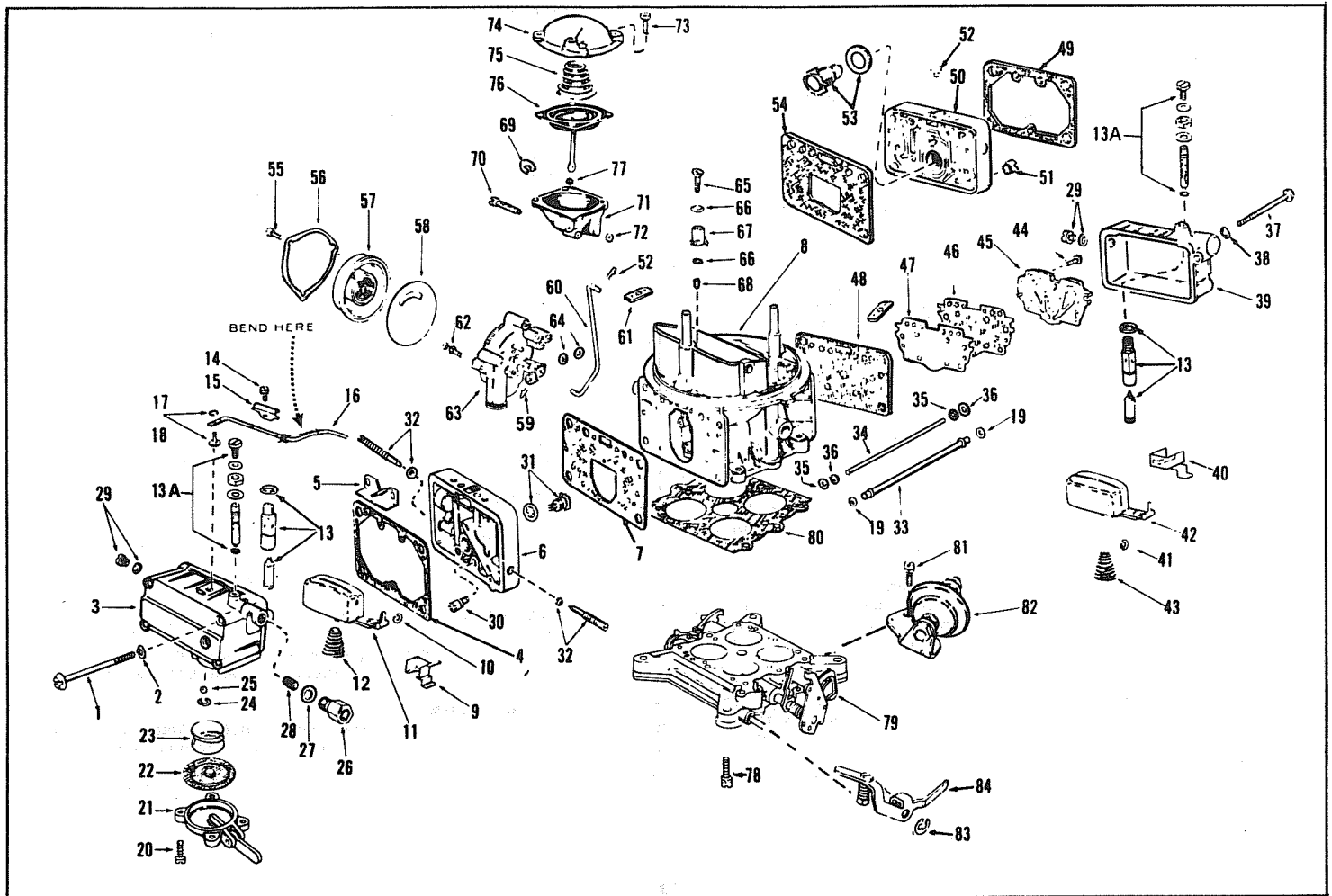


SERVICE INSTRUCTIONS

HOLLEY CARBURETOR MODEL 4150 - 4160



NOMENCLATURE

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|---|---|---|
| 1. Primary fuel bowl screws (4) | 29. Fuel level sight plugs and gasket (2) | 59. Choke rod pin |
| 2. Primary fuel bowl screw gaskets (4) | 30. Primary metering jets (2) | 60. Choke rod |
| 3. Primary fuel bowl | 31. Power valve and gasket | 61. Choke rod seal |
| 4. Primary fuel bowl gasket | 32. Idle adjusting screw and seals (2) | 62. Choke housing screw (3) |
| 5. Main vent baffle (if used) | 33. Fuel line tube (2) | 63. Choke housing |
| 6. Primary metering body | 34. Fuel balance tube (if used) | 64. Choke housing gasket (2) |
| 7. Primary metering body gasket | 35. Fuel balance tube "O" ring gasket (if used) (2) | 65. Pump nozzle screw |
| 8. Main body casting | 36. Fuel balance tube "O" ring gasket (if used) (2) | 66. Pump nozzle gasket (2) |
| 9. Primary bowl baffle | 37. Secondary fuel bowl screw (4) | 67. Pump nozzle |
| 10. Primary float pin retainer | 38. Secondary fuel bowl screw gasket (4) | 68. Pump check needle |
| 11. Primary float | 39. Secondary fuel bowl | 69. Secondary link retainer |
| 12. Primary float return spring | 40. Secondary bowl baffle | 70. Secondary diaphragm housing screw |
| 13. Needle and seat assembly (2) | 41. Secondary float pin retainer | 71. Secondary diaphragm housing |
| 13A. Needle and seat assembly (external adjustment) (2) | 42. Secondary float | 72. Secondary diaphragm housing gasket |
| 14. Vent valve retainer screw | 43. Secondary float return spring | 73. Secondary diaphragm cover screw (4) |
| 15. Vent valve clamp | 44. Secondary metering body screw (if used) (6) | 74. Secondary diaphragm cover |
| 16. Vent valve rod | 45. Secondary metering body (if used) | 75. Secondary diaphragm return spring |
| 17. Vent valve retainer | 46. Secondary metering body plate gasket (if used) | 76. Secondary diaphragm assembly |
| 18. Vent valve | 47. Secondary metering body plate (if used) | 77. Secondary diaphragm check ball |
| 19. Fuel tube "O" ring gasket (2) | 48. Secondary metering body gasket (if used) | 78. Throttle body to main body screw (8) |
| 20. Pump diaphragm cover screw (4) | 49. Secondary fuel bowl gasket (if used) | 79. Throttle body |
| 21. Pump diaphragm cover | 50. Secondary metering body (if used) | 80. Throttle body gasket |
| 22. Pump diaphragm | 51. Secondary metering jet (if used) (2) | 81. Dash pot bracket screw (if used) |
| 23. Pump diaphragm return spring | 52. Secondary bowl vent (if used) | 82. Dash pot and bracket assembly (if used) |
| 24. Pump intake check ball retainer | 53. Secondary power valve (if used) | 83. Pump lever retainer |
| 25. Intake check ball | 54. Secondary metering body gasket (if used) | 84. Pump lever |
| 26. Fuel inlet fitting | 55. Thermostat cover screw (3) | |
| 27. Fuel inlet fitting gasket | 56. Thermostat cover retainer | |
| 28. Fuel inlet strainer (if used) | 57. Thermostat cover | |
| | 58. Thermostat cover gasket | |

DISASSEMBLY

The numerical sequence of the exploded view may be followed in most instances to disassemble the carburetor far enough to permit the cleaning, inspection, and installation of the kit contents. Variation in design, omission and addition of parts may occur between models in this group. NOTE: On the 4150 model carburetors the parts (49, 50, 51, 52, 53 and 54) will be used in place of parts (45, 46, 47). Some models have a pressed in retainer (24) over the intake check ball (25). Do not attempt to remove.

CLEANING

Clean parts thoroughly in an approved cleaning solvent or lacquer thinner. Rinse parts in a suitable solvent and blow out all passages with compressed air. Do not soak leather, plastic, diaphragm assemblies, rubber or other similar material in cleaning solvent.

REASSEMBLY

Reverse the numerical sequence of exploded view, to reassemble carburetor, noting the following special instructions.

1. If the adjustable needle and seat (13A) used in the carburetor being serviced appears different than the assembly packaged in this kit, it will be necessary to purchase the original Holley equipment fuel valve seat lock screw (part number 5R-765), and fuel valve seat adjusting nut (part number 39R-160). These parts may be purchased thru your local Holley supplier.
2. Throttle body to main body gasket (80) matches the throttle body one way.
3. Install pump needle (68) point downward and make sure nozzle (67) is centered before tightening.
4. Primary fuel bowl should be installed before installing the secondary fuel bowl.
5. Lubricate all "O" rings to aid in installation.
6. Idle adjusting screws (32) should be seated lightly and backed out approximately one turn initial setting.

FLOAT SETTING — EXTERNAL ADJUSTMENT TYPE (Fig. 1)

- (a) For preliminary setting, invert each fuel bowl. Loosen lock screw and turn adjusting nut until float is parallel with floor of bowl.
- (b) Final adjustment must be made after carburetor is installed on engine. With car on level surface, run engine long enough to stabilize fuel. Stop engine and remove sight plugs from fuel bowls. Fuel should be level with the lower edge of sight plug opening.
- (c) To correct fuel level, turn the adjusting nut clockwise to lower fuel level and counter clockwise to raise fuel level, after each adjustment, tighten lock and screw and run engine to stabilize fuel level. CAUTION: Never attempt to adjust the fuel level with engine running as a fire hazard may occur.

FLOAT SETTING — INTERNAL ADJUSTMENT TYPE

(Figs. 2 through 4)

With the fuel bowl inverted identify the float in your carburetor using figures 2 through 4. After the proper identification, adjust float as described in the respective figure and refer to the Adjust-

ment Data Chart for the clearance (A) shown in figures 2 through 4. CAUTION: When adjusting float, never allow needle to be pressed into its seat.

SECONDARY THROTTLE STOP (Fig. 5)

Back secondary throttle stop screw (B) out until throttle valves are completely closed. Adjust stop screw until it just touches the stop on lever; then turn one half turn more.

VACUUM KICK (Fig. 6) If so equipped.

Press diaphragm stem (A) inward until it bottoms. Crack throttle valve slightly and close choke valve as far as possible without forcing. The dimension (B) should be as listed in Adjustment Data Chart between upper edge of choke valve and wall of air horn. To adjust, bend link (C).

IDLE ADJUSTMENT (Fig. 7 and Fig. 8)

Turn speed screw (1) in until throttle valves are opened slightly. Allow engine to warm up to normal operating temperature. Turn mixture screws (2) "in" or "out" until the smoothest idle is obtained. Readjust speed screw (1) for idle speed of 450 — 500 R.P.M. Automatic transmission in "Drive" 500 — 550 Standard transmission. NOTE: 1968 and later models refer to tune-up decal in engine compartment for the proper idle R.P.M. On the 1968 Chrysler, Dodge, and Plymouth models there is only one idle mixture screw, (left hand thread). Refer to (Fig. 8) for location of speed screw (1) and mixture screw (2) and proceed as described above.

DASHPOT (Fig. 9) If so equipped.

With throttle valves at curb idle loosen nut or screw, rotate dashpot to give the dimension 5/64 between the end of dashpot plunger stem and throttle lever with dashpot stem fully compressed.

BOWL VENT (Fig. 10) if so equipped.

With throttle valves closed (curb idle) the dimension at bowl vent valve (B) should be as listed in Adjustment Data Chart between bowl vent valve and its seat. To adjust, bend lever (C). On late models refer to exploded view and bend rod (16) at point indicated.

PUMP OVERRIDE SPRING (See Fig. 10)

Hold throttle valves in wide open position. Fully compress lever (A) in pump cover. There should be .015 — .030 clearance between adjusting nut and lever (A). To adjust, turn adjusting nut or screw.

AUTOMATIC CHOKE

Carburetors equipped with the integral choke (Housing on Carburetor), rotate cover against spring tension until mark on cover is aligned with center index mark on housing. (Tighten screws). NOTE: Do not exceed two notches rich or lean when setting choke.

FAST IDLE

The fast idle screw should just touch the lowest speed step of fast idle cam at (curb idle) with choke valve wide open.

