



The first OEM-specific Gen-IV
supercharged V-8 for the
Industrial industry

“LST” 6.0L V-8 SC High-Performance Industrial Engine

New for
2010

Features & Benefits

- High-flow cylinder head design with Swirl-Wing technology
- Enhanced valvetrain with offset intake rocker arms to enable a more direct intake port
- Returnless fuel injection with center feed stainless steel fuel rail
- 103.25 mm bore block with structural improvements and nodular iron bearing caps
- New sumped pistons with 8.0:1 compression ratio
- 6.52 gms/sec. high-flow injectors
- 1.9L /rev Roots type four-lobe rotor supercharger with 160 deg. rotor twist
- Integrated single brick charge air cooler
- Piston oil spray cooling
- Forged steel crankshaft
- Four active layer MLS head gasket
- Stacked plate aluminum oil cooler
- New supercharged family of OEM-specific 6.0L engine
- Flat-faced flywheel with wide ring gear to accept front or rear mount starter (8-bolt mount)
- Balancer with 6-bolt PTO hub
- 8 qt. oil pan with dual horizontal drains (1 each side)
- Exhaust manifolds and oil dipstick/tube assembly deleted
- Brico 3010 intake/exhaust seat inserts (E85 capable)
- Stellite faced Inconel exhaust valves



MEFI-5 (Industrial Electronic Fuel Injection - Fifth-Generation), is an advanced engine controller capable of meeting all the emissions, OBD-M and driveability requirements of Industrial applications.



*“LST” 6.0L V-8 SC Industrial
(Photo may not represent final
content as shipped)*

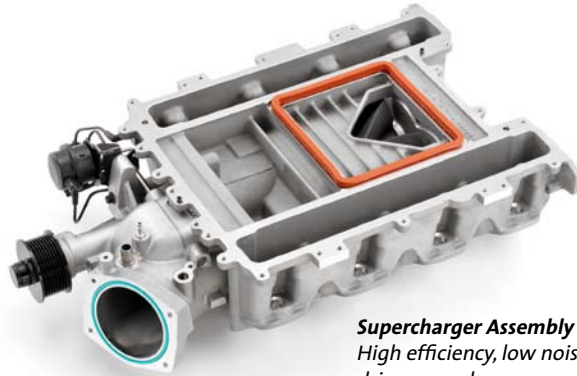
Available Options

- An electronic control module (ECM) and related hardware are available in kit form. The ECM uses state-of-the-art technology to optimize fuel and spark control.
- “LST” acoustic cover and related mounting hardware are available in kit form.
- GM-designed accessory drive components will be available in kit form (includes supercharger drive parts).

"LST" 6.0L V-8 SC Industrial Engine

"LST" 6.0L Feature Focus

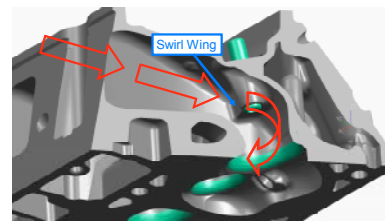
Considered by many as a key "new" member in our "Image" engine category, the "LST" makes its debut for Industrial applications in the 2010 model year. The "LST" introduces the first production supercharged Gen-IV small block engine to the Industrial industry and is slated to exceed customer expectations with outstanding overall performance.



Supercharger Assembly
High efficiency, low noise front drive supercharger assembly with throttle inlet adapter



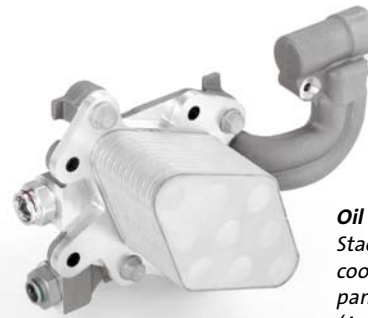
Piston Squirter
Block-mounted oil squirter for piston cooling



Swirl-Wing Cylinder Head
Cast aluminum cylinder head with wing in inlet port to induce combustion chamber swirl



Supercharger Rotor Set
Four-lobe "TVS" rotor set with 160 degree twist



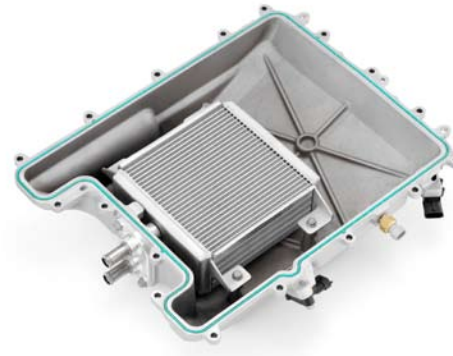
Oil Cooler Assembly
Stacked plate aluminum oil cooler for direct mounting to oil pan (requires closed cooling) (Available as an option)



Sumped 8.0:1 Piston
Cast hypereutectic coated skirt piston with sump in dome for compression control



Right Rear Engine View
(shown with Flexplate, as shipped)
(Photo may not represent final content as shipped)



Charge Air Cooler Assembly
Integrated single brick tube and fin charge air cooler with rear coolant entry (requires closed cooling)

Specifications

Type: 6.0L V-8 SC (Gen-IV Small Block)

Displacement: 5967 cc (364 ci)

Compression Ratio: 8.0:1

Valve Configuration: Overhead Valves

Assembly Site: Silao, Mexico

Valve Lifters: Hydraulic Roller

Firing Order: 1 - 8 - 7 - 2 - 6 - 5 - 4 - 3

Bore x Stroke: 103.25 x 92 mm

Fuel System: Sequential Fuel Injection

Fuel Type: Regular Unleaded (87 octane)

Engine Orientation: Longitudinal

Valves Per Cylinder: 2

Bore Center (mm): 111.76

Engine Mass: 467 lbs (212 kg)

Horsepower:

151 hp (113 kW) @ 2000 rpm

Torque:

395 lb-ft (536 Nm) @ 2000 rpm

Actual power levels may vary depending on OEM calibration and application. Hp/torque based on testing with 87 RON fuel.

Fuel Shutoff: 5600 rpm

Materials:

Block: Cast Iron

Cylinder Head: A356-T6 Rotocast Cast Aluminum

Intake Manifold: Cast Aluminum

Main Bearing Caps: Nodular Iron

Crankshaft: Forged Steel

Camshaft: Hollow Steel

Connecting Rods: Forged Powder Metal

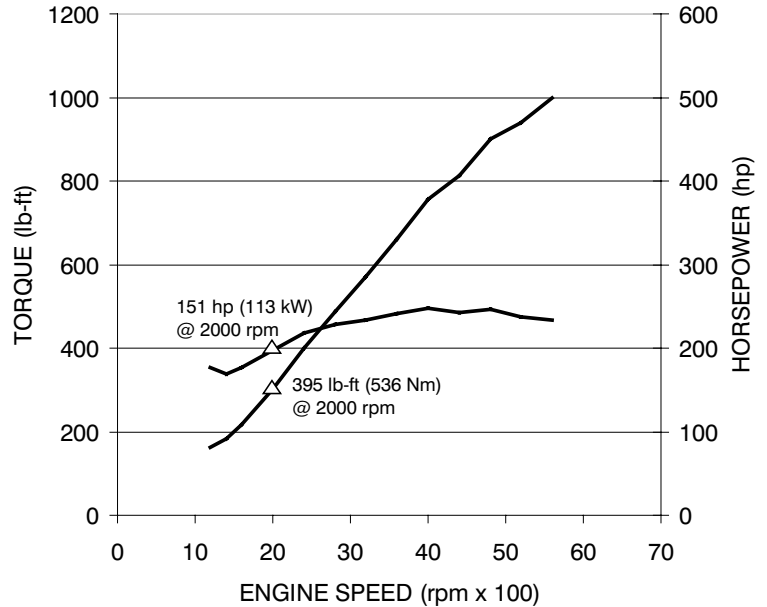
Additional Features: 1.9 L/rev Supercharger
Integrated Single Coolant to Air
Intercooler

Requires closed cooling system

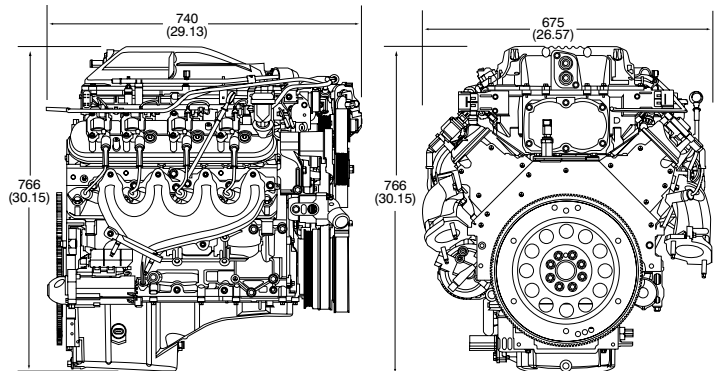
Piston Oil Spray Cooling

Direct Mount Ignition Coils

2.56:1 SC Pulley Ratio



Actual power levels may vary depending on OEM calibration and application. Plot depicted represents Industrial "LST" engine running with RON 87 fuel. (Preliminary/Estimated values).



Note: Shown with exhaust manifolds (not part of engine as shipped) and truck style oil pan.



GM Powertrain

www.gmpowertrain.com