



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

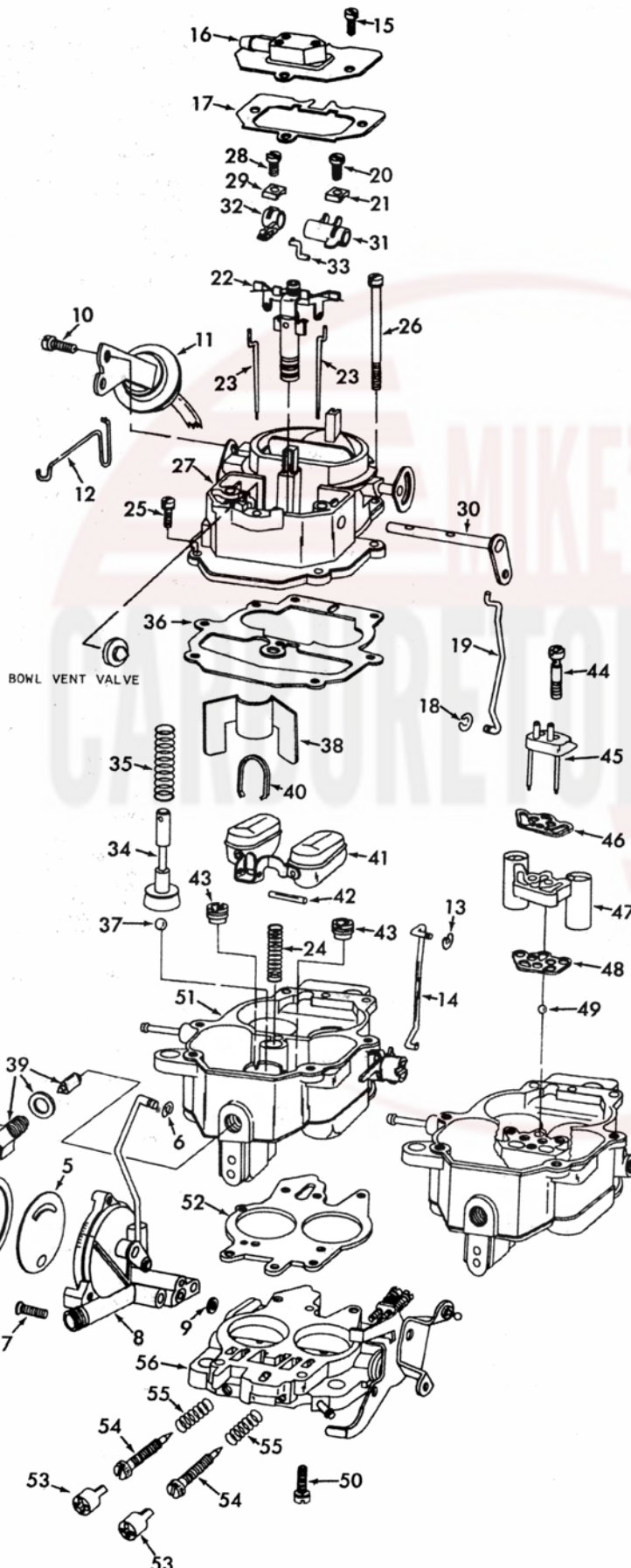
OFF VEHICLE CARBURETOR SERVICE

CARTER MODEL — BBD

50-529-8

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

HOT/AIR CHOKE



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: TURN IDLE LIMITER CAPS AGAINST STOPS. THEN IDLE LIMITER CAPS CAN BE REMOVED BY INSTALLING A NO. 10 SHEET METAL SCREW INTO CENTER OF CAP AND TURN CLOCKWISE. CAP REMOVED COUNT NUMBER OF TURNS REQUIRED TO SEAT EACH SCREW & RECORD. (MODELS WITH BOWL VENT VALVE, ROTATE LEVER UP AS FAR AS POSSIBLE TO REMOVE RUBBER VENT VALVE FROM LEVER.)

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (3)- CHOKE COVER RETAINER	29. WASHER- PUMP ARM
2. RETAINER(3)-CHOKE COVER	30. SHAFT- PUMP
3. CHOKE COVER ASSY.	31. ARM- METERING ROD
4. GASKET- CHOKE COVER	32. ARM- PUMP LINK
5. BAFFLE- CHOKE HOUSING	33. LINK- PUMP
6. RETAINER- CHOKE ROD	34. PUMP ASSY.
7. SCREW (2)- CHOKE HOUSING	35. SPRING- PUMP
8. HOUSING ASSY.- CHOKE	36. GASKET- BOWL COVER
9. SEAL- VAC. PASSAGE	37. BALL- PUMP INTAKE CHECK (LARGE)
10. SCREW (2)- CHOKE PULL OFF	38. BAFFLE- FUEL BOWL
11. CHOKE PULL OFF ASSY.	39. NEEDLE, SEAT & GASKET ASSY.
12. LINK- CHOKE PULL OFF	40. RETAINER- FLOAT PIN
13. RETAINER- FAST IDLE ROD	41. FLOAT ASSY.
14. ROD- FAST IDLE	42. PIN- FLOAT
15. SCREW (3)- DUST COVER	43. JET (2)- MAIN
16. COVER ASSY.- DUST	44. SCREW (2)- VENTURI CLUSTER
17. GASKET- COVER	45. COVER- VENTURI
18. RETAINER- PUMP ROD	46. GASKET- VENTURI COVER
19. ROD- PUMP	47. CLUSTER ASSY. VENTURI
20. SCREW- METERING ROD ARM WASHER	48. GASKET- VENTURI CLUSTER
21. WASHER- METERING ROD ARM	49. BALL- PUMP DISC. CHECK (SMALL)
22. PISTON ASSY.- VACUUM	50. SCREW & LOCKWASHER (2)- THROTTLE BODY
23. ROD (2)- METERING	51. BOWL ASSY.
24. SPRING- VACUUM PISTON	52. GASKET- THROTTLE BODY
25. SCREW & LOCKWASHER (4)- BOWL COVER	53. CAP (2)- IDLE LIMITER
26. SCREW & LOCKWASHER (2)- BOWL COVER	54. NEEDLE (2)- IDLE ADJUSTING
27. BOWL COVER ASSY.	55. SPRING (2)- IDLE ADJ. NEEDLE
28. SCREW- PUMP ARM WASHER	56. THROTTLE BODY 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 ASSEMBLYS WITH ATTACHED PLASTIC PARTS FOR A LONG PERIOD OF TIME. DO NOT SOAK ANY PARTS CONTAINING RUBBER OR DIAPHRAGM ASSYS.

REASSEMBLY

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

SPECIAL INSTRUCTIONS

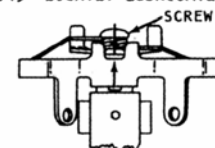
IDLE ADJUSTING NEEDLES (54)- TURN IN UNTIL LIGHTLY SEATED THEN BACK OUT NUMBER OF TURNS COUNTED ON DISASSEMBLY

FLOAT (41)- IF THE ARM NEEDLE CONTACT SURFACE IS GROOVED & FLOAT IS SERVICEABLE, POLISH THE NEEDLE CONTACT SURFACE OF THE ARM WITH CROCUS CLOTH.

RETAINER FLOAT PIN (40)- BE SURE RETAINER IS SEATING ON FLOAT PIN AND NOT HUNG UP IN GUIDE SLOTS.

PUMP ARM(32)- BE SURE S LINK IS IN THE OUTER HOLE OF THE PUMP ARM

PUMP PLUNGER(34)- LIGHTLY LUBRICATE CUP BEFORE INSTALLING.



VACUUM PISTON ASSY.(22)- BEFORE INSTALLING, ADJUST THE GAP (AS ILLUSTRATED) BY TURNING ALLEN HEAD SCREW ON TOP OF PISTON.

CARBURETOR MOUNTING NUTS.- LOOSELY TIGHTEN NUTS THEN ALTERNATELY TIGHTEN IN A CRISSCROSS PATTERN TO 13 FT. LBS TORQUE.

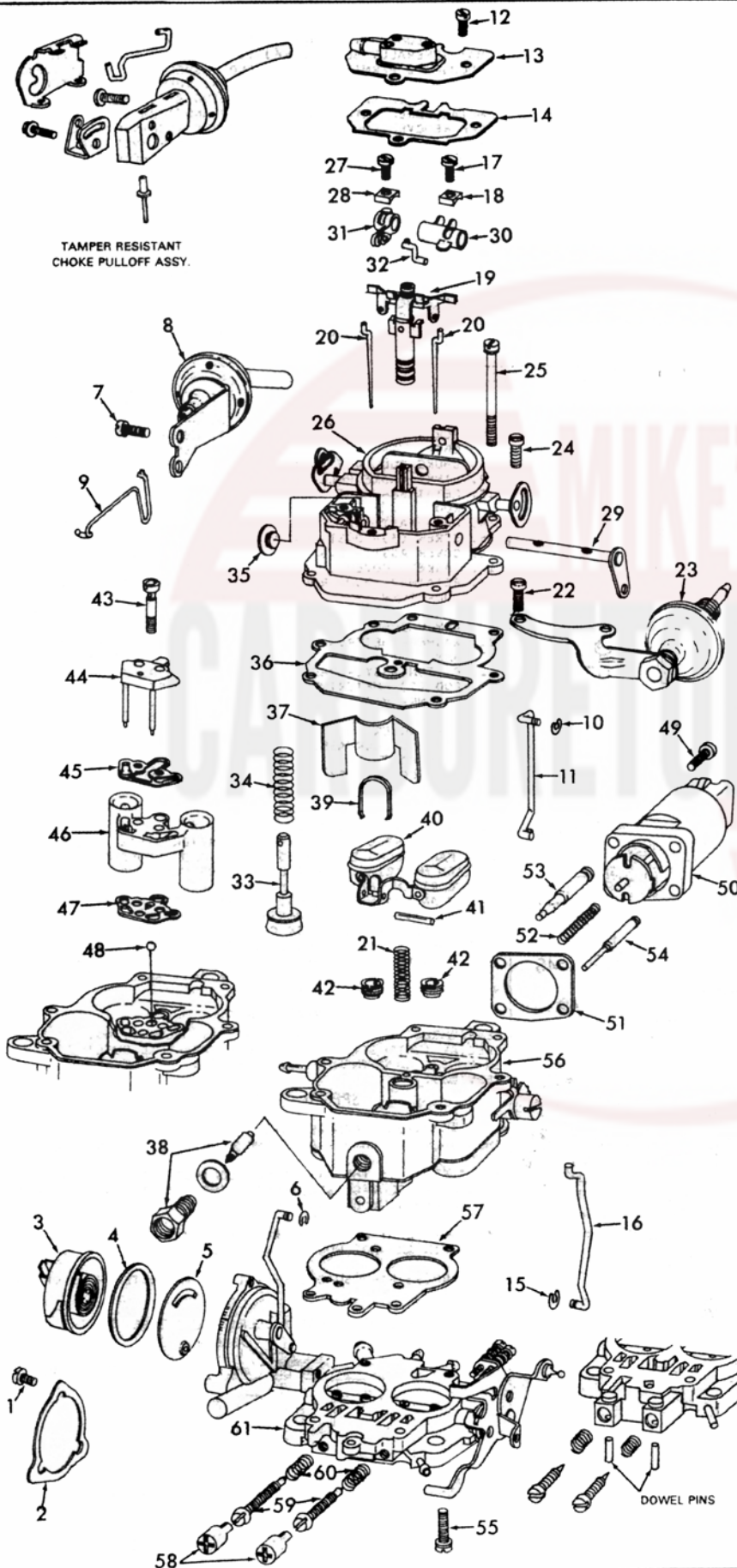
INSTRUCTION SHEET

CARTER CARBURETOR — MODEL BBD

WITH/STEPPER MOTOR

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: TURN IDLE LIMITER CAPS AGAINST STOPS. THEN IDLE LIMITER CAPS CAN BE REMOVED BY INSTALLING A NO. 10 SHEET METAL SCREW INTO CENTER OF CAP AND TURN CLOCKWISE. CAP REMOVED - COUNT NUMBER OF TURNS REQUIRED TO SEAT EACH SCREW AND RECORD. (MODELS WITH BOWL VENT VALVE, ROTATE LEVER UP AS FAR AS POSSIBLE TO REMOVE RUBBER VENT VALVE FROM LEVER.)

TAMPER RESISTANT MODELS. GRIND HEADS OFF THE BREAKAWAY SCREWS RETAINING CHOKE COVER. REMOVE RETAINER COVER, GASKET, BAFFLE AND REMAINING PORTION OF SCREWS.

MODELS WITH MICRO SWITCH MOUNTED ON THE THROTTLE BODY, REMOVE CHOKE HOUSING AND MICRO SWITCH BEFORE CLEANING. MODELS WITH CHOKE PULL-OFF LINKAGE COVER, DRILL OFF POP-UP HEAD AND PUNCH OUT THE REMAINING PORTION OF RIVET TO REMOVE COVER. IDLE MIXTURE NEEDLES SEALED WITH A DOWEL PIN. TO REMOVE PIN USE A SHARP PUNCH HELD AT AN ANGLE AND DRIVE PIN OUT BOTTOM OF HOLE.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (3) - RETAINER	32. LINK - PUMP
2. RETAINER - CHOKE COVER	33. PUMP ASSY.
3. CHOKE COVER ASSY.	34. SPRING - PUMP
4. GASKET - CHOKE COVER	35. VALVE - BOWL VENT
5. BAFFLE - CHOKE HOUSING	36. GASKET - BOWL COVER
6. RETAINER - CHOKE ROD	37. BAFFLE - FUEL BOWL
7. SCREW (2) - CHOKE PULL OFF	38. NEEDLE, SEAT & GASKET ASSY.
8. CHOKE PULL OFF ASSY.	39. RETAINER - FLOAT PIN
9. LINK - CHOKE PULL OFF	40. FLOAT ASSY.
10. RETAINER - FAST IDLE ROD	41. PIN - FLOAT
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16. ROD - PUMP	47. GASKET - VENTURI CLUSTER
17. SCREW - METERING ROD ARM WASHER	48. BALL - PUMP DISC CHECK
18. WASHER - METERING ROD ARM	49. SCREW (4) - STEPPER MOTOR
19. PISTON ASSY. - VACUUM	50. STEPPER MOTOR ASSY.
20. ROD (2) - METERING	51. GASKET - STEPPER MOTOR
21. SPRING - VACUUM PISTON	52. SPRING - STEPPER MOTOR
22. SCREW & LKWSHR (2) - DASH POT	53. PIN - METERING (MAIN SYSTEM)
23. DASH POT & BRACKET ASSY.	54. PIN - METERING (LOW SPEED)
24. SCREW & LKWSHR (2) - BOWL COVER	55. SCREW & LKWSHR (2) - THROTTLE BODY
25. SCREW & LKWSHR (2) - BOWL COVER	56. BOWL ASSY.
26. BOWL COVER ASSY.	57. GASKET - THROTTLE BODY
27. SCREW - PUMP ARM WASHER	58. CAP (2) - IDLE LIMITER
28. WASHER - PUMP ARM	59. NEEDLE (2) - IDLE ADJUSTING
29. SHAFT - PUMP	60. SPRING (2) - IDLE ADJ. NEEDLE
30. ARM - METERING ROD	61. THROTTLE BODY ASSY.
31. ARM - PUMP LINK	

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REASSEMBLY

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

NOTE SPECIAL PROCEDURE ON TAMPER RESISTANT MODELS SEE FIG. 5 & 6.

SPECIAL INSTRUCTIONS

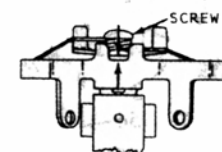
IDLE ADJUSTING NEEDLES (59) - TURN IN UNTIL LIGHTLY SEATED THEN BACK OUT NUMBER OF TURNS COUNTED ON DISASSEMBLY.

FLOAT (40) - IF THE ARM NEEDLE CONTACT SURFACE IS GROOVED & FLOAT IS SERVICEABLE, POLISH THE NEEDLE CONTACT SURFACE OF THE ARM WITH CROCUS CLOTH.

RETAINER FLOAT PIN (39) - BE SURE RETAINER IS SEATING ON FLOAT PIN AND NOT HUNG UP IN GUIDE SLOTS.

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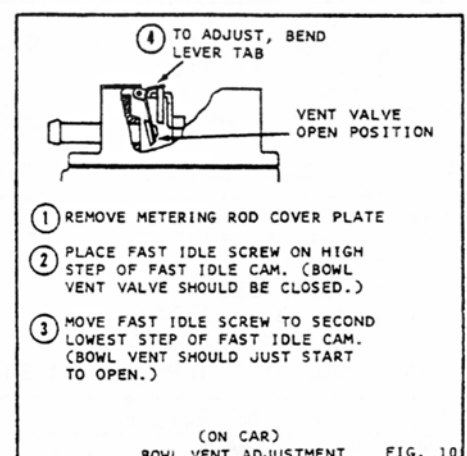
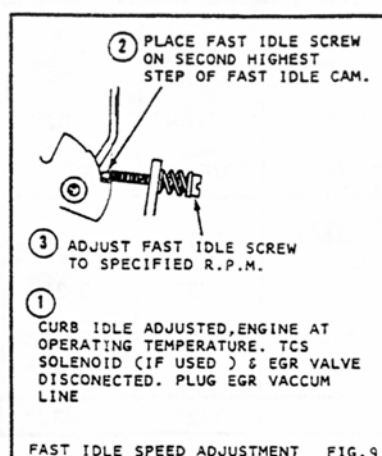
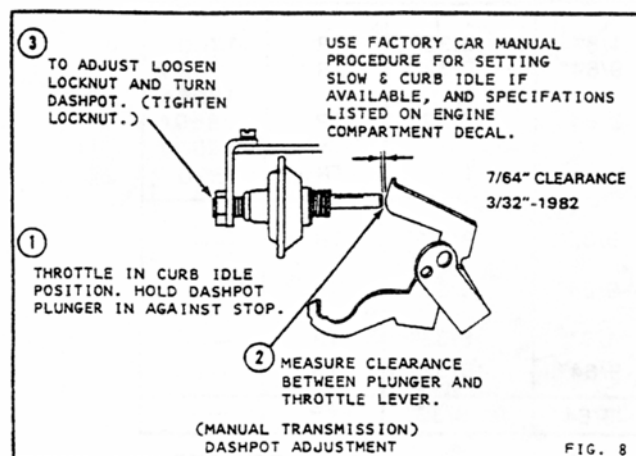
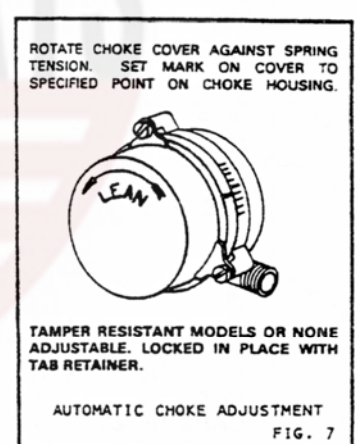
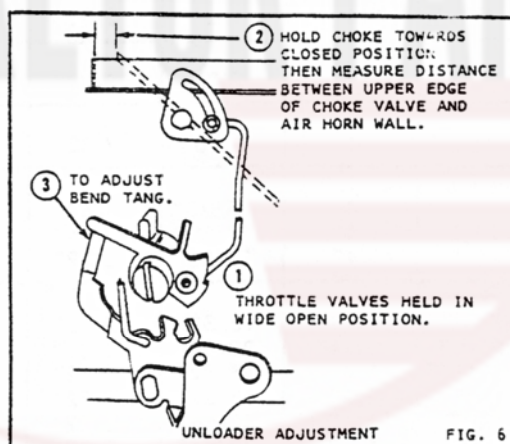
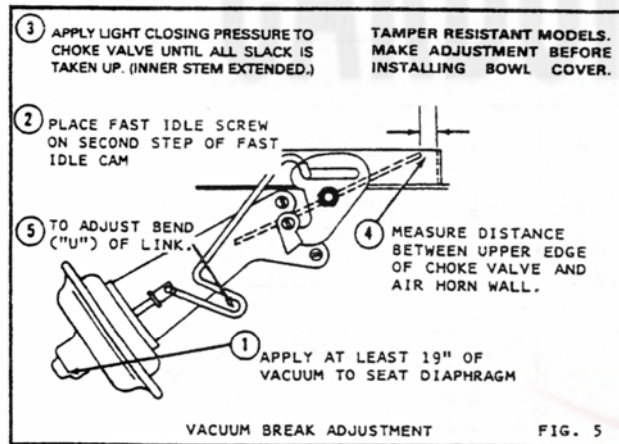
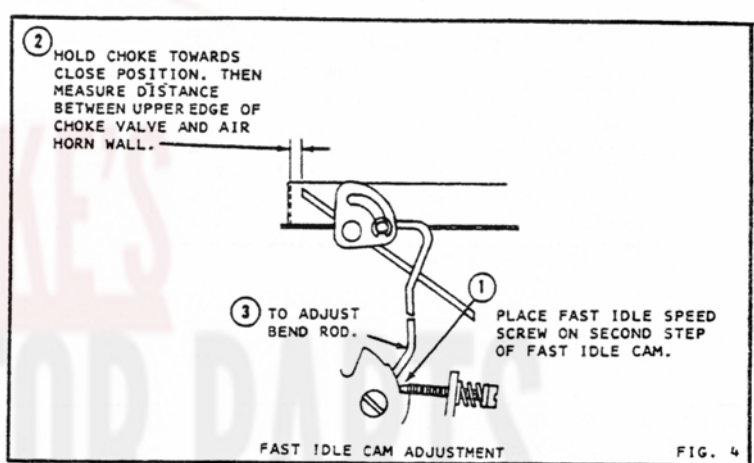
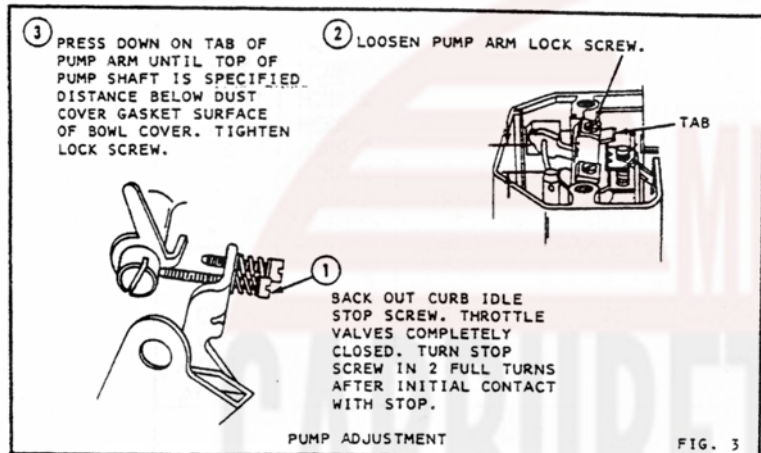
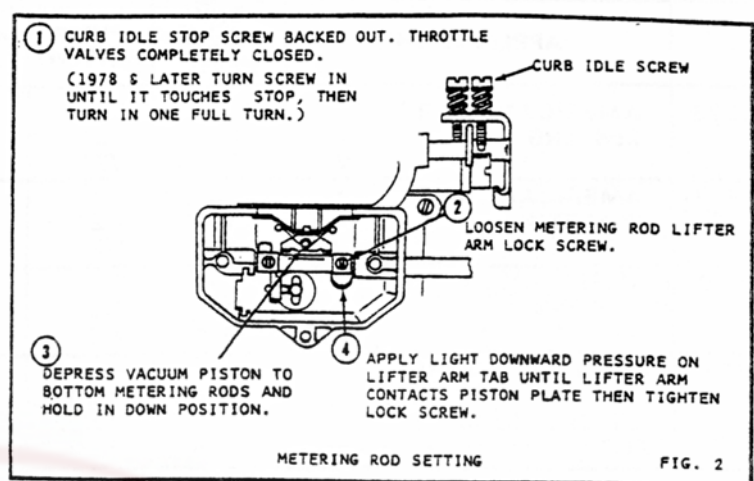
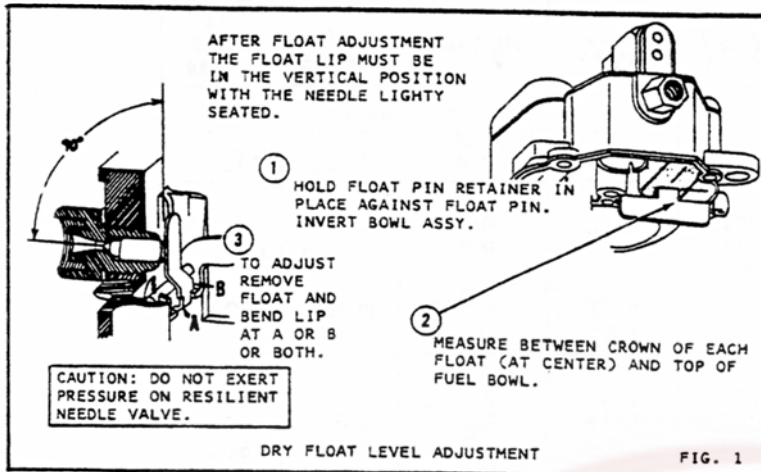
1974 - 83 .035" GAP

VACUUM PISTON ASSY. (19) - BEFORE INSTALLING, ADJUST THE GAP (AS ILLUSTRATED) BY TURNING ALLEN HEAD SCREW ON TOP OF PISTON

CARBURETOR MOUNTING NUTS - LOOSELY TIGHTEN NUTS THEN ALTERNATELY TIGHTEN IN A CRISSCROSS PATTERN TO 13 FT. LBS. TORQUE.

DOWEL PINS

ADJUSTMENTS



ADJUSTMENT DATA TABLE

	APPLICATION	DRY FLOAT LEVEL	PUMP SETTING	FAST IDLE CAM SETTING	VACUUM BREAK	UNLOADER	AUTO CHOKE	FAST IDLE R.P.M.
1976	AMERICAN MTRS. 258" ENG. A/T M/T	1/4" 1/4"	1/2" 1/2"	3/32" 3/32"	1/8" 1/8"	1/4" 1/4"	2-RICH 1-RICH	1700 1700
1977	AMERICAN MTRS. 258" ENG. A/T M/T	1/4" 1/4"	1/2" 1/2"	7/64" 3/32"	5/32" 1/8"	9/32" 9/32"	1-RICH 1-RICH	1600 1500
1978	AMERICAN MTRS. 258" ENG. A/T M/T	1/4" 1/4"	1/2" 1/2"	7/64" 3/32"	5/32" 1/8"	9/32" 9/32"	INDEX 1-RICH	1600 1500
1979	AMERICAN MTRS. 258" ENG. A/T H/T (Carb. NO. 8221) A/T ALL M/T	1/4" 1/4" 1/4"	15/32" 17/32" 17/32"	7/64" 7/64" 7/64"	9/64" 5/32" 5/32"	9/32" 9/32" 9/32"	1-RICH 1-RICH 1-RICH	1600 1600 1500
1980	AMERICAN MTRS. 258" ENG. CARB. NO. 8216 CALIF. A/T CARB. NO. 8247 CALIF. M/T CARB. NO. 8253 CALIF. A/T CARB. NO. 8246 49S M/T CARB. NO. 8248 49S A/T CARB. NO. 8256 49S A/T CARB. NO. 8313 49S A/T CARB. NO. 8278 ALT. A/T	1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4"	33/64" 33/64" 15/32" 33/64" 33/64" 15/32" 33/64" 17/32"	3/32" 3/32" 3/32" 3/32" 3/32" 3/32" 3/32" 3/32"	9/64" 5/32" 1/8" 9/64" 5/32" 1/8" 1/8" 9/64"	9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32"	2-RICH 1-RICH 2-RICH 2-RICH 1-RICH 2-RICH 1-RICH INDEX	1850 1700 1850 1850 1700 1850 1850 1850
1981	AMERICAN MTRS. 258" ENG. CARB. NO. 8308, 8309 ALL/T CARB. NO. 8310 A/T ALL OTHERS ALL/T	1/4" 1/4" 1/4"	33/64" 33/64" 1/2"	3/32" 3/32" 3/32"	1/8" 9/64" 1/8"	9/32" 9/32" 9/32"	TR TR TR	1700 1850 1700M 1850A
1982-86	AMERICAN MTRS. 258" ENG. CARB. NO. 8310, 8338, 8339, 8360, 8362, 8364, 8367, 8383, 8384 ALL/T	1/4"	1/2"	3/32"	9/64"	9/32"	TR	--
1977	JEEP, TRUCK 258" ENG. ALL/T	1/4"	7/16"	3/32"	9/64"	9/32"	2-RICH	1650
1978	JEEP (ALL MODELS) 258" ENG. ALL/T	1/4"	7/16"	3/32"	9/64"	9/32"	2-RICH	1650
1979	JEEP (ALL MODELS) 258" ENG. A/T M/T H/T (CARB. NO. 8229) M/T	1/4" 1/4" 1/4"	15/32" 17/32" 17/32"	7/64" 7/64" 3/32"	9/64" 5/32" 1/8"	9/32" 9/32" 9/32"	1-RICH 1-RICH 1-RICH	1600 1500 1500
1980	JEEP 258" ENG. CARB. NO. 8253 CALIF. A/T CARB. NO. 8254 CALIF. M/T CARB. NO. 8255 49S ALL/T CARB. NO. 8256 49S A/T CARB. NO. 8257 49S M/T CARB. NO. 8277 ALT. M/T	1/4" 1/4" 1/4" 1/4" 1/4" 1/4"	15/32" 33/64" 15/32" 15/32" 33/64" 33/64"	3/32" 3/32" 3/32" 3/32" 3/32" 3/32"	1/8" 1/8" 9/64" 1/8" 1/8" 1/8"	9/32" 9/32" 9/32" 9/32" 9/32" 9/32"	2-RICH 2-RICH 2-RICH 2-RICH 2-RICH 1-RICH	1850 1700 1700M 1850 1700 1700
1981	JEEP 258" ENG. CARB. NO. 8311 M/T CARB. NO. 8312 ALL/T ALL OTHERS ALL/T	1/4" 1/4" 1/4"	33/64" 1/2" 33/64"	.085" 3/32" 3/32"	1/8" 9/64" 9/64"	9/32" 9/32" 9/32"	TR TR TR	1700 1700M 1850A 1850A 1700M 1850
1981-82	CARB. NO. 8310	1/4"	33/64"	3/32"	9/64"	9/32"	TR	1850
1982	JEEP 258" ENG. CARB. NO. 8340 A/T CARB. NO. 8341, 8354, 8355 CARB. NO. 8349, 8351, 8357	1/4" 1/4" 1/4"	1/2" 1/2" 1/2"	7/64" 3/32" 3/32"	5/32" 9/64" 1/8"	9/32" 9/32" 9/32"	TR TR TR	-- -- --
1983	CARB. NO. 8360, 8362, 8364, 8367	1/4"	1/2"	3/32"	9/64"	9/32"	TR	--
1984-86	CARB. NO. 8383, 8384	1/4"	1/2"	3/32"	9/64"	9/32"	TR	--

H/T=HILLY TERRAIN
TR=TAMPER RESISTANT

REV. 2/87