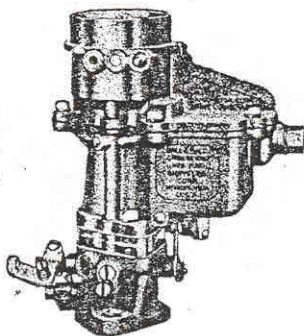


**CAR SERIAL NUMBERS**

- No. E6G1—Model "S1" Standard 1936  
—6043701 and higher
- No. E6G1—Model "S1" Custom 1936  
—5500001 and higher
- No. E6G1—Model "S2" Airflow 1936  
—5089001 and higher
- No. E6I1—Model "S3" 1937—5517301  
and higher

**MOTOR SERIAL NUMBERS**

- No. E6G1—Model "S1" Airstream 1936  
S1-1001 and higher
- No. E6G1—Model "S2" Airflow 1936  
—S2-1001 and higher
- No. E6I1—Model "S3" 1937—S3-1001  
and higher



**DE SOTO  
MODELS  
"S1" AIRSTREAM  
"S2" AIRFLOW  
1936**

**AND EARLY 1937 MODEL "S-3"  
PRODUCTION**

**DOWN-DRAFT CARBURETERS—MODELS E6G1 and E6I1—LIST PRICE \$20.00**

A \$4.00 exchange allowance is deducted from the list price if buyer turns in old carburetor.

**CARBURETER SPECIFICATIONS**

E6G1 used on De Soto 6 Cylinder Engine: 3 3/8 inch (85.725 mm) bore, 4 1/2 inch (114.30 mm) stroke—1936

E6I1 used on De Soto 6 Cylinder Engine: 3 3/8 inch (85.725 mm) bore, 4 1/4 inch (107.95 mm) stroke—Early 1937

Dimensions: Flange size, 1 1/2 inch (38.1 mm).

Throttle bore, 1-11/16 inch (42.86 mm).

Main venturi, 1-9/32 inch (32.54 mm) I. D.

**Float Setting:** Top of float 5/64 inch (1.98 mm) plus or minus 1/64 inch (.397 mm) below top surface of carburetor body casting.

**Vent:** (To float chamber.) Outside: Size 3/16 inch (4.76 mm) drill.

\*Gasoline Intake Needle: Triangular, horizontal. No. 42 (.237 mm) drill in needle seat.

**Idle Orifice Tube:** Jet size, .0276 inch (.70 mm) drill. Idle passage air bleed (in body) size .063 inch (1.60 mm) diameter.

Economizer in body—size .049 inch (1.25 mm) diameter.

**Idle Ports:** Upper port, Keyhole type; length, .128 inch (3.25 mm); width, .027 inch (.69 mm); .063 inch (1.60 mm) diameter hole at top.

Top of port located .081 to .085 inch (2.06 to 2.16 mm) above top edge of valve.

Lower port size, .053 to .057 inch (1.35 to 1.45 mm) drill. (For idle adjustment screw.)

\*FOR READINGS BELOW, VIEW CARBURETER WITH FLANGE DOWN AND FLOAT CHAMBER AT RIGHT

**Throttle Lever:** Adjusting—on left side, length 1 1/4 inches (31.75 mm). When open, points up.

**Choker:** Butterfly type, with compensating (poppet) air valve.

\*Set Idle Adjustment Screw: 1/4 to 1 turn open. For richer mixture turn screw out. Do not idle engine below 300 rpm, or 6 miles per hour.

**Main Metering Jet:** Calibrated to flow 282 to 286 CC per minute. (Do not gauge for size. If in doubt, replace with new part.)

**Vent Tube:** Air bleed through plug in diffuser, size .0315 inch (.80 mm) drill.

**Accelerating Jets:** 2—.0354 inch (.90 mm) 21/64 inch (8.33 mm) from end.

2—.0354 inch (.90 mm) 1-1/64 inch (25.8 mm) from end.

**Step-up Jet:** Size: No. 63 (.94 mm) drill.

**Accelerating Pump:** Type, delayed action.

Stroke: Summer setting (inner hole, short stroke).

Intermediate setting (center hole).

Winter setting (outer hole, long stroke).

Pump intake passage, size .115 to .120 inch (2.93 to 3.05 mm) diameter in body.

Pump needle seat size .062 to .065 inch (1.58 to 1.65 mm) diameter in body.

Pump (discharge) jet size .0354 inch (.90 mm) drill.

**Throttle and Choke Valves:** Interconnected to open throttle valve to fast idle position when choke is in use.

**Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!**

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

<b>Spark Plug Gap</b> .025"	<b>Set Breaker Points</b> .020"	<b>Use Timing Light or Motor Gauge</b> Breaker Points to Open: 1936 Cast Iron Head: Top Dead Center 1936 Aluminum Head: 5° After T. D. C. 1937 Cast Iron Head: .002" After T.D.C.	<b>Valve Clearance</b> Set Valves 1936 { Intake .005" Exhaust .008" 1937 { Intake .006" Exhaust .010"	<b>Use Gauge</b> 5/64 Inch	<b>Idle Adjustment Screw Setting</b> 1/4 to 1 Turn Open
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**CARBURETER ADJUSTMENTS**

If carburetor loads up after considerable service, check float level. Wear on lip of float lever will raise float level. Before adjusting float, be sure float lever pin plug is firmly seated. Reset float level by bending lip of float lever away from needle to raise level, or bend lip toward needle to lower float level. Bend vertical lip of float only.

If motor stalls while idling, set throttle lever adjusting screw so motor runs approximately 300 r.p.m. Then set idle adjustment screw as instructed above. If these adjustments do not correct the trouble, remove idle orifice tube and plug assembly and clean with compressed air.

If acceleration is not satisfactory remove pump jet and clean with compressed air. Also examine pump link setting. Pump link has three holes giving short, medium and long strokes. If link is set to short stroke, reset to give longer stroke to pump piston. In hot weather, high altitudes, or

**Caution:** Do not attempt to gauge metering jets with drills.

when high test gasoline is used, connect pump link in inner hole, giving shorter stroke.

Maximum economy is secured only when breaker points, spark plugs, valves and motor timing are set to manufacturer's specifications. After motor is properly tuned, the following should also be done to insure satisfactory performance and economy:

- (a) Float level must be set as above.
- (b) Step-up rod in step-up jet must seat and move freely. When reassembling, jet must be screwed in tight against seat.
- (c) Step-up piston in body casting should not bind and must be free of dirt.
- (d) Main metering jet can be replaced with leaner than standard metering jets, for altitude or high test fuel.

These jets have been flow-tested, to insure correct fuel flow.

