


MOVE TO ZERO

Setting new standards for
performance and reliability
with near-zero emissions.

ISX12N™





THE ISX12N. MOVE TO ZERO.

Heavy-duty Performance with Near-Zero emissions.

The Cummins Westport ISX12N engine delivers strong pulling power and heavy-duty durability for line-haul, regional-haul truck/tractor, vocational, refuse and motorcoach applications. In addition to performance and reliability you can count on, the ISX12N offers a near-zero emissions option for your fleet.

Natural Gas – Ultra Low Emissions with Fuel Choice

The ISX12N is certified to the California Air Resources Board (ARB) and Environmental Protection Agency (EPA) Optional Low NOx emissions standard of 0.02 g/bhp-hr — 90% lower than current emissions standards. It also exceeds the current Phase I Greenhouse Gas emissions regulations by 8%. Cummins Westport natural gas engines have met the 2010 EPA standard for particulate matter (0.01 g/bhp-hr) since 2001.

Natural gas is a low carbon, domestically abundant fuel source. All Cummins Westport engines offer customers the choice of using compressed natural gas (CNG), liquefied natural gas (LNG), or renewable natural gas (RNG) as a fuel. RNG is pipeline-quality natural gas produced from the decomposition of organic wastes, which can come from a variety of sources such as dairy farm waste, landfills, and

urban waste treatment plants. Combining Cummins Westport ultra low emission engines with RNG fuel provides additional and significant GHG reductions. Learn more with the Cummins Westport GHG Emissions calculator at [cwiplaybook.com](https://www.cwiplaybook.com).

Next Generation Natural Gas Technology

Cummins Westport natural gas engines feature spark-ignited stoichiometric combustion with cooled exhaust gas recirculation, and a simple maintenance-free, Three-Way Catalyst (TWC) for consistent emissions control. Beginning in 2018, Cummins Westport natural gas engines include a new engine control module, on-board diagnostic (OBD) capability, an enhanced TWC, and a closed crankcase ventilation system. The ISX12N also includes a new fuel system offering faster response time and increased reliability.

ISX12NTM

Maintenance

Truck and Motorcoach

Maintenance Item [^]	Distance	Hours	Months
Oil and Filter*	25,000 mi (40,000 km)	500	6
Spark Plugs	50,000 mi (80,000 km)	1,000	12
Coolant Filter	75,000 mi (120,000 km)	1,500	12
Overhead Set Adjustment**	150,000 mi (240,000 km)	3,000	2 yrs
Cooling System Flush	300,000 mi (480,000 km)	6,000	2 yrs
Engine Brake Adjustment	300,000 mi (480,000 km)	6,000	2 yrs
Closed Crankcase Ventilation Filter	500,000 mi (800,000 km)	10,000	5 yrs
Ignition Coil Extension	500,000 mi (800,000 km)	10,000	5 yrs
Air Cleaner / Element	Follow manufacturer's published recommendations		

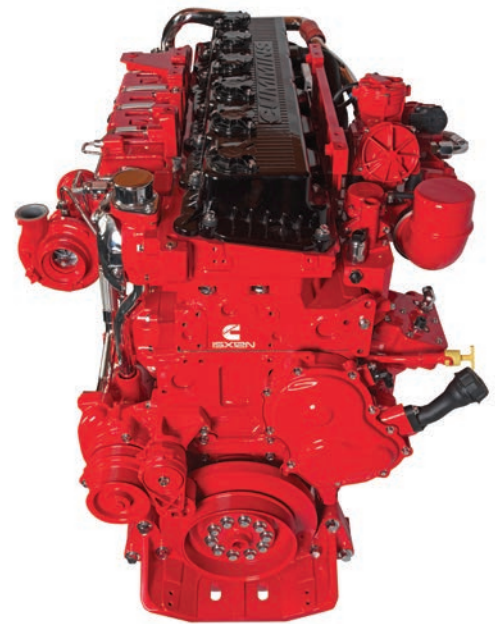
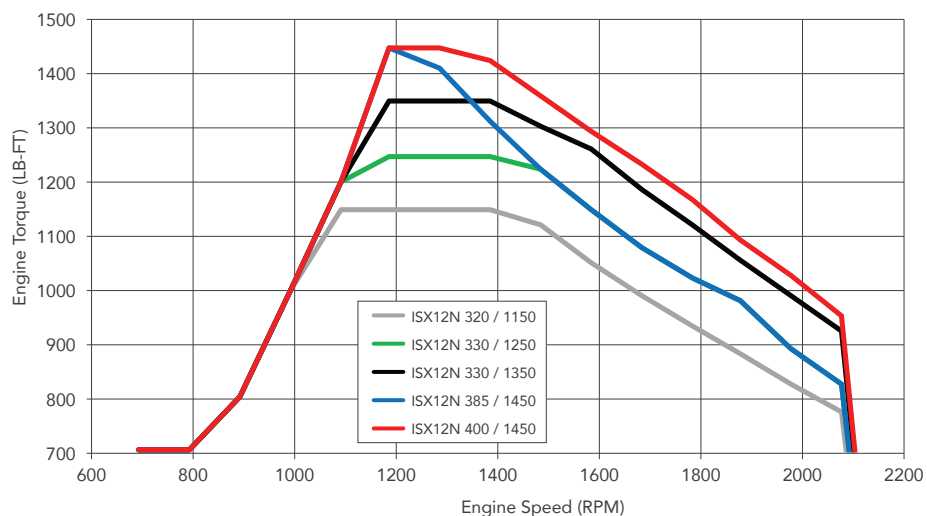
Consult your Owners or Operation and Maintenance manual for the complete daily and routine maintenance schedule.

[^]Based on a duty cycle of 50 mph / 80 kph average speed. Distance intervals may decrease based on average speed.

*Requires natural gas engine oil. These intervals apply to normal duty line haul truck and motor coach applications using CES 20085 or 20092 natural gas oil

**Initial overhead set adjustment at 1,000 hours.

Torque Curves



ISX12N Ratings

Line Haul / Regional Haul Truck and Vocational

Engine Model	Advertised hp (kW) @ rpm	Peak Torque lb-ft (N-m) @ rpm	Governed Speed
ISX12N 320	320 (239) @1700	1150 (1559) @ 1200	2100 rpm
ISX12N 330	330 (246) @ 1700	1250 (1695) @ 1200	2100 rpm
ISX12N 350	350 (261) @ 1700	1450 (1966) @ 1200	2100 rpm
ISX12N 385	385 (287) @ 1700	1350 (1830) @ 1200	2100 rpm
ISX12N 400	400 (298) @ 1800	1450 (1966) @ 1200	2100 rpm

Commuter Coach

Engine Model	Advertised hp (kW) @ rpm	Peak Torque lb-ft (N-m) @ rpm	Governed Speed
ISX12N 400	400 (298) @1800	1450 (1966) @ 1200	2100 rpm

Motorcoach

Engine Model	Advertised hp (kW) @ rpm	Peak Torque lb-ft (N-m) @ rpm	Governed Speed
ISX12N 320	320 (239) @1700	1150 (1559) @ 1200	2100 rpm
ISX12N 330	330 (246) @ 1700	1250 (1695) @ 1200	2100 rpm
ISX12N 350	350 (261) @ 1700	1450 (1966) @ 1200	2100 rpm
ISX12N 385	385 (287) @ 1700	1350 (1830) @ 1200	2100 rpm
ISX12N 400	400 (298) @ 1800	1450 (1966) @ 1200	2100 rpm

Refuse

Engine Model	Advertised hp (kW) @ rpm	Peak Torque lb-ft (N-m) @ rpm	Governed Speed
ISX12N 320	320 (239) @1700	1150 (1559) @ 1200	2100 rpm
ISX12N 330	330 (246) @ 1700	1250 (1695) @ 1200	2100 rpm
ISX12N 350	350 (261) @ 1700	1350 (1830) @ 1200	2100 rpm
ISX12N 350	350 (261) @ 1700	1450 (1966) @ 1200	2100 rpm

Engine Features & Enhancements

New Engine Control Module (ECM)

The ECM provides full monitoring and control of the engine sensors, and the fuel and ignition systems. Cummins Westport 2018 engines feature a new ECM, Model CM2380, which offers faster processing to support heavy-duty OBD requirements (500K baud rate). It is also telematics capable, and provides improved diagnostics and durability. Full interface capability to Cummins INSITE™ and diagnostic service tools.

On-Board Diagnostics (OBD)

The OBD system continuously monitors the engine and after-treatment system. It gives the vehicle owner or repair technician electronic access to the status of various vehicle subsystems for diagnostic purposes. A Malfunction Indicator Lamp (MIL) is connected to the OBD system and is located on the vehicle's instrument panel. If the OBD system detects a malfunction related to the emissions control system, the MIL will come on and alert the operator. The engine will continue to operate normally until a diagnosis is made.

New Fuel System

A new fuel system features faster response times and more accurate fueling and EGR control. Fewer parts allows for a simpler system which offers greater performance and reliability.

Closed Crankcase Ventilation (CCV) system

A CCV system reduces engine emissions by capturing crankcase emissions and rerouting these gases back to the engine. This results in more complete combustion and lower emissions.

Enhanced Three-Way Catalyst (TWC)

TWCs are effective, simple, passive devices. They provide consistent emissions control performance, are maintenance-free, and can be mounted vertically or horizontally on the vehicle. Cummins Westport engines don't require aftertreatment such as a diesel particulate filter or selective catalytic reduction.

Advanced Air Handling

Electronic control for precise air handling.

High-Energy Ignition System

New ignition control module – provides better performance and improved spark plug and coil durability, plus self-diagnostics.

Wastegate Turbocharger

Water-cooled bearing housing for durability, and electronic control for precise air handling.

Transmission

Automatic, manual, and automated manual options available.

Front- and Rear-Engine Power Take-Off (FEPTO and REPTO)

Options provide additional torque, for a variety of vocational applications.

Specifications

NOx Emission	0.02 g / bhp-hr. (90% below EPA)
Maximum Horsepower	400 HP 298 kW
Peak Torque	1,450 LB-FT 1,966 Nm
Governed Speed	2100 RPM
Type	4-cycle, spark-ignited, in-line 6-cylinder, turbocharged, CAC
Engine Displacement	762.2 CU IN 11.9 LITERS
Number of Cylinders	6
Operating Cycles	4
Net Weight (dry)	2,650 lb 1,202 KG
Fuel Type	CNG / LNG / RNG
Aftertreatment	Three-Way Catalyst

Warranty

Cummins Westport engines feature the same factory base warranty coverage as Cummins diesel engines. For truck applications, this comprehensive warranty includes parts, labor and progressive damage on virtually everything from the block casting to fuel system for 2 years / 250,000 miles (402,336 kilometers). For motorcoach, a 2-year, unlimited-miles/kilometers warranty is available. Major components coverage is also available – contact your local Cummins distributor or Cummins Westport representative for details.

Extended Coverage

Cummins Westport Inc. also offers a variety of extended coverage plans to meet every customer's need. For full extended coverage plan details, contact your local Cummins distributor or Cummins Westport representative.

Better Customer Care

Cummins Westport-powered vehicles are supported by the 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 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-CUMMINS™ (1-800-286-6467).



Cummins Westport – The Natural Choice

Cummins Westport Inc. designs, engineers and markets 6- to 12-liter spark-ignited natural gas engines for commercial transportation applications such as trucks and buses. Our natural gas engines are manufactured by Cummins, and are available from leading truck and bus manufacturers.

Natural Gas Playbook

To learn more about how to incorporate natural gas engines into your fleet, visit our Natural Gas Playbook website. We'll guide you through what you need to know to ensure successful implementation and operation of your natural gas engines.

cwiplaybook.com

