

Caterpillar Model 3516C-HD (High Displacement) marine propulsion engines.

Engines are keel cooled (less Coolers), and provided with the following standard and optional equipment.

These engines are EPA Tier II certified.

Standard Equipment

AIR INLET SYSTEM

Separate circuit after cooler core, corrosion resistant coated (air side)
Power core air cleaner, regular duty
Dual turbochargers, 152 mm (6 in) OD straight connection

CONTROL SYSTEM

Dual Caterpillar A-III Electronic Engine Control, with Electronic Unit Injector Fuel System
Rigid Wiring Harness (10 amp DC power required to drive Electronic Engine Control Module)

COOLING SYSTEM

Oil cooler
Thermostats and housing, full open temperature 92 C (198 F)
Jacket water pump, gear driven, centrifugal
Auxiliary fresh water pump
Auxiliary sea water pump, Centrifugal, Non-self priming
Expansion tank on commercial engines

EXHAUST SYSTEM

Dry gas tight Exhaust Manifolds with heat shields
Dual Turbochargers with water-cooled bearings and heat shield
Exhaust outlet, vertical, 356 mm (14 in) round flanged outlet on:
High displacement engines @ 1600

FLYWHEELS & FLYWHEEL HOUSINGS

Flywheel, SAE No. 00, 183 teeth
Flywheel housing, SAE No. 00

FUEL SYSTEM

Simplex fuel filter, RH, with service indicators
Fuel transfer pump
Electronically Controlled Unit Injectors

INSTRUMENTATION

Graphical Unit (Marine Power Display) for analog or digital display of:
Engine Oil Pressure
Engine Water Temperature
Fuel Pressure
System DC Voltage
Air Inlet Restriction
LH & RH Exhaust Temperature (prior to turbocharger)
Fuel Filter Differential
Oil Filter Differential
Service meter
Engine Speed
Instantaneous Fuel Consumption
Total Fuel Consumed
Engine Control Switch (4 position)
Alarm Horn
Alarms are prioritized

Backup ECM ready light
Backup ECM in control light
Overspeed shutdown notification light
Emergency stop notification light
Pre-lube override
Shutdown override

LUBE SYSTEM

Dual crankcase breather groups, Top mounted
Oil filler and dipstick
Oil pump, gear type
Simplex oil filter with service indicators
3500C engines:
1000 hour sump oil pan on commercial rating

MOUNTING SYSTEM

3500C engines:
Rails, engine mounting, ledge type, 203 mm x 203 mm (8 in x 8 in)

POWER TAKE-OFFS

Accessory drive on standard rotation engines: lower RH
Front housing, Two-sided

PROTECTION SYSTEM

A-III Electronic Monitoring System provides customer programmable engine de-rating strategies to protect against adverse operating conditions
Emergency stop push button (located in Electronic Instrument Panel)
Safety shutoff protection:
Oil pressure and water temperature (Non-redundant, uses OP and WT sensors).
Overspeed (Redundant and independent of engine governing system speed sensed by backup ECM which is MCS approved)

GENERAL

Vibration damper and guard
Paint, Caterpillar Yellow for the engine with black rails.
Lifting eyes

THESE ENGINES MEET THE CURRENTLY PROPOSED IMO EMISSION STANDARDS FOR THE YEAR 2000 AS DEFINED BY REGULATION 13 OF ANNEX VI TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978

A statement of compliance issued by the United States government's EPA (Environmental Protection Agency) is included in the technical file that is shipped with the engine as proof of our engine's ability to meet IMO emissions requirements.

Optional Equipment Included:

- * ABS ENGINE CERTIFICATE
- * SPRAY SHIELDING
- * KEEL COOLED
- * COOLANT LEVEL SENSOR / INSTALLED
- * WATER LEVEL SWITCH GAUGE / INSTALLED
- * MPD PILOT HOUSE INSTRUMENT PANEL
- * THROTTLE POSITION SIGNAL CONVERTER
- * OIL PAN DRAIN VALVE
- * EMERGENCY LUBE OIL CONNECTIONS

- * CENTRIFUGAL OIL FILTERS
- * LUBRICATING OIL 1000 HOUR SUMP
- * FUEL PRIMING PMP RH MOUNTED
- * FLEXIBLE FUEL LINES / SHIPPED LOOSE
- * SHUTOFF CONTACTORS / INSTALLED
- * ALARM CONTACTORS OP/WT / UNWIRED
- * CRANKCASE EXPLOSION RELIEF VALVE
- * AIR STARTING MOTOR LH MOUNTED
- * AIR PRESSURE REGULATOR
- * SHRINK WRAP PROTECTION
- * PAPER PARTS BOOKS
- * CATERPILLAR YELLOW PAINT