

Powering Productivity. Every Engine.

QSX11.9 And QSX15 (290-600 hp) Tier 4 Interim/Stage IIIB



Powering Productivity. Every[™] Engine.

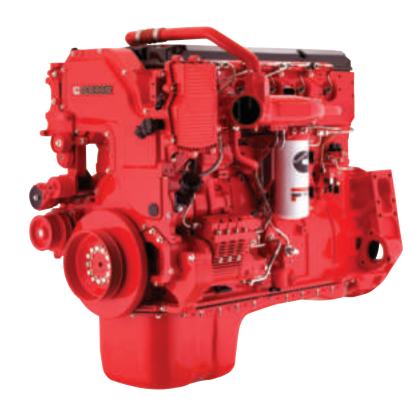
Better Performance. Every Time.

At Cummins, we're driving higher productivity with quicker engine response, a torque rise of up to 50%, and reduced operating costs with up to 5% better fuel economy. The QSX11.9 and QSX15 engines are designed and built to make every piece of off-highway equipment more efficient.

EPA Tier 4 Interim/Euro Stage IIIB regulations took effect January 1, 2011. The regulations require a major reduction of Particulate Matter (PM) and also require significant oxides of nitrogen (NOx) reductions. These new emissions standards drive the need for cooled Exhaust Gas Recirculation (EGR) – a proven technology since 2002 – and the Cummins Particulate Filter exhaust aftertreatment. The Cummins Particulate Filter requires no operator action during normal operation, and reduces particulate matter by 90%.

Cummins QSX11.9 and the QSX15 are designed with a common architecture and share many of the same components, key performance systems and electronic control systems. We've taken proven technology and used it across the board, for enhanced reliability and durability in construction, agriculture, materials handling and other types of rugged industrial applications.





We are distinct from other engine manufacturers because we design and manufacture every key component and subsystem ourselves, utilizing a fully integrated approach to optimize performance from our Direct FlowTM air filter, Cummins VGTTM Turbocharger and Xtra-High Pressure Injection (XPI) fuel system to the Cummins Particulate Filter.

Extensive field-testing in a variety of equipment has shown significantly faster engine response and equal reliability compared to our best Tier 3 engines, all with the incorporation of our aftertreatment system. In addition, equipment operators will appreciate significantly lower noise levels with smoother engine operation.

From a maintenance and service standpoint, our tools are ready. Both QuickCheck 5200 and QuickServe® Online are equipped for the most recent emissions standards, fully supported by the most capable support network in the business.

The QSX11.9 and QSX15 represent the next step in the evolution of Cummins technology, building on proven expertise to deliver the durable, dependable performance and exceptional productivity that you've come to rely on. Every engine. Every time.



Cummins QSX11.9.

The key to success is building upon your strengths. The proof is Cummins Tier 4 Interim/Stage IIIB QSX11.9. We've taken everything we've learned with the Cummins QSM engine and combined it with the advanced technology platform of the QSX15. The result is a compact engine with 290-500 hp (216-373 kW) and up to 1600 lb-ft (2169 N•m) of peak torque. The QSX11.9 has one of the highest power-to-weight ratios in its class, and its remarkable torque rise (up to 50%) enables the engine to more quickly take full advantage of the torque power – just as rpm speed falls due to tougher working conditions.

Reliability, durability and productivity are similar to the QSX15, because the QSX11.9 shares virtually every major component and subsystem. This includes the XPI fuel injection system, Direct Flow air filter, the Cummins CM2250 Electronic Control Module (ECM), our proprietary Cummins VGT Turbocharger and the Cummins Particulate Filter.

The addition of the Cummins Particulate Filter reduces particulate matter emissions by over 90%, while the cooled-EGR subsystem reduces NOx emissions by 45%.

QSX11.9 Ratings

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	RATED HP(KW) @ RPM	PEAK HP(KW) @ RPM	PEAK TORQUE LB-FT(N•M) @ RPM
500*	500 (373) @ 1800	500 (373) @ 1800	1600 (2169) @ 1400
475*	475 (354) @ 1800	475 (354) @ 1800	1600 (2169) @ 1400
460*	460 (343) @ 2100	500 (373) @ 1800	1600 (2169) @ 1400
450	450 (336) @ 1800	450 (336) @ 1800	1600 (2169) @ 1400
435**	435 (324) @ 1900	450 (336) @ 1800	1600 (2169) @ 1400
430	430 (321) @ 1800	430 (321) @ 1800	1500 (2034) @ 1400
425*	425 (317) @ 1800	475 (354) @ 1800	1600 (2169) @ 1400
400	400 (298) @ 2100	450 (336) @ 1800	1600 (2169) @ 1400
400	400 (298) @ 2100	425 (317) @ 1800	1500 (2034) @ 1400
400	400 (298) @ 1800	400 (298) @ 1800	1450 (1966) @ 1400
375	375 (280) @ 2100	415 (309) @ 1800	1450 (1966) @ 1400
375**	375 (280) @ 1900	375 (280) @ 1800	1350 (1830) @ 1400
375**	375 (280) @ 1800	375 (280) @ 1800	1350 (1830) @ 1400
355	355 (265) @ 2000	370 (276) @ 1800	1250 (1695) @ 1400
350	350 (261) @ 2100	385 (287) @ 1800	1350 (1830) @ 1400
350**	350 (261) @ 1800	385 (287) @ 1800	1350 (1830) @ 1400
335	335 (250) @ 2100	370 (276) @ 1800	1250 (1695) @ 1400
290	290 (216) @ 2100	320 (239) @ 1800	1090 (1478) @ 1400
	475* 460* 450 435** 430 425* 400 400 375 375** 355 350 350**	HP(KW) @ RPM 500* 500 (373) @ 1800 475* 475 (354) @ 1800 460* 460 (343) @ 2100 450 450 (336) @ 1800 435** 435 (324) @ 1900 430 430 (321) @ 1800 425* 425 (317) @ 1800 400 400 (298) @ 2100 400 400 (298) @ 2100 400 400 (298) @ 1800 375 375 (280) @ 1900 375** 375 (280) @ 1900 375** 375 (280) @ 1900 355 355 (265) @ 2000 350 350 (261) @ 2100 335 335 (250) @ 2100	HP(KW) © RPM HP(KW) © RPM 500* 500 (373) @ 1800 500 (373) @ 1800 475* 475 (354) @ 1800 475 (354) @ 1800 460* 460 (343) @ 2100 500 (373) @ 1800 450 450 (336) @ 1800 450 (336) @ 1800 435*** 435 (324) @ 1900 450 (336) @ 1800 430 430 (321) @ 1800 475 (354) @ 1800 425* 425 (317) @ 1800 475 (354) @ 1800 400 400 (298) @ 2100 450 (336) @ 1800 400 400 (298) @ 2100 425 (317) @ 1800 400 400 (298) @ 2100 425 (317) @ 1800 375 375 (280) @ 2100 400 (298) @ 1800 375** 375 (280) @ 2100 415 (309) @ 1800 375** 375 (280) @ 1800 375 (280) @ 1800 375** 375 (280) @ 1800 375 (280) @ 1800 355 355 (265) @ 2000 370 (276) @ 1800 350** 350 (261) @ 2100 385 (287) @ 1800 350** 350 (261) @ 1800 370 (276) @ 1800

QSX11.9 Specifications

Engine Type	In-Line,	6-Cylinder
Displacement	726 cu in	11.9 Liters
Rated Power	290-500 hp	216-373 kW
Peak Torque	1090-1600 lb-ft	1478-2169 N∙m
Bore and Stroke	5.12 in x 5.91 in	130 mm x 150 mm
Aspiration	Turbocharged ar	nd Charge Air Cooled
Oil System Capacity	48 U.S. Quarts	45.42 Liters
Length	55.1 in	1400 mm
Width	38.0 in	965 mm
Height	48.8 in	1240 mm
Weight (Wet) (Dry) (Aftertreatment System	2,797 lb 2,640 lb)*** 125 lb	1,269 kg 1,197 kg 57 kg

OSX11.9 Maintenance Intervals

	Hours	
Oil and Filter	500	
Overhead Adjustment	3,000	
Coalescing Filter	3,000	
Diesel Particulate Filter	6,000	

^{*}Indicates a restricted rating

All ratings are intermittent unless otherwise noted. Additional ratings may be available. Check with your Cummins distributor or dealer.

^{**}Indicates a continuous rating

^{***}Depending on configuration



Cummins QSX15.

The QSX15 combines the best of all worlds – with low emissions, up to 5% better fuel economy, plus up to 2050 lb-ft (2779 N•m) of peak torque with a 50% torque rise. There are 12 ratings available to match the power demands of every type of heavy-duty application. The sophisticated XPI fuel system is capable of delivering fuel to the cylinder at high pressures, enabling multiple injection events per cycle. It also uses a new Direct Flow air filter, which has a smaller profile than conventional cylindrical units. For high-dust work environments, an optional pre-cleaner cover is available, which removes up to 90% of all particles before they even reach the filter, extending service intervals and reducing operating costs.

Cummins QSX15 for Tier 4 Interim/Stage IIIB is designed and built to deliver clear advantages versus our Tier 3 engines – in any type of industrial equipment, on every job.

QSX15 Ratings

ENGINE MODEL	RATED HP(KW) @ RPM	PEAK HP(KW) @ RPM	PEAK TORQUE LB-FT(N•M) @ RPM
QSX15 600*	600 (447) @ 1800	600 (447) @ 1800	2050 (2779) @ 1400
QSX15 580*	580 (433) @ 2100	600 (447) @ 1800	2050 (2779) @ 1400
QSX15 575*	575 (429) @ 1800	575 (429) @ 1800	1950 (2644) @ 1400
QSX15 550*	550 (410) @ 2100	590 (440) @ 1800	2050 (2779) @ 1400
QSX15 550*	550 (410) @ 1800	550 (410) @ 1800	1750 (2373) @ 1400
QSX15 535	535 (399) @ 2100	580 (433) @ 1800	1950 (2644) @ 1400
QSX15 525**	525 (391) @ 1800	525 (391) @ 1800	1750 (2373) @ 1400
QSX15 500**	500 (373) @ 1800	500 (373) @ 1800	1600 (2169) @ 1400
QSX15 500	500 (373) @ 2100	550 (410) @ 1800	1850 (2508) @ 1400
QSX15 450	450 (336) @ 2100	500 (373) @ 1800	1700 (2305) @ 1400
QSX15 450**	450 (336) @ 1800	450 (336) @ 1800	1500 (2034) @ 1400
QSX15 400	400 (298) @ 2100	440 (328) @ 1800	1500 (2034) @ 1400

QSX15 Specifications

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Engine Type	In-Line,	6-Cylinder
Displacement	915 cu in	15 Liters
Rated Power	400-600 hp	298-447 kW
Peak Torque	1500-2050 lb-ft	2035-2779 N•m
Bore and Stroke	5.39 in x 6.65 in	137 mm x 169 mm
Aspiration	Turbocharged an	d Charge Air Cooled
Oil System Capacity	48 U.S. Quarts	45.42 Liters
Length	56.8 in	1443 mm
Width	40.6 in	1032 mm
Height	51.1 in	1298 mm
Weight (Wet) (Dry) (Aftertreatment System)**	3,166 lb 3,009 lb * 125 lb	1,436 kg 1,365 kg 57 kg

QSX15 Maintenance Intervals

	Hours	
Oil and Filter	500	
Overhead Adjustment	6,000	
Coalescing Filter	3,000	
Diesel Particulate Filter	6,000	

^{*}Indicates a restricted rating

All ratings are intermittent unless otherwise noted. Additional ratings may be available. Check with your Cummins distributor or dealer.

^{**}Indicates a continuous rating

^{***}Depending on configuration

Cummins Particulate Filter.

The proven Cummins Particulate Filter reduces particulate matter by over 90%. This insulated filter is integrated with the Cummins VGT Turbocharger as a single electronic system, driven by the ECM to maximize particulate filter self-regeneration. Its rugged design has been optimized to handle any equipment shock and vibration loads. The Cummins Particulate Filter is passive up to 99% of the time, depending on duty cycle. No incremental actions are required by the operator to keep the Diesel Particulate Filter (DPF) clean. No burner is required to generate additional heat.

Every Confidence.

QSX11.9 and QSX15 engines come with a full 2-year/2,000-hour warranty that covers all Cummins branded components, including the engine and exhaust aftertreatment. Major components coverage continues into the third year, up to 10,000 hours of operation from the date each engine is put 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 for the first year of operation. This includes Cummins branded electrics such as alternators, starters and the Cummins Particulate Filter.

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

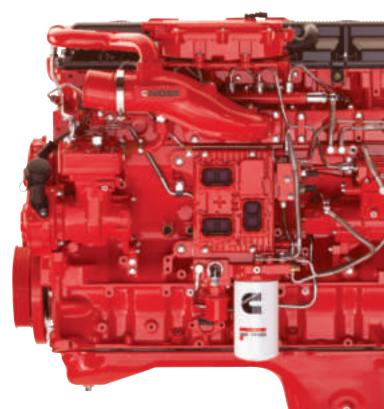
Step Three: Major components coverage, including block, crankshaft, camshaft and rods on all products for the third year or up to 10,000 hours of operation. Total hours are cumulative from the date the engine goes in service.



Encompass Extended Coverage.

Encompass gives you a flexible choice of plans that include parts and labor, or parts, labor and travel coverage. Encompass protection plans are available with your choice of up to five years of extended coverage with unlimited hours.

Encompass protection plans may be purchased up to six months after the in-service date of your Cummins QSX11.9 or QSX15 engine. See your Cummins distributor for pricing. For additional details, ask to see our Industrial Encompass Protection Plan brochures.



Cummins Electronic Control Module (ECM)
Two times the speed, two times increased memory
capability, three times faster processing power than
the previous model.

Tools At Your Fingertips.

QuickCheck 5200.

The QuickCheck 5200 handheld computer transforms the way you look at engine data. It has a brilliant color screen, faster processing speeds, greater memory and longer battery life than its predecessor.

The rugged, portable and user-friendly QuickCheck 5200 is fully compatible with any electronic engine. Powered by the Microsoft Windows CE operating system, the QuickCheck 5200 device features an integrated data link adapter that connects to your engine via J1587 or J1939 industry-standard data links for rapid, trouble-free data capture. No separate adapter is required.

QuickCheck is ready to operate for Tier 4 Interim and all previous engine platforms. For a demonstration or to buy Cummins QuickCheck 5200, see your Cummins dealer or distributor.





QuickServe® Online.

As a Cummins owner, you have access to one of the most comprehensive and powerful parts and service tools in the industry – Cummins QuickServe Online.

This is the same web site used by Cummins certified technicians to get parts and service information about your engine. And while it contains parts and service data for over 11 million engines, finding the information for your QSX11.9 or QSX15 engine takes just seconds.

The first step is to register your engine. Go to quickserve.cummins.com and click on "Create an Account." There you will see the different subscription plans you can choose from. You have the option to register for free or purchase one of the subscription plans to access additional information. Once you have registered, you simply enter the engine serial number listed on your data plate, and you will be able to view customized information about your engine at your convenience.

For an annual subscription fee, you can register for the Limited Owners Plan to get access to a cross-reference of Cummins ReCon® parts, service bulletins and the latest repair procedures. QuickServe Online even gives exploded parts diagrams to help with identification of components in subassemblies.

With the Limited Owners Plan, you can use the Shopping Cart feature to create a pick list of parts that you need. Distributor contact information is available online so you can review your parts list with your local Cummins distributor to make sure that you have every part needed to complete your engine repair. To register, visit quickserve.cummins.com.



INSITE.™

INSITE is a PC-based software application that provides quick and easy access to your engine's electronic performance information, which enables faster service turnaround times. INSITE helps ensure accurate procedures and diagnoses, and limits downtime while increasing productivity and profits.

Cummins INSITE software supplies engine information quickly, getting the inside details you need. No matter what kind of equipment you run, INSITE is the one support product to have in your virtual toolbox to fit every Cummins electronic engine regardless of emissions level.

Every Question. Answered.

To learn more about Tier 4 Interim/Stage IIIB, please see www.Tier4.info. If you have additional questions regarding Cummins engines, or want to register your engine, use one of the following methods to contact us:

Service Network – Cummins engines are backed by the strength of Cummins global network of over 6,600 service locations worldwide.

Cummins Care – For questions regarding your Cummins engine or for assistance in finding a repair facility, call Cummins Care at 1-800-DIESELS™ (1-800-343-7357).

Customers in Europe, the Middle East or Africa should call +44 (0) 1327 886464, or e-mail cabo.customerassistance@cummins.com.

For online assistance to Cummins-related questions, click on the "Contact Us" link in the header at cumminsengines.com.

Cummins Online Registration – Register all your Cummins engines quickly and easily at cumminsengines.com to ensure quality parts and service for your engine.







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