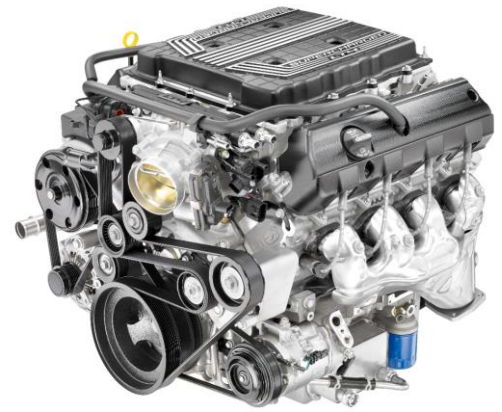


6.2L V-8 SC, LT4

SUPERCHARGED POWER

The LT4 engine builds on the design strengths of the previous LS9 supercharged engine while incorporating direct injection and continuously variable valve timing. Nestled on top is the 1.7L Eaton® R1740 TVS supercharger which spins up to 20,460 rpm. That's enough to generate more than 9 lbs of boost and help produce 650 horsepower and 650 lb-ft of torque.



Automotive engine shown

STATE-OF-THE-ART TECHNOLOGIES

Direct Injection

- Injects fuel only where it is needed, directly into the combustion chamber, promoting precise fuel control, combustion, and efficiency.
- Fosters a more complete burn of the fuel in the air-fuel mixture.
- Operates at a lower temperature than conventional port injection.
- Improved fuel atomization at cold temperatures enhances ability to start at cold temperatures.

Variable Valve Timing (VVT) Technology

- The dual-equal cam phasing system adjusts camshaft timing at the same rate for both intake and exhaust valves.
- Enhances torque and power across a wider engine speed range by adjusting camshaft timing at the same rate for both intake and exhaust valves to match performance needs at any engine speed.

Twin-Rotor R1740 Twin Vortices Supercharger

- Creates additional horsepower compared to non-boosted engines by forcing more air into the combustion chamber using an air pump driven by the engine's crankshaft.
- Spins up to 20,460 rpm which is 5,000 rpm more than the supercharger used on the previous LS9 engine thanks to smaller diameter rotors which enables them to produce power-enhancing boost earlier in the rpm band.
- Boost is achieved more efficiently via a more direct discharge port than the previous LS9 charger that creates less turbulence, reducing heat and speeding airflow into the engine.
- Typical supercharger "whine" noise is suppressed by using a lid with a constrained-layer damping panel assembled over the discharge port to damp the high frequency content of the air pulsations exiting the supercharger discharge port.

Dual-Brick Air-to-Liquid Intercooler

- Two low-profile, aluminum clamshell heat exchangers mounted longitudinally adjacent to the rotors in the supercharger help lower the temperature of air used in the combustion chamber creating denser air, which means more oxygen in a given volume, resulting in optimal combustion and more power vs non-supercharged engines.
- Cooling bricks are cooled by their own coolant circuit, with a remote pump and heat exchanger, which contribute up to 140-degree F (60 Degrees C) cooler air being fed into the cylinder heads which substantially increases the amount of oxygen available for the combustion process.

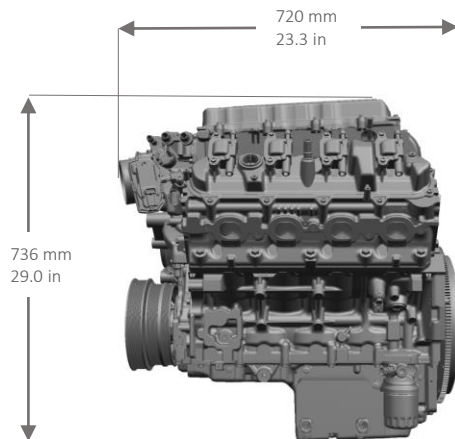
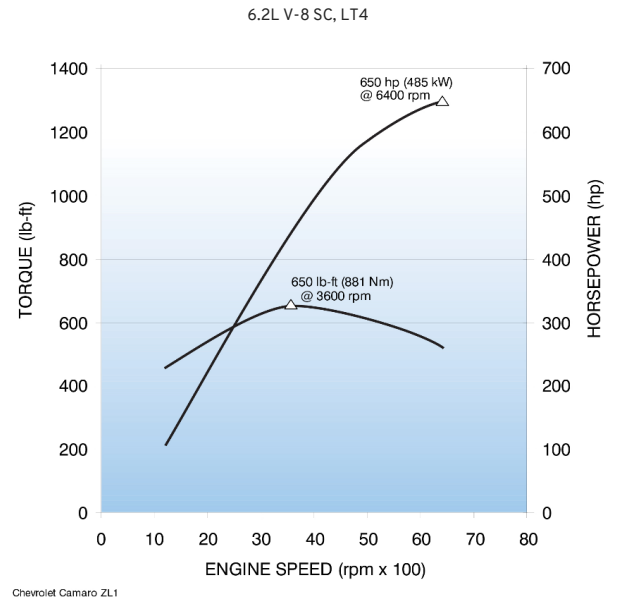
ADDITIONAL FEATURES

- Available Active Fuel Management (AFM)
- Electronic throttle control
- Dual-pressure control and variable displacement oil pump
- Oil-Spray piston cooling
- Extended-life spark plugs
- Dexos 5W30 oil
- Wet sump
- 58x crank timing

6.2L V-8 SC , LT4

SPECIFICATIONS

Type:	6.2L Gen-V V-8 Small-Block
Displacement:	6162 CC (376 CI)
Engine orientation:	Longitudinal
Compression ratio:	10.0:1
Valve configuration:	Overhead valves
Vales per cylinder:	Two
Assembly site:	Bowling Green, KY, of globally sourced parts
Valve lifters:	Hydraulic roller
Firing order:	1-8-7-2-6-5-4-3
Bore x stroke:	103.25 x 92.0mm
Fuel System:	Direct Injection
Fuel type:	Premium gasoline (93 Octane)
Horsepower:	650 hp (485 kW) @ 6400 rpm*
Torque:	650 lb-ft (881 Nm) @ 3600 rpm*
	*GM tested per SAE J1349
	Actual power levels may vary depending on OEM calibration and application.
Maximum engine speed:	6600 RPM
Emissions control:	Three-way catalytic converter, positive crankcase ventilation
Block:	Cast aluminum
Cylinder head:	Cast aluminum
Intake manifold:	Cast aluminum supercharger
Exhaust manifold:	NA
Main bearing caps material:	Cast nodular iron
Crankshaft:	Forged steel
Camshaft:	Billet steel
Connecting rod:	Forged powdered metal



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