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First Fuelie

HIGHER FUEL PRESSURES MEANT MORE PERFORMANCE FOR CORVETTE
BY ANDY BOLIG/PHOTOS ANDY BOLIG



Fuel Injection

There was no hiding why Chevrolet started installing Rochester fuel-injection units on Corvettes. To go racing! Originally, the mechanical fuel-injection units were designed as an answer to a fuel-sloshing problem that occurred on carbureted cars. Under heavy lateral acceleration, the fuel would move from side to side inside the carburetor, giving inconsistent fuel supply to the engine. This was obviously a hindrance to performance, and Zora was trying to make a statement on racetracks around the world. Sputtering engines made the wrong statement, so, starting in 1957, Corvettes could be equipped with the new mechanical fuel-injection units manufac-



tured by Rochester Products, a division of GM. Until then, no fuel-injection systems were available on American production cars. Now American car purchasers could purchase a car directly off the showroom floor, equipped with this new technological wonder that allowed the car's engine to turn at very high RPM and still be smooth and very responsive. Other benefits of using fuel injection, even in these early, mechanical systems, were a decrease in engine emissions and better fuel economy – the very same reasons that, after a hiatus, fuel injection would return under the hoods of Corvettes, and it won't be going away any time soon.



Of course, Joseph Lukason wasn't interested in racing his '57 when he purchased it, and he really wasn't too concerned about increased fuel mileage or decreased emissions. The reason Joseph purchased this car is the same reason they have become such icons in the Corvette arena – they're just so cool! Joseph's car wasn't too cool when he purchased it, though. In his words, it was "about a condition 32, on a scale of 200!" Apparently, previous owners were

interested in the Corvette's fuel-injected power potential. The car was an old drag racer and had an old Chevelle 12-bolt rearend with a '70s vintage Borg Warner Super T10 4-speed. Being an old dragster, its mileage was considerably low, being put on a quarter-mile at a time. Also, the car had endured limited exposure to the elements, which preserved its frame in almost perfect condition, while the body was badly abused. The rear wheel openings were cut to allow for larger tires and

the front end had been patched together with sheet metal and 3/8-inch bolts, then covered under leagues of body filler. While the chassis was undergoing a total restoration, the neglected body was shipped to J&M Enterprises for repair in the form of new rear fenders, rear valance, trunk lid, rear deck lid, hood, front surround, front valance, dash and both front fenders. But, hey, the doors are original!

Jerry's Corvette Restoration in Spring



1



5



2



6



3



7



4

1. The first of the fuel-injection systems, still making Corvette a performance icon.

2. The interior, while considered spartan by today's standards, was definitely business-minded. The lack of radio, heater and courtesy lamps meant that this Corvette was ordered with performance in mind.

3. Positraction was new in Corvettes and this tag alerted technicians and owners alike to the special needs of this new, non-slip novelty. While similar in appearance to 1956 differentials, baffles were installed for '57 production that limited oil flow out to the axle area, helping to keep the differential gears better lubricated.

4. Notice the round mufflers. The '57 Corvette exhaust system is the only one built between 1953 and 1962 to use round mufflers.

5. Along with the aluminum shims installed between the frame and the front crossmember, the rear suspension received upgrades to improve handling and performance. A redesigned front hanger for the rear spring was used to help decrease the shackle angle. Also, notice the small bumper over the front section of the spring. These were installed to prevent excessive spring wrap-up under acceleration. They are another way to tell whether the car was an early- or late-production '57, as they were used only on later-production '57s.

6. While the original transmission and the car parted ways years ago, Jerry Clark scoured the Internet to locate a properly dated specimen, pricey or not.

7. The underside of the '57 is as clean as the top side. You can notice the tapered aluminum shim that is installed between the frame and the crossmember.

Hill, Florida, handled the task of making the chassis look and work as good as new. Jerry's small shop specializes in restorations, not modifications, so Joseph's Corvette was treated to the full Monty, and the total restoration took only nine months! He wanted to have the car ready for its first Top-Flight attempt at Howey in the Hills in November. It received Second Flight due to a wiring glitch that pulled it one and a half points shy of receiving Top Flight status on its first outing.

The fuel-injection unit contributed to Corvette's V-8 engine finally getting over the one-hp-per-cubic-inch hurdle by pumping out 283 hp from the new-for-'57 283 engine. 756 of the 283hp-optional fuel-injected Corvettes were ordered in 1957; 43 of them were the ultra-rare, airbox '57 fuelies. These few fuelies had a special airbox under the hood that ducted cooler air to the engine

from under the grille. They also had their tachometers relocated from the center of the dash to the steering column for easier viewing via a special mounting bracket. To add to the performance potential of the '57 Corvette, a four-speed manual transmission became available late in production. Joseph's Corvette was so equipped, and the hunt was on to replace the Super T10 with an original T10 of the proper vintage. Two were located at \$6,500 apiece, and one now resides under the floorboards of Joseph's Corvette. Likewise, the original positraction rearend, available for the first time in a Corvette in 1957, was removed years ago, so a new one had to be located at nearly the same cost as the transmission. Fuel injection, positraction and a four-speed were all firsts for Corvette in '57 and now, Joseph's Corvette, once again, has all three as originally offered. ■