Cummins Westport The Natural Choice



INTRODUCING







In 2016, Cummins Westport introduced the ISL G Near Zero (NZ) natural gas engine - the first MidRange engine in North America to receive emissions certifications from the U.S. Environmental Protection Agency (EPA) and the Air Resources Board (ARB) in California for meeting the 0.02 g/bhp-hr optional Near Zero NOx Emissions standard. The ISL G NZ is designed for new medium-duty truck, urban bus, school bus, and refuse applications. It is also available for repowers of existing natural gas vehicles.

With exhaust emissions 90% lower than the current EPA NOx limit of 0.2 g/bhp-hr, the ISL G NZ also meets the 2017 EPA greenhouse gas emission requirements with a 9% GHG reduction from the current ISL G. For engines operating on renewable natural gas (RNG), GHG reductions may be even further reduced. California Energy Commission has defined this certified Near Zero emission technology with the use of RNG as equivalent to a 100% battery truck using electricity from a modern combined cycle natural gas power plant.

The ISL G NZ features the same Stoichiometric cooled Exhaust Gas Recirculation (SEGR) combustion technology, spark ignition, and simple TWC aftertreatment as the ISL G natural gas engine. It can operate on 100 percent natural gas, which can be carried on the vehicle in either compressed or liquefied form (CNG / LNG respectively), and it can also run on 100 percent biomethane or renewable natural gas, which meet published Cummins fuel specifications.



Features

- Electronic Control Module: Provides full monitoring and control of engine sensors, fuel system and ignition system, with full interface capability to Cummins INSITE and diagnostic service tools.
- Three-Way Catalyst: Simple passive device, highly effective hydrocarbon, CO and NOx control with no maintenance costs. No Diesel Particulate Filter (DPF) or Selective Catalytic Reduction (SCR) systems are required. The ISL G Near Zero catalyst includes a mid-catalyst temperature sensor connected to the ECM.
- Closed Crankcase Ventilation (CCV): The ISL G Near Zero features a chassis mounted CCV system that prevents crankcase emissions, generated by the engine during normal operation, from escaping into the atmosphere. Crankcase emissions are captured and redirected through the CCV filter, where oil is removed, before sending the gases back to the intake manifold to be reintroduced to the combustion chamber. This reduces engine related methane emissions by 70%.

Ratings

Model	Advertised HP (kW) @ rpm	Peak Torque lb-ft (N∙m) @ rpm	Governed Speed
ISL G NZ 320	320 (239) @ 2000	1000 (1356) @ 1300	2200 RPM
ISL G NZ 300	300 (224) @ 2100	860 (1166) @ 1300	2200 RPM
ISL G NZ 280	280 (209) @ 2000	900 (1220) @ 1300	2200 RPM
ISL G NZ 260	260 (194) @ 2200	660 (895) @ 1300	2200 RPM
ISL G NZ 250	250 (186) @ 2200	730 (990) @ 1300	2200 RPM

ISL G Near Zero Specifications

Advertised Horsepower	320 hp	239 kW	
Peak Torque	1,000 lb-ft	1,356 N∙m	
Governed Speed	2,200 rpm		
Clutch Engagement Torque	550 lb-ft	746 N∙m	
Туре	4-cycle, spark-ignited, inline 6-cylinder, turbocharged, CAC		
Displacement	540 cu. in.	8.9 L	
Bore and Stroke	4.49 in x 5.69 in	114 mm x 145 mm	
Operating Cycles	4		
Oil System Capacity	7.3 U.S. gal	27.6 L	
Coolant Capacity	13.1 U.S. qts	12.4 L	
System Voltage	12 V	·	
Net Weight w/ Std. Accessories, Dry	1,625 lbs	737 kg	
Aftertreatment	Three-Way Catalyst (TWC)		
Fuel Types	CNG / LNG / Biomethane. Methane number 75 or greater		
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> Warranty

The ISL G Near Zero engine is offered with the same base warranty and extended warranty options as the ISL G natural gas engine.

> Better Customer Care



Cummins Westport-powered vehicles are supported by Cummins service network, the largest and most capable in North America. Cummins authorized technicians are fully trained on Cummins Westport natural gas

engines, with ready access to Genuine Cummins Parts and warranty support. For questions regarding your Cummins Westport engine, or for assistance in finding a repair facility in the United States or Canada, call Cummins Care at: 1-800-DIESELS™ (1-800-343-7357).

