STROMBERG WW 2-BARREL (CHRYSLER CORP.)

1959 MODELS

DODGE & DART
326" Engine (Synchro-mesh) 3-164, 3-182
326" Engine (Auto. Trans.) 3-181, 3-183
PLYMOUTH
318" Engine (Synchro-mesh) 15-38
318" Engine (Overdrive) 15-39
318" Engine (Auto. Trans.) 15-40

1960 MODELS

DODGE, DART, PLYMOUTH
318" Engine (Synchro-mesh) 15-41, 15-41A
318" Engine (Auto. Trans.) 15-42

1961 MODELS

DODGE DART & PLYMOUTH
318" Engine (Synchro-mesh) 15-43
318" Engine (Auto. Trans.) 15-44
318" Engine (Auto. Trans. CCV) 15-45

1962 MODELS

DODGE DART & PLYMOUTH
318" Engine (Synchro-mesh) 3-198
318" Engine (Auto. Trans.) 3-199
318" Engine (Auto. Trans. CCV) 3-200

1963 MODELS

DODGE & PLYMOUTH
318" Engine (Synchro-mesh) 3-222, 3-222A
318" Engine (Auto. Trans.) 3-223, 3-223A

1964 MODELS

DODGE, DART, PLYMOUTH
318" Engine (Synchro-mesh) 3-239
318" Engine (Auto. Trans.) 3-240

1965 MODELS

DODGE & PLYMOUTH
273" Engine (Synchro-mesh) 3-248
273" Engine (Auto. Trans.) 3-249
318" Engine (Synchro-mesh) 3-250
318" Engine (Auto. Trans.) 3-251

1966 MODELS

DODGE & PLYMOUTH
318" V8 (Std. - No "CAP")
(Synchro-mesh) 3-258
(Auto. Trans.) 3-259
318" V8 (With "CAP")
(Synchro-mesh) 3-260
(Auto. Trans.) ..... 3-261 & 3-261A

1967 MODELS

DODGE & PLYMOUTH
318" V8 (Std. - No "CAP")
(Synchro-mesh) 3-272
(Auto. Trans.) 3-273
318" V8 (With "CAP")
(Synchro-mesh) 3-274
(Auto. Trans.) 3-275

CCV - Closed crankcase ventilation system.

►CHANGES, CAUTIONS, CORRECTIONS

►*"CAP" CARBURETOR NOTE:* These "CAP" carburetors are special units used in cars with "Cleaner Air Package" and require special adjustment procedures for Idle Speed & Mixture adjustment and Fast Idle Speed adjustment.

►*1959 DODGE & PLYMOUTH COLD ENGINE STALLING CORRECTION: NOTE* - Plymouth carburetors coded 15-40A have improved choke piston to correct this condition. On earlier Plymouth and all Dodge carburetors, correct as follows:

1) Remove air cleaner, welch plug in end of vacuum piston cylinder, and vacuum piston with link assembly.
2) Enlarge bleed hole in vacuum piston groove using No. 50 drill (.070"). Clean piston thoroughly and reinstall in cylinder using new welch plug. Piston must operate freely.
3) Check vacuum piston setting and adjust for choke valve opening of 13/32" (Dodge), 3/8" (Plymouth). *See Choke Vacuum Piston under ADJUSTMENTS for procedure. PLYMOUTH NOTE - If excessive loading results during warm-up, increase setting to 13/32" and, if necessary for satisfactory starting, set automatic Choke 2 Rich.*

►*1960 DODGE & PLYMOUTH HESITATION OR STUMBLE ON LIGHT ACCELERATION DURING WARM-UP (Auto. Trans. Cars with 15-42 Carb.):* Correct by installing .052" main metering jets (Stromberg No. 386208) and main discharge nozzle, Stromberg No. 386949.

►*1962 DODGE & PLYMOUTH STUMBLE OR SURGING CORRECTION (Auto. Trans. Cars with 3-199 Carb.):* May be caused by lean jet calibration. Correct by installing .052" main jets (replacing .051") and check float level. *NOTE - In extreme cases, .053" jet can be used.*

►*1962 DODGE & PLYMOUTH STUMBLE ON ACCELERATION OR ENGINE DYING DURING WARM-UP CORRECTION:* May be caused by bent accelerating pump rocker arm. Center section of arm between normal bends at outer ends must be straight. If straightening arm does not correct trouble, check bowl vent opening and adjust by bending pump operating rod. *See ADJUSTMENTS.*

►*HARD COLD STARTING CORRECTION (All Carburetors with Choke Vacuum Piston in Air Horn):* May be caused by choke piston sticking due to gum formations in cylinder. Correct by removing air horn and squirting carburetor cleaner, lacquer thinner, or alcohol through piston link opening while operating choke by hand to remove gum and free piston.

►*DODGE & PLYMOUTH 318" ENGINE AUTO. TRANS. CARS SEVERE STUMBLE OR ENGINE STALL CORRECTION (Cars with "CAP" Stromberg WW 3-261 Carb.): Later 3-261A carburetors have been revised and do not require correction - see Note below.* This condition occurs when throttle opened slowly from standing start. Correct by performing the following steps:

1) Check bowl vent opening and change setting to .080" (standard setting .050"). *See ADJUSTMENTS below.*
2) Check ignition timing and set timing at 5° ATDC. *See car model Tune-Up pages.*
3) After making above changes, check performance by applying brakes, placing transmission in Drive, and slowly opening throttle. If engine stalls or is very rough at one-third throttle or less, make the following additional change:
4) Replace Idle Tubes with new parts, Stromberg No. 387183, or enlarge opening at small end of original tubes with a No. 70 (.028") drill (turn drill by hand). *CAUTION - Do not use a larger drill.*
5) Readjust idle speed to 600 RPM and adjust idle fuel mixture.

NOTE - Later 3-261A carburetors have revised idle transfer hole locations and new idle tubes. These carburetors do not require modification.

CARBURETOR IDENTIFICATION

Stromberg code number stamped on fuel bowl directly above fuel inlet fitting. First part of number ("3" or "15") indicates vehicle make, remaining digits ("149","150" etc.) designate a particular carburetor model. A suffix letter ("A" etc.) indicates changes in parts, jet calibration, or adjustment specifications as listed. *(Continued)*

STROMBERG WW 2-BARREL (CHRYSLER CORP.) (Continued)

DESCRIPTION

Two-barrel downdraft type with vacuum controlled power valve and throttle operated accelerating pump. All carburetors are used with separate "Well Type" automatic choke. These carburetors have various features requiring special adjustments as follows:

Choke Vacuum Piston (1959-63 Carburetors) - Used to provide initial choke opening. Located in air horn and linked directly to choke valve. *See Adjustments.*

Vacuum Kick (1964 & Later Carburetors) - This is a vacuum diaphragm unit used instead of choke vacuum piston. Mounted on air horn bracket and linked directly to choke valve lever. *See Adjustments.*

Idle Vent (1960 & Later Carburetors) - Bowl vent located on pump plunger stem and adjusted as part of accelerating pump adjustment. Special pump setting procedure required.

ADJUSTMENT

NOTE - If preliminary setting required to warm-up engine, set both idle mixture screws ¾-1¼ turns open from a lightly seated position. Make idle adjustments with headlights on high beam (Cars with Alternator), Air Con-

CARBURETOR ADJUSTMENT SPECIFICATIONS

Stromberg Code No.	Idle Speed (Engine RPM) Hot ①	Idle Speed (Engine RPM) Fast	Fast Idle Cam Pos.	Float Level Setting	Unloader Setting	Idle Vent	Accel. Pump Travel	Choke Piston or Vac.Kick	Auto. Choke Setting
3-149	475	.....	3/16" ⑤	7/32"	11/64"	.....	9/32-5/16"	1/4"	Index
3-150	475	.....	5/32" ⑤	7/32"	11/64"	.....	9/32-5/16"	13/64"	Index
3-159	475	.....	⑥	3/16"	19 Drill ⑥	.....	3/16-7/32"	.....	Index
3-160	475	.....	⑥	3/16"	19 Drill ⑥	.....	3/16-7/32"	.....	Index
3-163	475	.....	9/32" ⑤	7/32"	15/64"	.....	9/32-5/16"	31/64"	Index
3-164	475 ②	1300 ③	9/32" ⑤	7/32"	15/64"	.....	9/32-5/16"	29/64"	Index
3-181	475 ②	1300 ③	9/32" ⑤	7/32"	15/64"	.....	9/32-5/16"	29/64"	Index
3-182	475 ②	1300 ③	9/32" ⑤	7/32"	15/64"	.....	9/32-5/16"	31/64"	Index
3-183	475 ②	1300 ③	9/32" ⑤	7/32"	15/64"	.....	9/32-5/16"	29/64"	Index
3-198	500	1250 ③	13/64" ⑤	7/32"	15/64"	5/64"	.....	13/32"	Index
3-199	500	1250 ③	13/64" ⑤	7/32"	15/64"	5/64"	.....	21/64"	Index
3-200	500	1250 ③	13/64" ⑤	7/32"	15/64"	5/64"	.....	⑧	Index
3-222,A	500	1400 ③	13/64" ⑤	7/32"	15/64"	5/64"	.....	3/8"	Index
3-223,A	500	1400 ③	13/64" ⑤	7/32"	15/64"	5/64"	.....	19/64"	Index
3-239	500	700 ④	5/16" ④	7/32"	15/64"	5/64"	.....	15/64"	Index
3-240	500	700 ④	17/64" ④	7/32"	15/64"	5/64"	.....	13/64"	Index
3-248	500	700 ④	9/64" ⑤	7/32"	5/16"	5/64"	.....	17/64"	Index
3-249	500	700 ④	9/64" ⑤	7/32"	5/16"	5/64"	.....	#4 Drill	Index
3-250	500	700 ④	9/64" ⑤	7/32"	5/16"	5/64"	.....	17/64"	Index
3-251	500	700 ④	9/64" ⑤	7/32"	5/16"	5/64"	.....	15/64"	Index
3-258	500	700 ④	#28 Drill	7/32"	5/16"	.060"	.....	G (.261")	2 Rich
3-259	500	700 ④	#28 Drill	7/32"	5/16"	.060"	.....	D (.246")	2 Rich
3-260	650	1450 ⑤	#28 Drill	7/32"	5/16"	.060"	.....	G (.261")	Index
3-261,A	600	1600 ⑤	#28 Drill	7/32"	5/16"	.060"	.....	D (.246")	Index
3-272	500	700 ④	#20 Drill	7/32"	5/16"	.060"	.....	A (.234")	2 Rich
3-273	500	700 ④	#20 Drill	7/32"	5/16"	.060"	.....	4 (.209")	2 Rich
3-274	650	1400 ⑤	#20 Drill	7/32"	5/16"	.060"	.....	A (.234")	Index
3-275	600 ⑨	1400 ⑤	#20 Drill	7/32"	5/16"	.060"	.....	4 (.209")	Index
15-38	475 ②	1300 ③	1/4" ⑤	7/32"	15/64"	.....	1/4"	31/64"	Index
15-39	475 ②	1300 ③	1/4" ⑤	7/32"	15/64"	.....	1/4"	31/64"	Index
15-40	500 ②	1300 ③	1/4" ⑤	7/32"	15/64"	.....	1/4"	29/64"	Index
15-41,A	500 ②	1400 ③	13/64" ⑤	7/32"	15/64"	3/32"	9/32-5/16"	31/64"	Index
15-42	500 ②	1400 ③	13/64" ⑤	7/32"	15/64"	3/32"	9/32-5/16"	11/32"	Index
15-43	500 ②	1250 ③	13/64" ⑤	7/32"	15/64"	5/64"	.....	31/64"	Index
15-44	500 ②	1250 ③	13/64" ⑤	7/32"	15/64"	5/64"	.....	31/64"	Index
15-45	500 ②	1250 ③	13/64" ⑤	7/32"	15/64"	5/64"	.....	31/64"	Index

① - Auto. Trans. in "N". Air Conditioner ON.
② - 550 RPM on Air Conditioned Cars (Air Conditioner ON).
③ - Fast idle screw on TOP step of fast idle cam.
④ - Fast idle screw on LOW step of fast idle cam.
⑤ - Fast idle screw on SECOND step of fast idle cam (against shoulder of top step).
⑥ - Requires special procedure. See ADJUSTMENTS.
⑦ - Connector rod in center hole of throttle lever.
⑧ - 13/32" (Synchro-mesh), 21/64" (Auto. Trans.).
⑨ - Air Conditioner OFF.

STROMBERG WW 2-BARREL (CHRYSLER CORP.) (Continued)

ditioning ON (if so equipped). On Automatic Transmission Cars, unsnap ball joint connector at carburetor shaft bellcrank before making idle speed adjustment. After adjustment completed, turn ball joint connector up or down as necessary so ball on bellcrank mates exactly with socket, connect rod.

Idle Speed & Mixture

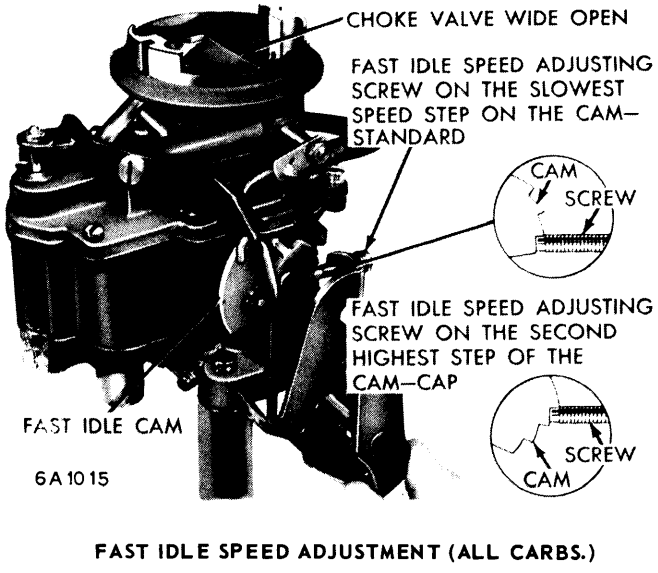
Std. Carburetors - With engine at normal operating temperature, adjust idle speed to correct engine RPM (see Specifications) with choke valve wide open and fast idle screw not contacting fast idle cam. Adjust both idle mixture screws equally for highest engine RPM, then turn screws in to lean mixture until engine speed begins to drop off, finally turn screws out just enough to recover lost engine speed. This procedure will assure leanest possible fuel mixture for smooth idling. Recheck idle speed. If necessary to readjust idle speed, repeat idle mixture adjustment.

"CAP" Carburetors - *Exhaust Analyser must be used to assure correct fuel mixture setting.*

Fast Idle Speed (On Engine)

Std. Carburetors - With hot idle speed correctly adjusted and engine idling at normal operating temperature with transmission in neutral, position fast idle cam on correct step of fast idle cam as listed in specifications, adjust fast idle screw for correct engine fast idle speed (see Specifications).

"CAP" Carburetors - *Ignition timing and distributor control valve adjustments must be correct before adjusting fast idle speed.*
Adjust fast idle speed in same manner as for Std. Carburetor (above) with fast idle screw on second step of fast idle cam.



FAST IDLE SPEED ADJUSTMENT (ALL CARBS.)

Fast Idle Cam Position

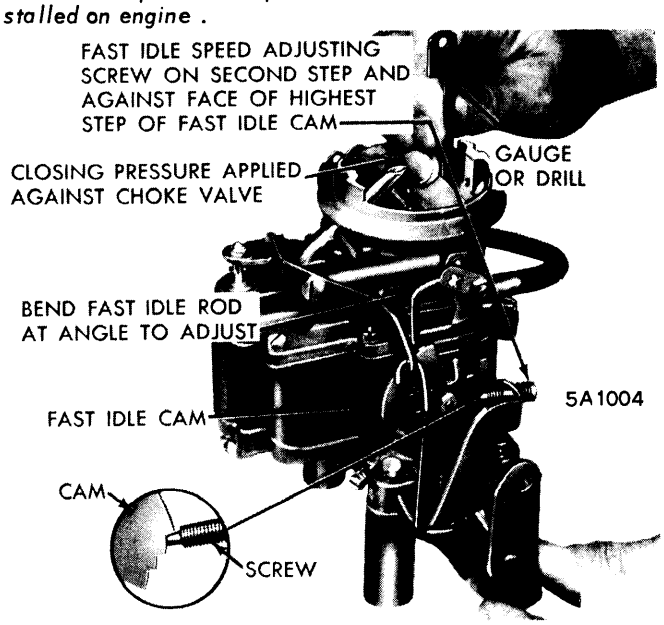
1957-63 Carburetors - *Two different adjustments required as follows:*

1) Back off throttle stopscrew so that throttle valves **tightly closed.** Position fast idle cam so that fast idle **adjusting screw** is on second step of cam and against **shoulder of top** step of cam, turn fast idle adjusting screw **until it just contacts** cam, then turn screw in an additional number of turns as listed in table below. *NOTE - This setting should provide correct fast idle speed with carburetor installed on engine. Throttle stopscrew must be adjusted for correct hot (slow) idle speed after fast idle adjustment completed.*
2) With fast idle screw in position as in step 1 (above), close choke valve as far as possible with light pressure. Measure choke valve opening or clearance between upper edge of valve and air horn wall using a drill rod of correct size (see Specifications). Adjust by bending fast idle connector rod at upper angle.

1959-63 Fast Idle Screw Setting

Car Model	Setting (Turns In)
1959-60 Dodge	8
1959 Plymouth	7½
1960 Plymouth	8
1961 Dodge & Plymouth	8
1962 Dodge & Plymouth	7½
1963 Dodge & Plymouth	7

1964 & Later Carburetors - Position fast idle cam so that fast idle adjusting screw is on correct step of cam as listed in Specifications and against shoulder of next highest step, close choke valve as far as possible with light pressure. Measure clearance between upper edge of choke valve and air horn wall using drill rod of correct size (see Specifications). If clearance not correct, adjust by bending fast idle connector rod at upper angle. *Fast idle speed is adjusted On Car after carburetor installed on engine .*



FAST IDLE CAM POSITION ADJUSTMENT (TYPICAL)

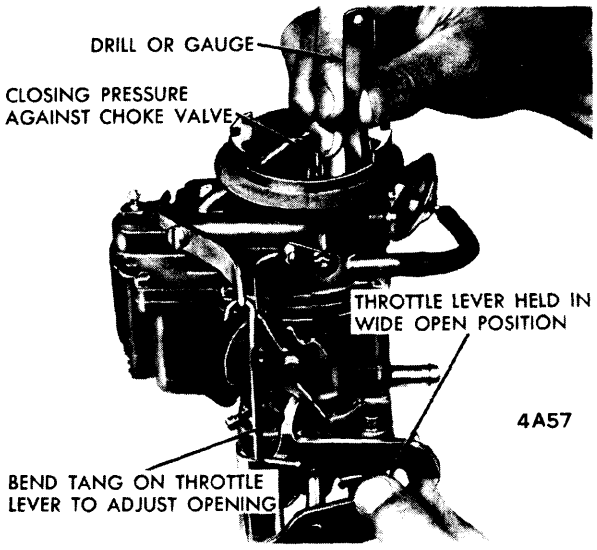
Unloader

Close choke valve, open throttle valves wide which will open choke valve slightly. Measure choke valve opening or clearance between upper edge of valve and air horn wall using drill rod of correct size (see Specifications). If clearance not correct, adjust by bending tang on throttle lever. Then adjust Choke Vacuum Piston or Vacuum Kick Diaphragm.

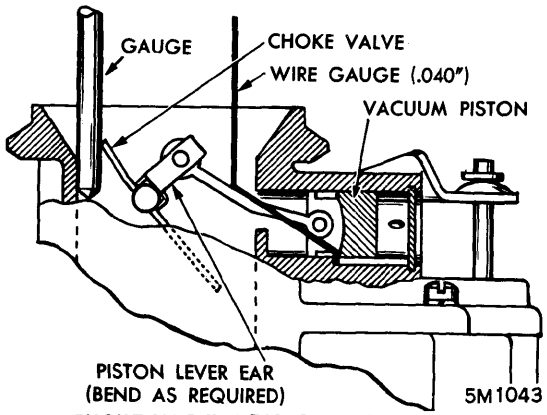
Choke Vacuum Piston (1959-63 Carburetors)

Bend the end of a .040" wire gauge to the **shape shown in** illustration and insert gauge in slot **in vacuum piston** cylinder as shown. Close choke valve **so that gauge is**

STROMBERG WW 2-BARREL (CHRYSLER CORP.) (Continued)



UNLOADER ADJUSTMENT



CHOKE VACUUM PISTON ADJUSTMENT

gripped between choke piston and end of slot. Measure choke valve opening or clearance between upper edge of valve and air horn wall using a drill rod of correct size (see Specifications). If clearance not correct, bend ear on choke piston lever as required.

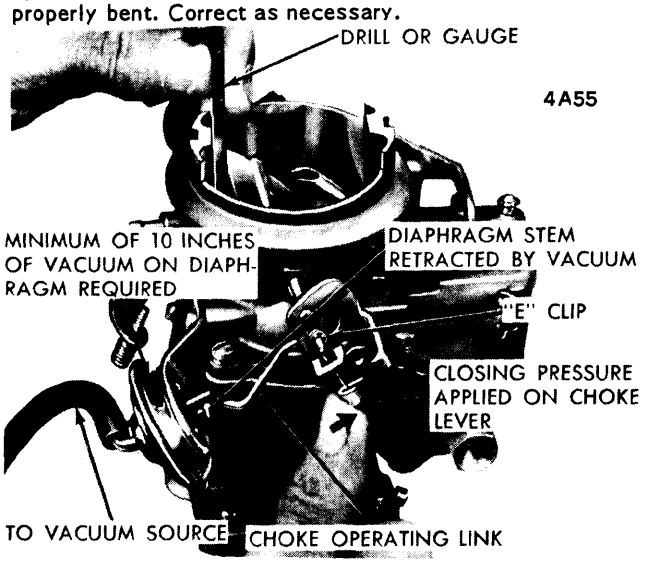
Vacuum Kick (Choke Vacuum Diaphragm) (1964 & Later Carburetors)

All Carburetors - *NOTE - A separate vacuum source (Distributor Tester or another engine) with minimum vacuum of 10" of Hg. must be used to energize the diaphragm for adjustment.*

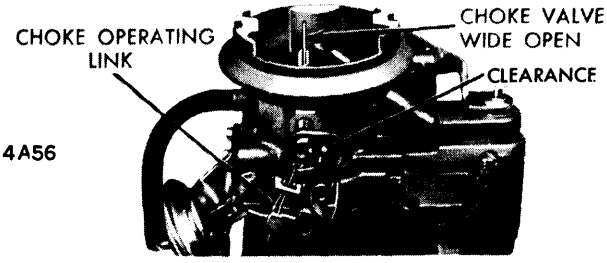
Checking - With engine not running, open throttle valve and move choke valve to closed position. Disconnect vacuum hose from diaphragm and connect hose from test vacuum source at this point. Insert a gauge or drill rod of correct size (see Specifications) between edge of choke valve and air horn wall, apply closing pressure on choke shaft lever to provide smallest choke valve opening possible without distorting diaphragm link *(CAUTION - Link must deflect wire spring on lever before it reaches end of travel within slot).* At this point a slight drag should be noted as gauge is withdrawn from choke valve. If choke opening not correct, adjust as follows:

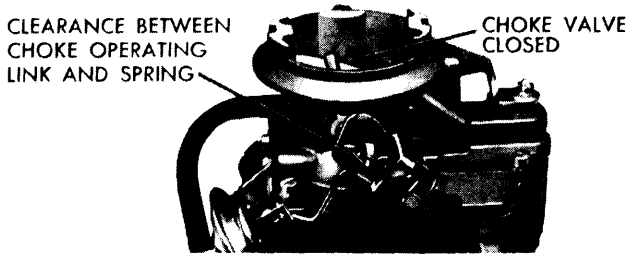
Adjustment - Disengage and remove choke operating link from diaphragm and choke lever *(CAUTION - Damage will result if attempt made to bend link on carburetor).* Bend operating link at the angle to provide correct choke valve opening (see illustration). *NOTE - A .010" change in link length will change choke valve opening .020" - Use 2" micrometer to check original and adjusted length.* Reinstall link and recheck choke valve opening.

Final Check - Reinstall vacuum hose on diaphragm fitting. With no vacuum applied to diaphragm, some clearance should exist between choke operating link and choke lever slot in both the open and closed valve positions (see illustration) to allow full opening and closing of the choke valve. With vacuum applied (engine running), choke valve must have free movement between kick position and wide open choke position. If binding exists, link has been improperly bent. Correct as necessary.



VACUUM KICK ADJUSTMENT





CHOKE OPERATING LINK CLEARANCE (WITH VACUUM KICK)

Accelerating Pump & Idle Vent

NOTE - Idle vent not used on 1959 carburetors.

1959 Carburetors - Back off throttle stopscrew and open choke valve so that fast idle screw does not contact fast idle cam. Make certain that pump connector rod is engaged in center hole of throttle lever. With throttle valves tightly closed, use scale on bowl cover to measure height of pump

STROMBERG WW 2-BARREL (CHRYSLER CORP.) (Continued)

arm at pump plunger. Open throttle wide and repeat measurement. Difference between these measurements is pump travel (see Specifications). Adjust by bending connector rod at lower angle.

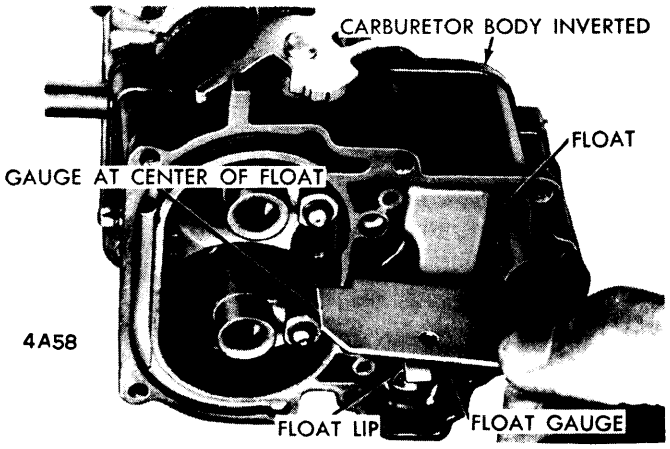
1960 & Later Carburetors (With Idle Vent) - *Accelerating pump travel is automatically set when bowl vent is properly adjusted.* Back off idle adjusting screw and open choke valve so that when throttle valves are closed, fast idle screw will not contact cam. Place pump rod in center hole in throttle lever and pump vent clip (located on pump stem under bowl vent valve) in center notch. With throttle valves closed tightly, clearance between bowl vent seat and bowl vent should be as indicated in specifications. To adjust, bend pump rod at lower angle.

ACCELERATING PUMP ADJUSTMENT NOTE - If pump rod is moved to either the short or long stroke position, a corresponding change must be made in location of bowl vent clip, and the amount of lift of bowl vent rechecked and adjusted.

Pump Seasonal Setting - *See CARBURETION on car model Tune-Up pages for recommended settings.*

Float Level

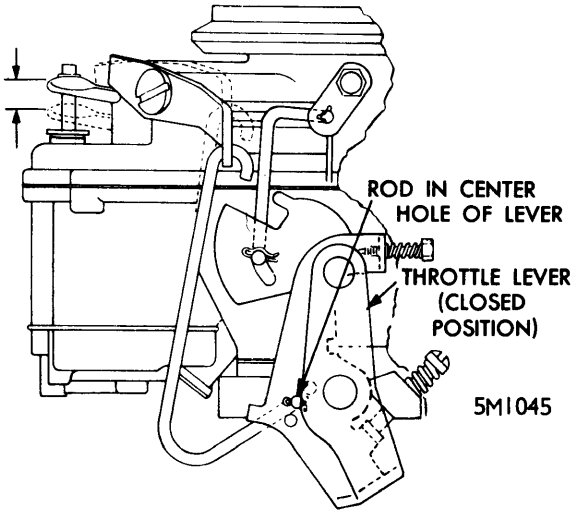
NOTE - Fuel inlet needle is tipped with synthetic rubber Weight of float only should force needle against the seat. Invert float bowl and check distance between surface of fuel bowl (gasket removed) and top of float at center. This measurement should be as indicated in specifications. To adjust, hold float at bottom of bowl and bend tang on float as necessary. *CAUTION - When bending float tang, do not allow tang to push against needle. When float is correctly set, float tang should be perpendicular to needle or slanted not more than 10° away from needle.*



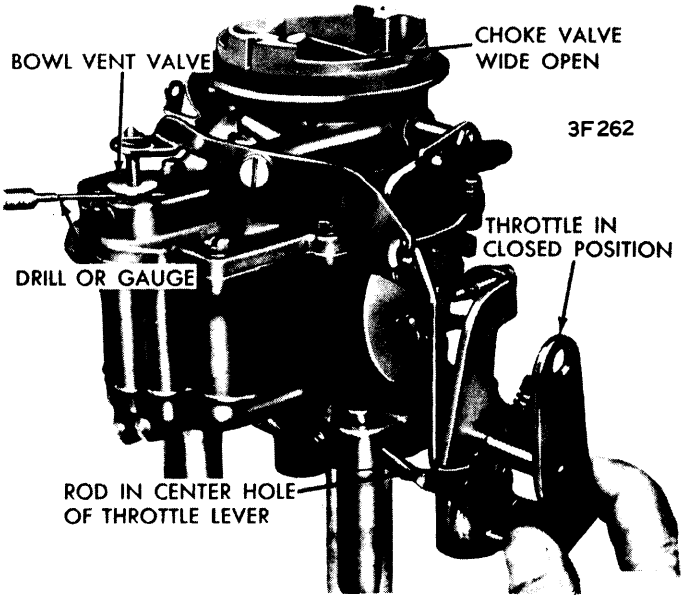
FLOAT LEVEL ADJUSTMENT

Automatic Choke

"Cross-over" Well Type - See Specifications for settings. Do not change settings. *NOTE - This unit serviced as an assembly and repairs should not be attempted.*



ACCELERATING PUMP ADJUSTMENT (WITHOUT IDLE VENT)



BOWL VENT & ACCELERATING PUMP ADJUSTMENT

OVERHAUL

Disassembly

1) Remove pump operating rod and disconnect fast idle rod, then remove vacuum diaphragm hose. Remove choke operating link and remove vacuum diaphragm and bracket.
2) Remove air horn from carburetor and disengage accelerator pump plunger rod from rocker arm. Remove bowl vent valve and slide pump plunger and rod out of air horn. Remove spring seat and compression spring from rod. *NOTE - Keep pump plunger in gasoline to prevent leather from drying out.*
3) Pry vacuum power piston from air horn using an open end wrench and a support. *NOTE - This assembly is staked in place.* Remove idle tubes from main body, then remove screw and gasket from accelerator pump discharge cluster and remove cluster.
4) Invert main body and remove the accelerator pump inlet and discharge check balls. *NOTE - Do not attempt to remove the high-speed bleeders.* Remove pump discharge check ball from center of discharge strut section.

(Continued)

STROMBERG WW 2-BARREL (CHRYSLER CORP.) (Continued)

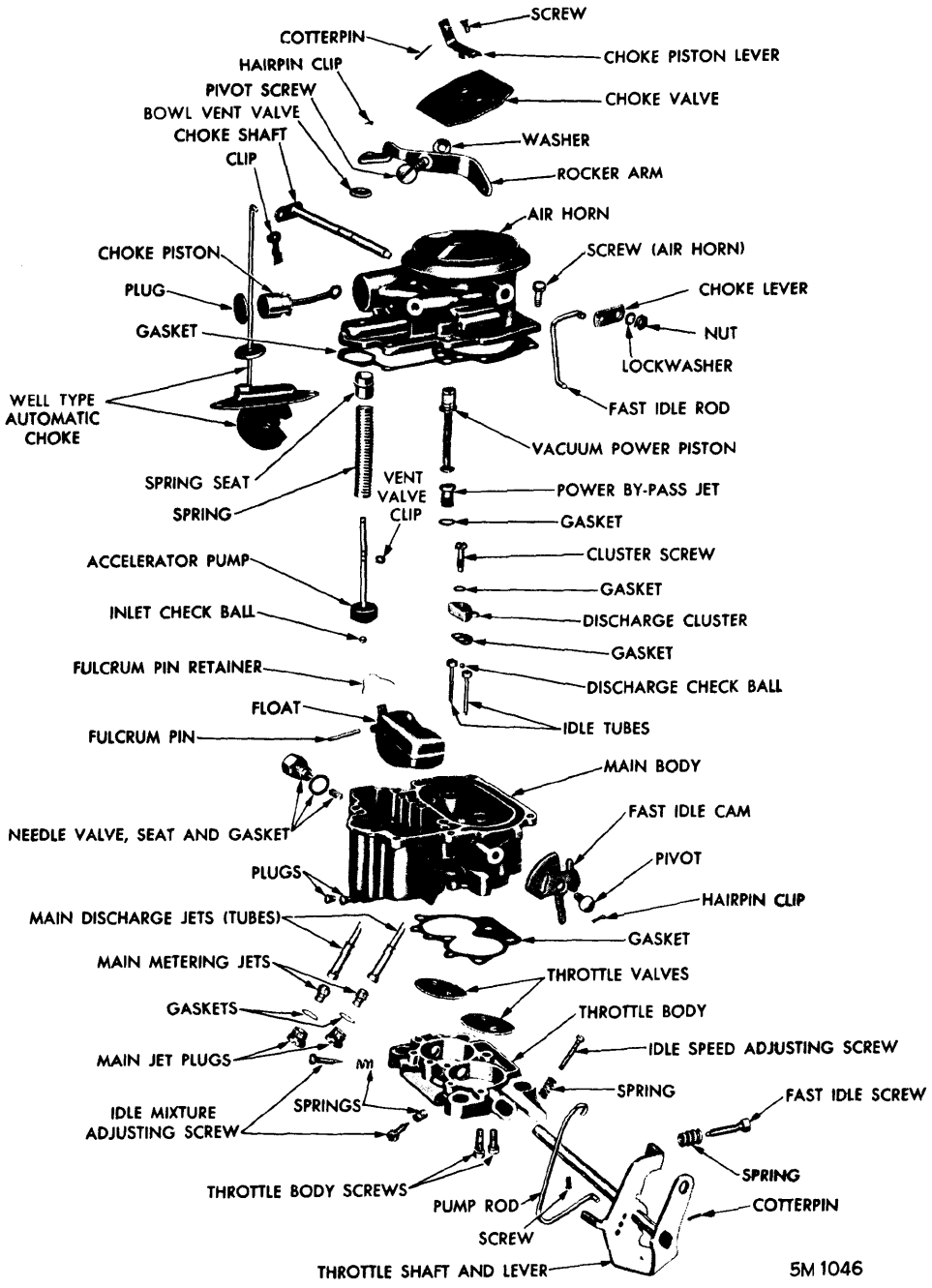
5) Remove fuel inlet needle valve seat and gasket, then pry out float fulcrum pin spring and remove float and fulcrum pin. Remove power by-pass jet, then remove attaching screws and separate main body from throttle body.
6) Remove main jet plugs and use a suitable tool to remove main jets. Remove main discharge jets with a suitable tool (Tool No. 73608 has a tapered thread and should be screwed into jet. Threads which are formed in jet do no damage). Remove idle mixture adjusting screws and springs. *NOTE - It is not advisable to remove throttle valves and shaft unless parts replacement is necessary.* If it is necessary to remove these parts, mark each throttle valve and scribe a line along shaft to assure replacement in same position.

Reassembly

Reverse disassembly procedure and note the following:

Throttle Body - If throttle valves and shaft were removed, insert throttle valves in same position in same barrel that valves were removed from, leaving screws loose. Close throttle, align valves to scribe marks and check for best closing before tightening screws.

Vacuum Kick Diaphragm - Before installing, check for internal leakage by depressing diaphragm stem and placing finger over vacuum fitting to seal passage, then release stem. If stem moves mores than 1/16" in 10 seconds, leakage is excessive and unit should be replaced.



STROMBERG WW (CHRYSLER CORP.) CARBURETOR ASSEMBLY (TYPICAL)