

AIRTEC Fitting Instructions

Vehicle:	BMW E90/E92/E93 M3
Product:	Power Steering Cooler
Part number:	ATMSBMW19



Kit Contents:

1x AIRTEC Motorsport Power Steering Cooler	
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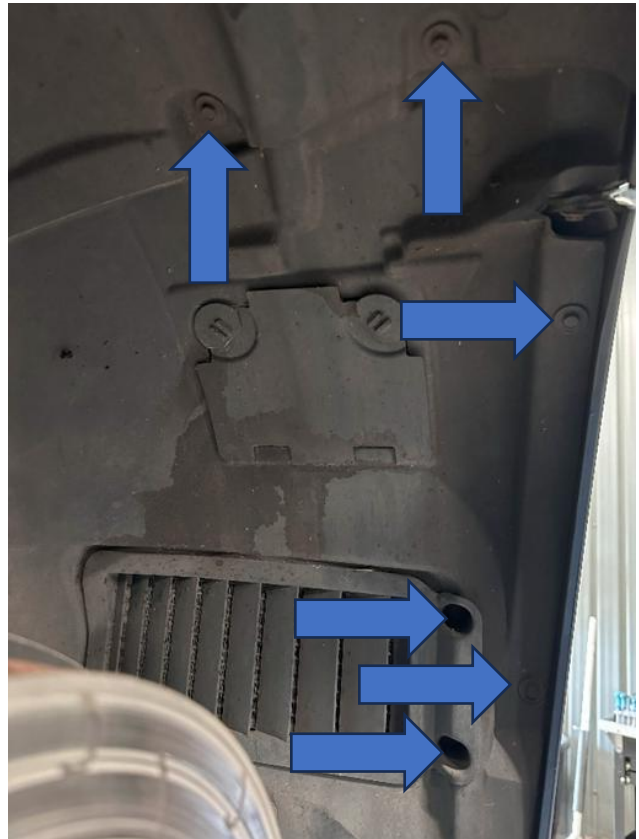
Tools Required:

Ratchet and Socket Set	Allen Key Set
Torx Socket Set	1 to 2-litres CHF 11S Hydraulic Fluid (depending on loss)

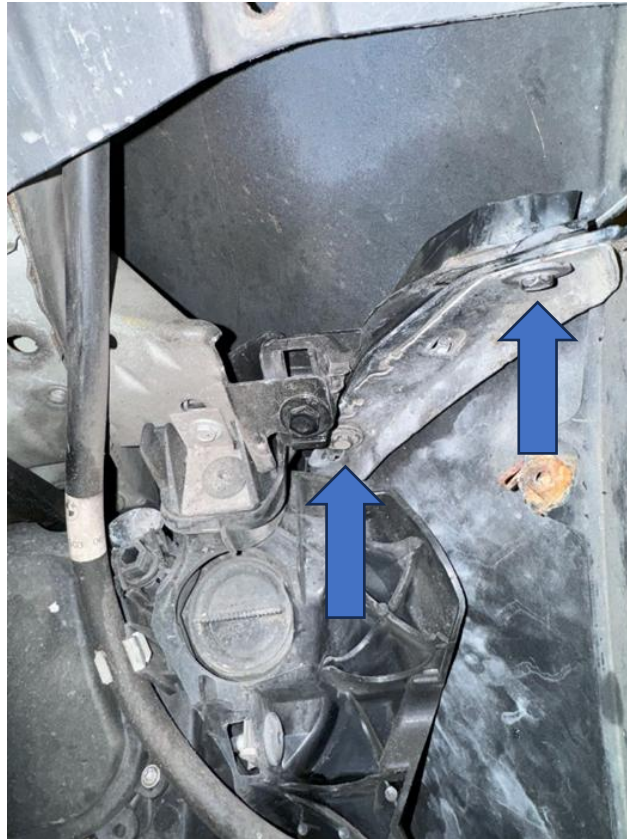
PLEASE THOROUGHLY READ THESE INSTRUCTIONS AND MAKE SURE YOU ARE FAMILIAR WITH THE STEPS BEFORE CARRYING THEM OUT

Instructions:

1. Raise the car into the air and remove the front wheels. Then proceed to remove the front half of the arch liner on both sides. The front right-hand side is held in with seven 8mm bolts and one 10mm plastic nut and the left-hand side with six bolts and three 10mm plastic nuts. **Please note:** this car is fitted with the AIRTEC Motorsport undertray, which requires the removal of the four Allen Key bolts each side (orange arrows).



2. With the arch liners removed you will be able to access the two 8mm bolts on each side attaching the front bumper to the wing.



3. Under the car, undo the three Allen Key bolts attaching the undertray to the metal skid plate.



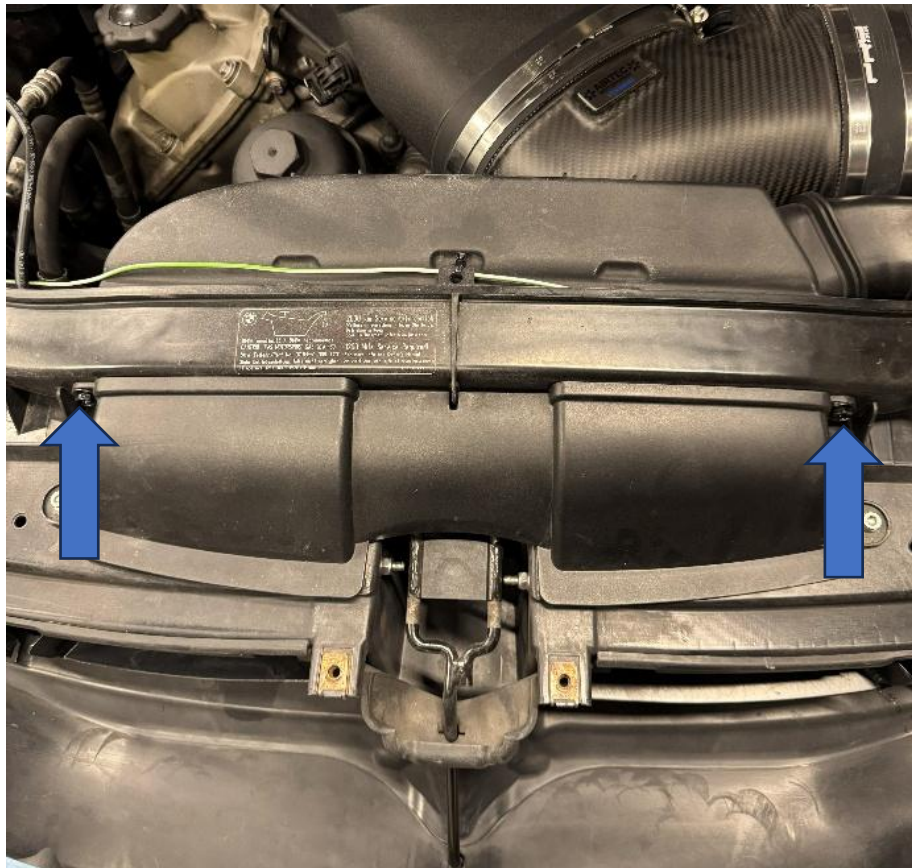
4. Working in the engine bay, remove the four T30 Torx bolts holding the top of the bumper in place.



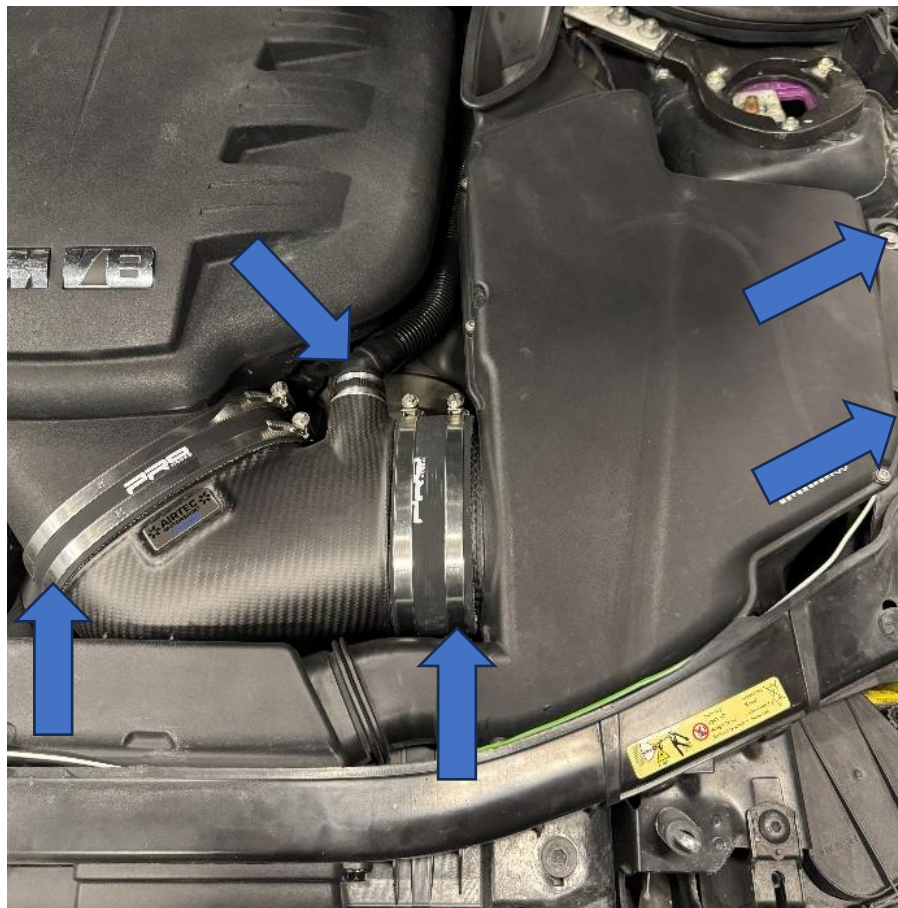
5. With the help of a second person, pull the edge of the bumper away until it releases. If your car is fitted with front parking sensors, then unclip the connectors before removing the bumper.



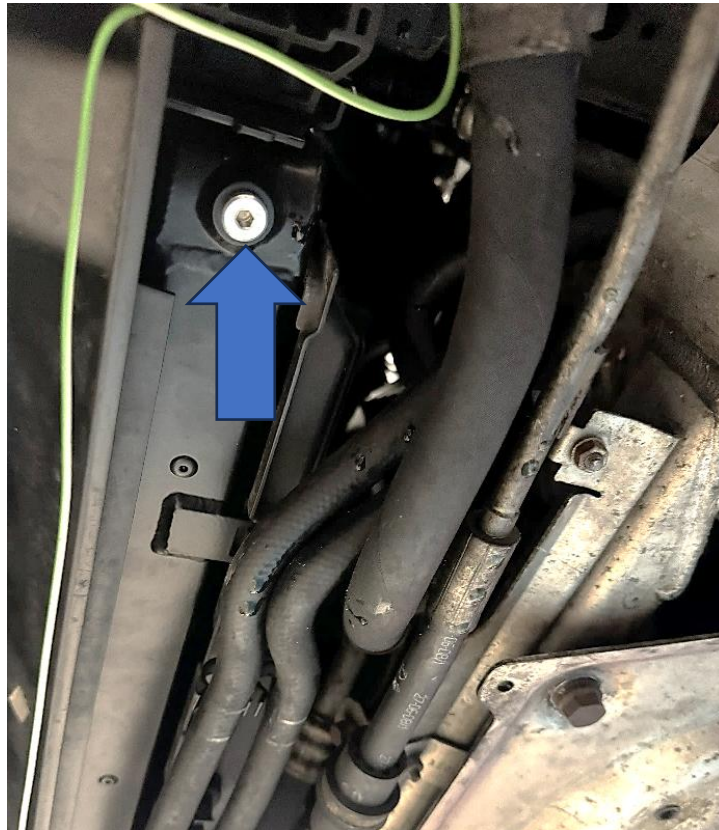
6. Undo the two T27 Torx fittings and remove the back part of the air feed to allow more clearance.



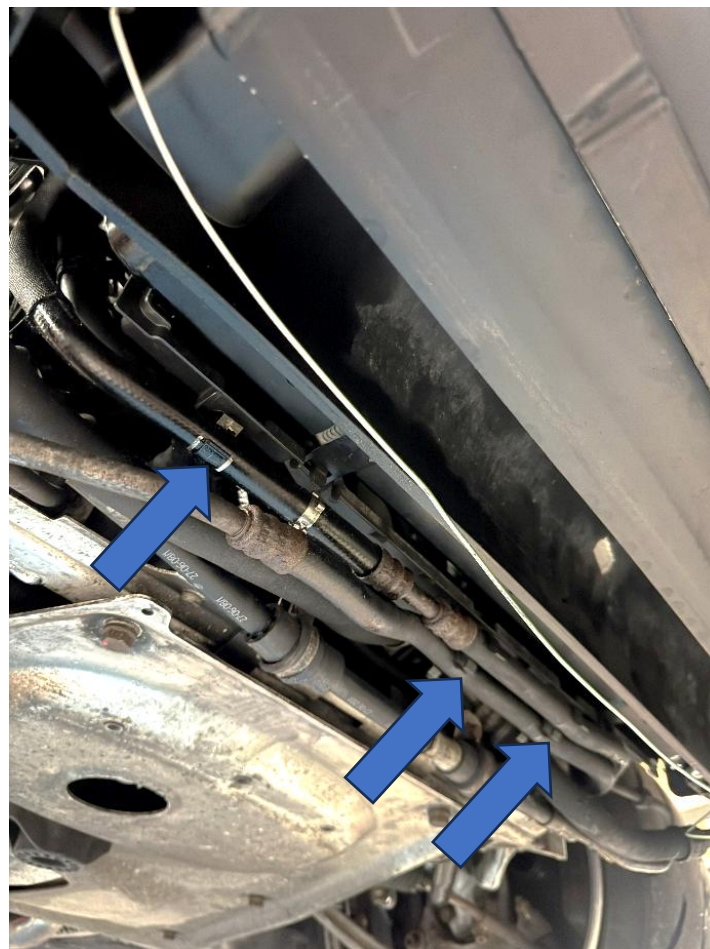
7. Remove the induction pipe by disconnecting the vacuum line and jubilee clips. Then undo the two 10mm bolts on the right-hand side of the air box and lift the assembly out.



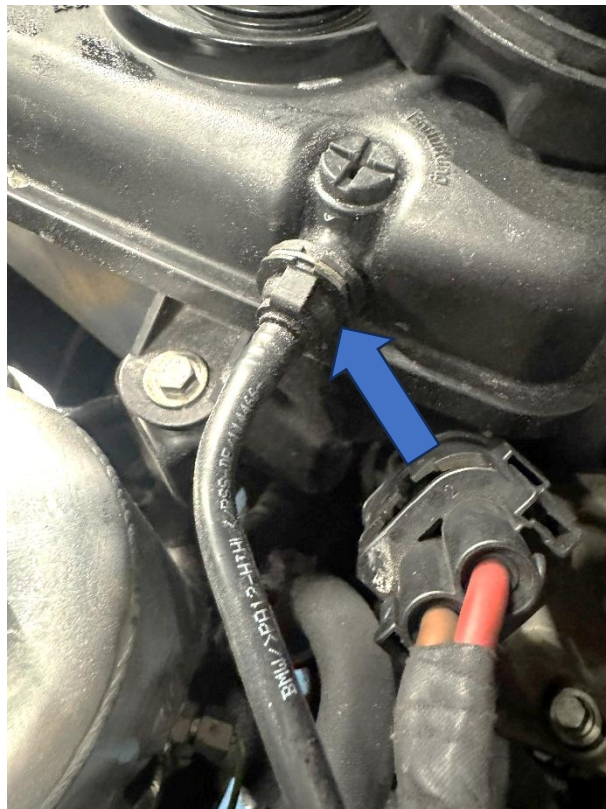
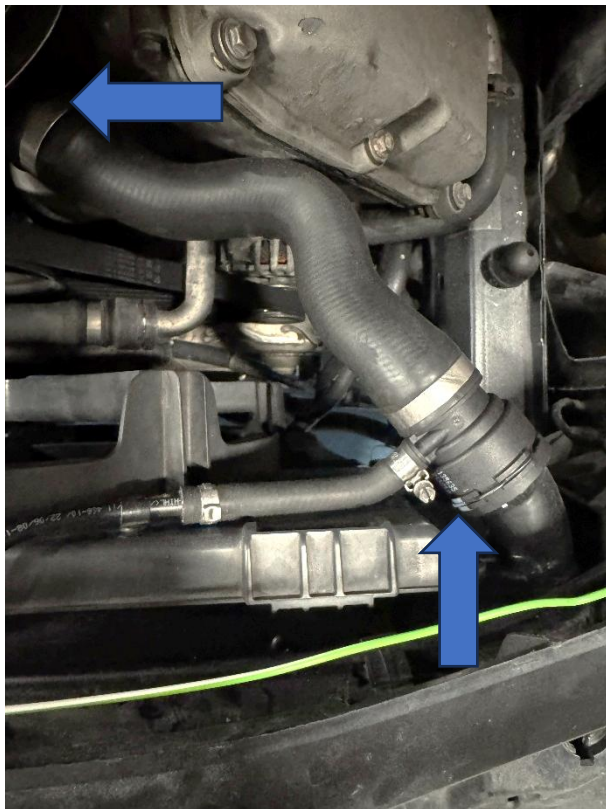
8. Working underneath the car, locate the radiator drain and empty the coolant into a suitable container.



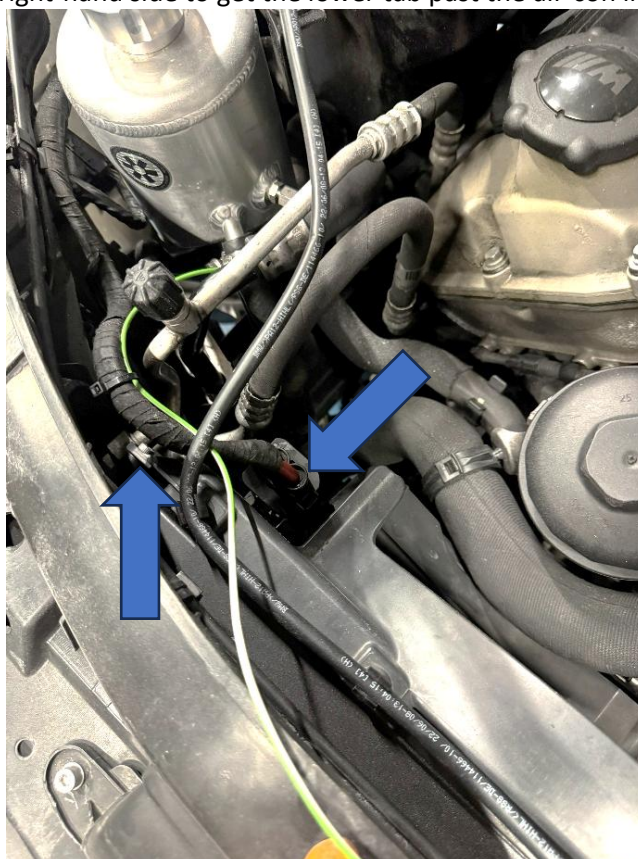
9. Then remove the power-steering lines from the clips attached to the radiator fan shroud.



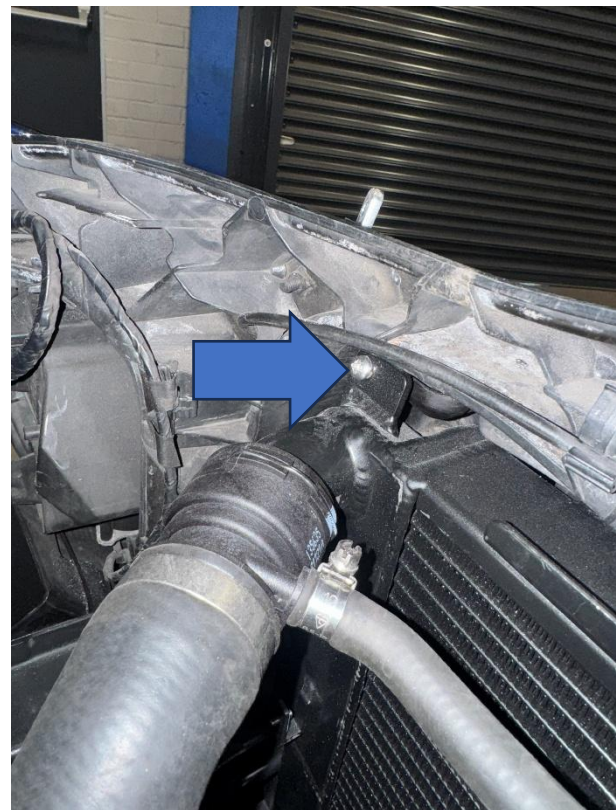
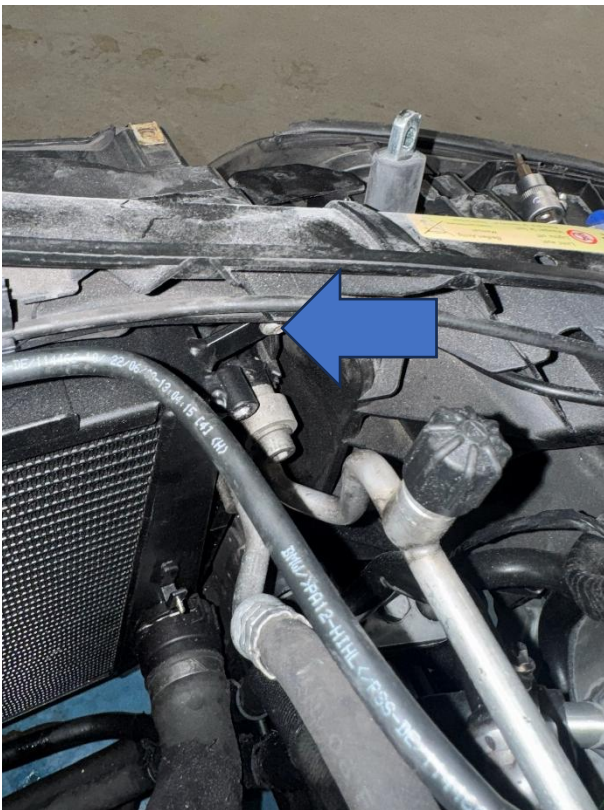
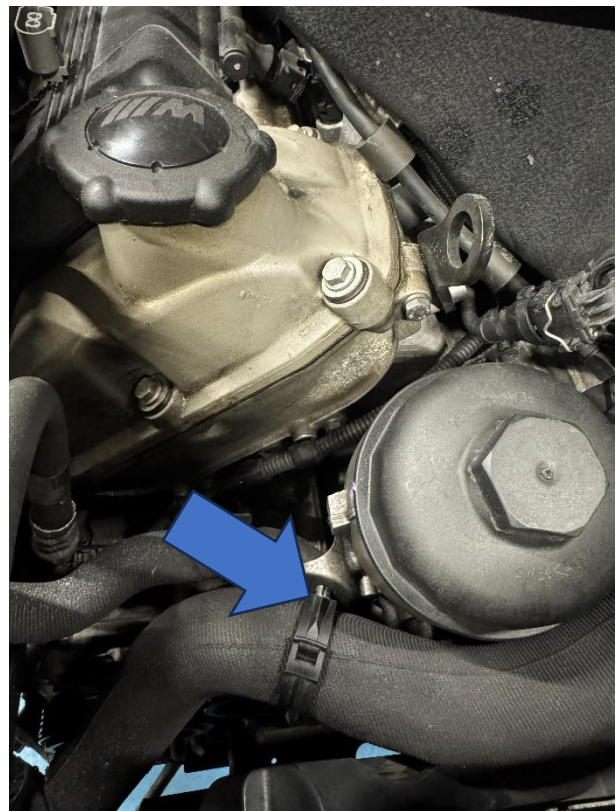
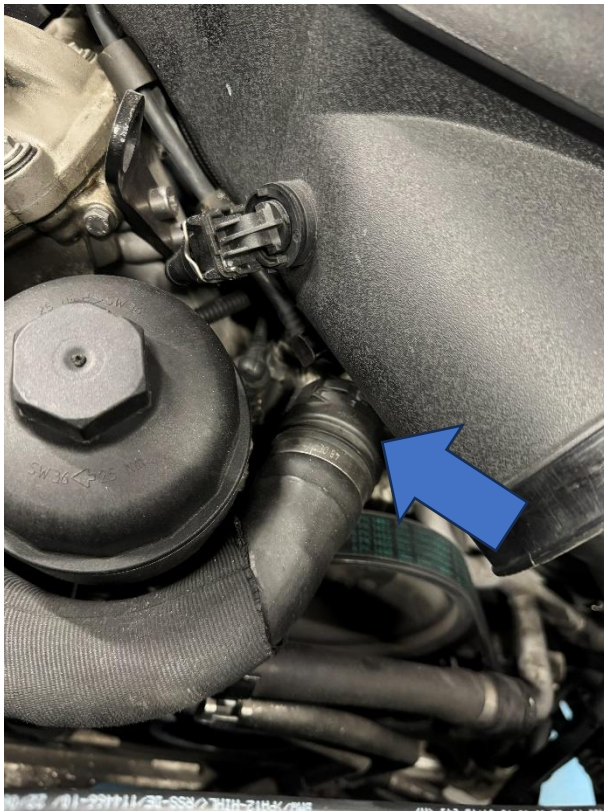
10. The right-hand radiator hose and header tank T-piece are fragile, so we suggest removing it altogether by disconnecting the radiator hose from both the radiator and the engine. Then carefully unclip the smaller hose going to the header tank from the top of the fan shroud and then finally disconnect it from the tank.



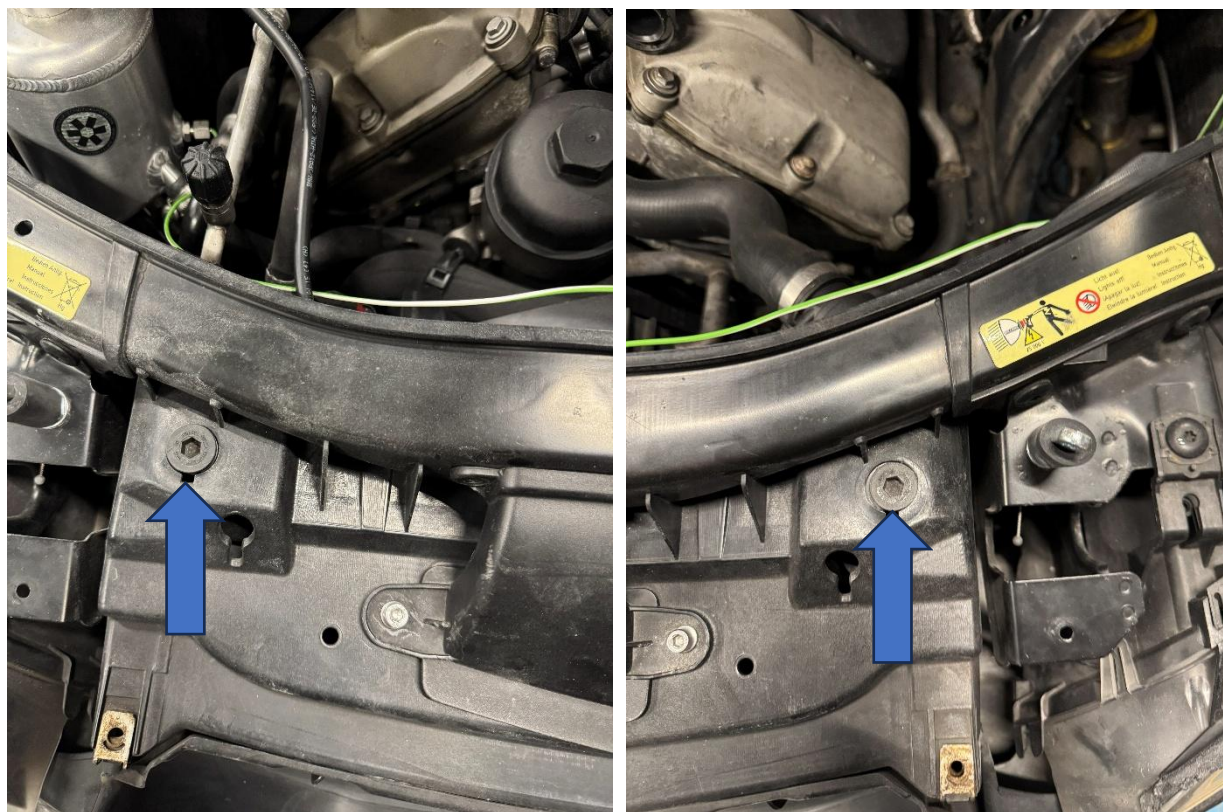
11. Now remove fan shroud by unplugging the wiring connector on the left-hand side and then undoing the fixing holding the shroud to the radiator. This car is fitted with our AIRTEC Motorsport aluminium radiator upgrade, so is fitted with an M5 bolt. Once removed, you will then be able to slowly pull the fan shroud out by angling it up on the right-hand side to get the lower tab past the air-con lines.



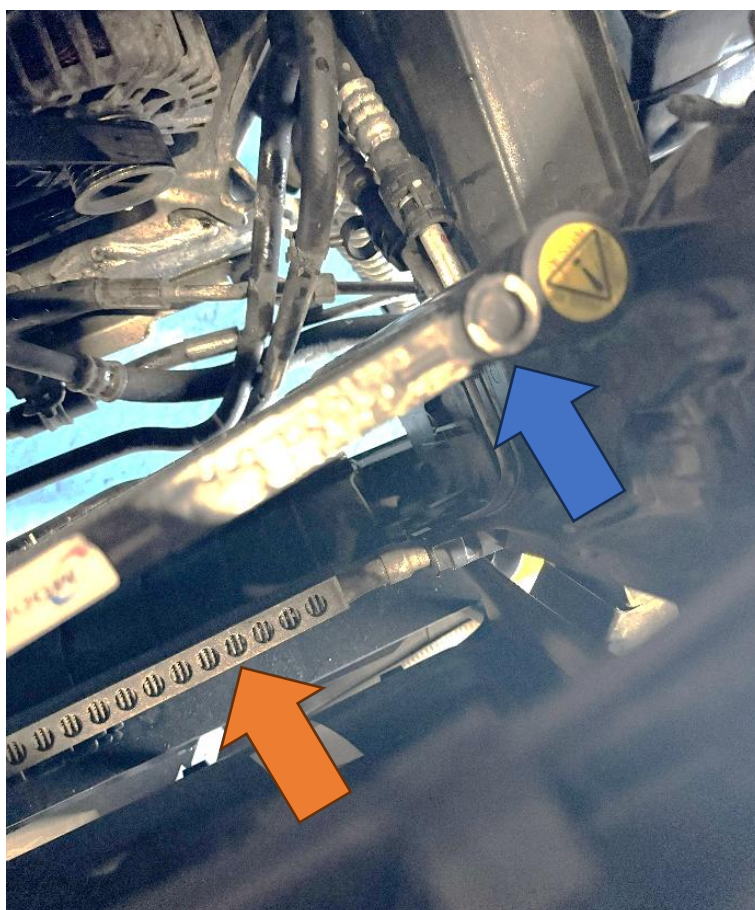
12. With the shroud removed, disconnect the left-hand radiator hose from the engine side as well as removing the clip securing the hose to the oil filter housing. The radiator can then be removed by undoing the two Torx bolts attaching the radiator to the surround.



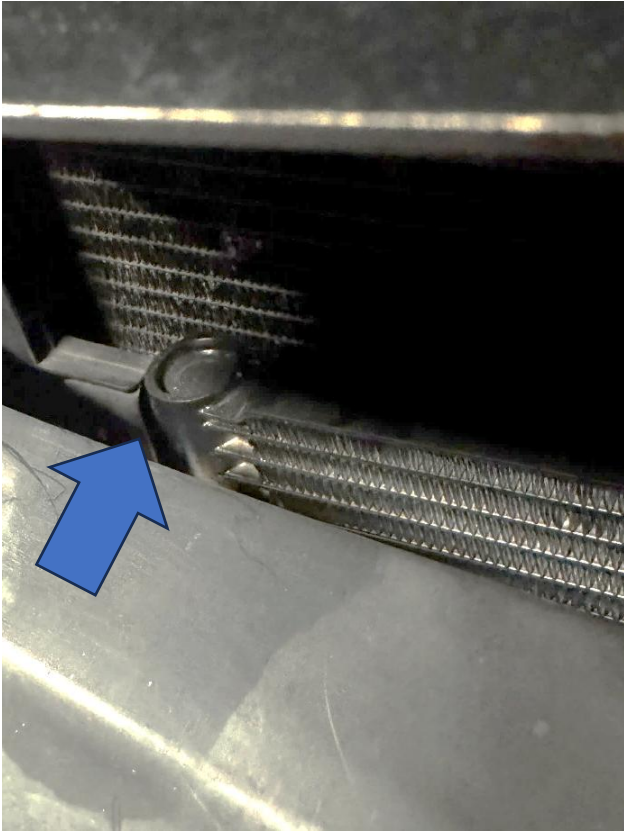
13. With the radiator released, the 10mm Allen Key rubber fittings located on the slam panel can be removed.



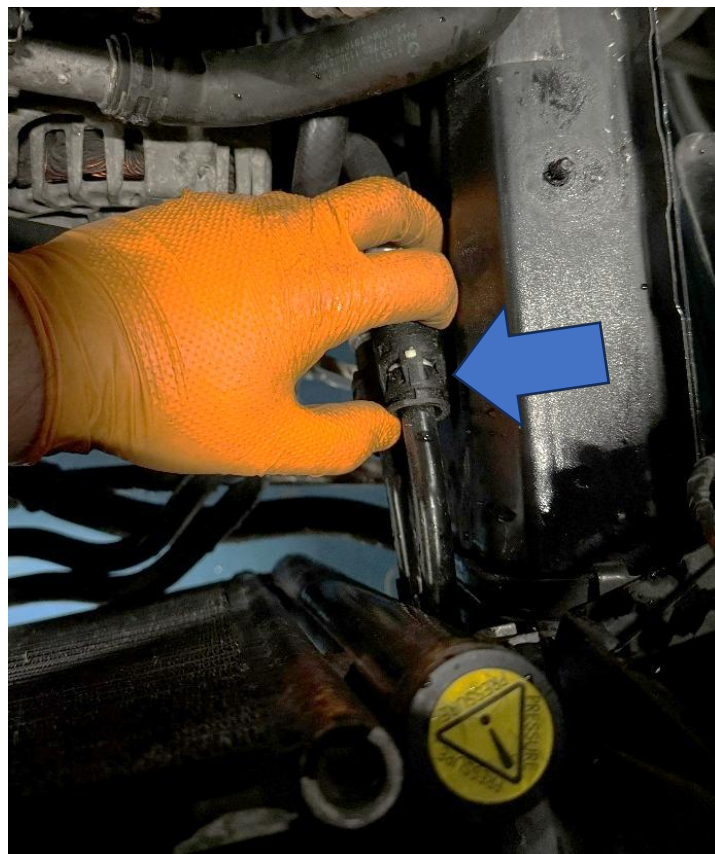
14. Now push the air-con condenser back on the right-hand side (blue arrow indicating direction to push air-con condenser). This will reveal the power-steering cooler (orange arrow), which you can then pull back on the right-hand side to release it from its mounting clip.



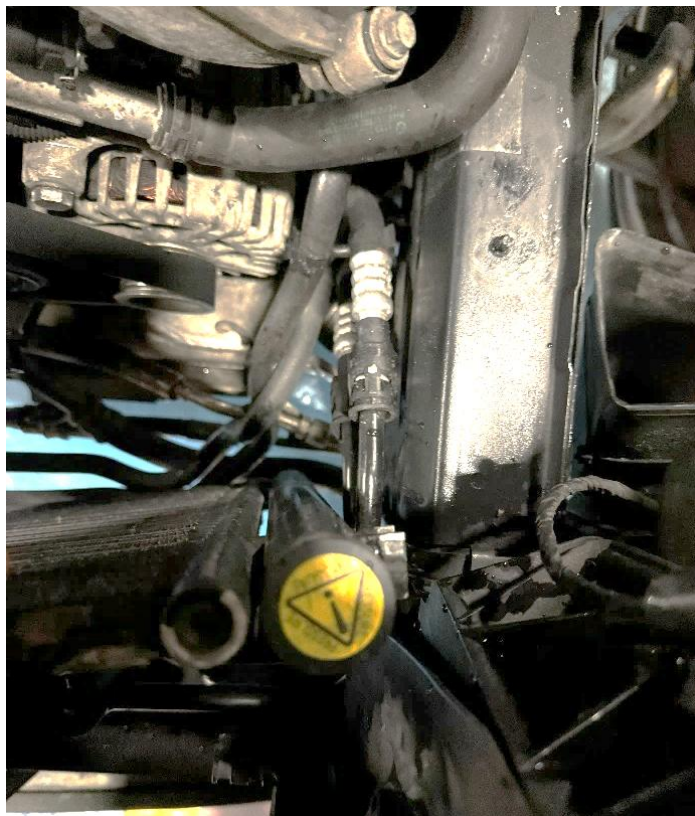
15. To unclip the left-hand side of the power-steering cooler, from the front of the car firmly but carefully push it back to release it. You can then manoeuvre the cooler out from the top.



16. Have a suitable container on hand to collect any spilt fluid spilt and then disconnect the power-steering lines by pulling back on the connectors to release them. The cooler can then be removed from the car.



17. You can now install the new AIRTEC Motorsport cooler in place by refitting it to the original plastic clips in reverse of removal. Then reconnect the hoses and ensure that these have fully seated and the clip engaged.



18. Finally, refit the radiator, bumper and arch liners in reverse of removal, following the manufacturer's instructions for bleeding the coolant system.

IMPORTANT: You can then top up the power steering fluid and bleed system by going from lock-to-lock firstly with the engine **off**. Then check the level, top up as necessary and then start the car and repeat the process until the level is full.