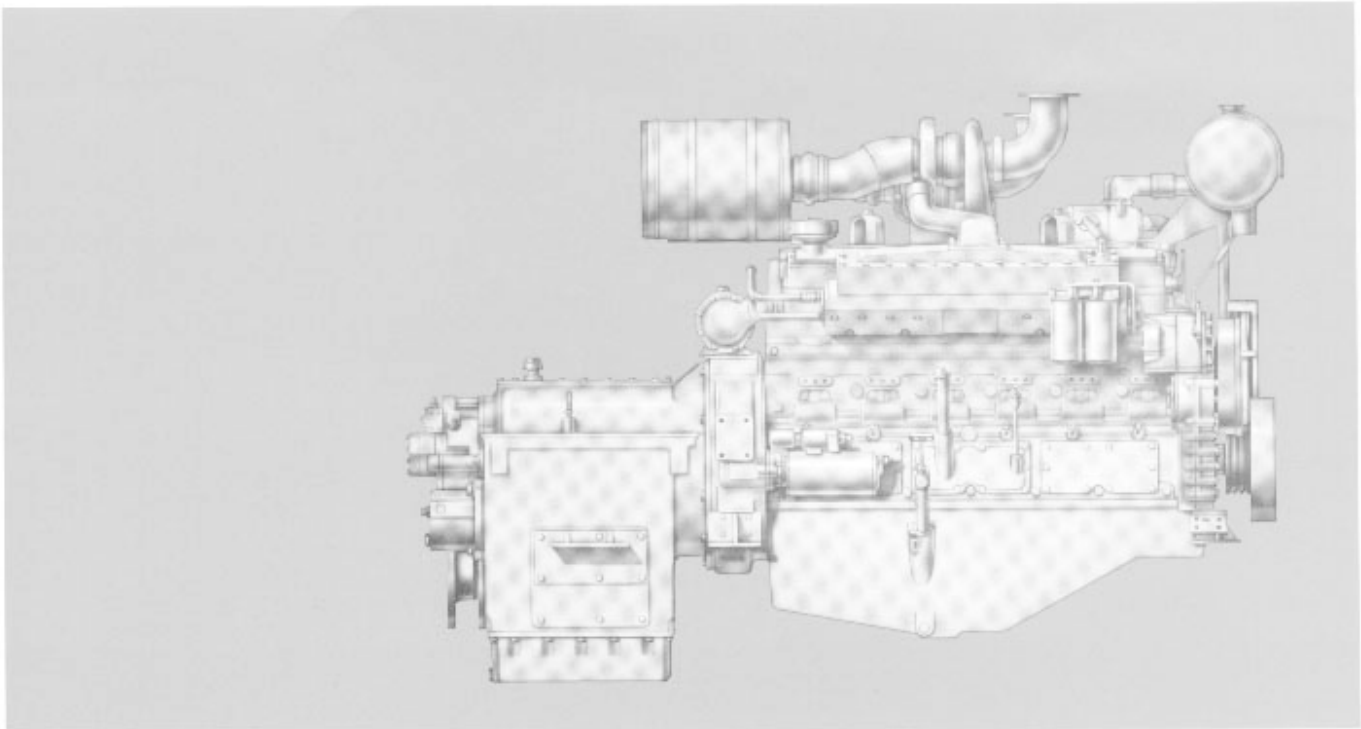


# Cummins Marine Diesel

# VTA-1710-M1



## Specifications

	<u>Metric</u>
<b>Power Ratings</b>	
Light Duty .....	605 bhp
Rated RPM .....	1950
Continuous Duty .....	545 bhp
Rated RPM .....	1800
<b>Four Stroke Cycle, Turbocharged-Aftercooled, V12 Diesel Engine</b>	
Bore and Stroke .....	5 1/2 x 6 in.    140 x 152 mm
Displacement .....	1710 cu. in.    28 L
Oil Pan Capacity .....	18 U.S. gals.    68 L
Net Weight, Dry† .....	7990 lbs.    3 630 kg

†With selected accessories and Twin Disc MG-521 gear.

## Design Features

**Aftercooler:** Large capacity aftercoolers result in cooler, denser intake air for more efficient combustion and reduced internal stresses for longer life. Aftercoolers are plumbed into engine coolant circuit.

**Bearings:** Replaceable, precision type, steel backed inserts. Seven main bearings, 5.75 in. (145 mm) diameter. Connecting rod bearings 3.75 in. (95 mm) diameter.

**Camshaft:** Dual camshafts precisely control valve and injector timing. Lobes are induction hardened for long life. Fourteen replaceable precision type bushings 2.0 in. (51 mm) diameter.

**Camshaft Followers:** Induction hardened, roller type for long cam and follower life.

**Connecting Rods:** Drop forged, I-beam section 12 in. (304 mm) center to center length. Rifle drilled for pressure lubrication of piston pin. Rod is tapered on piston pin end to reduce unit pressures. Rods are removable through cylinders.

**Cooling System:** Belt driven centrifugal engine coolant pump. Large volume water passages provide even flow of coolant around cylinder liners, valves, and injectors. Dual modulating by-pass thermostats regulate coolant temperature. Spin-on corrosion resistors check rust and corrosion, controls acidity, and remove impurities.

**Crankshaft:** High tensile strength steel forging with induction hardened fillets. Fully counterweighted and spin balanced.

**Cylinder Block:** Alloy cast iron with removable wet liners. Cross bolt support to main bearing cap provides extra strength and stability.

**Cylinder Heads:** Alloy cast iron. Each head serves three cylinders. Drilled fuel supply and return lines. Valve

Cylinders. Limited fuel supply and return lines. Valve seats are replaceable corrosion resistant inserts. Valve guides and cross head guides are replaceable inserts.

*Design Features continued on back page.*