INSTRUCTION SHEET **OFF VEHICLE CARBURETOR SERVICE** 50-505-3 ROCHESTER MODELS M4MC, M4MCA, M4MEA

REF.

GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET /22 BOWL COVER INSTALLATION TIGHTEN BOWL COVER SCREWS IN SEQUENCE AS SHOWN. USE THESE PARTS FROM CLD PLUNGER

DISASSEMBLY

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: PUMP LEVER PIN (9) CAN BE DRIVEN IN UNTIL IT RELEASES PUMP LEVER (10). BOWL COVER SCREWS (24) ARE LOCATED INSIDE OF THE AIR HORN. ON MODELS WITH AUXILIARY METERING ROD (26). PUSH TOP OF ROD TO ONE SIDE TO UNHOOK IT FROM ITS HOLDER BEFORE REMOVING BOWL COVER GASKET (27). ANEROID OR FILLER SPOOL METERING ROD ASSY. (32) IS FRAGILE AND SHOULD BE HANDLED GENTLY. THE UNITS ARE FACTORY-ADJUSTED AND EXTREMELY CRITICAL. NO ADJUSTMENT SHOULD BE ATTEMPTED. REPLACED WITH A SPACER ON 1976 MODELS. POWER PISTON ASSYS. (33)(37) CAN BE REMOVED BY CAREFULLY PRYING OUT OR BY BOUNCING PISTON. CAUTION: ON MODELS USING A MAIN AND AUXILIARY POWER PISTON, BE SURE AND MARK POWER PISTON SPRINGS (36)(38) AS THEY ARE REMOVED. THEY ARE NOT INTERCHANGEABLE. PRIMARY MAIN JETS (45) ARE THE ONLY JETS REMOVEABLE. IDLE LIMITER CAPS (64) CAN CAREFULLY BE REMOVED BY CUTTING OFF WITH PLIERS. NO REPLACEMINT CAPS ARE NECESSARY AS A BARE MIXTURE NEEDLE IS SUFFICIENT TO INDICATE THAT THE MIXTURE HAS BEEN READJUSTED. BEFORE REMOVING IDLE ADJUSTING NEEDLES (65) TURN EACH NEEDLE IN AND COUNT THE NUMBER OF TURNS IT TAKES TO SEAT EACH NEEDLE (RECORD). 1976 MODELS HAVE A.P.T. ADJUSTMENT SCREW LOCATED DIRECTLY IN FRONT OF POWER PISTON. NO ATTEMPT SHOULD BE MADE TO READJUST. FACTORY ADJUSTED TO MEET EMISSION REQUIREMENTS.

NOMENCLATURE

KEF.	•	REF	
NO.		NO.	
1.	SCREW (2)-FRONT VACUUM BREAK	×38.	SPRING-AUX. POWER PISTON
2.	FRONT VACUUM BREAK ASSY.	39.	INSERT - FLOAT BOWL
3.	HOSE-FRONT VAC. BREAK		FLOAT & LEVER ASSY.
	UNIT		HINGE PIN - FLOAT
4.	CONNECTING ROD-FRONT VAC.	42.	NEEDLE, SEAT, & GASKET
	BREAK		ASSY.
5.	HOSE-REAR VAC. BREAK	43.	PLUG-PUMP DISC. BALL
6.	SCREW (2)-REAR VAC. BREAK	44.	BALL - PUMP DISC.
7.	REAR VACUUM BREAK ASSY.		JET (2) - PRIMARY MAIN
8.	CONNECTING ROD-REAR VAC.	46.	SCREW (3)-CHOKE COVER
	BREAK	1	RETAINER
	PIN-PUMP LEVER		RETAINER (3)-CHOKE COVER
	LEVER - PUMP		CHOKE COVER ASSY.
	ROD - PUMP		GASKET - CHOKE COVER
12.	SCREW & LOCKWASHER- VENT		SCREW - STAT COIL LEVER
	COVER		LEVER - STAT COIL
	COVER - VENT VALVE	52.	SCREW & WASHER-CHOKE
	GASKET - COVER		HOUS ING
	SPRING - VENT VALVE		CHOKE HOUSING
	SCREW - CHOKE LEVER		SEAL-CHOKE HOUSING
	LEVER - CHOKE SHAFT		CAM - FAST IDLE
18.	SCREW-SEC. METERING ROD		CAM - SECONDARY LOCKOUT
	HOLDER	57.	SHAFT ASSYINTERMEDIATE
	HOLDER-SEC. METERING RODS		CHOKE
	METERING ROD (2)-SECONDARY		ROD - CHOKE
21.	SCREW & LOCKWASHER (2)-		LEVER-INTERMEDIATE CHOKE
22	BOWL COVER (LONG) SCREW & LOCKWASHER (4)-	60.	SEAL-INTERMEDIATE CHOKE
22.	BOWL COVER	۱,	SHAFT
×27	BAFFLE - AIR		TUBE - VACUUM PASSAGE SCREW & LOCKWASHER (2) -
	SCREW (2) - BOWL COVER	02.	THROTTLE BODY
24.	(TAPERED HEAD)	67	THROTTLE BODY ASSY.
25	BOWL COVER ASSY.		CAP (2) - IDLE LIMITER
	METERING ROD (1) -	65.	
20.	AUXILIARY	,	SPRING (2) - IDLE ADJ.
27.	GASKET - BOWL COVER	00.	NEEDLE
	SPACER - PUMP STEM	67	GASKET - THROTTLE BODY
	PUMP ASSY.	68.	FILTER NUT-FUEL INLET
	SPRING - PUMP RETURN	69	GASKET-FILTER NUT
	SCREW (2)-ANEROID ASSY.		FILTER - FUEL
	ANEROID ASSY.(SPACER 1976)		SPRING - FUEL FILTER
	POWER PISTON ASSYMAIN		SCREW (2) - COVER
	SPRING - METERING ROD	×73.	COVER - IDLE COMPENSATOR
			IDLE COMPENSATOR ASSY.
	SPRING-MAIN PISTON ASSY.		GASKET - IDLE COMPENSATOR
	POWER PISTON ASSY		FLOAT BOWL ASSY.
	AUXILIARY		

ITEMS NOT NORMALLY FOUND ON ALL MODELS.

CLEANING

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 FILLER SPOOL OR ANEROID
ASSY. (32), FLOAT (40), DIAPHRAGM UNITS (2) (7), OR PARTS
MADE OF RUBBER OR PLASTIC IN CLEANING SOLVENTS. DO NOT SAND,
WIRE BRUSH, OR FILE ON TEFLON-COATED PARTS.

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

SPECIAL INSTRUCTIONS SPECIAL INSTRUCTIONS SEE NEXT PAGE.

ADJUSTMENTS

FIG. 2

SPECIAL INSTRUCTIONS

FUEL FILTER NUT & GASKET (68) (69)- INSTALL AND TIGHTEN SECURELY (18 FT. LBS.). DO NOT OVER-TIGHTEN.

IDLE ADJUSTING NEEDLES (65)- TURN EACH NEEDLE IN UNTIL LIGHTLY SEATED, THEN BACK OUT THE NUMBER OF TURNS COUNTED AT DISASSEMBLY (ALTERNATE 3-4 TURNS OUT).

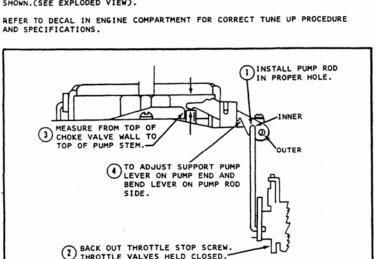
SEALS, INTERMEDIATE CHOKE SHAFT (60) (54)- SEAL (60) INSTALL WITH LIP FACING OUT. SEAL (54) INSTALL WITH LIP FACING IN.

CHOKE COVER ASSY. (48)- DO NOT INSTALL COVER UNTIL CHOKE LINKAGE ADJUSTMENTS ARE MADE. CAUTION: ELECTRIC CHOKE MODELS DO NOT USE A CHOKE COVER GASKET (49) BETWEEN THE ELECTRIC CHOKE ASSY. AND HOUSING

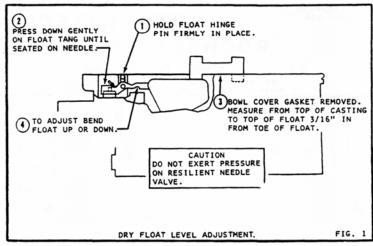
FLOAT INSTALLATION- INSTALL FLOAT BY SLIDING FLOAT LEVER UNDER PULL CLIP FROM FRONT TO BACK, INSTALL FLOAT PIN (DO NOT INSTALL PULL CLIP IN HOLES OF FLOAT ARM)

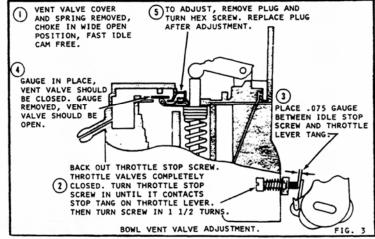
POWER PISTON ASSYS. (33) (37)- PRESS DOWN FIRMLY ON PLASTIC POWER PISTON RETAINER TO BE SURE IT IS FLUSH WITH TOP OF BOWL CASTING.

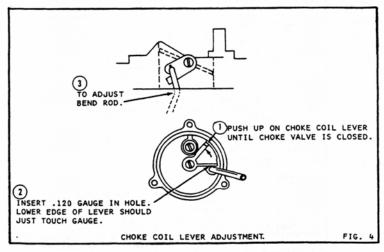
BOWL COVER INSTALLATION-TIGHTEN BOWL COVER SCREWS IN SEQUENCE AS SHOWN. (SEE EXPLODED VIEW).



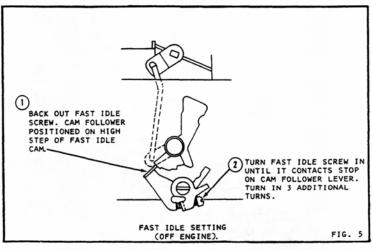
THROTTLE VALVES HELD CLOSED

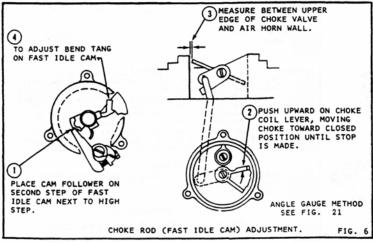


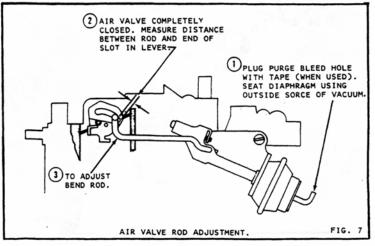


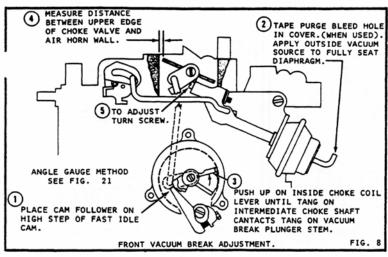


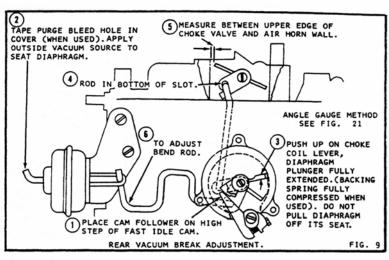
PUMP ROD ADJUSTMENT.

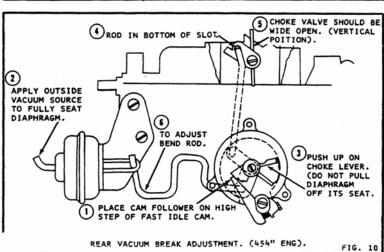


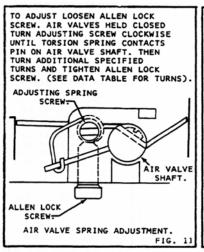


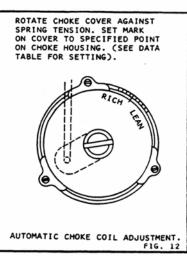


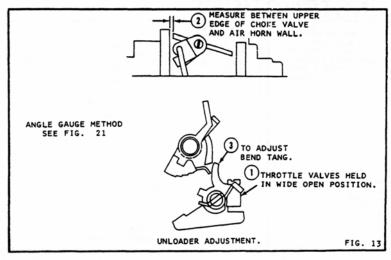


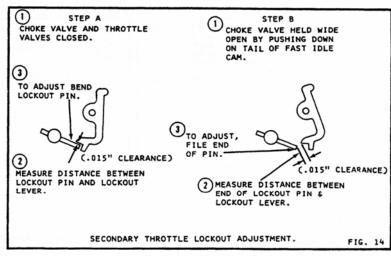


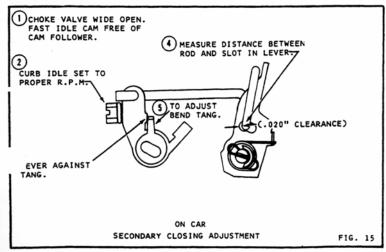


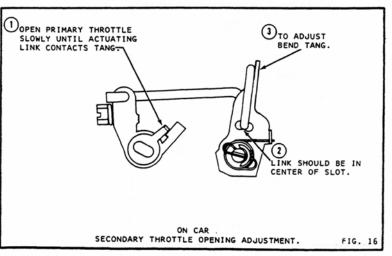


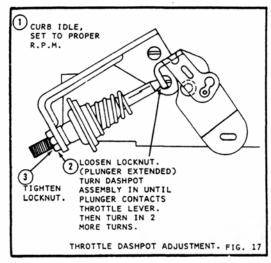


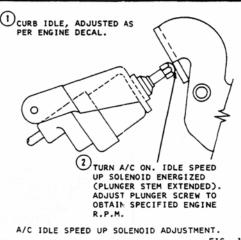


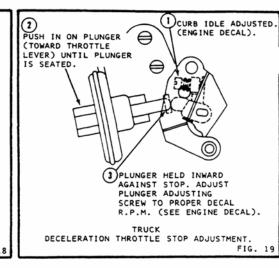


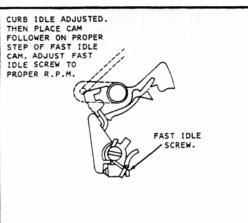








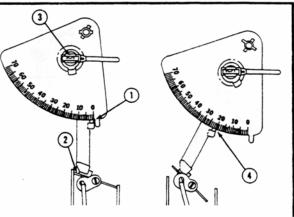




CAUTION: PLACE CARBURETOR ON HOLDING FIXTURE SO THAT IT WILL REMAIN IN SAME POSITION WHEN GAUGE IS IN PLACE.

- 1. ROTATE DEGREE SCALE UNTIL ZERO (0) IS OPPOSITE POINTER.
 2. CHOKE VALVE HELD COMPLETLY CLOSED.
- 2. CHOKE VALVE HELD COMPLETLY CLOSED. PLACE MAGNET SQUARLEY 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 CUTLINE IN MAKING ADJUSTMENT, INSTEAD OF MEASURING GAP AT EDGE OF CHOKE VALVE MAKE ADJUSTMENT TO BRING BUBBLE BACK TO CENTER POSITION.

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



ANGLE GAUGE METHOD (USE WITH REGULAR ADJUSTMENT OUTLINE)

FIG. 2.

1980 SPECIAL INSTRUCTIONS

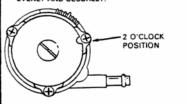
CAREFULLY ALIGN A #21 DRILL (.159") ON POP RIVET HEAD AND DRILL ENOUGH TO REMOVE RIVET HEAD. DRILL ALL 3 RIVET HEADS. USE A DRIFT PUNCH AND HAMMER, DRIVE THE REMAINDER OF RIVETS OUT OF THE CHOKE HOUSING. REMOVE CHOKE COMPONENTS. REPLACEMENT RETAINERS AND SELF TAPPING SCREWS ARE FOUND IN REPAIR KIT.

FAST IDLE ADJUSTMENT. (ON CAR).

FIG. 20

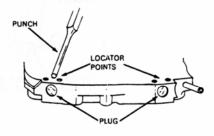
BEFORE ASSEMBLING CHOKE, START SELF TAPPING SCREWS IN CHOKE HOUSING TO BE SURE SCREWS START EASILY AND ARE ALIGNED PROPERLY.

CHOKE COVER INSTALLATION. ALIGN NOTCH IN COVER WITH RETAINER TAB (2 O'CLOCK POSITION). TIGHTEN SCREWS EVENLY AND SECURELY.



REMOVING & REPLACING TAMPER RESISTANT CHOKE COVER

SUPPORT THROTTLE BODY. THEN PLACE A PUNCH BETWEEN THE TWO LOCATOR POINTS IN THROTTLE BODY. BREAK OUT THROTTLE BODY TO GAIN ACCESS TO THE IDLE MIXTURE NEEDLE, DRIVE OUT HARDENED STEEL PLUG COVERING MIXTURE NEEDLE. HARDENED PLUG WILL SHATTER (PLUG WILL NOT BE REPLACED). REMOVE IDLE ADJUSTING NEEDLE USING PROPER DEEP SOCK.



IDLE MIXTURE NEEDLE PLUG REMOVAL

FOLLOW PROCEDURE IN FIG. 9, & FIG. 21.
TO ADJUST USE A 1/8" HEX WRENCH TURN SCREW IN REAR COVER UNTIL BUBBLE IS CENTERED.
NOTE: ON DELAY MODELS (#634433 OR #64797 STAMPED ON BRACKET), PLUG END COVER USING A PUMP PLUNGER CUP 2G TYPE OR EQUIVALENT. REMOVE CUP AFTER ADJUSTMENT.

