

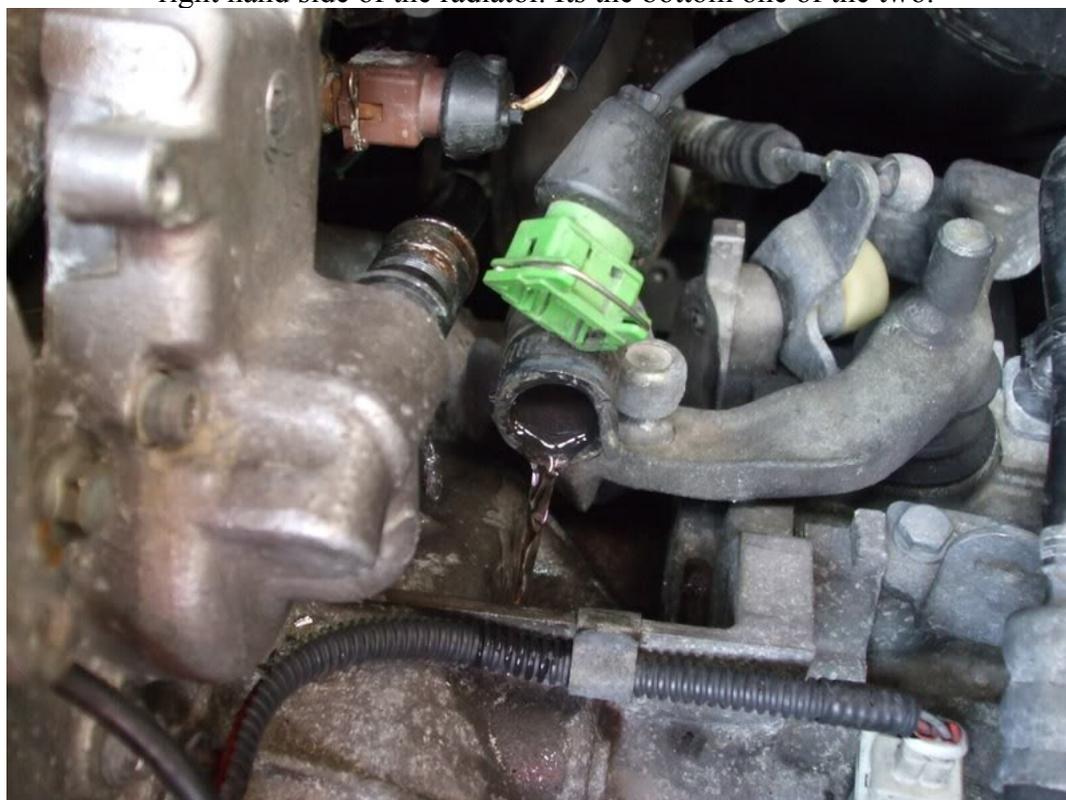
How To: Thermostat change - D8 V6 194bhp

Firstly, take off the Air Filter hoses and connectors and lift off. This leaves you with this workable space....

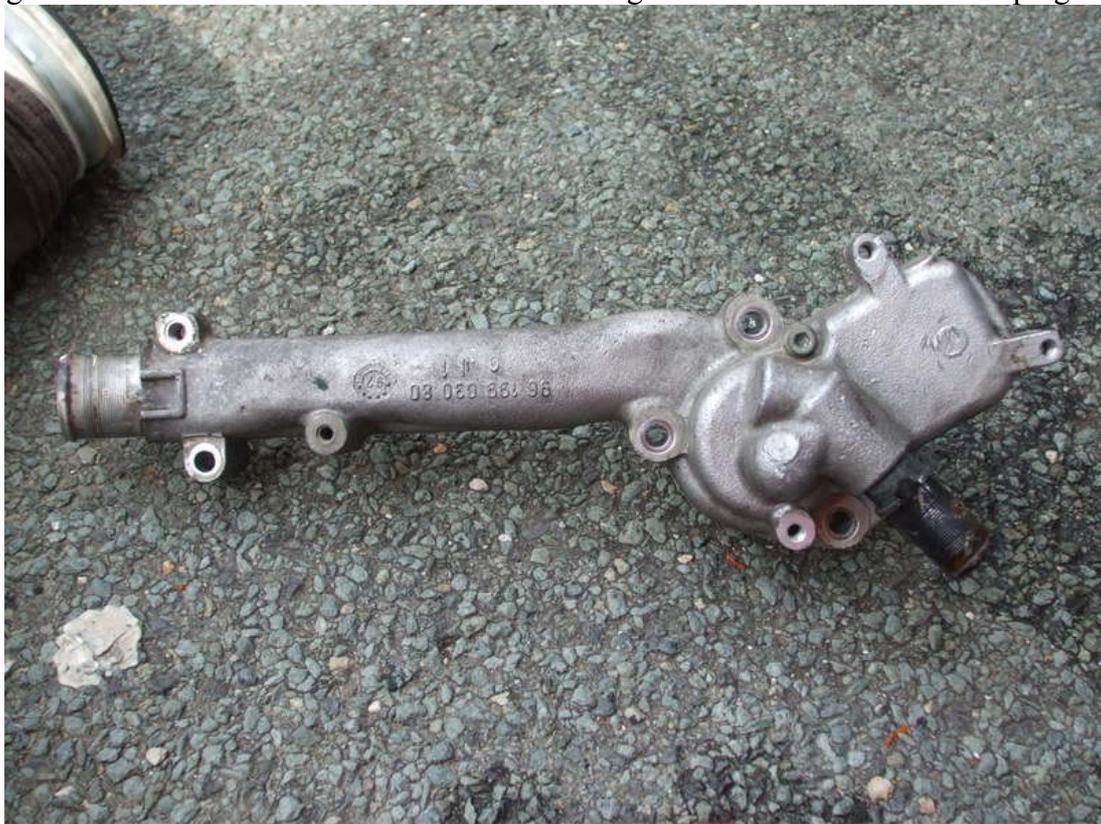


I started with taking the two bolts out of the cable holder at the front of the engine because there is a 10mm Thermostat casing bolt UNDERNEATH this cable holder.

Then i took off the hoses. There is one at the back on a spring clip (which i changed to a screw clip), and the big one on the right hand side of the radiator. Its the bottom one of the two.

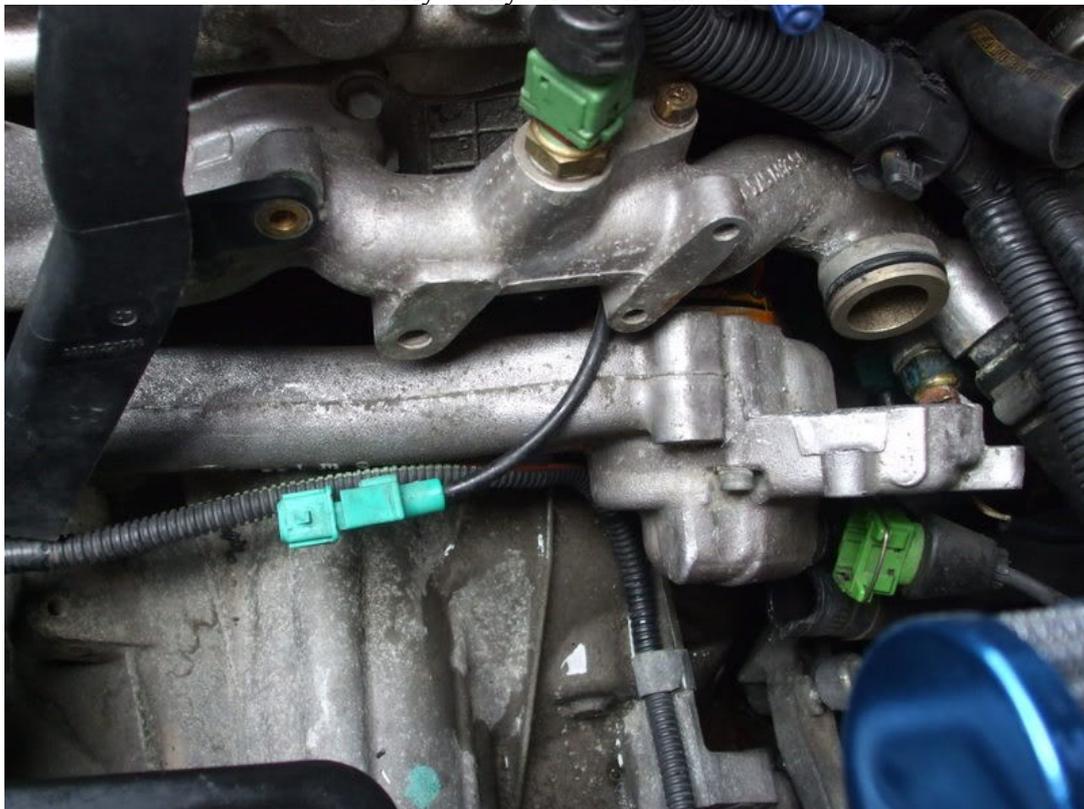


Once the hoses are disconnected water will flow! There will be about 4 litres come out! After this start taking off the bolts. There are 3 on the main casing, one at the bottom of the casing near the radiator. There is also a cable holding plate at the top of the housing that need to come off. There are 2 bolts holding this on. Mine was black. Unplug the connector too!!



There is however, a black bar on the underside of the Thermo casing towards the back of the engine. It holds a bar on. I bent mine back with a screwdriver. Its important to get this off as on of the main bolts that holds the casing on, is UNDERNEATH this. So it has to come off!

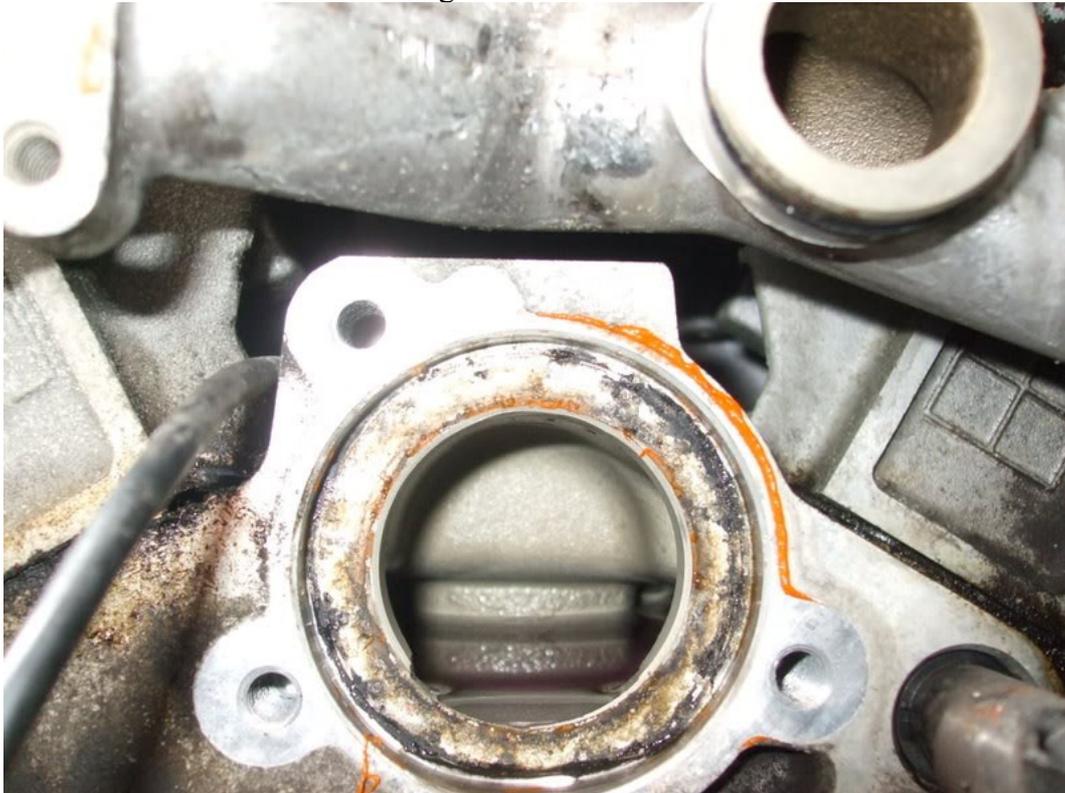
If you hold the casing from where the hoses come off you can rock the casing free once the bolts are out. There are 4 (?) bolts that connect it to the engine. It might take a bit of leverage with the screwdriver at the top of the casing. Mine came out fairly easily and looks like this...



Once off inspect the casing and clean if necessary. Mine had bits of rust like debris in it. The Thermostat will take a bit off riving to get off. I used a flat screwdriver and dug it into the seal. It did damage it a bit but don't worry about that. Don't be too rough though in case you Thermostat is OK and can be re-used. The inside of the casing with the Thermostat out looks like this.....I had already put my new seal in here though.....



And this is what the engine looks like with the Thermo out....



I gave both sides a good clean and where the seal sits a very thin coat of liquid gasket....



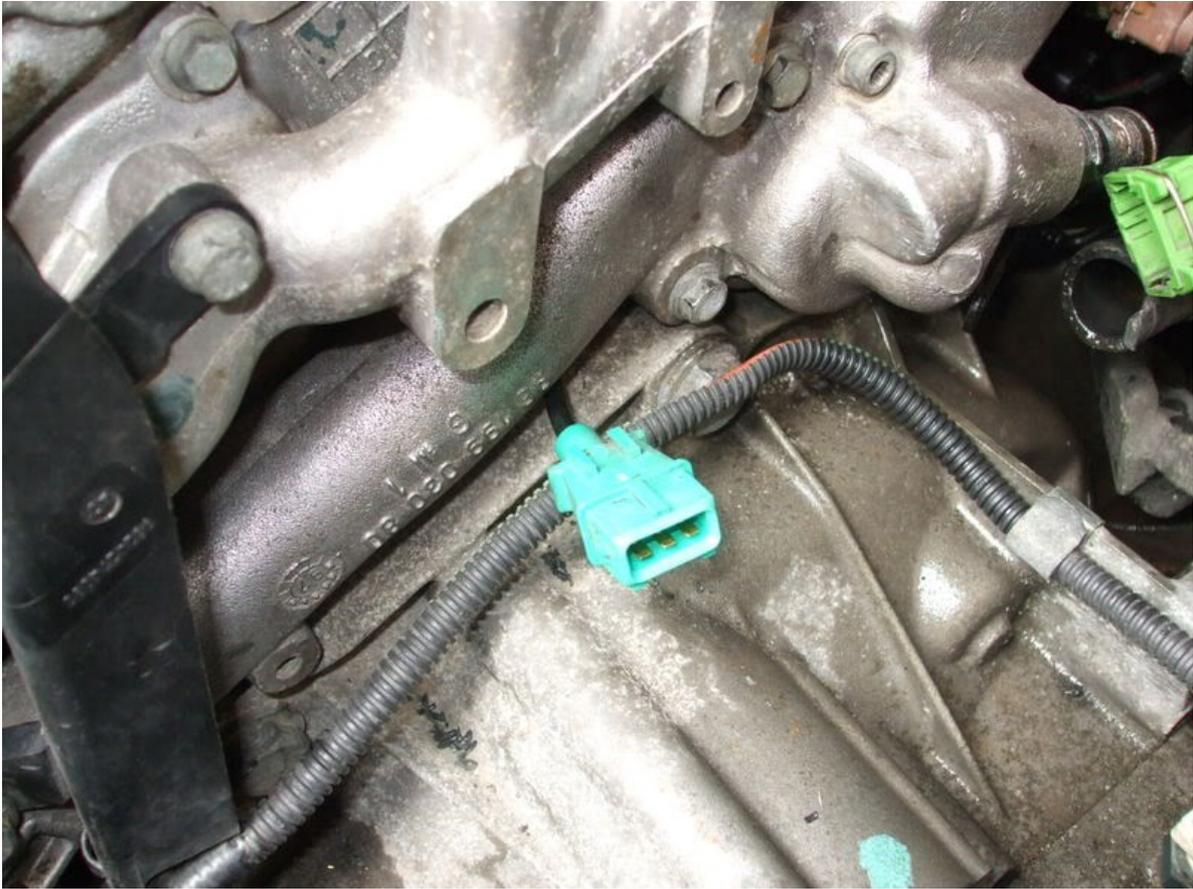
Place you seal in and give it a bit of a light tap to make sure its in. You will know when its in.

Basically refitting is a reversal of removal. Don't forget the bolt at the bottom of the casing UNDER where the black rod goes and don't forget the bolt UNDER the plastic cable holding at the front of the engine. These two are important as they hold the casing to the engine.

Give the casing a tap at the back on the topmost part of the casing to make sure the seal is good on the other bit of the housing.

Tighten up all the bolts and place the black cable holder back in place. RECONNECT THE GREEN CONNECTOR! Don't forget this!

One thing to think about after the green connector is unconnected and hanging, is when you put the Thermostat casing back on. I made the mistake of just putting the casing on. The cables should go ON TOP of the casing...not in between as pictured here.....otherwise you will not be able to connect them. It will be about 3 inches short!!.....



If it turns out short, you will have to take the casing off again!!! I had to! DOH!

Right, after all the bolts are tight, green connector connected, hoses in place and tightened you are ready for bleeding.

I used the empty bottle trick. A Fanta Zero bottle is perfect with a bit of tap added! I also blocked the overflow pipe.



Provided by 406 Coupe Club There are 4 bleed points on the D8 V6. <http://www.406coupeclub.org>

One is on the radiator itself on the right hand side. This needs turned quarter of a turn to open/shut.

One is at the back of the engine above the heater matrix. Looks like a tyre valve on top of one of the hoses! I took mine right off to bleed and put it back on when it was air free.

There are 2 brass screws on the Thermostat casing. These are easily visible. You will need a Alan key or a T20 star drive socket like i used!

Once the bottle is on top up with water or coolant...or a mixture of both. I knew my water had lost loads in previous attempts so i just used coolant. It should take about 4 litres in total but will need topped up.



Place the bottle in and fill. Then start your engine. I had the GF sit in the car and hold it at 2000rpm. You will see the bubbles coming already! Rush to the front of the car and open the Radiator bleed point by a quarter turn. Nothing should come out straight away. Wait until it does come out and runs free of air. Now shut it and move to the bleed point above the heater matrix!

I took mine off fully and let it run until it ran free of air then put it back on tight. My GF was watching the bottle and beeped the horn when it was going down. I added a bit more water/coolant.

Then i got the Star torx bit and loosened the bleed screws on the casing. There are 2 and you will see it bubble. Once it seem to stop bubbling close it. Applies to both.

So all bleed points have been bled but there might be a bit of air still in the system. The GF then revved the engine quite hard for a few seconds. There wa a lot of bubble action! When it seems to reduce or stop go back to the Radiator bleed point.

Open it by another quarter turn. You should see the bottle start to empty. This is OK because you dont want to flood the engine bay when you take off the bottle!!

Turn off the engine and put the Pressure cap back on. Water might still reduce a bit so put some in the car! TAKE OFF THE CLAMP ON THE OVERFLOW...if you fitted one!!

I took mine for a 2 min drive then came back. I loosened the pressure cap carefully. Please be careful doing this as it COULD be hot. Mine wasn't so i took it off completley. The Header tank took about another litre of water/coolant.

Seems to be running a lot better and its only cost £2.75 for a new seal and about an hours work in total. I'm OK with mechanical work but am not a Mechanic. If i can do it, i'm sure you can