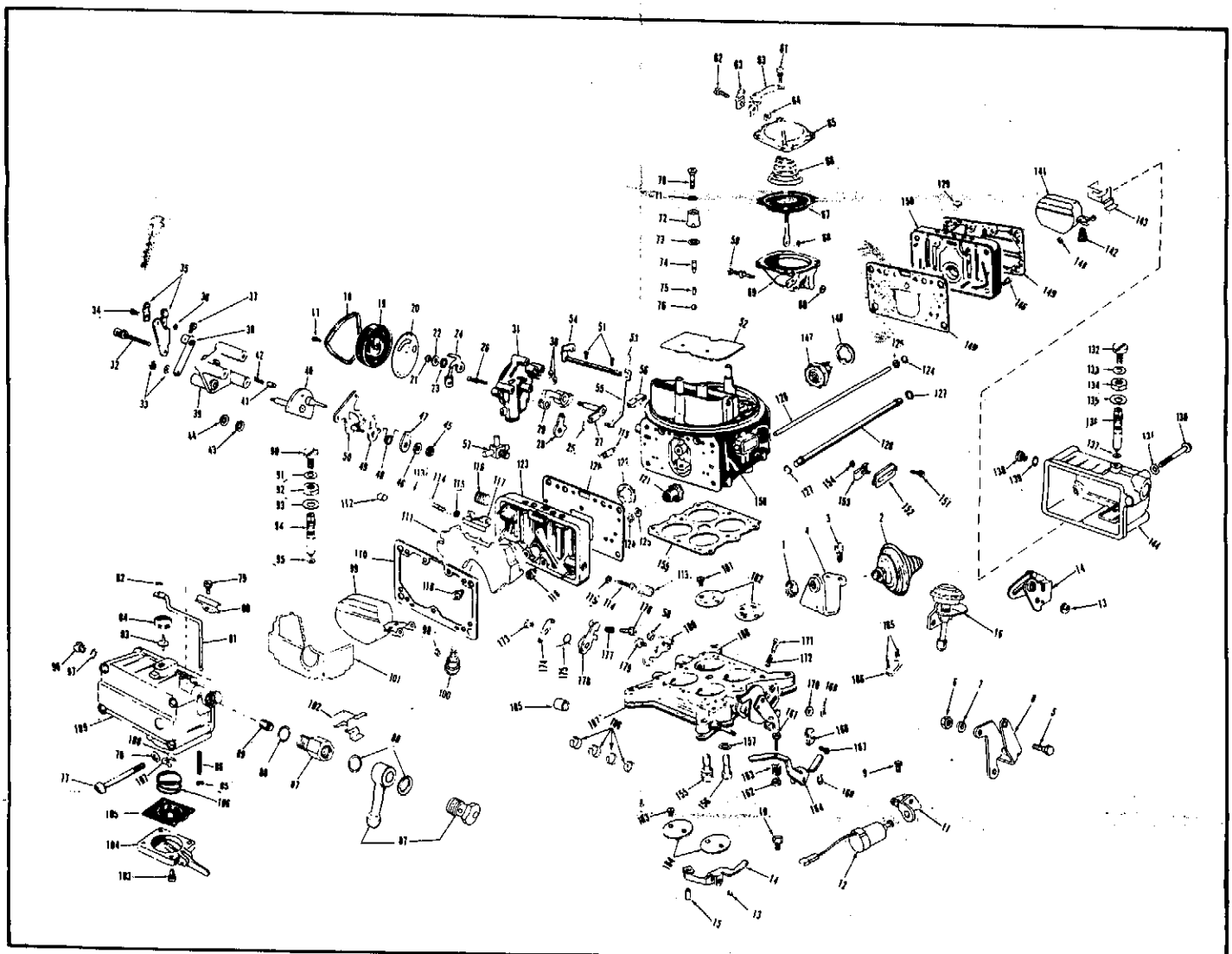
199R-8378

instruction sheet Holley Carburetor Model 4150/4150C

TYPICAL VIEW

The exploded view shown is typical of the model carburetor this kit will service, the view may differ slightly from the actual carburetor being renewed.
This kit may contain more parts than are actually required to service a given carburetor. When similar gaskets or parts are included in the kit, compare with original parts.



NOMENCLATURE

REF. NO.	REF. NO.	REF. NO.	REF. NO.
1. Dashpot nut	17. Therm. housing clamp screw	31. Choke housing assembly	41. Fast idle cam plunger
2. Dashpot assembly	18. Therm. housing clamp	32. Fast idle cam plate screw	42. Fast idle cam plunger spring
3. Dashpot bracket screw	19. Thermostat housing assy.	33. Choke control lever nut & lockwasher	43. Choke oper. lever spring washer
4. Dashpot bracket	20. Thermostat housing gasket	34. Wire bracket clamp screw	44. Choke oper. lever washer
5. Throttle lever extension screw	21. Choke therm. shaft nut	35. Choke control wire bracket clamp	45. Back up plate stud nut
6. Throttle lever extension nut	22. Shaft nut lockwasher	36. Wire bracket clamp screw nut	46. Stud nut lockwasher
7. Lockwasher extension nut	23. Therm. lever spacer	37. Choke lever assembly swivel screw	47. Choke spring washer
8. Throttle lever extension	24. Therm. lever, link & piston assembly	38. Choke lever & swivel assembly	48. Choke spring
9. Solenoid bracket screw	25. Choke rod retainer	39. Fast idle cam plate	49. Choke rod & lever bushing assembly
10. Solenoid bracket screw	26. Choke housing screw	40. Fast idle cam & shaft assembly	50. Back up plate & stud assy.
11. Solenoid bracket	27. Choke housing lever & shaft assembly		51. Choke plate screw
12. Solenoid assembly	28. Choke therm. lever		52. Choke plate
13. Cam follower retainer	29. Fast idle cam assembly		53. Choke rod retainer
14. Cam follower lever	30. Choke housing gasket		54. Choke lever & shaft assy.
15. Pump oper. lever screw sleeve			55. Choke rod
16. Modulator assembly			

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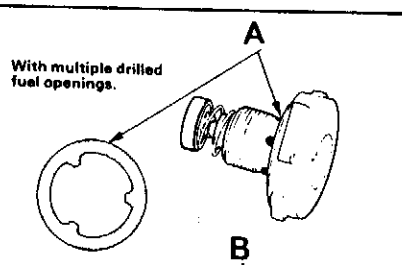
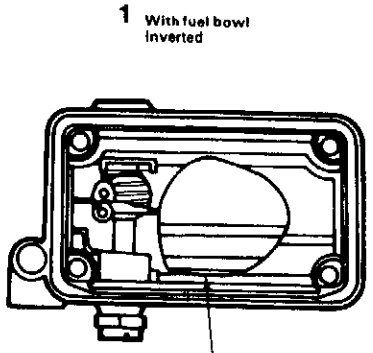
(Nomenclature continued on next page)

CARBURETOR ADJUSTMENTS

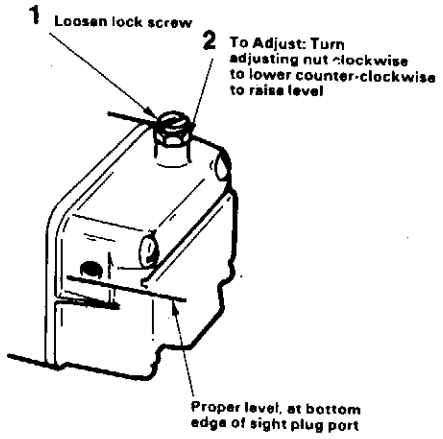


NOTE: Proper power valve gasket must be used as shown, use of improper gasket will result in fuel leakage around power valve.
Power valve (A): Torque to 40-50 inch pounds
Power valve (B): Torque to 40-50 inch pounds

FIG. 1 – POWER VALVE INSTALLATION

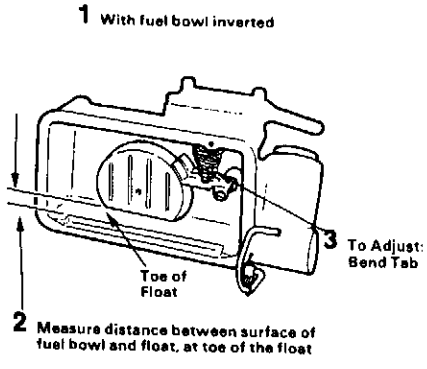


External Adjustable Type
FIG. 2 – DRY FLOAT SETTING



With car on level surface and engine running

FIG. 3 – WET LEVEL ADJUSTMENT



Non-Adjustable Type
FIG. 4 – DRY FLOAT SETTING

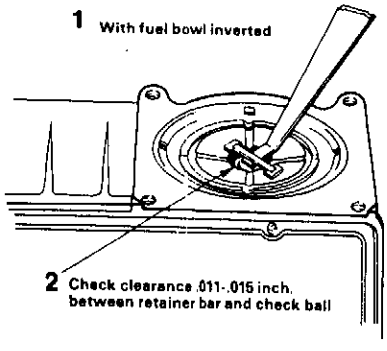


FIG. 5 – PUMP INTAKE CHECK BALL ADJUSTMENT

CAUTION: Be sure "O" rings and washers are seated in recesses.

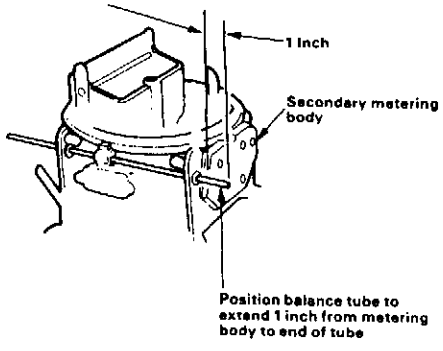


FIG. 6 – BALANCE TUBE ADJUSTMENT

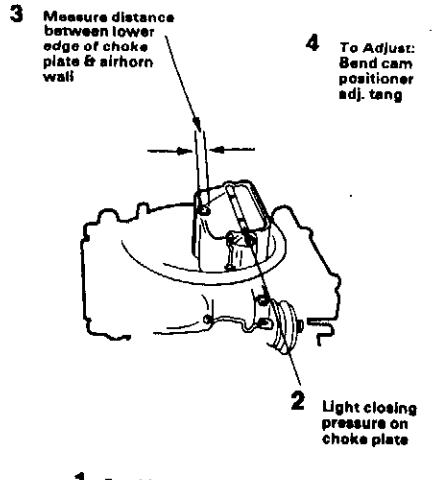


FIG. 7 – CAM INDEX ADJUSTMENT

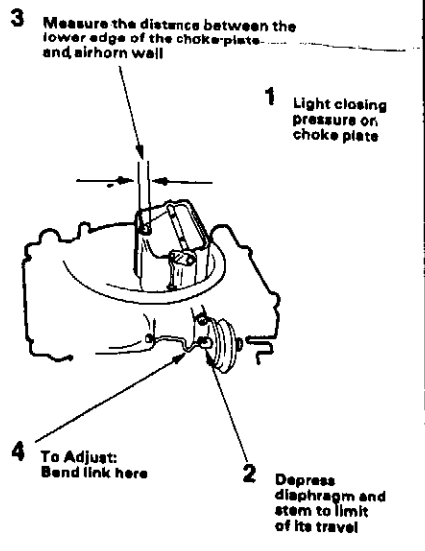
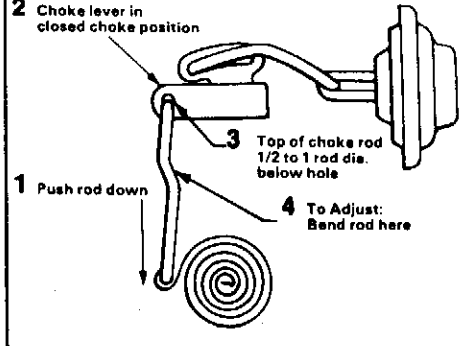
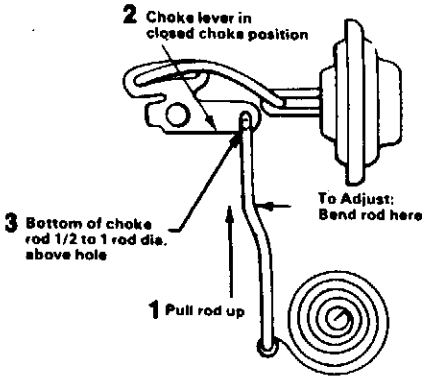


FIG. 8 – VACUUM KICK ADJUSTMENT



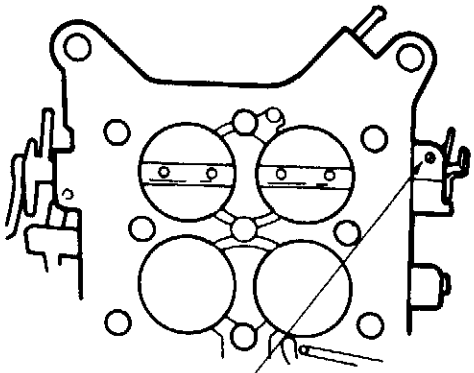
Type 1
FIG. 9 – CHOKE ROD ADJUSTMENT

CARBURETOR ADJUSTMENTS



Type II

FIG. 10 – CHOKE ROD ADJUSTMENT



Back the secondary throttle stop screw out until the secondary throttle plates are closed in the throttle bore. Turn the screw in (clockwise) until it just touches the stop on the lever, then give it an additional 1/4 turn.

FIG. 14 – SECONDARY THROTTLE STOP ADJUSTMENT

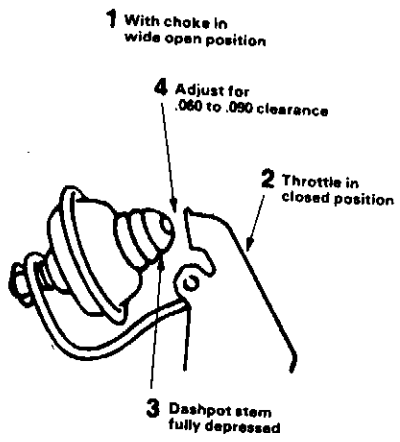


FIG. 17 – DASHPOT ADJUSTMENT

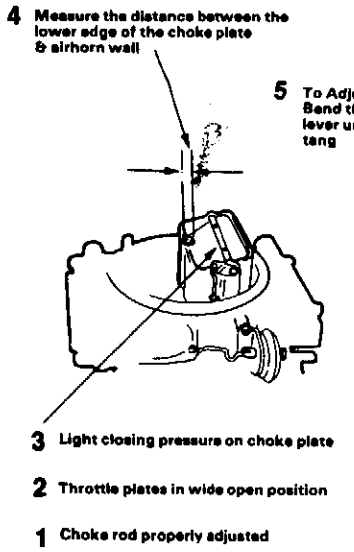


FIG. 11 – UNLOADER ADJUSTMENT

NOTE: Bend a paper clip (.030 to .036 dia.) as shown to provide end no longer than 1/8 inch long.

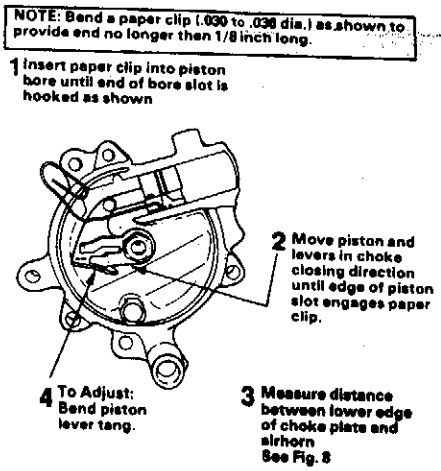


FIG. 15 – CHOKE QUALIFYING (INTEGRAL CHOKE) ADJUSTMENT

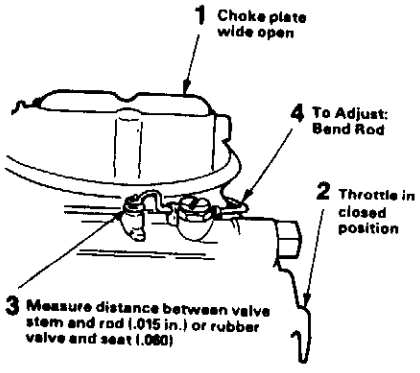


FIG. 12 – VENT VALVE ADJUSTMENT

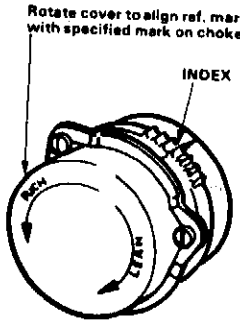


FIG. 16 – CHOKE ADJUSTMENT

POWER VALVE IDENTIFICATION

Example: Power Valve Assembly

25R591-65

65 Which designates the stamped number, also identifies the opening point of the power valve (i.e., 6.5" vacuum).

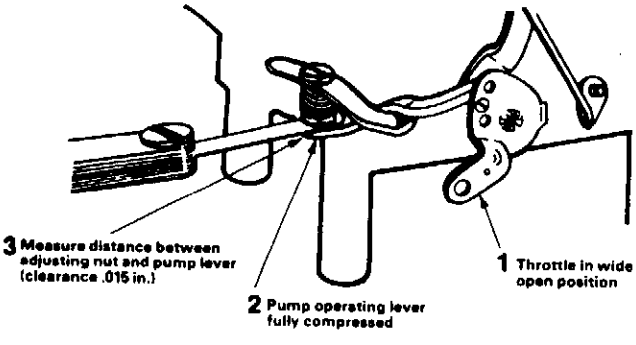
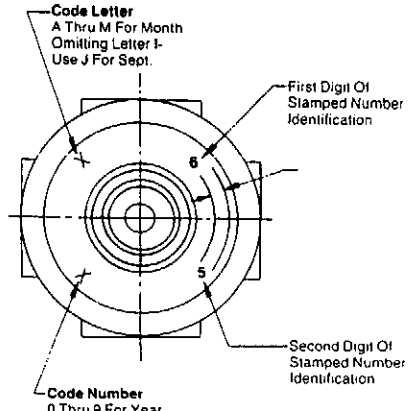


FIG. 13 – PUMP OVERRIDE ADJUSTMENT



NOMENCLATURE Continued

REF. NO.	
56.	Choke rod seal
57.	Four-way hose connector
58.	Sec. diaph. link retainer
59.	Sec. diaph. housing screw
60.	Sec. diaph. housing gasket
61.	Sec. diaph. cover screw
62.	Wire bracket & clamp screw
63.	Wire bracket clamp
64.	Clamp screw nut
65.	Sec. diaph. cover
66.	Sec. diaph. spring
67.	Sec. diaph. & link assy.
68.	Sec. diaph. housing check ball
69.	Sec. diaphragm housing
70.	Pump disch. nozzle screw
71.	Pump disch. nozzle screw gasket
72.	Pump disch. nozzle
73.	Pump disch. nozzle gasket
74.	Pump disch. needle valve
75.	Pump check ball weight
76.	Pump discharge nozzle check ball
77.	Primary fuel bowl screw
78.	Primary fuel bowl screw gasket
79.	Air vent clamp screw
80.	Air vent rod clamp
81.	Air vent rod
82.	Air vent valve retainer
83.	Air vent valve
84.	Air vent cap
85.	Air vent rod spring retainer
86.	Air vent rod spring
87.	Fuel inlet fitting
88.	Fue inlet fitting gasket
89.	Fuel inlet filter
90.	Pri. fuel valve seat lock screw
91.	Fuel valve seat lock screw gasket
92.	Fuel valve seat adj. nut
93.	Fuel valve adj. nut gasket
94.	Pri. fuel inlet & valve seat assembly
95.	Fuel valve seat O-ring seal
96.	Fuel level check plug
97.	Fuel level check plug gasket
98.	Float retainer
99.	Primary float assembly
100.	Primary float spring
101.	Primary fuel bowl filler
102.	Primary baffle plate
103.	Pump diaph. cover screw & lockwasher
104.	Primary pump diaph. cover assembly
105.	Primary pump diaph. assy.
106.	Pri. diaph. return spring
107.	Pri. check ball retainer
108.	Pri. check ball or check valve
109.	Pri. fuel bowl assembly
110.	Pri. fuel bowl gasket
111.	Pri. metering body filler
112.	Vacuum tube plug
113.	Idle limiter cap
114.	Idle adj. needle
115.	Idle adj. needle seal
116.	Spark hole plug
117.	Metering body vent baffle
118.	Primary metering jet
119.	Tube & O-ring assembly
120.	Pri. metering body gasket
121.	Pri. power valve assy.
122.	Pri. power valve gasket
123.	Pri. metering body assy.
124.	Balance tube washer
125.	Balance tube O-ring seal
126.	Balance tube
127.	Fuel line tube O-ring seal
128.	Fuel line tube
129.	Sec. bowl vent valve
130.	Sec. fuel bowl screw
131.	Sec. fuel bowl screw gasket
132.	Sec. fuel valve seat lock screw
133.	Fuel valve seat lock screw gasket
134.	Sec. fuel valve seat adj. nut
135.	Fuel valve seat adj. nut gasket
136.	Sec. fuel inlet valve & seat assembly
137.	Fuel valve seat O-ring seal
138.	Sec. fuel level check plug
139.	Fuel level check plug gasket
140.	Float retainer
141.	Sec. float assembly
142.	Sec. float spring
143.	Sec. baffle plate
144.	Sec. fuel bowl assembly
145.	Sec. fuel bowl gasket
146.	Sec. metering jet
147.	Sec. power valve assy.
148.	Sec. power valve gasket
149.	Sec. metering body gasket
150.	Sec. metering body assy.
151.	H.I.C. cover screw
152.	H.I.C. cover
153.	Hot idle compensator assy.
154.	H.I.C. seal
155.	Throttle body screw & lockwasher
156.	Throttle body screw
157.	Throttle body screw gasket
158.	Main body assembly
159.	Throttle body gasket
160.	Pump oper. lever retainer
161.	Pump lever adj. screw
162.	Pump lever adj. screw fitting
163.	Pump lever adj. screw spring
164.	Pump lever
165.	Throttle connector rod cotter pin
166.	Throttle connector rod
167.	Pump cam lock screw
168.	Pump cam
169.	Throttle connector pin retainer
170.	Throttle connector pin washer
171.	Throttle stop screw
172.	Throttle stop screw spring
173.	Fast idle cam lever screw & lockwasher
174.	Fast idle cam pick up lever
175.	Fast idle cam lever spring
176.	Fast idle cam lever adj. screw
177.	Fast idle cam lever adj. screw spring
178.	Fast idle cam lever
179.	Secondary diaph. lever assembly screw
180.	Sec. diaph. lever assy.
181.	Sec. throttle plate screw
182.	Sec. throttle plate
183.	Pri. throttle plate screw
184.	Pri. throttle plate
185.	Pri. throttle shaft bearing (solid)
186.	Throttle shaft bearing (ribbon) pri. & sec.
187.	Flange gasket
188.	Throttle body assembly

DISASSEMBLY

Rest the carburetor on a repair stand to avoid damage to the throttle plates during renew procedures. Use exploded view as a guide, and follow the numerical sequence in general to disassemble unit far enough to permit cleaning and inspection. Do not remove throttle plates or shaft. Idle limiter: turn the idle limiter cap to its leanest (clockwise) position and remove cap. Observe and record the initial position of the needle slot. Turn the idle needles clockwise until lightly seated, recording the number of turns required to seat the needles. This procedure is necessary to reinstall the idle needles after renewing.

Use care not to damage idle adjusting needles when removing idle limiter caps.

CLEANING

Cleaning must be done with carburetor disassembled. Soak parts long enough to soften and remove all foreign material. Use a carburetor solvent, lacquer thinner or denatured alcohol. Make certain the throttle body is free of all hard carbon deposits. Wash off in suitable solvent. Blow out all passages in castings with compressed air and check carefully to insure thorough cleaning of obscure areas.

CAUTION: Do not soak parts containing rubber or plastic material. Serious damage could result.

Fuel bowls, should only be exposed to carburetor cleaner long enough to permit removal of gum and varnish deposits with a brush. **(NOTE:** Some fuel bowls have internal "O" ring seals which are not removable, but can be damaged by prolonged exposure to some carburetor cleaning solvents.)

REASSEMBLY

Reassemble in reverse order of disassembly. Note special instructions and follow outline in making adjustments.

Manually operate the throttle lever and choke mechanism, checking for binding or malfunction. Any binding or interference could cause throttle to stick during operation and result in loss of carburetor throttle control (or uncontrolled engine speed).

Check carburetor to be sure there are no leaks, flooding, which might cause a fire.

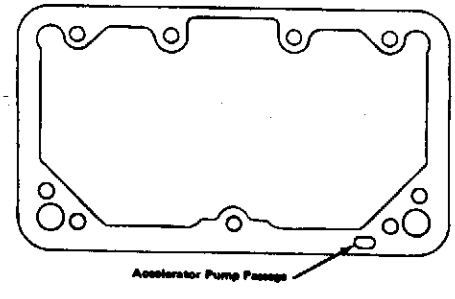
SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLES — Tapered portion of needle must be straight and smooth. If grooved or ridged, a new needle should be installed.

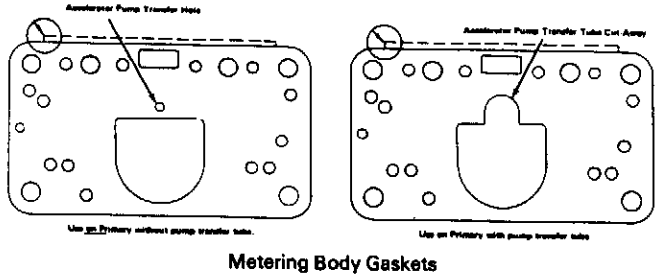
PUMP INLET CHECK VALVE — Lubricate tip of new valve and insert in center hole in pump cavity. Pull thru from fuel bowl side until seated.

CHOKE PLATE SCREW — Choke plate screws are staked to prevent loosening. To avoid breaking or stripping the threads in the choke shaft, lightly file off the staking. Choke plates screws should be restaked after tightening to prevent loosening.

THROTTLE BODY — Do not remove throttle shaft or plates. If throttle plates are nicked or damaged, it will be necessary to replace the throttle body.



The primary fuel bowl gasket must be installed with the accelerator pump passage on the right side of the main jets. Fuel bowl screws must be torqued to 40 inch pounds.



Metering Body Gaskets