



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

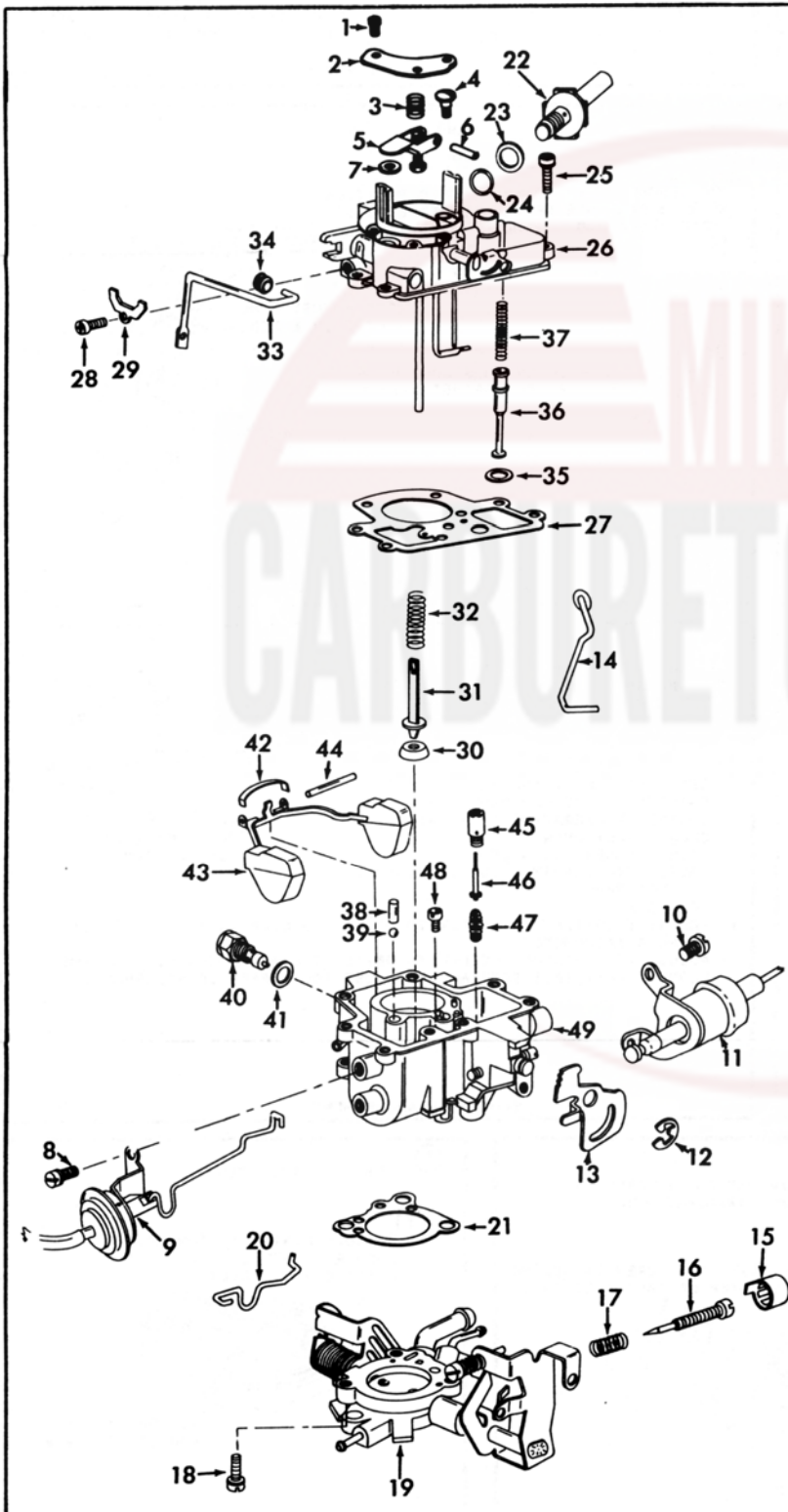
OFF VEHICLE CARBURETOR SERVICE

HOLLEY-MODEL 1945

50-490-10

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. CAUTION: MAKE NOTE OF SLOT IN OPERATING LEVER, PUMP LINK (20) IS REMOVED FROM. MAIN WELL TUBE IS NOT REMOVABLE. TAKE EXTREME CARE SO AS NOT TO BEND OR DAMAGE TUBE. NOTE: REMOVE STAKING FROM BOWL COVER FOR EASY REMOVAL OF POWER PISTON RETAINING WASHER (35). TO REMOVE PLASTIC LIMITER CAP (15) INSTALL A SHEET METAL SCREW IN THE CENTER OF THE CAP AND TURN CLOCKWISE.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (3)- VENT VALVE COVER	25. SCREW & LOCKWASHER (7)- BOWL COVER
2. COVER- VENT VALVE	26. BOWL COVER ASSY.
3. SPRING- VENT LEVER	27. GASKET- BOWL COVER
4. SCREW- LEVER PIN	28. SCREW- PUMP ROD CLAMP
5. LEVER- VENT VALVE	29. CLAMP- PUMP ROD
6. PIN- LEVER	30. CUP- PUMP
7. VALVE- VENT (1976)	31. STEM- PUMP CUP
8. SCREW (2)- CHOKE PULL OFF ASSY.	32. SPRING- PUMP
9. CHOKE PULL OFF ASSY.	33. ROD- PUMP
10. SCREW & LOCKWASHER (2)- TP SOLENOID ASSY.	34. SEAL- PUMP ROD
11. TP SOLENOID ASSY.	35. WASHER RETAINER- PISTON
12. RETAINER- FAST IDLE CAM	36. PISTON- POWER VALVE
13. CAM- FAST IDLE	37. SPRING- POWER VALVE PISTON
14. ROD & WASHER- FAST IDLE	38. WEIGHT- PUMP DISC. BALL
15. CAP- IDLE LIMITER	39. BALL- PUMP DISC. CHECK
16. NEEDLE- IDLE ADJUSTING	40. NEEDLE & SEAT ASSY.
17. SPRING- IDLE ADJ. NEEDLE	41. GASKET- NEEDLE SEAT
18. SCREW & LOCKWASHER (3)- THROTTLE BODY	42. RETAINER- FLOAT PIN
19. THROTTLE BODY ASSY.	43. FLOAT ASSY.
20. LINK- PUMP OPERATING	44. PIN- FLOAT HINGE
21. GASKET- THROTTLE BODY	45. JET- POWER VALVE
22. VALVE- IDLE ENRICHMENT (1975)	46. STEM- POWER VALVE
23. GASKET- VALVE	47. SPRING- POWER VALVE
24. O-RING- VALVE	48. JET- MAIN
	49. 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 FLOAT (43), ENRICHMENT VALVE (22), CHOKE PULL OFF (9) OR SOLENOID UNITS OR PARTS CONTAINING RUBBER 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

POWER VALVE SPRING (47)- SPRING IN KIT IS GOOD FOR 74-75 ONLY. 76-77- USE OLD SPRING OVER.

PUMP SPRING (32)- INSTALL WITH SMALL END TOWARDS PUMP CUP.

POWER PISTON WASHER (35)- LIGHTLY STAKE CASTING AROUND WASHER.

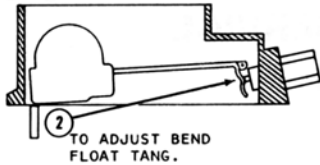
PUMP LINK (20)- INSTALLED IN SLOT NOTED ON DISASSEMBLY.

THROTTLE BODY SCREW INSTALLATION (18)- TIGHTEN EVENLY AND TORQUE TO 30 INCH LBS.

IDLE ADJ. NEEDLE (16)- TURN IN UNTIL LIGHTLY SEATED, THEN BACK OUT 1 1/2 TURNS.

ADJUSTMENTS

- 1 FLOAT BOWL INVERTED AND FLOAT PIN HELD IN PLACE BY FLOAT PIN RETAINER. STRAIGHT EDGE HELD ACROSS SURFACE OF FLOAT BOWL AT TOE END OF FLOATS. DISTANCE BETWEEN STRAIGHT EDGE AND FLOAT SHOULD BE AS SPECIFIED.

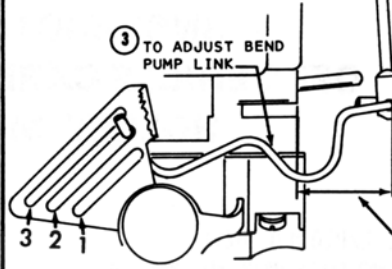


CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

DRY FLOAT LEVEL ADJUSTMENT

FIG. 1

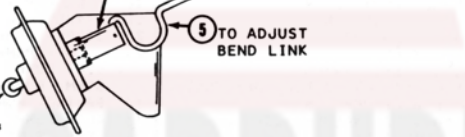
- 1 THROTTLE HELD IN CLOSED POSITION (CURB IDLE) (LINK IN HOLE RECORDED ON DISASSEMBLY.)
- 2A ALL OTHERS. MEASURE PUMP OPERATING LINK LENGTH.
- 3 TO ADJUST BEND PUMP LINK
- 2 1974 PASSENGER CAR MEASURE DISTANCE FROM VACUUM PASSAGE CASTING TO OUTER EDGE OF HOLE IN PUMP OPERATING ROD.



PUMP STROKE ADJUSTMENT

FIG. 2

- 1 PLACE FAST IDLE SCREW ON HIGH STEP OF CAM.
- 4 MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.
- 3 CLOSE CHOKE GENTLY EXTENDING OUTER STEM UNTIL IT STOPS. (DO NOT PULL CHOKE DIAPHRAGM OFF ITS SEAT.)
- 2 APPLY OUTSIDE VACUUM SOURCE TO FULLY SEAT DIAPHRAGM (15")
- 5 TO ADJUST BEND LINK



CHOKE PULLOFF ADJUSTMENT

FIG. 3

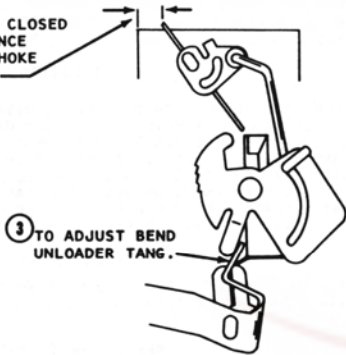
- 2 HOLD CHOKE VALVE TOWARD CLOSED POSITION MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.
- 3 TO ADJUST BEND FAST IDLE ROD.
- 1 PLACE FAST IDLE SCREW ON SECOND HIGHEST STEP OF FAST IDLE CAM AGAINST HIGH STEP



FAST IDLE CAM POSITION ADJUSTMENT

FIG. 4

- 1 HOLD THROTTLE LEVER IN WIDE OPEN POSITION.
- 2 HOLD CHOKE VALVE TOWARD CLOSED POSITION. MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.
- 3 TO ADJUST BEND UNLOADER TANG.



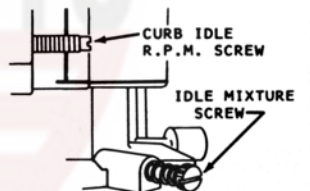
UNLOADER ADJUSTMENT

FIG. 5

USE FACTORY CAR MANUAL PROCEDURE FOR SETTING CURB IDLE IF AVAILABLE, AND SPECIFICATIONS LISTED ON ENGINE DECAL

SUPPLEMENT

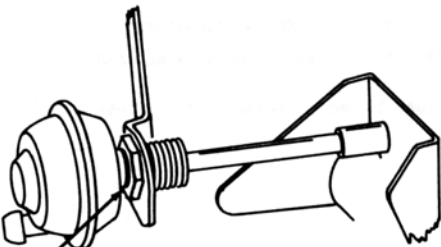
1. SET IGNITION TIMING PER CAR FACTORY SPECIFICATIONS AND PROCEDURE.
2. ENGINE AT OPERATING TEMPERATURE, CHOKE FULLY OPEN. AIR CLEANER INSTALLED. AUTOMATIC TRANSMISSION IN NEUTRAL. (NOT PARK) A/C OFF
3. ADJUST THROTTLE STOP SCREW TO SPECIFIED CURB IDLE SPEED R.P.M. USING A TACHOMETER.
4. ADJUST IDLE MIXTURE NEEDLE TO OBTAIN THE HIGHEST R.P.M. AT THE LEANEST BEST IDLE SETTING. READJUST IDLE SPEED IF NECESSARY.



SLOW IDLE ADJUSTMENT

FIG. 6

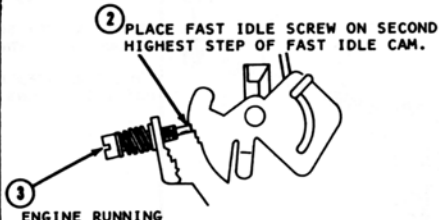
- 1 ENGINE RUNNING OPEN THROTTLE AND HOLD AT SPECIFIED R.P.M.
- 2 ADJUST DASHPOT SO STEM JUST CONTACTS LEVER AND TIGHTEN LOCKNUT. (DO NOT DEPRESS STEM)
- 3 CHECK TO MAKE SURE SLOW IDLE RETURNS CONSISTANTLY TO SPECIFICATIONS.



DASHPOT ADJUSTMENT

FIG. 7

- 1 AIR CLEANER REMOVED AND VACUUM FITTINGS PLUGGED. TRANSMISSION IN NEUTRAL.
- 2 PLACE FAST IDLE SCREW ON SECOND HIGHEST STEP OF FAST IDLE CAM.
- 3 ENGINE RUNNING ADJUST FAST IDLE SCREW TO PROPER R.P.M.



(CHECK INFORMATION ON ENGINE DECAL)

FAST IDLE SPEED ADJUSTMENT

FIG. 8

- 1 CURB IDLE ADJUSTED
- 2 MEASURE DISTANCE FROM COVER SUPPORT SURFACE TO FLAT OF PLASTIC VENT LEVER.
- 3 TO ADJUST TURN ADJUSTING SCREW.



ON CAR BOWL VENT VALVE ADJUSTMENT

FIG. 9

ADJUSTMENT DATA TABLE

Year	Application		Float Level	Pump Adj.		Choke Pull Off	Fast Idle Cam	Unloader	Dashpot R.P.M.	Fast Idle R.P.M.	Bowl Vent Adj.
	All Chrysler Products			Slot	Stroke						
1974	Passenger	M/T	Flush	—	1 1/16"	9/64"	5/64"	1/4"	2300	1600	1/16"
	198" Eng.	A/T	Flush	—	13/16"	3/32"	5/64"	1/4"	—	1700	1/16"
	225" Eng.	A/T	Flush	—	3/4"	3/32"	5/64"	1/4"	—	1700	1/16"
1974	Truck	M/T	Flush	—	2 7/32"	9/64"	5/64"	1/4"	2300	1600	1/16"
		A/T	Flush	—	2 11/32"	3/32"	5/64"	1/4"	—	1700	1/16"
1975	Passenger	M/T	3/64"	—	2 7/32"	1/8"	5/64"	1/4"	2300	1600	1/16"
		A/T	3/64"	—	2 21/64"	3/32"	5/64"	1/4"	—	1700	1/16"
1975	Truck	M/T	3/64"	—	2 7/32"	7/64"	5/64"	1/4"	2300	1600	1/16"
		A/T	3/64"	—	2 21/64"	3/32"	5/64"	1/4"	—	1700	1/16"
1976	Passenger	M/T	Flush**	—	2 7/32"	7/64"	5/64"	1/4"	2300	1600	1/16"
		A/T	Flush**	—	2 21/64"	7/64"	5/64"	1/4"	—	1700	1/16"
1977-78	Passenger	M/T	Flush**	2	2 7/32"	7/64"	5/64"	1/4"	2500	1600	1/16"
		A/T	Flush**	3	2 21/64"	7/64"	5/64"	1/4"	—	1700	1/16"
1977-78	Passenger Calif.	M/T	Flush**	2	2 7/32"	5/32"	5/64"	1/4"	2500	1600	1/16"
		A/T	Flush**	3	2 21/64"	1/8"	5/64"	1/4"	—	1700	1/16"
1979	Passenger	M/T	Flush**	1	1 45/64"	7/64"	5/64"	1/4"	2500	1400	1/16"
		A/T	Flush**	2	1 5/8"	7/64"	5/64"	1/4"	—	1600	1/16"
1979	Truck	M/T	Flush**	1	2 7/32"	7/64"	5/64"	1/4"	2300	1600	1/16"
		A/T	Flush**	2	2 21/64"	7/64"	5/64"	1/4"	—	1600	1/16"
1980	Passenger 49 States	M/T	Flush**	1	1 45/64"	.150"	.090"	1/4"	2300	1400	1/16"
	49 States	A/T	Flush**	2	1 5/8"	.140"	.090"	1/4"	—	1600	—
	Canada	M/T	Flush**	1	1 45/64"	.110"	.090"	1/4"	2300	1400	1/16"
	Canada	A/T	Flush**	2	1 5/8"	.110"	.090"	1/4"	—	1600	—
1980	Truck 49 States	M/T	Flush**	1	1 45/64"	.130"	.080"	1/4"	—	1600	.060"
	49 States	A/T	Flush**	2	1 39/64"	.130"	.090"	1/4"	—	1600	.060"
	Canada	M/T	Flush**	1	1 45/64"	.100"	.080"	1/4"	2300	1600	.060"
	Canada	A/T	Flush**	2	1 39/64"	.100"	.080"	1/4"	—	1600	.060"
1981-83	49 States/Canada	M/T	Flush**	2	1 45/64"	.130"	.080"	1/4"	—	1800	—
		A/T	Flush**	2	1 39/64"	.130"	.090"	1/4"	—	1600	—
1984-87	Truck Federal	M/T	Flush**	2	1 39/64"	.130"	.080"	1/4"	—	1600	—
		A/T	Flush**	2	1 39/64"	.150"	.080"	1/4"	—	1600	—
	Canada	M/T	Flush**	1	1 45/64"	.130"	.080"	1/4"	—	1800	—
		A/T	Flush**	2	1 39/64"	.130"	.090"	1/4"	—	1600	—

*3/64" CLEARANCE

**FLUSH WITH BOWL COVER GASKET IN PLACE