Replacing the HIF6 floats

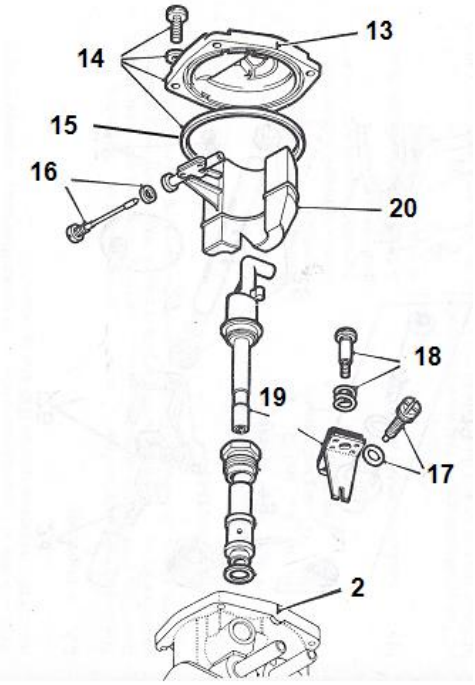
Victor Smith found on starting up his MGBGTV8 that petrol was running from the overflow hose which is routed to discharge below the car. It was traced to the float in the nearside HIF6 carburettor that had leaked so it was partially full of fuel. Here he describes replacing the floats with a new pair from Burlen. (May 16)

Two new floats were ordered from Burlen (who took over the SU business) and provide replacement parts for SU fuel systems and carburettor rebuild services. The float repair kit **GSU206** for an HIF6 comes with replacement gaskets and a replacement seal (rubber ring) at the bottom of the carburettor - seal float **GSU552**.

Replacing the HIF6 floats was relatively straightforward

Remove the air cleaners (**1**), remove the overflow fuel hose from the side of each carburettor (**2**), remove the fuel supply hose from the nearside carburettor (**3**) which comes from the fuel supply filter nearby, remove the hose from both flame traps (**4**) on both sides of the engine which push on to connectors on each carburettor, remove the two bolts on the choke cable clamp on the front of the airbox (**5**) and the clip (**6**) on the offside of the airbox holding the choke cable, remove the two bolts (with grommets and spacers) at the back of the airbox (**7**), remove the two short bolts through the lower carburettor body (**8**) to the airbox (they have both a head you can get a spanner on and a groove for a screwdriver), then lift the airbox (**9**) away from the carburettors. As you lift the airbox the engine breather filter (**10**) will disconnect from the rubber hose below but remain in the clip.

Next remove the six nuts on the threads (**11**) clamping the adapter assembly (known at the Factory as the "pair of trousers" from its appearance) above the inlet manifold and then lift the adapter (**12**) clear of the studs.



At this point and before further progress, place a piece of kitchen paper or clean rag in each of the two large openings in the exposed face of the inlet manifold to avoid any unwanted material falling into the inlet manifold.

As the two carburettors are attached to the adapter assembly, you can turn the adapter over so the underside of each HIF6 is ready for the removal of the bottom coverplate (**13**). Mark the coverplate and body of the carburettor to ensure the correct reassembly. Unscrew the four retaining screws (**14**) on each cover plate and remove the cover plate with the rubber sealing ring (**15**). You will now see the float which is held in position by a float pivot spindle (**16**).

Remove the jet adjusting screw complete with the "O" ring (**17**) and then the jet adjusting lever retaining screw with spring (**18**). Withdraw the jet (**19**). Remove the float pivot spindle (**16**) and fibre washer and then lift out the float (**20**). Replace the float with the new float supplied by Burlen.

Reassembly is essentially the process above reversed with a few points to note. First you will see there is no gasket between the lower inlet manifold and the adapter assembly above, but there will be traces of sealant with a bluish colour. Nic Houslip suggests using a thin layer of Hylomar, a blue coloured sealant that never goes hard, between the surfaces on reassembly. He adds "that when you buy it make sure you get the original one, not the silicone replacement - and get a tube, avoid the aerosol as it's inconvenient". The MGBGTV8 Workshop Manual Supplement AKD8468 shows the induction manifold on Sheet 2 30.15.02 and on page 06-1 the torque setting on the induction manifold bolts as **28 lbf ft (1.80kgf m)**.

The second point is it is a tight squeeze reaching in between the back of the airbox and the heater box to reconnect the breather filter to the hose (**10**) below.