## SERVICING INSTRUCTIONS Brass Bowl Model Updraft Carbureters



## (Obtain clean pan for parts)

- Remove body and bowl nut and clean out hole in nut (A).
- Remove bowl (B) and examine tip of metering rod projecting through (central) multiple jet. See that it does not bind in jet and that jet is not worn oval. Replace body and bowl nut to protect metering rod.
- Wash bowl in clean gasoline—wipe dry and see that bowl is free from lint.
- Detach float (C) and remove bowl-ring gasket (D) on body casting.
- Remove intake needle (E) using care not to damage point.
- Remove all jets and needle seat (F) from body casting (using fitted screw drivers to avoid damage to slots).
- Take off strainer cap and gauze (if any); scrape gasket off body.
- Detach pump arm (G) and remove pump plunger if unit has accelerating pump. Do not loosen pump cylinder in casting unless scored or dented (if so, it should be replaced with new part).
- Unscrew idle adjustment screw (H), take off spring (I).
- Wash all parts in clean gasoline—brush off dirt blow out all jets and ball check with compressed air. Replace if clogged up or carbonized.



- Scrape carbon from bore of body casting around throttle valve, and from valve. Wash casting in clean gasoline — then blow out all gas and air passages thoroughly, including pump cylinder, air intake, and vents.
- Check all jets with parts list for the unit. (See specifications in Service Manual.) If wrong parts are found, replace them with parts specified for the carbureter being serviced.

## TO REASSEMBLE CARBURETER

- 13. Replace worn or torn gaskets with new ones.
- 14. Always put in new bowl ring gasket (D) to insure a gas-tight seal between body and bowl. A used gasket is very likely to leave an air leak. Soak new gasket in water before using.
- 15. All jets and plugs must seat air-tight. Air or gas must pass through drilled holes—not around threads. It is poor economy to re-assemble damaged parts.
- 16. Replace multiple jet nozzle (J) with a new one if central jet shows wear from a bent metering rod or if slot is burred. Burrs interfere with free flow of gasoline.
- A worn or bent metering rod should be replaced, with new throttle valve and rod assembly (K) for economy of gasoline.



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- 18. Low speed jet tube (L) must seat air-tight in casting, top and bottom. Soldered joint must be air-tight no blow holes. It is often impossible to re-seat a used low speed jet tube in body casting. In such cases, new tube should be installed to insure a proper idle. Never interchange a jet from one unit to another. Never force a new jet tube in; if threads will not engage, bend tube slightly.
- Pump jet assembly (M) should be taken apart and thoroughly cleaned before replacing in body casting. Use new jet if clogged or damaged. Do not lose ball inside assembly.
- Ball check (N) must be tight against mouth pressure at threaded end and must open freely. Housing must be seated gas tight, but not forced in so as to damage seated end.
- Ball check screen should be added on all ball checks as insurance against dirt in pump jet. Also to keep out water.
- 22. Examine plunger leather (O) to see that it is soft and flexible and makes gas-tight seat all around cylinder. If in doubt, replace with new leather soaked in gasoline. Replace plunger spring (P) if damaged. Spring should be stretched slightly before mounting leather.

Be sure to use loading cylinder when replacing plunger in pump cylinder, to avoid damage to leather, and to put a few drops of oil in cylinder above plunger.

23. Replace pump arm assembly and pin with new parts, if bent or worn from long service or if arm is loose on throttle shaft. Some pump arms have holes for summer and winter settings. Adjust to long stroke for cold weather; to shorter stroke for normal or hot weather.

In some models, pump adjustment is by means of screw in body casting, near base of pump (consult catalog sheet to obtain correct adjustment).

- 24. Rubber pump boot assemblies (including plunger shaft) are available for many carbureters with 3/4" diameter pump cylinders, not originally equipped with these boots. They keep water and road dirt out of pump cylinder and are insurance against pump troubles.
- 25. Replace throttle shaft and lever assembly if shaft is worn in casting or lever is loose on shaft. A new valve should always be installed with new throttle shaft, using new valve screws. (See carbureter specifications for idle port opening.)
- Choker shaft and lever assembly should be replaced if bent or worn. If choker spring (Q) is weak, it should be replaced.



- Make sure that venturi choke cone (R) slides freely on stand pipe. If a few drops of oil do not remedy a sticking cone, both pipe (S) and cone should be replaced.
- 28. Replace needle and seat with new assembly if needle seat is burred or needle shows scratches or groove due to wear. It is well to check old needle and seat by mouth suction. Never install new needle in old seat or vice-versa. These parts come in matched and tested sets.
- 29. Examine float carefully for leaks before remounting. A leaky float must be replaced—do not attempt to solder a leak—it is dangerous. Hole worn on float lever lip by needle may sometimes be taken out by filing. Bright spots on float indicate float is bent and rubbing on body casting or bowl. If float lever cannot be straightened to avoid friction, install new float as float must rise and fall freely.
- 30. Important: Check float level. Invert carbureter and measure from machined surface of casting (under bowl ring gasket) on side of casting opposite needle seat. Refer to tune-up chart or specification sheet for correct float level. Bending lip of float lever slightly is usually sufficient to change float level.
- When replacing bowl on body, make sure that bowlring gasket is smooth and seals air-tight.
- 32. Replace body and bowl nut, first making certain that gasket on nut is not worn or damaged. If necessary, use a new assembly of these parts to insure against gas leak. Fill bowl with gas and examine unit for leaks. Test spray from pump jet by opening throttle quickly. Spray should last 2 to 3 seconds.
- 33. Always scrape carbureter flange and manifold to remove traces of old gasket, and use new flange gasket when remounting carbureter. A used flange gasket never makes an air-tight seal. In remounting carbureter, be sure wire to choke is adjusted so that choke will be wide open when dash control is pushed in, but will give full choke when pulled out. To adjust idling mixture: Open idle adjustment screw until engine fires evenly without loading or missing.

Idle engine speed is regulated by throttle lever adjusting screw. With hand throttle closed, set throttle lever adjusting screw so car will run about 5 miles per hour on level ground, with spark fully retarded.

Remember—A liberal exchange allowance is offered to apply against the purchase of a new Carter unit. Replacement rather than repair is often indicated by a careful inspection before servicing.