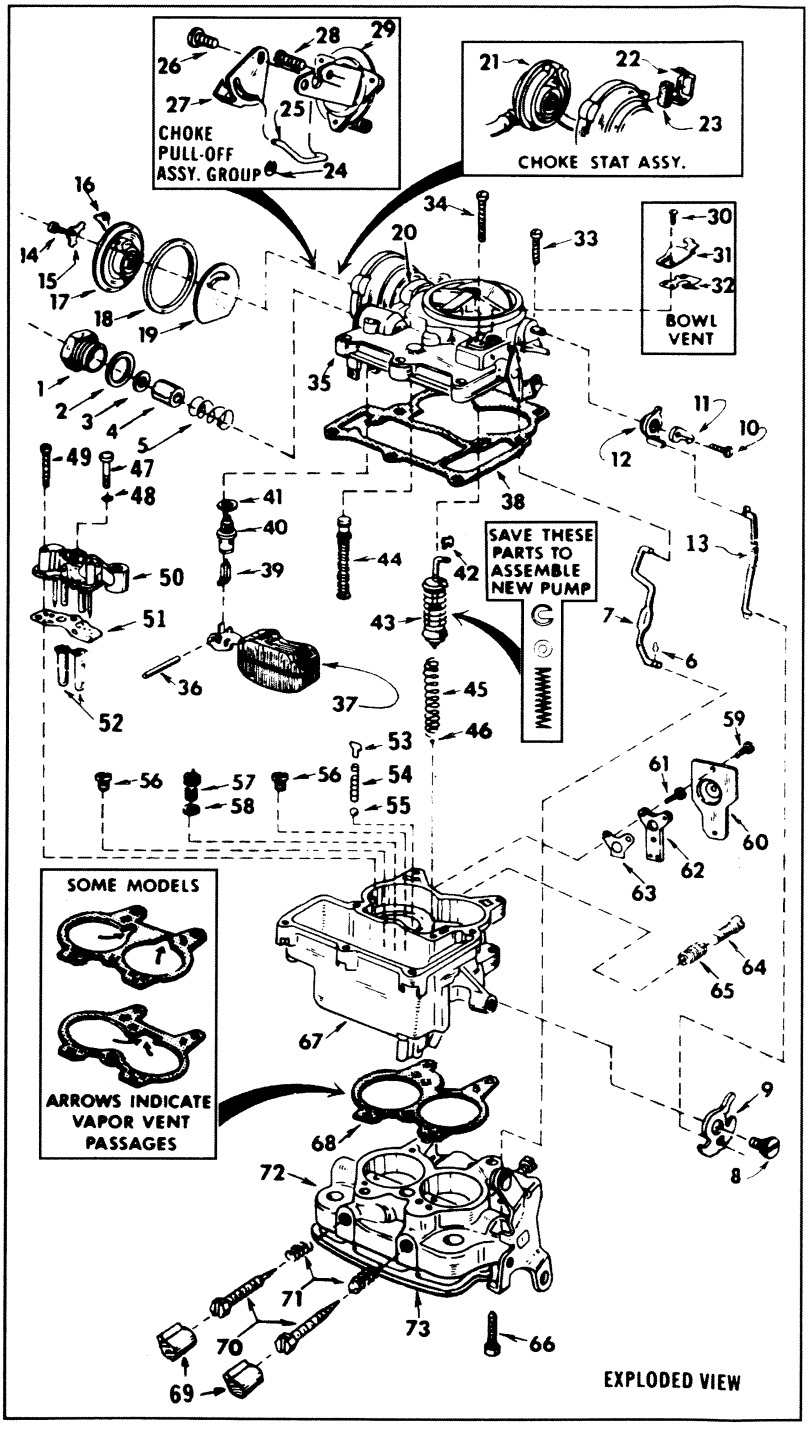
FUEL SYSTEM
SERVICE INSTRUCTION WORKSHEET

TO REPAIR
ROCHESTER CARBURETOR
2 BARREL --- Models 2G, 2GC, 2GV

1. **Carefully read the text in the following pages to become familiar with the contents of this worksheet before performing carburetor overhaul.**
2. The exploded view shown is typical of the model carburetor this kit will service. The view may differ slightly from the actual carburetor being overhauled.
3. Use the exploded view as a guide. The numerical sequence may generally be followed to disassemble the carburetor far enough to permit cleaning and inspection.
4. Parts list shown DOES NOT reflect the contents of the kit
5. Kit may contain extra parts intended for other carburetors within this group. Substitute identical replacement parts for original worn parts found in carburetor

PARTS LIST SHOWN DOES NOT REFLECT THE CONTENTS OF THE KIT.



DISASSEMBLY - ASSEMBLY HIGHLIGHTS

1. UPON DISASSEMBLY, MARK LOCATION & NOTE POSITION OF ALL SPRINGS WHICH HAVE TO BE REMOVED.
2. RETAIN ALL OLD GASKETS FOR MACHING PURPOSES.
3. SOME MODELS: REMOVE LIMITER CAPS (69) BY TURNING IN #8 SHEET METAL SCREW IN CENTER OF CROSS SLOTS FORCING LIMITER CAPS OFF.
4. WHEN REMOVING MIXTURE SCREWS (70) MARK POSITION, TURN IN UNTIL LIGHTLY SEATED, COUNTING NUMBER OF TURNS, TURN OUT TO INDEX MARK, RECORD NUMBER OF TURNS FOR RE-ASSEMBLY AND THEN REMOVE. IF MIXTURE SCREWS WERE REMOVED WITHOUT INDEXING, TURN IN UNTIL LIGHTLY SEATED. TURN OUT TWO TURNS.
5. COVER OPENING ON INTAKE MANIFOLD AFTER CARBURETOR IS REMOVED.
6. TO PREVENT LOSS OF COOLANT, DO NOT DISCONNECT HOSE FROM CHOKE STAT (21).
7. INSTALL CHOKE HOUSING SEAL (20) WITH LIP FACING OUTWARD.
8. LIGHTLY LUBRICATE PISTON ASSEMBLY CUP (43) BEFORE INSTALLING.
9. DO NOT ALLOW **VITON** NEEDLE (39) TO BE PRESSED INTO SEAT (40).
10. **IMPORTANT:** WHEN TWO SEAT GASKETS (41) ARE SUPPLIED, USE THIN GASKET FIRST. IF FLOAT MEASUREMENT IS EXTREMELY LOW, THEN REPLACE WITH THICKER GASKET.
11. CHECK THROTTLE LINKAGE FOR FREEDOM OF MOVEMENT BEFORE & AFTER INSTALLATION OF CARBURETOR ON ENGINE.
12. WHEN RE-INSTALLING POWER VALVE PISTON (44) IN AIR HORN ASSEMBLY (35), LIGHTLY STAKE UNIT IN PLACE.
13. TURN IN IDLE AIR SCREW (64, WHERE USED) UNTIL SEATED THEN TURN OUT 2 TURNS.

CLEANING

Cleaning must be done with carburetor disassembled. Use spray cleaner and a stiff bristle brush to remove dirt and carbon deposits. Do not use abrasives and wires to clean parts and passageways. Wash off in suitable solvent, and clear all passageways with compressed air.

Caution: When cleaning with solvent do not soak or spray parts containing rubber, leather, plastic and electrical components.

PARTS LIST

1. Adapter, Fuel Inlet
2. Gasket, Adapter
3. Gasket, Fuel Filter
4. Filter, Fuel Inlet
5. Spring, Overide, Filter
6. Clip, Pump Rod Lower
7. Rod, Pump Piston
8. Screw, Fast Idle Cam
9. Cam, Fast Idle
10. Screw, Lever, Trip
11. Lever, Trip
12. Lever, Engaging Choke
13. Rod, Connecting, Choke
14. Screw, Retainer, Choke Cover
15. Retainer, Serrated, Choke Cover
16. Retainer, Choke Cover
17. Cover, Choke Stat Assembly
18. Gasket, Choke Cover
19. Deflector, Heat, Choke Cover
20. Seal, Choke Housing (Not Shown)
21. Choke Stat Cover Assembly #
22. Holder, Filter #
23. Filter, Intake Air #
24. "E" Clip, Choke Pull-Off Link #
25. Link, Choke Pull-Off #
26. Screw, Choke Shaft Slotted Lever #
27. Lever, Choke Shaft Slotted #
28. Screw, Choke Pull-Off Mounting #
29. Choke Pull-Off Assembly #
30. Screw, Vent Valve Cover #
31. Cover, Vent Valve #
32. Valve, Vent #
33. Screw, Air Horn Mounting (Short)
34. Screw, Air Horn Mounting (Long)
35. Air Horn Assembly
36. Rod, Float Hinge
37. Float Assembly
38. Gasket, Air Horn
39. Needle, Fuel Inlet
40. Seat, Fuel Inlet
41. Gasket, Seat
42. Clip, Pump Piston
43. Piston Assembly, Pump
44. Piston Assembly, Power Valve
45. Spring, Piston Return
46. Ball Check, Pump Intake (small)
47. Screw, Center, Venturi Assy.
48. Gasket, Center Screw
49. Screw, Mounting, Venturi Assembly
50. Venturi Assembly
51. Gasket, Venturi
52. Tube, Main Well (2)
53. Retainer, Spring, Pump Discharge
54. Spring, Pump Discharge Ball
55. Ball Check, Pump Discharge (Large)
56. Jet, Main (2)
57. Power Valve
58. Gasket, Power Valve
59. Screw, Hot Idle Compensator Cover
60. Cover, Hot Idle Compensator
61. Screw, Bi-Metallic Valve
62. Bi-Metallic Valve, Hot Idle Compensator
63. Gasket, Bi-Metallic Valve
64. Screw, Idle Air Adjusting (By-Pass Idle System)
65. Spring, Idle Air Adjusting Screw
66. Screw, Throttle Body to Main Body
67. Main Body
68. Gasket, Throttle Body to Main Body (Match up old Gasket)
69. Cap, Limiter #
70. Screw, Idle Mixture
71. Spring, Idle Mixture Screw
72. Throttle Body Assembly
73. Gasket, Flange

Some Models

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ADJUSTMENT DATA

FIG. 1
FLOAT LEVEL ADJUSTMENT

1. Invert air horn with gasket in place.
2. PLASTIC FLOAT:
   Measure distance from lip at toe of float to air horn gasket.
   METAL FLOAT:
   Measure distance from toe edge of seam on float to air horn gasket.
3. To adjust, bend float arm as shown (both floats).

NOTE: Do not exert pressure on resilient needle valve as incorrect setting may result.

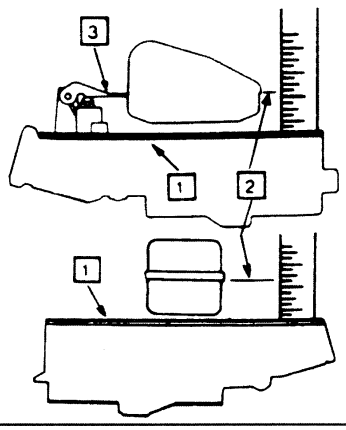


FIG. 2
FLOAT DROP ADJUSTMENT

1. Hold air horn right side up. Allow float to hang free. Retain gasket in place.
2. PLASTIC FLOAT:
   Measure distance from gasket surface to lip at toe of float.
   METAL FLOAT:
   Measure distance from gasket surface to bottom of float.
3. To adjust, bend float tang.

NOTE: Needle must not wedge at maximum drop.

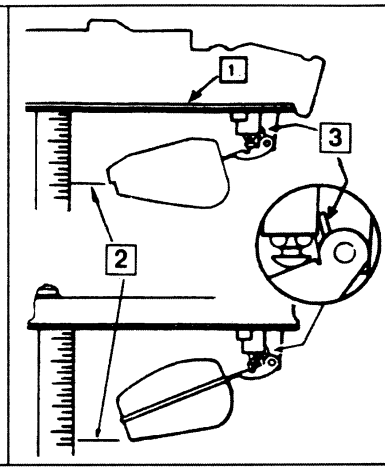


FIG. 3
PUMP ROD ADJUSTMENT

1. Back out idle speed screw so that throttle valves are fully closed.
2. Measure specified distance from top of pump rod to top of air horn ring.
3. To adjust, bend rod.

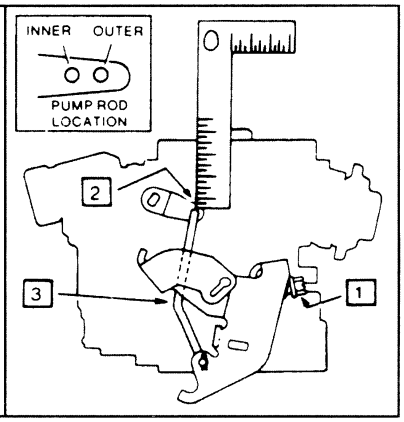


FIG. 4
BOWL VENT ADJUSTMENT

NOTE: Idle speed should be adjusted prior to this adjustment.

TYPE I:
1. With choke valve wide open, fast idle screw must be off fast idle cam (idle stop solenoid energized).
2. Measure distance between widest point of valve and seat. Should be .025".
3. To adjust, bend actuating tang on pump lever.

TYPE II:
4. Place idle speed screw on 2nd step of fast idle cam next to highest step. Vent valve should just be closed.
5. If valve is not closed, adjust be turning vent valve screw.

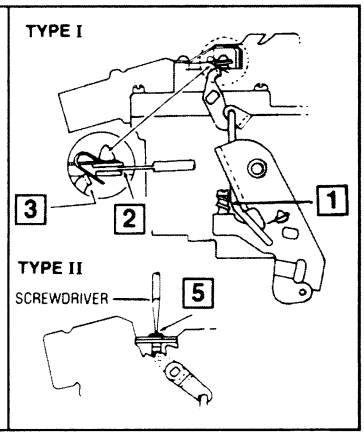


FIG. 5
INTERMEDIATE CHOKE ROD ADJUSTMENT

NOTE: Remove thermostatic cover, heat shield, then open throttle valves.

1. Rotate intermediate choke lever to close choke valve.
2. Check as specified piston location B1, B2, B3 with reference to bore.
3. To adjust, bend rod.

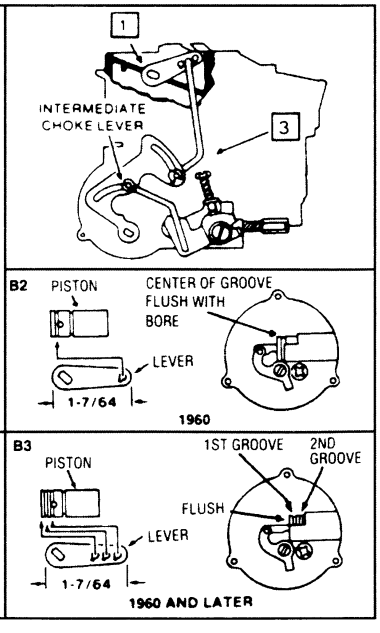


FIG. 6
INTERMEDIATE CHOKE ROD ADJUSTMENT

1. With thermostat cover and heat shield removed, hold choke valve in closed position.
2. Measure as specified piston location with reference to end of bore.
3. To adjust, bend rod.

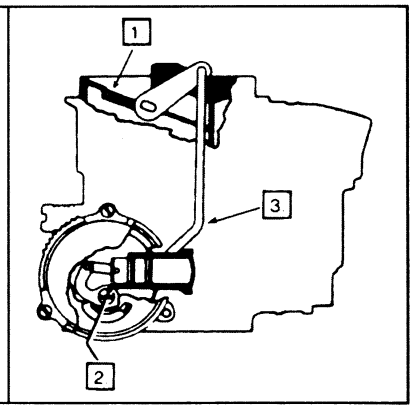
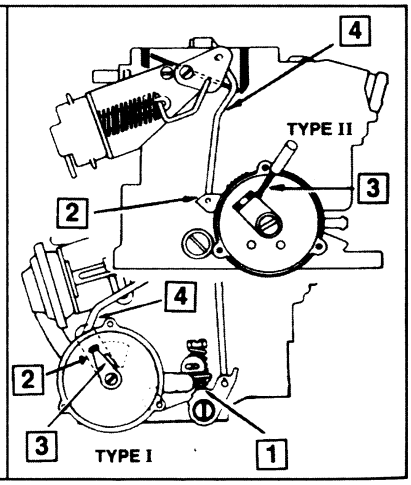


FIG. 7
INTERMEDIATE CHOKE ROD ADJUSTMENT

1. With thermostatic cover and inside baffle plate removed, place fast idle screw on highest stop of cam.
2. Close choke valve by pushing up on choke coil lever.
3. Type I—Lever must line up with edge of projection inside choke housing.
   Type II—Lever must line up with edge of .120" plug gauge inserted in hole inside choke housing.
4. To adjust, bend rod at kink.



ADJUSTMENT DATA (Cont'd)

FIG. 8
CHOKE ROD CAM ADJUSTMENT

1. Place fast idle screw on 2nd step of cam next ot highest step.
2. Hold choke valve closed.
2A. Models with split choke push up on lever so rods are in end of slots.
3. Measure distance between upper edge of choke valve and air horn wall using a gauge or drill bit.
4. To adjust, bend rod as shown.
4A. Models with split choke to adjust, bend rod as shown.

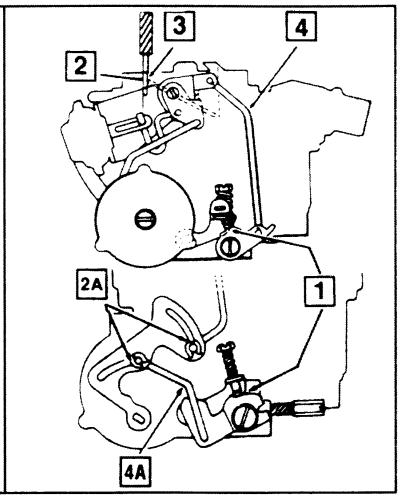
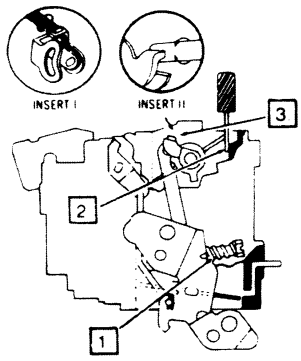


FIG. 9
CHOKE ROD (FAST IDLE CAM) ADJUSTMENT

IMPORTANT: Before making adjustments 1-2-3, read note and paragraphs "Procedure 1" and "Procedure 2" below.

1. Place low idle speed screw on 2nd step of fast idle cam against shoulder of high step.
2. Measure as specified between upper edge of choke valve and wall of air horn.
3. To adjust, bend tang as necessary (see insert I or II).
NOTE: It is required that both slow idle and fast idle screws be positioned as follows before initiating a choke rod adjustment.

Procedure 1—Models using single idle stop screw only -rotate stop screw clockwise until it just touches bottom step of fast idle cam, then turn screw in one full turn. Models using both a slow idle and a fast idle screw -turn slow idle screw in until it just contacts stop. Then turn this screw in one full turn from this point. Next, turn the fast idle screw in until it touches bottom step of fast idle cam.



Procedure 2—All models -position fast idle screw on second step of fast idle cam against shoulder of high step. While holding screw in this position, choke clearance between upper edge of choke valve and wall of air horn. Adjust to specified dimension by bending tang on choke lever and collar assembly.

FIG. 10
VACUUM BREAK ADJUSTMENT (Throttle side)

1. With fast idle screw on highest step of cam, seat vacuum diaphragm using an outside vacuum source.
2. Pull out on plunger until seated (spring compressed).
3. Rod must locate in bottom of slot when pushing up on lever.
4. Gauge as specified between wall of air horn and upper edge of choke valve.
5. To adjust, bend link.

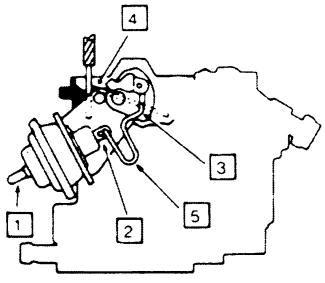


FIG. 11
AUXILIARY VACUUM BREAK ADJUSTMENT (Choke side)

1. With fast idle screw on highest step of cam, seat vacuum diaphragm using an outside vacuum source.
2. Pull out on plunger until seated (spring compressed) (See notes).
3. Push up on lever so rod is in bottom of slot.
4. Gauge as specified between wall of air horn and upper edge of choke valve.
5. To adjust, bend rod.

NOTES:
A. Do not pull vacuum diaphragm off its seat.
B. When purge filter is used (see insert I), remove vacuum break diaphragm hose and rubber cover on filter element from vacuum break tube. Tape small bleeder hole closed. After adjustment, tape must be removed, and the above replaced in reverse order.

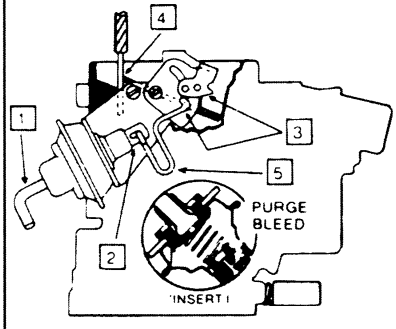


FIG. 12
CHOKE UNLOADER ADJUSTMENT

1. Maintain throttle valves wide open position.
2. Gauge as specified between wall of air horn and upper edge of choke valve.
3. To adjust, bend tang (see insert I). **NOTE:** On split choke linkage model 2GC, bend tang on dechoke lever on choke side of carburetor (see insert II).

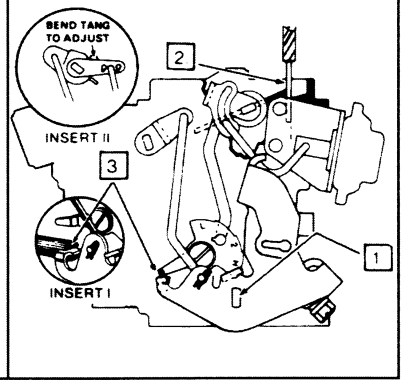


FIG. 13
UNLOADER ADJUSTMENT

1. Position throttle valves wide open.
2. Move choke valve toward closed position.
3. Gauge as specified between air horn wall and upper edge of choke valve.
4. To adjust, bend tang.

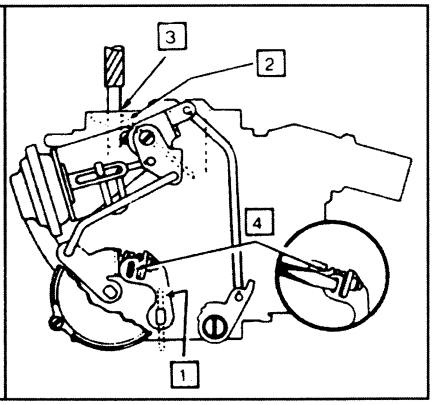
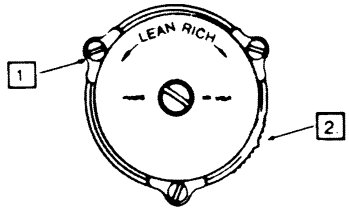


FIG. 14
AUTO CHOKE ADJUSTMENT

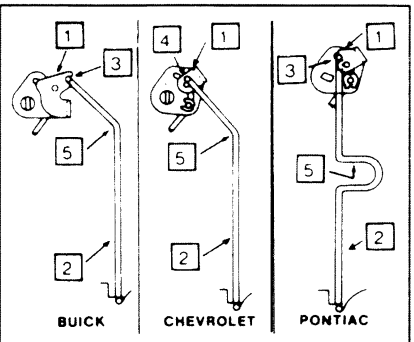
1. Loosen 3 hold-down screws.
2. Align index mark on choke cover with specified notch on housing.



ADJUSTMENT DATA (Cont'd)

FIG. 15
CHOKE COIL ROD ADJUSTMENTS

1. Remove upper end of rod from choke lever. Hold choke valve fully closed.
2. Lift upward on rod against stop.
3. End of rod should fit gauge notch.
4. Bottom of rod even with top of hole.
5. To adjust, bend rod.



(TYPICAL)

FIG. 16
CHOKE COIL ROD ADJUSTMENT

1. Remove upper end of rod from choke lever.
2. Hold choke valve wide open.
3. Push down on rod to end of travel.
4. Top edge of pin or rod on swivel must be in specified location.
5. To adjust, bend rod or turn swivel up or down.

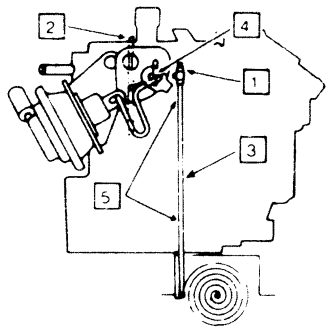
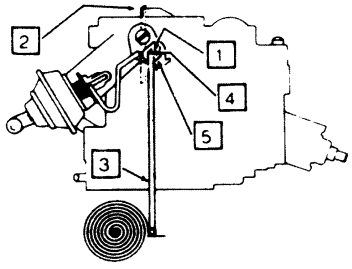
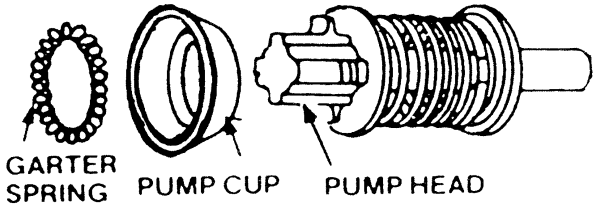


FIG. 17
CHOKE COIL ROD ADJUSTMENT

1. Remove upper end of rod from choke lever.
2. Hold choke valve wide open.
3. Push down on rod to end of travel.
4. Rod must locate in bottom of slot in lever.
5. To adjust, place screw driver in slot and bend lever as needed.



NOTE: '71 Models- Top of rod must fit notch in lever.



KITS WITH PUMP CUP ONLY
Remove old cup with garter spring (if used) from pump head. Install new cup (with new garter spring if used) in same position on pump.

SPECIFICATIONS BY APPLICATION

Year	Application	Float Level Fig. 1	Float Drop Fig. 2	Pump Rod Fig. 3	Inter. Choke Rod Fig. 6	Choke Rod Cam Fig. 8 & 9	Vac. Break Throt. Side Fig. 10	Vac. Break Chk. Side Fig. 11	Un-loader Fig. 12 & 13	Choke Setting Fig. 14
CHECKER, CHEVROLET — SPECIFICATION I.D.-B										
1973	350 Eng.—Exc.	19/32	1-9/32	1-7/16	—	.245	.140	—	.325	[7]
	Carb. Nos. 7043111, 113	19/32	1-9/32	1-1/2	—	.200	.130	—	.250	[7]
CHEVROLET										
1972	400 Eng.—Exc.	23/32	1-9/32	1-1/2	—	.095	.180	—	.325	[7]
	Carb. No. 7042118, 838	23/32	1-9/32	1-1/2	—	.100	.190[6]	—	.325	[7]
GM TRUCKS										
1973	307 Eng.	25/32	1-9/32	1-7/16	—	.245	.170	—	.350	[7]
1973-71	350 Eng.	23/32	1-9/32	1-7/16[8]	—	—	—	—	—	—
GM TRUCKS —SPECIFICATION I.D.-D										
1986-74	350 Eng.[11]	11/16	1-9/32	1-7/16	—	—	—	—	—	—
1973	350 Eng.	23/32	1-9/32	1-7/16	—	—	—	—	—	—
BUICK, OLDSMOBILE, PONTIAC —SPECIFICATION I.D.-G										
1977	231 Eng.—A/T—Fed.	7/16	1-5/32	1-17/32	.120	.080	.110	.040[12]	.140	1NR
	—M/T—Fed. & A/T—E.O.	7/16	1-5/32	1-1/2	.120	.080	.110	.040	.140	1NR
	—A/T—Alt.	7/16	1-5/32	1-17/32	.120	.080	.130	.100	.140	1NR
	—A/T—Cal.	7/16	1-5/32	1-5/8	.120	.080	.130	.110	.140	1NR
	—M/T—Cal.—Exc.	7/16	1-5/32	1-1/2	.120	.080	.130	.100	.140	1NR
	Carb. No. 17057445	7/16	1-5/32	1-5/8	.120	.080	.140	.110	.140	1NL
	350 Eng.	15/32	1-5/32	1-9/16	.120	.080	.140	.100	.180	1NR
1976	231 Eng.—A/T—Fed.	7/16	1-5/32	1-19/32	.120	.080	.120	.100	.140	1NR
	—M/T—Fed.	7/16	1-5/32	1-19/32	.120	.080	.110	.100	.140	1NR
	Carb. Nos. 17054652; 57354	7/16	1-5/32	1-9/16	.120	.080	.120[13]	.100[13]	.140	1NR
	—A/T & M/T—Cal.	7/16	1-5/32	1-19/32	.120	.080	.130	.110	.140	1NR
	350 Eng.—A/T—Fed.—Early	15/32	1-5/32	1-9/16	.120	.080	.140	.100	.180	1NR
	—Late	15/32	1-5/32	1-5/8	.120	.080	.180[6]	.030	.180	1NR
1975	231 Eng.—A/T—Fed.	7/16	1-9/32	1-19/32	.120	.080	.120	.120	.140	1NR
	—M/T—Fed.	7/16	1-9/32	1-19/32	.120	.080	.180[3]	.120	.140	1NL
	—A/T—Cal.	7/16	1-9/32	1-19/32	.120	.080	.120	.120	.140	1NL
	—M/T—Cal.	7/16	1-9/32	1-19/32	.120	.575	.120	.120	.140	1NL
	350 Eng.	15/32	1-9/32	1-19/32	.120	.080	.140	.120	.180	1NR

SPECIFICATIONS BY APPLICATION (Cont'd)

Year	Application	Float Level Fig. 1	Float Drop Fig. 2	Pump Rod Fig. 3	Inter. Choke Rod Fig. 6	Choke Rod Cam Fig. 8 & 9	Vac. Break Throt. Side Fig. 10	Vac. Break Chk. Side Fig. 11	Unloader Fig. 12 & 13	Choke Setting Fig. 14
CHECKER, CHEVROLET, OLDSMOBILE & PONTIAC —SPECIFICATION I.D.-H										
1977	305 Eng.	19/32	1-9/32	1-17/32	.120	.260	.130[14]	—	.325	Index
1975	350 Eng.	11/16	1-1/4	1-5/8	.120	.400	.130	—	.350[15]	Index
1974	350 Eng.—M/T	19/32	1-9/32	1-1/2[16]	—	.200	.140	—	.250	[7]
	350, 400 Eng.—A/T	19/32	1-9/32	1-9/16	—	.245	.130	—	.325	[7]
GM TRUCKS										
1977	305 Eng.	19/32	1-9/32	1-17/32	.120	.260	.130[14]	—	.325	Index
1975	350 Eng.	11/16	1-1/4	1-5/8	.120	.400	.130	—	.350[15]	Index
1974	350 Eng.—A/T	19/32	1-9/32	1-9/16	—	.245	.130	—	.325	[7]
	—M/T	19/32	1-9/32	1-21/32	—	.200	.140	—	.250	[7]
BUICK, CHEVROLET, OLDSMOBILE & PONTIAC —SPECIFICATION I.D.-J										
1978	305 Eng.—A/T—Alt. Exc.	15/32	1-9/32	1-17/32	.120	.260	.130[17]	—	.325	Index
	Carb. Nos. 17058126, 128	19/32	1-9/32	1-21/32	.120	.260	.130	—	.325	Index
	—M/T—Fed.	19/32[19]	1-9/32	1-17/32	.120	.260	.130[18]	—	.325	Index
	Carb. Nos. 17058176, 178	19/32	1-9/32	1-21/32	.120	.260	.130	—	.325	1NL
1977	305 Eng.—M/T—Fed.	7/16	1-9/32	1-17/32	.120	.260	.130[14]	—	.325	Index
GM TRUCKS										
1978	305 Eng.—A/T—Fed.	19/32	1-9/32	1-17/32	.120	.260	.130[17]	—	.325	Index
	—M/T—Fed.	19/32	1-9/32	1-17/32	.120	.260	.130[18]	—	.325	Index
GM TRUCKS —SPECIFICATION I.D.-K										
1986-79	350 Eng. - Exc.	5/8	1-9/32	1-15/32[16]	–	–	–	–	–	–
	Carb. No. 17082129	5/8	1-9/32	1-21/32	–	.245	.130	–	.250	[7]
	Carb. Nos. 7044133, 7047413	11/16	1-9/32	1-9/16	–	–	–	–	–	–
1978-74	350 Eng.[11]	11/16	1-9/32	1-9/16	–	–	–	–	–	–
MARINE (MERCURY) —SPECIFICATION I.D.-L										
	Carb. No. 17057139	9/16[20]	1-3/4[20]	1-17/32[20]	[20]	[20]	[20]	[20]	[20]	[20]
	17080350				[20]	[20]	[20]	[20]	[20]	[20]
MARINE (CHRIS CRAFT) —SPECIFICATION I.D.-M										
	151/181 L-4 Eng.	5/8	1-5/8	1-1/8	Flush	1/32	—	—	5/64	Index
	225 V6 Eng.—Carb. No. 7025181	11/16	1-29/32	1-1/8	—	1/32	—	—	5/64	Index
	—Carb. No. 7025189	11/16	1-29/32	1-1/8	Flush	1/32	—	—	5/64	1NR
MARINE (CRUSADER)										
	225 V6 Eng.—Carb. No. 7025181	11/16	1-29/32	1-1/8	—	1/32	—	—	5/64	Index
	—Carb. No. 7025189	11/16	1-29/32	1-1/8	Flush	1/32	—	—	5/64	1NL
	283 Eng. -w/Choke Coil	11/16	1-29/32	1-1/8	Flush	1/32	—	—	5/64	1NL
MARINE (GRUMMAN ALLIED)										
	300 Eng.	19/32	1-29/32	1-5/32	—	—	—	—	1/8	Index
MARINE (REVLEY CORP.)										
	225 Eng.	11/16	1-29/32	1-1/8	—	1/32	—	—	3/16	Index
MARINE (UNIVERSAL MOTORS)										
	198, 225 V6 Eng. —Carb. Nos. 7023081, 7025181	11/16	1-29/32	1-1/8	—	1/32	—	—	3/16	Index

ABBREVIATIONS:

- A/T Automatic Transmission
- Alt. Altitude
- Cal. California
- Exc. Except
- E.O Economy Option
- Fed. Federal (49 States)
- M/T Manual Transmission
- N.L. Notch Lean
- N.R. Notch Rich

FOOTNOTES:

[1] See procedure, Fig. 15.

[2] Adjust choke coil rod 2/3 the thickness of the rod higher than the notch or .080" if Emission Label specifies ignition timing 12° BTDC and idle speed 625 RPM.

[3] Carb. No. 17055520; 7045147 set 120".

[4] Carb. No. 7040062, 462, 463 set 9/16.

[5] Carb. No. 7040461 set .080".

[6] Carb. No. 7042838, 17056141 set .200".

[7] See procedure, Fig. 17.

[8] Carb. No. 17054659 set 1-1/2.

[11] Carb. Nos. 17058120, 420, 423 —if idle mixture adjustment is required, a new propane enrichment method is necessary. See service manual.

[12] Carb. Nos. 17057180, 182 set .060".

[13] Carb. No. 17054652 set .130" & .110" respectively.

[14] Initial setting. After 22,500 miles, reset to .160".

[15] Carb. Nos. 7045100, 110, 111, 128 set .330".

[16] Carb. Nos. 7044115, 17080126, 17082423 set 1-21/32.

[17] Reset to .150" at 30,000 miles and over.

[18] Reset to .160" at 30,000 miles and over.

[19] Carb. No. 17058107 set 15/32.

[20] Refer to Marine Manufacturers' Specifications.