



The first production Gen-IV
supercharged V-8 for the
marine industry

“LSA” 6.2L V-8 SC Marine Engine

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 9.1:1 compression ratio
- 6.52 gms/sec. high flow injectors
- 1.9L /rev Roots type four lobe rotor supercharger with 160 degrees 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
- Block and camshaft revisions to accept Al-Sn (Pb-free) cam bearings
- Brico 3010 int/exh seat inserts (E85 capability)
- LS9 timing chain tensioner (improved durability)
- 14-pin injector harness connectors both sides – impacts engine harness mating connector on right side



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



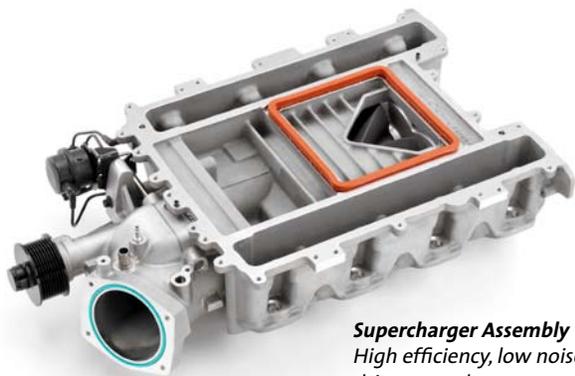
*“LSA” 6.2L V-8 SC Marine
(Premium Fuel Required)*

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
- “LSA” 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)

"LSA" 6.2L Feature Focus

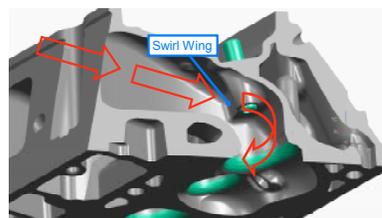
Considered by many as a key "new" member in our "Image" engine category, the "LSA" continues for marine applications in the 2010 model year. The "LSA" is the first production supercharged Gen-IV small block engine for the marine industry and is slated to exceed customer expectations with outstanding 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



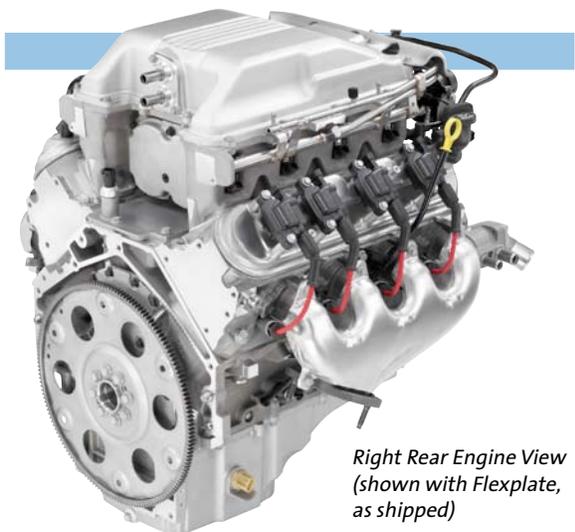
Supercharger Rotor Set
Four-lobe "TVS" rotor set with 160 degree twist



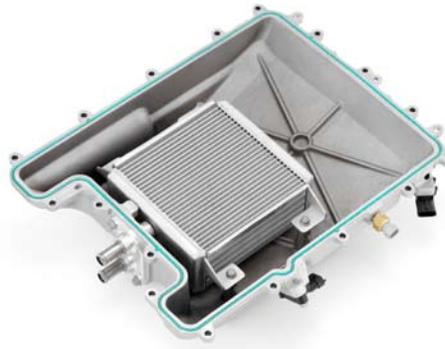
Oil Cooler Assembly
Stacked plate aluminum oil cooler for direct mounting to oil pan (requires closed cooling).



Sumped 9.1:1 Piston
Cast hypereutectic coated skirt piston with sump in dome for compression control.



Right Rear Engine View
(shown with Flexplate, as shipped)



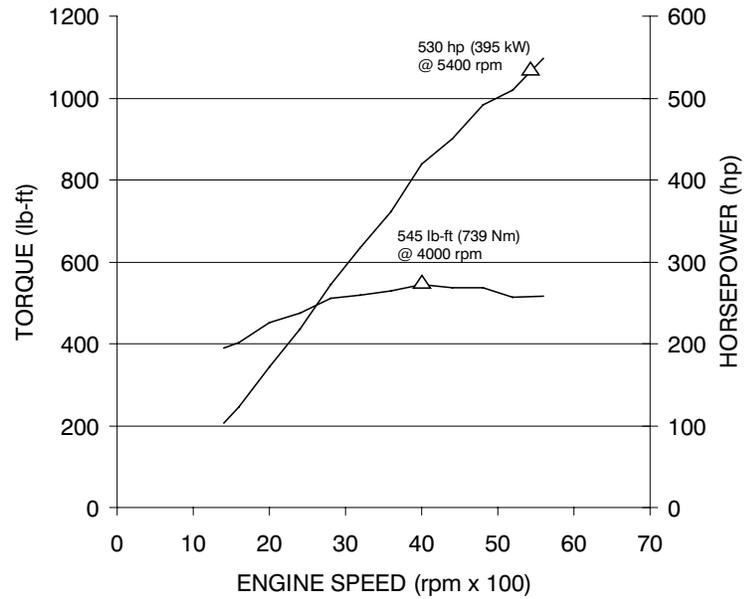
Charge Air Cooler Assembly
Integrated single brick tube and fin charge air cooler with rear coolant entry (requires closed cooling)

Specifications

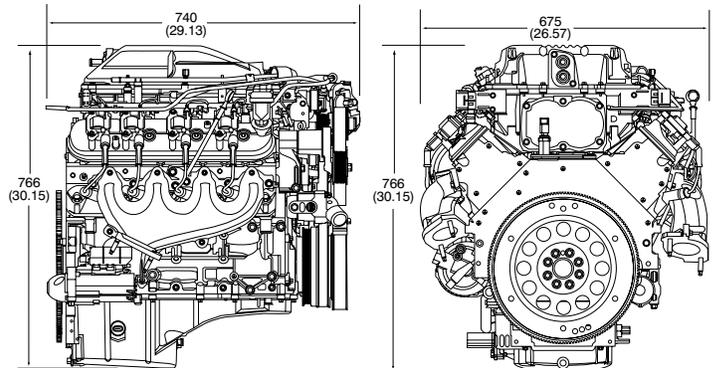
Type: 6.2L V-8 SC (Gen-IV Small Block)
Displacement: 6162 cc (376.0 ci)
Compression Ratio: 9.1:1
Valve Configuration: Overhead Valves
Assembly Site: Silao, Mexico
Valve Lifters: Hydraulic Roller
Firing Order: 1 - 8 - 7 - 2 - 6 - 5 - 4 - 3
Bore x Stroke: 103.25 x 92 mm
Fuel System: Sequential Fuel Injection
Fuel Type: Premium Fuel recommended, not required
Engine Orientation: Longitudinal
Valves Per Cylinder: 2
Bore Center (mm): 111.76
Engine Mass: 467 lbs (212 kg)
Horsepower:
 530 hp (395 kW) @ 5400 rpm
Torque:
 545 lb-ft (739 Nm) @ 4000 rpm
 Actual power levels may vary depending on OEM calibration and application. Hp/torque based on testing with 93 RON fuel.
Fuel Shutoff: 5600 rpm

Materials:

Block: Cast Aluminum
 Cylinder Head: A356-T6 Rotocast Cast Aluminum
 Intake Manifold: Cast Aluminum
 Exhaust Manifold: High Silicon/High Moly Cast Iron
 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



Actual power levels may vary depending on OEM calibration and application. Plot depicted represents Marine "LSA" engine as tested with 93 RON fuel.



GM Powertrain

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