

Holley Carburetor Model 4150/4150C Instruction Sheet 199R8378

TYPICAL VIEW

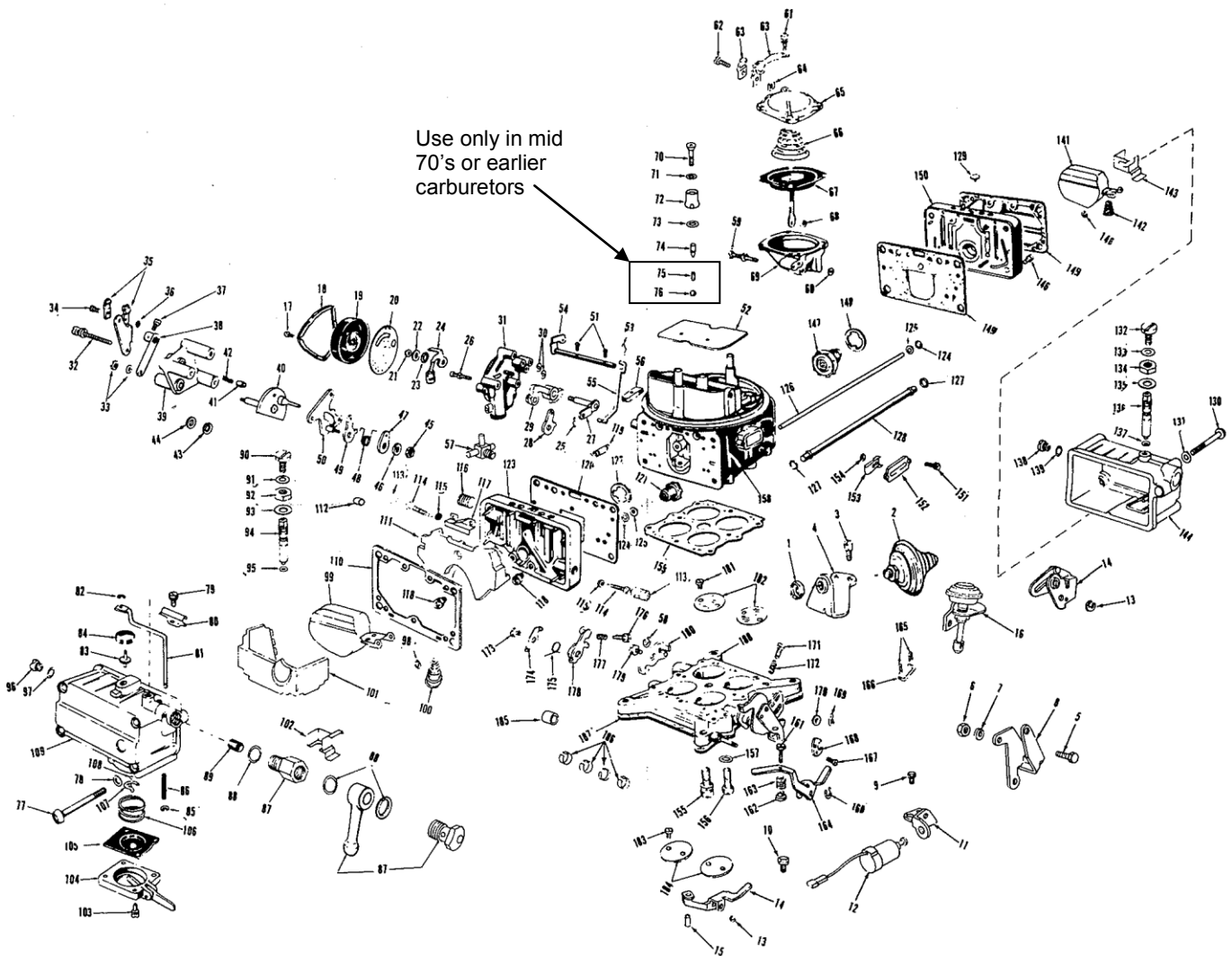
The exploded view shown is typical of the model carburetor this kit will service. The view may differ slightly from the actual carburetor being renewed.

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 the original parts.

DISASSEMBLY:

Rest the carburetor on a repair stand to avoid damage to the throttle plates during the renew procedures. Use the exploded view as a guide, and follow the numerical sequence in general to disassemble the unit far enough to permit cleaning and inspection. Do not remove the throttle plates or shaft. Idle limiter: turn the idle limiter caps to its leanest (clockwise) position and remove the cap. Observe and record the initial position of the needle slot. Turn the idle needs 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 the idle adjusting needles when removing the idle limiter caps.



| Ref. No. | Desc | Ref. No. | Desc | Ref. No. | Desc |
|----------|---------------------------------------|----------|---------------------------------------|----------|---|
| 1 | Dashpot nut | 64 | Clamp screw nut | 127 | Fuel line tube o-ring seal |
| 2 | Dashpot assembly | 65 | Sec. diaph. cover | 128 | Fuel line tube |
| 3 | Dashpot bracket screw | 66 | Sec. diaph. spring | 129 | Sec. bow l vent valve |
| 4 | Dashpot bracket | 67 | Sec. diaph. & link assy | 130 | Sec. fuel bow l screw |
| 5 | Throttle lever extension screw | 68 | Sec. diaph. housing check ball | 131 | Sec. fuel bow l screw gasket |
| 6 | Throttle lever extension nut | 69 | Sec. diaph. housing | 132 | Sec. fuel valve seat lock screw |
| 7 | Throttle lever extension nut | 70 | Pump disch. nozzle screw | 133 | Sec. fuel valve seat lock screw gasket |
| 8 | Throttle lever extension | 71 | Pump disch. nozzle screw gasket | 134 | Sec. fuel valve seat adj. nut |
| 9 | Solenoid bracket screw | 72 | Pump disch. nozzle | 135 | Fuel valve seat adj. nut gasket |
| 10 | Solenoid bracket screw | 73 | Pump disch. nozzle gasket | 136 | Sec. fuel inlet valve & seat assy |
| 11 | Solenoid bracket | 74 | Pump disch. needle valve | 137 | Fuel valve seat o-ring seal |
| 12 | Solenoid assembly | 75 | Pump check ball w eight | 138 | Sec. fuel level check plug |
| 13 | Cam follow er retainer | 76 | Pump disch. nozzle check ball | 139 | Fuel level check plug gasket |
| 14 | Cam follow er lever | 77 | Primary fuel bow l screw | 140 | Float retainer |
| 15 | Pump oper. lever screw sleeve | 78 | Primary fuel bow l screw gasket | 141 | Sec. float assy |
| 16 | Modulator assembly | 79 | Air vent clamp screw | 142 | Sec. float spring |
| 17 | Therm. housing clamp screw | 80 | Air vent rod clamp | 143 | Sec. baffle plate |
| 18 | Therm. housing clamp | 81 | Air vent rod | 144 | Sec. fuel bow l assy |
| 19 | Thermostat housing assembly | 82 | Air vent valve retainer | 145 | Sec. fuel bow l gasket |
| 20 | Thermostat housing gasket | 83 | Air vent valve | 146 | Sec. metering jet |
| 21 | Choke therm. shaft nut | 84 | Air vent cap | 147 | Sec. pow er valve assy |
| 22 | Shaft nut lockw asher | 85 | Air vent rod spring retainer | 148 | Sec. pow er valve gasket |
| 23 | Therm. lever spacer | 86 | Air vent rod spring | 149 | Sec. metering body gasket |
| 24 | Therm. lever , link & piston assy | 87 | Fuel inlet fitting | 150 | Sec. metering body assy |
| 25 | Choke rod retainer | 88 | Fuel inlet fitting gasket | 151 | H.I.C. cover screw |
| 26 | Choke housing screw | 89 | Fuel inlet filter | 152 | H.I.C. cover |
| 27 | Choke housing lever & shaft assy | 90 | Pri. fuel valve seat lock screw | 153 | Hot idle compensator assy |
| 28 | Choke therm. lever | 91 | Fuel valve seat lock screw gasket | 154 | H.I.C. seal |
| 29 | Fast idle cam assy | 92 | Fuel valve seat adj. nut | 155 | Throttle body screw & lockw asher |
| 30 | Choke housing gasket | 93 | Fuel vlave adj. nut gasket | 156 | Throttle body screw |
| 31 | Choke housing assembly | 94 | Pri. fuel inlet & valve seat assy | 157 | Throttle body screw gasket |
| 32 | Fast idle cam plate screw | 95 | Fuel valve seat o-ring seal | 158 | Main body assy |
| 33 | Choke control lever nut & lockw asher | 96 | Fuel level check plug | 159 | Throttle body gasket |
| 34 | Wire bracket clamp screw | 97 | Fuel level check plug gasket | 160 | Pump oper. lever retainer |
| 35 | Choke control wire bracket clamp | 98 | Float retainer | 161 | Pump lever adj. screw |
| 36 | Wire bracket clamp screw nut | 99 | Primary float assy | 162 | Pump lever adj. screw fitting |
| 37 | Choke lever assy sw ivel screw | 100 | Primary float spring | 163 | Pump lever adj. screw spring |
| 38 | Choke lever & sw ivel assy | 101 | Primary fuel bow l filler | 164 | Pump lever |
| 39 | Fast idle cam plate | 102 | Primary baffle plate | 165 | Throttle connector rod cotter pin |
| 40 | Fast idle cam & shaft assy | 103 | Pump diaph. cover screw & lockw asher | 166 | Throttle connector rod |
| 41 | Fast idle cam plunger | 104 | Pri. pump diaph. cover assy | 167 | Pump cam lock screw |
| 42 | Fast idle cam plunger spring | 105 | Primary pump diaph. assy | 168 | Pump cam |
| 43 | Choke oper. lever spring w asher | 106 | Pri. diaph. return spring | 169 | Throttle connector pin retainer |
| 44 | Choke oper. lever w asher | 107 | Pri. check ball retainer | 170 | Throttle connector pin washer |
| 45 | Back up plate stud nut | 108 | Pri. check ball or check valve | 171 | Throttle stop screw |
| 46 | Stud nut lockw asher | 109 | Pri. fuel bow l assy | 172 | Throttle stop screw spring |
| 47 | Choke spring w asher | 110 | Pri. fuel bow l gasket | 173 | Fast idle cam lever screw & lockw asher |
| 48 | Choke spring | 111 | Pri. metering body filler | 174 | Fast idle cam pick up lever |
| 49 | Choke rod & lever bushing assy | 112 | Vacuum tube plug | 175 | Fast idle cam lever spring |
| 50 | Back up plate & stud assy | 113 | Idle limiter cap | 176 | Fast idle cam lever adj. screw |
| 51 | Choke plate screw | 114 | Idle adj. needle | 177 | Fast idle cam lever adj. screw spring |
| 52 | Choke plate | 115 | Idle adj. needle seal | 178 | Fast idle cam lever |
| 53 | Choke rod retainer | 116 | Spark hole plug | 179 | Sec. diaph. lever assy screw |
| 54 | Choke lever & shaft assy | 117 | Metering body vent baffle | 180 | Sec. diaph. lever assy |
| 55 | Choke rod | 118 | Primary metering jet | 181 | Sec. throttle plate screw |
| 56 | Choke rod seal | 119 | Tube & o-ring assy | 182 | Sec. throttle plate |
| 57 | Four-w ay hose connector | 120 | Pri. metering body gasket | 183 | Pri. throttle plate screw |
| 58 | Sec. diaph. link retainer | 121 | Pri. pow er valve assy | 184 | Pri. throttle plate |
| 59 | Sec. diaph. housing screw | 122 | Pri. pow er valve gasket | 185 | Pri. throttle shaft bearing (solid) |
| 60 | Sec. diaph. housing gasket | 123 | Pri. metering body assy | 186 | Throttle shaft bearing (ribbon) pri. & sec. |
| 61 | Sec. diaph. cover screw | 124 | Balance tube w asher | 187 | Flange gasket |
| 62 | Wire bracket & clamp screw | 125 | Balance tube o-ring seal | 188 | Throttle body assy |
| 63 | Wire bracket clamp | 126 | Balance tube | | |

CLEANING:

Cleaning must be done with the 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.

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 to 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 could cause a fire.

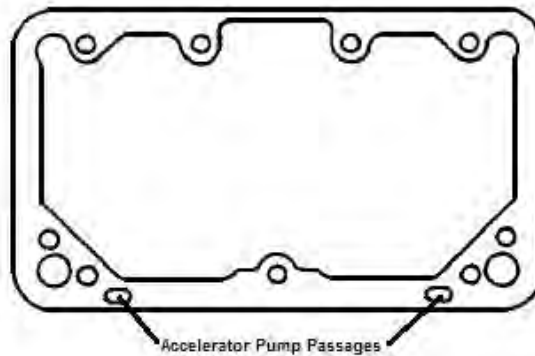
SPECIAL INSTRUCTIONS:

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

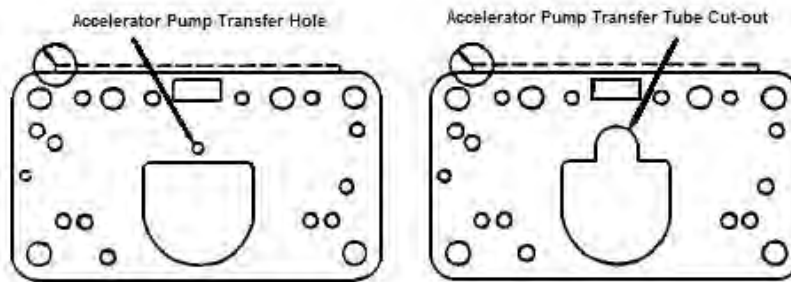
PUMP INLET CHECK VALVE – Lubricate tip of new valve and insert in center hole in pump cavity. Pull thru from fuel bowl side until seated.

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 restaked after tightening to prevent loosening.

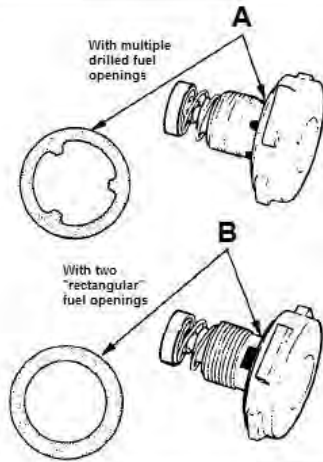
THROTTLE BODY – Do not remove throttle shaft or plates. If throttle plates are nicked or damaged, it will be necessary to replace the throttle body.



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 in./lbs.

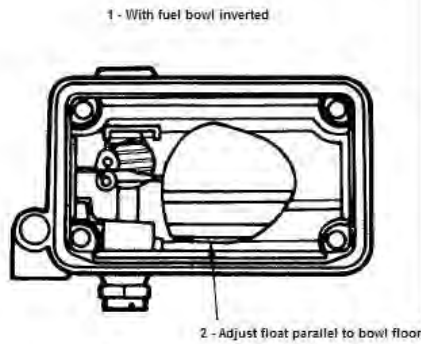


METERING BODY GASKETS



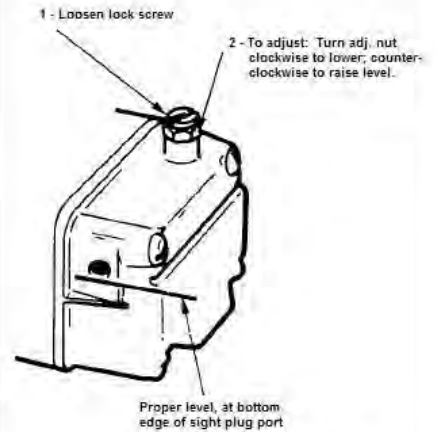
NOTE: Proper power valve gasket must be used as shown, use of improper gasket will result in fuel leakage around power valve.
 Power valve (A): Torque to 40-50 in./lbs.
 Power valve (B): Torque to 40-50 in./lbs.

FIG. 1 - POWER VALVE INSTALLATION



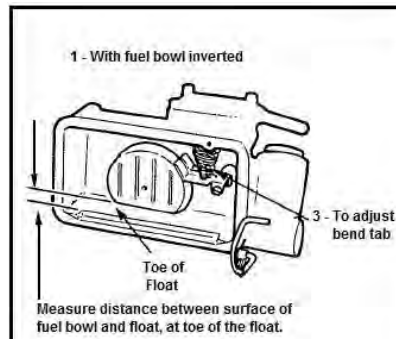
External Adjustable Type

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

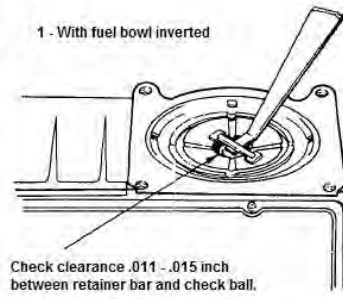


FIG. 5 - PUMP INTAKE CHECK BALL ADJ.

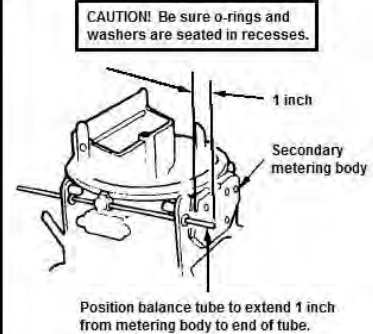


FIG. 6 - BALANCE TUBE ADJUSTMENT

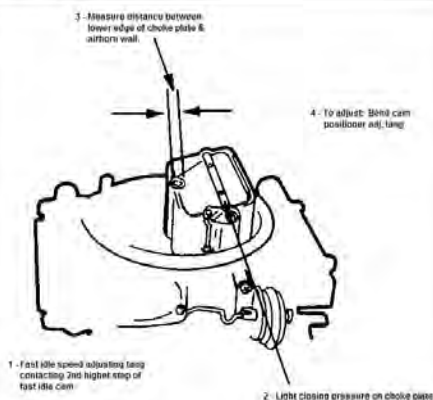


FIG. 7 - CAM INDEX ADJUSTMENT

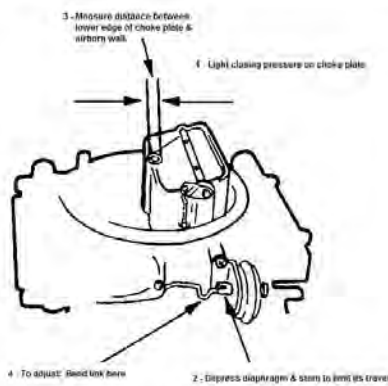


FIG. 8 - VACUUM KICK ADJUSTMENT

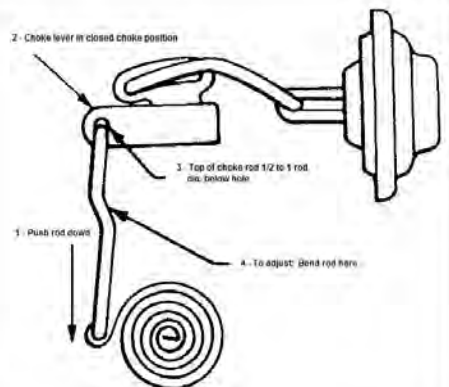


FIG. 9 - CHOKE ROD ADJUSTMENT

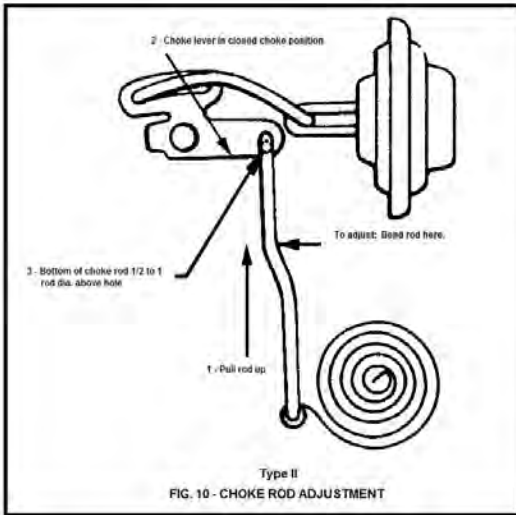


FIG. 10 - CHOKE ROD ADJUSTMENT

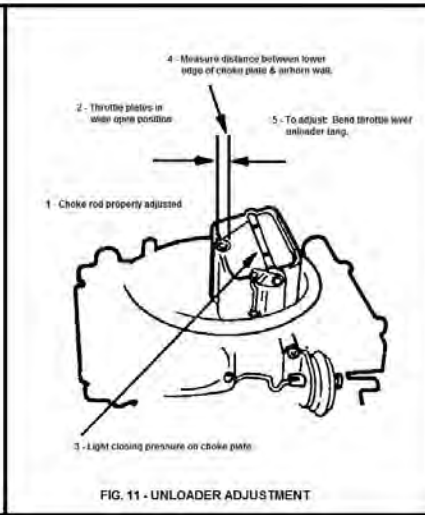


FIG. 11 - UNLOADER ADJUSTMENT

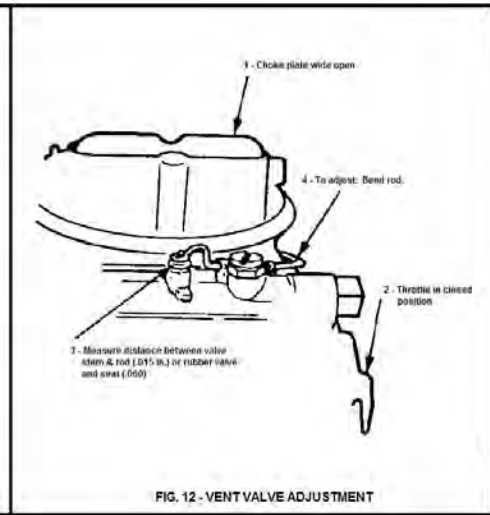


FIG. 12 - VENT VALVE ADJUSTMENT

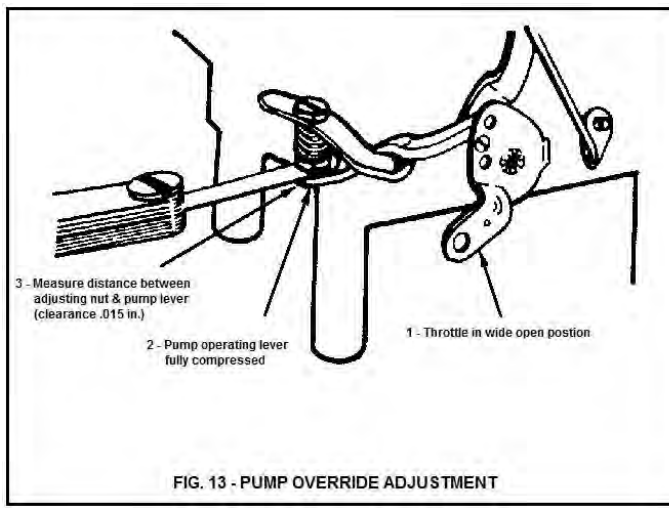


FIG. 13 - PUMP OVERRIDE ADJUSTMENT

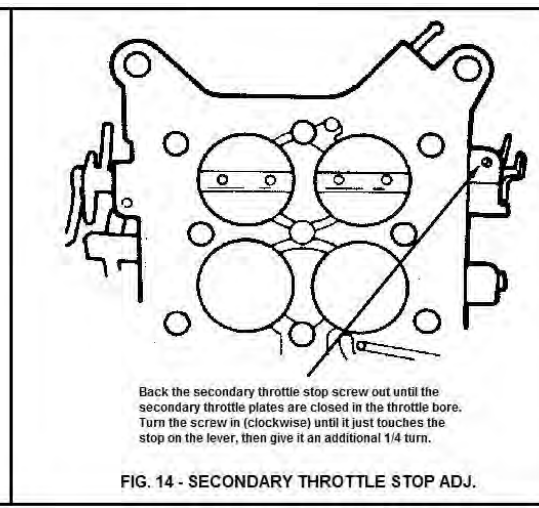


FIG. 14 - SECONDARY THROTTLE STOP ADJ.

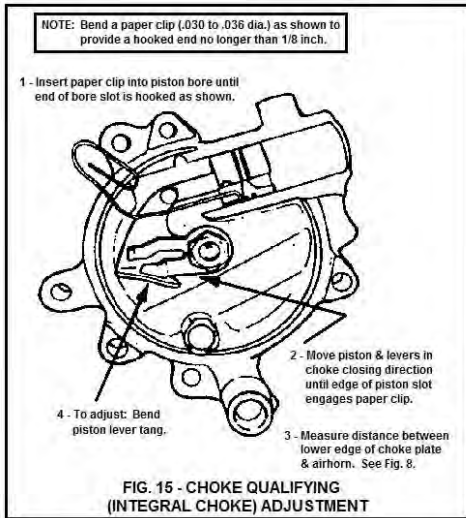


FIG. 15 - CHOKE QUALIFYING (INTEGRAL CHOKE) ADJUSTMENT

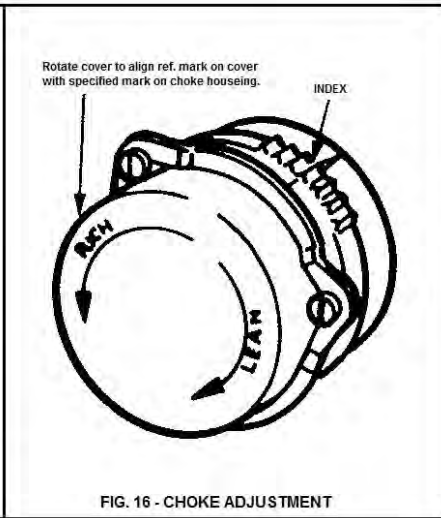


FIG. 16 - CHOKE ADJUSTMENT

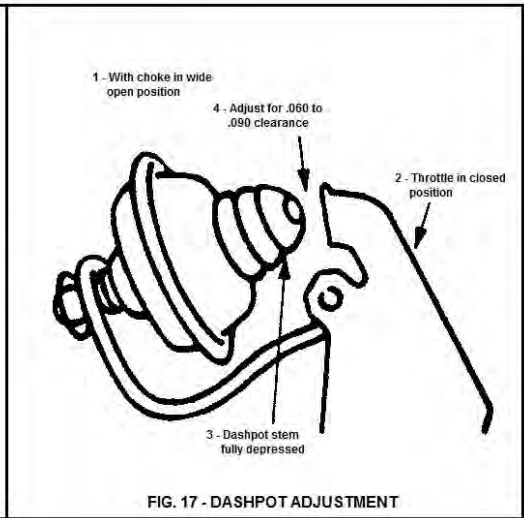


FIG. 17 - DASHPOT ADJUSTMENT

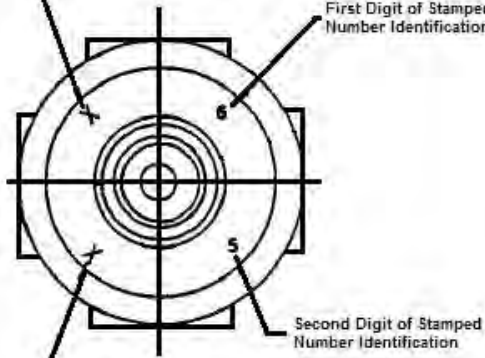
Example: Power Valve Assembly

125-65

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

Code Letter A thru M for Month -
omitting Letter I - Use J for Sept.

First Digit of Stamped
Number Identification



Second Digit of Stamped
Number Identification

Code Number 0 thru 9 for Year

POWER VALVE IDENTIFICATION

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