

# FUEL SYSTEM

## SERVICE INSTRUCTION WORKSHEET

TO REPAIR

GF3464-4

HOLLEY CARBURETOR

1 BARREL • Models 1904, 1908, 1960

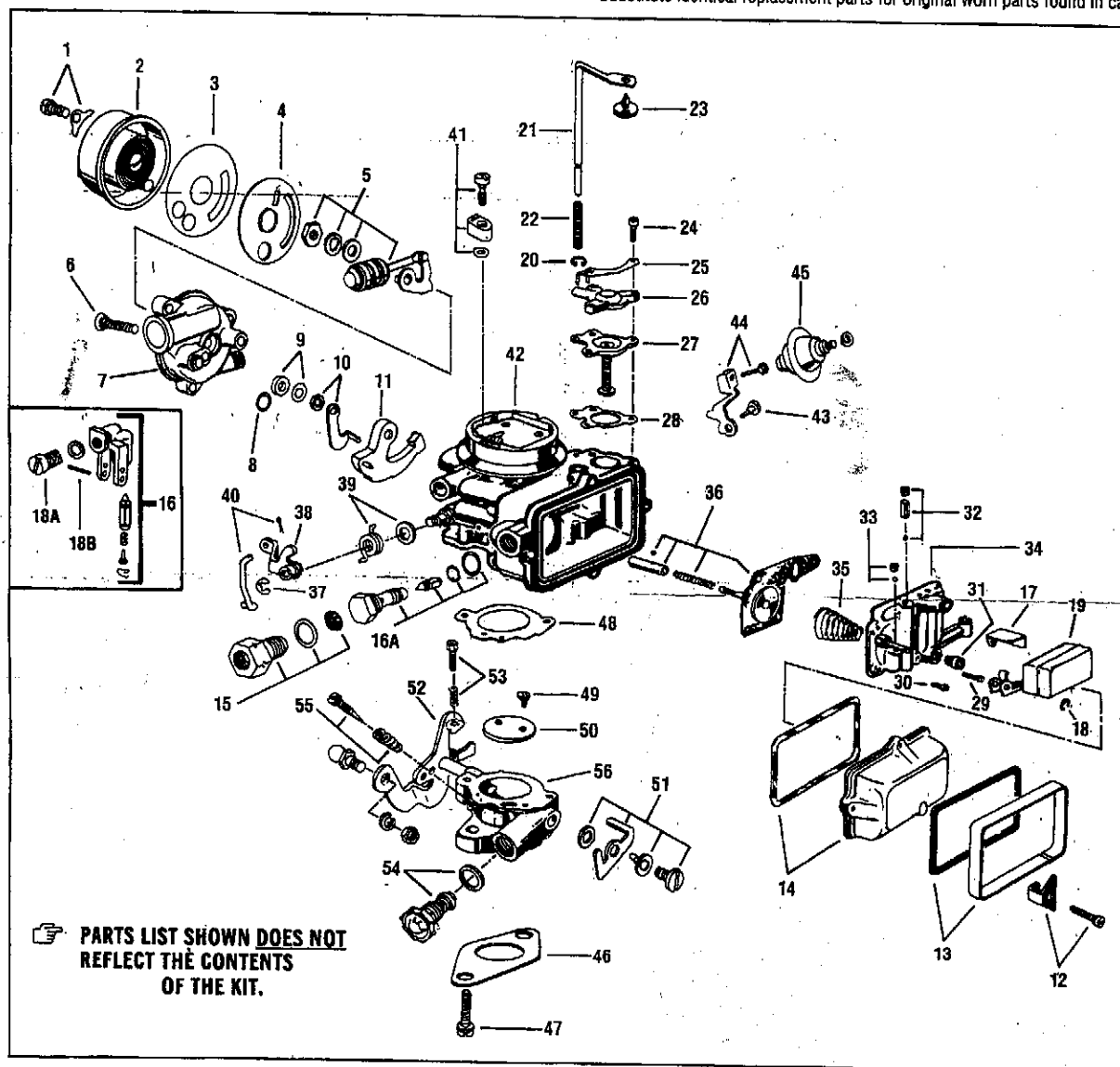
1. Carefully read the text in the following pages to become familiar with the contents of this worksheet before performing carburetor overhaul.

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

3. Use the exploded view as a guide. The numerical sequence of the parts list may generally be followed to disassemble the carburetor far enough to permit cleaning and inspection.

4. Parts list shown DOES NOT reflect the contents of the kit.

5. Kit may contain extra parts intended for other carburetors within this group. Substitute identical replacement parts for original worn parts found in carburetor.



### PARTS LIST

- |                                    |                                 |  |                                     |
|------------------------------------|---------------------------------|--|-------------------------------------|
| 1. Screw & retainer, cover (3)*    | 16A. Needle & seat assembly*    | 30. Screw, main well (3 short)           | 45. Dashpot assembly*               |
| 2. Thermostatic coil & cover assy. | 17. Baffle, fuel inlet*         | 31. Jet, main metering                   | 46. Gasket, flange                  |
| 3. Gasket, cover*                  | 18. E clip, float*              | 32. Ball & weight, pump discharge        | 47. Screw, throttle body (2)        |
| 4. Plate, choke baffle*            | 18A. Screw, fuel inlet seat *   | 33. Ball, pump inlet                     | 48. Gasket, throttle body           |
| 5. Piston assembly*                | 18B. Pin, float hinge *         | 34. Main well & economizer body assembly | 49. Screw, throttle valve (2)       |
| 6. Screw, choke housing*           | 19. Float assembly              | 35. Spring, pump return                  | 50. Valve, throttle                 |
| 7. Housing, choke*                 | 20. E clip, vent rod *          | 36. Pump diaphragm & sleeve assy.        | 51. Vent operating lever assy.*     |
| 8. Washer, choke housing*          | 21. Rod, vent*                  | 37. E clip, pump operating lever         | 52. Throttle operating lever        |
| 9. Seal & washer, choke shaft*     | 22. Spring, vent rod*           | 38. Lever, pump operating                | 53. Screw & spring, throttle stop   |
| 10. Lever, choke pick-up*          | 23. Valve, vent rod*            | 39. Spring & washer, lever*              | 54. Spark valve assembly*           |
| 11. Cam, fast idle*                | 24. Screw, economizer cover (3) | 40. Link, pump                           | 55. Needle & spring, idle adjusting |
| 12. Screw & retainer, cover (4)*   | 25. Guide, vent rod*            | 41. Nozzle assy., pump disch.            | 56. Throttle body assembly          |
| 13. Ring & gasket, cover*          | 26. Cover, economizer           | 42. Main body assembly                   |                                     |
| 14. Cover & gasket, fuel bowl      | 27. Economizer assembly         | 43. Screw, dashpot lever*                |                                     |
| 15. Fitting & strainer             | 28. Gasket, economizer          | 44. Lever assembly, dashpot*             |                                     |
| 16. Needle & seat assembly**       | 29. Screw, main well (2 long)   |  |                                     |

\* Some models.  
\*\* Solid needle, some models.

## REMOVAL & INSTALLATION NOTES

1. Cover opening on intake manifold after carburetor is removed.
2. It is not necessary to disassemble choke housing (7) unless choke shaft seal (9) and choke housing washer (8) have to be replaced.
3. Do not disassemble throttle valve unless it's necessary.
4. To remove sleeve and spring from pump diaphragm (36), depress sleeve so the ball can drop out of the hole.
5. Before removing idle adjusting needle (55), turn in until lightly seated, counting number of turns. Record for proper installation.
6. Install parts and components in reverse order of removal.
7. The needle valve supplied in the kit replaces spring-loaded or solid needle.
8. When installing sleeve & spring onto pump diaphragm (36), place hole in sleeve in line with notch on diaphragm stem, depress spring and drop the ball into hole. Release sleeve slowly.

## REMOVAL & INSTALLATION NOTES (Cont'd)

9. If old seat assembly has a float bumper spring, transfer same to new seat.
10. When installing needle & seat assy. (16), do not tighten screw (18A). Install bowl cover (14), tighten cover screws (12) evenly around cover and then tighten fuel inlet screw (18A).
11. When installing idle adjusting needle (55), turn in until lightly seated then back out number of turns recorded earlier.

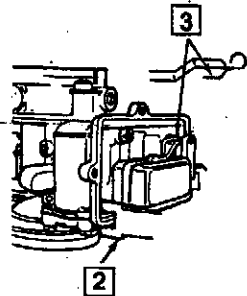
## CLEANING

Cleaning must be done with carburetor disassembled. Use spray cleaner and a stiff bristle brush to remove dirt and carbon deposits. Do not use abrasives and wires to clean parts and passageways. Wash off in suitable solvent, and clear all passageways with compressed air.  
**Caution:** When cleaning with solvent do not soak or spray parts containing rubber, leather, plastic and electrical components.

## ADJUSTMENT DATA

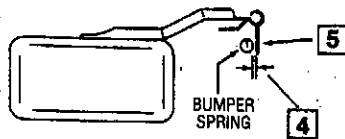
**FIG. 1  
FLOAT ADJUSTMENT  
Float Level**

1. With float assembled, invert main body.
2. Measure distance between inside surface of bowl to top of float at toe end, using a gauge or drill bit.
3. To adjust, bend tab as shown.



**Float Drop (for needle & seat assy. with bumper spring)**

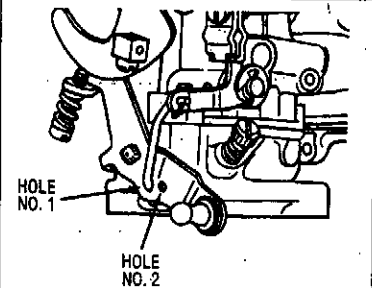
4. With main body inverted and float level adjusted, vertical tang should just clear the float bumper spring.
5. To adjust, bend tang.



**FIG. 2  
PUMP LINK POSITION**

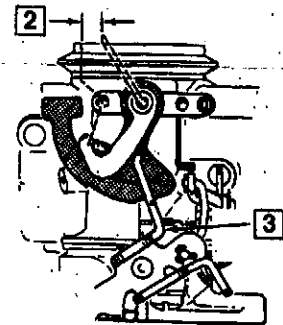
Install pump link in hole no. 1 for regular operation.

Install pump link in hole no. 2 for rich mixture operation.



**FIG. 3  
UNLOADER ADJUSTMENT  
(Some Models)**

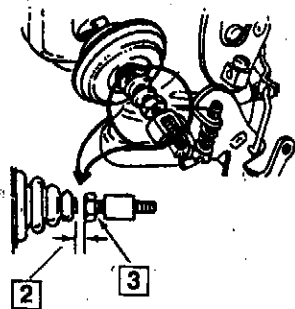
1. Hold throttle valve in wide open position.
2. With choke valve held toward closed position, measure distance between upper edge of choke valve and air horn wall using a gauge or drill bit. Ford applications measure 1/4".
3. To adjust, bend unloader lever at elbow.



**FIG. 4  
DASHPOT ADJUSTMENT**

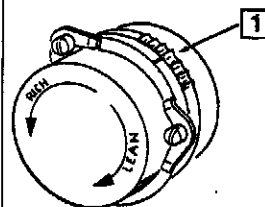
**NOTE:** Slow idle adjustment should be performed first.

1. Depress dashpot plunger to fully seat diaphragm.
2. Measure distance between end of plunger and screw head.  
 Ford w/144, 170 engine —set 1/8"  
 Ford w/215, 223 engine —set 1/16"
3. To adjust, turn screw as necessary.



**FIG. 6  
AUTOMATIC CHOKE  
ADJUSTMENT**

1. Rotate stat cover against spring tension and align mark on cover with index mark on housing.



**FIG. 5  
SLOW IDLE ADJUSTMENT**

1. Bring engine to normal operating temperature. Choke in wide open position.
2. Adjust idle mixture needle to a smooth idle.
3. Adjust idle stop screw for proper R.P.M.  
 —Set 550 RPM with M/T and A.C. "ON".  
 —Set 500 RPM with A/T in Drive and A.C. "ON".

