ROCHESTER MODEL 4G 4-BARREL

CHEVROLET

Application	Rochester No.
1965	
327" V8	7025125
1966	
327" V8	7025125
327" V8 With A.I.R.	7036125

CHEVROLET & GMC

Application	Rochester No.
1967	
327" V8	7027125
327" V8	7037125

NOTE — Carburetors used on vehicles with A.I.R. are special units with different jet calibrations and adjustment specifications.

CARBURETOR IDENTIFICATION

Rochester carburetor number is stamped on upper part of brass tag attached to carburetor. A letter ("A", "B", etc.) stamped in box in lower left corner of tag indicates successive engineering changes or modifications made in production (each succeeding letter indicates that all previous modifications also included). Notation in second box on tag ("A5","B5", etc.) designates month and year that carburetor was manufactured (A — January, B — February etc. and 5 — 1965) and can also be used to identify modifications. Marks in following two boxes are inspection markings and have no service significance.

DESCRIPTION

Four barrel downdraft type with two primary barrels each supplemented by a secondary barrel which begins operation at approximately half-throttle. The primary and secondary sections have independent fuel bowl and float systems (twin floats), idle systems (no idle adjustment provided for secondary side), main metering and discharge systems and interconnected throttle valves. An accelerating pump, vacuum piston controlled power valve, and choke valve are used on the primary side only.

ADJUSTMENT

HOT (SLOW) IDLE RPM

See appropriate article in TUNE-UP Section.

COLD (FAST) IDLE RPM

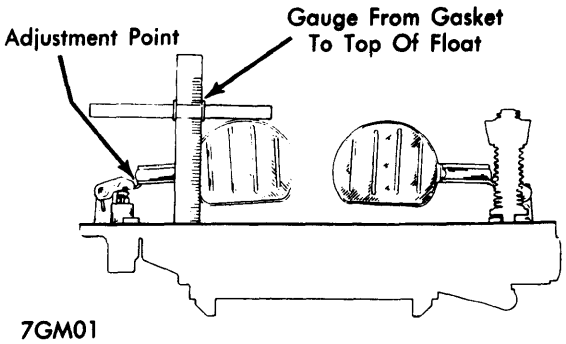
See appropriate article in TUNE-UP Section.

ACCELERATOR & DOWNSHIFT LINKAGE ADJUSTMENT

See appropriate article in TUNE-UP Section.

FLOAT LEVEL

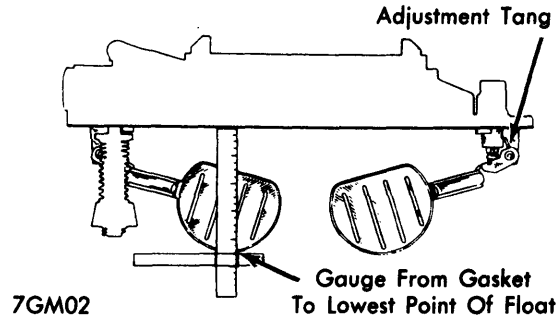
Invert air horn with gasket in place. Align both floats in center of gasket cutout. To check float level, measure distance between top of each float and air horn gasket (see illustration). Distance should be as indicated in specifications. To adjust, bend float arms at point near needle valve and seat.



FLOAT LEVEL ADJUSTMENT

FLOAT DROP

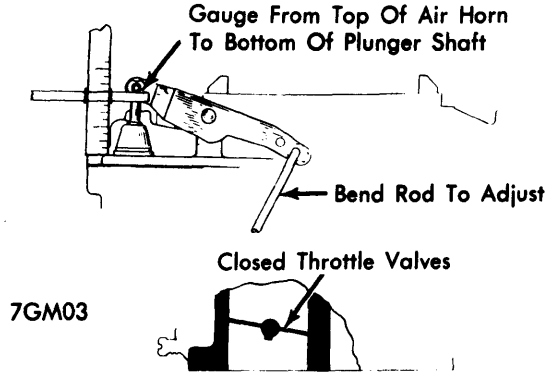
Hold air horn upright with floats hanging free, then measure distance from surface of air horn gasket to lowest point of float (see illustration). Distance should be as indicated in specifications. To adjust, bend tang at needle valve.



FLOAT DROP ADJUSTMENT

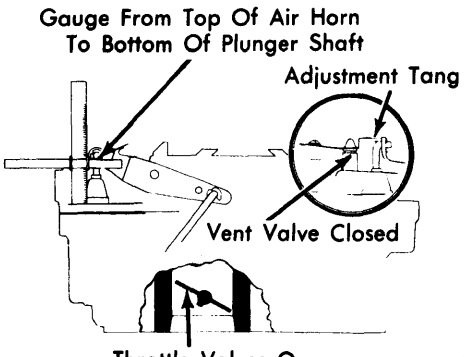
ACCELERATOR PUMP ROD

With accelerator pump rod in outer hole, back out idle screw until throttle valves are completely closed. Measure distance between top of air horn to bottom of pump lunger shaft (see illustration). Distance should be as indicated in specifications. To adjust, bend pump rod.



ACCELERATOR PUMP ADJUSTMENT

ROCHESTER MODEL 4G 4-BARREL (Cont.)



IDLE VENT ADJUSTMENT

IDLE VENT

Accelerator pump rod must be correctly adjusted before adjusting idle vent. Open throttle valves until specified distance between top of air horn and bottom of accelerator pump rod is obtained (see illustration). At this position, vent valve should just close. To adjust, bend tang on pump lever.

CHOKE ROD

With choke valve in wide open position, bring idle screw forward until it just touches fast idle cam. Screw should contact cam at scribed mark. To adjust, bend choke rod.

CARBURETOR ADJUSTMENT SPECIFICATIONS

Rochester Carb. No.	Idle Speed (Engine RPM) ①		Float Level Setting ②	Float Level Setting ③	Float Drop Setting	Accelerator Pump Setting	Idle Vent Setting
	Man. Trans.	Auto. Trans.					
7025125	450-500	450-500	1 17/32"	1 19/32"	2 1/4"	1 1/16"	3 1/32"
7036125	450-500	450-500	1 17/32"	1 19/32"	2 1/4"	1 1/16"	3 1/32"
7027125	500	500	1 17/32"	1 19/32"	2 1/4"	1 1/16"	3 1/32"
7027125	700	600	1 17/32"	1 19/32"	2 1/4"	1 1/16"	3 1/32"

① — Manual transmission in Neutral and automatic transmission in "D".
② — Primary float.
③ — Secondary float.

OVERHAUL

DISASSEMBLY

1) Remove fast idle cam screw, clip from choke rod at cam and remove cam. Remove clip from upper end of choke rod and remove choke rod. Remove choke valve screws and choke valve. Remove choke valve shaft spring, depress accelerator pump lever and remove choke shaft.

2) Remove swivel retainer from boss and remove swivel and spring. Remove inlet gasket fitting and strainer. Remove air horn retaining screws, lift air horn straight up to remove.

3) Invert air horn, remove float pin from primary float and remove float and needle valve. Mark float as primary float. Remove needle seat with a suitable screwdriver. Remove float pin, float, needle valve and seat from secondary side.

4) Remove power piston by depressing spring and allowing to snap back. Remove retainer from accelerator pump plunger shaft and remove accelerator pump by sliding through rubber seal. Remove seal from air horn.

5) Remove primary venturi cluster, main jets and power valve. Remove secondary venturi cluster and secondary main jets. Do not mix primary and secondary main jets. Remove accelerator pump return spring from pump well.

6) Remove retaining ring, inlet screen and check ball from bottom of pump well. Remove pump discharge guide with a pair of needle nose pliers and remove spring and check ball. Invert float bowl and remove throttle valve body from float bowl.

7) Remove auxiliary throttle valve assembly from float bowl. Remove idle mixture screws and springs. Do not attempt to disassemble throttle valve assembly any further.

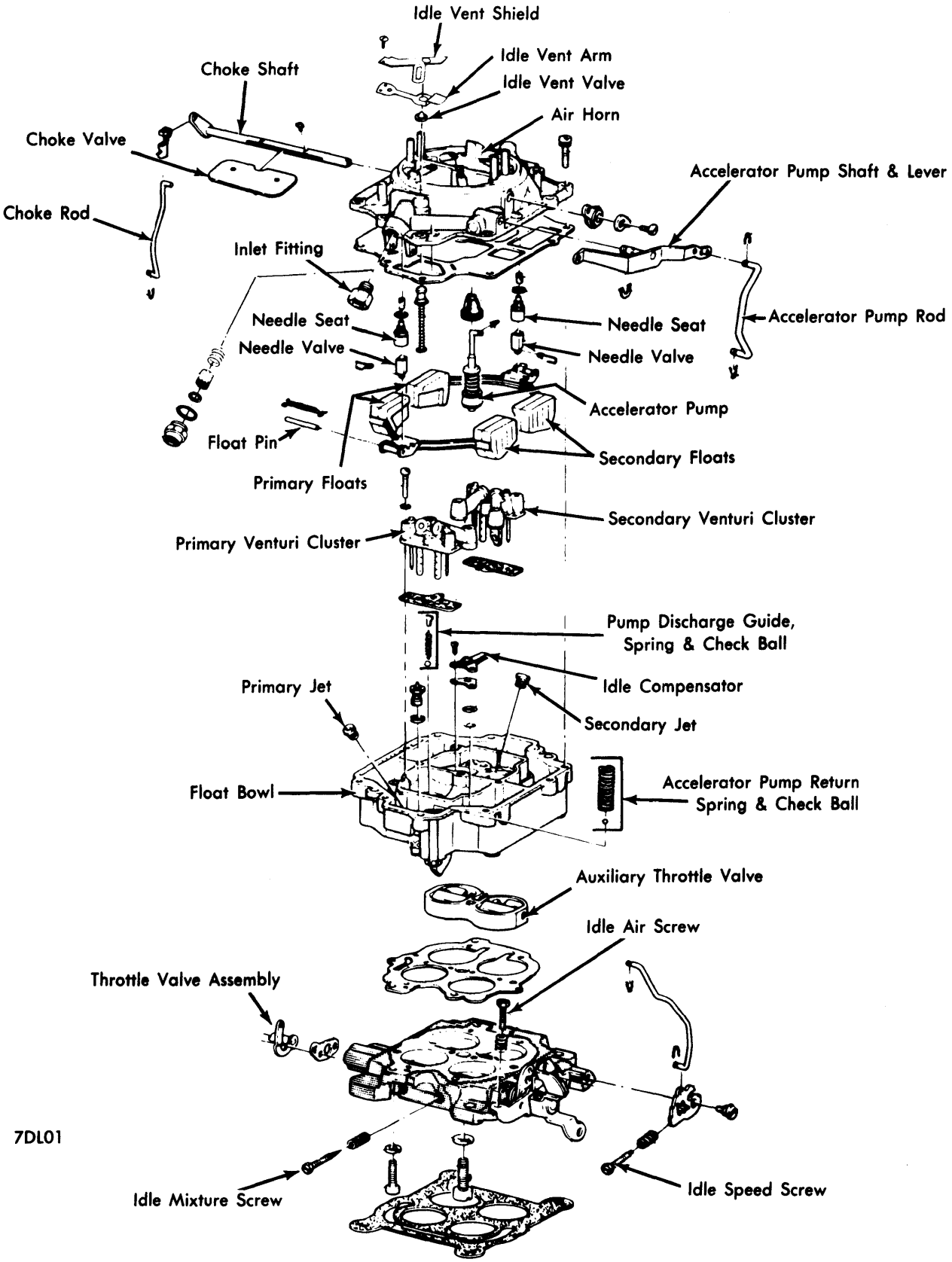
CLEANING & INSPECTION

Thoroughly clean carburetor castings and metal parts in a suitable cleaning solvent. Do not immerse accelerator pump or any rubber or synthetic parts in solution. These components should be cleaned in clean gasoline. Check all parts and casting passages for carbon deposits and blow out all passages with compressed air. Inspect all components for wear or damage.

REASSEMBLY

To assemble carburetor, use all new gaskets and reverse disassembly procedure.

ROCHESTER MODEL 4G 4-BARREL (Cont.)



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