

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel

1975-79 General Motors

CARBURETOR APPLICATION

1975 CARBURETOR APPLICATIONS

Application	Rochester No. Man. Trans.	Rochester No. Auto. Trans.
Buick (M4MC)		
350" (Exc. Electra Limited)		
Federal		7045244
California		7045544
350" Electra Limited		
All States		7045246
400"		
All States		7045264
455"		
Federal		7045240
California		7045548, 7045541
Cadillac (M4MEA)		
Federal		7045230
California		7045530
Chevrolet (M4MC)		
350"		
Camaro		
Federal	7045203, 7045209	7045208, 7045202
California	7045503, 7045209	7045502
Chevrolet		
California		7045504
Chevelle & Monte Carlo		
California	7045503	7045504
Corvette		
All States	7045211, 7045223	7045210, 7045222
Nova		
Federal	7045207	7045206
California	7045507	7045506
400"		
Federal		7045228
California		7045224
454"		
Federal		7045200
Oldsmobile (M4MC)		
350"		
Cutlass & 88		
Federal		
With A/C		7045183
Without A/C		7045250
California		
With A/C		7045483
Without A/C		7045550
Omega		
Federal		7045426
California		7045546
400"		
Federal		7045264
455" (Exc. Toronado)		
Federal		
With A/C		7045184
Without A/C		7045251
California		
With A/C		7045484
Without A/C		7045551
455" Toronado		
Federal		7045185
California		7045485

1975 CARBURETOR APPLICATIONS (Cont.)

Application	Rochester No. Man. Trans.	Rochester No. Auto. Trans.
Pontiac (M4MC)		
350"		
Ventura		
Federal		7045246
California		7045546
LeMans, Grand Am & Firebird		
Federal	7045269	7045268
California		7045568
400"		
Firebird		
Federal	7045263	7045274
California		7045568
All Other Models		
Federal		7045266, 7045260
California		7045564
455" (Exc. Station Wagon)		
Federal		7045260
California		7045562
455" Station Wagon		
Federal		7045262
California		7045566

1976 CARBURETOR APPLICATIONS

Application	Rochester No. Man. Trans.	Rochester No. Auto. Trans.
Buick (M4MC)		
350" V8 (Exc. Skylark)		
Federal		17056244
California		17056544
Skylark		
Federal		17056246
California		17056546
455" V8		
Federal		17056240
California		17056540
Cadillac (M4ME & M4MEA)		
Federal		17056230
California		17056530
High Altitude ¹		17056232
Chevrolet (M4MC & M4ME)		
350" V8		
Camaro & Nova		
Federal	17056203	17056202
California	17056503	17056502
Corvette		
Federal	17056207	17056206
California	17056507	17056506
High Performance		
Without A/C	17056211	17056210
With A/C		17056226
Chevelle		
		17056202

¹ - High altitude carburetor is M4MEA model.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

1976 CARBURETOR APPLICATIONS (Cont.)

Application	Rochester No. Man. Trans.	Rochester No. Auto. Trans.
Chevrolet (Cont.)		
400" V8		
Federal		17056228
California		17056528
454" V8 ¹		
Federal		17056200
Oldsmobile (M4MC)		
350" V8 Omega ²		
Federal		17056246
California		17056546
350" V8 Cutlass & Delta ²		
Federal		17056250
Federal With/AC		17056253
California		17056550
California With/AC		17056553
350" V8 Cutlass ³		
Federal		17056258
Federal With/AC		17056259
455" V8 All Models ² (Exc. Toronado)		
Federal		17056251
Federal ⁴		17056256
California		17056551
California ⁴		17056556
455" V8		
Ninety Eight ³		
Without/AC		17056255
With/AC		17056257
455" V8 Toronado		
Federal		17056252
California		17056552
Pontiac (M4MC)		
350" V8 (Exc. Ventura)		
California		17056568
350" V8 Ventura		
Federal		17056246
California		17056546
400" V8		
Except Firebird		
Federal		17056264
California		17056564
400" V8 Firebird		
Federal	17056263	17056274
455" V8 (Exc. Pontiac Wagon & Firebird)		
Federal		17056262
California		17056562
455" V8		
Pontiac Wagon		
California		17056566
455" V8 Firebird		
Federal		17056261

- ¹ - M4ME carburetor used on 454" V8 models.
- ² - Early production models.
- ³ - Late production models.
- ⁴ - Ambulance and Hearse models.

1977 CARBURETOR APPLICATIONS

Application	Rochester No. Man. Trans.	Rochester No. Auto. Trans.
Buick (M4MC)		
350" & 403" V8		
Federal		17057202, ¹ 204
California		³ 17057241, 250
High Altitude		¹ 17057253, ² 255
California		¹ 17057256
High Altitude		⁴ 17057502, ¹ 504
California		17057550, ¹ 553
High Altitude		17057258, 582
California		¹ 17057584
Cadillac		
(M4ME & M4MEA)		
350" & 425" V8		
Federal		¹ 17055130, ¹ 131
California		¹ 17057530
High Altitude		¹ 17057232, ¹ 233
Chevrolet (M4MC)		
350" V8		
Federal	17057203	17057202, ¹ 204
California		17057502, ¹ 204
High Altitude		17057582, ¹ 584
Oldsmobile (M4MC)		
350" & 403" V8		
Federal		⁶ 17057202, ¹ 204
California		17057250, ⁵ 252
High Altitude		¹ 17057253, ⁷ 255
California		¹ 17057256
High Altitude		⁸ 17057502, ¹ 504
California		17057550, ⁵ 552
High Altitude		¹ 17057553
High Altitude		⁵ 17057257, 258
California		⁸ 17057582, ¹ 584
Pontiac (M4MC)		
350" V8		
Federal		17057255, ¹ 256
California		17057262
California		¹ 9 17057502, ⁹ 504
High Altitude		17057550, ¹ 553
High Altitude		17057258, ¹ 9 582
California		17057584
400" V8		
Federal	¹⁰ 17057263	¹⁰ 17057266, 274
403" V8		
Federal		17057255, ¹ 256
California		17057550, ¹ 553
High Altitude		17057258

- ¹ - With A/C.
- ² - Except Station Wagon.
- ³ - Station Wagon only.
- ⁴ - Skylark only.
- ⁵ - Toronado only.
- ⁶ - Delta 88 only.
- ⁷ - Except Station Wagon.
- ⁸ - Omega only.
- ⁹ - Ventura and Phoenix only.
- ¹⁰ - Firebird only.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

1978 CARBURETOR APPLICATIONS

Application	Rochester No. Man. Trans.	Rochester No. Auto. Trans.
Buick		
231" Turbo V6		
VIN 3 M4ME		
Federal		17058240
California		17058540
High Altitude		17058246
301" V8 VIN Y		
M4MC		17058272
305" V8 VIN H		
M4MC		¹ 17058202, ² 204
350" V8 VIN L		
M4MC		
Federal		³ 17058249
California		¹ 17058502
		² 17058504
High Altitude		¹ 17058582
		² 17058584
350" V8 VIN R		
M4MC		
California		17058553
High Altitude		17058258
350" V8 VIN X		
M4MC		17058241
403" V8 VIN K		
M4MC		
Federal		¹ 17058250
		² 17058253
California		17058553
High Altitude		17058258
Cadillac		
425" V8 VIN S		
M4ME		
Federal		⁴ 17058230
		⁵ 17058530
California		⁴ 17058530
		⁶ 17058533
High Altitude		⁴ 17058232
		⁶ 17058233
Chevrolet		
350" V8 VIN L		
M4MC		
Federal		¹ 17058202
		² 17058204
California		¹ 17058502
		² 17058504
High Altitude		¹ 17058582
		² 17058584
350" V8 VIN H		
M4MC		
Corvette	¹ 17058210	² 17058228

¹ - Without A/C.² - With A/C.³ - Mid-Year release. No information available.⁴ - DeVille and Brougham.⁵ - Commercial and Limousine chassis.⁶ - Eldorado only.

1979 CARBURETOR APPLICATIONS

Application	Rochester No. Man. Trans.	Rochester No. Auto. Trans.
231" V6		
VIN 3 M4ME		
Federal		17059240, 9242, 9243
California		17059540, 9543, 9544
301" V8 M4MC		
Federal	17059271	17059272
305" V8 M4MC		
Federal		
Without A/C	17059203, 9207	17059217, 9218
With A/C		17059216, 9222
California		
Without A/C		17059502
With A/C		17059504
High Altitude		
Without A/C		17059582
With A/C		17059584
350" V8		
VIN L, 4 & 8		
M4MC		
Federal	17059203, 9211	17059210, 9217
California		
Without A/C		17059502
With A/C		17059504
High Altitude		
Without A/C		17058582
With A/C		17059584
350" V8 VIN R		
M4MC		
Federal		
Without A/C		17059250, 9251
With A/C		17059251, 9253, 9259
California		
High Altitude		17059553, 9554
High Altitude		
Without A/C		17059258
With A/C		17059256
350" V8 VIN X		
M4MC		
Federal		17059241
400" V8 M4MC		
Federal		17059263
403" V8 M4MC		
Federal		
Without A/C		17059250
With A/C		17059253
California		
High Altitude		17059553
High Altitude		17059258
425" V8 M4ME		
Federal		17059230, 9532
California		17059530, 9532
High Altitude		17059232, 9532

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

2-131

CARBURETOR IDENTIFICATION

The Rochester M4MC and M4ME carburetor numbers are stamped on a vertical section of the float bowl, near the secondary throttle. If float bowl is replaced, follow manufacturer's instructions contained in service package to ensure part number is transferred to new float bowl.

DESCRIPTION

The M4MC and M4ME carburetors are of a 2-stage downdraft design. The primary side has a triple venturi system. The secondary side is composed of 2 large bores using the air valve principle in which fuel is metered in direct proportion to amount of air passing through secondary bores. A baffle is attached to the secondary side of the air horn above the main well bleed tubes to deflect incoming air to improve secondary nozzle operation on heavy acceleration. This model uses the bowl-mounted choke housing with thermostatic control assembly.

ADJUSTMENTS

HOT (SLOW) IDLE RPM

See appropriate article in TUNE-UP PROCEDURES section.

IDLE MIXTURE

See appropriate article in TUNE-UP PROCEDURES section.

COLD (FAST) IDLE RPM

NOTE: This is a preliminary adjustment only. It is required to ensure that other adjustments are made with fast idle speed approximately correct. Final Cold (Fast) Idle Speed adjustment must be made with carburetor installed and engine running. See appropriate article in TUNE-UP PROCEDURES section.

Place fast idle speed cam follower on high step of fast idle cam. Back off fast idle speed screw until throttle valves are completely closed. Now turn fast idle speed screw in until it just touches lever, then turn an additional 2 turns in.

CHOKE VALVE ANGLE GAUGE

Manufacturer recommends that some carburetor adjustments be performed using Choke Valve Angle Gauge (J-26701). While preparations and actual adjustments may vary with individual adjustment, the procedure for using the angle gauge to check the choke valve angle remains the same.

- 1) Rotate degree scale on angle gauge so that 0 degree mark is opposite pointer. With choke valve closed, place angle gauge magnet squarely on choke valve.
- 2) Rotate leveling bubble on angle gauge until it is centered. Rotate degree scale until specified degree mark is opposite pointer.

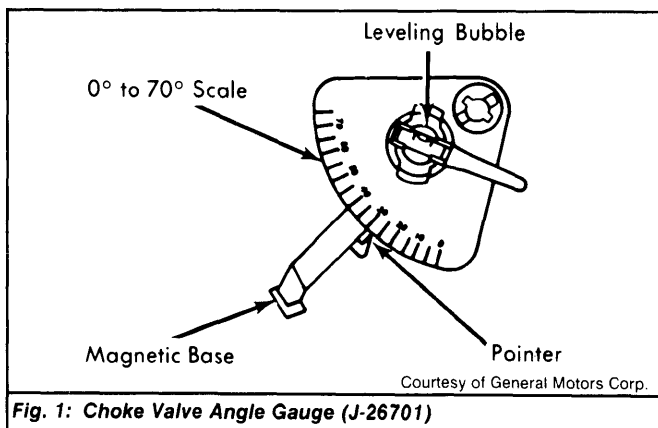


Fig. 1: Choke Valve Angle Gauge (J-26701)

- 3) Now perform individual adjustment preparations as outlined in the following carburetor adjustments requiring angle gauge. If bubble is centered, adjustment is correct. If not, adjust carburetor as outlined.

NOTE: If choke valve angle gauge is not available, the individual adjustments will include procedure for checking clearance between choke valve and air horn wall. Both degree and decimal specifications will be given in CARBURETOR ADJUSTMENT SPECIFICATIONS table.

FLOAT LEVEL

- 1) Remove air horn. Remove gasket from main body casting. Hold float retainer firmly in place. See Fig. 2.
- 2) Apply light finger pressure to push float gently against needle. Measure distance with "T" scale from top of casting to top of float. Gauging point should be $\frac{3}{16}$ " back from end of float at toe.
- 3) If adjustment is needed, remove float from main body of carburetor. Bend float arm up or down. Install float and recheck float level.
- 4) Be sure to check float alignment after adjusting operation. Install new gasket and reinstall air horn.

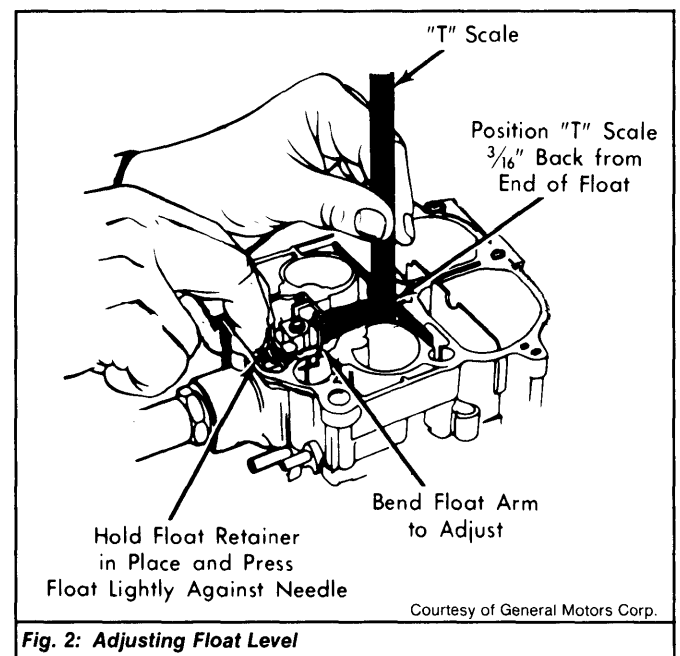


Fig. 2: Adjusting Float Level

ACCELERATOR PUMP ROD

- 1) Close throttle valves completely. Make sure fast idle cam follower is off fast idle cam steps. Bend secondary throttle closing tang to make sure primary throttle valves are fully closed. Readjust after accelerator pump adjustment. See Fig. 3.
- 2) Make sure accelerator pump rod is in specified hole (inner or outer) in accelerator pump lever. Using a "T" scale, measure specified distance from top of choke valve wall (next to vent stack) to top of pump stem. To adjust, bend accelerator pump lever at point shown.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

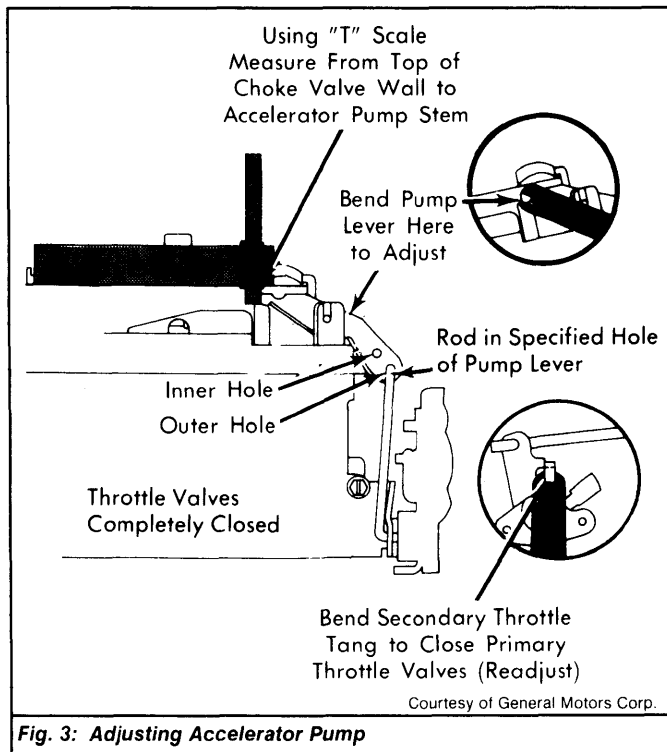


Fig. 3: Adjusting Accelerator Pump

CHOKE COIL LEVER

- 1) Loosen 3 screws retaining thermostatic cover and coil assembly and remove cover from housing. Press upward on thermostatic coil tang (counterclockwise) until choke valve is closed. See Fig. 4.
- 2) Make sure choke rod is in bottom of slot in choke lever. Insert a drill or pin gauge of specified size into hole in choke housing casting.
- 3) Lower edge of lever in choke housing should just touch drill or pin gauge. Bend choke rod at point shown to adjust. Install choke coil and cover. Adjust automatic choke.

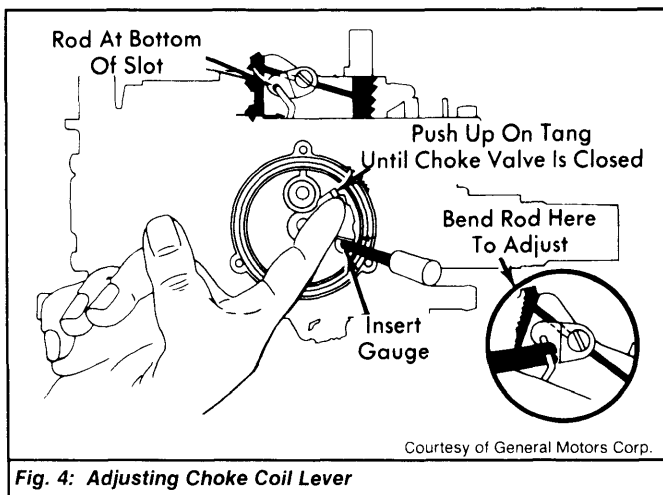


Fig. 4: Adjusting Choke Coil Lever

CHOKE ROD (FAST IDLE CAM)

NOTE: Fast idle adjustment and choke coil lever must be adjusted first. This adjustment is performed using choke valve angle gauge. See CHOKE VALVE ANGLE GAUGE in this article.

- 1) Place fast idle speed cam follower on second step of fast idle cam against shoulder of highest step. See Fig. 5. Close choke by pushing up on choke coil lever or vacuum break lever tang. Hold choke closed with a rubber band.

- 2) Bubble on choke angle gauge should be centered with specified angle mark opposite pointer. If angle gauge is not available, measure specified clearance between upper edge of choke valve and air horn wall. To adjust, bend tang on fast idle cam until bubble on angle gauge is centered or correct clearance is obtained.

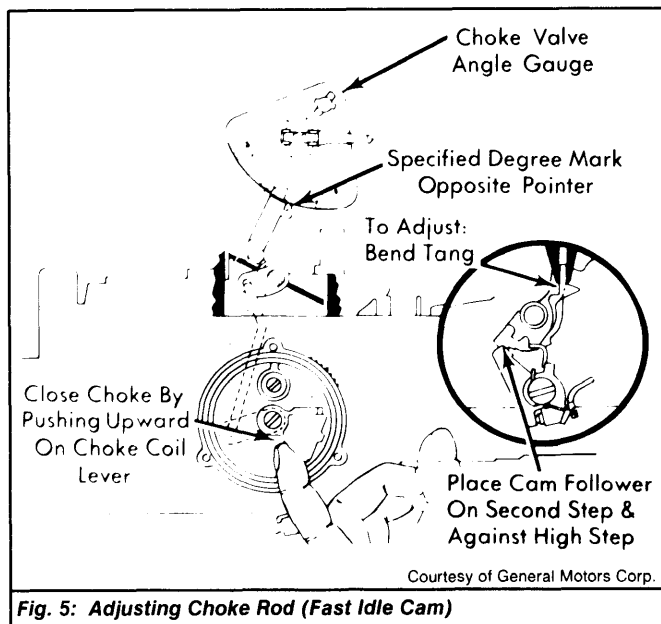


Fig. 5: Adjusting Choke Rod (Fast Idle Cam)

AIR VALVE ROD

- Front** - 1) Using an outside vacuum source, seat primary (front) choke vacuum break diaphragm. Plug purge bleed hole (if equipped) with masking tape. Hole is found in end of diaphragm. See Fig. 6.

- 2) Make sure air valve is completely closed. Insert a .015" drill or pin gauge between rod and end of slot in lever. Bend rod at point shown to adjust clearance in slot. Remove tape and reconnect vacuum hose to diaphragm.

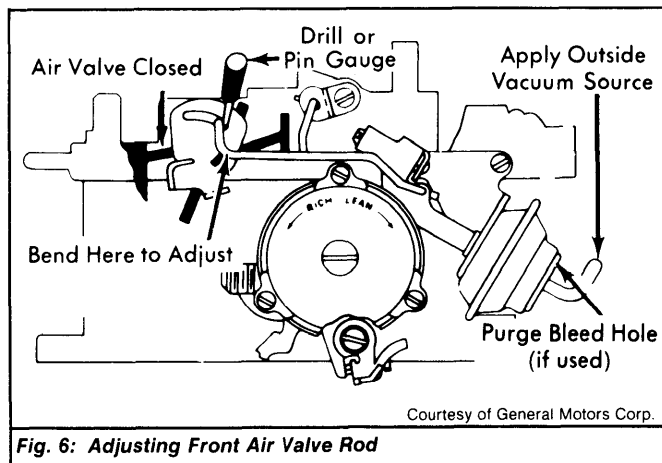


Fig. 6: Adjusting Front Air Valve Rod

- Rear** - Using an outside vacuum source, seat secondary (rear) choke vacuum break diaphragm. See Fig. 7. Make sure air valve is completely closed. Insert a .015" drill or pin gauge between rod and end of slot in lever. Bend rod at point shown to adjust clearance in slot. Reconnect vacuum hose to diaphragm.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

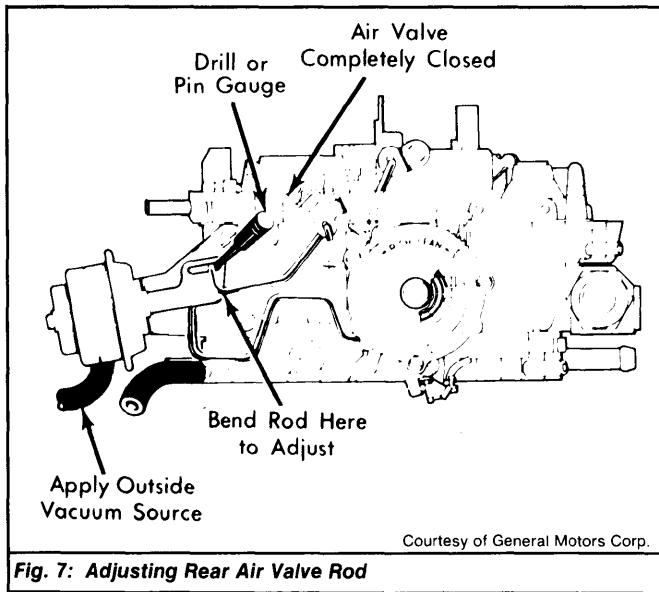


Fig. 7: Adjusting Rear Air Valve Rod

FRONT VACUUM BREAK

NOTE: This adjustment is performed using choke valve angle gauge. See **CHOKE VALVE ANGLE GAUGE** in this article.

- 1) Using an outside vacuum source of at least 15 in. Hg vacuum, seat front vacuum break diaphragm. See Fig. 8. Plug purge bleed hole (if equipped) with masking tape. Hold is found in end of diaphragm.
- 2) Close choke by pushing up on choke coil lever or vacuum break lever tang. Hold choke closed with a rubber band. Bubble on angle gauge should be centered with specified degree mark opposite pointer.
- 3) If angle gauge is not available, measure specified clearance between upper edge of choke valve and air horn wall. To adjust, turn vacuum break adjustment screw until bubble is centered or correct clearance is obtained.

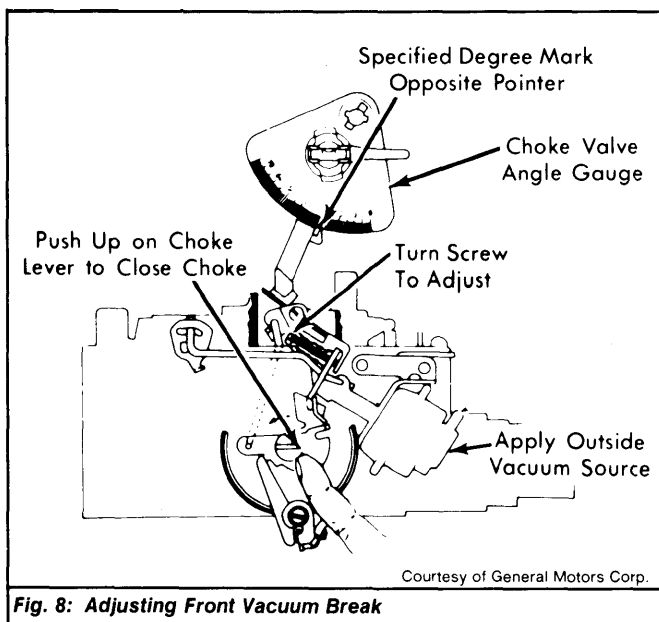


Fig. 8: Adjusting Front Vacuum Break

REAR VACUUM BREAK

NOTE: This adjustment is performed using choke valve angle gauge. See **CHOKE VALVE ANGLE GAUGE** in this article.

- 1) Using an outside vacuum source of at least 15 in. Hg vacuum, seat rear vacuum break diaphragm. See Fig. 9. Make sure bucking spring on diaphragm plunger (if equipped) is compressed and seated.
- 2) Close choke valve by pushing up on choke coil lever or vacuum break lever tang. Hold in position with a rubber band. Bubble on angle gauge should be centered with specified degree mark opposite pointer.
- 3) If angle gauge is not available, measure specified clearance between lower edge of choke valve and air horn wall. To adjust, bend secondary (rear) vacuum break rod at point shown until bubble is centered or correct clearance is obtained. Do not turn screw in end of diaphragm.

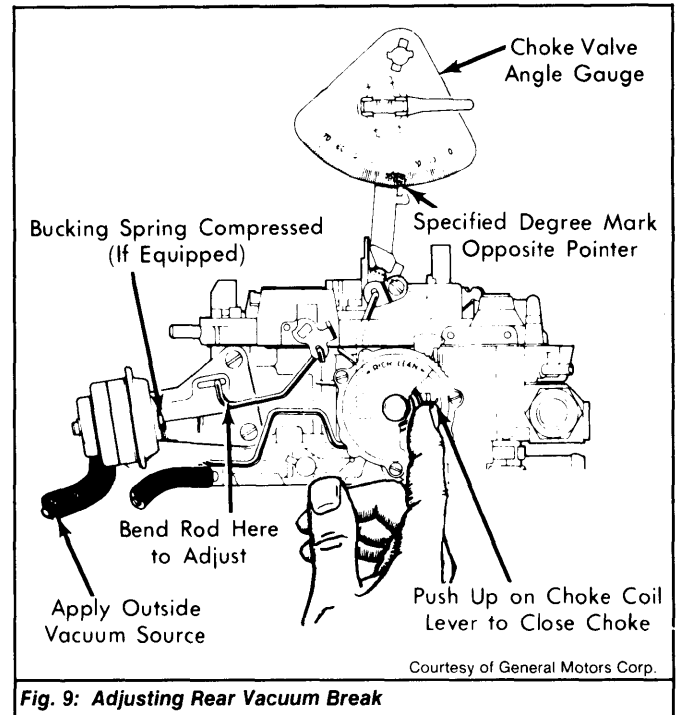


Fig. 9: Adjusting Rear Vacuum Break

AIR VALVE SPRING

- 1) Use Allen wrench to loosen lock screw. Turn tension adjusting screw counterclockwise until air valve opens part way. See Fig. 10.
- 2) Hold air valve closed. Turn tension adjusting screw clockwise specified number after spring contacts pin. Hold adjusting screw and tighten lock screw.

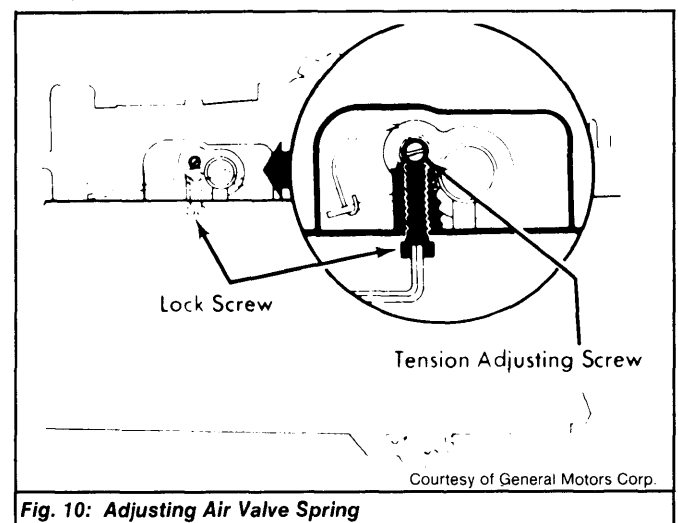


Fig. 10: Adjusting Air Valve Spring

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

AUTOMATIC CHOKE

Loosen 3 choke cover retaining screws. Position fast idle cam follower on high step of fast idle cam. Rotate cover in specified direction to align reference mark on cover with specified graduation in housing. Tighten cover screws.

CHOKE UNLOADER

NOTE: This adjustment is performed using choke valve angle gauge. See **CHOKE VALVE ANGLE GAUGE** in this article.

- 1) Adjust automatic choke. Hold throttle valves wide open. See Fig. 11. If engine is warm, close choke valve by pushing up on vacuum break lever tang. Hold in position with a rubber band.
- 2) Bubble on choke valve angle gauge should be centered with specified degree mark opposite pointer. If angle gauge is not available, measure specified clearance between upper edge of choke valve and air horn wall.
- 3) To adjust, bend choke unloader tang on throttle lever until bubble is centered or correct clearance is obtained.

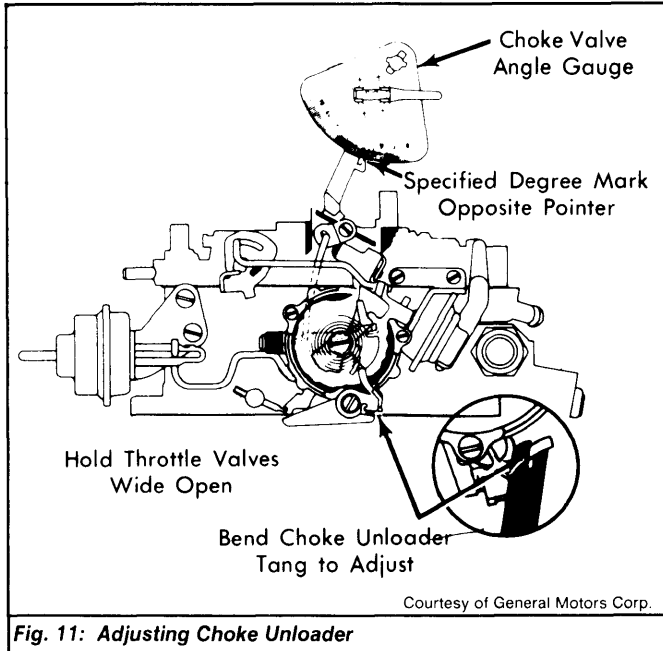


Fig. 11: Adjusting Choke Unloader

SECONDARY THROTTLE VALVE LOCK-OUT

Lock-Out Lever Side Clearance – Hold choke valve and throttle valves closed completely. See Fig. 12. Measure secondary throttle valve lock-out specified side clearance between pin and lock-out lever. Specified clearance is .015". To adjust, bend pin.

Lock-Out Lever Opening Clearance – Push down on tail of fast idle cam and open choke valve completely. See Fig. 12. Measure secondary throttle valve lock-out specified opening clearance between end of pin and toe of lock-out lever. Specified clearance is .015". To adjust, file end of lock-out pin. Make sure all burrs are removed.

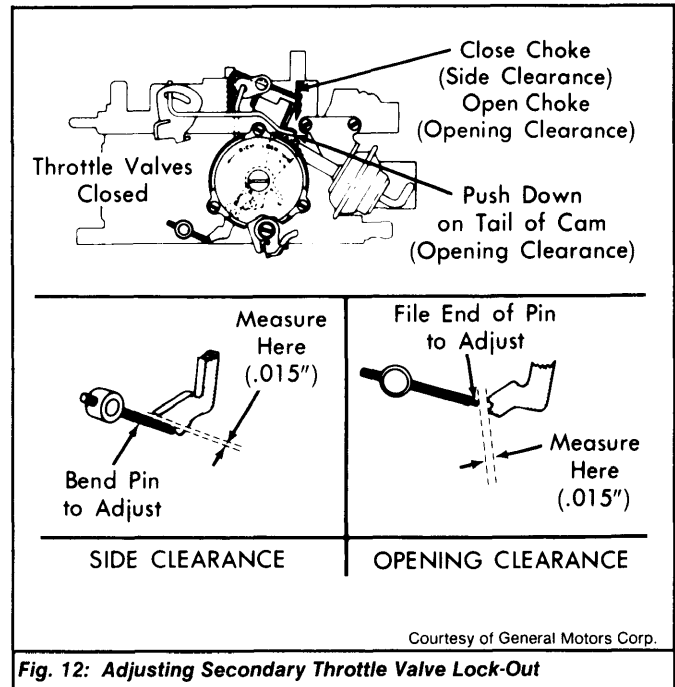


Fig. 12: Adjusting Secondary Throttle Valve Lock-Out

SECONDARY CLOSING LINKAGE

- 1) Engine idle speed must be correctly adjusted. Hold choke valve wide open and make sure fast idle cam follower is off fast idle cam steps. See Fig. 13.
- 2) Make sure secondary closing lever is against tang. Measure specified clearance between secondary throttle link and slot in secondary throttle lever. Specified clearance .020". To adjust bend tang.

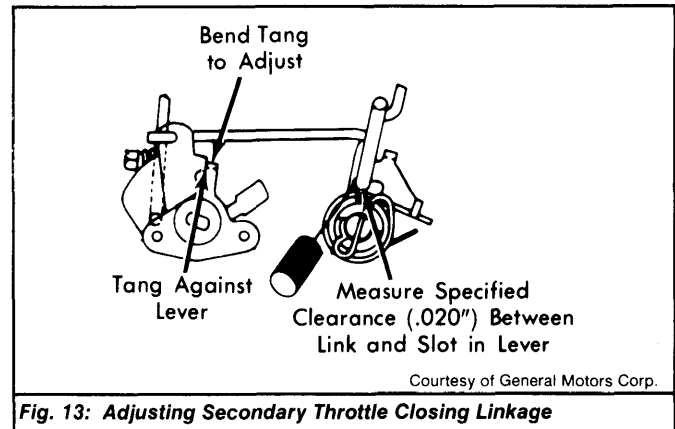


Fig. 13: Adjusting Secondary Throttle Closing Linkage

SECONDARY OPENING LINKAGE

Open primary throttle valves until secondary throttle link just contacts tang on secondary throttle lever. See Fig. 14. Link should be centered in slot of secondary throttle lever. To adjust, bend tang on secondary throttle lever.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

2-135

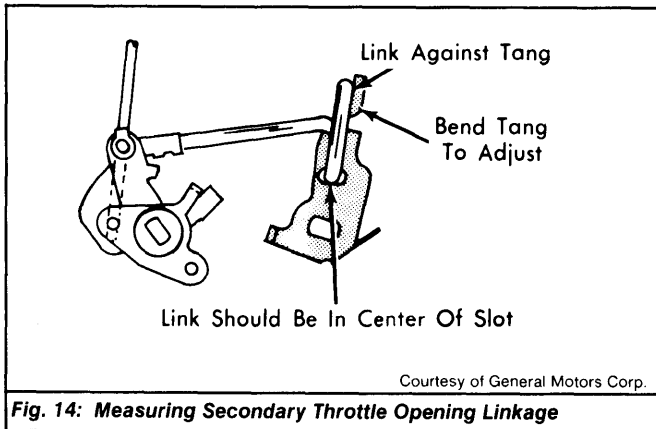


Fig. 14: Measuring Secondary Throttle Opening Linkage

OVERHAUL

CARBURETOR

NOTE: Before performing any service on carburetor, it is essential that carburetor be placed on Holding Fixture (J-8328) to prevent damage to throttle valves.

Removal (Idle Stop Solenoid) – If equipped with idle stop solenoid, remove screws securing solenoid and bracket to float bowl and remove assembly.

Removal (Air Horn) – 1) Remove upper choke lever from end of choke shaft by removing retaining screw. Then rotate upper choke lever to remove choke rod from slot in lever. Remove rod by holding lower lever outward with small screwdriver and twisting rod counterclockwise.

2) Remove vacuum hose from front vacuum break unit. Remove secondary metering rods by removing the small screw in top of metering rod hanger. Lift upward on metering rod hanger until secondary metering rods are completely out of air horn. Metering rods may be disassembled from hanger by rotating ends out of holes in end of hanger.

3) Drive small roll pin (pump lever pivot pin) inward until pump lever can be removed from air horn, then remove pump lever from pump rod. Remove 9 air horn-to-bowl attaching screws: 2 next to venturi, 5 short screws, and 2 countersunk screws. Remove secondary air baffle deflector, if equipped, from beneath 2 center air horn screws. Remove air horn from float bowl (using care not to bend small protruding tubes) by lifting straight up. Air horn gasket should remain on float bowl for removal later.

Disassembly (Air Horn) – 1) If not previously removed, remove from vacuum break bracket attaching screw. Remove diaphragm from air valve dashpot rod and remove dashpot rod from air valve lever. Further disassembly of air horn is not required or recommended for cleaning purposes, however, if part replacement is required, proceed with next step.

2) If necessary, remove staking on both choke valve attaching screws. Remove choke shaft and choke valve from air horn.

NOTE: Air valves (secondary) and air valve shaft should not be removed. However, if it is necessary to replace air valve closing spring or center plastic eccentric cam, a repair kit is available.

Disassembly (Float Bowl) – 1) Remove air horn gasket by lifting out of dowel locating pins and lifting tab of gasket from beneath power piston hanger, being careful not to distort springs holding main metering rods.

2) Remove pump plunger from pump well. Remove pump return spring from pump well. Remove power piston and metering rods by depressing piston stem and allowing it to snap free. Do not remove power piston by using pliers on metering rod hanger. Remove power piston spring from well.

3) Remove metering rods from power piston by disconnecting tension spring from top of each rod. Then, rotate rod to remove from hanger.

NOTE: Use care when disassembling rods to prevent distortion of tension spring and metering rods. Carefully note the position of tension spring for reassembly. Remove plastic filler block over float valve.

4) Remove float assembly and float needle by pulling up on retaining pin. Remove float needle seat and gasket. Remove 2 cover screws and carefully lift Adjustable Part Throttle (APT) metering rod with filler spool, or aneroid, from float bowl.

5) Remove primary main metering jets. Remove pump discharge check ball retainer and check ball. Remove hose from rear vacuum break control assembly. Remove 2 screws from rear vacuum break bracket and rotate assembly to remove vacuum break rod from slot in plunger head.

NOTE: Do not attempt to remove APT metering jet or secondary metering orifice plates. These jets are fixed and if damaged, float bowl replacement is required.

6) Remove vacuum break rod by holding down on fast idle cam (hot idle position); move end of vacuum break rod away from float bowl, then disengage rod from hole in intermediate choke lever.

Disassembly (Choke) – 1) Remove 3 attaching screws and retainers from choke cover and coil assembly, then pull straight outward and remove cover and coil assembly from choke housing. Remove choke cover gasket.

2) It is not necessary to remove baffle plate from beneath thermostatic coil. Distortion of thermostatic coil may result if forced off center retaining post on choke cover.

3) Remove choke housing assembly from float bowl by removing retaining screw and washer inside choke housing. Complete choke assembly can be removed from float bowl by sliding outward.

4) Remove secondary throttle valve lock-out lever from float bowl and lower choke lever from inside float bowl cavity (invert bowl to remove). Remove plastic tube seal from choke housing.

5) To disassemble intermediate choke shaft from choke housing, remove coil lever retaining screw at end of shaft inside choke housing. Then remove thermostatic coil lever from flats on intermediate choke shaft. Remove intermediate choke shaft from choke housing by sliding outward. Fast idle cam can now be removed from intermediate choke shaft.

6) Remove cup seal from inside choke housing shaft hole if housing is to be immersed in carburetor cleaner. Also, remove cup seal from float bowl plastic insert for bowl cleaning purposes. DO NOT attempt to remove plastic insert.

Disassembly (Throttle Body) – 1) Remove accelerator pump rod from throttle lever. Invert throttle body and position on a holding fixture with manifold side up. Position a punch in between 2 locator points on manifold side of throttle body. There are 2 locator points adjacent to each mixture screw.

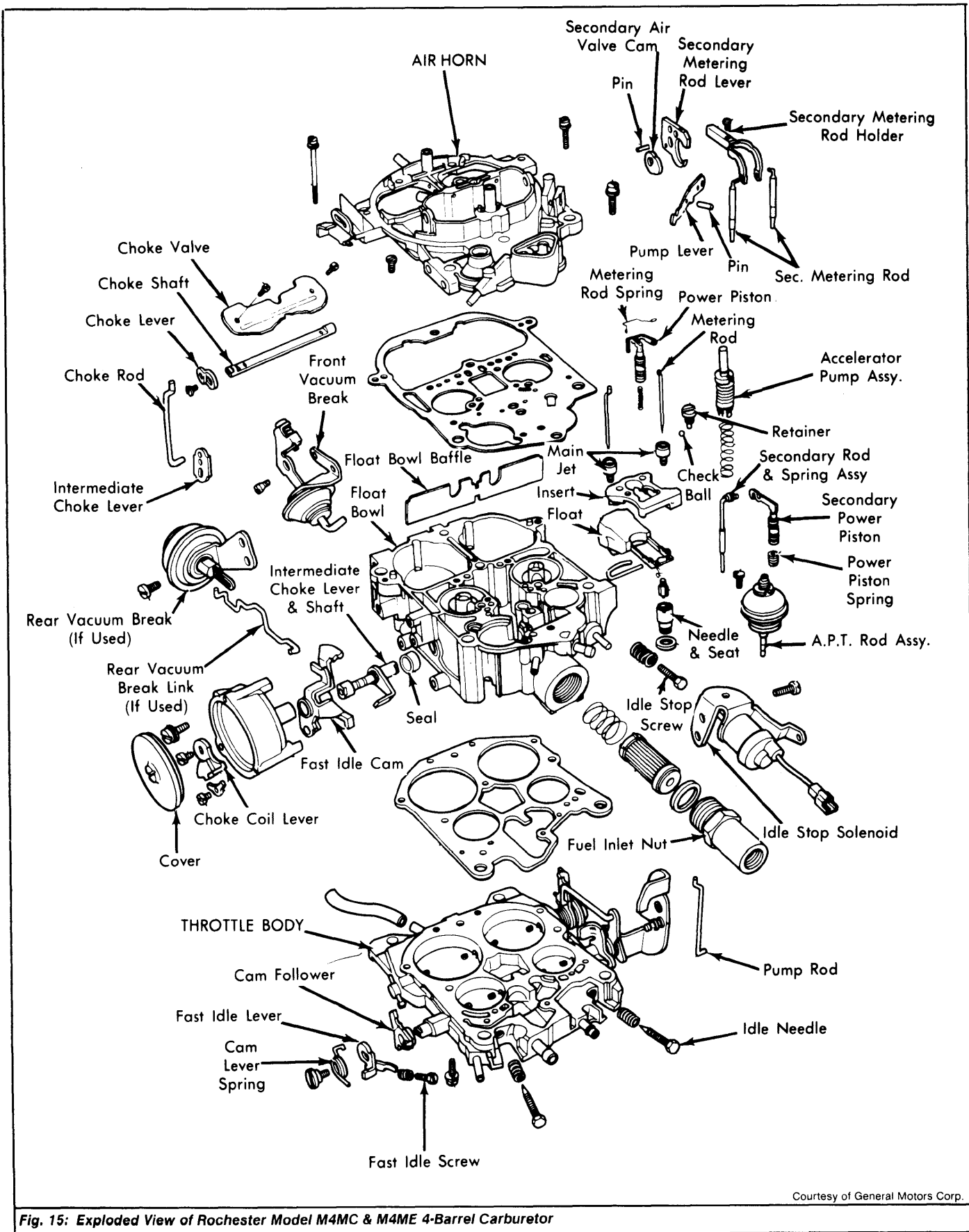
2) Using a hammer, drive punch against throttle body to break out portion of throttle body to gain access to idle mixture screw plugs. Drive out hardened steel plugs.

CAUTION: Hardened steel plugs will shatter. It is not necessary to remove plug completely. Remove just enough pieces to allow Idle Mixture Adjuster (J-28706) or a thin walled $\frac{3}{16}$ " deep socket to be used to remove mixture screws and spring.

Cleaning & Inspection – Use a regular carburetor cleaning solution. Soak components long enough to thoroughly clean all surfaces and passages of foreign matter. Remove any residue after cleaning by rinsing components in a suitable solvent. Do not soak any components containing rubber, leather or plastic. Blow out all passages with dry compressed air.

Reassembly (Throttle Body) – 1) Install idle mixture screws and springs. Lightly seat screws, then back out 2 turns as a preliminary adjustment.

1975-79 FUEL SYSTEMS Rochester M4MC & M4ME 4-Barrel (Cont.)



Courtesy of General Motors Corp.

Fig. 15: Exploded View of Rochester Model M4MC & M4ME 4-Barrel Carburetor

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

2-137

2) Install accelerator pump rod in throttle lever. Align tang on rod with slot in lever. End of rod should point outward toward throttle lever.

Reassembly (Choke Housing) - 1) Install new cup seal into insert on side of float bowls for intermediate choke shaft. Lip of cup seal faces outward. Install secondary throttle valve lock-out lever on boss on float bowl with recess in hole in lever facing carburetor bowl. Install intermediate choke shaft (steps on fast idle cam face downward).

2) Carefully install fast idle cam and intermediate choke shaft assembly in choke housing. Install thermostatic coil lever onto flats on intermediate choke shaft. Inside thermostatic choke coil lever is properly aligned when both inside and outside levers face toward fuel inlet. Install inside lever retaining screw into end of intermediate choke shaft and tighten.

3) Install lower choke rod lever into cavity in float bowl. Install choke housing-to-bowl sliding intermediate choke shaft into lower choke lever. Install choke housing retaining screws and washers. Do not install choke cover and coil assembly until choke coil lever is properly adjusted.

NOTE: The intermediate choke shaft lever and fast idle cam are in correct relationship when tang on lever is beneath fast idle cam.

Reassembly (Float Bowl) - 1) Install new throttle body gasket over 2 locating dowels on bowl. Install throttle body, making certain throttle body is properly located over dowels on float bowl, then install 2 throttle body-to-bowl screws and tighten.

2) Place carburetor on holding fixture. Install fuel inlet filter spring, filter, new gasket, inlet nut and tighten inlet nut to 18 ft. lbs. Install air baffle in secondary side of float bowl with notches toward top. Top edge of baffle must be flush with bowl casting.

3) If removed, install baffle in pump well slot. Install accelerator pump discharge check ball and retainer in passage next to pump well. Tighten retainer. Install primary main metering jets. Install aneroid cavity insert into float bowl.

4) Install new needle seat assembly with gasket. To facilitate adjustment, bend float arm upward at notch in arm before assembly. Install float by sliding float lever under pull-clip from front to back. With float lever in pull-clip, hold float assembly at toe and install retaining pin from APT metering side.

5) Adjust float level. Install plastic filler block over float needle, pressing downward until properly seated. Install power piston spring in power piston well. If main metering rods were removed from hanger, reinstall, making sure tension spring is connected to top of each rod.

6) Install power piston assembly in well with metering rods properly positioned in metering jets. Press down firmly on plastic power piston retainer to make sure retainer is seated in recess in bowl and top is flush with top of bowl casting. If necessary, tap retainer lightly into place.

7) Install pump return spring in pump well. Install air horn gasket by carefully sliding tab of gasket around main metering rods and beneath power piston hanger. Position gasket over 2 dowel pins on float bowl.

8) Carefully lift one corner of air horn gasket and install pump plunger in pump well by pushing plunger to bottom of well against return spring tension. While holding in this position, align pump plunger stem with hole in gasket and press in place.

Reassembly (Air Horn) - 1) If removed, install choke shaft, choke valve, and 2 attaching screws. Tighten screws securely and stake lightly into place. Check choke valve for freedom of movement and proper alignment before staking screws in place.

2) Holding down on air horn gasket at pump plunger location, carefully lower air horn assembly onto float bowl, making sure that bleed tubes, accelerating well tubes, pullover enrichment tubes (if used), and pump plunger stem are positioned properly through holes in air horn gasket.

NOTE: DO NOT force air horn assembly onto bowl, but rather lower lightly into place.

3) Install 2 long air horn screws, 5 short screws, and 2 countersunk screws into primary venturi area. If used, install secondary air baffle beneath 2 center air horn screws. All air horn screws must be tightened evenly and securely. See Fig. 16.

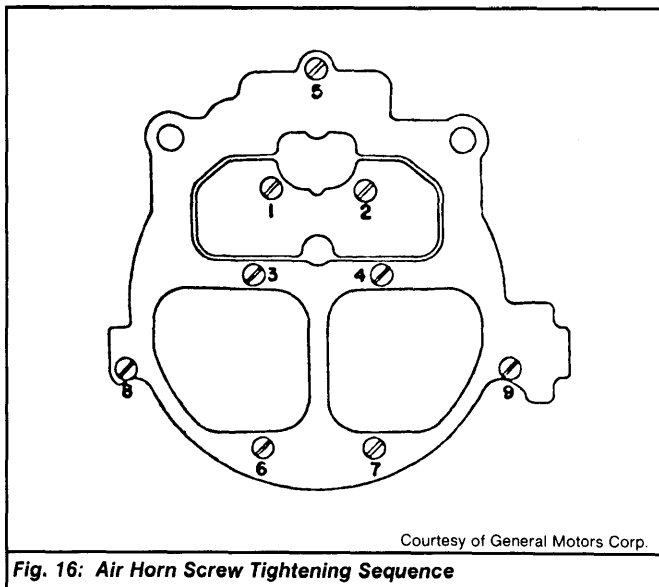
4) Install vacuum break diaphragm rod into slot in lever on end of air valve shaft. Then, install other end of rod into hole in front vacuum break diaphragm plunger. Install front vacuum break control and bracket assembly to air horn, using 2 retaining screws through bracket. Tighten screws securely. Do not attach vacuum break hose until vacuum break adjustment is complete.

5) Connect upper end of pump rod-to-pump lever by placing rod in specified hole in lever. Align hole in pump lever with hole in air horn casting. Using small screwdriver, push pump lever roll pin back through casting until end of pin is flush with casting bosses in air horn.

6) Install 2 secondary metering rods into secondary metering rod hanger (upper end of rods point toward each other). Install secondary metering rod holder, with rods onto air valve cam follower. Install retaining screw and tighten securely. Work air valves up and down several times to ensure they are free in all positions.

7) Connect choke rod into lower choke lever inside bowl cavity. Install choke rod into slot in upper choke lever and retain choke lever to end of choke shaft with attaching screw. Make sure that flats on end of choke shaft align with flats in choke lever. Front and rear vacuum break units, fast idle cam (choke rod), and inside thermostatic choke coil lever must be adjusted properly before installing choke thermostatic coil and cover assembly and gasket.

8) After above adjustments are complete, the thermostatic coil and cover assembly and gasket should be installed and cover assembly rotated until choke valve just closes. On all models except 454" engine, tang on thermostatic coil must be installed in slot in inside choke coil lever pickup arm. At this point, index cover should be adjusted. Install 3 choke cover retainers and screws and tighten securely. If used, position and retain idle stop solenoid and bracket assembly or decel throttle stop vacuum assembly.



Courtesy of General Motors Corp.

Fig. 16: Air Horn Screw Tightening Sequence

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

1975 CARBURETOR ADJUSTMENT SPECIFICATIONS										
Rochester Carb. No. ①	Unloader	Pump Rod	Float Setting	Pump Rod Location	Choke Rod	Air Valve Dashpot	Rear Vac. Break	Front Break Setting	Air Valve Windup	Choke Coil Lever
Buick										
5240	.240"	$\frac{3}{32}$ "	$\frac{7}{16}$ "	Inner	.095"	.015"	.120"	.135"	$\frac{7}{16}$	⊙85
5548	.240"	$\frac{3}{32}$ "	$\frac{7}{16}$ "	Inner	.095"	.015"	.120"	.135"	$\frac{7}{16}$	⊙85
5541	.240"	$\frac{3}{32}$ "	$\frac{7}{16}$ "	Inner	.095"	.015"	.120"	.135"	$\frac{7}{16}$	⊙85
5244	.240"	$\frac{15}{32}$ "	$\frac{5}{16}$ "	Outer	.095"	.015"	.115"	.130"	$\frac{3}{4}$	⊙85
5246	.240"	$\frac{15}{32}$ "	$\frac{5}{16}$ "	Outer	.095"	.015"	.115"	.130"	$\frac{3}{4}$	⊙85
5544	.240"	$\frac{15}{32}$ "	$\frac{5}{16}$ "	Outer	.095"	.015"	.130"	.145"	$\frac{3}{4}$	⊙85
5264	.230"	$\frac{3}{32}$ "	$\frac{1}{2}$ "	Inner	.260"	.015"	.130"	.150"	$\frac{1}{2}$	⊙85
Cadillac										
5230	.215"	$\frac{3}{8}$ "	$\frac{15}{32}$ "	Outer	.080"	.030"	.130"	.160"	$\frac{7}{16}$	.120"
5530	.215"	$\frac{3}{8}$ "	$\frac{15}{32}$ "	Outer	.080"	.030"	.230"	.230"	$\frac{1}{2}$	.120"
Chevrolet										
5200	.325"	.275"	$\frac{17}{32}$ "	Inner	.300"	.015"	.550"	.200"	$\frac{9}{16}$	.120"
5202	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5203	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5206	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5207	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5208	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5209	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5210	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5211	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5222	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5223	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5224	.325"	.275"	$\frac{15}{32}$ "	Inner	.325"	.015"	.170"	.180"	$\frac{3}{4}$	.120"
5228	.325"	.275"	$\frac{15}{32}$ "	Inner	.325"	.015"	.170"	.180"	$\frac{3}{4}$	.120"
5502	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5503	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5504	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5506	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
5507	.325"	.275"	$\frac{15}{32}$ "	Inner	.300"	.015"	.170"	.180"	$\frac{7}{8}$	.120"
Oldsmobile										
5246	.240"	$\frac{3}{8}$ "	$\frac{5}{16}$ "	Outer	.095"	.015"	.130"	.115"	$\frac{3}{4}$	.120"
5546	.240"	$\frac{3}{8}$ "	$\frac{5}{16}$ "	Outer	.095"	.015"	.145"	.130"	$\frac{3}{4}$	.120"
5183	.235"	$\frac{9}{32}$ "	$\frac{3}{8}$ "	Inner	.135"	.030"	.190"	.140"	$\frac{1}{2}$	.120"
5250	.230"	$\frac{9}{32}$ "	$\frac{15}{32}$ "	Inner	.135"	.030"	.245"	.190"	$\frac{1}{2}$	.120"
5483	.235"	$\frac{9}{32}$ "	$\frac{15}{32}$ "	Inner	.135"	.030"	.140"	.190"	$\frac{1}{2}$	.120"
5550	.235"	$\frac{9}{32}$ "	$\frac{15}{32}$ "	Inner	.135"	.030"	.140"	.190"	$\frac{1}{2}$	.120"
5264	.235"	$\frac{9}{32}$ "	$\frac{17}{32}$ "	Inner	.130"	.030"	.150"	.260"	$\frac{1}{2}$	.120"
5184	.235"	$\frac{9}{32}$ "	$\frac{3}{8}$ "	Inner	.135"	.030"	.190"	.140"	$\frac{3}{4}$	.120"
5251	.235"	$\frac{9}{32}$ "	$\frac{3}{8}$ "	Inner	.135"	.030"	.190"	.140"	$\frac{3}{4}$	.120"
5484	.235"	$\frac{9}{32}$ "	$\frac{3}{8}$ "	Inner	.135"	.030"	.190"	.140"	$\frac{3}{4}$	.120"
5551	.235"	$\frac{9}{32}$ "	$\frac{3}{8}$ "	Inner	.135"	.030"	.190"	.140"	$\frac{3}{4}$	.120"
5185	.235"	$\frac{9}{32}$ "	$\frac{15}{32}$ "	Inner	.135"	.030"	.190"	.140"	$\frac{3}{4}$	.120"
5485	.235"	$\frac{9}{32}$ "	$\frac{15}{32}$ "	Inner	.135"	.030"	.140"	.200"	$\frac{3}{4}$	.120"
Pontiac										
⊙5246	.240"	$\frac{15}{32}$ "	$\frac{5}{16}$ "	Outer	.095"	.015"	.130"	.115"	.....	.....
⊙5246	.240"	$\frac{15}{32}$ "	$\frac{5}{16}$ "	Outer	.095"	.015"	.145"	.130"	.....	.....
5263	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"
5264	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"
5268	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.375"	.120"
5269	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.160"	.265"	.375"	.120"
5274	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"
5260	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"
5262	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"
5266	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"
5562	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"
5564	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"
5568	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"
5566	.230"	$\frac{9}{32}$ "	$\frac{1}{2}$ "	Inner	.130"	.030"	.150"	.260"	.500"	.120"

① - Prefix number is 704.

⊙ - Federal Adjustment Specifications.

② - Calif. Adjustment Specifications.

⊙ - Plug gauge size.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

1976 CARBURETOR ADJUSTMENT SPECIFICATIONS										
Rochester Carb. No. ①	Unloader	Pump Rod	Float Setting	Pump Rod Location	Choke Rod	Air Valve Dashpot	Rear Vac. Break	Front Break Setting	Air Valve Windup ②	Choke Setting
Buick										
6240	.250"	9/32"	15/32"	Inner	.095"	.015"	.120"	.135"	7/16	.020"
6244	.250"	3/8"	5/16"	Outer	.095"	.015"	.120"	.130"	3/4	.020"
6246	.250"	3/8"	7/16"	Outer	.095"	.015"	.120"	.130"	3/4	.020"
6540	.250"	3/8"	15/32"	Outer	.095"	.015"	.120"	.135"	7/16	.020"
6544	.250"	3/8"	5/16"	Outer	.095"	.015"	.130"	.130"	3/4	.020"
6546	.250"	3/8"	7/16"	Outer	.095"	.015"	.130"	.130"	3/4	.020"
Cadillac										
6230	.230"	3/8"	13/32"	Outer	.080"	.030"	.160"	.160"	3/8	.120"
6232	.230"	3/8"	13/32"	Outer	.080"	.030"	.160"	.160"	3/8	.120"
6530	.230"	9/32"	7/16"	Inner	.080"	.030"	.160"	.160"	3/8	.120"
Chevrolet										
6200	.270"	9/32"	13/32"	Inner	.190"	.015"	.160"	.240"	7/8	.120"
6202	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	7/8	.120"
6203	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	7/8	.120"
6206	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	7/8	.120"
6207	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	7/8	.120"
6210	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	1	.120"
6211	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.170"	1	.120"
6226	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	1	.120"
6228	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	3/4	.120"
6502	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	7/8	.120"
6503	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	7/8	.120"
6506	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	7/8	.120"
6507	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	7/8	.120"
6528	.325"	9/32"	13/32"	Inner	.325"	.015"	.....	.185"	3/4	.120"
Oldsmobile										
6246	.250"	9/32"	5/16"	Inner	.130"	.030"	.120"	.130"	3/4	.120"
6250	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	3/4	.120"
6251	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	1/2	.120"
6252	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.200"	3/4	.120"
6253	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	3/4	.120"
6255	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	3/4	.120"
6256	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	1/2	.120"
6257	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	1/2	.120"
6258	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	3/4	.120"
6259	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	1/2	.120"
6546	.250"	9/32"	5/16"	Inner	.130"	.030"	.130"	.130"	3/4	.120"
6550	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	1/2	.120"
6551	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	3/4	.120"
6552	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	3/4	.120"
6553	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	1/2	.120"
6556	.230"	3/8"	13/32"	Outer	.095"	.015"	.140"	.190"	3/4	.120"
Pontiac										
6246	.250"	3/8"	5/16"	Outer	.095"	.015"	.120"	.130"	3/4	.120"
6261	.230"	3/8"	17/32"	Outer	.125"	.030"	.250"	.170"	5/8	.120"
6262	.230"	3/8"	17/32"	Outer	.130"	.030"	.250"	.160"	1/2	.120"
6263	.230"	3/8"	17/32"	Outer	.125"	.030"	.250"	.170"	5/8	.120"
6264	.230"	3/8"	17/32"	Outer	.125"	.030"	.250"	.160"	1/2	.120"
6274	.230"	3/8"	17/32"	Outer	.125"	.030"	.250"	.160"	1/2	.120"
6546	.250"	3/8"	17/32"	Outer	.095"	.015"	.130"	.130"	3/4	.120"
6562	.230"	3/8"	5/16"	Outer	.125"	.030"	.250"	.170"	1/2	.120"
6564	.230"	3/8"	17/32"	Outer	.120"	.030"	.260"	.150"	1/2	.120"
6566	.230"	3/8"	17/32"	Outer	.120"	.030"	.250"	.170"	1/2	.120"
6568	.230"	3/8"	17/32"	Outer	.125"	.030"	.250"	.160"	1/2	.120"

① — Prefix number is 1705.

② — Specification is amount screw is turned.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

1977 CARBURETOR ADJUSTMENT SPECIFICATIONS										
Rochester Carb. No. ①	Choke Unloader	Acc. Pump Rod	Float Setting	Pump Rod Location	Choke Rod	Air Valve Dashpot	Aux. Vac. Break	Break Setting	Air Valve Windup	Choke Setting
Buick										
7202	.....	9/32"	15/32"	Inner	.325"	.015"	.....	.160"	.....	.120"
7204	.280"	9/32"	15/32"	Inner	.325"	.015"	.....	.215"	7/8	.120"
7241	.240"	3/8"	5/16"	Outer	.095"	.015"	.....	.....	3/4	.120"
7250	.220"	9/32"	13/32"	Inner	.100"	.030"	.180"	.135"	1/2	.120"
7253	.220"	9/32"	13/32"	Inner	.100"	.030"	.180"	.135"	1/2	.120"
7255	.220"	9/32"	13/32"	Inner	.100"	.030"	.180"	.135"	1/2	.120"
7256	.220"	9/32"	13/32"	Inner	.100"	.030"	.180"	.135"	1/2	.120"
7258	.220"	9/32"	13/32"	Inner	.100"	.030"	.225"	.215"	1/2	.120"
7502	.400"②	9/32"	15/32"	Inner	.325"	.015"	.....	.165"	7/8	.120"
7504	.280"	9/32"	15/32"	Inner	.325"	.015"	.....	.215"②	7/8	.120"
7550	.220"	9/32"	13/32"	Inner	.100"	.030"	.225"	.215"	1/2	.120"
7553	.220"	9/32"	13/32"	Inner	.100"	.030"	.225"	.215"	1/2	.120"
7582	.280"	9/32"	15/32"	Outer	.325"	.015"	.....	.180"	7/8	.120"
7584	.280"	9/32"	15/32"	Outer	.325"	.015"	.....	.245"②	7/8	.120"
Cadillac										
7230	.230"	9/32"	13/32"	Outer	.080"	.030"	.120"	.140"	1/2	.120"
7231	.230"	3/8"	13/32"	Outer	.080"	.030"	.140"	.140"	1/2	.120"
7232	.230"	3/8"	13/32"	Outer	.080"	.030"	.120"	.140"	1/2	.120"
7233	.230"	3/8"	13/32"	Outer	.080"	.030"	.140"	.140"	1/2	.120"
7530	.230"	7/16"	13/32"	Outer	.080"	.030"	.150"	.150"	1/2	.120"
7533	.230"	7/16"	13/32"	Outer	.080"	.030"	.150"	.150"	1/2	.120"

① - Prefix number is 1705.

② - Measured at BOTTOM.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

1977 CARBURETOR ADJUSTMENT SPECIFICATIONS (Cont.)										
Rochester Carb. No. ①	Choke Unloader	Acc. Pump Rod	Float Setting	Pump Rod Location	Choke Rod	Air Valve Dashpot	Aux. Vac. Break	Break Setting	Air Valve Windup	Choke Setting
Chevrolet										
7202	.....	3/32"	1 1/32"	Inner	.325"	.015"	.....	.160"	.....	.120"
7203	.280"	3/32"	1 1/32"	Inner	.325"	.015"	.....	.160"	7/8	.120"
7204	.280"	3/32"	1 1/32"	Inner	.325"	.015"	.....	.160"	7/8	.120"
7210	.280"	3/32"	1 1/32"	Inner	.325"	.015"	.....	.180"	1	.120"
7211	.280"	3/32"	1 1/32"	Inner	.325"	.015"	.....	.180"	1	.120"
7228	.280"	3/32"	1 1/32"	Inner	.325"	.015"	.....	.245"②	1	.120"
7502	.280"	3/32"	1 1/32"	Inner	.325"	.015"	.....	.165"	7/8	.120"
7504	.280"	3/32"	1 1/32"	Inner	.325"	.015"	.....	.165"	7/8	.120"
7510	.....	3/32"	1 1/32"	Inner	.325"	.015"	.....	.180"	.....	.120"
7528	.....	3/32"	1 1/32"	Inner	.325"	.015"	.....	.180"	.....	.120"
7582	.280"	3/32"	1 1/32"	Outer	.325"	.015"	.....	.180"	7/8	.120"
7584	.280"	3/32"	1 1/32"	Outer	.325"	.015"	.....	.180"	7/8	.120"
Oldsmobile										
7202	.280"	3/32"	1 1/32"	Inner	.325"	.015"	.....	.160"	7/8	.120"
7204	.280"	3/32"	1 1/32"	Inner	.325"	.015"	.....	.160"	7/8	.120"
7250	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.180"	.135"	1/2	.120"
7252	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.180"	.135"	1/2	.120"
7253	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.180"	.135"	1/2	.120"
7255	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.180"	.135"	1/2	.120"
7256	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.180"	.135"	1/2	.120"
7257	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.225"	.135"	1/2	.120"
7258	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.225"	.135"	1/2	.120"
7502	.285"	3/32"	1 1/32"	Inner	.325"	.....	.....	.175"	7/8	.120"
7504	.285"	3/32"	1 1/32"	Inner	.325"	.....	.....	.175"	7/8	.120"
7550	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.225"	.135"	1/2	.120"
7552	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.225"	.135"	1/2	.120"
7553	.220"	3/32"	1 1/32"	Inner	.100"	.030"	.225"	.135"	1/2	.120"
7582	.285"	3/32"	1 1/32"	Inner	.325"	.....	.....	.175"	7/8	.120"
7584	.285"	3/32"	1 1/32"	Inner	.325"	.....	.....	.175"	7/8	.120"
Pontiac										
7250	.205"	3/32"	1 1/32"	Inner	.095"	.030"	.170"	.125"	1/2	.120"
7253	.205"	3/32"	1 1/32"	Inner	.095"	.030"	.170"	.125"	1/2	.120"
7255	.205"	3/32"	1 1/32"	Inner	.095"	.030"	.170"	.125"	1/2	.120"
7256	.205"	3/32"	1 1/32"	Inner	.095"	.030"	.170"	.125"	1/2	.120"
7258	.205"	3/32"	1 1/32"	Inner	.095"	.030"	.215"	.125"	1/2	.120"
7262	.220"	3/8"	1 1/32"	Outer	.130"	.030"	.240"	.150"	1/2	.120"
7263	.220"	3/8"	1 1/32"	Outer	.130"	.030"	.240"	.165"	5/8	.120"
7266	.220"	3/8"	1 1/32"	Outer	.130"	.030"	.240"	.150"	1/2	.120"
7274	.220"	3/8"	1 1/32"	Outer	.130"	.030"	.240"	.150"	1/2	.120"
7502	.280"	.....	.....	.....	.325"	.030"	.....	.165"	.....	.120"
7504	.280"	.....	.....	.....	.325"	.030"	.....	.165"	.....	.120"
7550	.200"	3/32"	1 1/32"	Inner	.095"	.030"	.215"	.125"	1/2	.120"
7553	.200"	3/32"	1 1/32"	Inner	.095"	.030"	.215"	.125"	1/2	.120"
7582	.280"	.....	.....	.....	.325"	.030"	.....	.165"	.....	.120"
7584	.280"	.....	.....	.....	.325"	.030"	.....	.165"	.....	.120"

① — Prefix number is 1705

② — Measured at BOTTOM

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

1978 CARBURETOR ADJUSTMENT SPECIFICATIONS

Roch. Carb. No.	Float Level	Acc. Pump Adj.	Choke Coil Lever	Choke Rod (Cam)	Air Valve Rod	Front Vacuum Break	Rear Vacuum Break	Auto. Choke Coil	Choke Unloader Adj.	Sec. Lockout Adj.	Sec. Closing Adj.	Air Valve Spring
Buick												
M4MC												
17058202	15/32"	9/32" ⊕	.120"	46°	.015"	27°	.....	2 NL	42°	.015"	.020"	①
17058204	15/32"	9/32" ⊕	.120"	46°	.015"	27°	.....	2 NL	42°	.015"	.020"	7/8
17058228	15/32"	9/32" ⊕	.120"	46°	.015"	30°	.....	2 NL	42°	.015"	.020"	1
17058241	5/32"	3/8" ⊕	.120"	18°	.015"	21.5°	19°	1 NR	38°	.015"	.020"	3/4
17058250	13/32"	9/32" ⊕	.120"	18°	.030"	23°	30.5°	2 NR	35°	.015"	.020"	1/2
17058253	13/32"	9/32" ⊕	.120"	18°	.030"	23°	30.5°	2 NR	35°	.015"	.020"	1/2
17058258	13/32"	9/32" ⊕	.120"	19°	.030"	24°	36.5°	2 NR	35°	.015"	.020"	1/2
17058282	15/32"	9/32" ⊕	.120"	46°	.015"	27°	.....	INDEX	42°	.015"	.020"	7/8
17058284	15/32"	9/32" ⊕	.120"	46°	.015"	27°	.....	INDEX	42°	.015"	.020"	7/8
17058502	15/32"	9/32" ⊕	.120"	46°	.015"	28°	.....	2 NL	42°	.015"	.020"	7/8
17058504	15/32"	9/32" ⊕	.120"	46°	.015"	28°	.....	2 NL	42°	.015"	.020"	7/8
17058553	15/32"	9/32" ⊕	.120"	19°	.030"	24°	36.5°	2 NR	35°	.015"	.020"	1/2
17058559	15/32"	9/32" ⊕	.120"	19°	.030"	25°	.....	3 NR	36.5°	.015"	.020"	1/2
17058582	15/32"	9/32" ⊕	.120"	46°	.015"	30°	.....	2 NL	42°	.015"	.020"	7/8
17058584	15/32"	9/32" ⊕	.120"	46°	.015"	30°	.....	2 NL	42°	.015"	.020"	7/8
M4ME												
17058240	7/32"	9/32" ⊕	.120"	14.5°	.015"	21°	23°	INDEX	38°	.015"	.020"	3/4
17058246	7/32"	9/32" ⊕	.120"	14.5°	.015"	23°	23°	INDEX	38°	.015"	.020"	3/4
17058540	7/32"	9/32" ⊕	.120"	14.5°	.015"	21°	19°	1 NR	38°	.015"	.020"	3/4

- ⊕ - Inner hole.
- ⊙ - Outer hole.
- Ⓢ - Each spec = number of turns.

1978 CARBURETOR ADJUSTMENT SPECIFICATIONS (Cont.)

Roch. Carb. No.	Float Level	Acc. Pump Adj.	Choke Coil Lever	Choke Rod (Cam)	Air Valve Rod	Front Vacuum Break	Rear Vacuum Break	Auto. Choke Coil	Choke Unloader Adj.	Sec. Lockout Adj.	Sec. Closing Adj.	Air Valve Spring
Cadillac												
M4ME												
17058230	13/32"	3/8" ⊕	.120"	16° ⊙	.030"	25° ⊙	39° ⊙	2 NR	35°	.015"	.020"	①
17058232	13/32"	3/8" ⊕	.120"	16° ⊙	.030"	26° ⊙	28° ⊙	2 NR	35°	.015"	.020"	1/2
17058233	13/32"	3/8" ⊕	.120"	16° ⊙	.030"	26° ⊙	28° ⊙	2 NR	35°	.015"	.020"	1/2
17058530	13/32"	3/8" ⊕	.120"	16° ⊙	.030"	26° ⊙	28° ⊙	2 NR	35°	.015"	.020"	1/2
17058531	13/32"	3/8" ⊕	.120"	16° ⊙	.030"	26° ⊙	28° ⊙	2 NR	35°	.015"	.020"	1/2
17058532	13/32"	3/8" ⊕	.120"	16° ⊙	.030"	26° ⊙	28° ⊙	2 NR	35°	.015"	.020"	1/2
17058533	13/32"	3/8" ⊕	.120"	16° ⊙	.030"	26° ⊙	28° ⊙	2 NR	35°	.015"	.020"	1/2
17058535	15/32"	3/8" ⊕	.120"	16° ⊙	.030"	26° ⊙	28° ⊙	2 NR	35°	.015"	.020"	1/2

- ⊕ - Inner hole.
- ⊙ - Plug gauge measurement - .080".
- Ⓢ - Plug gauge measurement - .140".
- Ⓣ - Plug gauge measurement - .150".
- Ⓢ - Plug gauge measurement - .250".
- Ⓣ - Plug gauge measurement - .165".
- Ⓢ - Each spec = number of turns.

1978 CARBURETOR ADJUSTMENT SPECIFICATIONS (Cont.)

Roch. Carb. No.	Float Level	Acc. Pump Adj.	Choke Coil Lever	Choke Rod (Cam)	Air Valve Rod	Front Vacuum Break	Rear Vacuum Break	Auto. Choke Coil	Choke Unloader Adj.	Sec. Lockout Adj.	Sec. Closing Adj.	Air Valve Spring
Chevrolet												
M4MC												
17058202	15/32"	9/32"	.120"	46°	.015"	27° ⊙	.....	2 NL	42°	.015"	.020"	7/8 ⊙
17058203	15/32"	9/32"	.120"	46°	.015"	27° ⊙	.....	2 NL	42°	.015"	.020"	7/8 ⊙
17058204	15/32"	9/32"	.120"	46°	.015"	27° ⊙	.....	2 NL	42°	.015"	.020"	7/8 ⊙
17058210	15/32"	9/32"	.120"	46°	.015"	30° ⊙	.....	2 NL	42°	.015"	.020"	.....
17058228	15/32"	9/32"	.120"	46°	.015"	30° ⊙	.....	2 NL	42°	.015"	.020"	7/8 ⊙
17058502	15/32"	9/32"	.120"	46°	.015"	28° ⊙	.....	2 NL	42°	.015"	.020"	7/8 ⊙
17058504	15/32"	9/32"	.120"	46°	.015"	28° ⊙	.....	2 NL	42°	.015"	.020"	7/8 ⊙
17058582	15/32"	9/32"	.120"	46°	.015"	30° ⊙	.....	2 NL	42°	.015"	.020"	7/8 ⊙
17058584	15/32"	9/32"	.120"	46°	.015"	30° ⊙	.....	2 NL	42°	.015"	.020"	7/8 ⊙

- ⊙ - Above 22,500 miles, set to 30°.
- Ⓢ - Above 22,500 miles, set to 31°.
- Ⓣ - Above 22,500 miles, set to 33°.
- Ⓢ - Number of turns.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

1978 CARBURETOR ADJUSTMENT SPECIFICATIONS (Cont.)

Roch. Carb. No.	Float Level	Acc. Pump Adj.	Choke Coil Lever	Choke Rod (Cam)	Air Valve Rod	Front Vacuum Break	Rear Vacuum Break	Auto. Choke Coil	Choke Unloader Adj.	Sec. Lockout Adj.	Sec. Closing Adj.	Air Valve Spring
Oldsmobile M4MC												
17058204	15/32"	9/32"⓪	.120"	46°⓪	.015"	27°⓪	.....	2 NL	42°⓪	.015"	.020"	3/8"⓪
17058250	13/32"	9/32"⓪	.120"	18°⓪	.030"	23°⓪	30.5°⓪	2 NR	35°	.015"	.020"	1/2"⓪
17058253	13/32"	9/32"⓪	.120"	18°⓪	.030"	23°⓪	30.5°⓪	2 NR	35°⓪	.015"	.020"	1/2"⓪
17058257	13/32"	9/32"⓪	.120"	19°⓪	.030"	24°⓪	36.5°⓪	2 NR	35°⓪	.015"	.020"	1/2"⓪
17058258	13/32"	9/32"⓪	.120"	19°⓪	.030"	24°⓪	36.5°⓪	2 NR	35°⓪	.015"	.020"	1/2"⓪
17058259	13/32"	9/32"⓪	.120"	19°⓪	.030"	24°⓪	30.5°⓪	2 NR	35°⓪	.015"	.020"	1/2"⓪
17058502	15/32"	9/32"⓪	.120"	46°⓪	.015"	28°⓪	.....	2 NL	42°⓪	.015"	.020"	3/8"⓪
17058504	15/32"	9/32"⓪	.120"	46°⓪	.015"	28°⓪	.....	2 NL	42°⓪	.015"	.020"	3/8"⓪
17058553	13/32"	9/32"⓪	.120"	19°⓪	.030"	24°⓪	36.5°⓪	2 NR	35°⓪	.015"	.020"	1/2"⓪
17058555	13/32"	9/32"⓪	.120"	19°⓪	.030"	24°⓪	36.5°⓪	2 NR	35°⓪	.015"	.020"	1/2"⓪
17058582	15/32"	9/32"⓪	.120"	46°⓪	.015"	30°⓪	.....	2 NL	42°⓪	.015"	.020"	3/8"⓪
17058584	15/32"	9/32"⓪	.120"	46°⓪	.015"	30°⓪	.....	2 NL	42°⓪	.015"	.020"	3/8"⓪

- ⓪ — Inner hole.
- Ⓛ — Plug gauge measurement — .096".
- Ⓜ — Plug gauge measurement — .314".
- Ⓝ — Plug gauge measurement — .103".
- Ⓞ — Plug gauge measurement — .157".
- Ⓟ — Plug gauge measurement — .129".
- Ⓠ — Plug gauge measurement — .136".
- Ⓡ — Plug gauge measurement — .164".
- Ⓢ — Plug gauge measurement — .179".
- Ⓣ — Plug gauge measurement — .183".
- Ⓤ — Plug gauge measurement — .230".
- Ⓥ — Plug gauge measurement — .277".
- Ⓦ — Plug gauge measurement — .220".
- Ⓧ — Number of turns.

1978 CARBURETOR ADJUSTMENT SPECIFICATIONS (Cont.)

Roch. Carb. No.	Float Level	Acc. Pump Adj.	Choke Coil Lever	Choke Rod (Cam)	Air Valve Rod	Front Vacuum Break	Rear Vacuum Break	Auto. Choke Coil	Choke Unloader Adj.	Sec. Lockout Adj.	Sec. Closing Adj.	Air Valve Spring
Pontiac M4MC												
17058202	15/32"	9/32"⓪	.120"	46°	.015"	27°	.....	1 NL	42°	.015"	.020"	.....
17058204	15/32"	9/32"⓪	.120"	46°	.015"	27°	.....	1 NL	42°	.015"	.020"	.....
17058241	5/16"	3/8"Ⓛ	.120"	18°	.015"	21.5°	19°	1 NR	38°	.015"	.020"	3/4"⓪
17058250	13/32"	9/32"⓪	.120"	18°	.030"	23°	30.5°	2 NR	35°	.015"	.020"	1/2"⓪
17058253	13/32"	9/32"⓪	.120"	18°	.030"	23°	30.5°	2 NR	35°	.015"	.020"	1/2"⓪
17058258	13/32"	9/32"⓪	.120"	19°	.030"	24°	36.5°	2 NR	35°	.015"	.020"	1/2"⓪
17058263	17/32"	3/8"Ⓛ	.120"	23°	.030"	28°	40°	INDEX	35°	.015"	.020"	3/8"⓪
17058264	17/32"	3/8"Ⓛ	.120"	23.5°	.030"	26°	40°	1 NR	35°	.015"	.020"	1/2"⓪
17058266	17/32"	3/8"Ⓛ	.120"	23.5°	.030"	26°	40°	INDEX	35°	.015"	.020"	1/2"⓪
17058272	15/32"	3/8"Ⓛ	.120"	14.5°	.030"	24°	32°	2 NR	36°	.015"	.020"	3/8"⓪
17058274	17/32"	3/8"Ⓛ	.120"	23.5°	.030"	26°	40°	INDEX	35°	.015"	.020"	1/2"⓪
17058276	17/32"	3/8"Ⓛ	.120"	23.5°	.030"	26°	40°	INDEX	35°	.015"	.020"	1/2"⓪
17058278	17/32"	3/8"Ⓛ	.120"	23.5°	.030"	26°	40°	1 NR	35°	.015"	.020"	1/2"⓪
17058502	15/32"	9/32"⓪	.120"	46°	.015"	28°	.....	2 NL	42°	.015"	.020"	.....
17058504	15/32"	9/32"⓪	.120"	46°	.015"	28°	.....	2 NL	42°	.015"	.020"	.....
17058553	13/32"	9/32"⓪	.120"	19°	.030"	24°	36.5°	2 NR	35°	.015"	.020"	1/2"⓪
17058582	15/32"	9/32"⓪	.120"	46°	.015"	30°	.....	2 NL	42°	.015"	.020"	3/8"⓪
17058584	15/32"	9/32"⓪	.120"	46°	.015"	30°	.....	2 NL	42°	.015"	.020"	3/8"⓪

- ⓪ — Inner hole.
- Ⓛ — Outer hole.
- Ⓧ — Number of turns.

NOTE — Hot (Slow) Idle and Cold (Fast) Idle RPM specifications are located on the EMISSION CONTROL/TUNE-UP DECAL found in the vehicle engine compartment. This specification may vary with individual vehicle applications. Any adjustment specification not found in this table, will be included in the ADJUSTMENT Section of this article.

1975-79 FUEL SYSTEMS

Rochester M4MC & M4ME 4-Barrel (Cont.)

1979 CARBURETOR ADJUSTMENT SPECIFICATIONS											
Application	Float Level Setting	Accelerator Pump		Choke Coil Lever Setting	Choke Rod Setting ^①	Air Valve Rod Setting ^②	Vacuum Break		Air Valve Spring Setting ^③	Auto. Choke Setting	Choke Unloader Setting
		Stem Setting	Hole Setting				Primary Setting ^①	Secondary Setting ^①			
Model M4MC											
17059203	15/32"	1/4"	Inner	.120"	38°	.015"	27°	.....	7/8	2NL	38°
17059207	15/32"	1/4"	Inner	.120"	38°	.015"	27°	.....	7/8	2NL	38°
17059210	15/32"	1/4"	Inner	.120"	38°	.015"	27°	.....	1	1NL	38°
17059211	15/32"	1/4"	Inner	.120"	38°	.015"	27°	.....	1	2NL	38°
17059216	15/32"	1/4"	Inner	.120"	38°	.015"	27°	.....	7/8	1NL	38°
17059217	15/32"	1/4"	Inner	.120"	38°	.015"	27°	.....	7/8	1NL	38°
17059218	15/32"	9/32"	Inner	.120"	38°	.015"	28°	.....	7/8	2NL	38°
17059222	15/32"	9/32"	Inner	.120"	38°	.015"	28°	.....	7/8	2NL	38°
17059228	15/32"	9/32"	Inner	.120"	38°	.015"	27°	.....	1	1NL	38°
17059241	5/32"	3/8"	Outer	.120"	18°	.015"	20°	18°	3/4	1NR	38°
17059250	13/32"	9/32"	Inner	.120"	18°	.030"	23°	30.5°	1/2	2NR	35°
17059253	13/32"	9/32"	Inner	.120"	18°	.030"	23°	30.5°	1/2	2NR	35°
17059256	13/32"	9/32"	Inner	.120"	19°	.030"	24°	32°	1/2	2NR	35°
17059258	13/32"	9/32"	Inner	.120"	19°	.030"	24°	32°	1/2	2NR	35°
17059259	13/32"	9/32"	Inner	.120"	18°	.030"	23°	30°	1/2	2NR	35°
17059263	13/32"	3/8"	Outer	.120"	23°	.030"	28°	38°	3/8	Index	35°
17059271	7/16"	3/8"	Outer	.120"	20°	.030"	25°	34°	3/8	1NR	33°
17059272	15/32"	3/8"	Outer	.120"	14.5°	.030"	23°	29.5°	3/8	2NR	33°
17059282	13/32"	1/4"	Inner	.120"	38°	.015"	27°	.....	7/8	1NL	38°
17059284	13/32"	1/4"	Inner	.120"	38°	.015"	27°	.....	7/8	1NL	38°
17059502	15/32"	1/4"	Inner	.120"	38°	.015"	28°	.....	7/8	2NL	38°
17059504	15/32"	1/4"	Inner	.120"	38°	.015"	28°	.....	7/8	2NL	38°
17059553	13/32"	1/4"	Inner	.120"	19°	.030"	24°	36.5°	1/2	2NL	38°
17059554	13/32"	1/4"	Inner	.120"	19°	.030"	24°	36.5°	1/2	2NL	38°
17059582	15/32"	11/32"	Outer	.120"	38°	.015"	33°	.....	7/8	1NL	46°
17059584	15/32"	11/32"	Outer	.120"	38°	.015"	33°	.....	7/8	1NL	46°
Model M4ME											
17059230	13/32"	9/32"	Inner	.120"	16°	.030"	25°	37°	1/2	2NR	25°
17059232	13/32"	9/32"	Inner	.120"	16°	.030"	26°	28°	1/2	2NR	25°
17059240	7/32"	9/32"	Inner	.120"	14.5°	.015"	21°	21°	3/4	1NR	30°
17059242	7/32"	9/32"	Inner	.120"	14.5°	.015"	15°	13°	3/4	2NR	30°
17059243	7/32"	9/32"	Inner	.120"	14.5°	.015"	21°	21°	3/4	1NR	30°
17059530	13/32"	9/32"	Inner	.120"	16°	.030"	26°	28°	1/2	2NR	25°
17059532	13/32"	9/32"	Inner	.120"	16°	.030"	26°	28°	1/2	2NR	25°
17059540	7/32"	9/32"	Inner	.120"	14.5°	.015"	21°	23°	3/4	1NR	38°
17059543	7/32"	9/32"	Inner	.120"	14.5°	.015"	21°	23°	3/4	1NR	38°
17059544	7/32"	9/32"	Inner	.120"	14.5°	.015"	21°	21°	3/4	1NR	30°

① - 13° = .066"; 14.5° = .074"; 15° = .077"; 16° = .083"; 18° = .096"; 19° = .103"; 20° = .110"; 21° = .117"; 23° = .129"; 24° = .136"; 25° = .142"; 26° = .149"; 27° = .157"; 28° = .164"; 29.5° = .175"; 30° = .179"; 30.5° = .183"; 32° = .195"; 33° = .203"; 35° = .220"; 37° = .234"; 38° = .243"; 46° = .314".

② - Setting is for both Front and Rear Air Valve Rod adjustments.

③ - Specification is amount of turn.