## Internal Design Features



## **Design Features Continued**

Cylinder Liners: Replaceable wet liners dissipate heat faster than dry liners and are easily replaced without reboring the block.

Exhaust Manifolds: Water cooled.

Fuel System: Cummins exclusive low pressure PT™ system with wear compensating pump, variable speed control, and integral dual flyweight governors. Camshaft actuated fuel injectors give accurate metering and timing. Fuel lines are internal drilled passages in cylinder heads. Fuel hoses are U.L. marine listed. Spinon fuel filters.

Gear Train: Timing gears and accessory drive gears are induction hardened helical gears driven from crankshaft and located at front of block.

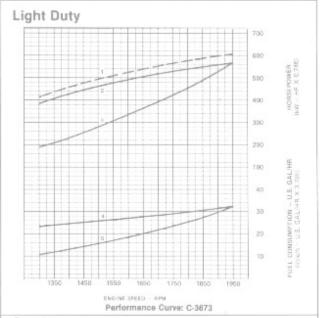
Lubrication: Large capacity gear pump provides pressure lubrication to all bearings and oil supply for piston cooling. All pressure lines are internal drilled passages in block and heads. Oil cooler and full flow filters maintain oil condition and maximize oil and engine life.

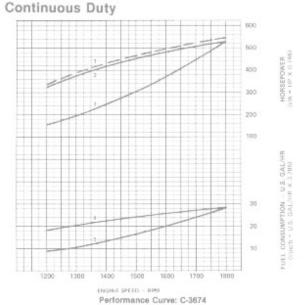
Pistons: Aluminum alloy, cam ground and barrel shaped to compensate for thermal expansion assures precise fit at operating temperatures. CeCorr™ grooved skirt finish provides superior lubrication. Oil cooled for rapid heat dissipation. Teflon pads on thrust faces minimize liner vibration and noise. Three compression and one oil ring.

Piston Pins: Full floating, tubular steel retained by snap rings. 2 in. (51 mm) diameter.

**Turbocharger:** Dual exhaust gas driven turbochargers provide more power, improved fuel economy, and lower smoke and noise levels.

Valves: Dual 1.88 in. (48 mm) diameter poppet type intake and exhaust valves. Wear resistant face on





Curves shown represent engine performance capabilities at SAE standard J816b conditions of 500 ft. (150 m) altitude (29.00 ° Hg [736 mm Hg] dry barometer), 85 °F (29 °C) air intake temperature, and 0.38 ° Hg (9.6 mm Hg) water vapor pressure with No. 2 diesel fuel.

The fuel consumption curves are based on a fuel weight of 7.1 lbs (3.2 kg) per U.S. gallon.

- 1. Gross Brake Horsepower.
- 2. Net horsepower with Reverse Reduction Gear.
- 3. Hypothetical Propeller Power Curve (2.7 exponent).
- 4. Fuel Consumption for Net Shaft Horsepower,
- 5. Fuel Consumption for Hypothetical Propeller,

LIGHT DUTY RATING — This rating is intended for use in variable load applications where full throttle operation does not exceed ½ of the operating time in any given period of operation followed by operation at or below the Continuous Duty Rating RPM. As a general rule, these applications operate from 400 to 2000 hours per year.

CONTINUOUS DUTY RATING — This is a 24 hour continuous rating and is intended for use in applications requiring uninterrupted service at full throttle operation. As a general rule, these applications operate over 2000 hours per year. This rating conforms with: British Standard Rating (BS649:1958) and DIN6270 Output B for Continuous Operation.

Cummins has always been a pioneer in product improvement. Thus specifications may change without notice. Illustrations may include optional equipment.