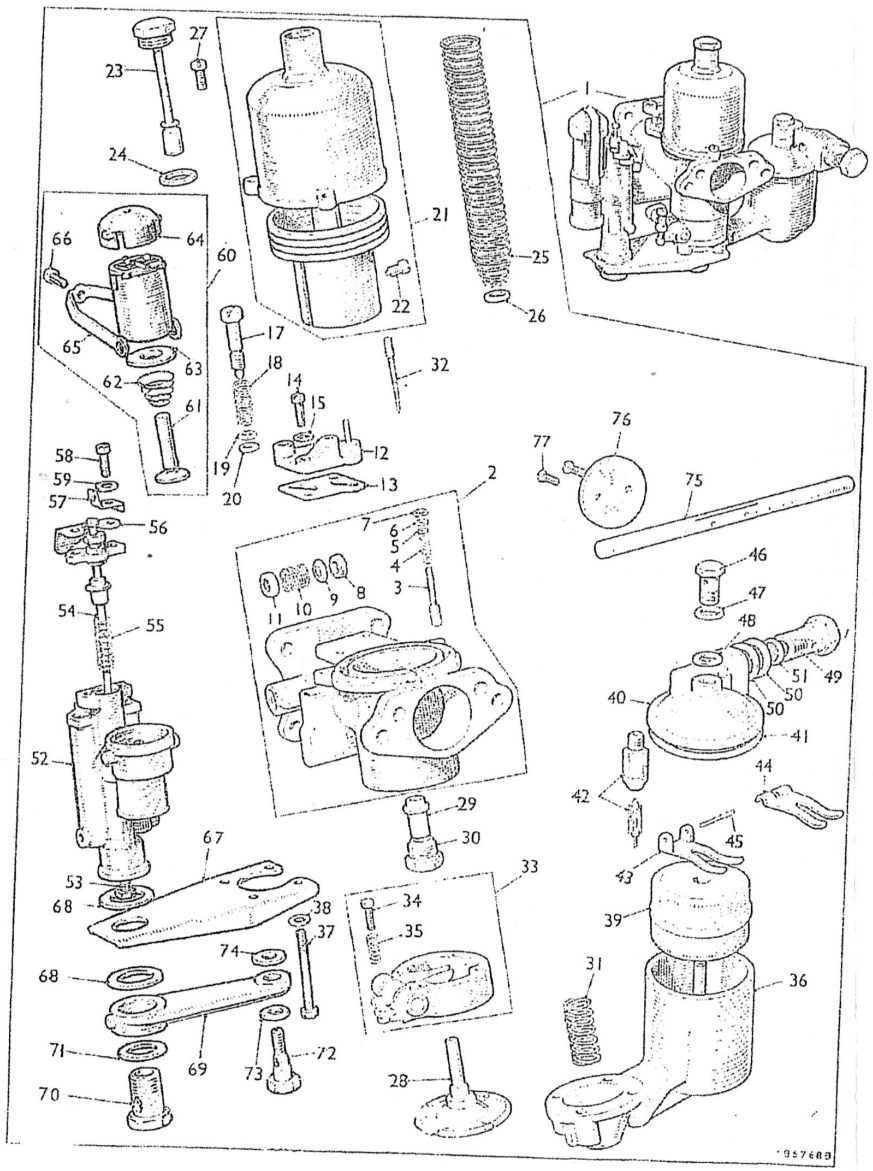
SU-563 SU Carburator Spec Sheet

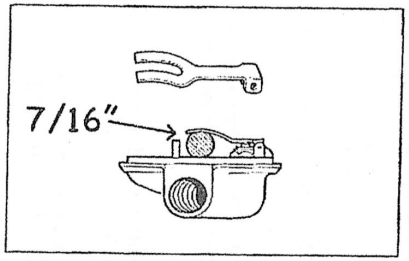


Typical S.U. HD Type Carburetor - Thermo

Illus #	Description	Part #
1	Carburetter Assemby - front	
2	Body Assembly	
3	Pin - piston lifting	
4	Spring- pin	
5	Washer (viton)	AUC 4943
6	Washer- brass	
7	Circlip -pin	
8	Gland (cork-rubber)	AUC 2098
9	Washer -dished	
10	Spring	
11	Retainer -spring	
12	Adapter -auto ignition	
13	Gasket -adapter	AUC 2114
14	Screw -adapter	
15	Washer -shakeproof	
17	Valve -slow running	
18	Spring -valve	
19	Washer -dished (brass)	AUC 2130
20	Washer- gland (viton)	AUC 2029
21	Chamber & Piston Assembly	
22	Screw - needle locking	
23	Cap and Damper	
24	Washer - fibre	AUC 4900
25	Spring -piston-red	
26	Washer -thrust	
27	Screw -chamber to body	
28	Jet	Included
29	Bearing -jet	
30	Screw -jet locking	
31	Spring -jet return	AUC 2006
32	Needle -jet	
33	Housing Assembly -Jet	
34	Screw -stop adjusting	
35	Spring -screw	
36	Chamber -float	
37	Bolt -float chamber fixing	
38	Washer -shakeproof	
39	Float	
40	Lid -float chamber	
41	Gasket -lid	AUC 1147
42	Needle & Seat	6151
43/44	Lever -hinged	
45	Pin -hinge	AUC 1152
46	Nut - Cap	
47	Washer -aluminum	AUC 1557
48	Washer -fibre	AUC 1928
49	Bolt -banjo	
50	Washer -fibre	AUC 2141
51	Filter -fuel	
52	Body -Thermo	
53	Jet -accelerator	
54	Needle	
55	Spring -needle-blue	
56	Shield -dust	
57	Finger -spring	
58	Screw -fixing	
59	Washer -shakeproof	
60	Solenoid Assembly	
61	Plunger & Valve	
62	Spring -conical	
63	Plate -spring locating	
64	Cap -end	
65	Strap -securing	
66	Screw -clamping	
67	Bracket -thermo body	
68	Washer -fibre	AUC 4763
69	Casting -pipe	
70	Bolt -casting to thermo body	
71	Washer -fibre	AUC 2141
72	Bolt -casting to float chamber	
73	Washer -aluminum	AUC 1557
74	Washer -fibre	AUC 2089
75	Spindle -throttle	
76	Disc -throttle	
77	Screw -disc	

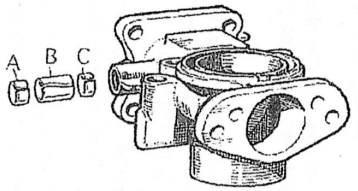
Part #'s listed above ^ included in rebuild kit.

Float Chamber Fuel Level



(a) Remove the float chamber lid and invert it.
(b) With the needle on its seating insert a 11.0 mm (7/16 in) diameter round bar between the forked lever and the lip of the float chamber lid.
(c) The prongs of the lever should just rest on the bar. If not, carefully bend the lever until they do.

P.T.F.E. BUSHING



Illus. #	Description	Part #
A	Ring - outer	
B	Bush (teflon) -spindle	AUD 2424
C	Ring (brass) - inner	AUD 2500

Part #'s listed above ^ included in rebuild kit.

"Parts for the Solution"

BRITISH SUPERIOR

Replacement Parts For SU & Zenith Carburetors

SU-563 SU Carburator Spec Sheet

HELPFUL HINTS for HD THERMO CHOKE CARBURETORS

When undertaking the repair and rebuilding of S.U. Carburetors, you have to remember that the units you wish to repair are at least 30 years old, and possibly as much as 50. It would be naïve to think that you are the first person to disassemble these units; many of these units have been worked on by knowledgeable people as well as by people who have no experience. You should have at hand the diagram enclosed with this kit as well as a factory shop manual. In the case of multiple carburetor installations, take one apart at a time so that you may have some reference when reassembling.

Cleaning the carburetor requires solvent usually found in local auto parts stores, and sometimes a mild abrasive. *Scotchbrite* brand nylon scrub pads work well. DO NOT USE SAND PAPER OR GLASS BEAD on any of the piston and dome assembly. These are critical fit components; it is best not to introduce any abrasive into the carb as you will regret it.

The HD carburetor with a few exceptions (Aston Martin) idles through the large idle air screw (AUC 2028) only, so for it to be effective the butterfly must be closed fully at idle.

When assembling any carburetor, be sure to oil the threads of any and all screws.

When installing jets, be sure to back off the old mixture setting screw (AUC 2521) so that the diaphragm is stretched. This lets the jet tube come up to the top of the jet bearing (AUC 2001).

Some HD8 carburetors use a plastic bushing in the throttle shaft which has a narrow (1/16") spacer between the bore and the bush as well as a wide one (1/4"). If you are removing the shaft, be sure not to lose these narrow rings on either side of the bush.

When removing the fuel feed bolt at the bottom of float chamber (AUC 2086), be careful. While it has a large head, the shank is only 5/16" with a cross drilled hole in it; this makes it weak. Sometimes it is best to remove the float bowl completely to view the inside; this bolt frequently is corroded.

The Start carb body is only a series of tubes and air passages. If you are getting fuel coming out of this unit, the problem lies with the float chamber it is attached to (bad float, bad needle and seat, incorrect float level).

THROTTLE SHAFT WEAR: Remove all shaft springs, open butterfly about 30% and wiggle in the 2 o'clock to 7 o'clock direction; if movement seems excessive, new throttle shafts are needed as worn shafts affect mixture and idle. The factory said 2.5 thousandths inches was minimum clearance.

Inspect floats for signs of leakage. Brass floats get vertical stress cracks which are visible. Plastic ones wear out their pivot points.

FLOAT FORKS: There were changes in float fork configuration. There are two types of forks: (1) ones that have folded pivot tangs with a hole drilled for the pivot pin (AUC 1980/AUC 1981) made of steel and plated; (2) there also is a stainless steel fork where the pivot end look like the tines of a fork (AUD 2285/AUD 2299). They ARE NOT interchangeable. AUC 1980 fit bowl covers with a short pedestal (AUC 1160, 1161, 4260, 4261 etc.). Height of pivot hole on pedestal from gasket face to center of hole is approx .220".
The AUD 2285 fits "tall" pedestal. Those covers' (AUD 2283, 2284 and others) pedestal height is approx .325". While forks and covers are not interchangeable individually, whole cover & fork assemblies are interchangeable as a unit. They all take the same needle and seat. The low pedestal covers are most common pre-war up to the mid 1960's, the tall ones are later, and are currently supplied as replacements. There are other part numbers of covers out there too numerous to list.

FILLING THE DAMPER: For the proper operation of the carburetor, you must fill the hollow steel tube attached to the piston. This acts as a shock absorber (pre-war carbs do not have a hollow tube) and smoothes the piston rise. You can use official SU damper oil, or in warm seasons use motor oil (10/40 or 20/50), and in the cold season use automatic transmission oil. You can also experiment. Fill tube halfway. If you overfill slightly, do not worry.

FUEL LEAKAGE: You are the first line of defense! If you see a leak or smell gas, stop and investigate.

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