

instruction sheet

Rochester Carburetor Models - 4G, 4GC

TYPICAL VIEW

The exploded view shown is typical of the model carburetor this kit will service. The view may differ slightly from the actual carburetor being renewed.

This is a universal kit that may contain more parts than are actually required to service a given carburetor. When similar gaskets or parts are included in the kit, compare with original parts.

DISASSEMBLY

Rest the carburetor on a repair stand to avoid damage to the throttle plates during renew procedures. Use exploded view as a guide, and follow the numerical sequence in general to disassemble unit far enough to permit cleaning and inspection. Do not remove the throttle plates or shaft. If wear or damage is evident, the throttle body must be replaced.

CHOKE PLATE — Does not require removal. Choke plate screws are staked over to prevent loosening. If necessary to remove choke plate lightly file off staking from choke plate screws prior to removal.

HOT WATER CHOKE COVER — Do not disassemble unless parts are being replaced, and do not soak in cleaner or solvent.

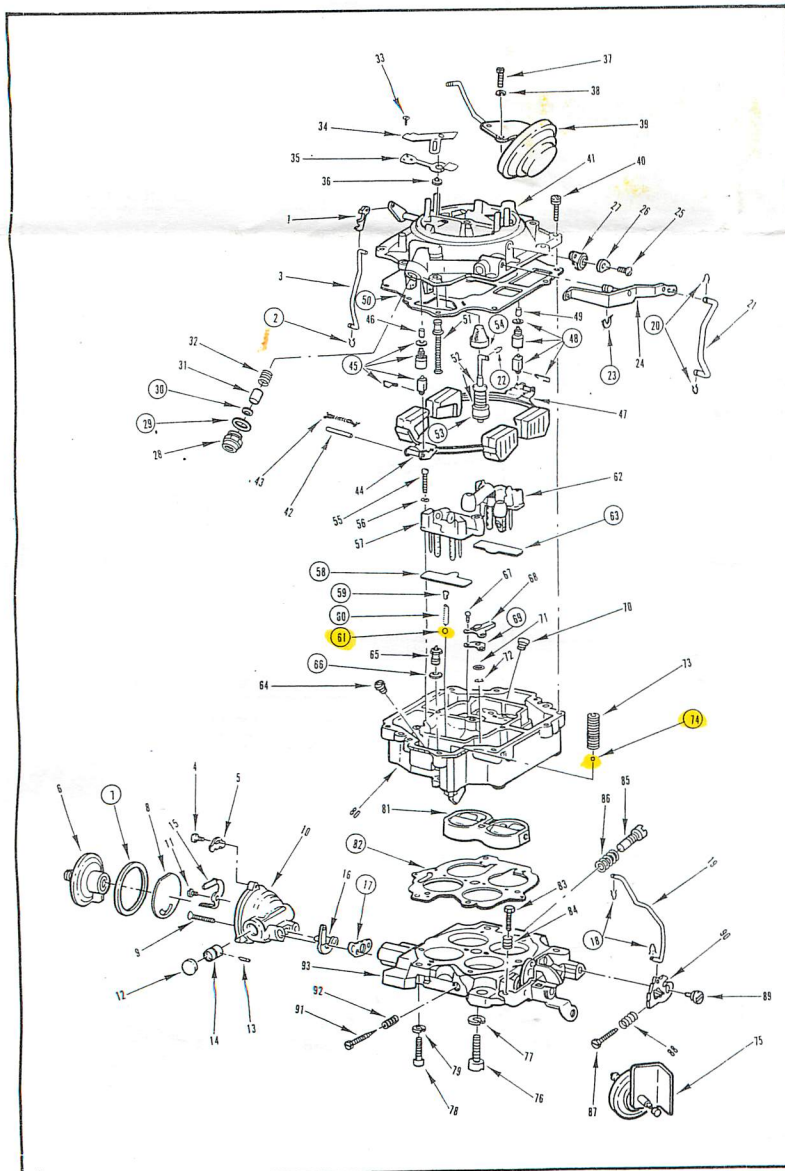
POWER PISTON ASSEMBLY — Remove staking from airhorn prior to removal.

IDLE ADJUSTING NEEDLES — Prior to removal turn needles in until lightly seated, counting and recording the number of turns. This procedure is necessary for initial idle setting after renewing.

NOTE: To aid in assembly mark float assembly, venturi cluster, and metering jet locations.

NOMENCLATURE

REF. NO.	REF. NO.
1. Choke rod retainer	48. Sec. needle & seat assy.
2. Choke rod retainer	49. Sec. needle & seat strainer
3. Intermediate choke rod	50. Airhorn gasket
4. Choke cover retainer screw	51. Power piston assy.
5. Choke cover retainer	52. Pump-spring & retainer
6. Choke cover assembly	53. Pump cup & stem assy.
7. Choke cover gasket	54. Pump boot
8. Choke baffle plate	55. Venturi cluster screw
9. Choke housing screw	56. Lockwasher
10. Choke housing	57. Primary venturi cluster
11. Choke piston lever screw	58. Pri. venturi cluster gasket
12. Choke housing plug	59. Pump disch. spring guide
13. Choke piston pin	60. Pump disch. spring
14. Choke piston	61. Pump disch. check ball
15. Choke piston lever	62. Sec. venturi cluster
16. Intermediate choke shaft	63. Sec. venturi cluster gasket
17. Choke housing gasket	64. Primary metering jet
18. Choke rod retainer	65. Power valve assembly
19. Choke rod	66. Power valve gasket
20. Pump rod retainer	67. Idle compensator screw
21. Pump rod	68. Idle compensator valve
22. Pump stem retainer	69. Idle compensator gasket
23. Pump shaft & lever clip	70. Sec. metering jet
24. Pump shaft & lever	71. Pump inlet strainer retainer
25. Choke trip lever screw	72. Pump inlet strainer
26. Choke trip lever	73. Pump return spring
27. Choke lever & collar	74. Check ball
28. Fuel inlet fitting	75. Throttle return check assy.
29. Fuel inlet fitting gasket	76. Large throttle body screw
30. Fuel filter gasket	77. Lockwasher
31. Fuel filter	78. Small throttle body screw
32. Fuel filter spring	79. Lockwasher
33. Bowl vent valve screw	80. Fuel bowl assembly
34. Bowl vent valve shield	81. Aux. throttle valve assy.
35. Bowl vent valve arm	82. Throttle body gasket
36. Bowl vent valve	83. Curb idle adj. screw
37. Vacuum break control screw	84. Curb idle adj. screw spring
38. Lockwasher	85. Idle air adj. needle
39. Vacuum break & rod assy.	86. Idle air adj. needle spring
40. Airhorn screw & lockwasher	87. Fast idle adj. screw
41. Airhorn assembly	88. Fast idle adj. screw spring
42. Float lever pin	89. Fast idle cam screw
43. Float balance spring assy.	90. Fast idle cam
44. Pri. float & lever assy.	91. Idle adjusting needle
45. Pri. needle & seat assy.	92. Idle adj. needle spring
46. Pri. needle & seat strainer	93. Throttle body assembly
47. Sec. float & lever assy.	



CLEANING

Cleaning must be done with carburetor disassembled. Soak parts long enough to soften and remove all foreign materials. Use a carburetor solvent, lacquer thinner or denatured alcohol. Make certain the throttle body is free of all carbon deposits. Wash off in suitable solvent. Blow out all passages in castings with compressed air and check carefully to insure thorough cleaning of obscure areas. **CAUTION:** Do not soak parts containing rubber or plastic material, serious damage could result.

REASSEMBLY

Reassemble in reverse order of disassembly. Note special instructions and follow outline in making adjustments. Manually operate the throttle lever and choke mechanism, checking for binding or interference could cause throttle to stick during operation and could result in loss of carburetor throttle control (or uncontrolled engine speed). Check carburetor to be sure there are no leaks or flooding which might cause a fire.

SPECIAL INSTRUCTIONS

IDLE AIR NEEDLE (85) — If equipped turn in until light seated and backout 1-1/2 - 2 turns

NEEDLE & SEAT GASKET — When two seat gaskets are provided, use the thin gasket first, and measure the dry float level. If float level is extremely low, replace with thicker gasket.

FLOAT BALANCE SPRING ASSY. (43) — If equipped, make sure the spring is between float tang and needle seat

POWER PISTON ASSY. (51) — Lightly stake casting around washer after installation.

CHOKE PLATE SCREWS — If removed, must be re-staked to prevent loosening.

CARBURETOR ADJUSTMENTS

1 Airhorn inverted with airhorn gasket in place 3 To Adjust: Bend here 2 Measure the distance between the top of airhorn gasket & top of heel of each float NOTE: When two inlet seat gaskets are supplied, use the thin gasket first. If the float level measurement is extremely low, then replace with thicker gasket CAUTION: DO NOT EXERT PRESSURE ON VITON INLET NEEDLE WEDGE TYPE FLOAT METAL OR PLASTIC FIG. 1 — DRY FLOAT ADJUSTMENT	1 Airhorn inverted with airhorn gasket in place 3 To Adjust: Bend here 2 Measure the distance between the top of airhorn gasket & top of each float NOTE: When two inlet seat gaskets are supplied, use the thin gasket first. If the float level measurement is extremely low, then replace with thicker gasket CAUTION: DO NOT EXERT PRESSURE ON VITON INLET NEEDLE ROUND OR "D" TYPE FLOAT FIG. 2 — DRY FLOAT ADJUSTMENT	2 To Adjust: Carefully bend float pontoons slightly 1 Airhorn gasket raised. Toe of floats should be flush with airhorn surface FIG. 3 — FLOAT TOE ADJUSTMENT WITHOUT DIMPLE	
3 To Adjust: Carefully bend pontoon slightly 2 Measure distance between top of airhorn gasket & center of dimple on each float 1 Airhorn inverted with airhorn gasket in place FIG. 4 — FLOAT TOE ADJUSTMENT WITH DIMPLE	2 Center float pontoons in airhorn gasket cut out, or parallel to edge of airhorn 3 Floats should be parallel 1 Align airhorn gasket on airhorn CAUTION: DO NOT BEND PLASTIC FLOATS WHERE THEY ARE MOLDED TO FLOAT ARMS. FIG. 5 — FLOAT ALIGNMENT	2 Bounce float lightly 1 Hold power piston in full up position 3 With float hanging freely, measure distance between airhorn gasket & center of dimple or scribed line on plastic float 4 To Adjust: Bend forked tang FIG. 6 — VACUUM ASSIST SPRING ADJUSTMENT	
1 Float hanging freely 3 To Adjust: Bend tang 2 Measure the distance between airhorn gasket & bottom of float ROUND OR "D" TYPE FLOAT FIG. 7 — FLOAT DROP ADJUSTMENT	2 Float with dimple measure distance between airhorn gasket & center of dimple 3 Float without dimple measure distance between airhorn gasket & bottom of float 1 Float hanging freely 4 To Adjust: Bend tang WEDGE TYPE FLOAT FIG. 8 — FLOAT DROP ADJUSTMENT	2 Measure distance between airhorn gasket & bottom of scribe line on float 3 To Adjust: Bend tang 1 Float hanging freely PLASTIC TYPE FLOAT FIG. 9 — FLOAT DROP ADJUSTMENT	3 Measure distance between top of airhorn casting & bottom of pump stem 1 Pump rod positioned in proper hole 4 To Adjust: Bend pump rod 2 Back out throttle stop screw, and hold throttle in fully closed position FIG. 10 — PUMP ROD ADJUSTMENT

CARBURETOR ADJUSTMENTS

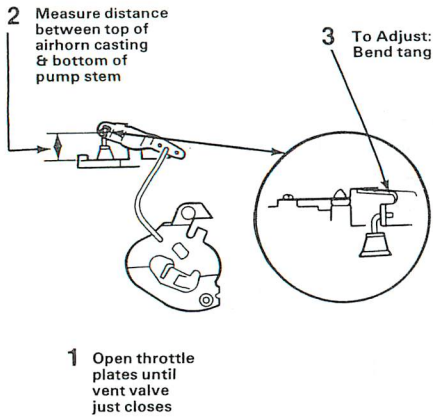


FIG. 11 - BOWL VENT ADJUSTMENT

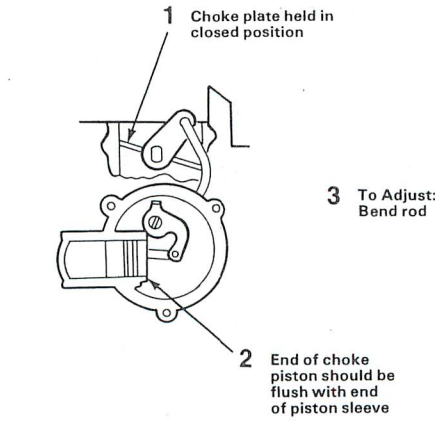


FIG. 12 - INTERMEDIATE CHOKE ROD ADJUSTMENT

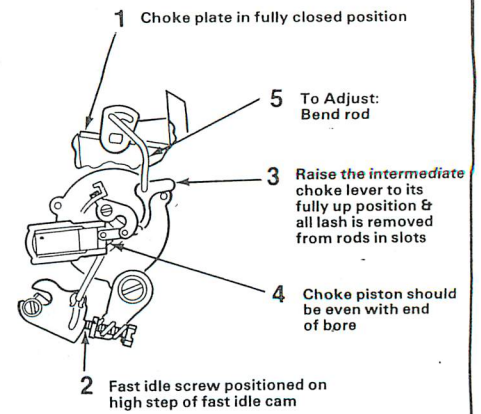


FIG. 13 - INTERMEDIATE CHOKE ADJUSTMENT

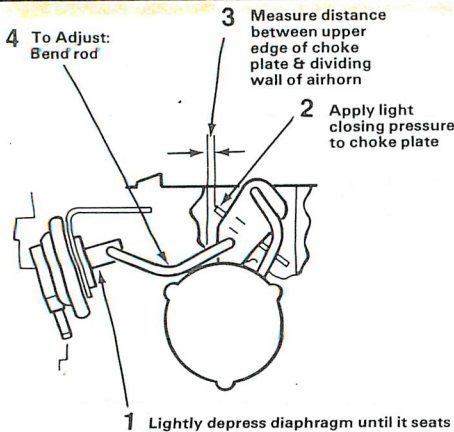


FIG. 14 - VACUUM BREAK ADJUSTMENT

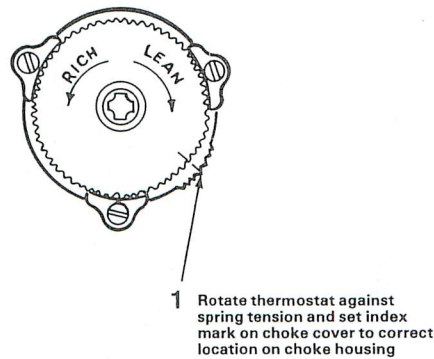


FIG. 15 - AUTOMATIC CHOKE ADJUSTMENT

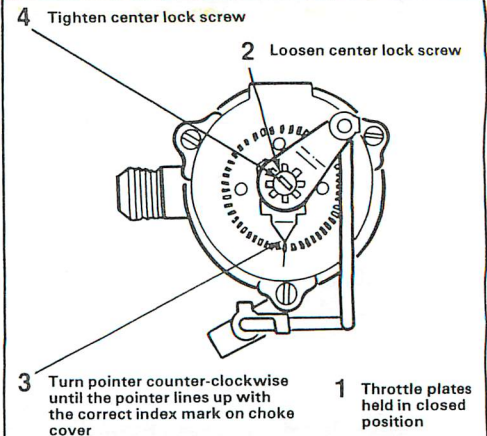


FIG. 16 - CHOKE MODIFIER ADJUSTMENT

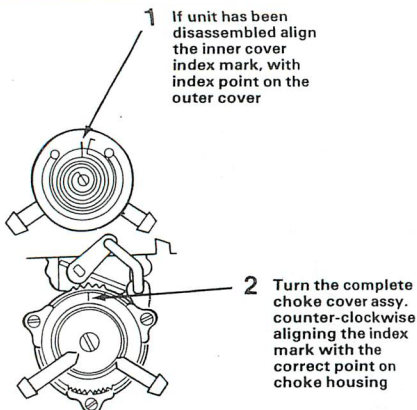


FIG. 17 - HOT WATER CHOKE COIL ADJUSTMENT

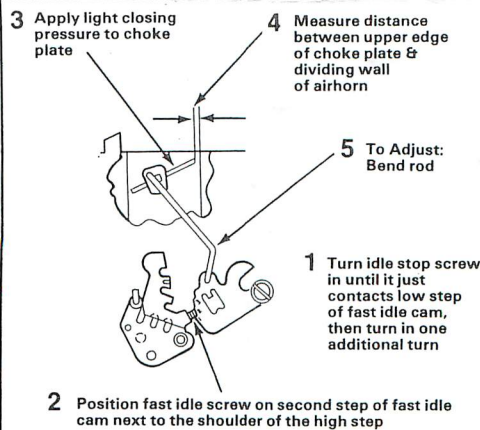


FIG. 18 - CHOKE ROD ADJUSTMENT

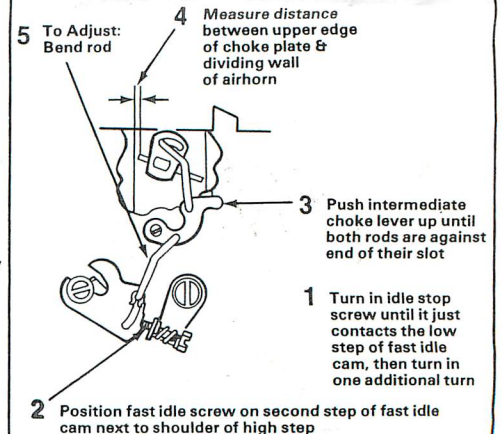


FIG. 19 - CHOKE ROD ADJUSTMENT

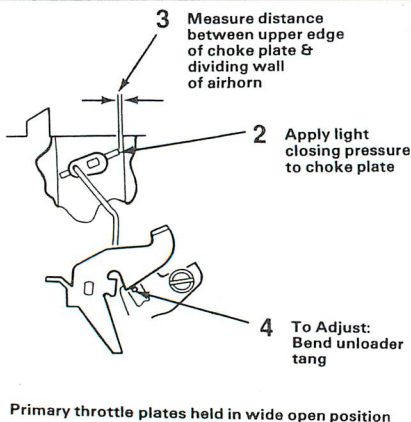


FIG. 20 - UNLOADER ADJUSTMENT

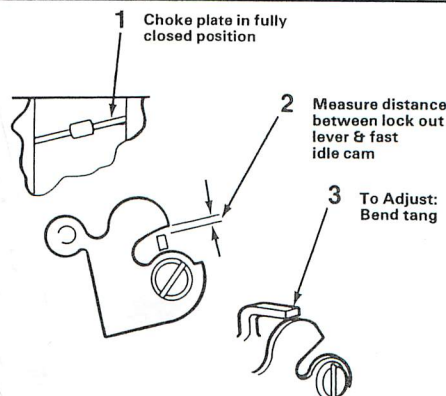


FIG. 21 - SECONDARY LOCK-OUT ADJUSTMENT

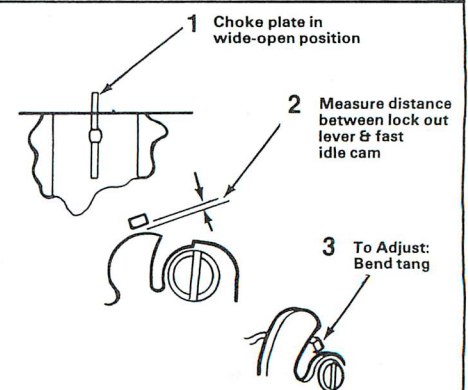


FIG. 22 - SECONDARY CONTOUR ADJUSTMENT

ADJUSTMENT SPECIFICATIONS

Year & Make		Pri. Dry Float Level	Sec. Dry Float Level	Pri. Float Toe Adj.	Sec. Float Toe Adj.	Vac. Assist. Spring Adj.	Pri. Float Drop Adj.	Sec. Float Drop Adj.	Pump Rod Location	Pump Rod Adj.	Bowl Vent Valve Adj.	Intermediate Choke Rod Adjustment	Auto Choke Adj.	Choke Rod Adj.	Un- Loader Adj.	Sec. Lock- Out	Sec. Contour Adj.	Curb Idle R.P.M.		Fast Idle R.P.M.		
																		M/T	A/-Dr.	See Note 1		
1964-65	Acadian-283"-327" Eng.	1-17/32"	1-19/32"	—	—	—	2-1/4"	2-1/4"	Note 4	1-1/16"	31/32"	Flush	Index	1/16"	1/4"	1/64"	1/64"	500	500	—		
1955-56	Buick-All	1-9/16"	1-9/16"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	—	Flush	Index	9/64"	1/8"	1/64"	1/32"	500	450	1700		
1957	Buick-All	1-3/8"	1-3/8"	Flush	Flush	—	1-13/16"	1-13/16"	Center	1-1/32"	—	Flush	Index	5/32"	9/64"	1/64"	1/32"	500	450	1500		
1958	Buick-Early - 7011600	1-3/8"	1-3/8"	3/8"	3/8"	—	1-5/16"	1-5/16"	Center	1-1/32"	—	Flush	Index	5/32"	9/64"	1/64"	1/32"	500	450	1500		
1958	Buick-Late - 7013100	1-13/32"	1-3/8"	7/16"	3/8"	—	1-11/32"	1-11/32"	Center	1-1/32"	—	Flush	Index	5/32"	9/64"	1/64"	1/32"	500	450	1500		
1959	Buick-W/Vac. Assist. Float	1-15/32"	1-3/8"	11/16"	3/8"	1-1/16"	1-1/2"	1-5/16"	Center	1-1/32"	—	Flush	Index	5/32"	9/64"	1/64"	1/32"	500	450	650 Low Step		
1959	Buick-W/O Vac. Assist. Float	1-3/8"	1-3/8"	1/2"	3/8"	—	1-7/16"	1-5/16"	Center	1-1/32"	—	Flush	Index	5/32"	9/64"	1/64"	1/32"	500	450	650 Low Step		
1960-62	Buick-All-Standard	1-11/32"	1-3/8"	9/16"	3/8"	—	1-7/16"	1-5/16"	Center	1-1/32"	—	Flush	Index	1/16"	9/64"	1/64"	1/32"	500	500	650 Low Step		
1961-62	Buick-All-Special	1-11/32"	1-3/8"	9/16"	3/8"	—	1-7/16"	1-5/16"	Outer	29/32"	—	Flush	Index	3/64"	9/64"	1/64"	1/32"	500	500	650 Low Step		
1963	Buick-All-Standard	1-11/32"	1-3/8"	9/16"	3/8"	—	1-7/16"	1-1/4"	Center	1"	—	Flush	Index	3/64"	9/64"	1/64"	1/32"	500	500	650 Low Step		
1963	Buick-All-Special	1-11/32"	1-3/8"	9/16"	3/8"	—	1-9/16"	1-9/32"	Outer	29/32"	—	Flush	Index	3/64"	9/64"	1/64"	1/32"	500	500	650 Low Step		
1964	Buick-Special-Skylark and LeSabre	1-11/32"	1-3/8"	19/32"	3/8"	—	1-19/32"	1-3/16"	Inner	31/32"	—	Flush	1-N-Rich	3/64"	1/8"	1/64"	1/32"	500	500	650 Low Step		
1964	Buick-Standard 401" Eng.	1-11/32"	1-3/8"	17/32"	13/32"	—	1-7/16"	1-3/16"	Center	1-1/32"	—	Flush	Index	1/32"	1/8"	1/64"	1/32"	550	550	650 Low Step		
1965	Buick-401" & 425" Eng.	1-13/32"	1-13/32"	—	—	—	1-1/16"	1-1/4"	Center	1"	—	1/32" Out	Index	1/16"	1/8"	1/64"	1/32"	500	500	650 Low Step		
1966	Buick-401" Eng. A/T	1-13/32"	1-13/32"	—	—	—	1-1/16"	1-1/16"	Center	1"	—	1/32" Out	Index	1/16"	1/8"	1/64"	1/32"	500	500	650 Low Step		
1952	Cadillac-All	1-3/4"	1-3/4"	—	—	—	2-1/4"	2-1/4"	—	15/16"	7/8"	—	1-N-Rich	1/32"	5/64"	1/64"	1/64"	—	380	1700		
1953	Cadillac-All	1-9/16"	1-9/16"	—	—	—	2-1/4"	2-1/4"	—	15/16"	7/8"	—	1-N-Rich	1/32"	5/64"	1/64"	1/64"	—	380	1700		
1954	Cadillac-All	1-19/32"	1-19/32"	—	—	—	2-1/4"	2-1/4"	—	15/16"	27/32"	—	1-N-Rich	3/64"	9/64"	1/64"	1/64"	—	400	1700		
1955-56	Cadillac-All	1-19/32"	1-19/32"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	7/8"	—	Index	3/64"	9/64"	1/64"	1/64"	—	400	1700		
1957	Cadillac-All	1-3/8"	1-3/8"	Flush	Flush	—	1-13/16"	1-13/16"	—	15/16"	7/8"	Flush	Index	3/64"	9/64"	1/64"	1/64"	—	450	1700		
1958	Cadillac W/O Vac. Assist. Float	1-3/8"	1-3/8"	3/8"	3/8"	—	1-5/16"	1-5/16"	—	29/32"	13/16"	Flush	Index	1-N-Rich	3/64"	9/64"	1/64"	1/64"	—	475	1700	
1958	Cadillac W/Vac. Assist. Float	1-7/16"	1-3/8"	5/8"	3/8"	1-1/32"	1-1/2"	1-5/16"	—	29/32"	13/16"	Flush	Index	1-N-Rich	3/64"	9/64"	1/64"	1/64"	—	475	1700	
1959-62	Cadillac-All	1-7/16"	1-3/8"	5/8"	3/8"	1-1/32"	1-1/2"	1-5/16"	—	27/32"	3/4"	Flush	Index	1-N-Rich	3/64"	9/64"	1/64"	1/64"	—	500	1700	
1963	Cadillac-All	1-7/16"	1-3/8"	5/8"	3/8"	1-1/16"	1-1/2"	1-1/4"	—	27/32"	—	Flush	Index	1-N-Rich	3/64"	9/64"	1/64"	1/64"	—	500	1700 Second Step	
1964-66	Cadillac-All	1-7/16"	1-3/8"	5/8"	3/8"	1-1/16"	1-1/2"	1-1/16"	Outer	13/16"	—	Flush	Index	3/64"	9/64"	1/64"	1/64"	—	500	1700 Second Step		
1965	Checker Cab-327" Eng.	1-17/32"	1-19/32"	—	—	—	2-1/4"	2-1/4"	Outer	1-1/16"	31/32"	Flush	Index	1/16"	1/4"	1/64"	1/64"	475	450	—		
1965-66	Chevelle 283"-327" Eng.	1-17/32"	1-19/32"	—	—	—	2-1/4"	2-1/4"	Note 4	1-1/16"	31/32"	Flush	Index	1/16"	1/4"	1/64"	1/64"	500	500	—		
1956-57	Chevrolet-All	1-5/8"	1-5/8"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	—	—	1-N-Lean	3/64"	15/64"	1/64"	1/64"	500	450	—		
1958	Chevrolet-All	1-5/8"	1-11/16"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	31/32"	—	Index	3/64"	15/64"	1/64"	1/64"	500	450	—		
1959-60	Chevrolet-W/O Float Torsion Spring	1-5/8"	1-11/16"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	31/32"	Flush	Index	1-N-Lean	3/64"	15/64"	1/64"	500	450	—		
1959-64	Chevrolet-W/Float Torsion Spring	1-17/32"	1-19/32"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	31/32"	Flush	Index	1/16"	15/64"	1/64"	1/64"	500	500	—		
1963	Chevrolet 409" Eng.	1-1/2"	1-5/16"	13/16"	1/2"	1-7/32"	1-1/2"	1-7/32"	—	1"	29/32"	Flush	Index	5/64"	9/64"	1/64"	1/64"	—	475	—		
1964	Chevrolet-409" Eng. M/T 7024123	1-1/2"	1-5/16"	13/16"	1/2"	1-7/32"	1-1/2"	1-1/8"	—	1-1/32"	15/16"	Flush	Index	1/16"	9/64"	1/64"	1/64"	500	—	—		
1964	Chevrolet-409" Eng. A/T 7024124	1-1/2"	1-5/16"	13/16"	1/2"	1-7/32"	1-1/2"	1-1/8"	—	29/32"	13/16"	Flush	Index	1/16"	9/64"	1/64"	1/64"	—	475	—		
1964	Chevrolet-409" Eng. M/T 7024127	1-1/2"	1-13/32"	25/32"	21/32"	1-5/32"	1-1/2"	1-7/16"	—	1-1/32"	15/16"	Flush	Index	3/32"	9/64"	1/64"	1/64"	500	—	—		
1964	Chevrolet-409" Eng. A/T 7024128	1-1/2"	1-13/32"	25/32"	21/32"	1-5/32"	1-1/2"	1-7/16"	—	29/32"	13/16"	Flush	Index	3/32"	9/64"	1/64"	1/32"	—	475	—		
1965	Chevrolet-409" Eng. M/T	1-1/2"	1-1/2"	25/32"	21/32"	1-5/32"	1-1/2"	1-7/16"	—	1-1/32"	15/16"	Flush	Index	3/32"	1/8"	1/64"	1/64"	500	—	—		
1965	Chevrolet-409" Eng. A/T	1-13/32"	1-13/32"	25/32"	21/32"	1-5/32"	1-1/2"	1-7/16"	—	29/32"	13/16"	Flush	Index	3/32"	1/8"	1/64"	1/64"	—	475	—		
1965-66	Chevrolet & Chevy II 327" Eng. & 283" Eng.	1-17/32"	1-19/32"	—	—	—	2-1/4"	2-1/4"	Note 4	1-1/16"	31/32"	Flush	Index	1/16"	1/4"	1/64"	1/64"	500	450	—		
1957	Chevrolet Truck 283" Eng.	1-5/8"	1-5/8"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	—	—	—	—	—	—	—	500	—	—		
1957	Chevrolet Truck 322" Eng.	1-9/16"	1-9/16"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	—	—	—	—	—	—	—	500	—	—		
1958	Chevrolet Truck	1-5/8"	1-11/16"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	31/32"	—	—	—	—	—	—	500	—	—		
1959-61	Chevrolet Truck	1-11/16"	1-3/4"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	31/32"	—	—	—	—	—	—	500	450	—		
1952	Oldsmobile	1-3/8"	1-3/8"	—	—	—	1-15/16"	1-15/16"	—	1-1/16"	1"	—	Index	1/16"	3/32"	1/64"	1/32"	—	375	1450		
1953	Oldsmobile	1-9/16"	1-9/16"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	1"	—	Index	1/16"	3/32"	1/64"	1/32"	—	375	1450		
1954-56	Oldsmobile	1-5/8"	1-5/8"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	15/16"	—	Index	3/64"	1/8"	1/64"	1/32"	450	400	1500		
1957	Oldsmobile	1-5/8"	1-5/8"	—	—	—	2-1/4"	2-1/4"	—	1-1/16"	13/16"	Flush	Index	3/64"	3/32"	1/64"	1/32"	475	450	1500		
1958-62	Oldsmobile-All Standard	1-15/32"	1-3/8"	Note 3	3/8"	1-1/16"	1-1/2"	1-5/16"	—	1-1/32"	29/32"	Flush	Index	3/64"	1/8"	1/64"	1/32"	525	500	1600		
1963	Oldsmobile-All Standard	1-15/32"	1-3/8"	11/16"	3/8"	1-1/16"	1-1/2"	1-3/16"	Inner	1"	29/32"	Flush	Index	3/64"	1/8"	1/64"	1/32"	525	500	1600		
1961-62	Oldsmobile-F85 (Except 7020985)	1-13/32"	1-3/8"	5/8"	3/8"	29/32"	1-1/2"	1-3/8"	Outer	1-1/32"	15/16"	Flush	Index	3/64"	3/16"	1/64"	1/32"	575	550	1600		
1962	Oldsmobile-F85 (7020985)	1-15/32"	1-3/8"	11/16"	3/8"	1-1/8"	1-1/2"	1-1/8"	Outer	1-1/32"	15/16"	Flush	Index	3/64"	3/16"	1/64"	1/32"	575	550	1600		
1963	Oldsmobile-F85	1-7/16"	1-3/8"	17/32"	3/8"	—	1-3/8"	1-1/8"	Outer	1"	29/32"	Flush	Index	2-N-Rich	3/64"	3/16"	1/64"	1/32"	525	500	1600	
1964	Oldsmobile-F85 & Jet Star 88	1-15/32"	1-3/8"	17/32"	3/8"	—	1-3/8"	1-1/8"	—	29/32"	Flush(*)	—	Index	3/64"	3/16"	1/64"	1/32"	525	500	1000 Low Step		
1964	Oldsmobile-All Standard	1-15/32"	1-3/8"	11/16"	3/8"	1-1/32"	1-1/2"	1-3/16"	Inner	29/32"	Flush	Index	Index	3/64"	1/8"	1/64"	1/					