CARTER BBD 2-BARREL

1959 MODELS

CHRYSLER	Carter Carburetor No. Synchro-mesh	Auto. Trans.
Windsor		2795S, 2872S
DE SOTO		
Firesweep		2822S, 2870S
Firedome		2793S, 2871S
DODGE		
Coronet & Royal	2870S	2870S
PLYMOUTH		
MP2	2775S, 2864S	2777S, 2866S
Overdrive Cars	2776S, 2865S	

1960 MODELS

CHRYSLER		
383" V8	2924S	2924S
DE SOTO		
361" V8	2923S, 2924S	2923S, 2924S
383" V8	2924S	2924S
DODGE & PLYMOUTH		
318" V8	2921S, SA	2922S, SA
Overdrive Cars	2983S	

1961 MODELS

CHRYSLER & DE SOTO		
361" & 383" V8	2923SA	2923SA
(With CCV) ①	3132S, SA	3132S, SA
DODGE & PLYMOUTH		
318" V8	2921S, SA	2922S, SA
361" V8 (With CCV) ①	3132S, SA	3132S, SA

1962 MODELS

CHRYSLER		
383" V8	3244S	3244S
361" & 383" V8 (With CCV) ①	3245S	3245S
DODGE & PLYMOUTH		
318" V8	3240S	3241S
361" V8 (With CCV) ①	3245S	3245S

1963 MODELS

CHRYSLER & DODGE 880		
383" V8	3476S	3476S
DODGE & PLYMOUTH		
318" V8	3472S	3473S
361" & 383" V8	3475S	3475S

1964 MODELS

CHRYSLER & DODGE 880		
383" V8	3685S	3685S
DART, VALIANT, BARRACUDA		
273" V8	3767S, SA	3768S, SA
DODGE & PLYMOUTH		
318" V8	3682S	3683S
361" & 383" V8	3684S	3684S

1965 MODELS

CHRYSLER, DODGE, PLYMOUTH	Carter Carb. No. Synchro-mesh	Auto. Trans.
273" V8	3843S	3844S
318" V8	3847S	3848S
361" & 383" V8	3849S	3850S

1966 MODELS

CHRYSLER, DODGE, PLYMOUTH		
273" V8 (No "CAP")	4113S	4114S
(With "CAP")	4115S, SA	4116S, SA
361" V8 (No "CAP")	4125S	4127S
(With "CAP")	4126S	4128S
383" V8 (No "CAP")	4125S	②
(With "CAP")	4126S	②

1967 MODELS

CHRYSLER, DODGE, PLYMOUTH		
273" V8 (No "CAP")	4113SA	4114SA
(With "CAP")	4115SA	4116SA
383" V8 (No "CAP")	4296S	4297S
(With "CAP")	4306S	4307S
318" V8 (Canada)	4123SA	③ 4124SA & 4463S

① - Cars with "Closed Crankcase Ventilation" system.
② - Stromberg WWC carburetors used on these cars.
③ - All specifications for 4463S are same as listed for Model 4124SA.

►CHANGES, CAUTIONS, CORRECTIONS

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

►*HARD COLD STARTING CORRECTION (All cars with Choke Vacuum Piston in Air Horn):* Condition may be caused by choke piston sticking due to gum formation. To correct, remove air horn, squirt carburetor cleaner, lacquer thinner, or alcohol through piston link opening in air horn while operating choke by hand to clean out gum formation and free piston.

►*1959 CHRYSLER HESITATION OR STUMBLE ON ACCELERATION (Warm Engine):* If not corrected by complete engine tune-up and carburetor adjustment, install pump connector rod in outer hole of throttle lever. If condition persists, install new Step-up Rods, Carter No. 75-997 or 75-999.

►*1959 DE SOTO FLAT SPOT OR SURGE AT LOW SPEED OR ON ACCELERATION (Firedome Engine with 2871S Carb.):* If not corrected by engine tune-up and carburetor adjustment, install new Step-up Rods, Carter No. 75-999. Remove venturi cluster and enlarge inner diameter of two cluster screws to .054" (use No. 54 drill in a pin vise - do not use power drill).

►*1962 DODGE & PLYMOUTH CONSTANT SPEED SURGE CORRECTION (318" Engine with 3241S Carb.):* Correct by installing richer Step-Up Rod, Carter No. 75-1600 (to replace standard 75-1605). Make certain float setting is 1/4".

►*1963 CHRYSLER, DODGE, PLYMOUTH ENGINE RICHNESS DURING WARM-UP (With 383" Engine):* If this condition occurs on cars driven at continuous high speeds in warm climates, it may be caused by choke thermostatic coil distortion. Install new coil assembly. Chrysler Part No. 2463159. *(Continued)*

CARTER BBD 2-BARREL (Continued)

1964 361" & 383" ENGINE WITH CARTER 3684S & 3685S CARBURETORS LEAN ENGINE SURGE AT 50-55 MPH CORRECTION: Replace cluster screws, Part No. 101-454 with cluster screws Part No. 101-450. *NOTE - If the above screws are not available, drill out the lengthwise hole in Part No. 101-454 using a No. 54 drill.* If additional correction is required, drill out idle orifice tubes with a No. 68 drill. In the event that neither of the above corrections eliminate the trouble, replace main jets with new ones. Use the same Carter Part No. 120-284S.

► *1964 273" ENGINE STUMBLE & SURGE (AT LOW TEMPERATURE) CORRECTION:* On early cars, equipped with 3767S & 3768S carburetors, the above condition can be corrected by replacing the Carter No. 120-210S main jets with Part No. 120-211S. Also install new step-up wires, Carter No. 75-1631 (3767S); No. 75-1616 (3768S), with the new main jets. *NOTE - When making this change, stamp an "A" on carburetor identification tag.*

► *1964 EARLY PRODUCTION 273" ENGINE EXCESSIVE CHOKE ACTION, RICHNESS OR LOADING CORRECTION:* This condition may be caused by an incorrect choke assembly. The **correct** choke will have "AV-816" stamped on the circular cover that travels with the choke rod. The **incorrect** choke will have "AX-801" stamped on circular cover. If necessary, an incorrect choke may be used temporarily by readjusting it to one notch lean.

► *1965 CHRYSLER, DODGE, PLYMOUTH FUEL ECONOMY IMPROVEMENT (Auto. Trans. Cars with 361" or 383" Engine & Carter 3850S Carb.):* For short trip driving. Choke Vacuum Kick adjustment is critical and correct setting is important for correct performance and warm-up fuel economy. See *Vacuum Kick Adjustment.* If carburetor fuel mixture is on the rich side, a one size leaner main metering jet, Carter No. 120-296S may be installed (performance will not be acceptable with this jet if mixture is on the lean side). Also check Ignition Timing and Distributor Advance (mechanical & vacuum) performance.

CARBURETOR IDENTIFICATION

Carter number stamped on tag attached to carburetor by air horn screw. Standard suffix letter "S" denotes basic carburetor design, "SA", "SB", etc. indicate changes in parts, jet calibration, or adjustment settings as listed. *NOTE* - "CAP" carburetors identified by GREEN tag.

DESCRIPTION

Two barrel downdraft type with non-adjustable vacuum controlled step-up rods in metering jets. A Venturi Cluster or main nozzle assembly is used which includes secondary venturi, main nozzles, main vent tubes, and idle tubes as an assembly (attaching screws are hollow with calibrated restriction and serve as Idle Air Bleeds). These carburetors have various design differences and different adjustments as follows:

Automatic Choke - All carburetors have separate "Crossover" or well type automatic choke mounted on manifold. 1963 and earlier carburetors have choke vacuum piston in cylinder on air horn to provide initial choke opening. 1964 and later carburetors have separate Vacuum Kick Diaphragm mounted on air horn and linked to choke lever.

Spring-Staged Choke - Used on some 1965 and later carburetors to reduce choke closing torque at low temperatures and to provide better starting mixture at low and moderate temperatures.

Bowl Vent - Two types used with different adjustments: **1)** "Saxophone Key" type mounted on bowl cover adjacent to pump plunger and operated by arm on pump lever (must be adjusted whenever pump plunger stroke adjusted). **2)** Concentric type mounted on upper end of pump plunger shaft (adjusted as part of pump plunger stroke adjustment).

ADJUSTMENT

"ON ENGINE" ADJUSTMENT NOTE - Engine must be at normal operating temperature when making idle speed and mixture adjustment and fast idle speed adjustment. When adjusting idle speed, turn headlights ON. If car equipped with air conditioning, turn air conditioner ON.

"CAP" CARBURETOR CAUTION - Idle mixture screws have limited travel (lock at approximately 2 turns open) and will be broken if any attempt made to remove them from carburetors.

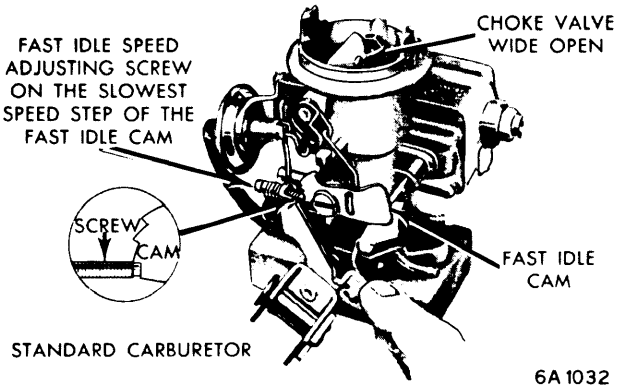
Idle Speed & Mixture

Std. Carburetors - 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 maximum engine RPM and smooth idling, then turn screws in to lean mixture until engine speed begins to drop off, finally turn screws out to richen mixture just enough to recover the 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

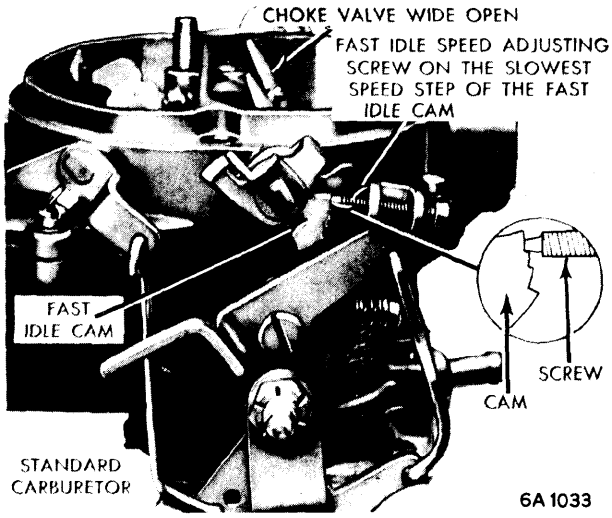


FAST IDLE SPEED ADJUSTMENT (FAST IDLE CAM AT THROTTLE LEVER)

CARTER BBD 2-BARREL (Continued)

transmission in neutral, position fast idle screw on correct step of fast idle cam as listed in specifications, turn fast idle adjusting screw in or out for correct fast idle speed (see Specifications).

"CAP" Carburetors - *CAUTION - Ignition timing and Distributor Control Valve adjustments must be correct before adjusting fast idle.* Adjust in same manner as Std. Carburetor (above) with fast idle screw on **second** step of fast idle cam (see illustrations and Specifications).



FAST IDLE SPEED ADJUSTMENT (FAST IDLE CAM ON CHOKE SHAFT)

Fast Idle Cam Linkage

NOTE - Carburetors adjusted differently as follows: **1963 & Earlier Carburetors (With Fast Idle Cam mounted at Throttle Lever)** - *NOTE - Fast idle cam is linked to choke shaft lever by connector rod.* With choke valve tightly closed and lip on choke shaft inner lever contacting lug on outer lever, fast idle adjusting screw should be centered on index mark on fast idle cam. Adjust by bending lip on choke shaft inner lever.

1963 & Earlier Carburetors (With Fast Idle Cam mounted on Choke Shaft) - *NOTE - These carburetors have separate fast idle lever (with fast idle screw) linked to throttle lever by connector rod.* With choke valve tightly closed and lug on fast idle cam contacting lip on choke shaft lever, fast idle adjusting screw should be centered on index mark on fast idle cam. Adjust by bending lip on choke shaft lever.

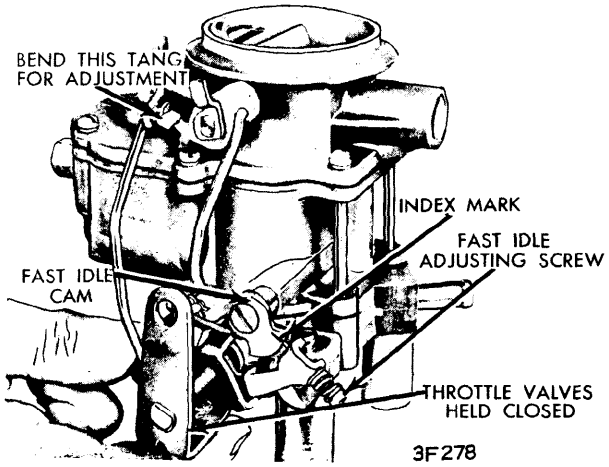
1964 & Later Carburetors (With Vacuum Kick Diaphragm) - Position fast idle adjusting screw on correct step of fast idle cam and against shoulder of next highest step as indicated in specification table (below) move choke valve toward closed position as far as possible with light pressure. Measure choke valve opening by inserting drill or gauge of correct size (see specification table below) between top edge of valve and air horn wall. A slight drag should be felt as drill or gauge is withdrawn. Adjust by bending tang on choke lever and collar assembly (carburetors with fast idle cam on choke shaft), or by bending fast idle connector rod at the angle (carburetors with fast idle cam at throttle lever).

Fast Idle Cam Linkage (Choke Valve Opening)

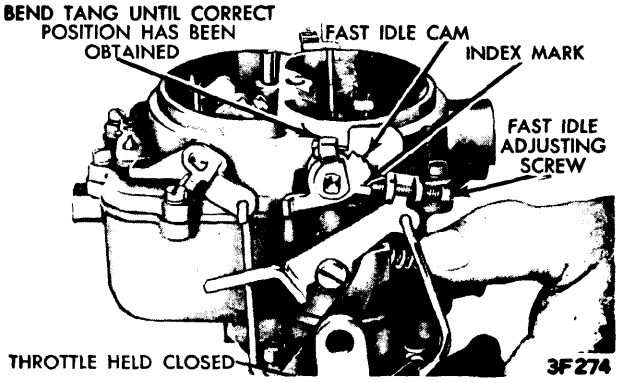
Carburetor No.	Fast Idle Screw Position	Gauge
3682S, 3683S	①	1/4"
3684S, 3685S	①	15/64"
3767S, SA; 3768S, SA	①	1/4"
3843S, 3844S, 3847S	②	7/64"
3848S, 3849S, 3850S	②	7/64"
4113S, SA; 4114S, SA	②	3/32"
4115S, SA; 4116S, SA	②	3/32"
4123S, SA; 4124S, SA	②	3/32"
4125S, 4126S, 4127S, 4128S	②	1/8"
4296S, 4297S	②	.027"
4306S, 4307S	②	.020"

① - Fast idle screw on bottom step and against shoulder of second step of fast idle cam.

② - Fast idle screw on second step and against shoulder of first step of fast idle cam.



FAST IDLE LINKAGE ADJUSTMENT (TYPICAL) (FAST IDLE CAM AT THROTTLE VALVE)



FAST IDLE LINKAGE ADJUSTMENT (TYPICAL) (FAST IDLE CAM ON CHOKE SHAFT)

CARTER BBD 2-BARREL (Continued)

CARBURETOR ADJUSTMENT SPECIFICATIONS

Carter Carb. No.	Idle Speed (Engine RPM) Hot ①	Idle Speed (Engine RPM) Fast ②	Initial Idle Mixture	Float Level	Accel. Pump Stroke	Bowl Vent Setting ⑥	Unloader Setting	Auto. Choke Setting	Vacuum Kick Setting ⑥
2772S	450-500	1400	1/4-1 1/2	5/16"	1" ⑪	.062-.093"	15/64"	Index	
2775S	450-500	1400	1/4-1 1/2	9/32"	1 1/8" ⑧	.....	1/4"	Index	
2776S	450-500	1400	1/4-1 1/2	9/32"	1 1/8" ⑧	.....	1/4"	Index	
2777S	475-500	1400	1/4-1 1/2	9/32"	1 1/8" ⑧	.....	1/4"	Index	
2793S	500 ④	1400	1/4-1 1/4	5/16"	1" ⑪	.062-.093"	15/64"	Index	
2795S	500 ④	1400	3/4-2 1/4	5/16"	1" ⑪	.062-.093"	15/64"	Index	
2822S	450-500 ③	1400	1/4-1 1/2	5/16"	1" ⑪	.062-.093"	15/64"	Index	
2864S	450-500	1400	1/4-1 1/2	9/32"	1 1/8" ⑧	.....	1/4"	Index	
2865S	450-500	1400	1/4-1 1/2	9/32"	1 1/8" ⑧	.....	1/4"	Index	
2866S	475-500	1400	1/4-1 1/2	9/32"	1 1/8" ⑧	.....	1/4"	Index	
2870S	500 ④	1400	1/4-1 1/4	5/16"	1" ⑪	.062-.093"	15/64"	Index	
2871S	500 ④	1400	1/4-1 1/4	5/16"	1" ⑪	.062-.093"	15/64"	Index	
2872S	500 ④	1400	1/4-1 1/2	5/16"	1" ⑪	.062-.093"	15/64"	Index	
2921S, SA	500 ⑤	1400	1/4-1 1/2	9/32"	⑩	1/16" ⑧	1/4"	Index	
2922S, SA	500 ⑤	1400	1/4-1 1/2	9/32"	⑩	1/16" ⑧	1/4"	Index	
2923S, SA	500 ④	1400	1/8-1 1/2	5/16"	1" ⑪	.067-.080"	15/64"	Index	
2924S	500 ④	1400	1/8-1 1/2	5/16"	1" ⑪	.067-.080"	15/64"	Index	
2983S	500 ④	1400	1/4-1 1/2	1/4"	⑩	1/16" ⑧	1/4"	Index	
3132S, SA	500 ④	1400	1/8 -1 1/2	5/16"	1" ⑪	.067-.080"	15/64"	Index	
3240S	500	1400	1/4-1 1/2	1/4"	⑩	1/16" ⑧	1/4"	Index	
3241S.	500	1400	1/4-1 1/2	1/4"	⑩	1/16" ⑧	1/4"	Index	
3244S	500	1400	1/8-1 1/2	9/32"	1" ⑪	.067-.080"	15/64"	Index	
3245S	500	1400	1/8-1 1/2	9/32"	1" ⑪	.067-.080"	15/64"	Index	
3472S	500	1400	1/4-1 1/2	1/4"	⑩	1/16" ⑧	1/4"	Index	
3473S	500	1400	1/4-1 1/2	1/4"	⑩	1/16" ⑧	1/4"	Index	
3475S	500	1400	1/8-1 1/2	1/4"	1" ⑪	.067-.080"	1/4"	2 Rich	
3476S	500	1400	1/8-1 1/2	1/4"	1" ⑪	.067-.080"	1/4"	2 Rich	
3682S	500	700⑦	1/4-1 1/2	1/4"	⑩	1/16" ⑧	1/4"	Index	3/16"
3683S	500	700⑦	1/4-1 1/2	1/4"	⑩	1/16" ⑧	1/4"	Index	3/16"
3684S	500	700⑦	1/4-1 1/2	5/16"	1" ⑪	1/16"	1/4"	2 Rich	11/64"
3685S	500	700⑦	1/4-1 1/2	5/16"	1" ⑪	1/16"	1/4"	2 Rich	11/64"
3767S, SA	500	700⑦	1/4-1 1/2	1/4"	⑩	1/16" ⑨	1/4"	Index	3/16"
3768S, SA	500	700⑦	1/4-1 1/2	1/4"	⑩	1/16" ⑨	1/4"	Index	3/16"
3843S	500	700⑦	1/4-1 3/4	1/4"	⑩	1/16" ⑨	1/4"	Index	11/64"
3844S	500	700⑦	1/4-1 3/4	1/4"	⑩	1/16" ⑨	1/4"	Index	1/8"
3847S	500	700⑦	1/4-1 3/4	1/4"	⑩	1/16" ⑧	1/4"	Index	11/64"
3848S	500	700⑦	1/4-1 3/4	1/4"	⑩	1/16" ⑧	1/4"	Index	5/32"
3849S	500	600⑦	1/4-1 1/2	5/16"	1" ⑪	1/16"	1/4"	2 Rich	3/16"
3850S	500	700⑦	1/4-1 1/2	5/16"	1" ⑪	1/16"	1/4"	2 Rich	5/32"
4113S,SA	500	700⑦	1/2-2 3/4	1/4"	⑩	1/16" ⑨	1/4"	2 Rich	11/64"
4114S,SA	500	700⑦	1/2-2 3/4	1/4"	⑩	1/16" ⑧	1/4"	2 Rich	1/8"
4115S,SA	700	1400 ⑬	2½-3¼	1/4"	1 1/64" ⑧	.....	1/4"	Index	11/64"
4116S,SA	650 ⑭	1500 ⑬	2½-3	1/4"	1 1/64" ⑧	.....	1/4"	Index	1/8"
4123SA	500	700 ⑦	1/2-2 3/4	1/4"	29/32"	1/16" ⑨	1/4"	2 Rich	3/16"
4124SA	500	700⑦	1/2-2 3/4	1/4"	29/32"	1/16" ⑧	1/4"	2 Rich	5/32"
4125S	500	700⑦	1/4-1 1/2	11/32"	1" ⑪	3/64"	1/4"	2 Rich	11/64"
4126S	650	1600 ⑬	1-2	11/32"	1" ⑪	3/64"	1/4"	2 Rich	11/64"
4127S	500	700⑦	1/4-1 1/2	11/32"	1" ⑫	3/64"	1/4"	2 Rich	9/64"
4128S	600	1400 ⑬	1/2-1 1/8	11/32"	1" ⑫	3/64"	1/4"	2 Rich	11/64"
4296S	550	700⑦	1/4-1 1/2	11/32"	29/32" ⑪	1/16"	1/4"	2 Rich	5/32"
4297S	550	700⑦	1/4-1 1/2	11/32"	29/32" ⑪	1/16"	1/4"	2 Rich	3/32"
4306S	650	1700 ⑬	1/4-1 1/2	11/32"	1" ⑫	3/64"	1/4"	2 Rich	5/32"
4307S	600	1400 ⑬	1/4-1 1/2	11/32"	1" ⑫	3/64"	1/4"	2 Rich	1/8"

CARTER BBD 2-BARREL (Continued)

CARBURETOR ADJUSTMENT SPECIFICATIONS (Continued)

① - Synchro-mesh & Auto. Trans. (except as noted). Auto. Trans. in "N", Air Conditioning ON.
② - Fast idle screw on high step (at index mark) of fast idle cam (except as noted).
③ - 475-500 RPM for Auto. Trans. cars.
④ - 575 RPM for Air Conditioned cars.
⑤ - 575 RPM (Dodge), 550 RPM (Plymouth) for Air Conditioned cars.
⑥ - Not required on other carburetors.
⑦ - Fast idle screw on LOW step of fast idle cam.
⑧ - Connector rod in CENTER hole of throttle lever and INNER hole of pump arm.
⑨ - Connector rod in CENTER hole of throttle lever and OUTER hole of pump arm.
⑩ - Pump stroke adjustment will be correct when bowl vent adjusted (see Bowl Vent specifications).
⑪ - Connector rod in CENTER hole of throttle lever (pump arm has single hole).
⑫ - Connector rod in OUTER hole of throttle lever.
⑬ - Fast idle screw on SECOND step of fast idle cam (against shoulder of first step).
⑭ - Air Conditioner turned OFF.

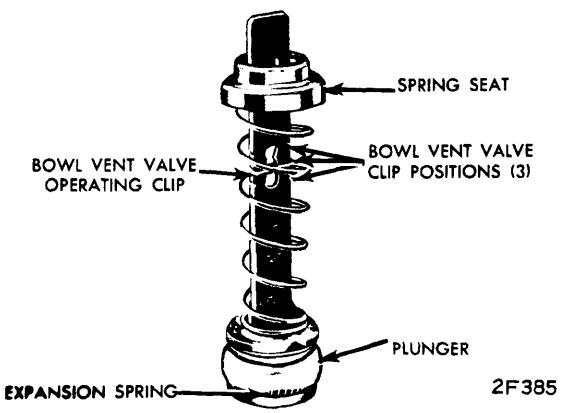
Accelerating Pump

NOTE - Some carburetors have "concentric" type bowl vent located on pump plunger shaft which is adjusted as part of pump stroke adjustment. "Saxophone Key" type bowl vent is adjusted separately. Early carburetors do not have a bowl vent.

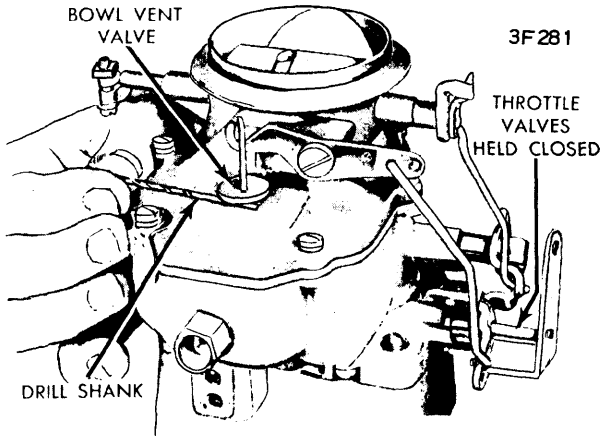
Carburetors without Bowl Vent - *NOTE - Some carburetors have connector rod adjustment both at throttle lever and pump lever and connector rod must be connected properly at both levers as detailed in Specifications when checking pump.* Back off throttle stopscrew so that throttle valves tightly closed. Use scale to measure distance from top surface of bowl cover to top of pump plunger shaft (see Specifications). If distance not correct, adjust by bending connector rod at angle.

Carburetors with "Concentric" Bowl Vent - Back off throttle stopscrew so that throttle valves tightly closed. Make certain that pump connector rod engaged in correct holes of throttle lever and pump arm (see Specifications), and that bowl vent pin or hairpin clip engaged in correspondingly correct groove of pump plunger stem (see Note below). Measure clearance between bowl vent and top surface of bowl cover (see illustration). If clearance not correct (see Specifications), adjust by bending pump connector rod at lower angle. This adjustment will ensure correct pump plunger height above bowl cover.

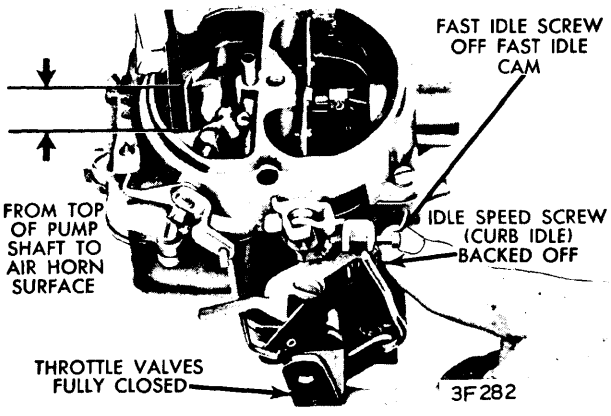
BOWL VENT CLIP NOTE - Whenever pump connector rod moved from one throttle lever hole to another, clip must be shifted to correct groove in pump plunger shaft as follows: Center Hole (Center Groove), Inner Hole (Upper Groove), Outer Hole (Lower Groove).



ACCELERATING PUMP PLUNGER ASSEMBLY (WITH "CONCENTRIC" BOWL VENT)



ACCELERATING PUMP & BOWL VENT ADJUSTMENT (WITH "CONCENTRIC TYPE" BOWL VENT)



ACCELERATING PUMP TRAVEL ADJUSTMENT (WITH SEPARATE BOWL VENT)

Carburetors with "Saxophone Key" Type Bowl Vent - Back off throttle stopscrew and open choke valve so that throttle valves tightly closed. With pump connector rod engaged in correct hole of throttle lever as listed in Specifications, measure distance from top surface of bowl cover to top of pump plunger shaft (see Specifications). If distance not correct, adjust by bending connector rod at lower angle. Then check and adjust bowl vent. *(Continued)*

CARTER BBD 2-BARREL (Continued)

Bowl Vent

"Saxophone Key" Type - *NOTE - "Concentric" type bowl vent adjusted as part of accelerating pump adjustment.* After adjusting accelerating pump, and with throttle valves tightly closed, use drill rod to check bowl vent opening or clearance between heel of rubber grommet on bowl vent arm and seat on bowl cover. Adjust by bending lip on vent operating arm.

Vacuum Kick (Choke Vacuum Diaphragm)

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.*

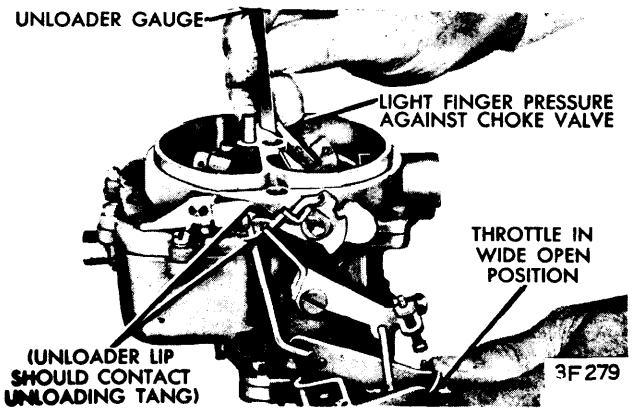
Checking - With engine not running, open throttle valves and move choke valve to closed position. Disconnect vacuum hose from diaphragm fitting and connect hose from test vacuum source at this point. Insert a gauge or drill rod of correct size (see Specifications) between edge of choke valve and air horn wall, apply closing pressure on choke shaft lever to provide smallest choke valve opening possible without distorting diaphragm link *(CAUTION - Diaphragm internal spring must be compressed which will be noted by extension of diaphragm stem).* At this point, a slight drag should be noted as gauge is withdrawn from choke valve. If choke valve opening not correct, adjust diaphragm link 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). Reinstall link and recheck choke valve opening.

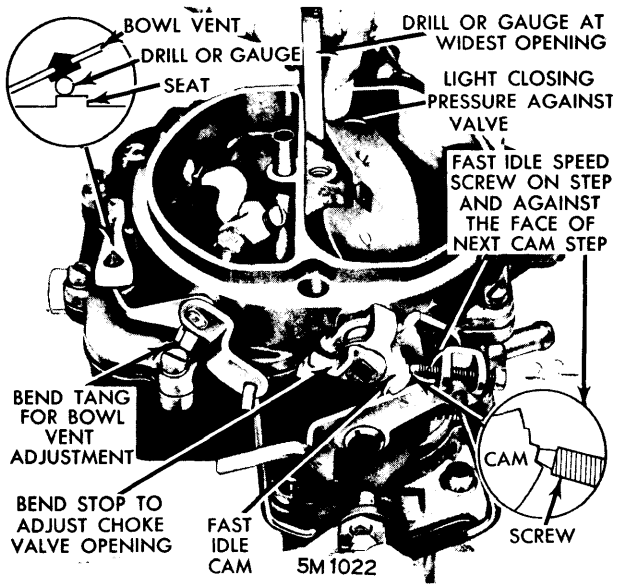
Final Check - Reinstall vacuum hose on diaphragm fitting. With no vacuum applied to diaphragm, some clearance should exist between choke operating link and choke lever slot in both the open and closed choke valve positions (see illustration) to allow full opening and closing of choke valve. With vacuum 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.

Unloader

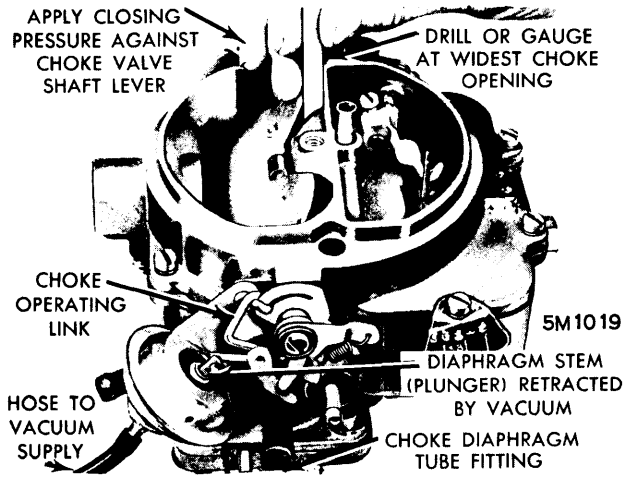
Adjust after fast idle linkage adjusted. Hold throttle valve in wide open position and check choke valve opening by inserting drill or gauge of correct size (see Specifications) between edge of valve and air horn wall. A slight drag should be felt as drill or gauge is withdrawn. Adjust by bending unloader arm on throttle lever (Carburetors with fast idle cam at throttle lever), by bending unloader arm on fast idle lever (Carburetors with fast idle cam on choke shaft).



UNLOADER ADJUSTMENT (TYPICAL)



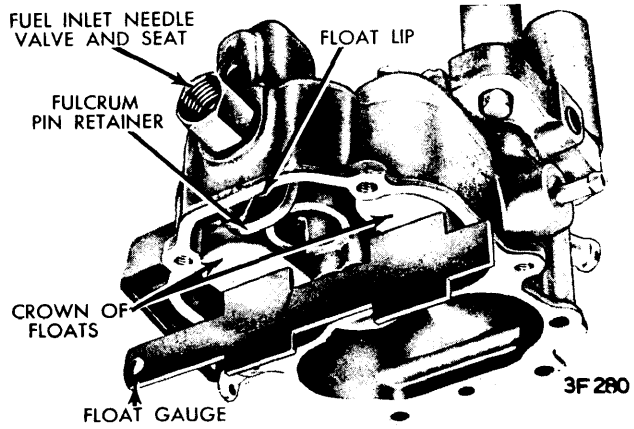
FAST IDLE CAM & BOWL VENT ADJUSTMENT ("SAXOPHONE KEY" TYPE VENT VALVE)



VACUUM KICK SETTING (TYPICAL)

Float Level

With carburetor off engine, remove fuel bowl cover and invert carburetor main body so that weight of float only



FLOAT SETTING MEASUREMENT (TYPICAL)

CARTER BBD 2-BARREL (Continued)

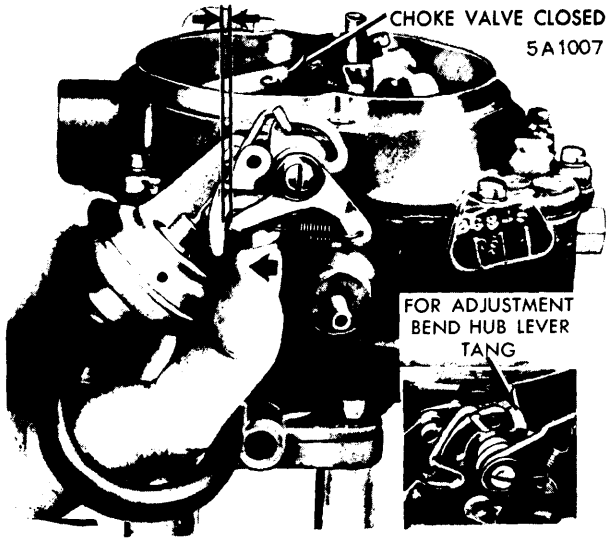
is holding needle valve against seat (hold fingers against fulcrum pin retainer to fully seat pin). Use the correct gauge or a scale (see specifications) and measure distance between surface of fuel bowl and crown of each float at center. To adjust, bend lip of float lever. *CAUTION - When bending float lip, do not allow lip to push against needle valve which is rubber tipped.*

Spring-Staged Choke

NOTE - Not used on all carburetors. With choke valve closed, press on hub lever with finger and check clearance between shaft and hub levers with a feeler gauge (see illustration). Clearance should be .020-.030" (all carburetors). Adjust by bending hub lever tang as required.

Automatic Choke

"Cross-over" Well Type (In Manifold) - See Specifications. *CAUTION - This unit serviced as a complete assembly and should not require adjustment. Do not attempt to repair unit.*



SPRING-STAGED CHOKE ADJUSTMENT

OVERHAUL

► *"CAP" CARBURETOR IDLE MIXTURE SCREW CAUTION & REPLACEMENT PROCEDURE: Screws have limited travel and will be damaged or broken if any attempt made to remove them from carburetor. For replacement of damaged or broken screws, refer to "Chrysler Corp. 'CAP' Carter Carburetor Idle Mixture Screw Replacement"*

Disassembly

1) Disconnect and remove fast idle connector rod, then disengage accelerator pump operating rod, then remove vacuum hose between main body and vacuum diaphragm. Remove choke operating link and remove vacuum diaphragm and bracket assembly.

2) Remove air horn and discard gasket, then disengage accelerator pump plunger from rocker arm by pushing up on bottom of plunger and sliding plunger shaft off hook. Slide plunger out of air horn and remove bowl vent valve, spring and seat. *NOTE - If either the old plunger or a new plunger is to be used, immerse in gasoline to prevent it drying out.*

3) Remove fuel inlet valve needle, seat and gasket, then remove floats and fulcrum pin. Remove step-up piston screw and slide piston and rods out of well. Remove piston spring and gasket.

4) Remove main metering jets and gaskets, then remove retaining screws, venturi cluster and gaskets. *NOTE - Do not remove idle orifice tubes or main vent tubes from venturi.*

5) Invert carburetor and allow accelerating pump inlet and discharge ball checks to drop out into the hand. Take out retaining screws and separate throttle body from main body.

6) Check choke valve for free operation (if choke shaft sticks in bearings, or valve binds due to gum deposits in air horn, correct by thorough cleaning). Do not remove throttle valves or shaft unless replacement of parts required (manufacturer recommends replacement of throttle body if wear is extreme). To remove valves, mark position of valves on shaft, then remove valve screws *(CAUTION - Screws are staked, use care not to break screws off in shaft),* lift valves out and slide shaft out of throttle body.

Cleaning

Wash carburetor metal parts in a suitable carburetor cleaner or solvent. DO NOT place diaphragm assembly in any liquid.

Reassembly

Use all new gaskets. Reverse disassembly procedure and note the following:

Throttle Valve Installation - If throttle valve shaft or throttle body is worn, it is recommended that a new throttle body (with shaft) be used. Install throttle valves with mark ("C" in circle) downward and on idle port side, install new screws loosely, then close throttle valves tightly and centralize valves by tapping them lightly. Tighten screws securely and stake them in place by squeezing with pliers.

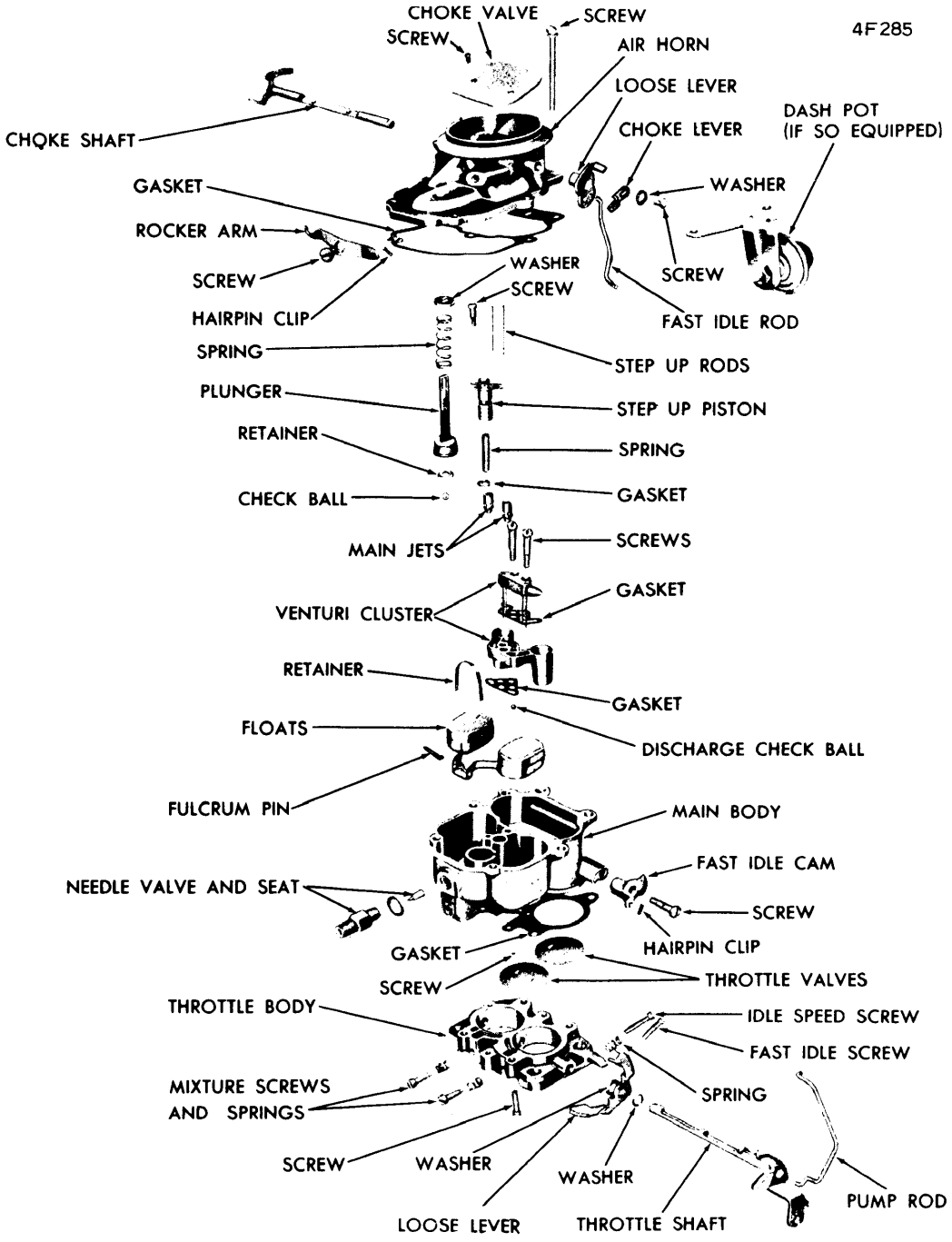
Accelerating Pump Assembly - Check the pump operation as follows: Pour clean gasoline in float bowl (½" deep), then operate pump plunger several times to fill cylinder and remove all air from discharge passage. Use a small brass rod to hold discharge ball down on its seat, and press pump plunger down. No fuel should be emitted at either the discharge or intake passages. If fuel discharge is noted, remove check balls and inspect for damage. Reset ball by using a small brass rod on ball and tapping lightly to form a new ball seat. *NOTE - Install a new check ball after using ball in reseating operation.* When installing plunger, make sure plunger leather enters cylinder evenly.

(Continued)

CARTER BBD 2-BARREL (Continued)

Step-up Piston & Rod Assembly - Make sure that step-up rods are free on piston plate (must return to vertical position when released), and that piston is free in cylinder. See that step-up rods enter metering jets when installing assembly in carburetor.

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 more than 1/16" in 10 seconds, leakage is excessive and unit should be replaced.



CARTER BBD 2-BARREL CARBURETOR ASSEMBLY (TYPICAL)