SERVICE INSTRUCTIONS

CARTER CARBURETOR THERMO-QUAD 9800, 9801

DISASSEMBLY

The numerical sequence of the exploded view may be used as a guide to disassemble unit far enough to permit cleaning, inspection, and installation of the kit contents. NOTE: Two of the bowl cover attaching screw (17) are located between choke valve and inner wall of air horn. To separate bowl cover from flange assembly, it will be necessary to revolve the bowl cover to disengage the fast idle cam rod (2), from slot in cam. To remove the plunger (29) spring (30) and intake check (28) use a small rod placed on the upper end of plunger shaft and tap lightly. Do not remove the air valve parts (41-42-43) unless the air valve or shaft is sticking or binding.

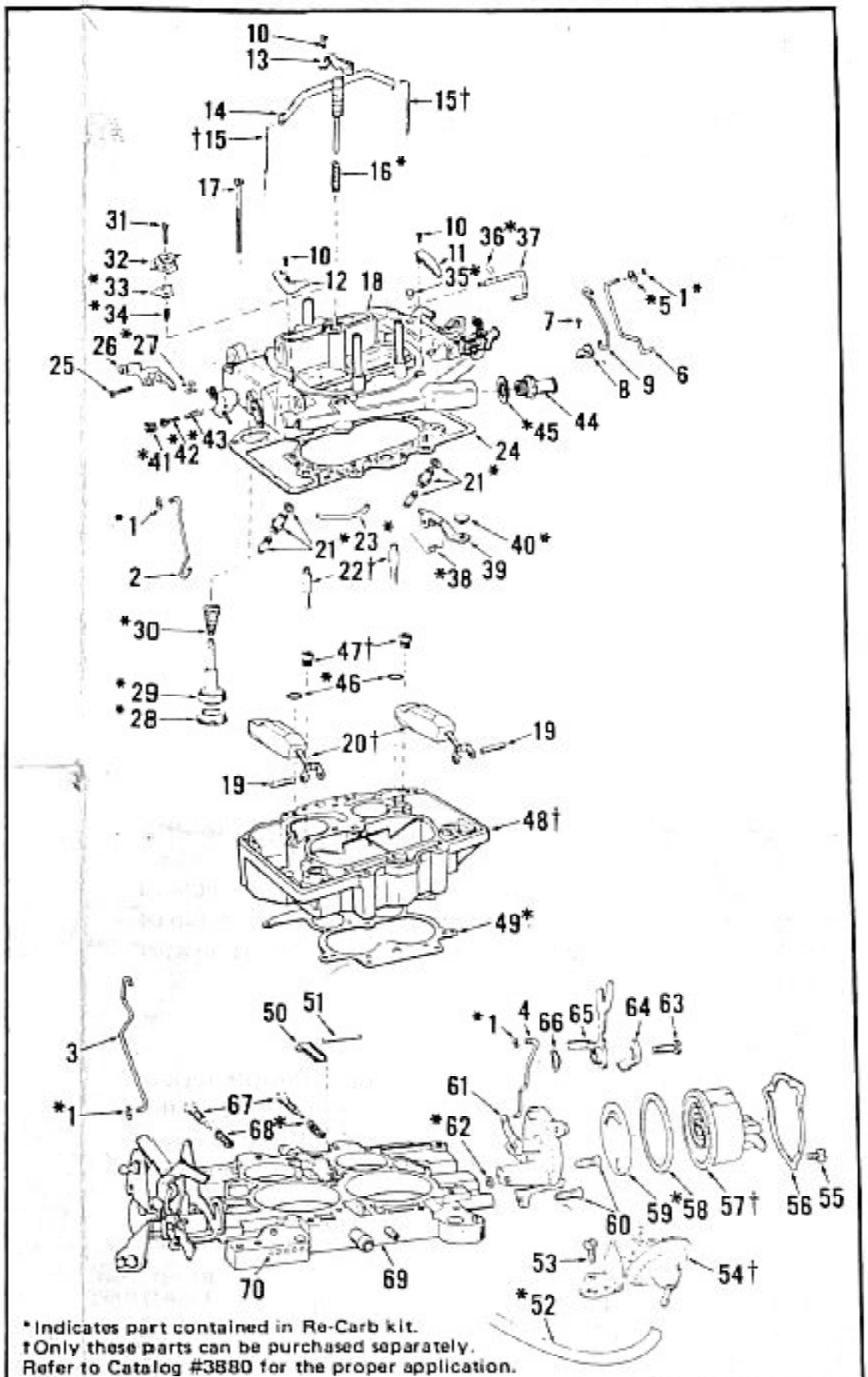
CLEANING

Clean all parts in an approved cleaning solvent. Special attention should be given to carbon deposits in throttle bore and passages, rinse parts in a suitable solvent. Blow out all passages with compressed air. **CAUTION: DO NOT SOAK DIAPHRAGM ASSEMBLIES OR RUBBER MATERIAL IN THE CLEANING SOLVENT.**

REASSEMBLY

Reverse the numercial sequence of the exploded view to reassemble carburetor. **NOTE: THE FOLLOWING SPECIAL INSTRUCTIONS.**

1. Idle mixture screw (67) should be seated lightly and then backed out approximately two turns for the initial setting. Refer to the manufacturer's service manual for the proper idle and fast idle final adjustment on the engine.
2. Lubricate the cup on plunger assembly (29). Install spring (30) with the small end downward on plunger stem. Insert stem thru hole in bowl cover, hold in place by installing "S" link with lower open end toward choke valve. The link should read "S" from front of carburetor.
3. Install step up piston and hanger assembly (14) with metering rods (15) attached, and the guide dimples on hanger toward the Choke valve.
4. **NOTE: THE METERING ROD SETTING IS PRE-SET AT THE FACTORY. DO NOT ATTEMPT TO ADJUST.**
5. After reassembly and all adjustments have been made, be sure throttle valves move freely from closed to wide open position.
6. Be sure the upper vent lever (37) on bowl cover is positioned in the fork of bowl lever (65) on flange assembly, when installing bowl cover.
7. If the air valve parts (41-42-43) were removed during disassembly, be sure that the end of spring (43) engages into slot of air valve adjustment plug.



*Indicates part contained in Re-Carb kit.
†Only these parts can be purchased separately.
Refer to Catalog #3880 for the proper application.

NOMENCLATURE

1. *Connector rod retainers
2. Fast idle connector rod
3. Throttle connector
4. Choke control rod
5. *Choke pull-off rod washer
6. Choke pull-off rod
7. Choke lever screw
8. Choke lever
9. Choke connector rod
10. Step-up piston and metering rod cover screw (3)
11. Metering rod cover plate choke side
12. Metering rod cover plate pump side
13. Step-up piston cover plate
14. Step-up piston assembly
15. †Metering rod (2)
16. *Vacuum piston spring
17. Bowl cover screw (10)
18. Bowl cover assembly
19. Float lever pin
20. †Float assembly
21. *Needle and seat assembly
22. †Secondary metering jet
23. *Pump passage hose
24. Bowl cover gasket
25. Pump arm screw
26. Pump arm
27. *Pump "S" link
28. *Pump intake check assembly
29. *Pump plunger assembly
30. *Plunger spring
31. Pump housing screw
32. Pump housing
33. *Pump housing gasket
34. *Pump discharge check needle
35. *Bowl vent and adjustment plug
36. *Bowl vent pin retainer
37. Bowl vent lever (upper)
38. *Bowl vent lever spring
39. Bowl vent arm
40. *Bowl vent grommet
41. *Air valve lock plug
42. *Air valve adjustment plug
43. *Air valve spring
44. Fuel inlet fitting
45. *Fuel inlet fitting gasket
46. *Quad ring (2)
47. †Primary metering jet (2)
48. †Fuel bowl
49. *Throttle to body gasket
50. Step-up piston lever
51. Step-up piston lifter pin
52. *Hose
53. Choke pull-off bracket screw
54. †Choke pull-off assembly
55. Thermostatic coil housing retainer screw (3)
56. Thermostatic coil housing retainer
57. †Thermostatic coil housing
58. *Thermostatic coil housing gasket
59. Baffle plate
60. Choke housing attaching screw (2)
61. Choke housing and lever assembly
62. *Choke housing passage gasket
63. Bowl vent outer lever screw
64. Bowl vent outer lever
65. Bowl vent operating lever (lower)
66. Throttle shaft washer
67. Idle mixture screw
68. *Idle mixture screw spring
69. Flange assembly
70. Carter Part Number

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ADJUSTMENTS

FLOAT LEVEL (FIG. 1)

With bowl cover inverted gasket installed and float resting on seated needle, the dimension of each float at outer end should be 29/32. To adjust bend lever. **NOTE: NEVER ALLOW LIP OF FLOAT TO BE PRESSED AGAINST NEEDLE WHEN ADJUSTING.**

SECONDARY THROTTLE LINKAGE (FIG. 2)

Open throttle valves to the wide open position. The primary and secondary throttle shaft stops should contact casting at the same time. To adjust bend link.

SECONDARY LOCK-IN (FIG. 3)

Apply light pressure downward on the fast idle screw to move choke control lever to the wide open choke position. The dimension between lock-in lever and top of secondary lever should be .075 inch. To adjust, bend tang on fast idle arm.

AIR VALVE SPRING (FIG. 4)

1. Loosen lock plug. Rotate adjustment plug (inner) clockwise to allow air valve to position itself wide open.

2. Check to see that air valve and shaft are operating freely.

3. To adjust, rotate adjustment plug (inner) counter clock-wise until air valve just contacts stop. Then turn two additional number of turns, while holding the adjustment plug in this position tighten lock plug.

ACCELERATOR PUMP (FIG. 5)

STEP 1

Turn the idle speed screw (A) inward until it just touches the stop on throttle lever, then turn in two (2) more turns. With the throttle connector rod installed in the inner hole of pump arm, the dimension from bottom of "S" link to top of bowl cover should be 11/32 inch. To adjust, bend connector rod B.

STEP 2

Open throttle slowly until the secondary throttle lock-in latch just contacts (A), (refer to insert). Hold in this position and measure from the bottom of "S" link to top of bowl cover the dimension should be 5/32 inch. To adjust, bend tang (C) on throttle lever.

BOWLVENT (FIG. 6)

Remove the rivet plug from air horn. With the idle speed screw in same position as for the accelerator pump adjustment, hold throttle closed. The dimension from top of valve to top of casting should be 13/16, to adjust bend operating lever. Install a new plug and tap it lightly.

CHOKE CONTROL LEVER (FIG. 7)

Close choke valve by pushing on choke lever, with throttle partially open. The vertical dimension from top of rod hole to base of carburetor should be 3-15/32 inch. To adjust, bend rod.

DIAPHRAGM CONNECTOR ROD (FIG. 8)

Seat the diaphragm by using an outside source of vacuum, or by pressing downward on end of diaphragm stem. The dimension between air valve and stop on casting should be .030 inch. To adjust, bend diaphragm connector rod.

FAST IDLE CAM. INDEX LINKAGE (FIG 9)

Place fast idle screw on second step of cam. Move choke valve toward the closed position, by applying a light pressure to choke lever. The dimension between lower edge of choke valve and wall of air horn should be (9800 - 3/32) (9801 - 7/64) inch. To adjust, bend fast idle rod.

CHOKE PULL-OFF (FIG. 10)

Seat diaphragm by using an outside source of vacuum or by pressing downward on diaphragm stem. Apply a light pressure on choke lever to move choke valve toward the closed position. The dimension between lower edge of choke valve and wall of air horn should be (9800 - 5/32) (9801 - 9/64) inch. To adjust, bend tang on fast idle arm.

UNLOADER (FIG. 11)

With throttle valves wide open and choke valve moved toward the closed position by applying a light closing pressure to choke lever. The dimension between lower edge of choke valve and wall of air horn should be 5/16 inch. To adjust, bend tang on fast idle arm.

ELECTRIC CHOKE SETTING (FIG. 12)

Rotate cover against spring tension until mark on thermostat cover is aligned with index mark on housing.

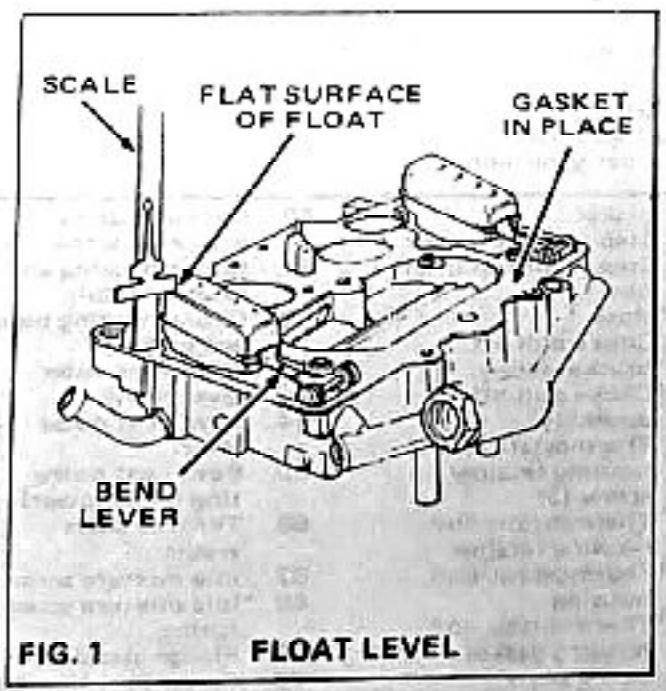


FIG. 1 FLOAT LEVEL

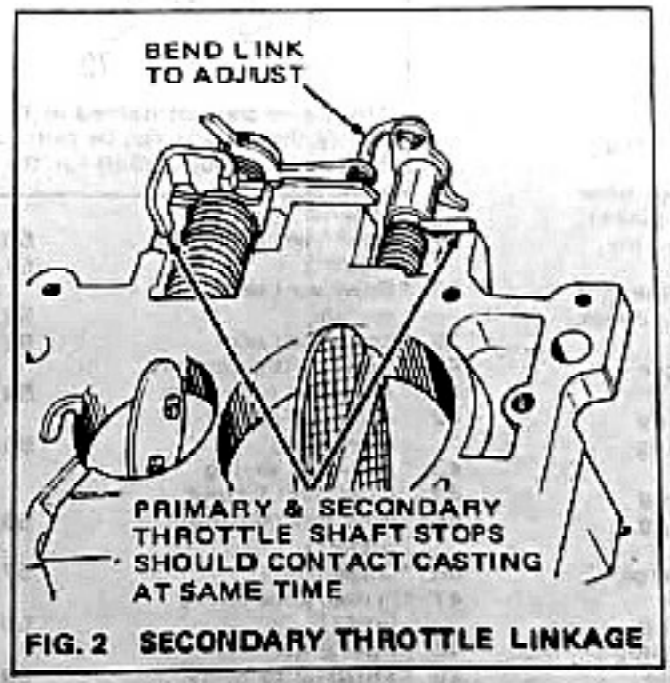


FIG. 2 SECONDARY THROTTLE LINKAGE

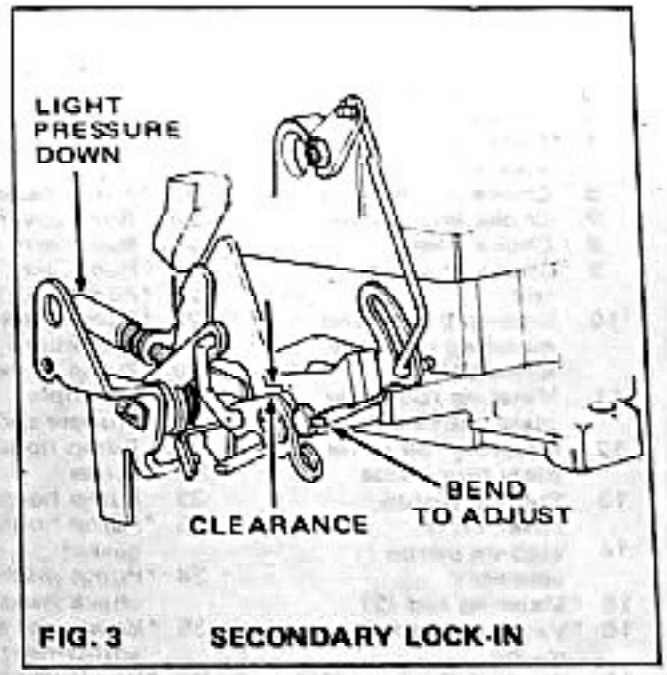


FIG. 3 SECONDARY LOCK-IN

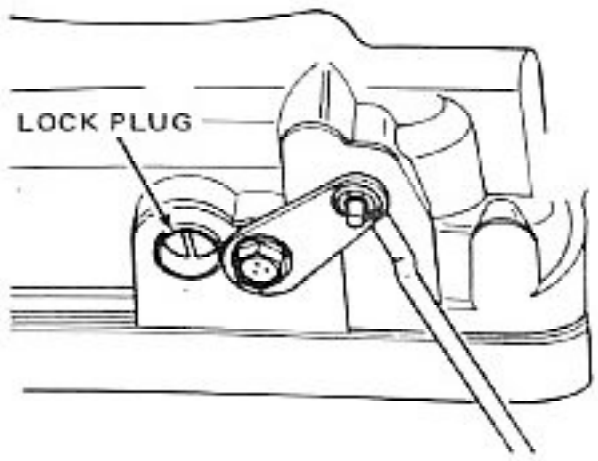


FIG. 4 AIR VALVE SPRING

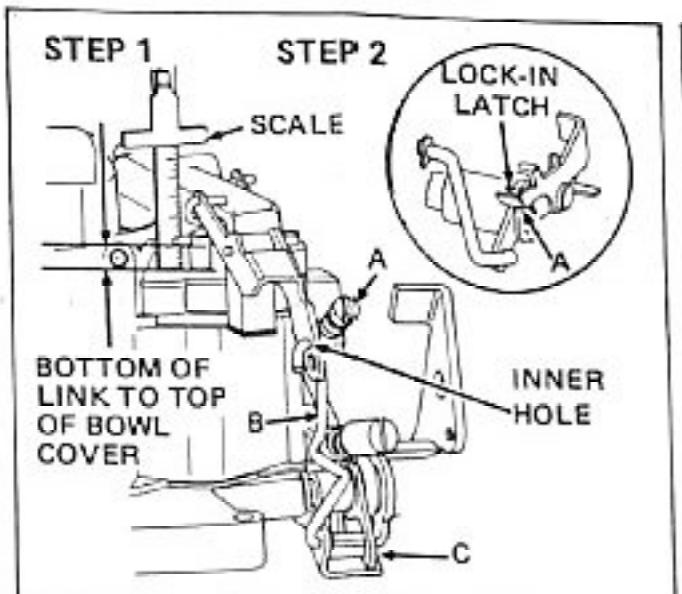


FIG. 5 ACCELERATOR PUMP

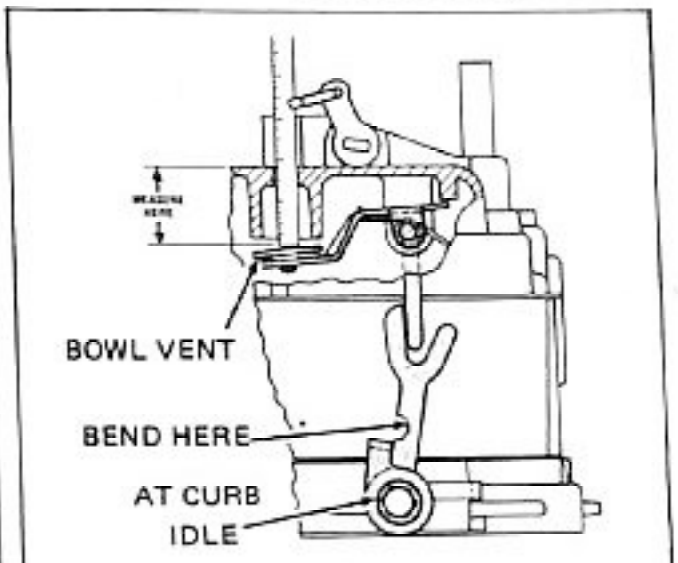


FIG. 6 BOWL VENT

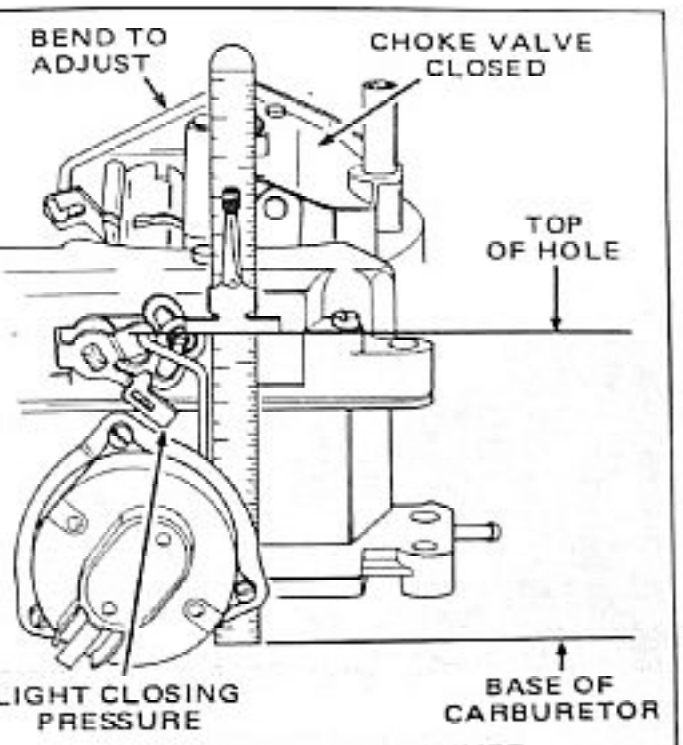


FIG. 7 CHOKE CONTROL LEVER

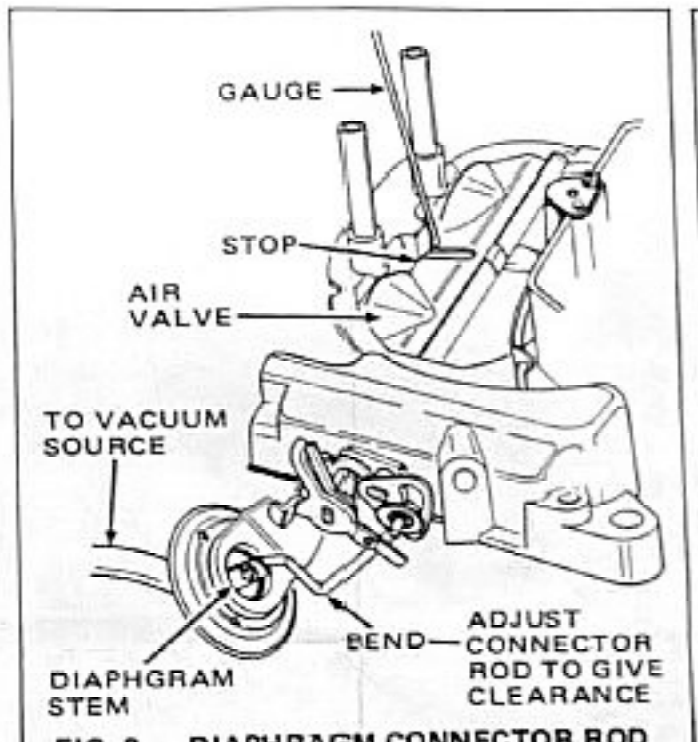


FIG. 8 DIAPHRAGM CONNECTOR ROD

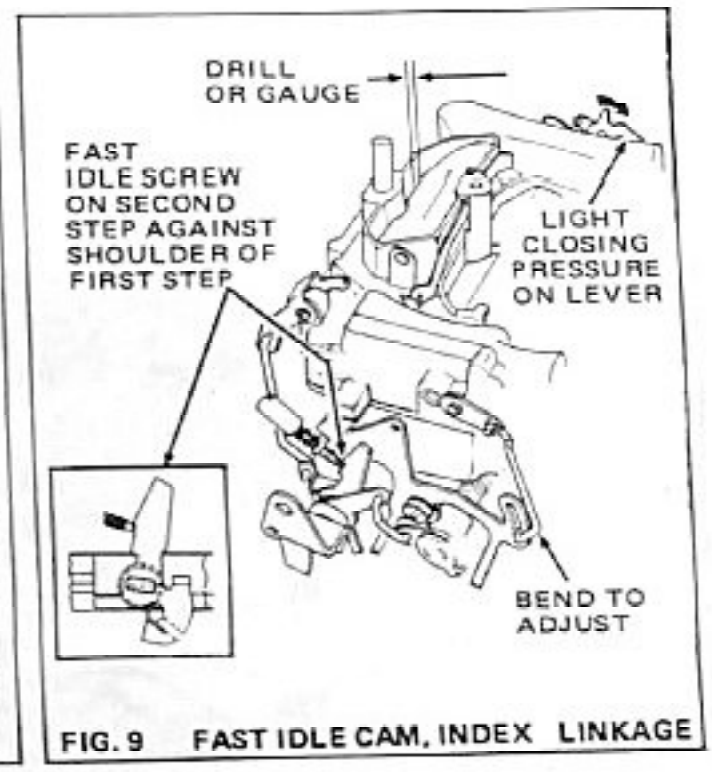


FIG. 9 FAST IDLE CAM, INDEX LINKAGE

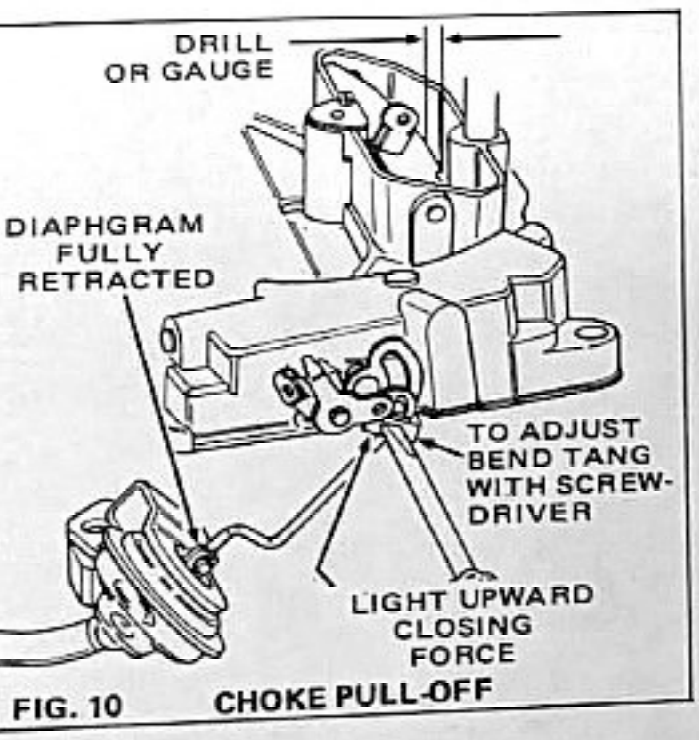


FIG. 10 CHOKE PULL-OFF

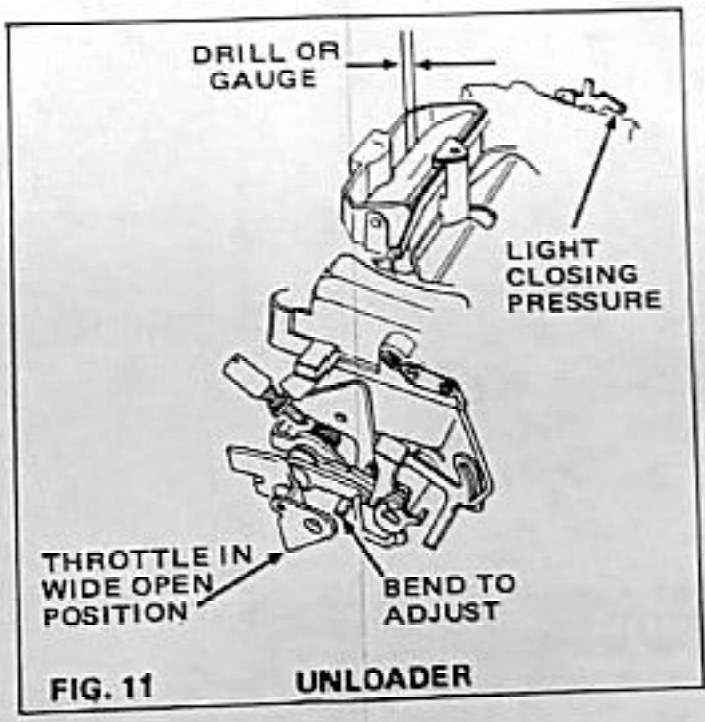


FIG. 11 UNLOADER

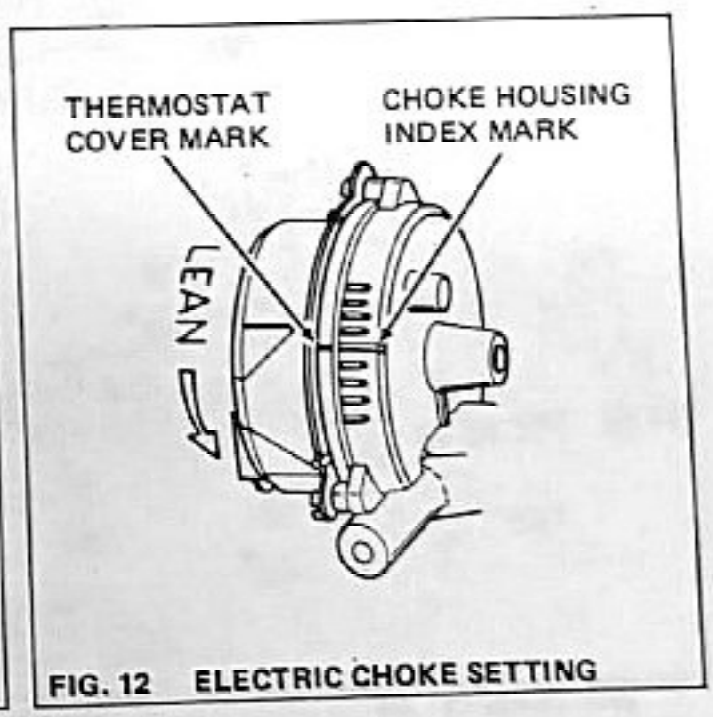
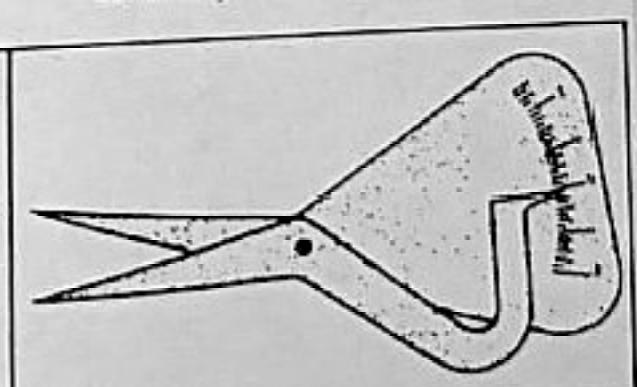


FIG. 12 ELECTRIC CHOKE SETTING

UNIVERSAL GAUGE

It is a precision instrument and must be handled carefully.

When used as shown the caliper ends will gauge most float levels, choke valve clearances, etc.



When it is necessary to measure to a point below the gauging suiface, revolve the moveable arm 180° as shown.