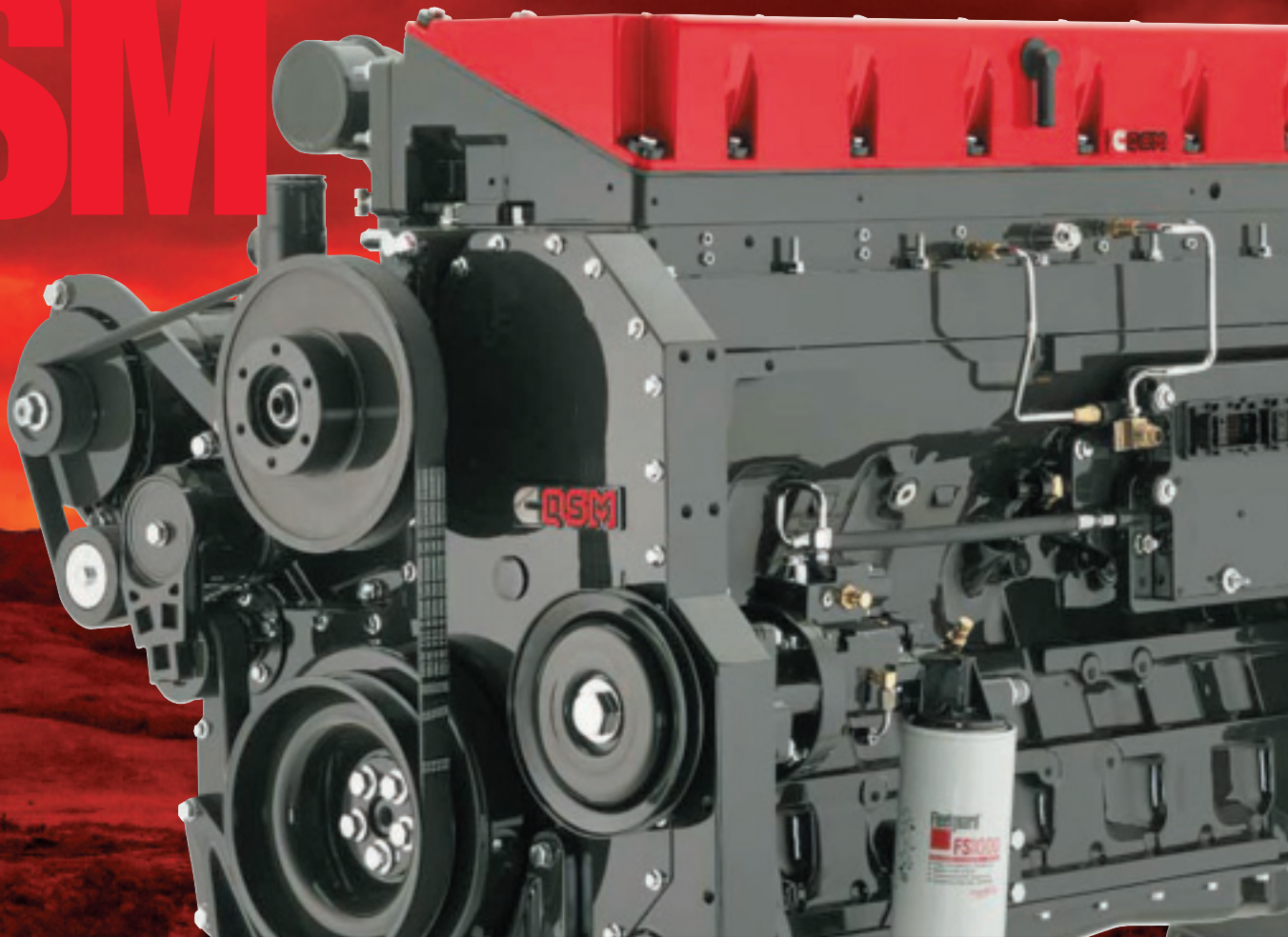




EVERY CHALLENGE.

QSM



FOR OFF-HIGHWAY APPLICATIONS

FOR OFF-HIGHWAY APPLICATIONS.



Your business depends on having the power to meet every challenge. The QSM with Quantum System electronic controls provides highly productive power for equipment on the world's most demanding work sites. And the QSM is the first engine to be certified to EPA Tier 3 and Euro Stage IIIA levels. Cummins knows combustion and delivers a cost-effective solution utilizing advanced "in-cylinder" technology.

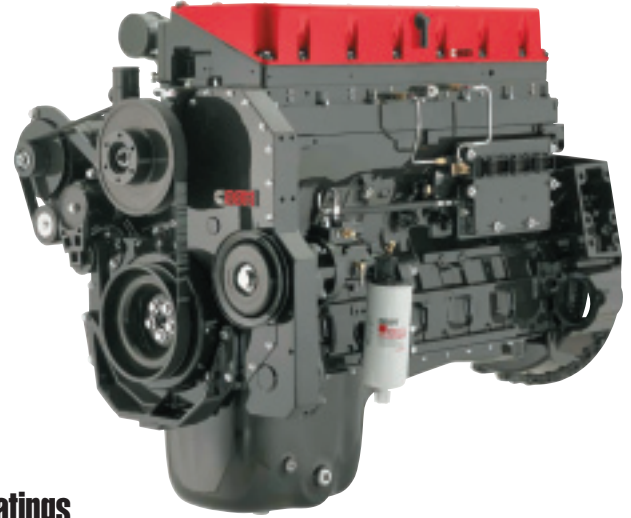
Every day, QSM engines are put to the test in wheel loaders, excavators, haul trucks, 4WD tractors, reach stackers and more. And every day, they deliver superior performance that's the result of advanced combustion technology and our responsive wastegated turbocharger. Electronically controlled unit injectors with cam-driven rate shaping optimize both emissions and efficiency. The QSM is available in a wide range of ratings from 290-400 hp.

Performance.

The QSM high-pressure injection system and electronic controls ensure clean, powerful and efficient operation every time. The ECM continuously monitors data from strategically placed sensors within the engine, optimizing the fuel-to-air mixture for maximum combustion. This increases engine responsiveness, improves fuel efficiency and significantly reduces noise levels.

Versatility.

No matter what type of job you have to do – from agriculture to construction to a wide range of industrial applications – the QSM is designed to function as an integral part of your equipment. CELECT™ programmable features let you customize engine performance to equipment use. Our electronic control module has the capacity and the connections to receive input from all your other vehicle systems and adjust engine performance to match.



Ratings

| ENGINE MODEL | ADVERTISED HORSEPOWER | PEAK HORSEPOWER | PEAK TORQUE |
|--------------|-----------------------|-----------------|-----------------------|
| QSM 400* | 400 @ 2100 RPM | 446 @ 1800 RPM | 1400 LB-FT @ 1400 RPM |
| QSM 400* | 400 @ 2100 RPM | 428 @ 1900 RPM | 1400 LB-FT @ 1400 RPM |
| QSM 400 | 400 @ 2100 RPM | 403 @ 1800 RPM | 1400 LB-FT @ 1400 RPM |
| QSM 400* | 400 @ 1800 RPM | N/A | 1400 LB-FT @ 1400 RPM |
| QSM 375 | 375 @ 2100 RPM | 400 @ 1800 RPM | 1400 LB-FT @ 1400 RPM |
| QSM 360 | 360 @ 2100 RPM | 385 @ 1800 RPM | 1350 LB-FT @ 1400 RPM |
| QSM 360* | 360 @ 1800 RPM | N/A | 1260 LB-FT @ 1400 RPM |
| QSM 350 | 350 @ 2100 RPM | 385 @ 1800 RPM | 1310 LB-FT @ 1400 RPM |
| QSM 350 | 350 @ 2000 RPM | 372 @ 1800 RPM | 1350 LB-FT @ 1400 RPM |
| QSM 340** | 340 @ 1800 RPM | N/A | 1260 LB-FT @ 1400 RPM |
| QSM 335 | 335 @ 2100 RPM | 365 @ 1800 RPM | 1235 LB-FT @ 1400 RPM |
| QSM 300 | 300 @ 2100 RPM | 335 @ 1800 RPM | 1050 LB-FT @ 1400 RPM |
| QSM 290 | 290 @ 2100 RPM | 320 @ 1800 RPM | 1090 LB-FT @ 1400 RPM |

*Restricted rating. **Indicates a continuous rating. All ratings are intermittent unless noted. Additional ratings may be available. Check with your Cummins distributor or dealer.

Specifications

| | | |
|-----------------------|------------------------------------|-----------------|
| ENGINE TYPE | IN-LINE, 6-CYLINDER | |
| DISPLACEMENT | 660 CU IN | 10.8 LITERS |
| ADVERTISED HORSEPOWER | 290-400 HP | 216-298 kW |
| PEAK POWER | 446* HP | 333* kW |
| PEAK TORQUE | 1050-1400 LB-FT | 1424-1898 N•M |
| NOMINAL TORQUE RISE | 40% | |
| BORE AND STROKE | 4.92 IN X 5.79 IN | 125 MM X 147 MM |
| ASPIRATION | TURBOCHARGED AND CHARGE AIR COOLED | |
| OIL SYSTEM CAPACITY | 41 U.S. QT | 39 LITERS |
| COOLANT CAPACITY | 10 U.S. QT | 9.5 LITERS |
| LENGTH | 51.4 IN | 1306 MM |
| WIDTH | 36.0 IN | 914 MM |
| HEIGHT | 50.4 IN | 1280 MM |
| WEIGHT (WET) | 2,170 LB | 984 KG |

*Restricted rating.

Features And Benefits.

The QSM Quantum System provides superior fuel economy with strong engine performance, engine protection and other programmable features. Components include:

- Holset HX55 Wastegated Turbo – Designed for optimum boost across operating range.
- The Venturi™ Oil Filter and Lube System – 10-micron LF9001 Filter from Fleetguard combines with a new lubrication system. Can double oil change intervals – up to 700 hours in some applications.
- CELECT™ Electronic Engine Management – Provides superior performance, fuel efficiency, diagnostics and prognostics using full-authority electronics. Its programmable features let you customize engine performance to equipment use.
- High-Capacity ECM – New space-efficient Electronic Control Module packs ten times more memory and ten times more processing power.
- Sealed Sensors – Fully sealed to resist water intrusion. Combined temperature and pressure sensors reduce inventory and simplify maintenance.
- Advanced Combustion Technology – Optimized injector tips and a reshaped steel piston bowl improve fuel economy and emissions control with longer change intervals.
- Articulated Pistons and Liners – Steel-topped pistons handle higher cylinder temperatures for improved fuel efficiency and emissions control. Patented mid-stop cylinder liners resist cavitation and extend life-to-overhaul.
- The Auto-Tensioning Belt Drive – Self-adjusting for optimum tension, which increases fan, alternator and fan belt life.
- Improved Camshaft Durability – Exhaust valve lobes are designed to improve wear tolerance. The injector lobe profile has been revised to optimize injection.
- The Rear Engine Power Take-Off (REPTO) Option – Provides additional capacity for driving remote-mounted devices.

Maintenance.

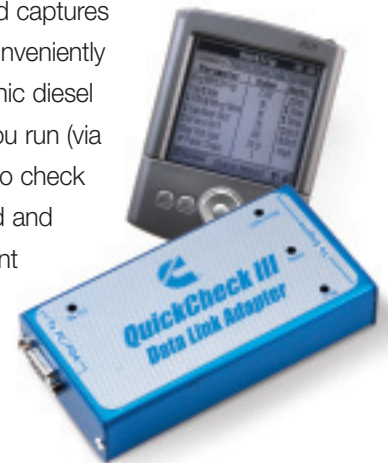
The QSM is designed to deliver more time on the job, and less time being serviced. Maintenance intervals have been made longer, and service has been made simpler.

Maintenance is kept to an absolute minimum, with oil change intervals that are double the previous standards in some applications.

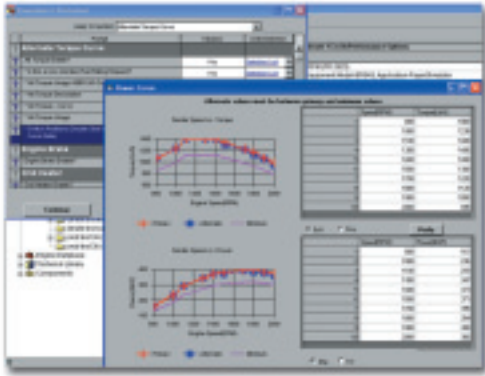
Cummins QSM engines feature a Venturi oil filter by our Fleetguard subsidiary in combination with an improved lube system that increases oil flow, reduces lubrication delay at start-up and improves protection. This system allows for oil change intervals of up to 700 hours in some applications.

Cummins QuickCheck III.

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.



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.

Cummins Advisor:



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 will deliver the performance you expect the first time – every time.

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.

Warranty Coverage.

Cummins QSM gives you everything you need, with one of the simplest and most comprehensive plans anywhere. 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.

Cummins three-step coverage is available worldwide. For more information, call the Cummins Customer Assistance Center at 1-800-DIESELS (1-800-343-7357) and request Bulletin 3624359.

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 QSM engine. See your Cummins distributor for pricing. For additional details, ask to see Bulletins 3624422, 3624423 and 3624424.

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

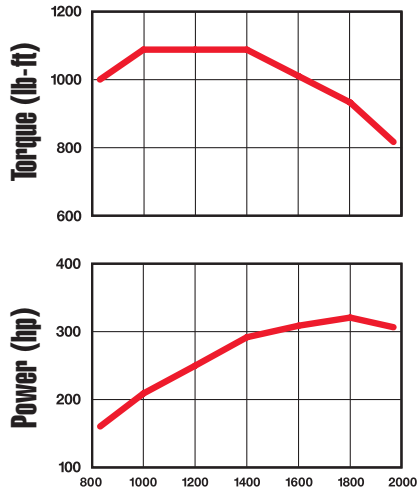
Every Question, Answered.

- 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.

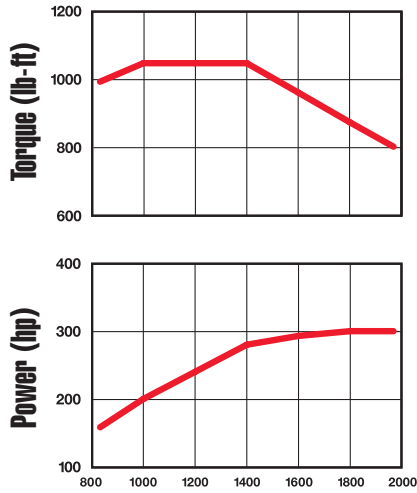


TORQUE AND POWER CURVES.

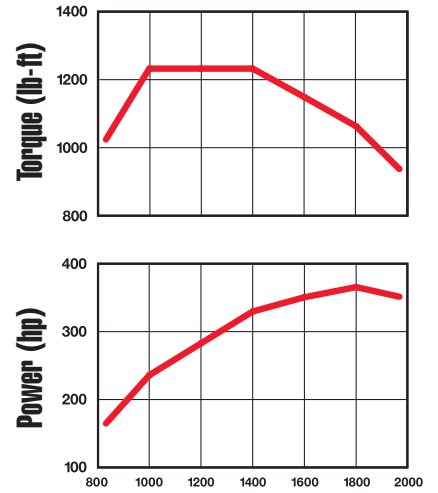
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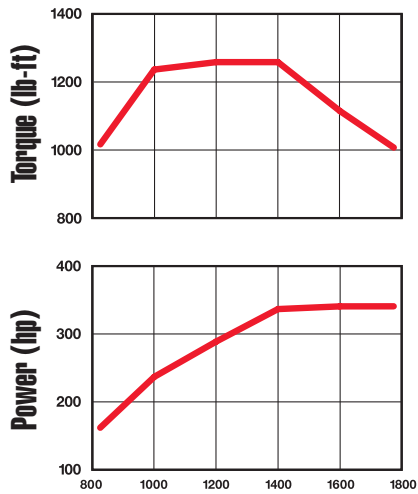
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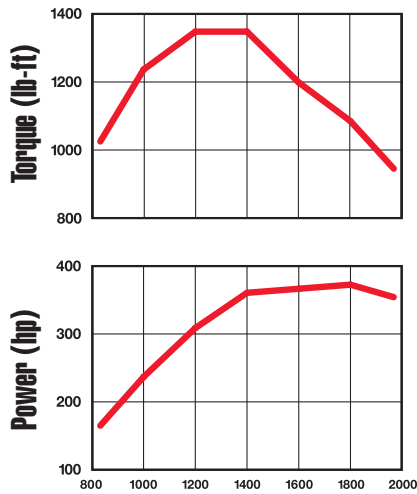
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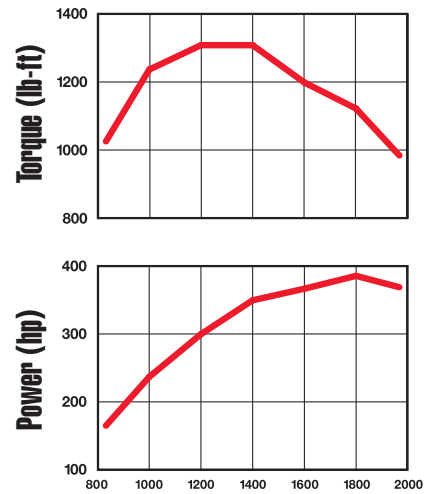
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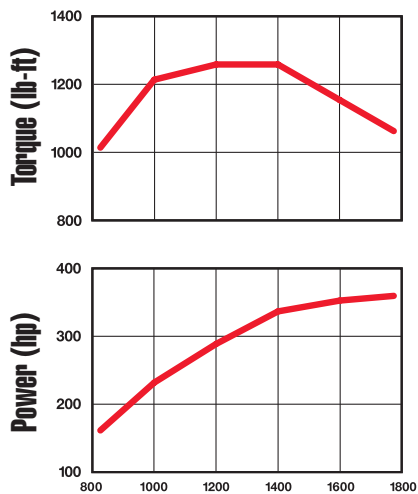
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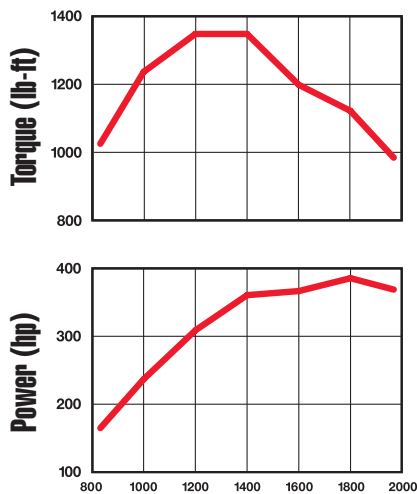
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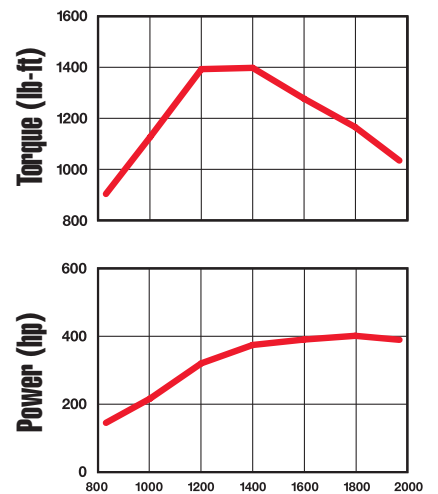
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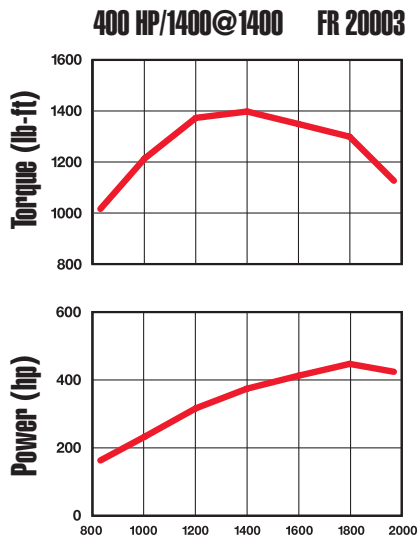
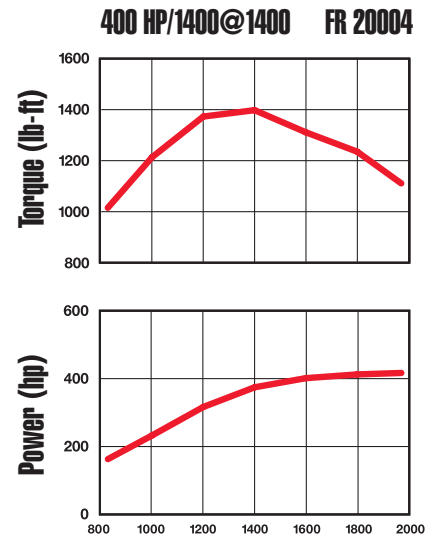
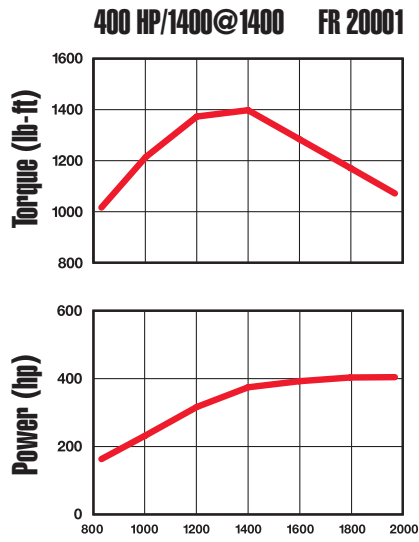
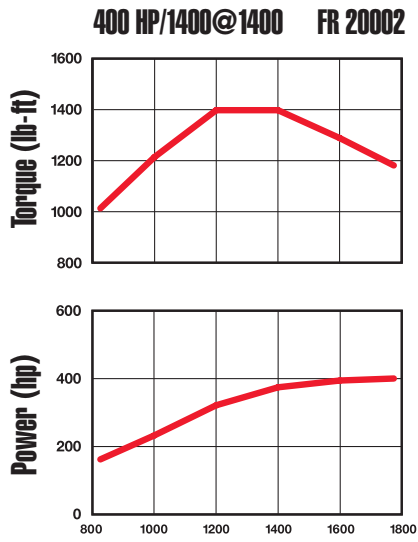


360 HP/1350@1400 FR 20018



375 HP/1400@1400 FR 2999







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