

# FUEL SYSTEM

## SERVICE INSTRUCTION WORKSHEET

TO REPAIR

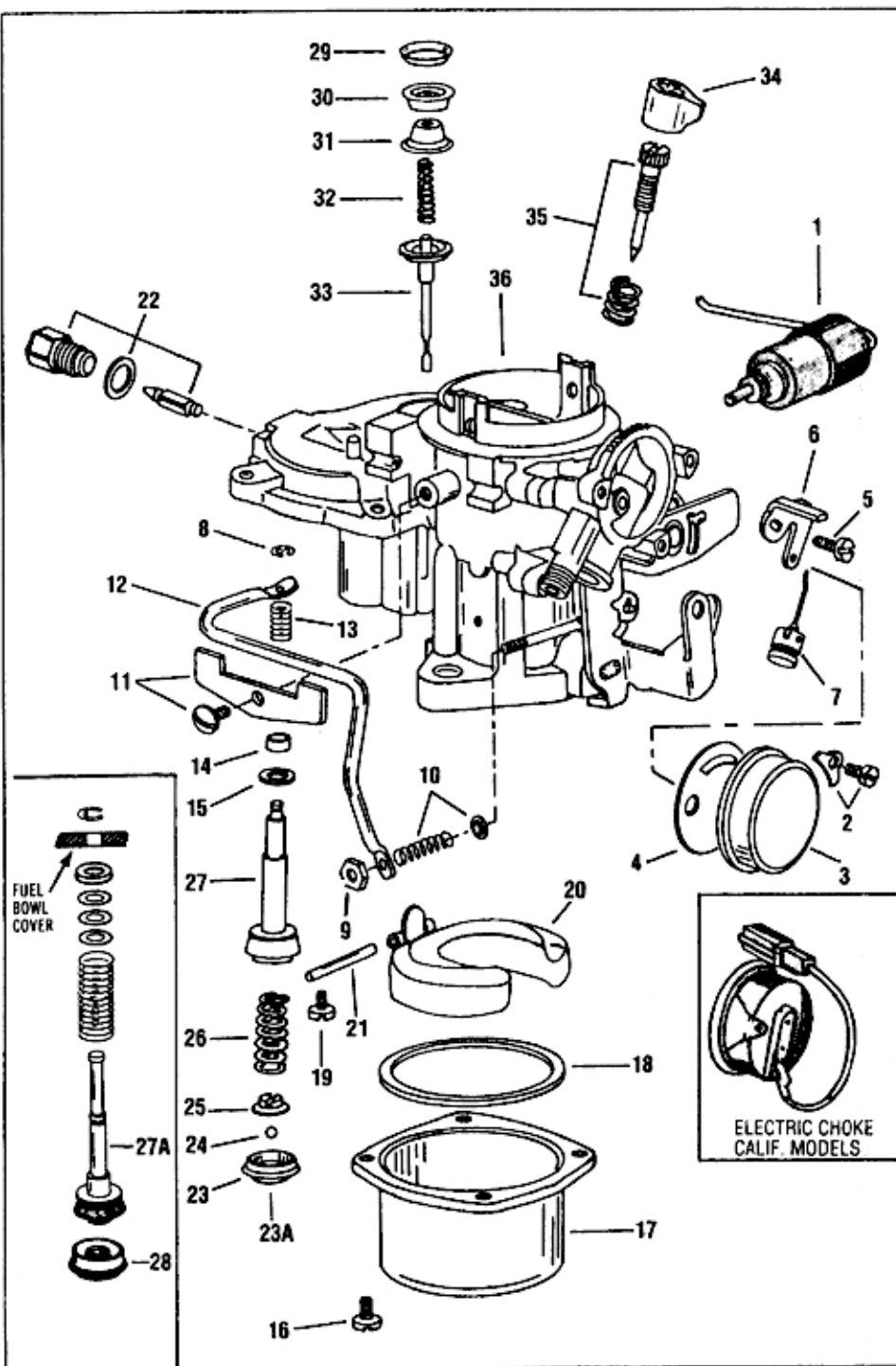
GF3564-4

CARTER CARBURETOR

1 BARREL • MODEL RBS

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 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 of the parts list 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.



### 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. Solenoid assembly
2. Screw & retainer, choke cover (3)
3. Thermostatic coil & cover assembly
4. Gasket, cover
5. Screw, choke piston lever
6. Lever, choke piston
7. Piston & link assembly
8. Retainer, pump stem
9. Nut, pump arm connecting
10. Spring & retainer, pump arm
11. Screw & retainer, pump arm
12. Pump arm
13. Spring, pump stem (upper)
14. Bushing, pump stem\*
15. Washer, pump stem
16. Screw, fuel bowl (4)
17. Fuel bowl assembly
18. Gasket, fuel bowl
19. Screw, float pin (2)
20. Float assembly
21. Pin, float hinge
22. Needle & seat assembly
23. Seat, intake ball check (with hole)\*
- 23A. Retainer, pump cylinder (solid)\*
24. Ball, intake check\*
25. Retainer, intake check ball\*
26. Spring, pump return (lower)
27. Fuel pump assembly
- 27A. Fuel pump assembly (1970 & later models)
28. Pump intake check assembly (late models)
29. Washer, conical
30. Cover, step up piston
31. Retainer, step up diaphragm
32. Spring, step up piston return
33. Step up piston assembly
34. Cap, limiter
35. Idle adjusting screw & spring
36. Main body assembly

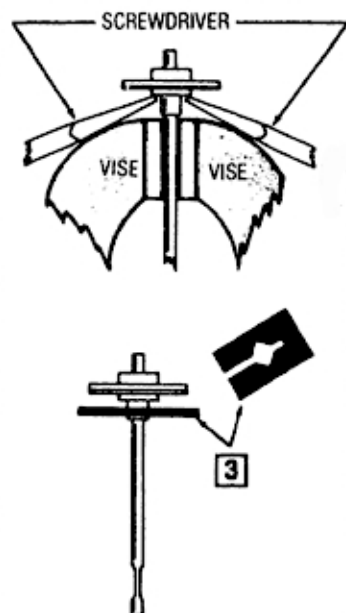
\* Some Models.

## REMOVAL AND INSTALLATION NOTES

1. Cover opening on intake manifold after carburetor is removed.
2. To remove fuel pump assembly, (27), push assembly to bottom of pump cylinder, then tap lightly on pump stem to remove parts 23, 24, 25, 26 & 27.
3. To remove, step up piston (33), pry out washer (29), then pierce diaphragm cover (31) near outer edge and pry out cover.
4. On 1968 and '69 models, remove rubber vent valve before cleaning.
5. Before removing idle adjusting screw (35), turn in until lightly seated, counting number of turns. Record for proper installation.
6. Install parts and components in reverse order of removal.
7. See Fig. 1 for proper assembly of diaphragm onto step up piston.
8. For installation of step up piston (33) follow the instructions below:  
Place assembly in position. Using retainer (31), press diaphragm down to place against gasket ledge in casting. Remove retainer and examine for even installation. Install parts 32, 31 and 30.  
Use a 5/8" socket as a drift and tap in place with a hammer. Install conical washer (29) with small opening down and tap in place using a 1/2" socket as a drift. Drive washer into cover 3/32" to 1/8" below top edge of cover. **CAUTION:** Do not strike center of cover, or drive conical washer in beyond 1/8".
9. Before installing fuel pump assembly (27), remove paper sleeve if available. Flare leather cup slightly and soak in clean oil for a few minutes.
10. When installing idle adjusting screw (35), turn in until lightly seated, then back out number of turns recorded earlier.

**FIG. 1**  
**ASSEMBLY OF NEW**  
**DIAPHRAGM TO STEP UP ROD**

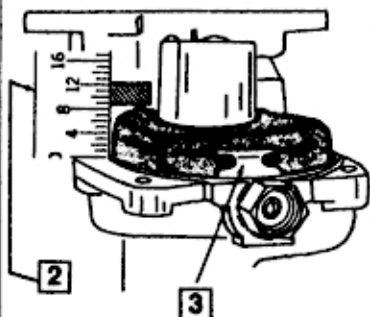
1. Secure old step up piston in a soft jaws vise.
2. Use two screwdrivers and pry diaphragm off as shown. **BE CAREFUL** not to bend step up rod.
3. Insert original rod into new diaphragm assembly stem. Use the supplied tool, place it over stem as shown and squeeze in vise to crimp stem around rod. **CAUTION:** Squeeze tool only once. Do not over-tighten.



## ADJUSTMENT DATA

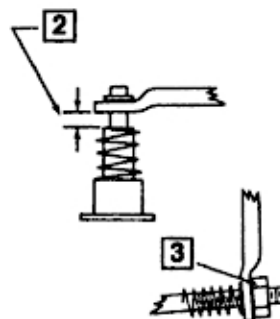
**FIG. 2**  
**FLOAT LEVEL ADJUSTMENT**

1. Invert main body assembly and remove fuel bowl gasket.
2. Measure distance from casting to top of small bump at toe of float. Measure both sides.
3. To adjust, remove float and bend hinge at narrowest point.  
**Caution:** Do not exert pressure on needle valve as damage or incorrect setting may result.



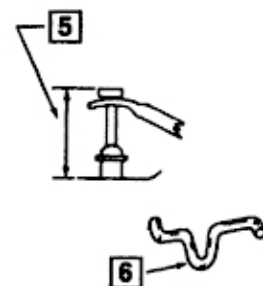
**FIG. 3**  
**PUMP ADJUSTMENT**  
**Early Models**

1. Back out throttle stop screw and hold throttle valve closed.
2. Measure distance between shoulder on pump stem and connector rod.
3. To adjust, turn nut as necessary.



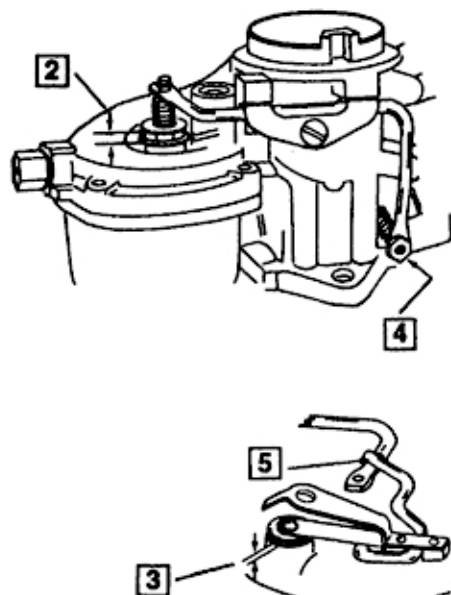
**Late Models**

4. Repeat step 1.
5. Measure distance between top of pump stem and top of fuel bowl cover.
6. To adjust, bend link as shown.



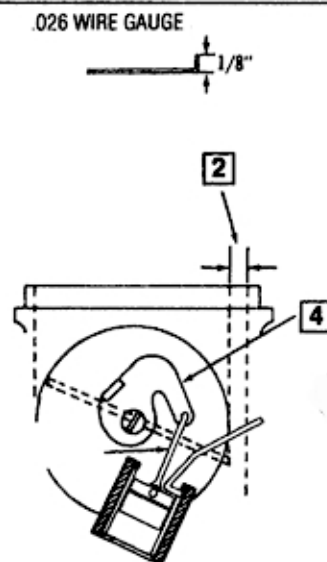
**FIG. 4**  
**BOWL VENT**  
**ADJUSTMENT**

1. Back out throttle stop screw and hold throttle valve closed.
2. 1963-67 models—measure distance between washer on pump stem and boss on bowl cover.
3. 1968-Up models—measure distance between bottom of rubber valve and its seat.
4. To adjust (early models), turn adjusting nut as necessary.
5. To adjust (late models), bend vent arm.



**FIG. 5**  
**CHOKE PULLDOWN ADJUSTMENT**

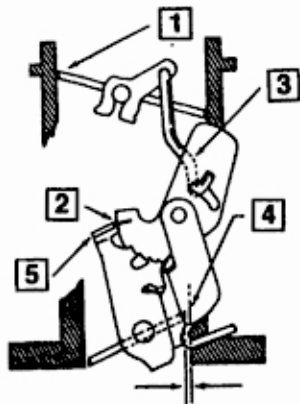
- NOTE:** Prepare gauge as shown.
1. Insert bent side of gauge between piston slot and upper edge of right hand slot in choke housing. Rotate choke lever counterclockwise until gauge is held snug in piston slot. Hold in place.
  2. Measure distance between lower edge of choke valve and air horn wall using a gauge or drill bit.
  3. To adjust, bend piston link.
  4. 1971 & later models—adjust by bending lever.  
**Important:** Remove choke piston lever before bending.



## ADJUSTMENT DATA (Cont'd)

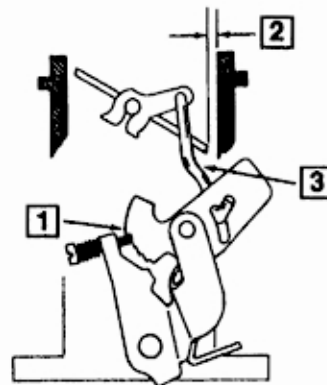
**FIG. 6**  
**FAST IDLE LINKAGE ADJUSTMENT**  
**THROTTLE VALVE ADJUSTMENT**

1. Hold choke valve tightly closed. Make sure connector rod is against end of slot.
2. Check that tang on throttle lever is aligned with index mark on cam.
3. To adjust, bend connector link as shown.
4. While tang is still aligned as in step 2, measure distance between throttle valve and bore (idle port side).
5. If adjustment is needed after step 4, bend tang.



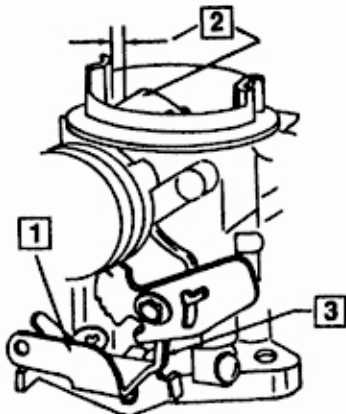
**FIG. 7**  
**FAST IDLE LINKAGE ADJUSTMENT**  
**1971 & later Ford**

1. Place fast idle screw on second step against shoulder of first step.
2. Lightly close choke valve and measure distance between lower edge of choke valve and air horn wall using a gauge or drill bit.
3. To adjust, bend connector rod at elbow.



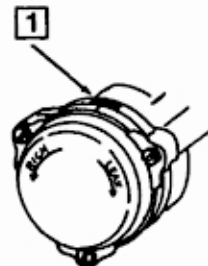
**FIG. 8**  
**UNLOADER ADJUSTMENT**

1. Hold throttle valve wide open.
  2. Lightly close choke valve and measure distance between upper edge of choke valve and air horn wall.
- To adjust, bend unloader tang on throttle lever.



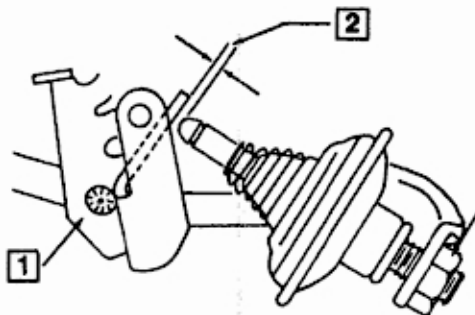
**FIG. 9**  
**AUTOMATIC CHOKE**  
**ADJUSTMENT**

1. Rotate stat cover against spring tension. Align mark on cover with specified point on choke housing.



**FIG. 10**  
**DASHPOT ADJUSTMENT**  
**(On Car)**

1. Throttle valve set at curb idle.
2. With diaphragm stem fully depressed, measure distance ( $3/32 - 1/8$ ) between end of stem and tang using a gauge or drill bit.
3. To adjust, loosen nut and turn dashpot assembly. Tighten nut when done.



## SPECIFICATION CHART

Year	Application	Float Level Fig. 2	Pump Adjustment		Bowl Vent Fig. 4	Choke Pulldown Fig. 5	Throttle Valve Fig. 6	Fast Idle Linkage Fig. 7	Unloader Fig. 8	Auto Choke Fig. 9
			Early	Late						
<b>AMERICAN MOTORS</b>										
1969	199, 232 Eng. —A.T. —M.T.	9/16 9/16	1/64 1/64	— —	5/64 5/64	7/32 3/16	1/32 1/32	— —	— —	2NR Index
1968	232 Eng.	9/16	1/64	—	5/64	1/4	1/32	—	1/8	2NR
1967-63	199, 232 Eng.	15/32	1/64	—	1/16	—	1/32 <sup>1</sup>	—	1/8	<sup>2</sup>
<b>JEEP</b>										
1971-66	232 Eng.	21/32	1/64	—	1/16	—	1/32 <sup>3</sup>	—	1/8	1NR
<b>STUDEBAKER</b>										
1964-63	194 Eng.	15/32	1/64	—	1/16	—	3/64	—	3/16	Index
<b>FORD, MERCURY</b>										
1974-72	250 Eng.	9/16	—	1-3/8	—	3/16 <sup>3</sup>	—	7/64	1/4	Index <sup>6</sup>
1971	250 Eng.	9/16	—	1-3/8	—	3/16 <sup>3</sup>	—	7/64	9/32	Index <sup>6</sup>
1970	250 Eng.	9/16	—	1-3/8	—	3/16	3/64	—	9/32	Index <sup>6</sup>
<b>FORD TRUCK</b>										
1974-72	250 Eng.	9/16	—	1-3/8	—	3/16 <sup>5</sup>	—	7/64	9/32	Index <sup>6</sup>

### FOOTNOTES:

- <sup>1</sup> Carb. No. 3766 set 3/64.
- <sup>2</sup> Carb. Nos. 3487; 3498; 3708, 09 set Index.  
Carb. Nos. 3727, 28 set 2NL.  
Carb. No. 3488 set 1NL.  
Carb. Nos. 3765, 66; 3882 set 1NR.
- <sup>3</sup> Models with manual choke set 3/64.
- <sup>4</sup> Models with 199 Eng. set 3/16.  
Models with 232 Eng. set 1/8.
- <sup>5</sup> Models with M/T set 19/64.
- <sup>6</sup> Models with A/T set 1NR.

### ABBREVIATIONS:

A/T - Automatic Transmission  
M/T - Manual Transmission  
N.L. - Notch Lean  
N.R. - Notch Rich