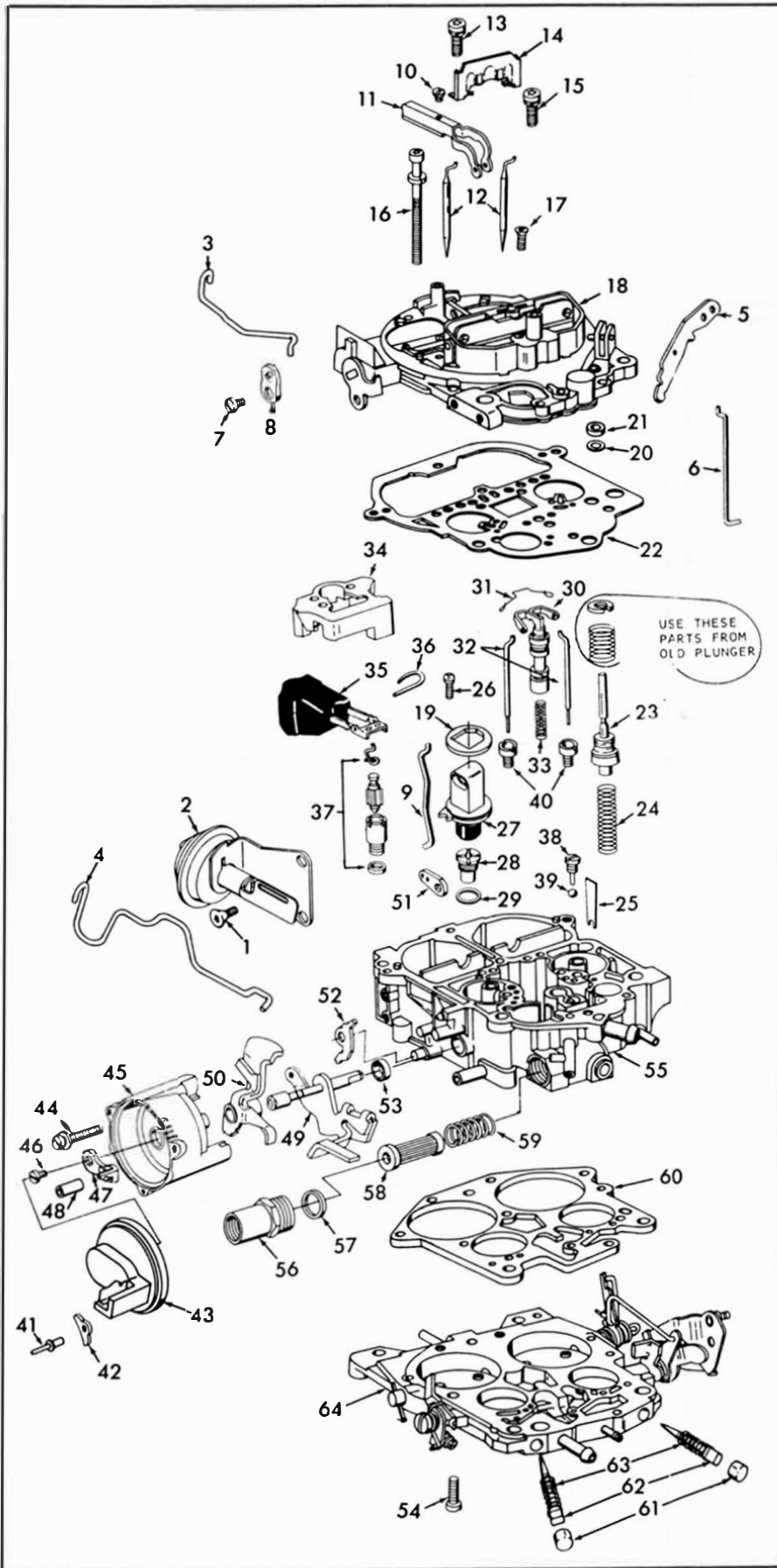


# INSTRUCTION SHEET

## OFF VEHICLE CARBURETOR SERVICE

### ROCHESTER MODELS M4MED - M4MEF

**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 PUMP LEVER (5) JUST DRIVE PIN IN FAR ENOUGH TO RELEASE LEVER. BOWL COVER SCREWS (17) ARE INSIDE AIR HORN. DO NOT REMOVE BRASS TUBES FROM BOWL COVER. CAREFULLY PRY UP OR BOUNCE POWER PISTON ASSY. (30) TO RELEASE PLASTIC LOCK RING HOLDING IT IN PLACE CAUTION: NO ATTEMPT SHOULD BE MADE TO READJUST OR REMOVE ADJUSTING SCREW LOCATED DIRECTLY IN FRONT OF POWER PISTON OR RICH STOP BUSHING LOCATED IN THE BOWL COVER ABOVE THE POWER PISTON ASSY. (WHERE USED). FACTORY ADJUSTED TO MEET EMISSION REQUIREMENTS. SOME UNITS MAY HAVE FRONT AND/OR REAR VACUUM BREAK UNITS.

TO REMOVE CHOKE COVER CAREFULLY ALIGN A #21 DRILL (1597) ON POP RIVET HEAD AND DRILL ENOUGH TO REMOVE RIVET HEAD. DRILL ALL 3 RIVET HEADS USE A DRIFT PUNCH AND HAMMER. DRIVE THE REMAINDER OF RIVETS OUT OF THE CHOKE HOUSING. REMOVE CHOKE COMPONENTS.

TO REMOVE IDLE MIXTURE NEEDLE PLUGS SEE FIG. (11).

#### NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (2) - REAR VAC BREAK	30. POWER PISTON ASSY.
2. REAR VAC. BREAK ASSY.	31. SPRING - METERING ROD
3. LINK - REAR VAC. BREAK TO AIRVALVE LEVER	32. METERING ROD (2) - PRIMARY
4. LINK - REAR VAC BREAK TO CHOKE	33. SPRING - POWER PISTON
5. LEVER - PUMP	34. INSERT - FLOAT BOWL
6. ROD - PUMP	35. FLOAT & LEVER ASSY.
7. SCREW - CHOKE LEVER	38. HINGE PIN - FLOAT
8. LEVER - CHOKE SHAFT	37. NEEDLE & SEAT ASSY.
9. ROD - CHOKE	38. PLUG - PUMP DISC BALL
10. SCREW - SEC. METERING ROD HOLDER	39. BALL - PUMP DISC
11. HOLDER - SEC. METERING RODS.	40. JET (2) - PRIMARY MAIN
12. METERING ROD (2) - SECONDARY	41. RIVET (3) - CHOKE RETAINER
13. SCREW & LOCKWASHER (2) - BAFFLE	42. RETAINER (3) - CHOKE COVER
14. BAFFLE - BOWL COVER	43. CHOKE COVER ASSY. - ELECTRIC
15. SCREW & LOCKWASHER (7) - BOWL COVER	44. SCREW - CHOKE HOUSING
16. SCREW & LOCKWASHER (2) - BOWL COVER	45. CHOKE HOUSING ASSY.
17. SCREW (2) - BOWL COVER (TAPERED HEAD)	48. SCREW - STAT COIL LEVER
18. BOWL COVER ASSY.	47. LEVER - STAT COIL
19. GASKET - SOLENOID CONNECTOR	48. BUSHING (PLASTIC) - STAT LEVER
20. RETAINER - PUMP STEM SEAL	49. SHAFT ASSY. - INTERMEDIATE CHOKE
21. SEAL - PUMP STEM	50. CAM - FAST IDLE
22. GASKET - BOWL COVER	51. LEVER - INTERMEDIATE CHOKE
23. PUMP PLUNGER ASSY.	52. CAM - SECONDARY LOCKOUT
24. SPRING - PUMP RETURN	53. SEAL - INTERMEDIATE CHOKE SHAFT
25. BAFFLE - PUMP WELL	54. SCREW & LOCKWASHER (3) - THROTTLE BODY
26. SCREW - PUMP SOLENOID (DUAL CAPACITY)	55. FLOAT BOWL ASSY.
27. SOLENOID ASSY. - PUMP	56. FILTER NUT - FUEL INLET
28. VALVE ASSY. - PUMP	57. GASKET - FILTER NUT
29. GASKET - PUMP VALVE ASSY.	58. FILTER - FUEL
	59. SPRING - FILTER
	60. GASKET - THROTTLE BODY
	61. PLUG (2) - IDLE NEEDLE (NOT REPLACED)
	62. NEEDLE (2) - IDLE ADJ.
	63. SPRING (2) - IDLE ADJ. NEEDLE
	64. 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 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 UNITS, SOLENOIDS, FLOAT, ELECTRIC CHOKE OR PARTS CONTAINING RUBBER OR PLASTIC IN CLEANING SOLVENTS.

#### REASSEMBLY

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

#### SPECIAL INSTRUCTIONS

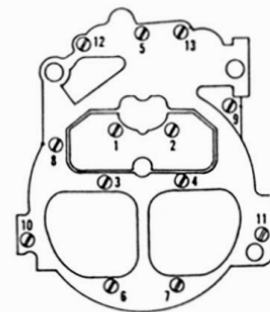
IDLE ADJUSTING NEEDLES (62) - TURN EACH NEEDLE IN UNTIL LIGHTLY SEATED. THEN BACK OUT 3-4 TURNS. FOLLOW VEHICLE MANUFACTURERS' PROCEDURES TO COMPLETE IDLE ADJUSTMENT ON CAR.

FUEL FILTER (58) - BE SURE TO USE FILTER WITH BUILT IN ROLL OVER CHECK VALVE AND WITH CHECK VALVE FACING OUT. TIGHTEN FILTER NUT TO 18 FT. LBS.

INTERMEDIATE CHOKE SEAL (53) LIP OF SEAL IS FACING OUT.

POWER PISTON AND METERING ROD INSTALLATION. BE CAREFUL TO PROPERLY POSITION METERING RODS IN METERING JETS AND THE PLASTIC RETAINER FOR PISTON IS PROPERLY LOCKED IN PLACE.

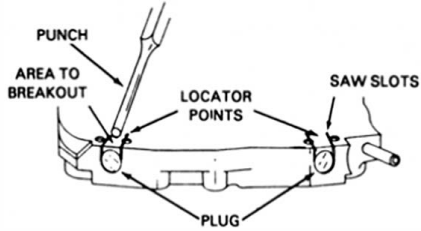
BOWL COVER INSTALLATION  
TIGHTEN BOWL COVER SCREWS  
IN SEQUENCE AS SHOWN.



# ADJUSTMENTS

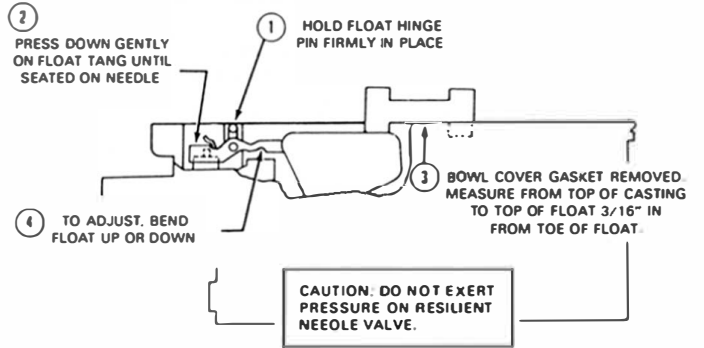
## IDLE MIXTURE NEEDLE PLUG REMOVAL

SAW 2 SLOTS AS SHOWN (DO NOT EXTEND MORE THAN 1/8" BEYOND LOCATOR POINTS). SUPPORT THROTTLE BODY. THEN PLACE A PUNCH BETWEEN THE TWO LOCATOR POINTS IN THROTTLE BODY. HOLDING PUNCH AT 45° ANGLE BREAK OUT THROTTLE BODY CASTING TO GAIN ACCESS TO THE HARDENED STEEL PLUG. HOLD A CENTER PUNCH VERTICAL DRIVE IT INTO THE STEEL PLUG (HARDENED) PLUG WILL BREAK. REMOVE PIECES TO GAIN ACCESS TO IDLE MIXTURE NEEDLE.



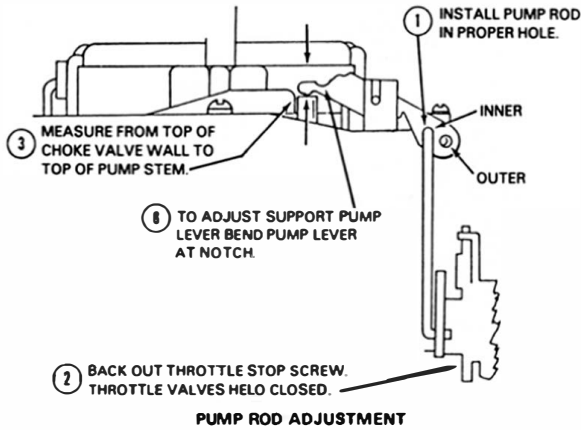
IDLE MIXTURE NEEDLE PLUG REMOVAL

FIG 1



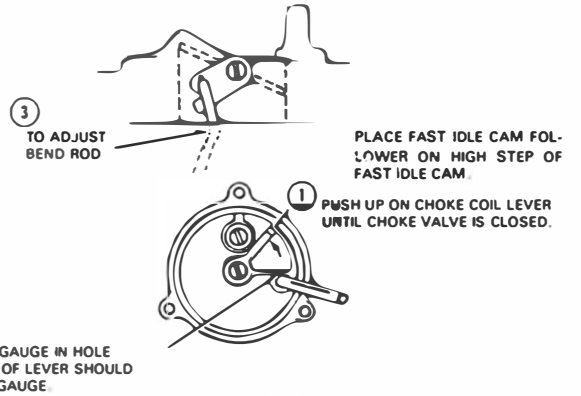
DRY FLOAT LEVEL ADJUSTMENT

FIG. 2



PUMP ROD ADJUSTMENT

FIG 3

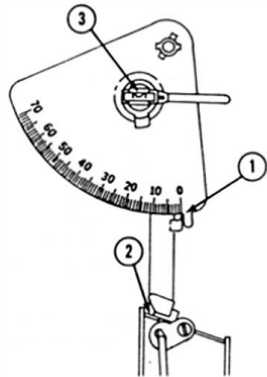


CHOKE COIL LEVER ADJUSTMENT

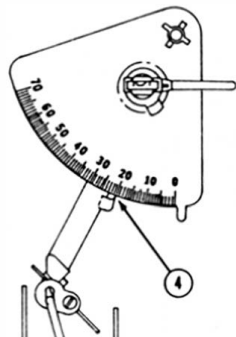
FIG. 4

CAUTION: PLACE CARBURETOR ON HOLDING FIXTURE SO THAT IT WILL REMAIN IN SAME POSITION WHEN GAUGE IS IN PLACE.

1. ROTATE DEGREE SCALE UNTIL ZERO (0) IS OPPOSITE POINTER.
2. CHOKE VALVE HELD COMPLETELY CLOSED. PLACE MAGNET SQUARELY ON TOP OF CHOKE VALVE
3. ROTATE BUBBLE UNTIL IT IS CENTERED.

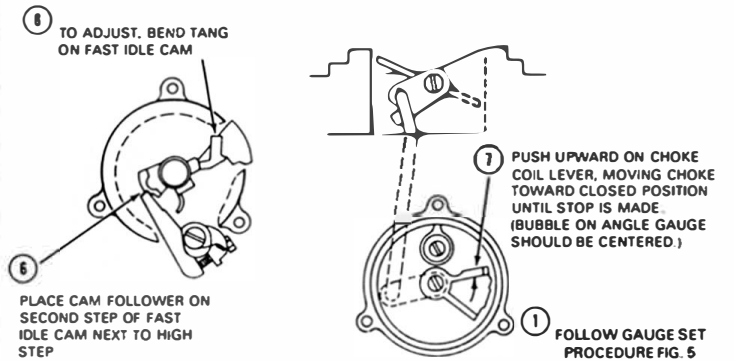


4. ROTATE SCALE SO THAT DEGREE SPECIFIED FOR ADJUSTMENT IS OPPOSITE POINTER.
  5. FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENT.
- GAUGE J-26701 KENT MOORE TOOL  
BT-7704 BORROUGHS TOOL



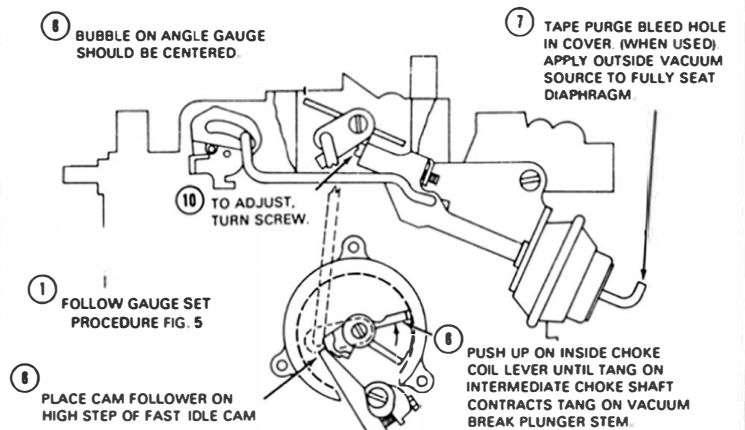
ANGLE GAUGE BASIC ADJUSTMENT

CONTINUE NUMERICAL OUTLINE IN EACH ADJUSTMENT USING DEGREE SETTING. FIG 5



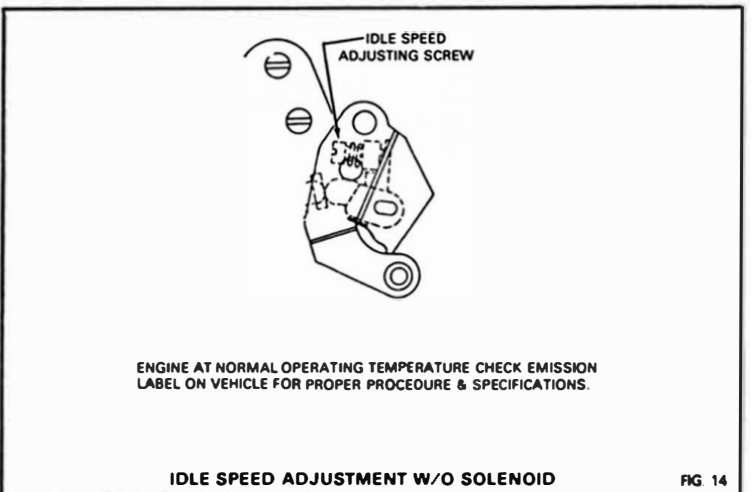
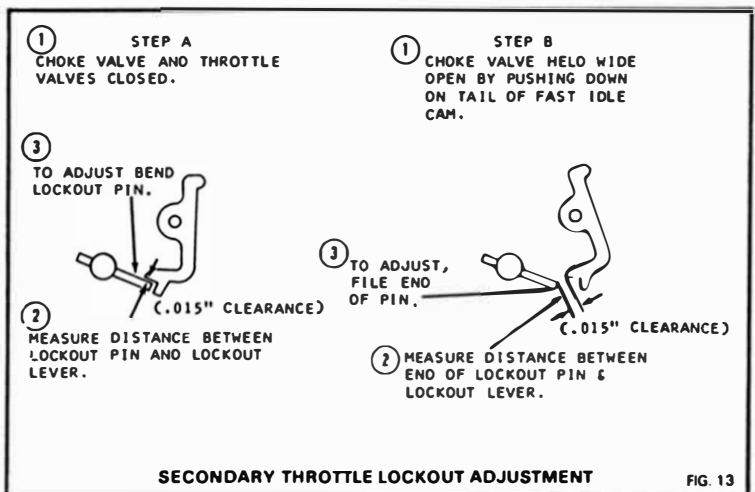
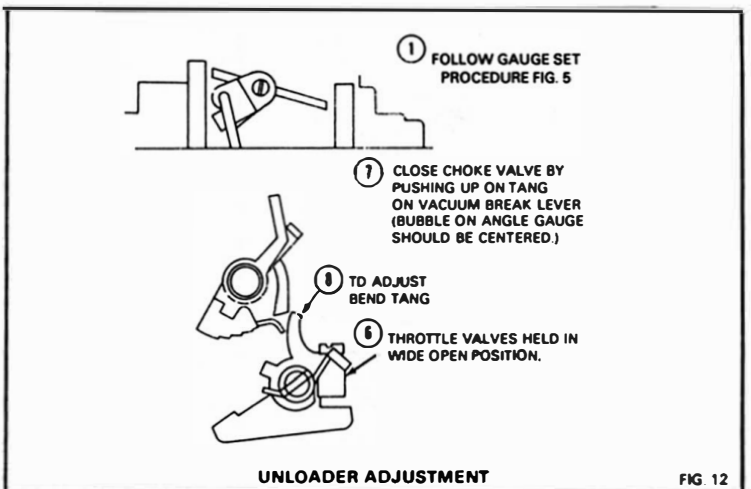
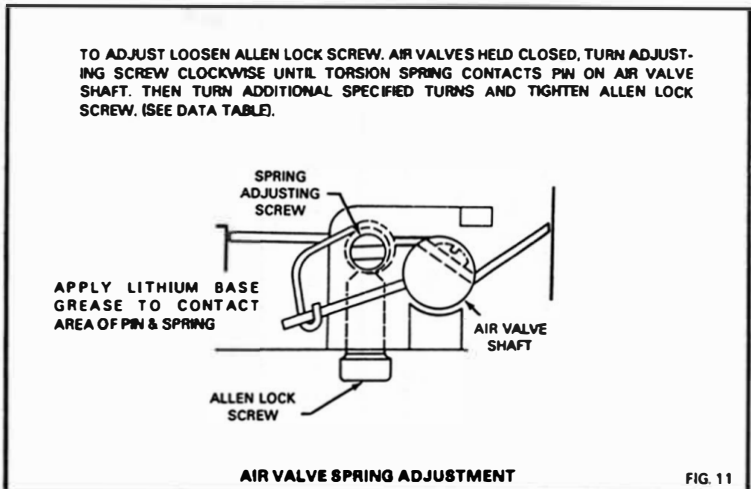
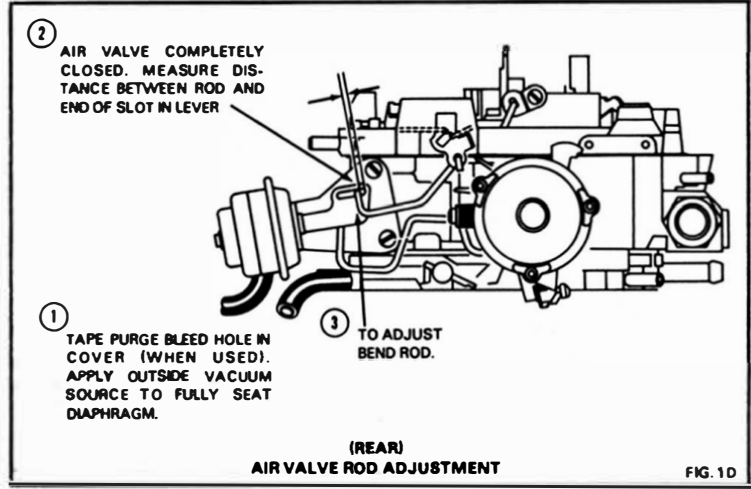
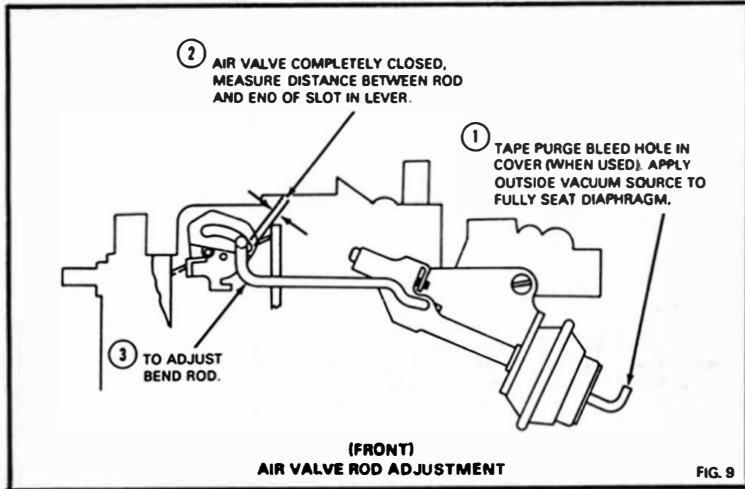
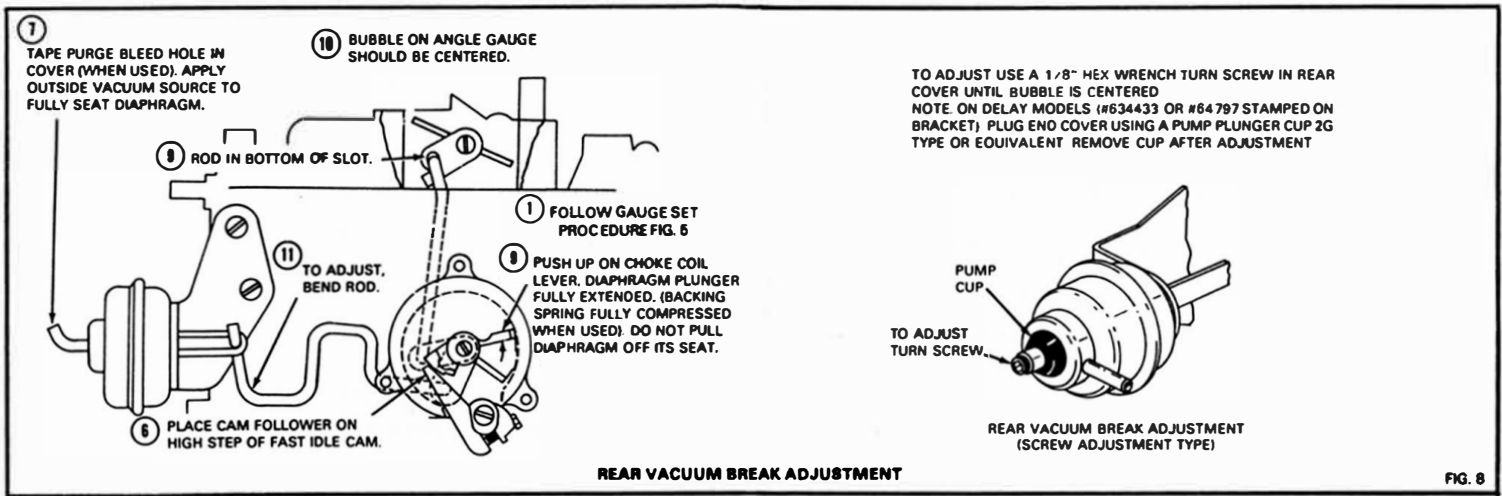
FAST IDLE CAM (CHOKE ROD) ADJUSTMENT

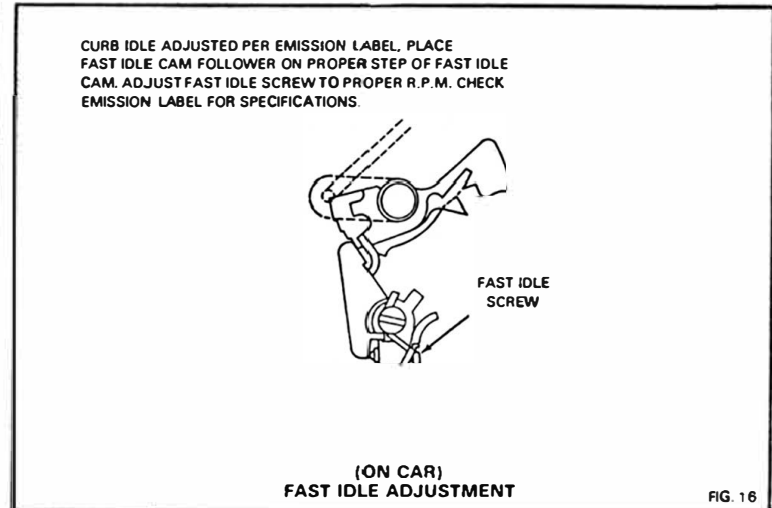
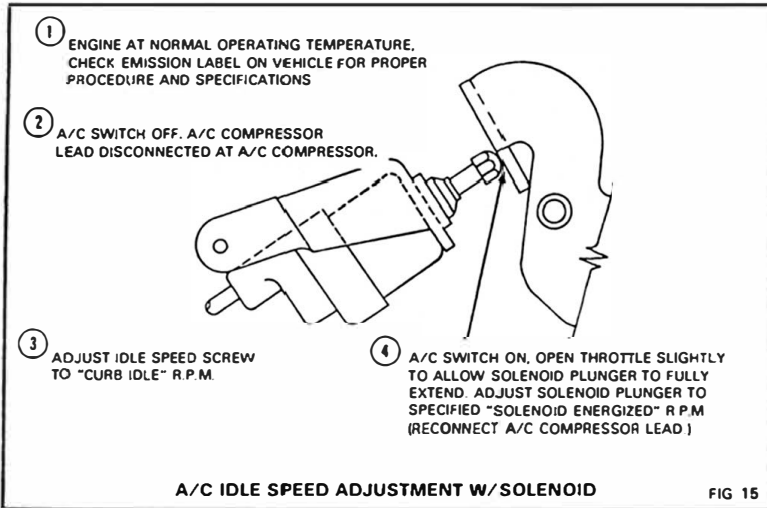
FIG. 6



FRONT VACUUM BREAK ADJUSTMENT

FIG. 7





**ADJUSTMENT DATA TABLE**

YEAR	MAKE	FLOAT LEVEL	PUMP ROD LOCATION	PUMP SETTING	CHOKE ROD	AIR VALVE ROD	VACUUM BREAK (FRONT)	VACUUM BREAK (REAR)	AIR VALVE SPRING (TURN)	UNLOADER ADJ.
1985	CHEVROLET & GMC TRUCK 281" ENG. (4.3L) CARB. NOS. 17085208, 210 CARB. NOS. 17085222, 224	13/32"	INNER	9/32"	20°	.025	28°	38°	7/8	39°
		13/32"	INNER	9/32"	20°	.025"	28°	38°	1/2	39°
1985-87	CHEVROLET & GMC TRUCK 305" ENG. (5.0L) CARB. NOS. 17085215, 228, 229, 230, 231  350" ENG. (5.7L) CARB. NOS. 17085208, 228, 229, 235, 290, 292, 294, 298 CARB. NOS. 17085003, 213  GM Carb. Nos. 17085000 GM Carb. Nos. 17085001  454" ENG. (7.4L) CARB. NOS. 17085004, 212	13/32"	INNER	9/32"	20°	.025"	--	25°	7/8	32°
		13/32"	INNER	9/32"	48°	.025"	--	25°	7/8	39°
		13/32"	INNER	9/32"	48°	.025"	27°	--	7/8	35°
		12/32"	INNER	9/32"	48°	.025	24°	30°	7/8	40°
		12/32"	INNER	9/32"	48°	.025	23°	30°	1	40°
		13/32"	INNER	9/32"	48°	.025"	23°	--	7/8	35°
1988	CHEVROLET & GMC TRUCK 281" ENG. (4.3L) CARB. NOS. 17086045, 047 CARB. NOS. 17088053, 055 CARB. NOS. 17088044, 048 CARB. NOS. 17088048, 054	17/32"	OUTER	3/8"	20°	.025"	28°	38°	7/8	39°
		17/32"	OUTER	3/8"	20°	.025"	28°	38°	1/2	39°
		17/32"	INNER	9/32"	20°	.025"	28°	38°	7/8	39°
		17/32"	INNER	9/32"	20°	.025"	28°	38°	1/2	39°
1988	CHEVROLET & GMC TRUCK 305" ENG. (5.0L) CARB. NOS. 17085231, 284 CARB. NOS. 17085283, 285  350" ENG. (5.7L) CARB. NOS. 17085235	13/32"	INNER	9/32"	20°	.025	--	28°	7/8	32°
		13/32"	INNER	9/32"	20°	.025	--	24°	7/8	32°
		13/32"	INNER	9/32"	48°	.025	--	28°	7/8	39°
1988	BUICK, CHEVROLET, PONTIAC, OLDS. 305" ENG. (5.0L) CANADA CARB. NOS. 17088580, 582 588, 590	3/8"	INNER	9/32"	15°	.025"	21°	--	7/8	30°