

1968 Corvette: Service Bulletin: Choke and Hot Restart Problems

Subject: Choke and Hot Restart Problems

Model and Year: 1968 Corvette with 427 cu. in. Engine

Source: Chevrolet Dealer Service Technical Service Bulletin

Bulletin No: 68-T-23 Re-Issue

Section: VIm

Date: Apr. 24, 1968

TO: ALL CHEVROLET DEALERS

This bulletin is being reissued to correct the part number on page 2 indicated by an asterick.

Early built 1968 Corvettes with 427 Cu. In. Engines may be subject to complaints of hard starting when cold or after a hot engine soak condition.

The hard cold starting problem may be due to interference or bind conditions of the choke rod, resulting in failure of the choke to move fully closed. Choke rod revisions corrected this possible condition with early October production vehicles. Field correction of this condition is outlined on Page2.

On 3 x 2 carburetor engines, a possible condition of hard starting after hot soak has been alleviated by addition of a fuel bowl idle vent (on the primary carburetor) in early October produced vehicles. If this condition is encountered in the field, add an idle vent as outlined on Page 4.

Correction of Choke Rod Interference Condition

427 Cu. In. 390 H.P. Engine

Install new choke rod (Part No. 3937738) which has a greater off-set and a reverse entry direction at the choke lever end. Adjust to one rod diameter interference by bending at the off-set as necessary.

427 Cu. In. - 3 x 2 Carburetor Engines

Install new choke rod (Part No. 3919899) which has a greater off-set leg length and check for interference between choke thermostat coil and the manifold pocket as shown in Figure 3. If interference exists in this area, adjust the coil as much as possible on its mounting location, and if necessary, grind the pocket area or the choke rod end to gain clearance needed.

PARTS AND LABOR DATA - Choke Rod Correction - 390 H.P. Engine

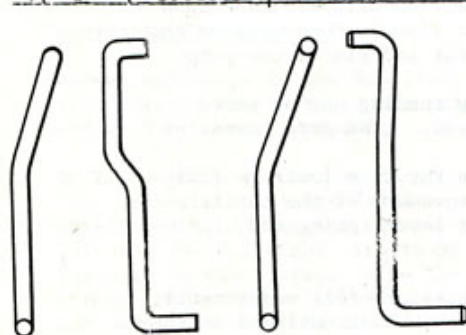
| QUA. | PART NO. | PART DESCRIPTION | P | FC | L | T | OPERATION NO. | TIME |
|------|----------|------------------|------------|----|----|---|---------------|------|
| 1. | 1 | 3937738 | Rod, Choke | X | 26 | | 06428090 | .2 |

PARTS AND LABOR DATA - Choke Rod Correction - 3 x 2 Carburetor Engine

| QUA. | PART NO. | PART DESCRIPTION | P | FC | L | T | OPERATION NO. | TIME |
|------|----------|------------------|------------|----|----|---|---------------|------|
| 1. | 1 | 3919899 | Rod, Choke | X | 26 | | 06428091 | .2 |

PARTS AND LABOR DATA - 3 x 2 Carburetor, Fuel Bowl Idle Vent Addition

| QUA. | PART NO. | PART DESCRIPTION | P | FC | L | T | OPERATION NO. | TIME |
|------|----------|------------------|------------------|----|----|---|---------------|------|
| 1. | 1 | 3918757 | Rod, Vent Valve | X | 53 | | 06404090 | 1.4 |
| 2. | 1 | 3881420 | Valve, Vent | | | | | |
| 3. | 1 | 3881441 | Clamp, Valve Rod | | | | | |
| *4. | 1 | 3947085 | Bowl, Float | | | | | |
| 5. | 1 | 3881435 | Spring | | | | | |
| 6. | 1 | 3901002 | Screw | | | | | |

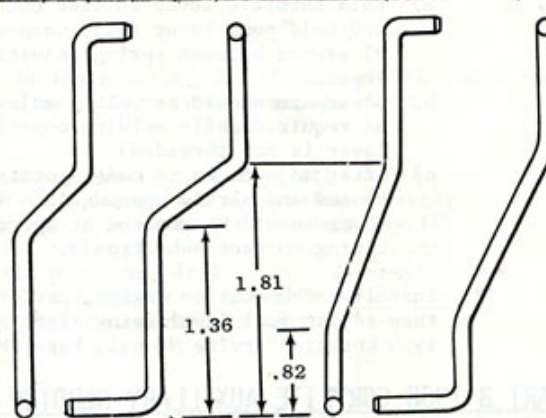


LATE

EARLY

390 HP - 427 Cu. In. Engine

FIGURE 1



LATE

EARLY

3 x 2 Carburetors

FIGURE 2

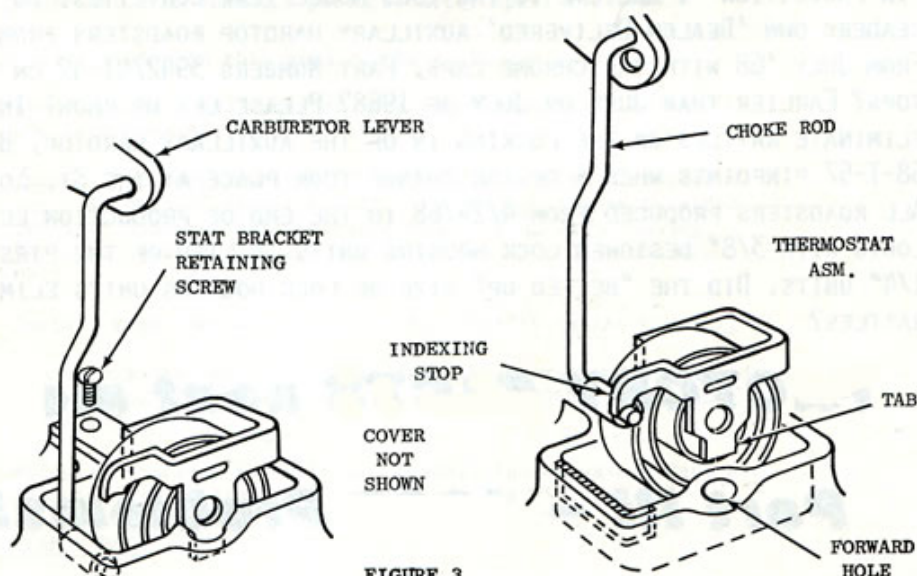


FIGURE 3

Installation of fuel bowl external idle vent - Holley 3 x 2 primary carburetor.

1. Remove Primary Carburetor from engine.
2. Remove Fuel Bowl Assembly
3. Install vent valve, rod, clip and spring on new fuel bowl.
4. Transfer all float bowl components from existing bowl to new bowl and make preliminary float level adjustment.
5. Install new bowl on carburetor with new bowl and body gaskets
6. Adjust idle vent valve as follows:
 - a. Back off idle speed screw until throttle valves are fully closed.
(Choke valve open and throttle arm off idle screw).
 - b. Check clearance between vent valve and seat (.065").
 - c. Bend air vent valve rod to adjust.
 - d. Turn idle screw in until contact is made with throttle lever, then turn screw in 1-1/2 additional turns for preliminary idle speed adjustment.
7. Adjust accelerator pump as follows:
 - a. Hold throttle lever in wide open position with a rubber band and hold pump lever fully compressed (Down), then measure the clearance between spring adjusting nut and arm of the pump lever.

- b. Clearance should be .015"; adjust by turning nut or screw as required while holding opposite end. (The pump operating lever is not threaded).
- c. After adjustment is made, rotate the throttle lever to fully closed and partly open again. Any movement of the throttle lever should be noticed at operating lever spring end, indicating correct pump tip-in.

8. Install carburetor on engine, perform necessary idle adjustments, then adjust fuel level using sight plug method as outlined in the 1968 Chassis Service Manual, Page 6M-30.

Online URL:

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