

SERVICE INSTRUCTIONS

CARTER CARBURETOR MODEL - BBS

DISASSEMBLY

The numerical sequence of the exploded view may be followed in most instances to permit the cleaning, inspection, and installation of the kit contents. Some variation in shape, omission, and addition of some parts will occur between models in this group. NOTE: The idle mixture screw (45) on the C.A.P. (Cleaner Air Package) carburetors have a limited travel and are not removable. The idle limiter cap (44) if so equipped, should not be removed, unless the new service limiter cap is included in repair kit.

To disassemble the integral choke parts (if equipped) from the air horn, refer to insert at top of exploded view.

CLEANING

Clean all parts thoroughly in an approved carburetor solvent or lacquer thinner. Special attention should be given to carbon deposits in the throttle bore and passages. Blow out all passages with compressed air. *Do Not immerse choke diaphragm, leather, plastic, rubber or other similar materials in cleaning solvent if they are to be reused.*

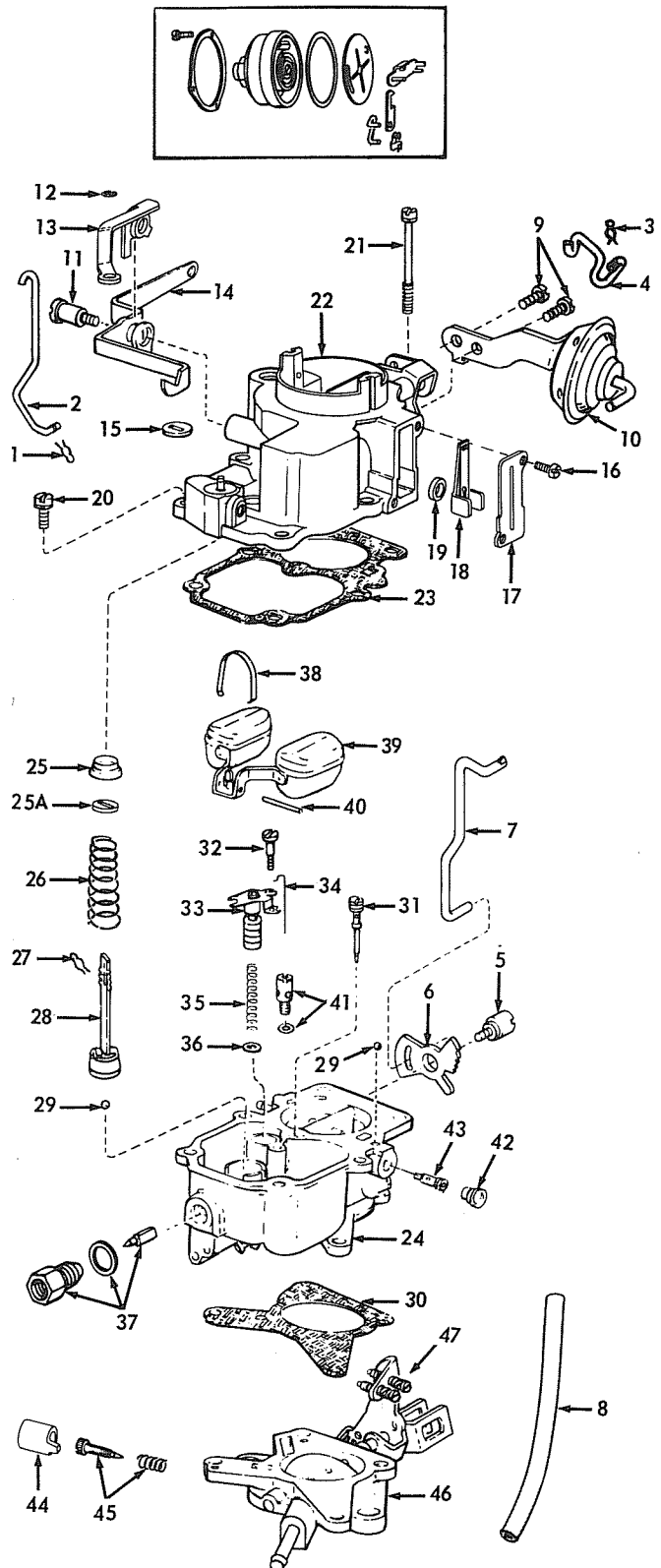
REASSEMBLY

Reverse the numerical sequence of exploded view for reassembly. Note the following special instructions.

1. Make sure Step-up Piston gasket (36) is installed before installing vacuum piston (33) and step up rod (34).
2. Lubricate plunger leather on plunger assembly (28) before installing.
3. Refer to Data Chart for the proper installation of pin spring (27) and connector rod (7) as indicated in pump adjustment column.

NOMENCLATURE

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| 1. Throttle Rod Pin Spring (Large) | 25. Pump Plunger Bushing |
| 2. Throttle Rod | 25A. Pump Plunger Washer |
| 3. Choke Pull-off Rod Pin Spring (Small) | 26. Pump Plunger Spring |
| 4. Choke Pull-off Rod | 27. Pump Plunger Pin Spring (Small) |
| 5. Fast Idle Cam Screw | 28. Pump Plunger Assy. |
| 6. Fast Idle Cam | 29. Pump Intake and Discharge Check Ball (2) |
| 7. Choke Rod | 30. Throttle Body Gasket |
| 8. Hose | 31. Low Speed Jet |
| 9. Choke Pull-off and Bracket Screw (2) | 32. Step-up Piston Plate Screw |
| 10. Choke Pull-off & Bracket | 33. Step-up Piston Plate |
| 11. Pump Lever Screw | 34. Step-up Rod |
| 12. Vent Valve Lever Retainer | 35. Step-up Piston Spring |
| 13. Vent Valve Lever | 36. Step-up Piston Gasket |
| 14. Pump Plunger Lever | 37. Needle & Seat Assembly |
| 15. Vent Valve | 38. Float Pin Retainer |
| 16. Cover Screw (2) | 39. Float |
| 17. Cover | 40. Float Pin |
| 18. Compensator Valve | 41. Main Metering Jet and Gasket |
| 19. Compensator Valve Gasket | 42. Rivet Plug |
| 20. Air Horn Screw (2) (Short) | 43. Pump Jet |
| 21. Air Horn Screw (4) (Long) | 44. Idle Limiter Cap |
| 22. Air Horn | 45. Idle Mixture Screw & Spring |
| 23. Air Horn Gasket | 46. Flange Assembly |
| 24. Main Body | 47. Throttle Speed Screw |



CARBURETOR ADJUSTMENTS

FLOAT LEVEL (FIG. 1)

1. With gasket removed invert carburetor and hold retainer against float in bottom of guide slots.
2. Bend float lip to obtain the clearance specified in Data Chart between top of each float (at center of float) and top surface of body casting. **Note: Never allow needle to be pressed into seat.**

FAST IDLE (FIG. 2)

TYPE 1 – Off Engine

Open throttle valve and hold choke valve fully closed to allow fast idle cam (in piston housing) to rotate to the fast idle position. The dimension (A) between lower edge of throttle valve and bore of casting should be as listed in Data Chart. To adjust, bend connector rod (B).

TYPE 2 – Off Engine (See insert Fig. 2)

Close choke valve and align fast idle screw (C) with index mark of cam. Adjust the fast idle screw (C) to the dimension (A) as specified in Data Chart between lower edge of throttle valve and bore of casting.

TYPE 3 – On Engine

With engine running, place fast idle screw on the proper fast idle cam step as listed in Data Chart, and turn fast idle speed screw to set the engine R.P.M. as listed in Data Chart.

UNLOADER (FIG. 3)

Open throttle valve wide open, close choke valve as far as possible without forcing. The dimension (C) between top edge of choke valve and inner wall of air horn, as specified in Data Chart. To adjust early carburetors through 1959 bend trip lever arm (D) in piston housing, 1960 and later carburetors, adjust tang (E) on the throttle lever (See insert Fig. 3).

CHOKE VACUUM KICK (FIG. 4)

1964 Carburetors press diaphragm stem (D) inward until bottomed. 1965 and later (See insert Fig. 4) press diaphragm plunger (not stem) (D) inward to bottom diaphragm and also to allow the diaphragm stem internal spring, to be compressed by extending the stem as choke valve is moved toward the closed position to obtain the proper dimension specified in Data Chart, between top edge of Choke Valve and wall of air horn. To adjust, open or close the "U" bend in link (E). **CAUTION** – Remove link to adjust to prevent damage to diaphragm. **NOTE:** Optional method of bottoming diaphragm is to apply at least 10" of vacuum from an outside source of vacuum to the diaphragm assembly.

AUTOMATIC CHOKE (IF EQUIPPED)

Integral Type 1 (Housing on carb.) Rotate cover against spring tension until mark on cover is aligned with center index mark on housing. (Tighten screws). **NOTE:** Do not exceed 2 notches "rich" or "lean" from index mark on housing when adjusting.

Cross-Over Type 2 Remove unit from manifold at base of carburetor. Loosen lock nut and turn mounting post with screw driver, until index mark on disc is aligned with specified mark between "L" and "R". Scale marks, as listed in Data Chart. Tighten lock nut and reinstall unit.

NOTE: 1972 & later are not adjustable.

IDLE SPEED AND MIXTURE (SEE EXPLODED VIEW)

NON-EMISSION CARBURETORS

1. Turn mixture screw (45) clockwise to seat lightly then back out approximately 1 to 2 turns.
2. Turn throttle speed screw (47) clockwise until it just touches the stop on casting, then turn in one full turn.
3. Start engine and allow to reach normal operating temperature.
4. With the aid of a tachometer readjust the idle mixture screw to obtain the highest R.P.M. with transmission in "neutral". Alternator equipped engines turn headlights on.
5. Readjust the idle speed screw to obtain between 500-600 engine R.P.M.

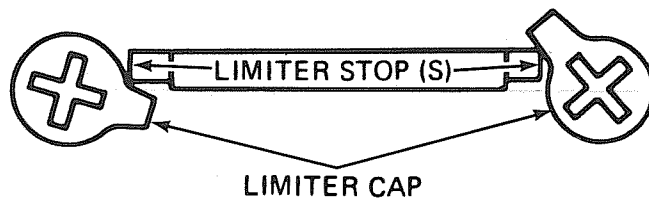
EMISSION CARBURETORS

Follow the idle mixture adjustment procedure as outlined in the car manufacturers service manual. If not available make temporary adjustment as follows:

1. Check ignition timing.
2. With engine at normal operating temperature, air conditioner off, headlights turned on, the air cleaner installed where possible.
3. Turn throttle speed screw (47) for speed of 550-600 R.P.M. Transmission in neutral. The Air Cleaner Program (C.A.P.) carburetors, set idle speed screw for engine speed of 600-700 R.P.M., 1968 and later carburetors see tune up decal in engine compartment for specified R.P.M. Use a tachometer for this adjustment.
4. Turn idle mixture screw (45) for the highest R.P.M.
5. Readjust speed screw if necessary.
6. Turn idle mixture screw inward (lean) until speed drops 10 to 15 R.P.M. then turn mixture screw out 1/4 turn for final setting.

IDLE LIMITER CAP INSTALLATION (IF EQUIPPED)

1. Soak cap in hot water to aid in installation.
2. Place cap on Mixture screw head and press firmly using care not to turn mixture screw when forcing cap in place.
3. The tab on limiter cap should be in the maximum counter clockwise position against the limiter stop after installation. (See Illustration)



PUMP (FIG. 5)

TYPE 1

With throttle valve closed (at curb idle), the connector rod and pin spring installed in the proper position as listed in Data Chart, proceed as follows. The dimension (A) should be as listed in Data Chart from the top of the bowl cover to the top of plunger shaft. To adjust, bend connector rod (C).

TYPE 2

The dimension (B) should be as listed in Data Chart between vent valve and bushing in bowl cover. To adjust, bend connector rod (C).

TYPE 3 (FIG. 5A)

Step A. The dimension should be as listed in Data Chart from top of plunger shaft to shoulder of air horn as shown by scale. To adjust bend connector rod. (A)

Step B. The dimension (C) should be 9/32 inch from bowl cover to top of vent valve shaft. To adjust, bend tang (B).

DASHPOT – IF EQUIPPED (FIG. 6)

Loosen lock nut (B), connect a tachometer and position throttle valve at 2000 R.P.M. Adjust dash pot (C) until the stem just contacts tang (D) on throttle lever. Tighten lock nut.