Replacement Heater Tap / Valve

In early May 2022 we were out on a drive when Emma started to misfire; the first check was to look at all the gauges, at which time the temperature gauge was noted to be reading higher than normal. Pulling into a nearby local car park I let it cool down a bit then took the radiator cap off, and as suspected nothing there. I carry a litre bottle of water in the space under the false floor in the boot area and topped up the radiator to see the water almost immediately disappear and spread on the ground under the car. Lifting the other bonnet half revealed it was coming from the end of the new heater water tap that I had fitted eleven months earlier courtesy of the MGB Hive. I had the heater switched on and fortunately turning the tap off stopped the leak. Two trips over to a nearby residence to refill my water bottle topped up the radiator and left half a bottle spare to offer some solace on the way home.

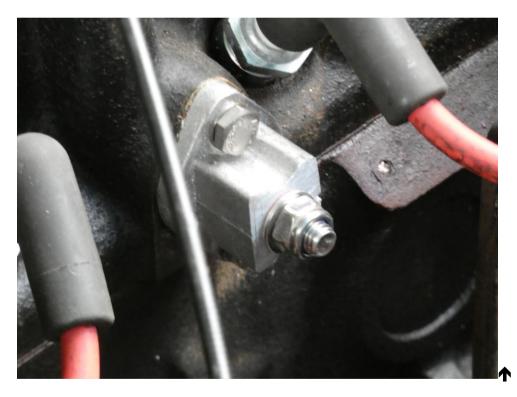
Once home I stripped out the old valve and found that the problem was the diaphragm had split; no way was I going to replace it with another substandard pattern part. To quickly retain the use of the car I blocked the heater pipe, cut the boss off of the old tap and sealed the hole with a stainless steel button cap screw, nut and fibre washer.



↑ No wonder it leaked.



↑ The temporary solution.



↑ It doesn't look too bad.

As a final solution I decided to keep my new water tap/heater valve simple and make a replacement tap from domestic plumbing fittings. In the event (as described below) that didn't work out.

The final solution:

Winter finally arrived and the first job was to take a standard tap off of one of my spare engines, cut the boss off and tap it to take my plumbing fitting, at that time I realised that the boss wasn't thick enough to take the larger thread of the plumbing fitting. A couple of days later we drove over to the MGB Hive and I asked the counter chap if he would show me the water tap gaskets for an MGB and an MG Midget. He turned out to be very helpful and asked me what I wanted them for, when I explained he went off and came back with

both gaskets, plus a Midget water tap and its aluminium boss. Comparing the two gaskets and the boss I decided that if I extended the holes in the boss the Midget boss would fit the MGB cylinder head.

Back home I elongated the holes with a round file, which reduced the hole distance to the MGB spacing, only one problem, the holes were now so close to the raised section of the boss that a normal hexagon screw wouldn't fit in. Back in the car again and a quick trip to my favourite nut and bolt store produced two socket cap screws (the black ones in the photo below).

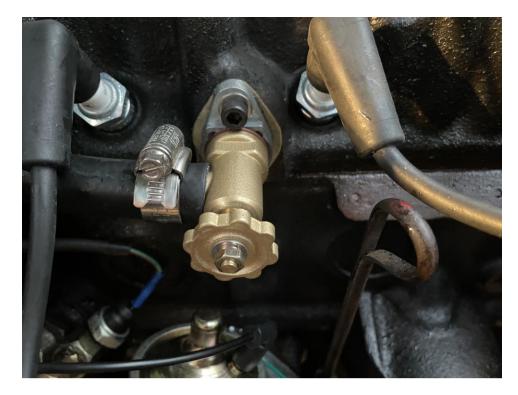


↑ The holes in the aluminium boss have been elongated.

After putting a flat on the end of two flat washers I carried out a trial assembly; that was ok so I assembled the tap to the boss, using a selection of different make fibre washers, until the outlet was pointing in the right direction when fully tightened. Next I screwed the boss to the cylinder head using a new MGB gasket and some Blue Hylomar.

The next problem was that the hose from the bottom of the heater radiator to the tap was just a couple of inches to short (I had cut the end off and blocked it off when I carried out my earlier bodge), not a major problem as I had some spare hose.

After about an hours work it was job done. I'm quite pleased with it but although I put some Copaslip on the screws I intend to replace them with some stainless ones (My nut and bolt man normally has them but Sods-Law meant that he was out of stock.



↑ The final solution.

The total cost was around £23, this was more than the cost of an original style pirate copy tap, but there's no point in fitting another one of those if there's a good chance it will cause another breakdown through a split diaphragm.