

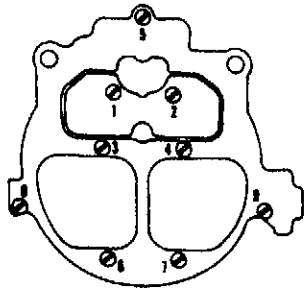
# FUEL SYSTEM SERVICE INSTRUCTION WORKSHEET

## TO REPAIR

GF3713-21

ROCHESTER CARBURETOR

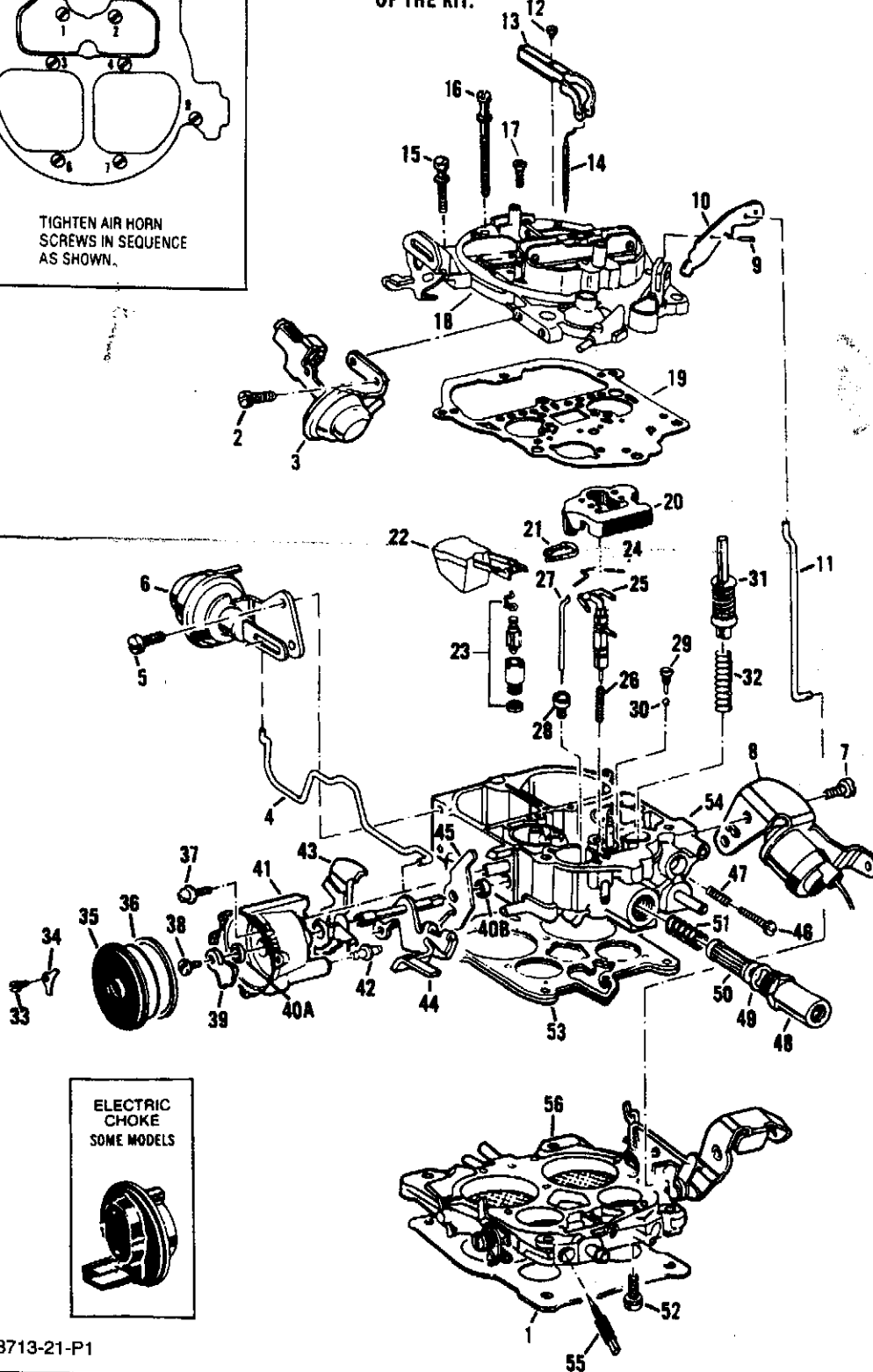
4 BARREL • Type 4MV, M4MC,  
M4ME, M4MEA



TIGHTEN AIR HORN  
SCREWS IN SEQUENCE  
AS SHOWN.

**PARTS LIST SHOWN DOES NOT  
REFLECT THE CONTENTS  
OF THE KIT.**

EXPLODED VIEW



ELECTRIC  
CHOKE  
SOME MODELS



1. Carefully read the text in the following pages to become familiar with the contents of this worksheet before performing carburetor overhaul.
2. The exploded view shown is typical of the model carburetor this kit will service. The view may differ slightly from the actual carburetor being overhauled.
3. Use the exploded view as a guide. The numerical sequence may generally be followed to disassemble the carburetor far enough to permit cleaning and inspection.
4. Parts list shown DOES NOT reflect the contents of the kit.
5. Kit may contain extra parts intended for other carburetors within this group. Substitute identical replacement parts for original worn parts found in carburetor.

### CLEANING

Cleaning must be done with carburetor disassembled. Use spray cleaner and a stiff bristle brush to remove dirt and carbon deposits. Do not use abrasives and wires to clean parts and passageways. Wash off in suitable solvent, and clear all passageways with compressed air. **Caution:** When cleaning with solvent do not soak or spray parts containing rubber, leather, plastic and electrical components.

### PARTS LIST

1. Gasket, Flange
2. Screw, Front Vacuum Break (2)
3. Front Vacuum Break Assy.
4. Rod, Rear Vacuum Break
5. Screw, Rear Vacuum Break (2)
6. Rear Vacuum Break Assy.
7. Screw, Idle Stop Solenoid (2)
8. Idle Stop Solenoid Assy.
9. Pin, Pl. Lever
10. Lever, Pump
11. Rod, Pump Lever
12. Screw, Sec. Metering Rods Holder
13. Holder, Sec. Metering Rods
14. Rod, Sec. Metering (2)
15. Screw, Air Horn (5)
16. Screw, Air Horn (2)
17. Screw, Air Horn (tapered head)(2)
18. Air Horn Assy.
19. Gasket, Air Horn
20. Filter Block
21. Hinge Pin, Float
22. Float Assy.
23. Needle, Seat, Washer & Clip Assy.
24. Spring, Metering Rod
25. Power Piston Assy.
26. Spring, Power Piston
27. Metering Rod, Primary (2)
28. Jet, Primary (2)
29. Retainer, Pump Discharge Ball
30. Ball, Pump Discharge
31. Pump Piston Assy. (save spring & retainer from old pump)
32. Spring, Pump Return
33. Screw, Choke Cover Retainer (3)
34. Retainer, Choke Cover (3)
35. Choke Cover Assy.
36. Gasket, Choke Cover
37. Screw, Choke Housing
38. Screw, Coil Lever
39. Lever, Choke Coil
40. Seal, Choke Shaft (A, B)
41. Choke Housing Assy.
42. Seal, Choke Housing
43. Cam, Fast Idle
44. Intermediate Choke Shaft & Lever
45. Lever, Secondary Lockout
46. Screw, Idle Stop
47. Spring, Idle Stop Screw
48. Fitting, Fuel Inlet
49. Washer, Fuel Filter
50. Fuel Filter
51. Spring, Fuel Filter
52. Screw, Throttle Body (3)
53. Gasket, Throttle Body
54. Main Body Assy.
55. Idle Needle & Spring Assy. (2)
56. Throttle Body Assy.

## DISASSEMBLY and ASSEMBLY NOTES

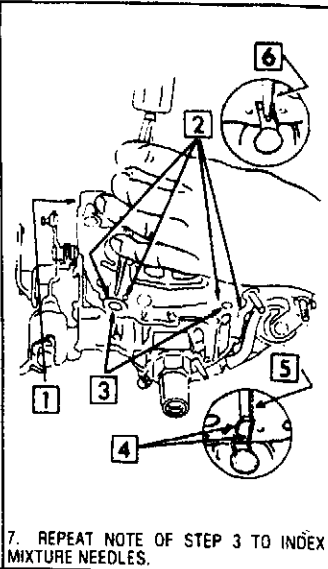
- Air horn screws (17) are located inside air horn assembly (18).
- Pump lever pin (9) can be driven in to release pump lever (10).
- On models with main (25) and auxiliary power pistons (not shown) make sure to mark their respective springs upon disassembly. They are not interchangeable.
- Primary jets (28) are the only jets removable.
- Before removing idle adjusting needles (55), turn each needle in. Count and record number of turns until lightly seated. Use data for proper reassembly.
- 1976 models have A.P.T. adjustment screw. Refer to Fig. 2.
- Reassemble in reverse order of disassembly.

- Install seal 40A with lip facing in and seal 40B with lip facing out.
- Do not assemble choke cover assy. (35) until choke rod adjustment is made.
- On models with electrical choke, do not install gasket (36).
- Assemble new pump piston (found in kit) with spring and retainer saved from old pump piston assy.
- Tighten fuel inlet fitting (48) securely (18 ft./lbs.). Do not over-tighten.
- Tighten air horn screws in sequence shown in exploded view.
- Refer to Fig. 2A for flange gasket style.

**FIG. 1**

### REMOVAL OF SEALED MIXTURE SCREWS (IF REQUIRED)

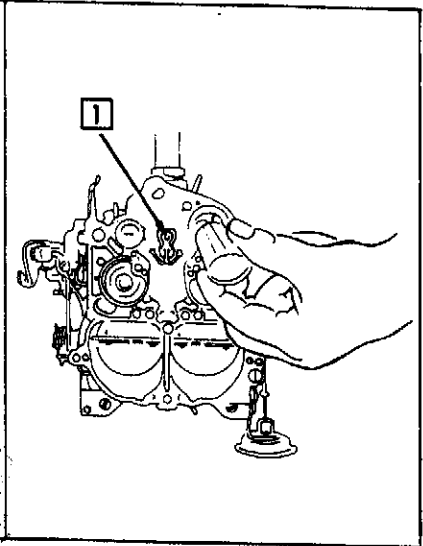
1. INVERT THROTTLE BODY AS SHOWN.
  2. PLACE PUNCH BETWEEN 2 LOCATION MARKS OVER IDLE MIXTURE NEEDLE PLUG.
  3. BREAK OUT THROTTLE BODY TO PROVIDE ACCESS TO HARDENED STEEL PLUG. NEXT, DRIVE OUT PLUG EXPOSING MIXTURE NEEDLE.
- NOTE: BEFORE REMOVING MIXTURE NEEDLE, CAREFULLY MARK POSITION. THEN, USING A SOCKET WRENCH, TURN NEEDLE IN COUNTING NUMBER OF TURNS TO LIGHTLY SEAT. NEXT, TURN OUT COUNTING NUMBER OF TURNS TO ORIGINAL INDEX MARK. RECORD SETTING & REMOVE NEEDLE. REPEAT PROCEDURE FOR OTHER MIXTURE NEEDLE.
4. LATE MODELS: CUT 2 PARALLEL SLOTS ON EITHER SIDE OF LOCATION MARKS USING A HACKSAW. SLOTS SHOULD NOT EXTEND BEYOND 1/8" OF LOCATION POINTS.
  5. POSITION A FLAT PUNCH AT A 45° ANGLE BETWEEN ENDS OF SAW MARKS IN THROTTLE BODY. DRIVE PUNCH BETWEEN SLOTS CAUSING SLUG TO BREAK OFF.
  6. NEXT, HOLD CENTER PUNCH IN A VERTICAL POSITION & DRIVE IT INTO STEEL PLUG. REPOSITION PUNCH TO A 45° ANGLE & DRIVE PLUG OUT OF CASTING EXPOSING MIXTURE NEEDLE.



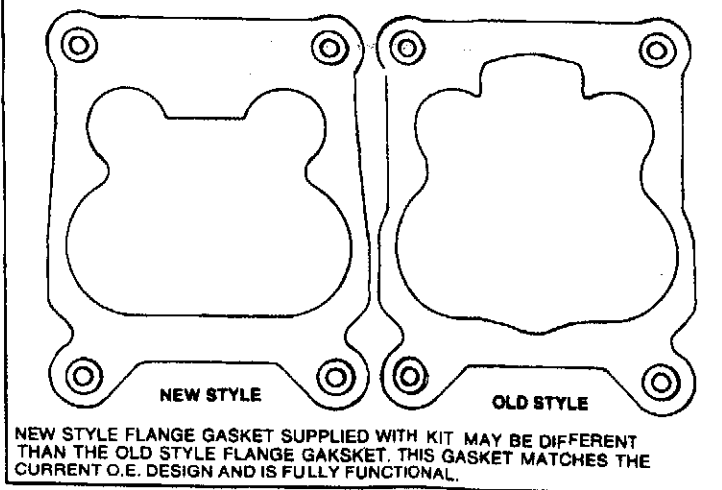
**FIG. 2**

### METERING ROD ADJ. SCREW — LOCATION

1. CAUTION: DO NOT REMOVE OR ALTER THE A.P.T. (ADJUSTING PART THROTTLE) METERING ROD ADJUSTING SCREW. THIS SCREW SETS THE MAXIMUM DEPTH OF METERING ROD TRAVEL WITHIN THE MAIN JET ORIFICE.
- OTHER MODELS: THIS ADJUSTMENT MAY BE LOCATED ON TOP OF A BELLOWS ASSEMBLY (NOT SHOWN). THESE UNITS ARE FACTORY PRE-SET. IT IS NOT ADVISABLE TO ALTER ANY SETTING IN THE FIELD.



**FIG. 2A**

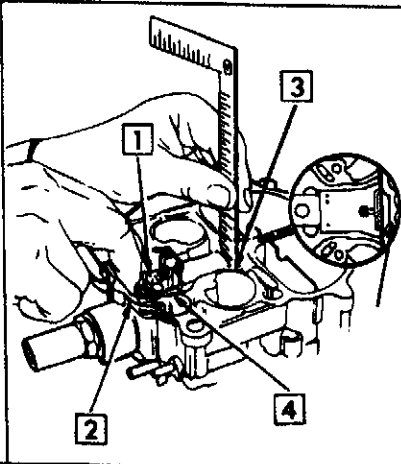


## ADJUSTMENT DATA

**FIG. A**  
FLOAT LEVEL  
ADJUSTMENT

1. HOLD FLOAT RETAINER FIRMLY IN PLACE.
  2. PUSH FLOAT DOWN LIGHTLY AGAINST NEEDLE. DO NOT PRESS NEEDLE INTO SEAT.
  3. MEASURE FROM TOP OF FLOAT TO TOP OF CASTING.
- NOTE: MEASURING POINT IS 3/16" BACK FROM TOE OF FLOAT.
4. TO ADJUST, BEND FLOAT ARM.

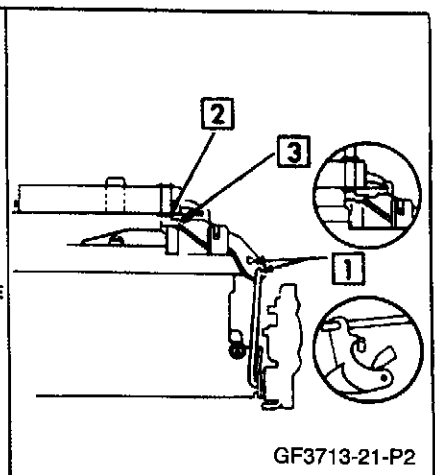
NOTE: See Fig. J for proper float needle and clip location.



**FIG. B**  
ACCELERATOR PUMP  
ADJUSTMENT AND ROD  
LOCATION

NOTE: COMPLETELY CLOSE THROTTLE VALVES.

1. POSITION PUMP ROD IN SPECIFIED HOLE OF PUMP LEVER.
2. MEASURE DISTANCE BETWEEN TOP OF CHOKE VALVE WALL AND TOP OF PUMP STEM.
3. TO ADJUST, BEND PUMP LEVER.



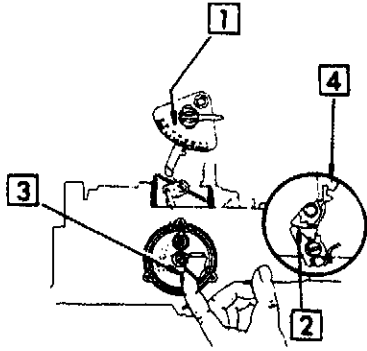
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## ADJUSTMENT DATA (CONT'D)

**FIG. C  
CHOKE ROD ADJUSTMENT**

NOTE: PLACE DEGREE SCALE ON CLOSED CHOKE VALVE AND CENTER LEVELING BUBBLE ON GAUGE.

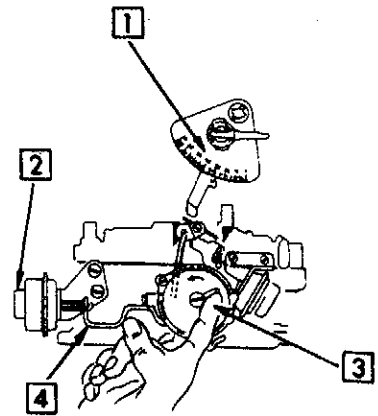
1. MOVE DEGREE SCALE ONLY TO SPECIFIED ANGLE.
2. PLACE CAM FOLLOWER ON RECORD STEP OF CAM (NEXT TO HIGH STEP).
3. CLOSE CHOKE BY PUSHING UPWARD ON CHOKE COIL LEVER.
4. TO ADJUST, BEND TANG ON FAST IDLE CAM UNTIL BUBBLE IS CENTERED.



**FIG. G  
REAR VACUUM BREAK ADJUSTMENT**

NOTE: PLACE DEGREE SCALE ON CLOSED CHOKE VALVE AND CENTER LEVELING BUBBLE ON GAUGE.

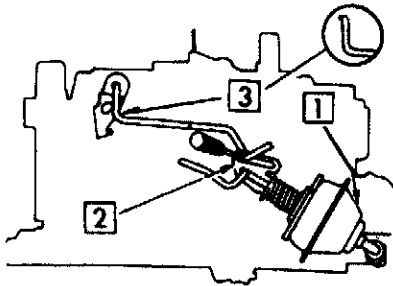
1. MOVE DEGREE SCALE ONLY TO SPECIFIED ANGLE.
  2. SEAT REAR DIAPHRAGM BY APPLYING AN OUTSIDE VACUUM SOURCE.
- NOTE: ON DELAY MODELS, COVER AIR BLEED HOLE WITH A PIECE OF TAPE. REMOVE TAPE AFTER ADJUSTMENT.
3. TURN CHOKE VALVE TOWARD CLOSED POSITION BY ROTATING CHOKE COIL LEVER COUNTERCLOCKWISE.
  4. TO ADJUST, BEND LINK UNTIL BUBBLE IS CENTERED.



**FIG. D  
AIR VALVE ROD ADJUSTMENT**

NOTE: COMPLETELY CLOSE SECONDARY AIR VALVE.

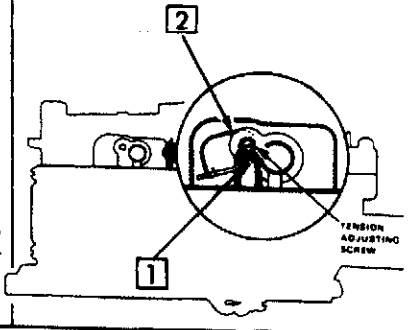
1. SEAT DIAPHRAGM BY APPLYING AN OUTSIDE VACUUM SOURCE.
2. MEASURE BETWEEN ROD AND END OF SLOT IN LEVER.
3. TO ADJUST, BEND ROD.



**FIG. E  
AIR VALVE SPRING WIND-UP ADJUSTMENT**

NOTE: COMPLETELY CLOSE SECONDARY AIR VALVE.

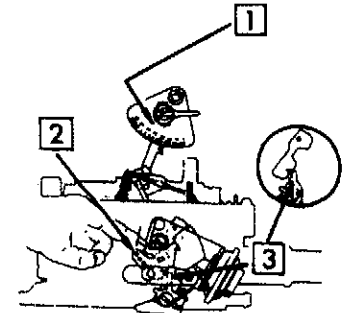
1. LOOSEN LOCK SCREW.
2. TURN ADJUSTING SCREW SPECIFIED NUMBER OF TURNS AFTER SPRING CONTACTS PIN.
3. TIGHTEN LOCK SCREW.



**FIG. H  
UNLOADER**

NOTE: PLACE DEGREE SCALE ON CLOSED CHOKE VALVE AND CENTER LEVELING BUBBLE ON GAUGE.

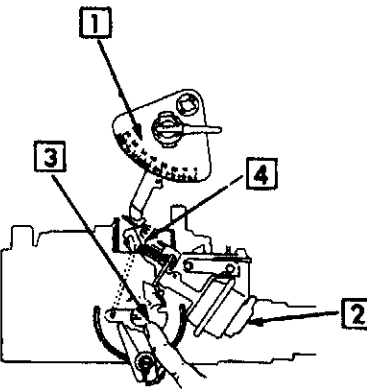
1. MOVE DEGREE SCALE ONLY TO SPECIFIED ANGLE.
2. PUSH UP OR DOWN ON LEVER TOWARDS CLOSED CHOKE. NOTE: HOLD PRIMARY THROTTLE VALVES WIDE OPEN.
3. TO ADJUST, BEND TANG UNTIL BUBBLE IS CENTERED.



**FIG. F  
FRONT VACUUM BREAK ADJUSTMENT**

NOTE: PLACE DEGREE SCALE ON CLOSED CHOKE VALVE AND CENTER LEVELING BUBBLE ON GAUGE.

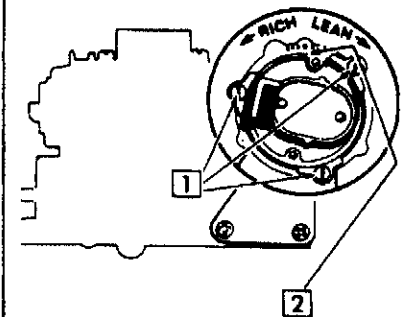
1. MOVE DEGREE SCALE ONLY TO SPECIFIED ANGLE.
  2. SEAT DIAPHRAGM BY APPLYING AN OUTSIDE VACUUM SOURCE.
- NOTE: ON DELAY MODELS, COVER AIR BLEED HOLE WITH A PIECE OF TAPE. REMOVE TAPE AFTER ADJUSTMENT.
3. TURN CHOKE VALVE TOWARD CLOSED POSITION BY ROTATING CHOKE COIL LEVER COUNTERCLOCKWISE.
  4. TO ADJUST, TURN SCREW UNTIL BUBBLE IS CENTERED.



**FIG. I  
AUTOMATIC CHOKE ADJUSTMENT**

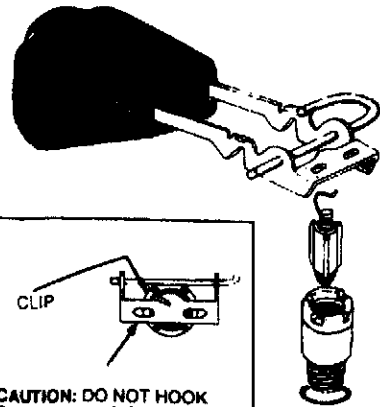
NOTE: POSITION FAST IDLE SCREW ON HIGH STEP OF FAST IDLE CAM.

1. LOOSEN 3 HOLD-DOWN SCREWS.
- NOTE: SOME MODELS HAVE CHOKES WHICH DO NOT REQUIRE ADJUSTMENT. HOWEVER, IF DISASSEMBLY BECOMES NECESSARY, SCRIBE A REFERENCE LINE FROM CHOKE COVER TO HOUSING THEN DRILL OUT RIVETS USING A NO. 21 DRILL (.159"). REASSEMBLE TO REFERENCE MARK USING SIMILAR RIVETS OR APPROPRIATE SIZE SHEET METAL OR SELF-TAPPING SCREWS.
2. POSITION SCRIBE LINE ON ELECTRIC CHOKE TO SPECIFIED MARK ON CHOKE HOUSING. CHOKE VALVE MUST BE SPRING-LOADED TOWARD CLOSED POSITION.



**FIG. J  
FLOAT NEEDLE &  
CLIP LOCATION**

NOTE: HOOK CLIP OVER EDGE OF  
FLAT ON FLOAT ARM IN  
OPPOSITE DIRECTION OF  
PONTOON (AS SHOWN).



CAUTION: DO NOT HOOK  
CLIP IN HOLES OF FLOAT  
ARM.

**SPECIFICATION BY APPLICATION**

Year	MODEL	Float Level	Accelerator Pump		Choke Rod	Air Valve Rod	Air Valve* Spring Wind-Up	Front Vac. Brk.	Rear Vac. Brk.	Unloader	Choke Setting
			Adj.	Rod Location							
<b>GM TRUCKS — SPECIFICATION I.D. - A</b>											
1978	350 Eng.-Fed.-G-10 Van · Sportvan -A.T.-w/o A.C. w/A.C. -M.T.	7/16" 7/16" 7/16"	9/32" 9/32" 9/32"	Inner Inner Inner	46° 46° 46°	1/64" 1/64" 1/64"	7/8 7/8 7/8	27° 27° 28°	— — —	42° 42° 42°	2NL 2NL 2NL
<b>BUICK &amp; OLDSMOBILE — SPECIFICATION I.D.- B</b>											
1981	307 Eng.-Export, Can.	13/32"	9/32"	Inner	15°	1/32"	1/2	22°	34°	35°	T.R.
<b>BUICK &amp; PONTIAC</b>											
1980	301W Eng.	7/16"	3/8"	Outer	14.5°	1/32"	5/8	25°	32.5°	33°	T.R.
1979	301W Eng.-A.T. -Carb. # 17059272 M.T. -Carb. # 17059271	15/32" 7/16"	3/8"	Outer	14.5° 20°	1/32"	5/8	23° 25°	29.5° 34°	35° 33°	2NR 1NR
1978	301W Eng.-All	15/32"	3/8"	Outer	14.5°	1/32"	5/8	24°	32°	36°	2NR
<b>CHEVROLET, OLDSMOBILE</b>											
81-80	305 Eng.	7/16"	1/4"	Inner	20°	1/32"	7/8	27°	—	38°	T.R.
1979	305 Eng.-Exc. Alt.	+	+	+	+	+	+	+	+	+	+
<b>CHEVROLET (CORVETTE) — SPECIFICATION I.D.- C</b>											
1980	350 Eng.-A.T.-Hi-Perf.	7/16"	9/32"	Inner	20°	1/32"	1	30°	—	38°	T.R.
<b>GM TRUCKS</b>											
1980	350 Eng.-All/T	15/32"	9/32"	Inner	46°	1/64"	7/8	—	26°	42°	—
<b>BUICK &amp; CADILLAC — SPECIFICATION I.D. - D</b>											
1980	252 Eng.	5/16"	9/32"	Inner	24.5°	1/32"	5/8	18°	14°	38°	T.R.
<b>GM TRUCKS</b>											
1980	305 Eng.-Caballero	7/16"	1/4"	Inner	20°	1/32"	7/8	27°	—	38°	T.R.
1979	305, 350 Eng.-Caballero -Exc. 2.29 Axle	+	+	+	+	+	+	+	+	+	+
<b>CHEVROLET, PONTIAC — SPECIFICATION I.D. - F</b>											
1980	301 Eng.	15/32"	5/16"	Outer	16°	1/32"	5/8	20°	28°	33°	T.R.
<b>GM TRUCKS</b>											
86-84	454 Eng.	3/8"	9/32"	Inner	46°	1/32"	7/8	24°	30°	40°	T.R.
86-81	350 Eng.	3/8"	9/32"	Inner	37°	1/32"	1	23°	30°	40°	T.R.
84-80	454 Eng.-Calif.	3/8"	9/32"	Inner	46°	1/32"	3/4	24°	30°	40°	T.R.
83-82	350M Eng.	3/8"	9/32"	Inner	37°	1/32"	1	23°	30°	40°	T.R.
1980	350, 400 Eng.-Calif.	3/8"	9/32"	Inner	37°	1/32"	1	23°	30°	40°	T.R.
<b>GM TRUCKS — SPECIFICATION I.D. - H</b>											
89	454W Eng.	13/32"	9/32"	Inner	36°	1/32"	7/8	23°	—	35°	T.R.
88	350M Eng.	13/32"	9/32"	Inner	46°	1/32"	7/8	27°	—	35°	T.R.
	454W Eng.	13/32"	9/32"	Inner	36°	1/32"	7/8	23°	—	35°	T.R.
87	350M Eng.-Fed.	13/32"	9/32"	Inner	46°	1/32"	7/8	27°	—	35°	T.R.
	-Calif.	3/8"	9/32"	Inner	46°	1/32"	1	23°	30°	40°	T.R.
	454 Eng.-Calif.	3/8"	9/32"	Inner	46°	1/32"	7/8	24°	30°	40°	T.R.

NOTE: Letter or Number following Engine Size indicates Engine Code — Part of Vehicle Identification No. (5th digit of VIN thru 1980, 8th digit '81-89). VIN located on dash panel.

\* Number of Turns.

**SPECIFICATION BY APPLICATION (Cont'd)**

Year	MODEL	Float Level	Accelerator Pump		Choke Rod	Air Valve Rod	Air Valve* Spring Wind Up	Front Vac. Brk	Rear Vac. Brk	Unloader	Choke Setting
			Adj.	Rod Location							
<b>GM TRUCKS - SPECIFICATION I.D. - H (CONT'D)</b>											
86-85	305H Eng.	13/32"	3/8"	Outer	20°	1/32"	7/8	-	26°	32°	T.R.
	350L Eng.	13/32"	3/8"	Outer	46°	1/32"	7/8	-	26°	39°	T.R.
	350M Eng. -w/Carb. Nos. 17085001; 17111315	3/8"	9/32"	Inner	46°	1/32"	1	23°	30°	40°	T.R.
	-w/Carb. Nos. 17085003, 213; 17111343	13/32"	9/32"	Inner	46°	1/32"	7/8	27°	-	35°	T.R.
	454 Eng. -Exc. Carb Nos. 17085000; 17111308	13/32"	9/32"	Inner	36°	1/32"	7/8	23°	-	35°	T.R.
-Carb. Nos. 17085000; 17111306	3/8"	9/32"	Inner	46°	1/32"	7/8	24°	30°	40°	T.R.	
84	Exc. Caballero 305 Eng. -Exc. Carb Nos. 17084290, 292	13/32"	9/32"	Inner	46°	1/32"	7/8	-	26°	39°	T.R.
-Carb. Nos. 17084290, 292	13/32"	9/32"	Inner	46°	1/32"	7/8	-	24°	39°	T.R.	
83	350L Eng. -Exc. Carb. Nos. 17079294, 17079297, 17083234, 235	13/32"	9/32"	Inner	46°	1/32"	7/8	-	24°	39°	T.R.
-Carb. Nos. 17079294, 297; 17083234, 235	13/32"	9/32"	Inner	46°	1/32"	7/8	-	26°	39°	T.R.	
82	350L Eng. -Carb. Nos. 17068587, 590; 17082234, 235	13/32"	9/32"	Inner	46°	1/32"	7/8	-	26°	39°	T.R.
-Carb. Nos. 17068596; 17078254, 284, 297; 17082290, 291, 292, 293	13/32"	9/32"	Inner	46°	1/32"	7/8	-	24°	39°	T.R.	
-Carb. Nos. 17068592, 17068605; 17082506, 508	13/32"	9/32"	Inner	46°	1/32"	7/8	23°	36°	39°	T.R.	
81	350L Eng. -Exc. Carb. Nos. 17067286, 288; 17081506, 508	13/32"	9/32"	Inner	46°	1/32"	7/8	-	24°	42°	T.R.
Carb Nos. 17067286, 288; 17081506, 508	13/32"	9/32"	Inner	46°	1/32"	7/8	23°	36°	36°	T.R.	

**GM TRUCKS - SPECIFICATION I.D. - J**

1984	305 Eng. -Exc. Caballero	13/32"	9/32"	Inner	46°	1/32"	7/8	-	24°	39°	T.R.
1983	305H Eng. -Exc. Caballero	13/32"	9/32"	Inner	46°	1/32"	7/8	-	24°	39°	T.R.
1982	305F Eng. (17082524, 26)	13/32"	9/32"	Inner	46°	1/32"	7/8	-	36°	39°	T.R.
305H Eng.	13/32"	9/32"	Inner	46°	1/32"	7/8	-	24°	39°	T.R.	
1981	305F Eng. (17081524, 26)	13/32"	5/16"	Outer	46°	1/32"	7/8	-	36°	38°	T.R.
305L Eng.	13/32"	9/32"	Inner	46°	1/32"	7/8	-	23°	42°	T.R.	

**CHRYSLER CORP. DODGE TRUCKS - SPECIFICATIONS I.D. - M**

87-84	318, 360 Eng. - Carb #17085409	13/32"	3/8"	Outer	20°	1/32"	5/8	-	27°	38°	-
	-Carb. #17085408	13/32"	3/8"	Outer	20°	1/32"	1/2	-	27°	38°	-
	411, 415, 431 -Carb. #17085417	13/32"	3/8"	Outer	20°	1/32"	3/4	-	27°	38°	-

**BUICK CHEVROLET OLDSMOBILE PONTIAC - SPECIFICATION I.D. - N**

1987	305 Eng. -Can. -Carb #17087117, 118, 119, 120, 123, 124	1/2"	9/32"	Inner	15°	1/32"	7/8	23°	-	26°	T.R.
1986	Carb. #17086580, 582, 588, 589, 590	3/8"	9/32"	Inner	15°	1/32"	7/8	21°	-	30°	T.R.

**GM TRUCKS**

86-85	305H Eng. - Carb. #17085215, 226, 227, 230, 231	13/32"	9/32"	Inner	20°	1/32"	7/8	-	26°	32°	T.R.
	250L Eng. - Carb. #17085206, 288, 229, 235, 290, 292, 294, 298	13/32"	9/32"	Inner	46°	1/32"	7/8	-	26°	39°	T.R.
1986	4.3N Eng. - Carb #17086046	17/32"	9/32"	Inner	20°	.025	7/8	26°	38°	39°	-
1985	4.3N Eng. - Carb #17085205, 208, 210, 216	13/32"	9/32"	Inner	20°	1/32"	7/8	26°	38°	39°	T.R.
	-Carb #17085219, 222, 224	13/32"	9/32"	Inner	20°	1/32"	1/2	26°	36°	39°	T.R.

**BUICK CHEVROLET OLDSMOBILE & PONTIAC - SPECIFICATION I.D. - O**

86-85	305 Eng. -Can. -M.T.	3/8"	9/32"	Inner	15°	1/32"	7/8	21°	-	30°	T.R.
	350-8 Eng. -Can.	1/2"	9/32"	Inner	15°	1/32"	7/8	21°	-	30°	T.R.
1984	305H Eng. -Export Can. Carb. #17084280, 281, 282, 283, 284, 285, 288, 289	3/8"	9/32"	Inner	20°	1/32"	7/8	23°	-	38°	T.R.
	350-8 Eng. -Can	1/2"	9/32"	Inner	20°	1/32"	7/8	23°	-	38°	T.R.
83-82	305H Eng. -Export Can. Carb #17082280, 281, 282, 283, 288, 289, 17083280, 281, 282, 283	3/8"	9/32"	Inner	20°	1/32"	7/8	25°	-	38°	T.R.
	305L Eng. -Export Can Carb #17082296, 297	1/2"	9/32"	Inner	20°	1/32"	7/8	25°	-	38°	T.R.
1979	305, 350 Eng. Carb. #17059210, 211, 228	15/32"	9/32"	Inner	38°	1/64"	1	27°	-	38°	1N1*
	#17059203, 207	15/32"	9/32"	Inner	38°	1/64"	1	27°	-	38°	1N1*

NOTE: Letter of Number following Engine size indicates Engine Code - Part of Vehicle Identification No. (5th digit of VIN thru 1980, 8th digit '81-89). VIN located on dash panel.

\*Number of Turns



## SPECIFICATION BY APPLICATION (Cont'd)

Year	MODEL	Float Level	Accelerator Pump		Choke Rod	Air Valve Rod	Air Valve* Spring Wind-Up	Front Vac. Brk.	Rear Vac Brk	Unloader	Choke Setting
			Adj.	Rod Location							
<b>GM TRUCKS SPECIFICATION I.D. 0 (Cont'd)</b>											
77-75	350, 454 Eng. Carb. #17045202, 203 #7045218, 219 #7045220 #7045512, 517 #17056208, 209, 508, 509 #17056218, 219, 508, 509, 518, 519 #17056221 #17056512, 517 #17057202, 204 #17057218, 222 #17057221 #17057518, 522 #17057502, 503, 504 #17057219, 519 #17057582, 584, 586, 588	15/32" 5/16" 17/32" 17/32" " 5/16 7/16" 7/16" 15/32" 7/16" 3/8" 7/16" 15/32" 7/16 15/32" 7/16 15/32 <sup>2*</sup>	9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 9/32" 3/5"	Inner Inner Inner Inner Index Inner Inner Inner Inner Inner Inner Inner Inner Inner Inner Outer	45° 47° 12° 12° 47° 47° 47° 47° 47° 47° 47° 47° 47° 47° 47° 47° 47°	1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64"	7/5 3/4 9/16 9/16 7/5 7/5 7/5 7/5 7/5 7/5 7/5 7/5 7/5 7/5 7/5 7/5	30° 30° 33° 30° 31° 31° 29° 31° 28° 28° 28° 28° 28° <sup>16</sup> 28° 30° <sup>15</sup>	29° 29° — — — — — — 28° — — — — — — — —	47° 47° 41° 41° 42° 47° 42° 42° 42° 42° 42° 42° 42° 42° 42° 42° 42°	Index <sup>17</sup> Index <sup>17</sup> Index Index 2NL <sup>23</sup> 2NL <sup>23</sup> 2 Rich Index 2NL 2NL 2 Rich 2NL 2NL <sup>24</sup> 3NL <sup>25</sup> 2NL
<b>BUICK, CHEVROLET &amp; OLDSMOBILE — SPECIFICATION I.D. - P</b>											
87-85	307Y Eng. -Export, Can.	13/32"	9/32"	Inner	15°	1/32"	1/2	21°	34°	27°	T.R.
<b>BUICK, OLDSMOBILE, PONTIAC — SPECIFICATION I.D. - R</b>											
1979	400 Eng.	17/32"	3/8"	Outer	23°	1/32"	5/8	23°	38°	35°	Index
1978	400 Eng. Carb. #17058263	17/32" 17/32"	3/8" 3/8"	Outer Outer	23.5° 23°	1/32" 1/32"	1/2 5/8	26° 28°	40° 40°	35° 35°	Index <sup>26</sup>
1977	301 Eng. -Early 350P, 400-Eng. Carb. #17057263	11/32" 17/32" 17/32"	1/4" 3/8" 3/8"	Inner Outer Outer	15° 23° 23°	— 1/32" 1/32"	— 1/2 5/8	24° <sup>30</sup> 26° 28°	36° 38° 38°	39° 35° 35°	2NR 1NR 1NR
1976	350 Eng. -Exc. Ventura 400 Eng. -Exc. Firebird -A.T. Carb. #17056263 455 Eng. -Exc. Calif. -Calif.	17/32" 17/32" 17/32" 17/32"	3/8" 3/8" 3/8" 3/8"	Outer Outer Outer Outer	23° 23° 23° 23°	1/32" 1/32" 1/32" 1/32"	1/2 1/2 5/8 1/2	26° 26° 29° 26°	39° 39° 39° 39°	36° 36° 36° 36°	1NR 1NR 1NR 1NR
1975	350 Eng. -Exc. Ventura: 400 Eng., 455 Eng. Carb. #7045268, 269, 568	17/32" 17/32"	9/32" 9/32"	Inner Inner	23° 23°	1/32" 1/32"	1/2 7/16	26° 26°	40° 40°	36° 36°	Index Index
74-73	400 Eng. Carb. #17054828	+	+	+	+	+	+	+	+	+	+
<b>BUICK, OLDSMOBILE, PONTIAC — SPECIFICATION I.D. - S</b>											
1981	307 Eng. Can.	13/32"	9/32"	Inner	17°	1/32"	1/2	36°	34°	35°	T.R.
1980	307, 350 Eng. -Fed.	13/32"	9/32"	Inner	17°	1/32"	1/2	26°	34°	35°	T.R.
1979	350, 403 Eng. -Fed. -Calif., Alt. Carb. #17059553, 554	13/32" 13/32" 13/32"	9/32" 9/32" 9/32"	Inner Inner Inner	18° 19° 19°	1/32" 1/32" 1/32"	1/2 1/2 1/2	23° 24° 24°	30.5° 32° 36.5°	35° 35° 35°	2NR 2NR 2NR
1978	350, 403 Eng. -Fed. Carb. #17058259 -Calif., Alt.	13/32" 13/32" 13/32"	9/32" 9/32" 9/32"	Inner Inner Inner	18° 19° 19°	1/32" 1/32" 1/32"	1/2 1/2 1/2	23° 24° 24°	30.5° 30.5° 36.5°	35° 35° 35°	2NR 2NR 2NR
1977	350, 403 Eng. -Fed. -Calif., Alt. Carb. #17057550, 553	13/32" 15/32" 13/32"	9/32" 9/32" 9/32"	Inner Inner Inner	19° 19° 19°	1/32" 1/32" 1/32"	1/2 1/2 1/2	24° 24° 24°	180 225 225	35° 35° 35°	2NR 3NR 2NR
1976	350 Eng. -Exc. Omega 455 Eng. Carb. #17056552	13/32" 13/32" 13/32"	9/32" 9/32" 9/32"	Inner Inner Inner	23° 23° 23°	1/32" 1/32" 1/32"	1/2 3/4 3/4	31° 31° 33°	140 140 140	36° 36° 36°	2NR 2NR <sup>27</sup> 2NR
1975	350 Eng. -Exc. Omega Carb. #7045250 Carb. #7045550 455 Eng. Carb. #704583 Carb. #705485	15/32" 15/32" 15/32" 15/32" 15/32" 15/32"	9/32" 9/32" 9/32" 9/32" 9/32" 9/32"	Inner Inner Inner Inner Inner Inner	24° 29° 24° 24° 24° 27°	1/32" 1/32" 1/32" 1/32" 1/32" 1/32"	1/2 <sup>28</sup> 1/2 1/2 3/4 1/2 3/4	31° 38° 42° 31° 42° 42°	140 180 180 140 140 180	36° 45° 36° 36° 36° 36°	2NR 2NR 2NR 2NR <sup>29</sup> 2NR 2NR
<b>GM TRUCKS</b>											
1978	403 Eng., Motor Home Carb. #17058559	15/32" 15/32"	9/32" 9/32"	Inner Inner	19° 19°	1/32" 1/32"	1/2 1/2	24° 24°	— —	35° 36.5°	3NR 3NR
1977	403 Eng. -Motor Home	15/32"	9/32"	Inner	19°	1/32"	1/2	24°	—	35°	3NR
<b>BUICK, OLDSMOBILE, PONTIAC — SPECIFICATION I.D. - T</b>											
1981	350 Eng. -Can.	7/16"	9/32"	Inner	18°	1/32"	3/4	23°	20.5°	38°	T.R.
1980	350X Eng. -Fed.	7/16"	9/32"	Inner	18°	1/32"	3/4	23°	20.5°	38°	T.R.
1979	350X Eng.	5/16"	3/8"	Outer	18°	1/64"	3/4	20°	19° <sup>31</sup>	38°	1NR
1978	231-3 Eng. -Exc. Alt. -Alt. 350X Eng.	7/32" 7/32" 5/16"	9/32" 3/8" 3/8"	Inner Outer Outer	14.5° 14.5° 18°	1/64" 1/64" 1/64"	3/4 3/4 3/4	21° 23° 21.5°	23° 23° 19°	38° 38° 38°	Index Index 1NR
77-75	350 Eng. -Carb. #7045544 #7045244, 246 #17054903 #17054904 #17056244, 246 #17056544, 546 350J Eng. -Cal. -Fed. -A.T. Carb #17057241, 242 #17057248	3/8" 3/8" 11/32" 5/16" 5/16" 5/16" 5/16" 5/16"	3/8" 3/8" 3/8" 3/8" 3/8" 3/8" 3/8" 3/8"	Outer Outer Outer Outer Outer Outer Outer Outer	18° 18° 18° 18° 18° 18° 18° 18°	1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64" 1/64"	3/4 3/4 3/4 3/4 3/4 3/4 3/4 3/4	25° 23° 23.5° 23.5° 23° 23° 23° 23°	23° 21° 23° 21° 21° 21° 23° 23°	37° 37° 38° 38° 39° 39° 39° 39°	1NR 1NR Index 1NR 1NR Index Index Index

NOTE: Letter or Number following Engine Size Indicates Engine Code — Part of Vehicle Identification No. (5th digit of VIN thru 1980, 8th digit '81-89). VIN located on dash panel.

\* Number of Turns.

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## SPECIFICATION BY APPLICATION (Cont'd)

Year	MODEL	Float Level	Accelerator Pump		Choke Rod	Air Valve Rod	Air Valve* Spring Wind-Up	Front Vac. Brk.	Rear Vac. Brk.	Unloader	Choke Setting
			Adj.	Rod Location							
<b>BUICK, OLDSMOBILE, PONTIAC — SPECIFICATION I.D. - T (Cont'd)</b>											
	455 Eng. -Cal -Fed. -A T Carb. #7045240	15/32"	3/8"	Inner	18°	1/64"	7/16	24°	21°	37°	1NR
	455 Eng. -Cal -Fed. -A T. (Cont'd) Carb. #1705541, 548 #17056240 #17056540	15/32" 15/32" 15/32"	3/8" 9/32" 3/8"	Outer Inner Outer	18° 18° 18°	1/64" 1/64" 1/64"	7/16 7/16 7/16	24° 25° 24°	21° 22° 22°	37° 39° 39°	1NR 1NR 1NR
<b>CHRIS-CRAFT — SPECIFICATION I.D. - U</b>											
	305 Eng. -Carb. #17056287 #17059296	1/4" 9/32"	9/32" 5/16"	Inner Inner	33 33	.015 .015	3/4 1/2	21° 33	— —	33 33	Index Index
	307 Eng. -Carb. #7044288	1/4"	9/32"	Inner	33	.030	3/8	27°	—	33	33
	350 Eng. -Carb. #17058280 #17059295	1/4" 11/32"	9/32" 5/16"	Inner Inner	33 33	.030 .015	3/8 1/2	21° 19°	— —	33 33	Index Ga. Notch
	454 Eng. -Carb. #7044283, 289 #17059294	1/4" 5/16"	9/32" 5/16"	Inner Inner	33 33	.030 .015	3/8 5/8	27° 19°	— —	33 33	Ga. Notch Ga. Notch
<b>CHRYSLER</b>											
	318, 360 Eng. -Carb. #17084001; 17086115, 116	33	33	33	33	33	33	33	33	33	33
<b>CRUSADER (THERMO ELECTRON)</b>											
	350 Eng. -Carb. #17059293	5/16"	5/16"	Inner	33	.030	9/16"	27°	—	33	Ga. Notch
<b>MERCURISER (MERCURY MARINE)</b>											
	224 Eng. -Carb. #17083522	33	33	33	33	33	33	33	33	33	33
	229 Eng. -Carb. #17063515	33	33	33	33	33	33	33	33	33	33
	262 Eng. -Carb. #17084516	33	33	33	33	33	33	33	33	33	33
	305 Eng. -Carb. #17057282, 283 -Carb. #17059291	1/4" 1/4"	9/32" 5/16"	Inner Inner	33 33	33 .015	3/8" 3/8"	15° 19°	33 —	33 33	33 Ga. Notch
	-Carb. #17080564, 565	1/4"	5/16"	Inner	33	.015	3/8"	19°	—	33	Ga. Notch
	350 Eng. -Carb. #17057295 -Carb. #17057298	1/4" 1/4"	9/32" 9/32"	Inner Inner	33 33	.030 .030	3/8" 3/8"	27° 16°	— —	33 33	Ga. Notch 33
	-Carb. #17059280	1/4"	9/32"	Inner	33	.030	1/2"	15°	—	33	33
	-Carb. #17059288	1/4"	5/16"	Inner	33	.030	5/8"	27°	—	33	33
	-Carb. #17059289	1/4"	5/16"	Inner	33	.015	1/2"	19°	—	33	Ga. Notch
	-Carb. #17080561	1/4"	5/16"	Inner	33	.015	3/8"	20°	—	33	Ga. Notch
	-Carb. #17080562	1/4"	5/16"	Inner	33	.015	1/2"	27°	—	33	Ga. Notch
	-Carb. #17085013	33	6/16"	Inner	33	.015	3/8"	27°	—	33	Ga. Notch
	-Carb. #19086069	33	33	33	33	33	33	33	33	33	33
	454 Eng. -Carb. #7044286 -Carb. #17057287	1/4" 5/16"	9/32" 9/32"	Inner Inner	33 33	.030 .030	3/8" 1/3"	27° 16°	— —	33 33	33 33
	-Carb. #17057299	1/4"	9/32"	Inner	33	.030	3/4"	16°	—	33	33
	-Carb. #17059287	1/4"	5/16"	Inner	33	.030	3/4"	16°	—	33	33
	-Carb. #17059290	9/32"	5/16"	Inner	33	.015	3/4"	19°	—	33	Ga. Notch
	-Carb. #17080560	1/4"	5/16"	Inner	33	.030	1/2"	19°	—	33	Ga. Notch
	-Carb. #17080563	1/4"	5/16"	Inner	33	.015	3/4"	27°	—	33	Ga. Notch
		1/4"	5/16"	Inner	33	.015	1/2"	27°	—	33	Ga. Notch
<b>OLDSMOBILE MARINE ENGINES</b>											
	455 Eng. -Carb. #7045282	1/4"	9/32"	Inner	33	.030	3/4"	34°	—	33	Index
<b>O.M.C. OUTBOARD MARINE CORP.</b>											
	262 Eng. -Carb. #17085010	33	33	33	33	33	33	33	33	33	33
	305 Eng. -Carb. #17057290 #17059286	1/4" 5/16"	9/32" 5/16"	Inner Inner	33 33	.030 .030	1/2" 1/2"	19° 19°	— —	33 33	33 Ga. Notch
	350 Eng. -Carb. #17059286	5/16"	5/16"	Inner	33	.030	1/2"	19°	—	33	Ga. Notch
	427 Eng. -Carb. #7045282	1/4"	9/32"	Inner	33	.030	3/4"	34°	—	33	Index
	454 Eng. -Carb. #7045283 #17059285 #17086117	1/4" 5/16" 33	9/16" 5/16" 33	Inner Inner 33	33 33 33	.030 .030 33	3/8" 1/2" 33	15° 19° 33	— — 33	33 33 33	Index 33 Ga. Notch
<b>VOLVO PENTA</b>											
	305, 350 Eng. -Carb. #17056287 #17057292 #17059283 #17059296 #17059298	1/4" 1/4" 1/4" 9/32" 1/4"	9/32" 9/32" 5/16" 5/16" 5/16"	Inner Inner Inner Inner Inner	33 33 33 33 33	.015 .030 .030 .015 .030	3/4" 3/4" 1/2" 1/2" 1/2"	21° 21° 21° 33 21°	— — — — —	33 33 33 33 33	Index Index Index Index Index
	454 Eng. -Carb. #7044289	1/4"	9/32"	Inner	33	.030	3/8"	27°	—	33	Index

**ABBREVIATIONS:**

A.C.	Air Conditioning
Alt.	Altitude
A.T.	Automatic Transmission
Calif.	California
Can.	Canada
Eng.	Engine
Exc.	Except
Fed.	Federal
Ga.	Gauge
Hi. Perf.	High Performance
M.T.	Manual Transmission
NL	Notch Lean
NR	Notch Rich
T.R.	Tamper Resistant
w/	with
w/o	without

**FOOTNOTES:**

- 1 Carb. # 17084230 set 26°.
- 2 Carb. # 17083230, 321 set 26°.
- 3 Carb. # 17081226, 227 set 24°.
- 4 Carb. # 17082230, 231 set 26°.
- 5 Carb. # 17085215 set 46°.
- 6 Carb. # 17085226, 227, 228, 229, 290, 292 set 24°.
- 7 Carb. # 17056503, 507; 17059211 set 2NL.
- 8 Carb. # 17059216, 217, 282, 284 set 2NL.
- 9 Set 30° after first scheduled tune-up.
- 10 Set 31° after first scheduled tune-up.
- 11 Set 33° after first scheduled tune-up.
- 12 Carb. # 7045228 set 30°.
- 13 Carb. # 17056211 set 29°.
- 14 Set 38° after first scheduled tune-up.
- 15 Set 42° after first scheduled tune-up.
- 16 Carb. # 17057502, 504 set 40° after first scheduled tune-up.
- 17 Carb. # 7045203, 219 set 2 NL.
- 18 Carb. # 17082213 set 9/32".
- 19 Carb. # 17059061, 201 set Index.
- 20 Carb. # 17058503, 506, 508 set 9/32" Inner; Carb. # 17058509, 510, 586, 588 set 11/32" Outer.
- 21 Carb. # 17058509, 510, 586, 588 set 2NL.
- 22 Seat w/groove at upper edge set 5/16" w/o groove set 7/16".
- 23 Carb. # 17056209, 219 set 3NL; 17056509, 519, 17057519 set 1NL.
- 24 Carb. # 17057503 set 1NL.
- 25 Carb. # 17057586, 588 set 7/16".
- 26 Carb. # 17059264, 278 set 1NR.
- 27 Carb. # 17056551, 556 set 1NR.
- 28 Carb. # 7045185 3/4 turns.
- 29 Carb. # 7045551 set 1NR.
- 30 Carb. # 17057173 set 28°.
- 31 Carb. # 17059241 set to 20.5°.
- 32 Top of rod even with bottom of hole.
- 33 Refer to Marine manufacturers specifications.

+ Specification Data not available.