

FUEL SYSTEM

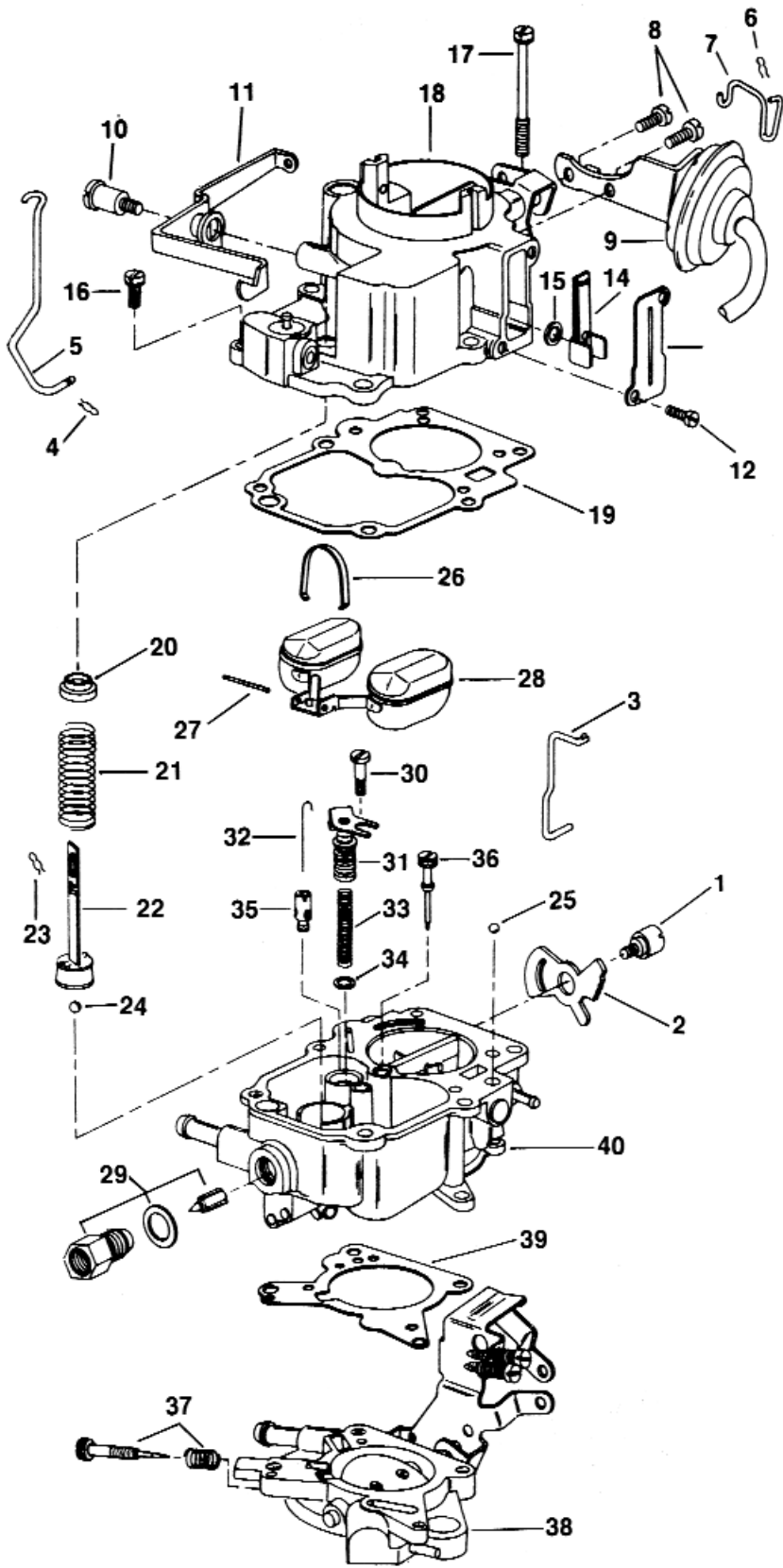
SERVICE INSTRUCTION WORKSHEET

TO REPAIR

GF3494-8

CARTER CARBURETOR

1 BARREL—MODEL BBS



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.

SPECIAL NOTES

1. Idle mixture screws (37) are not removable on C.A.P. carburetors.
2. On other carburetors, before removing idle mixture screws (37), turn screws until lightly seated, counting number of turns. Use this figure when reassembling carburetor.
3. Pump plunger clip (23) should be assembled onto center groove of pump plunger as standard setting.
4. Pump piston cup must be lightly lubricated with clean engine oil then flared before installation.
5. **Caution:** Do not allow needle to be pressed into seat when making the adjustment as it may damage the needle's tip.
6. Late model carburetors do not use a washer with main metering jet (35).
7. Be sure to install pump intake ball (24), pump discharge ball (25), and step-up piston washer (34) before installing air horn assy. (18).
8. Carburetor models equipped with climatic choke should adjust fast idle and unloader before installing the thermostatic coil components.
9. **Note:** Whenever pump operating rod is moved from one hole to another, a corresponding change must be made in vent valve clip (23) on pump stem as follows:

Center hole—center groove; inner hole—upper groove;
outer hole—lower groove.

PARTS LIST

- | | |
|------------------------------------|------------------------------------|
| 1. Screw, fast idle cam | 22. Pump, plunger assembly |
| 2. Cam, fast idle | 23. Clip, pump plunger |
| 3. Rod, choke connector | 24. Ball, pump intake |
| 4. Cotter pin | 25. Ball, pump discharge |
| 5. Rod, accelerator pump | 26. Retainer, float pin |
| 6. Cotter pin | 27. Pin, float hinge |
| 7. Rod, choke pull-off | 28. Float assembly |
| 8. Screw, choke pull-off (2) | 29. Needle, seat & washer assembly |
| 9. Choke pull-off assembly | 30. Screw, step-up piston plate |
| 10. Screw, pump & vent valve lever | 31. Step-up piston assy. |
| 11. Lever, pump plunger | 32. Rod, step-up |
| 12. Screw, cover (2) | 33. Spring, step-up piston |
| 13. Cover, compensator valve | 34. Washer, step-up piston |
| 14. Compensator valve | 35. Jet, main metering |
| 15. Washer, compensator valve | 36. Jet, low speed |
| 16. Screw, air horn (2 short) | 37. Screw & spring, idle adjusting |
| 17. Screw, air horn (4 long) | 38. Throttle body assembly |
| 18. Air horn assembly | 39. Gasket, throttle body |
| 19. Gasket, air horn | 40. Main body assembly |
| 20. Retainer, pump plunger | |
| 21. Spring, pump plunger | |

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

ADJUSTMENT DATA

FIG. 1 FLOAT ADJUSTMENT

While holding the retainer against the float pin in the bottom of the guide slots, invert the carburetor body and measure the float body drop.

Carefully bend the float lip to make any corrections. (See Specification Chart.)

FIG. 2 PUMP TRAVEL & BOWL VENT ADJUSTMENT

NOTE: Bowl vent clearance will automatically be achieved with pump travel adjustment.

1. Set throttle valve at closed position and throttle connector rod 'A' in center hole of throttle lever and outer hole of pump arm (unless otherwise specified).

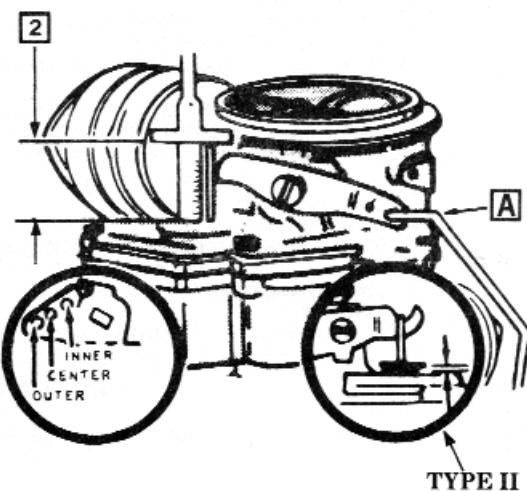
TYPE I

2. Measure dimension from surface of casting to top of pump plunger. It should be as specified in chart. To adjust, bend rod 'A'.

TYPE II

3. With clip (23) in center groove of pump plunger as standard setting, measure dimension between vent valve and bushing. It should be as specified in chart. To adjust, bend rod 'A'.

TYPE I



TYPE III (Late Models)

4. Set as in step 1 except throttle valve at carb. idle.
5. With clip (23) in center groove of pump plunger, measure dimension from air cleaner gasket surface to top of pump plunger. It should be as specified in chart. To adjust, bend rod 'A'.
6. Measure dimension 'B' from surface of casting to top of vent valve shaft.
7. To adjust, bend tang on operating lever.

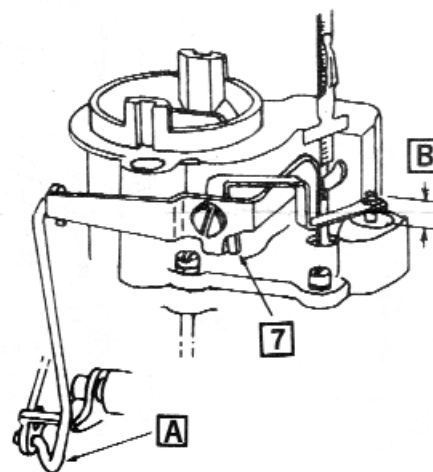
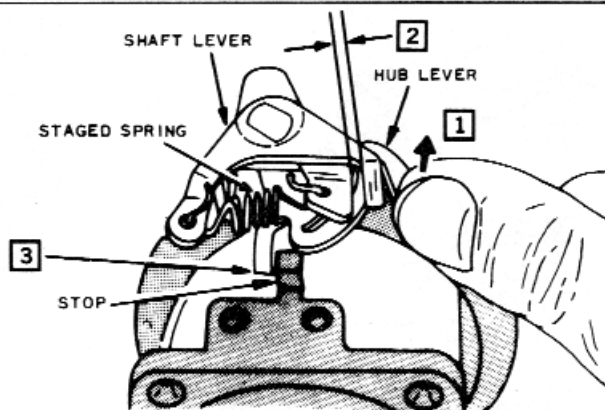


FIG. 3 SPRING STAGED CHOKE ADJUSTMENT

Used on 170" Engine only (except Taxi).

1. Apply light pressure on hub lever to close choke completely.
2. Clearance between the shaft lever and the hub lever should be .010-.040 on all models.
3. Bend the hub lever tang to correct the clearance.



ADJUSTMENT DATA (Cont'd)

**FIG. 4
FAST IDLE ADJUSTMENT**

TYPE I

1. Back out throttle screw. Open throttle and close choke valve to allow fast idle cam to turn to fast idle position.
2. Measure dimension between edge of throttle valve and bore (opposite the idle port).
3. To adjust, bend choke connector rod.

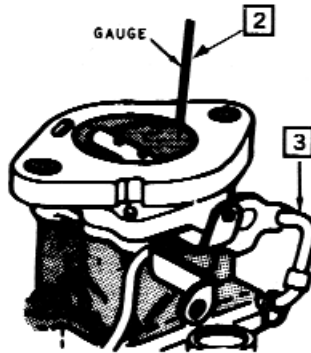
TYPE II

4. Close choke valve and repeat step 3 until fast idle screw is aligned with index mark on cam.
5. Repeat step 2. To adjust, turn screw.

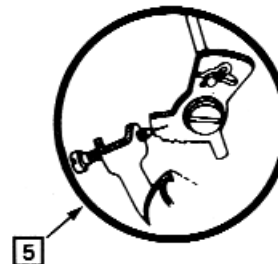
TYPE III (Late Models)—Linkage Adjustment
(Illustration not shown)

6. Place fast idle speed screw on indicated step of fast idle cam (see spec. chart).
7. Measure dimension between upper edge of choke valve and wall of air horn.
8. To adjust, bend choke connector rod.

TYPE I



TYPE II



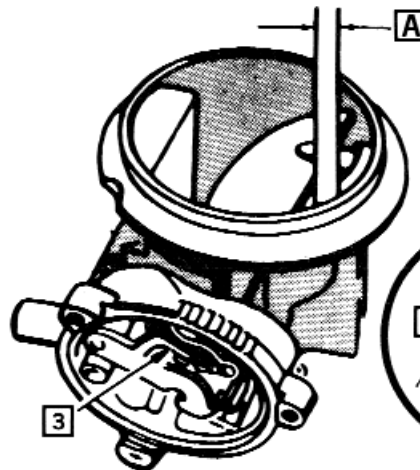
**FIG. 5
UNLOADER ADJUSTMENT**

TYPE I

1. While holding throttle valve wide open, close choke valve without forcing.
2. Measure dimension "A" with gauge or drill bit between upper edge of choke valve and wall of air horn.
3. To adjust, bend arm on choke trip lever (inside piston housing).

TYPE II & III

4. Repeat steps 1 and 2.
5. To adjust, bend tang on throttle lever—
(see insert Fig. 5).



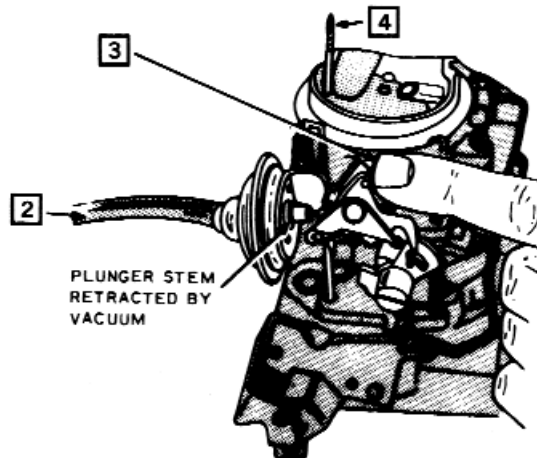
TYPE II & III



TYPE I

**FIG. 6
CHOKE VACUUM
PULL-OFF ADJUSTMENT
(VACUUM KICK)**

1. With engine shut off, open throttle valve and allow choke valve to close.
2. Apply outside vacuum source to choke pull-off or press plunger in until seated.
3. Apply light closing pressure to choke valve.
4. Measure dimension with gauge or drill bit between upper edge of choke valve and wall of air horn.
5. To adjust, bend choke connecting rod at "U" shaped section.



SPECIFICATION BY APPLICATION

Year	MODEL/CARB. NO.	Float Level	Pump & Bowl Vent ¹			Fast Idle		Unloader		Choke Pull-off Vacuum Kick	Choke Setting	Curb Idle R.P.M.
			TYPE	Lever Hole	Adjust.	Linkage Adjust.	Throttle Valve Adjust.	TYPE	Adjust.			

CHRYSLER INDUSTRIAL

	170, 225 Eng.-Carb. No. 3699	1/4	II	Center	1/16	15/64	1/32	II	3/16	11/64	2NR	500
	-Carb. No. 3802	1/4	II	Center	1/16	15/64	1/64	II	3/16	5/32	2NR	500

DODGE TRUCKS

1981-74	225 Eng.	1/4	III	Outer	5/16 ¹⁰	5/64	—	III	3/16	7/64	—	7
1973	225 Eng.-w/E.C.S.	1/4	III	Outer	5/16 ¹⁰	5/64	—	III	3/16	7/64	—	7
1972-73	225 Eng.	1/4	II ²	Outer	1/32 ¹⁰	5/64	—	II	3/16	7/64	—	7
1971-70	225 Eng.-w/E.C.S.-M/T	1/4	III	Outer	5/16 ⁶	5/32	—	III	3/16	—	—	7
	-A/T	1/4	III	Outer	5/16 ⁶	5/64	—	III	3/16	5/64	2NR	7
	-w/o E.C.S.-M/T	1/4	II ²	Outer	1/32 ¹⁰	5/32	—	II	3/16	—	—	7
	-A/T	1/4	II ²	Outer	1/32 ¹⁰	5/64	—	II	3/16	7/64	2NR	7
1969	225 Eng.-M/T	1/4	II ²	Outer	1/16	5/32	1/32	II	3/16	—	9	7
	-A/T	1/4	II ²	Outer	1/16	5/64	1/64	II	3/16	7/64	2NR	7
1968-66	170, 225 Eng.	7/32	II ²	Outer	1/16	5/32	—	II	3/16	—	—	550
	-w/C.A.P.-M/T	1/4	II ²	Outer	1/16	5/64	—	II	3/16	7/64	2NR	550
	-w/ & w/o C.A.P.-A/T	1/4	II	Center	1/16	5/32	—	II	3/16	—	—	500
	-w/o C.A.P.-M/T	1/4	II	Center	1/16	7/32	—	II	3/16	5/32	2NR	500
1965-64	170, 225 Eng.	7/32	II	Center	1/16	—	—	II	3/16	—	Index	500
1963-61	170, 225 Eng.	1/4	II	Center	1/16	5/64	1/32	II	3/16	7/64	2NR	500
	Carb. No. 4199 Carb. No. 3699; 3700, 82; 3812, 13	1/4	II	Center	1/16	15/64 ⁴	1/32	II	3/16	11/64 ⁵	2NR	500

DeSOTO, DODGE, PLYMOUTH

1971-70	198 Eng.-w/E.C.S.-M/T	1/4	III	Outer	5/16 ⁶	5/64	—	III	3/16	7/64	2NR	7
	-A/T	1/4	III	Outer	5/16 ⁶	5/64	—	III	3/16	5/64	2NR	7
	w/o E.C.S.-M/T	1/4	II ²	Outer	1/32	5/64	—	II	3/16	7/64	2NR	7
	A/T	1/4	II ²	Outer	1/32	5/64	—	II	3/16	7/64	2NR	7
1969-68	170 Eng.	1/4	II ²	Outer	1/16	5/64	1/64	II	3/16	7/64	2NR	7
1967-66	170, 225 Eng.-M/T	1/4	II ²	Outer	1/16	5/64	1/64	II	3/16	5/32	2NR	550 ⁸
	-w/o C.A.P.-A/T	1/4	II	Center	1/16	5/64	1/64	II	3/16	7/64	2NR	550
1965-64	Carb. No. 3999, 4000	1/4	—	—	—	—	—	—	—	—	—	550
	Carb. No. 3995	1/4	II	Center	1/16	5/64	1/64	II	3/16	5/32	2NR	550
	Carb. No. 3965, 3967, 3966	1/4	II	Center	1/16	5/64	1/64	II	3/16	3/32 ¹²	2NR	700
	Carb. No. 3833, 3834, 3836, 37, 38, 39, 40, 41, 3964 4196, 4197, 4198	1/4	II	Center	1/16	5/64	1/64	II	3/16	9/64	2NR	550 ¹¹
1963-60	Carb. No. 3664, 75, 3676, 77, 78, 79, 3680, 81	1/4	II	Center	1/16	15/64 ^{3, 16}	1/32	II	3/16	5/32 ¹³	2NR	550
	Carb. No. 2900, 01, 2985, 86, 3093, 94, 3127	7/32	I	Center	27/32	—	1/32	I	11/64	—	Index	550
	Carb. No. 3053	9/32	I	Center	27/32	—	1/32	I	11/64	—	Index	500
	Carb. No. 3097, 3129, 3233	9/32	II	Inner	1/16	—	1/32	II	3/16	—	2NR ¹⁵	500
	Carb. No. 3286, 87, 3511	7/32	—	—	1/16	—	1/32	—	3/16	—	Index	550
	Carb. No. 3098, 99, 3128	7/32	—	—	1/16	—	1/32	—	3/16	—	Index	550
	Carb. No. 3229, 30, 31, 32, 34, 35, 37, 38, 3239, 3462, 63, 64, 3265, 66, 3468, 3552	7/32	II	Center	1/16	—	1/32	II	3/16	—	2NR ¹⁴	550
	Carb. No. 3510, 3512	7/32	I	Center	27/32	—	1/32	I	11/64	—	Index	550
	Carb. No. 4196, 97, 4198	1/4	II	Center	1/16	5/64	1/64	II	3/16	9/64	2NR	550

FOOTNOTES:

¹ Pump plunger clip in center groove unless otherwise specified.

² Pump plunger clip in lower groove.

³ Carb. No. 3676, 77, 79 set 7/32".

⁴ Carb. No. 3782, 3813 set 7/32"; Carb. No. 3700 set 3/16".

⁵ With A/T set 1/8".

⁶ Set "B" dimension to 17/64". Make adjustments after curb idle has been set.

⁷ See engine decal.

⁸ Carb. with C.A.P. set 700 R.P.M.

⁹ Manual choke.

¹⁰ Make adjustment after curb idle has been set.

¹¹ Carb. No. 3964 set 700.

¹² Carb. No. 3966 set 1/8".

¹³ Carb. No. 3676, 78, 80 set 1/8".

¹⁴ Carb. No. 3462, 63, 66, 68, 3552, 90 set 4NR.

¹⁵ Carb. No. 3097, 3511 set Index.

¹⁶ Carb. No. 3678, 3680 set 3/16".

ABBREVIATIONS

A/T	Automatic Transmission
C.A.P.	Cleaner Air Package
E.C.S.	Evaporation Control System
M/T	Manual Transmission
w/	With
w/o	Without