1975-79 FUEL SYSTEMS
Rochester 1ME Single Barrel

CARBURETOR APPLICATION

CHEVROLET CARBURETOR APPLICATION

Application	Man. Trans.	Auto. Trans.
1976		
1.4L 4-Cyl.		
Federal	17056031	17056030, [2] 036
Calif.	17056331	17056330
1.6L 4-Cyl.		
Federal	17056035	17056034, [2] 032
Calif.	17056335	17056334, [2] 332
1977		
1.4L 4-Cyl.		
Federal	17057031	17057030
1.6L 4-Cyl.		
Federal	17057035, [1] 045	17057034, 038 [1] [2] 17057042
Calif.	17057335	17057334, [2] 332
250" 6-Cyl.		
Federal		
Without A/C	17057013	17057014
With A/C		17057015, 16, 20
Calif.		
Without A/C		17057310, 314
With A/C		17057312, 318
High Alt.		17057016
1978		
1.6L 4-Cyl.		
Federal		
VIN J ONLY	17058031	[2] 17058036, 038
Exc. VIN J	17058035	[2] 17058032, 034
Calif.	17058335	[2] 17058332, 334
High Alt.	17058045	[2] 17058042, 044
250" 6-Cyl.		
Federal	17058013	[2] 17058014, 8020
Calif.		17058314
1979		
250" 6-Cyl.		
Federal	17059013	17059014, 9020
Calif.		17059314

[1] - High Alt. use only.
[2] - With A/C.

CARBURETOR IDENTIFICATION

The carburetor model identification is stamped on a vertical portion of the float bowl, adjacent to the fuel inlet nut. If replacing float bowl, follow manufacturer's instructions contained in service package so that the identification number can be transferred to the new float bowl.

DESCRIPTION

The Rochester model 1ME carburetor is of a single barrel downdraft type carburetor using a triple venturi in conjunction with a plain tube nozzle. This model carburetor incorporates an electrically activated integral automatic choke system. The choke vacuum diaphragm is mounted externally to carburetor air horn and is connected to thermostatic coil lever through a connector link. An electrically actuated idle stop solenoid and dual throttle return springs are used on all models.

ADJUSTMENTS

NOTE: For all adjustments not covered in this article, see appropriate article in TUNE-UP PROCEDURES section.

FLOAT LEVEL

1) Remove air horn. Hold float pin firmly in place. Push down on end of float arm against top of float needle. *See Fig. 1.*
2) With gasket removed, use a depth or "T" scale to measure distance from top of casting to index point at toe of float.
3) If adjustment is needed, gently bend float arm up or down. Do not force needle against needle seat. Install new gasket, replace air horn. Start engine and check for leaks.

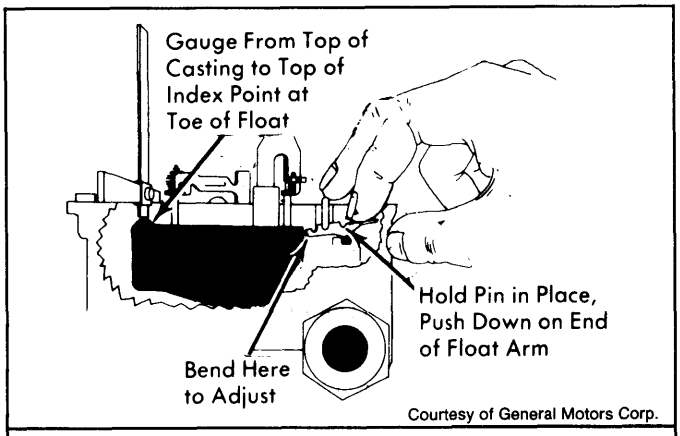

Fig. 1: Adjusting Float Level

METERING ROD

All 1976-77 & 1978 Chevette - 1) Remove air horn and gasket. Back out idle stop solenoid. Rotate fast idle cam so idle screw is not touching steps on fast idle cam. Hold throttle valve in fully closed position. *See Fig. 2.*
2) Ensure power piston is in full up position. Measure specified clearance between rod holder and carburetor bowl surface. Measurement can be made using a drill or pin gauge.
3) If adjustment is needed, gently bend metering rod holder up or down. Reassemble carburetor. Install new air horn-to-body gasket. Check for leaks.

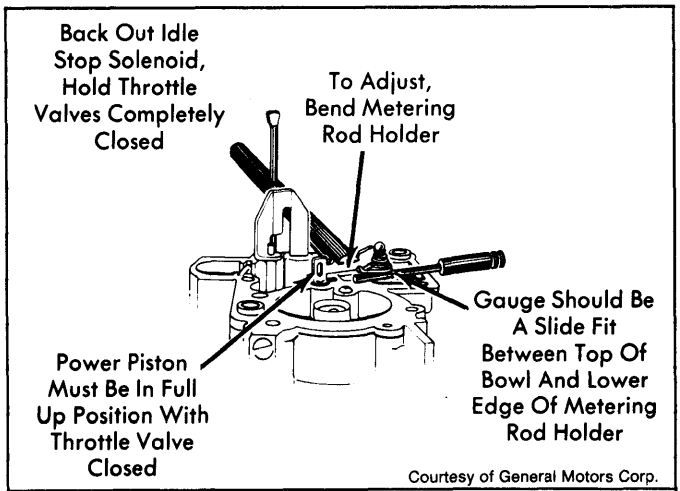

Fig. 2: Adjusting 1976-78 Metering Rod

1978 Exc. Chevette & All 1979 - 1) Remove air horn and gasket. Hold throttle valve wide open. Push down on metering rod against spring tension. *See Fig. 3.*
2) Slide metering rod out of slot in holder and remove from main metering jet. Back out idle stop solenoid. Hold throttle valve in fully closed position.
3) Press down on power piston. Swing metering rod holder over flat surface of bowl casting next to bore.
4) Measure specified clearance between rod holder and carburetor surface. Measurement can be made using a drill or pin gauge.

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5) If adjustment is needed, gently bend holder arm up or down. Reassemble carburetor. Install new air horn-to-body gasket. Check for leaks.

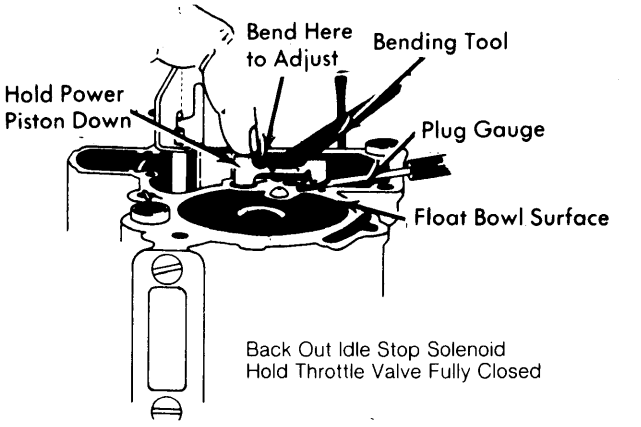

Fig. 3: Adjusting 1978-79 Metering Rod

CHOKE COIL LEVER

1) Place cam follower on HIGHEST step of fast idle cam. Hold choke valve closed. *See Fig. 4.*

2) If adjustment is correct, .120" plug gauge should be able to pass through hole in lever and enter hole in casting. Bend connector link to adjust.

NOTE: 1976-78 choke coil lever is shown in Fig. 4, 1979 is similar.

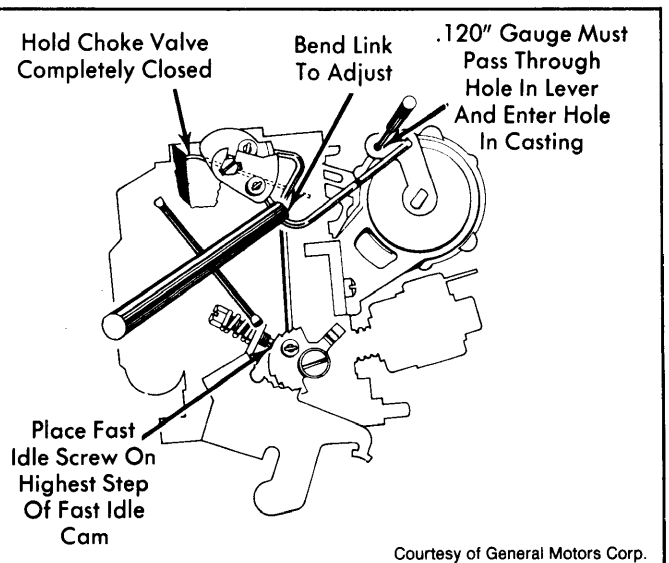

Fig. 4: Adjusting Choke Coil Lever

AUTOMATIC CHOKE

1) Loosen choke coil cover retaining screws. Place cam follower on HIGH step of fast idle cam.

2) With choke coil lever located inside coil tang, align mark on electric choke with specified point on choke housing. Tighten retaining screws.

CHOKE COIL ROD (FAST IDLE CAM)

1) Make sure fast idle speed is correctly set. Place fast idle cam follower on SECOND step of fast idle cam, against HIGHEST step. *See Fig. 5.*

2) Apply light closing pressure to choke valve. Measure specified clearance between lower edge of choke valve and air horn wall. Measurement can be made with a specified drill or pin gauge. To adjust, bend fast idle cam rod.

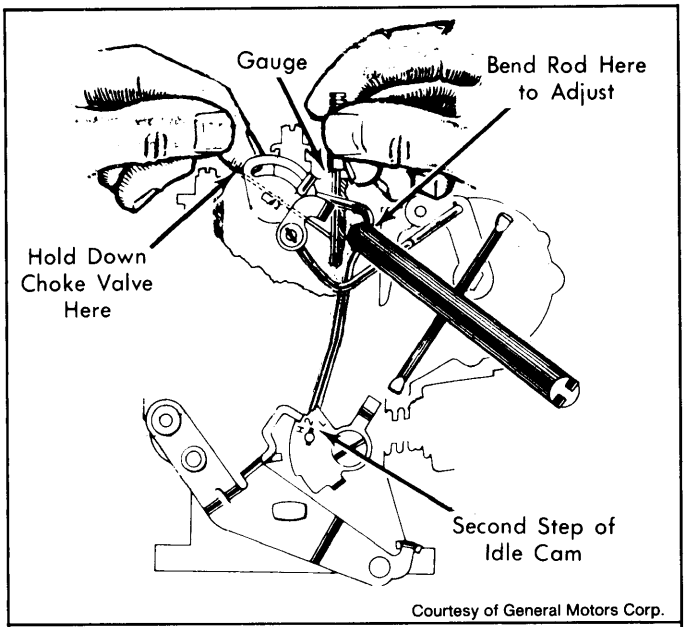

Fig. 5: Adjusting Choke Coil Rod

VACUUM BREAK

1) Place cam follower on HIGHEST step of fast idle cam. Use outside vacuum source and apply enough vacuum to seat diaphragm. *See Fig. 6.*

2) Diaphragm plunger should be IN and seated. If used, bucking spring should be fully compressed.

3) Push up on choke coil lever. Rod should be snug in end of diaphragm plunger slot. On models equipped with delay feature, cover purge bleed hole in vacuum break end cover with masking tape.

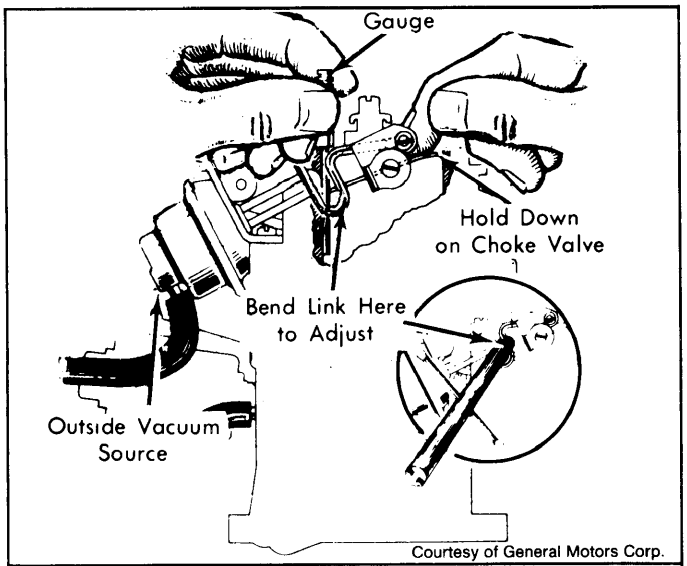

Fig. 6: Adjusting Vacuum Break

4) Measure specified clearance between lower edge of choke valve and air horn wall. Measurement can be made with a specified drill or pin gauge.

5) To adjust, bend "U" shaped portion of vacuum diaphragm connector link. Remove masking tape. Check linkage for binding.

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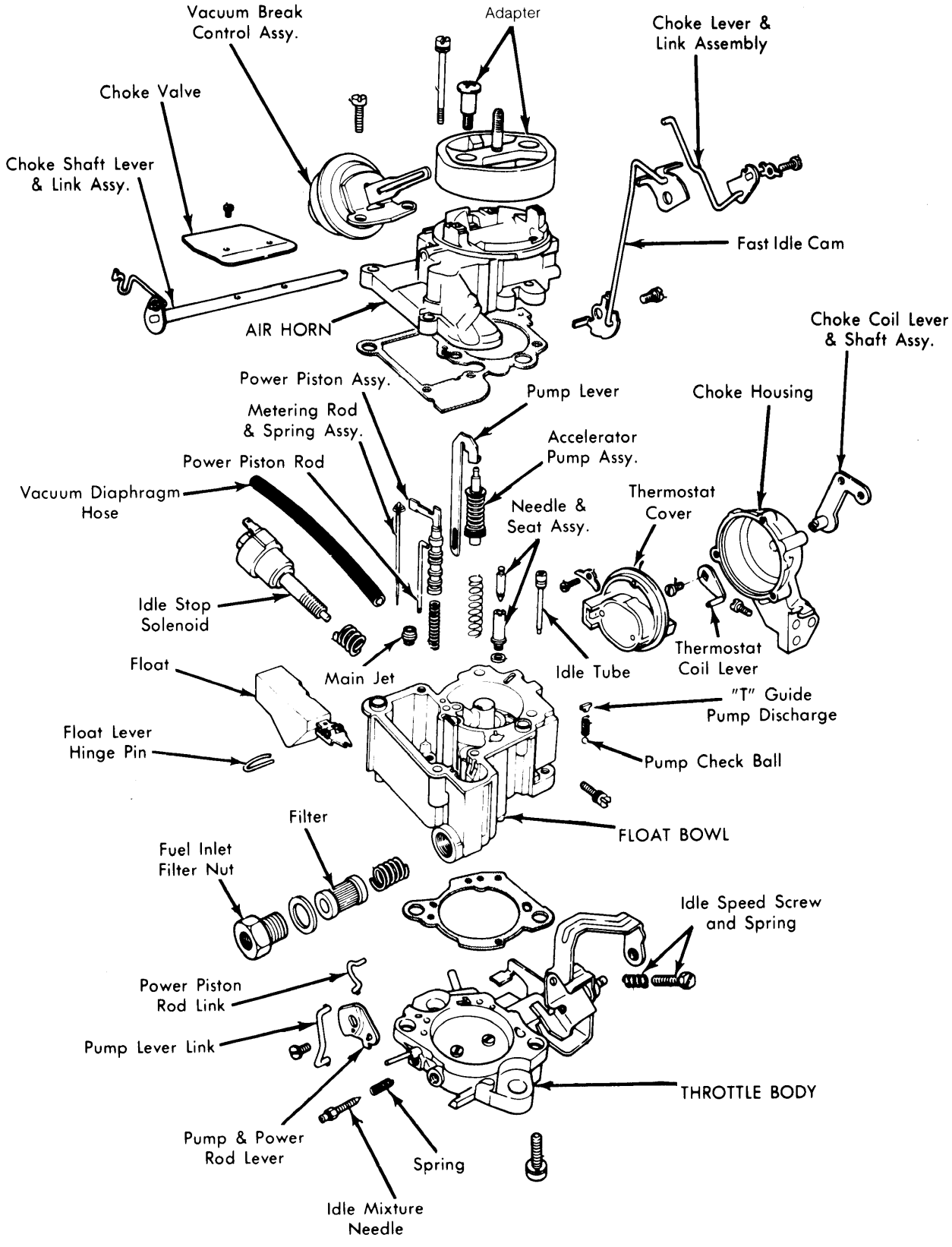

Courtesy of General Motors Corp.

Fig. 7: Exploded View of 1ME Carburetor

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Rochester 1ME Single Barrel (Cont.)

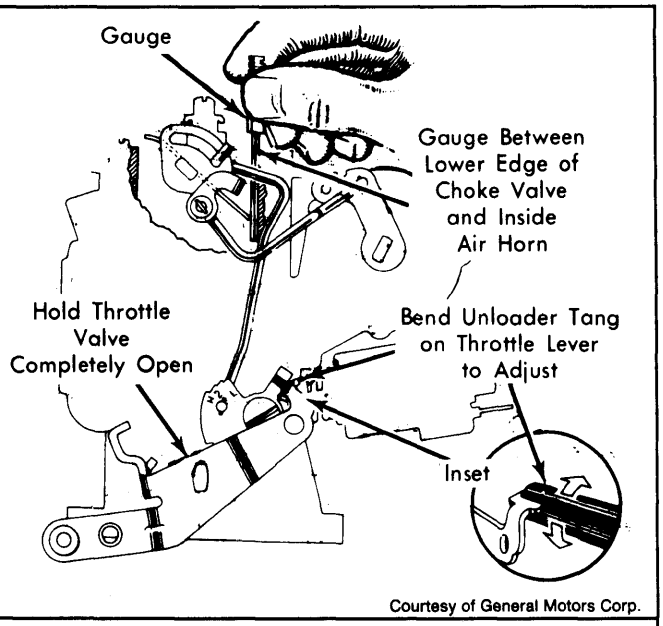

Fig. 8: Adjusting Choke Unloader

CHOKE UNLOADER

1) Open throttle valve wide open. Apply light closing pressure to choke valve. Measure specified clearance between lower edge of choke valve and air horn wall. *See Fig. 8.*

2) Measurement can be made with a specified drill or pin gauge. To adjust, bend choke unloader tang.

1975-79 FUEL SYSTEMS
Rochester 1ME Single Barrel (Cont.)

1976 CARBURETOR ADJUSTMENT SPECIFICATIONS

Rochester Car. No.	Idle Speed (Engine RPM)		Float Level Setting	Metering Rod Setting	Fast Idle (Off Engine)	Choke Rod Setting	Vacuum Break Setting	Unloader Setting	Auto. Choke Setting ②
	Hot ①	Fast							
17056030	①	①	5/32"	.072"	N/A	.065"	.085"	.200"	3 Rich
17056031	①	①	5/32"	.072"	N/A	.065"	.085"	.200"	3 Rich
17056032	①	①	5/32"	.073"	N/A	.065"	.085"	.200"	3 Rich
17056034	①	①	5/32"	.073"	N/A	.065"	.085"	.200"	3 Rich
17056035	①	①	5/32"	.073"	N/A	.065"	.085"	.200"	3 Rich
17056036	①	①	5/32"	.072"	N/A	.065"	.085"	.200"	3 Rich
17056330	①	①	5/32"	.072"	N/A	.065"	.085"	.200"	3 Rich
17056331	①	①	5/32"	.072"	N/A	.065"	.085"	.200"	3 Rich
17056332	①	①	5/32"	.073"	N/A	.065"	.085"	.200"	3 Rich
17056334	①	①	5/32"	.073"	N/A	.065"	.085"	.200"	3 Rich
17056335	①	①	5/32"	.073"	N/A	.065"	.085"	.200"	3 Rich

① — See Emission Control Tune-Up Decal.
② — Number of notches, rich or lean.

1977 CARBURETOR ADJUSTMENT SPECIFICATIONS

Rochester Car. No.	Idle Speed (Engine RPM)		Float Level Setting	Metering Rod Setting	Choke Lever Setting	Choke Rod Setting	Vacuum Break Setting	Unloader Setting	Auto. ② Choke Setting
	Hot	Fast							
17057013	①	2000	3/8"	.070"	.100"	.120"	.125"	.325"	1NR
17057014	①	2000	3/8"	.070"	.085"	.120"	.120"	.325"	2NR
17057015	①	2000	3/8"	.070"	.100"	.120"	.125"	.325"	1NR
17057016	①	2000	3/8"	.070"	.095"	.120"	.125"	.325"	1NL
17057018	①	2000	3/8"	.070"	.095"	.120"	.125"	.325"	1NR
17057020	①	2000	3/8"	.070"	.085"	.120"	.120"	.325"	2NR
17057030	①	2400	5/32"	.080"	.050"	.120"	.080"	.200"	3NR
17057031	①	2300	5/32"	.080"	.050"	.120"	.080"	.200"	3NR
17057032	①	2400	5/32"	.080"	.050"	.120"	.080"	.200"	3NR
17057034	①	2400	5/32"	.080"	.050"	.120"	.080"	.200"	3NR
17057035	①	2300	5/32"	.080"	.050"	.120"	.080"	.200"	3NR
17057042	①	2400	5/32"	.080"	.050"	.120"	.080"	.200"	2NR
17057044	①	2400	5/32"	.080"	.050"	.120"	.080"	.200"	2NR
17057045	①	N/A	5/32"	.080"	.050"	.120"	.080"	.200"	2NR
17057310	①	1800	3/8"	.070"	.....	.120"	.....	.....	INDEX
17057312	①	1800	3/8"	.070"	.....	.120"	.....	.....	INDEX
17057314	①	1800	3/8"	.070"	.100"	.120"	.110"	.225"	INDEX
17057318	①	1800	3/8"	.070"	.100"	.120"	.110"	.225"	INDEX
17057332	①	N/A	5/32"	.080"	.050"	.120"	.080"	.200"	2NR
17057334	①	N/A	5/32"	.080"	.050"	.120"	.080"	.200"	2NR
17057335	①	N/A	5/32"	.080"	.050"	.120"	.080"	.200"	2NR

① — See Emission Control Tune-Up Decal.
② — Number of notches rich or lean.

1975-79 FUEL SYSTEMS
Rochester 1ME Single Barrel (Cont.)

1978 CARBURETOR ADJUSTMENT SPECIFICATIONS

Rochester Carb. No.	Idle Speed (Engine RPM)		Float Level Setting	Metering Rod Setting	Choke Lever Setting	Choke Rod Setting	Vacuum Break Setting	Unloader Setting	Auto. Choke Setting
	Hot	Fast							
Chevette									
17058031	①	2400	5/32"	.080"	.120"	.105"	.150"	.500"	2 NR
17058032	①	2400	5/32"	.080"	.120"	.080"	.130"	.500"	3 NR
17058033	①	2400	5/32"	.080"	.120"	.080"	.130"	.500"	2 NR
17058034	①	2400	5/32"	.080"	.120"	.080"	.130"	.500"	3 NR
17058035	①	2300	5/32"	.080"	.120"	.080"	.130"	.500"	3 NR
17058036	①	2400	5/32"	.080"	.120"	.080"	.130"	.500"	3 NR
17058037	①	2400	5/32"	.080"	.120"	.080"	.130"	.500"	2 NR
17058038	①	2400	5/32"	.080"	.120"	.080"	.130"	.500"	3 NR
17058042	①	2400	5/32"	.080"	.120"	.080"	.130"③	.500"	2 NR
17058044	①	2400	5/32"	.080"	.120"	.080"	.130"③	.500"	2 NR
17058045	①	2300②	5/32"	.080"	.120"	.080"	.130"③	.500"	2 NR
17058332	①	2400	5/32"	.080"	.120"	.080"	.130"③	.500"	2 NR
17058334	①	2400	5/32"	.080"	.120"	.080"	.130"③	.500"	2 NR
17058335	①	2300②	5/32"	.080"	.120"	.080"	.130"③	.500"	2 NR
Chevrolet Camaro Nova									
17058013	①	2000④	3/8"	.080"	.120"	.180"	.200"	.500"	INDEX
17058014	①	2100④	5/16"	.100"	.120"	.180"	.200"	.500"	INDEX
17058020	①	2100④	5/16"	.100"	.120"	.180"	.200"	.500"	INDEX
17058314	①	2000④	3/8"	.100"	.120"	.190"	.245"	.400"	INDEX

① — See Emission Control Tune-Up Decal.
② — Not adjustable.
③ — Above 30,000 miles, set to .160".
④ — Transmission in NEUTRAL.

1979 CARBURETOR ADJUSTMENT SPECIFICATIONS

Application	Float Level Setting	Metering Rod Setting	Choke Coil Lever Setting	Auto. Choke Setting	Choke Coil Rod Setting	Vacuum Break Setting	Choke Unloader Setting
17059013	3/8"	.095"	.120"	Index	.180"	.200"	.400"
17059014	3/8"	.095"	.120"	Index	.180"	.200"	.400"
17059020	3/8"	.095"	.120"	Index	.180"	.200"	.400"
17059314	3/8"	.100"	.120"	Index	.190"	.245"	.400"