

DE SOTO "V-8"

MODEL S-24 "ADVENTURER"

1956

(2445S)
Rear Carburetor

(2476S)
Front Carburetor

WCFB Four-Bore Down-Draft Climatic® Control **Carburetors Nos. 2445S-2476S**

CARBURETOR SPECIFICATIONS

For DeSoto 8 Cylinder Engine: 3.78 Inch Bore, 3.80 Inch Stroke

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.

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 650 to 750 R.P.M. in neutral.

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

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

Metering Rod Jet: Primary: size (2445S) .0935 inch, (2476S) .089 inch diameter. Secondary: Size .055 inch diameter.

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.

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:
 6° B. T. C.
 At Vibration Damper**

**Float Setting
 Primary 7/32 Inch
 (Use Gauge T109-283)
 Secondary 11/32 Inch
 (Use Gauge T109-285)**

**Idle Adjustment
 Screw Setting
 1/8 to 1/4
 Idle Engine at
 650 to 750
 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 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 vacuumeter 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 vacuumeter 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.

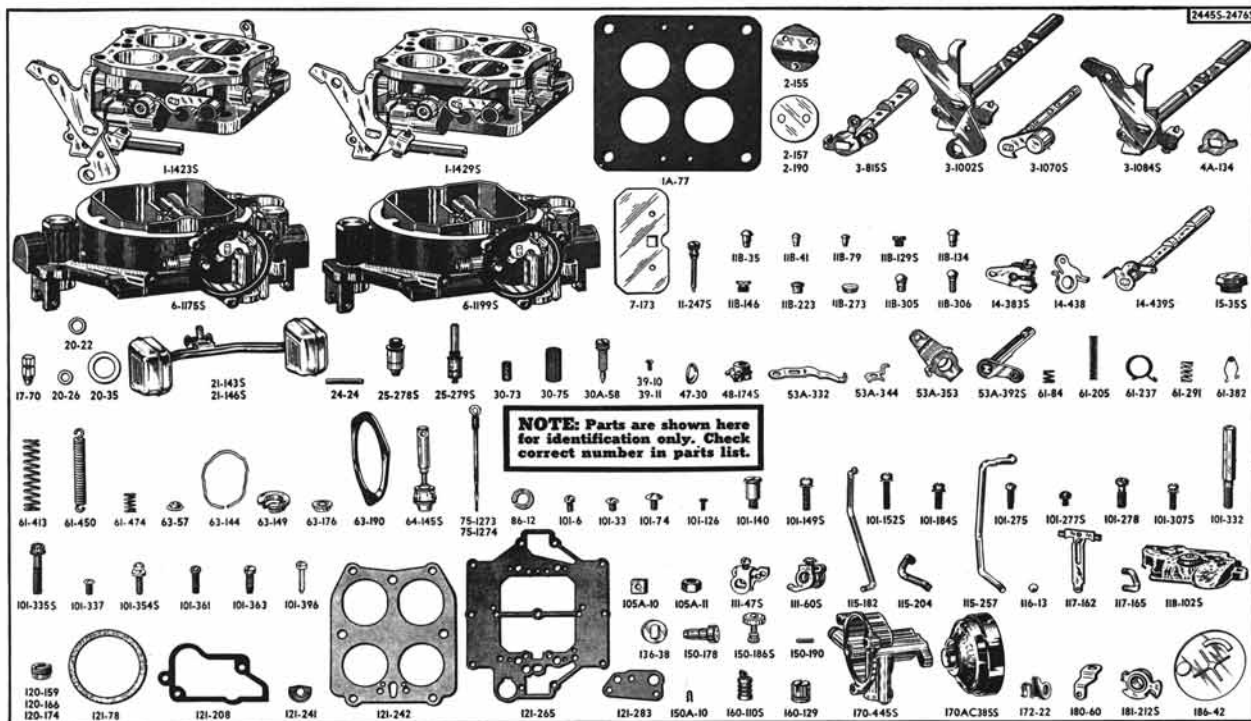
FAST IDLE ON CAR: 1350 to 1400 R.P.M.

UNLOADER ADJUSTMENT: With throttle wide open there should be 11/64 inch clearance between upper edge of choke valve and inner wall of air horn (gauge T109-166). 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).

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.



DeSoto "V-8"—1956—Carbureters Nos. 2445S-2476S

WHEN SERVICING, USE GASKET ASSORTMENT No. 269A

Part No.	PART NAME	Part No.	PART NAME
1-1423S	Body flange assembly (2445S).....	11B-273	Secondary throttle shaft rivet plug.....
1-1429S	Body flange assembly (2476S).....	11B-305	Rivet plug .....(2)
1A-77	Flange gasket	11B-306	Rivet plug
2-92	Primary throttle valve.....(2)	14-383S	Choke lever and screw assembly.....
2-155	Auxiliary throttle valve.....(2)	14-438	Cam trip lever.....
2-157	Secondary throttle valve.....(2)	14-439S	Choke piston lever, link and shaft assembly.....
2-190	Primary throttle valve (Sup. by 2-92).....(2)	15-35S	Strainer nut assembly.....(2)
3-815S	Secondary throttle shaft and operating lever assembly	17-70	Pump check needle.....
3-1002S	Primary throttle shaft and lever assembly (2445S)....	20-22	Needle seat gasket.....(2)
3-1070S	Auxiliary throttle shaft, lever and weight assembly....	20-26	Relief valve gasket.....
3-1084S	Primary throttle shaft and lever assembly (2476S)....	20-35	Bowl strainer gasket.....(2)
4A-134	Primary throttle shaft dog.....	21-143S	Primary float and lever assembly.....
6-1175S	Air horn assembly (2445S).....	21-146S	Secondary float and lever assembly.....
6-1199S	Air horn assembly (2476S).....	24-24	Float lever pin.....(2)
7-173	Choke valve	25-278S	Primary needle and seat assembly.....
11-247S	Low speed jet assembly.....(4)	25-279S	Secondary needle and seat assembly.....
11B-35	Rivet plug .....(6)	30-73	Primary needle seat strainer.....
11B-41	Rivet plug	30-75	Bowl strainer
11B-79	Rivet plug (early prod. (4), (late prod. (3)	30A-58	Idle adjustment screw.....(2)
11B-129S	Pump discharge passage plug assembly.....	39-10	Primary throttle valve attaching screw.....(4)
11B-134	Rivet plug	39-11	Choke valve attaching screw.....(2)
11B-146	Level sight plug.....(2)	47-30	Welsh plug
11B-223	Nozzle passage and idle port rivet plug.....(8)	48-174S	Pump jet and housing assembly.....
		53A-332	Lockout arm

Part No.	PART NAME	Part No.	PART NAME
53A-344	Vent arm	101-337	Secondary throttle valve attaching screw.....(4)
53A-353	Primary operating lever.....	101-354S	Choke lever clamp screw and washer assembly.....
53A-392S	Pump operating lever and countershaft assembly.....	101-361	Coil housing attaching screw.....(3)
61-84	Idle adjustment screw spring.....(2)	101-363	Piston housing attaching screw.....(2)
61-205	Vacuum piston spring.....	101-396	Fast idle adjustment screw.....
61-237	Fast idle cam spring.....	103-14	Lead shot (late prod.)
61-291	Throttle lever adjusting screw spring.....	105A-10	Choke lever clamp screw nut.....
61-382	Metering rod spring.....	105A-11	Flange stud nut.....(4)
61-413	Upper pump spring.....	111-475	Pump arm and screw assembly.....
61-450	Secondary throttle return spring.....	111-605	Metering rod arm and screw assembly.....
61-474	Bowl vent spring.....	115-182	Choke connector rod.....
63-57	Intake check ball retainer.....	115-204	Throttle operating rod.....
63-144	Delayer plate retainer ring.....	115-257	Throttle connector rod.....
63-149	Bowl vent spring retainer.....	116-13	Pump intake check ball.....
63-176	Pump spring retainer.....	117-162	Vacuum piston link.....
63-190	Coil housing retainer.....	117-165	Pump connector link.....
64-145S	Pump plunger and rod assembly.....	118-102S	Dust cover assembly.....
75-1273	Metering rod—standard (.073 x .062 x .053 (2476S)	120-159	Primary metering rod jet (2476S).....(2)
	.....(2)	120-166	Primary metering rod jet (2445S).....(2)
75-1274	Metering rod—standard (.078 x .070 x .045 (2445S)	120-174	Secondary metering jet.....(2)
	.....(2)	121-78	Coil housing gasket.....
86-12	Flange stud lock washer.....(4)	121-208	Dust cover gasket.....
101-6	Pump arm clamp screw.....	121-241	Pump jet housing gasket.....
101-33	Metering rod arm clamp screw.....	121-242	Body flange gasket.....
101-74	Throttle shaft screw.....	121-265	Air horn gasket.....
101-126	Auxiliary throttle valve attaching screw.....(4)	121-283	Piston housing gasket.....
101-140	Fast idle cam screw.....	136-38	Throttle shaft washer.....
101-149S	Body flange attaching screw and washer assembly	150-178	Auxiliary valve lockout arm pin.....
	.....(4)	150-186S	Pin and valve cap assembly.....
101-152S	Air horn attaching screw and washer assembly.....	150-190	Choke piston pin.....
101-184S	Dust cover attaching screw and washer assembly (2)	150A-10	Pin spring
101-275	Piston housing attaching screw.....	160-110S	Vacuum piston and pin assembly.....
101-277S	Vent arm attaching screw and washer assembly.....	160-129	Choke piston
101-278	Pump jet housing attaching screw.....	170-445S	Piston housing and plug assembly.....
101-284	Piston housing attaching screw (Sup. by 101-363)	170AC385S	Thermostatic coil and housing assembly.....
	.....(2)	172-22	Throttle connector rod retainer.....
101-307S	Bracket and air horn attaching screw and washer assembly	180-60	Lever return spring bracket.....
	.....(8)	181-212S	Fast idle cam assembly.....
101-332	Throttle lever adjusting screw.....	186-42	Choke baffle plate.....
101-335S	Air horn attaching screw and washer assembly.....(7)		

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