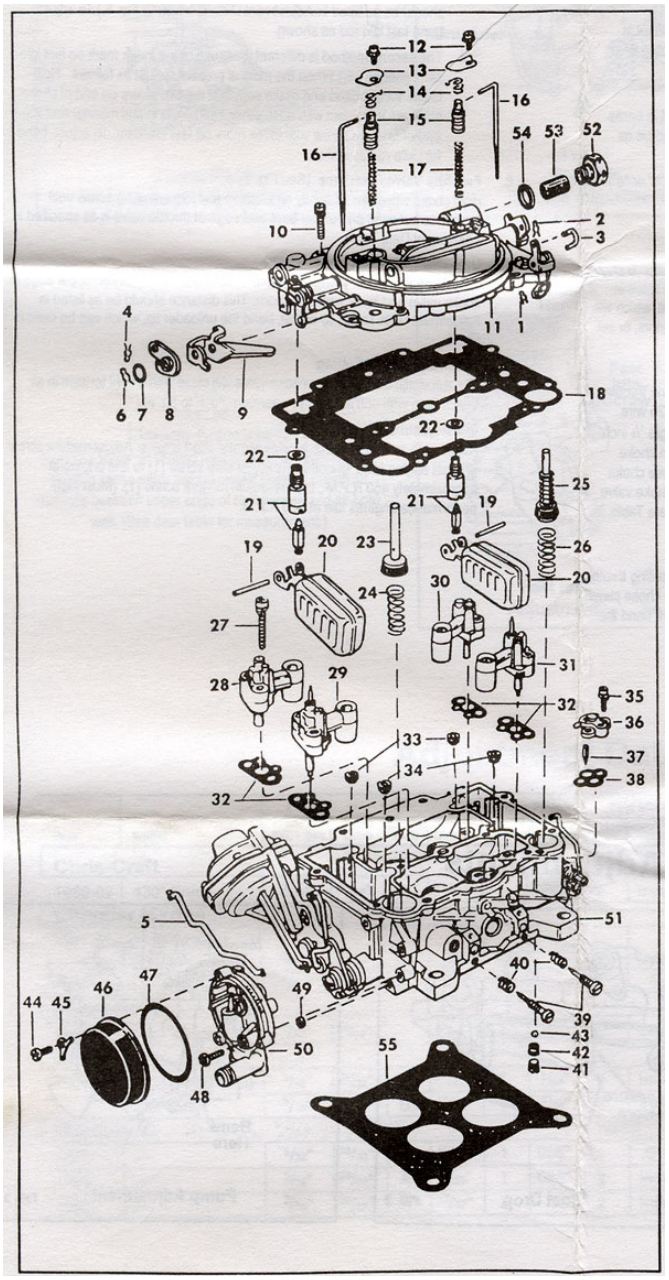
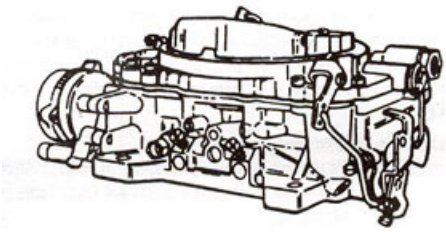
INSTRUCTION SHEET

Off Vehicle Carburetor Service – Carter Model – AFB

General Exploded View

The general design and parts shown will vary to individual units covered on this instruction sheet.





Nomenclature

Ref.No.

1. Pin Spring
2. Pin Spring
3. Pump Link
4. Pin Spring
5. Choke Connector Rod
6. Pin Spring
7. Dashpot Lever Washer
8. Outer – Dashpot Arm
9. Inner – Dashpot Arm
10. Screw and Lock Washer Assembly
11. Air Horn Assembly
12. Screw and Lock Washer Assembly
13. Step – Up Piston Covers
14. Step – Up Rod Retaining Spring
15. Vacuum Pistons
16. Step – Up Rods
17. Vacuum Pistons
18. Air Horn Gasket
19. Float Pin
20. Float Assemblies
21. Needle and Seat Assemblies
22. Needle Seat Gaskets
23. Dashpot Plunger Assembly
24. Dashpot Plunger Spring
25. Pump Plunger Assembly
26. Pump Return Spring
27. Screw and Lock Washer Assembly
28. Secondary Venturi Assembly - Choke Side

Ref.No.

29. Primary Venturi Assembly - Choke Side
30. Secondary Venturi Assembly - Pump Side
31. Primary Venturi Assembly - Pump Side
32. Venturi Cluster Gaskets
33. Secondary Metering Jets
34. Primary Metering Jets
35. Screw and Lock Washer Assembly
36. Pump Jet Housing
37. Pump Discharge Needle
38. Pump Jet Housing Gasket
39. Idle Adjusting Screws
40. Idle Adjusting Screw Springs
41. Pump Intake Passage Plug
42. Pump Intake Ball Seat
43. Pump Intake Ball
44. Screw
45. Coil Housing Retainer
46. Thermostatic Coil and Housing Assembly
47. Coil Housing Gasket
48. Screw
49. Choke Piston Housing Assembly
50. Choke Piston Housing Gasket
51. Carburetor Body Assembly
52. Fuel Inlet Fitting
53. Fuel Inlet Strainer
54. Fuel Inlet Fitting Gasket
55. Flange Gasket

Disassembly

a. Disassemble in the order of index numbers on the exploded view drawing. Disassembly need not be carried further than parts exploded on the drawing unless additional parts require replacement.

b. Notice the holes from which linkage rods are removed so they can be returned to the same locations during reassembly.

Cleaning

Soak parts long enough to soften and remove all foreign material. Use a carburetor cleaning solvent, lacquer thinner or denatured alcohol. Use a small brush to aid cleaning, if necessary. Make certain the throttle body is free of all hard carbon deposits. Blow out all passages in castings with compressed air, and check carefully to insure thorough cleaning of obscure areas.

Caution: Do not soak rubber, leather or plastic parts in solvent.

Reassembly

Reassemble the carburetor using essentially the reverse order of disassembly. Refer to **Disassembly** paragraph (b), when installing linkage rods.

Adjustments

1. **Float Setting Adjustment (See Fig. 1)**
   With air horn held upside down; air horn gasket and floats in place, measure the distance between edges of floats and gasket surface at outer ends. Refer to Adjustment Data Table for proper gauge. Adjust by carefully bending float bracket and make sure that floats are properly aligned to avoid interference in the bowl.

2. **Float Drop Adjustment (See Fig. 2)**
   With air horn held upright and level, measure at location shown (gasket in place). Adjust to dimension listed in Adjustment Data Table by bending float stop tabs on float bracket.

3. **Pump Adjustment (See Fig. 3)**
   a. Back out throttle stop screw until primary throttle valves seat in bores. The distance from top of pump plunger rod to air horn should be as listed in Adjustment Data Table.
   b. Insert rod in lever hole listed in Adjustment Data Table (“a”, “b” or “c”).
   c. Adjust by bending pump rod at location shown in figure 3.

4. **Choke Piston Linkage Adjustment**
   a. **Type I (See Fig. 4)**
   Hold choke valve closed and measure clearance between stop in choke piston housing and choke lever. This distance should be as listed in Adjustment Data Table. To adjust bend choke connector rod, this will be positioned at slightly different locations for some carburetors, or set lever on countershaft if lever has a clamp screw.
   b. **Type II**
   Keep fast idle cam from touching adjusting screw by blocking throttle approximately half open. With choke valve open place a .026 wire gauge (made by bending a .026 diameter wire at a 90° angle 1/8 inch from end) between bottom of slot in piston and top of slot in choke piston cylinder. Holding the .026 wire gauge in position, close choke valve until resistance is felt. The distance between top of choke valve and air horn should be the same as given in Adjustment Data Table. To adjust, bend choke connector rod.
   c. **Type III**
   Keep fast idle cam from touching the adjusting screw by holding throttle open. When holding the choke valve closed, the top of the choke piston should be flush with the top of the piston cylinder. To adjust, bend the choke connector rod.

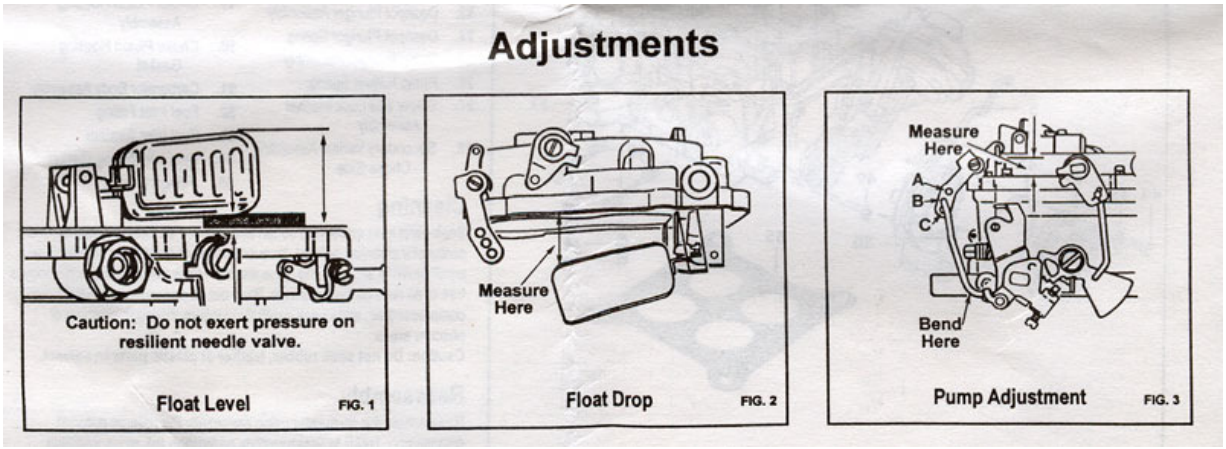
5. **Fast Idle Linkage Adjustment (See Fig. 5 and 6)**
   Methods of performing this adjustment vary between carburetors and car models. The first type of adjust is made as follows:
   a. Hold choke valve closed and fast idle cam against stop on carburetor housing. The clearance between the two levers on end of choke shaft should be as listed in Adjustment Data Table (See Fig. 5.) To adjust, bend fast idle rod as shown.
   b. The second method is different because of the index mark on fast idle cam. (See Fig 6.) When the mark is present, adjust as follows: Hold choke lever closed and make sure that the two levers on end of choke shaft are in contact with each other. Hold parts in this manner and align end of fast idle screw with index mark on fast idle cam. To adjust, bend fast idle rod as shown.

6. **Fast Idle Valve Clearance (See Fig. 7)**
   Hold choke valve closed tightly and tighten fast idle adjusting screw until clearance between carburetor bore and edge of throttle valve is as specified in Adjustment Data Table.

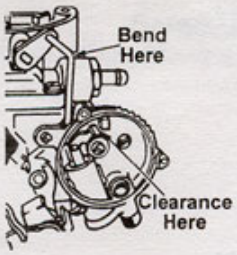
7. **Unloader Adjustment (See Fig. 5)**
   Open primary throttle valves wide and check clearance between upper edge of choke valve and inner wall of air horn. This distance should be as listed in Adjustment Data Table. To adjust, bend the unloader lip, which can be seen in Fig. 5.

8. **Automatic Choke Setting**
   Set automatic choke so that choke valve will close with a light tension in air intake bore with unit at room temperature 70°F to 80°F.

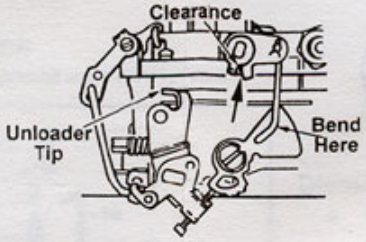
9. **Idle Adjustment (See Fig. 8)**
   Adjust stop screw (1) to crack valve slightly. Start engine. Adjust mixture screw (2) until engine idles smoothly. Re-adjust stop screw (1) to idle engine at approximately 450 R.P.M.; then re-adjust mixture screw (1). (Most high performance engines idle at 500 R.P.M.)



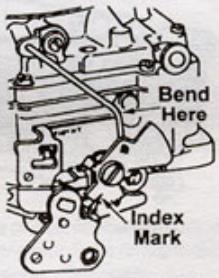
Adjustments (Cont.)



Choke Piston
Linkage Adjustment FIG. 4



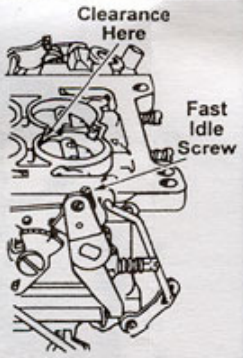
TYPE 1
Fast Idle
Linkage Adjustment FIG. 5



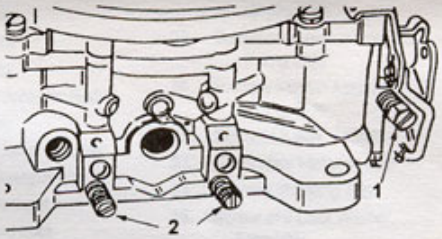
TYPE 2
Fast Idle
Linkage Adjustment FIG. 6

TYPE 3
Fast Idle
Linkage Adjustment

Fast idle screw on second step against shoulder of first. Holding choke valve toward closed position, measure distance between upper edge of choke valve and air horn wall. (See data table for measurement.)



Fast Idle
Adjustment FIG. 7



Idle Adjustment FIG. 8

Adjustment Data Table

Year	Model	Float Level Pri. - Sec.	Float Drop	Pump Adjust. Hole	Pump Adjust. Dimen.	Choke Piston Link Adjust. Type	Choke Piston Link Adjust. Dimen.	Fast Idle Link Adjust. Type	Fast Idle Link Adjust. Dimen.	Fast Idle Valve Dimen.	Automatic Choke Setting	Un-Loader Dimen.	Sec. Throttle Lever Adj. Step 1	Sec. Throttle Lever Adj. Step 2	Slow Idle R.P.M.
Chris-Craft															
1960-62	430" Eng.	3/16"	23/32"	A	17/32"	1	.086"	2	Index	.030"	Index	1/8"	27/64"	1/64"	700
Chrysler Marine															
1961-65	8 cyl. M318B, M383, M413	7/32"	23/32"	B	7/16"	—	—	2	Index	.020"	1-Rich	1/4"	13/64"	1/64"	500
1965	M273B	7/32"	23/32"	B	7/16"	—	—	3	1/16"	.020"	2-Rich	1/4"	21/64"	1/64"	500
Crusader															
1965	Mark 7-8-9-10	7/32"	23/32"	—	33/64"	1	.010	2	Index	.012"	Index	3/16"	15/64"	1/64"	550
Dearborn															
1961-64	361" & 390" Eng.	3/16"	23/32"	A	17/32"	1	5/64"	2	Index	.030"	Index	1/8"	27/64"	1/64"	600
	289" Eng.	3/16"	3/4"	B	15/32"	1	9/64"	2	Index	.020"	Index	3/32"	—	—	600
Mercury															
1957	—	5/32"	23/32"	B	15/32"	1	.086"	1	.010"	.020"	1-Rich	5/64"	—	—	500
1959	—	3/16"	23/32"	A	17/32"	1	.086"	2	Index	.030"	Index	1/8"	15/32"	1/64"	—
1960	—	3/16"	23/32"	A	17/32"	2	1/8"	2	Index	.040"	Index	1/8"	25/64"	1/64"	525