

Marvel-Schebler Model USX Series Carburetors

INSPECTION AND CLEANING

1. Dispose of only the parts that are contained in the repair kit: throttle shaft, gaskets, needle seat, float shaft, float valve assembly and "O" rings.
2. The remainder of the parts and castings should be soaked in a reliable brand of carburetor cleaner until all foreign material has been removed. Follow the instructions for the type cleaner selected. Dry with compressed air after cleaning.

ASSEMBLY AFTER CLEANING

1. Blow out all passages with compressed air.

Note: Do not direct compressed air into the pump channel, as this may affect the ball check valve assembly.

2. Install nozzle gasket (44), nozzle (43), gasket (42) and plug (41).
3. Install idle tube (45).
4. Assemble pump spring (35) on diaphragm assembly (34) and attach the pump housing (33) to bowl cover (30) with screws (32).
5. If removed, install minimum fuel jet (50) and plug (49), power needle seat (48), "O" ring (47) and power needle (46).
6. Install float valve seat (39) with gasket (38) and valve (40).
7. With throttle flange down, insert float (37) and float shaft (36). Set float lever at this time. The float lever must be parallel with the flange, and must operate with proper clearance all around. Bend with needle nose pliers if necessary. (See figure 2-3).
8. Install bowl cover assembly (30) with gasket (31) and screws (29).
9. Install idle needle (51). Insert strainer (27) into plug (25) and install it with gasket (26) and fuel fitting (25).

10. Place two or three drops of light-machine oil on bearing (62) and (63). Insert "V" packing (7), retainer (6), plug (8), throttle shaft (3) with screw (5) and spring (4) in place into casting. Attach throttle valve (2) to shaft (3) with screws (1).
11. Install choke shaft plug (24) and choke packing (23). Install choke bracket (20) on casting with screws (19). Clip (21) and screw (22) should be in place.
12. Assemble the choke shaft (11) by attaching spring (12), lever (13), snap ring (14), swivel (17), cotter pin (15) and screw (16).
13. Slide washer (18) on shaft (11) and install it in casting. Install choke valve (10) with screws (9).

PRELIMINARY NEEDLE SETTING

Power needle - 3 turns open; Idle needle 1-1/2 turns open; Throttle stop screw - 1-1/2 turns open.

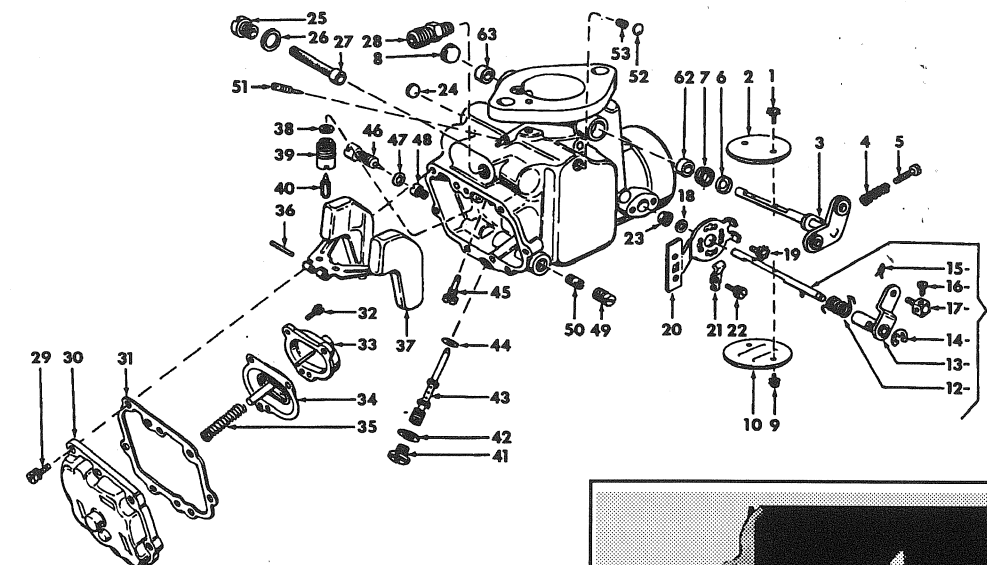


Figure 2-2. Exploded view of typical USX carburetor

Check identification number on carburetor to determine that repair is applicable to numbers shown.

DISASSEMBLY (See Figure 2-2)

1. Remove throttle valve screws (1), throttle valve (2), throttle shaft (3), packing retainer (6), packing (7) and cup (8).
2. Remove choke valve screws (9), choke valve (10) and shaft assembly (11). Remove snap ring (14), lever (13), spring (12), cotter pin (15) and swivel (17). Remove washer packing retainer (18) and packing (23).
3. Remove choke bracket screws (19), bracket (20), choke packing (23) and choke shaft hole plug (24).
4. Remove strainer retainer (25), washer (26), strainer (27) and fuel-line connection (28).
5. Remove bowl cover screws (29), housing (30) and gasket (31).
6. Remove pump housing screws (32), housing (33), pump (34) and pump spring (35).
7. Remove float shaft (36) and float (37). Remove float valve (40), float valve seat (39) and gasket (38).
8. Remove nozzle plug (41), gasket (42), nozzle (43) and gasket (44).
9. Remove idle tube (45).
10. Remove power needle (46), "O" Ring (47), power needle seat (48), minimum fuel jet plug (49) and minimum fuel jet (50).
11. Remove idle needle (51).

Note: Some models have an economizer jet (53). This is not subject to wear and should not require replacement.

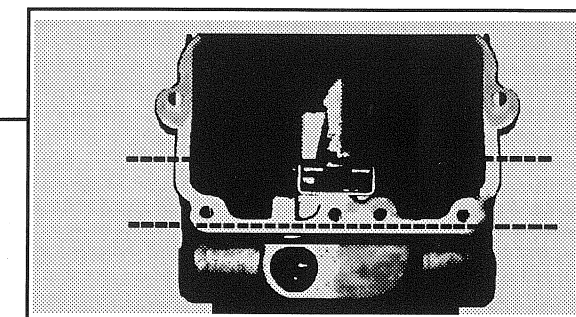


Figure 2-3. Checking float lever

