

D7E

Track-Type Tractor



Engine

Engine Model	Cat® C9.3 ACERT™	
Global Emissions	U.S. Tier 4 Interim/EU Stage IIIB/ Japan MLIT Step 4	
Engine Power (Maximum)		
ISO 14396	198 kW	266 hp
ISO 14396 (DIN)		270 hp
Net Power (Rated)		
ISO 9249/SAE J1349	175 kW	235 hp
ISO 9249/SAE J1349 (DIN)		238 hp
Net Power (Maximum)		
ISO 9249/SAE J1349	187 kW	251 hp
ISO 9249/SAE J1349 (DIN)		254 hp

Drive Train

Type	Electric Drive	
Weights		
Operating Weight – STD SU	26 055 kg	57,441 lb
Operating Weight – LGP S	28 525 kg	62,886 lb
Shipping Weight – STD	21 955 kg	48,402 lb
Shipping Weight – LGP	24 335 kg	53,649 lb

D7E Features

Electric Drive Powertrain

The revolutionary electric drive system delivers excellent dozing efficiency and performance while consuming considerably less fuel and fewer parts to reduce lifetime owning and operating costs.

Operator Station

Center post cab design offers more space, all-around visibility and reduced noise levels.

ACERT Engine Technology

Cat C9.3 engine with ACERT Technology powers an electric generator that efficiently converts mechanical energy into AC electrical current. The engine is integrated with a Cat aftertreatment solution to meet U.S. Tier 4 Interim/EU Stage IIIB/ Japan MLIT Step 4 emission standards.

Grade Control Ready

Deeply integrated wiring is installed at the factory to make it simple to add a Cat AccuGrade™ system for improved accuracy and increased productivity.

Serviceability

Tilt cab provides easy access to drive system components, hydraulic pumps and lines. Grouped service points and large access doors facilitate easy daily maintenance.

Sustainability

Designed to do more work while consuming fewer resources.

Contents

Powertrain.....	3
Engine	4
Cooling System.....	4
Emissions Technology	5
Operator Station.....	6
Integrated Technologies.....	7
Work Tools.....	8
Serviceability and Customer Support.....	9
Undercarriage	10
Sustainability	10
Waste Handler.....	11
Stockpile Machine.....	12
Specifications.....	13
Standard Equipment.....	17
Optional Equipment.....	18
Notes.....	19



The Cat D7E was designed to meet growing demand for powerful yet highly maneuverable track-type tractors. By adapting electric drive technology to the unique requirements of dozer applications, Caterpillar has developed an all-new class of tractor that delivers the best possible balance of heavy-dozing and fine-grading performance.

The innovative diesel-electric powertrain is also designed to burn considerably less fuel and consume fewer fluids and parts for reduced owning and operating costs. Improved productivity and efficiency means getting more work done while using fewer resources. The D7E meets U.S. Tier 4 Interim/EU Stage IIIB/Japan MLIT Step 4 emission standards.

Powertrain

First-of-its-kind Electric Drive delivers power and efficiency

The electric generator, power inverter and propulsion module in the electric drive system replace traditional mechanical components such as a torque converter and transmission.

The Cat C9.3 engine with ACERT Technology turns a powerful electric generator that efficiently converts mechanical energy into AC electrical current. Electrical current from the generator flows through specially armored cables and military grade connectors to a solid-state power inverter. Advanced electronics send AC current to the propulsion module to control the motors and provides DC current for the accessory systems.

The propulsion module delivers well-modulated torque via axles to the final drives. Consisting of state-of-the-art AC electric motors – and connected to the D7E updated differential steering system – the propulsion module has no moving electrical contacts and few moving mechanical parts.

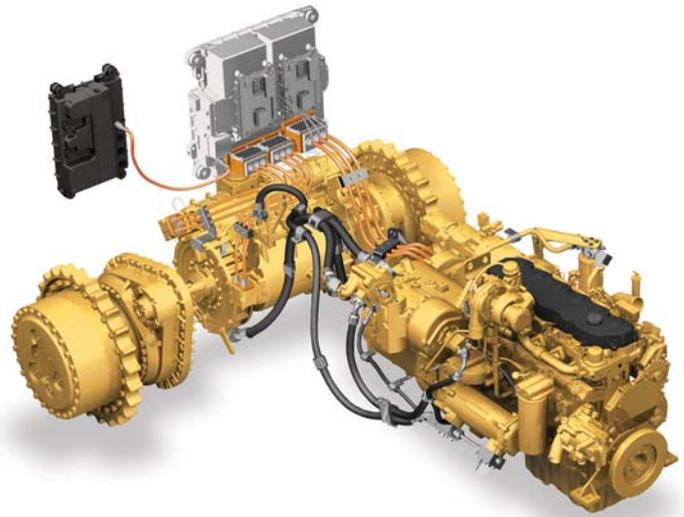
All electrical components are fully sealed to safely operate in a wide range of dozing conditions. Liquid cooling ensures that the electric drive components deliver peak performance in extreme temperature conditions.

The D7E electric drive system is highly efficient at delivering engine power to the ground. Infinitely variable speed control, means there are no gears to shift. Operators can concentrate on the task and the job site, rather than on shifting gears and managing engine speed. Training is simplified as well.

A proven differential steering system combines with electric drive to make the D7E the only system that can perform locked-track pivot turns for better maneuverability. A dedicated D8-size steering pump delivers improved performance.

Benefits

- Fuel efficiency: 10 – 30 percent less fuel burned per hour.
- Reduced owning and operating costs: Fewer moving parts, longer drive train component life, reduced lifetime service and maintenance.
- Resourceful: Designed to use less fuel and fluids, and fewer replacement parts.
- Increased efficiency: Lower fuel usage per cubic yard of material moved.
- Increased productivity: More material moved per hour.
- Versatility: Power, smooth operation and maneuverability for a wide variety of applications.



Engine

ACERT™ Technology



The D7E features a Cat C9.3 ACERT engine and a Cat Clean Emissions Module aftertreatment to deliver the performance and efficiency that customers demand, while meeting U.S. Tier 4 Interim/EU Stage IIIB/ Japan MLIT Step 4 emission standards.

The efficient drivetrain allows the engine to operate in a tighter rpm range, 1,500 – 1,800 rpm, which helps extend engine life and improve fuel economy. The increased drivetrain efficiency also allows the machine to achieve greater performance at lower horsepower than previous models, adding even more to the D7E overall benefits.

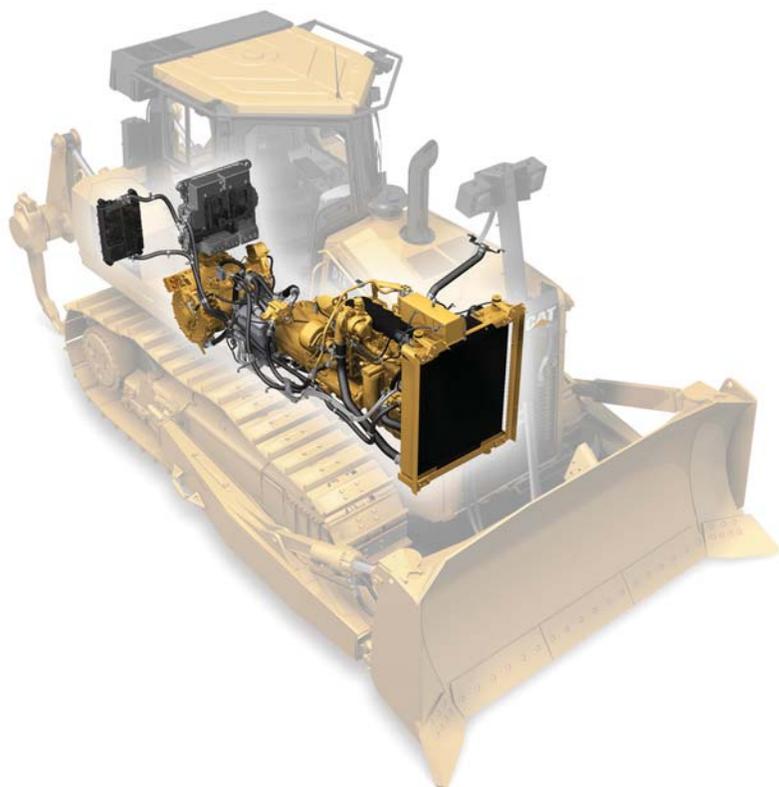
Features

- Serviceability: Electric priming pump and easier engine access make service easier.
- Leak Protection: Components are sealed, preventing leaks and protecting fluids from contamination.

Cooling System

Efficient and easy to service

The D7E cooling system uses a three-part radiator built with rugged, highly efficient aluminum bar cores for charged air, jacket water, and the separate circuit. Although the jacket water and separate circuit coolant operate at different temperatures, the radiator appears and acts as one integrated unit. Airflow is managed by a hydraulic variable speed demand fan, reducing power requirements and fuel consumption. A molded shroud ensures efficient air flow through the radiator and the fan utilizes lightweight, durable blades for high efficiency and quiet operation. A larger gap between fins reduces plugging, and the single-plane design allows for easier cleaning and service.





Emissions Technology

Reliable, integrated solutions

Cat NO_x Reduction System

The Cat NO_x Reduction System captures and cools a small quantity of exhaust gas, then routes it into the combustion chamber where it drives down combustion temperatures and reduces NO_x emissions.

Aftertreatment Technologies

To meet U.S. Tier 4 Interim/EU Stage IIIB/Japan MLIT Step 4 emission standards, Cat aftertreatment components have been designed to match application needs. System components include a **Diesel Oxidation Catalyst (DOC)**, which uses a chemical process to convert regulated emissions in the exhaust system, and a **Diesel Particulate Filter (DPF)** that traps particulate matter that is carried into the exhaust stream.

The DOC, DPF and Cat Regeneration System are contained in a Caterpillar designed Clean Emissions Module (CEM) that protects the components, minimizes the aftertreatment footprint and simplifies maintenance. For high debris applications that require thermal shields on exhaust components, an optional insulated CEM is available for the D7E.

Cat Regeneration System

The Cat Regeneration System is designed to work transparently, without any interaction needed from the operator. Under most operating conditions, engine exhaust is hot enough to oxidize soot through passive regeneration. If supplemental regeneration is needed, the Cat Regeneration System elevates exhaust gas temperatures to burn off soot in the Diesel Particulate Filter (DPF). This is a process that happens automatically, but the operator can initiate the cycle when convenient or interrupt regeneration as needed. Soot level monitor and regeneration indicator lights are integrated into the dash display.

Delayed Engine Shutdown

Delayed Engine Shutdown feature is available to allow the machine to cool immediately after a heavy work load or regeneration cycle.

Engine Idle Shutdown Timer

An optional Engine Idle Shutdown timer will sound a warning and shut down the engine after the machine has been idling for a pre-set period of time.

Operator Station

Unprecedented all-around visibility and comfort



The D7E cab is designed to maximize operator efficiency. From the operator's seat, the single center post aligns perfectly with the air intake, exhaust and lift cylinder, greatly enhancing forward visibility. The angled door provides more side glass area, enhancing sightlines to the blade and all around the job site. That helps operators work more confidently and productively all shift long and enhances job site safety.

- The cab offers more interior space, as well as wider, swing out doors for easier cab access.
- Ergonomic controls are fully adjustable and designed for low-effort comfort. Switches and controls for various systems are located within easy reach of the operator.
- A standard Eco Reverse mode works during the reverse travel direction of the dozing cycle and during idle time to save even more fuel.
- Interior noise levels are reduced to a quiet 75 dB(A) (ISO 6396).
- A single-unit heating, ventilation and air conditioning (HVAC) system is self contained and powered by electrical current from the accessory power converter. It has no belts, needs no long refrigerant lines, and maintains maximum cooling efficiency even when the machine goes to idle.
- An integrated display screen provides a range of machine status information, plus safety, service and maintenance-related alerts. Built-in connections and mounts make for easy installation of a grade control system display.
- A speed recall feature allows operators to pre-set the desired forward and reverse travel speed, and then resume that speed simply by pressing a button.



Integrated Technologies

Solutions to make work easier and more efficient

Caterpillar is the only manufacturer to offer fully-integrated electronic technology solutions that enable greater accuracy, higher productivity, lower operating costs and more profitability.

AccuGrade

AccuGrade uses positioning and guidance technologies, machine sensors, and automatic blade control to help operators get to grade faster, easier and more efficiently. Digital design plans, real-time cut/fill data, and in-cab guidance give operators detailed information to work more confidently and achieve greater accuracy, in fewer passes, using less material. Operators can stay on grade and improve productivity and accuracy by nearly 50 percent over conventional methods. Grade stakes and checkers are minimized, making the work site safe, efficient, and cost effective. AccuGrade technologies include Cross Slope, Sonic, Laser, GPS, and/or Universal Total Station (UTS).

Product Link™

Product Link helps take the guesswork out of equipment management with remote monitoring capabilities for your machine or your entire fleet. Track asset location, hours, fuel usage, diagnostic codes, idle time and more through the secure VisionLink™ user interface, powered by Trimble. Knowing where your equipment is, what it's doing and how it's performing enables you or your Cat dealer to manage your fleet in real-time so you can maximize efficiency, improve productivity, and lower operating costs.

*Product Link licensing not available in all areas. Please consult your Cat dealer for availability.



Work Tools

Designed for performance and versatility

Dozer Blades

The D7E features a robust, single lift cylinder design. The single cylinder delivers the same power as a dual-cylinder system, but with fewer than half the components. Blade stability is excellent, supported by L-shaped push arms.

Dozer blade capacity is the same as previous models, although the D7E blade enhances durability with thicker plating.

Blade Options

- Universal Blade
- Semi-Universal Blade
- Straight Blade
- Angle Blade
- Coal Blade
- Wood Chip Blade
- LGP Angle Blade
- LGP Variable Radius SU Blade

Rear Attachments

Distributed hydraulics and commonality among D7E rear Work Tools help maximize productivity and efficiency. A well-balanced machine design means counterweights are not needed when a rear work tool is not attached.

- **Ripper** – The ripper on the D7E is placed closer to the machine for improved balance. The Ripper Auto Stow function allows the operator to automatically raise and position the ripper for the next pass. Cast-in ripper mounts mean the machine comes ready-to-pin from the factory, so a ripper can be mounted quickly and easily.
- **Winch** – The hydraulically driven winch for the D7E features positive load control with variable speed, a dual braking system, a single lever control and a standard three roller fairlead.
- **Drawbar** – The drawbar for the D7E is suited for a variety of applications, including disks, compactors, chopper wheels, pull-type scrapers and retrieving other equipment.

Serviceability and Customer Support

When uptime counts

Designed for Serviceability

The D7E redefines serviceability. With easy access to service points and longer service intervals, the D7E can significantly reduce total owning and operating costs.

A tilt cab allows easy access to modular major components, such as generator, propulsion module, power electronics and hydraulics. The heating, ventilation and air conditioning (HVAC) system is self contained for improved performance, increased service intervals and ease of serviceability.

Service points are grouped on the left side of the machine for quick and easy routine maintenance. Ground-level sight gauges provide quick and easy inspection of fluid levels. Modular final drives can be easily accessed and serviced.

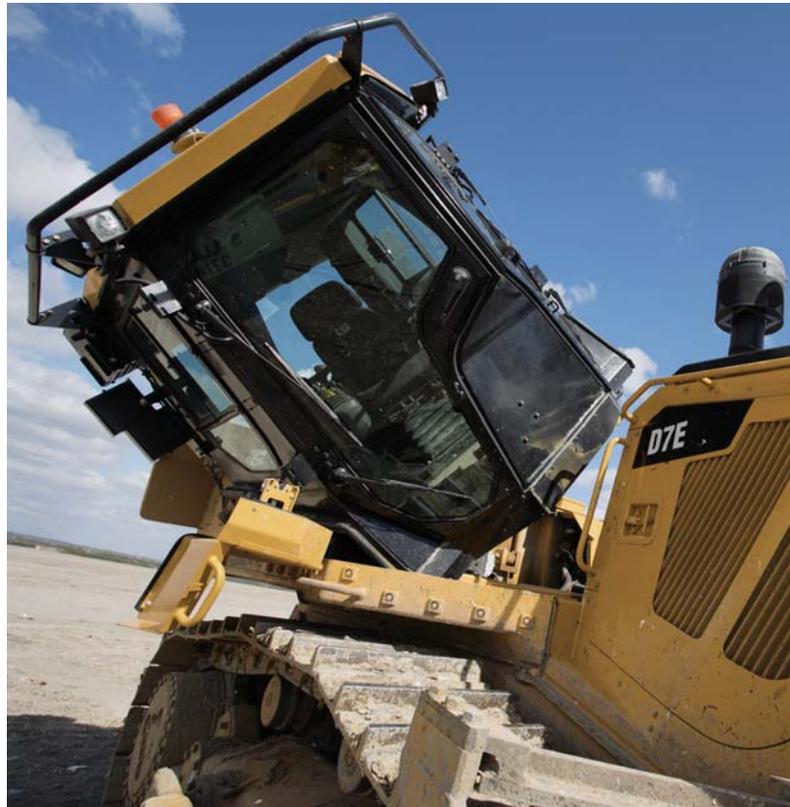
Ground Level Service Center

The ground level service center is accessible on the left hand fender without setting foot on the machine, giving easy access to the battery disconnect, remote engine shutdown and optional access light switches. It also houses an LED warning indicator showing that the powertrain and accessory systems are energized. When the systems are de-energized and safe for maintenance, the indicator turns off.

Renowned Cat Dealer Support

From helping you choose the right machine to knowledgeable ongoing support, Cat dealers provide the best in sales and service. Manage costs with preventive maintenance programs like Custom Track Service, Scheduled Oil Sampling (S·O·SSM) analysis, and guaranteed maintenance contracts. Stay productive with best-in-class parts availability. Cat dealers can even help you with operator training to help you boost profits.

And when it's time for machine replacement, your Cat dealer can help you save even more with Genuine Cat Remanufactured parts. Receive the same warranty and reliability as new products at cost savings of 40 to 70 percent for powertrain and hydraulic components.



Undercarriage

Engineered for performance

The D7E features an advanced undercarriage design for greater machine versatility in a wider range of applications. Enhanced visibility, especially to the sides, is only one of the many benefits of this highly efficient undercarriage system.

D10-size sprocket bearings offer added durability. Shock loads are directed through the roller frame to reduce wear and tear on the machine – and on the operator.

The Heavy Duty undercarriage system components are designed for extended wear life in abrasive conditions and rocky or uneven terrain. The Standard arrangement is designed for versatility and works in a variety of soil conditions. The LGP configuration increases track contact area and reduces ground pressure for improved stability and excellent flotation in soft ground conditions.



Sustainability

Resourceful in every way

The D7E is designed to maximize efficiency and productivity while conserving natural resources.

- Uses 10–30 percent less fuel per hour than previous models. Many customers are reporting even better fuel savings in their own applications.
- In the first two years of production, customers using the D7E saved more than 5.7 million liters (1.5 million gallons) of diesel fuel as compared to the D7R. Significant fuel savings means greatly reduced emissions and lower costs for customers.
- The D7E earned a 2009 Clean Air Excellence Award from the U.S. Environmental Protection Agency.
- More efficient – 25 percent more material moved per liter/gallon of fuel.
- Fewer parts and longer component life, less fuel and fluids, means less to replace and less to dispose of.
- Major structures and components are built to be rebuilt, reducing waste and replacement costs.
- Approximately 98% of machine materials can be recycled (ISO 16714), conserving valuable natural resources and further enhancing machine end-of-life value.



Waste Handler

Designed and built for performance

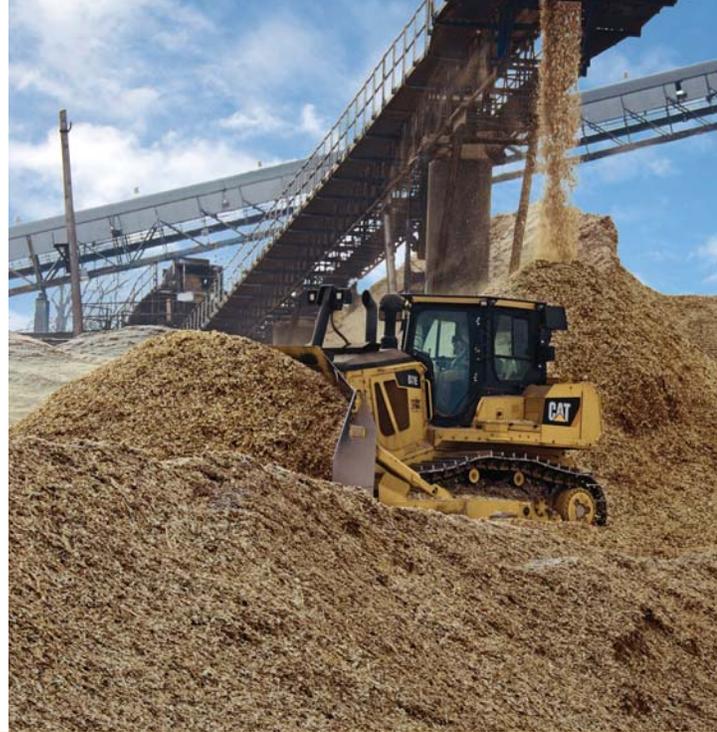
The fuel-efficient D7E Waste Handler is a heavy-duty machine designed especially for waste handling applications. Its versatility makes it a powerful and highly maneuverable machine for dozing and spreading waste, as well as an ideal fine grading machine to place just the right depth of cover material.

The D7E WH is designed to give you more uptime in harsh landfill conditions, with specialized components that are installed during factory assembly for maximum performance.

- Heavy duty guarding and screens help protect machine components against damage from material wrapping, impact and debris build-up.
- Special seals help prevent debris from getting in the engine and transmission compartments, as well as into the final drives.
- Hydraulic demand fan offers efficient cooling and reverses to reject debris. Single plane radiator offers easy clean-out.
- Insulated Clean Emissions Module and thermal shields provide a high level of thermal protection.
- A clean air module increases cab air pressure to keep dust out and filter the air for a more pleasant operator environment.
- Special lighting packages and a black hood and lift cylinder help your operators work more efficiently in low light conditions.
- Features like well placed grab bars, an access ladder for refueling/rear window cleaning and an optional rear vision camera contribute to helping you meet your job site safety goals.
- Specialized track shoe and blade offerings help you optimize your machine for maximum productivity.

Your Cat dealer can provide you with more information about the special features of the D7E Waste Handler.





Stockpile Machine

Move more material in less time

Caterpillar offers a D7E Stockpile arrangement designed for maximum productivity when moving loose material like coal or wood chips. The D7E is especially well suited to this application because of its maneuverability and exceptional fuel economy, helping you move more material in less time, and using significantly less fuel.

- Specialized guarding and seals help protect the machine from damage and debris build-up in major components.
- Single-plane cooling package gives you greater cooling efficiency, reduced plugging and easier clean-out access. Hydraulic demand fan offers efficient cooling and reverses to reject debris.
- Insulated Clean Emissions Module and thermal shields provide a high level of thermal protection.
- Shielding and seals help keep debris out of engine and powertrain.
- Additional features like a turbine precleaner and roof-mounted filter help protect both the machine and the operator in high debris conditions.
- Special blade and track shoe offerings let you optimize the machine for the job.

Please talk with your Cat dealer for complete details and options on the D7E equipped for Stockpile applications.

D7E Track-Type Tractor Specifications

Engine

Engine Model	Cat® C9.3 ACERT™	
Global Emissions	U.S. Tier 4 Interim/ EU Stage IIIB/ Japan MLIT Step 4	
Engine Power (Maximum)		
SAE J1995	201 kW	270 hp
ISO 14396	198 kW	266 hp
ISO 14396 (DIN)	270 hp	
Net Power (Rated)		
ISO 9249/ SAE J1349	175 kW	235 hp
ISO 9249/ SAE J1349 (DIN)	238 hp	
Net Power (Maximum)		
ISO 9249/ SAE J1349	187 kW	251 hp
ISO 9249/ SAE J1349 (DIN)	254 hp	
Bore	115 mm	4.5 in
Stroke	149 mm	5.9 in
Displacement	9.3 L	567 in ³

- Maximum Engine Power at 1,600 rpm, Rated Net Power at 1,700 rpm, Maximum Net Power at 1,450 rpm.
- Net power advertised is the power available at the flywheel when engine is equipped with fan, air cleaner, and muffler.
- No derating required up to 3200 m (10,500 ft) altitude, beyond 3200 m (10,500 ft) automatic derating occurs.
- All nonroad U.S. EPA Tier 4, European Union (EU) Stage IIIB and IV, and Japan (MLIT) Step 4 certified diesel engines are required to use:
 - Ultra Low Sulfur Diesel (ULSD) and Sulfur-Free fuels that are 15 ppm (mg/kg) sulfur or less.
 - Cat DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specification.

Service Refill Capacities

Fuel Tank	409 L	108 gal
Cooling System	87 L	22.5 gal
Engine Crankcase	30 L	8 gal
Powertrain	60 L	16 gal
Final Drives (each)	28 L	7 gal
Final Drive (LGP each)	34 L	9 gal
Pivot Shaft Compartment	7 L	1.8 gal
Hydraulic Tank	76 L	20 gal

Weights

Shipping Weight	21 955 kg	48,402 lb
Operating Weight – STD SU	26 055 kg	57,441 lb
Operating Weight – LGP S	28 525 kg	62,886 lb
Shipping Weight – LGP	24 335 kg	53,649 lb

- Shipping Weight includes lubricants, coolant, ROPS/FOPS cab, standard track and 10% fuel.
- Operating Weight includes blade, lubricants, coolant, full fuel tank, standard track, ROPS/FOPS cab, drawbar and operator.

Hydraulic Controls – Pump

Pump Output – Steering	312 L/min	82.4 gal/min
Pump Output – Implement	200 L/min	52.8 gal/min
Lift Cylinder Flow	200 L/min	52.8 gal/min
Ripper Cylinder Flow	200 L/min	52.8 gal/min
Pump Type	Piston, Variable Displacement	
Tilt Cylinder Flow – Head End Flow	93 L/min	24.6 gal/min
Tilt Cylinder Flow – Rod End Flow	66 L/min	17.4 gal/min

Hydraulic Controls – Main Relief Valve

Pressure Setting – Steering	27 600 kPa	4,000 psi
-----------------------------	------------	-----------

- Rated Implement Pump Speed 2,000 rpm.
- Rated Steering Pump Speed 2,500 rpm.

Hydraulic Controls – Maximum Operating Pressure

Bulldozer	27 600 kPa	4,000 psi
Tilt Cylinder	27 600 kPa	4,000 psi
Ripper (Lift)	27 600 kPa	4,000 psi
Ripper (Pitch)	27 600 kPa	4,000 psi
Steering	41 000 kPa	5,950 psi

Ripper

Type	Multi-Shank	
Number of Pockets	3	
Overall Beam Width	2088 mm	82.2 in
Beam Cross Section	355 mm	14.0 in
Maximum Clearance Raised (under tip, pinned in bottom hole)	588 mm	23.1 in
Maximum Penetration	650 mm	25.6 in
Maximum Penetration Force	87.4 kN	19,639 lbf
Pryout Force	234.4 kN	52,695 lbf
Weight – with One Shank	1650 kg	3,572 lb
Each Additional Shank	150 kg	330 lb
Ramp Angle	26 Degrees	
Pocket Spacing	900 mm	35.4 in
Shank Gauge	1800 mm	70.9 in
Shank Section	72 mm × 228 mm 2.8 in × 9.0 in	

D7E Track-Type Tractor Specifications

Winch		
Winch Model	PA90	
Weight*	1520 kg	3,350 lb
Oil Capacity	12 L	3.2 gal
Winch and Bracket Length	1115 mm	93.9 in
Winch Case Length	1110 mm	43.7 in
Winch Case Width	826 mm	32.5 in
Increased Tractor Length – STD	1032 mm	93.9 in
Increased Tractor Length – LGP	1032 mm	93.9 in
Drum Diameter	318 mm	12.5 in
Drum Width	226 mm	8.9 in
Flange Diameter	610 mm	24 in
Drum Capacity – 24 mm (1 in)	62 m	203 ft
Drum Capacity – 29 mm (1.13 in)	56 m	185 ft
Ferrule Size (O.D. × Length)	60 mm × 65 mm 2.38 in × 2.56 in	
Winch Drive	Hydraulic	
Control	Electronic/Hydraulic	
Installed Weight	1520 kg	3,350 lb
Winch Length	1115 mm	43.9 in
Overall Width	1090 mm	43 in
Throat Clearance	218 mm	8.6 in
Rope Diameter (recommended)	25 mm	1 in
Cable Ferrule Size (O.D. × Length)	60 mm × 65 mm 2.38 in × 2.56 in	
Maximum Bare Drum Line Pull	400.3 kN	90,000 lbf
Maximum Bare Drum Line Speed	21 m/min	70 ft/min
Maximum Full Drum Line Pull	253.5 kN	57,000 lbf
Maximum Full Drum Line Speed	35 m/min	116 ft/min

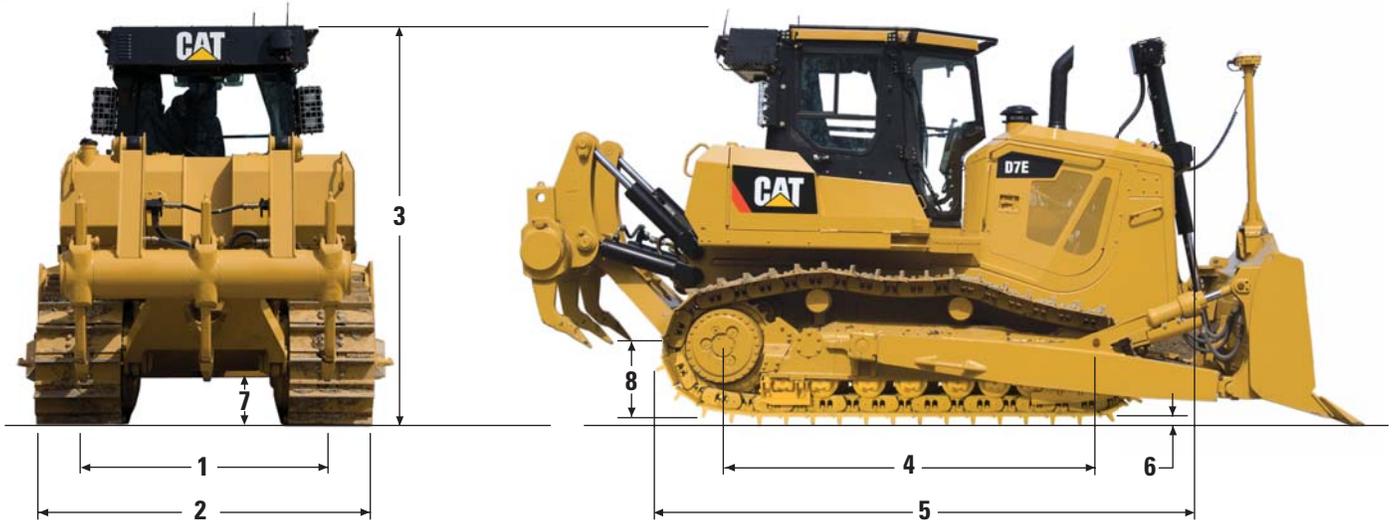
* Basic winch weight, mounting arrangement, hydraulic and electrical system weight.

Standards	
ROPS/FOPS	<ul style="list-style-type: none"> • Rollover Protective Structure (ROPS) meets the following criteria: ISO 3471:2008 • Falling Object Protective Structure (FOPS) meets the following criteria: ISO 3449:2005 Level II
Brakes	<ul style="list-style-type: none"> • Crawler Machine Brake Requirements meets the following criteria: ISO 10265:2008
Cab	ANSI/SAE J1166 OCT98
	<ul style="list-style-type: none"> • The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT98 is 77 dB(A), and as measured by ISO 6396:2008 is 75 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed. • Hearing protection may be needed when operating with an open cab (when not properly maintained or doors/windows open) for extended periods and noisy environment. • The exterior sound pressure level for the standard machine measured at a distance of 15 m (49.2 ft) according to the test procedures specified in SAE J88 APR95, mid-gear-moving operation, is 80 dB(A).

Drive Train	
Type	Electric Drive
AC Compressor Nominal Input Voltage	320 Volts
AC Compressor Maximum Input Current	12 Amps
Electric Water Pump System Nominal Input Voltage	320 Volts
Electric Water Pump System Nominal Input Current	5 Amps
AC Generator and Propulsion Module Voltage	480 Volts
	<ul style="list-style-type: none"> • Nominal current dependent on heat/humidity loading on HVAC unit. • Measured with water pump operating speed of 4,400 rpm. Measurement is 1 Amp with the water pump operating speed of 2,100 rpm.

Dimensions

All dimensions are approximate



	STD		LGP	
1 Track Gauge	1981 mm	78 in	2286 mm	90 in
2 Width of Tractor over Trunnions	2880 mm	113 in	3423 mm	135 in
Width of Tractor without Trunnions (std. shoes)	2591 mm	102 in	3200 mm	126 in
3 Machine Height from Tip of Grouser				
Top of Stack	3365 mm	132 in	3365 mm	132 in
Top of Standard Cab	3392 mm	134 in	3392 mm	134 in
From Ground Face of Shoe	3322 mm	131 in	3322 mm	131 in
4 Length of Track on Ground	3016 mm	119 in	3450 mm	136 in
5 Length of Basic Tractor	4608 mm	181 in	4608 mm	181 in
With the following attachments add to basic tractor length:				
Ripper (with tip at ground line)	1391 mm	55 in		N/A
Ripper (with tip fully raised)	1222 mm	48 in		N/A
Winch	1032 mm	41 in	1032 mm	41 in
Drawbar	270 mm	10.6 in	270 mm	10.6 in
S Blade	977 mm	38 in		N/A
SU Blade	1187 mm	47 in		N/A
U Blade	1425 mm	56 in		N/A
A Blade	1230 mm	48 in	1230 mm	48 in
6 Height of Grouser	70 mm	2.75 in	70 mm	2.75 in
7 Ground Clearance	472 mm	18.6 in	472 mm	18.6 in
Ground Contact Area (std. shoes)	3.68 m ²	5,698 in ²	6.31 m ²	9,792 in ²
Number of Shoes per Side		40		44
Standard Shoe Width and Type	610 mm	24 in	915 mm	36 in
		MS		MS
Ground Pressure	69.5 kPa	10.1 psi	44.3 kPa	6.4 psi
Pitch	215.9 mm	8.5 in	215.9 mm	8.5 in
Track Rollers/Side		7		8
Number of Carrier Rollers		2		2
8 Drawbar Height (grouser tip to center of clevis)	719 mm	28 in	719 mm	28 in

D7E Track-Type Tractor Specifications

Bulldozer Specifications

Blade		7S	7SU	7U	7A		7S LGP
					Straight	Angled 25°	
Blade Capacity (SAE J1265)	m ³	5.16	6.86	8.34	5.15	–	5.89
	yd ³	6.75	8.98	10.91	6.74	–	7.7
Width (over end bits)	mm	3904	3713	3988	4503	4120	4545
	ft	12.81	12.18	13.08	14.77	13.52	14.91
Height	mm	1363	1524	1553	1373	1373	1343
	ft	4.5	5	5.1	4.5	4.5	4.4
Digging Depth	mm	586	586	586	711	711	644
	in	23.1	23.1	23.1	28	28	25.4
Ground Clearance	mm	1108	1108	1108	1120	1120	1264
	in	43.6	43.6	43.6	44.1	44.1	49.8
Maximum Tilt	mm	1045	987	1085	695	695	785
	in	41.1	38.9	42.7	27.4	27.4	30.9
Weight*	kg	3504	3832	3806	3790	3790	3970
	lb	7,709	8,431	8,373	8,330	8,330	8,734

* Weight includes cylinder mounting, lift cylinder and lines, blade, push arms, trunnions, and cylinder lines (Tilt).

Undercarriage

Type	Heavy Duty Undercarriage			
Configuration	STD		LGP	
Number of Rollers (each side)	7		8	
Number of Shoes (each side)	40		44	
Pitch	216 mm	8.5 in	216 mm	8.5 in
Shoe Width	610 mm	24 in	915 mm	36 in
Grouser Height (MS)	70 mm	2.75 in	70 mm	2.75 in
Length of Track on Ground (Heavy Duty)	3016 mm	119 in	3450 mm	136 in
Track Gauge	1981 mm	78 in	2286 mm	90 in
Ground Contact Area (Heavy Duty)	3.68 m ²	5,698 in ²	6.31 m ²	9,792 in ²
Ground Pressure (Heavy Duty)	69.5 kPa	10.1 psi	44.3 kPa	6.4 psi
Ground Clearance	472 mm	18.6 in	472 mm	18.6 in

Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

POWERTRAIN

- Aftercooler, Air to Air
- Air Cleaner, Precleaner with Strata
- Tube Dust Ejector
- C9.3 ACERT Engine
 - EPA/ARB Tier 4 Interim/ EU Stage IIIB/Japan MLIT Step 4
 - Certified Engine with Aftertreatment
- Coolant, Extended Life
- Differential Steering
- Ecology Drains (Engine Oil, Coolant, Hydraulic Oil, Fuel Tank, Powertrain Case)
- Electronic Air Cleaner Service Indicator
- Fan, Hydraulically Driven Demand with High Ambient Capability
- Final Drives, Double Reduction
- Generator, AC
- Parking Brake
- Power Inverter
- Propulsion Module
- Prescreener
- Radiator, Core, Aluminum Bar Plate
- Separate Circuit Core, Aluminum Bar Plate
- Starting Aid, Ether
- Transmission, Continuously Variable
- Turbocharger, Wastegated
- Water Separator, Primary Fuel Filter

UNDERCARRIAGE

- Guards, End Track Guiding
- Heavy Duty Track (610 mm/24" Moderate Service)
- Master Link
- Rollers and Idlers, Lifetime Lubricated
- Sprocket Rim Segments, Replaceable
- Track Adjusters, Gas Spring Recoil
- Undercarriage, Heavy Duty

ELECTRICAL

- Accessory Power Converter (APC)
- Alarm, Backup
- Batteries, Maintenance Free (1,000 CCA)
- Converter, 24V to 12V, 10 Amp
- Heater, Engine Coolant, 120V
- Horn, Forward Warning

OPERATOR ENVIRONMENT

- Armrest, Adjustable
- Bidirectional Shift Switch
- CB Ready
- Cab, Center Post, Integral ROPS/FOPS
- Continuously Variable Speed Control
- Controls, Electro-Hydraulic, Pilot
- Operated with Electronic Deactivation Switch
- Foot Supports, Dash
- Hour Meter, Electronic
- Machine Isolation
- Mirror, Rearview
- Modular HVAC, Cab Mounted
- Monitoring System, Electronic, with Coolant, Power Train Oil, and Hydraulic Oil Temperature, Fuel Gauge, Tachometer, Gear Indicator and Diagnostic Functions
- Operator Presence
- Pedal, Travel Control
- Radio Ready, 12V
- Seat Belt, Retractable, 76 mm (3 in)
- Seat, Cloth, Air Suspension
- Speed Recall Button
- Throttle Dial, Electronic with Eco Reverse
- Wipers, Intermittent

OTHER STANDARD EQUIPMENT

- CD ROM Parts Book
- Cab, Tilt
- Engine Enclosures, Perforated
- Front Tow Hook
- Grade Control Ready
- Guards, Hinged Bottom
- Guard, Final Drive Flange
- Hood, Perforated
- Hydraulics, Load Sensing, Dozer Lift and Tilt
- Oil Cooler, Hydraulic
- Oil Cooler, Powertrain
- Product Link (Satellite or Cellular)
- Radiator Doors, Louvered, Double Hinged
- Screen, Grill Door Fan
- S·O·S Sampling Ports
- Vandalism Protection for Fluid Compartments and Battery Box

D7E Optional Equipment

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

MACHINE ARRANGEMENTS

- LGP Arrangement
- EU Regional Package
- Sound Suppression (Europe)
- Stockpile/Woodchip Arrangement
- Waste Handling/Landfill Arrangement (XL, LGP)

POWERTRAIN

- Arctic/Cold Weather Attachments
- Battery – Heavy Duty (1,400 CCA) or Arctic
- Engine Coolant Heater, 240V
- Fast Fuel
- Fuel Tank – High Capacity (408 L/122 gal)
- Heavy Duty Grill Door, Hinged
- Insulated Clean Emissions Module
- Powertrain Oil Change System
- Remote Disconnect Switch
- Reversible Fan

OPERATOR ENVIRONMENT

- Black Hood and Back of Blade
- Converter – 24V to 12V
- Front and Rear Door/Window Screens
- Heated Seat
- Lights
 - Basic (6) Lights
 - Premium (10) HID Lights
 - Warning Strobe
- Rear Vision Camera
- Sliding Rear Window

TRACK

- 610 mm, 660 mm, 914 mm (24", 26", 36")
- Moderate Service, Extreme Service

CONSTRUCTION TECHNOLOGIES

- AccuGrade Ready Installation Arrangement
- AccuGrade Mounting Bracket – Center
- Dual Tilt

GUARDING

- Bottom – Heavy Duty, Sealed
- Fast Fuel
- Final Drive, Sprocket
- Fuel Tank
- Lights
- Track Roller Frame

BLADES

- SU (Semi-universal), U (Universal), (S) Straight, and Angle Blades
- Sweeps (without canopy)
- Track Guide Guards
- Turbine Precleaner

REAR IMPLEMENTS

- Counterweight
- Drawbar
- Implement Towing Arrangement
- Implement Towing Arrangement – Eject Scraper
- Multi-shank Ripper and Ripper Hydraulics
- Striker Bar
- Winch Arrangement/Winch Hydraulics

D7E Track-Type Tractor

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

© 2013 Caterpillar Inc.
All rights reserved

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

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ6142-02 (03-2013)
Replaces AEHQ6142-01

