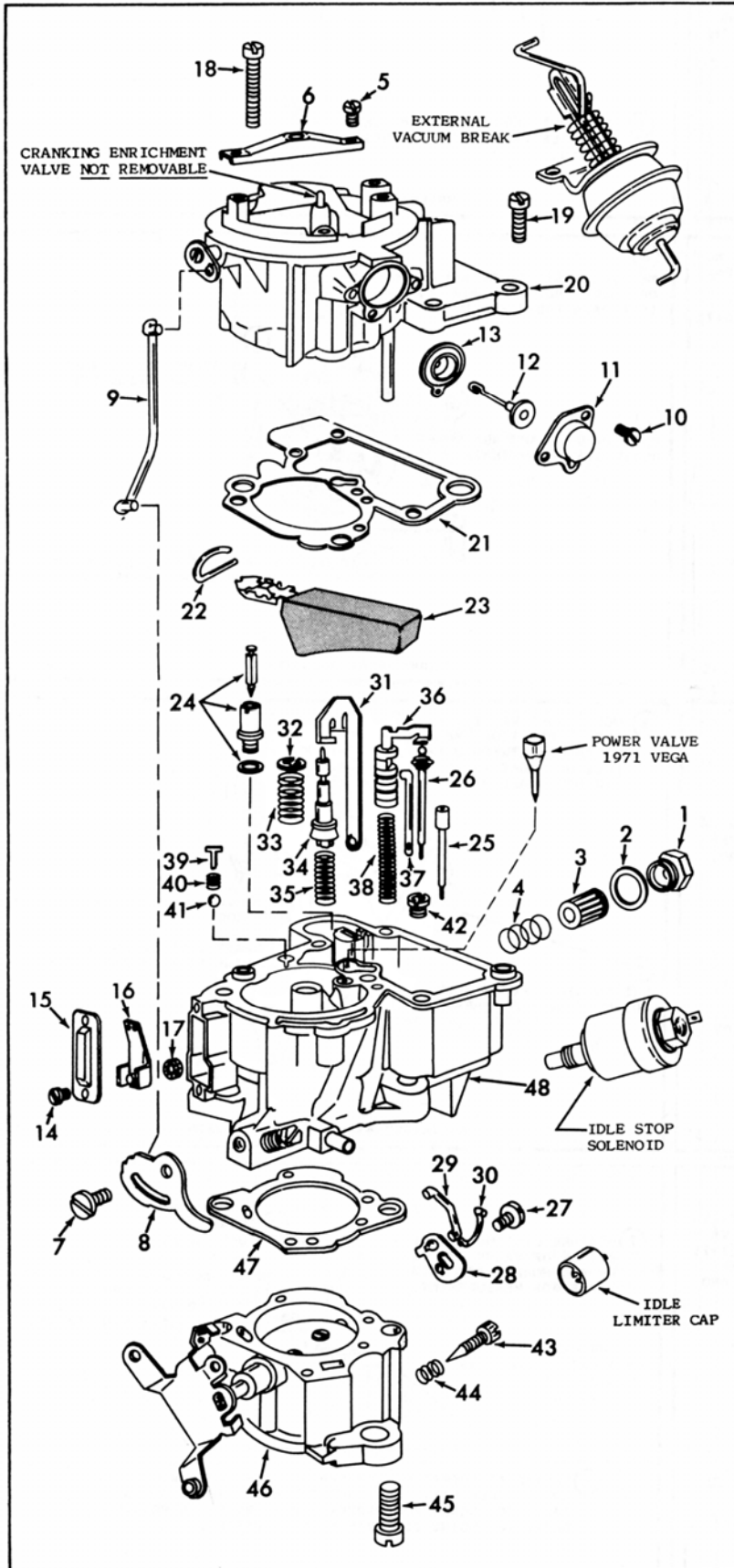


INSTRUCTION SHEET

ROCHESTER CARBURETOR — MODELS M-MV

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: CRANKING ENRICHMENT VALVE IS NOT REMOVABLE. IDLE VENT VALVE NEED NOT BE REMOVED. TWO STYLES ARE USED: ONE WITH SPRING, ONE WITHOUT SPRING. REMOVE VACUUM BREAK DIAPHRAGM (13) FROM LINK ASSEMBLY (12) BEFORE CLEANING. TO REMOVE METERING ROD (26) PRESS DOWN ON ROD AND SLIDE NARROW NECK OF ROD OUT OF SLOT IN ROD HOLDER (36). CAUTION: 1968 AND LATER MODELS HAVE A CALIBRATION SCREW IN CHANNEL AT BOTTOM OF FLOAT BOWL WHICH IS FACTORY ADJUSTED AND SEALED. DO NOT TAMPER WITH.

NOMENCLATURE

| REF. NO. | REF. NO. |
|---|-------------------------------------|
| 1. NUT - FUEL INLET FILTER | 24. NEEDLE, SEAT & GASKET ASSY. |
| 2. GASKET - FILTER NUT | 25. IDLE TUBE ASSEMBLY |
| 3. FILTER - FUEL | 26. METERING ROD & SPRING |
| 4. SPRING - FUEL FILTER | 27. SCREW - PUMP & POWER LINK LEVER |
| 5. SCREW (2) - AIR CLEANER STUD BRACKET | 28. LEVER - PUMP & POWER LINK |
| 6. BRACKET - AIR CLEANER STUD | 29. LINK - PUMP LEVER |
| 7. SCREW - FAST IDLE CAM | 30. LINK - POWER PISTON ROD |
| 8. CAM - FAST IDLE | 31. LEVER - PUMP OPERATING |
| 9. ROD - CHOKE | 32. RETAINER - PUMP SPRING |
| 10. SCREW (2) - DIAPH. COVER | 33. SPRING - PUMP |
| 11. COVER - DIAPHRAGM | 34. PUMP CUP & STEM ASSEMBLY |
| 12. LINK ASSY. - VACUUM BREAK DIAPHRAGM | 35. SPRING - PUMP RETURN |
| 13. DIAPHRAGM - VACUUM BREAK | 36. POWER PISTON ASSEMBLY |
| 14. SCREW (2) - IDLE COMPENSATOR COVER | 37. ROD - POWER PISTON |
| 15. COVER - IDLE COMPENSATOR | 38. SPRING - POWER PISTON |
| 16. IDLE COMPENSATOR ASSY. | 39. GUIDE - PUMP DISCH. SPRING |
| 17. GASKET - IDLE COMPENSATOR | 40. SPRING - PUMP DISCHARGE |
| 18. SCREW LONG (3) - BOWL COVER | 41. BALL - PUMP DISCHARGE |
| 19. SCREW SHORT (3) - BOWL COVER | 42. JET - MAIN METERING |
| 20. BOWL COVER | 43. NEEDLE - IDLE ADJUSTING |
| 21. GASKET - BOWL COVER | 44. SPRING - IDLE NEEDLE |
| 22. HINGE PIN - FLOAT | 45. SCREW (2) - THROTTLE BODY |
| 23. FLOAT ASSEMBLY | 46. THROTTLE BODY ASSEMBLY |
| | 47. GASKET - THROTTLE BODY |
| | 48. FLOAT BOWL ASSEMBLY |

CLEANING

CAUTION: BE SURE ALL SOLENOID AND VACUUM BREAK UNITS AND PARTS (3-13-23-34) ARE NOT PLACED IN ANY TYPE OF CLEANING SOLVENT. OTHER PLASTIC PARTS WILL WITHSTAND NORMAL CLEANING IN CARBURETOR CLEANER. CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE (1) A CARBURETOR CLEANER (2) LACQUER THINNER OR (3) DENATURED ALCOHOL. MAKE CERTAIN THE THROTTLE BODY IS FREE OF ALL HARD CARBON DEPOSITS. WASH OFF IN SUITABLE SOLVENT MAKING SURE TO THOROUGHLY FLUSH CHOKE ENRICHMENT VALVE CAVITY. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE: BEFORE PART NOS. (45-43-26-18-19-13) ARE ASSEMBLED, CHECK SPECIAL INSTRUCTIONS AND ADJUSTMENTS. FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS.

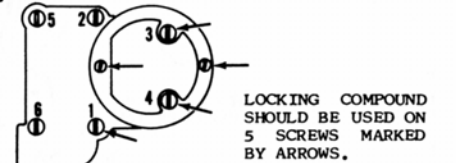
SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLE (43). TURN IN UNTIL LIGHTLY BOTTOMED, THEN BACK OUT 2 TO 5 TURNS, (1971) MODELS ARE EQUIPPED WITH A LOCKED MIXTURE SCREW CAP. DO NOT REMOVE UNLESS MANUFACTURERS PROCEDURE IS FOLLOWED TO READJUST IDLE MIXTURE, AND NEW CAP INSTALLED.

THROTTLE BODY TO BOWL ATTACHING SCREWS (45). TIGHTEN EVENLY AND TORQUE TO 12-15 FT. LBS.

METERING ROD (26). CHECK METERING ROD ADJUSTMENT BEFORE INSTALLING ROD.

BOWL COVER ATTACHING SCREWS (18-19). TIGHTEN SECURELY USING TIGHTENING SEQUENCE.



VACUUM BREAK DIAPHRAGM (13). INSTALL WITH RECESS OF DIAPHRAGM AROUND HEAD OF PLUNGER (12).

ADJUSTMENTS

② MEASURE DISTANCE FROM TOP OF FLOAT (1/16" IN FROM END OF FLAT SURFACE) TO TOP OF FLOAT BOWL CASTING. (SEE DATA TABLE FOR MEASUREMENT.)

③ TO ADJUST BEND FLOAT ARM WHERE IT ATTACHES TO FLOAT PONTOON.

① PRESS DOWN LIGHTLY ON FLOAT ARM HOLDING FLOAT RETAINER PIN IN PLACE AND FLOAT ARM AGAINST SEATED NEEDLE.

CAUTION
DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

FLOAT LEVEL ADJUSTMENT

FIG. 1

③ TO ADJUST BEND METERING ROD HOLDER

② PRESS POWER PISTON DOWN UNTIL IT STOPS. SWING METERING ROD HOLDER OVER FLAT SURFACE OF BOWL CASTING AND MEASURE BETWEEN LOWER SURFACE OF METERING ROD HOLDER AND FLAT SURFACE OF CASTING. (SEE DATA TABLE FOR MEASUREMENT.)

① BACK OUT SLOW IDLE STOP SCREW. THROTTLE VALVE HELD COMPLETELY CLOSED.

METERING ROD ADJUSTMENT

FIG. 2

② HOLD CHOKE VALVE TOWARD THE CLOSED POSITION, ROD IN END OF SLOT. MEASURE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL. (SEE DATA TABLE FOR MEASUREMENT.)

③ TO ADJUST BEND ROD

① PLACE FAST IDLE CAM FOLLOWER ON SECOND STEP OF FAST IDLE CAM NEXT TO SHOULDER OF HIGH STEP.

NOTE: ON MANUAL CHOKE MODELS, ALIGN FAST IDLE CAM FOLLOWER WITH INDEX LINE ON CAM.

(FAST IDLE CAM)
CHOKE ROD ADJUSTMENT

FIG. 3

③ MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL. (SEE DATA TABLE FOR MEASUREMENT.)

④ TO ADJUST, BEND TANG OF VACUUM BREAK LEVER

② PUSH IN ON DIAPHRAGM SHAFT UNTIL DIAPHRAGM SEATS.

① CLOSE CHOKE VALVE COMPLETELY AND HOLD IN PLACE WITH A RUBBER BAND AS SHOWN.

VACUUM BREAK ADJUSTMENT

FIG. 4

④ MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL.

⑤ TO ADJUST BEND ROD.

③ HOLD CHOKE VALVE TOWARD CLOSED POSITION, ROD IN END OF SLOT. (ON SOME MODELS EXTEND STEM TO COMPRESS BUCKING SPRING. DO NOT PULL DIAPHRAGM OFF ITS SEAT.)

② USE OUTSIDE VACUUM SOURCE TO FULLY SEAT DIAPHRAGM. (ON SOME MODELS TAPE OVER PURGE BLEED HOLE ON COVER.)

① FAST IDLE SCREW OR TANG ON HIGH STEP OF FAST IDLE CAM.

EXTERNAL VACUUM BREAK ADJUSTMENT

FIG. 5

③ HOLD CHOKE VALVE TOWARD CLOSED POSITION. MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.

④ TO ADJUST BEND ROD.

② USE OUTSIDE VACUUM SOURCE TO FULLY SEAT DIAPHRAGM.

① FAST IDLE SCREW OR TANG ON HIGH STEP OF FAST IDLE CAM.

AUXILIARY VACUUM BREAK ADJUSTMENT

FIG. 6

② HOLD CHOKE VALVE IN CLOSED POSITION, ROD IN END OF SLOT.

③ MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL. (1975 MEASURE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.)

④ TO ADJUST BEND UNLOADER TANG.

① OPEN THROTTLE LEVER TO WIDE OPEN POSITION.

UNLOADER ADJUSTMENT

FIG. 7

② MEASURE DISTANCE BETWEEN BOTTOM OF VALVE AND TOP OF AIR HORN. (SEE DATA TABLE FOR MEASUREMENT.)

③ TO ADJUST TURN VALVE

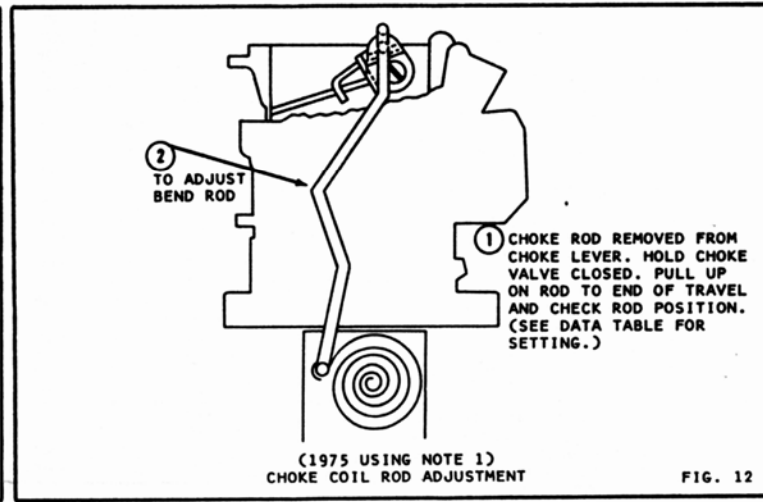
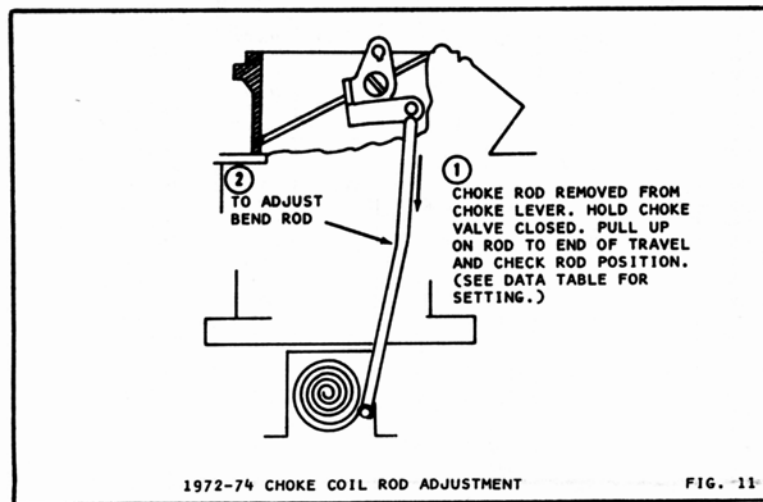
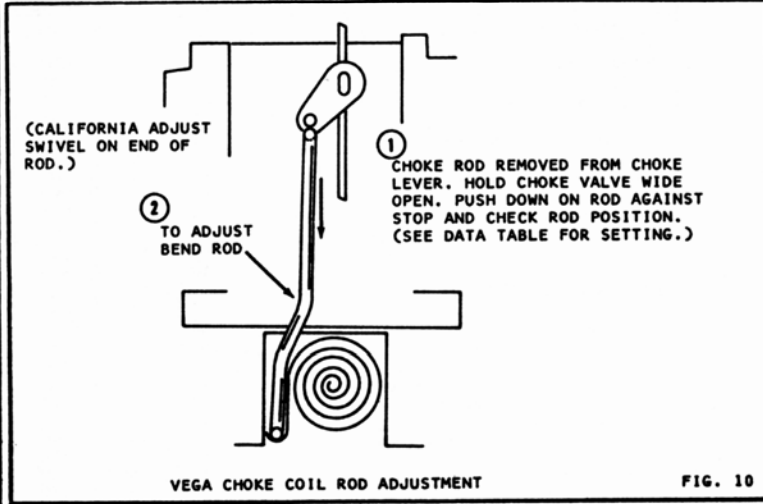
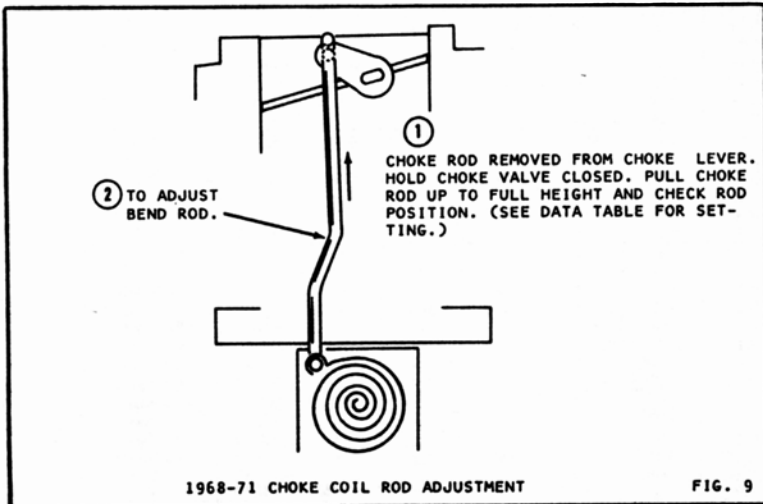
NOTE: WHEN IDLE STOP SOLENOID IS USED, MAKE SURE SOLENOID IS ACTIVATED WHEN CHECKING AND ADJUSTING IDLE VENT VALVE.

① ENGINE AT OPERATING TEMPERATURE AND CHOKE WIDE OPEN, ADJUST IDLE MIXTURE NEEDLE TO SMOOTH IDLE. ADJUST IDLE STOP SCREW FOR PROPER R.P.M. REFER TO PRINTED DECAL IN ENGINE COMPARTMENT FOR SETTING.

SLOW IDLE AND IDLE VENT ADJUSTMENT

FIG. 8

ADJUSTMENTS



USE FACTORY CAR MANUAL PROCEDURE FOR SETTING SLOW IDLE IF AVAILABLE, AND SPECIFICATIONS LISTED ON ENGINE DECAL.

FIG. 13

SUPPLEMENT IDLE ADJUSTING PROCEDURE

SLOW IDLE ADJUSTMENT WITH AND WITHOUT IDLE STOP SOLENOID

1. SET IGNITION TIMING PER CAR FACTORY SPECIFICATIONS AND PROCEDURE.
2. DISTRIBUTOR VACUUM HOSE DISCONNECT AND PLUG. ALSO DISCONNECT FUEL TANK HOSE AT VAPOR CANISTER.
3. IDLE MIXTURE SCREW TURN IN UNTIL LIGHTLY SEATED THEN BACK OUT 4 TURNS.
4. ENGINE AT OPERATING TEMPERATURE, CHOKE FULLY OPEN.
 - A. AUTOMATIC TRANSMISSION IN DRIVE
 - B. AIR CLEANER INSTALLED
5. ADJUST THROTTLE STOP SCREW TO SPECIFIED IDLE R.P.M. USING A TACHOMETER. NOTE: MODELS USING IDLE STOP SOLENOID MAKE ADJUSTMENT BY TURNING SOLENOID ASSY. (SOLENOID LEAD MUST BE CONNECTED SO SOLENOID WILL BE ENERGIZED.)
6. ADJUST IDLE MIXTURE NEEDLE TO OBTAIN THE HIGHEST R.P.M. AT THE LEANEST BEST IDLE SETTING.
7. TO ADJUST SLOWER IDLE SPEED DISCONNECT SOLENOID AT TERMINAL CONNECTION, AUTOMATIC TRANSMISSION IN NEUTRAL. MAKE ADJUSTMENT BY TURNING 1/8" HEX. SCREW AT REAR OF SOLENOID. CONNECT SOLENOID LEAD OPEN THROTTLE AND RELEASE. RECHECK HIGHER IDLE SPEED.
8. INSTALL IDLE LIMITER CAP WHEN REQUIRED.

C.E.C. VALVE ADJUSTMENT

- A. AUTOMATIC TRANSMISSION IN DRIVE
- B. MANUALLY EXTEND THE C.E.C. VALVE PLUNGER TO CONTACT THE THROTTLE LEVER AND PULL OUTWARD ON PLUNGER STEM TO END OF TRAVEL.
- C. TURN PLUNGER SCREW TO ADJUST ENGINE R.P.M. PASS. CAR A/T 650 DR. S/T 850 N. TRUCK A/T 750 DR. S/T 1000 N.

(CAUTION: C.E.C. VALVE IS NOT USED TO SET CURB IDLE.)

PLUNGER SCREW

C.E.C. VALVE ADJUSTMENT FIG. 14

① SLOW IDLE ADJUSTED, PLACE FAST IDLE CAM FOLLOWER ON PROPER STEP OF CAM AND CHECK R.P.M. REFER TO PRINTED DECAL IN ENGINE COMPARTMENT OR ADJ. DATA TABLE. NOTE: 1970 CHEVROLET DIVISION MODELS, DISCONNECT ELECTRICAL LEAD TO TRANSMISSION CONTROLLED SPARK SOLENOID.

② TO ADJUST, INSERT END OF SCREWDRIVER IN SLOT OF FAST IDLE CAM FOLLOWER AND BEND IN OR OUT FOR PROPER R.P.M.

NOTE: MANUAL CHOKE MODELS ROTATE FAST IDLE CAM TO THE FULL CLOCKWISE POSITION.

FAST IDLE ADJUSTMENT FIG. 15

