



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:

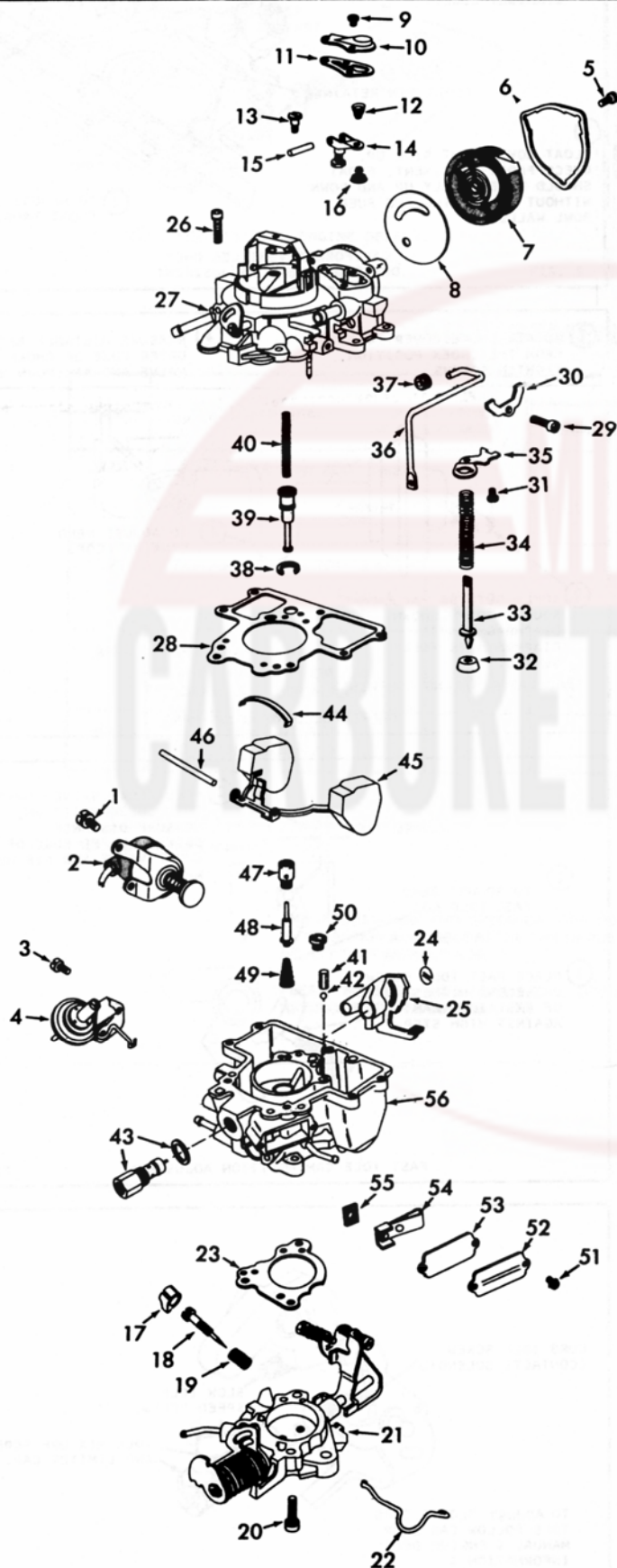
- On leather cups run your finger around the inside of the cup to break any manufacturer sealant.
- Apply 2 drops of oil to cups (leather, or rubber) before inserting into carburetor. Do not soak the cup in oil. The swelling of the cup needs to happen inside the carburetor. Allow the 2 drops of oil and 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.

INSTRUCTION SHEET

HOLLEY CARBURETOR—MODEL 1946

50-546-3

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. CAUTION: BEFORE REMOVING IDLE LIMITER CAP, TURN CAP TO THE LEANEST POSITION, REMOVE CAP FROM THIS POSITION, THEN TURN IDLE ADJUSTING NEEDLE (18) IN, COUNTING THE NUMBER OF TURNS IT TAKES TO BE LIGHTLY SEATED. THEN REMOVE NEEDLE AND SPRING. MAIN WELL TUBE IS NOT REMOVABLE. TAKE EXTREME CARE SO AS NOT TO BEND OR DAMAGE TUBE. REMOVE STAKING FROM BOWL COVER FOR EASY REMOVAL OF POWER PISTON RETAINING WASHER (38).

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW & LOCKWASHER (2)-SOLENOID	28. GASKET-BOWL COVER
2. SOLENOID ASSY.-ANTI-DIESEL	29. SCREW-PUMP ROD CLAMP
3. SCREW (2)-CHOKE PULLDOWN ASSY.	30. CLAMP-PUMP ROD
4. CHOKE PULLDOWN & LINK ASSY.	31. SCREW & LOCKWASHER-SPRING RETAINING PLATE
5. SCREW (3)-CHOKE RETAINER	32. CUP-PUMP
6. RETAINER-CHOKE COIL HOUSING	33. STEM-PUMP
7. ELECTRIC CHOKE COIL ASSY.	34. SPRING-PUMP
8. GASKET-CHOKE COIL ASSY.	35. PLATE-PUMP SPRING RETAINING
9. SCREW (3)-VENT VALVE COVER	36. ROD-PUMP OPERATING
10. COVER-VENT VALVE	37. GROMMET-PUMP ROD
11. GASKET-VENT VALVE COVER	38. RETAINER-VACUUM PISTON
12. SPRING-VENT VALVE	39. PISTON-POWER
13. SCREW-LEVER PIN	40. SPRING-POWER PISTON
14. LEVER-VENT VALVE	41. WEIGHT-PUMP DISC. BALL
15. PIN-LEVER	42. BALL-PUMP DISC.
16. VALVE-VENT	43. NEEDLE, SEAT & GASKET ASSY.
17. CAP-IDLE LIMITER	44. RETAINER-FLOAT PIN
18. NEEDLE-IDLE ADJUSTING	45. FLOAT ASSY.
19. SPRING-IDLE ADJ. NEEDLE	46. PIN-FLOAT HINGE
20. SCREW & LOCKWASHER (3)-THROTTLE BODY	47. JET-POWER VALVE
21. THROTTLE BODY ASSY.	48. STEM-POWER VALVE
22. LINK-PUMP-OPERATING	49. SPRING-POWER VALVE
23. GASKET-THROTTLE BODY	50. JET-MAIN
24. RETAINER-FAST IDLE CAM	51. SCREW & LOCKWASHER (2)-COVER
25. CAM-FAST IDLE	52. COVER-HOT IDLE COMPENSATOR
26. SCREW & LOCKWASHER (7)-BOWL COVER	53. GASKET-COVER
27. BOWL COVER ASSY.	54. COMPENSATOR-HOT IDLE
	55. GASKET-COMPENSATOR
	56. BOWL ASSY.

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BORES ARE FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK PLASTIC FLOAT, SOLENOID, DIAPHRAGM ASSY., OR RUBBER PARTS IN CLEANING SOLVENT.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS NECESSARY FOR CARBURETOR BEING SERVICED.

SPECIAL INSTRUCTIONS

VACUUM PISTON RETAINER (38) - LIGHTLY STAKE CASTING AROUND WASHER.

PUMP SPRING (34) - INSTALL WITH SMALL END TOWARDS PUMP CUP.

IDLE ADJ. NEEDLE (18) - TURN IN UNTIL LIGHTLY SEATED, THEN BACK OUT NUMBER OF TURNS RECORDED ON DISASSEMBLY.

ADJUSTMENTS

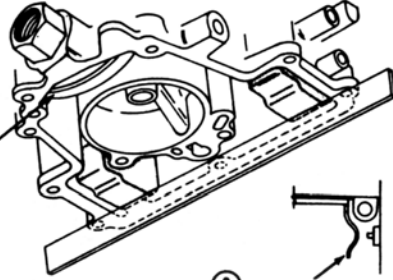
- 1 FLOAT BOWL INVERTED AND FLOAT PIN HELD IN PLACE FIRMLY BY PRESSING ON FLOAT PIN RETAINER. A STRAIGHT EDGE HELD ACROSS SURFACE OF FLOAT BOWL AT TOE END OF FLOATS. LOWEST POINT ON THE FLOAT SHOULD JUST TOUCH STRAIGHT EDGE.

FLOAT PIN RETAINER

- 3 FLOAT BOWL RIGHT SIDE UP. FLOAT SHOULD MOVE FREELY UP AND DOWN WITHOUT CONTACTING THE FUEL BOWL WALLS.

49 STATE VEHICLES ONLY
DRY FLOAT LEVEL ADJUSTMENT

- 4 STRAIGHTEN BY BENDING THE FLOAT ARMS, IF NECESSARY. (RECHECK THE FLOAT LEVEL ADJUSTMENT.)



- 2 TO ADJUST BEND FLOAT TANG.

FIG. 1

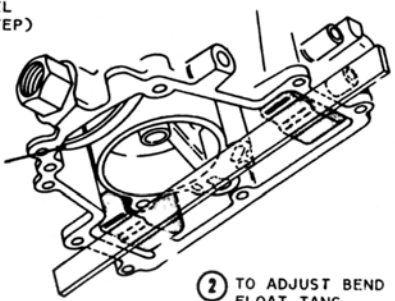
- 1 FLOAT BOWL INVERTED AND FLOAT PIN HELD FIRMLY IN PLACE BY PRESSING ON FLOAT PIN RETAINER. A STRAIGHT EDGE HELD ACROSS SURFACE OF FLOAT BOWL AT HEEL END OF FLOATS. "HEEL" (OR STEP) OF FLOAT SHOULD JUST TOUCH STRAIGHT EDGE.

FLOAT PIN RETAINER

- 3 FLOAT BOWL RIGHT SIDE UP. CHECK FLOAT ALIGNMENT. FLOAT SHOULD MOVE FREELY UP AND DOWN WITHOUT CONTACTING THE FUEL BOWL WALLS.

CALIFORNIA VEHICLES ONLY
DRY FLOAT LEVEL ADJUSTMENT

- 4 STRAIGHTEN BY BENDING THE FLOAT ARMS IF NECESSARY. (RECHECK THE FLOAT LEVEL ADJUSTMENT.)

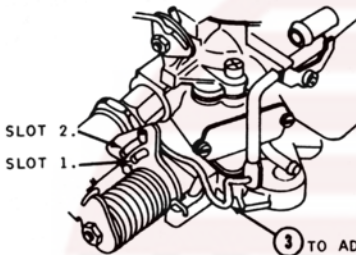


- 2 TO ADJUST BEND FLOAT TANG.

FIG. 2

- 1 PLACE LINK IN PROPER SLOT OF THROTTLE RETURN SPRING ARM.

SLOT 2.
SLOT 1.



- 2 MEASURE LENGTH OF PUMP LINK AS SHOWN.

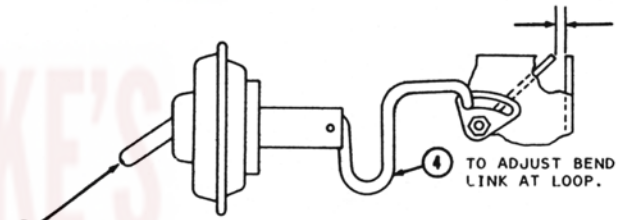
- 3 TO ADJUST BEND LOOP OF PUMP LINK.

PUMP STROKE ADJUSTMENT

FIG. 3

- 1 ROTATE CHOKE COVER 90° RICH FROM THE INDEX POSITION, TIGHTEN SCREWS

- 3 MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.



- 2 APPLY OUTSIDE VACUUM SOURCE TO PULLDOWN DIAPHRAGM UNTIL DIAPHRAGM IS FULLY SEATED.

(MODULATOR SPRING COMPRESSED)

- 4 TO ADJUST BEND LINK AT LOOP.

CHOKE PULLDOWN ADJUSTMENT

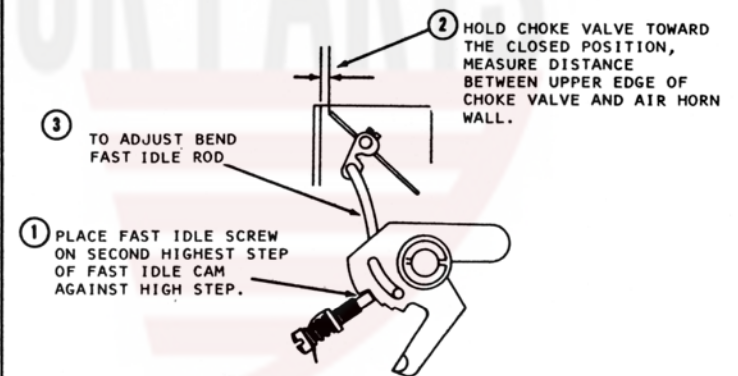
FIG. 4



ROTATE CHOKE COVER AGAINST SPRING TENSION. SET GROOVE IN THE EDGE OF CAP TO LINE UP WITH SPECIFIED NOTCH ON CHOKE HOUSING. (CHECK ENGINE EMISSION DECAL).

AUTOMATIC CHOKE COIL ADJUSTMENT

FIG. 5



- 3 TO ADJUST BEND FAST IDLE ROD

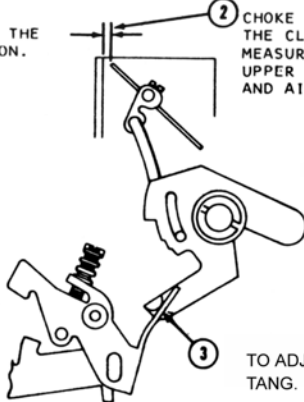
- 1 PLACE FAST IDLE SCREW ON SECOND HIGHEST STEP OF FAST IDLE CAM AGAINST HIGH STEP.

- 2 HOLD CHOKE VALVE TOWARD THE CLOSED POSITION, MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.

FAST IDLE CAM POSITION ADJUSTMENT

FIG. 6

- 1 THROTTLE HELD IN THE WIDE OPEN POSITION.

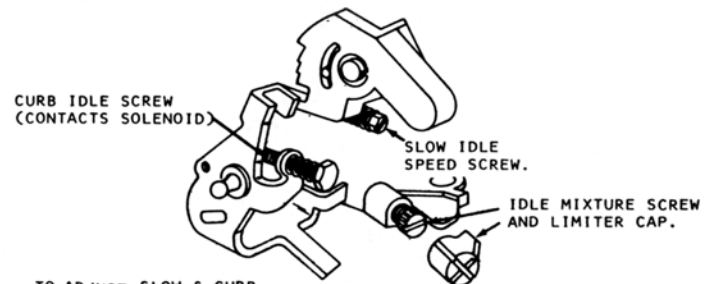


- 2 CHOKE VALVE HELD TOWARDS THE CLOSE POSITION. MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.

- 3 TO ADJUST BEND UNLOADER TANG.

CHOKE UNLOADER ADJUSTMENT

FIG. 7

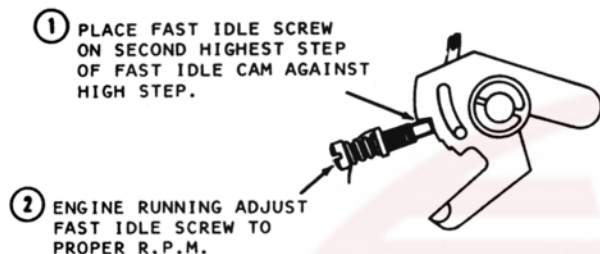


TO ADJUST SLOW & CURB IDLE FOLLOW CAR SHOP MANUAL & ENGINE DECAL INFORMATION & SPECIFICATIONS.

CURB AND SLOW IDLE SPEED ADJUSTMENT

FIG. 8

ADJUSTMENTS

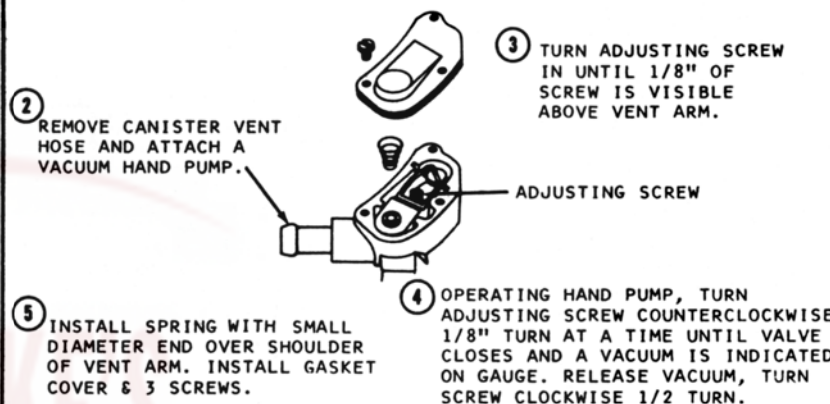


(CHECK INFORMATION ON ENGINE DECAL).

FAST IDLE ADJUSTMENT

FIG. 9

- ① CURB & SLOW IDLE ADJUSTED. (THROTTLE IN SLOW IDLE POSITION) ENGINE OFF.



ON CAR
EXTERNAL BOWL VENT ADJUSTMENT

FIG. 10

ADJUSTMENT DATA TABLE

Year	Application	Dry Float Level	Pump Adj.		Choke Pulldown Setting	*Auto Choke Setting	Fast Idle Cam Setting	Choke Unloader Setting
			Slot	Rod Length				
1978	Fairmont/Zephyr 200" Eng. Federal Calif.	Fig. 1 Fig. 2	2	2 5/32"	.110	INDEX	.090	.150
			2	2 5/32"	.150	INDEX	.130	.150
1979	Fairmont/Zephyr 200" Eng. Federal Calif.	Fig. 1 Fig. 2	2	2 1/4"	.080	INDEX	.055	.150
			2	2 5/16"	.150	INDEX	.130	.150
1980	200" Eng. Fed. A/T Carb. No. EOZE-DA, EA CARB. NO. EOBE-AA, CA	Fig. 1 Fig. 1	2	2 5/32"	.110	2-RICH	.070	.150
			2	2 5/32"	.100	2-RICH	.070	.150
1981	200" Eng. CANADA Carb. No. EOBE-AA, C/A	Fig. 1	2	2 5/32"	.100	2-RICH	.070	.150

Federal =ALL STATES EXCEPT CALIFORNIA

*Check Engine Emission Decal

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PLEASE REFER TO THE ENGINE DECAL, SERVICE SPECIFICATIONS AND TECHNICAL BULLETINS FOR REVISIONS TO THIS INFORMATION.