



Ever since I bought my 1985 +8 in 2019, I have had problems with excess heat in the footwells. Now I know that even with the large number of louvres in the bonnets, Morgans are prone to excessive heat coming from the fire wall, making it uncomfortable. But what we were experiencing was more than that.

On first inspection of the heater control valve, it was obvious a previous owner had problems with the valve not closing properly, given the large amount of Araldite on the outside of the valve (Figure 1). Definitely leakage into heater matrix and possibly other issues. So not wanting to disturb the proverbial hornet nest, I just adjusted the cable pull to ensure it was fully closed, and hoped for the best. This did make a difference, but not very much.

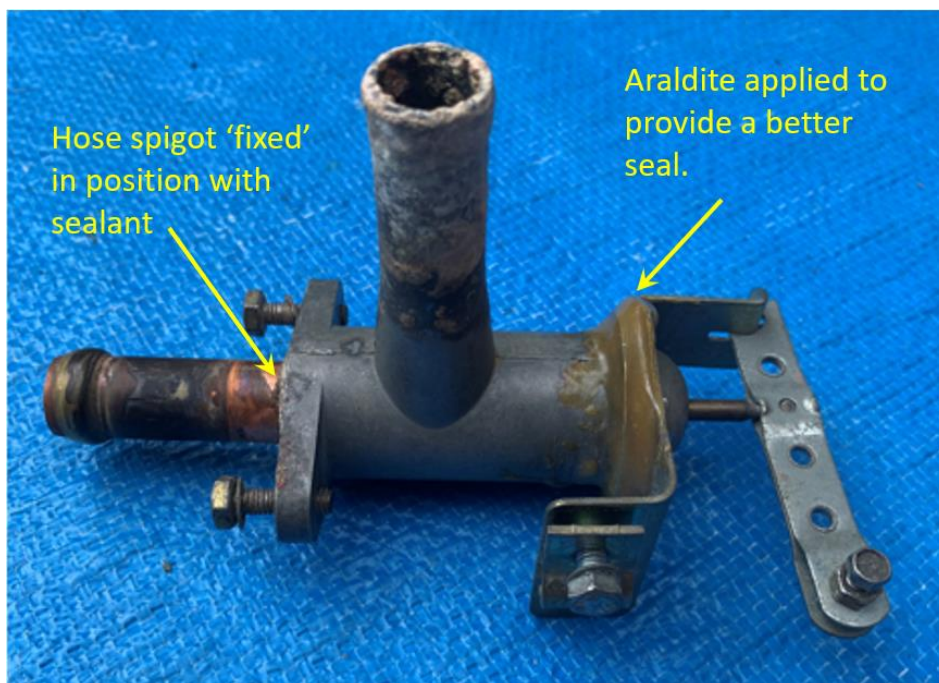


Figure 1

We persisted with the situation for a while and in an attempt for further improvement I made a plug to block airflow through the heater matrix. (Other owners have used the plastic lid from Vegemite or Peanut Butter jars, but in my case, they didn't fit). Again, there was some impact but not to the degree expected.

So, to the internet. A search showed equivalent but not identical valves were available but were very expensive, making a direct swap out of the question. Why this is the case I do not know. Maybe I was looking at the wrong websites. In addition, the valves that had the closest resemblance to the one fitted, still would have required some changes in hose routing and bracketing. As well as the fabrication of hose-tail to flange fitting, which I thought would be all too involved and messy. So, I went looking to see if there was something in the auto parts catalogues of Repco and other auto parts suppliers. At least I might save quite a few dollars. Again, there were a number of possibilities, but they all needed modifications to suit.

A route I was reluctant to take.

Other options were to replace the valve with a simple hand operated ball valve, and whilst this was the simplest solution it would require lifting the bonnet every time one wanted to change heater settings. Not really a practical solution. There was also the option of fitting an electrical solenoid which is a slightly more sophisticated solution to the hand operated ball valve enabling operation from the driving position, but that would render the cable pull redundant deviating away from the original set-up. Which I wanted to avoid.

This left me with having a go at repairing the existing valve.

It looked to be reasonably straight forward and eliminated the negatives of the previous options. Now it needs to be pointed out that the original valve is a non-serviceable item, so care and cunning needed to be applied. If I failed, then I guess nothing really was to be lost.

The tricky part is that the valve is held together with four swagged lugs that fit through the end cap. These needed to be loosened. So with the assistance of a Dremel and a small cutting disc, I was able to remove just enough of the lugs to gently prise the valve apart, taking care to leave enough for re-assembly (Figure 2). Of course this was after removing the Araldite. The pipe connection at the other end was similarly glued with Araldite and came apart reasonably easily.

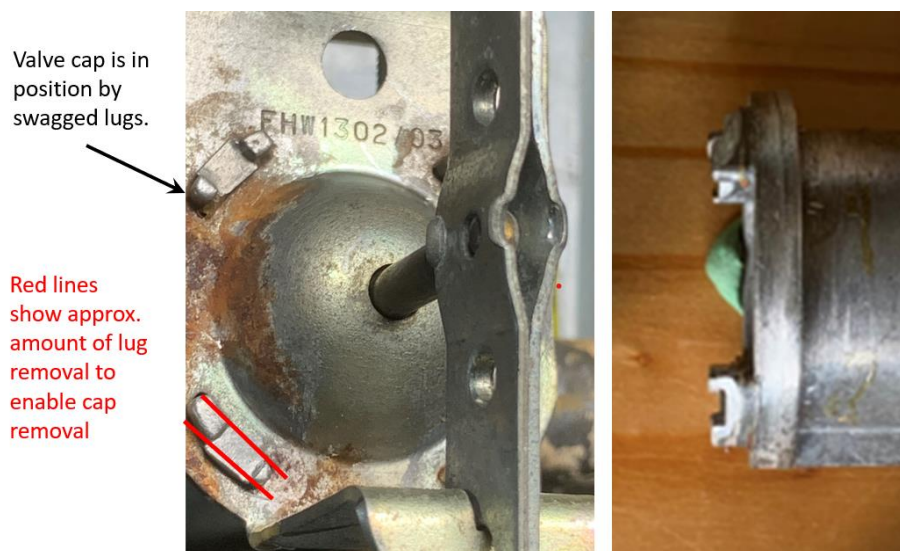


Figure 2

Further dismantling revealed the inner components of the valve (Figure 3) and on close inspection, a groove at the end of the actuating spindle, suggested a circlip for retaining the seal plug, was missing. This was most likely due to corrosion and could have been the main reason why the valve did not seal off properly.

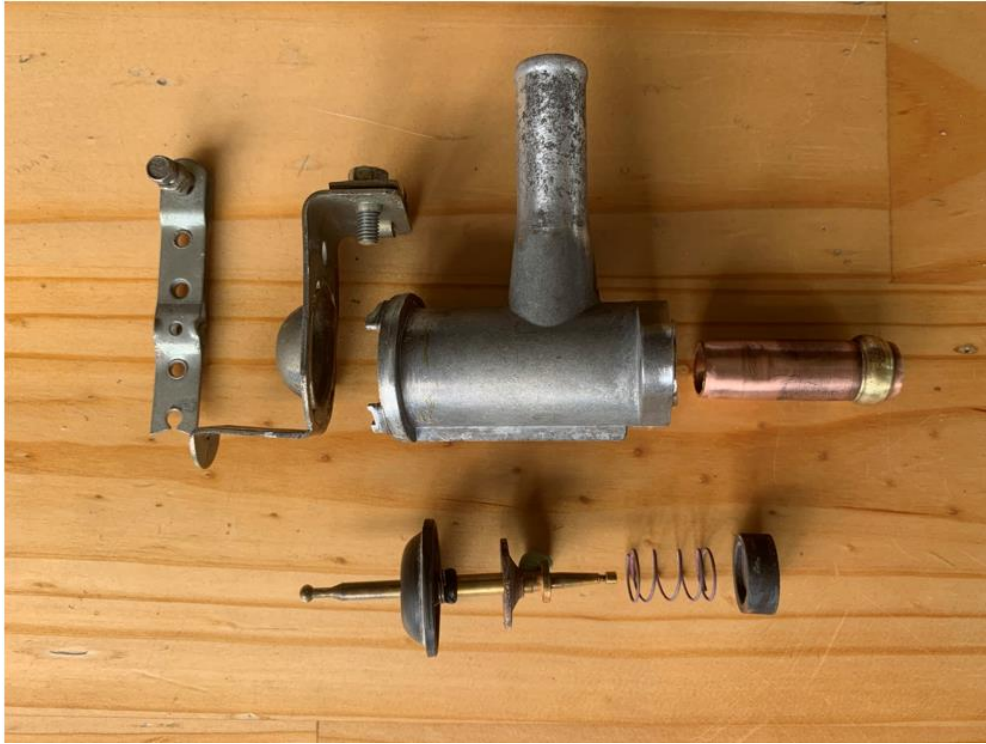


Figure 3

I then proceeded to:

- clean everything
- faced the seal ridge inside the valve body to remove any pitting due to corrosion
- flattened the end cap sealing surface (It was slightly distorted on removal)
- refitted the copper tube with Loctite
- re-assemble the plug seal onto the actuating spindle and secured with a twist of fine copper wire. (How long this will last remains to be seen).
- apply rubber grease to the end seal diaphragm
- re-assemble the valve; clamp the end cap in position & swage the lugs with a nail punch & hammer
- re-fit back into car (Title Figure); connect cable pull and ensure pull knob fully closes the valve
- test & confirm operation.

I'm really happy to say that all worked well and on an extended Club run both the passenger and driver experienced a much cooler day than ever before.