automatically and continually adjusting hydraulic power to maximize work tool efficiency.

**Winch.** A single lever control actuates both clutch and brake functions to improve operator efficiency.

- Input clutches on PTO shaft reduces engine horsepower losses to maintain fuel efficiency
- Clutch engagement and brake release are automatically synchronized for smoother operation
- Winch components can be serviced with winch mounted on the tractor



**Rear Counterweight.** Rear counterweights may be needed to optimize balance for backing up steep slopes or increasing performance in heavy dozing applications. Rear counterweights are recommended if another rear attachment is not specified.

**Drawbar.** The D6R III can be equipped with a drawbar for retrieving other equipment or pulling work tools such as:

- Disks
- Compactors
- Chopper wheels



**Multi-Shank Ripper.** The multi-shank parallelogram ripper offers the choice of one, two or three shanks depending on job conditions. Curved or straight ripper shanks are available.

## Serviceability

*Simplified service means more productive uptime.*



**Built-in Serviceability.** Major D6R Series III components are made as modules and most can be removed without disturbing or removing others. This means less service time and more productivity.

**Power Train Oil Filter and Pressure Taps.** The power train oil filter and pressure taps are remote-mounted in the right-hand fender. This provides ease of service and aids machine diagnostics.

**Engine Oil Filter.** The engine oil filter is located on the engine for easy servicing access and minimal downtime and is the only engine maintenance item on the right side of the engine compartment. An optional quick oil change attachment can further reduce maintenance time.

### **Water Separator and Fuel Filter.**

Easily located just inside the engine access panel, the water separator functions as the primary fuel filter, just ahead of the secondary fuel filter. A standard electric priming pump on the primary filter reduces the effort required to prime the system.

### **Quick Disconnect Fittings.**

Quick disconnect fittings allow for fast diagnosis of the power train and hydraulic oil systems.

### **Scheduled Oil Sampling Analysis.**

Scheduled oil sampling is made easier through live sampling ports for the engine oil, power train oil, hydraulic oil and coolant. The ports are also color coded for easy identification of each system.

**Underhood Service Light.** To make nighttime service and maintenance easier, an adjustable service light is located under the hood behind the radiator.



### **Caterpillar Monitoring System.**

The D6R III features a flexible monitoring system that is easily upgraded by flashing software. As technology changes and new electronics and software become available, this upgradable monitoring system allows the machine to be easily updated and take advantage of improvements.

The Caterpillar Monitoring System is designed to:

- Allow easy upgrades
- Reduce downtime
- Match software to unique application needs



## Engine

Cat C9 Engine with ACERT Technology

### Standard

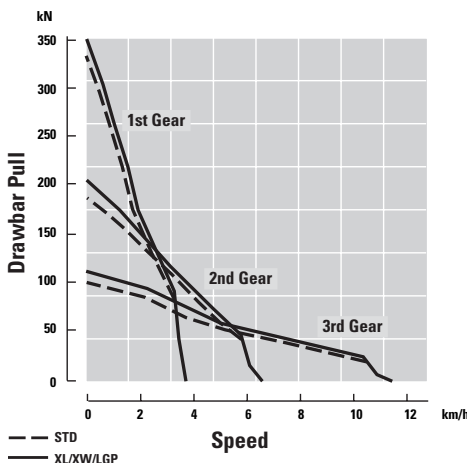
Gross Power (J1995)	159 kW/216 hp
Net Power at 1850 rpm	
ISO 9249	138 kW/188 hp
80/1269/EEC	138 kW/188 hp
Bore	112 mm
Stroke	149 mm
Displacement	8.8 Liters

### XL/XW/LGP

Gross Power (J1995)	170 kW/231 hp
Net Power at 1850 rpm	
ISO 9249	149 kW/203 hp
80/1269/EEC	149 kW/203 hp
Bore	112 mm
Stroke	149 mm
Displacement	8.8 Liters

- All engine horsepower (hp) are metric including front page.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No derating required up to 2300 m altitude, beyond 2300 m automatic derating occurs.
- Maximum altitude of 3000 m

### Drawbar Pull vs Ground Speed



## Brakes

ISO 10265 MARCH99

## Transmission

Forward	km/h
1	3.8
2	6.6
3	11.5
Reverse	
1	4.8
2	8.4
3	14.6

## Service Refill Capacities

	Liters
Fuel Tank	424
Cooling System	76.8
Engine Crankcase	28.0
Power Train	145.7
Final Drives (each)	13.6
Roller Frames (each)	24.6
Hydraulic Tank	51.5
Pivot Shaft Compartment	1.9

## Hydraulic Controls

### Pump

Capacity	69 bar
Rated Engine Speed	2125 rpm
Pump Output	217 L/min
Cylinder Flow	
Lift	190 L/min
Tilt	80 L/min
Ripper	160 L/min

### Main Relief Valve Settings

Pressure Setting	420 bar
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### Maximum Operating Pressure

Bulldozer	193 bar
Bulldozer Tilt	193 bar
Tilt Cylinder	193 bar
Ripper	
Lift	193 bar
Pitch	193 bar
Steering	400 bar

## Winch

Winch	PA 56
Weight	1179 kg
Bracket Length	1210 mm
Case Length	1210 mm
Case Width	975 mm
Increased Tractor Length	
STD	517 mm
XL/XW	517 mm
LGP	397 mm
Flange Diameter	504 mm
Drum	
Width	330 mm
Diameter	254 mm
Capacity – 22 mm	88 000 mm
Capacity – 25 mm	67 000 mm
Capacity – 29 mm	67 000 mm
Ferrule Size (O.D. x Length)	54 x 67 mm
Oil Capacity	67 Liters

## ROPS/FOPS

- ROPS (Rollover Protective Structure) meets ROPS criteria ISO 3471-1994.
- FOPS (Falling Object Protective Structure) meets ISO 3449-1992 Level II.

## Sound

- The operator sound level measured according to the procedures specified in ISO 6396:1992 is 81 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- The labeled sound power level is 111 dB(A) measured according to the test procedures and conditions specified in 2000/14/EC.

## Ripper

Type	Fixed Parallelogram	Maximum penetration	500 mm
Number of pockets	3	Maximum penetration force	66 kN
Overall beam width	2202 mm	Pryout force	91 kN
Beam cross section	216 x 254 mm	Weight with one shank	1634 kg
Maximum clearance raised (under tip, pinned in bottom hole)	511 mm	each additional shank	74 kg

## Weights

	Operating Weight kg	Shipping Weight kg		Operating Weight kg	Shipping Weight kg
STD A	18 669	14 708	XW A	21 116	17 364
STD SU	18 325	14 708	XW SU	20 671	17 364
XL A	20 251	16 703	XW VPAT	21 376	17 716
XL SU	20 080	16 703	LGP S	21 715	18 847
XL VPAT	21 110	17 178	LGP VPAT	23 051	19 044

## Bulldozer Specifications

		S STD	S LGP	SU STD	SU XL	SU XW	A*** STD	A*** XL	A*** XW	VPAT XL	VPAT XW	VPAT LGP
Blade Capacity	m <sup>3</sup>	3.89	3.75	5.61	5.61	5.62	3.93	3.93	4.30	4.73	5.10	4.32
Blade Width	mm	3360	4063	3260	3260	3556	4166	4165	4200	3880	4160	4160
Blade Height	mm	1257	1101	1412	1412	1412	1155	1155	1169	1295	1295	1191
Digging Depth	mm	473	655	473	459	459	506	524	500	737	737	672
Ground Clearance	mm	1104	1083	1104	1195	1195	1142	1205	1242	1174	1174	1230
Maximum Tilt	mm	765	701	743	743	743	408	408	408	440	460	502
Weight*	kg	2599	2836	2699	2973	2949	3050	3150	3400	3560	3650	3620
Weight**	kg	–	–	–	–	–	–	–	–	1593	1681	1591

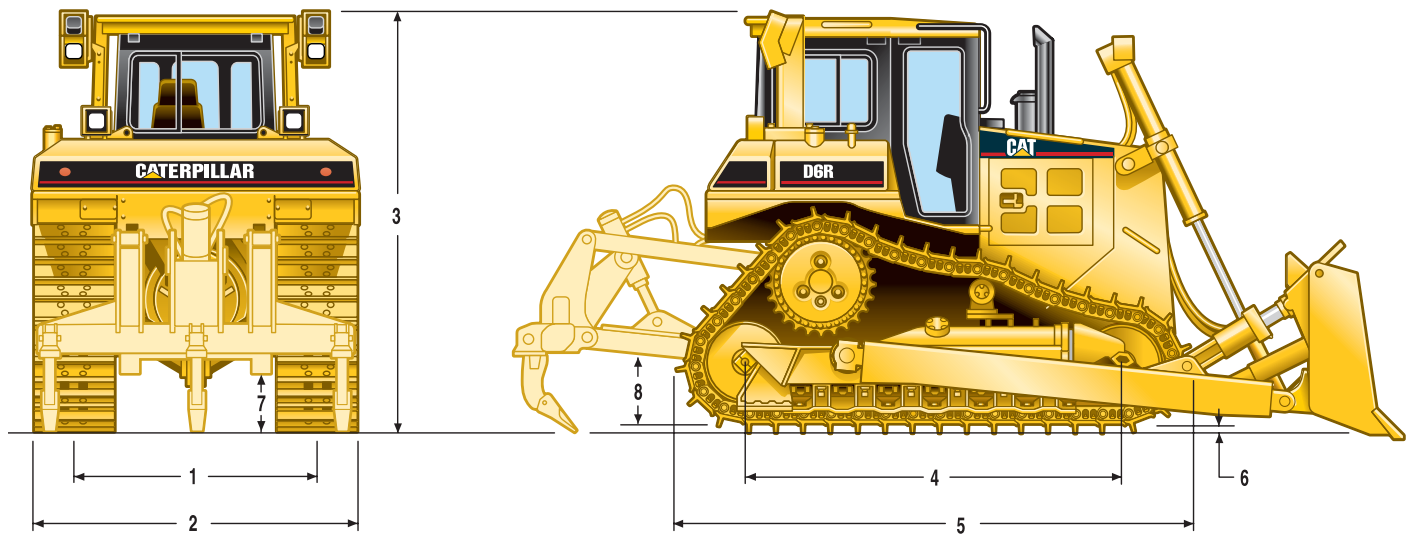
\* Includes push arms, blade, blade tilt cylinder(s), cutting edges and miscellaneous hardware components

\*\* VPTA blade only

\*\*\* Angle dozers include two tilt cylinders

# Dimensions

(approximate)



		STD	XL	XL VPAT	XW	XW VPAT	LGP S	LGP VPAT
<b>1</b> Track gauge	mm	1880	1880	2134	2032	2286	2286	2286
<b>2</b> Width of tractor								
Over trunnions	mm	2640	2640	—	2950	—	3428	—
Without trunnions (standard track)	mm	2440	2440	2692	2794	3048	3193	3150
<b>3</b> Machine height from tip of grouser:								
Stack	mm	3143	3143	3143	3143	3143	3193	3193
ROPS	mm	3195	3195	3195	3195	3195	3245	3245
<b>4</b> Length of track on ground	mm	2664	2871	2871	2871	2871	3275	3275
<b>5</b> Length of basic tractor	mm	3860	3860	3860	3860	3860	4247	4247
With following attachments add:								
Drawbar	mm	217	217	217	217	217	251	251
Ripper Multi-Shank (tip at ground line)	mm	1403	1403	1403	1403	1403	—	—
Winch	mm	517	517	517	517	517	397	397
S Blade	mm	1043	—	—	—	—	1218	—
SU Blade	mm	1235	1472	—	1472	—	—	—
A Blade	mm	1147	1349	—	1349	—	—	—
VPAT Blade	mm	—	—	1412	—	1412	—	1718
<b>6</b> Height of grouser	mm	65	65	65	65	65	65	65
<b>7</b> Ground clearance	mm	383	383	383	383	383	433	433
Track pitch	mm	203	203	203	203	203	203	203
Number of shoes per side		39	41	41	41	41	45	45
Number of rollers per side		6	7	7	7	7	8	8
Standard shoe	mm	560	560	560	760	760	915	810
Ground contact area (standard track)	m <sup>2</sup>	2.98	3.22	3.22	4.36	4.36	5.99	5.31
Ground pressure*	bar	0.61	0.62	0.66	0.47	0.49	0.36	0.43
<b>8</b> Drawbar height	mm	576	576	576	576	576	626	626
From ground face of shoe	mm	511	511	511	511	511	561	561

\* STD, XL, XW with SU blade, with no rear attachments unless otherwise specified.



# Standard Equipment

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

## Electrical

Alarm, backup  
Alternator, 95-amp  
Batteries, two maintenance-free 12V (24V system)  
Converter, 12V, 10 amp with two power outlets  
Diagnostic connector  
Horn, forward warning

## Operator Environment

Air conditioner, under-hood  
Armrests, adjustable  
Cab, ROPS/FOPS, sound-suppressed  
Differential steering control with touch shift  
Electronic distance travel indicator  
Caterpillar Monitoring System:  
    Temperature (coolant, hydraulic, power train), fuel level, tachometer, odometer, gear indicator, and diagnostics  
Foot pads, dash  
Heater  
Hourmeter, electronic  
Mirror, rearview  
Pedal, decelerator  
Pilot operated hydraulic controls with electronic deactivation switch  
Radio ready  
Seat, adjustable, contour suspension with gray fabric  
Seat belt, retractable 76 mm  
Throttle switch, electronic  
Wipers, intermittent

## Power Train

Advanced Modular Cooling System (AMOCS)  
Aftercooler, air-to-air (ATAAC)  
Air cleaner, pre-cleaner with strata tube dust ejector  
Air filter with electronic service indicator  
C9 ACERT, diesel, Electronic Unit Injection (HEUI)  
Coolant, extended life  
Electronically controlled powershift transmission, 3 forward, 3 reverse speeds  
Fan, blower, direct drive  
Final drives, 3-planet single reduction planetary  
Fuel priming pump, electric  
Muffler with mitered stack  
Parking brake, electronic  
Prescreener  
Shift management:  
    Controlled throttle, load compensating  
    Automatic directional and downshift  
Starting aid, automatic ether  
Torque divider  
Turbocharger, waste-gate  
Water separator

## Undercarriage

Carrier roller (XL, XW, and LGP)  
Equalizer bar, heavy-duty  
Guards, center track guiding (LGP)  
Guards, end guiding  
Idlers – SystemOne, center tread, lifetime lubricated  
Sprocket rim segments, replaceable  
Track adjusters, hydraulic  
Track roller frames, tubular  
Track rollers, lifetime lubricated  
Track, SystemOne, moderate service:  
    Standard arrangement – 560 mm, 39-section  
    XL arrangement – 560 mm, 41-section  
    XW arrangement – 760 mm, 41-section  
    LGP arrangement – 810 mm offset, 45-section (VPAT models)  
    915 mm, 45-section (non-VPAT models)

## Other Standard Equipment

CD-ROM parts book  
Cooler, hydraulic oil  
Engine enclosures, perforated  
Front pull device  
Guards, hinged bottom  
Hood, perforated  
Hydraulic, load sensing, dozer lift and tilt  
Product Link ready  
Radiator doors, hinged, fan blast deflector  
Scheduled oil sampling ports:  
    Engine oil, power train oil, hydraulic oil, and engine coolant  
Tool box  
Vandalism protection:  
    Cap locks for fluid compartments and battery box

## Optional Equipment

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

### Electrical

AccuGrade Ready Option (Laser/GPS)  
Alternator, 150 amp (brushless)  
Alternator, 95 amp (ducted)  
Lights, supplemental:  
    11 construction (not for VPAT models)  
    11 waste disposal/VPAT package  
    7 (for use with VPAT model)  
    7 (not for VPAT models)  
Sweeps  
Machine Security System  
Power converter  
Product Link

### Operator Environment

Air conditioner (ROPS mounted)  
Air suspension seat, cloth  
    (for use with cab)  
Canopy arrangement (OROPS)  
Glass, ultra strength  
Seat – vinyl (for use with cab)  
Steps, heavy duty grab handles

### Power Train

Drains, ecology (torque converter and transmission)  
Fan: Demand (clutch drive), ejector, Flexxaire, or reversible  
Grid, radiator core protector  
Oil change system, high speed engine and power train  
Precleaner: turbine with or without screen, or with prescreener  
Radiator AMOCS, waste handling, 6 FIN/IN cores; abrasion resistant cores  
Starting Aids  
    Batteries, heavy duty  
    Heater, engine coolant  
Thermal shield

### Undercarriage

SystemOne, Extreme Service (ES), Moderate Service (MS)  
Track, Pairs (STD/XL)  
    560 mm, ES; 610 mm MS or ES  
Track, Pairs (XW)  
    762 mm ES or Trap  
Track, Pair (LGP, non-VPAT)  
    914 mm ES or Trap  
Heavy-duty, Extreme Service (ES), Moderate Service (MS)  
Track, Pairs (STD/XL)  
    560 mm MS or ES; 610 mm MS or ES  
Track, Pairs (XW)  
    762 mm, MS or ES  
Track, Pairs (LGP, non-VPAT)  
    914 mm MS

### Guards

Front pull hook, extreme service, sealed  
Crankcase – extreme service sound suppressed, sealed  
Final drive clamshell  
Final drive seals  
Fuel tank with or without mechanical winch or ripper  
Precleaner  
Radiator, bottom heavy-duty  
Radiator, heavy-duty, punched (non-VPAT)  
Radiator, hinged, two-piece, heavy-duty (non-VPAT)  
Radiator, hinged, 2-piece heavy-duty (VPAT)  
Rear heavy-duty, transmission  
Screen, rear – with ROPS mounted air conditioner  
Seals, idler GP  
Striker bar GP, front and rear  
Sweeps (not compatible with VPAT machines)  
SystemOne  
    Guard, track guiding, center (STD, XL, XW)  
    Guard, track roller (STD, XL, XW, LGP)

### Hydraulics

Ripper  
Winch  
AccuGrade

### Rippers

Ripper, multi-shank  
Ripper Attachments  
    Tooth, D6 multi-shank ripper  
    Curved or straight (up to 3)

### Winch Arrangements (PACCAR)

Fairlead, 3 rollers  
Fairlead roller (4th roller)  
Installation arrangement, winch  
Winch arrangement – slow speed with freespool (slow speed) or (normal speed)

### Other Attachments

AccuGrade blade kit  
Counterweight, rear  
Counterweight, additional rear slab  
Drawbar, rigid, long or short  
Radio, 12V AM/FM cassette  
Sound suppression

# D6R Series III Track-Type Tractor

HEHQ5655 (11/2005) hr

Materials and specifications are subject to change without notice.  
Featured machines in photos may include additional equipment.  
See your Caterpillar dealer for available options.

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