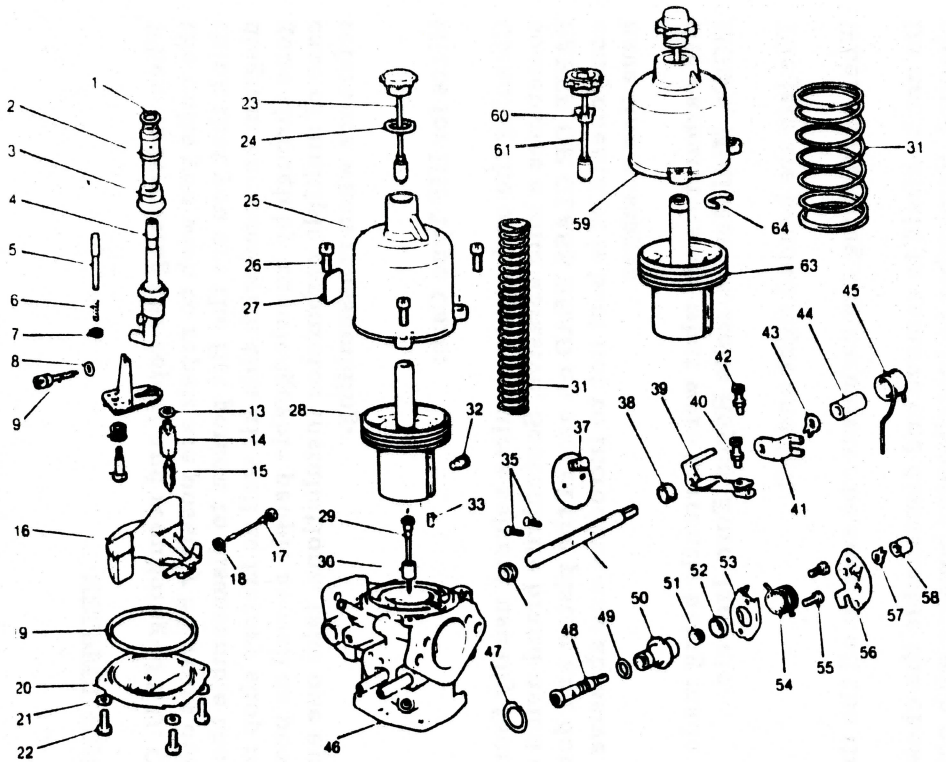
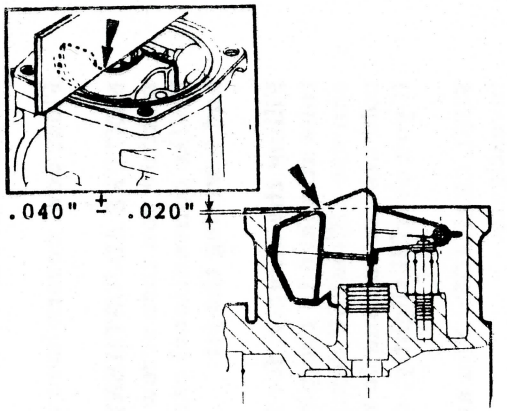
Typical Type HIF Carburetter Components



1 Jet bearing washer
2 Jet bearing
3 Jet bearing nut
4 Jet assembly
5 Lifting pin
6 Lifting pin spring
7 Circlip
8 Adjusting screw seal
9 Jet adjusting screw
10 Bi-metal jet lever
11 Jet spring
12 Jet retaining screw
13 Needle seat washer (if required)
14 Float needle seat
15 Float needle
16 Float
17 Float pivot
18 Pivot seal
19 Float-chamber cover seal
20 Float-chamber cover
21 Spring washer
22 Cover screw
23 Piston damper
24 Damper washer
25 Suction chamber
26 Chamber screw
27 Identity tag
28 Piston
29 Jet needle
30 Needle guide
31 Piston spring
32 Needle retaining screw
33 Needle spring
34 Throttle spindle seal
35 Throttle disc screws
36 Throttle spindle
37 Throttle disc
38 Throttle spindle seal
39 Throttle actuating lever
40 Fast-idle screw and nut
41 Throttle lever
42 Throttle adjusting screw and nut
43 Tab washer
44 Retaining nut
45 Throttle spring
46 Body
47 Cold start seal
48 Cold start spindle
49 'O' ring
50 Cold start body
51 Spindle seal
52 End cover
53 Retaining plate
54 Cold start spring
55 Retaining screw
56 Fast-idle cam
57 Tab washer
58 Retaining nut
59 Ball bearing suction chamber
60 Piston damper ball bearing S.C. (early)
61 Bearing retention clip (early)
62 Piston damper ball bearing S.C. (later)
63 Piston ball bearing S.C. (later)
64 Circlip – bearing retention (later)

MADE IN USA
WWW.JOECURTO.COM



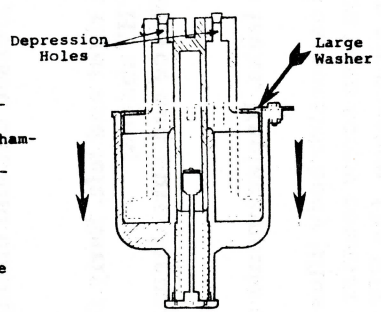
FLOAT LEVEL ADJUSTMENT

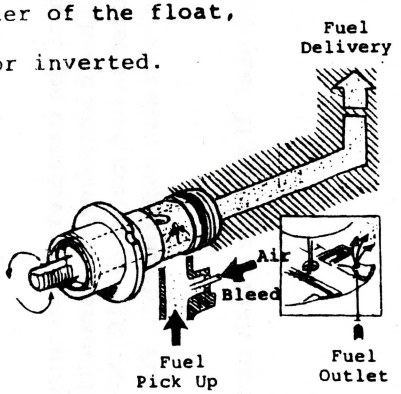
HIF TYPE CARBURETORS

The correct float level is .040" ± .020" measured from the float chamber flange above the center of the float, with carburetor inverted.

PISTON DROP TIMES

On 1 1/4" carburetors the drop time is 3-5 seconds. All larger carburetors have a drop time of 5-7 seconds. Thoroughly clean the piston, dashpot chamber, and plug depression transfer holes. Fit nut, bolt, and large flat washer to one dashpot securing flange and measure time piston takes to move length of chamber.





CHOKE HIF TYPE

The choke is a rotary valve type. A "V" channel allows progressively more mixture into the carburetor between the bridge and the throttle plate, until at full choke a straight through drilling allows maximum enrichment. Air is also drawn through an air bleed to help emulsify the fuel. Simultaneously, engine RPM is increased by a fast idle cam.

"Parts for the Solution"

BRITISH SUPERIOR

Replacement Parts For SU & Zenith Carburetors

HELPFUL HINTS for HIF TYPE 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., HIF have tiny passages.

HIF carburetors are what were currently being made and used on late model British cars, MGB's, Mini Metros, Rolls Royce, Euro Jags etc.

The jets are handed right and left.

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

Do not be afraid to remove and disassemble the choke unit, there are vital seals that must be changed. Remember to install outer housing with notch in the up position (illus # 50).

When installing choke cable make sure that when it is in the "OFF" position the choke lever is fully down with a little slack in the cable otherwise you get a rich mixture.

THROTTLE SHAFT WEAR: Remove all shaft springs, open butterfly about 30% and wiggle in the 2 o'clock to 7 o'clock direction. If excessive change them. Worn shafts affect mixture and idle. The factory said 2.5 thousandths inches was minimum clearance. HIF carbs have shaft bushings which are able to be pressed out and changed without any machine work. The factory said 2.5 thousandths inches was minimum clearance.

Inspect floats for signs of leakage. HIF floats are handed right and left. Early floats has a spindly arm later floats have a more solid support arm ("H" shaped).
Dual applications such as MGB use a pair of each; Rolls Royce and Euro Jaguar use a pair of only one hand.

Float bowl covers have a tendency to distort this causes leaks. Replacements are available.

MIXTURE ADJUSTMENT is done by a screw on corner of carburetor body (illus # 9); to richen mixture you turn screw clockwise (in) to lean mixture you turn screw counter clockwise (out). Unlike conventional carburetors which open and close an air passage, the HIF screw is raising and lowering the jet.

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) 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 automatic transmission oil. You can also experiment. Fill tube to ½ from its top. 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.