

SERVICE INSTRUCTIONS

CARTER CARBURETOR THERMO-QUAD 9800

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.**

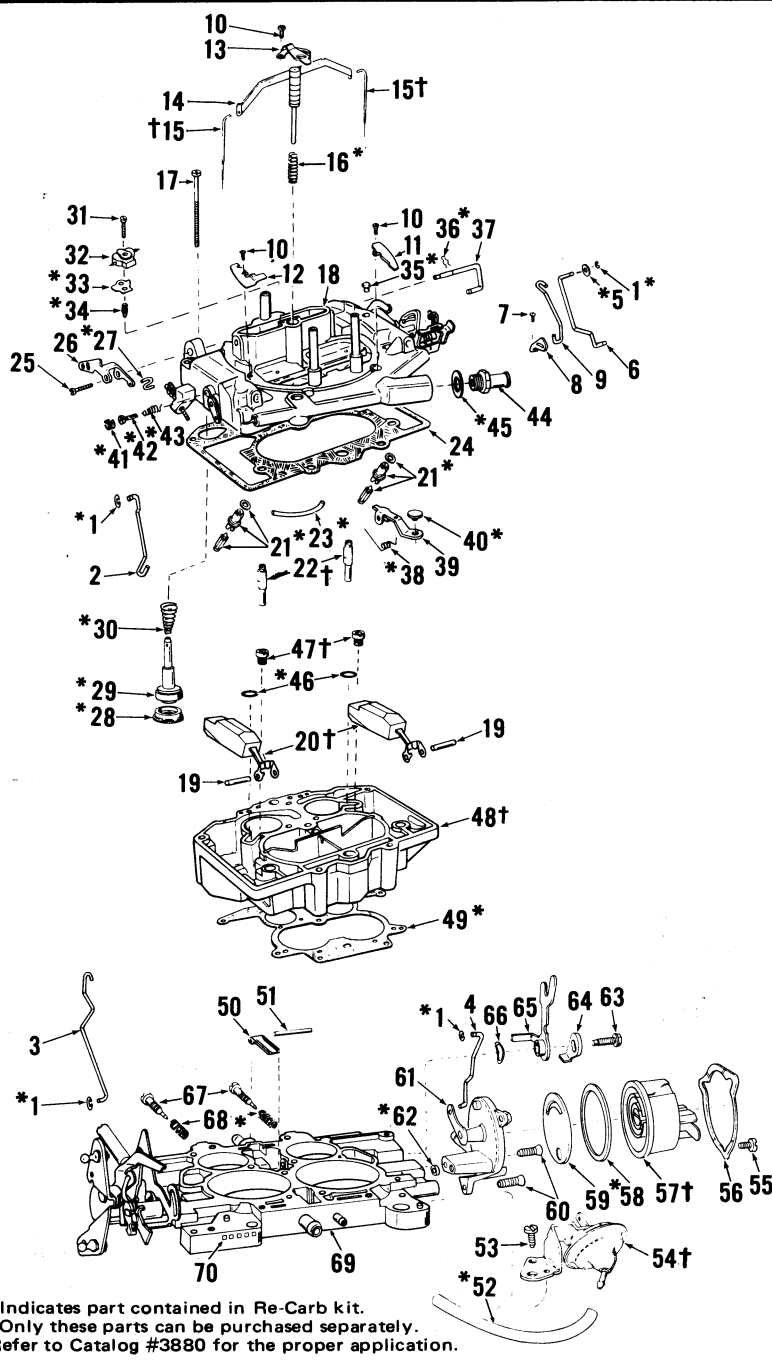
REASSEMBLY

Reverse the numerical 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.

NOMENCLATURE

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



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

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 tang (A), (refer to insert). Hold in this position. Measure again from the bottom of "S" link to top of bowl cover the dimension should be 1/8 inch. To adjust, bend tang (C) on throttle lever.

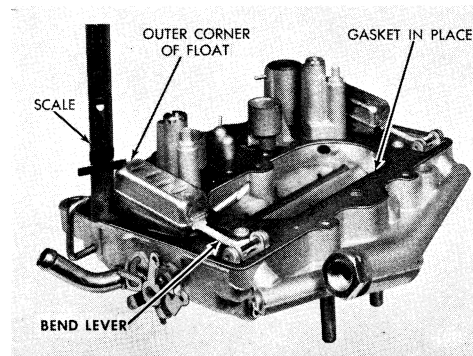


FIG. 1 FLOAT LEVEL

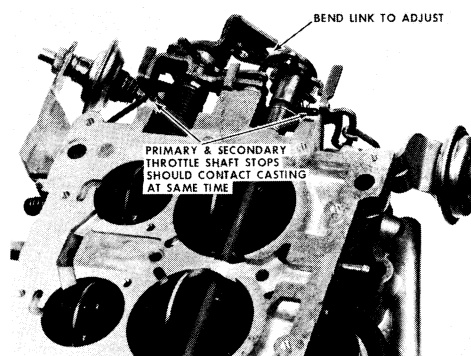


FIG. 2 SECONDARY THROTTLE LINKAGE

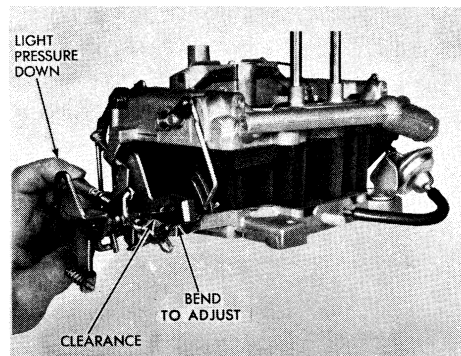


FIG. 3 SECONDARY LOCK-IN

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. Measure the dimension from top of valve to top of casting. 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 1-13/32 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 3/32 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 5/32 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.

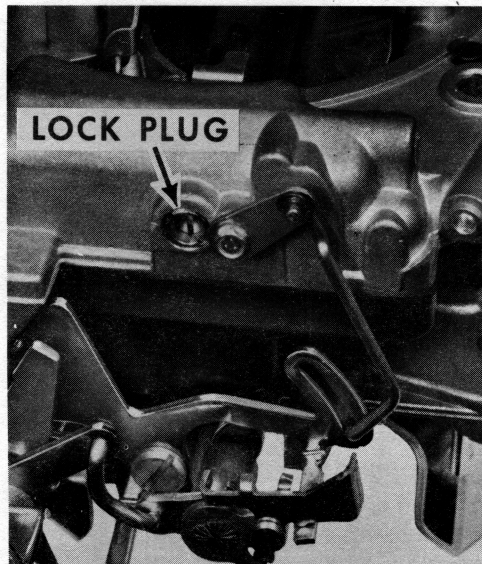


FIG. 4 AIR VALVE SPRING

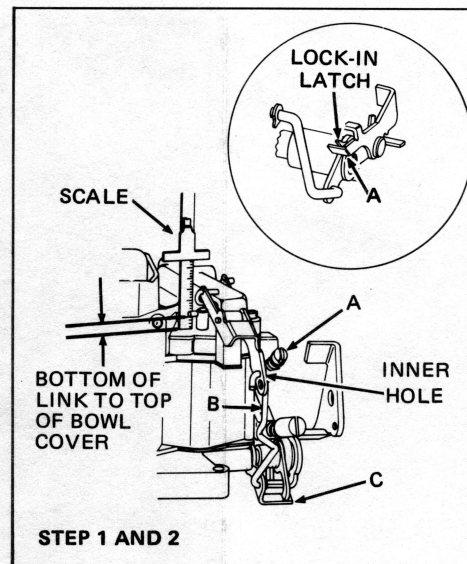


FIG. 5 ACCELERATOR PUMP

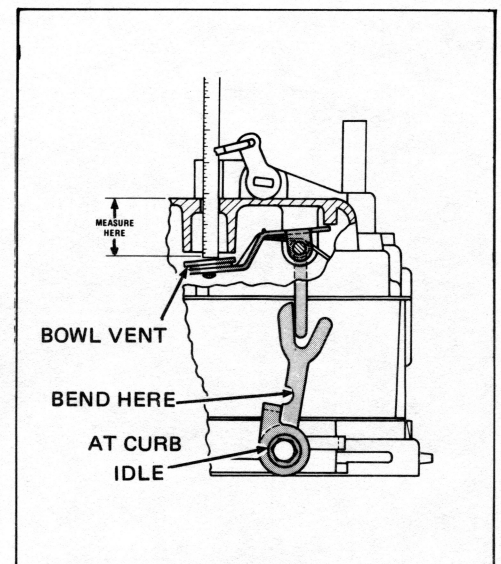


FIG. 6 BOWL VENT

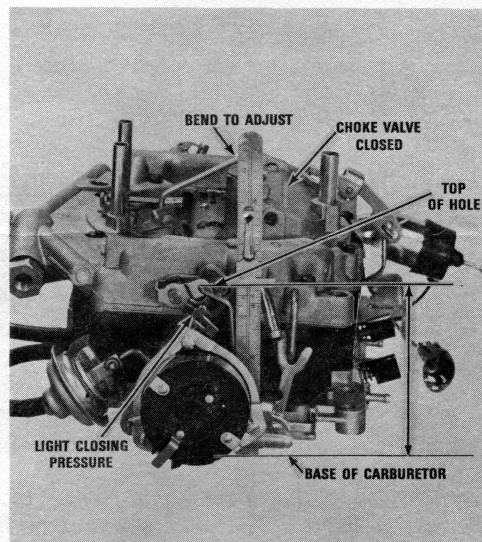


FIG. 7 CHOKE CONTROL LEVER

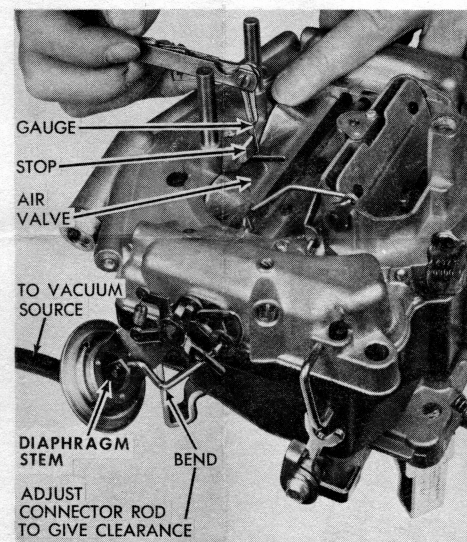


FIG. 8 DIAPHRAGM CONNECTOR ROD

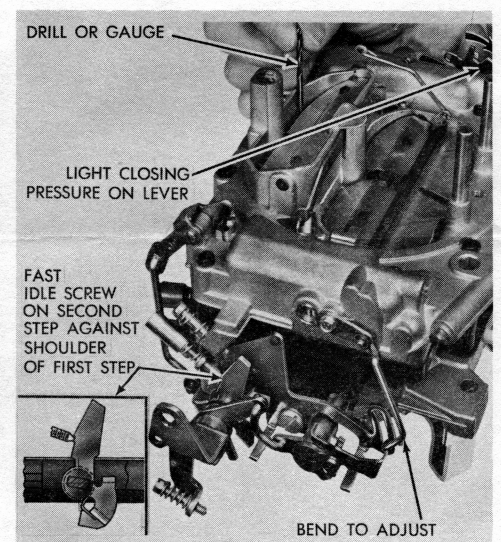


FIG. 9 FAST IDLE CAM, INDEX LINKAGE

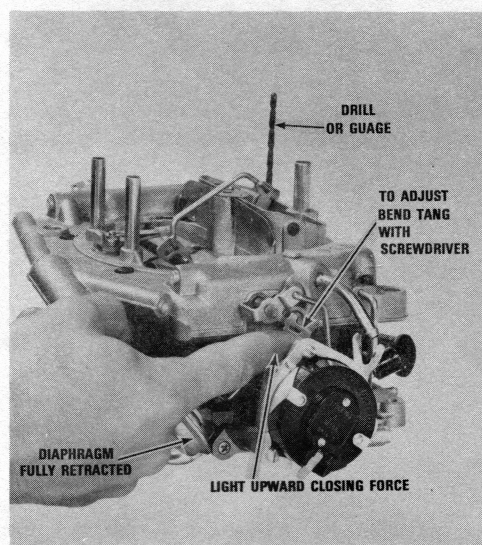


FIG. 10 CHOKE PULL-OFF

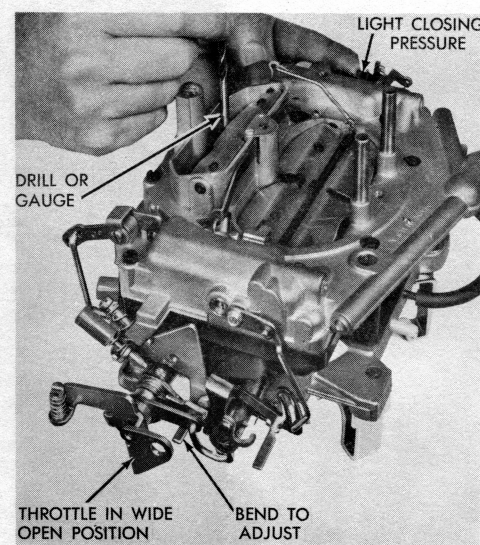


FIG. 11 UNLOADER

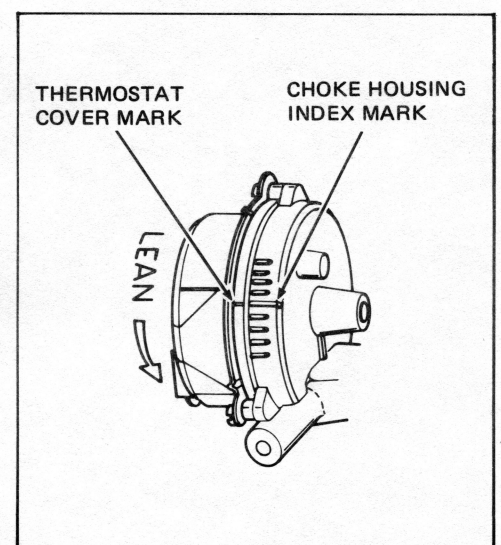


FIG. 12 ELECTRIC CHOKE SETTING