

This Zenith late model service kit is designed for customers who are simply planning to disassemble their carburetor for a good cleaning. It includes the necessary gaskets, small fiber washers, a needle and seat, plus some extra items in case you need them. **NOTE:** Some of the items in this kit will not be necessary and will be put aside. This is because they are meant for another model carburetor, or (due to the limited throttle usage in our marine application) are normally not needed.

The kit has 3 parts bags. Mark the bags 1, 2, and 3 so they match photo 1. Open the bags and group the contents to match photo 1.

Remove the following parts and set aside, as they probably won't be needed: **From bag 1 remove:** Choke shaft hole plug (metal cup) (x1), steel washers (x2), float pin (x1). **From bag 2 remove:** Throttle shaft hole plug (metal cup) (x1), rubber shaft seals (x4), steel washers (x2), small thin gray fiber gasket (x1), the larger of the two flange gaskets (x1). All the contents from bag 3 will be used.

NOTE: Take careful note of the orientation of parts, and location of fiber washers as you disassemble your carburetor.

Disassembly and Cleaning

- 1) Using 1/2" wrench, remove main passage plug with fiber washer from lower housing, set both aside. Save all the old fiber washers so you can match the fiber washers during reassembly (photos 2,3).
- 2) Remove main jet with fiber washer, set both aside (photos 4,5). Be sure to use a screwdriver that fits the slot.
- 3) Remove idle adjusting needle and spring from upper housing, set aside (photo 6).
- 4) Turn carburetor over and remove 4 housing bolts. If you have a 5 bolt carburetor, remove last bolt from top, set bolts aside (photo 7).
- 5) Carefully Separate the upper and lower housings, being careful not to damage the float. **NOTE:** The bowl gasket needs to stay attached to the upper housing during separation to avoid bending the float. Use a razor blade or putty knife to Separate the gasket from the lower housing prior to separation, so the gasket can stay with the upper housing as you lift it off (photo 8).
- 6) Using a needle nose pliers, pull out the float pin from upper housing, and set the float and pin aside (photo 9).
- 7) Pull up and remove venturi, along with bowl gasket, set both aside (photo 10).
- 8) Turn over upper housing and allow the float needle to fall out. Using a large screwdriver that fits the slot, loosen and remove the seat with fiber washer, set needle, seat and gasket aside (photos 11,12).
- 9) Using a 11/32" nut driver, remove discharge nozzle and fiber washer from lower housing, set both aside (photo 13,14).
- 10) Using carburetor cleaner wash all inner surfaces of both the upper and lower housings. The use of a tooth brush will help remove any crud, or varnish that may have built up. **NOTE:** We recommend wearing shop gloves and eye protection when spraying carburetor cleaner.
- 11) Using carburetor cleaner with its red plastic tube, spray all ports/jets and passages to clear out any dirt, allowing the cleaner to freely flow through the passageways and out the other end when possible. Verify that all jets and nozzles have open and clear orifices. If necessary use a single bristle pulled from a steel brush to clear any blockages (photos 15-20).

Reassembly

NOTE: Reassembly is largely a matter of reversing the assembly steps. Match new fiber washers up with old ones to verify correct location.

- 1) Install main jet with new fiber washer into lower housing, then install main passage plug (photos 2,3).
- 2) Install main discharge nozzle into lower housing using new fiber washer (photo 13,14).
- 3) Install new float valve seat into upper housing using new fiber washer. Then insert new needle with its rubber tipped end going in the seat (photos 11,12).
- 4) Test fit the venturi in the upper and lower housings. If it's too difficult to insert, file around the edges with a medium file to remove any rough spots, or casting lines.
- 5) With the bowl gasket properly oriented, gently work the venturi down through the gasket until the gasket seats inside of the large venturi groove (photo 10).
- 6) Seat venturi and bowl gasket together into the upper housing (photo 10).
- 7) Align the float with the upper housing and insert float pin (photo 9).
- 8) Gently place the lower housing on top of the upper housing, allowing the float to carefully align with, then install and tighten 4 or 5 housing bolts (photo 8).
- 9) Install new idle adjusting needle (with original spring) into upper housing. Tighten until fully seated, then loosen 1 turn (photo 6).

Label your bags 1, 2 and 3, then group as below.

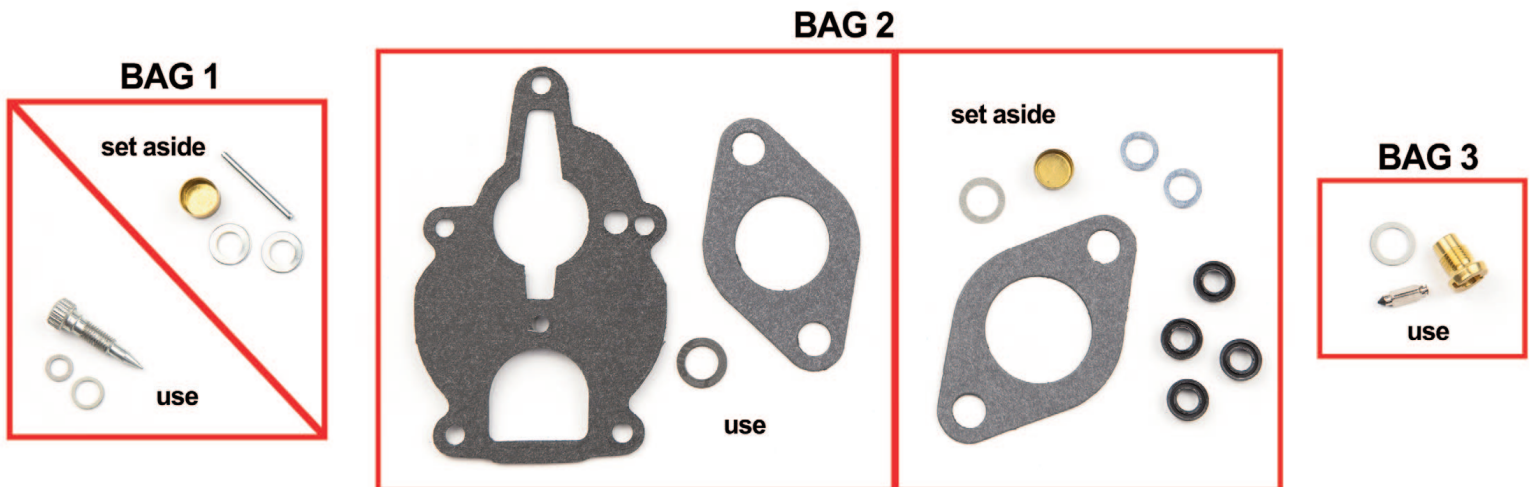
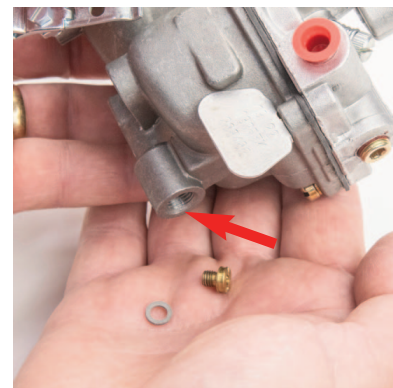
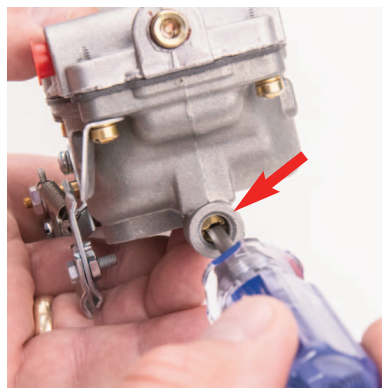
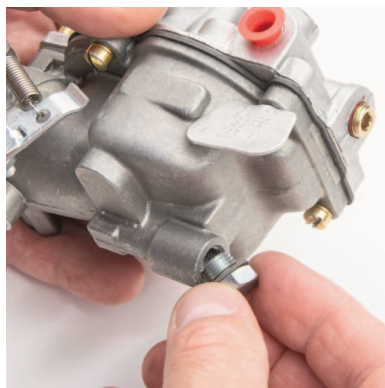
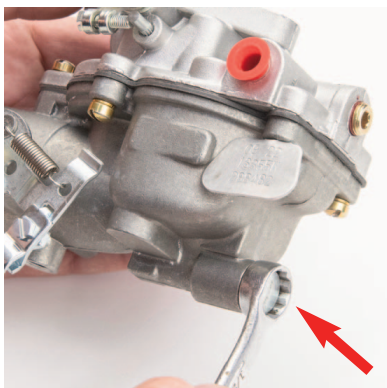


photo 1



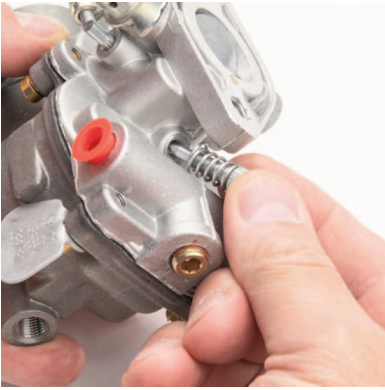


photo 6



photo 7

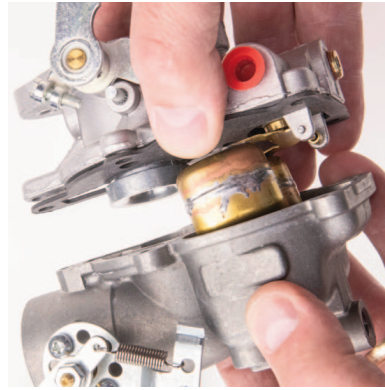


photo 8



photo 9

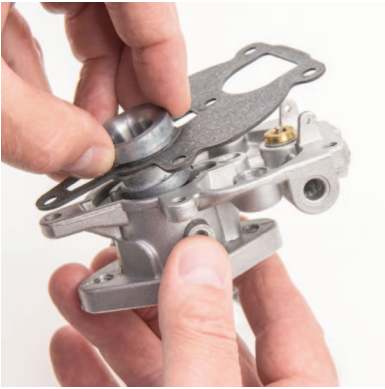


photo 10

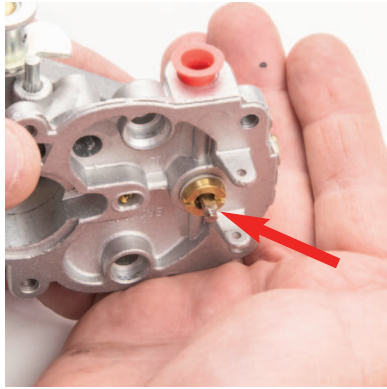


photo 11

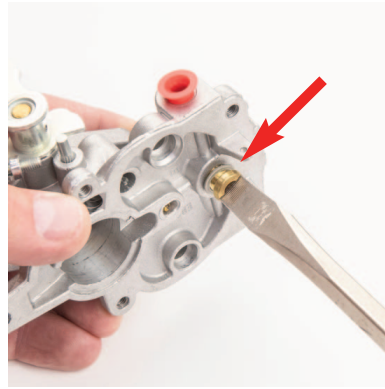


photo 12

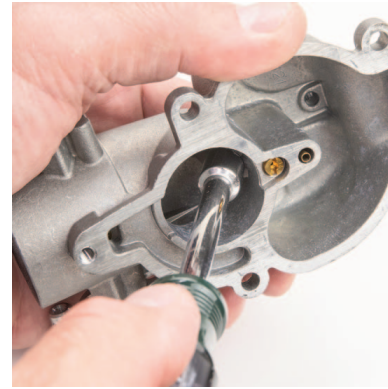


photo 13

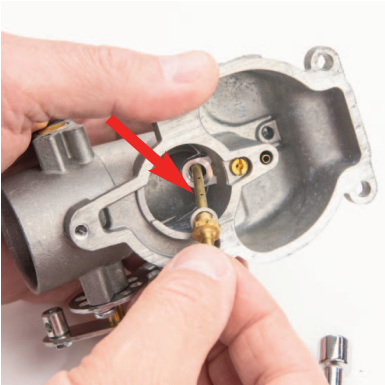


photo 14



photo 15



photo 16

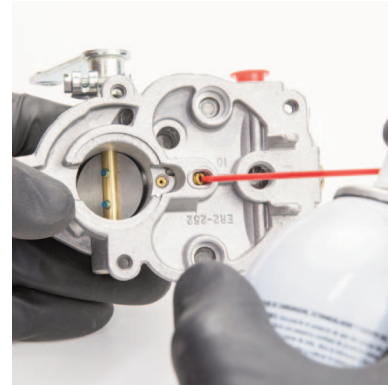


photo 17



photo 18

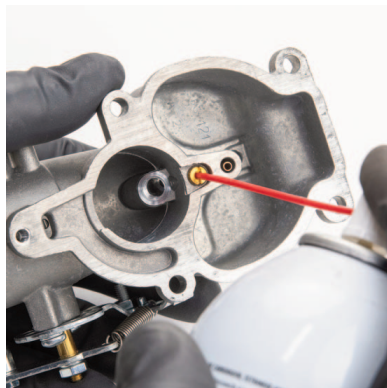


photo 19

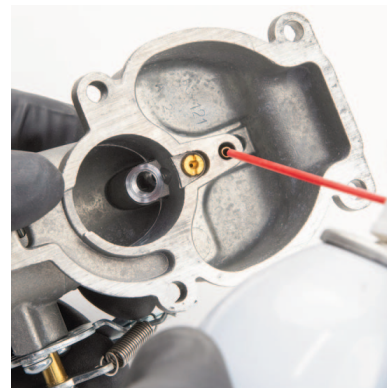


photo 20