



## **FMCCRAD10 VOLKSWAGEN T6.1 2.0TDI CHARGECOOLER RADIATOR** **INSTALLATION INSTRUCTIONS**



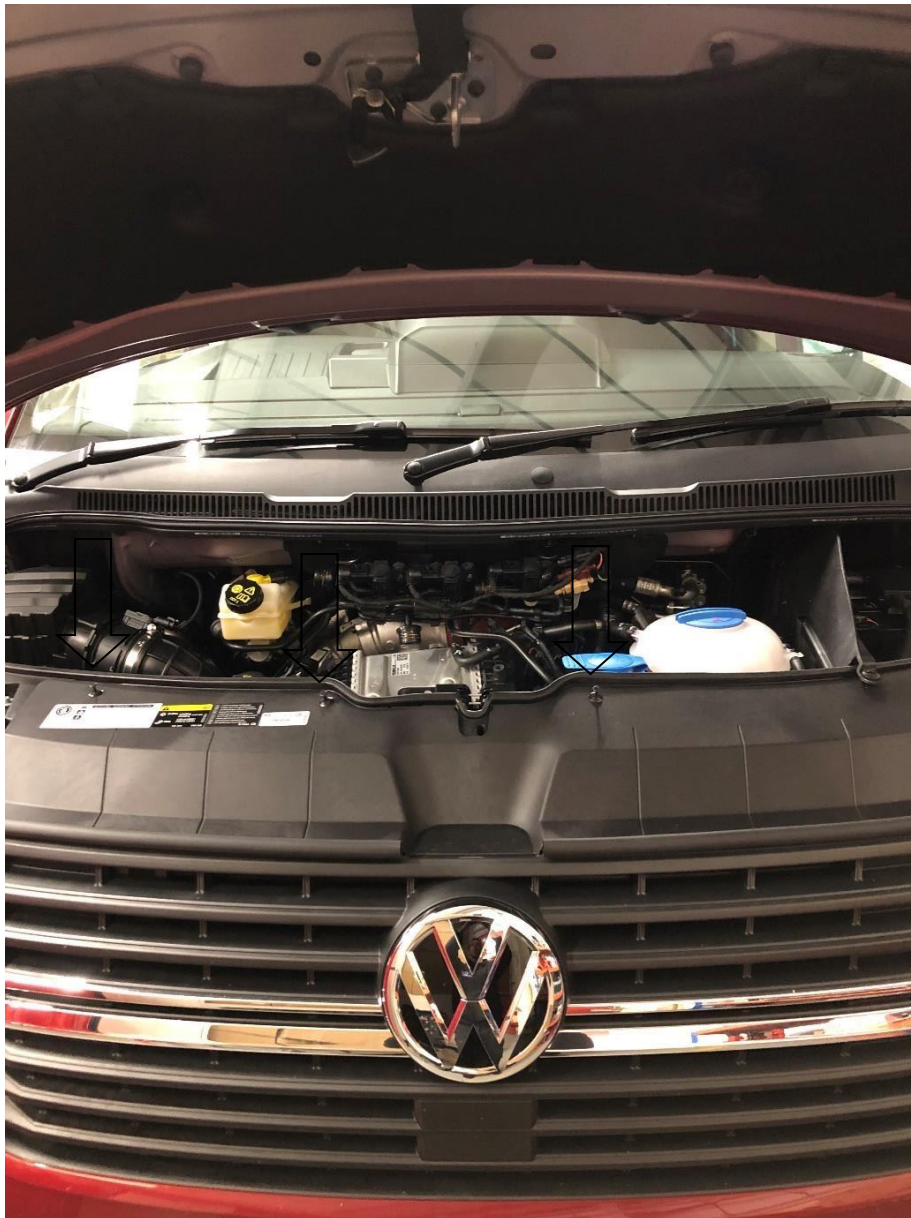
**Please thoroughly read through and familiarize yourself with these instructions in their entirety prior to beginning any part of the installation process of any component. Please also ensure the vehicle and engine has cooled down sufficiently to avoid risking possible skin burns or other injury.**

### **Tools required:**

- T25/T30/T40 Torx driver.
- 10/13mm socket and ratchet
- 7mm Hose clamp driver.
- Plastic panel-clip removal tool.
- Large flat blade screwdriver.
- Silicone lubricating spray.
- Ramp or axel stands

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1. Raise the vehicle on a ramp or suitable axle stands, to allow access to the underside of the front of the vehicle.
2. Open and secure the bonnet.
3. Using a plastic panel clip removal tool or flat-blade screwdriver remove the three plastic fasteners that run along the top of the slam panel.



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4. Using a large flat-blade screwdriver, undo the large plastic fastener and remove the plastic divider.



5. Using a T25 Torx driver remove the 2x screws from inside each wheel arch.

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6. Using a T25 Torx driver undo the 2x fasteners securing the underside corner of the bumper to the arch liner, this is the same on either side.



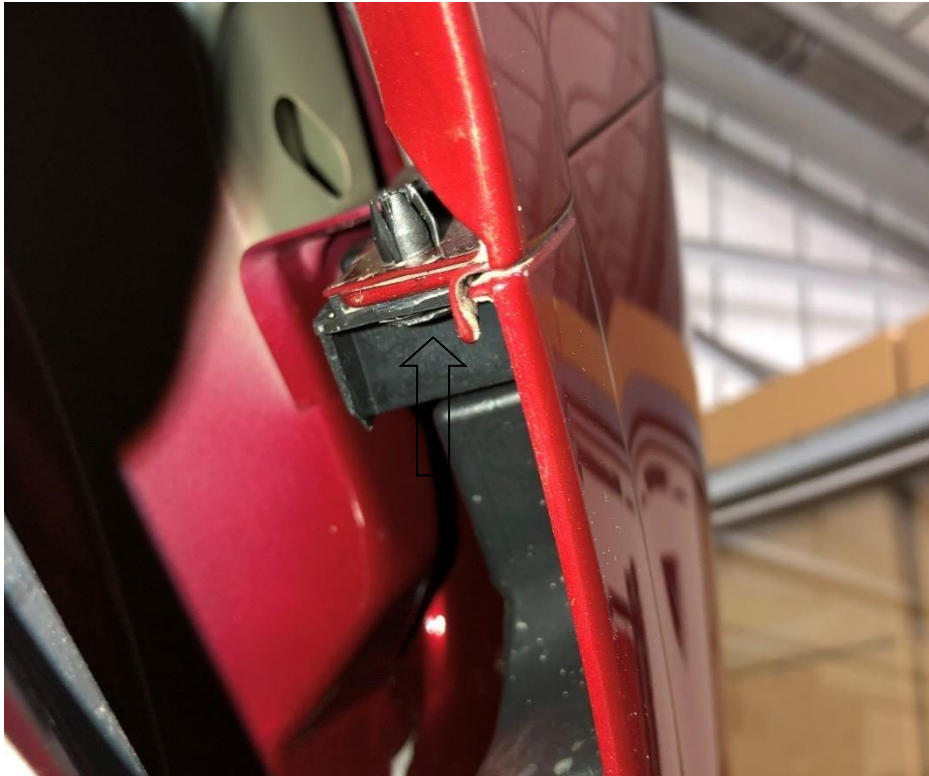
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7. There are six 13mm fasteners holding the under try to the vehicle, use a 13mm socket and ratchet to remove them.



8. Pull the arch liner back to reveal the plastic trim fastener securing the top corner of the bumper to the wing. Remove from both sides of the bumper.

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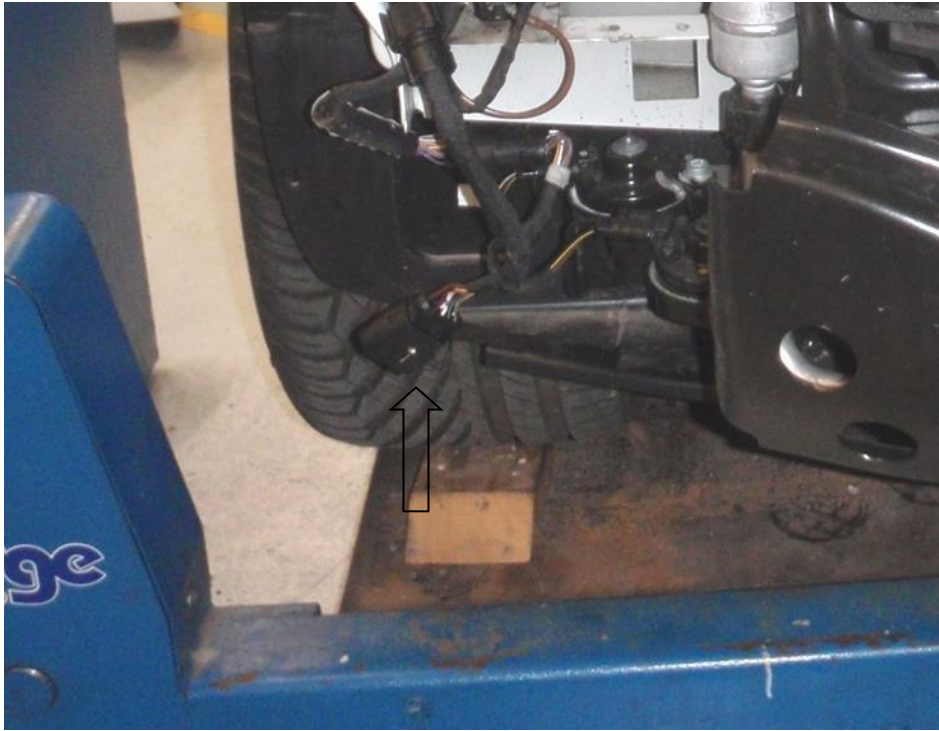


9. Carefully pull the edge of the bumper away from the vehicle starting at each wheel arch.



10. Pull the arch liner back on the left-hand side of the vehicle and disconnect the large wiring plug.

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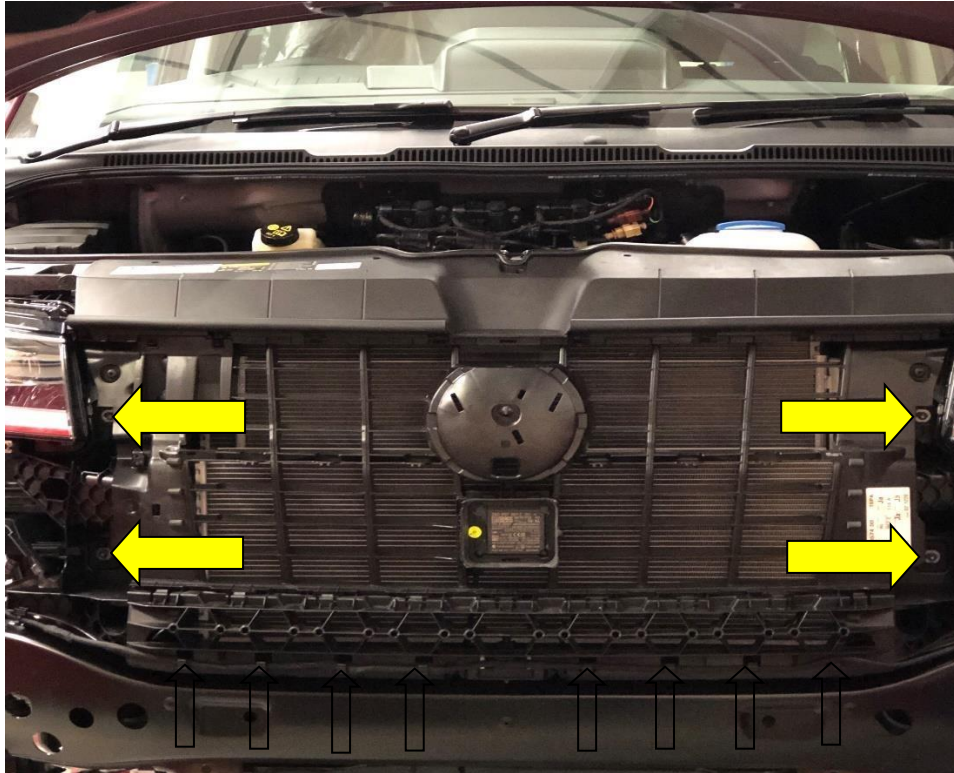


11. Loosen the fasteners for the head lights but do not remove the lights, three are T30 Torx and one is a T25 Torx.



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12. Unclip the wiring loom that runs along the bottom of the plastic support panel. Now remove the four T30 fasteners securing the plastic support panel, the panel will now pull away from the vehicle.



13. Unplug the temperature sensor and ACC (Vehicle specification depending)



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14. To drain the coolant from the vehicle. Disconnect the wiring to this sensor. Remove the horseshoe clip and remove the sensor. Have a suitable container ready to drain the coolant.

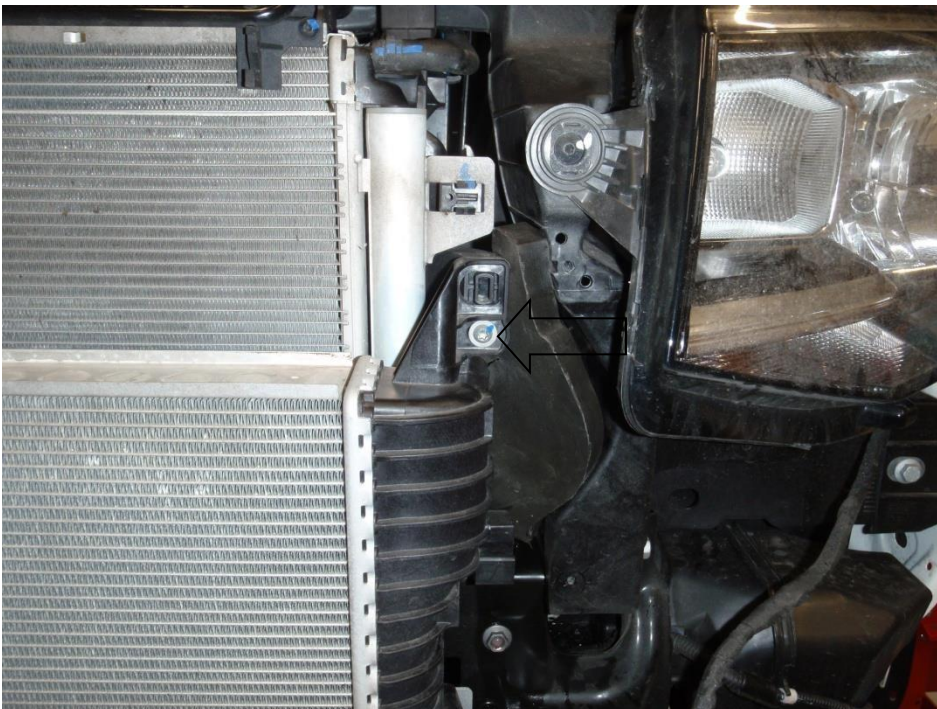


15. Using a flat blade screwdriver release the clips on the charge cooler radiator couplers.



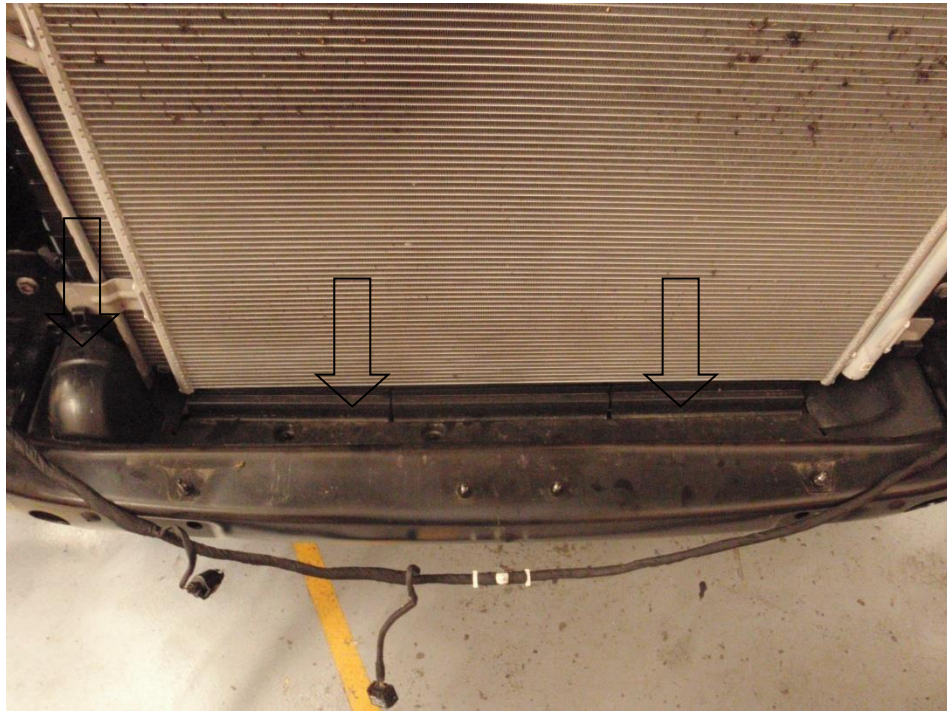
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16. Using a T30 Torx driver undo 2x screw on the left-hand and right-hand charge cooler radiator top mounts and remove the OEM charge cooler radiator from the vehicle.

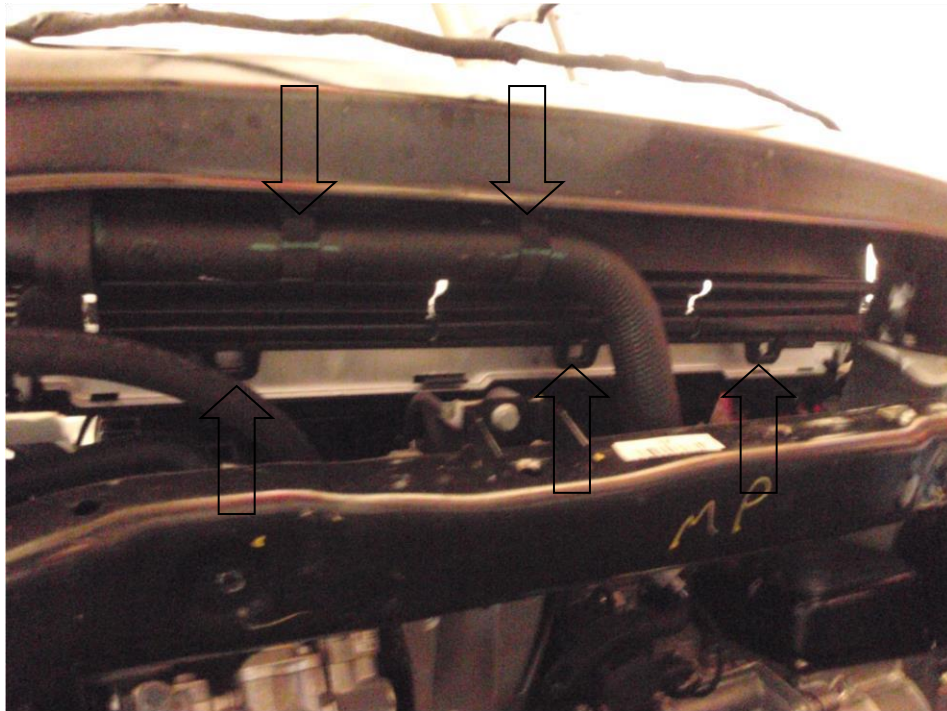


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17. To fit the charge cooler radiator without trimming, remove the radiator hose cover. Remove 3x clips from the crash bar, unclip from the bottom of the radiator and unclip the hose clamps.

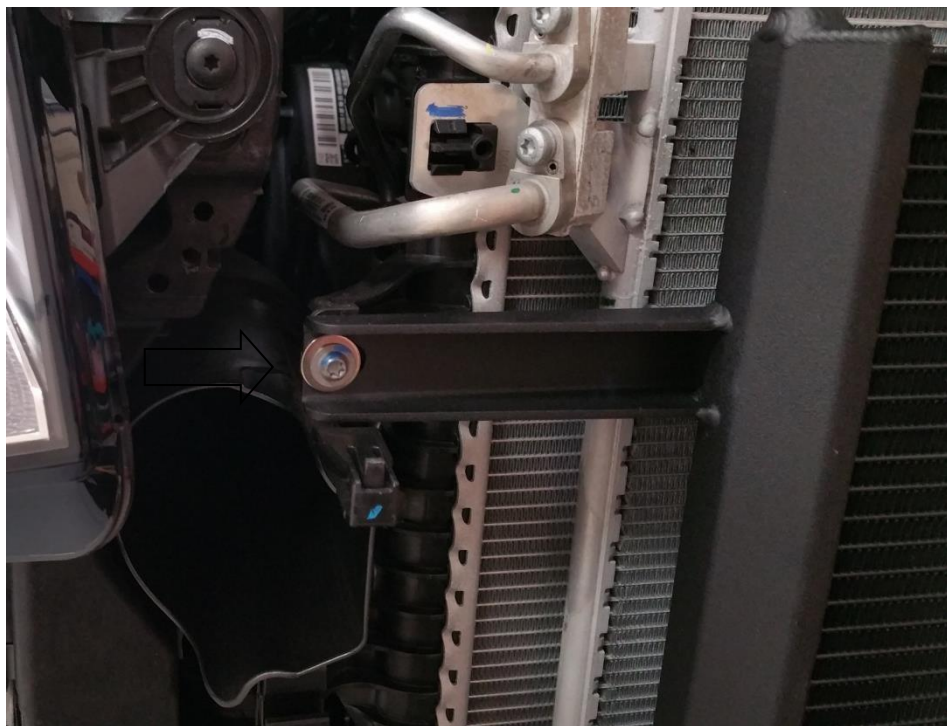


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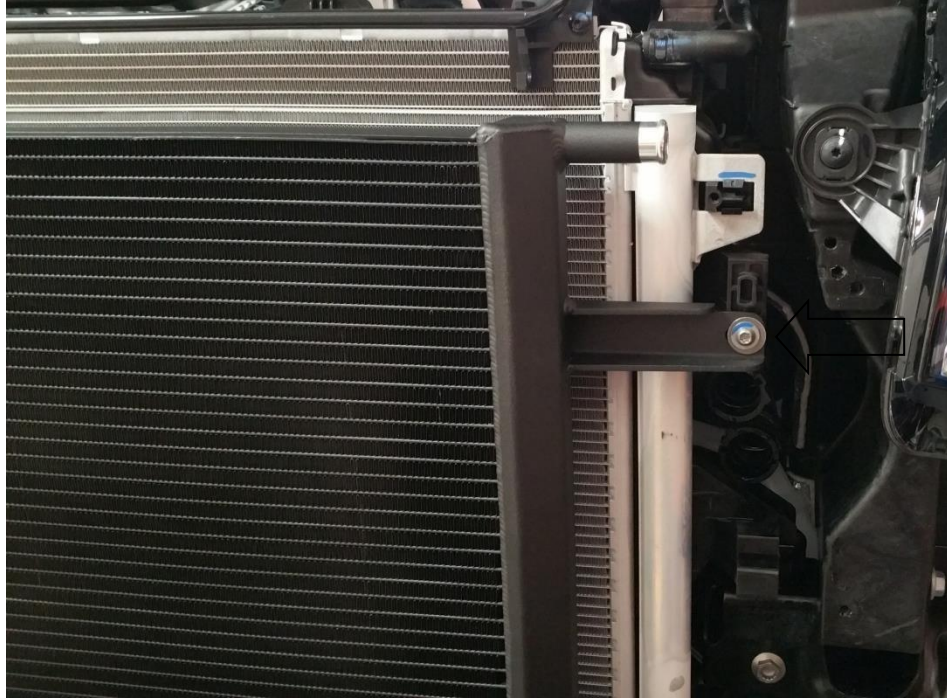


18. Place the Forge chargecooler radiator in position.

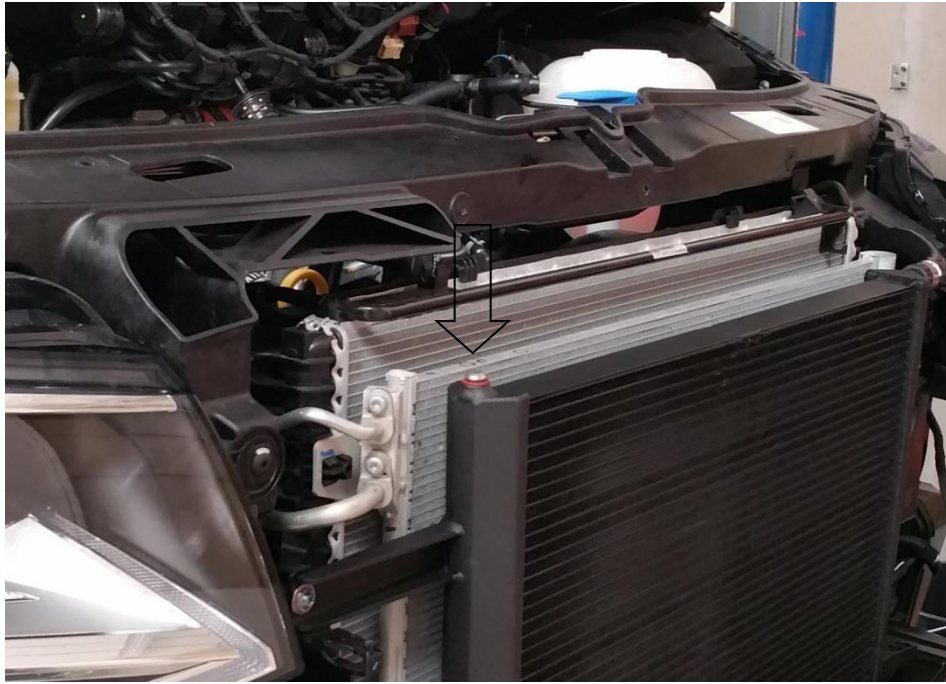
19. Secure the top brackets in place with the 2x OEM screws and the 2x 6mm ID x 20mm washers provided.



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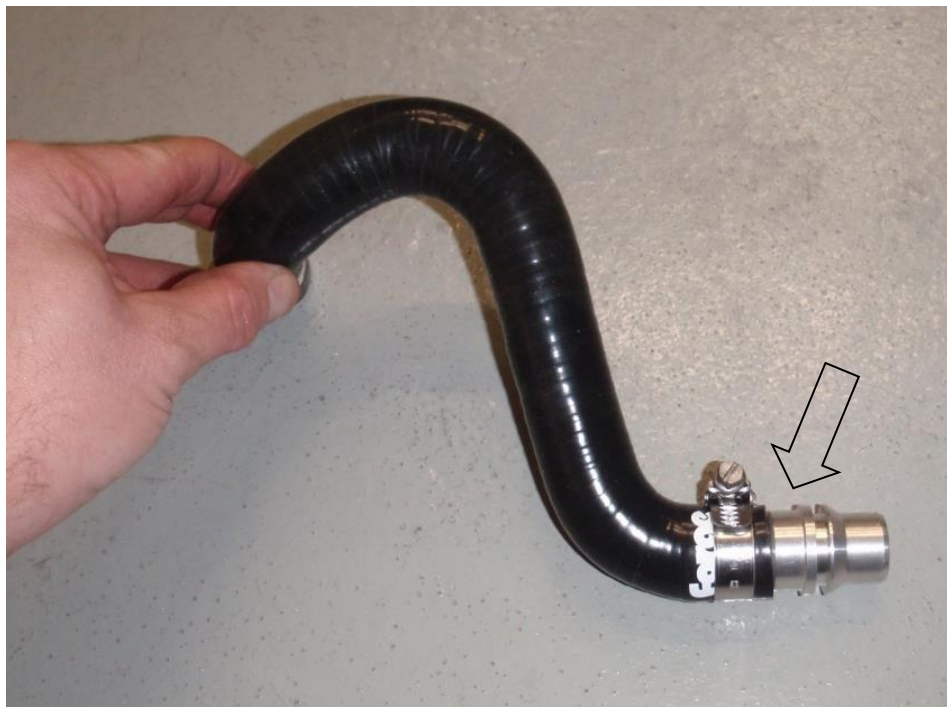


20. Fit the M8 x 12mm Allen cap bolt and red fibre washer provided to the bleed outlet on top of the charge cooler radiator. Do not fully tighten.



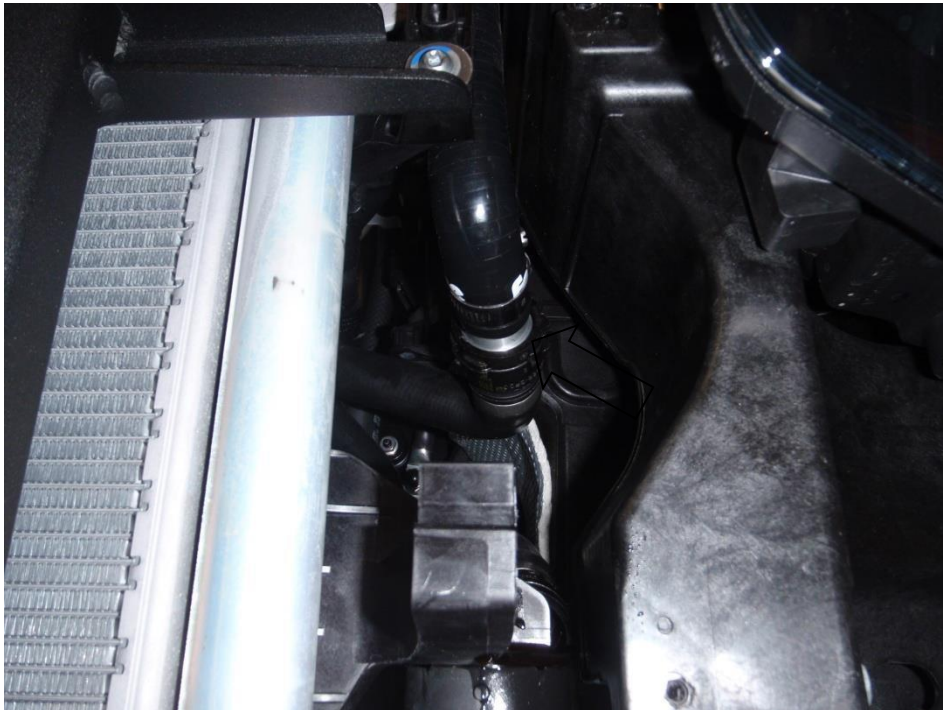
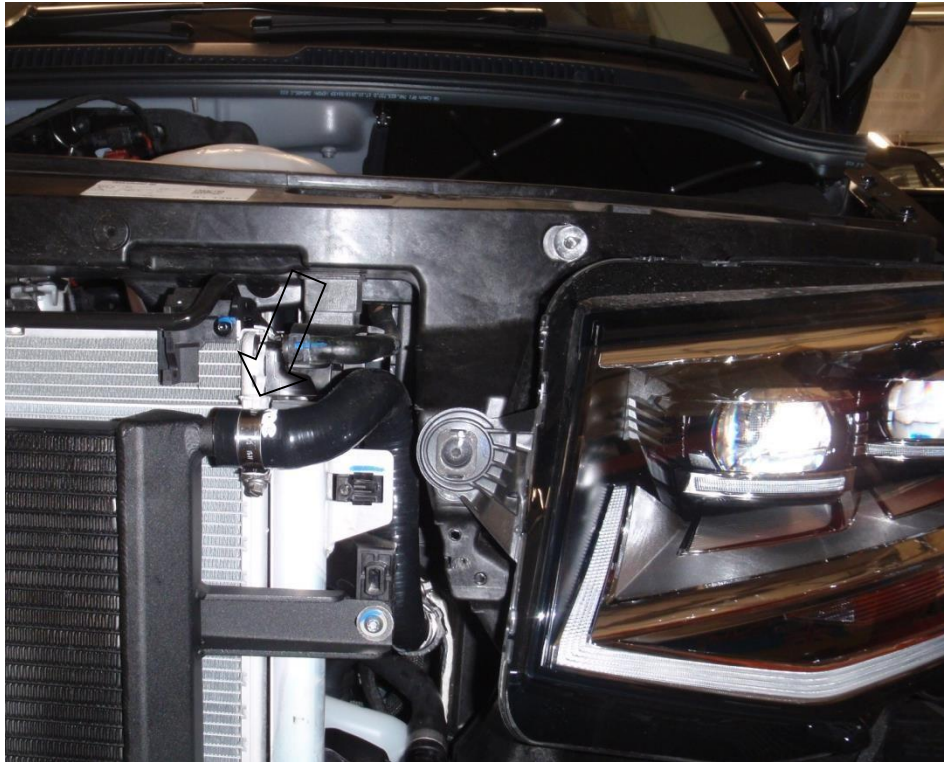
21. Fit the coolant coupler to the hose (marked #1889) provided as shown in the photo below and secure the coupler with a suitable hose clamp provided.

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22. Fit the open end of the hose to the top outlet of the charge cooler radiator and fit the aluminium coupler into the female OEM coupler ensuring the spring clip has correctly seated.

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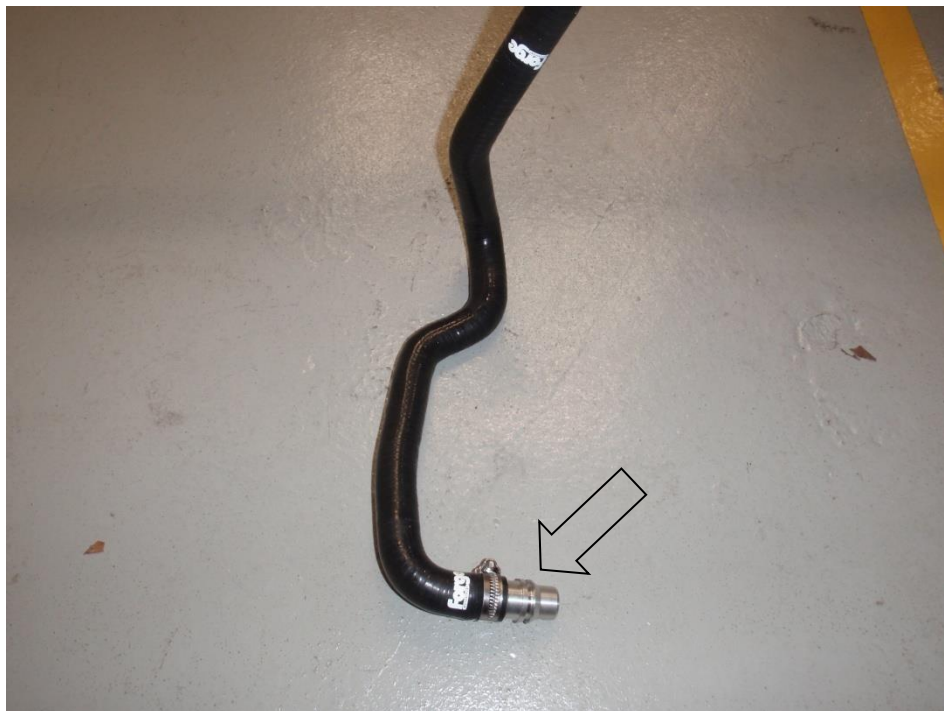
23. Using the remaining 2x hoses, 1x hose joiner, 1x coolant coupler and hose clamps, connect the second outlet of the chargecooler radiator to the OEM female coolant coupler.

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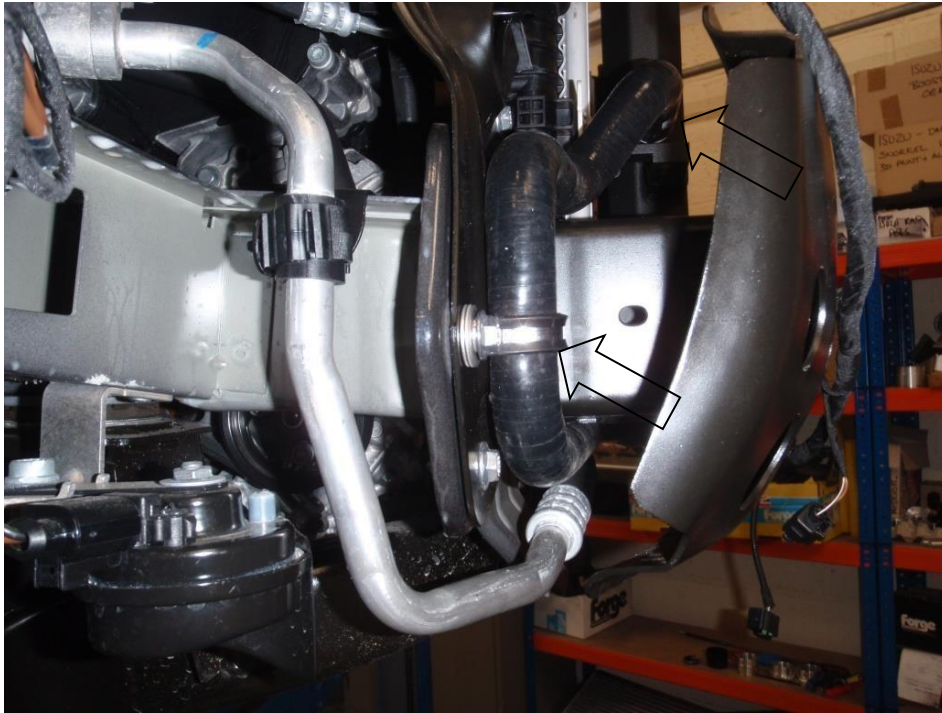


24. Fit the coolant coupler to the hose (marked #1888) provided as shown in the photo below and secure the coupler with a suitable hose clamp provided.



25. Connect the other hose to the outlet of the chargecooler and secure with a suitable hose clamp provided. Using the P-clip, M8 x 30mm Allen cap head bolt and the 3x 8mm penny washers provided, secure the silicone hose in position.

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26. Feed the hose with the coolant coupler between the chassis and the AC condenser and secure in position with 2x cable ties provided. Insert the aluminium coupler into the OEM female coupler and ensure the spring clip is correctly seated.



27. From underneath the vehicle, connect the two hoses together using the 19mm hose joiner and 2x hose clamps provided.

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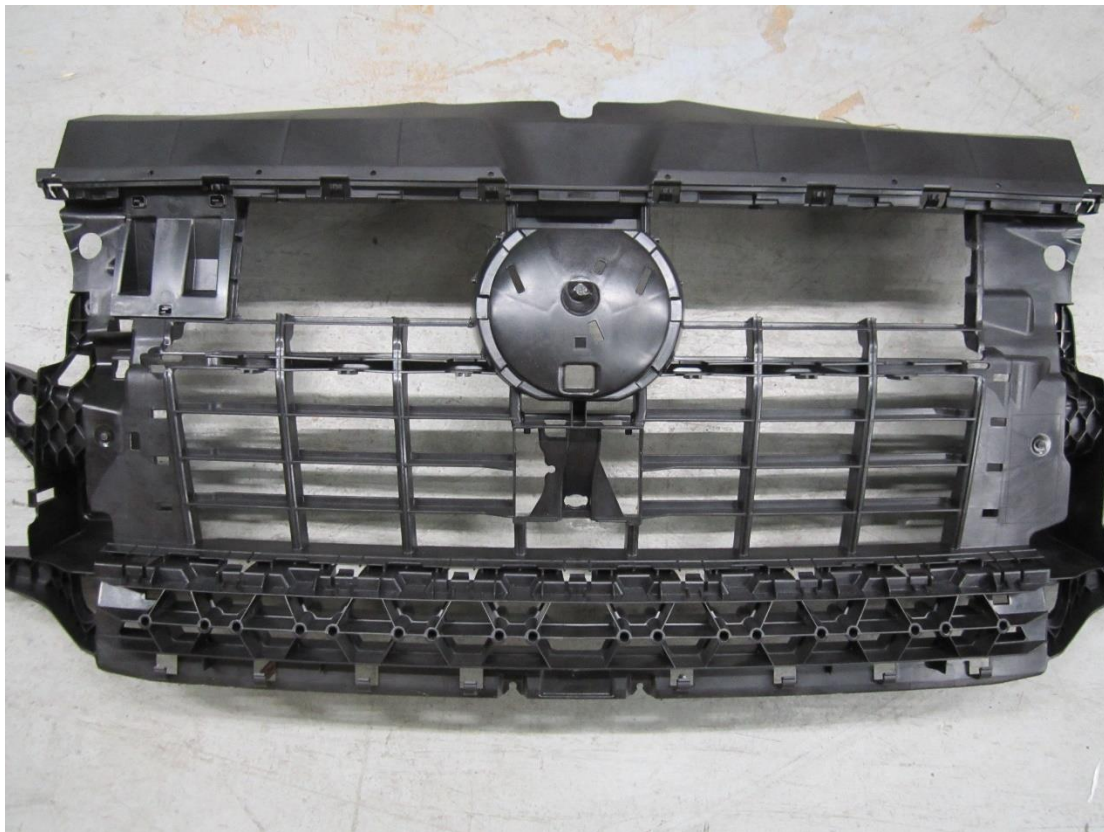
28. Check that the hoses are positioned correctly before fully tightening all the hose clamps.

29. Refill the engine coolant to the correct level before refitting the bumper and bleed any air out of the charge cooler radiator using the M8 Bleed screw on top.

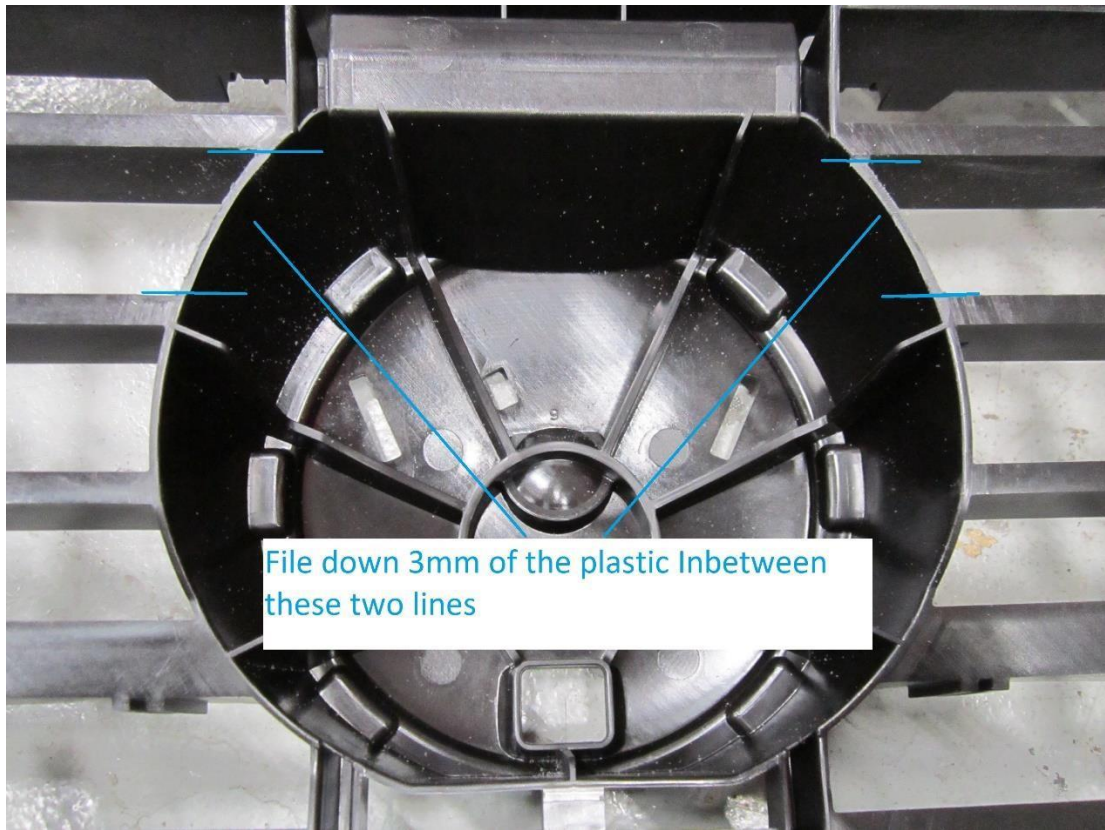
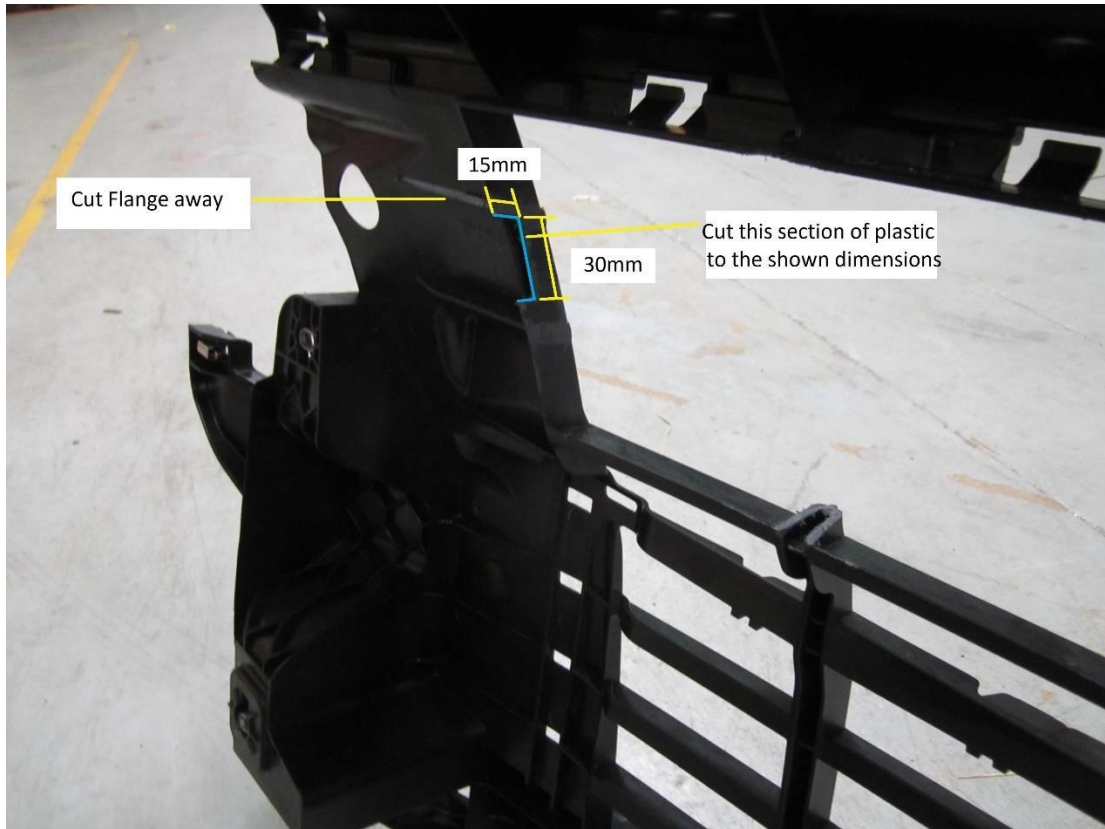


30. With the FMCCRAD10 now fitted you will have to modify the plastic support panel for it to fit back into place. Cut away all the areas marked below with a hacksaw and file.

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31. Reassemble your vehicle in the reverse order of disassembly.

32. Your installation should now be complete. Enjoy Your New Performance!