
Product Information Bulletin

ISB6.7 G, ISL G, ISL G Near Zero and ISX12 G Intended Use Guidelines

March 18, 2016

The low emissions and high performance of the Cummins Westport ISB6.7 G, ISL G, ISL G Near Zero (NZ) and ISX12 G natural gas engines continue to make these engines the natural choice for a wide variety of local, regional, and on highway applications. The success of these engines has also led to increasing use in applications that have been traditionally served by larger, heavier engines.

Intended Use Guidelines are provided to ensure customers' expectations for performance, efficiency, reliability, and durability can be satisfied. With the introduction of the ISB6.7 G and ISL G NZ engines in 2016, these guidelines have been updated.

In general, for applications for applications up to 33,000 lb. the ISB6.7 G is recommended.

For vehicles operating up to 66,000 lb. GVW, the ISL G/ISL G NZ natural gas engines are an excellent choice.

For vehicles operating more than 60,000 miles per year and up to 80,000 lb. GVW, regardless of application, the ISX12 G is recommended.

Most ISL G and ISX12 G natural gas engines will spend considerable time in urban traffic or on secondary roads, so startability and cruise gradeability must meet customer expectations.

Startability of a vehicle is defined as the maximum grade on which a vehicle can begin to move in its lowest gear without throttle application and is directly related to the total gear ratio and engine displacement.

Cruise gradeability refers to the vehicle's ability to maintain desired on highway cruise speeds on a minimum 0.5% grade.

ISB6.7 G, ISL G and ISL G Near Zero engines are compatible with automatic transmissions, the supplier of which can be consulted on performance predictions based on rear axle ratio, tire size, desired top road speed, and intended use.

Optimum fuel economy in regional haul applications is achieved when the ISL G is geared to cruise in the 1800-2000 rpm range.

ISX12 G engines are compatible with automatic, manual and automated manual transmissions, the supplier of which can be consulted on performance predictions based on rear axle ratio, tire size, desired top road speed, and intended use.

Optimum fuel economy in line haul applications is achieved when the ISX12 G is geared to cruise in the 1400-1475 rpm range.

Cummins PowerSpec helps you find the ideal gearing specs for the ISB6.7 G, ISL G / ISL G NZ and ISX12 G. For more information visit powerspec.cummins.com



Intended Service Guidelines

Customer expectations for performance, reliability, and durability change with the nature of the vehicle's use. Some applications like line-haul trucking operate at relatively high duty cycles for long durations. Other applications like refuse collection operate at low duty cycles but with extremely high stop/start frequency.

Customers have the responsibility to operate and maintain their engines as recommended in Operation and Maintenance manuals. Maintenance intervals as published by Cummins Westport are similar to Cummins diesel engines and are established based on vehicle applications and average speed.

Some examples of recommended guidelines are as follows:

		ISB6.7 G		ISL G ISL G NZ		ISX12 G	
General Recommendations		<33,000 lb		< 66,000 lb		< 80,000 lb	
Intended Use	Minimum Startability (%)	GVW (lbs)	GCW (lbs)	GVW (lbs)	GCW (lbs)	GVW (lbs)	GCW (lbs)
Line Haul	14	26,000	33,000	66000	66000	80000	80000
Local P&D	20	33,000	33,000	66000	66000	80000	80000
Regional Haul	20	33,000	33,000	66000	66000	80000	80000
Utility/Dump Truck	28	33,000	33,000	66000	66000	80000	80000
Refuse Packer	28	33,000	N/A	72000	N/A	80000	N/A
Transit/Shuttle Bus	20	33,000	N/A	66000	N/A	80000	80000
Highway Coach	20	33,000	N/A	66000	N/A	80000	80000

Consult your Cummins or Cummins Westport representative referring to Application Engineering Bulletin (AEB) 140.26, Automotive Natural Gas Intended Service Guidelines, for further information.

Exceptions

Cummins Westport advises that no waivers or exceptions will be granted for operation outside Intended Use Guidelines.

Customers should be advised that not following recommended intended use, maintenance or operating guidelines **may** lead to diminished performance, reliability, durability and support.

Cummins Westport Inc. is a joint venture of Cummins Inc. and Westport Innovations Inc. that designs, engineers and markets 6 to 12 litre spark-ignited natural gas engines for North American commercial transportation applications such as school buses, trucks, and transit buses.

For further information on Cummins Westport products visit www.cumminswestport.com

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