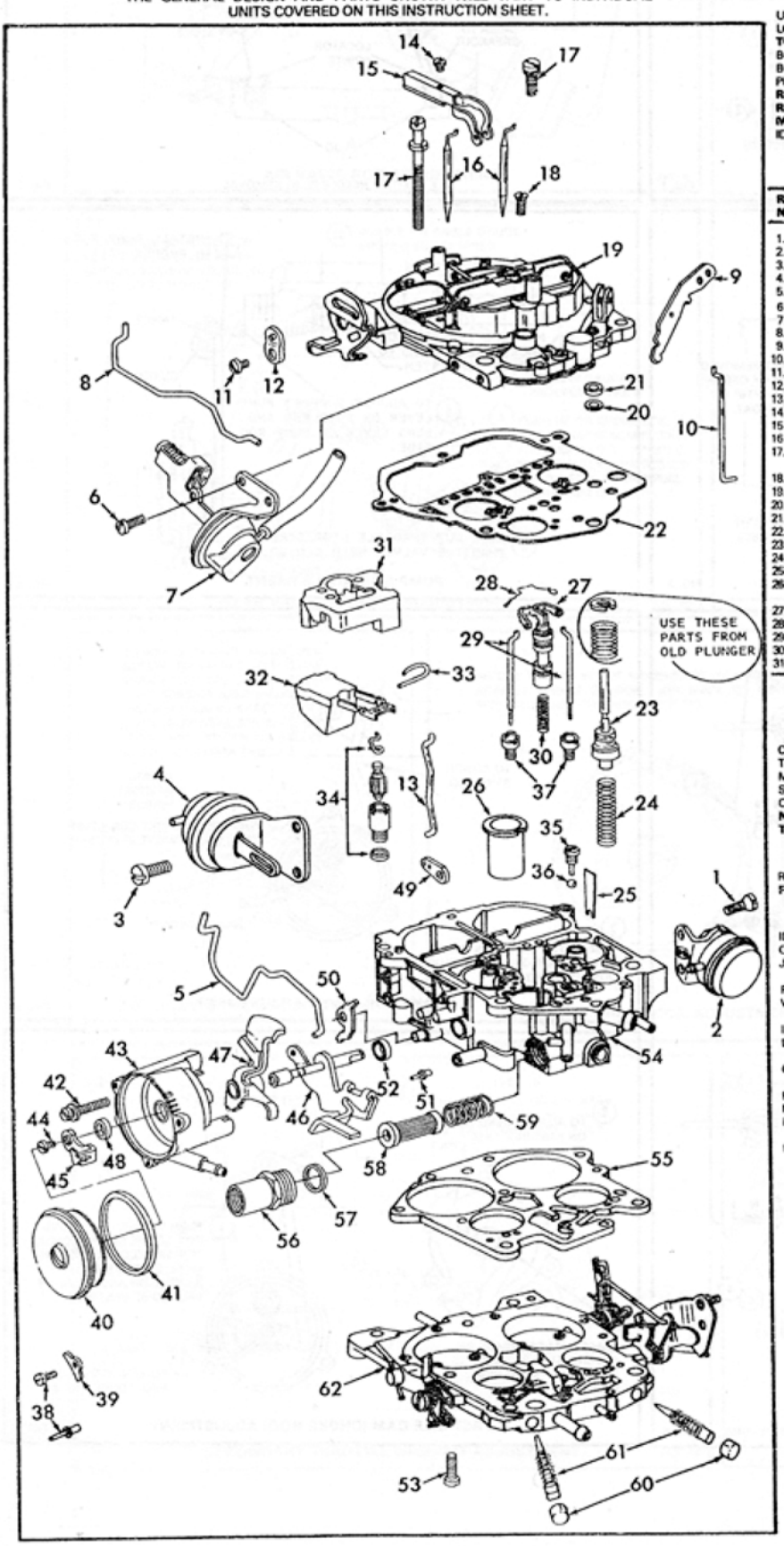
INSTRUCTION SHEET
OFF VEHICLE CARBURETOR SERVICE
ROCHESTER MODELS M4MC-M4ME

GF10581

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 (9) JUST DRIVE PIN IN FAR ENOUGH TO RELEASE LEVER.** BOWL COVER SCREWS (18) ARE INSIDE THE AIR HORN. DO NOT REMOVE BRASS TUBES FROM BOWL COVER. CAREFULLY PRY UP OR BOUNCE POWER PISTON ASSY. (27) TO RELEASE PLASTIC LOCK RING HOLDING IT IN PLACE. **A.P.T. ADJUSTMENT SCREW LOCATED DIRECTLY IN FRONT OF POWER PISTON. NO ATTEMPT SHOULD BE MADE TO READJUST OR REMOVE ADJUSTING SCREW. FACTORY ADJUSTED TO MEET EMISSION REQUIREMENTS.** FOR REMOVAL OF TAMPER RESISTANCE CHOKE COVER SEE FIG (1). TO REMOVE IDLE MIXTURE NEEDLE PLUGS SEE FIG (2).

NOMENCLATURE

REF. NO.	
1. SCREW (2) - THROTTLE LEVER ACTUATOR	32. FLOAT & LEVER ASSY.
2. THROTTLE LEVER ACTUATOR ASSY.	33. HINGE PIN - FLOAT
3. SCREW (2) - REAR VAC. BREAK	34. NEEDLE, SEAT & GASKET ASSY.
4. REAR VAC. BREAK ASSY.	35. PLUG - PUMP DISC. BALL
5. LINK - REAR VAC. BREAK	36. BALL - PUMP DISC.
6. SCREW (2) - FRONT VAC. BREAK	37. JET (2) - MAIN METERING
7. FRONT VAC. BREAK & HOSE ASSY.	38. SCREW/RIVET (3) - RETAINER
8. LINK - FRONT VAC. BREAK	39. RETAINER (3) - CHOKE COVER
9. LEVER - PUMP	40. CHOKE COVER ASSY.
10. ROD - PUMP	41. GASKET - CHOKE COVER (HOT AIR ONLY)
11. SCREW - CHOKE LEVER	42. SCREW & LOCKWASHER - CHOKE HOUSING
12. LEVER - CHOKE SHAFT	43. CHOKE HOUSING ASSY.
13. ROD - CHOKE	44. SCREW - STAT COIL LEVER
14. SCREW - SEC. METERING ROD HOLDER	45. LEVER - STAT COIL
15. HOLDER - SEC. METERING RODS	46. SHAFT ASSY. - INTERMEDIATE CHOKE
16. METERING ROD (2) - SECONDARY	47. CAM - FAST IDLE
17. SCREW & LOCKWASHER - BOWL COVER	48. SEAL - CHOKE HOUSING
18. SCREW (2) - BOWL COVER (TAPERED HEAD)	49. LEVER - INTERMEDIATE CHOKE
19. BOWL COVER ASSY.	50. CAM - SECONDARY LOCKOUT
20. RETAINER - PUMP STEM SEAL	51. TUBE - VAC. PASSAGE
21. SEAL - PUMP STEM (1980 UP)	52. SEAL - INTERMEDIATE CHOKE SHAFT
22. GASKET - BOWL COVER	53. SCREW & LOCKWASHER (3) - THROTTLE BODY
23. PUMP PLUNGER ASSY.	54. FLOAT BOWL ASSY.
24. SPRING - PUMP RETURN	55. GASKET - THROTTLE BODY
25. BAFFLE - PUMP WELL	56. FILTER NUT - FUEL INLET
26. INSERT - ANDIROD CAVITY (SOME MODELS)	57. GASKET - FILTER NUT
27. POWER PISTON ASSY.	58. FILTER - FUEL
28. SPRING - METERING ROD	59. SPRING - FILTER
29. METERING ROD (2) - PRIMARY	60. PLUG (2) - IDLE NEEDLE (NOT REPLACED)
30. SPRING - POWER PISTON	61. NEEDLE & SPRING ASSY. (2) - IDLE ADJ.
31. INSERT - FLOAT BOWL	62. 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 (61) - TURN EACH NEEDLE IN UNTIL LIGHTLY SEATED, THEN BACK OUT 3-4 TURNS. (FOLLOW VEHICLE MANUFACTURERS PROCEDURED TO COMPLETE IDLE ADJUSTMENT ON CAR.)

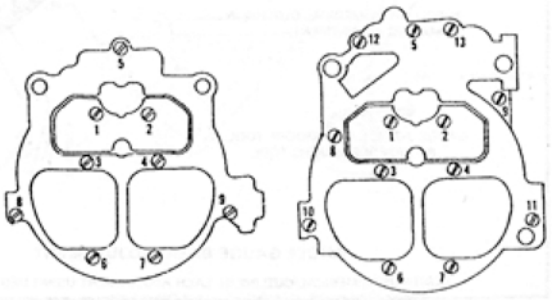
FUEL FILTER (58) - BE SURE TO USE FILTER WITH BUILT IN ROLL OVER CHECK VALVE AND WITH CHECK VALVE FACING OUT. TIGHTEN FILTER NUT TO 18 FT. LBS.

INTERMEDIATE CHOKE SEALS (48), (52) - SEAL (52) LIP OF SEAL IS FACING OUT AND SEAL (48) LIPS OF SEAL IS FACING IN.

CHOKE COVER GASKET (41) - DO NOT USE GASKET WITH ELECTRIC CHOKE COVER.

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.

PUMP WELL BAFFLE (25) - SLOT IN BAFFLE GOES TO BOTTOM OF SLOT IN PUMP WELL.



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

ADJUSTMENTS

1980-81

CAREFULLY ALIGN A #21 DRILL (.159") 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. REPLACEMENT RETAINERS AND SELF TAPPING SCREWS OR POP RIVETS ARE FOUND IN REPAIR KIT.

1980

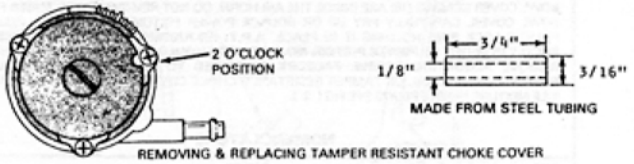
BEFORE ASSEMBLING CHOKE, START SELF TAPPING SCREWS IN CHOKE HOUSING TO BE SURE SCREWS START EASILY AND ARE ALIGNED PROPERLY.

CHOKE COVER INSTALLATION. ALIGN NOTCH IN COVER WITH RETAINER TAB (20° CLOCK) POSITION. TIGHTEN SCREWS EVENLY AND SECURELY.

1981

TO REASSEMBLE ALIGN NOTCH IN COVER WITH RETAINER TAB (20° CLOCK POSITION). CAUTION: BE SURE LOOP END OF COIL SPRING IS ON PIN OF COIL PICK UP LEVER. INSTALL RETAINERS AND NEW POP RIVETS TO SECURE CHOKE COVER.

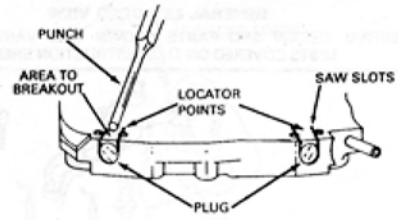
IT MAY BE NECESSARY TO USE AN ADAPTER (TUBE) IF INSTALLING TOOL INTERFERES WITH ELECTRICAL CONNECTOR TOWER ON CHOKE COVER.



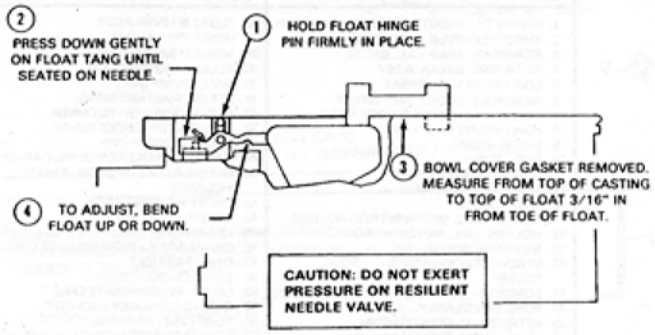
REMOVING & REPLACING TAMPER RESISTANT CHOKE COVER FIG. 1

IDLE MIXTURE NEEDLE PLUG REMOVAL

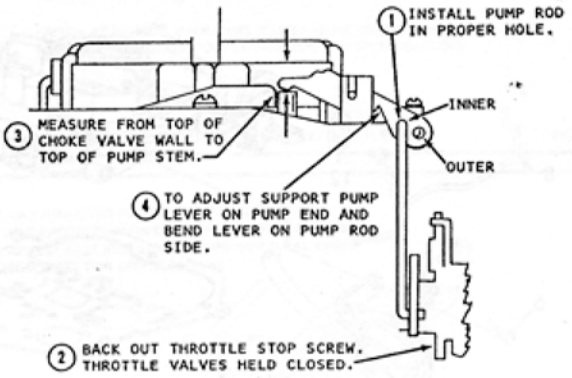
SAW 2 SLOTS AS SHOWN (DO NOT EXTEND MORE THAN 1/8" BEYOND LOCATOR POINTS). SUPPORT THROTTLE BODY, THEN PLACE A PUNCH BETWEEN THE TWO LOCATOR POINTS IN THROTTLE BODY. HOLDING PUNCH AT 45° ANGLE BREAK OUT THROTTLE BODY CASTING TO GAIN ACCESS TO THE HARDENED STEEL PLUG. HOLD A CENTER PUNCH VERTICAL DRIVE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



IDLE MIXTURE NEEDLE PLUG REMOVAL FIG. 2

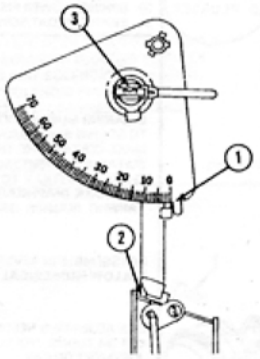


DRY FLOAT LEVEL ADJUSTMENT FIG. 3

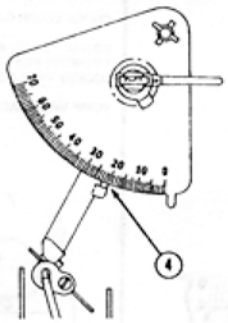


PUMP ROD ADJUSTMENT FIG. 4

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.

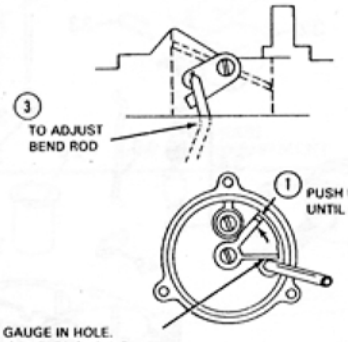


4. ROTATE SCALE SO THAT DEGREE SPECIFIED FOR ADJUSTMENT IS OPPOSITE POINTER.
5. FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENT.

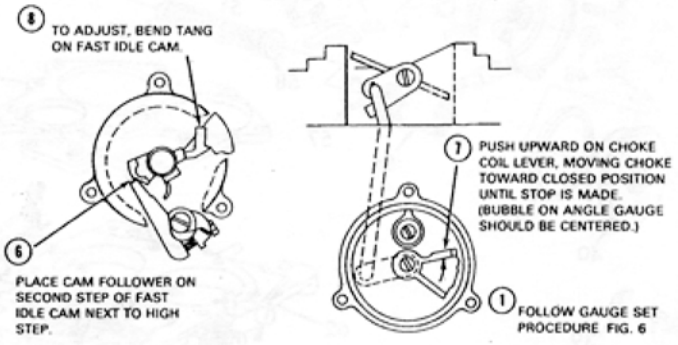
GAUGE J-26701 KENT MOORE TOOL
BT-7704 BORROUGHS TOOL

ANGLE GAUGE BASIC ADJUSTMENT

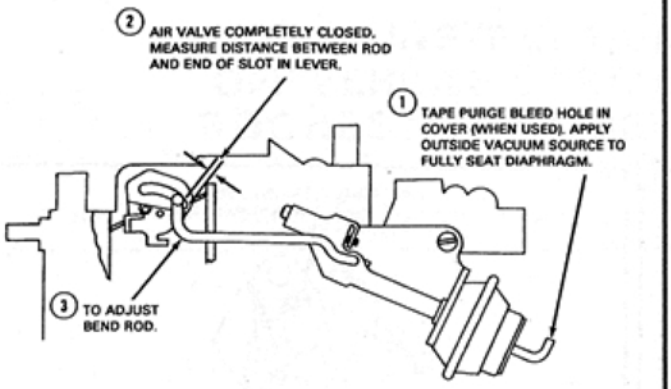
CONTINUE NUMERICAL OUTLINE IN EACH ADJUSTMENT USING DEGREE SETTING. FIG. 6



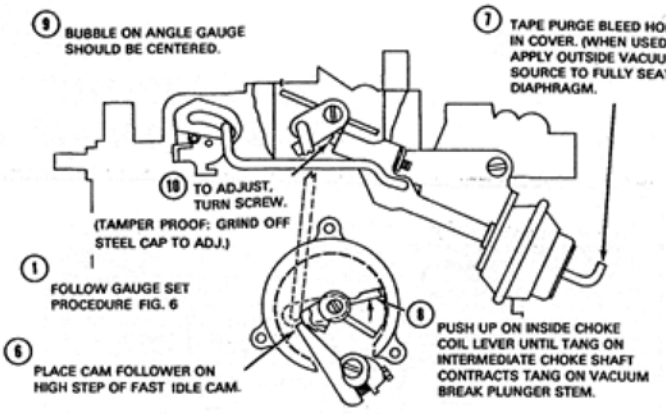
CHOKE COIL LEVER ADJUSTMENT FIG. 5



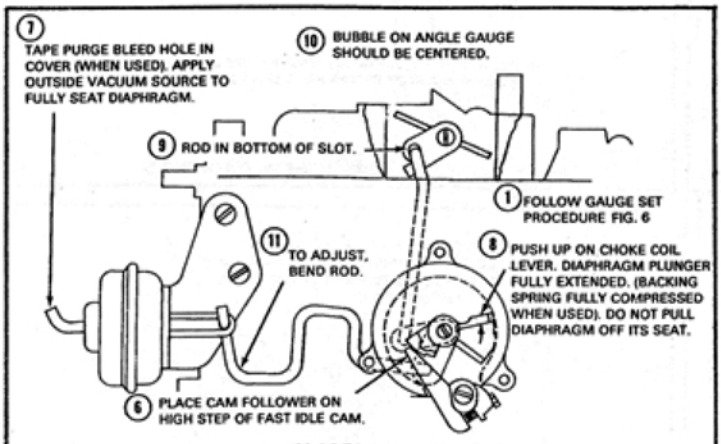
FAST IDLE CAM (CHOKE ROD) ADJUSTMENT FIG. 7



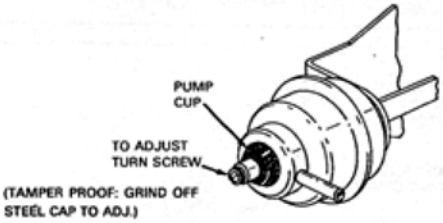
AIR VALVE ROD ADJUSTMENT FIG. 8



FRONT VACUUM BREAK ADJUSTMENT FIG. 9

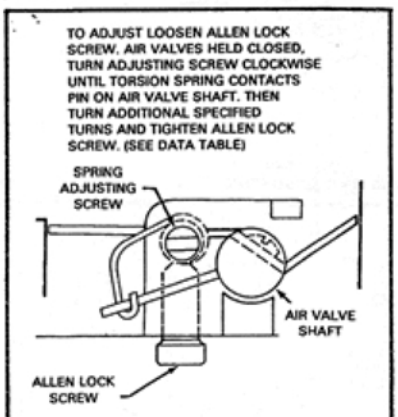


REAR VACUUM BREAK ADJUSTMENT FIG. 10

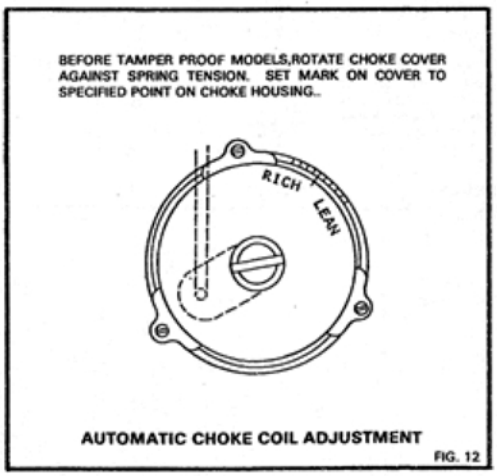


REAR VACUUM BREAK ADJUSTMENT (SCREW ADJUSTMENT TYPE)

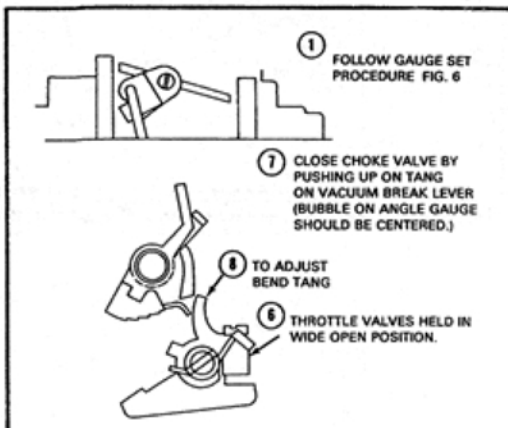
FIG. 10A



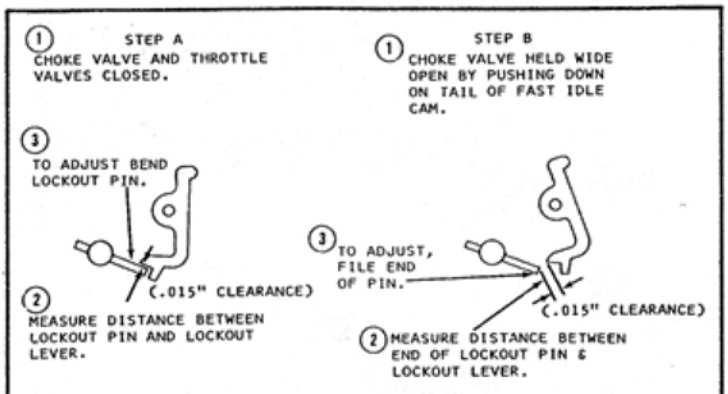
AIR VALVE SPRING ADJUSTMENT FIG. 11



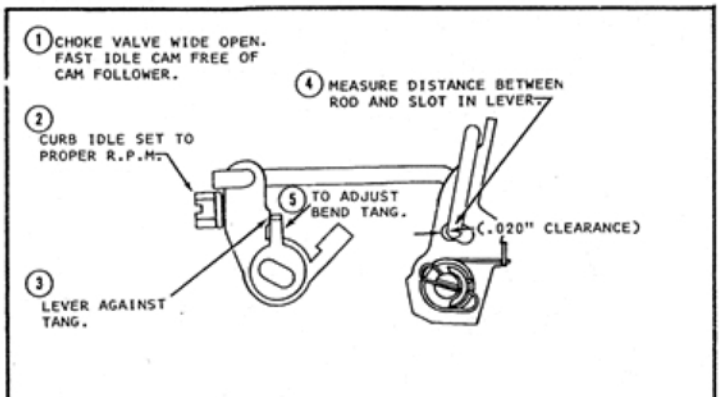
AUTOMATIC CHOKE COIL ADJUSTMENT FIG. 12



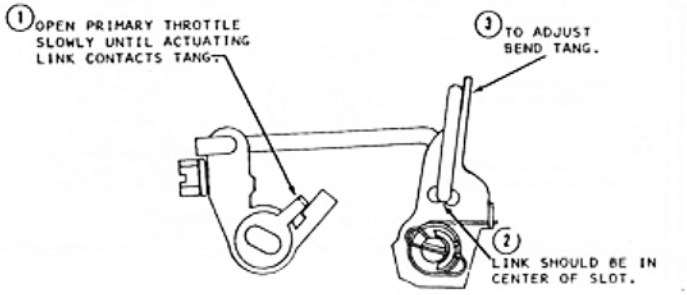
UNLOADER ADJUSTMENT FIG. 13



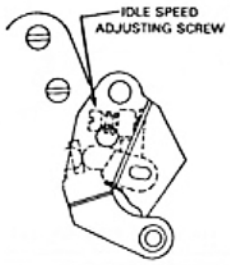
SECONDARY THROTTLE LOCKOUT ADJUSTMENT FIG. 14



(ON CAR)
SECONDARY CLOSING ADJUSTMENT FIG. 15

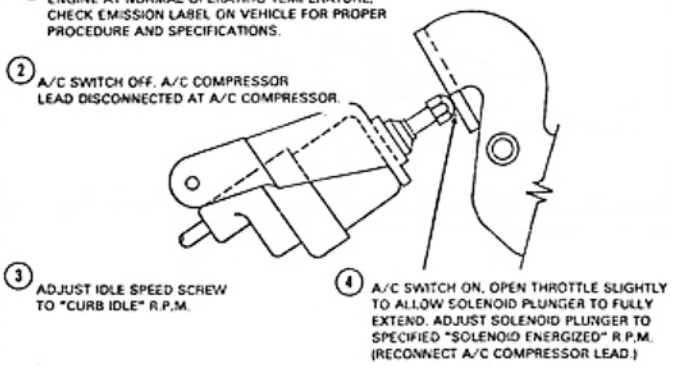


(ON CAR)
SECONDARY THROTTLE OPENING ADJUSTMENT FIG. 16



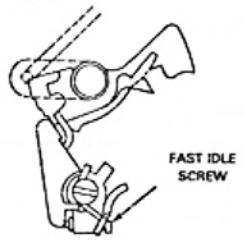
ENGINE AT NORMAL OPERATING TEMPERATURE CHECK EMISSION LABEL ON VEHICLE FOR PROPER PROCEDURE & SPECIFICATIONS.

IDLE SPEED ADJUSTMENT W/O SOLENOID FIG. 17



A/C IDLE SPEED ADJUSTMENT W/SOLENOID FIG. 18

CURB IDLE ADJUSTED PER EMISSION LABEL. PLACE FAST IDLE CAM FOLLOWER ON PROPER STEP OF FAST IDLE CAM. ADJUST FAST IDLE SCREW TO PROPER R.P.M. CHECK EMISSION LABEL FOR SPECIFICATIONS.



(ON CAR)
FAST IDLE ADJUSTMENT FIG. 19