

Heating and Ventilating the Wooden Chassis Marcos

When Isobel asked me to write an article I considered repeating my usual tirade against casein glue in chassis repairs, but I have already written it up three times so why repeat the exercise?

All Marcos between 1964 and 1970 used the same basic heater system; contrary to contemporary road tests where improvements were often vaunted, it did not basically change. Most Marcos improvements centred around making the car cheaper to produce.

The basic design is a Smiths heater matrix located in the cross beam behind the dash. This was fed air from a convoluted hose located below it and running through the engine bay from the fan, air being distributed through an outlet below the screen and to the footwells via small convoluted pipes running behind the glove box and the speedo. Controls comprise hinged flaps to the footwells and an inline flapper to the main ducting, whilst there is an 'adjustable' water control, bulkhead located on earlier cars, engine-mounted in the case of the V6 Ford. The air to the system is 'encouraged' by a Smiths electric fan, an axial type mounted close to either wheel arch in early cars; the centrifugal 'snail' type generally located in front of the radiator in post-1968 cars.

As we all know, Marcos owners are inveterate tinkers, usually to the detriment of the car and even I will admit to moving the footwell supply further forward in an 1800 I rebuilt in an attempt to warm my toes. Unfortunately the most common improvement seems to be to simply forget to put back the fan and main convoluted hose - it results in a tidier engine bay if a somewhat smelly and dirty cockpit! The plastic hose is a tight fit in the 3 litre and tended to break up anyway: I made a great deal of pocket money in the 1970s buying the hoses out of Imps in a West London scrapyards and flogging them to Rory - until he discovered he could buy it new!

Anyway, to work. Where do you get the bits now, almost 40 years since the car was designed? 'Snail fans', which are more efficient and quieter, are a cinch as I discovered accidentally. I was trying to find a couple of flapper valves for my 1800 and 1600 and asked Rimmer Bros if they could help. They duly faxed back a catalogue page from the Triumph Dolomite range illustrating the valve attached to a snail blower. The price seemed reasonable and I ordered two flappers: three days later a huge and heavy box arrived containing the two flappers still attached to two steel cased snail blowers together with an indispensable item - a 90° rubber connection - the latter lending itself admirably for connecting the hose to the bottom of the heater matrix, an item Marcos were never able to take advantage of.



Figure 1 - 90 degree connector with large diameter convoluted hose

Incidentally the snail blowers used by Marcos were always a rather brittle polystyrene which was vulnerable and difficult to repair: for years I have used an aluminium case from an A40 but the units from Rimmers are steel and also come with a somewhat BL-looking cardboard rheostat, which I assume with a suitable switch gives a 2-speed facility.



Figure 2 - Dolomite snail fan

The axial fans are more difficult. I have owned four pre-1968 cars but they have all come without fans or the fans have been incinerated (thinks, do Marcos catch fire easily or is it just unhappy owners and a box of matches?). An obvious fix is to use a 'snail' type fan but if you want the car to look original you will need to find one. I do not even know what other cars use them but I recalled that the Hillman Imp used a similar device in the deluxe version with a plain fanless adaptor in the standard Imp. I called on a friend of mine who collects Imps and has a shed full of spares: he gave me both types of unit and I found that with some drilling and filing I could join the two face to face and make a passable Marcos unit. Better still, the Dolomite flapper valve fits straight on; it's a little longer than the original but it is quick and cheap and can be shortened. A couple of wrinkles: the 1800 fan is strapped to the top of the subframe on the passenger side, the hose is extended to fit onto a fiberglass scoop behind the nearside sidelight, later cars simply took the air from beside the radiator on the driver's side which is probably just as effective.



Figure 3 - Axial fan from Imp components with Dolomite flapper valve

There are a few modifications to the Morris Minor matrix but your car should already have these. Within the case, which is held together by four spring clips, there should be strips of foam to stop the air bypassing the matrix (after 35 years it won't), and you must seal around the hole on the chassis below the casing to stop dirt and noise. Both the air and water control cables should be available as BL Spares. It is worth trying David Methley for the early parts because the racers tend to chuck the stuff beloved by true Marcos enthusiasts straight into the skip!

The footwell flappers are probably only available in scrapyards. I took a handful from the Marcos skip a few years ago but the connectors which fit behind the dash can only be obtained through KL Automotive of Denby Works, Ripley, Derbyshire (01773 740255) and are in steel, not aluminium.

One of the most irritating aspects of Marcos dash-mounted heater controls is their propensity to pull out of the panel as the birch ply delaminates, mainly because they were originally meant for steel panels and the ply has been severely recessed to allow for the short lengths of screw thread. This applies particularly to the later cars with Ambla-covered dashes on birch ply. The temptation is to start messing around with washers: don't bother, simply cut ply discs of the requisite thickness and diameter and Araldite these in flush. This is quicker and stronger as it should be because, as we all know, wood is best!

Footwell ventilators, connector available from KL Automotive.

Richard Falconer