



General Instructions

- Take lots of pictures as you take your carburetor apart. This will give you a reference of where things go.
- Using a cookie sheet with folded up sides will help keep parts from falling on the floor.
- We suggest not removing the throttle shaft, valves, or choke shaft unless they are corroded, or very dirty. These parts can be easily damaged and are difficult to re-assemble.
- Instruction sheets that come with our carburetor kits are somewhat generic. It may not match your parts exactly.
- Do NOT use WD-40 around your carburetor. It reacts with ethanol.
- Using Silicon Spray Lubricant on the gaskets will help with sticking in case you need to take the carburetor apart again.
- Be careful after taking the top of the carburetor off. Turning the carburetor upside down may cause parts to fall out and you won't know where they were.
- Screws and jets that are frozen can often be removed after heating outside the screw or jet.
- Stuck check balls can be removed by heating the outside of where the check ball resides and tapping the carburetor on the work bench.
- Do not discard any parts until complete done. You may have to refer for size, or matching.

Cleaning:

- Clean with carburetor dis-assembled.
- Soak all parts except rubber & electrical in Simple Green for 2 hours. Aluminum parts will get discolored if left longer.
- Wash parts with hot water if available to remove all chemicals.
- Blow out each passage way taking special notice of the smaller ones. Test each passage that air goes through the entire passage.
- Blow out the idle mixture hole.

- Check any hole above the idle mixture hole (inside the bore). This is the idle discharge and often becomes plugged.
- A tooth brush can facilitate cleaning parts.
- Soda blasting, then washing again will make the carburetor look good any will clean any minor deposits.
- Any corrosion, or deposits that are hard to remove may indicate the passages are also corroded and the carburetor should be replaced.
- If your engine has been sitting for 6 months or more, the gas has probably turned, and the gas tank will need to be cleaned as well as the fuel lines. Flushing new gas through the tank will not be enough.

Assembly:

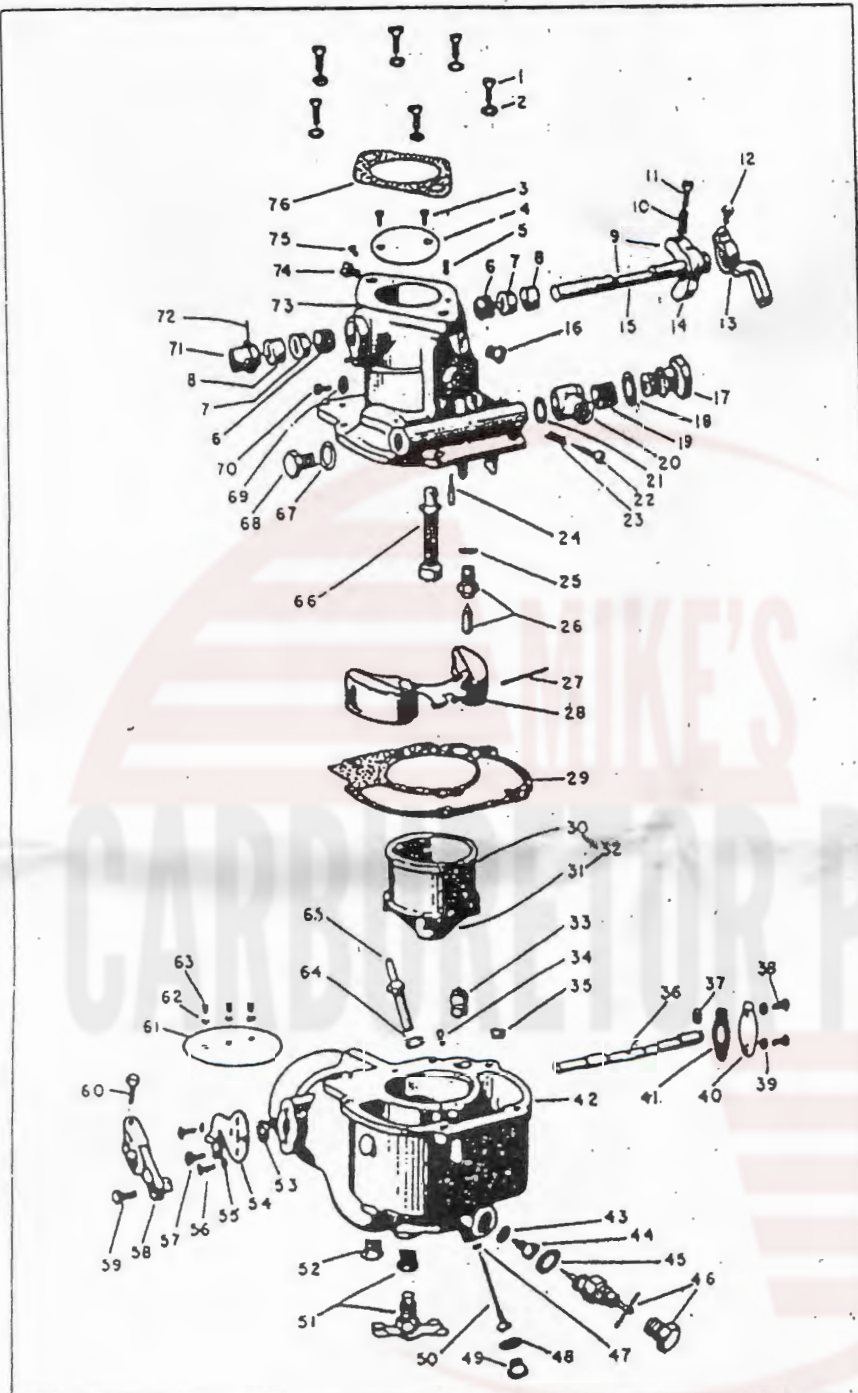
- Do NOT apply any gasket sealant on any of the gaskets. Gas will break sealant part and the particles will clog the small passages.
- Test your float.
 - Brass floats should be immersed into hot water. As the air inside expands any leak will be noticeable with air bubbles.
 - Plastic, or Nitrophyl floats should be weighed. The weight is in grams. Check our technical pages for any weight specification that we may have.
- Most gaskets will fit as expected, but you may have to trim some, especially under the venturis.
- Your kit may include multiple gaskets in order to get better coverage out of the kit. Use the one that fits the best. Look for any opening the gasket may leave allowing air into the carburetor. Some holes may be casting holes that don't lead to anything and do not have to be covered.
- Mounting gaskets for multiple bore carburetors do not have to have matching holes. Example a four-barrel gasket can be open in the middle instead of 4 holes as long as the carburetor has some kind of passage between bores. The passage is between primary, or secondary, not both.
- When adjusting the float be careful not to put any pressure on the needle. The viton tip is easily damaged.
- Most idle mixture screws can be cleaned using a soft wire wheel. Inspect for any scoring, which would indicate over tightening. Screw with scoring should be replaced.

Accelerator Pumps:

- On leather cups run your finger around the inside of the cup to break any manufacturer sealant.
- Apply 2 drops of oil to cups (leather, or rubber) before inserting into carburetor. Do not soak the cup in oil. The swelling of the cup needs to happen inside the carburetor. Allow the 2 drops of oil and the gas to do its job naturally.
- Twist the pump as you are inserting to help keep the cup from curling or folding over.
- Test your accelerator pump circuit before putting the top of the carburetor back on. Our technical pages have instructions on how to do this for most carburetor types.
- Pump wells are usually slight tapered, and the pump will not seal until it gets towards the bottom.

ZENITH CARBURETOR RESTOROGRAPH

3002

63, 63M & 263M
SERIES

1 DISASSEMBLY

Disassembly consists of separating the carburetor into two basic groups: fuel bowl and air intake-throttle body and the disassembly of each of these groups. Use exploded illustration above as a guide for disassembly and reassembly.

2 CLEANING AND INSPECTION

Thoroughly clean all metal parts in P & D Metalclene or Speedclene. Blow out all parts and channels with air pressure. Inspect housing for damage, excessive wear, burrs or warpage. DO NOT CLEAN NON-METALLIC PARTS in P & D Metalclene or Speedclene.

KEY NO.	PART NAME
1	SCREW-Bowl to Body
2	LOCKWASHER
3	SCREW-Throttle Plate
4	PLATE-Throttle
5	SCREW-Vacuum Channel
6	RUSHING-Throttle Shaft
7	WASHER-Shaft Packing
8	RETAINER-Throt.Sh.Pkg.
9	SHAFT & LEVER-Throttle
10	SPRING-Throt.Stop Screw
11	SCREW-Throttle Stop
12	SCREW-Throt.Lever Clamp
13	LEVER-Throttle Clamp
14	LEVER-Throttle Stop
15	SHAFT-Throttle
16	PLUG-Vacuum Spark Channel
17	PLUG-Filter
18	WASHER-Filter Plug
19	SCREEN-Fuel Filter
20	BODY-Union
21	WASHER-Union Body
22	NEEDLE-Idle Adjusting
23	SPRING-Idle Adj. Needle
24	JET-Idle
25	WASHER-Fuel Valve Seat
26	VALVE & SEAT-Fuel
27	AXLE-Float
28	FLOAT
29	GASKET-Bowl to Body
30	VENTURI
31	VALVE-Power Jet
32	VENT-Well
33	VALVE-Pump Check
34	SHAFT-Choke
35	WASHER-Ch. Sh. Thrust
36	SCREW-Cover Plate
37	LOCKWASHER
38	PLATE-Choke Sh. Cover
39	GASKET-Cover Plate
40	BOWL-Fuel
41	WASHER-Main Jet
42	JET-Main
43	WASHER-Main Passage Plug
44	PLUG or ADJ.-Main Jet
45	WASHER-Power/Accel.Jet
46	WASHER-Passage Plug
47	PLUG-Passage
48	JET-Power & Accelerating
49	PLUG or VALVE-Bowl Drain
50	PLUG-Intake Drain
51	WASHER-Ch.Sh. Packing
52	BRACKET-Choke
53	LOCKWASHER
54	SCREW-Bracket
55	SCREW-Tube Clamp
56	LEVER-Choke
57	SCREW-Ch.Lever Swivel
58	SCREW-Ch. Lever Clamp
59	PLATE-Choke
60	LOCKWASHER
61	SCREW-Choke Plate
62	WASHER-Discharge Jet
63	JET-Discharge
64	PUMP PISTON
65	WASHER-Inlet Plug
66	PLUG-Fuel Inlet
67	LOCKWASHER
68	SCREW-Venturi Set
69	BUSHING-Throttle Lever
70	TAPER PIN-Bushing
71	BODY-Throttle
72	PLUG-Auto. Ch. Channel
73	JET-Pickup
74	GASKET-Plange

REASSEMBLY

When reassembling carburetor use essentially the reverse order from disassembly.

ASSEMBLY OF CHOKE IN AIR INTAKE - MODELS 63AW14 AND 63AW16

1. Insert choke shaft packing felt (53) into counter-bore at side of air intake, then install choke bracket (54), according to match marks made at time of disassembly, and assemble bracket screws (56) and lockwashers (55).
2. Insert choke shaft (36) into choke shaft holes with grooved end of shaft at side opposite bracket, then install horse shoe thrust washer (37) in groove of shaft.
3. With machined surface of fuel bowl up and air intake on near side, rotate shaft to have flat side facing down. Insert choke plate (61) into air intake section poppet side first and with spring of poppet valve facing down.
4. Center choke plate in shaft, close choke and align holes in plate and shaft, then install three screws (63) and lockwashers (62) loosely. Tap choke plate lightly to center plate and then tighten screws evenly and firmly.
5. Install cover plate gasket (41), dust cover plate (40), screws (38) and lockwashers (39) to thrust washer side of air intake.
6. Install choke clamp lever (58) on shaft with swivel facing body and position lever so that swivel is aligned with tube holder set screw when choke is closed, then tighten lever set screw (60).

ASSEMBLY OF CHOKE IN AIR INTAKE - MODELS 63AW10, 63AW11 and 63AW12

1. Hold fuel bowl assembly with machined surface up and facing air intake, insert choke shaft in shaft holes from left side (threaded end last).
2. Rotate choke shaft to have flat side facing down, then insert choke plate (30) into air intake, poppet valve first and with spring of poppet valve facing down.
3. Center choke plate on shaft, close choke and align hole in plate with holes in shaft, then install screws (28) and lockwashers (29) loosely.
4. Tap choke plate lightly to center plate and tighten screws evenly and firmly.
5. Place choke bracket on bracket assembly screw and attach bracket to air intake in same position it was in before removal. Refer to match marks made at time of disassembly.
6. Hold choke in wide open position and place choke lever on shaft so that lug on lever contacts lug on lower end of bracket.

NOTE: Check travel of lever to make sure choke will open and close fully.

7. Install choke lever nut and lockwasher and tighten securely.
8. Install choke shaft hole plug and gasket at side opposite choke lever.

ASSEMBLY OF FUEL BOWL - ALL MODELS

1. Place fiber washer (64) on main discharge jet (65) and install jet in fuel bowl and tighten firmly, using C161-9 wrench for 63AW10, -11 and -12, and C161-10 wrench for 63AW14 and -16 carburetors.

2. Install well vent jet (34) in fuel bowl and tighten lightly, using C161-80 well vent wrench for 63AW14 and -16; for 63AW10, -11 and -12 Models a screwdriver is used in place of tool C161-80.

3. Place fiber washer (47) on accelerating and power jet (50) and install jet in threaded angle passage in bottom of fuel bowl, using screwdriver.
4. Place fiber washer (43) on main jet (44) and install main jet in large threaded passage in side of fuel bowl, using C161-1 wrench for main jets that are used with main jet adjustment; and C161-82 wrench for standard main jets.
5. Place fiber washer (48) on hex plug (49) and install plug in threaded passage over accelerating jet, using a 7/16" or a 1/2" wrench, as required.
6. Install main jet adjustment assembly (46) or hex plug and fiber washer (45) in threaded passage over main jet, using a 1/2" or a 5/8" wrench, as required.
7. Install drain plugs (52) and (51) in threaded passages at bottom of air intake and fuel bowl, using a 3/8" wrench.

NOTE: Some models do not use these parts.

8. Fit formed end of C161-121 power jet wrench on power jet valve (33) and install valve in bottom of pump cylinder.
9. To install pump check valve assembly (35), start check valve into counter-bore with small opening out and align valve so that it is not cocked at an angle. For 63AW14 and -16 carburetors, insert formed end of C161-124 check valve tool into check valve body and drive check valve into counter-bore with a light hammer until it strikes bottom. For 63AW10, -11 and -12, use a flat 1/4" punch and drive check valve squarely into channel.

NOTE: Top of valve should be just below top end of channel when in place.

REPLACEMENT OF THROTTLE SHAFT BUSHINGS

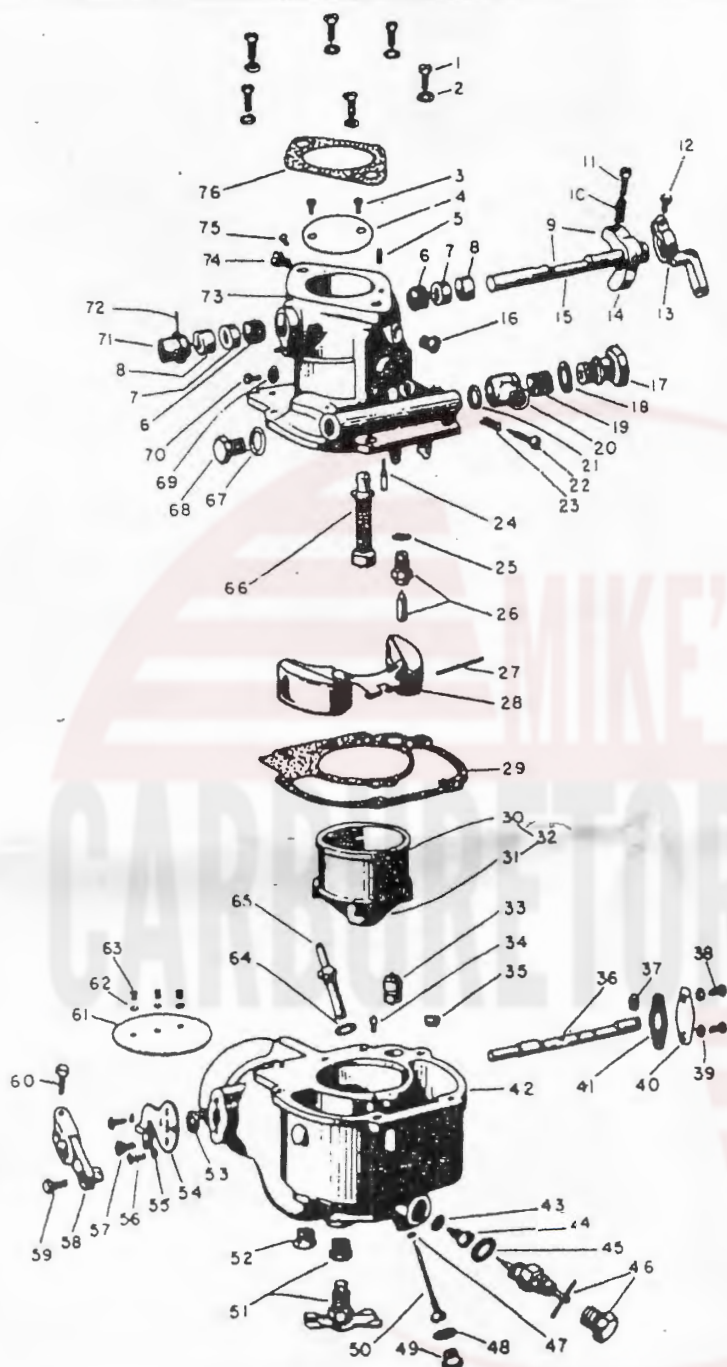
NOTE: Do not attempt to remove throttle shaft bushings unless new bushings are available for replacement. New bushings are undersize and require reaming with a line reamer to fit shaft properly. Both bushings and reamer must be available to complete this operation successfully.

1. To remove throttle shaft bushing (6) from throttle body, screw a taper tap 1/16" larger than throttle shaft hole size into bushing until firmly seated, then insert long punch or rod in opposite shaft hole and drive punch against end of tap until bushing is free of throttle body.
2. Repeat above operation to remove second bushing at opposite side of throttle body.
3. To install new throttle shaft bushing, place new bushing on C161-72-4 bushing driver with taper end of bushing away from shoulder.
4. Start bushing into shaft hole and drive bushing in until it bottoms, using a light hammer.
5. Repeat operations 3 and 4 to install second bushing in opposite shaft hole.

NOTE: C161-72-3 Bushing driver is for 5/16" shaft; C161-72-4 driver is for 3/8" shaft.

6. Line ream the two bushings after assembly, using C161-71-3 reamer for 5/16" shaft size or C161-71-4 reamer for 3/8" shaft size.

ZENITH CARBURETOR RESTOROGRAPH

63, 63M & 263M
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6. Install choke clamp lever (58) on shaft with swivel facing body and position lever so that swivel is aligned with tube holder set screw when choke is closed, then tighten lever set screw (60).

ASSEMBLY OF CHOKE IN AIR INTAKE - MODELS 63AW10, 63AW11 and 63AW12

1. Hold fuel bowl assembly with machined surface up and facing air intake, insert choke shaft in shaft holes from left side (threaded end last).
2. Rotate choke shaft to have flat side facing down, then insert choke plate (30) into air intake, poppet valve first and with spring of poppet valve facing down.
3. Center choke plate on shaft, close choke and align hole in plate with holes in shaft, then install screws (28) and lockwashers (29) loosely.
4. Tap choke plate lightly to center plate and tighten screws evenly and firmly.
5. Place choke bracket on bracket assembly screw and attach bracket to air intake in same position it was in before removal. Refer to match marks made at time of disassembly.
6. Hold choke in wide open position and place choke lever on shaft so that lug on lever contacts lug on lower end of bracket.

NOTE: Check travel of lever to make sure choke will open and close fully.

7. Install choke lever nut and lockwasher and tighten securely.
8. Install choke shaft hole plug and gasket at side opposite choke lever.

ASSEMBLY OF FUEL BOWL - ALL MODELS

1. Place fiber washer (64) on main discharge jet (65) and install jet in fuel bowl and tighten firmly, using C161-9 wrench for 63AW10, -11 and -12; and C161-10 wrench for 63AW14 and -16 carburetors.

2. Install well vent jet (34) in fuel bowl and tighten lightly, using C161-80 well vent wrench for 63AW14 and -16; for 63AW10, -11 and -12 Models a screwdriver is used in place of tool C161-80.

3. Place fiber washer (47) on accelerating and power jet (50) and install jet in threaded angle passage in bottom of fuel bowl, using screwdriver.
4. Place fiber washer (43) on main jet (44) and install main jet in large threaded passage in side of fuel bowl, using C161-1 wrench for main jets that are used with main jet adjustment; and C161-82 wrench for standard main jets.
5. Place fiber washer (48) on hex plug (49) and install plug in threaded passage over accelerating jet, using a 7/16" or a 1/2" wrench, as required.
6. Install main jet adjustment assembly (46) or hex plug and fiber washer (45) in threaded passage over main jet, using a 1/2" or a 5/8" wrench, as required.
7. Install drain plugs (52) and (51) in threaded passages at bottom of air intake and fuel bowl, using a 3/8" wrench.

NOTE: Some models do not use these parts.

8. Fit formed end of C161-121 power jet wrench on power jet valve (33) and install valve in bottom of pump cylinder.
9. To install pump check valve assembly (35), start check valve into counter-bore with small opening out and align valve so that it is not cocked at an angle. For 63AW14 and -16 carburetors, insert formed end of C161-124 check valve tool into check valve body and drive check valve into counter-bore with a light hammer until it strikes bottom. For 63AW10, -11 and -12, use a flat 1/4" punch and drive check valve squarely into channel.

NOTE: Top of valve should be just below top end of channel when in place.

REPLACEMENT OF THROTTLE SHAFT BUSHINGS

NOTE: Do not attempt to remove throttle shaft bushings unless new bushings are available for replacement. New bushings are undersize and require reaming with a line reamer to fit shaft properly. Both bushings and reamer must be available to complete this operation successfully.

1. To remove throttle shaft bushing (6) from throttle body, screw a taper tap 1/16" larger than throttle shaft hole size into bushing until firmly seated, then insert long punch or rod in opposite shaft hole and drive punch against end of tap until bushing is free of throttle body.
2. Repeat above operation to remove second bushing at opposite side of throttle body.
3. To install new throttle shaft bushing, place new bushing on C161-72-4 bushing driver with taper end of bushing away from shoulder.
4. Start bushing into shaft hole and drive bushing in until it bottoms, using a light hammer.
5. Repeat operations 3 and 4 to install second bushing in opposite shaft hole.

NOTE: C161-72-3 Bushing driver is for 5/16" shaft; C161-72-4 driver is for 3/8" shaft.

6. Line ream the two bushings after assembly, using C161-71-3 reamer for 5/16" shaft size or C161-71-4 reamer for 3/8" shaft size.

ASSEMBLY OF THROTTLE BODY

1. Assemble throttle shaft packing (7) in open side of retainer (3) and place completed assembly on C161-72-3 bushing driver (used with 5/16" shaft) or C161-72-4 bushing driver (used with 3/8" shaft) with packing facing small end of driver. Insert small end of driver into throttle shaft bushing. Start retainer into counter-bore of body and lightly drive retainer into body until flush with machined surface.

NOTE: Packing retainer must be flush or slightly below machined surface to avoid striking throttle lever.

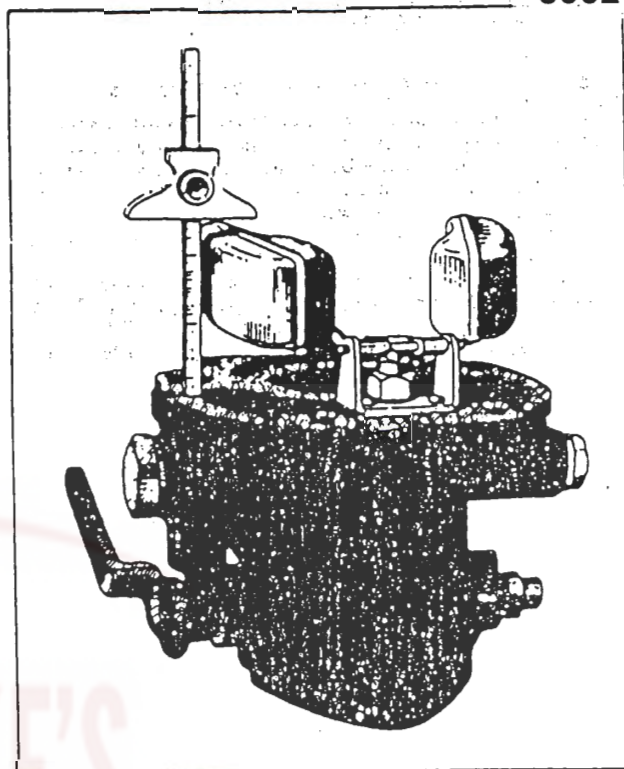
2. Repeat above operation to install second packing and retainer in opposite shaft hole.
3. Install throttle shaft and stop lever assembly (9) in throttle body and position according to match marks made at time of disassembly.
4. Insert throttle plate (4) in throttle shaft in same position it was in before disassembly. Center plate and then rotate shaft (counter-clockwise) to closed position. Hold throttle plate closed and start screws (3) into shaft loosely. Tap plate lightly and then tighten screws.

NOTE: Do not attempt to rivet threaded end of throttle plate screws.

5. Install throttle clamp lever (13) and position lever according to match marks made at time of disassembly.
6. On models which include throttle lever bushing (71), install lever bushing and secure with taper pin (72).
7. On models which include floating lever, position lever on shaft and tighten lever clamp screw.
8. On 63AW14 and -16 Models, install pickup tube jet (75) in threaded angle passage of throttle body near mounting flange.
9. Install idle adjusting needle (22) and spring (23) in threaded passage on side of throttle body. Turn idle needle in lightly against its seat, then back out needle 1-1/4 turns as a preliminary adjustment.
10. If channel plugs (44) and (16) were removed, replace plugs, using 7/16" wrench.
11. Insert venturi assembly (32) in throttle body, large opening end first. Rotate venturi to align screw hole with hole in throttle body. Install locating screw (70) and lockwasher (69) and tighten screw.
12. Install idle jet (24) in counter-bored hole in machined surface near venturi, using small screwdriver to tighten jet.
13. Install fuel valve seat (26) and fiber washer (25), using a 5/8" socket wrench for Models 63AW14, -16 and C161-85 wrench for Models 63AW10, -11 and -12.

NOTE: Be sure correct fiber washer is used. Fiber washer T56-67 (.065" thick) is used with C85-77 float; fiber washer T56-10 (.040" thick) is used with C85-83 float.

14. Install fuel valve needle (26) in seat. Position float assembly (28) in hinge bracket and insert float axle (27) through hinge bracket and float lever bushing from side opposite slotted end of bracket. Then push axle through slotted end of bracket, using handle end of screwdriver.



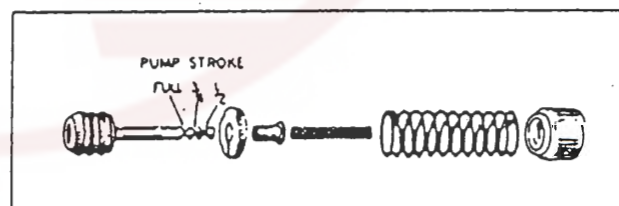
15. To insure correct fuel level in float chamber, check distance "A" from top of floats to machined surface (without gasket). This dimension should be as follows:

Carburetor Model	Dimension "A"
63AW10	1-5/8"
63AW11	1-19/32"
63AW12	1-19/32"
63AW14	2-1/64"
63AW16	2-1/64"

To increase or decrease distance between top of float bodies and machined surface, use long nose pliers and bend lever close to float body.

NOTE: Do not bend, twist or apply pressure on the float bodies. The float bodies when viewed from the free end of bodies must be centered and at right angles to the machined surface and must move freely on the float axle.

16. Install vacuum piston assembly (66) in vacuum cylinder in throttle body. Press retainer into recess of body with flat side of screwdriver. Check for free movement of piston in cylinder.



NOTE: If pump piston should be disassembled, make sure piston is reassembled on guide rod with piston in same groove as when removed, see illustration, above, for relationship of pump parts. Three grooves are provided in guide rod to permit changing pump stroke. For full stroke, assemble slot in center of piston in uppermost groove of guide rod; for three-quarter stroke, in center groove; for one-half stroke, in bottom groove.

17. Place throttle body gasket (29) on machined surface of throttle body.

ASSEMBLY OF THROTTLE AND FUEL BOWL BODIES

1. Place throttle body on fuel bowl, being careful not to damage floats or vacuum piston assembly. Align holes in throttle body and gasket with holes in fuel bowl and install throttle body assembly screws (1) and lockwashers (2) (four or six, as required). Tighten screws uniformly and securely.
2. Install fuel filter body (20), screen (19) two fiber washers (18) and (21) and filter plug (17) in threaded passage in throttle body of 63AW14 and 63AW16 carburetors. Install fuel inlet plug

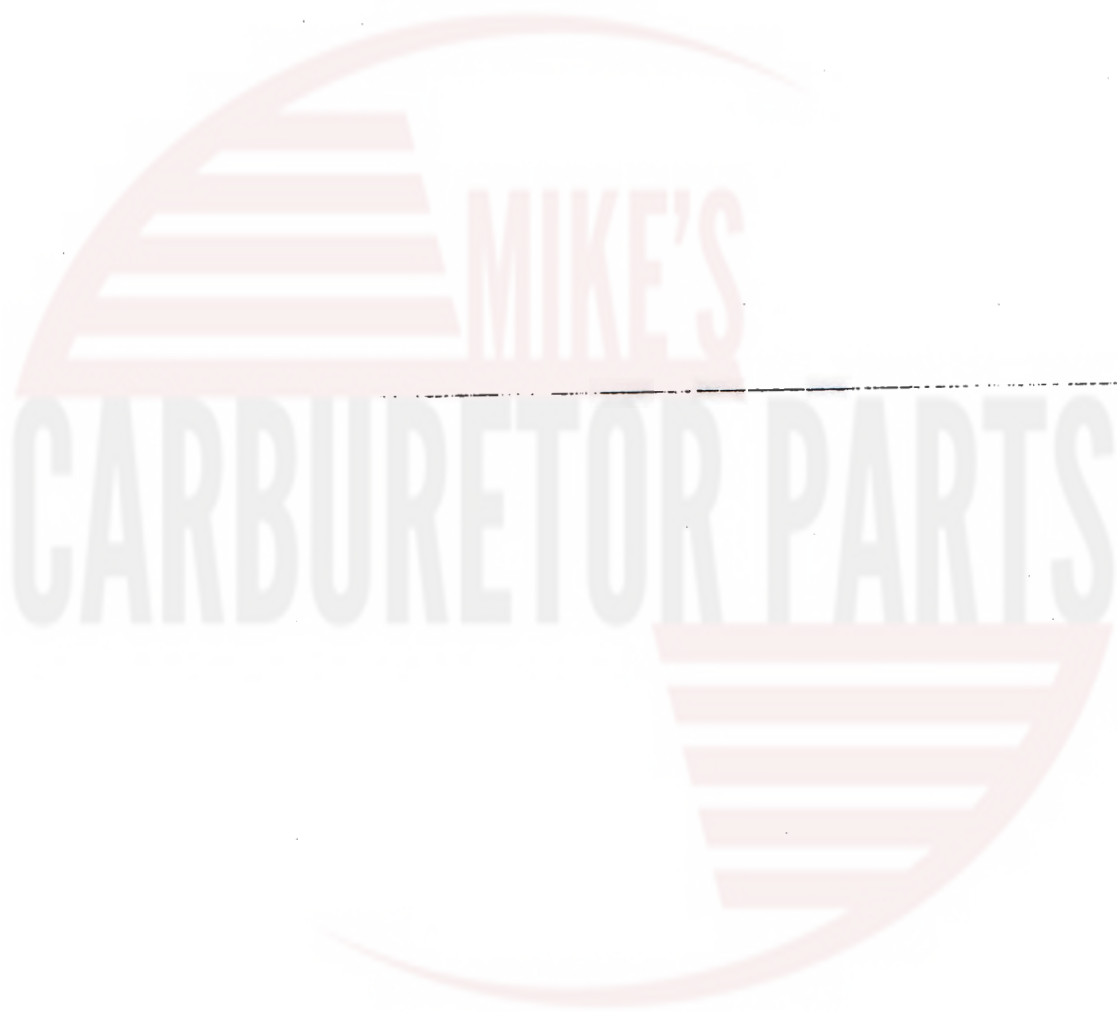
(68) and gasket (67) in opposite end of fuel passage.

NOTE: Some 63AW10, -11 and -12 Models use a filter head and filter element in place of these parts.

Assemble element to head with fingers only and install in fuel inlet passage on these models.

3. Hold throttle closed and turn throttle stop screw (11) in until it just contacts stop on throttle body; then turn screw IN 1-1/2 additional turns as a preliminary idle speed adjustment.

NOTE: If carburetor is to be used with speed governor installed between the carburetor and manifold, be sure vacuum channel screw (5) is in place in carburetor flange.

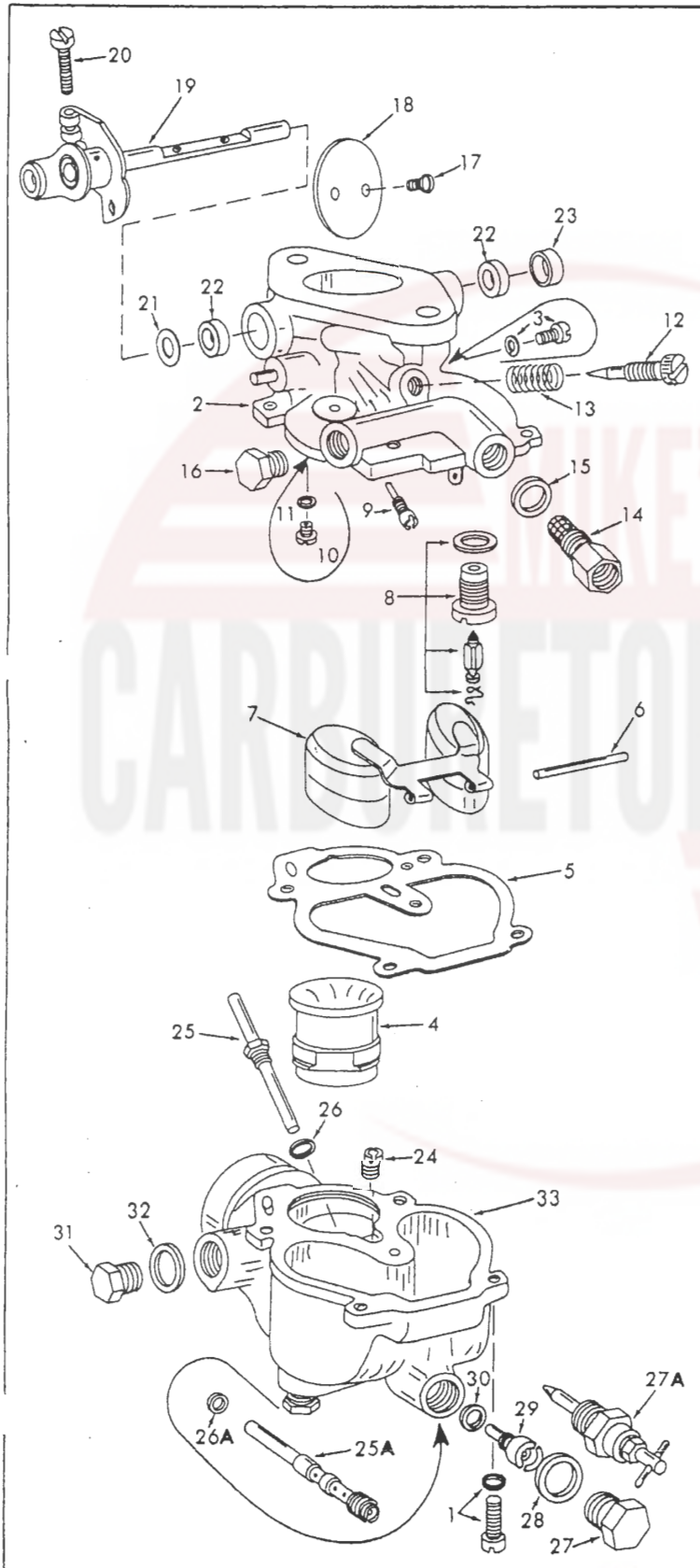


INSTRUCTION SHEET

ZENITH CARBURETOR SERIES — 61-62-67-68-161-267

GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET



DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. NOTE: BEFORE REMOVING THROTTLE VALVE (18) MAKE A SCRIBE MARK ON VALVE AND SURFACE OF FLANGE. ON SOME SERIES CARBURETORS IT IS NECESSARY TO FILE OFF REVETED OR PEENED END OF THROTTLE VALVE SCREW (17) FLUSH WITH THROTTLE SHAFT BEFORE REMOVING.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW & LOCKWASHER (4) - BOWL COVER	18. VALVE - THROTTLE
2. BOWL COVER ASSEMBLY	19. THROTTLE SHAFT & LEVER ASSY.
3. SCREW & LOCKWASHER (SERIES 62) - VENTURI	20. SCREW - THROTTLE STOP
4. GASKET - BOWL COVER	21. RETAINER - THROTTLE SHAFT SEAL
5. PIN - FLOAT LEVER	22. SEAL - THROTTLE SHAFT
6. FLOAT & LEVER ASSEMBLY	23. PLUG - THROTTLE SHAFT HOLE
7. NEEDLE, SEAT & GASKET ASSY.	24. JET - WELL VENT
8. JET - IDLE	25. NOZZLE - MAIN
9. JET (SERIES 62) - ECONOMIZER	25A. NOZZLE (SERIES 67-267) - MAIN
10. GASKET (SERIES 62) - ECONOMIZER JET	26. GASKET - MAIN NOZZLE
11. NEEDLE - IDLE ADJUSTING	26A. GASKET (SERIES 67-267) MAIN NOZZLE
12. SPRING - IDLE ADJUSTING NEEDLE	27. PLUG - MAIN PASSAGE
13. SCREEN & FITTING - FILTER	27A. MAIN JET ADJUSTMENT
14. GASKET - SCREEN & FITTING	28. GASKET - MAIN PASSAGE PLUG OR MAIN JET ADJUSTMENT
15. PLUG - FUEL INLET	29. JET - MAIN
16. SCREW & LOCKWASHER (2) - THROTTLE VALVE	30. GASKET - MAIN JET
	31. PLUG - CHOKE SHAFT HOLE
	32. GASKET - CHOKE SHAFT PLUG
	33. FLOAT BOWL ASSEMBLY

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE (1) A CARBURETOR CLEANING SOLVENT, (2) LACQUER THINNER, OR (3) DENATURIZED ALCOHOL. MAKE CERTAIN THE THROTTLE BORE IS FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTING WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK MAIN JET ADJUSTMENT (27A) OR RUBBER PARTS IN CLEANING SOLVENT.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS.

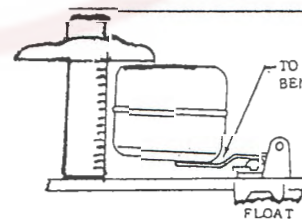
SPECIAL INSTRUCTIONS

MAIN JET ADJUSTMENT INSTALLATION (27A) - BACK OUT NEEDLE SEVERAL TURNS BEFORE TIGHTENING ASSEMBLY IN CARBURETOR. THEN TURN IN LIGHTLY UNTIL SEATED AND BACK OUT 2 TURNS.

THROTTLE SHAFT SEAL INSTALLATION - INSTALL NEOPRENE SEAL (22) WITH SEALING EDGES TO THE OUTSIDE. COVER WITH FLAT WASHER (21) AND STAKE IN PLACE.

THROTTLE VALVE INSTALLATION - INSTALL VALVE (18) WITH SCRIBE MARKS ALIGNED. TAP LIGHTLY TO CENTER IN THROTTLE BORE. TIGHTEN SCREWS SECURELY. WHERE NECESSARY, PEEN END OF SCREWS. THROTTLE HELD CLOSED, TURN THROTTLE STOP SCREW (20) IN UNTIL IT JUST CONTACTS STOP PIN, THEN TURN SCREW IN 1 1/2 ADDITIONAL TURNS.

IDLE NEEDLE INSTALLATION - TURN NEEDLE (12) IN LIGHTLY UNTIL SEATED THEN BACK OUT 1 1/4 TURNS.



CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE

SERIES -61-67-68-161-267 (1 5/32")
SERIES -62 (1 39/64")

WITH BOWL COVER INVERTED, MEASURE FROM MACHINED SURFACE OF BOWL COVER (NO GASKET) TO TOP OF EACH FLOAT PONTON. TO ADJUST BEND FLOAT LEVER CLOSE TO FLOAT BODY. NOTE: WHEN VIEWED FROM FREE END, THE FLOAT PONTONS MUST BE CENTERED AND AT RIGHT ANGLES TO THE MACHINED SURFACE OF BOWL COVER AND MOVE FREELY ON THE FLOAT PIN.

VENTURI INSTALLATION - INSTALL LARGE OPENING END OF VENTURI (4) INTO THROTTLE BORE AND POSITION VENTURI SO THAT MACHINED FLAT WILL BE TOWARD FUEL BOWL WHEN ASSEMBLED. SOME SERIES USE A GUIDE NOTCH OR SCREW TO HOLD VENTURI IN PROPER POSITION.

IDLE ADJUSTMENT - ENGINE AT OPERATING TEMPERATURE, CHOKE VALVE COMPLETELY OPEN, ADJUST IDLE SCREW UNTIL ENGINE RUNS SMOOTHLY WITH IDLE STOP SCREW SET AT PROPER IDLE R.P.M.