

# CHRYSLER "V-8"

(2317S)  
 C-68-300

1955-1956

(2445S)  
 Rear Carburetor  
 C-72-300, 1956

(2444S)  
 Front Carburetor  
 C-72-300, 1956

Two Carburetors Per Engine

WCFB Four-Bore Down-Draft Climatic® Control **Carbs. Nos. 2317S-2444S-2445S**

## CARBURETOR SPECIFICATIONS

For Chrysler 8 Cylinder Engine: 3-13/16 Inch Bore, 3 5/8 Inch Stroke (1955)

For Chrysler 8 Cylinder Engine: 3.94 Inch Bore, 3.63 Inch Stroke (1956)

**Dimensions:** Flange size, 1 1/8 inch Four Bore—4 bolt type.  
 Primary venturi size, 1 1/32 inch I. D.  
 Main venturi size, 1-1/16 inch I. D.

**Float Level:** See adjustments.

**Vents:** Inside (5), outside (none).

**Gasoline Intake:** Size No. 42 (.0935 inch) drill; in needle seat.

**Low Speed Jet Tube:** Jet, primary and secondary, size No. 69 (.0293 inch) drill. By-pass, in body size primary No. 52 (.0635 inch) drill, secondary (.057 inch) diameter. Economizer, in body size (.0452 inch) diameter. Idle bleed, in body size primary (.059 inch) diameter, secondary No. 44 (.086 inch) drill.

**Idle Port:** Upper, slot type, primary, length .175 inch; width .030 inch. Secondary, length .103 inch; width .030 inch.

**Idle Port Opening:** Primary .116 to .122 inch, secondary .059 to .065 inch above top edge of valve with valve tightly closed.

**Lower Port:** Primary (for idle adjustment screw), size No. 55 (.052 inch) drill.  
 Secondary (no idle adjustment screw), size No. 57 (.043 inch) drill.

**Set Idle Adjustment Screw:** 1/4 to 1 1/4 turns open. For richer mixture turn screw out. Do not idle engine below 700 R.P.M. in neutral.

**Main Nozzle:** Installed permanently. DO NOT REMOVE. Anti-percolating jet (4) size No. 70 (.028 inch) drill.

**Metering Rod:** (Vacuometer type) see parts list for size.

**Metering Rod Jet:** Primary: Size (2317S-2444S) .089 inch, (2445S) .0935 inch diameter.  
 Secondary: Size (2317S) .053 inch, (2444S-2445S) .055 inch diameter.

**Metering Rod Setting:** See adjustments.

**Accelerating Pump:** Discharge jet (twin) primary side only, size No. 74 (.0225 inch) drill. Intake ball check seat, size .115 to .120 inch diameter. Discharge needle seat, size No. 50 (.070 inch) drill. Relief passage (vent) to fuel chamber, size No. 42 (.0935 inch) drill.

**Pump Adjustment:** See adjustments.

**Choke:** Carter Climatic® Control, set on index. Butterfly type offset choke valve, primary side only. Choke heat suction hole, restriction in piston housing, size No. 43 (.089 inch) drill.

**Vacuum Spark Port:** Horizontal slot (round end) .045 x .110 inch. Top of port .035 to .045 inch above top edge of valve with valve tightly closed.

## Motor Tune-Up—Be Accurate!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.

**Spark Plug  
 Gap**  
 .035"

**Breaker Point  
 Setting**  
 .017"

**Ignition Timing  
 Breaker Points to Open:**  
 10° B.T.D.C. (1955)  
 8° B.T.D.C. (1956)  
 At Vibration Damper  
 With engine idling at  
 500 R.P.M.

**Valve Setting  
 (Hot)**  
 Intake .015"  
 Exhaust .025"

**Float Setting**  
 See Adjustments

**Idle Adjustment  
 Screw Setting**  
 1/4 to 1 1/4  
 Turns Open  
 Idle engine at  
 700 R.P.M.  
 in neutral

## CARBURETER ADJUSTMENTS

**FLOAT ADJUSTMENT:** Two separate float adjustments must be made—lateral and vertical. **LATERAL ADJUSTMENT:** With bowl cover assembly inverted, bowl cover gasket removed and float resting on seated needle, place float gauge directly under center of floats with notched portion of gauge fitted over edge of casting. Side of floats should just clear the vertical uprights of float gauge. Adjustment should be made by bending arms of floats. **VERTICAL ADJUSTMENT:** With float gauge in same position, floats should just clear the horizontal portion of gauge. Vertical distance between top of float and machined surface of casting must be  $7/32$  inch (gauge T109-283) for primary floats; and  $11/32$  inch (gauge T109-285) for secondary floats. Adjust by bending float arms.

**FLOAT DROP ADJUSTMENT:** With bowl cover held in upright position and measuring from center of floats, the distance between top of floats and bowl cover should be  $23/32$  inch for primary floats and  $27/32$  inch for secondary floats. Adjust by bending stop tabs on float bracket.

**PUMP ADJUSTMENT:** Install pump connector link in outer hole (long stroke) of pump arm, with ends extending toward countershaft arm. Back out throttle lever set screw until throttle valves seat in bores of carbureter. Hold straight edge across top of dust cover boss at pump arm. The flat on top of pump arm should be parallel to straight edge. Adjust by bending throttle connector rod at upper angle. (Use tool T109-213.)

**METERING ROD ADJUSTMENT:** Metering rod adjustment is important and must be made after completing the pump adjustment. No metering rod gauges are necessary. Procedure is as follows: 1. Back out throttle lever set screw to allow throttle valves to seat in bores of carbureter and loosen metering rod arm clamp screw. 2. With metering rods in place, press down on vacuometer link until metering rods bottom in carbureter body casting. 3. Holding rods in downward position and throttle valves seated, revolve metering rod arm until finger on arm contacts lip of vacuometer link. Hold in place and carefully tighten clamp screw.

**BOWL VAPOR VENT ADJUSTMENT:** This adjustment should be made after completing pump and metering rod

adjustments. Install dust cover and dust cover gasket. Back out throttle lever stop screw to allow throttle valves to seat in bores of carbureter. There should be  $1/16$  inch (gauge T109-197) between lower edge of bowl vapor vent valve and dust cover. To adjust, remove dust cover and bend vapor vent arm.

**FAST IDLE ADJUSTMENT:** (a) Loosen choke lever clamp screw on choke shaft. Insert .015 inch feeler gauge (T109-44) between lip of fast idle cam and boss of flange casting. Hold choke valve tightly closed and take slack out of linkage by pressing lever towards closed position—hold in place and tighten clamp screw. (b) With choke valve tightly closed, tighten fast idle adjustment screw until there is .006-.010 inch (gauge T109-200) opening between throttle valve and bore of carbureter (side opposite idle port). Be sure fast idle adjusting screw is on high step of cam while making this adjustment.

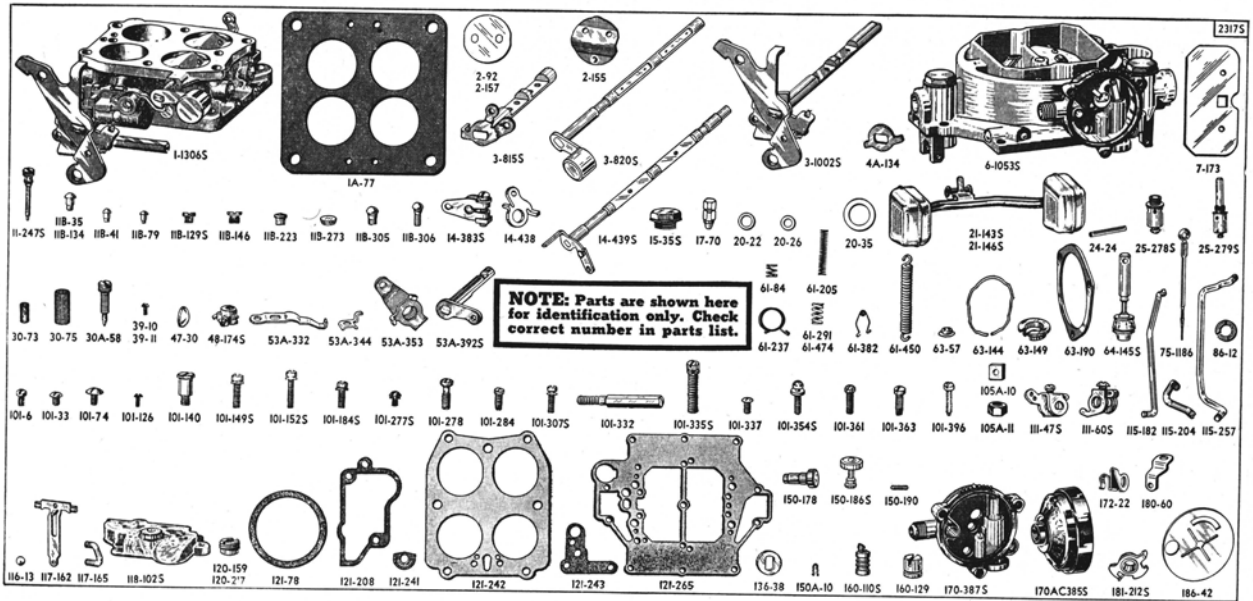
**FAST IDLE ON CAR:** 1450 to 1500 R.P.M.

**UNLOADER ADJUSTMENT:** With throttle wide open there should be  $3/16$  inch clearance between upper edge of choke valve and inner wall of air horn (gauge T109-28). Adjust by bending unloader lip on throttle shaft lever (use bending tool T109-41).

**AUXILIARY THROTTLE VALVE ADJUSTMENT:** (a) Disconnect secondary throttle operating rod. (b) Adjust stop lug on secondary throttle lever (use bending tool T109-214) until there is  $27/64$  inch clearance (gauge T109-242) between lower edge of auxiliary throttle valve and bore, when lug is against stop on flange.

**SECONDARY THROTTLE LEVER ADJUSTMENT:** The stop lug on both primary and secondary throttle levers should contact boss on flange at the same time. To adjust bend secondary throttle operating rod at angle (use bending tool T109-213). NOTE: Secondary throttle valves will be a few degrees from wide open position.

**AUXILIARY THROTTLE LOCK-OUT ADJUSTMENT:** This adjustment should be made after completing fast idle adjustment. 1. With choke valve closed, edge of hook on lock-out arm should contact auxiliary throttle lever, making maximum contact of locking step on lever. 2. Open choke valve. Auxiliary throttle valve should become unlocked a few degrees before the choke reaches wide open position. Adjust by bending lock-out arm.



**Chrysler "V-8"—1955-1956—Carbureters Nos. 2317S-2444S-2445S**

WHEN SERVICING, USE GASKET ASSORTMENT No. 269A

Part No.	PART NAME	Part No.	PART NAME
1-1306S	Body flange assembly (2317S).....	11B-306	Rivet plug (2317S (2), (2444S-2445S (1).....
1-1423S	Body flange assembly (2444S-2445S).....	14-383S	Choke lever and screw assembly.....
1A-77	Flange gasket .....	14-438	Cam trip lever.....
2-92	Primary throttle valve ..... (2)	14-439S	Choke piston lever, link and shaft assembly.....
2-155	Auxiliary throttle valve..... (2)	15-35S	Strainer nut assembly..... (2)
2-157	Secondary throttle valve..... (2)	17-70	Pump check needle.....
2-190	Primary throttle valve (2444S-2445S) (Sup. by 2-92)..... (2)	20-22	Needle seat gasket..... (2)
3-815S	Secondary throttle shaft and operating lever assembly	20-26	Relief valve gasket.....
3-820S	Auxiliary throttle shaft, lever and weight assembly (2317S) .....	20-35	Bowl strainer gasket..... (2)
3-1002S	Primary throttle shaft and lever assembly.....	21-143S	Primary float and lever assembly.....
3-1070S	Auxiliary throttle shaft, lever and weight assembly (2444S-2445S) .....	21-146S	Secondary float and lever assembly.....
4A-134	Primary throttle shaft dog.....	24-24	Float lever pin..... (2)
6-1053S	Air horn assembly (2317S) (Casting No. 6-1020) (Sup. by 6-1175S).....	25-278S	Primary needle and seat assembly.....
6-1175S	Air horn assembly (2444S-2445S) (Casting No. 6-1147) .....	25-279S	Secondary needle and seat assembly.....
7-173	Choke valve .....	30-73	Primary needle seat strainer.....
11-247S	Low speed jet assembly..... (4)	30-75	Bowl strainer .....
11B-35	Rivet plug .....	30A-58	Idle adjustment screw..... (2)
11B-41	Rivet plug (6-1053S (2), (6-1175S (1).....	39-10	Primary throttle valve attaching screw..... (4)
11B-79	Rivet plug (early prod. (4), (late prod. (3).....	39-11	Choke valve attaching screw..... (2)
11B-129S	Pump discharge passage plug assembly.....	47-30	Welsh plug .....
11B-134	Rivet plug .....	48-174S	Pump jet and housing assembly.....
11B-146	Level sight plug..... (2)	53A-332	Lockout arm .....
11B-223	Nozzle passage and idle port rivet plug..... (8)	53A-344	Vent arm .....
11B-273	Secondary throttle shaft rivet plug.....	53A-353	Primary operating lever.....
11B-305	Rivet plug (2317S (1), (2444S-2445S (2).....	53A-392S	Pump operating lever and countershaft assembly.....
		61-84	Idle adjustment screw spring..... (2)
		61-205	Vacuum piston spring.....
		61-237	Fast idle cam spring.....

Part No.	PART NAME	Part No.	PART NAME
61-291	Throttle lever adjusting screw spring.....	101-363	Piston housing attaching screw (2317S (1) with 6-1053S, (2) with 6-1175S), (2444S-2445S (2).....
61-382	Metering rod spring.....	101-396	Fast idle adjustment screw.....
61-413	Upper pump spring.....	103-14	Lead shot (late prod.).....
61-450	Secondary throttle return spring.....	105A-10	Choke lever clamp screw nut.....
61-474	Bowl vent spring.....	105A-11	Flange stud nut.....(4)
63-57	Intake check ball retainer.....	111-47S	Pump arm and screw assembly.....
63-144	Delayer plate retainer ring.....	111-60S	Metering rod arm and screw assembly.....
63-149	Bowl vent spring retainer.....	115-182	Choke connector rod.....
63-176	Pump spring retainer.....	115-204	Throttle operating rod.....
63-190	Coil housing retainer.....	115-257	Throttle connector rod.....
64-145S	Pump plunger and rod assembly.....	116-13	Pump intake check ball.....
75-1178	Metering rod—1 size lean .074" x .063" x .052" (2317S) .....(2)	117-162	Vacuum piston link.....
75-1179	Metering rod—2 sizes lean .075" x .065" x .055" (2317S) .....(2)	117-165	Pump connector link.....
75-1186	Metering rod—standard .073" x .062" x .048" (2317S) .....(2)	118-102S	Dust cover assembly.....
75-1273	Metering rod—standard .073" x .062" x .053" (2444S) .....(2)	120-159	Primary metering rod jet (2317S-2444S).....(2)
75-1274	Metering rod—standard .078" x .070" x .045" (2445S) .....(2)	120-166	Primary metering rod jet (2445S).....(2)
86-12	Flange stud lock washer.....(4)	120-174	Secondary metering jet (2444S-2445S).....(2)
101-6	Pump arm clamp screw.....	120-217	Secondary metering jet (2317S).....(2)
101-33	Metering rod arm clamp screw.....	121-78	Coil housing gasket.....
101-74	Throttle shaft screw.....	121-208	Dust cover gasket.....
101-126	Auxiliary throttle valve attaching screw.....(4)	121-241	Pump jet housing gasket.....
101-140	Fast idle cam screw.....	121-242	Body flange gasket.....
101-149S	Body flange attaching screw and washer assembly (4)	121-243	Piston housing gasket (2317S Use with 6-1053S).....
101-152S	Air horn attaching screw and washer assembly.....	121-265	Air horn gasket.....
101-184S	Dust cover attaching screw and washer assembly....(2)	121-283	Piston housing gasket (2317S Use with 6-1175S) (2444S-2445S) .....(2)
101-275	Piston housing attaching screw (2317S Use with 6-1175S) (2444S-2445S) .....(2)	136-38	Throttle shaft washer.....
101-277S	Vent arm attaching screw and washer assembly.....	150-178	Auxiliary valve lockout arm pin.....
101-278	Pump jet housing attaching screw.....	150-186S	Pin and valve cap assembly.....
101-284	Piston housing attaching screw (2317S (2) (Use with 6-1053S) .....(2)	150-190	Choke piston pin.....
101-307S	Bracket and air horn attaching screw and washer assembly .....(8)	150A-10	Pin spring .....(5)
101-332	Throttle lever adjusting screw.....	160-110S	Vacuum piston and pin assembly.....
101-335S	Air horn attaching screw and washer assembly.....(7)	160-129	Choke piston .....(2)
101-337	Secondary throttle valve attaching screw.....(4)	170-387S	Piston housing and plug assembly (2317S Use with 6-1053S) .....(2)
101-354S	Choke lever clamp screw and washer assembly.....	170-445S	Piston housing and plug assembly (2317S Use with 6-1175S) (2444S-2445S) .....(2)
101-361	Coil housing attaching screw.....(3)	170AC385S	Thermostatic coil and housing assembly.....
		172-22	Throttle connector rod retainer.....
		180-60	Lever return spring bracket.....
		181-212S	Fast idle cam assembly.....
		186-42	Choke baffle plate.....

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.