

FUEL SYSTEM SERVICE INSTRUCTION WORKSHEET

WORK SHEET TO REPAIR CARTER WCD TYPE CARBURETORS--TWO BARRELS

GF3558-1

HOW TO USE THIS INSTRUCTION SHEET

1. This worksheet has been designed to simplify your use of the repair Kit to tune-up a carburetor. It is set up so that you can follow each step by checking it off as you perform it. If you are interrupted any time during your work, you will know where you are when you get back to it.

2. The steps of disassembly are shown in numerical order. Parts are illustrated at right and are identified numerically in order to make it easy to find. Thus the first part to be removed is at the top of this list and can be found in the exploded drawing by its number designation. To reassemble proceed from the bottom of the list and check off operations in the right hand column.

3. The items contained in this kit are sufficient to replace the most frequently worn parts in the carburetor. The list of parts shown on this sheet DOES NOT reflect the contents of the kit.

4. This instruction sheet is applicable to all carburetors of this type. Since the illustrations (Exploded View) is typical and minor variations occur between the different models, procedures will be essentially as described and differences will be easily recognized. This kit may contain extra parts which are applicable to other carburetors in this group. Substitute identical replacement parts for original worn parts found on carburetor.

5. Cover manifold hole while the carburetor is off to prevent dust and dirt from entering.

6. Soak throttle body, air horn assembly and carburetor body in carburetor cleaner for about ten minutes. Remove carbon and all loose particles using a stiff bristle brush.

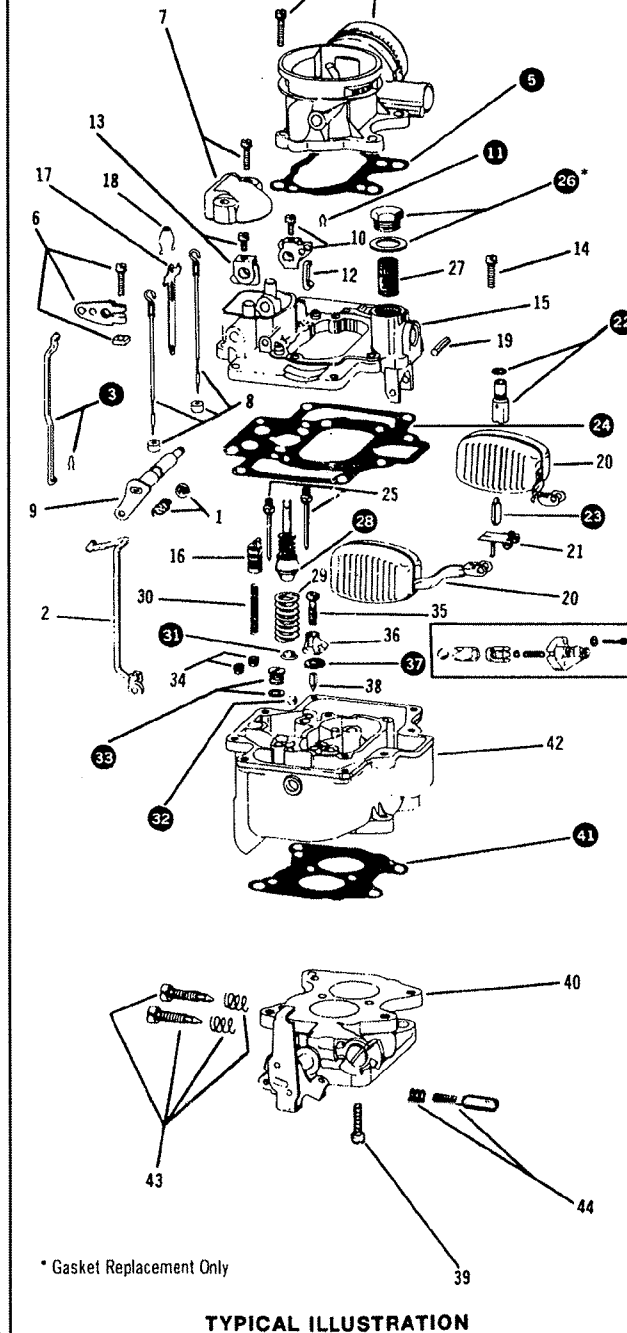
7. CAUTION: Parts made of rubber, leather, nylon or plastic are not to be soaked in carburetor cleaner.

8. Put small parts in strainer and allow to soak in a carburetor cleaner. Dry and place on paper towel.

9. Remove parts from solvent, blow out all passages and jets with air gun.

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

- NOTES: 1. Circled parts are included in most kits. Extra parts are included for other kits.
2. Pump Piston Cup (28) must be coated with a light film of lubricating oil then flared before installation.



PARTS LIST

1	Retainer & spring, pump rod
2	Throttle connector rod & retainer
3	Choke rod & pin spring
4	Air horn assy. & screws (4)
5	Gasket, air horn assy.
6	Choke lever, screw & nut
7	Dust cover & screws (2)
8	Metering rods & disks (2)
9	Lever & shaft assy., pump oper.
10	Pump arm & screw assy.
11	Pin, pump connector link
12	Link, pump connector
13	Metering rod arm & screw assy.
14	Screws, bowl cover (6)
15	Bowl cover
16	Vacuum piston
17	Link, vacuum piston
18	Spring, metering rod
19	Pin, float lever
20	Float assembly
21	Lever, auxiliary float
22	Seat assembly
23	Needle, seat assy.
24	Gasket, bowl cover
25	Low speed jet (2)
26	Nut & gasket, bowl strainer
27	Strainer, bowl cover
28	Pump Piston assy.
29	Spring, pump return
30	Spring, vacuum piston
31	Retainer (for 32)
32	Check ball, pump intake
33	Plug & gasket, pump discharge passage
34	Jet, metering rod (2)
35	Screw, pump jet hsg. attaching
36	Pump jet & hsg. assy.
37	Gasket, pump jet hsg.
38	Needle, pump discharge check
39	Screws (for 40) (4)
40	Body flange assembly
41	Gasket, body flange
42	Main body
43	Screw & spring, idle mixture adj. (2)
44	Screw, throttle lever adj.

NOTES:

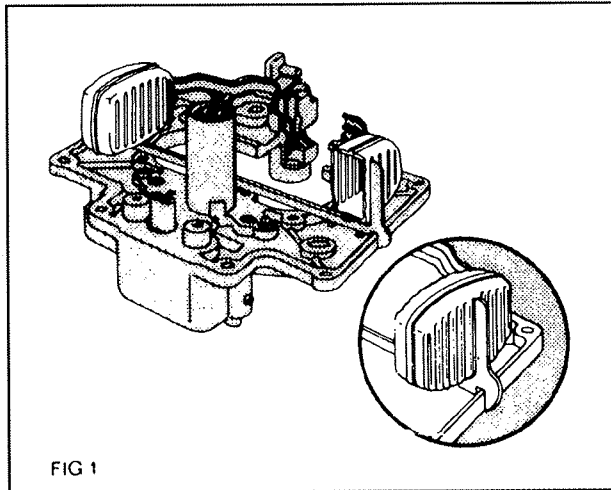
For initial setting, lightly seat (turn clockwise) idle adjusting screws (43) then back out approximately 1/2-1 1/2 turns. (EXCEPT WHERE IDLE LIMITER CAPS ARE USED).

Where IDLE LIMITER CAPS are used, refer to car manufacturers instructions for proper procedure to set idle mixture.

Pump discharge needle (38) should be installed POINT DOWN if located in main body.

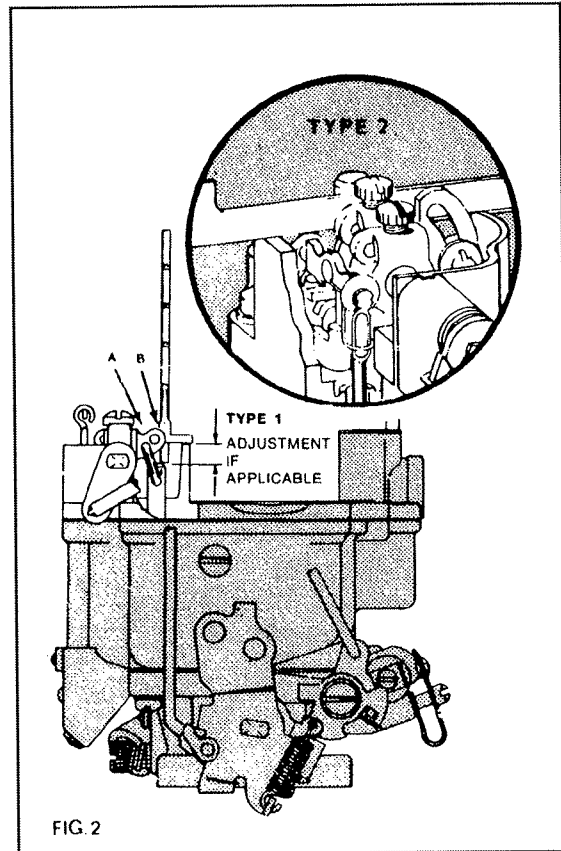
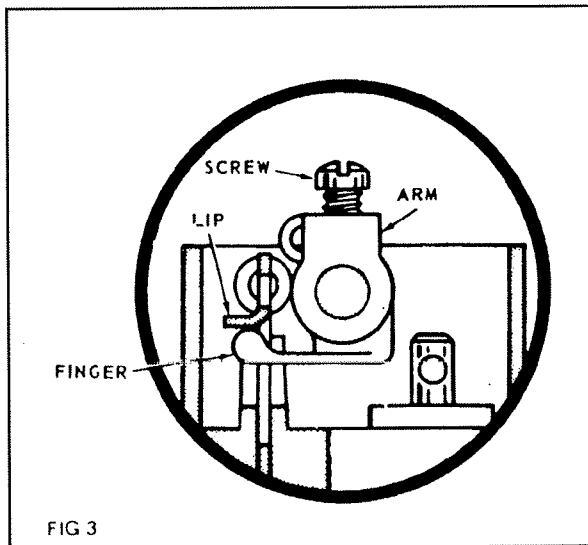
When installing vacuumer link (17), make sure lip on link is facing opposite carburetor bore.

CAUTION: When adjusting floats, do not allow VITON tip fuel inlet needle to be pressed into the needle and seat as damage to tip may result in incorrect float setting thus affecting proper fuel level in the bowl.



FLOAT ADJUSTMENT (Fig. 1)

Hold bowl cover assembly (15) in inverted position with gasket (24) removed and float lip resting freely on seated needle. The distance between top of float and machined surface of casting should be as specified (See Specification Chart). Float sides should just clear vertical uprights of float gauge. Bend float arms to adjust.



PUMP ADJUSTMENT (Fig. 2)

Insert pump connector link (12) in outer hole (B) of pump arm.

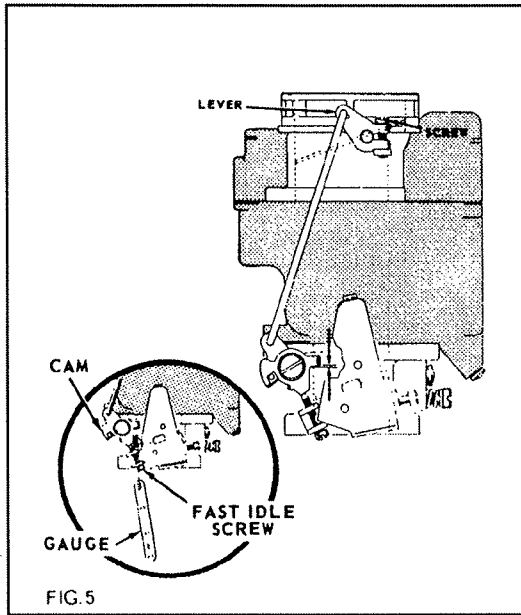
(See Illustration)

Bring throttle valves to a fully closed position by backing off throttle stopscrew. Place straightedge across top of dust cover boss above pump arm. (See TYPE 2)

Flat on pump arm should be parallel to straightedge. To adjust, bend throttle connector rod at upper angle.

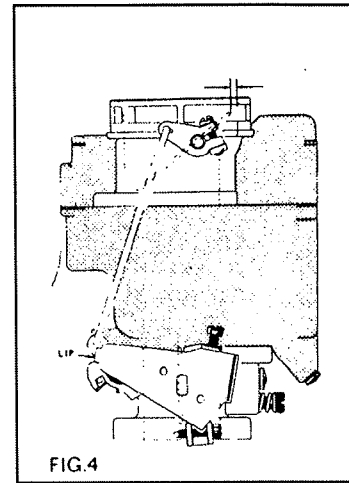
METERING ROD ADJUSTMENT (Fig. 3)

Loosen metering rod arm clamp screw (13) and press vacuumer link (17) down; until both metering rods (8) bottom in carburetor casting (12). Holding rods (8) in this position and throttle valves seated, rotate metering rod arm (13) until finger on arm contacts lip on vacuumer link (17) and tighten screw (13).



FAST IDLE ADJUSTMENT (Fig. 4)

Loosen choke lever clamp screw on choke shaft. Hold choke valve closed and revolve choke lever until specified clearance is obtained between lip on fast idle cam and boss on flange casting. Tighten choke lever clamp screw (6). Hold choke valve in closed position and adjust fast idle screw (44) to obtain specified clearance between throttle valve and carburetor bore on side opposite idle port (See Specification Chart).



UNLOADER ADJUSTMENT (Fig. 5)

Hold throttle valves wide open and check clearance between upper edge of choke and inner air horn wall. Clearance should be 3/16". Adjust by bending unloader lip on throttle shaft lever.

DASHPOT ADJUSTMENT (See Specification Chart)

Set carburetor throttle lever for proper curb idle speed. Holding dashpot fully depressed, adjust dashpot in bracket by loosening locknut and turning dashpot "IN" or "OUT" of bracket. Clearance between dashpot stem and throttle lever should be as specified.

SPECIFICATION CHART

Carburetor No.	Gauge	Float Level	Fast Idle		Auto Choke	Slow Idle R.P.M.		Fast Idle R.P.M.	Dashpot Setting
			Cam Clearance	Initial Setting		A/T	S/T		
2350S	CT109-37 ³	5/32"	.010"	.020"	Index	475N*	550	—	—
2586S, SA, 2887S, SA	CT109-37 ³	5/32"	.010"	.020"	Index	500N*	550	1900H/S	—
3076S	—	—	.010"	—	—	—	—	1825H/S	—
3170S, 3322S, 3434S, 3535S	CT109-37 ³	5/32"	.010"	.020"	Index	500N*	550	1900H/S	—
3706S, 3707S	CT109-37 ³	5/32"	.010"	.020"	Index	500N*	550	1800H/S	3
3888S	4	•	.010"	.020"	Index	600N*	600N*	1900H/S ²	1/8"
4191S	CT109-61	17/64"	.010"	.015"	2 rich	575N*	575N*	1850H/S ²	1/8"
4365S	CT109-75	7/32"	.010"	.015"	2 rich	600N*	600N*	2000H/S	5/64"
4410S, SA	CT109-75	7/32"	.010"	.016"	Index	—	650N	2000H/S	5/64"
4537S, SA	CT109-75	7/32"	.010"	.022"	Index	525D+	—	2000H/S	5/64"
4667S ¹	CT109-75	7/32"	.010"	.016"	Index	—	650N	2000H/S	7/64"
4668S ¹	CT109-75	7/32"	.010"	.022"	Index	525D+	—	2000H/S	7/64"
4816S ¹	CT109-75	7/32"	.010"	.021"	Index	600D+	—	2000H/S	3/32"
4817S ¹	CT109-75	7/32"	.010"	.024"	Index	—	600	2000H/S	3/32"
4950S ¹	CT109-75	7/32"	.010"	.024"	Index	600	—	2000H/S	—
6042S	CT109-75	7/32"	.010"	.025"	Index	600N	600N	—	7/64"

FOOTNOTES

- * 500 R.P.M. with Air Condition "ON".
- + Air Condition "OFF".
- 5/32" with black or brass tag; with green inspection tag or later 1/4", earlier 1/8".

- ¹ Idle Limiter Caps used.
- ² ± 100 R.P.M.
- ³ 3707 set 7/64".
- ⁴ Use applicable gauge.
- ⁵ Or CT109-81.

- D - Drive.
- N - Neutral.
- H/S - High Step of Cam.