

3) Either remove the fuse for the HPFP or tape the driver's side door up to prevent it from being opened (opening the door will prime the fuel pump and spray fuel all over you = not good)

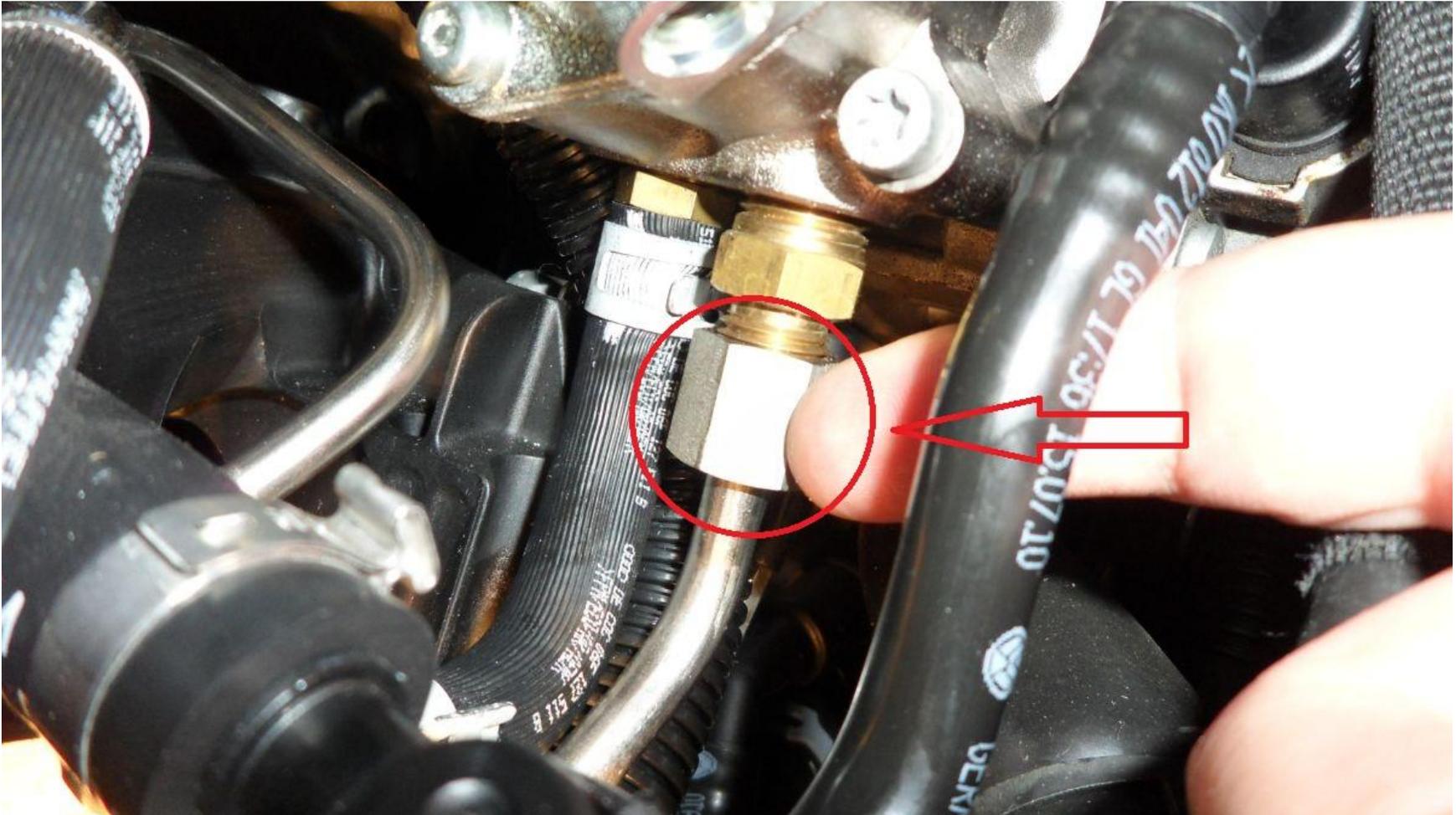
4) Remove black screw cap from right side front of the HPFP.



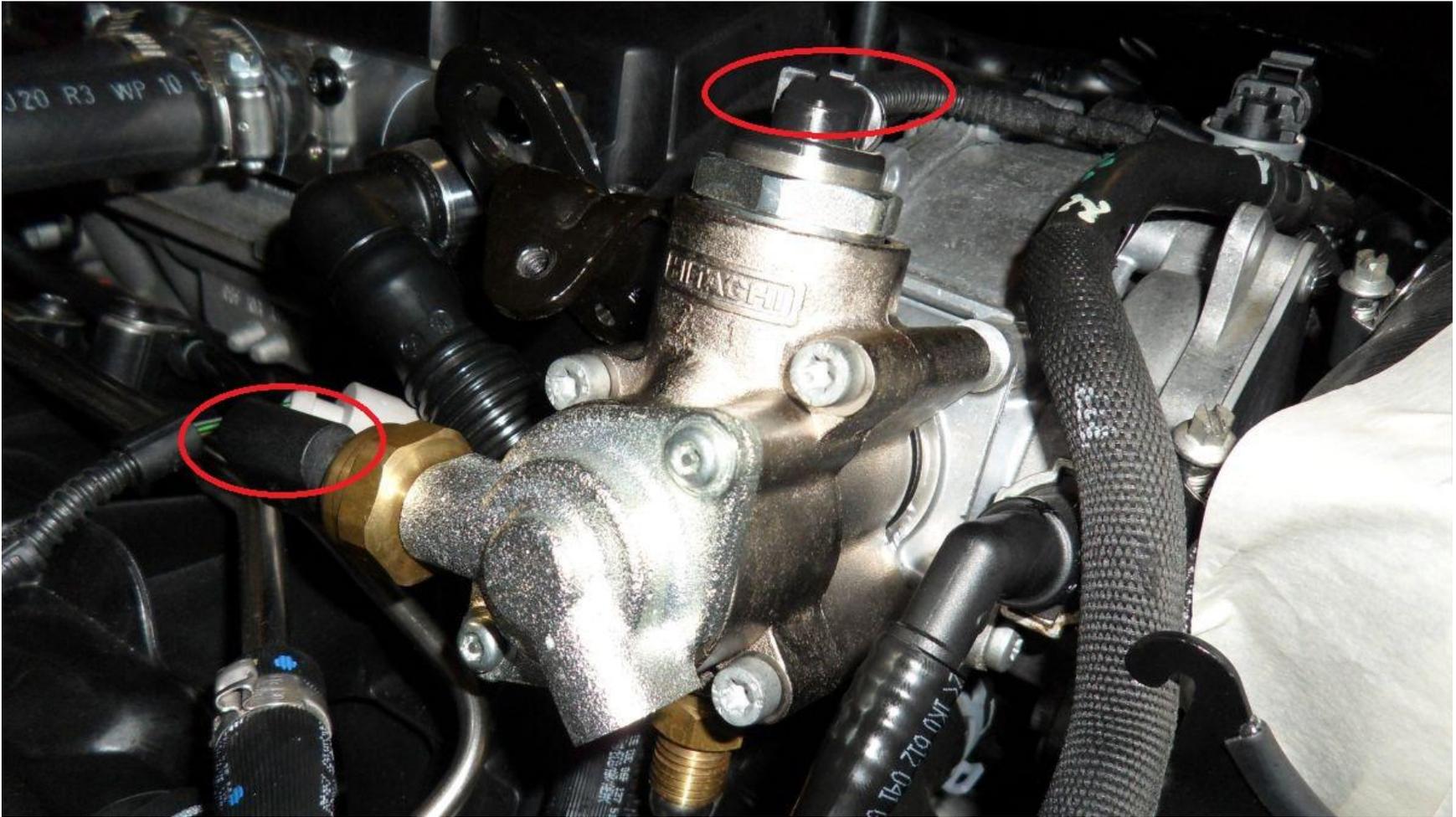
- 5) With the black plastic cap removed, stick a screwdriver gently into this valve to relieve the fuel pressure and allow excess fuel to drain out. (the pressure relief valve is like the valve you find on a car or bike tyre). Having a clean rag handy to wipe up the fuel is a good idea.
- 6) Once the fuel pressure is relieved, remove the valve altogether from the HPFP body with a 14mm spanner.



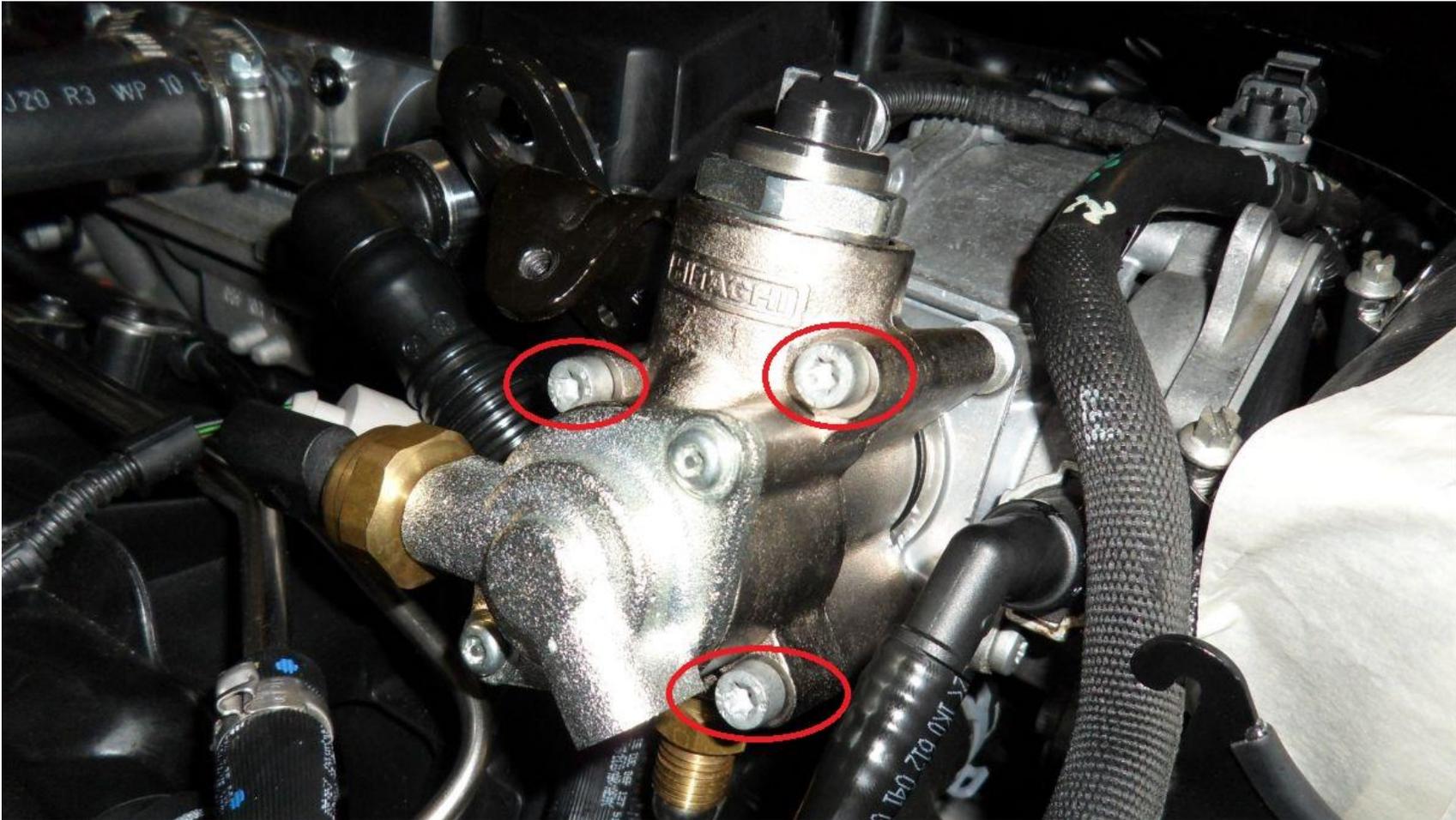
7) Using a 17mm spanner, crack and undo the silver high pressure fuel line leading into the bottom of the HPFP. Undo the nut completely and slide it back out of the way.



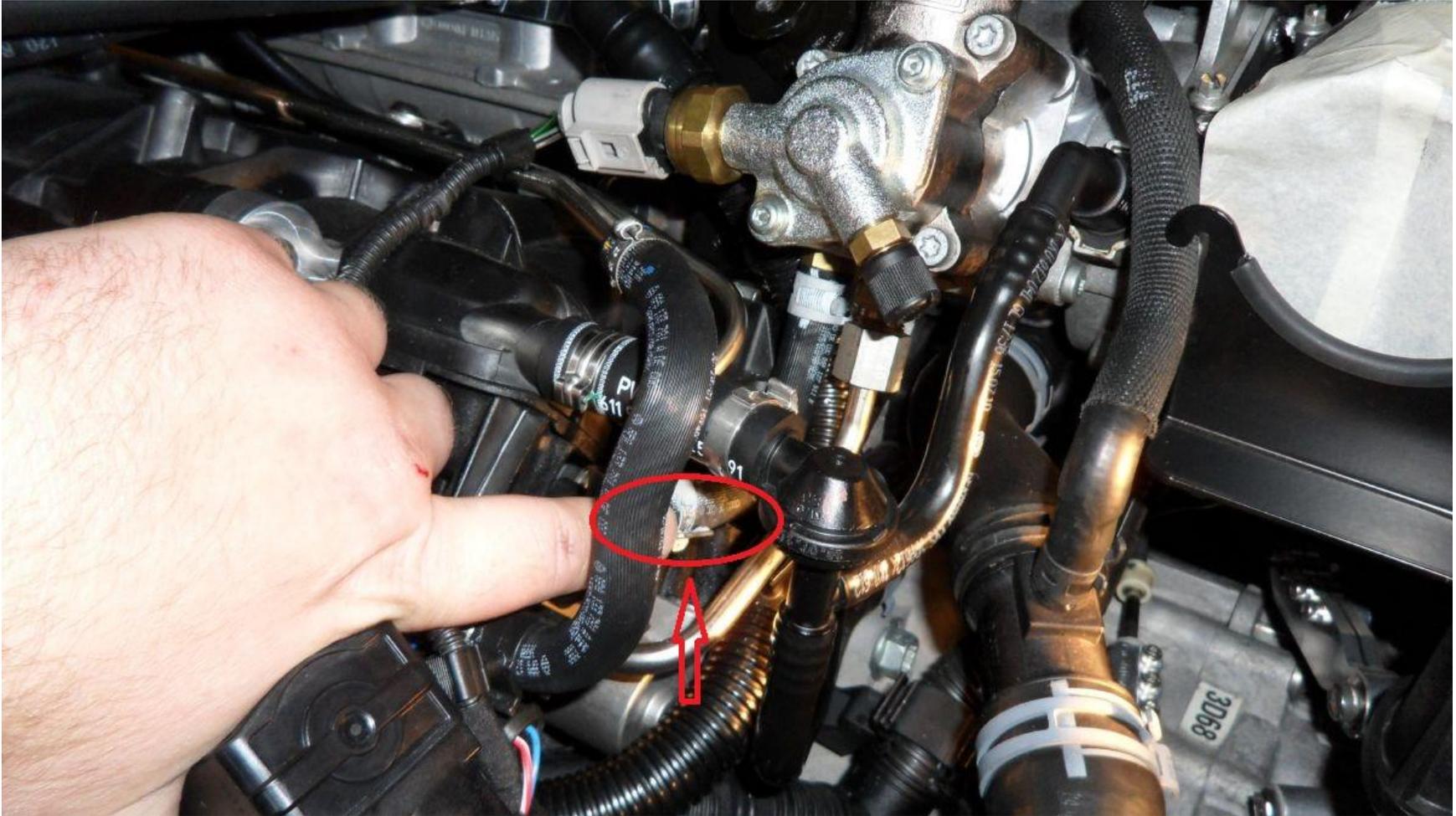
8) Unclip the black switch from the top of the HPFP and the cream coloured one from the side of it and move the connectors out of the way.



9) Now you will have access to the 3x T30 bolts which hold the HPFP into the engine. Loosen these and remove them.



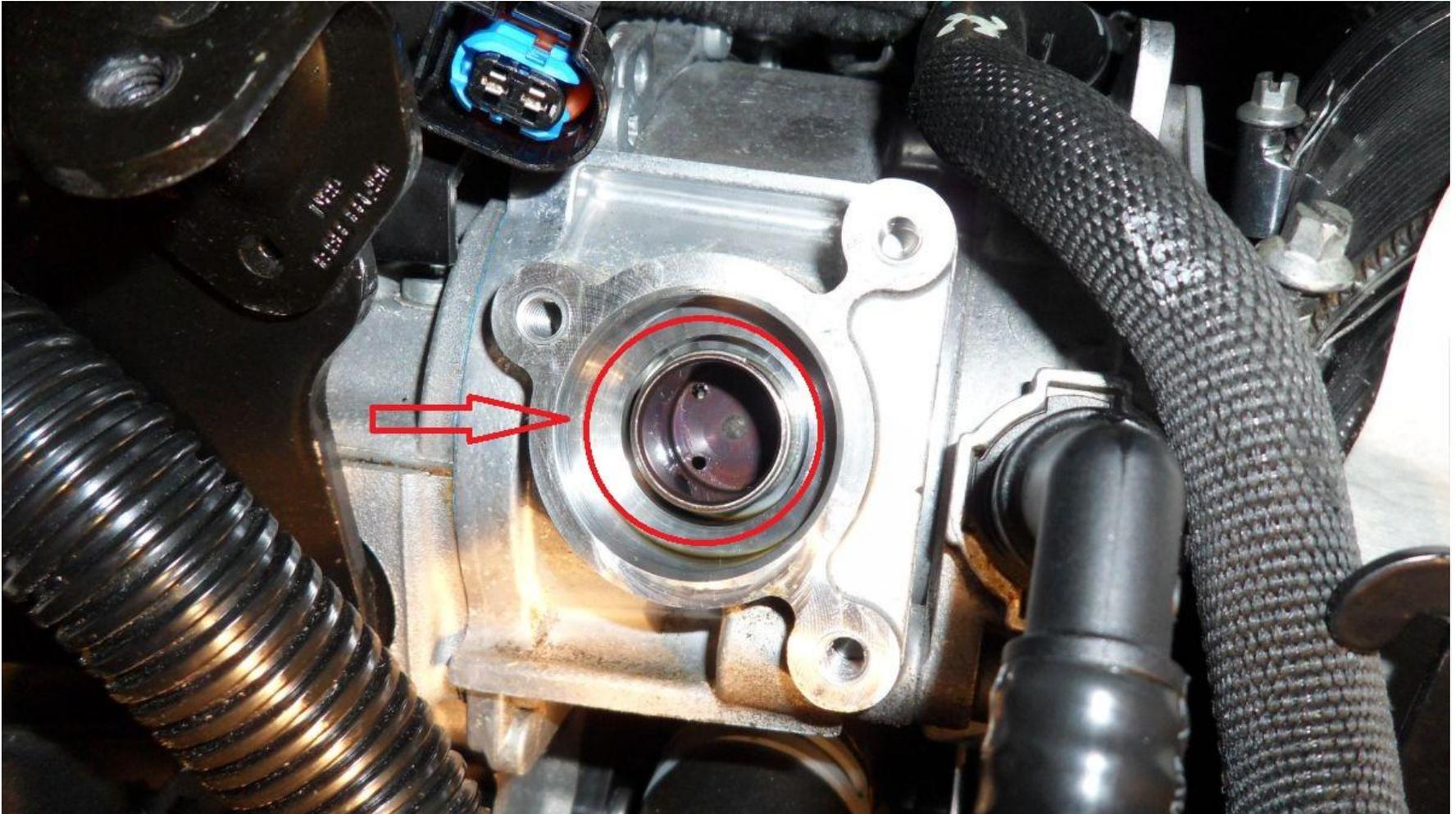
10) You will now have to remove the rubber fuel line leading into the bottom of the HPFP. In my case, I found it easier to undo the rubber line where it joined into the silver fuel lines back near the inlet manifold (rubber hose is only 10-15cm long) rather than directly at the HPFP as there isn't much room.



11) Once the rubber hose is free, you should be able to slide the HPFP assembly out and away from the engine.



12) With the pump removed, you will have access to pull out the cam follower and inspect the level if wear on it. In my cars case, the 10,000km its travelled has not created any wear to worry about on the cam follower.

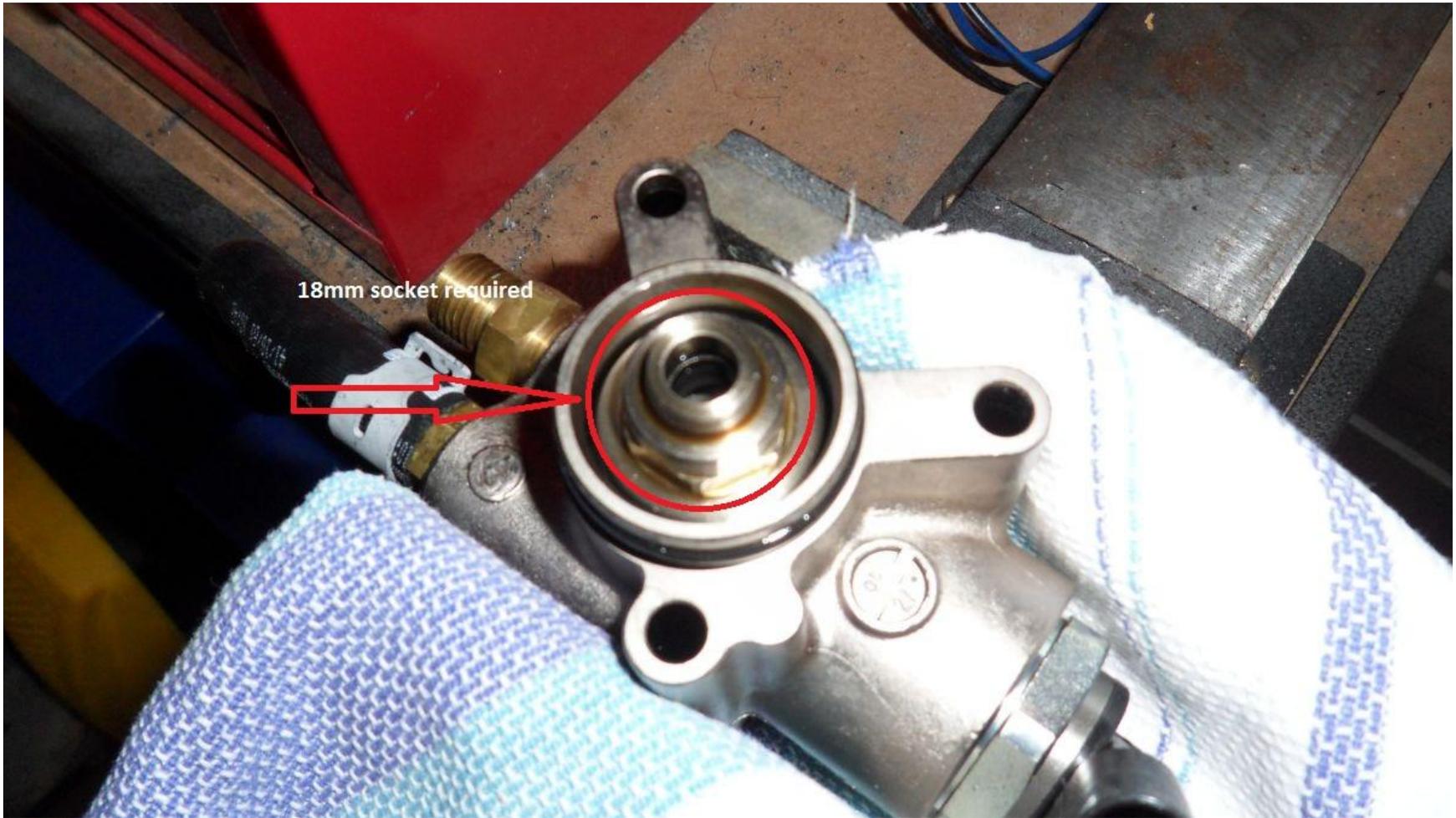


13) At this stage, I would suggest taking a photo of the stock HPFP to refer to at the end of the rebuild.

14) Take the HPFP over to a vice and secure it with the spring and piston facing up towards you (I put a clean rag around the pump to prevent scratching it with the vice). Pull directly upwards on the spring and piston and it will pop off. Place these safely on a clean workspace area.



15) With the spring and piston removed, you have access to the 18mm nut which needs to be removed. You can do this with a standard 18mm socket now, but you will need a long 18mm socket to put it back on later.



16) With the 18mm nut removed, you can now remove the stainless steel seal holder and cylinder. Place the cylinder with the spring and piston you removed earlier.



17) You should now have the following items removed from the HPFP. The only parts we are going to re-use are the stainless steel seal holder and the spring.



**Cylinder**

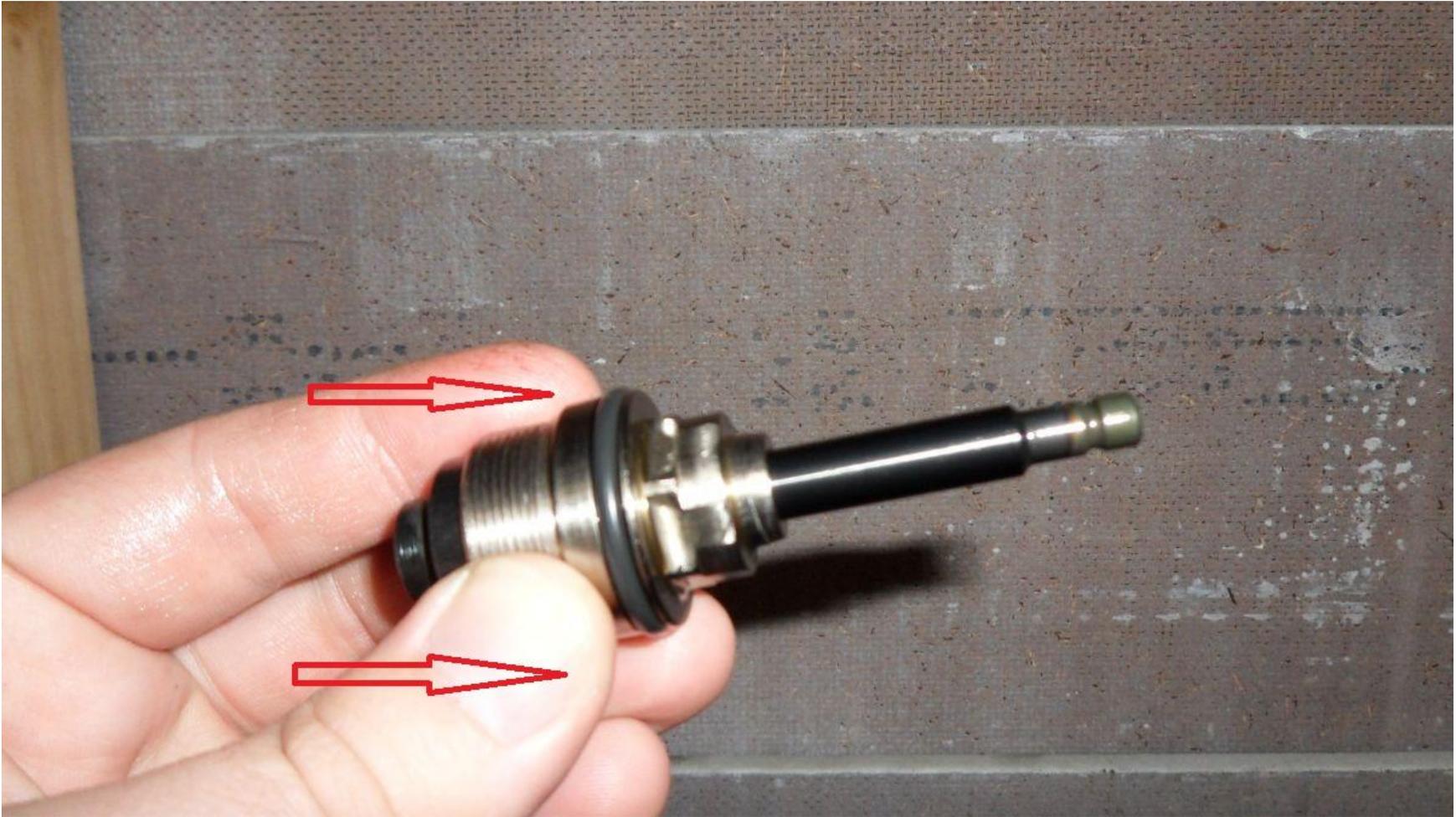
**Stainless Steel Seal Holder**

**Piston, spring & retainer**

18) Now, working in a clean environment, get the new Autotech components (piston, cylinder, spring retainer and guides) out of their packaging.



19) Ensure the Autotech piston (notice the thickness difference from the OEM piston) is clean and free of contaminants by dipping it in petrol before inserting it into the stainless seal holder. Insert it from below (the threaded end of the stainless steel seal holder) as shown by the arrows in the pic below.



20) Next, place the cylinder over the piston from the bottom of the threaded stainless steel seal holder. if you look closely at the new cylinder, you will see that one end is a larger diameter than the other. Ensure the end with the larger diameter goes into the stainless steel seal holder. (this is also easy to identify as the larger diameter end also has some holes drilled into the cylinder.)



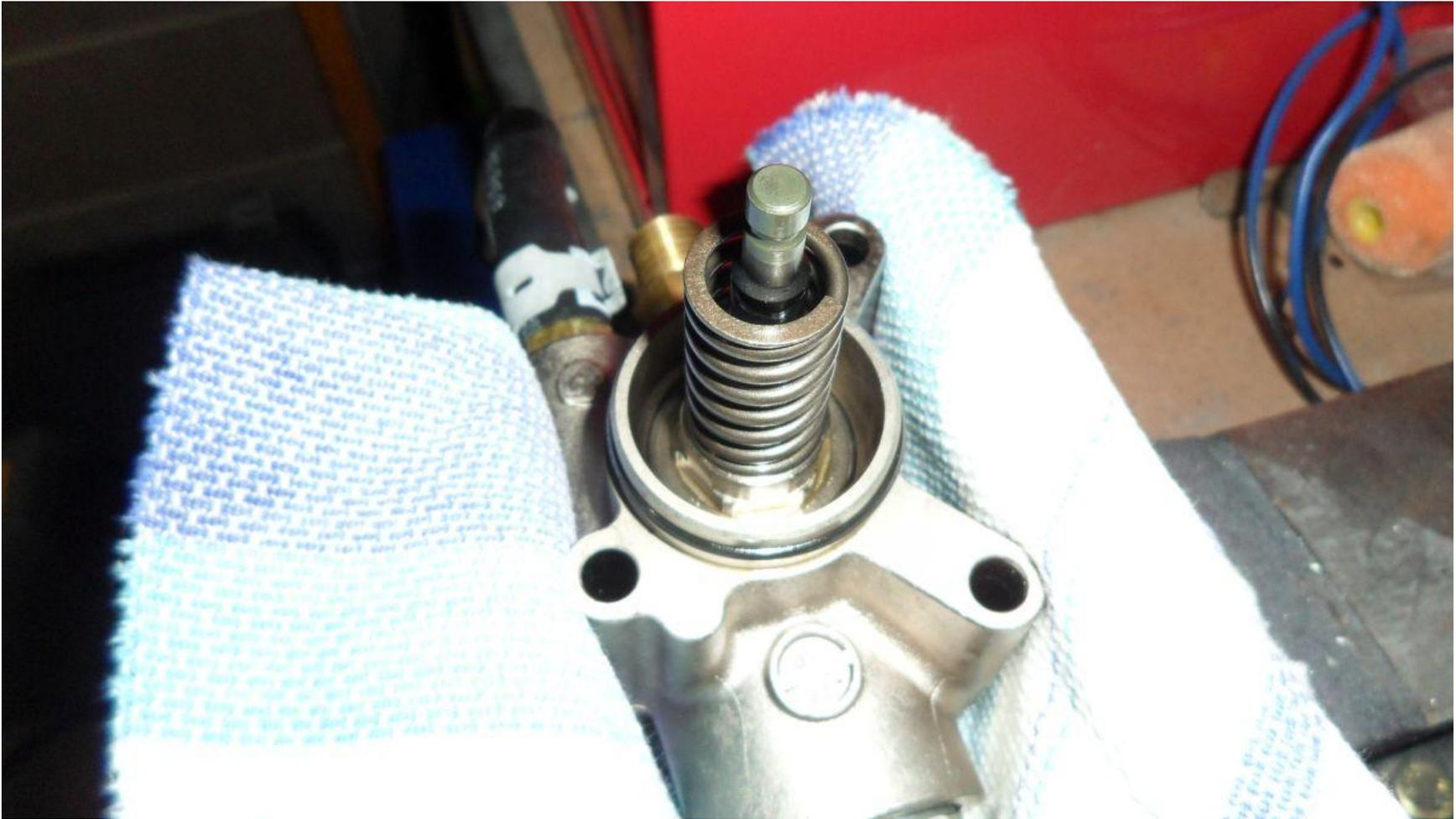
21) We will now put these parts back into the HPFP body. Lubricate the rubber seal on the stainless steel seal holder with some clean engine oil. Just use your finger to rub the oil onto the seal. Insert the parts back into the HPFP body.



22) Clean the 18mm nut you removed earlier and also clean the 18mm long socket you are about to use to tighten the nut up (this is to ensure no pieces of dirt fall into the HPFP during re-assembly). Tighten the 18mm nut up



23) Now clean the spring you removed earlier by dipping it in petrol. Lift the piston up as far as you can out of the HPFP body. Click the spring back in place over the top of the piston.



24) Now fit the titanium spring retainer over the top of the spring. Push down on the retainer/spring slightly (a few mm) and insert the 2x black retainer keepers. Make sure these are placed evenly and are flush with the top of the retainer.



