



**FOR MOTORHOMES** 

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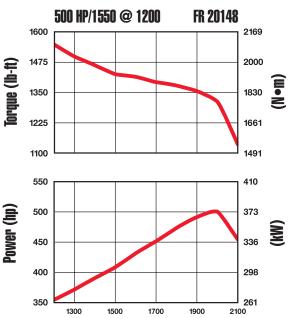
# ISM 500

The Cummins ISM is an ideal engine for the motorhome buyer looking to move up to a larger coach or to increase towing capability in the most economical manner. The added engine displacement, horsepower and torque of the ISM 500 deliver added performance and durability at a price less than a larger displacement engine. And like the larger engines, the ISM offers the added driver comfort associated with an optional engine compression brake.

The economics of the ISM are also boosted by its low cost of ownership as a result of its outstanding fuel economy, 15,000-mile (24,000 km) oil change interval and 120,000-mile (192,000 km) overhead adjustment requirement. The ISM 500 delivers performance, durability and low cost of ownership in a very economical way. The patented VG Turbo has electric actuation for better throttle response. There's a new crankcase ventilation system that's electronically managed for optimum efficiency.

The ISM was developed to optimize every aspect of the engine's operation, utilizing Cummins comprehensive in-house design approach to every engine system from the air intake to the exhaust system. Integration of Cummins advanced electronic controls, VG Turbo, high-pressure fuel system and combustion technology is how the ISM delivers on the performance and value expectations of the motorhome owner. And the ISM does it while being certified and compliant to the toughest standards, the 2007 EPA emissions regulations.





## **Specifications**

ADVERTISED HORSEPOWER	500 HP	373 KW
PEAK TORQUE	1550 LB-FT	2102 N•M
GOVERNED SPEED	2100 RPM	
CLUTCH ENGAGEMENT TORQUE	700 LB-FT	949 N•M
NUMBER OF CYLINDERS	6	
OIL SYSTEM CAPACITY	10.2 U.S. GALLONS	38.6 LITERS
ENGINE WEIGHT (DRY)	2,206 LB	1,000 KG

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



#### Features And Benefits.

The fuel system and VG Turbo combine to deliver improved performance and enhanced driveability.

#### Benefits include:

- Outstanding performance with fully integrated design
  - The fuel system delivers optimum balance of performance, emissions control and fuel economy across the entire operating range
  - Patented VG Turbo has enhanced response and control with electric actuation for infinite adjustment
  - Crankcase ventilation system is electronically managed for optimum efficiency and eliminates oil carryover
- Enhanced braking control with reduced service brake wear
  - Optional C Brake<sup>™</sup> by Jacobs<sup>®</sup>
  - Electronically controlled Variable Geometry Turbocharger increases braking performance
- Low cost of ownership
  - 15,000-mile (24,000 km) or 1-year oil change intervals
  - 120,000-mile (192,000 km) engine overhead adjustment

#### **Enhanced Reliability And Durability.**

The Heavy-Duty Cummins ISM is designed for years of dependable use in many different applications, including motorhomes.

- Articulated piston design features a forged-steel crown
  - Higher top ring position for optimizing fuel economy
  - Delivers increased durability
- Directed piston cooling
  - Lowers piston and oil ring temperatures
- Mid-stop cylinder liner
  - Minimizes oil consumption
  - Increases life-to-overhaul
- The Variable Geometry Turbocharger
  - Enhances reliability because it has only one moving part in the hot exhaust flow
- Self-tensioning belt drive system
  - Drives both fan and alternator for reduced maintenance
- Combination full-flow/bypass lube oil filter
  - Delivers better filtration for longer component life

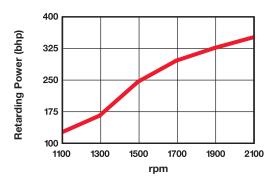


#### **Electronic Features.**

A single ECM (Electronic Control Module) controls the engine and coordinates interaction with the transmission, ABS, engine brake, cooling fan and more. Plus, the ISM has every diagnostic, maintenance-monitoring and engine protection feature that you need.

### **Engine Braking.**

C Brake by Jacobs is a compression brake designed specifically for the ISM that significantly increases stopping power, reduces wear on service brakes.



#### **ISM Maintenance Intervals.**

	MILES KILOMETERS	MONTHS
OIL AND FILTER	15,000 24,000	12
FUEL FILTER	15,000 24,000	12
COOLANT FILTER	15,000 24,000	12
OVERHEAD ADJUSTMENT	120,000 192,000	
COALESCING FILTER	150,000 240,000	24

Cummins ISM is fully compatible with long-life coolant/ antifreeze formulas that allow changes out to six years. Follow maintenance guidelines recommended by the manufacturer for safe use with extended service intervals.

See Owners Manual for complete details.

### **Equipment That Makes A Difference.**

- Cummins 18.7-cfm air compressor is a standard option on the ISM 500
- Water-in-fuel sensor alerts drivers of contamination that could cause performance and durability problems
- RoadRelay™ 4 is an onboard monitoring system that provides the driver with trip information such as mpg, engine fault details and optional anti-theft protection

#### Warranty And Extended Coverage Plans.

Standard Motorhome Warranty (U.S. and Canada only):

- 5 years or 100,000 miles (160,935 km), whichever comes first
- Includes parts and labor and progressive damage resulting from engine failure due to defects in material or factory workmanship
- Covers towing for the first year
- Complete warranty details are provided in Cummins Bulletin 3381340

#### **Optional Extended Coverage Plans:**

- Plans available for purchase through Cummins distributors
- 5 years/150,000 miles (241,402 km) or
  5 years/200,000 miles (321,869 km)
  - Covers 100% parts and labor except maintenance items
  - See Cummins Bulletin 3381368 for details
- 7 years/150,000 miles (241,402 km) or 10 years/200,000 miles (321,869 km)
  - Major components coverage
  - See Cummins Bulletin 3381367 for details



#### QuickServe® Online.

The right information is priceless. Things change so rapidly today, you can't afford to take a chance on outdated information. Paper manuals and CD-ROMs can't always keep pace with ever-changing parts and service information. You need the most current information – continuously updated – every minute of every day. The Internet is the answer. QuickServe Online is your complete reference for Cummins parts and service information on the Internet. For more information, contact your local Cummins distributor or log on to quickserve.cummins.com.



#### Coach Care.™

Coach Care is a network of service centers dedicated to making every maintenance or repair event a pleasant experience. Coach Care facilities are:

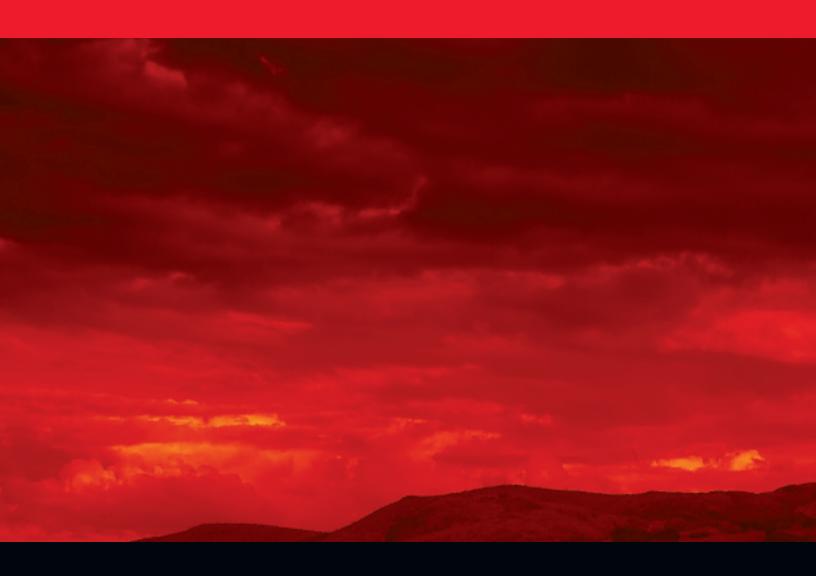
- Designed to meet the needs of motorhome owners
- Cummins distributor locations, fully certified by Cummins and Cummins Power Generation
- Certified to work on most motorhome chassis
- Capable of performing many appliance repairs (most locations)
- Equipped with overnight parking, electrical hookups, sanitation and sewage disposal
- Located near America's most popular motorhome destinations. Call 1-800-DIESELS for locations

For more information, check out the Coach Care section at funroads.com.

#### **Cummins Customer Support.**

Our Customer Care programs for motorhome buyers are unmatched by anyone else in the motorhome industry. Key elements of Cummins customer support include:

- Personalized factory assistance regarding general product and warranty support, product information, service location assistance and general Cummins information are available by calling 1-800-DIESELS
- The largest parts and service network in the industry with over 3,500 authorized repair locations throughout the U.S. and Canada
- Certified motorhome repair locations
- Accelerated problem diagnosis at every Cummins QuickServe location
- 24/7 access to Cummins
  - 1-800-DIESELS (1-800-343-7357) select Option 3 for service location assistance any time of the day or night
  - Log on to everytime.cummins.com and click the "Service Locator" link in the top bar for 24-hour service location assistance





Cummins Inc. Box 3005 Columbus, IN 47202-3005 U.S.A.

Phone: 1-800-DIESELS (1-800-343-7357) Fax: 1-800-232-6393 Internet: everytime.cummins.com

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