

Zenith Carburetor

Service Tips

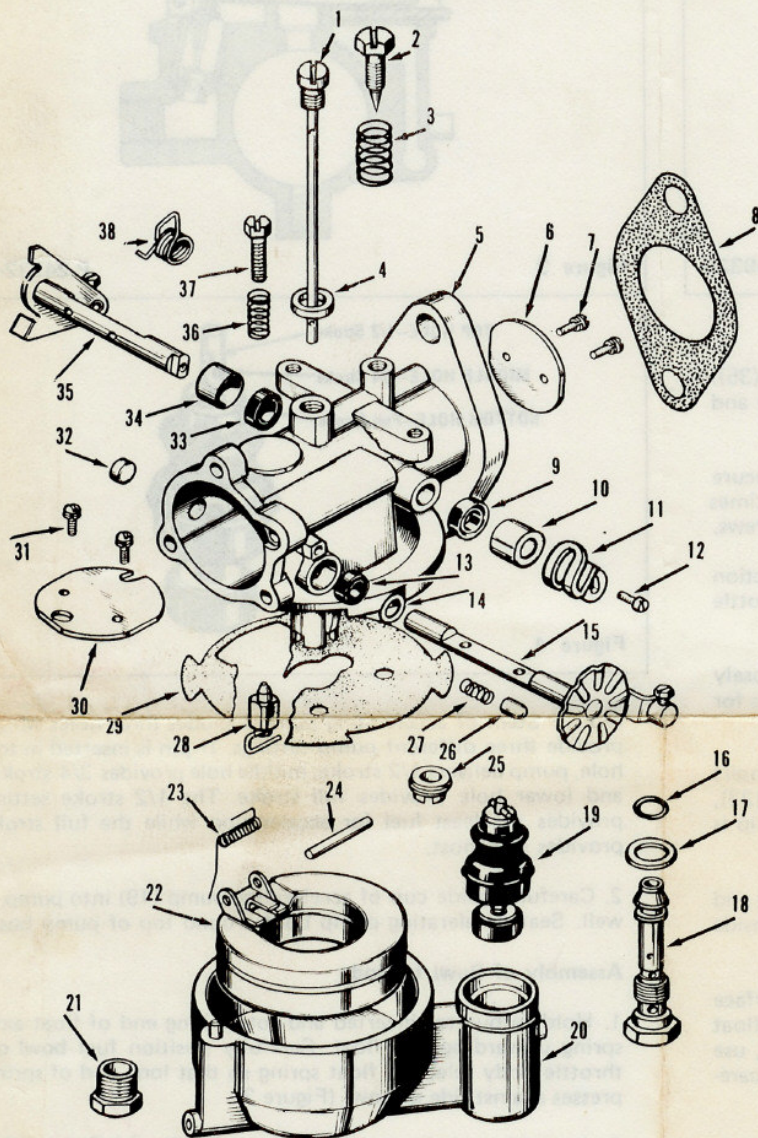


Figure 1

P-24932U

Key No.	Part Name
1	Idle Tube
2	Idle Adjusting Needle
3	Idle Adjusting Needle Spring
4	Idle Tube Gasket
5	Throttle Body
6	Throttle Plate
7	Throttle Plate Screws and Lockwashers
8	Flange Gasket
9	Throttle Shaft Seal
10	Seal Retainer
11	Accelerating Pump Lever
12	Pump Lever Screw
13	Choke Shaft Seal
14	Seal Retainer
15	Choke Shaft and Lever
16	O-Ring
17	Washer
18	Main Jet and Discharge Tube
19	Accelerating Pump
20	Fuel Bowl
21	Plug
22	Float
23	Float Spring
24	Float Axle
25	Check Valve
26	Friction Pin
27	Friction Pin Spring
28	Fuel Needle Valve
29	Bowl to Body Gasket
30	Choke Plate
31	Choke Plate Screws and Lockwashers
32	Choke Shaft Hole Plug
33	Throttle Shaft Seal
34	Seal Retainer
35	Throttle Shaft and Lever
36	Idle Stop Screw Spring
37	Throttle Stop Screw
38	Throttle Return Spring

DISASSEMBLY

Disassembly consists of separating the fuel bowl from the throttle body and the disassembly of the throttle body. Use the exploded view above as a guide for disassembly and assembly.

B. CLEANING AND INSPECTION

Thoroughly clean all metal parts in P & D Metalclene or Speedclene. Blow out all passages and channels with air pressure.

CAUTION: Do NOT clean non-metallic parts in P & D. Metalclene or Speedclene.

Inspect all parts for damage, excessive wear, burrs and warpage. Replace those parts which are defective.

C. ASSEMBLY

NOTE: The numbers in parenthesis in the following procedures are keyed to the parts shown in Figure 1.

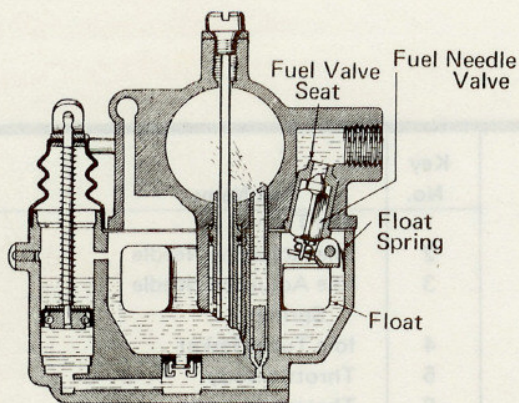


Figure 2

P-24932C

Assembly of Throttle Body

1. Assemble throttle return spring (38) on throttle shaft (35). Then assemble seals (9 and 33), seal retainers (10 and 34) and throttle shaft in throttle body.
2. Assemble throttle plate (6) on throttle shaft and secure loosely with screws (7). Snap plate open and shut several times to center plate in bore. Hold plate in place and tighten screws.
3. Assemble seal (13), seal retainer (14), cup plug (32) friction pin spring (27), friction pin (26) and choke shaft in throttle body.
4. Assemble choke plate (30) on choke shaft and secure loosely with screws (31). Tighten screws using same procedure as for throttle plate.
5. Assemble body to body gasket (29) on throttle body. Insert fuel valve (28) in fuel valve seat. Assemble float spring (23), float (22) and float axle (24). Be sure that fuel valve clip is attached to float tab.
6. Also be sure that float spring is positioned so that short end engages tab of float and so that long end can be rotated inside fuel bowl (Figure 2).
7. Check float level. With carburetor inverted, bottom surface of float should be 3/16" from gasket surface at point on float farthest from hinge (Figure 3). If adjustment is required, use long nosed pliers to bend tab that contacts fuel valve. Be careful to avoid damage to fuel valve or seat.
8. Install throttle stop screw (37) and spring (36). Adjust screw to open throttle slightly.
9. Install idle needle (2) and spring (3). Screw needle in until it seats lightly, and then back out 1-1/2 turns as a preliminary adjustment.

Assembly of Fuel Bowl

1. Assemble check valve (25) in passage in bottom of fuel bowl. Be sure that valve is not cocked.

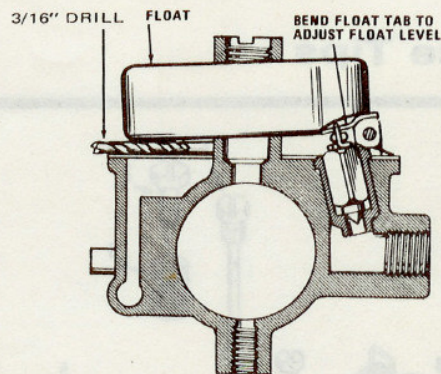


Figure 3

P-24932-I

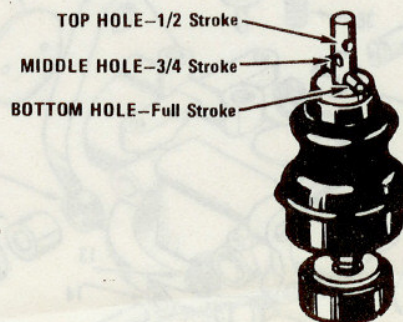


Figure 4

NOTE: Stem of accelerating pump includes three holes which provide three different pump settings. If pin is inserted in top hole, pump delivers 1/2 stroke; middle hole provides 3/4 stroke; and lower hole provides full stroke. The 1/2 stroke setting provides the least fuel for acceleration while the full stroke provides the most.

2. Carefully guide cup of accelerating pump (19) into pump well. Seat accelerating pump boot around top of pump boss.

Assembly of Bowl to Body

1. Hold carburetor inverted and rotate long end of float axle spring upward against float. Carefully position fuel bowl on throttle body releasing float spring so that long end of spring presses against side of bowl (Figure 2).
2. Assemble main jet and discharge tube (18) with O-Ring (16) and washer (17) in place through hole in bottom of bowl and into throttle body boss.
3. Assemble gasket (4) on idle tube (1) and insert tube in throttle body. Carefully guide tube through bore and into discharge tube on opposite side of venturi. Tighten idle tube and main jet.
4. Attach accelerating pump lever (11) to accelerating pump and to throttle shaft using screw (12).