# Run Hard. Dream Big.



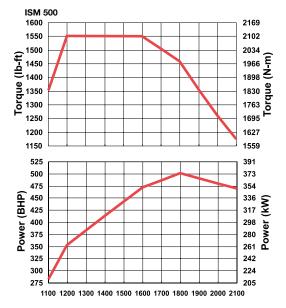


#### PERFORMANCE

Performance at SAE standard J1995 conditions of 300 ft (90 m) altitude (29.61 in. Hg [100 kPa] barometric pressure), 77 °F (25 °C) air intake temperature and 0.30 in. Hg (1 kPa) water vapor pressure with No. 2 diesel fuel will be within 5% of that shown at the time of engine shipment. Actual performance may vary with different ambient conditions.

Curves represent performance of the engine with fuel system, water pump, lubrication oil pump, air compressor (unloaded), and with 10 in.  $H_2O$  (250 mm) inlet air restriction and with 2.0 in. Hg (50 mm) exhaust restriction; not included are alternator, fan, optional equipment and driven components.

Within the recommended cruise range, gear to cruise at lower engine speeds for best economy, higher engine speeds for best performance.



#### **Restricted to RV and Emergency Vehicles**



## S P E C I F I C A T I O N S

| Advertised Horsepower                    | 500 bhp       | (373 kW)     |
|--|---------------|--------------|
| Peak Torque                              | 1550 lb-ft    | (2102 N·m)   |
| Governed Speed                           | 2100 rpm      |              |
| Clutch Engagement Torque                 | 700 lb-ft     | (950 N·m)    |
| Number of Cylinders                      | 6             |              |
| Bore and Stroke                          | 4.9x5.8 in    | (125x147 mm) |
| Engine Displacement                      | 661.0 cu in   | (10.8 L)     |
| Compression Ratio                        | 16.3:1        |              |
| Operating Cycles                         | 4             | (4)          |
| Oil System Capacity                      | 10.3 U.S. gal | (39 L)       |
| Coolant Capacity                         | 12 U.S. qt    | (11.3 L)     |
| Net Weight<br>with Std. Accessories, Dry | 2070 lb       | (938 kg)     |
| Installation Drawing Number              | 3170317       |              |

## DESIGN FEATURES

The ISM 500 retains the characteristics that made the Cummins M11 Plus a world leader - superior fuel economy, low maintenance costs, and high productivity.

Variable Wastegate Turbocharger System - Patented Four-Step Controller design optimizes turbocharger performance at any speed and load for maximum engine response and driver satisfaction.

Auto-Tensioning Belt Drive - Self-adjusting for optimum tension and belt life. Serpentine belt drives both the fan and alternator. **Cylinder Liners** - Patented mid-stop design with advanced surface finish provides longer life and minimizes oil consumption. Fully replaceable for faster, easier rebuilds.

**C** Brake<sup>™</sup> by Jacobs®<sup>\*</sup> - The new Interact System is designed for easy integration of the Cummins C Brake by Jacobs, ensuring that the engine and engine brake work seamlessly together.

Water-In-Fuel Sensor - Optional fuel filter combines water separator with water-in-fuel sensor to alert drivers to contamination that could cause performance problems.

**Cylinder Head -** One-piece cylinder head made from premium casting increases block strength.

**Piston** - Articulated design featuring forged steel crown and aluminum skirt allows for higher top ring position optimizing fuel efficiency.

**High-Capacity ECM** - New space-efficient Electronic Control Module packs ten times more memory and ten times more processing power into a smaller unit. Expanded memory lets you add features at a later date without changing the module. Located for easy accessibility. Enhances capabilities to use Cummins information products for management reporting and diagnostics.

**Electronic Features -** The Interact system includes full-authority electronics and is fully customizable. Features include diagnostics, asset protection, PTO, trip information, road speed governing, adjustable low idle speed, engine protection system, choice of engine governors, SAE J1587 and J1939 data links, real-time clock, Driver's Reward, Anti-Theft, and idle management features.

\*C Brake is a trademark of Cummins Engine Co. Jacobs is a registered trademark of Jacobs Vehicle Systems.

#### CUSTOMER SUPPORT

Service Network – Cummins engines are backed by over 3,500 authorized service outlets with strategic locations in every state and province. Customer Assistance Center – 1-800-DIESELS (1-800-343-7357). Cummins specialists provide technical assistance, service locator and product literature 24 hours/day, 365 days/year.



#### AUTOMATIC TRANSMISSION INFORMATION

The ISM 500 will deliver the optimum balance of performance and fuel economy if matched correctly. Select the proper rear axle ratio for the vehicle's tire size and desired top read speed. For transmission recommendations specific to your application, contact your local transmission dealer or Cummins distributor. Typical torque converter matches:

|            | HD-4060 | B-500  |
|------------|---------|--------|
| Fire Truck | TC-541  |        |
| RV         |         | TC-551 |



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