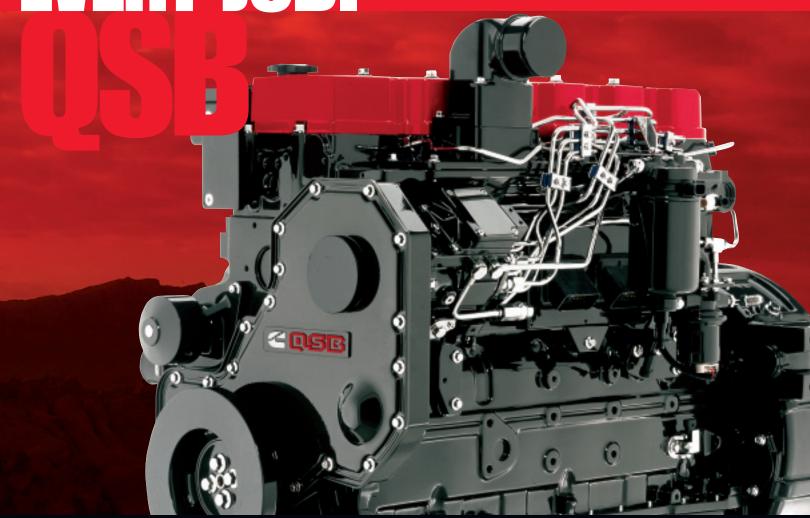


EVERY JOB.



FOR OFF-HIGHWAY APPLICATIONS

# FOR OFF-HIGHWAY APPLICATIONS.

# QSB

When you have a tough job to do, you need the power, precision and flexibility of Cummins QSB diesel engines with full-authority electronic controls. Cummins 4-cylinder and 6-cylinder QSB engines make every piece of equipment work harder, smarter and longer.

The QSB Series is based on the highly successful B Series and features power ratings from 110-275 hp, with both charge air-cooled and turbocharged versions that deliver strong performance. These engines combine proven full-authority electronic controls with the reliable performance you expect from one of the world's most successful and durable engine block designs.

QSB engines meet every Tier 2/Stage II emissions standard and will achieve Tier 3/Stage IIIA compliance with in-cylinder technology that maintains a compact, simple and cost-effective design solution.



#### **Ratings**

nuthigo			
ENGINE MODEL	ADVERTISED HORSEPOWER	PEAK Horsepower	PEAK TORQUE
QSB5.9			
QSB 275*	275 @ 2500 RPM	275 @ 2300 RPM	730 LB-FT @ 1500 RPM
QSB 240	240 @ 2500 RPM	250 @ 2300 RPM	730 LB-FT @ 1500 RPM
QSB 240	240 @ 2200 RPM	240 @ 2200 RPM	652 LB-FT @ 1500 RPM
QSB 230	230 @ 2200 RPM	230 @ 2200 RPM	652 LB-FT @ 1500 RPM
QSB 220	220 @ 2500 RPM	230 @ 2300 RPM	670 LB-FT @ 1500 RPM
QSB 215	215 @ 2500 RPM	225 @ 2300 RPM	655 LB-FT @ 1500 RPM
QSB 215	215 @ 2200 RPM	225 @ 2000 RPM	692 LB-FT @ 1500 RPM
QSB 205	205 @ 2500 RPM	215 @ 2300 RPM	625 LB-FT @ 1500 RPM
QSB 205	205 @ 2200 RPM	215 @ 2000 RPM	685 LB-FT @ 1500 RPM
QSB 190**	190 @ 2200 RPM	200 @ 2000 RPM	658 LB-FT @ 1500 RPM
QSB 185	185 @ 2500 RPM	190 @ 2300 RPM	575 LB-FT @ 1500 RPM
QSB 185	185 @ 2200 RPM	190 @ 2000 RPM	575 LB-FT @ 1500 RPM
QSB 180**	180 @ 2200 RPM	190 @ 2000 RPM	624 LB-FT @ 1500 RPM
QSB 173	173 @ 2500 RPM	179 @ 2300 RPM	530 LB-FT @ 1500 RPM
QSB 173	173 @ 2200 RPM	178 @ 1900 RPM	590 LB-FT @ 1500 RPM
QSB 165	165 @ 2000 RPM	165 @ 2000 RPM	541 LB-FT @ 1500 RPM
QSB 155	155 @ 2300 RPM	160 @ 2000 RPM	440 LB-FT @ 1500 RPM
QSB 155	155 @ 2500 RPM	160 @ 2300 RPM	440 LB-FT @ 1500 RPM
QSB 155	155 @ 2200 RPM	160 @ 2000 RPM	440 LB-FT @ 1500 RPM
QSB 140	140 @ 2200 RPM	145 @ 2000 RPM	434 LB-FT @ 1500 RPM
QSB 130	130 @ 2500 RPM	130 @ 2500 RPM	386 LB-FT @ 1400 RPM
QSB 130**	130 @ 2200 RPM	132 @ 2000 RPM	400 LB-FT @ 1400 RPM
QSB3.9			
QSB 130	130 @ 2500 RPM	135 @ 2300 RPM	355 LB-FT @ 1500 RPM
QSB 125	125 @ 2200 RPM	125 @ 2100 RPM	355 LB-FT @ 1500 RPM
QSB 120	120 @ 2500 RPM	125 @ 2300 RPM	350 LB-FT @ 1500 RPM
QSB4.5			
QSB 110	110 @ 2500 RPM	110 @ 2500 RPM	305 LB-FT @ 1500 RPM
QSB 110	110 @ 2200 RPM	110 @ 2000 RPM	305 LB-FT @ 1500 RPM

<sup>\*</sup>Indicates a restricted rating.

#### Check with your Cummins distributor or dealer. All ratings are Tier 2 approved.

#### **Specifications**

	QSB3.9	QSB4.5	QSB5.9	
ENGINE TYPE	IN-LINE, 4-CYLINDER	IN-LINE, 4-CYLINDER	IN-LINE, 6-CYLINDER	
DISPLACEMENT	238 CU IN	275 CU IN	359 CU IN	
	3.9 LITERS	4.5 LITERS	5.9 LITERS	
ADVERTISED HP	120-130 HP	110 HP	130-275 HP	
	89-97 KW	82 KW	97-205 KW	
PEAK TORQUE	350-355 LB-FT	305 LB-FT	400-730 LB-FT	
	475-481 N•M	414 N•M	542-990 N•M	
BORE AND STROKE	4.02 IN X 4.72 IN	4.02 IN X 5.39 IN	4.02 IN X 4.72 IN	
	102 MM X 120 MM	102 MM X 137 MM	102 MM X 120 MM	
ASPIRATION	RATION TURBOCHARGED AND CHARGE AIR COOLED			
OIL SYSTEM CAPACITY	′ 10 U.S. QT	10 U.S. QT	17 U.S. QT	
	9.5 LITERS	9.5 LITERS	16.1 LITERS	
COOLANT CAPACITY	8.3 U.S. QT	8.3 U.S. QT	10.5 U.S. QT	
	7.9 LITERS	7.9 LITERS	9.9 LITERS	
LENGTH	30.6 IN	30.6 IN	40.0 IN	
	777 MM	777 MM	1017 MM	
WIDTH	24.9 IN	24.9 IN	26.9 IN	
	632 MM	632 MM	684 MM	
HEIGHT	37.7 IN	35.5 IN	37.7 IN	
	958 MM	901 MM	958 MM	
WET WEIGHT	745 LB	745 LB	952-1056 LB	
	338 KG	338 KG	432-479 KG	

<sup>\*\*</sup>Indicates a continuous/water management rating.

All ratings are intermittent unless otherwise noted. Additional ratings may be available.

### **Features And Benefits.**

The QSB provides many benefits for your operation:

- Full-Authority Electronic Controls Optimize engine performance and provide seamless integration with other components, advanced diagnostics, plus a complete set of programming options.
- A Deep, Stiff Crankcase With Structural Ribs For lower noise and increased engine life.
- Holset Wastegated HX35 Turbocharger Designed by Holset, a Cummins subsidiary. Wastegated for better low-speed performance and high-speed boost.
- Low-Maintenance Fuel Filter Assembly Fuel filter incorporates an integral water separator and water-infuel sensor. 500-hour filter life with easy top-load replacement using standard Fleetguard® filters.
- Centered Injectors With Symmetrical Piston Bowls Improved airflow and even fuel dispersion, resulting in increased power, improved transient response and reduced fuel consumption on 24-valve versions of the QSB.
- Parent Bore Cylinder Block Designed for reduced noise and increased durability.

# **Options.**

- Centriguard™ Filter The Centriguard filter from Fleetguard uses centrifugal force to remove damaging soot particles, reducing valve bridge and fuel injection wear. Disposable and incinerable, it eliminates hazardous waste issues.
- Noise Reduction Packages Reduce overall noise level (up to 4 dBA less).
- Many others.

# **Base Warranty.**

QSB engines come with a full 2-year/2,000-hour warranty that covers all Cummins branded components, including electrics such as starters and alternators. Major components coverage continues into the third year, up to 10,000 hours of operation from the time your QSB engine goes in service.

Three simple steps explain everything you need to know:

**Step One:** Full coverage on all Cummins industrial engines and branded components with unlimited hours during the first year of operation. This includes Cummins branded electrics such as alternators, starters, etc.

**Step Two:** Full coverage is extended for the second year, up to 2,000 hours of operation. Total hours are cumulative from the time the engine goes in service.

**Step Three:** Major components coverage including block, crankshaft, camshaft and rods on all products for the third year or up to 10,000 hours of operation. Total hours are cumulative from the time the engine goes in service.

# **Encompass Protection Plans.**

Encompass protection plans are available with up to five years of coverage with unlimited hours, plus your choice of parts only, parts and labor, or parts, labor and travel.

Encompass protection plans may be purchased up to six months after the in-service date of your QSB engine. See your Cummins distributor for pricing. For additional details, ask to see Bulletins 3624422, 3624423, 3624424 and 3624570.

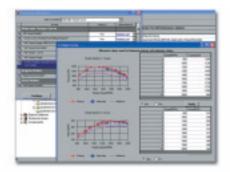
A \$200 deductible applies per service visit after the expiration of the base warranty.

#### Performance.

With the addition of full-authority electronics, the QSB offers more precise control over engine performance than ever. Which provides customers with a dependable, completely programmable power solution that can handle a wide range of operating conditions, load factors – and equipment – at the lowest possible cost of operation.

# **Every Installation.**

Getting every installation right – the first time – is as important to Cummins as it is to you. PowerMatch and Advisor help ensure that we get it right, every time.



# **Cummins PowerMatch.**

Cummins partners with OEM engineers to test and match the power of the QSM engine to specific equipment models and applications. We use our advanced electronics to shape power curves and ratings to match the jobs your equipment will be doing, taking into account the working environment, load factors, ambient temperatures and operating modes. Then we optimize the engine's performance with other vehicle components, using Advisor.

# **Maintenance Intervals.**

QSB engines are designed to run up to 250 hours/6 months for turbocharged engines and 500 hours/6 months for charge air-cooled engines between scheduled maintenance stops.

#### **Cummins Advisor.**

Getting every installation right – the first time – is what

Cummins Advisor is all about.

Advisor software builds a virtual model to make sure every system (air, intake, exhaust, cooling, etc.) is integrated for optimum performance. It takes into account everything from load factors to operating climates to duty cycles – then identifies systems or components that could negatively impact reliability – listing alternatives that deliver the performance you expect the first time – every time.



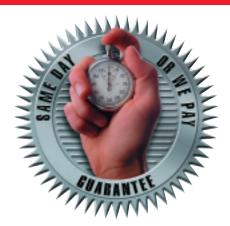
Questions about engine information? Cummins
QuickCheck III\* puts every answer in the palm of your hand! QuickCheck III software, together with your PDA handheld device, reads and captures engine data quickly and conveniently from any Cummins electronic diesel engine or other engines you run (via J2587 and J1939). Use

it to check everything from fuel burned and total engine hours to coolant temperature and boost pressure.

QuickCheck III even logs fault codes, which can be used with Cummins INSITE™ to get detailed repair instructions for faster service.

\*For information on hardware compatibility, please visit us online at http://quickcheck.cummins.com or see Bulletin 4081450.





# QuickServe® Says It All — With A Guarantee.

Cummins QuickServe is an entire system dedicated to performing fast, accurate maintenance and repair services – using quality Cummins and Cummins ReCon® parts – to minimize downtime and maximize productivity. Our distributors' service record is so reliable, we offer an exclusive QuickServe Guarantee\* to customers in the majority of our industrial markets.

Cummins distributors guarantee that engine service performed in their shop with a standard repair time of four hours or less will be completed that same day – or you'll receive a \$75 credit toward future Cummins parts or service work.



If your equipment is down and you can't bring it to one of our locations, we'll come to yours.

A Cummins

QuickServe truck and certified service technician will be dispatched within four hours of your call, or you'll receive a \$75 credit toward future Cummins parts or service work.

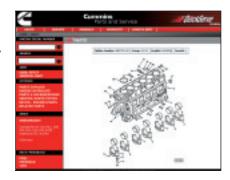
To schedule or request service, call your local Cummins distributor today. For additional details or to learn more about the QuickServe Guarantee, see our web site at www.everytime.cummins.com.

\*\$75 credit applies only to service in the U.S. and Canada. The QuickServe Guarantee varies by country. Please contact your local Cummins distributor for details.

# QuickServe® Online.

QuickServe Online (http://quickserve.cummins.com) gives you easy access to parts and service information.

While there are over eight million engines and literally billions of part numbers indexed in the QuickServe Online database, you can find the information you



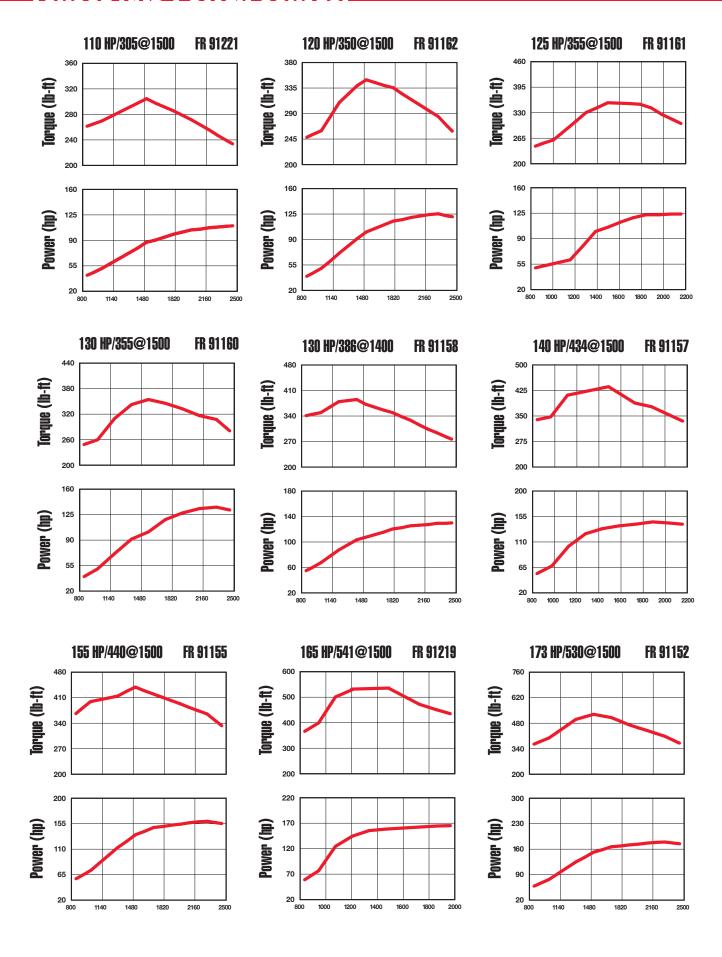
need in seconds with our high-speed search function and your engine's serial number.

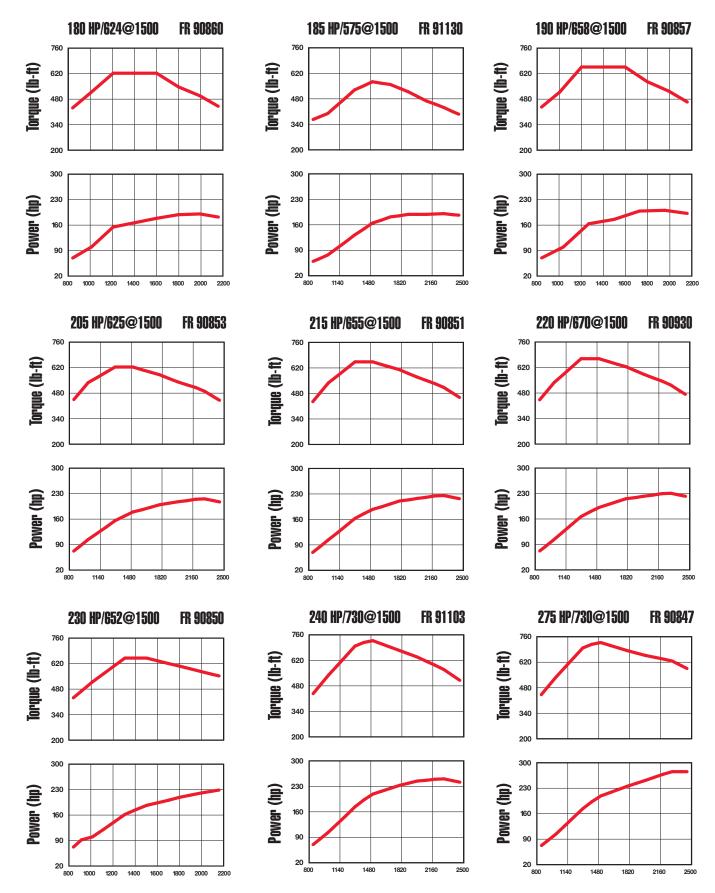
# **Every Question, Answered.**

- Service Network Cummins engines are backed by the strength of Cummins global network of over 5,500 service locations worldwide.
- Customer Assistance Center For technical assistance, service locations and product literature, call 1-800-DIESELS (1-800-343-7357).
- Cummins PowerMaster E-mail the experts for timely answers to Cummins-related questions at powermaster@cummins.com.
- Cummins Online Registration Register all your Cummins engines quickly and easily at www.everytime.cummins.com to ensure quality parts and service for your engine.



# **TOROUE AND POWER CURVES**





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





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Phone: 1-800-DIESELS (1-800-343-7357) Fax: 1-800-232-6393 E-Mail: powermaster@cummins.com Internet: www.everytime.cummins.com

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