



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.

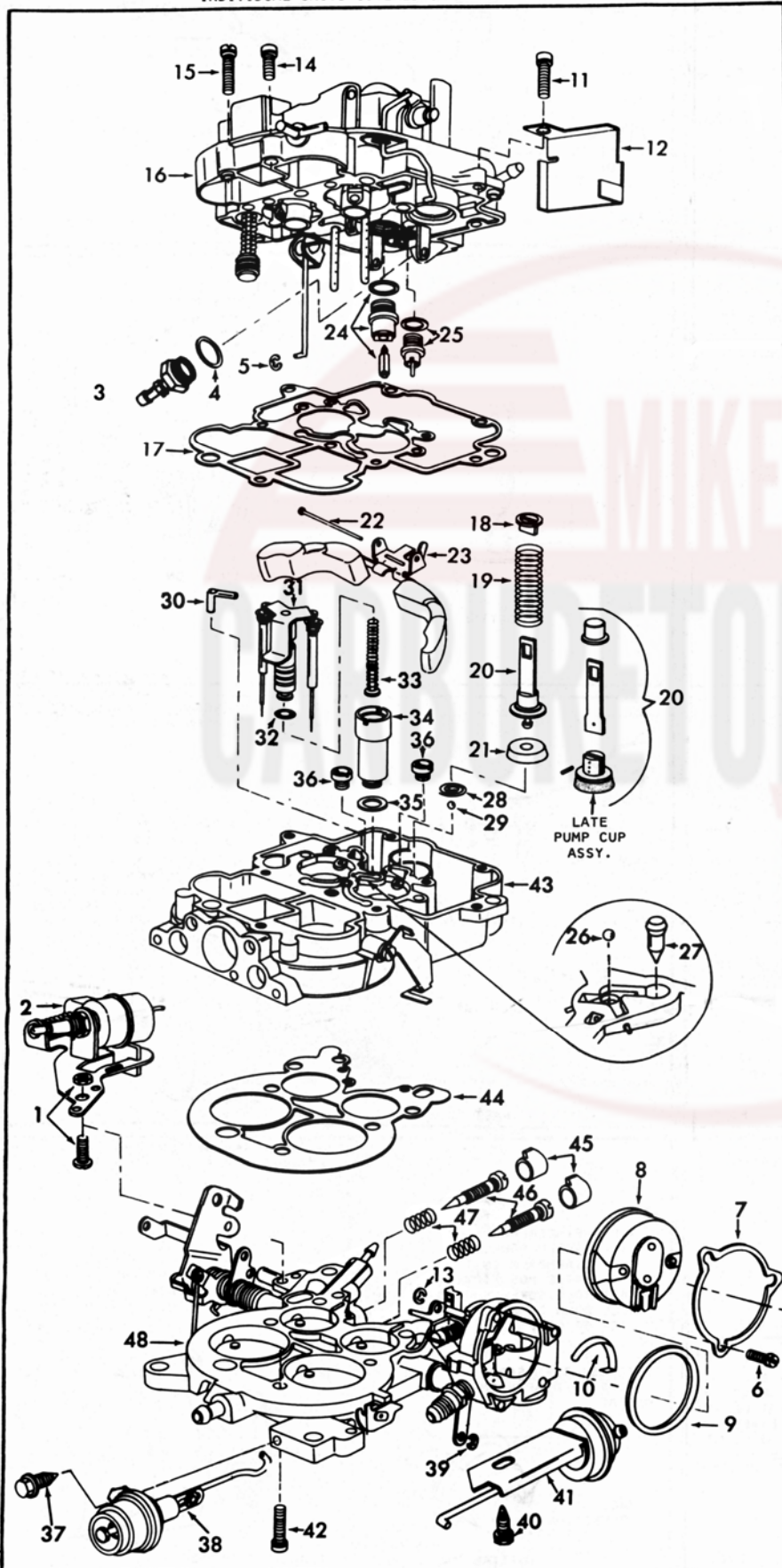
INSTRUCTION SHEET

50-496-6

AMERICAN MOTORS CARBURETOR- MODEL 4350

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: BEFORE REMOVING
PUMP OPERATING LINK MARK HOLE IN THROTTLE LEVER. (RETURN
TO SAME HOLE). THIS ROD IS PRESET AT FACTORY. DO NOT
CHANGE LENGTH. REFER TO SPECIAL INSTRUCTIONS. NOTE; TO
REMOVE IDLE LIMITER CAPS (45) INSTALL A SHEET METAL SCREW
IN THE CENTER OF CAP AND TURN CLOCKWISE.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW & NUT - THROTTLE POSITIONER	26. BALL - PUMP VENT CHECK (SMALL)
2. SOLENOID ASSY. - THROTTLE POSITIONER	27. NEEDLE - PUMP DISC. CHECK
3. FITTING - FUEL INLET	28. RETAINER-PUMP INLET CHECK BALL
4. GASKET - INLET FITTING	29. BALL - PUMP INLET CHECK
5. RETAINER - PUMP LINK	30. RETAINER - VACUUM PISTON ASSY.
6. SCREW (3) - CHOKE COVER RETAINER	31. VACUUM PISTON & METERING ROD ASSY.
7. RETAINER CLAMP - CHOKE COVER	32. O-RING - VACUUM PISTON
8. CHOKE COVER ASSY.	33. SPRING & GUIDE - VACUUM PISTON
9. GASKET - CHOKE COVER	34. CYLINDER - VACUUM PISTON
10. STOP-CHOKE PISTON (1975)	35. GASKET - VACUUM CYLINDER
11. SCREW & LOCKWASHER - SHIELD	36. JETS - MAIN METERING
12. SHIELD - CHOKE	37. SCREW - CHOKE MOTOR ASSY.
13. RETAINER - CHOKE ROD	38. CHOKE PULLDOWN MOTOR ASSY.
14. SCREW & LOCKWASHER (8) - UPPER BODY	39. RETAINER - THROTTLE POSITIONER ROD (JEEP ONLY)
15. SCREW & LOCKWASHER (1) - UPPER BODY (LONG)	40. SCREW-THROTTLE POSITIONER BRACKET (JEEP ONLY)
16. UPPER BODY ASSY.	41. THROTTLE POSITIONER ASSY. (JEEP ONLY)
17. GASKET - UPPER BODY	42. SCREW & LOCKWASHER (6) - THROTTLE BODY TO MAIN BODY
18. BUSHING - PUMP SPRING (UPPER)	43. MAIN BODY ASSY.
19. SPRING - PUMP RETURN	44. GASKET - THROTTLE BODY
20. STEM ASSY. - PUMP	45. CAP (2)-IDLE LIMITER
21. CUP - PUMP	46. NEEDLE (2) - IDLE ADJ.
22. PIN - FLOAT LEVER	47. SPRING (2) - IDLE ADJ. NEEDLE
23. FLOAT & LEVER ASSY.	48. THROTTLE BODY ASSY.
24. NEEDLE & SEAT ASSY.-PRI.	
25. NEEDLE & SEAT ASSY.-AUX.	

CLEANING

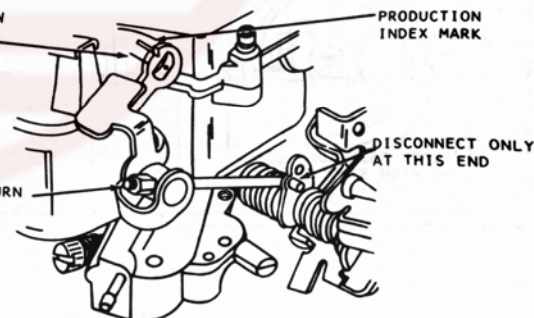
CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK
PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL.
USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE
BORES ARE FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF
IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH
COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING
OF OBSCURE AREAS. CAUTION: DO NOT SOAK DIAPHRAGM OR SOLENOID
ASSYS., FLOAT OR PARTS CONTAINING RUBBER SUCH AS 2,8,23,38,41.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL
INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING
ADJUSTMENTS.

SPECIAL INSTRUCTIONS

SCRIBE NEW
LINES



BEFORE DISASSEMBLY. THROTTLE VALVES CLOSED LEVER AGAINST STOP
SCREW. (TSP OFF). SCRIBE A NEW INDEX LINE AS SHOWN. DO NOT
USE PRODUCTION INDEX MARK ON CARBURETOR (FOR MANUFACTURING
REFERENCE ONLY). FOR NORMAL SERVICE THE THROTTLE LINK NEED
ONLY BE DISCONNECTED AT LOWER END. (DO NOT CHANGE LENGTH OF
LINK. IT IS NOT A PUMP ADJUSTMENT.)

IDLE ADJUSTING NEEDLES(41)-TURN EACH NEEDLE IN UNTIL LIGHTLY
SEATED THEN BACK OUT 2 TURNS. (DO NOT INSTALL IDLE
LIMITER CAPS AT THIS TIME.)

FLOAT LEVER PIN (22) INSTALLATION-INSTALL SO HEAD OF PIN IS
ON THE PUMP SIDE.

CHOKE COVER (8)-WHEN INSTALLING BE SURE CHOKE SPRING IS
PLACED IN SLOT OF VACUUM PISTON LEVER.

ADJUSTMENTS

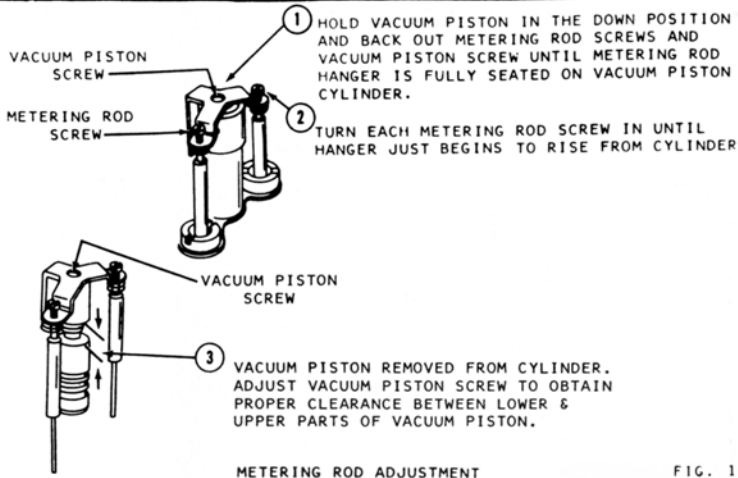
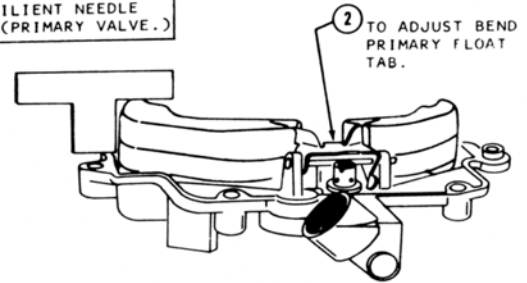


FIG. 1

CAUTION:
DO NOT EXERT PRESSURE
ON RESILIENT NEEDLE
VALVE (PRIMARY VALVE.)

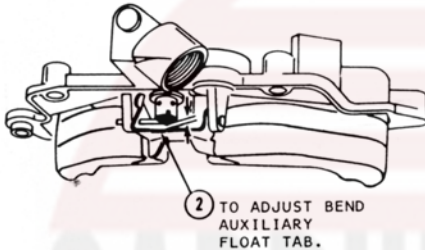


- 1 BOWL COVER GASKET REMOVED. UPPER BODY INVERTED. MEASURE FROM UPPER BODY GASKET SURFACE TO TOE OF EACH FLOAT.

PRIMARY NEEDLE & SEAT
DRY FLOAT LEVEL ADJUSTMENT

FIG. 2

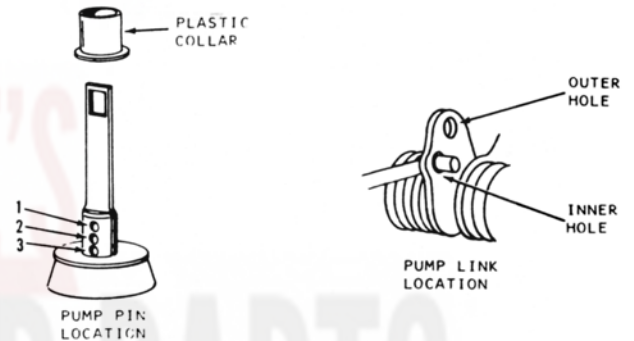
- 1 UPPER BODY HELD IN THE NORMAL POSITION. RAISE FLOAT TO THE CLOSED POSITION. THEN MEASURE BETWEEN AUXILIARY NEEDLE AND THE AUXILIARY FLOAT TAB. (DO NOT RAISE NEEDLE OFF ITS SEAT.)



AUXILIARY NEEDLE & SEAT
FLOAT LEVER CLEARANCE ADJUSTMENT

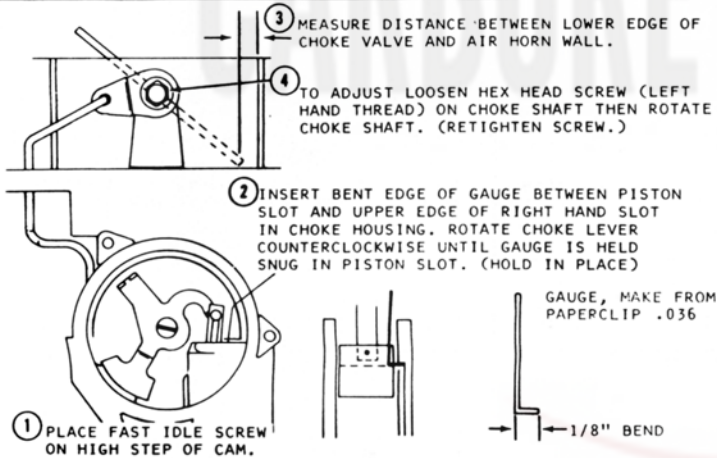
FIG. 3

PLACE PIN IN SPECIFIED HOLE THEN SLIDE COLLAR ON TO HOLD IN PLACE. (ONLY ADJUSTMENT FOR PUMP TRAVEL.)



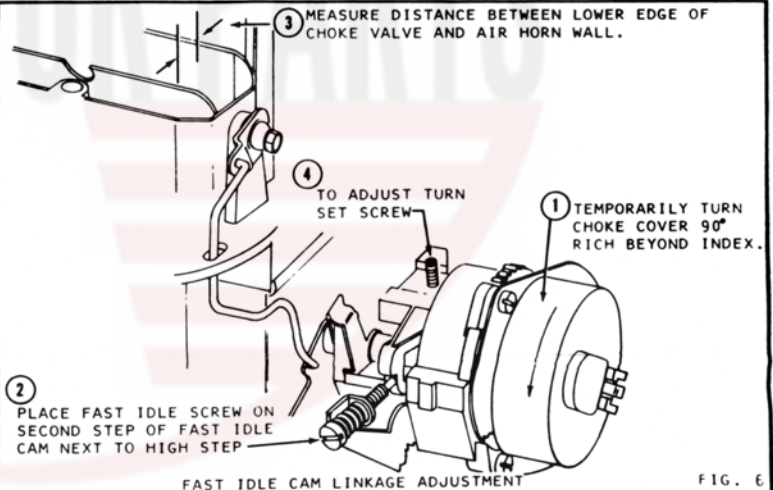
PUMP ADJUSTMENT

FIG. 4



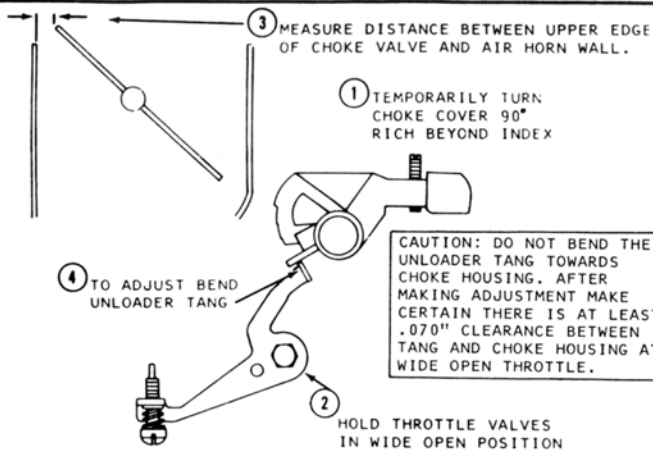
INITIAL CHOKE VALVE CLEARANCE ADJUSTMENT.

FIG. 5



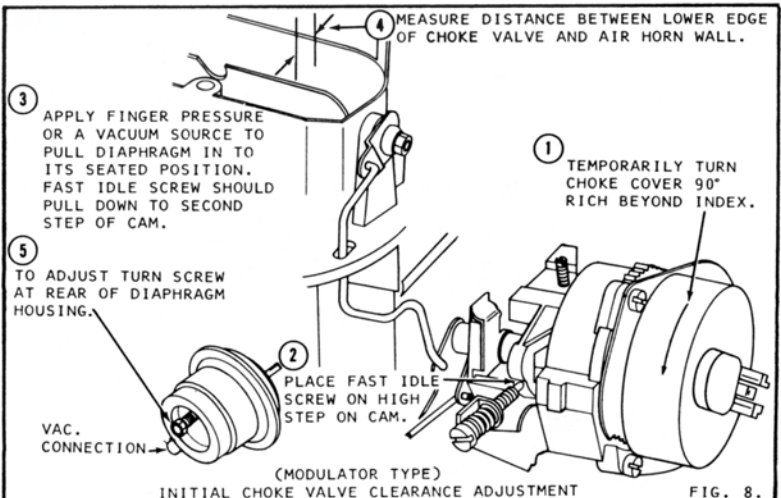
FAST IDLE CAM LINKAGE ADJUSTMENT

FIG. 6



CHOKE UNLOADER ADJUSTMENT

FIG. 7

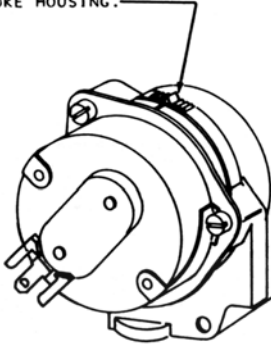


INITIAL CHOKE VALVE CLEARANCE ADJUSTMENT

FIG. 8.

ADJUSTMENTS

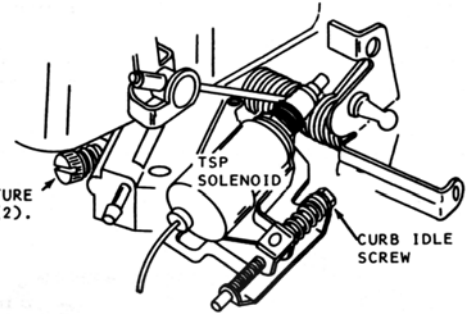
ROTATE CHOKE COVER AGAINST SPRING TENSION. SET MARK ON COVER TO SPECIFIED POINT ON CHOKE HOUSING.



AUTOMATIC CHOKE SETTING

FIG. 9

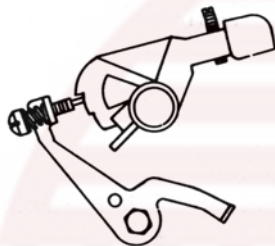
IDLE MIXTURE NEEDLES (2).



① USE FACTORY SERVICE MANUAL PROCEDURE AND SPECIFICATIONS LISTED ON ENGINE DECAL FOR SETTING CURB IDLE.

CURB IDLE ADJUSTMENT.

FIG. 10

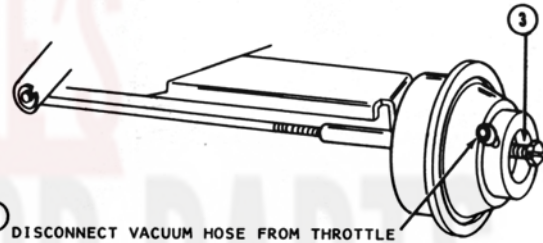


ADJUST CURB IDLE, THEN PLACE FAST IDLE SCREW ON SECOND STEP OF FAST IDLE CAM AND ADJUST FAST IDLE SCREW TO PROPER R.P.M.

FAST IDLE ADJUSTMENT

FIG. 11

① ENGINE AT OPERATING TEMPERATURE AND CURB IDLE ADJUSTED. (TACHOMETER CONNECTED) TRANSMISSION IN NEUTRAL.



②

DISCONNECT VACUUM HOSE FROM THROTTLE POSITIONER & PLUG. CONNECT OUTSIDE VACUUM SOURCE OF AT LEAST 10" HG. TO VACUUM FITTING OF THROTTLE POSITIONER AND CHECK R.P.M.

③

TO ADJUST TURN SCREW. (1900 R.P.M. + - 50 R.P.M.)

④

REMOVE VACUUM SOURCE ENGINE SHOULD RETURN TO CURB IDLE.

(JEEP ONLY) - THROTTLE POSITIONER. (MODULATOR)

FIG. 12.

ADJUSTMENT DATA TABLE

YEAR	APPLICATION	METERING ROD	DRY FLOAT LEVEL	FLOAT LEVER AUX.	PUMP PIN HOLE	PUMP LINK HOLE	CHOKE INITIAL CLEARANCE	FAST IDLE CAM LINKAGE	UNLOADER	CHOKE PULLDOWN	AUTO CHOKE	FAST IDLE R.P.M.
1975	PASS CARS 360", 401" ENG. A/T	.154	.900	.050	NO. 3	INNER	.144	.166	.325	---	2-RICH	1600
1975	JEEP & JEEP TRUCK 360", 401" ENG. A/T 360" ENG. M/T	.130 .130	.900 .900	.050 .050	NO. 3 NO. 3	INNER INNER	.147 .147	.166 .166	.325 .325	---	2-RICH 2-RICH	1600 1600
1975	POLICE 360", 401" ENG. A/T	.154	.940	.030	NO. 3	INNER	.144	.166	.325	---	2-RICH	1600
1976	PASS CARS 360", 401" ENG. A/T	.131	.900	.050	NO. 3	INNER	.132	.135	.325	.245	2-RICH	1600
1976	JEEP H.D. 360", 401" ENG. A/T 360", 401" ENG. M/T JEEP H.D. CALIF. 360" ENG. A/T	.128 .120 .122	.900 .900 .900	.050 .050 .050	NO. 3 NO. 3 NO. 3	INNER INNER INNER	.135 .135 .140	.135 .135 .135	.325 .325 .325	---	2-RICH 2-RICH 2-RICH	1600 1600 1600
1976	POLICE 360", 401" ENG. A/T	.124	.940	.030	NO. 3	INNER	.135	.135	.325	---	2-RICH	1600
1977	CHEROKEE, WAGONEER, TRK. 360", 401" ENG. A/T 360" (ALL) M/T 360", 401", CALIF. A/T (1 TON P.O. TRK.)	.128 .120 .122	.900 .900 .900	.050 .050 .050	NO. 3 NO. 3 NO. 3	INNER INNER INNER	.135 .135 .140	.135 .135 .135	.325 .325 .325	---	2-RICH 2-RICH 2-RICH	1600 1600 1600
1978	JEEP 360", 401" ENG. A/T 360" M/T	.128 .120	.900 .900	.050 .050	NO. 3 NO. 3	INNER INNER	.135 .135	.135 .135	.325 .325	---	2-RICH 2-RICH	1600 1600

FLOAT LEVEL GAUGE
.900 = 29/32
.940 = 15/16"