CAT® Defense

CAT® ENGINES

POWERING FORCES
TO MOVE MISSIONS FORWARD

**

GET LEGENDARY CAT RELIABILITY AND DURABILITY WITH LOW OPERATING COSTS

Based on decades of diesel engine innovation and expertise, our engines are designed for severe duty equipment and the most demanding environments and applications around the world.

Land Power Train Solutions

Whether providing border security or patrolling hundreds of miles of shoreline, Cat Defense land engine solutions help to ensure the required speed and power are at the ready to keep operations moving forward through whatever the world throws in the way.

More importantly, they are backed by the Cat® global dealer network ready to keep missions moving anywhere in the world.

- **Military Vehicle Powerpacks**
- **High Power Density Engines**

Land Applications	
Tracked Vehicles	Wheeled Vehicles

Military Modifications

PowerSWITCH
Combat Override
EMC Clamshell
Auxiliary Control Module
JP8 Fuel Compatible
Bespoke Design Services

Dealer Support

The Caterpillar global network of dealers is the best in the world at providing support to keep your bulldozer up and running. With over 99% of customer orders shipped the same day, Cat dealers are partners in support.

C4.4

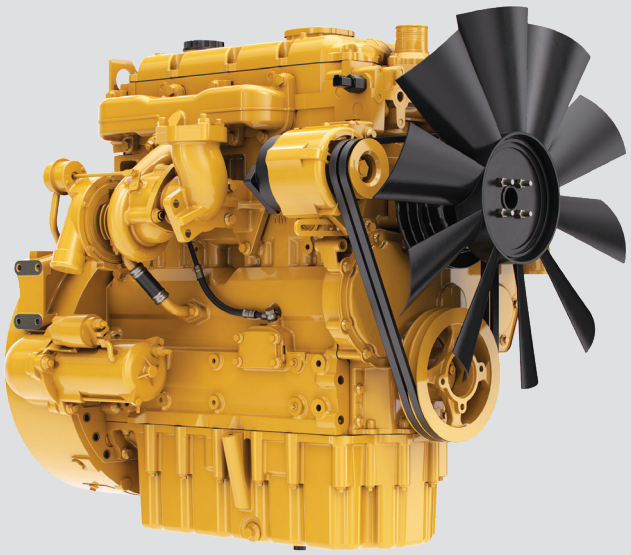
142-200 bhp (106-149 kW)
412-609 lb-ft (558-825 Nm)

BUILT TO POWER:

Light Weight 4x4s

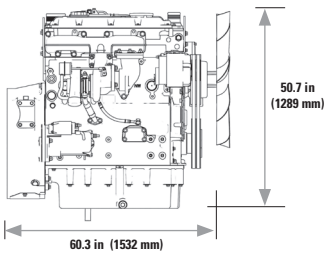
Light Weight Utility Trucks

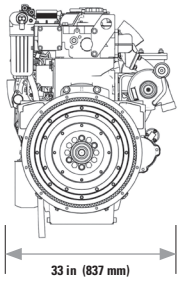
Special Forces Vehicles



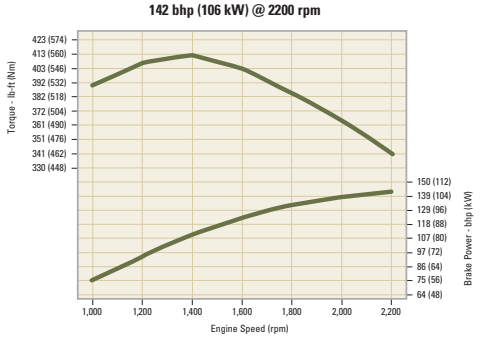
Specifications

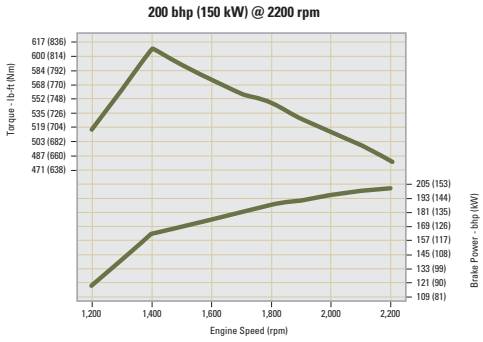
Engine Configuration	In-line 4 Cylinder
Bore and Stroke (in/mm)	4.13 x 5 / 105 x 127
Displacement (in³/L)	268.5 / 4.4
Aspiration	Turbocharged Aftercooled (Twin Turbocharged Aftercooled)
Cycle	4 Stroke
Combustion System	Direct Injection
Compression Ratio	16.5:1
Rotation from Flywheel End	Counterclockwise
Oil Capacity (gal/L)	1.9 - 2.9 / 7 - 11
Cooling System	Liquid
Coolant Capacity (gal/L)	1.9 / 7
Weight (lb/kg)	1523 / 691 (1559 / 707)





Turbocharged measurements shown.





Based on SAE J1995

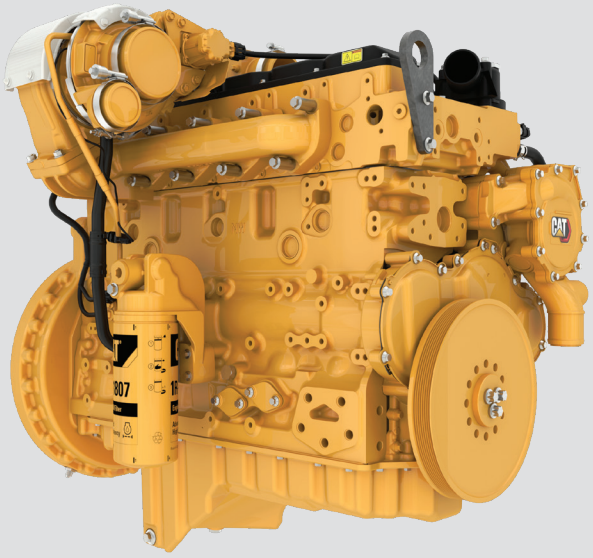
Brake Power (bhp/kW)	Speed (rpm)	Torque (lb-ft/Nm)	Speed (rpm)	Emission Level
142 / 106	2,200	142 / 558	1,440	Stage IIIa
200 / 149	2,200	609 / 825	1,440	Stage V

C7.1 High Speed

340 bhp (254 kW)
660 lb-ft (895 Nm)
2950 rpm

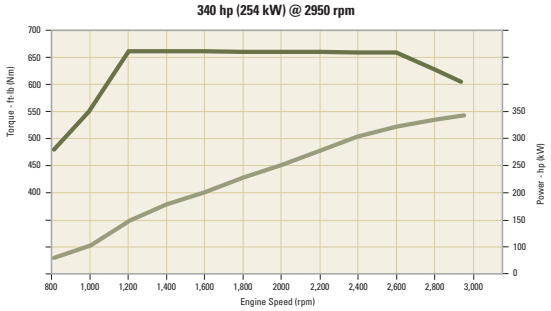
BUILT TO POWER:

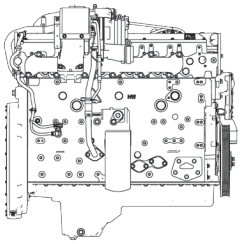
Light to Medium Weight 4x4s

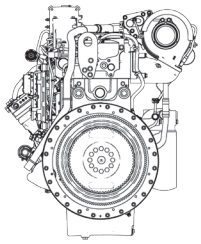


Specifications

Engine Configuration	In-line 6 Cylinder
Bore and Stroke (in/mm)	4.1 x 5.3 / 105 x 135
Displacement (in³/L)	427.7 / 7.01
Aspiration	Turbocharged and Aftercooled
Cycle	4 Stroke
Combustion System	Direct Injection
Compression Ratio	16.5:1
Rotation from Flywheel End	Counterclockwise
Oil Capacity (gal/L)	3.2 - 4.7 / 12 -14
Cooling System	Liquid
Dry Weight (lb/kg)	1,312 / 595







Based on SAE J1995

Brake Power (bhp/kW)	Speed (rpm)	Torque (lb-ft/Nm)	Speed (rpm)	Emission Level
340 / 254	2,950	660 / 895	1,200	Unregulated

C7.1 High Torque

325-360 bhp (242-269 kW)
1003-1050 lb-ft (1360-1423 Nm)
2300 rpm

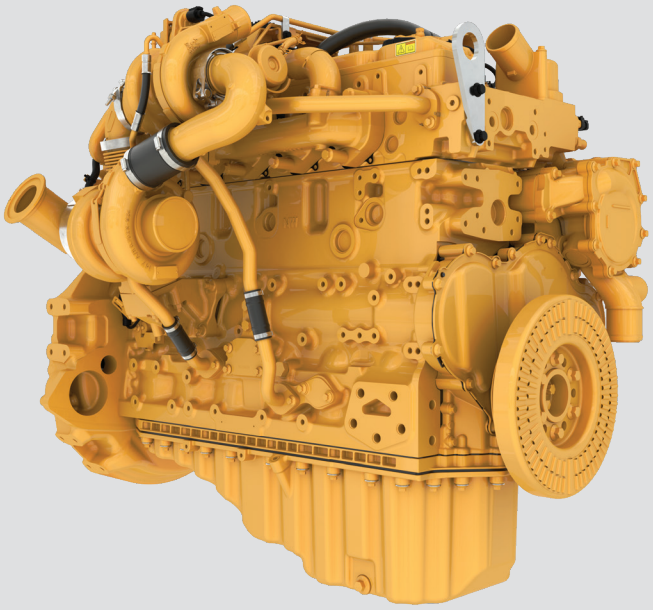
BUILT TO POWER:

Wheeled and Tracked APCs

Wheeled MRAPs

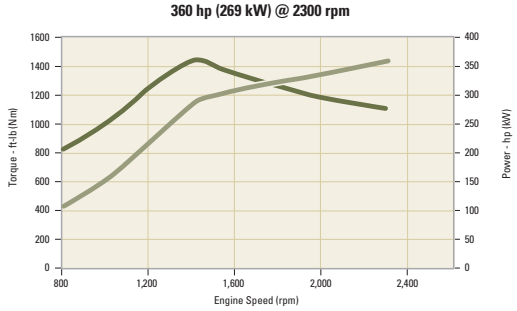
Medium Weight Utility Trucks

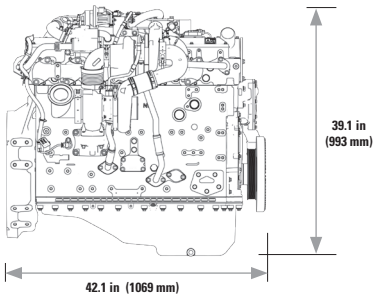
All Terrain Tracked Carriers

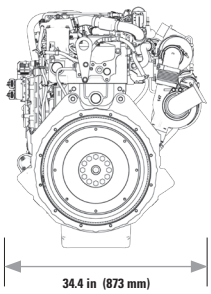


Specifications

Engine Configuration	In-line 6 Cylinder
Bore and Stroke (in/mm)	4.1 x 5.3 / 105 x 135
Displacement (in³/L)	427.7 / 7.01
Aspiration	Turbocharged and Aftercooled
Cycle	4 Stroke
Combustion System	Direct Injection
Compression Ratio	15.8:1
Rotation from Flywheel End	Counterclockwise
Oil Capacity (gal/L)	3.4 - 4.2 / 13 -16
Cooling System	Liquid
Coolant Capacity (gal/L)	3.49 / 13.2
Dry Weight (lb/kg)	1,312 / 595







Based on SAE J1995

Brake Power (bhp/kW)	Speed (rpm)	Torque (lb-ft/Nm)	Speed (rpm)	Emission Level
325 / 242	2,300	1003 / 1360	1,440	Euro III*
340 / 254	2,300	1050 / 1423	1,440	Unregulated
360 / 269	2,300	1050 / 1423	1,440	Unregulated

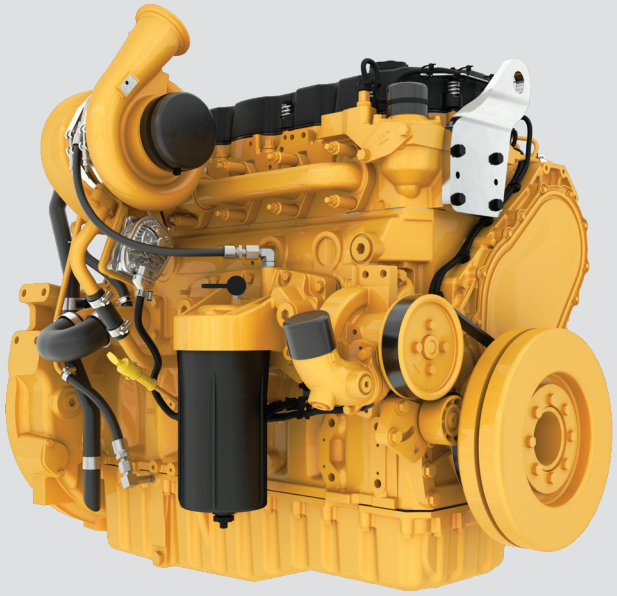
* Emits equivalent to Euro III. Does not meet current EU emission standards.

C9.3B

450-600 bhp (336-447 kW)
1,401-1,670 lb-ft (1899-2265 Nm)

BUILT TO POWER:

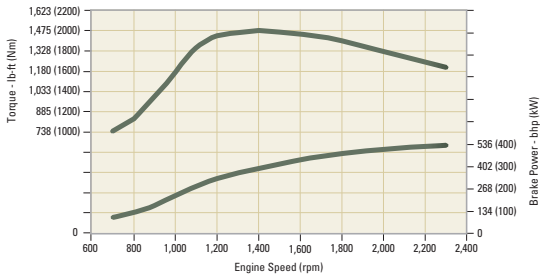
Wheeled APCs and IFVs
Wheeled MRAPs
Medium Weight Utility Trucks



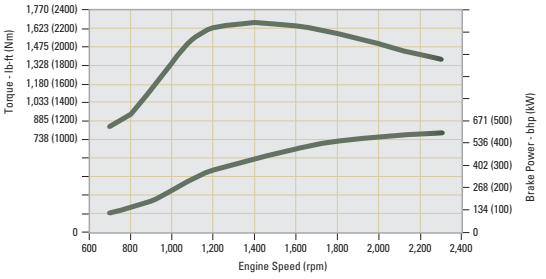
Specifications

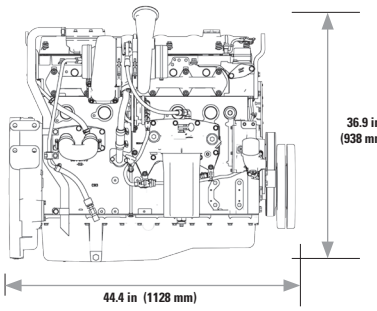
Engine Configuration	In-line 6 Cylinder
Bore and Stroke (in/mm)	4.53 x 5.87 / 115 x 149
Displacement (in³/L)	567 / 9.3
Aspiration	Turbocharged and Aftercooled
Cycle	4 Stroke
Combustion System	Direct Injection
Compression Ratio	17:1
Rotation from Flywheel End	Counterclockwise
Oil Capacity (gal/L)	8.0 / 30.0
Cooling System	Liquid
Coolant Capacity (gal/L)	5.3 / 19.8
Weight (lb/kg)	1,872 / 850

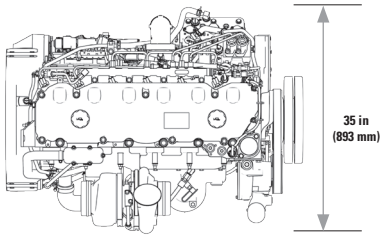
530 bhp (395 kW)



600 bhp (447 kW)







Based on SAE J1995

Brake Power (bhp/kW)	Speed (rpm)	Torque (lb-ft/Nm)	Speed (rpm)	Emission Level
450 / 336	2,300	1,401 / 1899	1,400	Euro III*
530 / 395	2,300	1,475 / 2000	1,400	Euro III*
600 / 447	2,300	1,670 / 2265	1,400	Unregulated

* Emits equivalent to Euro III. Does not meet current EU emission standards.

C13

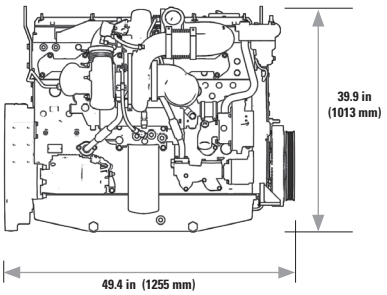
600-711 bhp (447-530 kW)
1,760-1,991 lb-ft (2386-2700 Nm)

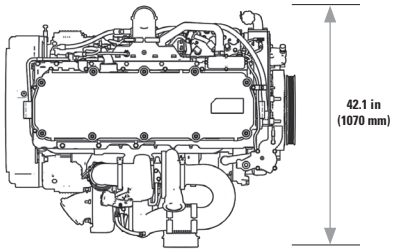
BUILT TO POWER:

Wheeled APCs and IFVs
Wheeled MRAPs
Medium Weight Utility Trucks
Tracked Combat Vehicles

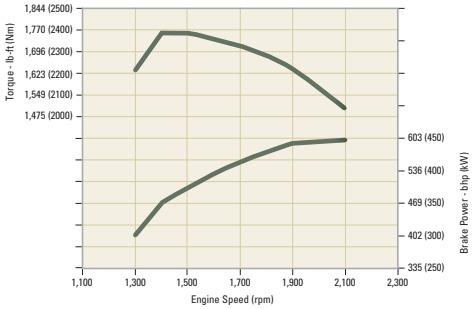
Specifications

Engine Configuration	In-line 6 Cylinder
Bore and Stroke (in/mm)	5.12 x 6.18 / 130 x 157
Displacement (in³/L)	763 / 12.5
Aspiration	Turbocharged and Aftercooled
Cycle	4 Stroke
Combustion System	Direct Injection
Compression Ratio	15.8 to 18:1
Rotation from Flywheel End	Counterclockwise
Oil Capacity (gal/L)	8 / 30
Cooling System	Liquid
Coolant Capacity (gal/L)	3.8 / 14.2
Dry Weight (lb/kg)	2,371-2,520 / 1075-1143

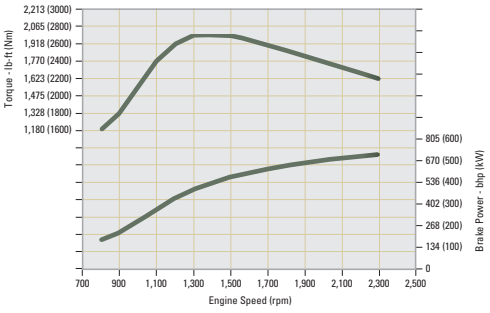




600 bhp (447 kW)



711 bhp (530 kW)



Based on SAE J1995

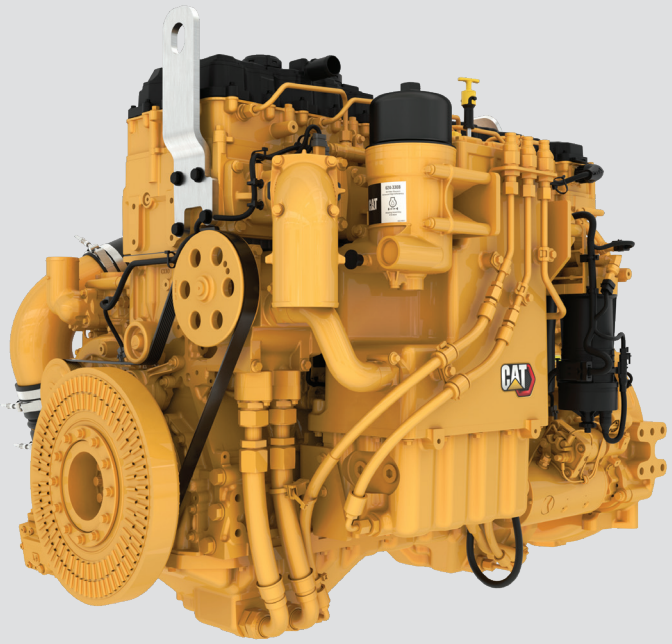
Brake Power (bhp/kW)	Speed (rpm)	Torque (lb-ft/Nm)	Speed (rpm)	Emission Level
600 / 447	2,100	1,760 / 2386	1,400	Unregulated
711 / 530	2,300	1,991 / 2700	1,300	Unregulated

C13D

850-1,000 bhp (634-746 kW)
2,300-2,923 lb-ft (2900-3963 Nm)

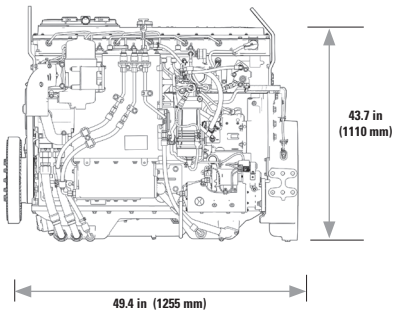
BUILT TO POWER:

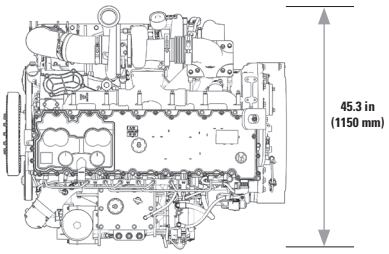
Tracked/Wheeled IFVs
MBTs
Heavy Utility Trucks



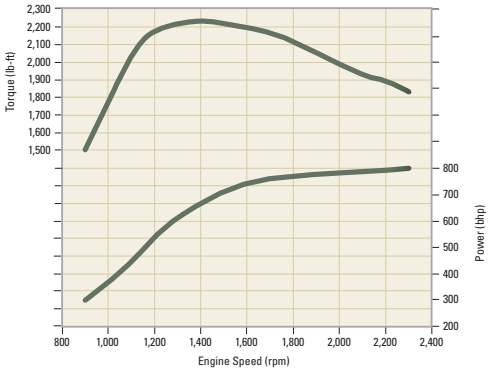
Specifications

Engine Configuration	In-line 6 Cylinder
Bore and Stroke (in/mm)	5.1 x 6.3 / 130 x 162
Displacement (in³/L)	787 / 12.9
Aspiration	Series Turbocharged and Aftercooled
Cycle	4 Stroke
Combustion System	Direct Injection
Compression Ratio	15:1
Rotation from Flywheel End	Counterclockwise
Oil Capacity (gal/L) w/dry sump system	13.5 / 51
Cooling System	Liquid
Coolant Capacity (gal/L)	3.8 / 14.2
Dry Weight (lb/kg)	3,270 / 1483

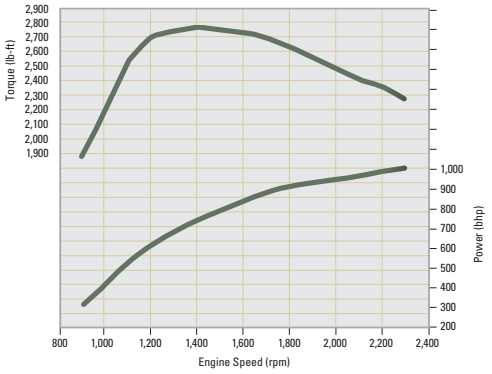




850 bhp (634 kW)



1,000 bhp (746 kW)

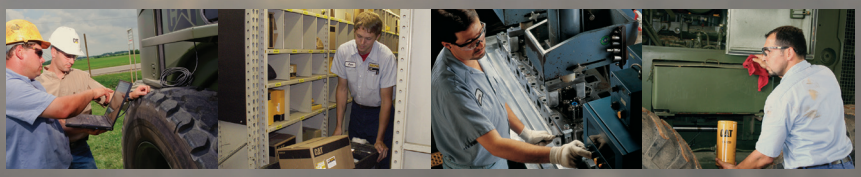


Based on SAE J1995

Brake Power (bhp)	Speed (rpm)	Torque (lb-ft)	Speed (rpm)	Emission Level
850	2,300	2,300	1,400	Low BSFC & Euro III*
1,000	2,300	2,923	1,700	Unregulated

* Emits equivalent to Euro III. Does not meet current EU emission standards.

WHERE THERE'S DEMANDING WORK, THERE'S CAT® SUPPORT.



Local Service Operations

Staffed with highly skilled, Caterpillar-trained technicians

Parts Support

Delivering the right part when and where it's needed

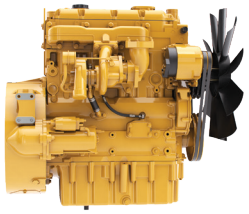
Remanufactured Parts

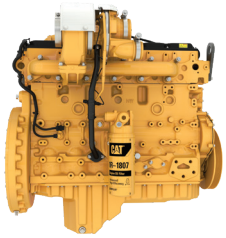
Reduce costs and accelerate repairs

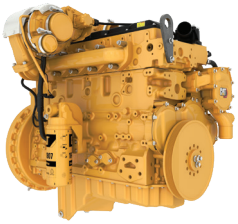
Component Repairs

High-quality service even when reman parts are not available

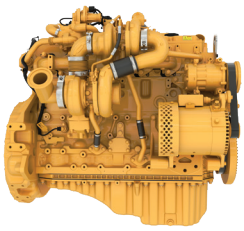
†

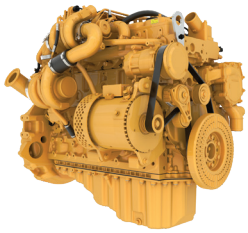






Shown with optional defense FEAD





C4.4 Standard Equipment

Air Inlet and Exhaust System
- Turbocharger
- Glowplugs
- Exhaust manifold, dry

Control System
- Electronic governing, J1939 speed control
- Automatic altitude compensation
- Programmable low and high idle and total engine limit
- Electronic diagnostics and fault logging
- SAE J1939 broadcast and control
- ADEM™ A6 Electronic Control Unit (ECU)

Cooling System
- Thermostats and housing
- Jacket water pump, centrifugal
- Water pump, inlet

Flywheels and Flywheel Housing
- SAE No. 2, or No. 3 flywheel housing

Fuel System
- High pressure common rail
- Fuel filter, secondary (4 micron)
- Fuel transfer pump

Lube System
- Crankcase breather
- Oil cooler
- Oil filler
- Lube oil filter
- Oil pan
- Oil dipstick
- Gear driven oil pump

General
- Vibration damper
- Lifting eyes

C7.1 High Speed Standard Equipment

Air Inlet and Exhaust System
- Turbocharger
- Glowplugs
- Exhaust manifold, dry

Control System
- Electronic governing, J1939
- Automatic altitude compensation
- Programmable low and high idle and total engine limit
- Electronic diagnostics and fault logging
- SAE J1939
- ADEM™ A6 Electronic Control Unit (ECU)

Cooling System
- Thermostats and housing
- Jacket water pump, centrifugal
- Water pump, inlet

Flywheels and Flywheel Housing
- SAE No. 1, No. 2, or No. 3 flywheel housing

Fuel System
- High pressure common rail
- Fuel transfer pump
- Combined primary and secondary fuel filter module
- Fuel filter with water separator, primary (10 micron)

Lube System
- Crankcase breather
- Oil cooler
- Oil filler
- Lube oil filter
- Oil pan
- Oil dipstick
- Gear driven oil pump

General
- Vibration damper
- Lifting eyes

C7.1 High Torque Standard Equipment

Air Inlet and Exhaust System
- Turbocharger
- Glowplugs
- Exhaust manifold, dry

Control System
- Electronic governing, J1939
- Automatic altitude compensation
- Programmable low and high idle and total engine limit
- Electronic diagnostics and fault logging
- SAE J1939
- ADEM™ A6 Electronic Control Unit (ECU)

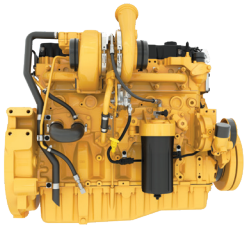
Cooling System
- Thermostats and housing
- Jacket water pump, centrifugal
- Water pump, inlet

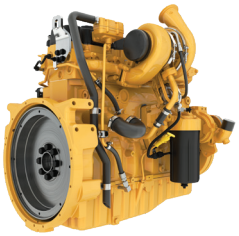
Flywheels and Flywheel Housing
- SAE No. 1, No. 2, or No. 3 flywheel housing

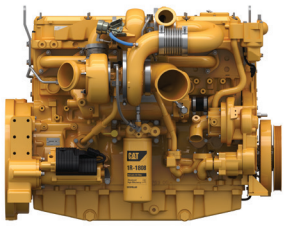
Fuel System
- High pressure common rail
- Fuel transfer pump
- Combined primary and secondary fuel filter module
- Fuel filter with water separator, primary (10 micron)

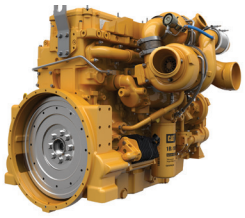
Lube System
- Crankcase breather
- Oil cooler
- Oil filler
- Lube oil filter
- Oil pan
- Oil dipstick
- Gear driven oil pump

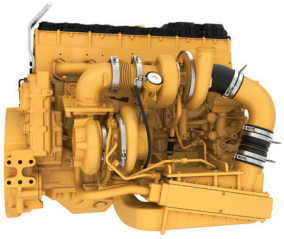
General
- Vibration damper
- Lifting eyes











C9.3B Standard Equipment

Air Inlet and Exhaust System
- VGT turbocharger
- Exhaust manifold, dry

Control System
- Electronic governing, PTO speed control
- Automatic altitude compensation
- Power compensation for fuel temperature
- Programmable low and high idle and total engine limit
- Electronic diagnostics and fault logging
- SAE J1939 broadcast and control
- ADEM™ A6 Electronic Control Unit (ECU)

Cooling System
- Thermostats and housing
- Jacket water pump, centrifugal
- Water pump, inlet

Flywheels and Flywheel Housing
- SAE No. 1, or No. 2 flywheel housing

Fuel System
- Electronic high pressure common rail
- Fuel filter, secondary
- ACERT Technology
- Fuel transfer pump

Lube System
- Crankcase breather
- Oil cooler
- Oil filler
- Lube oil filter
- Oil pan
- Oil dipstick
- Gear driven oil pump

General
- Vibration damper
- Lifting eyes

C13 Standard Equipment

Air Inlet and Exhaust System
- Single or series sequential turbochargers
- Exhaust manifold, dry

Control System
- Electronic governing, PTO speed control
- Automatic altitude compensation
- Power compensation for fuel temperature
- Programmable low and high idle and total engine limit
- Electronic diagnostics and fault logging
- SAE J1939 broadcast and control
- ADEM™ A4 Electronic Control Unit (ECU)

Cooling System
- Thermostats and housing
- Jacket water pump, centrifugal
- Water pump, inlet

Flywheels and Flywheel Housing
- SAE No. 1 flywheel housing

Fuel System
- MEUI™ injection
- Fuel filter, secondary
- ACERT™ Technology
- Fuel transfer pump

Lube System
- Crankcase breather
- Oil cooler
- Oil filler
- Lube oil filter
- Oil pan
- Oil dipstick
- Gear driven oil pump

General
- Vibration damper
- Lifting eyes

C13D Standard Equipment

Air Inlet and Exhaust System
- Series sequential turbochargers
- Exhaust manifold, dry

Control System
- Electronic governing, PTO speed control
- Automatic altitude compensation
- Power compensation for fuel temperature
- Programmable low and high idle and total engine limit
- Electronic diagnostics and fault logging
- SAE J1939 broadcast and control
- ADEM™ Electronic Control Unit (ECU)

Cooling System
- Thermostats and housing
- Jacket water pump, centrifugal
- Water pump, inlet

Flywheels and Flywheel Housing
- SAE No. 1, No. 2, or No. 3 flywheel housing

Fuel System
- Fuel filter, secondary
- ACERT™ Technology
- Fuel transfer pump

Lube System
- Crankcase breather
- Oil cooler
- Oil filler
- Lube oil filter
- Oil pan or dry sump
- Oil dipstick
- Gear driven oil pump

General
- Vibration damper
- Lifting eyes

Materials and specifications are subject to change without notice. Featured machines may include additional equipment. See your account manager for available options.

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