## 1971 ROCHESTER 2G, 2GC & 2GV 2-BARREL

### ROCHESTER 2G

| JEEP | Synchro-mesh | Auto. Trans. |
|---|---|---|
| 225" V6 | 7041185 | |

### ROCHESTER 2GC

| JEEP | |
|---|---|
| 225" V6 | 7041186 |

| OLDSMOBILE | | |
|---|---|---|
| 350" V8 | 7041155 | 7041156 |
| 455" V8 | | 7041159 |

### ROCHESTER 2GV

| BUICK | | |
|---|---|---|
| 350" V8 (Exc. LeSabre) | 7041143 | 7041142 |
| LeSabre | | 7041442 |

| CHEVROLET | | |
|---|---|---|
| 140" 4 Cyl. Vega | 7041181 | 7041182 |
| 307" V8 (200 HP) | 7041101 | 7041110 |
| 350" V8 (245 HP exc. Camaro) | 7041113 | 7041114 |
| (245 HP Camaro) | 7041127 | 7041102 |
| 400" V8 (255 HP) | 7041117 | 7041118 |

| CHRYSLER CORP. | |
|---|---|
| 318" V8 | 7041180 |

| JEEP | | |
|---|---|---|
| 350" V8 | 7041184 | 7041184 |

| PONTIAC | | |
|---|---|---|
| 307" V8 | 7041101 | 7041110 |
| 350" V8 (Early Cars) | 7041171 | 7041062 |
| (Later Cars) | | 7041162 |
| Firebird with A/C (Early Cars) | | 7041063 |
| (Later Cars) | | 7041163 |
| Altitude Package (All) | | 7041072 |
| 400" V8 | | 7041060 |
| Firebird With A/C | | 7041061 |
| Altitude Package (All) | | 7041070 |
| 455" V8 | | 7041064 |
| Altitude Package | | 7041074 |

### CARBURETOR IDENTIFICATION

Rochester carburetor number stamped on fuel bowl under fuel inlet. Consists of seven digits on top line of stamping pad.

### DESCRIPTION

**Carburetors** are of 2-barrel downdraft design with side fuel **bowl. 2G models** use a manual choke system. 2GC models **are equipped with** an integral automatic choke. 2GV models **use a conventional** choke valve in the carburetor air horn, regulated and operated by a remote choke coil mounted on the exhaust manifold. The 2GC and 2GV models have a vacuum-break diaphragm mounted on the carburetor body.

**Idle Stop Solenoid** – Used on some vehicles when Combined Emission Control Valve (C.E.C.) (see below) not used. Solenoid is energized when ignition switch is on, and controls curb idle speed when engine is running. When ignition switch is turned off, solenoid is de-energized and allows throttle valves to close further. The slower idle RPM thus obtained prevents "dieseling" or after-running.

**Combined Emission Control Valve** – Mounted on carburetor body, the C.E.C. Valve is actuated by a transmission switch and is a dual purpose solenoid and vacuum valve. When energized, the solenoid will increase the normal engine idle speed during high gear operation. This helps in controlling overrun hydrocarbons during deceleration. The solenoid further provides for operation of a valve which opens to supply vacuum to the distributor vacuum advance to obtain full spark advance during high gear operation.

When de-energized, the solenoid permits normal (curb) idle speed to be resumed in the lower gears and at idle provides retarded ignition timing (no vacuum to distributor) for improved emission control. *NOTE – Curb idle speed is obtained by idle stop screw adjustment. See Adjustments.*

**Idle Vent Valve** – Has been eliminated on all 2GC and 2GV carburetors, with the exception of those used on Chrysler Corp. vehicles.

**Throttle Control Solenoid** – Used with manual transmission on some cars. Solenoid is controlled by a transmission mounted switch and provides a high idle speed in third or fourth gear. This reduces exhaust gas dilution and misfiring on closed throttle deceleration.

**Idle Limiter Caps** – On most models these caps lock the idle mixture screws in a factory-set position and do not permit any adjustment of idle mixture settings. The limiter caps should be broken and removed only in case of carburetor overhaul, replacement of fuel bowl, throttle body, etc.

**Delayed Vacuum Break** – New system is used on all 2GC and 2GV carburetors used on V8 engines. An internal check valve is used in the choke vacuum diaphragm unit. After the engine starts, vacuum is applied to the diaphragm through the check valve. Valve action causes the diaphragm to move slowly inward and allows time to overcome cold engine friction and to wet the intake manifold to prevent a lean stall.

**Hot Idle Compensator Valve** – Used on some air conditioned car models. Valve is in carburetor bore and opens in case of excessive engine heat to admit outside air below the throttle valve and prevent overrich idle mixture and engine stalling.

**Variable Vacuum Break** – Included in the choke system on some models. The amount of choke valve "break" is varied by ambient temperature. This is accomplished by the addition of a "bucking" spring on the diaphragm plunger. Since the thermostatic choke coil exerts considerably more pressure on the choke valve during lower temperature operation than in warmer temperatures, this spring bucks against the pressure of the thermostatic coil to afford less choke valve opening in cold weather or to obtain a greater valve

## 1971 ROCHESTER 2G, 2GC & 2GV 2-BARREL (Cont.)

**CARBURETOR ADJUSTMENT SPECIFICATIONS**

| Rochester Carb. No. | Hot Idle Speed (Engine RPM) ① | | Float Level Setting | Float Drop Setting | Pump Rod Setting | Choke Rod Setting | Vacuum Break Setting | Unloader Setting | Auto. Choke Setting |
|---|---|---|---|---|---|---|---|---|---|
| | Synchro-mesh | Auto. Trans. | | | | | | | |
| 7041060 | ..... | 600 | 5/8" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041061 | ..... | 600 | 5/8" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041062 | ..... | 600 | 9/16" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041063 | ..... | 600 | 9/16" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041064 | ..... | 650 | 5/8" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041070 | ..... | 600 | 11/16" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | |
| 7041072 | ..... | 600 | 9/16" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041074 | ..... | 650 | 11/16" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | |
| 7041101 | 600 | ..... | 27/32" | 1 3/4" | 1 5/16" | .075" | .110" | .200" | ② |
| 7041102 | ..... | 550 | 25/32" | 1 3/8" | 1 17/32" | .100" | .170" | .325" | ② |
| 7041110 | ..... | 550 | 27/32" | 1 3/4" | 1 5/16" | .040" | .080" | .200" | ② |
| 7041113 | 600 | ..... | 23/32" | 1 3/8" | 1 17/32" | .100" | .180" | .325" | ② |
| 7041114 | ..... | 550 | 25/32" | 1 3/8" | 1 17/32" | .100" | .170" | .325" | ② |
| 7041117 | 600 | ..... | 23/32" | 1 3/8" | 1 17/32" | .100" | .170" | .325" | |
| 7041118 | ..... | 550 | 23/32" | 1 3/8" | 1 17/32" | .100" | .170" | .325" | ② |
| 7041127 | 600 | ..... | 23/32" | 1 3/8" | 1 17/32" | .100" | .180" | .325" | ② |
| 7041137 | 600 | ..... | 23/32" | 1 3/8" | 1 17/32" | .100" | .180" | .325" | ② |
| 7041142 | ..... | 600 | 15/32" | 1 7/32" | 1 15/32" | .080" | ⑤ | .180" | ② |
| 7041143 | 800 | ..... | 15/32" | 1 7/32" | 1 15/32" | .080" | ⑥ | .200" | ② |
| 7041155 | 550 | ..... | 17/32" | 1 3/8" | 1 11/32" | .140" | .200" | .170" | Index |
| 7041156 | ..... | 500 | 17/32" | 1 3/8" | 1 11/32" | .140" | .200" | .170" | 1 Lean |
| 7041159 | ..... | 500 | 17/32" | 1 3/8" | 1 11/32" | .140" | .215" | .170" | Index |
| 7041160 | ..... | ..... | 5/8" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041161 | ..... | ..... | 5/8" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041162,3 | ..... | 600 | 9/16" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041164 | | | 5/8" | 1 3/8" | 1 11/32" | .085" | .150" | .180" | ② |
| 7041171 | 800 | ..... | 9/16" | 1 3/8" | 1 11/32" | .085" | .160" | .180" | ② |
| 7041180 | ..... | 700 | 21/32" | 1 3/8" | 1 11/32" | .050" | .095" | .140" | ② |
| 7041181 | 850/700 | ..... | 21/32" | 1 7/8" | 1 3/8" | .080" | .140" | .180" | ② |
| 7041182 | ..... | 650/550 | 21/32" | 1 7/8" | 1 3/8" | .080" | .140" | .180" | ② |
| 7041184 | ③ | ③ | 1 3/16" ④ | 1 13/16" | 1 3/8" | .080" | ⑥ | .180" | ② |
| 7041185 | ③ | ③ | 1 5/32" ④ | 1 7/8" | 1 1/16" | ..... | ..... | ..... | ..... |
| 7041186 | ③ | ③ | 1 5/32" ④ | 1 7/8" | 1 1/16" | .055" | ..... | .140" | Index |
| 7041442 | ..... | 600 | 15/32" | 1 7/32" | 1 15/32" | .080" | ⑤ | .180" | ② |

① Higher Speed, Solenoid energized. Lower Speed, solenoid de-energized.
② See instructions under "Adjustment" section.
③ See Tune-up Decal under hood.
④ Measured from bowl gasket to **bottom** of float.
⑤ Primary .150". Secondary .140".
⑥ Primary .160". Secondary .140".

opening in warm weather. There is no adjustment necessary on the bucking spring as its action is governed by the usual "vacuum break" adjustment (see Adjustment).

## ADJUSTMENT

### Idle Speed & Mixture

*NOTE – Carburetors may have locking-type plastic caps on idle mixture adjusting screws.* No attempt should be made to adjust or tamper with idle mixture screws locked in position by these caps. If plastic caps, idle needle and spring are removed during such operations as carburetor overhaul, or fuel bowl or throttle body replacement, special procedure is required to readjust idle mixture screws.

**Idle Speed – Buick** – Air cleaner must be in position, automatic transmission in Drive. Remove vacuum hose at distributor and plug hose. Engine must be at normal operating temperature, but not abnormally hot. Adjust throttle stop screw to obtain specified idle RPM.

**Idle Speed – Chevrolet (except Vega)** – Disconnect fuel hose at vapor canister, disconnect and plug vacuum hose at distributor, engine at normal operating temperature. Manual transmission in neutral, A/C OFF. Auto. Trans. in DRIVE, A/C ON. Adjust throttle stop screw to specified RPM. *NOTE – Do not set idle speed with screw in plunger of C.E.C. Valve. Use screw in carburetor body.*

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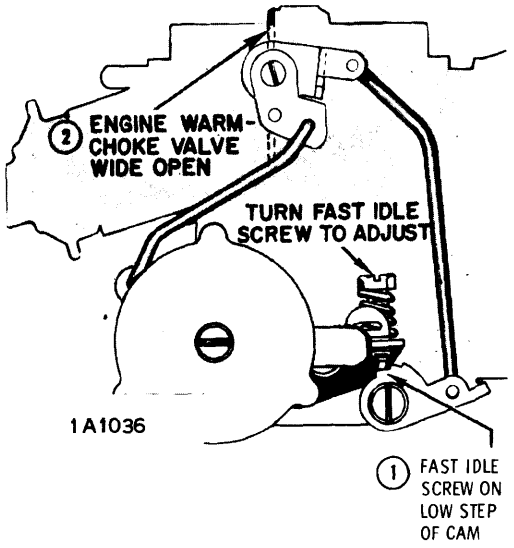
**Idle Speed – Chevrolet Vega** – Air cleaner on, automatic transmission in Drive, engine running at normal operating temperature, A/C On, distributor hose disconnected and plugged at distributor and fuel tank hose disconnected at vapor canister. Disconnect electrical connection at idle stop solenoid and adjust **carburetor** idle speed screw to specification. Reconnect wire at idle stop solenoid and adjust **solenoid** screw to obtain specified RPM. Reconnect hoses.

**Idle Speed & Mixture – Chrysler Corp.** – Air cleaner installed, engine at normal operating temperature, automatic transmission in NEUTRAL, distributor vacuum hose disconnected and plugged at distributor and A/C OFF. Adjust idle speed stop screw to obtain specified idle RPM. Adjust idle mixture screws (within range of limiter caps) for maximum idle RPM. Readjust idle speed screw (if necessary) to specified idle RPM.

**Idle Speed & Mixture–Jeep** – Adjust throttle stopscrew for specified idle speed. With air cleaner installed and Idle speed set, adjust mixture screws equally as required to obtain maximum engine RPM. Now, turn each mixture screw equally clockwise (lean), until a slight drop in engine RPM is noted for each mixture screw. Continue to turn mixture screws in as far as possible while maintaining idle at specified RPM.

**Idle Speed – Oldsmobile** – Air cleaner removed and air cleaner vacuum hose removed and fitting plugged at manifold, A/C OFF, carburetor hose removed and plugged at vapor canister, vacuum hose removed and plugged at distributor, transmission in neutral or PARK. Adjust carburetor throttle stop screw to obtain specified idle RPM.

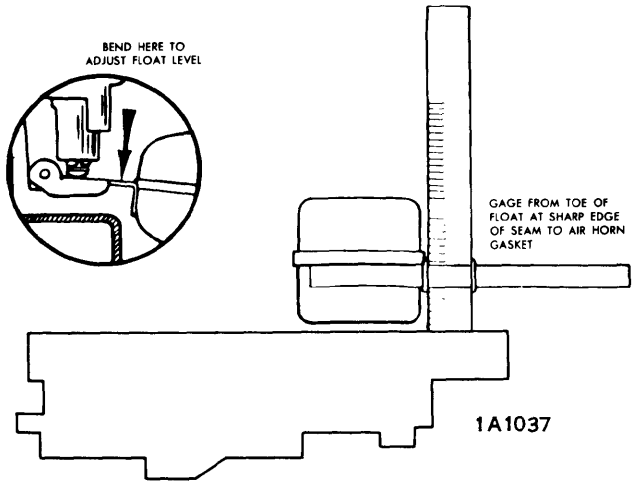
**Idle Speed – Pontiac** – Carburetor "evap" hose disconnected from vapor canister, A/C OFF, automatic transmission in Drive, engine running at normal operating temperature. Adjust carburetor idle stop screw to specified RPM.




**FAST IDLE ADJUSTMENT (OLDSMOBILE)**

**Chrysler Corp.** – Fast idle speed screw on second step of cam. Turn screw to obtain 1800 RPM.

**Oldsmobile** – With fast idle speed screw on low step of fast idle cam, adjust screw for 1000 RPM fast idle speed (synchro-mesh trans. in Neutral, Auto. Trans. in Park).




**FLOAT LEVEL ADJUSTMENT – METAL FLOAT**

### Fast Idle Speed

***NOTE** – This adjustment not necessary except on Oldsmobile and Chrysler Corp. vehicles. On other vehicles, **fast idle speed** will be correct when curb idle speed is adjusted to specification.* Adjustment is made with engine at **normal** operating temperature, choke valve wide open, **transmission** in neutral (all).

### Float Level (Metal Float)

Invert air horn assembly with gasket in place. Measure from face of gasket to lower (sharp) edge of float seam at free end of float. Obtain specified distance (see Specifications) by bending float arm.

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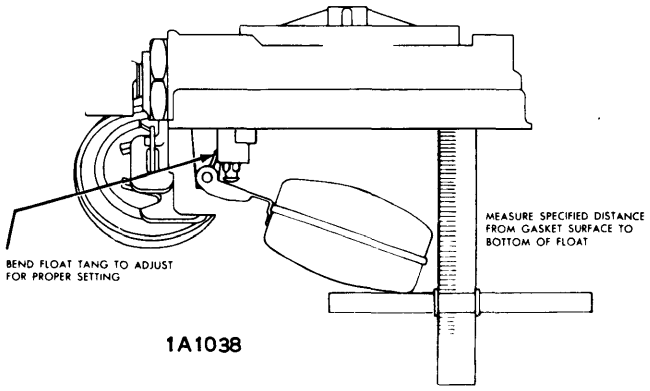
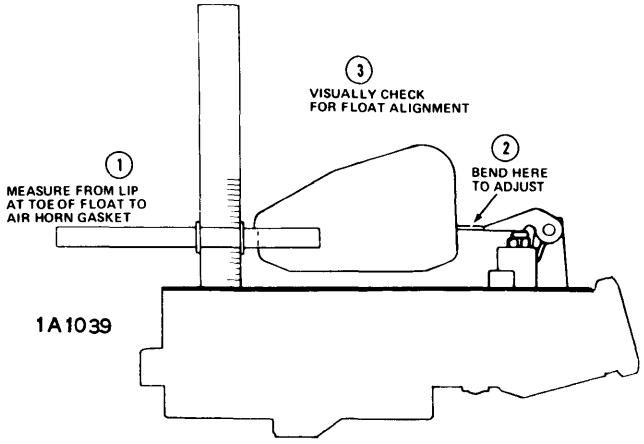



**FLOAT DROP ADJUSTMENT - METAL FLOAT**

### Float Drop (Metal Float)

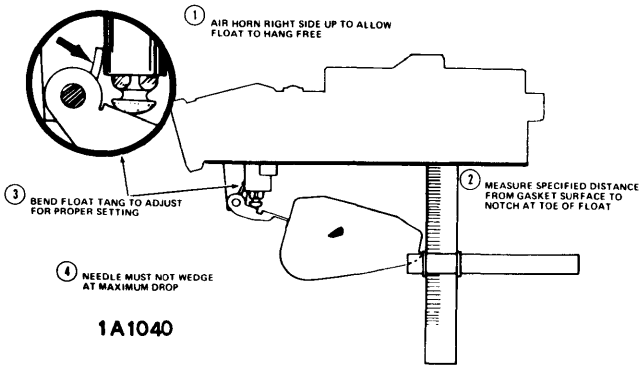
With bowl gasket in place, hold bowl cover in normal position and measure distance from gasket to bottom of float at lowest point. If distance not as specified (see Specifications) bend tang (on float) that rests against needle valve.




**FLOAT LEVEL ADJUSTMENT - PLASTIC FLOAT**

### Float Level (Plastic Float)

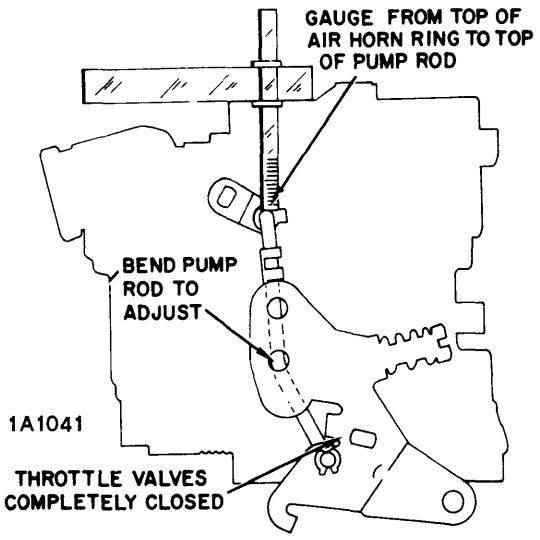
With bowl gasket in place, invert bowl cover and measure distance from gasket to lip on free end of float. If distance not as specified (see Specifications), adjust by bending float arm.




**FLOAT DROP ADJUSTMENT - PLASTIC FLOAT**

### Float Drop (Plastic Float)

Hold bowl cover in normal position with gasket in place and measure distance from gasket to notch on free end of float. If distance not as specified (see Specifications), adjust by bending tang (on float) that rests against needle valve.




**ACCELERATOR PUMP ADJUSTMENT**

### Accelerator Pump

With throttle stopscrew and fast idle screw (when used) backed out so that throttle valves are completely closed, measure distance from top of air horn ring to top of pump connector rod at pump lever. If distance not as specified (see Specifications), adjust by bending pump connector rod at existing bend.

### Idle Vent Valve (Chrysler Corp.)

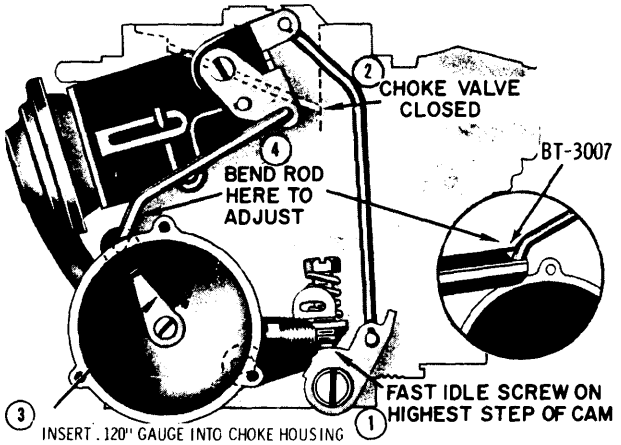
*Valve located under angled cover on bowl cover. Take out two screws and remove cover, gasket, and spring for access to valve for checking and adjustment.*

*NOTE - Make fast idle adjustment first.* With the fast idle screw on the second step of the fast idle cam (next to the highest step) the idle vent valve should be closed (seated). If adjustment correct on second step of cam, rotate cam to place fast idle screw on next lower step. Valve should just begin to open. To adjust, turn the adjustment screw in the plastic valve until it just closes with the fast idle screw on the second step of the fast idle cam.

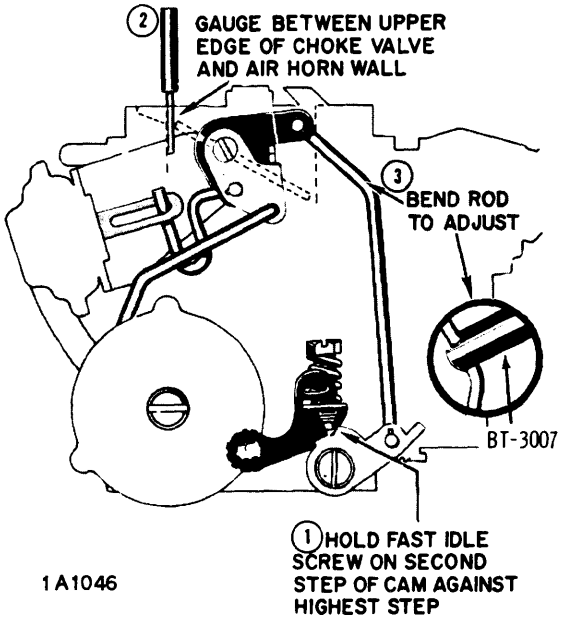
### Intermediate Choke Rod (2GC)

With fast idle screw on highest step of cam and choke valve fully closed, insert a .120" gauge into choke housing and rotate choke coil lever clockwise. Lever should contact gauge at the same time choke valve closes, if not, bend rod as shown to adjust.

## 1971 ROCHESTER 2G, 2GC & 2GV 2-BARREL (Cont.)



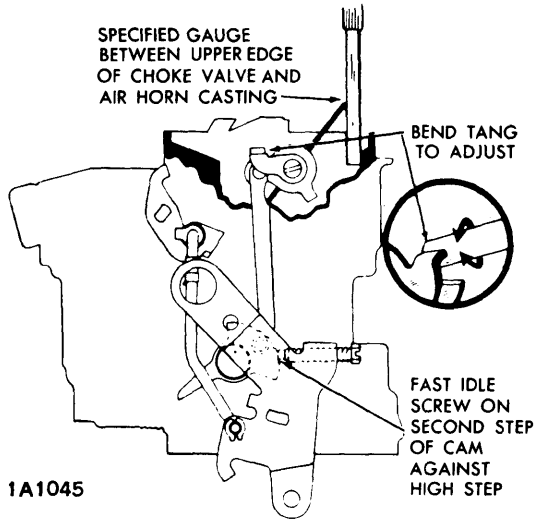

**INTERMEDIATE CHOKE ROD ADJUSTMENT – 2GC**




**CHOKE ROD ADJUSTMENT (2GC)**

### Choke Rod (All Models)

**2GV Carburetors** – Place fast idle speed adjusting screw in normal idle position, which is normally one to two turns in after contact with the lowest step of the fast idle cam, then after this initial adjustment, place screw on second step of the cam and against the shoulder of the high step. With choke held towards closed position, measure distance between upper edge of the choke valve and inside air horn wall using specified gauge (see Specifications). To adjust, bend tang on choke shaft lever.



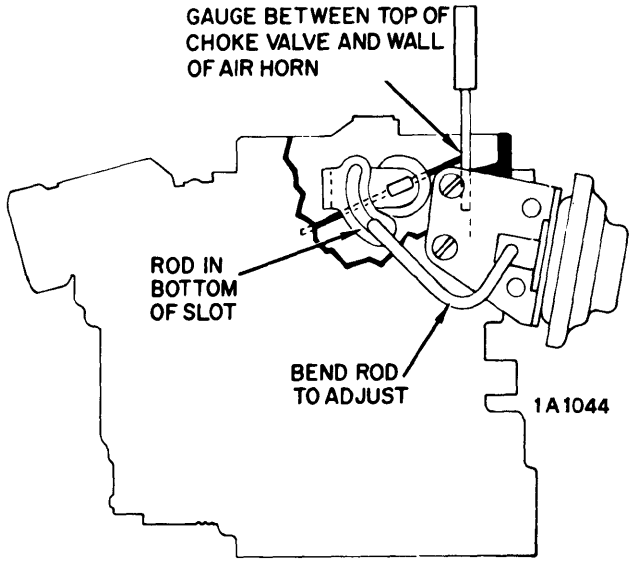

**CHOKE ROD ADJUSTMENT (2GV)**

**2GC Carburetors** – Position fast idle screw on second step of fast idle cam and against shoulder of high step. Measure clearance between upper edge of choke valve and air horn wall (see Specifications). Adjust by bending connecting rod as shown in illustration.

### Vacuum Break (2GV Carbs.)

*NOTE – Buick & Jeep 2GV carburetors have two vacuum break units (primary & secondary) which are adjusted separately.*

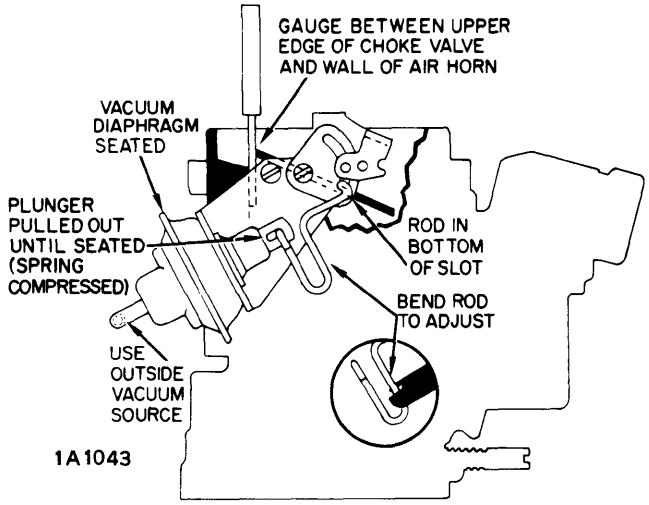
**Buick & Jeep (Primary)** – *This unit mounted on throttle lever side of carburetor.* Seat vacuum break diaphragm using an outside vacuum source or push diaphragm plunger inward until seated. Rotate choke valve toward closed position so that vacuum break rod is at bottom end of slot in choke valve lever (make certain fast idle screw does not hang up on fast idle cam and prevent choke valve closing). Gauge clearance between upper edge of choke valve and air horn wall. If this clearance not correct (see Specifications), adjust by bending vacuum break rod at existing bend as required.




**PRIMARY VACUUM BREAK ADJUSTMENT (BUICK & JEEP 2GV)**

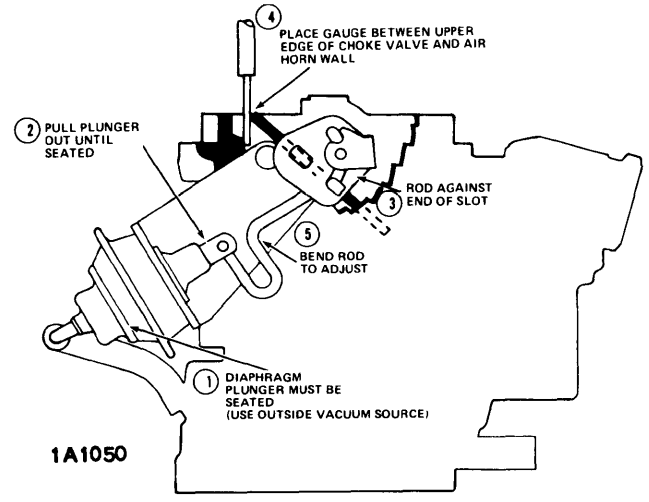
## 1971 ROCHESTER 2G, 2GC & 2GV 2-BARREL (Cont.)

**Buick & Jeep (Secondary) –** *This unit mounted on opposite side of carburetor from primary vacuum break.* Use outside vacuum source to hold vacuum break diaphragm in seated position *(CAUTION – It will require approximately 8 seconds for diaphragm to retract).* Rotate choke valve toward closed position with vacuum break rod at lower end of slot in choke valve lever until spring-loaded diaphragm plunger is fully extended *(CAUTION – Force should just be sufficient to fully compress spring without pulling vacuum diaphragm off its seat).* Hold choke valve in this position and gauge clearance between upper edge of choke valve and air horn wall. If clearance not correct (see Specifications), adjust by bending vacuum break link at existing loop as required.




**SECONDARY VACUUM BREAK ADJUSTMENT (BUICK & JEEP 2GV)**

**Chevrolet & Vega –** Use outside vacuum source to seat vacuum break diaphragm or push diaphragm plunger in until it seats. Move choke valve toward closed position as far as possible and make certain diaphragm rod is at bottom end of slot in choke valve lever. With choke valve held in this position, gauge clearance between upper edge of choke valve and air horn wall. If clearance not correct (see Specifications), adjust by bending vacuum break rod at existing bend as required.




**VACUUM BREAK ADJUSTMENT (CARBURETORS WITH SPRING-LOADED PLUNGER)**

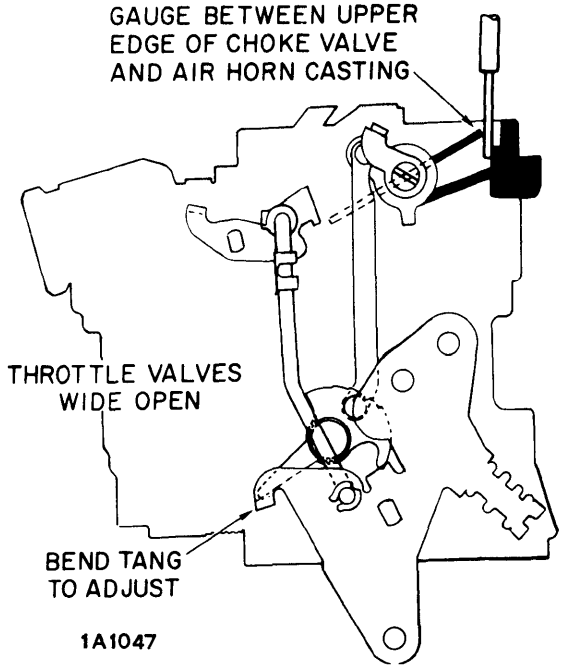
**Pontiac & Chrysler Corp. Carburetors –** Fully seat the vacuum break diaphragm using an auxiliary vacuum source. Bleed valve restriction will delay full seating for a few seconds. After diaphragm is fully seated, push choke valve toward the closed position until the spring-loaded diaphragm plunger is fully extended. Hold choke valve in this position and check clearance between upper edge of choke valve and air horn wall with specified gauge or drill (see Specifications). If adjustment required, bend vacuum break link. *CAUTION – Be careful when compressing the diaphragm plunger spring that the force used in closing the choke valve does not pull the vacuum diaphragm off its seat.*

### Vacuum Break (2GC Carbs.)

**Oldsmobile –** Use an outside vacuum source to fully seat vacuum break diaphragm *(CAUTION – Diaphragm has bleed valve restriction and several seconds will be required to retract diaphragm).* Make certain fast idle screw is on high step of fast idle cam, push choke valve toward closed position until spring loaded diaphragm plunger is fully extended (spring compressed) with rod at outer end of plunger slot *(CAUTION – Force used in closing choke valve should be just sufficient to extend diaphragm plunger without pulling diaphragm off its seat).* With choke valve in this position, gauge clearance between upper edge of choke valve and air horn wall. If clearance not correct (see Specifications), adjust by bending diaphragm connecting link at existing loop.

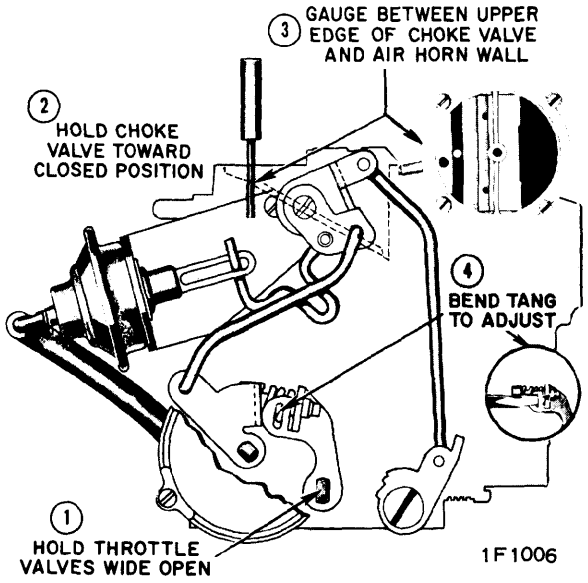
### Unloader (All Models)

With throttle valves held wide open, clearance between upper edge of choke valve and air horn wall should be as specified (see Specifications). Adjust by bending tang on throttle lever (all models except Oldsmobile). On Oldsmobile 2GC carburetors, adjust by inserting screwdriver blade in slot in throttle lever and bending tang toward pad on intermediate choke lever for more clearance, or away from pad for less clearance.




**UNLOADER ADJUSTMENT (EXCEPT OLDSMOBILE)**

## 1971 ROCHESTER 2G, 2GC & 2GV 2-BARREL (Cont.)




UNLOADER ADJUSTMENT (OLDSMOBILE)

### Automatic Choke (2GC Carburetors)

Loosen three retaining screws on choke coil cover. Rotate cover until index mark on cover is aligned with correct mark on choke coil housing (see Specifications).

### Automatic Choke (2GV Carburetors)

Disconnect choke rod at choke valve lever and check choke rod length for each car model as detailed below. *NOTE – When reconnecting choke rod, rod must enter hole in choke lever freely and without binding.*

**Buick & Jeep** – Close choke valve completely. Pull up on choke rod. End of rod should fit in gauge notch on side of choke lever. If adjustment necessary, bend rod at lower existing bend. On Buick, connect rod in "Std" hole of choke lever.

**Chevrolet & Vega** – Hold the choke valve wide open and push choke rod down to limit of travel. Top of rod should be even with center of hole in choke lever. If adjustment necessary, bend rod at existing bend. *NOTE – On standard Car application, top of choke rod should fit notch in choke lever.*

**Chrysler Corp.** – With choke valve completely closed, pull up on choke rod. Bottom of rod end should be even with top of hole in choke lever (one rod diameter interference fit). If adjustment required, bend rod at lower existing bend.

**Pontiac** – Hold choke valve closed and pull upward on choke rod. Bottom of rod should fit notch in choke lever. If adjustment necessary, open or close "U" bend in choke rod.

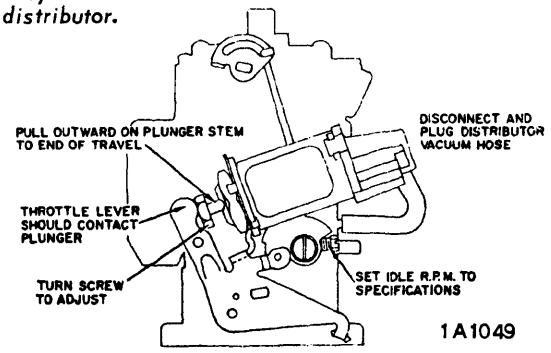
### Chevrolet Combined Emission Control Valve (C.E.C.)

*NOTE – This adjustment should be made and is necessary only after* 1) *Replacement of solenoid,* 2) *Major carburetor overhaul, or* 3) *Removal and replacement of throttle body.* After checking cam angle, ignition timing and curb idle engine speed, the following procedure is used to adjust the C.E.C. Valve:

1) Set the following conditions: Engine running at normal operating temperature, manual transmission in neutral, automatic transmission in DRIVE, vacuum hose removed and plugged at distributor, fuel tank hose from vapor canister disconnected and A/C OFF.

2) Manually extend the C.E.C. Valve plunger to contact the throttle lever and to the limit of its travel. Adjust plunger length to obtain 900 RPM (Synchro-mesh) or 650 RPM (Auto. Trans. in DRIVE).

*NOTE – Do not confuse the C.E.C. Valve with the conventional idle stop solenoid. Identification of the Valve is made by the vacuum hoses connected to the carburetor and the distributor.*




C.E.C. VALVE ADJUSTMENT

### Throttle Control Solenoid (Buick V8 Engines)

This solenoid used on manual transmissions and is controlled by a transmission mounted switch to increase idle speed when transmission is in third or fourth gear. Adjustment is made as follows:

1) With transmission in neutral and engine running at normal operating temperature, disconnect solenoid connector wire.

2) Disconnect relay single connector and plug into solenoid to energize.

3) Adjust solenoid adjusting bolt to obtain an idle speed of 1100 RPM. *NOTE – Solenoid is assembled at factory with plunger bottomed against stop and cannot be adjusted inward unless solenoid bracket also adjusted.*

### Throttle Dashpot

**Buick (with Auto. Trans.)** – With throttle valves in hot (curb) idle position, adjust dashpot two turns beyond point where plunger contacts throttle lever (plunger depressed 100").

**Oldsmobile** – With throttle valves in hot (curb) idle position, depress dashpot plunger fully and adjust dashpot for .060" clearance between end of dashpot plunger and throttle lever.

## OVERHAUL

### Disassembly

1) Remove fuel inlet fitting, gasket, fuel filter and spring. Remove pump rod by removing lower retaining clip and rotating pump rod until lug on upper end of rod passes through upper pump lever. Remove fast idle cam attaching screw, then remove fast idle cam and rod assembly by rotating until lug on upper end of choke rod passes through slot in upper choke lever and collar assembly.

2) Remove vacuum break diaphragm hoses, from both units (if so equipped). Remove primary vacuum break diaphragm by removing two attaching screws, remove break rod from

## 1971 ROCHESTER 2G, 2GC & 2GV 2-BARREL (Cont.)

lever by rotating rod until end slides out of slot in lever and lug on other end of rod out of slot of diaphragm plunger shaft. Remove secondary vacuum break unit (if equipped) by removing lever from end of choke shaft, then remove lever from diaphragm plunger rod and rod from plunger shaft. Remove bracket attaching screws and remove diaphragm and bracket assembly.

3) Remove air horn attaching screws and guide air horn gently upward from bowl. Invert air horn and remove float hinge pin and float assembly, remove float needle from arm, then remove float needle seat and gasket. Remove power piston by depressing stem and allowing it to snap free. Remove pump plunger assembly from inner pump arm by rotating assembly until end of shaft will slide out of hole in inner pump lever. Loosen set screw on inner arm and remove outer lever and shaft assembly. *NOTE – Plastic washer used between outer pump lever and air horn casting, do not immerse in carburetor cleaner.*

4) Remove choke valve retaining screws and remove choke valve from shaft. Remove shaft, then remove lever and collar assembly from shaft, noting position of choke lever in relation to trip lever on choke shaft, for easier assembly.

5) Remove pump plunger return spring from well, then remove check ball by inverting bowl and shaking into hand, remove pump inlet screen. Remove main jets, power valve and gasket. Remove venturi attaching screws (3), cluster and gasket. *NOTE – Center cluster has smooth shank and fibre gasket to seal accelerator pump by-pass.*

6) Remove plastic main well inserts, then using needle-nose pliers, remove pump discharge ball spring "T" retainer and remove discharge spring and ball. *NOTE – Throttle body assembly is serviced as a complete unit.* Invert carburetor and remove throttle body to bowl attaching screws, throttle body and body to bowl gasket. On 2GC carburetors, remove choke cover attaching screws, retainer, cover and coil assembly and gasket. Also on 2GC, remove baffle plate from inside choke housing, then remove choke housing attaching screws (2), choke housing and gasket; remove screw from end of intermediate choke shaft, then remove intermediate choke lever, choke coil lever, shaft assembly and dust seal from choke housing.

### Cleaning & Inspection

Clean all carburetor castings and metal parts in cleaning solvent. Do not immerse choke housing, coil assembly, pump plunger, or vacuum break diaphragm in solvent. Clean pump plunger in clean gasoline. Clean vacuum break diaphragm with clean cloth. Blow out all passages with compressed air. Inspect all parts for wear or damage and replace as necessary.

### Reassembly

Use all new gaskets. Reassemble carburetor by reversing disassembly procedure and noting the following:

**Idle Mixture Screws & Limiter Caps** – After installing mixture screws and springs, back out screws 2 turns as a preliminary idle adjustment. Do not install new limiter caps until idle mixture has been completed.

**Choke Valve Installation** – Install valve with identifying mark "RP" upward, center choke valve before tightening screws. *NOTE – Valve can be centered by installing fast idle lever and choke trip lever on end of shaft and maintaining .020" clearance between fast idle lever and air horn casting, or between choke trip lever and choke lever and collar assembly.* Stake choke valve screws lightly after tightening. Choke valve should move freely in housing.

**Accelerating Pump Assembly** – Lubricate pump shaft with suitable lubricant (light grease) when installing in bowl cover. Make certain that pump check balls are not interchanged. Inlet check ball is aluminum, discharge check ball is steel. *NOTE – Some models may have a two-piece pump plunger assembly in place of an inlet check ball.*