

FACTORY FACTS!

The way it REALLY was...
Text & Original Material by: ALAN KAPLAN

PART A 1963 CORVETTE WITH FUEL INJECTION COLD
STARTING PROCEDURE - CHEVROLET SERVICE NEWS -
VOLUME 35 - JUNE 1963 - NUMBER 6

Fuel Injection was first offered as a factory option for the 1957 Corvette model year. 1957 saw the widest range of fuel injection choices by option numbers 579A, 579B, 579C and 579E. Then model years 1958, 1959, 1960 and 1961 offered only two choices each. Starting with the 1962 model year and lasting through the last year of "Ram-Jet" fuel injection in 1965, one choice was offered for each year. 1962 and 1963 fuel injection was at 360 H.P. For 1964 and 1965 Corvette model years, the fuel injection option RPO L-84 was at 375 H.P. If you are one of the lucky owners of a 1963 F.I. Corvette, please note the starting information in this issue of Chevrolet Service News as the information in the original owners manual for 1963 is INCORRECT!!

Corvette Fuel Injection Cold Starting

The correct procedure for cold starting a 1963 fuel injection equipped Corvette is as follows:

Depress the accelerator pedal to the floor to index the fast idle cam, then fully release the pedal. With the accelerator pedal remaining fully released, crank the engine until it starts.

The above starting procedure should be brought to the owner's attention in the dealership. The 1963 Corvette Owner's Guide incorrectly states that starting procedures for a fuel injection equipped Corvette are the same as for a carburetor equipped vehicle.

PART B 1965-1966 CORVETTE WITH R.P.O. M-35 POWERGLIDE
AUTOMATIC TRANSMISSIONS - CHEVROLET ENGINEERING
BULLETIN T.N. #8 - AUGUST 5, 1965

1965 Corvette production ended early in August 1965. All 2,021 Corvettes in 1965 production with RPO M-35 Powerglide automatic transmissions have the service problem outlined in this engineering Bulletin. Based on the wording of this Technical Note #8, which was part of an engineering service letter, were early production 1966 RPO M-35 Corvettes still produced with the 1965 transmission control rod adjustment parts? Did any of our readers purchase a new 1966 Corvette with RPO M-35 and experience the problems listed in this Bulletin? Please do let us know!

**SECTION VII
TRANSMISSION - CONTINUED**

ESL's - Continued

**POWERGLIDE TRANSMISSION CONTROL ROD ADJUSTMENT (No. 217-TNM) 1965 Corvette
w/P.G. Trans.**

In the 1965 Corvette the adjustable Powerglide Transmission control rod clevis is located at the transmission range selector and parking brake outer lever (bell crank). However, there is no room to turn the clevis to adjust the control rod at that forward end. Misadjustment can result in transmission failure due to operation without the controls being in full detent. Such operation results in reduced oil pressure and, in turn, partial engagement of the affected clutches.

In the 1966 Corvette an adjustable clevis will be located at the transmission floor shift lever where there is room for adjustment. The 1966 Transmission Control Rod Unit will be made available primarily for the addition of this improvement in the 1965 model. Due to low volume sales of the current rod, it will also be used to replace the control rod in the 1966 Corvette.

As soon as the required 1966 parts become available, this unit will also be available.

**PART C 1968 CORVETTE INCORRECT CAMSHAFTS IN
PRODUCTION AT FLINT ENGINE PLANT**

This information on 1968 camshaft problems comes from an engineering service letter between different departments of Chevrolet in January 1968. It notes that factory mixups happen and what to look for when camshaft problems occur. These mixups over the years on Corvettes were not confined to erroneous problems. In 1967 for a short time there was a shortage of small block hoods and 'some' small block Corvettes left the St. Louis plant with big block hoods to keep production going on the line. If any of our readers know of other "mixups", please let VETTE VUES know!!

UPC VI - ENGINE

MISC. Information from Mr. L. M. Bayorgeon - Continued

CAMSHAFT PROBLEMS - Continued

Incorrect Camshaft

At the V-8 Plant, only three different camshafts are used in production: 302 mechanical lifter, cast no. 9347; 327 Corvette hydraulic lifter hi-lift, cast no. 3152; and cast no. camshaft 6930 which fits all other Flint V-8 engines in current production.

When a hi-performance camshaft is erroneously installed in a regular V-8 engine, it will have the following noticeable effects:

- . Rough idle.
- . Low vacuum.
- . Compression may be noticeably lower, but even, particularly when a mechanical lifter camshaft has been erroneously installed.

Since installation of wrong camshaft seldom happens, all other factors contributing to rough idle and low power should be checked first, such as electrical, carburetion and intake manifold problems.

If it is determined the camshaft is at fault, final identification of wrong camshaft will be made with the cast numbers on the shaft.

Incorrectly Ground Camshaft

Most frequent grind problem on camshafts is that which causes excessive base circle runout which prevents proper closing of the valves.

The effects of this problem are a poor quality idle and, in most cases, an uneven compression reading as well as low vacuum.

After eliminating electrical and carburetion problems, a poorly ground camshaft (for base circle) can be detected by the following method:



- . With the engine running, back off all lifters to zero lash. This should improve idle quality and raise vacuum reading.
- . If lower (uneven compression readings have been noted), perform a compression reading test with the lifters backed off to zero lash. The compression reading should be normal indicating a camshaft problem.

Base circle runout cannot be physically seen on the camshaft. It would be difficult to check for this condition in the field; however, the above mentioned check procedure should isolate the problem.

Say you saw it in

PART D 1973-1974 CORVETTE ENGINE OVERHEATING PROBLEMS
AND NEW GASKET UNITS FOR MANIFOLD AND CYLINDER
HEADS - CHEVROLET DEALER SERVICE TECHNICAL
BULLETIN - 74-T-6 - 12/5/73

By the time that this problem was noticed on a percentage basis, over 3,000 1974 "350" motor optioned Corvettes had left the St. Louis Corvette plant! Without mentioning why, this Bulletin also notes a change over to new gaskets for the inlet manifold and the cylinder heads. Did any of our readers who bought a brand new 1974 Corvette small block run into this overheating problem? Did your 1974 Corvette develop coolant leaks that required new gaskets? Please let us know!

 CHEVROLET MOTOR DIVISION General Motors Corporation Product and Safety Activities Dept.		Chevrolet Dealer Service Technical Bulletin	74-T-6 Number: VI Section: Dec. 5, 1973 Date:
Subject: ENGINE OVERHEAT DUE TO BLOCKED COOLANT PASSAGE IN THE CYLINDER HEAD - ALL SMALL BLOCK V-8 ENGINES		Attn: Service Manager	

TO: ALL CHEVROLET DEALERS

A small number of 350 and 400 cubic inch displacement V-8 engines were built before 9/24/73 (0924) with a coolant blockage in the cylinder head resulting in an overheat condition. A 1974 casting process change has resulted in a possible blockage of the coolant exit port in cylinder head casting No. 333882 (casting number appears on the top of the cylinder head beneath the rocker cover). This cylinder head is common to all 1974 small block V-8 engines, except for those used in C-K30 and 50 thru 60 series trucks.

As of 10/1/73, at all assembly plants, engine assemblies that were built before 9/24/73 and were not installed in vehicles have been inspected for the blockage and identified by a white, circular (1" dia.), paint mark appearing on the front of the engine block below the date stamp, or on the inlet manifold near the thermostat housing.

A blocked coolant passage should show up in the first five (5) to ten (10) minutes of engine operation, and it is recommended new units be run for that period during new car preparation. If an engine overheat condition is encountered, the following probe inspection should be made to determine if the coolant passage is blocked.

Important That All Service Personnel Read--Please Initial

Service Manager	Shop Foreman	Service Salesman	Service Technicians							

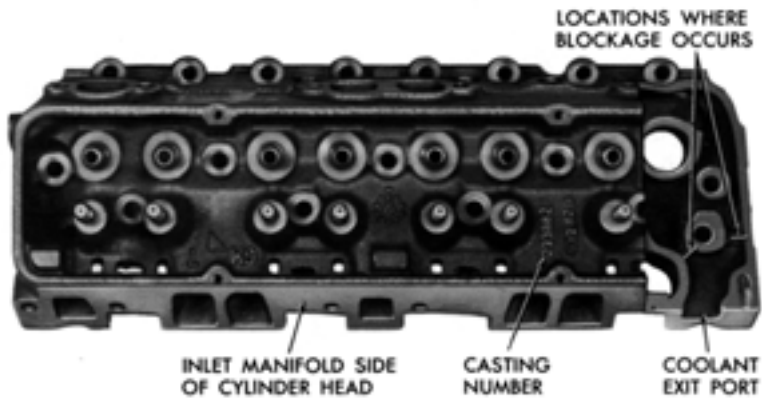
Say you saw it in

1. Remove the thermostat housing and thermostat.
2. Insert the oil level gauge (dipstick) into the thermostat port thru the inlet manifold coolant passage and into the cylinder head (refer to the illustration on page 3).
3. Work the dipstick into the cylinder head as far as possible by carefully rotating and pushing the handle with one hand while guiding the blade with the other hand.
4. If at least seven (7) inches of the dipstick is inserted past the edge of the thermostat port, there is no blockage.
5. Remove the dipstick and repeat the test for the other cylinder head.
6. If a blockage is present, it will occur at a depth of approximately five and one half (5-1/2) to six (6) inches from the edge of the thermostat port.
7. The blocked coolant port can be repaired by removing the inlet manifold and knocking out the casting flash in the blocked water passage with a suitable tool. Take care not to damage the oil drain boss. The particles of flashing that fall into the water jacket do not have to be removed. If the blockage cannot be removed, the cylinder head should be replaced.
8. If no blockage is found, look for other causes for overheat condition.

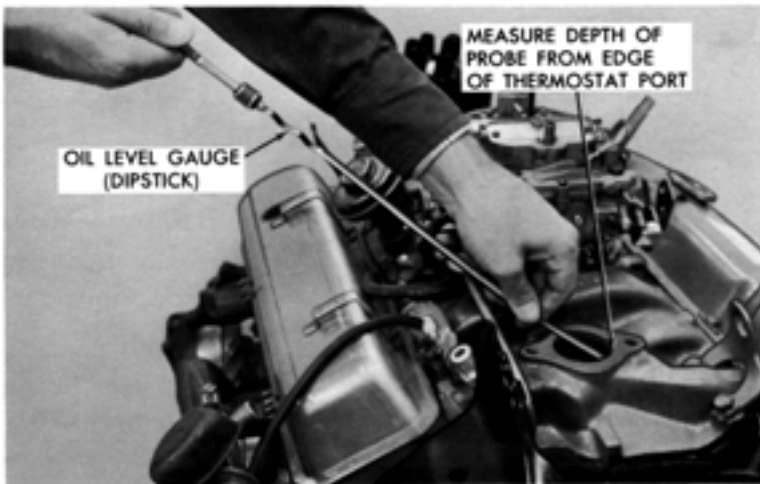
NOTE: As of 10/1/73, all General Motors Parts Division locations have inspected their stock of 1974 350 and 400 C.I.D. service engine assemblies and cylinder head assemblies for the blocked coolant port. Service cylinder head assemblies, No. 6260856 and No. 6260858, received by dealerships before 10/1/73 should be inspected for the blockage before they are used. Refer to the illustration to determine the location of the possible coolant port blockage.

**Thinking about selling your Corvette?
Why not place a free
photo classified ad.
Vette Vues Magazine,
PO Box 741596
Orange City, Fl 32774
Photos will not be returned.**

Say you saw it in



TOP VIEW OF A CYLINDER HEAD PARTIALLY SECTIONED TO SHOW BLOCKED COOLANT PASSAGES



INSPECTION PROBE OF COOLANT EXIT PORT

NEW INLET MANIFOLD SIDE GASKET USAGE FOR 1974

1974 inlet manifold side gasket usage has been changed for 350 and 400 cubic inch displacement V-8 engines with a four (4) barrel carburetor. Gaskets with a restricted crossover port are used on both the right hand and left hand side of the inlet manifold. 350 and 400 cubic inch displacement engines with a two (2) barrel carburetor still use a restricted gasket for the right hand application and an open gasket for the left hand. The correct inlet manifold side gaskets can be obtained in the following gasket units.

<u>ENGINE</u>	<u>INLET MANIFOLD GASKET UNITS</u>	<u>CYLINDER HEAD GASKET UNITS</u>
350/2-BBL.	6258833	6258831
350/4-BBL.	345195	345196
400/2-BBL.	6258833	6258830
400/4-BBL	345195	345197

WARRANTY CLAIM DATA

<u>PART COUNT</u>	<u>PART NUMBER</u>	<u>TOTAL PARTS NET + 25%</u>	<u>FAILURE CODE</u>	<u>FAILED LABOR OPER.</u>	<u>LABOR OPER. HOURS</u>	<u>OTHER LABOR HOURS</u>	<u>SUBLET DMN TOWING</u>
*	*	*	92	063196	**		

* Use applicable part count, part number and part price.

** Cylinder head blockage test - all vehicles with small block V-8 engines -- .5 hrs.

C-G10-30 and K10-20 vehicles with two groove fan pulley -- .7 hrs.

G Vans with air conditioning -- 1.0 hrs.


NOTE: Published flat rate times for intake manifold gasket replacement includes elimination of the blockage.

Chevrolet Motor Division
General Motors Corporation

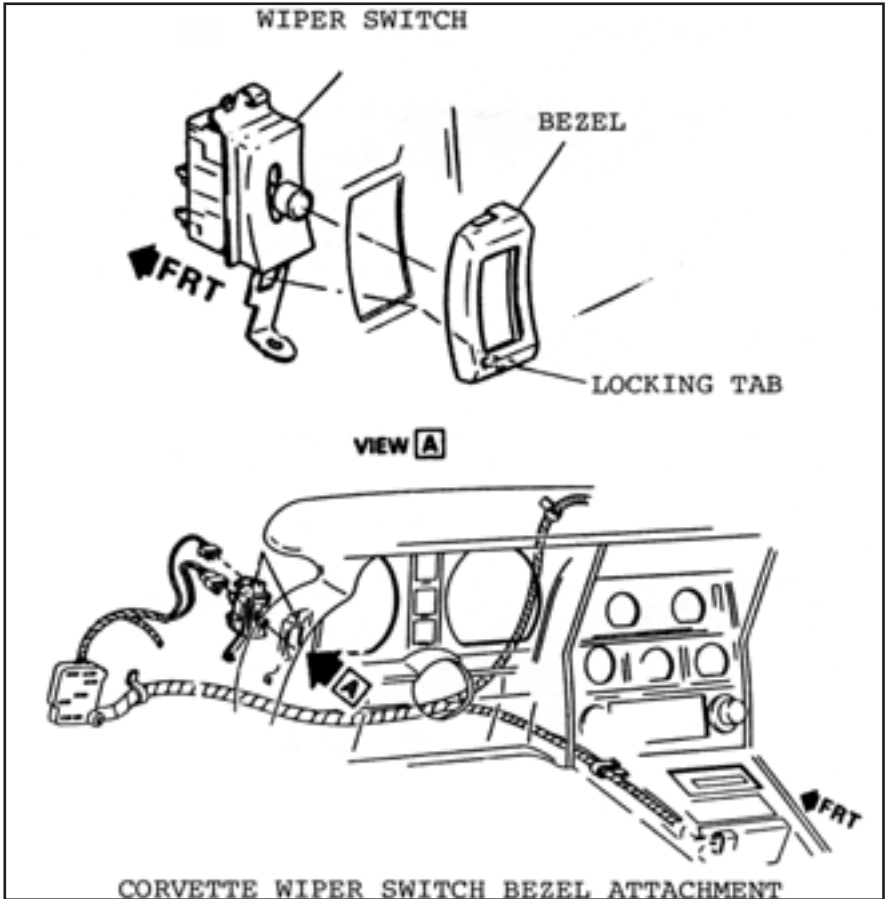
c: Dealer List
Chevrolet List

PART E 1981 CORVETTE BEZEL WIPER SWITCH NEW PART
NUMBER UPDATE - CHEVROLET DEALER SERVICE
INFORMATION BULLETIN - 81-I-19 - JANUARY 1981

If you have a 1981 early production Corvette with a "Glowing Condition" now you know the reason 'why' and 'how' to fix it! On the other hand, you may want your Corvette to continue "Glowing" rather than having to remove your speedometer cluster and poke around the maze behind your dash.

 CHEVROLET MOTOR DIVISION General Motors Corporation Product Assistance Dept.		Chevrolet Dealer Service Information Bulletin	81-I-19 Number: I Section: JANUARY, 1981 Date:																					
Subject: WINDSHIELD WIPER SWITCH BEZEL- 1981 CORVETTE		Attn: Service Manager																						
<p>TO: ALL CHEVROLET DEALERS</p> <p>Some early 1981 Corvettes with silver, red, or rust trim may exhibit a glow at night around the wiper switch bezel. In these colors, the bezel base material is "natural" and could become translucent with lights turned on. The remaining bezel colors were painted over a black base material and are not affected.</p> <p>The "natural" base material was cancelled in September, 1980.</p> <p>The glowing condition can be eliminated by replacing the original bezel with P/N 14016216, which is black and must be painted to match trim color. The bezel has a locking tab which engages the wiper switch as illustrated on page 2. Replacement requires setting the steering column to its lowest tilt position, removing the speedometer cluster, and reaching through the instrument panel to disconnect the bezel locking tab.</p> <p align="right">Chevrolet Motor Division General Motors Corporation</p> <p><small>Important That All Service Personnel Read—Please Initial</small></p> <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width:12.5%;">Service Manager</th> <th style="width:12.5%;">Shop Foreman</th> <th style="width:12.5%;">Service Salesman</th> <th colspan="4" style="width:50%;">Service Technicians</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				Service Manager	Shop Foreman	Service Salesman	Service Technicians																	
Service Manager	Shop Foreman	Service Salesman	Service Technicians																					

Clubs...Send in your FREE CLUB LISTING to help promote your event.
*Also, clubs receive a 10% discount on ads...
 this could be a great way to sell your raffle car
 tickets or promote your club event!*
386-775-8454



Coming next month in **FACTORY FACTS** for our August 2005 edition:
 1958 CORVETTE WINDSHIELD WIPER SERVICE INFORMATION
 1967 CORVETTE "421" BATTERY TEST PROCEDURE
 1968 CORVETTE WATER LEAKS
 1968 CORVETTE RADIO NOISE SERVICE UPDATE
 1981 CORVETTE NEW TRANSMISSION SCREEN SERVICE UPDATE
 1982 CORVETTE TRANSMISSION SERVICE UPDATE

It's hard to believe, but '2005' is now half over! We hope that you are driving and enjoying your Vette(s) and attending all of the Corvette shows and events in your area. Vettes were meant to be driven, and even if many of them are considered 'artwork'...the real fun is being behind the wheel and driving these beauties down the endless highways. So grab your best girl (or guy) and put those Corvettes on the road to adventure and sheer enjoyment!! I know that everyone at VETTE VUES certainly plans to do so in our own Vettes as '05 continues. We hope to see you right here next month...!

Say you saw it in