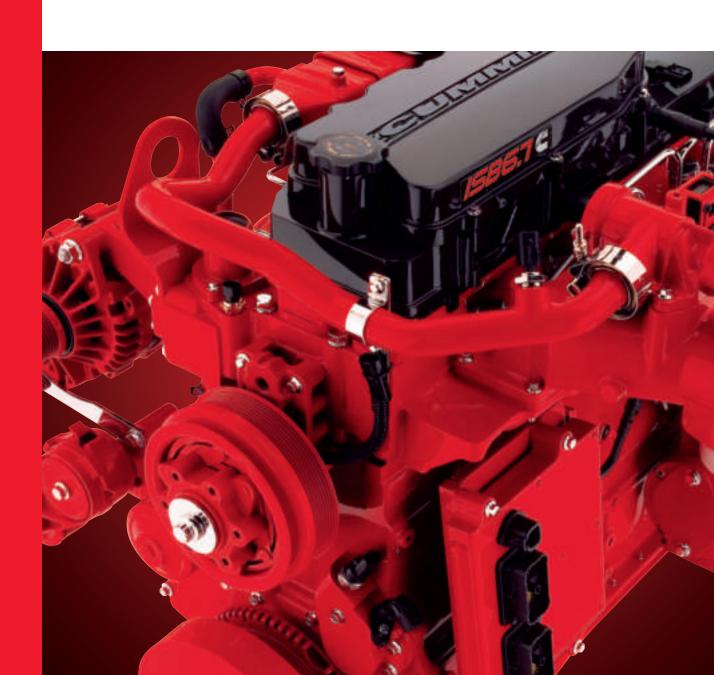


Better Every[™] Route.

Engines For School Bus And Shuttle Bus.



Cummins ISB6.7 And ISC8.3 Diesels.

Every[™] **Day Gets Off To A Great Start.**

Whether you're in charge of transporting students to school or shuttling people to and from the airport, you need exceptional reliability with excellent fuel efficiency. Fortunately, there are Cummins engines that deliver all of this, better than ever before.

Our ISB6.7 and ISC8.3 diesel engines have earned the trust of drivers and owners alike. It's the reason very few changes have been made to the base engine to meet EPA 2010 emissions standards.

Cummins Westport ISL G natural gas engine is your choice for the newest evolution of alternative fuel engine technology, combining all the advantages of clean-burning natural gas with "no compromise" power and torque for shuttle and school bus applications.

Low operating costs and big results are what you've come to expect from a Cummins engine, and our EPA 2010 engines deliver. Add in near-zero emissions and you've got an engine that's better, every route.



Increasingly restrictive emissions regulations used to mean reduced performance with lower fuel economy. But that's not the case with Cummins ISB6.7 and ISC8.3 engines.

Better Fuel Economy With Cummins Aftertreatment System.

Cummins-powered buses already get the best fuel economy in any type of school bus or shuttle operation. Starting in 2010, getting great fuel economy became even easier with the addition of Selective Catalytic Reduction (SCR). By keeping most of the emissions control in the exhaust system, we've been able to recalibrate our engines for more power and a bigger "sweet spot" so more drivers can achieve better fuel economy.

Cummins SCR technology, together with our proven cooled-EGR subsystem and Cummins Particulate Filter, enables our engines to meet 2010 emissions standards while maintaining best-in-class performance, reliability and durability.

Cummins SCR system is designed and manufactured by Cummins Emission Solutions specifically for our diesel engines, as part of a totally integrated package. It consists of a Diesel Exhaust Fluid (DEF) dosing system, the decomposition reactor, SCR catalyst and electronic controls. As exhaust passes from the Cummins Particulate Filter into the SCR system, it is sprayed with a fine mist of DEF. This fluid works to transform NOx into harmless nitrogen gas and water vapor.

The Cummins Particulate Filter reduces particulate matter by over 90%, and SCR utilizes DEF to achieve NOx emissions at near-zero levels. Over 400,000 SCR systems have been built and shipped by Cummins Emission Solutions.



Annual DEF Refill Rate.

DEF is sprayed at a rate of approximately 2% of fuel consumption and will need to be refilled periodically. Simply check the DEF gauge on your dashboard at each refueling. DEF is readily available at all Cummins distributors, Cummins Filtration's vast North America distribution network, and major service stations and truck stops.

To illustrate DEF usage, assume your bus gets 8 miles per gallon. At 15,000 miles (24,140 km) per year, you'll consume 1,875 gallons of diesel fuel each year. At 2% DEF dosing rate, you'll use 37.5 gallons of DEF. If your tank size is 10 gallons, you'll need to refill your DEF approximately four times a year.

Better Performance And Reliability.

Cummins is the only engine manufacturer to design, develop, manufacture and support nearly every component from the air intake to the exhaust aftertreatment in a totally integrated system. This allows us to optimize critical systems and deliver the right technology in a way that other manufacturers using outside suppliers simply can't match.



The Cummins VGT™ Turbocharger is both simple and precise. Electric actuation allows infinite adjustment, providing the exact amount of boost necessary for superior response. The proven sliding-nozzle design has best-in-class reliability and durability.

The High Pressure Common Rail (HPCR) fuel system on the ISB6.7 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, which maximizes fuel economy and performance while decreasing noise and exhaust emissions.

The proven technology of the XPI common-rail fuel system on the ISC8.3 delivers a precise quantity of fuel at ultra-high pressures. This, together with more robust electronic engine controls, enables multiple injection events per cycle. Flexibility in injection timing maximizes fuel economy and performance while decreasing exhaust emissions.

A next-generation cooled-EGR system lowers combustion temperatures for reduced emissions and optimized fuel economy.

A single higher-capacity ECM controls everything from air intake to exhaust aftertreatment for peak performance and near-zero emissions.



Targeted piston-cooling nozzles lower piston temperatures for increased durability in lower ratings, while gallery cooling achieves the same goal in higher-horsepower ratings. Plus, they feature state-of-the-art Fleetguard® oil filters from Cummins Filtration for extended component and engine life.

ISB6.7 Specifications

Advertised Horsepower	200-300 НР	149-224 KW
Peak Torque	520-660 LB-FT	705-895 N•M
Governed Speed	2600 RPM	
Clutch Engagement Torque	400 LB-FT	542 N•M
Number of Cylinders	6	
Oil System Capacity	3.75 U.S. GALLONS	14.2 LITERS
System Weight	1,340 LB	608 KG
Engine (Dry)	1,150 LB	522 KG
Aftertreatment System*	190 LB	86 KG

ISC8.3 Specifications

60-300 HP	194-224 KW
-860 LB-FT	895-1166 N•M
200 RPM	
00 LB-FT	678 N•M
6	
I.S. GALLONS	23.8 LITERS
1,840 LB	834 KG
1,640 LB	744 KG
200 LB	90 KG
	0-860 LB-FT 200 RPM 00 LB-FT 6 U.S. GALLONS 1,840 LB 1,640 LB 200 LB

 $^{^{\}ast}$ Increase over standard muffler and does not include chassis OEM-supplied components.

ISB6.7 Maintenance Intervals

Maintenance Item	Miles/Kilometers	Hours	Months
Oil and Filter*	15,000 мі 24,000 км	500	6
Primary Fuel Filter**	15,000 мі 24,000 км	500	6
Secondary Fuel Filter	15,000 мі 24,000 км	500	6
Coolant Filter	None***	None***	None***
Overhead Adjustment	150,000 MI 241,500 KM	5,000	48
Standard Coolant Change	**** 60,000 MI 96,000 KM	2,000	24
Coalescing Filter	Every 3rd to 4t	h Oil Chang	je Interval
DEF Filter	200,000 мі 320,000 км		
Particulate Filter Cleaning	200,000 мі 320,000 км		

ISC8.3 Maintenance Intervals

Maintenance Item	Miles/Kilometers	Hours	Months
Oil and Filter*	15,000 мі 24,000 км	500	6
Primary Fuel Filter**	15,000 MI 24,000 KM	500	6
Secondary Fuel Filter	30,000 мі 48,000 км	1,000	12
Coolant Filter	None***	None***	None***
Overhead Adjustment	150,000 MI 241,500 KM	5,000	48
Standard Coolant Change	**** 60,000 мі 96,000 км	2,000	24
Coalescing Filter	Every 3rd to 4	th Oil Chang	je Interval
DEF Filter	200,000 мі 320,000 км		
Particulate Filter Cleaning	200,000 мі 320,000 км		

^{*} Assuming normal duty cycle.

^{**} OEM-supplied, intervals may vary.

^{***} If engine is equipped with an optional coolant filter, it will need to be replaced at the same intervals as the oil filter.

^{****} Extended coolant drain/flush/fill intervals may be followed when certain requirements are met. For more information on these requirements, refer to the Cummins Coolant Requirements and Maintenance Service, Bulletin 3666132.

Cummins Westport ISL G Natural Gas Engine.

The 8.9-liter ISL G has met EPA 2010 emissions standards since 2007 using stoichiometric cooled-Exhaust Gas Recirculation (SEGR) spark-ignited combustion to create a high-performance natural gas engine. Torque at idle and fuel economy are improved vs. lean-burn engines by 30% and 5%, respectively.

Cooled EGR, in combination with stoichiometric combustion (the theoretical or ideal combustion process in which fuel and oxygen are completely consumed), creates an oxygen-free exhaust which allows for the use of Three-Way Catalyst (TWC) aftertreatment. TWCs are effective, simple, passive devices that are packaged as a muffler and are maintenance-free. The ISL G does not require active aftertreatment such as particulate filters (DPF) or Selective Catalytic Reduction (SCR).

The Natural Alternative.

The ISL G is rugged and reliable because it shares many components and parts with the Cummins L Series diesels and is built on the same assembly line as Cummins diesels. A wastegated turbocharger with electronic control for precise air handling and full drive-by-wire throttle control provide impressive diesel-like performance.

A new Electronic Control Module (ECM) provides full monitoring and control of engine sensors, fuel system and ignition system. The ECM provides full interface capability to Cummins INSITE™ and diagnostic service tools. It also provides Original Equipment Manufacturers (OEMs) and end users with the ability to tailor performance of the engine to fit the vehicle mission.



ISL G Specifications

Advertised Horsepower	250-320 HP	186-239 KW
Peak Torque	660-1000 LB-FT	895-1356 N•M
Governed Speed	2200 RPM	
Clutch Engagement Torque	550 LB-FT	746 N•M
Number of Cylinders	6	
Oil System Capacity	7.3 U.S. GALLONS	27.6 LITERS
System Weight	1,625 LB	737 KG
Engine (Dry)	1,625 LB	737 KG
Aftertreatment System*	0 LB	0 KG

^{*}Increase over standard muffler and does not include chassis OEM-supplied components.

ISL G Maintenance Intervals

Maintenance Item	Miles/Kilometers	Hours	Months
Oil and Filter	7,500 мі	500	6
	12,000 KM		
Fuel Filter	15,000 мі	1,000	12
	24,000 KM		
Coolant Filter	7,500 мі	500	6
	12,000 KM		
Spark Plugs	22,500 MI	1,500	18
	36,000 KM		
Coolant Change	30,000 мі	2,000	24
	48,000 KM		
Valve Adjustment	30,000 мі	2,000	24
	48,000 KM		

Every Confidence.

Cummins and Cummins Westport base engine coverage for school bus applications includes everything from the engine through the aftertreatment system, including the SCR catalyst, with 5-year/100,000-mile (160,935 km) total coverage. The base engine warranty for shuttle bus applications is 2 years/unlimited mileage. Coverage includes full parts and labor on warrantable failures and all consumables not reusable due to covered failure, with no deductible.

Every Coverage.

Cummins offers extended coverage options on all school bus and shuttle bus engines. For specific details, contact your local distributor.

Every Repair.

- INSITE Cummins INSITE diagnostic software is available for EPA 2010 products.
- QuickServe® Online Gives bus fleet maintenance personnel rapid access to parts and service information for over eleven million engine serial numbers. Part numbers and diagrams, maintenance information and service bulletins, warranty details and more are available via quickserve.cummins.com.

Every Question. Answered.

- Service Network Cummins engines are backed by nearly 3,500 authorized parts or service outlets in North America.
- Cummins Customer Support Center Call the Cummins specialists for information and service locations at 1-800-DIESELS[™] (1-800-343-7357) Cummins Customer Support Center.
- cumminsengines.com Access product literature and additional information. Register all of your Cummins engines quickly and easily on the web site to ensure quality parts and service for your engine.



School Bus/Shuttle Bus Engine Ratings.

ISB6.7 Ratings

ENGINE MODEL	ADVERTISED HP(KW)	PEAK TORQUE LB-FT (N•M) @ RPM	GOVERNED SPEED
ISB6.7 300	300 (224)	660 (896) @ 1600	2600 RPM
ISB6.7 280	280 (209)	660 (896) @ 1600	2600 RPM
ISB6.7 260	260 (194)	660 (896) @ 1600	2600 RPM
ISB6.7 250	250 (187)	660 (896) @ 1600	2600 RPM
ISB6.7 240	240 (179)	560 (760) @ 1600	2600 RPM
ISB6.7 220	220 (164)	520 (706) @ 1600	2600 RPM
ISB6.7 200	200 (149)	520 (706) @ 1600	2600 RPM
ISB6.7 HYBRID	280 (209)	660 (896) @ 1600	2600 RPM
ISC8.3 Ratings	300 (224)	860 (1167) @ 1400	2200 RPM
ISC8.3 270	270 (201)	800 (1086) @ 1300	2200 RPM
ISC8.3 260	260 (194)	660 (896) @ 1300	2200 RPM
ISL G Ratings			
ISL G 320	320 (239)	1000 (1356) @ 1300	2200 RPM
ISL G 300	300 (224)	860 (1166) @ 1300	2200 RPM
ISL G 280	280 (209)	900 (1220) @ 1300	2200 RPM
ISL G 260	260 (194)	660 (895) @ 1300	2200 RPM
ISL G 250	250 (186)	730 (990) @ 1300	2200 RPM

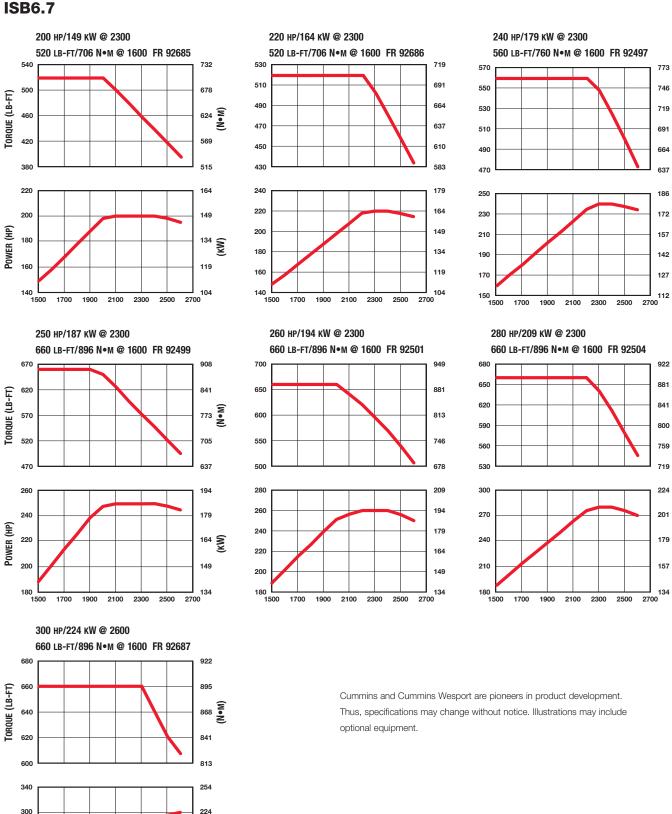
School Bus/Shuttle Bus Torque And Power Curves.

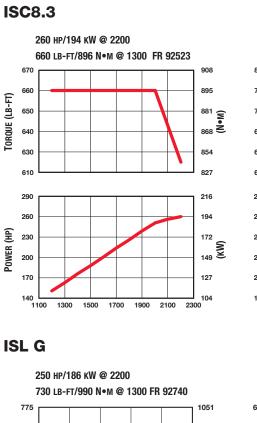
POWER (HP) 260

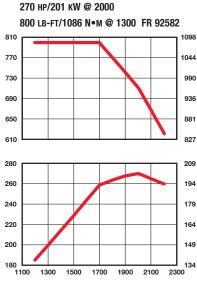
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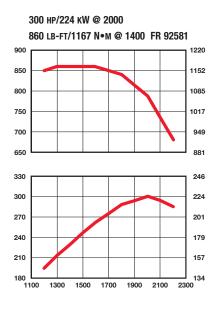
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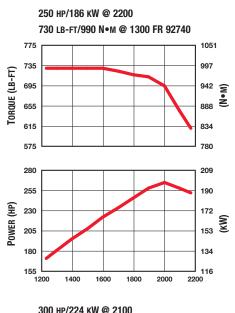
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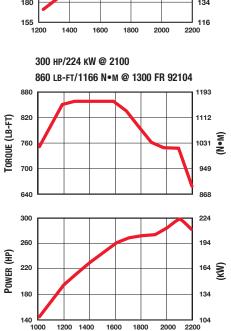








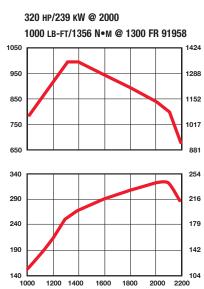


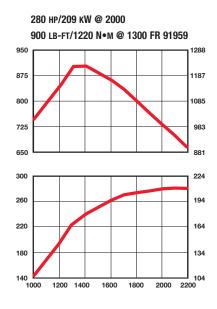


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