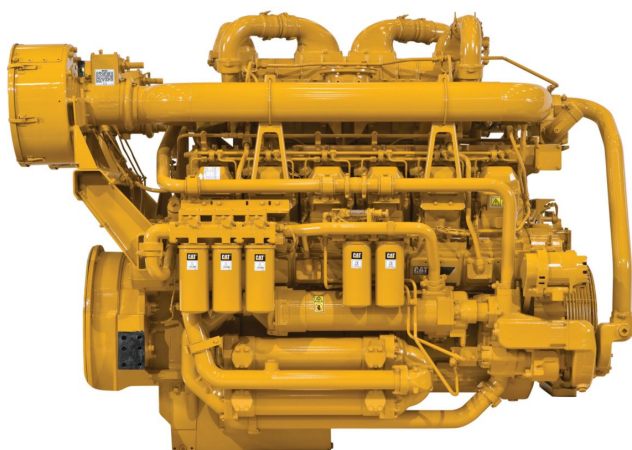




Well stimulation operations in the oilfield are complex and demanding. The 3512C (HD) engine for well stimulation operations was specifically developed to reach the highest power nodes while meeting the highest standards in durability, reliability, and emissions. Cat engines are backed by the worldwide network of Cat dealers ready to support your operation with technical support, service, parts, and warranty. 3512C (HD) engines, with ratings: 1603-1864 bkW (2150-2500 bhp) @ 1900 rpm meet IMO Tier II, China Stage III, U.S. EPA Marine Tier 2, and U.S. EPA Non-road Tier 2 equivalent emission standards. They are available using U.S. EPA and EU Flexibility, and for other regulated and non-regulated areas.

Specifications

General Specifications

Minimum Rating	1678 bkW	2250 bhp
Maximum Rating	1864 bkW	2500 bhp
Aspiration	Turbocharged-Aftercooled	
Displacement	3596 L	58.9 in ³
Flywheel and Flywheel Housing	SAE No. 0	
Flywheel Teeth	151	
Stroke	215 mm	8.5 in.
Bore	170 mm	6.7 in

Emissions

Emissions	Non-current EPA Tier 2 and China Stage III
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Dimensions

Length	2880 mm	113.8 in.
Width	1630 mm	64.2 in.
Height	2185 mm	86.1 in.
Weight	6416 kg	14145 lb

Benefits and Features

Engine Design

Proven reliability and durability - Robust diesel strength design prolongs life and lowers owning and operating costs - Broad operating speed range - Air shutoff — integrated with engine controls

Cooling System

Separate Circuit Aftercooler (SCAC)

Engine Mounted Transmission Oil Cooler —

Integration with engine cooling system allows ease of installation and a tighter overall engine package

Advanced Digital Engine Management

ADEM A3 engine management system integrates speed control, air/fuel ratio control and ignition/detonation controls into a complete engine management system with integrated digital ignition, engine protection and monitoring

Custom Packaging

For any petroleum application, trust Caterpillar to meet your project needs with custom factory generator sets and mechanical packages. Cat engines, generators, controls, radiators, and transmissions can be custom designed and matched in collaboration with our local dealers to create unique solutions. Custom packages are globally supported and are covered by a one year warranty after startup.

Full Range of Attachments

Large variety of factory-installed engine attachments reduces packaging time

Testing

Every engine is full-load tested to ensure proper engine performance

Product Support

More than 2,200 dealer outlets - Cat factory-trained dealer technicians service every aspect of your petroleum engine - Cat parts and labor warranty - Preventive maintenance agreements available for repair-before-failure options - S•O•SSM program matches your oil and coolant samples against Caterpillar set standards to determine: • Internal engine component condition • Presence of unwanted fluids • Presence of combustion by-products • Site-specific oil change interval

Over 80 Years of Engine Manufacturing Experience

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable products. • Cast engine blocks, heads, cylinder liners, front and flywheel housings • Machine critical components • Assemble complete engine

Web Site

For all your petroleum power requirements, visit www.catoilandgasinfo.com.

Standard Equipment

Air Inlet System

- Heavy-duty air cleaners (dual element/service indicator)
- Four center-mounted turbochargers

Control System

- Cat® ADEM A3 ECU — LH
- With electronic fuel injector fuel system (10 amp DC power required to drive electronic engine control module)

Cooling System

- Separate Circuit SCAC system
- Torque converter connections
- Thermostats and housing, jacket and separate circuit water pump, gear-driven centrifugal

Exhaust System

- Land well service engine

Flywheel and Flywheel Housings

- Flywheel, SAE No. 0, 151 teeth

- Flywheel housing, SAE No. 0

Fuel System

- Primary fuel filter
- Fuel priming pump
- Fuel filter — RH spin-on type
- Fuel transfer pump
- Electronically controlled unit injectors

Instrumentation

- No standard instrumentation
- Optional, remote instrumentation available
- Service meter

Lube System

- Crankcase breather — top mounted
- Oil cooler
- Oil filler and dipstick — LH
- Oil pump
- Oil filter — RH spin-on type
- Rear sump oil pan — 250-hour change interval
- Oil pan drain valve — 1" NPT female connection
- Fumes disposal
- Scavenger pump

Mounting System

- Trunion front support

Power Take-Offs

- Accessory drive — lower LH
- Front housing — two-sided

Protection System

- ADEM A3 ECU system to provide customer programmable engine deration strategies to protect against adverse operating conditions
- Emergency stop logic inputs provided at 40-pin customer interface connection
- Dual air inlet shutoff
- Oil pressure monitor

General

- Paint — Cat yellow
- Vibration damper and guard
- Lifting eyes

Optional Equipment

Charging System

- Charging alternators

Control System

- Local speed throttle control
- Throttle position sensors
- Governor conversion

Cooling System

- Coolant regulator conversion
- Water level switch gauge
- Coolant level sensors and coolant conditioner

Exhaust System

- Flexible exhaust fitting
- Elbows, flange, exhaust adapters
- Manifold and mufflers

Fuel Systems

- Flexible fuel lines
- Water/fuel separator
- Fuel level switch

Instrumentation

- Remote panel display and remote cylinder temperature display
- Gauges and instrument panels

Lube System

- Oil pans and filters
- Deep sump oil pan and front sump pan

Power Take-Offs

- Front crankshaft adapter
- Flywheel stub shaft

Protection System

- Sensors
- Shutoff controls

Starting System

- Air starting motors
- Electric starting motors
- Hydraulic starter
- Ether starting aids
- Battery sets — 24V
- Battery cable and battery rack



The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S•O•S, "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.