

# INSTRUCTION SHEET

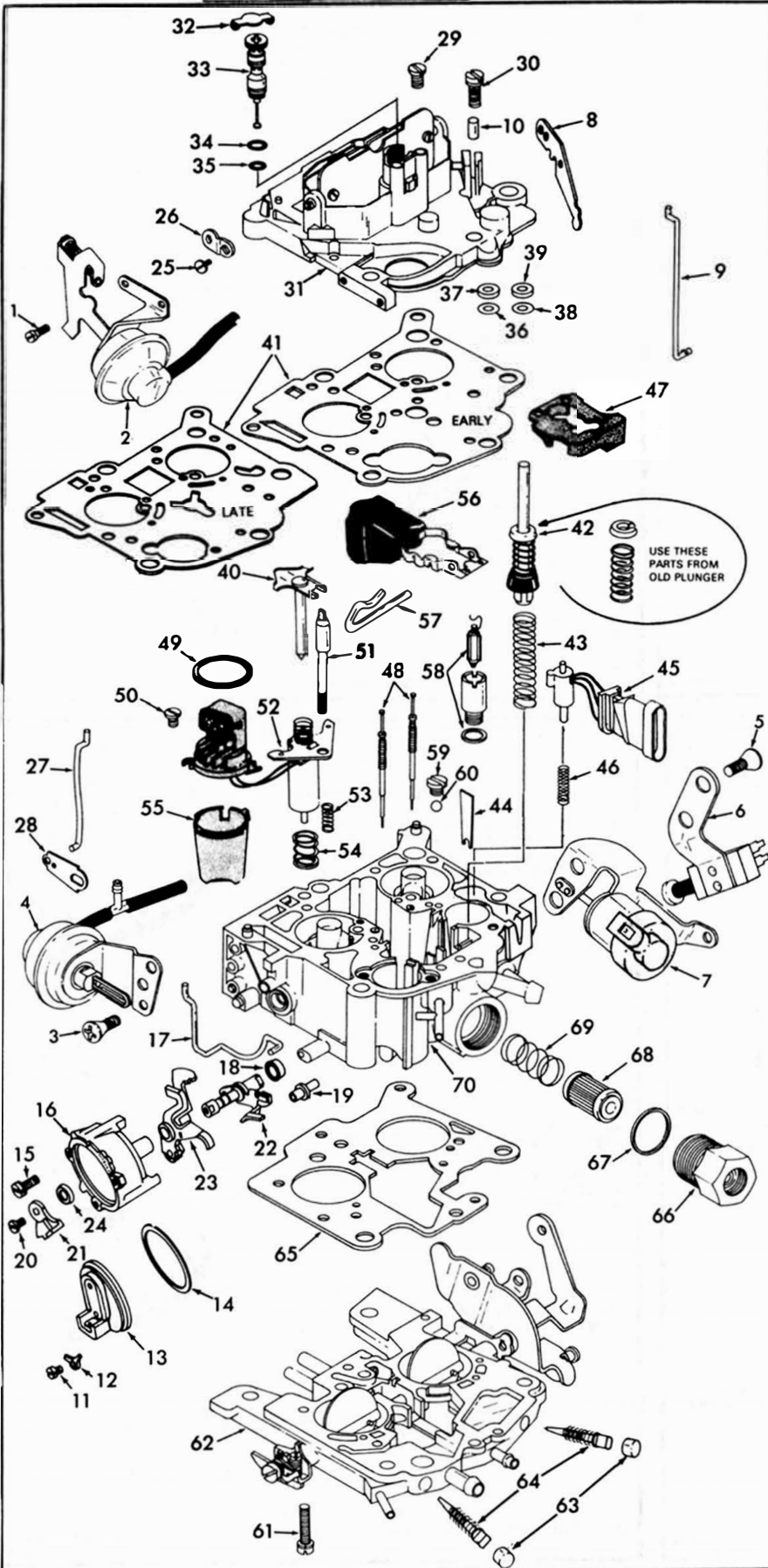
## OFF VEHICLE CARBURETOR SERVICE

### ROCHESTER MODEL — 210 (E2ME-E2MC).

50-588-5

#### 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 (8) JUST DRIVE PIN IN FAR ENOUGH TO RELEASE LEVER. LATER MODELS HAVE POP RIVETS HOLDING CHOKE COVER ON. SEE FIG. 2 FOR REMOVAL PROCEDURE. BOWL COVER SCREWS (29) ARE INSIDE THE AIR HORN. DO NOT REMOVE BRASS TUBES FROM BOWL COVER. LATER MODELS WILL HAVE PLUG (32) HELD IN BY RIVETS. DRILL OUT RIVET HEADS. DISCARD BAFFLE (NOT REPLACED) BEFORE REMOVING IDLE AIR BLEED VALVE (33) TURN IN COUNTING THE NUMBER OF TURNS IT TAKES TO SEAT VALVE. RECORD FOR PROPER REASSEMBLY. MAIN JETS CAN BE REMOVED WITH PROPER WRENCH. IDLE NEEDLE PLUG (63) REMOVAL. SEE FIG. 3. BEFORE REMOVING IDLE ADJUSTING NEEDLES (64), TURN IN COUNTING THE NUMBER OF TURNS IT TAKES TO SEAT NEEDLE. RECORD FOR REASSEMBLY.

#### NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (2)—FRONT VACUUM BREAK	35. O-RING—AIR BLEED VALVE (LOWER/THIN)
2. FRONT VACUUM BREAK ASSY.	36. RETAINER—PUMP STEM SEAL
3. SCREW (2)—REAR VACUUM BREAK	37. SEAL—PUMP STEM
4. REAR VACUUM BREAK ASSY.	38. RETAINER—TPS PLUNGER SEAL
5. SCREW (2)—SOLENOID & SWITCH BRACKET	39. SEAL—TPS PLUNGER
6. SWITCH—W.O.T. ENRICHMENT (SOME MODELS)	40. PLUNGER—SOLENOID
7. SOLENOID—IDLE SPEED	41. GASKET—BOWL COVER
8. LEVER—PUMP	42. PUMP PLUNGER ASSY.
9. ROD—PUMP	43. SPRING—PUMP
10. PLUNGER—TPS ACTUATOR	44. BAFFLE—PUMP WELL
11. SCREW OR POP RIVET (3)—RETAINER	45. THROTTLE POSITION SENSOR ASSY.
12. RETAINER (3)—CHOKE COVER	46. SPRING—TPS
13. CHOKE COVER ASSY.	47. INSERT—FLOAT BOWL
14. GASKET—CHOKE COVER (HOT AIR MODELS)	48. MAIN METERING ROD & SPRING ASSY. (2)
15. SCREW TO WASHER—CHOKE HOUSING	49. GASKET—ECM CONNECTOR TO BOWL COVER
16. CHOKE HOUSING ASSY.	50. SCREW—ECM CONNECTOR
17. LINK—REAR VACUUM BREAK	51. SCREW—LEAN MIXTURE (SOLENOID ADJ.)
18. SEAL—INTERMEDIATE CHOKE SHAFT	52. SOLENOID & ECM CONNECTOR ASSY.
19. TUBE—VACUUM PASSAGE (HOT AIR MODEL)	53. SPRING—LEAN MIXTURE SCREW
20. SCREW—CHOKE COIL LEVER	54. SPRING—SOLENOID
21. LEVER—CHOKE COIL	55. INSERT—WELL (SOME MODELS)
22. SHAFT ASSY.—INTERMEDIATE CHOKE	56. FLOAT & LEVER ASSY.
23. CAM—FAST IDLE	57. HINGE PIN—FLOAT
24. SEAL—CHOKE HOUSING SHAFT HOLE (HOT AIR MODELS)	58. NEEDLE & SEAT ASSY.
25. SCREW—CHOKE LEVER	59. PLUG—PUMP DISC. BALL
26. LEVER—CHOKE SHAFT	60. BALL—PUMP DISC.
27. ROD—CHOKE	61. SCREW & LOCKWASHER (4)—THROTTLE BODY
28. LEVER—INTERMEDIATE CHOKE	62. THROTTLE BODY ASSY.
29. SCREW (2)—BOWL (TAPERED HEAD)	63. PLUG (2)—IDLE NEEDLE (NOT REPLACED)
30. SCREW & LOCKWASHER (5)—BOWL COVER	64. NEEDLE & SPRING ASSY. (2)—IDLE ADJ.
31. BOWL COVER ASSY.	65. GASKET—THROTTLE BODY
32. COVER—AIR BLEED VALVE (NOT USED OVER)	66. FILTER NUT—FUEL INLET
33. VALVE—IDLE AIR BLEED	67. GASKET—FILTER NUT
34. O-RING—AIR BLEED VALVE (UPPER/THICK)	68. FILTER—FUEL
	69. SPRING—FILTER
	70. FLOAT BOWL 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

FUEL FILTER (68) — 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.

IDLE ADJUSTING NEEDLES (64) — TURN EACH NEEDLE IN UNTIL LIGHTLY SEATED THEN BACK OUT NUMBER OF TURNS RECORDED ON DISASSEMBLY.

FLOAT INSTALLATION — INSTALL FLOAT BY SLIDING FLOAT LEVER UNDER PULL CLIP FROM FRONT TO BACK. INSTALL FLOAT PIN (DO NOT INSTALL PULL CLIP IN HOLES OF FLOAT ARM.)

LEAN MIXTURE SCREW (51) (SOLENOID ADJ.) — TURN MIXTURE CONTROL SCREW IN FLOAT BOWL CLOCKWISE UNTIL LIGHTLY BOTTOMED THEN BACK OUT REQUIRED NUMBER OF TURNS.

CARB. NO. 17059496 2 TURNS OUT  
 CARB. NO. 17080454 4 1/2 TURNS OUT  
 ALL OTHER 1980-81 3 1/2 TURNS OUT

SEALS (39) (37) — INSTALL WITH LIP OF SEAL FACING UPWARD. LIGHTLY STAKE SEAL RETAINER IN THREE PLACES.

IDLE AIR BLEED VALVE (33) — TURN VALVE IN UNTIL LIGHTLY BOTTOMED. THEN BACK OUT NUMBER OF TURNS RECORDED ON DISASSEMBLY. IF NOT KNOWN BACK OUT 4 TURNS.

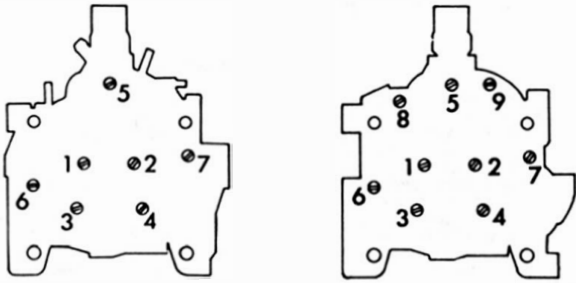
SEALS (24) (18) — INSTALL SEAL (24) WITH LIP FACING IN AND SEAL (18) WITH LIP FACING OUT.

ELECTRIC CHOKE MODELS. DO NOT USE A CHOKE COVER GASKET.

THE COMPUTER COMMAND CONTROL (CCC) FORMERLY (C4) SYSTEM IS A SOPHISTICATED SYSTEM. THE PROCEDURE FOR SETTING THE IDLE AIR BLEED VALVE AND MIXTURE CONTROL SYSTEM MUST BE FOLLOWED EXACTLY. USE THE ENGINE DECAL AND CAR DIV. SERVICE MANUAL PROCEDURE.

BOWL COVER INSTALLATION—TIGHTEN BOWL COVER SCREWS IN SEQUENCE SEE FIG. 1

# ADJUSTMENTS



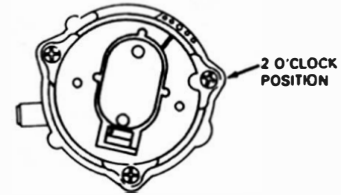
BOWL COVER SCREW TIGHTENING SEQUENCE

FIG 1

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, SELF TAPPING SCREWS OR POP RIVETS ARE FOUND IN REPAIR KIT.

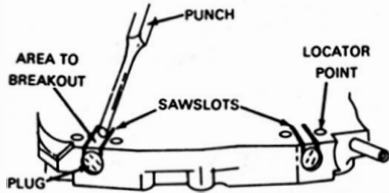
BEFORE ASSEMBLING CHOKE. START SELF TAPPING SCREWS IN CHOKE HOUSING TO BE SURE SCREWS START EASILY AND ARE ALIGNED PROPERLY. CHOKE COVER INSTALLATION. ALIGN NOTCH IN COVER WITH RETAINER TAB (2 O'CLOCK POSITION). TIGHTEN SCREWS EVENLY AND SECURELY. 1981 INSTALL RETAINERS AND NEW POP RIVETS TO SECURE CHOKE COVER.

CAUTION: BE SURE LOOP END OF COIL SPRING IS ON PIN OF COIL PICK UP LEVER



REMOVING & REPLACING TAMPER RESISTANT CHOKE COVER

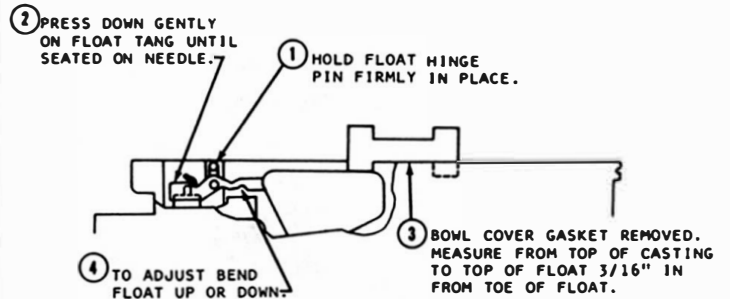
FIG 2



SAW 2 SLOTS AS SHOWN (DO NOT EXTEND MORE THAN 1/8" BEYOND LOCATER POINTS). SUPPORT THROTTLE BODY, THEN PLACE A PUNCH BETWEEN THE TWO LOCATER 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 (HARDENEO PLUG WILL BREAK). REMOVE PIECES TO GAIN ACCESS TO IDLE MIXTURE NEEDLE.

IDLE MIXTURE NEEDLE PLUG REMOVAL

FIG 3

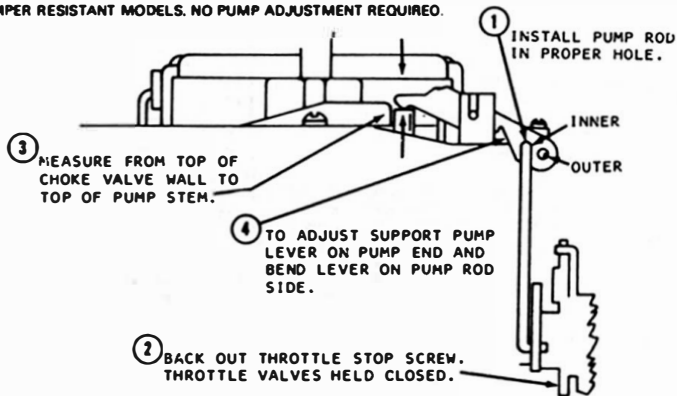


CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

DRY FLOAT LEVEL ADJUSTMENT

FIG. 4

TAMPER RESISTANT MODELS. NO PUMP ADJUSTMENT REQUIRED.



PUMP ROD ADJUSTMENT

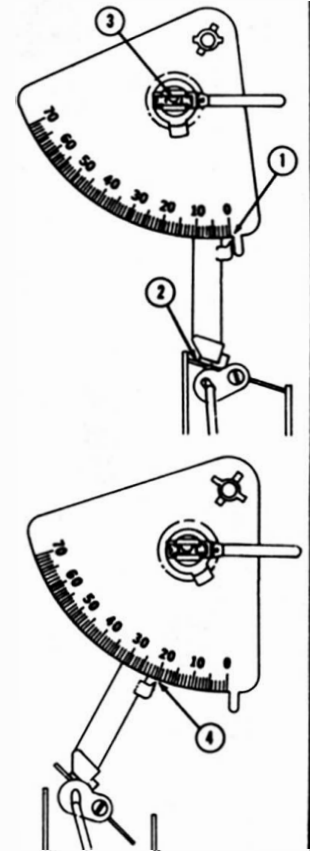
FIG. 5

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.  
6. ADJUST UNTIL BUBBLE IS CENTERED.

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

GAUGE : J-26701 KENT MOORE TOOL  
BT-7704 BORRHOUGHS TOOL



ANGLE GAUGE BASIC ADJUSTMENT.

CONTINUE NUMERICAL OUTLINE IN EACH ADJUSTMENT USING DEGREE SETTING.

FIG. 7



1 PLACE FAST IDLE CAM FOLLOWER ON HIGH STEP OF FAST IDLE CAM.

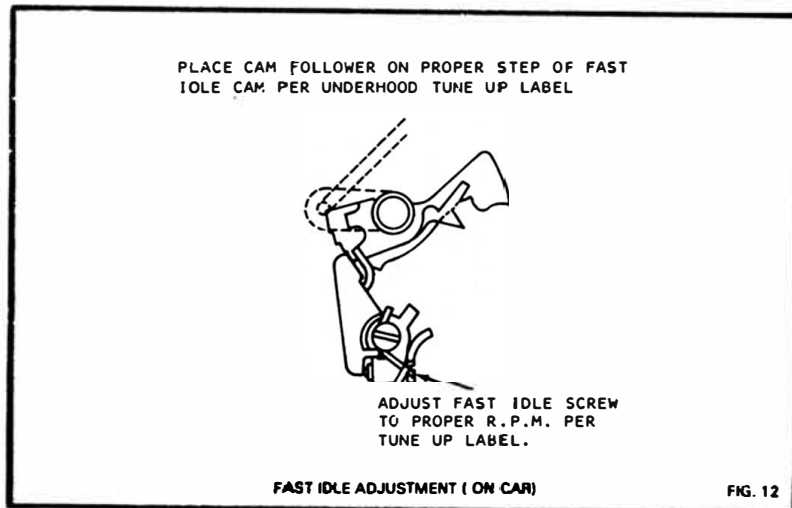
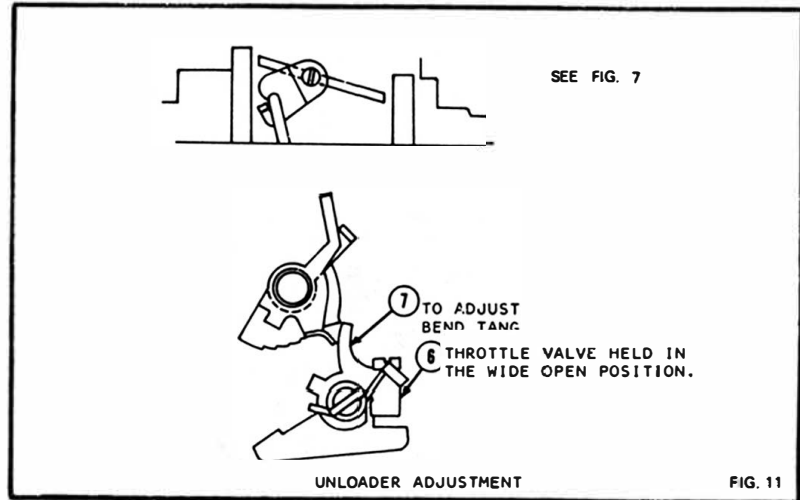
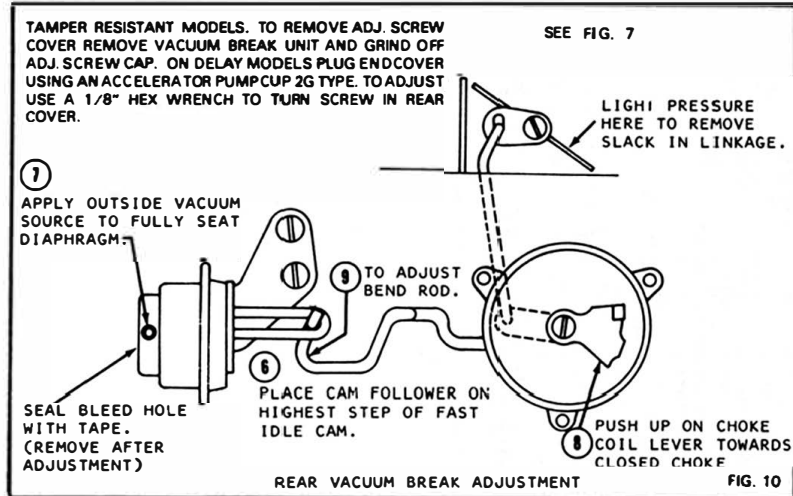
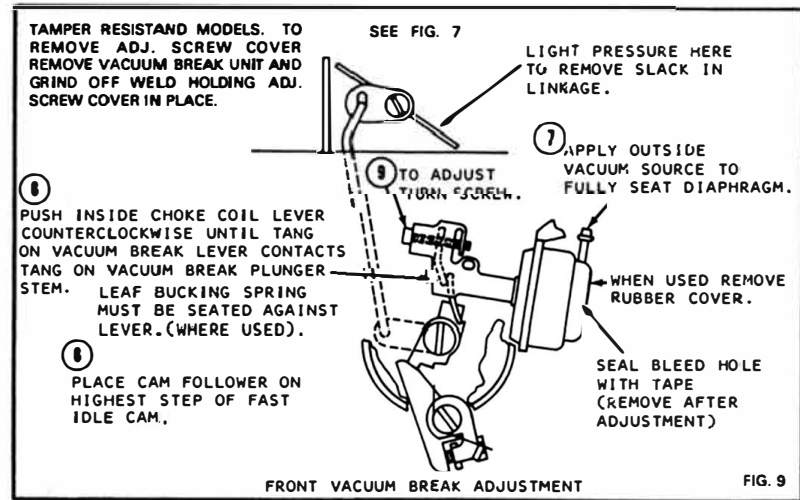
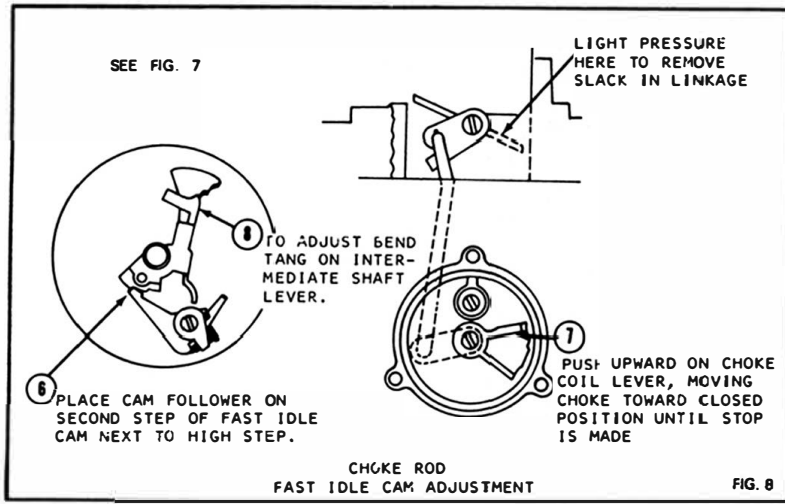
4 TO ADJUST BEND ROD.

3 INSERT .120 GAUGE IN HOLE. LOWER EDGE OF LEVER SHOULD JUST TOUCH GAUGE.

2 PUSH UP ON CHOKE COIL LEVER UNTIL CHOKE VALVE IS CLOSED.

CHOKE COIL LEVER ADJUSTMENT

FIG. 6



### ADJUSTMENT DATA TABLE

YEAR	APPLICATIONS	FLOAT LEVEL SETTING	PUMP ROD LOCATION	PUMP ROD SETTING	FAST IDLE CAM (CHOKEROD)	VACUUM BREAK FRONT	VACUUM BREAK REAR	AUTO CHOKE SETTING	UNLOADER SETTING
1979	GM PRODUCTS V6 231" ENG. CARB NO 17059496 CALIF.	5/18"	OUTER	3/8"	24.5°	21°	30°	1-RICH	38°
1980	BUICK V8 231" ENG. CARB NO. 17080491 CARB NOS. 17080493, 495 CARB NOS 17080498, 498 CARB NOS 17081190, 193	5/16" 5/16" 5/16" 5/16"	TR TR TR TR	TR 3/8" TR TR	24.5° 24.5° 24.5° 24.5°	21° 21° 21° 21°	35° 30° 33° 31°	N/A N/A N/A N/A	38° 38° 38° 38°
1981	BUICK V6 231" ENG CARB NO 17081191 CARB NOS 17081192, 194, 197, 198, 199	5/16" 3/8"	TR TR	TR TR	24.5° 18°	28° 28°	24° 24°	N/A N/A	38° 38°
1981	BUICK V8 265" ENG. CARB NO 17081160	1/4"	TR	TR	14.5°	24°	36°	N/A	35°
1982	BUICK V6 183" ENG. (3 OL) CARB NO 17082196 CARB NOS 17082183, 186	5/16" 5/16"	TR TR	TR TR	18° 18°	21° 24°	19° 28°	N/A N/A	27° 27°
1982	BUICK V6 231" ENG (3.8L) CARB NOS 17082182, 184, 192, 194 CARB NO 17082497	5/16" 5/16"	TR TR	TR TR	18° 24.5°	28° 28°	24° 24°	N/A N/A	32° 32°
1983	BUICK V6 3.0L ENG. CARB. NO. 17083194 CARB NO 17083193	5/16" 5/16"	TR TR	TR TR	17° 17°	27° 23°	25° 28°	N/A N/A	35° 27°
1984	BUICK V6 181" ENG (3.0L) CARB. NOS 17084193, 195	5/16"	TR	TR	17°	27°	25°	N/A	35°
1985	BUICK V6 181" ENG (3.0L) CARB. NO 17085192, 194	11/32"	TR	TR	17°	27°	25°	N/A	35°
1983	BUICK V6 231" ENG. (3.8L) CARB. NOS. 17083190, 192 CARB. NOS 17082182, 184 CALIF.	5/16" 5/16"	TR TR	TR TR	18° 18°	28° 28°	24° 24°	N/A N/A	32° 32°
1984-86	BUICK V6 231" ENG. (3.8L) A/T	5/16"	TR	TR	18°	28°	24°	N/A	32°
1981	CHECKER MOTORS 229" ENG. (3.8L) CARB NOS 17081130, 132	11/32"	TR	TR	20°	25°	--	N/A	38°
1981	CHECKER MOTORS 267" ENG. (4.4L) CARB, NOS 17081138, 140	11/32"	TR	TR	20°	25°	--	N/A	40°
1982	CHECKER MOTORS 229" ENG (3.8L) CARB NOS 17082130, 132	3/8"	TR	TR	20°	27°	--	N/A	38°
1982	CHECKER MOTORS 267" ENG (4.4L) CARB NOS 17082138, 140	3/8"	TR	TR	20°	27°	--	N/A	38°
1980	CHEVROLET V6 231" ENG. (3.8L) CARB NO. 17080491 CARB NOS. 17080493, 495 CARB NO 17080496, 498	5/16" 5/16" 5/16"	TR TR TR	TR 3/8" TR	24.5° 24.5° 24.5°	21° 21° 21°	35° 30° 33°	N/A N/A N/A	38° 38° 38°
1981	CHEVROLET V8 229" ENG. (3.8L) CARB. NOS. 17081130, 131, 132, 133, 134, 136	11/32"	INNER	TR	20°	25°	--	N/A	38°
1981	CHEVROLET V8 231" ENG. (3.8L) CARB. NOS. 17081194, 198, 199, 496 CARB. NO. 17081196	3/8" 5/16"	TR TR	TR TR	18° 24.5°	28° 28°	24° 24°	N/A N/A	38° 38°
1981	CHEVROLET V8 267" ENG. (4.4L) CARB. NO. 17081138, 140	11/32"	INNER	TR	20°	25°	--	N/A	40°
1982-84	CHEVROLET V8 229" ENG. (3.8L) CARB. NOS. 17082130, 132	3/8"	TR	TR	20°	27°	--	N/A	38°
1982	CHEVROLET V8 231" ENG. (3.8L) CARB. NO. 17082497	5/16"	TR	TR	24.5°	28°	24°	N/A	32°
1982-83	CARB. NOS. 17082182, 184, 192	5/16"	TR	TR	18°	28°	24°	N/A	32°
1984	CHEVROLET V6 231" ENG. (3.8L) A/T	5/16"	TR	TR	18°	28°	24°	N/A	32°
1982	CHEVROLET V8 267" ENG. (4.4L) CARB. NOS. 17082138, 140	3/8"	TR	TR	20°	27°	--	N/A	38°
1980	OLDSMOBILE V6 231" ENG. (3.8L) CARB. NO. 17080491 CARB. NOS. 17080493, 495 CARB. NOS. 17080496, 498 CARB. NOS. 17081190, 193	5/18" 5/16" 5/16" 5/18"	TR TR TR TR	TR 3/8" TR TR	24.5° 24.5° 24.5° 24.5°	21° 21° 21° 21°	35° 30° 33° 31°	N/A N/A N/A N/A	38° 38° 38° 38°
1980	OLDSMOBILE V8 280" ENG. CARB. NO. 17080454	13/32"	INNER	9/32"	14°	24°	34°	N/A	35°

### ADJUSTMENT DATA TABLE

YEAR	APPLICATIONS	FLOAT LEVEL SETTING	PUMP ROD LOCATION	PUMP ROD SETTING	FAST IDLE CAM (CHOKE ROD)	VACUUM BREAK FRONT	VACUUM BREAK REAR	AUTO CHOKE SETTING	UNLOADER SETTING
1981	OLDSMOBILE V8 231" ENG. (3.8L) CARB NO 17081191 CARB NOS 17081192, 194, 197, 198, 199, 498	5/16"	TR	TR	24.5°	28°	24°	N/A	38°
		3/8"	TR	TR	18°	28°	24°	N/A	38°
1981	OLDSMOBILE V8 280" ENG. CARB NO 17081150	13/32"	TR	TR	14°	24°	38°	N/A	35°
1982	OLDSMOBILE V6 183" ENG. (3.0L) CARB NO 17082198 CARB NOS. 17082183, 188	5/16" 5/16"	TR TR	TR TR	18° 18°	21° 24°	19° 28°	N/A N/A	27° 27°
1982	OLDSMOBILE 231" ENG. (3.8L) CARB NOS 17082182, 184, 192, 194 CARB NO 17082497	5/16" 5/16"	TR TR	TR TR	18° 24.5°	28° 28°	24° 24°	N/A N/A	32° 32°
1982	OLDSMOBILE V8 280" ENG. CARB NOS. 17082150, 152	13/32"	TR	TR	14°	24°	38°	N/A	35°
1983	OLDSMOBILE 3.0L ENG. CARB. NO. 17083194 CARB. NO. 17083193	5/16"	TR	TR	17°	27°	25°	N/A	35°
		5/16"	TR	TR	17°	23°	28°	N/A	27°
1984	OLDSMOBILE V6 181" ENG. (3.0L) CARB. NO. 17084193, 195	5/16"	TR	TR	17°	27°	25°	N/A	35°
1985	OLDSMOBILE V8 181" ENG (3.0L) CARB NO 17085192, 194	11/32"	TR	TR	17°	27°	25°	N/A	35°
1983	OLDSMOBILE 231" ENG. (3.8L) CARB NOS. 17083190, 192 CARB NOS. 17082182, 184 CALIF.	5/16"	TR	TR	18°	28°	24°	N/A	32°
		5/16"	TR	TR	18°	28°	24°	N/A	32°
1984-86	OLDSMOBILE V6 231" ENG. (3.8L)	5/16"	TR	TR	18°	28°	24°	N/A	32°
1980	PONTIAC V8 231" ENG. (3.8L) CARB NO 17080491 CARB NOS. 17080493, 495 CARB NOS. 17080498, 498 CARB NO. 17081190	5/16"	TR	TR	24.5°	21°	35°	N/A	38°
		5/16"	TR	3/8"	24.5°	21°	30°	N/A	38°
		5/16"	TR	TR	24.5°	21°	33°	N/A	38°
		5/16"	TR	TR	24.5°	21°	31°	N/A	38°
1981	PONTIAC V8 231" ENG. (3.8L) CARB NOS. 17081191, 198 CARB NOS. 17081192, 194, 197, 198, 199, 498	5/16"	TR	TR	24.5°	28°	24°	N/A	38°
		3/8"	TR	TR	18°	28°	24°	N/A	38°
1981	PONTIAC V8 285" ENG. CARB NO. 17081180	1/4"	TR	TR	14.5°	24°	38°	N/A	35°
1982	PONTIAC V8 231" ENG. (3.8L) CARB NOS 17082182, 192 CARB NO. 17082497	5/16"	TR	TR	18°	28°	24°	N/A	32°
		5/16"	TR	TR	24.5°	28°	24°	N/A	32°
1983	PONTIAC 231" ENG. (3.8L) CARB NO. 17083192 CARB NO. 17082182 CALIF.	5/16"	TR	TR	18°	28°	24°	N/A	32°
		5/16"	TR	TR	18°	28°	24°	N/A	32°
1983-84	PONTIAC 229" ENG. (3.8L) CARB NOS. 17082130, 132	3/8"	TR	TR	20°	27°	--	N/A	38°
1984	PONTIAC V8 181" ENG. (3.0L) CARB NO. 17084193, 195	5/16"	TR	TR	17°	27°	25°	N/A	35°
1984-86	PONTIAC V8 231" ENG. (3.8L)	5/16"	TR	TR	18°	28°	24°	N/A	32°

TR=TAMPER RESISTANT

N/A=NON ADJUSTABLE