



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

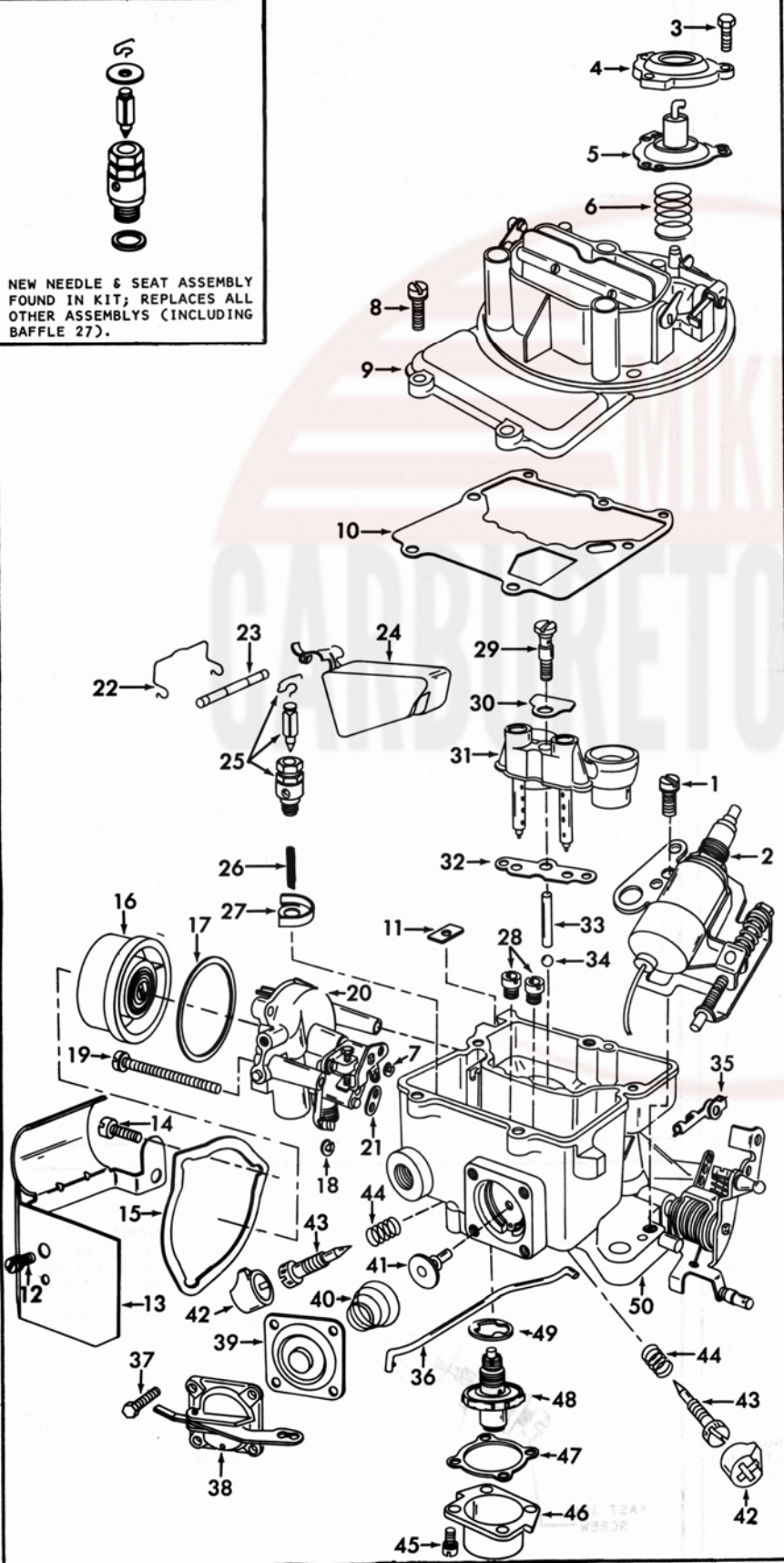
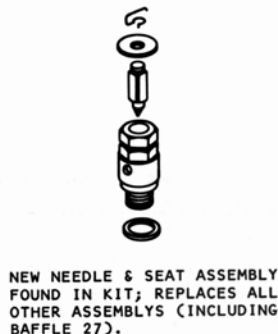
AMERICAN MOTORS CARBURETOR

MODEL 2100

50-502-6

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: TO REMOVE IDLE LIMITER CAPS
(42) INSTALL A SHEET METAL SCREW IN THE CENTER OF THE CAP AND
TURN CLOCKWISE.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW & LOCKWASHER - THROTTLE POSITIONER	27. BAFFLE - NEEDLE SEAT
2. THROTTLE POSITIONER ASSY.	28. JET (2) - MAIN
3. SCREW (3) - MODULATOR COVER	29. SCREW - PUMP DISCHARGE NOZZLE
4. COVER - MODULATOR	30. PLATE - AIR DISTRIBUTION
5. DIAPHRAGM ASSY. - MODULATOR	31. VENTURI CLUSTER ASSY.
6. SPRING - DIAPHRAGM RETURN	32. GASKET - VENTURI CLUSTER
7. RETAINER - CHOKE ROD	33. WEIGHT - DISC. BALL
8. SCREW & LOCKWASHER (4) - BOWL COVER	34. BALL - DISCHARGE CHECK
9. AIR HORN ASSEMBLY	35. RETAINER - PUMP ROD
10. GASKET-AIR HORN	36. ROD - PUMP
11. SEAL - CHOKE ROD	37. SCREW (4) - PUMP COVER
12. SCREW (2) - CHOKE SHIELD	38. COVER & LEVER ASSY.
13. SHIELD - CHOKE	39. DIAPHRAGM - PUMP
14. SCREW (3) - RETAINER CHOKE COVER	40. SPRING - DIAPHRAGM RETURN
15. RETAINER - CHOKE COVER	41. VALVE - PUMP INLET
16. CHOKE COVER ASSY.	42. CAP (2) - IDLE LIMITER
17. GASKET - CHOKE COVER	43. NEEDLE (2) - IDLE ADJUSTING
18. RETAINER - FAST IDLE ROD	44. SPRING (2) - IDLE ADJ. SPRING
19. SCREW & LOCKWASHER (3) - CHOKE HOUSING ASSY.	45. SCREW & LOCKWASHER (4) - VALVE COVER
20. CHOKE HOUSING ASSY.	46. COVER - POWER VALVE
21. GASKET - CHOKE HOUSING	47. GASKET - COVER
22. RETAINER - FLOAT PIN	48. VALVE - POWER
23. PIN - FLOAT HINGE	49. GASKET - POWER VALVE
24. FLOAT & LEVER ASSY.	50. MAIN BODY ASSY.
25. NEEDLE, SEAT & GASKET ASSY.	
26. SCREEN - NEEDLE SEAT	

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, SOLENOIDS OR ANY PARTS CONTAINING OR
COVERED WITH RUBBER OR DIAPHRAGM MATERIALS 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 (48) - USE CARE WHEN TIGHTENING TO PREVENT DISTORTION
OF GASKET (49).

POWER VALVE COVER (46) - INSTALL WITH THE IDLE LIMITER STOPS
TOWARDS MAIN BODY.

IDLE ADJUSTING NEEDLES (43) - TURN IN UNTIL SEATED, THEN BACK OUT
2 TURNS. (DO NOT INSTALL IDLE LIMITER CAPS AT THIS TIME.)

PUMP INLET CHECK VALVE (41) INSTALLATION - LUBRICATE TIP OF NEW
VALVE AND INSERT IN CENTER HOLE OF PUMP CAVITY. USE NEEDLE NOSE
PLIERS AND PULL THRU FROM FUEL BOWL SIDE UNTIL FULLY SEATED. CUT
OFF VALVE TIP AT RETAINING SHOULDER.

PUMP DIAPHRAGM RETURN SPRING (40) INSTALLATION - INSTALL LARGE
OPEN END OF SPRING OVER RUBBER INLET CHECK VALVE (41).

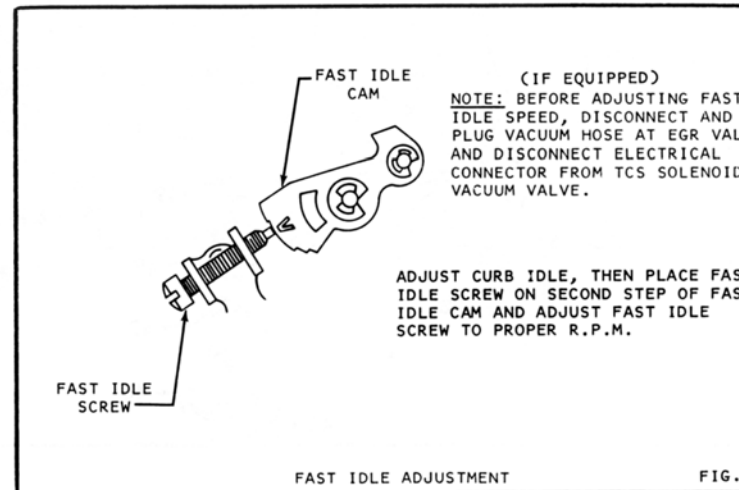
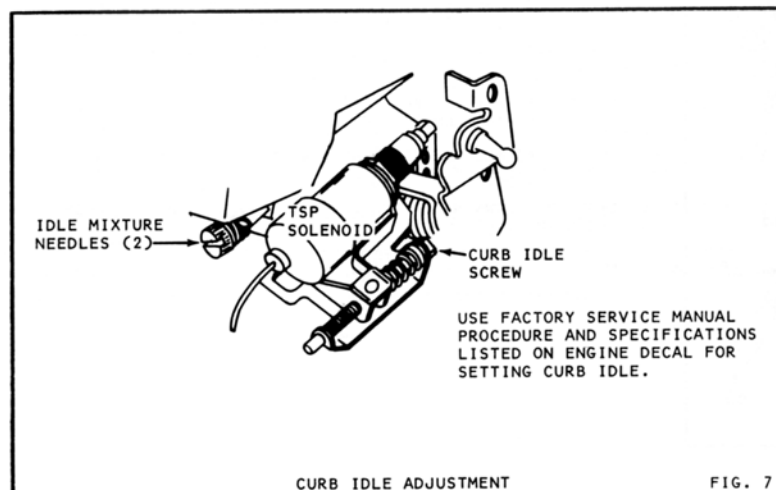
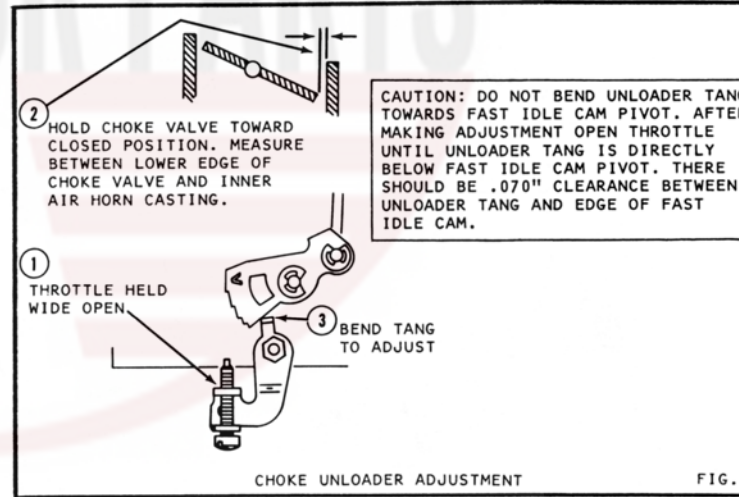
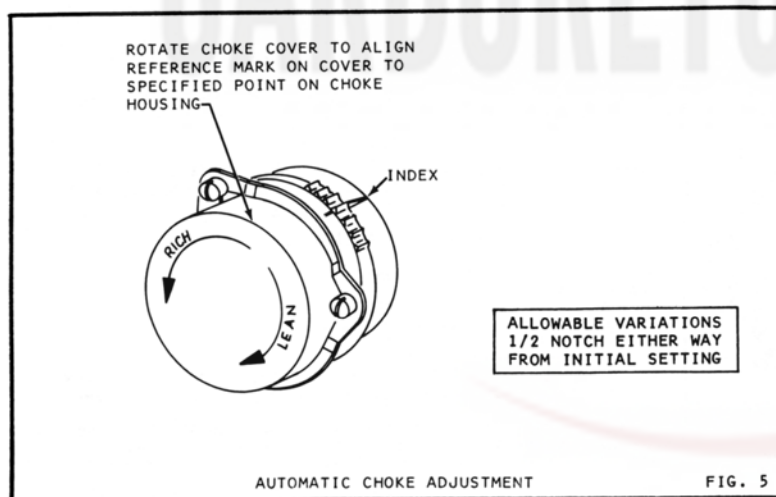
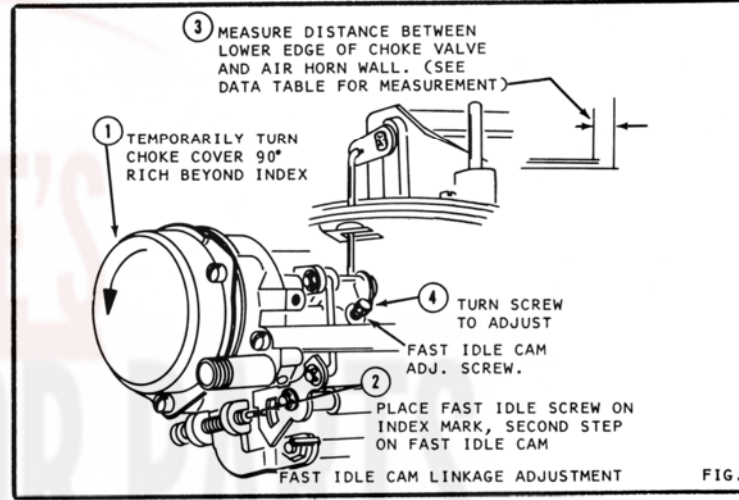
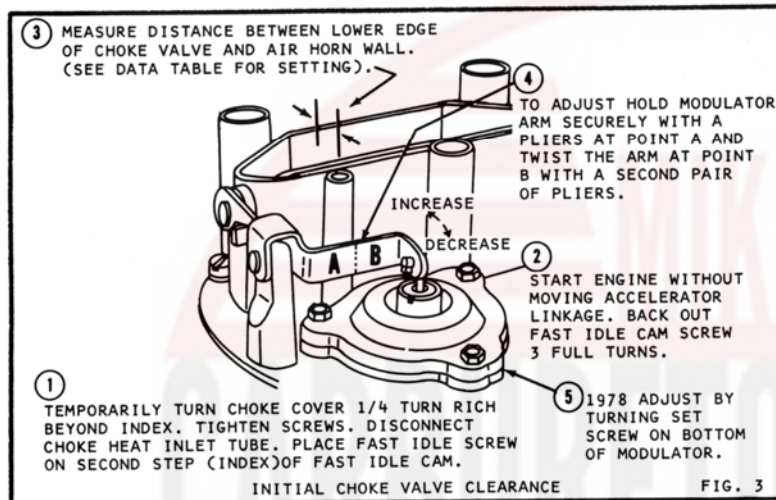
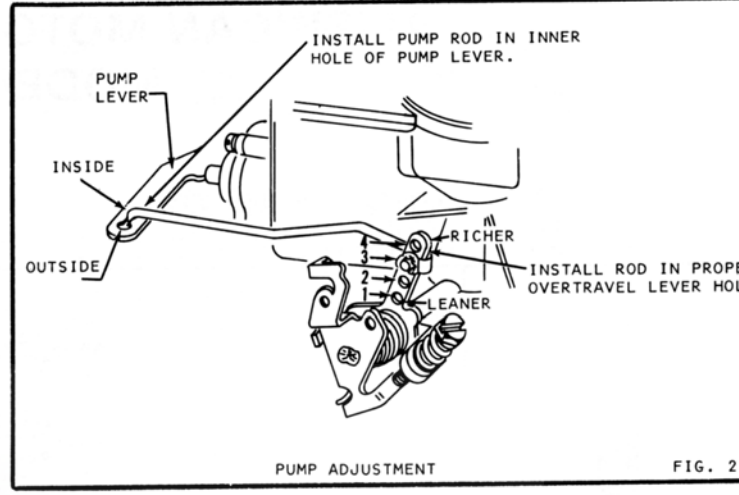
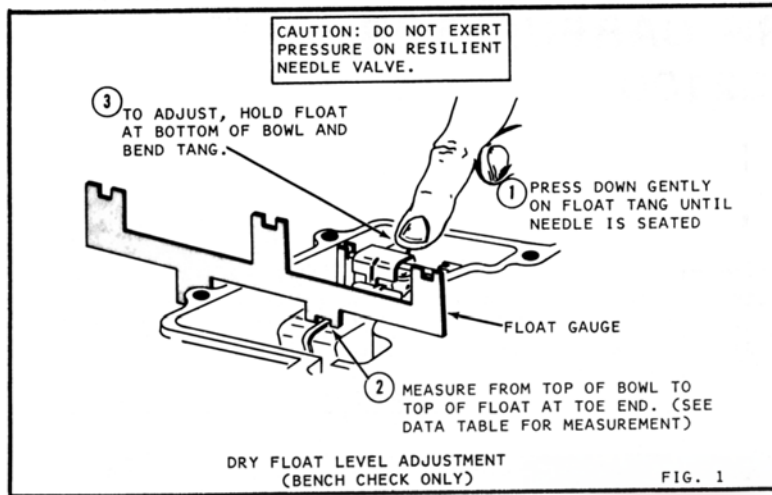
NEEDLE SEAT BAFFLE (27) - WHEN USED NO GASKET IS USED UNDER
NEEDLE SEAT.

FLOAT PIN RETAINER (22) - BE SURE TO LOCK IN GROOVE ON NEEDLE
SEAT BEFORE CHECKING FLOAT LEVEL.

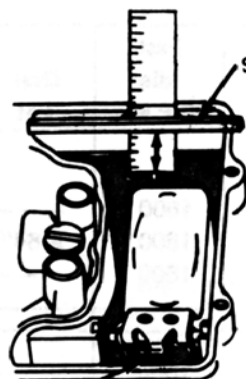
CHOKE COVER (16) INSTALLATION - BE SURE TO INSTALL BI-METAL
SPRING HOOK IN SLOT OF LEVER.

CARBURETOR HOLD DOWN NUTS - TORQUE TO 14 FT. LBS. AIR CLEANER
STUD-TORQUE TO 10 FT. LBS.

ADJUSTMENTS



ADJUSTMENTS

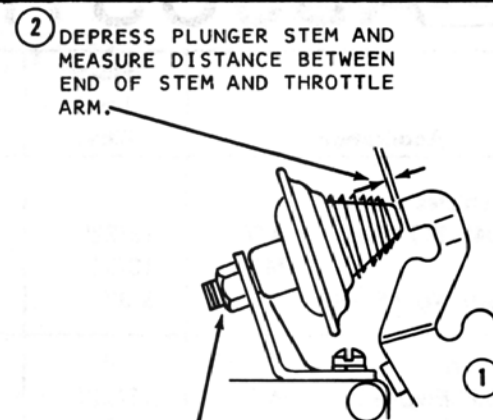


STRAIGHTEDGE

1. VEHICLE ON A LEVEL SURFACE AND ENGINE AT NORMAL OPERATING TEMPERATURE.
2. REMOVE AIR HORN ATTACHING SCREWS. START AND LET ENGINE IDLE FOR A FEW MINUTES, THEN ROTATE AIR HORN OUT OF WAY AND REMOVE AIR HORN GASKET.
3. WHILE ENGINE IS IDLING, USE A T-SCALE TO MEASURE THE VERTICAL DISTANCE FROM THE TOP MACHINED SURFACE OF THE CARBURETOR MAIN BODY TO THE LEVEL OF THE FUEL IN THE BOWL. CAUTION: MEASUREMENT MUST BE MADE AT LEAST 1/4" AWAY FROM ANY VERTICAL SURFACE TO ASSURE AN ACCURATE READING. (SEE DATA TABLE FOR SETTING.)
4. TO ADJUST. STOP ENGINE. BEND FLOAT TAB UPWARD TO RAISE FUEL LEVEL, AND DOWNWARD TO LOWER IT. TO RECHECK LEVEL ENGINE MUST BE STARTED AND ALLOWED TO IDLE A FEW MINUTES TO STABILIZE FUEL LEVEL.
5. RECHECK CARBURETOR IDLE ADJUSTMENT.

WET FLOAT LEVEL ADJUSTMENT

FIG. 9



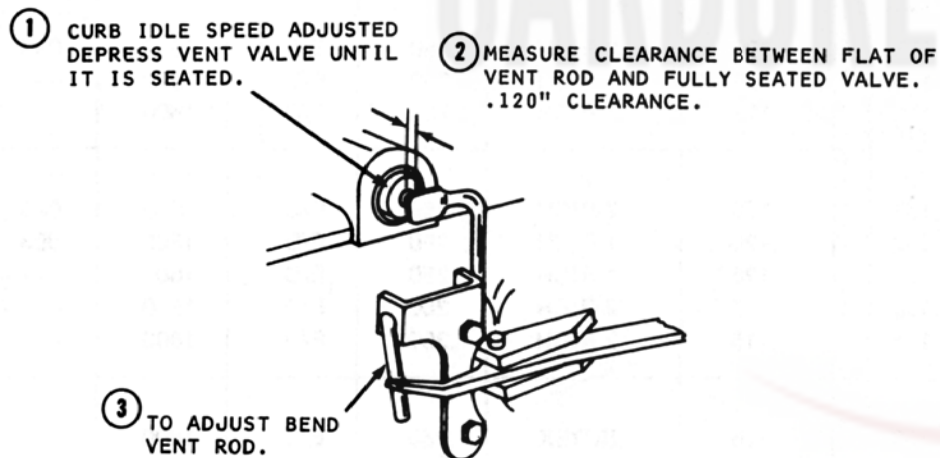
- (2) DEPRESS PLUNGER STEM AND MEASURE DISTANCE BETWEEN END OF STEM AND THROTTLE ARM.

(1) ADJUST CURB IDLE

- (3) LOOSEN LOCKNUT AND TURN UNIT TO ADJUST. TIGHTEN NUT.

(DASHPOT)
SLOW CLOSING THROTTLE ADJ.

FIG. 10



- (1) CURB IDLE SPEED ADJUSTED DEPRESS VENT VALVE UNTIL IT IS SEATED.

- (2) MEASURE CLEARANCE BETWEEN FLAT OF VENT ROD AND FULLY SEATED VALVE. .120" CLEARANCE.

- (3) TO ADJUST BEND VENT ROD.

NOT ALL CARBURETORS
BOWL VENT VALVE ADJUSTMENT

FIG. 11

ADJUSTMENT DATA TABLE

Year	Application	Float Level (Dry)	Fuel Level (Wet)*	Pump Lever Hole	Choke Initial Clearance	Fast Idle Cam	Auto Choke	Unloader	Curb Idle	Fast Idle R.P.M.	Dash Pot
1974	All Vehicles 304"-360" Eng. A/T 304" Eng. M/T Carb. No. 4RDH2	13/32" 13/32" 3/8"	.780 .780 .750	No. 3 No. 3 No. 3	1/8" 9/64" ---	1/8" 1/8" ---	1-RICH 2-RICH 2-RICH	1/4" 1/4" 1/4"	E/D E/D E/D	1600 1600 1600	--- 9/64" ---
1975	Pass. Cars 360" Eng. A/T 304" Eng. A/T 304" Eng. M/T	13/32" 13/32" 13/32"	.780 .780 .780	No. 3 No. 3 No. 3	.136 .136 .132	.126 .126 .120	1-RICH 1-RICH 2-RICH	1/4" 1/4" 1/4"	E/D E/D E/D	1600 1600 1600	--- --- 3/32"
1975	Jeep & Jeep Truck 360" Eng. A/T 360" Eng. M/T 304" Eng. M/T	13/32" 13/32" 13/32"	.930** .930** .930**	No. 3 No. 3 No. 3	.136 .136 .132	.115 .115 .120	2-RICH 2-RICH 2-RICH	1/4" 1/4" 1/4"	E/D E/D E/D	1600 1600 1600	--- --- 3/32"
1976	Pass. Cars 304" Eng. M/T 304" Eng. A/T 360" Eng. A/T	13/32" 13/32" 13/32"	.930** .780 .780	No. 3 No. 3 No. 3	.132 .136 .136	.120 .126 .126	2-RICH 1-RICH 1-RICH	.250 .250 .250	E/D E/D E/D	1600 1600 1600	.093 --- ---
1976	Jeep 304" Eng. M/T 304" Eng. Calif. M/T 304" Eng. A/T 360" Eng. H.D. M/T 360" Eng. H.D. A/T	13/32" 13/32" 13/32" 13/32" 13/32"	.930** .930** .930** .930** .930**	No. 3 No. 2 No. 3 No. 3 No. 3	.132 .132 .136 .136 .136	.120 .120 .126 .115 .115	2-RICH 1-RICH 1-RICH 2-RICH 2-RICH	.250 .250 .250 .250 .250	E/D E/D E/D E/D E/D	1600 1600 1600 1600 1600	.093 .093 --- --- ---
1977	Pass. Cars 304" Eng. A/T 360" Eng. A/T 304", 360" Calif. A/T	13/32" 13/32" 13/32"	.780 .780 .780	No. 3 No. 3 No. 3	.136 .136 .130	.126 .126 .120	INDEX 1-RICH 1-RICH	.250 .250 .250	E/D E/D E/D	1600 1600 1600	--- --- ---
1977	Jeep CJ-5, 7 304" Eng. M/T 304" Eng. Calif. M/T 304" Eng. All A/T	13/32" 13/32" 13/32" 13/32"	.930** .930** .930** .930**	No. 3 No. 2 No. 3 No. 3	.132 .132 .136 .136	.120 .120 .126 .126	2-RICH 1-RICH 1-RICH 1-RICH	.250 .250 .250 .250	E/D E/D E/D E/D	1600 1600 1600 1600	.093 .093 --- ---
1977	Cherokee, Wagoneer, Truck 360" Eng. M/T 360" Eng. A/T	13/32" 13/32"	.930** .930**	No. 3 No. 3	.136 .136	.115 .115	2-RICH 2-RICH	.250 .250	E/D E/D	1600 1600	--- ---
1978	Pass. Cars 304" Eng. Fed. A/T 360" Eng. Fed. A/T 304", 360" Eng. Calif. A/T	9/16" 9/16" 9/16"	.780 .780 .780	No. 3 No. 3 No. 3	.136 .136 .136	.126 .126 .126	INDEX 1-RICH 1-RICH	.250 .250 .250	E/D E/D E/D	1600 1600 1800	--- --- ---
1978	Jeep 304" Eng. M/T 304" Eng. A/T 360" Eng. All/T	9/16" 9/16" 9/16"	.930** .930** .930**	No. 3 No. 3 No. 3	.132 .136 .136	.120 .126 .115	2-RICH 1-RICH 2-RICH	.250 .250 .250	E/D E/D E/D	1500 1600 1600	--- --- ---
1979	Pass. Cars 304" Eng. Fed. A/T 304" Eng. Fed. M/T	5/16" 5/16"	.780 .780	No. 3 No. 3	.125 .125	.113 .113	1-RICH 1-RICH	.300 .300	E/D E/D	1600 1500	--- ---
1979	Jeep 304" Eng. Fed. M/T 304" Eng. Calif. M/T Carb. No. 9DM2H M/T 304" Eng. Fed. A/T	9/16" 9/16" 9/16" 9/16"	.930** .930** .930** .930**	No. 3 No. 3 No. 3 No. 3	.125 .132 .128 .140	.120 .120 .113 .125	2-RICH 1-RICH 1-RICH INDEX	.300 .250 .300 .360	E/D E/D E/D E/D	1500 1500 1600 1500	--- --- --- ---
1980	Jeep 304" Eng. Fed. Carb. No. ODM2J M/T Fed. Carb. No. ODA2J A/T Calif. Carb. No. ODM2JC M/T Calif. Carb. No. ODA2JC A/T Alt. Carb. No. ODM2A M/T	3/8" 3/8" 3/8" 3/8" 3/8"	.930** .930** .930** .930** .930**	No. 3 No. 3 No. 3 No. 3 No. 3	.125" .128" .120" .120" .128"	.113" .113" .106" .106" .113"	2-RICH 1-RICH 2-RICH 2-RICH 1-RICH	.300" .300" .300" .300" .300"	E/D E/D E/D E/D E/D	1500 1600 1500 1600 1500	--- --- --- --- ---

* - Refer to car service manual.

** - With Float damper spring.

E/D - Engine Decal

M/T - Manual Transmission

A/T - Automatic Transmission

**REPLACEMENT
STYLE UNIT**



**ORIGINAL
STYLE UNIT**



NEW DESIGN POWER VALVE

THE REPLACEMENT POWER VALVE INCLUDED IN THIS PACKAGE MAY DIFFER IN APPEARANCE FROM THE ORIGINAL STYLE UNIT DUE TO CHANGES IN MANUFACTURING MATERIALS AND TECHNIQUES. IT MEETS OR EXCEEDS ALL QUALITY, PERFORMANCE, AND ECONOMY REQUIREMENTS WHILE EXTENDING SERVICE LIFE.

CARBURETOR PARTS