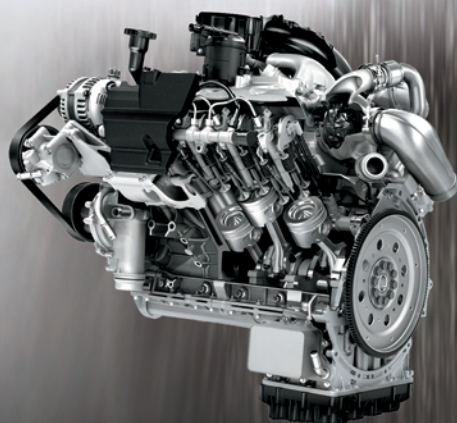




6.7L POWER STROKE® DIESEL ENGINE



2011 "F" SERIES SUPER DUTY

• Engine Description • Systems Overview • Component Location •

This publication is intended to provide technicians and service personnel with an overview of technical advancements in the 6.7L POWER STROKE® DIESEL Engine. The information contained in this publication will supplement information contained in available service information.

IMPORTANT SAFETY NOTICE

Appropriate service methods and proper repair procedures are essential for the safe, reliable operation of all motor vehicles, as well as, the personal safety of the individual performing the work. This manual provides general directions for accomplishing service repair work with tested, effective techniques. Following the directions will assure reliability. There are numerous variations in the procedures; techniques, tools, parts for servicing vehicles and the skill of the individual doing the work. This manual cannot possibly anticipate all such variations and provide advice or cautions as to each. Accordingly, anyone who departs from the instructions provided in this manual must first establish that they do not compromise their personal safety or the vehicle integrity by their choice of methods, tools or parts.

The following list contains some general WARNINGS that you should follow when you work on a vehicle.

Always wear safety glasses for eye protection.

Always perform work in a well ventilated area.

Use safety stands whenever a procedure requires you to be under the vehicle.

Be sure that the ignition switch is always in the OFF position, unless otherwise required by the procedure.

Never perform any service to the engine with the air cleaner removed and the engine running unless a turbocharger compressor inlet shield is installed.

Set the parking brake when working on the vehicle. If you have an automatic transmission, set it in PARK unless instructed otherwise for a specific service operation. If you have a manual transmission, it should be in REVERSE (engine OFF) or NEUTRAL (engine ON) unless instructed otherwise for a specific service operation.

Operate the engine only in a well-ventilated area to avoid the danger of carbon monoxide.

Keep yourself and your clothing away from moving parts when the engine is running, especially the fan, belts, and the turbocharger compressor.

To prevent serious burns, avoid contact with hot metal parts such as the radiator, turbocharger pipes, exhaust manifold, tail pipe, catalytic converter and muffler.

Do not smoke while working on the vehicle.

To avoid injury, always remove rings, watches, loose hanging jewelry, and loose clothing before beginning to work on a vehicle. Tie long hair securely behind the head.

Keep hands and other objects clear of the radiator fan blades.

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6.7 POWER STROKE

B20 TURBO DIESEL



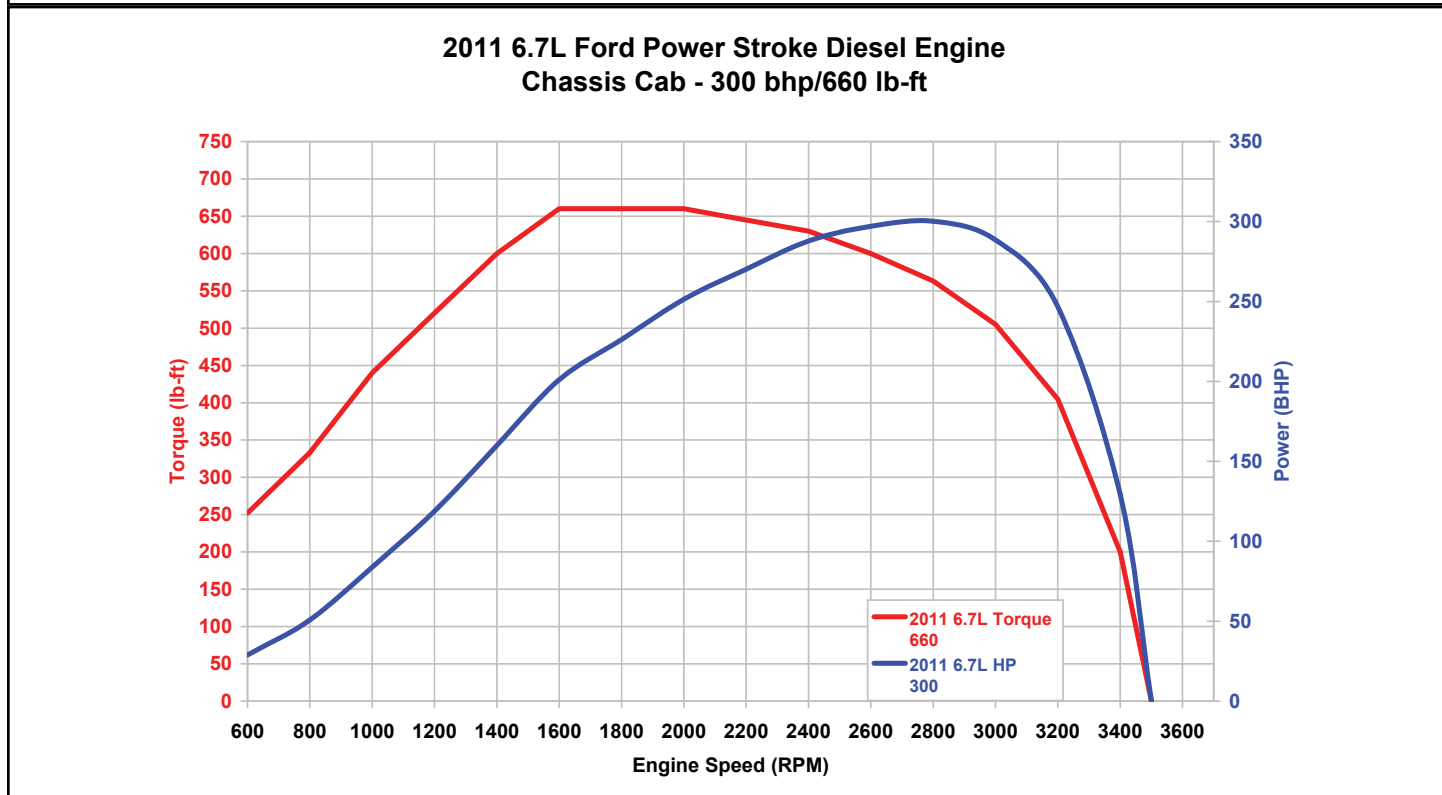
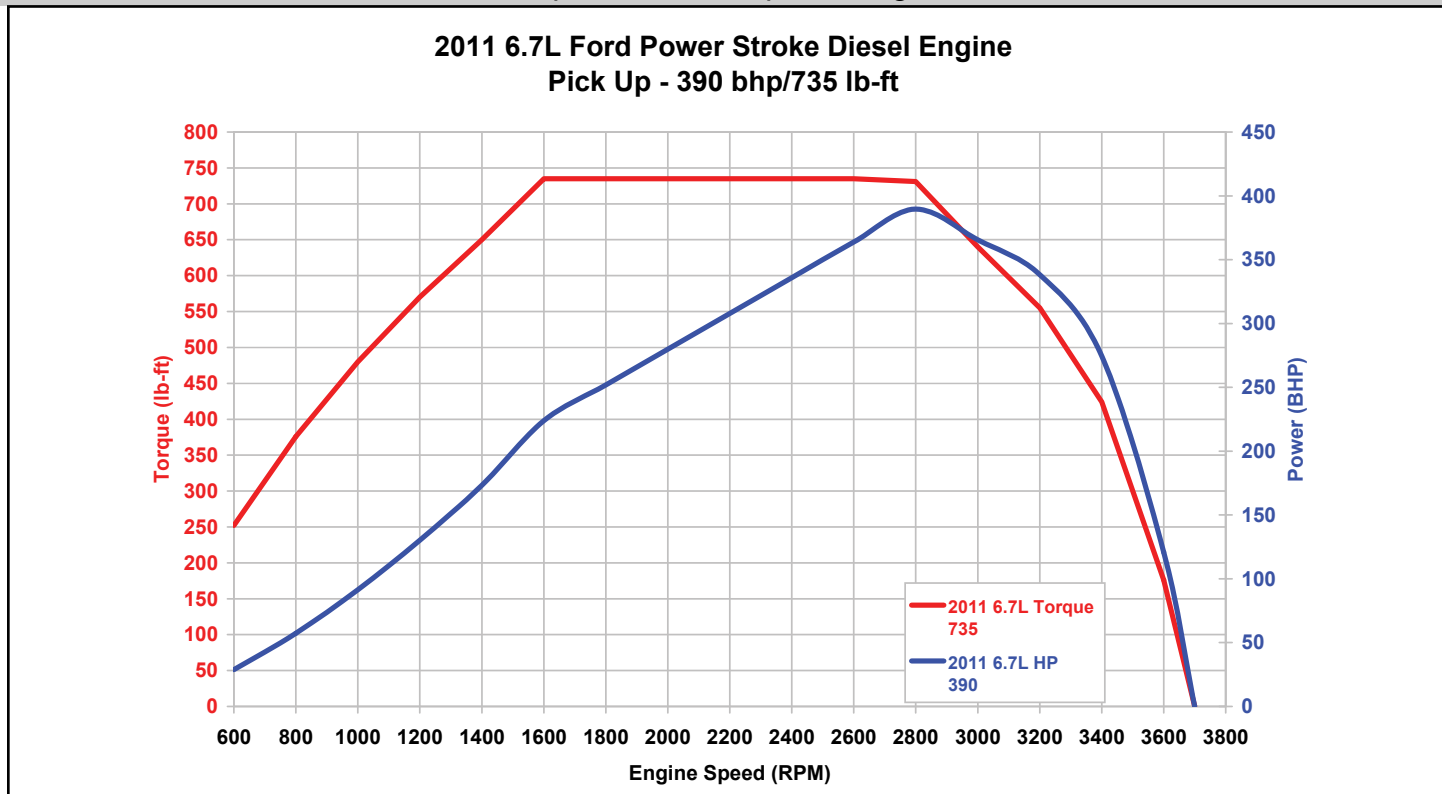
**Direct Injection
Turbocharged
Diesel Engine**

6.7L POWER STROKE® DIESEL OVERVIEW

Engine Features

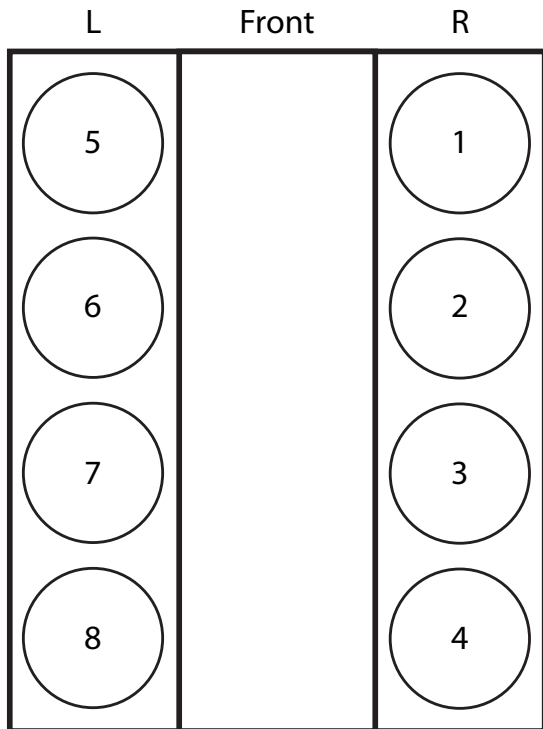
- The 6.7L Power Stroke® diesel has been designed to meet the tougher emissions standards set by the government.
- The 6.7L Power Stroke® diesel has been designed to meet the customer's expectations of high horsepower and torque over a wide RPM range.
- Meeting the more stringent customer and regulatory demands are accomplished in part by a high pressure common rail fuel system, DualBoost turbocharger system, 4 valves per cylinder, and a Selective Catalyst Reduction (SCR) system.

2011 6.7L Power Stroke® Diesel Horsepower and Torque Ratings



OVERVIEW

6.7L Power Stroke® Diesel Specifications		
Engine Type	Diesel, 4-Cycle	
Configuration	4 OHV/1 Cam-in-Crankcase-V8	
Displacement	6.7L (409 cu. in.)	
Bore and Stroke	99x108 mm (3.90 x 4.25 in)	
Compression Ratio	16.1:1	
Induction	DualBoost Variable Geometry Turbocharger	
	Chassis Cab	Pick Up
Rated Power @ RPM	300 hp @ 2800 rpm	390 hp @ 2,800 rpm
Peak Torque @ RPM	660 ft.-lb. @ 1600 rpm	735 ft.-lb. @ 1,600 rpm
Engine Rotation, Facing Flywheel	Counterclockwise	
Combustion System	High Pressure Common Rail Direct Injection	
Total Engine Weight (auto with oil)	499kg (1100 lbs)	
Primary Cooling System Capacity	27.8L (29.4 qts.)	
Powertrain Secondary Cooling System Capacity	11.1L (11.7 qts.)	
Lube System Capacity (including filter)	12.3L (13 qts.)	
Firing Order	1-3-7-2-6-5-4-8	



Specifications

The cylinders of the 6.7L Power Stroke® diesel are numbered from the front. The right side are cylinders 1, 2, 3, and 4 and the left side are cylinders 5, 6, 7, and 8.