

# SERVICE INSTRUCTIONS

## HOLLEY CARBURETORS FOR MODELS 1904 - 1908 - 1960

*This kit may contain extra and similar gaskets, cotter pins or retainers, that are applicable to other carburetors in this group. Therefore, to assure usage of correct pieces, use old gaskets, pins or retainers for identification.*

*Variations in shapes of some parts will occur between Carburetors in this group. If equipped with automatic choke, note setting before disassembly. The index mark on the choke cover should never be set more than two notches off specified setting.*

### DISASSEMBLY

Remove cotter pins (1) and pump link (2). Remove screws (3), separate throttle body (4) from main body (5) and remove gasket (6). Remove idle adjusting needle (7) and spring (8). If late type throttle body (9), remove spark valve (10), gasket (11), screw (12), and lever (13). In normal service overhaul, it is not necessary to remove throttle valve and shaft.

If equipped, remove dashpot (14) and lockwasher (15). Remove retainer (16) and (nylon) check ball (17) from main body (if used). Remove screws (18), clamps (19), clamp ring (20), gasket (21), float bowl (22) and gasket (23). Remove fuel fitting (24), gasket (25), inlet seat screw (26) and gasket (27). Remove fuel inlet needle seat and bracket assembly (28), and gasket (32) from inside main body. Some models will have the fuel inlet valve assembly located in the position of parts (24, 25, 26, 27). Remove float pin (29) releasing float (30). Slide fuel inlet needle and clip off float lip. If required, remove pin spring (31).

Remove screws (33), cover (34), lift economizer diaphragm and stem assembly (35) out of main body, and gasket (36). Remove screws (38 and 39), holding body (37) in position until screws are removed. Remove spring (40). Remove main metering jet (41), plug (42), and ball (43). Remove plug (44), weight (45) and ball (46 - if used).

Remove screw (47), gasket (48), nozzle (49) and gasket (50) from main body. Remove gasket (51), pull diaphragm assembly (52) out of body. Press sleeve (53) toward diaphragm until ball (55) drops out. Remove sleeve and spring (54).

If equipped with automatic choke, remove screws (56), retainers (57), cover (58), gasket (59) and plate (60). If choke piston and valve move freely, do not disassemble further. However, if necessary to disassemble further, remove parts (61 through 76) using reference numbers shown in illustration as a guide.

### REASSEMBLY

Place spring (8) on idle adjusting needle (7) and install in throttle body (4). Seat the needle finger-tight and back out one turn. If included, install spark valve (10) and gasket (11), lever (13) and screw (12) into late type throttle body (9).

Install ball (17) and retainer (16). Place gasket (50) and nozzle (49), gasket (48) and attach screw (47) to body. Place spring (54) on diaphragm stem (52), press sleeve (53) on stem compressing spring and insert ball (55) into hole in sleeve. Release sleeve slowly to make certain ball holds it on stem. Position diaphragm assembly (52) in body (5). Place gasket (51) over diaphragm.

Insert ball (46), weight (45) and plug (44) in body (37), then ball (43) and plug (42). Install main jet (41). Install spring (40) against diaphragm. Install body (37) in position, applying pressure to sleeve (53) to prevent overflexing diaphragm. Hold in place, install screws (38 and 39). Before screws are fully tight, release pressure on sleeve and tighten screws securely. This will insure full travel when the diaphragm is operated.

Place gasket (36) on economizer assembly (35), cover (34) and position all three parts while guiding screws (33) to insure alignment. Tighten to body securely. Install fuel inlet needle and spring on float lip. Guide needle into seat bracket (28), position float (30) and install pin (29). Install screw (26), gasket (27) and gasket (32) inside body onto threaded end of screw (26). Set assembly (28), float (30) into position and tighten screw (26) securely. Install fitting (24) and gasket (25). Using gauge supplied, refer to Figure 1 and adjust float as outlined.

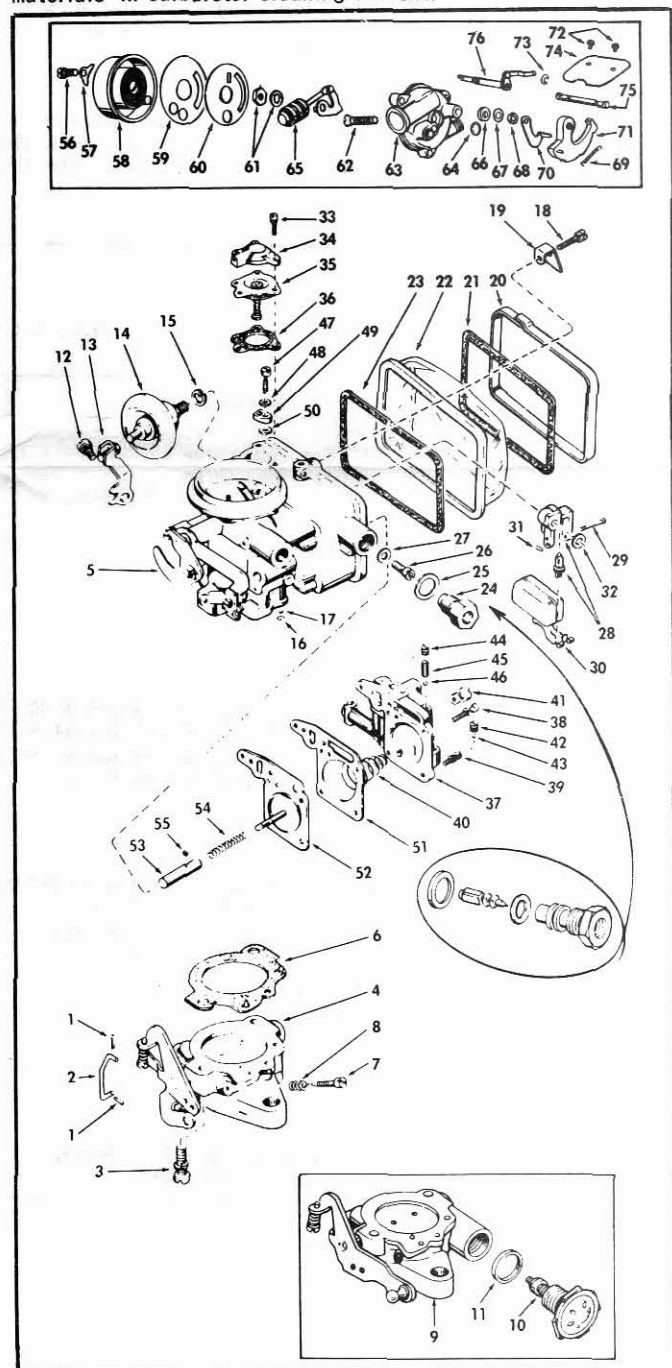
Place gasket (23) in main body (5), place bowl (22) against it and install gasket (21), ring (20), clamps (19) and screws (18). Tighten screws alternately a little at a time in order to evenly compress the gasket and prevent strain on bowl. Attach dashpot (14) and lockwasher (15) to main body if included.

Place gasket (6) on main body (5), install throttle body (4) and attach screws (3). Install link (2) and pins (1) in place.

Reverse numerical sequence to reassemble automatic choke using reference numbers shown in illustration.

### CLEANING

Clean all parts thoroughly in an approved carburetor cleaning solvent or lacquer thinner. Special attention should be given to carbon deposits in throttle bore and passages. Do not use a wire or similar instrument to clean passages and calibrated holes as calibration of carburetor may be destroyed. Do not immerse plungers, diaphragms, leather, felt, rubber or similar materials in carburetor cleaning solvent.



## ADJUSTMENTS

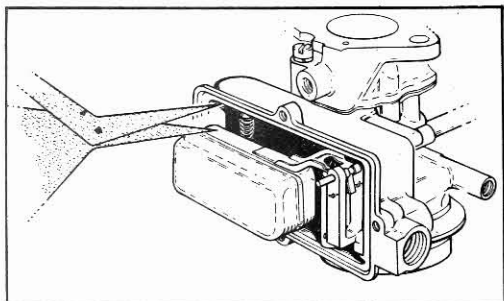


Figure 1

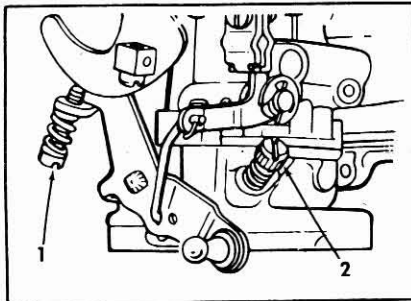


Figure 2

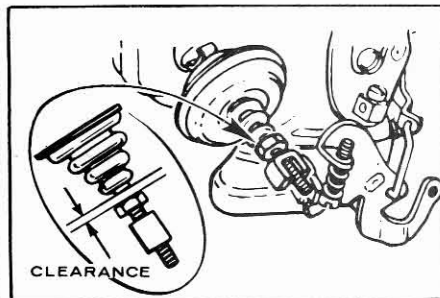


Figure 3

### FLOAT ADJUSTMENT (Figure 1)

Place carburetor upside down and measure float height (as shown) with gauge included in kit. Adjust to clearance indicated in the Data Chart. Adjust by bending float lip, however, never allow the lip of float to press against needle when adjusting.

### IDLE ADJUSTMENT (Figure 2)

Turn screw (1) in until throttle valve is opened slightly. Install carburetor on engine and allow to warm up thoroughly. Turn screw (2) either way until best idle is obtained. Readjust

screw (1) and again check mixture adjustment. Set idle speed between 450-500 R.P.M.

If smooth idle cannot be obtained, there may be something wrong with the carburetor and/or other component parts of the engine which must be located and corrected.

### DASHPOT ADJUSTMENT (Figure 3 - if equipped.)

After adjusting the idle, hold dashpot stem fully compressed and adjust the screw in dashpot lever to give the clearance as listed in Data Chart between screw and end of stem.

## DATA CHART

APPLICATION	FLOAT LEVEL	DASH POT <sup>Ⓢ</sup>
COMET		
1960-61 144" 170" Eng. Auto choke	9/16	9/64
Man. choke	13/64	9/64
EDSEL		
1959 223" Eng.	9/16	5/64
1960 223" Eng.	13/64	5/64
FALCON		
1960-61 144" Eng.	13/64	9/64
1961 170" Eng.	9/16	9/64
FORD		
1952-57 215" 223" Eng. Carbs. R-639, R-698, R-800, R-826, R-1220, R-1241, R-1243, R-1354, R-1443, R-1446, R-2042, R-1098, R-1153, R-1154, R-1242, R-1349, R-1350, R-1414, R-1415	13/64	5/64
1958-59 223" Eng.	9/16	5/64
1960-64 223" Eng.	13/64	5/64
FORD TRUCK		
1952-57 215" 223" Eng. Except Carbs. R-1154, R-1350	13/64	5/64
	9/16	5/64
1958-62 223" Eng. Except Carbs. R-1685, R-1818	13/64	5/64
	9/16	5/64
1963-67 144" 170" Eng.	9/16	-
INTERNATIONAL TRUCK		
ALL	3/8	5/64
MERCURY		
1961-62	13/64	5/64
RAMBLER		
1959- 196" Eng.	9/16	-
1960-62 196" Eng. Except Carbs. R-2166, R-2168	19/32	9/64
	11/16	9/64

<sup>Ⓢ</sup> Used on Auto. Trans. only.

## PARTS LIST

### HOLLEY MODELS 1904, 1908 AND 1960 CARBURETORS

1. Pump link cotter pin
2. Pump link
3. Screw and lockwasher assembly (throttle body)
4. Throttle body assembly (early)
5. Main body assembly
6. Throttle body gasket
7. Idle adjusting needle
8. Idle adjusting needle spring
9. Throttle body assembly (late)
10. Spark valve assembly
11. Spark valve gasket
12. Dashpot lever screw
13. Dashpot lever
14. Dashpot assembly
15. Dashpot lockwasher
16. Distributor check ball retainer
17. Distributor check ball (nylon)
18. Screw and lockwasher assembly (float bowl)
19. Float bowl clamp
20. Float bowl clamp ring
21. Float bowl clamp ring gasket
22. Float bowl
23. Float bowl gasket
24. Fuel inlet fitting
25. Fuel inlet fitting gasket
26. Fuel inlet seat screw
27. Fuel inlet seat screw gasket
28. Fuel inlet needle and seat assembly
29. Float lever pin
30. Float and lever assembly
31. Pin spring
32. Fuel inlet seat gasket
33. Screw and lockwasher assembly (economizer body cover)
34. Economizer cover
35. Economizer diaphragm assembly
36. Economizer body gasket
37. Main well and economizer body assembly
38. Screw and lockwasher assembly (main well and economizer body)
39. Screw and lockwasher assembly (main well and economizer body)
40. Pump return spring
41. Main metering jet
42. Pump inlet passage plug
43. Pump inlet ball (large)
44. Pump discharge passage plug
45. Pump discharge ball weight
46. Pump discharge ball (small)
47. Pump discharge nozzle screw
48. Pump discharge nozzle gasket
49. Pump discharge nozzle
50. Pump discharge nozzle gasket
51. Spacer gasket (main well body)
52. Pump diaphragm assembly
53. Pump push rod sleeve
54. Pump operating spring
55. Push rod sleeve ball (small)
56. Thermostat cover screw
57. Thermostat cover clamp
58. Thermostat cover assembly
59. Thermostat cover gasket
60. Thermostat cover plate
61. Choke shaft nut and lockwasher
62. Thermostat housing screw
63. Thermostat housing
64. Thermostat housing gasket
65. Thermostat piston and link assembly
66. Choke shaft seal
67. Choke shaft seal washer
68. Choke shaft nut
69. Choke lever spring
70. Choke pick-up lever
71. Fast idle cam
72. Choke plate screw
73. Choke plate link retainer
74. Choke plate
75. Choke shaft
76. Choke link and lever assembly