

2010 "L99" 6.2L V-8 VVT (L99)

6.2L V-8 (L99) CAR ENGINE

Features and benefits

- New engine offering in the Camaro SS
- First Small Block Car engine with VVT
- Active Fuel Management (automatic transmission models)
- SAE Certified Power & Torque
- High flow cylinder heads
- Higher flow intake manifold with acoustic shell
- Larger bore block with structural improvements
- Pistons (high engine output design)
- High flow injectors
- Acoustic beauty cover

New engine offering in Camaro

The "L99" V-8 is now available in the Camaro SS. The L99 performance is SAE Certified at 400 hp @ 5900 rpm and 410 lb-ft. of torque @4300 rpm. The "L99" V-8 will be mated up with the Hydra-Matic 6L80 (MYC) six-speed automatic in this application.

High Flow Cylinder Heads

The intake port shape size and shape have been modified to increase flow. The higher flow intake ports are similar to the LS3 6.2L. Casting changes were made to increase the opening at the exhaust face to improve exhaust port flow. A new exhaust manifold opening is required to match the heads.

Enhanced valvetrain

The inlet rocker arm is offset 6 mm between the valve tip and rocker bolt/push rod to enable a more direct intake port. The intake valve diameter is 55.0 mm and the exhaust valve diameter is 40.4. Intake and exhaust lift art at 12.7mm. The valvetrain was modified to interface with a cam phaser to provide 30 degrees of cam phaser authority. AFM Lifters in cylinders 1,4,6, and 7 and the AFM control system enables V4 operation at engine operating conditions where V4 mode is more efficient.

Higher flow intake manifold with acoustic shell

Intake ports revised to match cylinder head. The composite intake manifold is manufactured with a lost core process to improve runner to runner variation and to reduce flow losses. Acoustic foam is sandwiched between the outside top of the intake manifold and an additional "skull cap" acoustic shell to reduce radiated engine noise. Structural enhancements have been added to the manifold bosses.

Larger bore block with structural improvements

Casting and machining in the bulkheads was revised to improve block structure and to improve bay to bay breathing. The enhanced cylinder block casting is shared with the the 6.2L truck applications, 6.2L LS3 applications, and 6.2L supercharged LSA and L99 applications.

Pistons

A larger diameter piston design features design enhancements for the higher engine output.

High Flow Injectors

High flow 5.0 g/s injectors were used from the LS7 engine.

Acoustic / Beauty Cover

The beauty cover has a revised appearance and acoustic treatment

Overview

For the 2010 Camaro, General Motors engineers objective was to provide greater fuel efficiency by introducing Active Fuel Management technology and VVT technology to the automatic transmission application of the Camaro SS performance engine.

The L99 balanced the use of performance design features of the LS3 while introducing proven fuel efficiency enhancements used on the high volume truck applications. The L99 used the LS3 base engine block, head, intake manifold design elements to increase flow efficiency. The L99 also meets the more stringent Bin4 emission standards and again avoids the gas guzzler tax. The small block tradition of more for less continues.