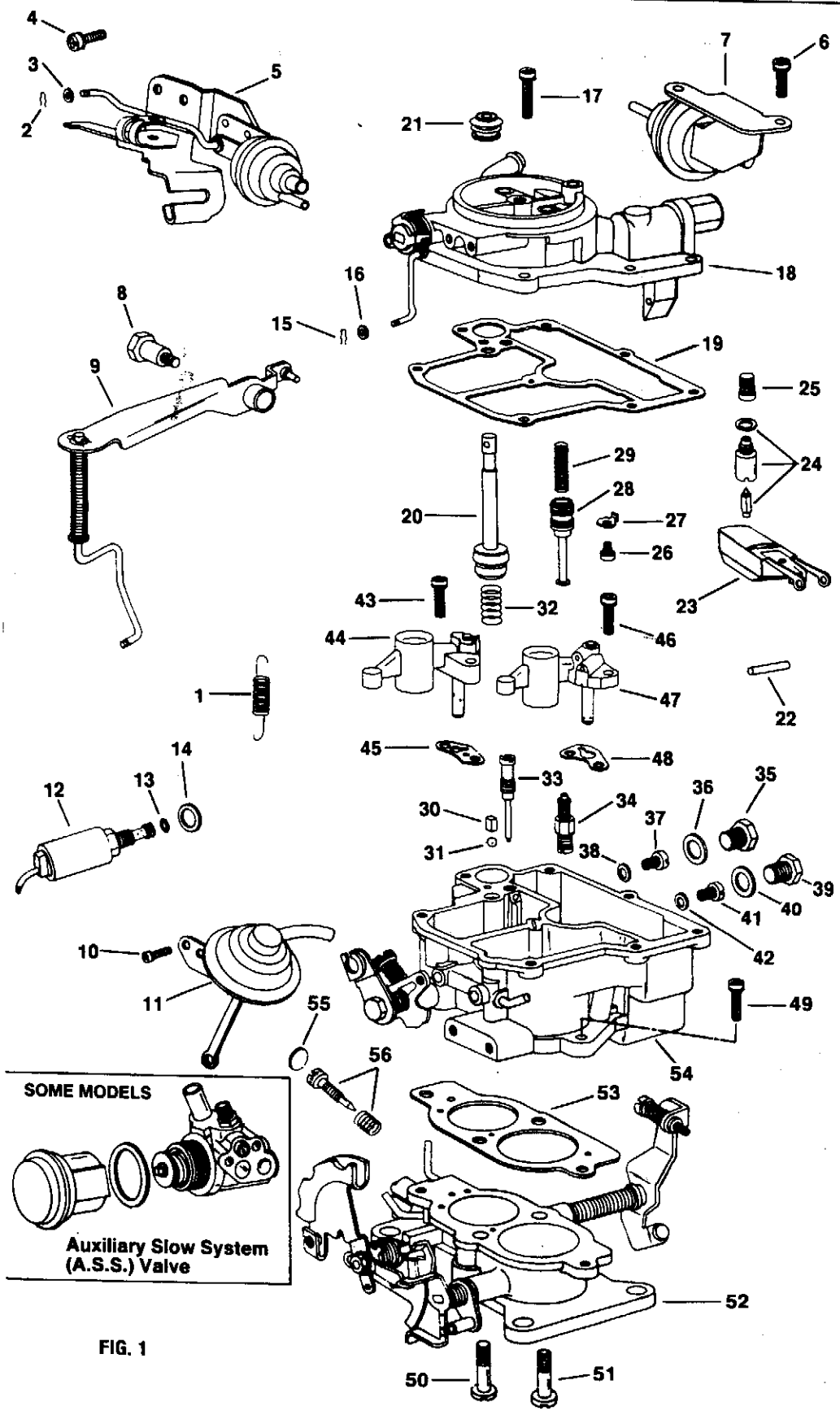
FUEL SYSTEM
SERVICE INSTRUCTION WORKSHEET

TO REPAIR
AISAN CARBURETOR

2 BARREL

GF3686-9



SOME MODELS

Auxiliary Slow System (A.S.S.) Valve

FIG. 1

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.

PARTS LIST

1. Spring, sec. throttle return
2. Clip, choke pull-off rod
3. Washer, choke pull-off rod
4. Screw, choke pull-off (2)
5. Choke pull-off assembly
6. Screw, positioner (2)
7. Positioner assembly
8. Screw, pump lever
9. Pump lever assembly
10. Screw, secondary diaphragm
11. Secondary diaphragm assy.
12. Solenoid, idle cut-off
13. O-ring, solenoid
14. Washer, solenoid
15. Clip, fast idle rod
16. Washer, fast idle rod
17. Screw, air horn (5)
18. Air horn assembly
19. Gasket, air horn
20. Pump plunger assembly
21. Boot, pump plunger
22. Pin, float hinge
23. Fuel float assembly
24. Needle, seat & washer assy.
25. Filter, fuel
26. Screw, piston retainer
27. Retainer, power piston
28. Power piston assembly
29. Spring, piston return
30. Weight, ball
31. Ball, pump discharge
32. Spring, pump return
33. Jet, idle
34. Power valve assembly
35. Plug, primary main jet
36. Washer, plug
37. Jet, primary main (brass)
38. Washer, jet
39. Plug, secondary main jet
40. Washer, plug
41. Jet, secondary main (chrome)
42. Washer, jet
43. Screw, primary venturi (2)
44. Primary venturi assembly
45. Gasket, primary venturi
46. Screw, secondary venturi (2)
47. Secondary venturi assembly
48. Gasket, secondary venturi
49. Screw, throttle body (2)
50. Screw, throttle body
51. Screw, throttle body (hollow)
52. Throttle body assembly
53. Gasket, throttle body
54. Main body assembly
55. Plug, needle
56. Needle & spring, idle mixture

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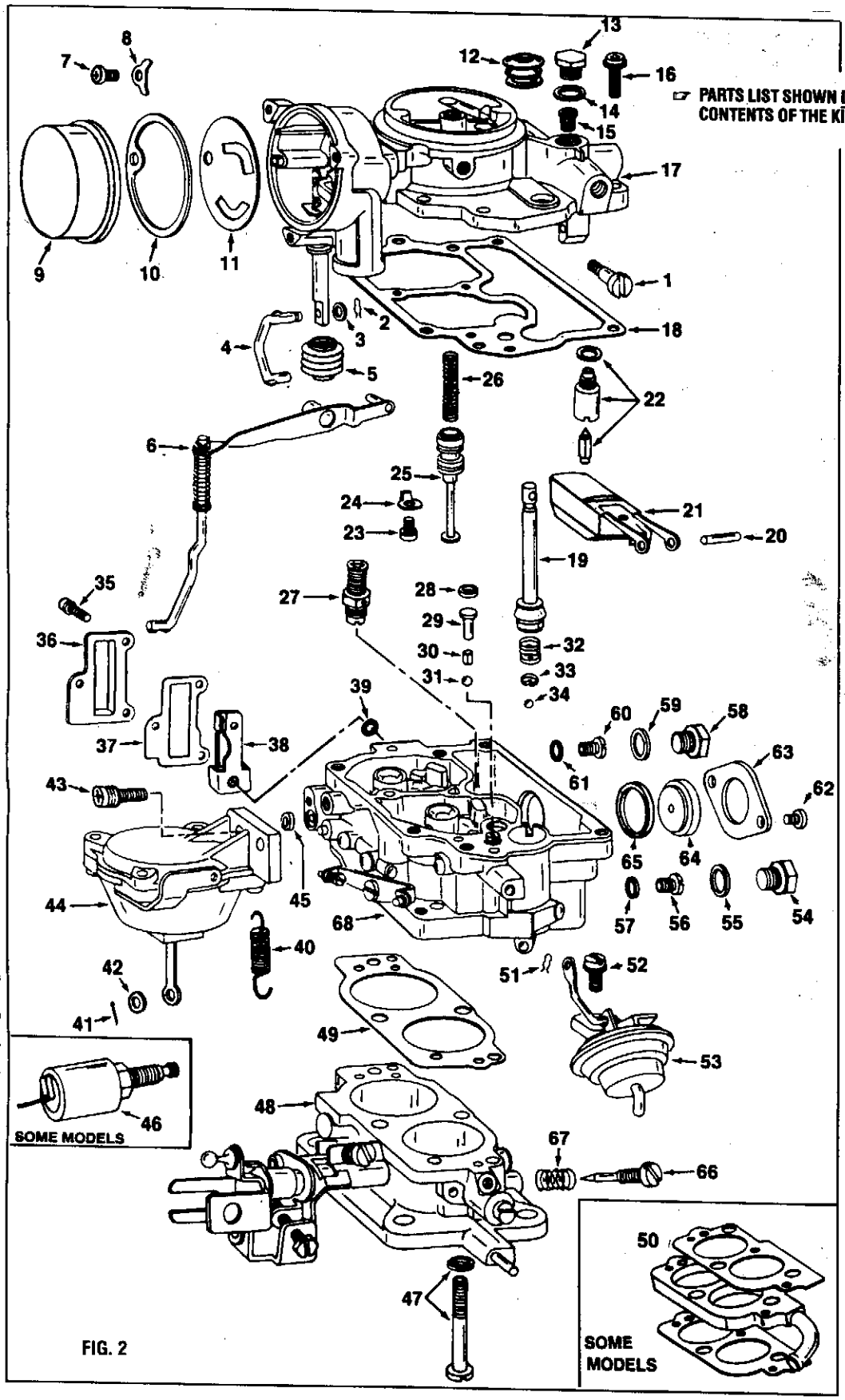


FIG. 2

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

PARTS LIST

1. Screw, pump lever
2. Clip, fast idle link
3. Washer, fast idle link
4. Link, fast idle
5. Boot, fast idle rod
6. Lever & rod assy. pump
7. Screw, choke cover retainer (3)
8. Retainer, choke cover (3)
9. Thermostatic coil & cover assy.
10. Gasket, choke cover
11. Baffle, choke cover
12. Boot, pump plunger
13. Plug, fuel filter
14. Washer, plug
15. Filter, fuel
16. Screw, air horn (6)
17. Air horn assembly
18. Gasket, air horn
19. Pump, plunger assembly
20. Pin, float hinge
20. Pump, plunger assembly
21. Float assembly
21. Boot, pump plunger
24. Needle, seat & washer assy.
23. Screw, piston retainer
24. Retainer, power piston
25. Power, piston assembly
26. Spring, piston return
27. Power valve assembly
28. Washer, stopper
29. Stopper, pump passage
30. Weight, discharge ball
31. Ball, pump discharge (big)
32. Spring, pump return
33. Retainer, intake ball
34. Ball, intake check (small)
35. Screw, cover (3)
36. Cover, idle compensator valve
37. Gasket, cover
38. Valve assy., idle compensator
39. O-ring, idle compensator valve
40. Spring, secondary return
41. Cotter pin, secondary diaphragm link
42. Washer, secondary diaphragm link
43. Screw, secondary diaphragm (2)
44. Secondary diaphragm assembly
45. Washer, diaphragm assembly
46. Solenoid, idle cut-off
47. Screw & washer, throttle body (4)
48. Throttle body assembly
49. Gasket, throttle body
50. Gaskets & insulator block
51. Clip, throttle positioner link
52. Screw, throttle positioner
53. Throttle positioner assembly
54. Plug, primary jet
55. Washer, plug
56. Primary main jet
57. Washer, primary jet
58. Plug, secondary jet
59. Washer, plug
60. Secondary main jet
61. Washer, secondary jet
62. Screw, sight glass retainer (2)
63. Retainer, sight glass
64. Sight glass, fuel level
65. O-ring, sight glass
66. Needle valve, idle mixture
67. Spring, needle valve
68. Main body assembly

REMOVAL & INSTALLATION NOTES

1. Cover opening on intake manifold after carburetor is removed.
2. When removing jets (**37**, **41** Fig. 1 & **56**, **60** Fig. 2), record sizes for proper installation.
3. To remove plug (**55**, Fig. 1), drill a hole in the center, then use a puller or pry plug. *(Be careful not to damage needle [56, Fig. 1]. There is only .040" clearance between plug and needle).*
4. Before removing idle mixture needle (**56**, Fig. 1 & **66**, Fig. 2), turn in until seated, counting number of turns. Record for proper installation and initial setting.
5. It is not necessary to remove secondary diaphragm assembly (**44**, Fig. 2) unless it needs to be replaced.
6. If carburetor is equipped with insulator block (**50**, Fig. 2) and gaskets are damaged or worn, it will be necessary to scrape off old gaskets. Exercise care.
7. Install parts and components in reverse order of removal.
8. Before installing pump plunger assembly (**20**, Fig. 1 & **19** Fig. 2), flare leather cup, then soak in light oil for a few minutes.
9. Be sure to install different length screws in original locations.
10. Before installing cover on A.S.S. valve (Fig. 1), apply a sealer on threads near gasket seat.
11. When installing main body to throttle body (Fig. 1), be sure to hook throttle return spring in notch of bracket on main body.
12. Install sight glass (**64**, Fig. 2) with dot toward inside of fuel chamber.

ADJUSTMENT DATA

FIG. 3
FLOAT LEVEL ADJUSTMENT

1. Invert air horn and remove gasket.
2. With float center tab slightly touching spring loaded needle, measure distance as shown between end of float and air horn surface. It should be as specified.
3. To adjust, bend center tab as necessary.

CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

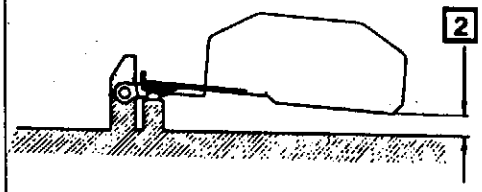


FIG. 4
FLOAT DROP ADJUSTMENT

1. Invert air horn and remove gasket.
2. Raise float gently by hand until it stops.
3. Measure distance between top of needle valve and float center tab.
4. To adjust, bend outer tabs as necessary.

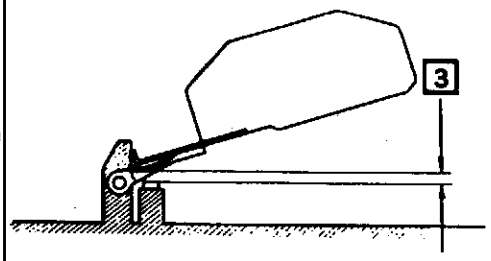


FIG. 5
FLOAT DROP ADJUSTMENT (Early Models)

1. Hold air horn upright without gasket.
2. With float hanging free, measure distance as shown between end of float and air horn surface. It should be as specified.
3. To adjust, bend outer tabs as necessary.

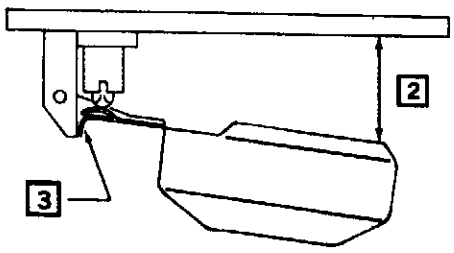


FIG. 6
FLOAT LEVEL (Wet)

1. With vehicle leveled and engine in operating temperature, recheck fuel level through sight glass.
2. Fuel level should be within marked tolerance (dot).
3. To adjust, repeat step 3, FIG. 1.

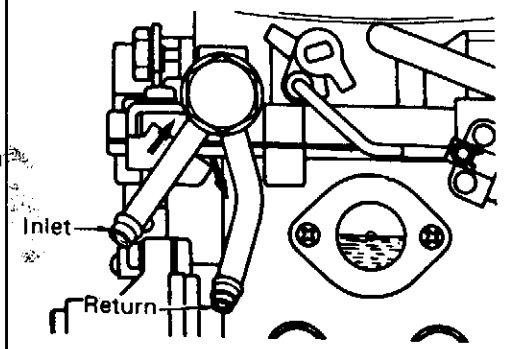


FIG. 7
PUMP STROKE ADJUSTMENT

1. With throttle valve closed, measure distance between top of pump plunger to top of air horn. Record.
2. With throttle valve wide open, measure distance as in step 1. Record.
3. The difference between the two measurements is total strok travel. It should be as specified.
4. To adjust, bend pump rod 'A'.

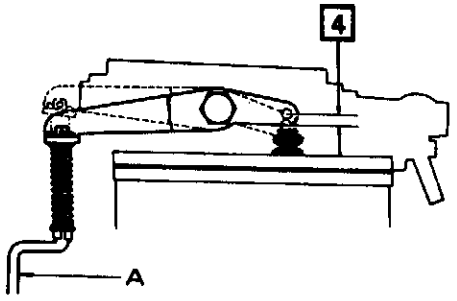


FIG. 8
FAST IDLE ADJUSTMENT

1. Hold choke valve fully closed.
2. Measure distance between lower edge of primary throttle valve and wall, using a gauge or drill bit. On some models, measure throttle valve opening angle. It should be as specified.
3. To adjust, turn fast idle adjusting screw.

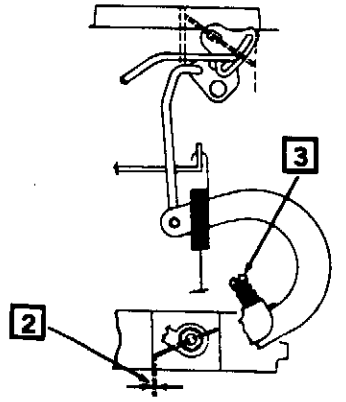
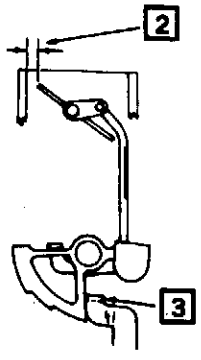


FIG. 9
UNLOADER ADJUSTMENT

1. Hold throttle valve in wide open position.
2. Hold choke valve toward closed position and measure distance between upper edge of choke valve and inner wall of air horn using a gauge or drill bit. On some models measure choke valve opening angle. It should be as specified.
3. To adjust, bend tang.
4. Some early applications bend tang here.



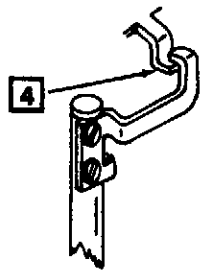
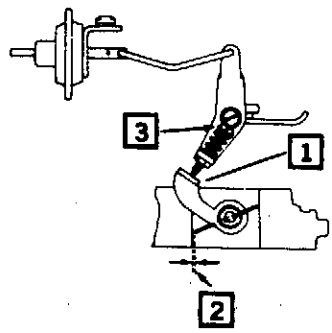


FIG. 10
THROTTLE POSITIONER ADJUSTMENT

1. Check that throttle positioner screw is making a contact with positioner stop.
2. Measure distance between lower edge of throttle valve and wall, using a gauge or drill bit. On some models, measure throttle valve opening angle. It should be as specified.
3. To adjust, turn throttle positioner screw.

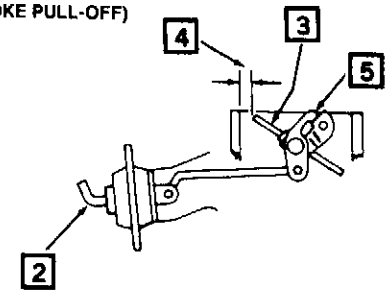


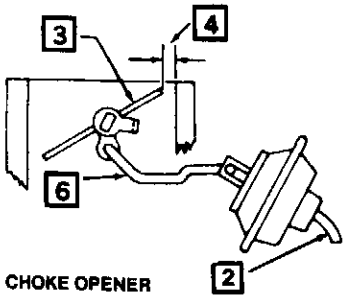
ADJUSTMENT DATA (Cont'd)

FIG. 11
VACUUM BREAK & AUX. CHOKE OPENER ADJUSTMENT

1. Place fast idle arm on high step of fast idle cam.
2. Apply outside vacuum source until diaphragm is fully seated.
3. Hold choke valve toward closed position. Make sure not to pull diaphragm.
4. Measure distance between upper edge of choke valve and inner wall of air horn using a gauge or drill bit. On some models measure choke valve opening angle. It should be as specified.
5. To adjust vacuum break, bend tab.
6. To adjust aux. choke opener, bend link.

VACUUM BREAK (CHOKE PULL-OFF)

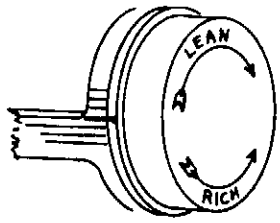




AUX. CHOKE OPENER

FIG. 12
AUTOMATIC CHOKE SETTING

1. Rotate thermostatic coil and cover assy. against coil tension.
2. Align mark on center with index mark on housing.
3. Allowable tolerance is two notches either side from initial setting.



SPECIFICATION CHART[1]

Year	Application	Float Level (Dry)	Float Drop	Pump Stroke	Fast Idle Adj.	Unloader	Throttle Positioner	Vacuum Break (Choke Pull-Off)	Aux. Choke Opener	Idle Speed R.P.M.	
										Slow	Fast
1982-81	3TC Eng.	6.5	1.2	5.0	24°	47°	17°[4]	40°	—	700	3000
	4KC Eng.	7.5	0.9	5.0	26°	—	8.5°	—	—	650	3500
1980	1AC Eng.	4.0	1.2	3.0	22°	47°	—	39°	—	650	3600
	3TC Eng.	6.5	1.2	5.0	24°	47°	17°[4]	40°	—	700	3000
1979-78	3KC Eng.	7.5	0.6	4.85	.95	—	—	42°	—	750	—
	4M Eng.	13	1	5.5	24°	40°	18.5°	—	—	750	2500
1977-75	3K, 3KC Eng.	6.5	48[2]	4.85	1.0	—	—	—	—	—	—
1974-70	2T, 2TC Eng.	3.5	1.2	5.0	1.1[3]	47°	—	—	—	—	2600
	3K, 3KC Eng.	6.5	48[2]	3.5	1.3	—	—	—	—	650	1300
1969-68	KC Eng.	6.5	48[2]	3.5	1.3	—	—	—	—	650	1300

FOOTNOTES:

[1] Dimensions are in millimeters.
[2] See Adjustment Data, Fig. 5.
[3] Models with 2T Eng. set 0.8mm.
[4] California Models set 16.5°.