

6.6L V-8 DURAMAX® TURBO DIESEL, L5P

HEAVY DUTY PULLING POWER

The L5P engine advances General Motors' Duramax® legacy for powerful, quiet, and durable diesels by offering more of those attributes with greater efficiency compared to the previous 2023 and older L5P engines. The latest L5P is even more capable with an impressive power rating of 470 horsepower and 975 lb-ft of torque. For confident towing power from the start, ninety percent of peak torque is produced from 1,550 rpm thru 2,850 rpm.



GM Powered Solutions L5P

STATE-OF-THE-ART TECHNOLOGIES

Refined Turbocharger

- Enhanced Variable-vane mechanism allows greater exhaust temperature capability, enabling the engine to achieve higher power at lower cylinder pressure
- Electronically Controlled, Variable-Geometry Turbocharger
- Improved exhaust-brake system capability compared to previous Duramax® 6.6L turbochargers

Robust Crank and Valvetrain Design

- Updated piston design to help optimize fuel/air mixture
- Pistons with refined aluminum material along with an oil cooling gallery help maximize performance and robustness vs previous Duramax® 6.6L engines
- Crankshaft with induction hardened main bearing journals and high pressure rolled fillets for strength and longevity

Enhanced Fuel Delivery

- New fuel pump design provides greater fuel pressure
- New fuel injectors designed to handle higher fuel pressure with optimized spray pattern

Venturi Jet Drain Oil Separator

- Designed to maximize oil control in sustained full-load operation
- Totally sealed system helps maximize the collection of misted oil entrained in the blow-by gas for reuse in the engine

Cold-Start System

- Fuel injection system and combustion chamber shape helps optimize cold-weather performance
- Enhanced ceramic glow plugs and automatic temperature compensation assist with quicker heat ups and reliable starting down to -40 deg F (-40 deg C)

Engine Cooling System

- Engine oil cooler for lower oil temperatures under high load conditions vs previous Duramax® 6.6L engines
- Gear-driven water pump provides optimized cooling system performance and reliability vs previous belt driven designs

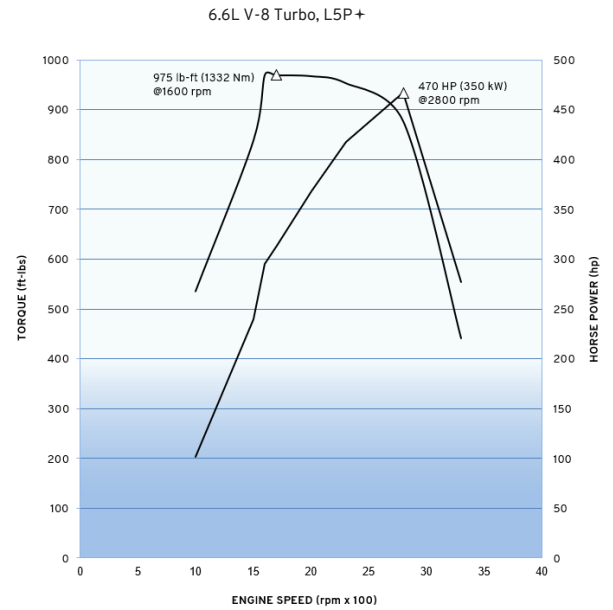
ADDITIONAL FEATURES

- Strong cast-iron cylinder block and aluminum cylinder heads
- Strong micro-alloy rotating and reciprocating assembly
- Optimized oil-flow and coolant flow capacity
- Segment-first re-melt piston bowl rim
- Exhaust Gas Recirculation system with single cooler and integrated bypass
- Advanced solenoid fuel system
- GM designed electronic controls
- Full-length damped steel oil pan that contributes to quietness
- Rocker cover/fuel system acoustical treatments
- B20 biodiesel compatibility

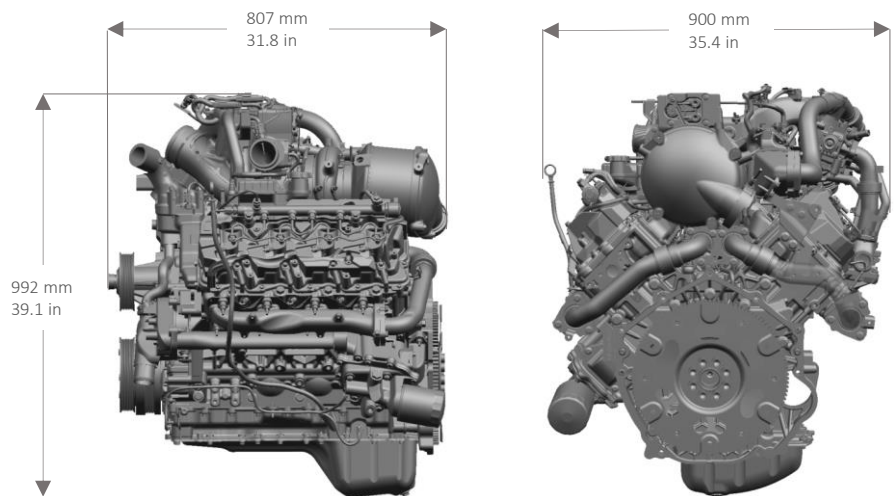
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SPECIFICATIONS

| | |
|------------------------|---|
| Type: | 6.6L V-8 Turbo Diesel |
| Displacement: | 6604 CC (403 CI) |
| Engine Orientation: | Longitudinal |
| Compression Ratio: | 16.0:1 |
| Valve Configuration: | Overhead Valves |
| Valves Per Cylinder: | Four |
| Assembly Site: | Moraine, Ohio Of Globally Sourced Parts |
| Valve Lifters: | Mechanical Roller |
| Firing Order: | 1-2-7-8-4-5-6-3 |
| Bore x Stroke: | 103 x 99 mm |
| Fuel System: | DI With High-Pressure Common Rail |
| Fuel Type: | Ultra-Low Sulfur Diesel And B20 Diesel |
| Horsepower: | 470 hp (350 kW) @ 2800 rpm* |
| Torque: | 975 lb-ft (1,322 Nm) @ 1600 rpm* |
| | *GM tested per SAE J1349 |
| | Actual Power Levels May Vary Depending On OEM Calibration And Application |
| Maximum Powered Speed: | 3450 rpm |
| Maximum Braking Speed: | 4800 rpm |
| Emissions Control: | Cooled Exhaust Gas Recirculation (EGR) Selective Catalytic Reduction (SCR) Diesel Particulate Filter (DPF) Intake Throttle |
| Block: | Cast Iron |
| Cylinder Head: | Cast Aluminum |
| Intake Manifold: | Cast Aluminum |
| Exhaust Manifold: | Cast Nodular Iron With Steel Pipe Extension |
| Main Bearing Caps: | Cast Nodular Iron |
| Crankshaft: | Forged Steel |
| Camshaft: | Steel |
| Connecting Rod: | PM Iron |



+ As tested in the Chevrolet Silverado HD and GMC Sierra HD.



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