Replacing the heater matrix

NB. The following describes this task based upon a 20v/vt coupé. The author is unsure if exactly the same procedure applies to the 16v/vt models but it is fair to assume that it is similar however we accept no responsibility if this turns out to be incorrect.

Note: this guide was compiled retrospectively so there are no actual destruct photos but it clearly shows all the components and it's pretty obvious what you need to do.

Step 1: Drain coolant. Best place is the lowest hose connecting to the radiator on the left hand side of the car (as viewed from the driving seat). Note: due to the position of the matrix you'll end up with coolant still in it and the hoses to it so if possible park facing downhill a bit as it might help.

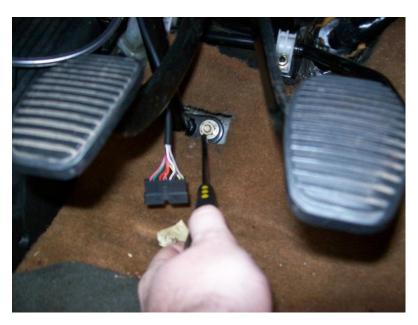
Hose to radiator



You don't have to take the fans out, this is just a suitable photo used to illustrate which hose is meant.

Step 2: Drivers footwell. The crash bar that supports the steering column has to come off. This is one 13mm bolt at the bottom and a 6mm hex key for the bolt at the top. I took the bottom part of the cowling off the steering wheel to help me see what I was doing but you might get away with not doing that (it's about 5 Philips head screws).

<u>Nut</u>



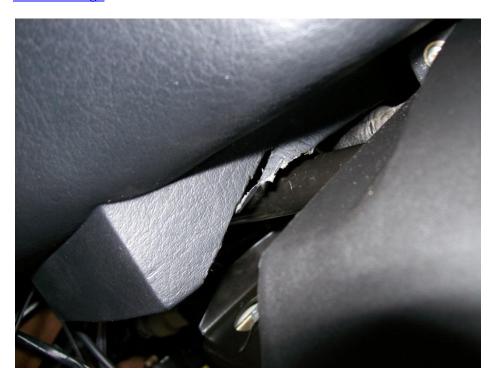
<u>Bolt</u>



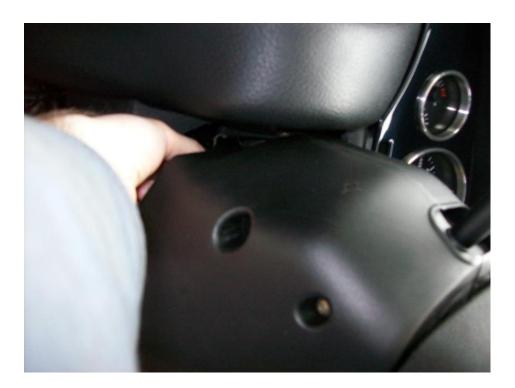
Screwdriver pointing to the bolt. This is lying under the steering column looking upwards, on the side towards the centre of the car.

Then you need to twist/manipulate the bar out the way. It's pretty tight and rather than mess about for ages I just trimmed a little off the dash to make it easy:

Dash trimmage

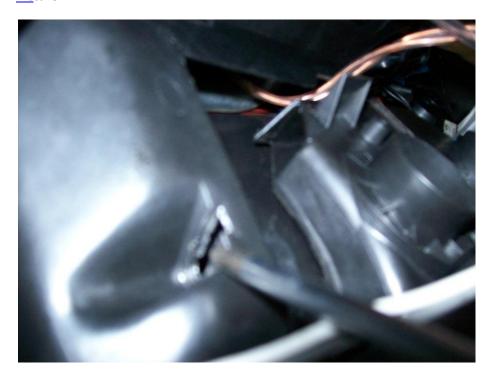


Wider angle



Step 3: Remove the plastic cover for the matrix. This is simply 2 Philips head screws. This plastic section runs right round the back of the dash but it's nice and flexible so you can bend it out the way.

<u>Pic</u>ture:

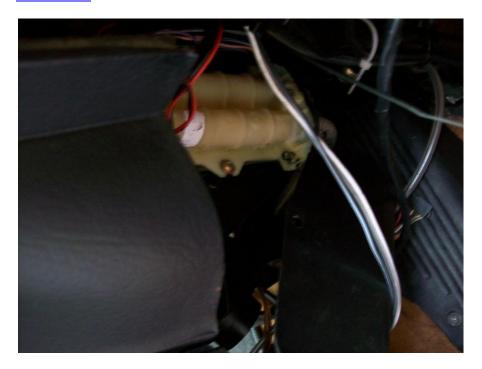


Plastic cowling pushed out of the way

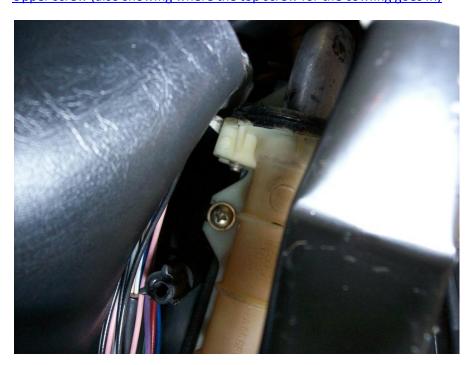


Step 4: Release the matrix. It's held on by another screw at the top (the one at the bottom through the cover also holds the matrix in place) and then it's held on to the pipe-work by 3 x 10mm bolts.

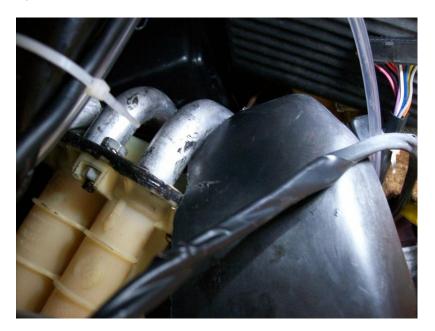
Lower screw



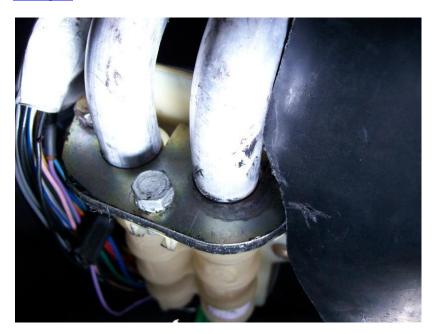
Upper screw (also showing where the top screw for the cowling goes in)



Pipe connection



And again

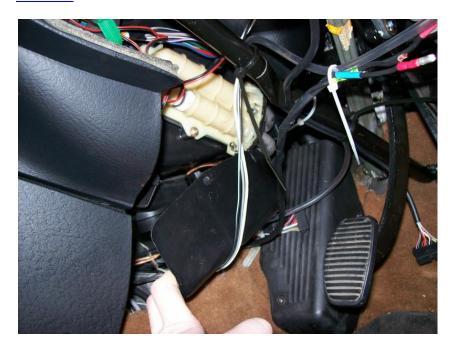


Step 5: Once the bolts are off the pipe connection, pull them out. They're not too tight, using a large screwdriver with a gentle amount of leverage to get them moving. There's quite a bit of play available in them once they're off which will allow you to move them downwards out of the way of the matrix. But note that there will be good volume of fluid released so you'll need a towel or something to soak it all up.

Once the pipes are released then you can simply pull the matrix out. That's it really. Replacement is just that lot in reverse. Best bet is to replace the o-rings at the same time and you might like to replace the metal retaining plate and metal bushes, Fiat part numbers;

Matrix: 46721967 O-rings: 7792369 Bushes: 46721979 Plate: 46721978

Overview



It has been found that even with new o-rings the joint can still leak so you may consider it worthwhile applying some silicone sealant for good measure.