



# 427 ENGINE

## "MYSTERY MOTOR"

We had some fun and rekindled fond memories last month with 327 Day, so this month we are declaring Sunday to be 427 Day! What better excuse to get your Corvette out this weekend and drive than to honor this iconic big block engine!

Development of the 427 big block started with the so-called "Mystery Motor" used in Junior Johnson's 1963 Daytona 500 record-setting Chevrolet stock car. This "secret" engine was a substantially modified form of the previous W-series 409 engine, and was subsequently released for production use in mid-1965 as the Mark IV, referred to in sales literature as the "Turbo-Jet V8." Playing off the popularity of its 327 little brother the "Mighty Mouse," the 427 soon became known to automotive journalists and enthusiasts as simply the "Rat."

The 427 was introduced as an engine option at the beginning of 1966 Corvette production. A variety of single and multi carburetor options, camshaft, cylinder head, intake, and compression ratio combinations would yield 7 unique 427 engine packages (see chart at the top of page 2).

Like the "Mouse" small block, the 427's rugged dependability and performance ensured an extensive role in Chevrolet and GMC Commercial vehicles, in addition to numerous marine applications. [Super Chevy Magazine even named the 427 as the number 7, 8 & 9 best engines ever made by Chevy!](#)



The 427 engine as seen in the 1968 LeMans #4 Corvette.



| First Year | Last Year | Engine Code | Features   | Compression ratio | Factory Gross Power Rating |
|------------|-----------|-------------|--|-------------------|----------------------------|
| 1966       | 1969      | L36         | 4-barrel   | 10.25:1           | 390 hp                     |
| 1966       | 1969      | L72         | 4-barrel + solid-lifters, more aggressive cam and high flow cylinder heads   | 11.00:1           | 425 hp                     |
| 1967       | 1969      | L68         | L36 with 3x2-barrel carbs.   | 10.25:1           | 400 hp                     |
| 1967       | 1969      | L71         | L72 with 3X2 barrel carbs.   | 11.00:1           | 435 hp                     |
| 1967       | 1969      | L89         | L71 + aluminum heads; RPO L89 also applied to L78 "375 HP" 396 engine with aluminum head option.                         | 11.00:1           | 435 hp                     |
| 1967       | 1969      | L88         | Racing-spec cam, high-flow aluminum heads (casting #s varied by model year) and some upgraded, competition-grade parts   | 12.50:1           | 430 hp                     |
| 1969       | 1969      | ZL1         | Aluminum block with open chamber "3946074" aluminum heads; cam even "hotter" than L88's; upgraded parts similar to L88's | 12.00:1           | 430 hp                     |

History repeated itself in 2006, as the LS7 505HP 427 was called upon to propel the 6th Generation Corvette Z06 model. Although the LS7 427 is a small block variant sharing very little with its 1960s big block ancestor, it proudly carries the Corvette 427 flag in the new century.

Data and stories about the Chevy 427 could fill volumes, but not here.

Any fan of the "Rat" can take it from here with your own stories and memories. Share your 427 stories on our Facebook page.

**Make sure to share this with other 427 owners, former owners and enthusiasts!**

[Check out this short video, celebrating one of our favorite 427 Corvettes!](#)

