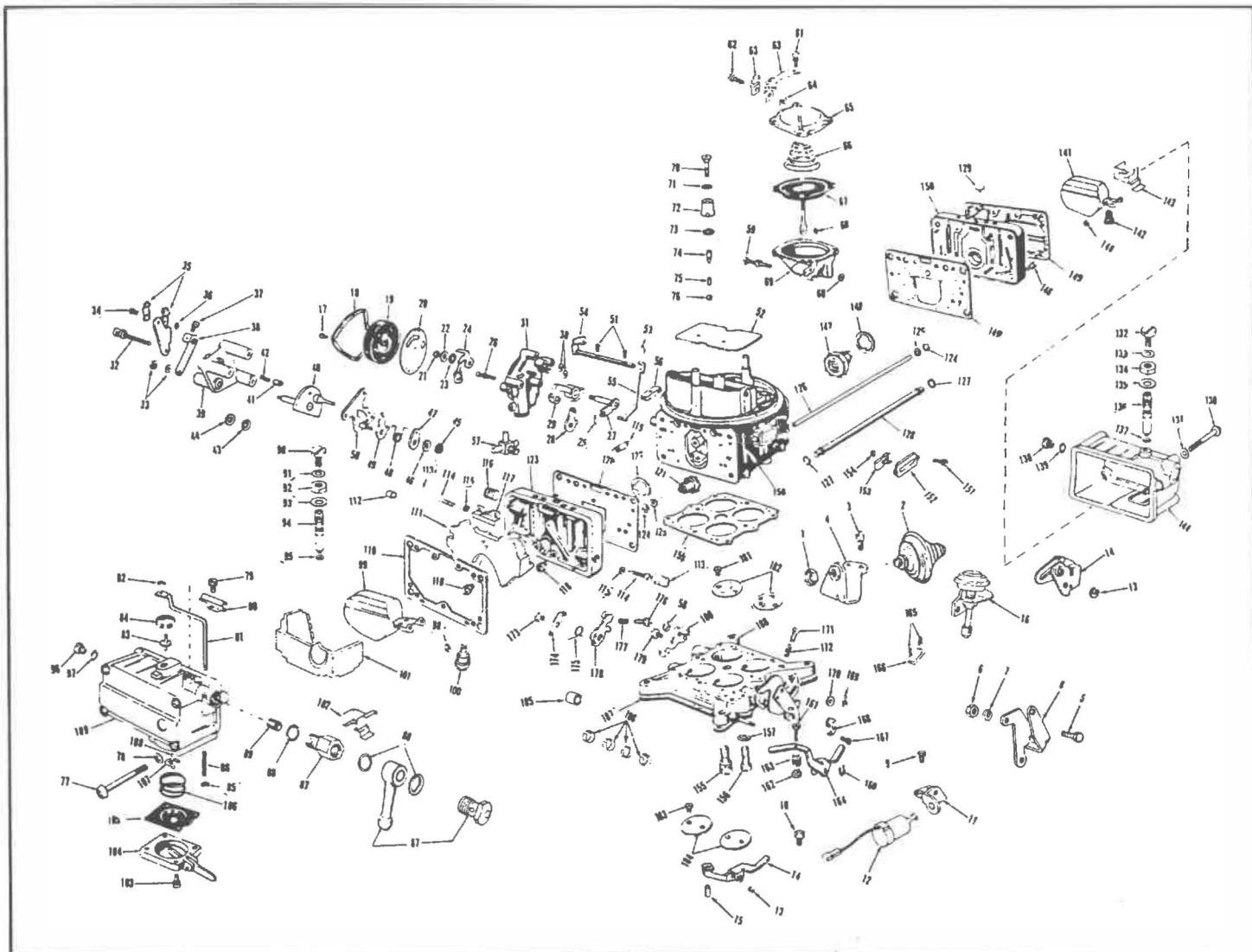


instruction sheet **Holley Carburetor Model 4150/4150C**

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			

NOMENCLATURE Continued

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

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.

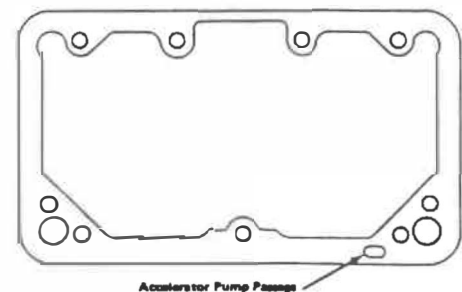
SPECIAL INSTRUCTIONS

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

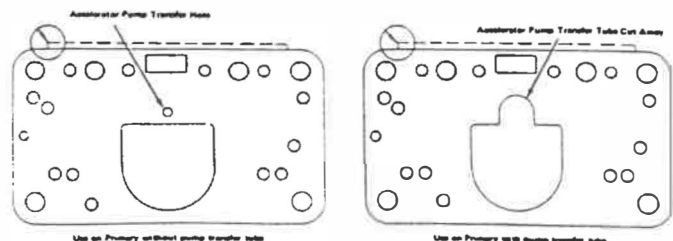
PUMP INLET CHECK VALVE — Lubricate tip of new valve and insert in center hole in pump cavity. Pull thru from fuel bowl side until seated.

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 plate screws should be re-staked 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.

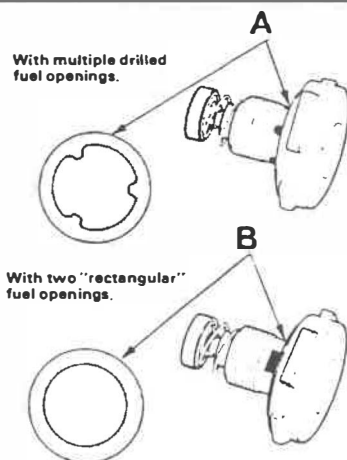


The primary fuel bowl gasket must be installed with the accelerator pump passage on the right side of the main jets. Fuel bowl screws must be torqued to 40 inch pounds.



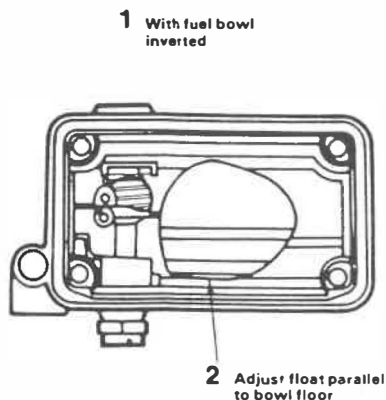
Metering Body Gaskets

CARBURETOR ADJUSTMENTS

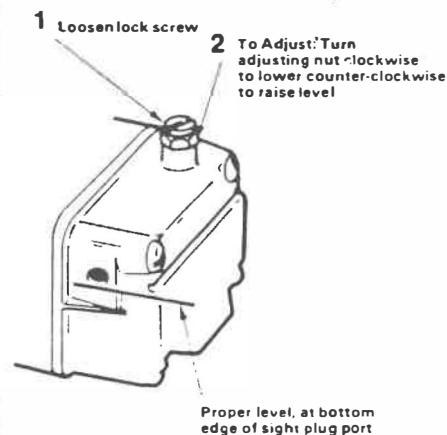


NOTE: Proper power valve gasket must be used as shown, use of improper gasket will result in fuel leakage around power valve.
Power valve (A): Torque to 40-50 inch pounds
Power valve (B): Torque to 40-50 inch pounds

FIG. 1 – POWER VALVE INSTALLATION

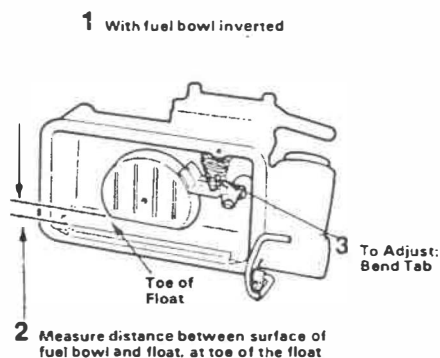


External Adjustable Type
FIG. 2 – DRY FLOAT SETTING



With car on level surface and engine running

FIG. 3 – WET LEVEL ADJUSTMENT



Non-Adjustable Type
FIG. 4 – DRY FLOAT SETTING

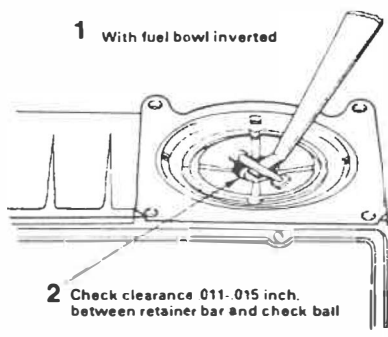


FIG. 5 – PUMP INTAKE CHECK BALL ADJUSTMENT

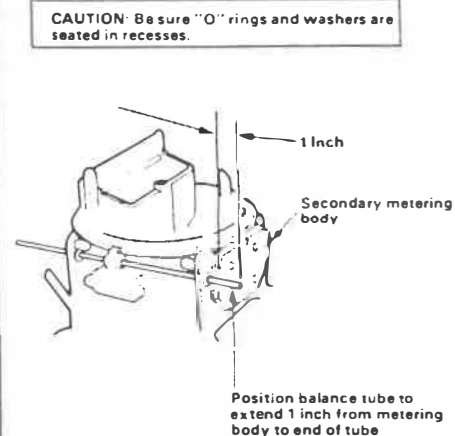


FIG. 6 – BALANCE TUBE ADJUSTMENT

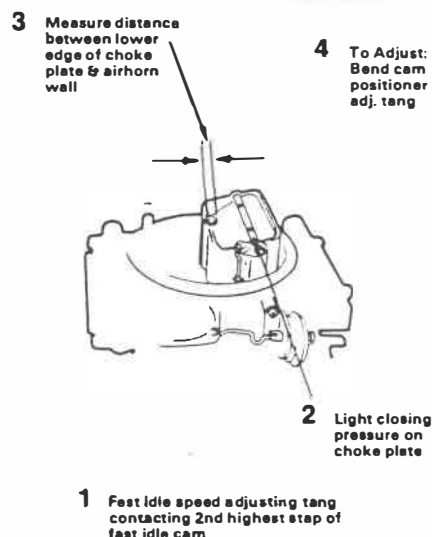


FIG. 7 – CAM INDEX ADJUSTMENT

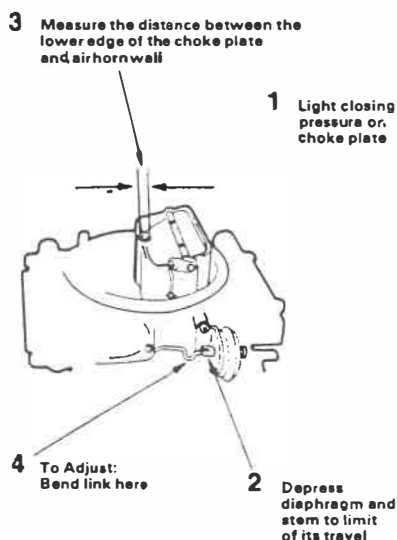
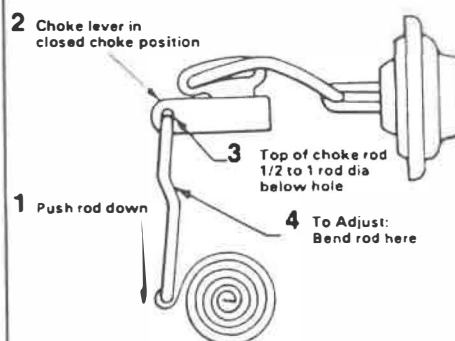


FIG. 8 – VACUUM KICK ADJUSTMENT



Type 1
FIG. 9 – CHOKE ROD ADJUSTMENT

CARBURETOR ADJUSTMENTS

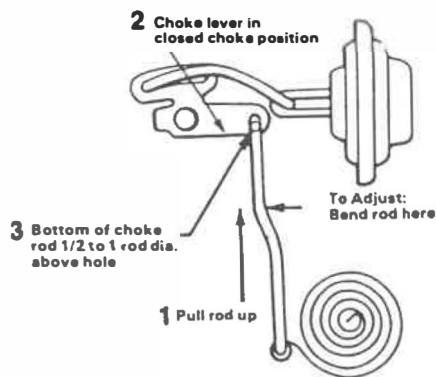


FIG. 10 - CHOKE ROD ADJUSTMENT

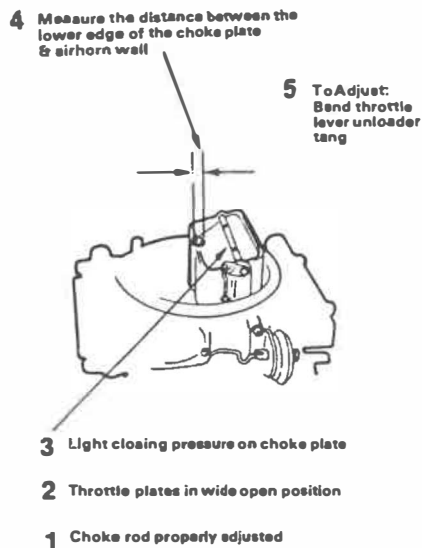


FIG. 11 - UNLOADER ADJUSTMENT

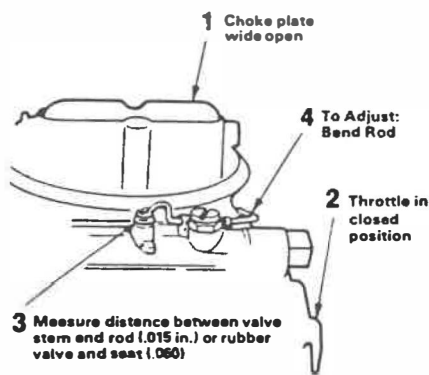


FIG. 12 - VENT VALVE ADJUSTMENT

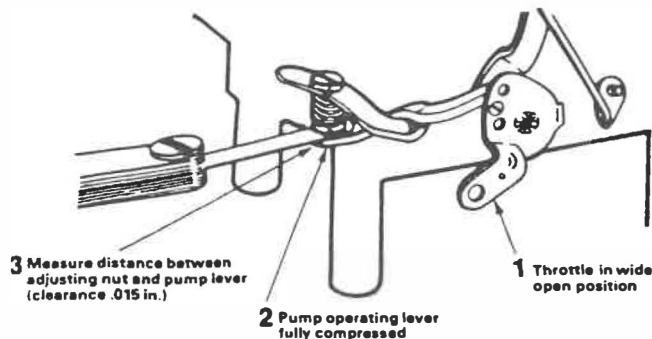
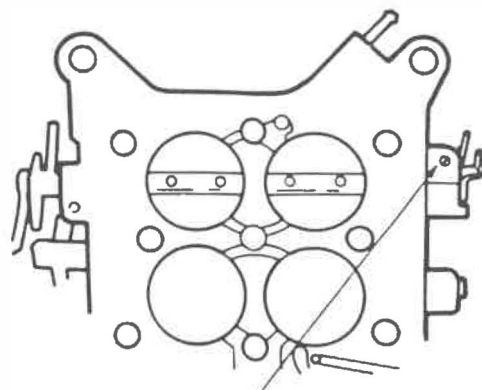


FIG. 13 - PUMP OVERRIDE ADJUSTMENT



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

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

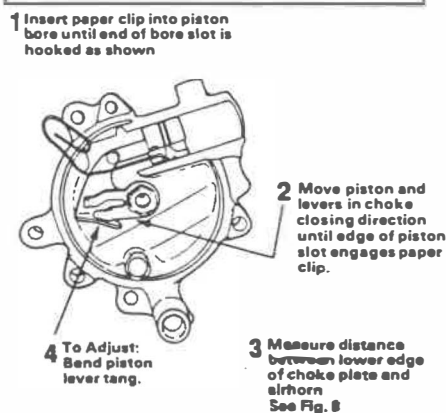


FIG. 15 - CHOKE QUALIFYING (INTEGRAL CHOKE) ADJUSTMENT

Rotate cover to align ref. mark on cover with specified mark on choke housing.

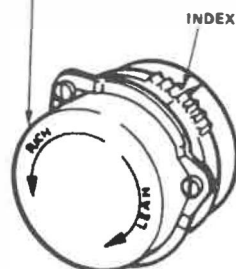


FIG. 16 - CHOKE ADJUSTMENT

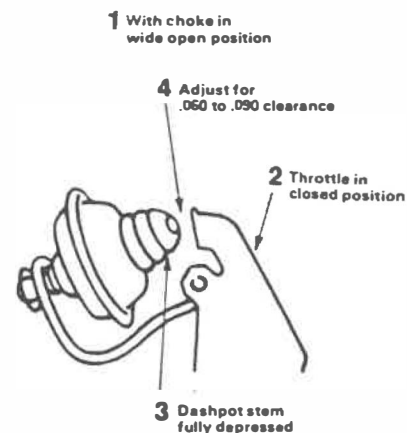


FIG. 17 - DASHPOT ADJUSTMENT

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).

