

Clearly Better. Every[™]Time.

QSB6.7 And QSL9 Engines (140-400 hp) For Tier 4 Final/Stage IV.



Clearly Ahead. Cummins QSB6.7 And QSL9 Engines For Tier 4 Final/Stage IV.



For U.S. Environmental Protection Agency (EPA) Tier 4 Final and EU Stage IV near-zero emissions regulations taking effect in 2014, Cummins has a technology solution with clear advantages for every type of equipment.

While other manufacturers outsource their emissions aftertreatment systems, Cummins manufactures our own. This total integration of the engine and the exhaust system allows us to optimize fuel economy above the 5 percent we've already achieved with Tier 4 Interim engines, while achieving near-zero emissions at the same time.

QSB6.7 engines range from 140-300 hp (104-224 kW), and QSL9 engines are rated at 240-400 hp (179-298 kW) for Tier 4 Final. They have the same heat rejection as the Tier 4 Interim engines, so there is minimal, if any, impact on the cooling package. The QSB6.7 is one of the most popular and versatile engines ever built by Cummins. The QSL9 combines very high strength with a compact footprint, for one of the best powerto-weight ratios in its class. These two engines are used in every type of construction equipment, including excavators, cranes, wheel loaders, compactors, air compressors and material-handling equipment such as heavy forklifts and container-handling trucks. They are commonly found in agricultural tractors and sprayers, as well as chippers and feller bunchers in the logging market.

All of the performance upgrades from Tier 4 Interim have been incorporated into the Tier 4 Final engines, and we're maximizing torque output, reaching 760 lb-ft (1030 N•m) on the QSB6.7 and 1200 lb-ft (1627 N•m) for the QSL9. Features common for the Tier 4 Final QSB6.7 and QSL9 engines include:

Fully Integrated Electronic Controls. A single, higher-capacity Electronic Control Module (ECM) controls everything from air intake to exhaust aftertreatment for peak performance. Provides seamless integration of all components to optimize engine performance.

High-Pressure Common-Rail Fuel Systems. The high-pressure common-rail fuel system on the QSB6.7 delivers a precise mixture of fuel and air at a constant pressure, regardless of engine rpm. This flexibility in injection timing allows multiple injection events per cycle. The QSL9 uses an XPI (Xtra-High Pressure Injection) fuel system, developed by Cummins to provide more efficiency for the 400-hp heavy-duty output of the 9-liter engine. In addition to increasing power output and lowering fuel consumption, these fuel systems reduce noise and engine vibration.

Fleetguard[®] Fuel Filters. These engines are equipped with Cummins Fleetguard fuel filters featuring nanotechnology-based media, designed to remove 98.7 percent of all particles as small as 4 microns, which is up to 13 times more than competing filters. **Direct Flow[™] Air System.** From Cummins Filtration – designed for Tier 4 installations to take less space, provide better protection and extend filter change intervals. Flat profile enables more efficient direct flow of air through the filter compared with conventional radial seal filters.

Cooled Exhaust Gas Recirculation (EGR).

Rebalanced for Tier 4 Final, this cooled EGR system reduces demand on the engine, improving fuel efficiency and lowering cost of operation as it reduces fuel consumption and greenhouse gas emissions.

Cummins VGT[™] Turbocharger. It has fewer moving parts than competitive turbochargers yet is infinitely adjustable – delivering the exact amount of air to the combustion chamber with the precision of electronic controls.



EcoFit[™] Ultra-Low Emission Systems.

Introduced by Cummins Emission Solutions, EcoFit Ultra-Low Emission Systems for the QSB6.7 and QSL9 utilize innovative aftertreatment technologies designed to improve equipment performance and integration with a more compact and flexible installation for Tier 4 Final.

The addition of the EcoFit Selective Catalytic Reduction (SCR) system provides the ability to precisely balance oxides of nitrogen (NOx) reduction between aftertreatment and cooled Exhaust Gas Recirculation (EGR) on the engine – giving greater control over the combustion formula than ever before. Combined with SCR, the EcoFit Diesel Oxidation Catalyst (DOC) achieves near-zero emissions with fully passive, flow-through operation. It is a "fit and forget" solution that is significantly smaller than a particulate filter and offers a substantial benefit for increasingly space-constrained installations. The DOC-SCR aftertreatment solutions can be installed in multiple configurations, including switchback, horizontal and vertical.

Global Customer Engineering.

OEM customers have access to secure technical data on every Cummins engine we build, using the Global Customer Engineering (GCE) web site at gce.cummins.com. Everything, from engine performance curves, upfit option availability, CAD models and Application Engineering Bulletins, is available to make it easier to install Cummins engines and aftertreatment systems. Please contact your Cummins representative to enable access to GCE.

Cummins Support. Everywhere.

No matter where your equipment is put to work, Cummins stands ready to service it. Our parts and service network is the world's largest, with over 6,600 Cummins distributor and dealer locations. Each authorized location maintains a full inventory of Genuine Cummins new and ReCon[®] parts.

Every Question. Answered.

For additional information, please visit cumminsengines.com or www.tier4.info and click on the Contact Us link.





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