



CHEVROLET SERVICE NEWS

From the Collection of Tony Greco
Automotive H.S. Bklyn. N.Y.

Corvette Engines

October, 1961

New engine lineup, numerous power plant refinements and fresh styling innovations are included in the Corvette for 1962.

A complete new line of power plants replaces the 283 cubic inch V-8 engines previously used for Corvette models. Based on the new passenger car engine, all Corvette engines now have a 327 cubic inch displacement. The Corvette base production engine will be the same as the passenger car Turbo-Fire 327, rated at 250 horsepower. A "street-type" increased performance version, rated at 300 horsepower is available as Regular Production Option 583. High performance units with special camshafts are available as Regular Production Option 396 in the carbureted version, and Regular Production Option 582 in the fuel injection version. Since only one fuel injection option is offered, the engine line-up is reduced from five engines to four.

CAUTION: Two cylinder head gaskets are used under each cylinder head on the 340 and 360 hp. Corvette engines, having a compression ratio of 11.25 to 1. When re-installing cylinder heads on these engines always use two new gaskets under each head.

CAUTION: Due to the configuration of the valve rocker covers on early production 327 cu. in. engines of 250 and 300 hp., it is possible to install the covers incorrectly and experience interference at the rocker arms. The side of the rocker cover having the greater vertical wall height before entering the side-to-top radius, should be installed inboard on the cylinder head.

The Two Thousand Dollar Freeze Plug!!!

A few years ago my wife and I bought a 1954 Corvette. Someone had either kept it up or due to a heating problem (that we were soon to discover) didn't use it much. The car was in fairly good shape although many replacements had been made over the years with incorrect parts. The next few years a lot of time, money and headaches went into educating myself about the early Corvettes and trying to track down what was correct for my car. The one problem over the years I just couldn't get a handle on was the overheating. I could drive the car for about fifteen minutes before it would get hot and eventually boil over if it was a warm day. On a cool day it would get to just under boiling and stay there unless I had to idle, then it would start to lose the coolant until there wasn't enough in the engine to sustain that precarious temperature and it would boil over.

I tried everything. I had the radiator rotted out. I changed all the coolant hoses. I rebuilt the water pump. I had the head boiled out and magged for cracks. The valve timing was checked and rechecked. I replaced the fan belt, thermostat, radiator cap, and head gasket.

Finally I had exhausted my capabilities and decided it was time to consult the professionals. I drove to the Chevy dealer in hopes they would succeed where I had failed. They were very confident and told me I could pick the car up in a week. Friday rolled around, I called and was told they would need the car for another week. Another phone call another week, another phone call another week, etc. Six weeks later I picked the car up. On the way home, which was about thirty miles away, the car boiled over. I was fit to be tied. Back to the Chevy dealer I went. Another week went by and even though I told the dealer I put a new head gasket on the car, they said it needed one. They proceeded to pull the engine apart and found I was right. At this point it was obvious they didn't know how to fix the problem any more than I did. They were just guessing at my expense. So, after persuading the service manager that a few minor adjustments to the bill were in order we took the car home.

The only thing I hadn't done yet was to pull the engine block out to see if there could possibly be something clogging it.

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MEMORABILIA

HAT PINS	\$3	SACE logo (red, black and white) on yellow background size: half inch by one inch.
PATCHES	\$3	SACE logo (red, black and white) on yellow background size: three inches square.
DASH PLAQUES	\$1	all three national conventions available.
SIGNS	\$6	"CORVETTE PARKING ONLY" red letters on white plastic; 12 inches by 18 inches.

Prices include postage. Send check or money order (US dollars only)
 SACE c/o Lucy Badenhoop
 8237 Cedar Landing Ct.
 Alexandria, VA 22306-3234

Two Thousand Dollar Freeze Plug cont.

In the process of taking the water pump adapter off I noticed that the block had three openings in the front of it. Two holes, which are about the size of quarters and are horizontal to each other and a third a little larger than a silver dollar centered below.

Upon close examination of the holes and the gasket configuration I could not understand how the water pump could pump any water through the engine. The two top holes were open with a freeze plug in the third opening. The gasket and adapter plate covered the two top holes and left the third hole (with the freeze plug in it) exposed when bolted up. This only left a small BB sized hole for any water to pass through the adapter plate. The freeze plug looked like it had been there forever. Now I was left with the dilemma of whether or not the freeze plug should be there. I had never rebuilt one of these engines before so I needed to get some expert help.

I had just joined S.A.C.E. and N.C.R.S. and didn't know any one with more knowledge of the differences between the Corvette and the regular Chevy engines.

Half a dozen long distance calls later I was given Roy Braatz' phone number. I called Roy, explained my predicament and asked if he had any experience with the water pump adapter plate on the six cylinder. Luck had finally come my way

as he stated he had just had his pump and adapter off his car. He could remember he didn't have a freeze plug on the front of his engine, that it should not have one, and told me to remove it.

I popped the freeze plug out and put the engine back together. To my delight the car doesn't even get close to getting hot now.

We reasoned that someone had mistakenly put the plug in the bottom hole thinking that it was to be used for a (passenger) car engine instead of the (Corvette). The passenger car only uses the two top holes as water passages. The Corvette uses the adapter plate to lower the water pump and block off the two top holes in the lower lined car.

Although this plug has cost me thousands of dollars and countless hours, I should be glad the plug was put in. Everyone that owned this car had a heating problem with it. It may not have been for sale if it hadn't been a problem for it's previous owners. I was fortunate enough to be the owner that was able to solve it.

I'm going to have the freeze plug plated and save it for a souvenir for my wife to wear to the next meet. She agrees, but only if it's gold plated.

Hopefully this article will save someone else from going through the trouble and expense I have.

by Emory Molchan, WA