



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.

Needle & Seat Assembly Installation Instructions

CAUTION

**Excessive Tightening Of The Needle Seat Locknut
Can Cause Thread Distortion And Damage
To The Fuel Bowl.**

Proper Installation Is As Follows:

- 1. Install and Adjust Needle & Seat To Provide
Correct Fuel Level**
- 2. Tighten Locknut Until Nut Contacts The Fuel
Bowl Surface. Then Tighten An Additional 1/8 Turn,
Or To A Torque Value Of 15-20 Inch Pounds.**

INSTRUCTION SHEET

HOLLEY CARBURETOR - MODEL 2300

50-301

SHOWING THE LATE DESIGN SAFETY SEAL ADJUSTABLE NEEDLE AND SEAT ASSEMBLY

DISASSEMBLY

1. USE EXPLODED VIEW ON OPPOSITE SIDE OF THIS SHEET AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION.

CLEANING

2. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE (1) A CARBURETOR CLEANING SOLVENT (2) LACQUER THINNER OR (3) DENATURED ALCOHOL. MAKE CERTAIN THE THROTTLE BODY IS FREE OF ALL HARD CARBON DEPOSITS. RINSE OFF IN SUITABLE SOLVENT AND BLOW OUT ALL PASSAGES IN CASTING WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK RUBBER, LEATHER OR PLASTIC PARTS IN SOLVENT.

REASSEMBLY

3. REASSEMBLE THE CARBURETOR USING THE REVERSE ORDER OF DISASSEMBLY. NOTE: WHEN INSTALLING IDLE ADJUSTING NEEDLES (15), RUN THEM DOWN UNTIL THEY SEAT LIGHTLY, THEN BACK THEM OUT ONE TURN. AFTER INSTALLING THE FLOAT, POSITION THE FUEL BOWL UPSIDE DOWN AND ADJUST THE FLOAT AS OUTLINED IN STEP 1 OF FLOAT LEVEL ADJUSTMENT.

ADJUSTMENTS

1. FLOAT LEVEL. SEE FIG. 1. STEP 1. WITH FUEL BOWL IN AN INVERTED POSITION, TURN THE ADJUSTING SCREW SLOT UNTIL THE TOP OF THE FLOAT IS PARALLEL WITH THE TOP OF THE FUEL BOWL. TIGHTEN LOCKNUT SNUGLY. STEP 2. WITH CAR ON A LEVEL FLOOR, BRING ENGINE TO NORMAL OPERATING TEMPERATURE, REMOVE PLUG FROM SIDE OF BOWL AND ADJUST RUNNING FUEL LEVEL TO BE AT LOWER EDGE OF INSPECTION HOLE. TIGHTEN LOCKNUT AND REPLACE SIGHT PLUG.

2. PUMP ADJUSTMENT. (A) WITH PUMP CAM (SEE FIG. 4) IN NO. 1 POSITION (62-64 RAMBLER AND WILLYS NO. 2 POSITION) (B) (SEE FIG. 2). THROTTLE HELD IN WIDE OPEN POSITION AND THE PUMP OPERATING ARM HELD IN A FULLY COMPRESSED POSITION, CHECK THE CLEARANCE BETWEEN THE ADJUSTING NUT AND THE PUMP OPERATING ARM. THE CLEARANCE SHOULD BE .015. TO ADJUST, TURN SCREW.

3. BOWL VENT ADJUSTMENT: WITH THROTTLE VALVE FULLY CLOSED, DISTANCE BETWEEN TOP OF FUEL BOWL AND VENT BUTTON SHOULD BE $1/16"$. TO ADJUST, BEND VENT ARM AT ACCELERATING PUMP LEVER. CAUTION: FORD AND MERCURY NO ADJUSTMENT REQUIRED. (SEE FIG. 3).

4. AUTOMATIC CHOKE SETTING: ALIGN MARK ON STAT COIL WITH INDEX ON CHOKE HOUSING, ALLOWABLE VARIATIONS, 2 MARKS EITHER WAY FROM INDEX.

5. SLOW IDLE ADJUSTMENT: ENGINE AT OPERATING TEMP., AND CHOKE WIDE OPEN, ADJUST IDLE MIXTURE NEEDLES (15) TO A SMOOTH IDLE. ADJUST IDLE STOP SCREW TO 500-550 R.P.M. (SEE FIG. 4).

6. FAST IDLE ADJUSTMENT: PLACE FAST IDLE SCREW ON HIGH STEP OF FAST IDLE CAM AND SET TO 1600-1700 R.P.M. (SEE FIG. 5).

7. DASHPOT ADJUSTMENT: THIS ADJUSTMENT IS MADE WITH CARBURETOR SET AT PROPER IDLE SPEED. DEPRESS DASHPOT PLUNGER FULLY. THE DISTANCE BETWEEN THE PLUNGER AND THROTTLE LEVER SHOULD BE $5/64"$. TO ADJUST, LOOSEN LOCKNUT AND ROTATE DASHPOT ASSEMBLY. RETIGHTEN LOCKNUT. (SEE FIG. 3).

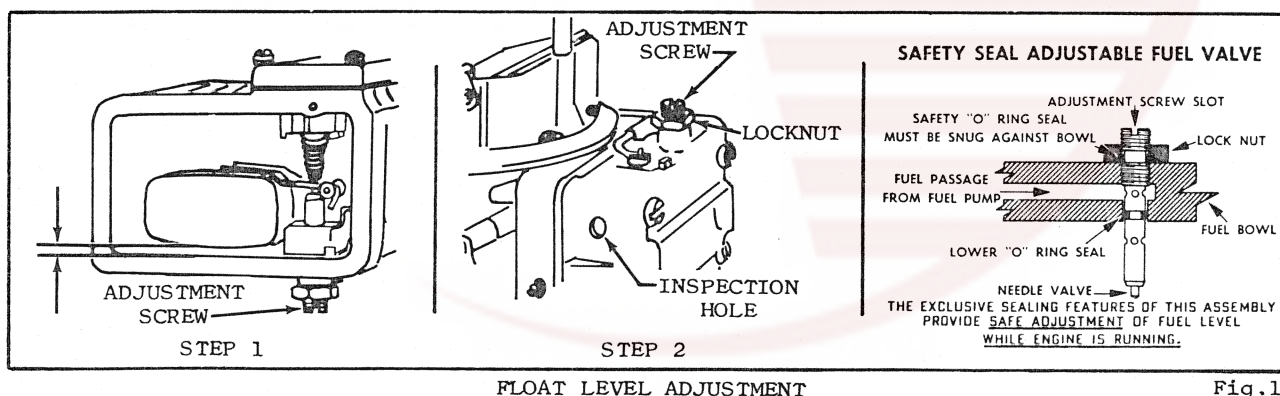
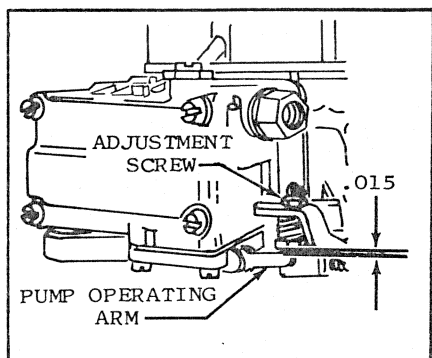
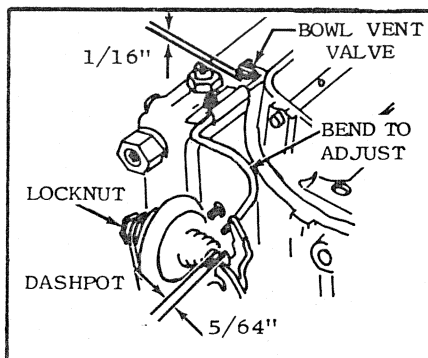


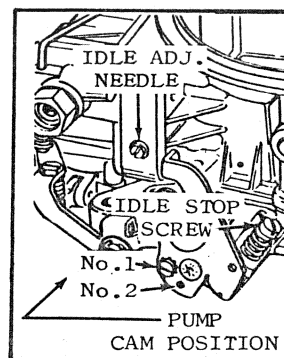
Fig.1



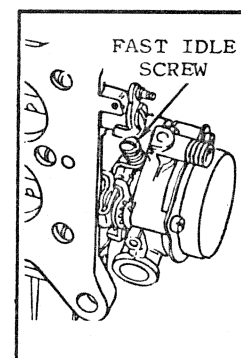
PUMP ADJUSTMENT Fig.2



BOWL VENT AND DASHPOT Fig.3
ADJUSTMENT



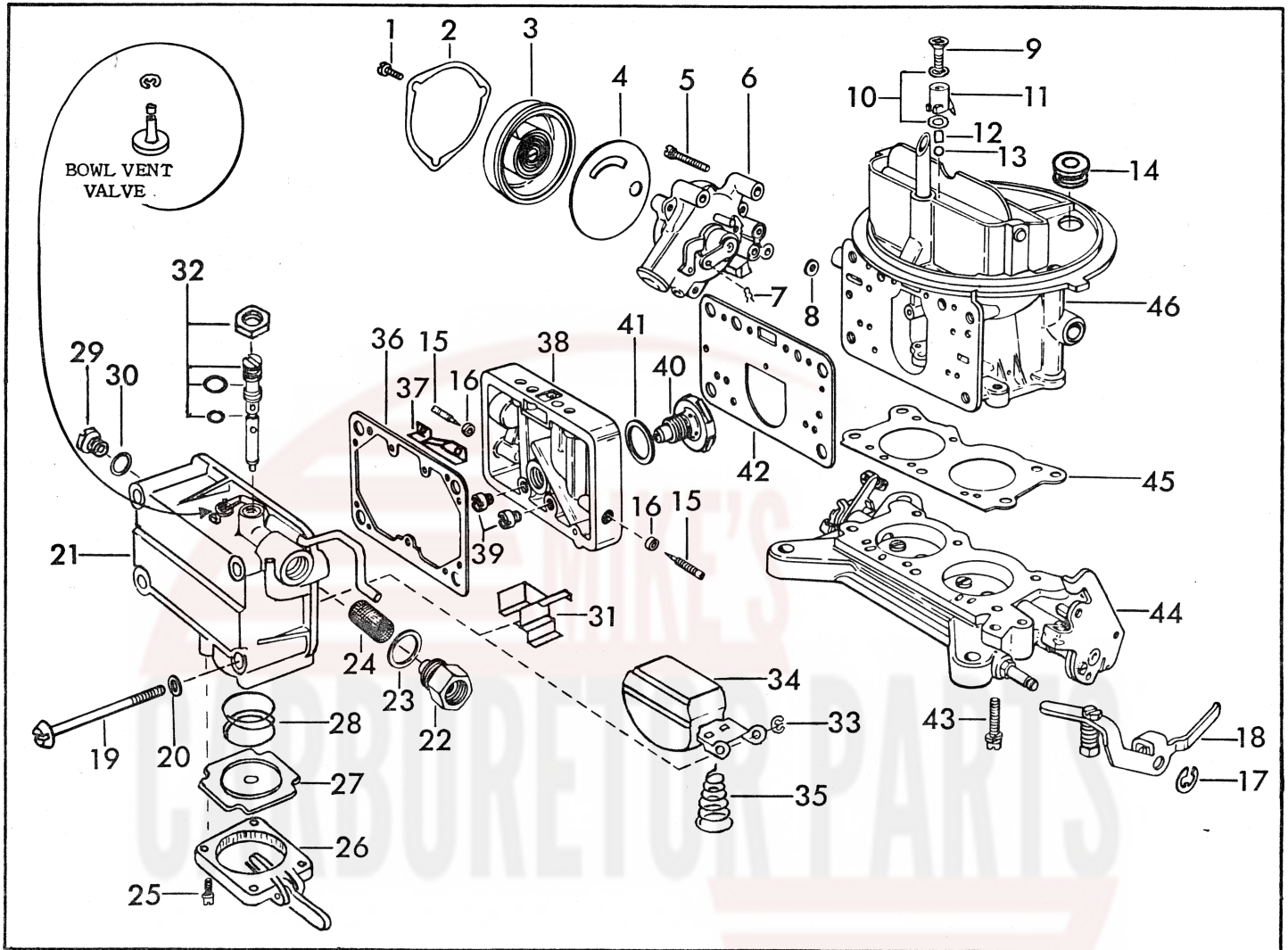
SLOW IDLE Fig.4
ADJUSTMENT



FAST IDLE Fig.5
ADJUSTMENT

GENERAL EXPLODED VIEW

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



NOMENCLATURE

REF.
NO.

1. SCREW-STAT COVER
2. CLAMP-STAT COVER
3. STAT COVER
4. GASKET-STAT COVER
5. SCREW & LOCKWASHER-CHOKE HOUSING ASSY.
6. CHOKE HOUSING ASSY.
7. RETAINER-CHOKE ROD LOWER
8. GASKET-CHOKE HOUSING
9. SCREW-PUMP DISCHARGE NOZZLE
10. GASKETS-PUMP DISCHARGE NOZZLE
11. NOZZLE-PUMP DISCHARGE
12. WEIGHT-PUMP CHECK BALL
13. BALL-PUMP DISCHARGE CHECK
14. GROMMET-COLD AIR CHOKE TUBE
15. NEEDLE-IDLE ADJUSTING
16. SEAL-IDLE NEEDLE
17. RETAINER-PUMP OPERATING LEVER
18. LEVER-PUMP OPERATING
19. SCREW-FUEL BOWL
20. GASKET-FUEL BOWL SCREW
21. FUEL BOWL ASSEMBLY
22. FITTING-FUEL INLET
23. GASKET-FUEL INLET FITTING
24. SCREEN-FUEL INLET

REF.
NO.

25. SCREW & LOCKWASHER-PUMP COVER
26. PUMP COVER ASSEMBLY
27. DIAPHRAGM-PUMP
28. SPRING-DIAPHRAGM RETURN
29. PLUG-FUEL LEVEL
30. GASKET-FUEL LEVEL PLUG
31. BAFFLE PLATE
32. NEEDLE, SEAT, O-RINGS & NUT ASSEMBLY
33. RETAINER-FLOAT
34. FLOAT ASSEMBLY
35. SPRING-FLOAT
36. GASKET-FUEL BOWL
37. BAFFLE-METERING BODY VENT
38. BODY-MAIN METERING
39. MAIN JETS
40. POWER VALVE
41. GASKET-POWER VALVE
42. GASKET-METERING BODY
43. SCREW & LOCKWASHER-THROTTLE BODY
44. THROTTLE BODY ASSEMBLY
45. GASKET-THROTTLE BODY
46. MAIN BODY ASSEMBLY