Difference Between L48 & L82 Corvette Engines

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by Rob Wagner



The L48 350-cubic-inch V-8 engine was a base power plant produced from 1967 to 1980. The L82 350 was a performance version of the base 350 and manufactured between 1973 and 1980. Both engines powered the Chevrolet Corvette and Camaro. The L48 was standard equipment on the Corvette from 1975 to 1980. The L82 was an option on the Corvette until 1980. Output varied as federal emissions controls became stricter in the mid and late 1970s.

Origins

The Chevrolet small-block 350 V-8 can trace its origins to the first small block V-8 that displaced 265 cubic inches and debuted in 1955. Chevrolet introduced the 350 in 1967 and it quickly became one of the most popular V-8s ever produced due to its compact size, wide-ranging output capabilities and durability. In 2011, the 350 remained a highly sought replacement engine for restorations and use in performance cars primarily because its 4-inch bore and 3.48-inch stroke is the most common engine size. The L48 was the first version of the base 350 V-8. It shares many of the same characteristics as the L30 327 V-8 with the major difference that the L48 had a longer stroke. The L48 and L30 share the same heads, block, intake and exhaust manifolds, carburetor and camshaft. The L48 and L82 share the same block and head casting numbers.

L48

The L48 350 originally powered the Camaro with Chevy installing the engine in the Nova one year later. Most Chevys beginning in 1969 received the L48 as standard equipment or an option depending on the vehicle. It generated about 20 extra horsepower than the 327, but featured a relatively mild cam. The L48 featured either a two- or four-barrel Quadra-Jet Rochester carburetor. It had an 8.2-to-1 compression ratio in 1975 to help deliver 165 horsepower. A year later output increased to 180. In 1979, the Corvette received a new dual snorkel air cleaner to help further boost horsepower to 195. In 1980, Chevy introduced a new version of the L48, the L81, which was identical to the L48, but featured spark advance, vacuum advance and computer control.

L82

Chevy boosted the compression ratio, used a four-barrel Rochester carb and dual-plane aluminum intake manifold to develop the performance L82 in 1975. It featured a 9-to-1 compression ratio to generate 205 horsepower. Output increased to 210 horsepower and 255 foot-pounds of torque in 1976. Two years later the L82 saw its output increase again to 220 horsepower. In 1979, Chevy gave the L82 larger valves, a 10.2-to-1 compression ratio and new cam to push horsepower to 225, and then 230 horsepower in 1980.

Differing Characteristics

The L82 featured many different components than the L48. The L82 had larger heads and valves, four-bolt mains, forged steel crank, different pistons and aluminum intake. Although the cam is stronger in the L82, it's physically identical to the L48. The L82 had 2.02-inch valves and the L48 measures 1.94 inches. The L48 possessed a cast crank, two-bolt mains and a cast-iron intake manifold. The L48 received an aluminum intake in 1980.

References

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