

ROCHESTER 4MC & 4MV 4-BARREL

BUICK (4MV)

Application	Rochester Carburetor No.	
	Man. Trans.	Auto. Trans.
350"		
Apollo		
Federal.....		7044246
California.....		7044546
All Others		
Federal.....		7044244
California.....		7044544
Hi. Alt.		7044248
455"		
All States	7044240	
Century Stage I.....		7044242
Hi. Alt.		7044248

CADILLAC (4MV)

Application	Rochester Carburetor No.	
	Man. Trans.	Auto. Trans.
Eldorado		
Federal.....		7044232
California.....		7044532
Hi. Alt.		7044235
Commercial		
All States		7044233
All Others		
Federal.....		7044230
California.....		7044530
Hi. Alt.		7044234

CHEVROLET (4MV)

Application	Rochester Carburetor No.	
	Man. Trans.	Auto. Trans.
350"		
Nova & Corvette		
Federal.....	7044207	7044206
California.....	7044507	7044506
Camaro Z-28		
All States	7044209	7044208
All Others		
Federal.....	7044203	7044204
California.....	7044503	7044502
400"		
All Models		
Federal.....		7044266
California.....		7044526
454"		
Corvette		
Federal.....	7044221	7044255
California.....	7044221	7044505
All Others		
Federal.....	7044201	7044223
California.....	7044201	7044500

OLDSMOBILE (4MC)

Application	Rochester Carburetor No.	
	Man. Trans.	Auto. Trans.
350"		
Cutlass Wagon.....		
		7043256
Omega.....		
		7043255
All Others		
		7043250
455"		
Oldsmobile & Cutlass		
Federal.....		7043251
California.....		7044558
Cutlass Hi. Perf.		
All States		7044559
Toronado		
Federal.....		7043252
California.....		7044557
Commercial.....		7043259

PONTIAC (4MC)

Application	Rochester Carburetor No.	
	Man. Trans.	Auto. Trans.
350"		
Ventura		
California.....		7044568
All Others		
Federal.....	7044269	7044268
400"		
All Models		
Federal.....	7043263	7044266
Hi. Alt.		7044274
455"		
Firebird Super Duty		
All States	7044273	7044270
Commercial		
All States		7044267
All Others		
All States		①7044262
Hi. Alt.		7044272

① — Except Bonneville, Catalina and Grandville with dual exhaust in California, which use Carb No. 7044560.

CARBURETOR IDENTIFICATION

Carburetor part number is stamped on a verticle section of the float bowl, near secondary throttle lever. When replacing float bowl assembly, follow manufacturers instructions, contained in service package, so that the part number is transferred to the new float bowl.

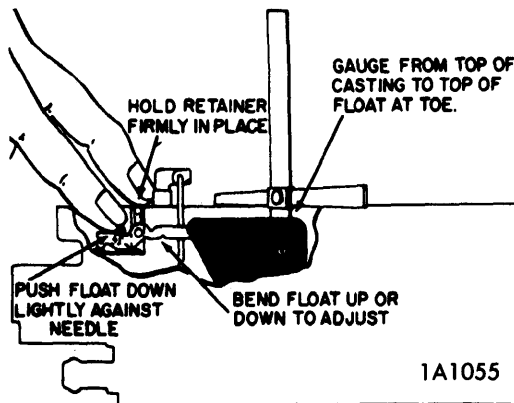
DESCRIPTION

Rochester 4MC and 4MV carburetors are similiar in design and operation. Basic difference is in automatic choke. Model 4MC has automatic choke mounted on carburetor body, while model 4MV automatic choke is mounted on intake manifold. Additional differences will be evident in the adjustment procedures.

ROCHESTER 4MC & 4MV 4-BARREL (Cont.)

FLOAT LEVEL

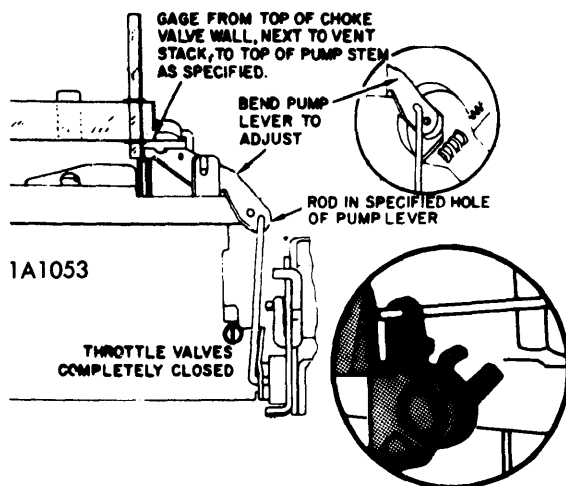
Hold retaining pin firmly in place with tang of float lightly seated on float needle. With adjustable T-scale, measure from top of float bowl gasket surface (gasket removed) to top of float at toe. Locate gauge point 1/16" from radius of toe. Bend float up or down to obtain specified clearance.



FLOAT LEVEL ADJUSTMENT

ACCELERATOR PUMP ROD

Completely close primary throttle valves by backing out idle speed screw and making sure that fast idle cam follower clears fast idle cam. It will also be necessary to bend the secondary throttle closing tang away from the primary throttle lever. With pump rod in specified hole, measure distance from top of choke valve wall, next to vent stack, to top of pump stem. Obtain specified measurement by bending pump lever. Support pump lever with screwdriver placed between lever and top of air horn. After adjustment is completed, readjust secondary throttle closing tang and idle speed screw.

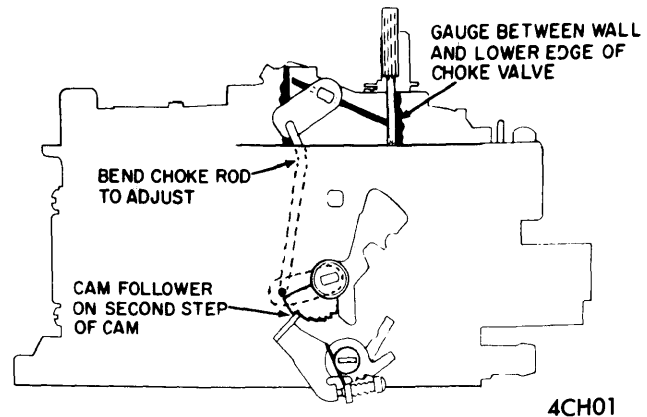


ACCELERATOR PUMP ADJUSTMENT

CHOKE ROD - FAST IDLE CAM (4MV)

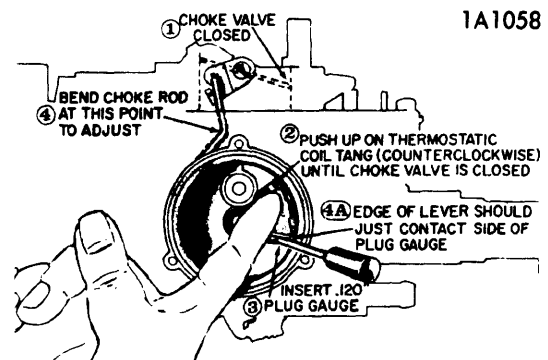
Place fast idle cam follower on second step of fast idle cam and hold it against high step of cam by pressing lightly upward on vacuum break lever. With choke rod in bottom of slot in choke lever, measure clearance between lower edge of

choke valve at choke lever end and air horn wall. If clearance is not as specified, adjust by bending choke rod at existing bend near upper end of rod.

CHOKE ROD ADJUSTMENT
(4MV CARBS.)

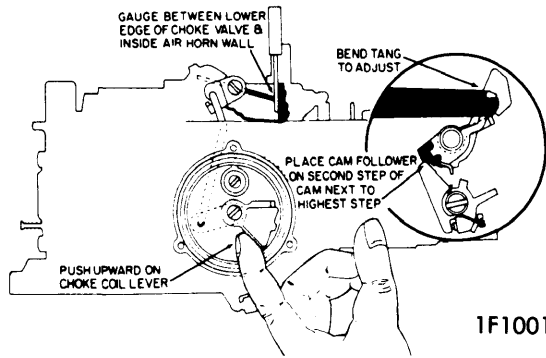
CHOKE COIL LEVER (4MC CARBS.)

Remove thermostatic choke cover and coil assembly. Hold choke valve closed, push up on thermostatic coil tang to end of travel. Insert a .120" plug gauge in hole in housing, just below edge of lever. Lever should just touch edge of gauge. Bend rod at existing bend if adjustment is required.

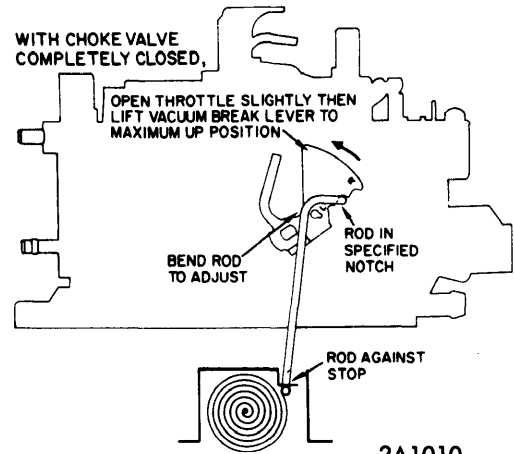
CHOKE COIL LEVER ADJUSTMENT
(4MC CARBS.)CHOKE ROD (FAST IDLE CAM)
(4MC CARBS.)

Place fast idle cam follower on second step of fast idle cam, move choke valve toward closed position by pressing on choke coil lever within automatic choke housing (remove choke cover and coil assembly for access) so that cam follower is held firmly against shoulder of high step of cam. With choke valve in this position, measure clearance between lower edge of choke valve at choke lever end and air horn wall. If clearance not correct (see Specifications), adjust by bending tang at side of fast idle cam as shown in illustration.

ROCHESTER 4MC & 4MV 4-BARREL (Cont.)



FAST IDLE CAM ADJUSTMENT (4MC CARBS.)

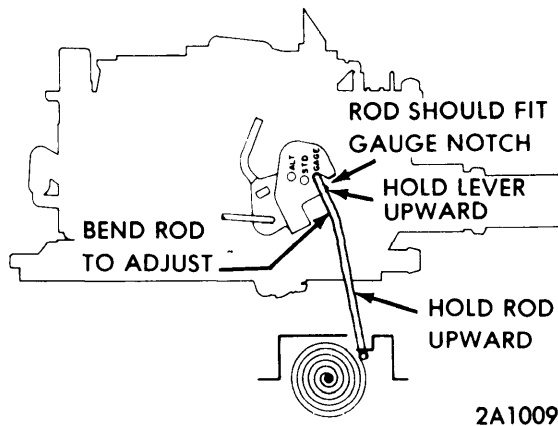


CHOKE COIL ROD ADJUSTMENT (CADILLAC)

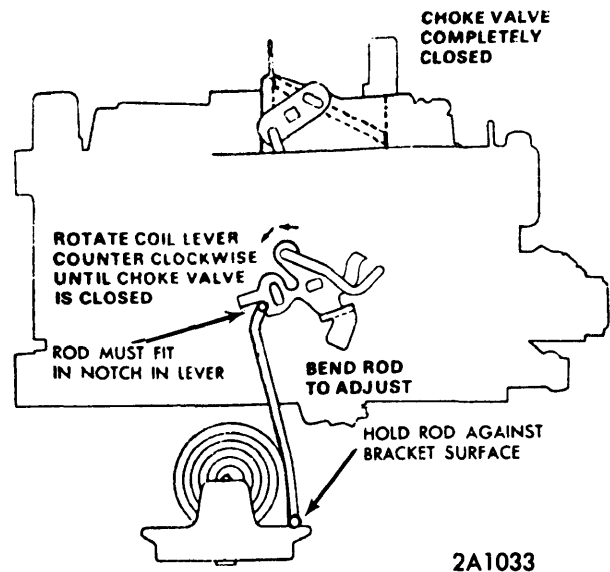
AUTOMATIC CHOKE COIL ROD (ALL 4MV CARBS.)

Buick — Hold choke valve fully closed by rotating vacuum break lever counterclockwise. Pull upward on choke thermostatic coil rod to end of travel. Rod should fit freely in gauging notch at edge of lever. Adjust by bending rod at existing bend. Reconnect rod in "Std" hole in lever.

Chevrolet — Hold choke valve completely closed by rotating vacuum break lever counterclockwise. With thermostatic coil rod disconnected, push downward on coil rod to end of travel. Rod should contact bracket surface. Coil rod should just fit in adjustment notch in choke coil lever; to adjust, bend choke coil rod or lever.



CHOKE COIL ROD ADJUSTMENT (BUICK)



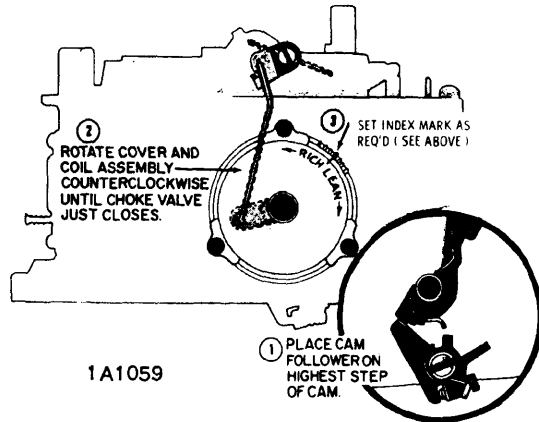
CHOKE COIL ROD ADJUSTMENT (CHEVROLET)

Cadillac — Remove choke assembly from manifold to disengage choke coil rod from vacuum break lever. Reinstall choke coil assembly, but do not install choke coil rod into hole in vacuum break lever. With choke valve completely closed, fast idle cam in cold start position and vacuum break lever in maximum upward position, pull choke coil rod upward to end of travel against stop in choke coil housing. Upper end of rod should fit in gauging notch. Bend choke coil rod to adjust for proper positioning in specified notch. **NOTE** — "L" gauging notch is for a one notch leaner setting and the "R" notch is for a one notch richer setting.

AUTOMATIC CHOKE COIL (4MC CARBS.)

Place cam followr on highest step of cam. Rotate choke cover counterclockwise until choke valve just closes. Rotate choke cover to place index mark at specified setting.

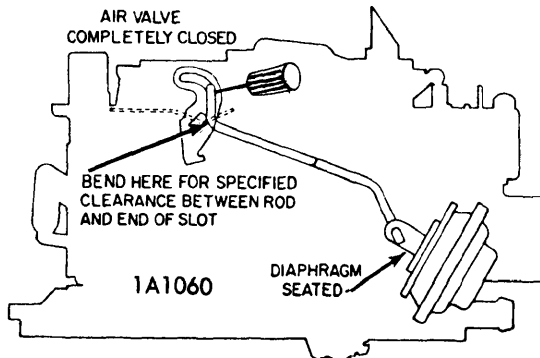
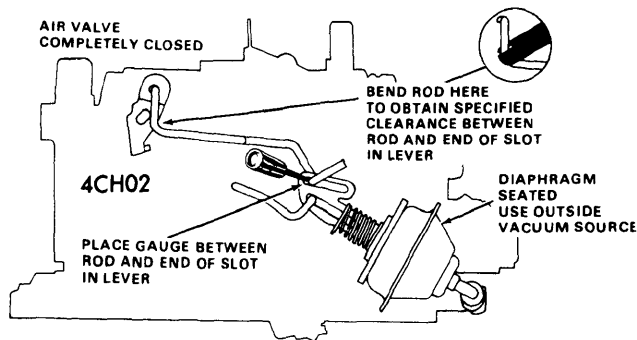
ROCHESTER 4MC & 4MV 4-BARREL (Cont.)



CHOKE COIL ADJUSTMENT (4MC CARBS.)

AIR VALVE DASHPOT
(4MC CARBS.)

Seat vacuum break diaphragm using an outside vacuum source. Make sure air valves are completely closed. Measure clearance between dashpot rod and end of slot in air valve lever. To adjust, bend rod at air valve end.

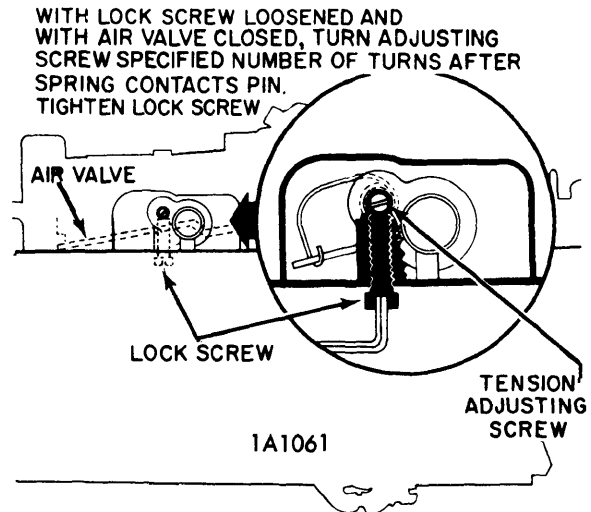
AIR VALVE DASHPOT ADJUSTMENT
(4MC CARBS.)

AIR VALVE DASHPOT ADJUSTMENT(4MV)

AIR VALVE DASHPOT ADJUSTMENT
(4MV)

Seat dashpot using an outside vacuum source of at least 10 in. Hg. With air valve completely closed, insert specified gauge

between rod and end of slot (as illustrated). If adjustment is necessary, bend rod at its upper bend to obtain specified clearance.



AIR VALVE SPRING ADJUSTMENT

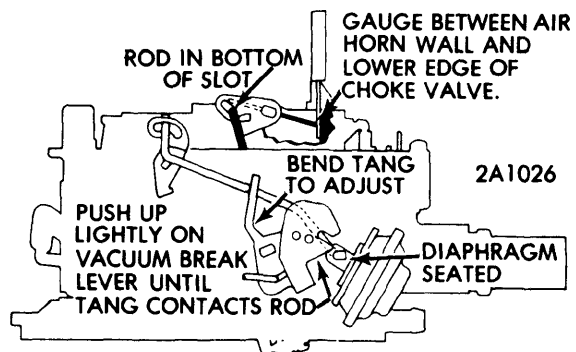
AIR VALVE SPRING

To adjust air valve spring wind-up, loosen lock screw (Allen screw) and turn adjusting screw counterclockwise to remove all spring tension. With air valve held closed, turn adjusting screw clockwise until torsion spring just contacts pin in shaft; then turn adjusting screw clockwise as specified in following table. While holding adjusting screw in this position, tighten lock screw.

VACUUM BREAK (4MV CARBS.)

NOTE - Place follower on high step of fast idle cam.

Buick - Using an outside vacuum source, seat vacuum break actuator, then with diaphragm seated and vacuum break lever tang held lightly against vacuum break rod, measure distance between lower edge of choke valve and air horn. To adjust, bend tang on lever.

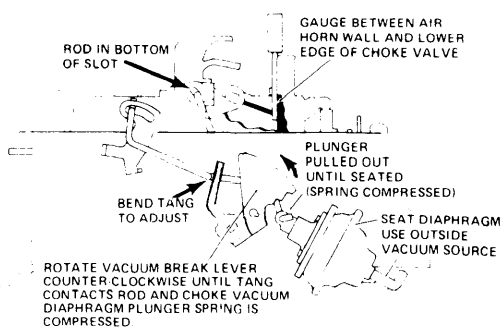


VACUUM BREAK ADJUSTMENT (BUICK)

Cadillac - Open throttle valve and place fast idle cam follower on high step. Place a rubber band on the vacuum break lever and some portion of the air horn near the

ROCHESTER 4MC & 4MV 4-BARREL (Cont.)

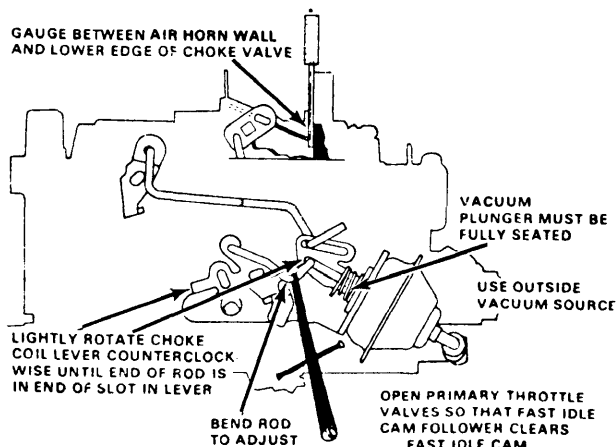
secondary valve so tang of vacuum break lever will pull rearward, contacting the vacuum break rod when vacuum is applied to unit. Disconnect the rubber tee from vacuum break unit, connect a short 15-20" piece of rubber hose to the nipple of the unit and apply vacuum from an external source to the nipple of the vacuum break unit until the diaphragm is seated and the diaphragm link is in the extended position. Clamp off hose and measure distance between the front wall of air horn and lower edge of choke valve (see Specifications). Remove all play from choke valve by lightly pressing valve toward its open position. **NOTE** — Choke rod should be at the bottom of the choke lever. Bend vacuum break lever tang to adjust.



2A1027

VACUUM BREAK ADJUSTMENT (CADILLAC)

Chevrolet — Seat choke vacuum break diaphragm using an outside vacuum source. Open throttle valve slightly so cam follower will clear steps of fast idle cam. Rotate vacuum break lever counterclockwise (towards direction of closed choke) and hold in place with a rubber band. End of vacuum break rod should also be in outer end of slot in vacuum break diaphragm plunger. Measure distance between lower edge of choke valve and inside air horn wall. To adjust, bend vacuum break link.

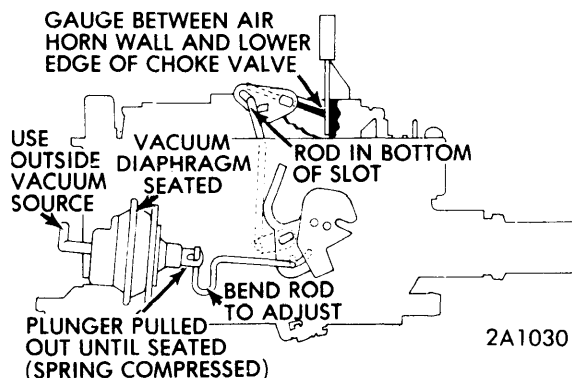


2A1028

VACUUM BREAK ADJUSTMENT (CHEVROLET)

AUXILIARY VACUUM BREAK (4MV CARBS.)

Buick — A bleed hole is located beneath rubber covered filter in vacuum break tube. When seating secondary vacuum break diaphragm, first remove rubber covered filter and plug bleed hole with piece of tape. Use an outside source to seat diaphragm. Rotate choke valve towards closed choke position, pushing on vacuum break lever until spring loaded plunger is fully extended. With choke valve in this position, measure distance between lower edge of choke valve and inside air horn wall. Bend vacuum break link at U-bend to adjust. Remove tape and reinstall rubber covered filter.

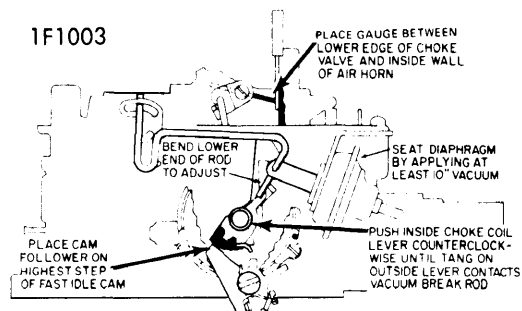


2A1030

AUXILIARY VACUUM BREAK ADJUSTMENT (BUICK)

VACUUM BREAK (4MC CARBS.)

Place fast idle cam follower on highest step of fast idle cam, use outside vacuum source. **NOTE** — Diaphragm will not seat immediately due to built-in delay action. With choke coil assembly removed, press up on inner choke coil lever to rotate shaft and outer lever counterclockwise until tang on outer lever contacts vacuum break rod. Tap lower edge of choke valve down to take up slack in linkage, then check clearance between lower edge of valve and air horn wall. Clearance should be as specified. To adjust, bend lower end of vacuum break rod at outer lever tang as required.

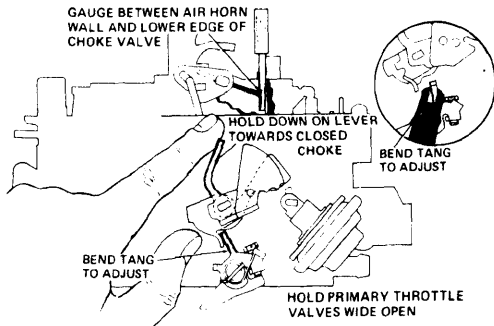


VACUUM BREAK ADJUSTMENT (4MC CARBS.)

UNLOADER

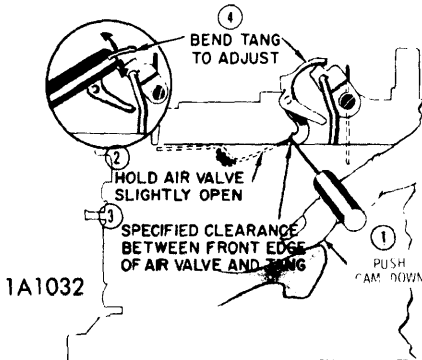
Rotate vacuum break lever counterclockwise towards closed choke position, then open primary throttle to wide open.

ROCHESTER 4MC & 4MV 4-BARREL (Cont.)



2A1031 UNLOADER ADJUSTMENT

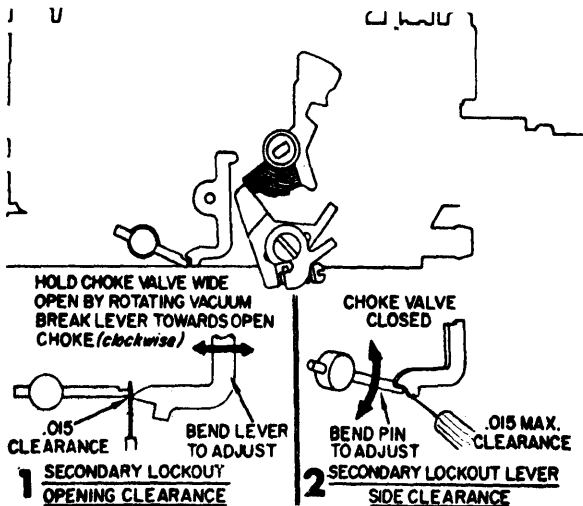
position. With throttle valves held wide open, distance between lower edge of choke valve and air horn wall should be as specified. To adjust, bend tang on fast idle lever.



1A1032 AIR VALVE LOCKOUT ADJUSTMENT (4MC CARBS.)

AIR VALVE LOCKOUT ADJUSTMENT

Push cam down, hold choke valve wide open and air valve slightly open. Measure distance between front edge of air valve and tang on lockout lever. If clearance is not as specified, adjust by bending upper end of lockout lever that bears against choke valve lever.



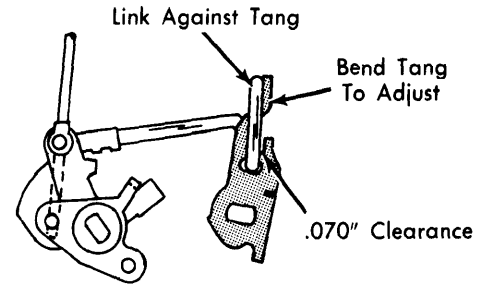
1A1066

SECONDARY THROTTLE LOCKOUT ADJUSTMENT

SECONDARY THROTTLE LOCKOUT

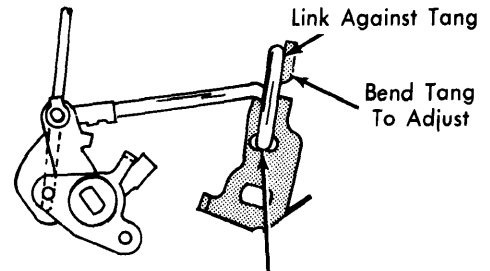
Opening Clearance - Hold choke valve wide open by rotating vacuum break lever toward open choke (clockwise). With secondary throttle valves held partially open, measure clearance between end of lockout pin and toe of lockout lever, distance should be .015". Bend lockout lever to adjust.

Secondary Lockout Pin Side Clearance - With choke valve and secondary throttle valve fully closed, bend lockout pin at point shown to obtain side clearance of .015" between side of lockout pin and lockout lever.



3-Point Pick-Up Lever

4CHA03



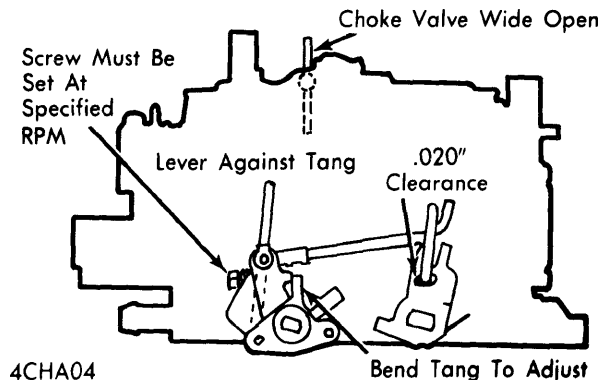
Link Should Be In Center Of Slot

2-Point Pick-Up Lever

SECONDARY THROTTLE OPENING ADJUSTMENT

SECONDARY THROTTLE OPENING

Open primary throttle valves until actuating link contacts upper tang on secondary lever. Since there are two types of linkage in production, check as follows:



4CHA04

SECONDARY THROTTLE CLOSING ADJUSTMENT

ROCHESTER 4MC & 4MV 4-BARREL (Cont.)

4CHA05

2-Point Pickup Linkage — Bottom of link should be in center of secondary lever slot.

3-Point Pickup Linkage — Clearance between link and middle tang should be .070".

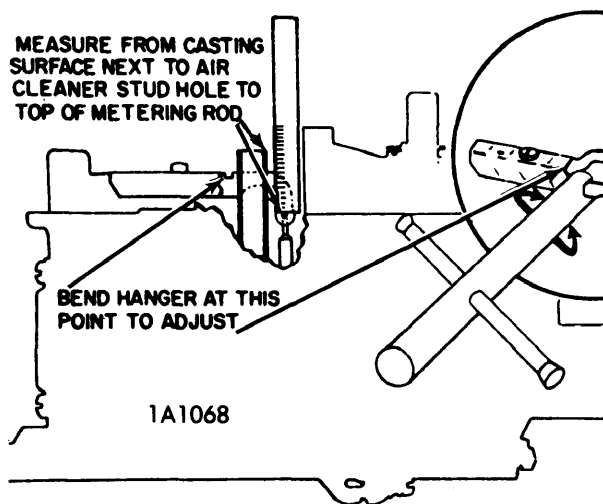
SECONDARY THROTTLE CLOSING

With curb idle properly adjusted, cam follower off fast idle cam and choke valve wide open, clearance between secondary throttle actuating rod and front of slot in secondary throttle lever (with closing tang on throttle lever resting against actuating lever) should be .020". If adjustment is required, bend tang on primary throttle actuating lever.

SECONDARY METERING RODS

NOTE — Metering rod hangers are selectively matched to each carburetor and letter stamped. Unless hanger has been damaged, no change in hanger (metering rod) setting will be necessary.

If a new metering rod hanger is installed, adjustment may be checked by measuring distance from top of metering rod to top of air horn (next to air cleaner stud hole). If measurement is not as specified, bend metering rod hanger so that both metering rods are adjusted to the same dimension. **NOTE** — Air valve must be closed when measurement is taken.



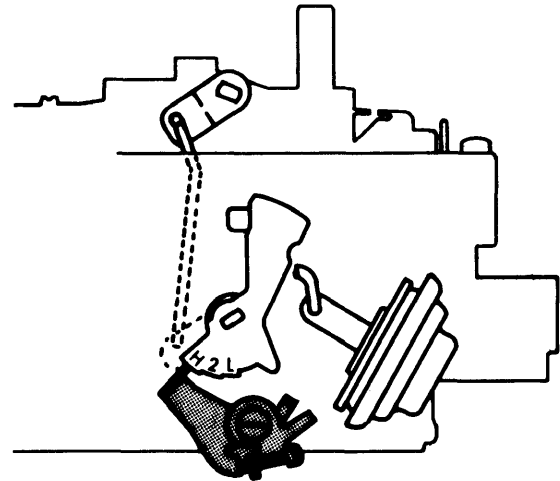
SECONDARY METERING ROD ADJUSTMENT

FAST IDLE SPEED

Fast idle speed may be adjusted after curb idle speed adjustment has been correctly made. All pre-adjustment conditions apply except for mode of automatic transmission operation. Adjust fast idle speed screw to obtain specified fast idle RPM, with cam follower on correct step of fast idle cam.

Application	Transmission Mode	Cam Step
Buick	"D"	Low
Cadillac	"N"	Highest
Chevrolet	"N"	Highest
Oldsmobile	"N"	Low
Pontiac	⊙	Highest

⊙ — Varies as per application, check tune-up decal



FAST IDLE ADJUSTMENT
ADJUSTMENT

IDLE SPEED

NOTE — In order to comply with emission standards, specifications shown on engine compartment emission control tune-up decal must be used in all instances. Decal information should be considered the most valid information available.

Preparations For Adjustment (All Models) — Block wheels and apply parking brake. Start and warm engine to normal operating temperature. Turn off air conditioner. Disconnect and plug vacuum hose to vacuum advance unit and hose from vapor canister to air cleaner or carburetor. Note following additional preparations for individual manufacturers.

Cadillac — Disconnect and plug vacuum hose to parking brake release (at vacuum release cylinder) and Automatic Level Control compressor (at air cleaner).

Cadillac & Pontiac — Remove air cleaner and plug vacuum hose(s) to air cleaner.

Buick, Chevrolet & Oldsmobile — Leave air cleaner installed. **NOTE** — On Oldsmobile, disconnect and plug air cleaner hose at intake manifold. On Buick and Oldsmobile, disconnect and plug EGR vacuum hose at EGR valve.

Adjustment (Buick, Chevrolet & Pontiac) — With preparations for adjustment complete and timing set, place manual transmission in Neutral or automatic transmission in "D". With solenoid de-energized, adjust carburetor idle speed screw to lower specified RPM. Energize solenoid and allow plunger to extend. Adjust solenoid to specified higher RPM.

Adjustment (Oldsmobile) — With preparations for adjustment complete and timing set, place manual transmission in Neutral or automatic transmission in "D". With solenoid energized and extended, adjust solenoid to higher specified RPM. Place automatic transmission in "P". De-energize solenoid and adjust carburetor idle speed screw to obtain lower specified RPM.

Adjustment (Cadillac) — With preparations for adjustment complete and timing set, place transmission in "D". De-energize solenoid and adjust carburetor idle speed screw to obtain 350-400 RPM. Reconnect solenoid lead and allow plunger to extend. Turn solenoid plunger to obtain specified idle RPM.

ROCHESTER 4MC & 4MV 4-BARREL (Cont.)

Application	Idle Speed (RPM)	
	Man. Trans.	Auto. Trans.
Buick	500/650	500/650
Cadillac.....		600
Chevrolet		
350"	500/900	500/600
400"	500/600	500/600
454"	500/800	500/600
Oldsmobile		
350"	650/550	650/550
455"	650/500	650/500
Pontiac		
350" & 400"		
Federal.....	600/1000	650
California.....		625
455"	600/1000	500/750

IDLE MIXTURE

Exhaust Gas Analyzer (Exc. Cadillac) – With preparations for adjustment complete, set timing to specifications and adjust idle to higher specified RPM. Place manual transmission in Neutral or automatic transmission in "D" and connect exhaust gas analyzer. If CO level exceeds specifications, turn mixture screws in (leaner) equally until correct CO level is obtained at specified idle RPM. Reset idle speed, if necessary, with air cleaner installed.

Exhaust Gas Analyzer Procedure (Cadillac) – With preparations for adjustment complete and timing set, connect exhaust gas analyzer. Cut tabs off of mixture screws limiter caps. Turn mixture screws in until seated, then back out four turns. Start engine and place transmission in "D" and adjust idle speed solenoid plunger to obtain 640 RPM. Alternately adjust mixture screws ¼ turn at a time, until CO level is .4% and idle is at or near 600 RPM. Adjust solenoid plunger to obtain 600 RPM, if necessary. If CO level is above .5% or below .3% at 600 RPM, adjust mixture screws in or out as required to obtain .4% at 600 RPM.

Application	Idle CO Level (%)
	CO%
Buick	0.3
Cadillac.....	0.4
Chevrolet.....	0.5
Oldsmobile.....	0.2
Pontiac	0.2

NOTE – Correct mixture for emission compliance and idle quality are preset by manufacturer. Following procedures should only be performed when normal tune-up procedures fail to give satisfactory idle performance at specified CO level, after major overhaul or part replacement.

Tachometer (Speed Drop) Procedure (All Exc. Oldsmobile & Cadillac) – With preparations for adjustment complete, set timing and adjust idle to higher specified RPM (with solenoid energized and extended). Cut off mixture screw limiter tabs. Place manual transmission in Neutral or automatic transmission in "D". Equally richen (counterclockwise) mixture screws until maximum RPM is obtained. Equally lean (clockwise) mixture screws until lower RPM is obtained. Install air cleaner (if removed), connect all vacuum hoses and recheck idle RPM. Use mixture screws for RPM correction, if required.

Tachometer (Speed Drop) Procedure (Oldsmobile) – With preparations for adjustment complete, disconnect and plug EGR hose (at carburetor). Break off mixture screw limiter caps and connect vacuum gauge to intake manifold. With transmission in "D", and idle speed solenoid energized, adjust idle to 680 RPM (600 RPM on Commercial). Equally richen (counterclockwise) mixture screws until maximum RPM is obtained and note vacuum reading. Now lean (clockwise) mixture screws until 650 RPM (600 RPM Commercial) is obtained. Check vacuum reading, no more than 2" drop is acceptable. Except on Commercial, place transmission in "P" with idle speed solenoid de-energized and adjust idle speed to 550 RPM.

Application	Tachometer (Speed Drop) RPM	
	Man. Trans.	Auto. Trans.
Buick		
350"	710/650	710/650
455"	720/650	720/650
Cadillac.....		640/600
Chevrolet		
350" & 400"		
Federal.....	950/900	650/600
California.....	950/900	630/600
454"	850/800	630/600
Oldsmobile		
Federal.....	950/850	650/600
California.....	950/850	630/600
Pontiac		
350"		
Federal.....	1200/1000	720/625
California.....		730/650
400"		
Federal.....	1310/1000	720/650
California.....		685/625
455"		
Federal.....		680/650
California.....		675/625

Lean Drop Idle Procedure (Cadillac) – With preparations for adjustment complete and timing set, connect a tachometer. Cut off mixture screw limiter tabs. Turn mixture screws in until seated, then back out four turns. Start engine and place transmission in "D", adjust idle speed solenoid to obtain 640 RPM. Alternately adjust mixture screws ¼ turn at a time until idle speed is at or near 600 RPM. Mixture should now be at an acceptable CO level.

OVERHAUL

DISASSEMBLY

Air Horn – 1) Remove larger retaining screw from idle stop solenoid bracket at float bowl, but do not remove bracket from air horn. Remove clip from upper end of choke rod, and remove rod. Disconnect pump arm at pivot, then remove from air horn. Remove vacuum diaphragm and its rod, which connects to air valve shaft.

2) Remove air horn-to-bowl attaching screws (2) next to primary venturi. Remove air horn by lifting straight up. Air horn gasket should remain on bowl. **CAUTION – Be careful not to bend the two small main well air bleed tubes pressed into the air horn. DO NOT attempt to remove these tubes.**

ROCHESTER 4MC & 4MV 4-BARREL (Cont.)

CARBURETOR ADJUSTMENT SPECIFICATIONS										
Rochester Carb. No.	Idle Speed (Engine RPM)		Float Setting	Pump Rod Location	Choke Rod	Aux. Vac. Break	Break Setting	Air Valve Windup	Choke Setting	Air Valve Dashpot
	Hot	Fast								
7044240	500/650	700	13/32"	③	.130"	.160"	.215"	7/16"	③	.030"
7044241	500/650	700	13/32"	③	.130"	.160"	.215"	7/16"	③	.030"
7044242	500/650	700	13/32"	③	.130"	.180"	.200"	7/16"	③	.030"
7044244	500/650	700	13/32"	④	.130"	.150"	.170"	11/16"	③	.030"
7044246	500/650	700	13/32"	④	.130"	.150"	.170"	11/16"	③	.030"
7044248	500/650	700	15/32"	④	.130"	.150"	.170"	11/16"	③	.030"
7044544	500/650	700	15/32"	④	.130"	.150"	.170"	11/16"	③	.030"
7044546	500/650	700	15/32"	④	.130"	.150"	.170"	11/16"	③	.030"
7044230	600	②1225	1/4"	③	.110"	.....	.185"	3/8"	③	.025"
7044232	600	②1225	3/8"	③	.110"	.....	.200"	1/2"	③	.025"
7044233	600	②1225	9/32"	④	.110"	.....	.185"	3/8"	③	.025"
7044234	600	②1225	1/4"	④	.090"	.....	.185"	5/16"	③	.025"
7044235	600	②1225	3/8"	④	.090"	.....	.200"	3/8"	③	.025"
7044530	600	②1225	1/4"	③	.110"	.....	.185"	3/8"	③	.025"
7044532	600	②1225	3/8"	③	.110"	.....	.200"	1/2"	③	.025"
7044201	500/800	①1600	3/8"	③	.430"	.....	.250"	7/16"	③	.015"
7044202	500/600	①1600	1/4"	③	.430"	.....	.230"	7/8"	③	.015"
7044203	500/900	①1600	1/4"	③	.430"	.....	.230"	7/8"	③	.015"
7044206	500/600	①1600	1/4"	③	.430"	.....	.230"	7/8"	③	.015"
7044207	500/900	①1600	1/4"	③	.430"	.....	.230"	7/8"	③	.015"
7044208	500/700	①1600	1/4"	③	.430"	.....	.230"	1"	③	.015"
7044209	500/600	①1600	1/4"	③	.430"	.....	.230"	1"	③	.015"
7044221	500/800	①1600	3/8"	③	.430"	.....	.250"	7/16"	③	.015"
7044223	500/600	①1600	3/8"	③	.430"	.....	.250"	7/16"	③	.015"
7044225	500/600	①1600	3/8"	③	.430"	.....	.250"	7/16"	③	.015"
7044500	500/600	①1600	3/8"	③	.430"	.....	.250"	7/16"	③	.015"
7044502	500/600	①1600	1/4"	③	.430"	.....	.230"	7/8"	③	.015"
7044503	500/900	①1600	1/4"	③	.430"	.....	.230"	7/8"	③	.015"
7044505	500/600	①1600	3/8"	③	.430"	.....	.250"	7/16"	③	.015"
7044507	500/900	①1600	1/4"	③	.430"	.....	.230"	7/8"	③	.015"
7044526	500/600	①1600	1/4"	③	.430"	.....	.230"	3/4"	③	.015"
7043250	650/550	1000	1/4"	③	.230"	.....	.200"	1/2"	③	.030"
7043251	650/500	1000	1/4"	③	.230"	.....	.200"	3/4"	③	.030"
7043252	650/500	1000	1/4"	③	.230"	.....	.200"	3/4"	③	.030"
7043255	650/550	1000	1/4"	③	.230"	.....	.200"	1/2"	③	.030"
7043256	650/550	1000	1/4"	③	.230"	.....	.200"	1/2"	③	.030"
7043259	650/500	1000	1/4"	③	.230"	.....	.215"	3/4"	③	.030"
7044557	650/500	1000	1/4"	③	.230"	.....	.200"	3/4"	⑦	.030"
7044558	650/500	1000	1/4"	③	.230"	.....	.200"	3/4"	③	.030"
7044559	650/500	1000	1/4"	③	.230"	.....	.275"	3/4"	③	.030"
7044280	.....	1000	1/4"	③	.230"	.....	.200"	1/2"	③	.030"
7044281	.....	1000	1/4"	③	.230"	.....	.200"	3/4"	③	.030"
7044282	.....	1000	1/4"	③	.230"	.....	.200"	3/4"	⑦	.030"
7043263	600/1000	1500	13/32"	③	.205"	.....	.290"	5/8"	③	.025"
7044262	650	1500	13/32"	③	.205"	.....	.260"	3/8"	③	.025"
7044266	650	1500	13/32"	③	.205"	.....	.260"	1/2"	③	.025"
7044267	600	1500	13/32"	③	.205"	.....	.260"	3/8"	③	.025"
7044268	650	1500	13/32"	③	.205"	.....	.260"	1/2"	③	.025"
7044269	600/1000	1500	13/32"	③	.205"	.....	.290"	1/2"	③	.025"
7044270	500/750	1500	13/32"	③	.205"	.....	.290"	3/4"	③	.025"
7044272	500/750	1500	13/32"	④	.205"	.....	.290"	3/8"	③	.025"
7044274	650	1500	13/32"	③	.205"	.....	.290"	7/16"	③	.025"
7044275	.....	1500	13/32"	③	.205"	.....	.260"	3/8"	③	.025"
7044276	.....	1500	13/32"	③	.205"	.....	.260"	1/2"	③	.025"

① - With vacuum advance connected and with EGR disconnected.
 ② - A/C off and on second step of fast idle cam.

③ - Inner Hole
 ④ - Outer Hole

⑤ - Gauge Notch
 ⑥ - Index

⑦ - 1 Rich

ROCHESTER 4MC & 4MV 4-BARREL (Cont.)

3) Hold air valve wide open, then tilt and slide secondary metering rods from hanger. **NOTE** - Further disassembly of air horn is not required for cleaning only. For parts replacement, take out choke valve screws, remove choke valve and slide choke shaft out. Remove pump lever roll pin and remove pump lever. **CAUTION** - Air valves and shaft are calibrated and must not be removed. If damaged, replace air horn assembly.

Float Bowl - 1) Remove pump plunger. Remove air horn gasket from dowels on secondary side, then remove gasket from around power piston and primary metering rods. Remove pump return spring, plastic filler over float valve, and power piston and main metering rods (use needle-nose pliers and pull straight up on metering rod hanger directly over power piston).

NOTE - Never remove power piston with pliers.

2) Remove power piston spring, disconnect tension spring from top of each metering rod, and remove rods from hanger. Remove float assembly by sliding assembly toward front of bowl to disengage needle pull clip. Be careful not to distort pull clip. Remove float needle retainer and needle assembly.

3) Remove primary metering jets. **CAUTION** - Do not remove secondary metering discs. Remove pump discharge check ball retainer and check ball, and remove baffle from secondary side of bowl. On 4MV carburetors, remove vacuum hose from tube connection on bowl and from vacuum break assembly. Remove choke assembly from float bowl (**NOTE** - If further disassembly of choke is necessary, remove vacuum brake link. Spread retaining ear on bracket next to vacuum break assembly and remove assembly from the lever).

4) Remove fast idle cam from choke assembly. Remove lower choke rod and actuating lever from inside the float bowl well. Remove hot idle compensator and "O" ring from float bowl.

5) Remove fuel filter and spring. Remove throttle body-to-bowl screws (2) and remove throttle body and insulator gasket.

Automatic Choke Disassembly (4MC Carb.) - 1) Pull cover and coil assembly straight out and off choke housing. Do not attempt to remove baffle plate beneath thermostatic coil. Remove retaining screw and washer inside choke housing, slide complete choke assembly off float bowl.

2) Remove coil lever retaining screw from end of shaft inside choke housing, remove lever from intermediate choke shaft flats, then remove intermediate choke shaft by sliding it out of housing, remove fast idle cam from shaft.

3) Remove cup seal from inside choke housing shaft hole in housing before immersing housing in carburetor cleaner, remove cup seal from float bowl plastic insert before cleaning bowl. **CAUTION** - Do not remove plastic insert.

Throttle Body - Remove pump rod from throttle lever. Remove idle limiter caps, idle mixture screws and springs. **CAUTION** - Handle throttle body carefully so as not to damage secondary throttle valves. Further disassembly for cleaning purposes is not necessary.

CLEANING & INSPECTION

1) No rubber parts, plastic parts, diaphragms or pump plungers should be immersed in carburetor cleaner. However, the plastic cam on the air valve shaft may be cleaned normally in carburetor cleaner.

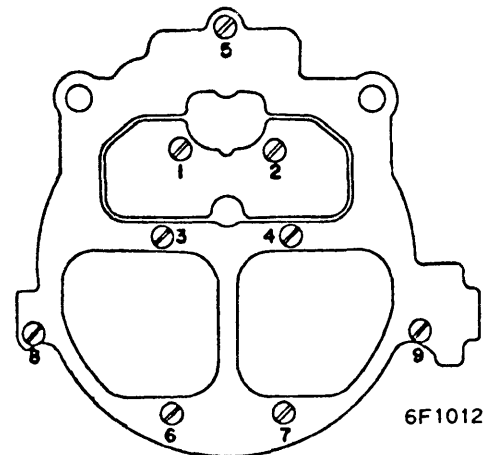
2) If air valve or cam are damaged, or air valve is binding, air horn assembly must be replaced. After cleaning parts in a suitable carburetor cleaner, rinse all parts as directed by carburetor cleaner manufacturer. Dry all parts and blow out all passages with compressed air.

3) When cleaning or overhauling a carburetor, identify the carburetor by the code stamped adjacent to the fuel inlet and order a complete Repair Kit for the carburetor being worked on. Check all valves and shafts for binding or damage.

REASSEMBLY

Reverse disassembly procedure using new parts and gaskets contained in the Repair Kit. When reassembling float bowl, be sure to adjust float level and make all other adjustments. See "Adjustment" in this article.

Automatic Choke Reassembly (4MC Carb.) - 1) Install cup seal in plastic insert on side of float bowl (lip facing outward). Install fast idle cam on intermediate choke shaft with steps on cam facing downward. Install new cup seal inside choke housing (lips facing inward toward inside of housing), then install fast idle cam and intermediate shaft through seal in choke housing.



AIR HORN TIGHTENING SEQUENCE

2) Install thermostatic coil lever on intermediate choke shaft flats so that both inside and outside levers face toward fuel inlet, then tighten retaining screw. Install lower choke rod lever in float bowl cavity. Install vacuum seal in choke housing cavity.

3) Install housing on bowl and slide intermediate shaft into lower choke lever. If choke housing correctly installed, tang on lever should be beneath fast idle cam. Do not install choke cover and coil assembly until choke coil lever adjustment is completed. See "Adjustment" in this article.

ROCHESTER 4MC & 4MV 4-BARREL (Cont.)

Vacuum Break Installation – If vacuum break diaphragm was removed from bracket, slide vacuum break diaphragm between retaining ears and bend ears down slightly to hold assembly securely. Install fast idle cam on vacuum break assembly.

Air Horn Installation – To prevent distortion of the air horn and binding of choke valve or air valve, tighten all air horn screws in correct sequence as shown in the accompanying illustration.