



The 3516B Auxiliary/Generator Set Engine incorporates a separate circuit aftercooling (SCAC) or sea water aftercooling (SWAC) system for all configurations. The primary advantage of the SCAC system is reduced aftercooler corrosion since no sea water circulates through the aftercooler. Many other improvements on these engines contribute to minimizing owning and operating costs. A strengthened fuel injection actuation system and rear gear train maintain reliability and durability while providing higher injection pressures. The 3516B also features thermo-laminated heat shields on all marine configurations to maintain surface temperatures below Marine Classification Society regulations.

Specifications

| Power Rating | | |
|----------------|-----------|----------|
| Minimum Rating | 1287 b kW | 1726 bhp |
| Maximum Rating | 1901 b kW | 2549 bhp |

| Engine Specifications | | |
|-----------------------|------------------------------|----------|
| Aspiration | | TA |
| Configuration | Vee 16 4-Stroke-Cycle Diesel | |
| Bore | 170 mm | 6.7 in |
| Stroke | 190 mm | 7.5 in |
| Displacement | 69 L | 4210 in3 |

| Dimensions & Weights | | |
|----------------------|---------|----------|
| Length | 3181 mm | 125.2 in |
| Minimum Width | 1703 mm | 67.1 in |
| Maximum Width | 2144 mm | 84.4 in |
| Minimum Height | 2053 mm | 80.8 in |
| Maximum Height | 2100 mm | 82.7 in |
| Minimum Dry Weight | 7955 kg | 17537 lb |
| Maximum Dry Weight | 8029 kg | 17700 lb |

Standard Equipment

AIR INLET SYSTEM

- Separate Circuit aftercooler core, corrosion resistant coated (air side)
- Air cleaner, regular duty
- Dual Turbochargers, 152 mm (6 in) OD straight connection

CONTROL SYSTEM

- Caterpillar A-III Electronic Engine Control, LH with Electronic Unit Injector Fuel System
- Rigid Wiring Harness

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

EXHAUST SYSTEM

- Dry gas tight exhaust manifolds with heat shields
- Dual Turbochargers with watercooled bearings and heat shields
- Exhaust outlet, vertical, 305 mm (12 in) round flanged outlet on engines @ 1800 rpm

FLYWHEELS & FLYWHEEL HOUSINGS

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

FUEL SYSTEM

- 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:

LUBE SYSTEM

- Crankcase breather, Top mounted
- Oil filter, RH
- Oil filler and dipstick, RH
- 500 hours sump oil pan
- Oil pump, gear type

MOUNTING SYSTEM

- Rails, engine mounting, engine length, industrial type, 254 mm (10 in), C-channel

POWER TAKE-OFFS

- Accessory drive
- Lower RH, Lower LH
- Front housing, Two-sided

PROTECTION SYSTEM

- A-III Electronic Monitoring System provides customer programmable engine de-ration strategies to protect against adverse operating conditions
- Emergency stop push button (located in Electronic Instrument Panel) Safety shutoff protection:

GENERAL

- Vibration damper and guard
- Paint, Caterpillar Yellow engine with black rails.
- Lifting eyes
- NOTE: 1. Engines for heat exchanger cooling do NOT include heat exchanger. 2. When used with competitive generator, a TVA is recommended. An alternative vibration damper may be required. 3. Engine is wired for auto start stop

Optional Equipment

CHARGING SYSTEM

- Battery Chargers
- Charging Alternators

CONTROL SYSTEM

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

FUEL SYSTEM

- Fuel Cooler
- Fuel priming pumps (LH and RH)
- Flexible fuel lines
- Rigid Fuel Lines
- Primary fuel filter
- LH FUEL FILTER
- Duplex fuel filters
- Fuel level switch

GENERATORS AND GENERATOR ATTACHMENTS

- Low voltage connection
- Generator conversion
- Low voltage extension box
- RFI filter
- Bearing temperature detectors (RTD)
- Manual voltage control
- Air filter
- Generator 695 Frame PM 2 BRG
- Generator 693 Frame PM 2 BRG
- Generator 692 Frame PM 2 BRG
- Generator 667 Frame PM 2 BRG

INSTRUMENTATION

- PL1000T Communication Module
- Customer Interface Box
- Thermocouples
- Remote panel display
- Remote cylinder temperature display

LUBE & FUEL SYSTEM

- RH Oil/ RH Fuel, RH Oil/Duplex Fuel, LH Oil/LH Fuel, LH Oil/Duplex Fuel, Duplex Oil/LH Fuel, Duplex Oil/Duplex Fuel

LUBE SYSTEM

- Deep Sump Oil Pan
- Oil Pan Drain Valve
- Oil Pan Drain Cover
- Emergency Lube Oil Connections
- Sump pumps
- Oil filters
- Lubricating oil
- Lube system

MOUNTING SYSTEM

- Rails

POWER TAKE-OFFS

- Flywheel Guard
- Flexible Coupling
- Coupling Hub
- Upper Left Hand Front Location
- Upper Left Hand Rear Location
- Upper Right Hand Front Location
- Upper Right Hand Rear Location
- Lower Left Hand Front Location
- Lower Left Hand Rear Location
- Front Housing Accessory Drives
- Upper LH Accessory Drive
- Upper RH Accessory Drive
- Front Power Take-offs
- Crankshaft Pulleys
- Damper Guard Removals

MARINE SOCIETY REQUIREMENTS

- SPRAY SHIELDING .

PROTECTION SYSTEM

- Air inlet shutoffs
- Switches and contactors
- Explosion relief valve
- Oil Temp Sensor
- Intake Manifold Temp Sensor

SPARE PART KITS

SPECIAL APPEARANCE

- Special appearance packages with chrome covers
- Chrome plated relief valves
- Black air cleaners
- Yacht Class Finish

STARTING SYSTEM

- Starting motors or barring device
- Air starting motors options
- Starting aids
- Battery sets - 24 volt - Dry

GENERAL

- Tool set
- Caterpillar datalink wire

PAINTS

- Special paints
- Special Paint Color Options

INSPECTIONS

- Inspection charges

PACKING

- Shrink wrap protection
- Shrink wrap protection - generator
- Storage preservation with glycol solution/vapor corrosion inhibitor
- Storage preservation with vapor corrosion inhibitor
- Export packaging
- AID emblem

EXHAUST SYSTEM

- Horizontal Exhaust
- Flexible fittings
- Elbows
- Flanges
- Flange and exhaust expanders
- Mufflers

AIR INLET SYSTEM

- Remote Air Inlet Adapters

COOLING SYSTEM

- Water level switch gauge
- Coolant level sensors
- Connections
- Radiator cooling conversion
- Keel Cooling Conversions
- Heat exchangers
- Auxiliary water pumps
- Sea water pump removal
- Air separator

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