Form 5305A

CARTER CARBURETOR
DIVISION OF ACF INDUSTRIES INCORPORATED
ST. LOUIS, MO., U. S. A.

CHRYSLER 2741S-2742S
Revised December, 1957

CHRYSLER "V-8"
MODEL LC3
"C300D"
1958

2741S Front Carbureter — **2742S Rear Carbureter**

WCFB Four-Bore Down-Draft Climatic® Control Carbureters Nos. 2741S-2742S

CARBURETER SPECIFICATIONS

For Chrysler 8 Cylinder 392 Cu. In. Engine

Dimensions: Flange size, 1-1/4 inch. Four Bore - 4 bolt type.
Primary venturi size, 11/32 inch I. D.
Main venturi (primary) size, 1-1/16 inch.
Main venturi (secondary) size, 1-1/4 inch I. D.

Vents: Outside, (4) in flange, (4) in air horn, Inside (7) in air horn.

Low Speed Circuit: (Primary side only). Jet, size No. 67 (032 inch) drill.
By-pass, size (.057 inch) diameter.
Economizer, size No. 54 (.055 inch) drill.
Idle bleed, size No. 44 (.086 inch) drill.
Idle port, slot type , length .156 inch; width .030 inch.

Idle Port Opening: .094 to .100 inch above top edge of valve with valve tightly closed.

Lower Port : (For idle adjustment screw), size No. 53 (.0595 inch) drill.

Set Idle Adjustment Screw: 1 to 2 turns open. For richer mixture turn screw out. Do not idle engine below 650 r.p.m. in neutral.

Idle Air Adjusting Screw: Seat size .187 inch diameter.

Main Nozzle: Installed permanently. DO NOT REMOVE. Anti-percolating bleed (primary, in plug) size No. 70 (.028 inch) drill; (secondary in plug) size No. 70 (.028 inch) drill.

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 .070 inch diameter.

Choke: (2742S only) Carter Climatic® Control, set one point rich. Butterfly type - offset choke valve, primary side only. Choke heat suction hole, restriction in bushing between air horn and piston housing size No. 50 (.070 inch) drill.

Vacuum Spark Port: (2742S only) Horizontal slot (round end) .064 x .120 inch. Top of port .006 to .014 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 carbureter.

Spark Plug Gap	Breaker Point Setting	Ignition Timing Breaker Points to Open:	Valve Setting (Hot)	Float Setting	Idle Adjustment Screw Setting
.035"	.017"	6° B.T.C. At Vibration Damper	Intake .015" Exhaust .024"	Primary 9/32 Inch (Use Gauge T109-284) Secondary 11/32 Inch (Use Gauge T109-285)	1 to 2 Turns Open Idle Engine at 650 R.P.M. In Neutral

NOTE: These cars are equipped with Hydraulic Valve Lifters – NO ADJUSTMENT.

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 center of float and machined surface of casting must be 9/32 inch (gauge T109-284) 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 float, the distance between top of floats and bowl cover should be 23/32 inch. Adjust by bending stop tabs on float brackets.

PUMP ADJUSTMENT: Install pump connector link in center hole (medium stroke) of pump arm, with ends extending toward countershaft arm. Back out throttle lever stop 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. (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 stop 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 vacumeter 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 vacumeter link. Hold in place and carefully tighten clamp screw.

FAST IDLE ADJUSTMENT: (2742S only) (a) Loosen choke lever clamp screw on choke shaft. Insert. 010 inch feeler gauge (T109-200) between lip of fast idle cam and boss of flange casting. Hold choke valve tightly closed and take slack out of linkage by pressing choke lever towards closed position hold in place and tighten clamp screw. (b) With choke valve tightly closed bend fast idle adjusting tang until there is .015 inch (gauge T109-44) opening between throttle valve and bore of carbureter side opposite idle port. Be sure fast idle adjusting tang is on high step of cam while making this adjustment.

FAST IDLE ON CAR: (2742S only) 1450 R.P.M. hot engine with idle adjusting tang on high step of cam.

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UNLOADER ADJUSTMENT: (2742S only) With throttle wide open there should be 1/8 inch (gauge T109-36) clearance Between upper edge of choke valve and inner wall of air horn. Adjust by bending unloader lip on throttle shaft lever (use bending tool T109-41).

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.

SECONDARY THROTTLE LEVER ADJUSTMENT: Primary and secondary throttle valves should reach wide open position at the same time. To adjust, bend throttle operating rod at angle. (Use bending tool T109-213). With primary and secondary throttle valves in tightly closed position there should be .010 - .030 inch (gauge T109-29) clearance between positive closing shoes on primary and secondary levers. To adjust, bend shoe on secondary lever.

AUXILIARY THROTTLE LOCK-OUT ADJUSTMENT: (2742S only) This adjustment should be made after completing fast idle and secondary throttle lever adjustments. Crack throttle valves and hold choke valve tightly closed. Then close throttle. Lock-out dog on auxiliary throttle shaft should freely engage in notch of lock-out arm. If necessary to adjusts, bend lock-out dog on auxiliary throttle shaft.

IDLE SPEED AND MIXTURE ADJUSTMENT (NORMAL ENGINE TEMP.): In making the idle adjustment on the engine the air adjustment screw is used to adjust idle speed in a similar manner as the throttle speed screw used previously. Turning the air adjustment screw outward increases engine speed, but also leans the mixture supplied to the manifold which must be compensated for by adjustment of the idle mixture adjusting screws.

Chrysler "V-8" – 1958 – Carbureters Nos. 2741S-2742S

WHEN SERVICING, USE GASKET ASSORTMENT NO. 310

Part No.	PART NAME
1-1566S	Body flange assembly (2742S)
1-1502S	Body flange assembly (2741S)
1A-110	Flange gasket
2-189	Primary throttle valve (2)
2-201	Secondary throttle valve (2)
2-206	Auxiliary throttle valve (2)
3-1096S	Secondary throttle shaft and dog assembly
3-1148S	Primary throttle shaft and lever assembly (2742S)
3-1149S	Auxiliary throttle shaft and weight ass'y.
3-1150S	Primary throttle shaft and lever ass'y. (2741S)
4A-179	Auxiliary throttle shaft and lockout dog (2742S)
6-1366S	Air horn assembly (2742S)
6-1368S	Air horn assembly (2741S)
7-173	Choke valve (2742S)
11-311S	Low speed jet assembly (.032") (2)
11B-35	Rivet plug (4)
11B-41	Rivet plug (2742S)
11B-79	Rivet plug
11B-129S	Pump discharge passage plug assembly
11B-134	Rivet plug
11B-223	Rivet plug (4)
11B-272	Rivet plug (2)
11B-294	Idle port rivet plug (2)
11B-305	Rivet plug (2)
11B-306	Rivet plug
14-383S	Choke lever and screw assembly (2742S)
14-439S	Choke piston lever, link and shaft ass'y. (2742S)
14-440	Cam trip lever (2742S)
15-63S	Strainer Nut Assembly (2)
17-70	Pump check needle
20-26	Relief valve gasket
20-126	Needle seat gasket (2)
20-127	Bowl strainer gasket. (2)
21-143S	Primary float and lever assembly
21-168S	Secondary float and lever assembly
24-24	Float lever pin (2)
25-278S	Primary and secondary needle and seat ass'y. (.0935") (2)
30-75	Bowl strainer
30A-67	Idle adjustment screw (2)
30A-79	Idle air adjustment screw (2)
39-11	Choke valve attaching screw (2742S)
47-30	Welsh plug (choke housing) (2742S)
47-33	Welsh plug (spark port)
48-174S	Pump jet and housing assembly
53A-333S	Pump operating lever and countershaft ass'y.
53A-344	Vent arm
53A-417	Lockout arm (2742S)
61-84	Idle adjustment screw spring (2)
61-128	Connector rod spring
61-205	Vacuum piston spring
61-291	Throttle lever adjusting screw spring
61-382	Metering rod spring
61-413	Upper pump spring
61-454	Fast idle cam spring (2742S)
61-474	Bowl vent spring
61-483	Secondary throttle return spring
61-593	Lockout arm spring (2742S)
61-595	Idle arm adjustment screw spring
63-35	Connector rod spring retainer
63-57	Intake check ball retainer
63-144	Delayer plate retainer ring (2742S)
63-149	Bowl vent spring retainer
63-176	Pump spring retainer
63-225	Coil housing retainer (2742S)
63-229	Heat Tube retainer (2742S)
64-145S	Pump plunger and rod assembly

Part No.	PART NAME
75-1160	Metering rod – standard. .076" x .066" x .048" (2)
75-1180	Metering rod .077" x .068" x .052" 1 size lean (2)
75-1181	Metering rod .078" x .070" x .055" 2 sizes lean. (2)
101-6	Pump arm clamp screw
101-33	Metering rod arm clamp screw
101-65	Lockout dog attaching screw (2742S)
101-74	Throttle shaft screw
101-149S	Body flange attaching screw and washer ass'y
101-152S	Air horn attaching screw and washer ass'y.
101-184S	Dust cover attaching screw & washer ass'y (2)
101-275	Piston housing attaching screw (2742S)
101-277S	Vent arm attaching screw and washer ass'y.
101-278	Pump jet housing attaching screw
101-298S	Body flange attaching screw and washer ass'y (2)
101-307S	Bracket and air horn attaching screw and washer assembly (8)
101-320	Auxiliary throttle valve attaching screw (4)
101-324	Fast idle cam screw (2742S)
101-335S	Air horn attaching screw and washer ass'y (7)
101-354S	Choke lever clamp screw and washer ass'y (2742S)
101-363	Piston housing attaching screw (2742S) (2)
101-382S	Body flange attaching screw and washer ass'y. (3)
101-391	Throttle lever adjusting screw
101-420	Primary and Secondary throttle valve attaching screw (8)
101-426	Coil housing attaching screw (2742S) (3)
103-14	Lead shot (2741S (4) (2742S (3)
105A-10	Choke lever clamp screw nut (2742S)
111-60S	Metering rod arm and screw assembly
111-78S	Pump arm and screw assembly
114-139	Throttle shaft arm (inner)
114-145	Throttle shaft arm (outer)
115-215	Choke connector rod (2742S)
115-216	Throttle connector rod
115-292	Throttle operating rod
116-13	Pump intake check ball
117-162	Vacumeter piston link
117-165	Pump connector link
118-102S	Dust cover assembly
120-163	Primary metering rod jet (.098") (2)
120-193	Secondary metering jet (.057") (2741S) (2)
120-226	Secondary metering jet (.065") (2742S) (2)
121-78	Coil housing gasket (2742S)
121-208	Dust cover gasket
121-241	Pump jet housing gasket
121-265	Air horn gasket
121-277	Body flange gasket
121-291	Heat tube cap gasket (2742S)
121-298	Piston housing gasket (2742S)
136-37	Throttle operating rod washer (5)
136-84	Throttle shaft spring washer
136-159	Throttle shaft washer
136-199	Copper washer (Use with 101-298S) (2)
145-142	Choke vacuum passage standpipe (2742S)
145-148	Cross over bowl vent tubes (2)
150-186S	Pin and valve cap assembly
150-190	Choke piston pin (2742S)
150A-10	Pin spring (2741S (4) (2742S (5)
160-110S	Vacuum piston and pin assembly
160-128	Choke piston (2742S)
170-489S	Piston housing and plug assembly (2742S)
170AW484S	Thermostatic coil and housing assembly (2742S)
181-204S	Fast idle cam assembly (2742S)
184-88	Choke heat tube cap (2742S)
186-42	Choke baffle plate (2742S)

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