

# 1966 Corvette: Service Bulletin: Automatic Choke Malfunction

**Subject:** Automatic Choke Malfunction

**Model and Year:** 1966 Passenger Cars with V-8 Engines

**Source:** Chevrolet Technical Service Bulletin

**Bulletin No:** TSB #66-6, DR #66-6

**Section:** VIm

**Date:** November 18, 1965

TO: ALL CHEVROLET DEALERS

An undisclosed number of early 1966 Chevrolets, Chevelles, Chevy II's and Corvettes with V-8 engines have been built with one or more of the following discrepancies in the remote automatic choke mechanism.

1. Choke thermostat assembly manufactured with the incorrect choke coil spring and/or the choke coil spring reversed.
2. Incorrect choke thermostat assembly and/or choke rod installed.
3. Choke rod incorrectly installed (upside down).
4. Incorrect choke vacuum break assembly on Rochester 4MV carburetor (Quadrajete).
5. Incorrect choke lever on Holley carburetor.
6. Incorrect carburetor on engine.

It should be noted that an important difference exists between the 327" (275 h.p.) engine choke operation and the remaining V-8 engines. That is, the direction of the thermostat operation between the two units is reversed. On the 327" (275 h.p.) application, the eye of the thermostat coil and the corresponding choke rod travels from a down position for closed choke relaxing upward for open choke. On the remaining V-8 engines (except 283 4

bbl. with integral choke), the thermostat operation is just the opposite, it travels from an up position from closed choke downward for open choke.

In interim 1966, choke thermostat assemblies and choke rods will be built as an assembly and will use a paint code identification system to alleviate manufacturing and assembly error.

In early 1966 vehicles, these discrepancies may result in customer complaints of rough idle, hard starting, rich fuel mixture, flooding and/or poor performance. When the above complaints are encountered, the choke mechanism should be checked for the correct installation of parts as outlined on the following pages.

CHOKE THERMOSTAT AND ROD IDENTIFICATION

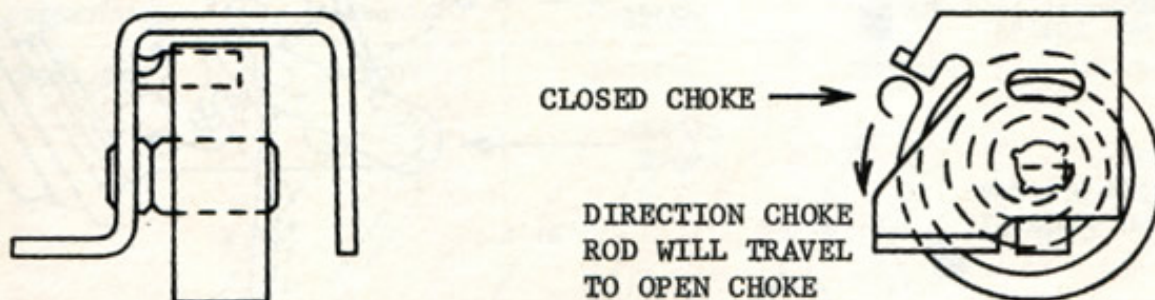


FIG. I - CHOKE THERMOSTAT ASSEMBLY - 283 V-8

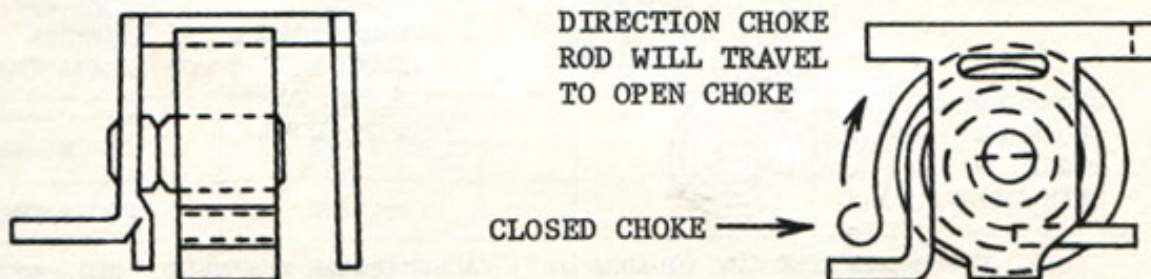


FIG. II - CHOKE THERMOSTAT ASSEMBLY - 327 V-8 (275 HP)

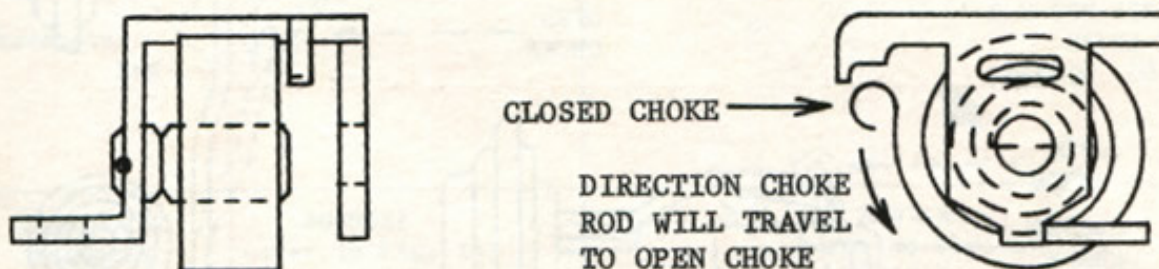


FIG. III - CHOKE THERMOSTAT ASSEMBLY - V-8 exc. 283 & 327 (275 HP)

NOTE: Choke thermostat assemblies, although similar in appearance, are not interchangeable. Check bracket design as shown in Figures I, II and III and the coil spring identification number shown on chart (Number stamped in coil, not number in ink). Choke coil springs are indexed to bracket and must not be interchanged or repositioned.

CHOKE THERMOSTAT AND ROD IDENTIFICATION (Cont'd)

V-8 Exc. 327 (275 HP)  
PART NO. 7032937

327 (275 HP) V-8  
PART NO. 7032953

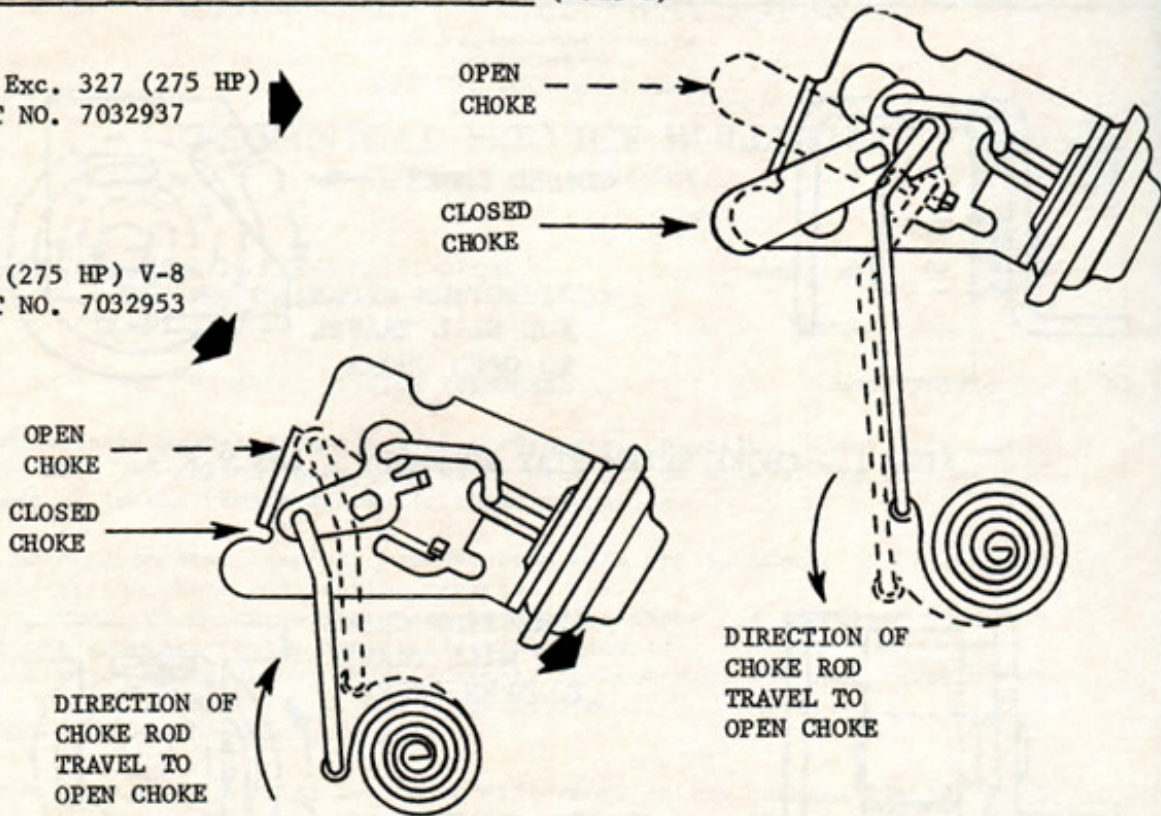


FIG. IV - ROCHESTER 4MV (QUADRA JET) VACUUM BREAK ASSEMBLY

V-8 Exc. 327 (275 HP)  
CHOKE LEVER  
PART NO. 3881408

327 (275 HP) V-8  
CHOKE LEVER  
PART NO. 3889760

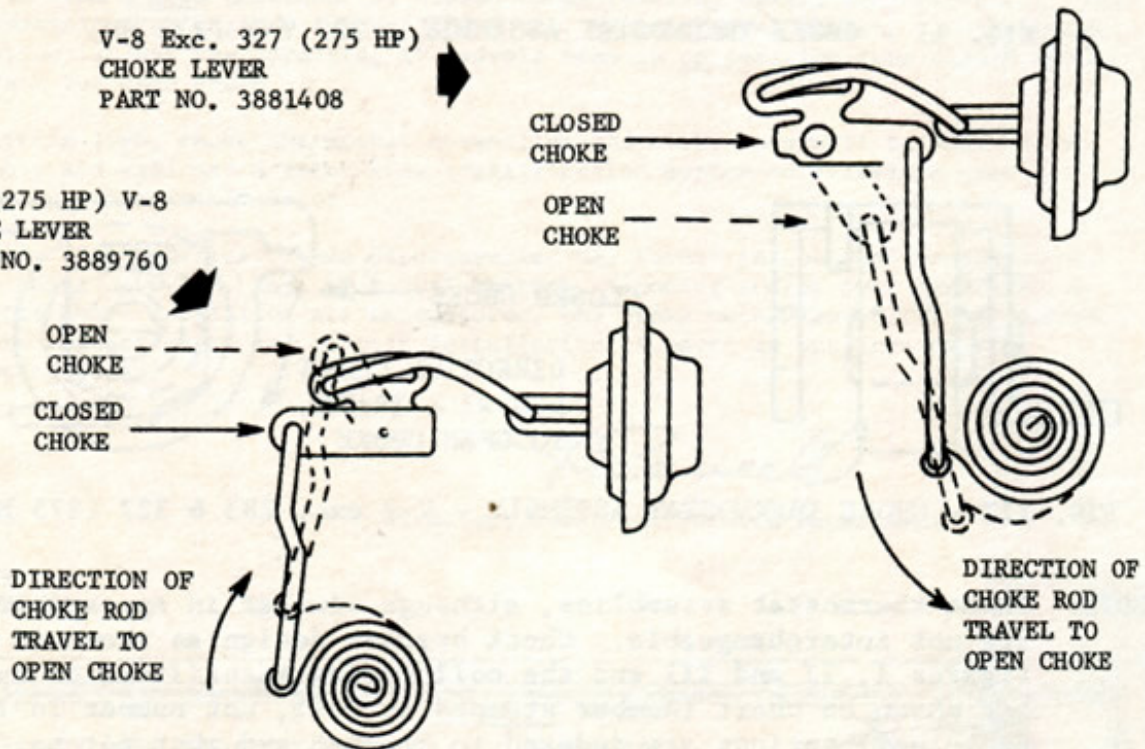


FIG. V - HOLLEY CHOKE LEVER AND VACUUM BREAK ASSEMBLY

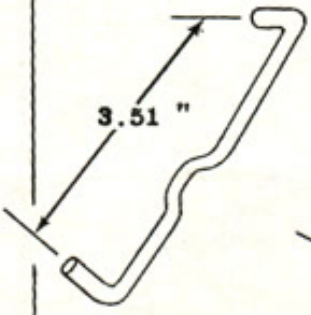
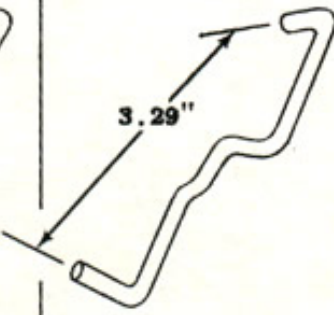
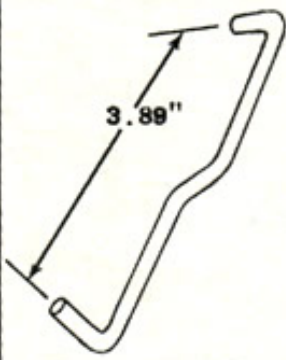
**CHOKE THERMOSTAT AND ROD IDENTIFICATION (Cont'd)**

|                                     |                                     |                                       |   |           |
|-------------------------------------|-------------------------------------|---------------------------------------|---|-----------|
| ENGINE                              | 283 2 BBL.                          | 327 (275 HP)                          |   |           |
| CARBURETOR                          | Rochester                           | Carter                                | Holley                                  | Rochester |
| CHOKE ROD                           | 3840907                             | 3881867                               | 3887112                                 | 3881868   |
|                                     |                                     |                                       |   |           |
| THERMOSTAT ASSEMBLY COIL IDENT. NO. | 3840909<br>Refer to Fig I<br>"1262" | 3887110<br>Refer to Fig. II<br>"7108" | 3887109<br>Refer to Figure II<br>"9938" |           |

|                                     |  |   |
|-------------------------------------|--|---|
| ENGINE                              | 327 (300 HP)                           | 327 (350 HP)                                  |
| CARBURETOR                          | Holley                                 | Holley  |
| CHOKE ROD                           | 3881866                                | 3881888                                       |
|                                     |  |   |
| THERMOSTAT ASSEMBLY COIL IDENT. NO. | 3869926<br>Refer to Fig. III<br>"9938" | Note 1 3887148<br>Refer to Fig. III<br>"7149" |

Note 1 - 3887148 Not available until approximately 12/1/65.

**CHOKE THERMOSTAT AND ROD IDENTIFICATION (Cont'd)**

|  |   |  |   |
|--|---|--|---|
| <b>ENGINE</b>                                      | <b>396 (325 HP AND 360 HP)<br/>427 (390 HP)</b>                                   |  | <b>396 (375 HP)<br/>427 (425 HP)</b>  |
| <b>CARBURETOR</b>                                  | <b>Holley</b>   | <b>Rochester</b>   | <b>Holley</b>   |
| <b>CHOKE ROD</b>                                   | <b>3886027</b>  | <b>3874890</b>   | <b>3885070</b>  |
| <b>Carburetor End</b><br><br><b>Thermostat End</b> |  |  |  |
| <b>THERMOSTAT ASSEMBLY COIL IDENT. NO.</b>         | <b>3869926</b><br>Refer to Fig. III<br>"9938"                                     |  | Note 1 <b>3887148</b><br>Refer to Fig. III<br>"7149"                                |

**ROCHESTER 4MV (QUADRAJET) VACUUM BREAK ASSEMBLY REPLACEMENT**

1. Remove carburetor air horn as outlined on Page 6M-25 of the 1966 Chassis Overhaul Manual.
2. Remove retaining screw from choke vacuum break assembly, then remove assembly.
3. Remove choke lever from float bowl well.
4. Install choke vacuum break assembly as outlined on Page 6M-27, Steps 5, 6, and 7 of the 1966 Chassis Overhaul Manual.
5. Install carburetor air horn as outlined on Page 6M-29 of the 1966 Chassis Overhaul Manual.

**HOLLEY CHOKE LEVER REPLACEMENT**

Disconnect choke vacuum break link, then remove choke lever retainer and choke lever. Reverse procedure to replace.

**PARTS AND LABOR DATA**

|    | QUA. | PART NO. | PART DESCRIPTION      | P | FC | L | T | OPERATION NO. | TIME   |
|----|------|----------|-----------------------|---|----|---|---|---------------|--------|
| 1. | A.R  | *        | Thermostat and/or Rod | X | 58 |   |   | G428012       | .2 hr. |
| 2. | A.R. | **       | " " " "               | X | 58 |   |   | G428091       | .4 hr. |
| 3. | 1    | 7032937  | Vacuum Break Assy     | X | 58 |   |   | G430091       | .5 hr. |
| 4. | 1    | 7032953  | " " "                 | X | 58 |   |   | G430091       | .5 hr. |
| 5. | 1    | 3881408  | Choke Lever           | X | 58 |   |   | G428092       | .2 hr. |
| 6. | 1    | 3889760  | " "                   | X | 58 |   |   | G428092       | .2 hr. |

\* Choke thermostat and/or Rod - exc. for Carter on 327 Engine

\*\* Choke thermostat and/or Rod - for Carter on 327 Engine

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