

# FUEL SYSTEM

## SERVICE INSTRUCTION WORKSHEET

TO REPAIR

GF3714-6

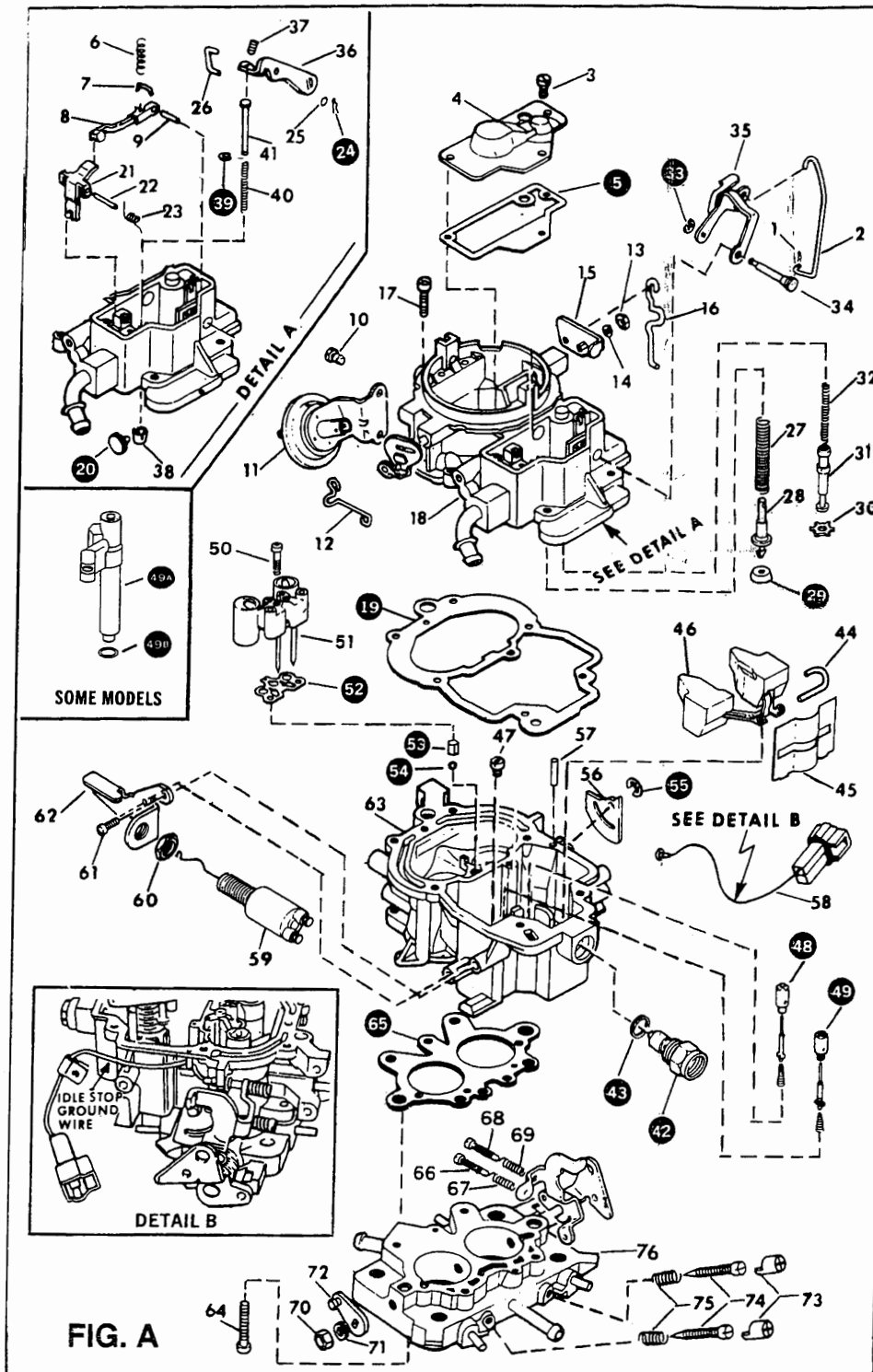
HOLLEY CARBURETOR

2 BARREL • MODELS 2280, 6280

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

### TYPICAL ILLUSTRATION



### 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. Pin, Cotter, Pump Rod
2. Rod, Pump
3. Screw, Cover (3)
4. Cover, Bowl Vent & Pump
5. Gasket, Bowl Vent & Pump
6. Spring, Bowl Vent Valve
7. Retainer, Pin Lever
8. Lever, Bowl Vent Valve
9. Pin, Bowl Vent Valve
10. Screw, Choke Diaphragm (2)
11. Choke Diaphragm Assy.
12. Link, Choke Diaphragm
13. Nut, Dechoke Lever
14. Washer, Dechoke Lever
15. Lever, Dechoke
16. Link, Fast Idle
17. Screw, Air Horn (6)
18. Air Horn
19. Gasket, Air Horn
20. Seal, Bowl Vent Valve
21. Lever, Bowl Vent Valve
22. Pin, Bowl Vent Valve
23. Spring, Bowl Vent Valve
24. Clip, Hair Pin
25. Washer
26. Link, Accelerator Pump
27. Spring, Pump
28. Stem, Pump
29. Cup, Pump
30. Retainer, Power Valve
31. Gasket, Power Valve
32. Spring, Power Valve
33. "E" Clip, Lever Shift
34. Shaft, Pump Valve
35. Lever, Pump
36. Lever, Pump & Power Valve
37. Screw, Adj. Power Valve
38. Cap, End, Power Valve
39. "E" Clip, Power Valve
40. Spring, Power Valve
41. Stem, Power Valve
42. Needle & Seat Assy. Inlet
43. Gasket, Needle & Seat Assy.
44. Pin, Float Hinge
45. Baffle, Float
46. Float & Hinge Assy.
47. Jet, Metering
48. Power Valve Assy. Vacuum (Mark Location)\*
49. Power Valve Assy. Mechanical (Mark Location)\*
- 49A. Solenoid, Feedback
- 49B. "O" Ring, Feedback Solenoid
50. Screw, Venturi Assy.
51. Venturi Assy.
52. Gasket, Venturi Assy.
53. Weight, Pump Discharge
54. Ball, Pump Discharge
55. "E" Clip, Fast Idle Cam
56. Cam, Fast Idle
57. Roll Pin, Ground Wire Hanger
58. Wire, Idle Stop, Ground
59. Transducer, Throttle Positioner
60. Nut, Transducer Adjusting
61. Screw, Transducer Bracket (2)
62. Bracket, Transducer
63. Main Body
64. Screw, Throttle Body to Main Body (4)
65. Gasket, Throttle Body to Main Body
66. Screw, Throttle Stop
67. Spring, Throttle Stop Screw
68. Screw, Fast Idle Adjusting
69. Spring, Fast Idle Screw
70. Nut, Throttle Shaft
71. Washer, Throttle Shaft
72. Lever, Transducer
73. Cap, Limiter (Some Models)
74. Screw, Idle Adjusting
75. Spring, Idle Screw Adjusting
76. Throttle Body Assy.

NOTE: Circled parts are included in most kits. Extra parts are included for other kits.

\* See Note 5 on Disassembly, Page 2.

### NOTES ON DISASSEMBLY

1. Do not remove choke or throttle valve plates or their respective shafts unless replacements are required.
2. Mark location for re-assembly of all levers, springs, main jets, rods and screws of different lengths.
3. Before dismantling Float Assy., measure and record float level setting for re-assembly since specification data may not be available for all carburetors.
4. To prevent loss or damage to pump discharge ball (Fig. A,54) and weight (53), invert main body (63) with venturi assembly (51) removed. Allow pump discharge ball & weight to fall into cupped hand.
5. **CAUTION:** Mechanical and vacuum power valves are not interchangeable. The mechanical power valve, (49), is located on the choke side of the carburetor and has a longer needle and a smaller diameter stem. The vacuum power valve, (48), is located on the throttle side of the carburetor and has a shorter needle and a larger diameter stem.

### NOTES ON DISASSEMBLY (Cont'd)

6. To remove limiter caps (73), insert no. 8 sheet metal screw into cross slot while grasping cap with a pair of pliers. Next, turn screw clockwise until cap lifts off.
7. Record location of pump rod (holes A or B, Fig. C) for proper reassembly.

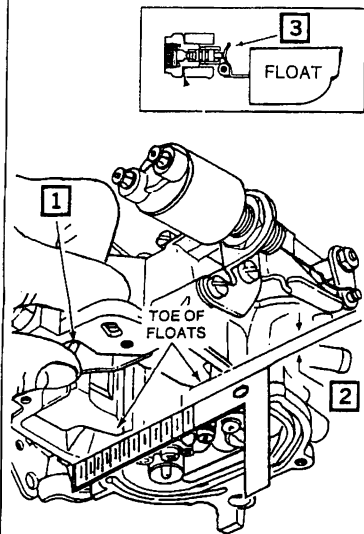
### NOTES ON RE-ASSEMBLY

1. When adjusting Float Level, do not allow VITON tip needle to be compressed into needle seat since this will cause a false reading which will effect correct fuel level in float bowl. After being compressed the rubber slowly recovers its shape.
2. Check float (Fig. A,46) for fuel absorption by pressing lightly between fingers. If surface appears wet or float has a heavy feel, check against a serviceable float and replace if necessary.
3. When lowering air horn assembly (Fig. A, 18) straight down on main body (63), guide pump cup (29) into pump cylinder and check both upper power valve assemblies for correct alignment with lower valve assembly pins. **CAUTION:** Misalignment can damage pins.

## ADJUSTMENT DATA

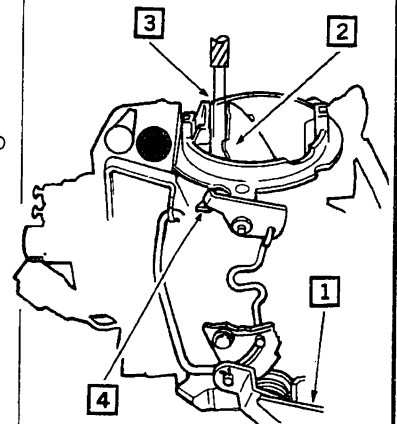
**FIG. B  
FLOAT LEVEL  
ADJUSTMENT**

1. INVERT MAIN BODY WITHOUT GASKET. POSITION FINGER TO HOLD FLOAT HINGE PIN IN PLACE TO FULLY SEAT FLOAT ASSEMBLY IN SLOT. CAUTION: ALLOW WEIGHT OF FLOATS ONLY TO PUSH NEEDLE AGAINST SEAT.
2. MEASURE AS SPECIFIED FROM TOE OF FLOATS TO SURFACE OF CASTING.
3. BEND FLOAT TANG TO ADJUST IF REQUIRED.



**FIG. D  
CHOKE UNLOADER  
SETTING**

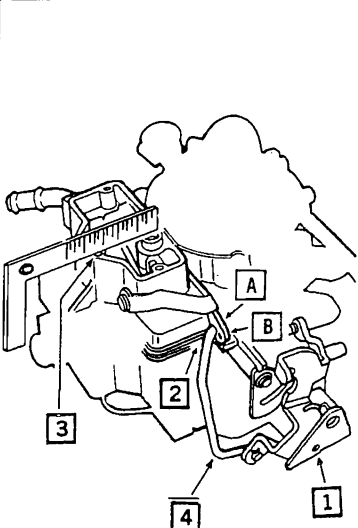
1. MOVE THROTTLE LEVER TO WIDE OPEN POSITION.
2. APPLY LIGHT CLOSING PRESSURE TO CHOKE VALVE.
3. MEASURE SPECIFIED DISTANCE BETWEEN WALL OF AIR HORN AND UPPER EDGE OF CHOKE VALVE.
4. BEND TANG TO ADJUST.



**FIG. C  
ROD LOCATION &  
PUMP ADJUSTMENT**

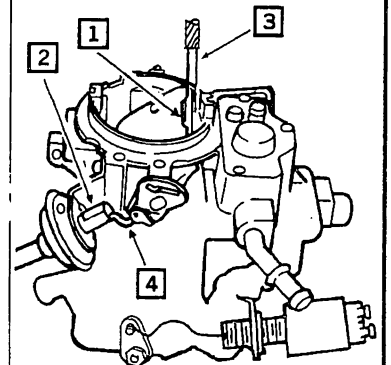
CAUTION: DO NOT DISTURB OR LOSE PIN LEVER RETAINER (Fig. A, 7)

1. POSITION THROTTLE AT CURB IDLE.
2. PLACE PUMP ROD IN SAME HOLE AS RECORDED IN DISASSEMBLY.
3. MEASURE AS SPECIFIED BETWEEN SURFACE OF CASTING AND TOP OF PUMP LEVER.
4. BEND ROD, TO ADJUST. SOME MODELS: ADJUST TO ZERO CLEARANCE BETWEEN CAP NUT & LEVER BY TURNING CAP NUT. NOTE: THIS ADJUSTMENT, IF REQUIRED, WILL EFFECT BOWL VENT AND MECHANICAL POWER VALVE SETTINGS. RESET BOTH AS NECESSARY.



**FIG. E  
VACUUM BREAK  
ADJUSTMENT**

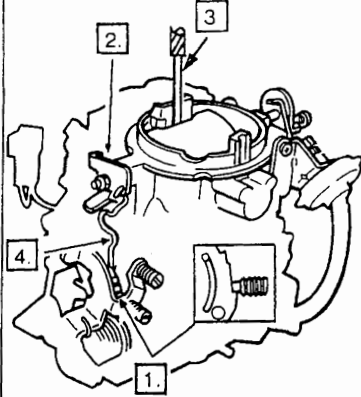
1. WITH FAST IDLE SCREW ON HIGH STEP OF CAM, APPLY LIGHT CLOSING PRESSURE TO CHOKE VALVE.
2. USING AN OUTSIDE VACUUM SOURCE, DEPRESS DIAPHRAGM PLUNGER TO END OF TRAVEL.
3. MEASURE SPECIFIED DISTANCE BETWEEN WALL OF AIR HORN AND UPPER EDGE OF CHOKE VALVE.
4. BEND CONNECTING LINK TO ADJUST.



## ADJUSTMENT DATA (Cont'd)

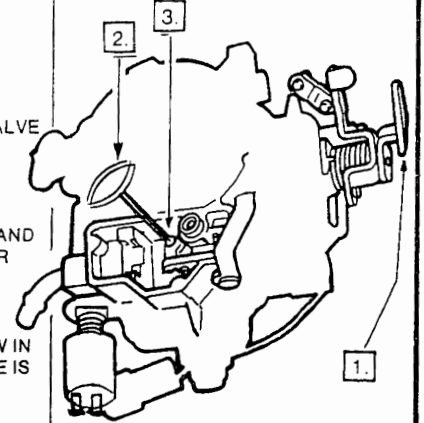
**FIG. F  
FAST IDLE CAM  
SETTING**

1. PLACE FAST IDLE SCREW ON SECOND STEP OF CAM
2. MAINTAIN LIGHT PRESSURE ON CHOKE VALVE LEVER TOWARD CLOSED CHOKE POSITION
3. MEASURE DISTANCE AS SPECIFIED BETWEEN WALL OF AIR HORN AND UPPER EDGE OF CHOKE VALVE
4. BEND LINK TO ADJUST



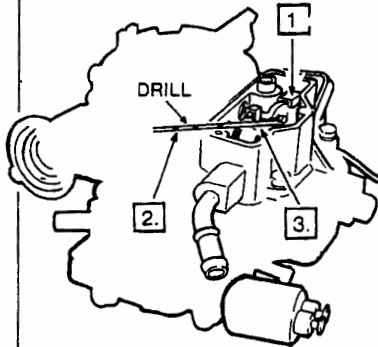
**FIG. H  
MECHANICAL  
POWER VALVE  
SETTING**

1. POSITION THROTTLE VALVE WIDE OPEN
2. PLACE HEX KEY IN ADJUSTING SCREW SOCKET. PRESS DOWN AND RELEASE TO CHECK FOR EXISTING CLEARANCE
3. IF ADJUSTMENT IS REQUIRED, TURN SCREW IN UNTIL ZERO CLEARANCE IS OBTAINED. NEXT, TURN SCREW OUT ONE FULL TURN. NOTE: THIS ADJUSTMENT MUST BE RE-SET IF PUMP ADJUSTMENT IS CHANGED



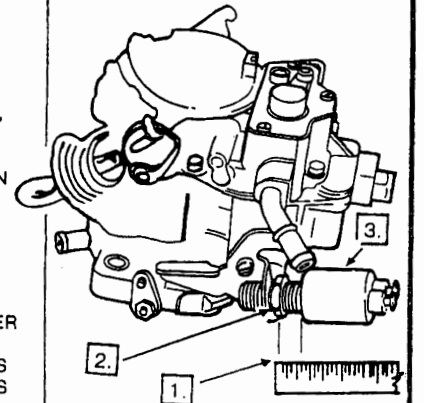
**FIG. G  
BOWL VENT  
SETTING**

1. WITH THROTTLE SET AT CURB IDLE, PUSH DOWN ON VENT VALVE LEVER
2. MEASURE AS SPECIFIED USING A DRILL OR GAUGE BETWEEN VENT VALVE LEVER AND VENT VALVE TANG
3. BEND END OF VENT VALVE LEVER TO ADJUST. NOTE: THIS ADJUSTMENT MUST BE RE-SET IF PUMP ADJUSTMENT IS CHANGED



**FIG. I  
TRANSDUCER  
ADJUSTMENT**

1. MEASURE AS SPECIFIED, DISTANCE BETWEEN BRACKET AND BODY OF TRANSDUCER AS SHOWN
2. IF ADJUSTMENT IS REQUIRED, LOOSEN JAM NUT
3. ROTATE TRANSDUCER CLOCKWISE OR COUNTER CLOCKWISE UNTIL CORRECT CLEARANCE IS OBTAINED. AFTERWARDS RE-TIGHTEN JAM NUT



## SPECIFICATIONS BY APPLICATION

Year	Application	Float Level	Pump Adj.	Un-loader	Vacuum Break	Fast Idle Cam	Bowl Vent	Mech. Power	Trans-ducer Adj.	Idle Speed R.P.M.	
		Fig. B	Fig. C	Fig. D	Fig. E	Fig. F	Fig. G	Fig. H	Fig. I	Slow	Fast
89-78	<b>CHRYSLER CORP. CARS, DODGE TRUCKS 318 ENG. w/CARB. NO.'S.</b>										
	R7990 .....	9/32	—	.310	.150	—	.060	—	—	5	5
	R8067, 8068 .....	9/32	<sup>1</sup>	.310	.110	.100	—	2	—	5	5
	R8448 .....	9/32	—	.310	.150	.070	.030	—	—	5	5
	R8612 .....	9/32	—	.310	.150	.070	.060	—	—	5	5
	R8634 .....	9/32	—	.310	.150	—	.060	—	—	5	5
	R8920 .....	9/32	<sup>1</sup>	.310	.070	.090	.060	2	—	—	—
	R8999; 9000, 9001 .....	9/32	.030 <sup>3</sup>	.310	.130	.070	.030	2	—	700	1600
	R9135 .....	9/32	<sup>1</sup>	.310	.130	.070	4	2	—	5	5
	R9136, 9151 .....	9/32	<sup>1</sup>	.310	.110	.070	4	2	—	5	5
	R9209 .....	9/32	.030 <sup>3</sup>	.310	.150	.070	.060	2	—	700	1600
	R9224, 9427, 9428 .....	9/32	<sup>1</sup>	.310	.150	.070	.060	2	—	5	5
	R9225 .....	★	★	★	★	★	★	★	★	★	★
	R9425, 9426, 9437 .....	9/32	<sup>1</sup>	.310	.130	.070	.060	2	—	5	5
	R9491, 9493, 9572, 9949, 9951 .....	9/32	<sup>1</sup>	.200	.140	.052	6	2	—	750	1500
	R9492 .....	★	★	★	★	★	★	★	★	★	★
	R9949, 9950 .....	9/32	—	.200	.140	.052	—	—	—	5	5
	R40093, 40164 .....	9/32	—	.250	.140	.070	4	2	—	760	1500
	R40095 .....	9/32	—	.240	.140	.052	—	—	—	5	5
	R40121 .....	9/32	<sup>1</sup>	.280	.130	.060	—	2	—	5	5
	R40132 .....	9/32	—	.250	.150	.070	—	—	—	5	5
	R40157, 40157-1 .....	9/32	—	.200	.140	.052	—	—	—	5	5
	R40165, 40165-1 .....	9/32	—	.250	.140	.070	—	—	—	5	5
	R40167, 40167-1, 40172, 40172-1, 40198 .....	9/32	—	.250	.140	.052	—	—	—	5	5
	R40200 .....	9/32	—	.200	.140	.052	—	—	—	5	5
	R40214, 40216 .....	9/32	.210 <sup>3</sup>	.250	.140	.070	.035	2	—	5	5
	R40217 .....	9/32	.135	.350	.160	.060	6	2	—	5	5
	R40218 .....	9/32	.135	.250	.140	.060	6	2	—	5	5
	R40220 .....	9/32	.135	.350	.130	.060	6	2	—	5	5
	R40221 .....	9/32	—	.250	.150	.070	—	—	—	5	5
	R40222 .....	9/32	—	.150	.130	.070	—	—	—	5	5
	R40243 .....	9/32	<sup>1</sup>	5	5	5	5	5	5	5	5
	R40245 .....	9/32	—	.200	.140	.052	—	—	—	5	5
	R40276 .....	9/32	<sup>1</sup>	.280	.130	.060	—	2	—	5	5
	R40294 .....	9/32	—	.350	.160	.070	6	2	5	5	5
	R40320, 40321 .....	5	5	5	5	5	5	5	5	5	5
	R40354A .....	★	★	★	★	★	★	★	★	★	★

**FOOTNOTES:**

- <sup>1</sup> Pump lever surface is flush with top of bowl vent casing.
- <sup>2</sup> Refer to text Fig. H.
- <sup>3</sup> At idle.
- <sup>4</sup> Solenoid operated.
- <sup>5</sup> See decal on vehicle. (V.E.C./Label).
- <sup>6</sup> Not adjustable.
- ★ Specification data not available for the following  
Carb. nos. R9225; R9492; R9950; R40095, 165, -1; 167, -1; 172, -1; 198, 200; R4035A.