

INSTRUCTION SHEET

OFF VEHICLE CARBURETOR SERVICE

ROCHESTER — MODEL 2SE

50-575-2

(4 CYL. 181CID. ENG.)

DISASSEMBLY

GENERAL EXPLODED VIEW

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

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. NOTE: MOST SCREWS HAVE SOME FORM OF LOCK TIGHT ON THEM. LINKAGE CONNECTED TO VACUUM BREAK UNIT NEED ONLY BE UNHOOKED AT VACUUM BREAK END. UNHOOK FAST IDLE CAM ROD WHEN REMOVING BOWL COVER. (FAST IDLE CAM AND SCREW OR NOT REMOVABLE.) TO REMOVE POWER PISTON ASSY. (34) LIGHTLY BOUNCE VACUUM PISTON TO WORK RETAINER OUT OF CASTING. PULL PLASTIC RETAINER (31) OUT, DO NOT PRY OUT THIS WILL DAMAGE SEALING BEADS ON BOWL CASTING. THE IDLE MIXTURE NEEDLE (50) IS SEALED WITH A HARDENED STEEL PLUG. IF NECESSARY TO REMOVE IDLE MIXTURE NEEDLE ON MAJOR OVERHAUL, FOLLOW PROCEDURE IN FIG. 1 TO REMOVE STEEL PLUG. (IDLE MIXTURE NEEDLE HAS BEEN FACTORY ADJUSTED AND SEALED FOR EMISSION CONTROL.)

TAMPER - RESISTANT CHOKE COVER

USING #21 DRILL (.159"), DRILL POP RIVET HEAD ENOUGH TO REMOVE HEAD. AFTER HEADS ARE REMOVED USE A DRIFT PUNCH AND SMALL HAMMER TO DRIVE THE REMAINDER OF THE RIVETS OUT OF THE CHOKE HOUSING. REMOVE CHOKE COMPONENTS. REPLACEMENT RETAINERS AND SELF TAPPING SCREWS OR POP RIVETS ARE FOUND IN REPAIR KIT.

NOMENCLATURE

REF. NO.	REF. NO.
1. HOSE - VACUUM BREAK	26. NEEDLE & SEAT ASSY.
2. SCREW - BRACKET	27. FILTER NUT - FUEL INLET
3. SCREW & LOCKWASHER - BRACKET	28. GASKET - FILTER NUT
4. VACUUM BREAK, SOLENOID & BRACKET ASSY.	29. FILTER - FUEL INLET
5. RETAINER (UPPER) - CHOKE ROD	30. SPRING - FUEL FILTER
6. BUSHING - CHOKE ROD	31. GUIDE - PUMP DISC. SPRING
7. SCREW - PUMP LEVER	32. SPRING - PUMP DISC. BALL
8. LEVER - PUMP	33. BALL - PUMP DISC.
9. SPACER WASHER - PUMP LEVER SCREW	34. POWER PISTON ASSY.
10. ROD - PUMP LEVER	35. SPRING - POWER PISTON
11. SCREW (2) - IDLE COMPENSATOR	36. JET - PRIMARY
12. IDLE COMPENSATOR	37. SCREW (3) - CHOKE RETAINER
13. GASKET - IDLE COMPENSATOR	38. RETAINER (3) - CHOKE COVER
14. SCREW & LOCKWASHER (2) LONG - BOWL COVER	39. ELECTRIC CHOKE COVER ASSY.
15. VENT STACK	40. SCREW - CHOKE LEVER
16. SCREW & LOCKWASHER (1) - BOWL COVER	41. LEVER - CHOKE
17. SCREW & LOCKWASHER (3) - BOWL COVER	42. CHOKE SHAFT & ROD ASSY.
18. BOWL COVER ASSY.	43. SCREW & LOCKWASHER (2) - CHOKE HOUSING
19. ROD - FAST IDLE CAM	44. HOUSING - CHOKE
20. PUMP ASSY.	45. SCREW & LOCKWASHER (4) - THROTTLE BODY
21. SPRING - PUMP RETURN	46. BOWL ASSY.
22. GASKET - BOWL COVER	47. GASKET - THROTTLE BODY
23. INSERT - FLOAT BOWL	48. THROTTLE BODY ASSY.
24. FLOAT ASSY.	49. PLUG - IDLE NEEDLE SEAL (NOT REPLACED)
25. PIN - FLOAT HINGE	50. NEEDLE - IDLE ADJUSTING
	51. WASHER - IDLE NEEDLE
	52. SPRING - IDLE NEEDLE

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, PLASTIC FILLER BLOCK, OR PARTS CONTAINING RUBBER IN ANY TYPE OF CLEANING SOLVENTS. (PLASTIC BUSHINGS USED ON ROD ENDS WILL WITHSTAND NORMAL CLEANING IN CARBURETOR CLEANER.)

REASSEMBLY

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

SPECIAL INSTRUCTIONS

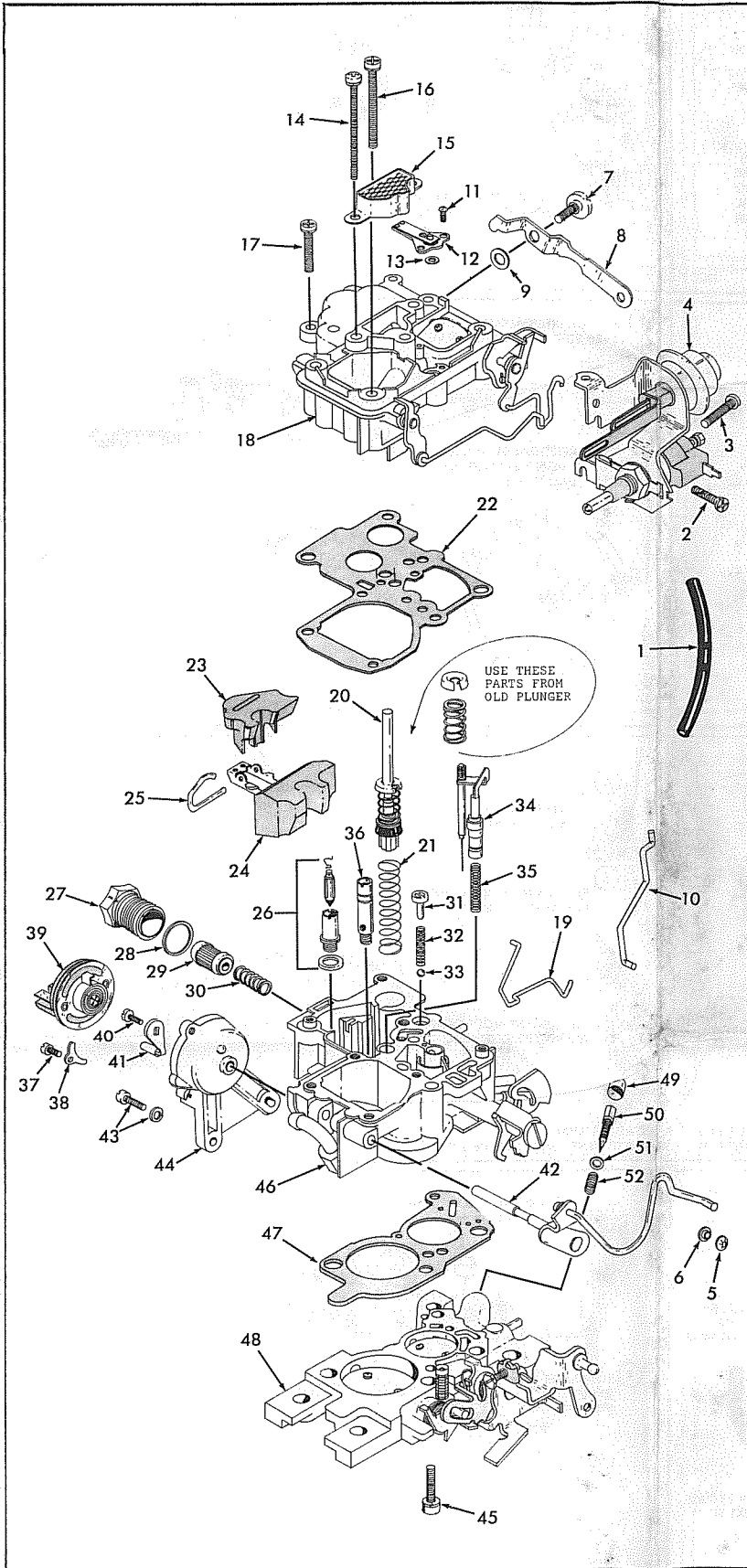
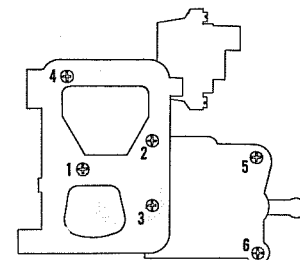
IDLE ADJUSTING NEEDLE (50) - TURN NEEDLE IN UNTIL LIGHTLY SEATED, THEN BACK OUT 3 TURNS.

POWER PISTON ASSY. (34) - PRESS DOWN FIRMLY ON PLASTIC POWER PISTON RETAINER TO MAKE SURE RETAINER IS SEATED IN RECESS OF FLOAT BOWL.

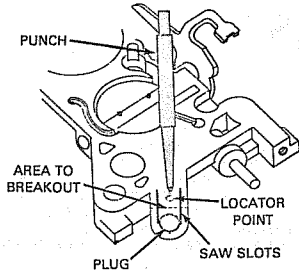
FUEL FILTER (29) - BE SURE TO USE FILTER WITH BUILT IN ROLL OVER CHECK VALVE AND WITH CHECK VALVE FACING OUT. TIGHTEN FILTER NUT (27) TO 18 FT. LBS.

NEEDLE & SEAT ASSY. (26) - WHEN INSTALLING FLOAT BE SURE TO HOOK NEEDLE PULL CLIP OVER EDGE OF FLAT ON FLOAT ARM FACING FLOAT PONTON. CAUTION: DO NOT HOOK PULL CLIP IN HOLES OF FLOAT ARM.

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



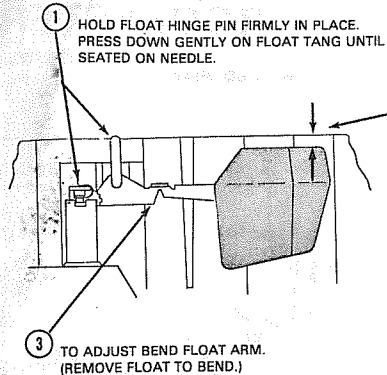
ADJUSTMENTS



SAW 2 SLOTS AS SHOWN (DO NOT EXTEND MORE THAN 1/8" BEYOND LOCATOR POINT). SUPPORT THROTTLE BODY, THEN PLACE A PUNCH IN THE LOCATOR POINT OF THE THROTTLE BODY, HOLDING PUNCH AT A 45° ANGLE, BREAKOUT 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

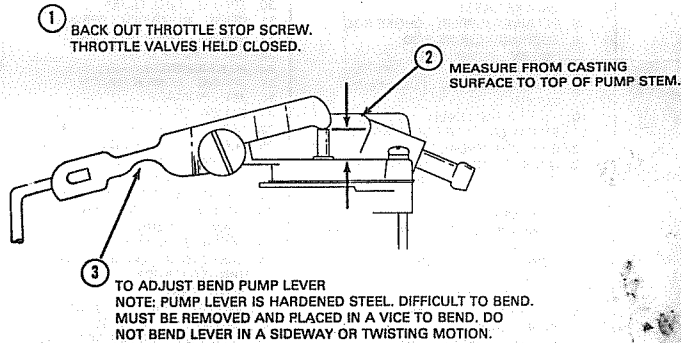
FIG. 1



CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

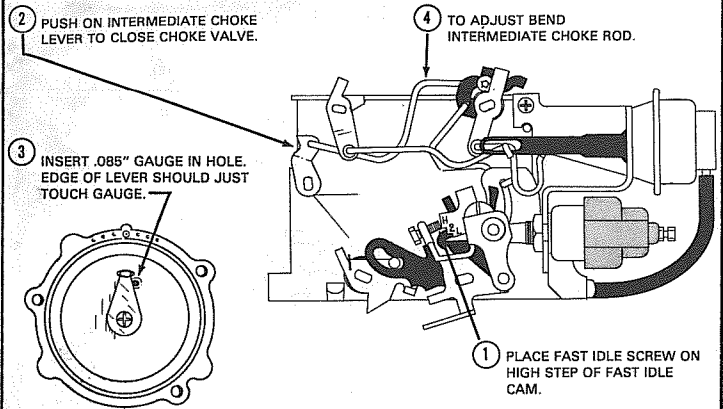
DRY FLOAT LEVEL ADJUSTMENT

FIG. 2



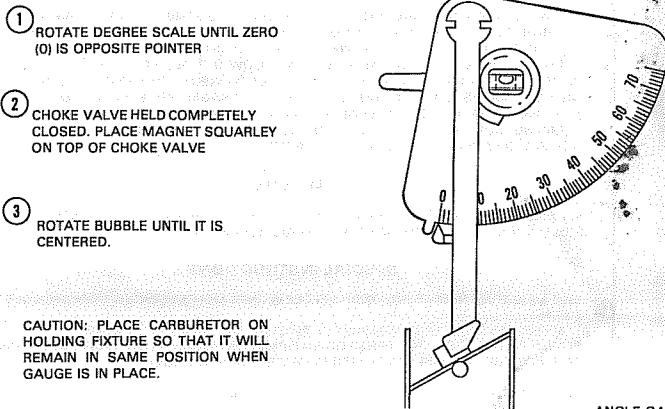
PUMP ROD ADJUSTMENT

FIG. 3



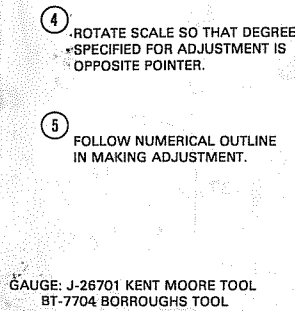
CHOKE COIL LEVER ADJUSTMENT

FIG. 4



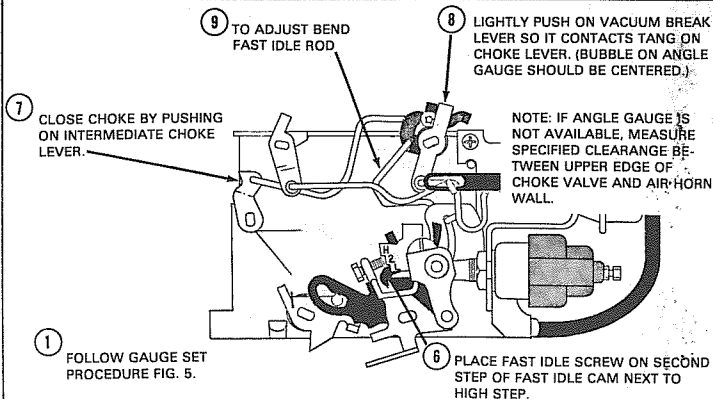
CAUTION: PLACE CARBURETOR ON HOLDING FIXTURE SO THAT IT WILL REMAIN IN SAME POSITION WHEN GAUGE IS IN PLACE.

ANGLE GAUGE, BASIC ADJUSTMENT
CONTINUE NUMERICAL OUTLINE IN EACH ADJUSTMENT USING DEGREE SETTING.



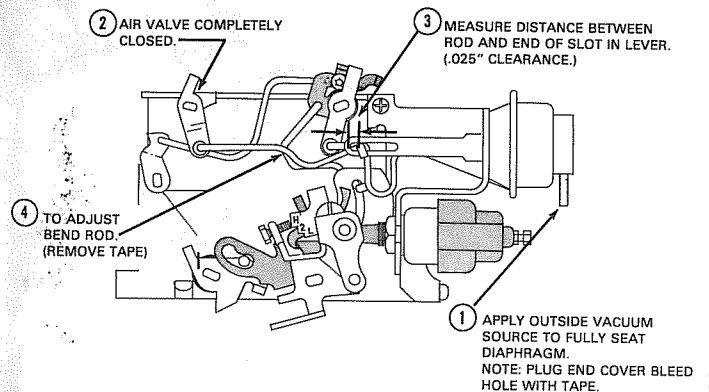
GAUGE: J-26701 KENT MOORE TOOL
BT-7704 BORROUGHS TOOL

FIG. 5



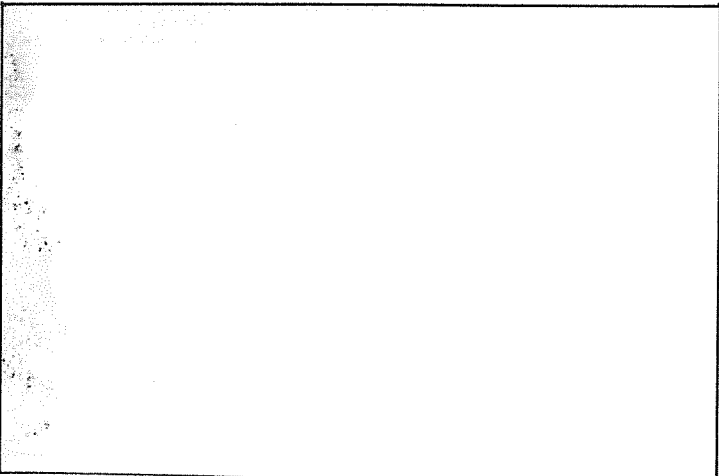
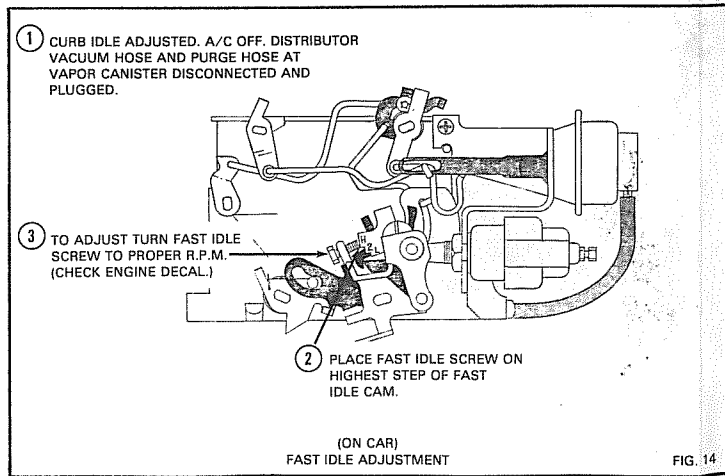
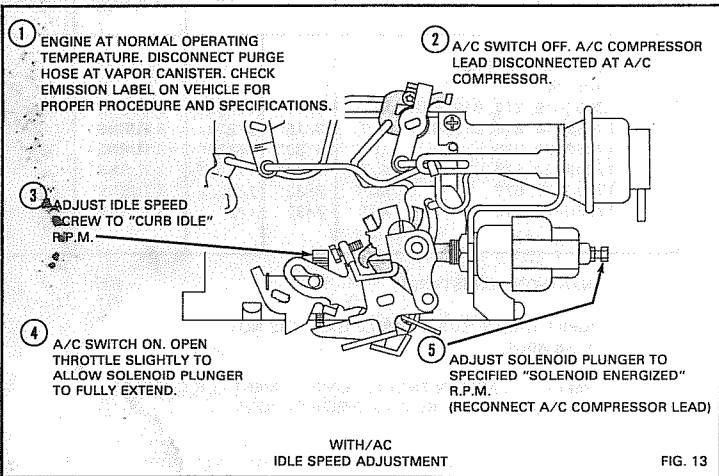
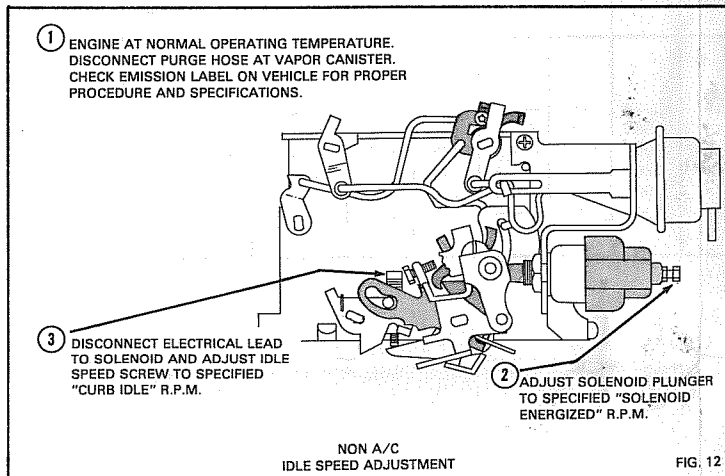
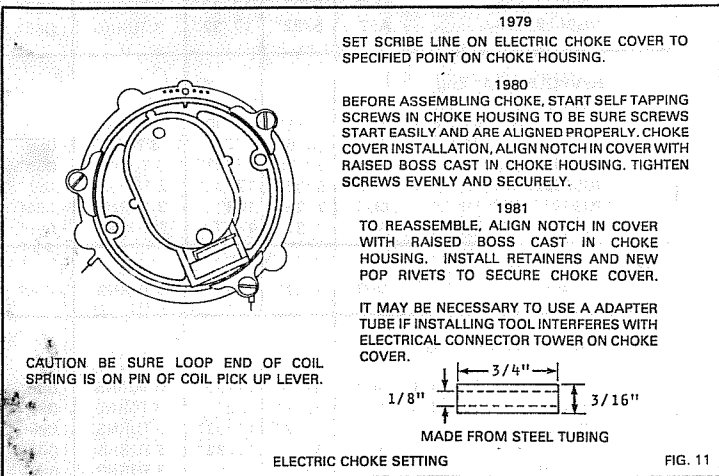
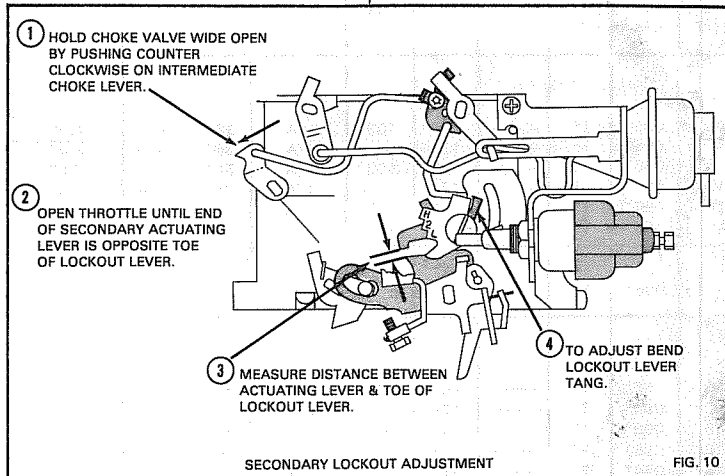
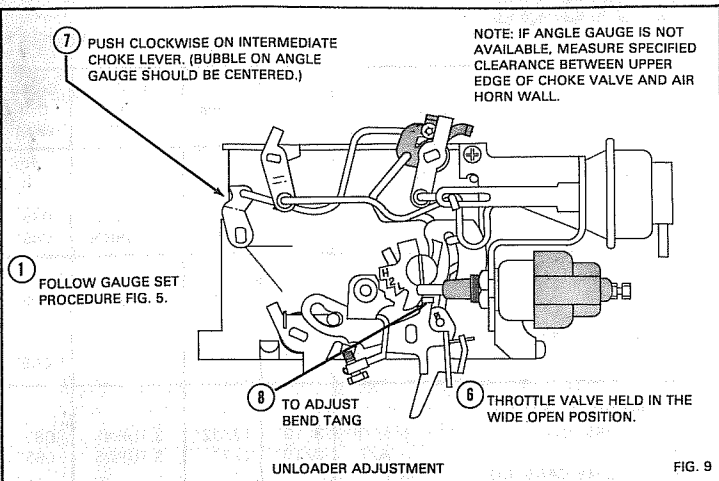
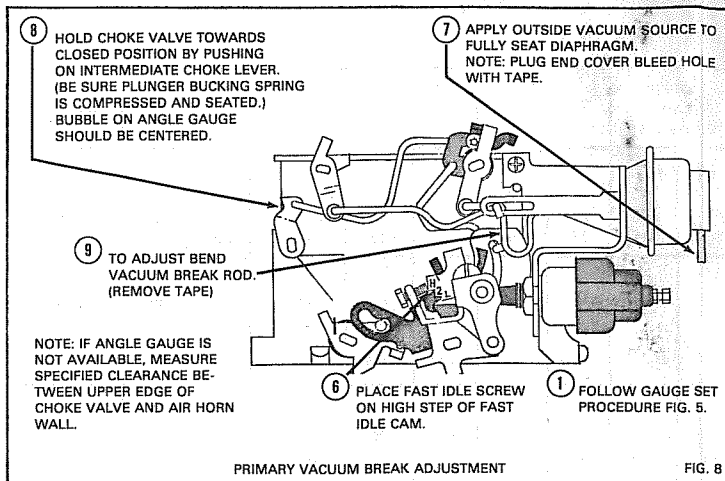
FAST IDLE CAM (CHOKE ROD) ADJUSTMENT

FIG. 6



AIR VALVE ROD ADJUSTMENT

FIG. 7



ADJUSTMENT DATA TABLE

Year	Application	Float Setting	Pump Rod	Fast Idle (Bench)	Choke Coil Lever	Fast Idle Cam		Air Valve Rod		Vacuum Break		Electric Choke Setting	Unloader		Secondary Lockout
						Choke Rod	Choke Rod	1	2	1	2		1	2	
1979 GM PASS CAR 151" Eng. 49S	M/T	3/16"	17/32"	3 TURNS	.085"	18°	.096"	2°	.025"	21°	.117"	1-RICH	32°	.195"	.025"
	A/T	3/16"	1/2"	3 TURNS	.085"	18°	.096"	2°	.025"	19°	.103"	2-RICH	32°	.195"	.025"
1980 AMC 151" Eng. 49S	A/T	3/16"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	20°	—	N/A	32°	.195"	.025"
1981 AMC 151" Eng. 49S	A/T	7/32"	1/2"	—	.085"	25°	—	1°	—	19°	.103"	N/A	34°	—	.025"
1980 BUICK 151" Eng. 49S Early	M/T	3/16"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	36°	—	.025"
	A/T	3/16"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	17°	—	N/A	36°	—	.025"
	M/T	5/32"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	36°	—	.025"
	A/T	5/32"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	17°	—	N/A	36°	—	.025"
1980 CHEVROLET 151" Eng. Carb. No.	M/T	3/16"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	36°	—	.025"
	A/T	3/16"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	17°	—	N/A	36°	—	.025"
	M/T	5/32"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	36°	—	.025"
	A/T	5/32"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	17°	—	N/A	36°	—	.025"
	M/T	7/32"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	21°	.117"	N/A	32°	.195"	.025"
	A/T	7/32"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	32°	.195"	.025"
1980 JEEP 151" Eng. CJ-5 49S	M/T	7/32"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	20°	—	N/A	32°	.195"	.025"
1980 OLDSMOBILE 151" Eng. Carb. No.	M/T	3/16"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	36°	—	.025"
	A/T	3/16"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	17°	—	N/A	36°	—	.025"
	M/T	5/32"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	36°	—	.025"
	A/T	5/32"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	17°	—	N/A	36°	—	.025"
	M/T	7/32"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	21°	.117"	N/A	32°	.195"	.025"
	A/T	7/32"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	32°	.195"	.025"
1980 PONTIAC 151" Eng. Carb. No.	M/T	3/16"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	36°	—	.025"
	A/T	3/16"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	17°	—	N/A	36°	—	.025"
	M/T	5/32"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	36°	—	.025"
	A/T	5/32"	17/32"	3 TURNS	.085"	18°	.096"	1°	—	17°	—	N/A	36°	—	.025"
	M/T	7/32"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	21°	.117"	N/A	32°	.195"	.025"
	A/T	7/32"	1/2"	3 TURNS	.085"	18°	.096"	1°	—	19°	.103"	N/A	32°	.195"	.025"

N/A=NON ADJUSTABLE

*DRILL GAUGE SIZE IF ANGLE GAUGE IS NOT AVAILABLE.

REFER TO LABEL IN ENGINE COMPARTMENT FOR CORRECT TUNE-UP PROCEDURE AND SPECIFICATIONS.