VW Polo TSI AW Oil Cooler Fitting Instructions

Tools Required:

- Ratchet and Socket Set
- Hose Fitting Spanner or Adjustable Spanner
- 32mm Socket
- 27mm Deep Socket
- 500ml of Correct Grade Engine Oil

Kit Contents:

- 1x AIRTEC Motorsport Oil Cooler
- 1x AIRTEC Motorsport Sandwich Plate & Bolt
- 1x VW Oil Fitting Adapter
- 2x Mounting Brackets
- 1x Spacer Bracket
- 2x Oil Lines with Fittings
- 2x M5x12mm Socket Head Bolts
- 4x M5 Pan Washers
- 2x M5 Nyloc Nuts

- 1x M6x35 Socket Head Bolt
- 2x M6x20mm Washers
- 1x M6x16 Socket Head Bolt
- 5x M6x12 Button Head Bolts
- 5x M6 Nyloc Nuts
- 10x M6 Pan Washers
- 1x 10mm M6 Spacer
- 2x Cable Ties

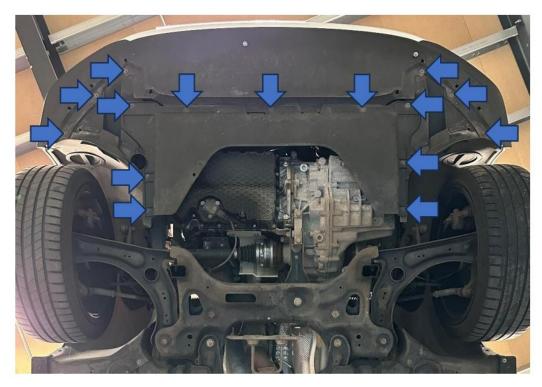


PLEASE THOROUGHLY READ THESE INSTRUCTIONS AND MAKE SURE YOU ARE FAMILIAR WITH THE STEPS BEFORE CARRYING THEM OUT



Instructions

1. Remove the undertray by undoing the nine T25 Torx bolts followed by the six T25 Torx bolts holding the bottom of the bumper to the car.



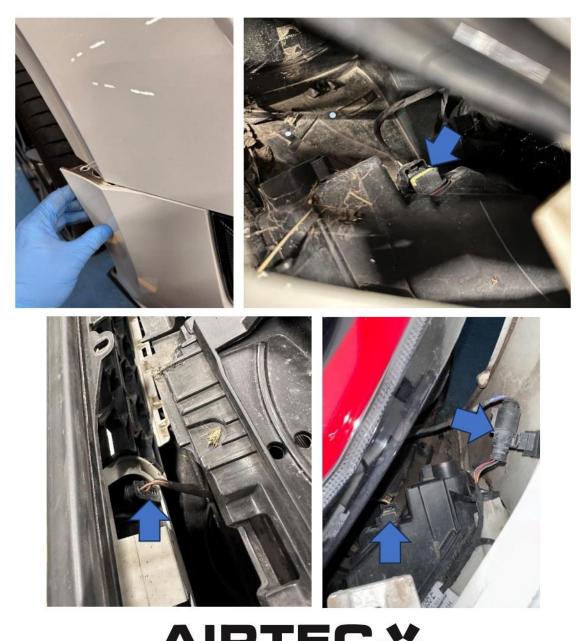
2. Working in each wheel arch, undo the three T25 Torx fittings and peel the arch liner back to allow access to remove the T25 bolt holding the bumper to the wing.



3. Under the bonnet, locate the four T25 Torx bolts at the front of the bumper and remove them.



4. With the help of a second person, pull the corner of the bumper out each side. As the bumper comes forward you will need to disconnect a wiring plug on the left-hand side followed by two wiring plugs on the right-hand side and single plug in the middle behind the badge.



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5. Remove the headlights by unplugging the connector and then undo the two T25 bolts holding the side of the headlight to the plastic bumper support. Then remove the three T27 bolts on top of the headlight.



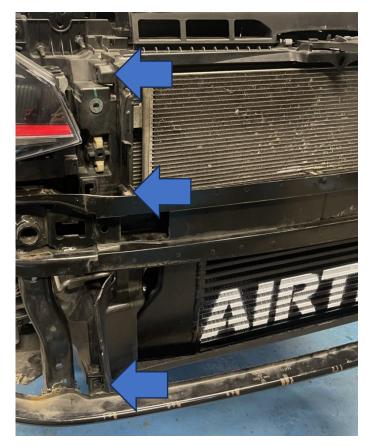
6. Remove the upper front plastic bumper support by undoing the two T25 bolts on top followed by the T27 bolt located each side and unclip the wiring harness as you remove the surround.







7. Carefully remove the large plastic air guides on both sides by unclipping them and manourering them out behind the crash bar.

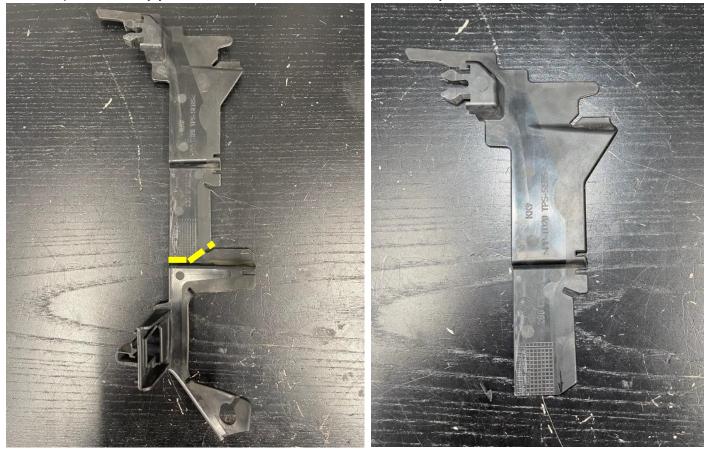


- You will need to trim both air guides. On the left-hand side, you need to remove a section to allow clearance for the hoses to pass through. The right-hand slot is needed to allow for the bracket to pass through.
 Please note: If you are unable to accurately and precisely make these cuts, you can simply remove the trims and not replace them, but air flow maybe disrupted.
 - A) Take the left-hand side air guide and trim on the line, as shown.

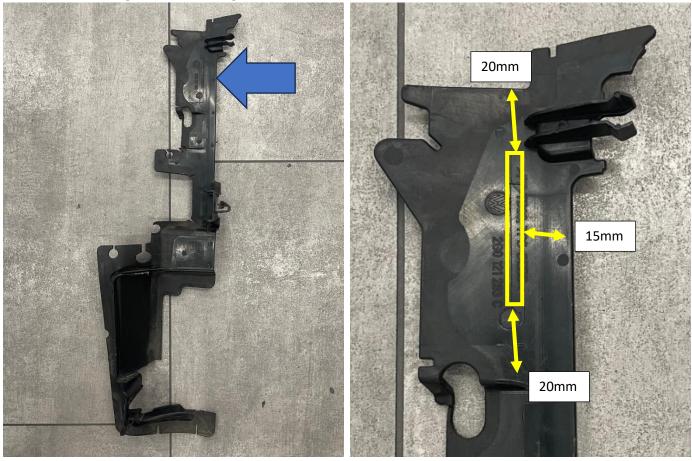




B) Trim the top piece as shown. You should be left with three pieces, as the centre section isn't needed.



C) Take the right-hand side air guide and trim as shown below.







Once all the trimming is complete, refit the air guides onto the car.



9. Fit the bottom bracket using the supplied M5 Socket Head bolts with Nyloc nuts and washers to secure it in place, but do not fully tighten yet to allow adjustment.



10. Now fit the top bracket using the supplied M6 Socket Head bolt with 20mm washer, but do not fully tighten.

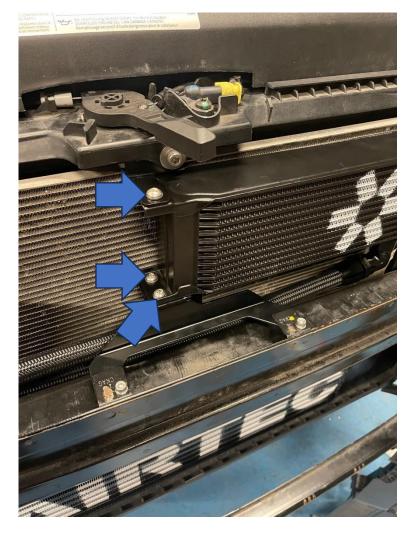


11. Attach the lines to the oil cooler exactly as shown and fully tighten the connections using a hose fitting spanner or adjustable spanner.





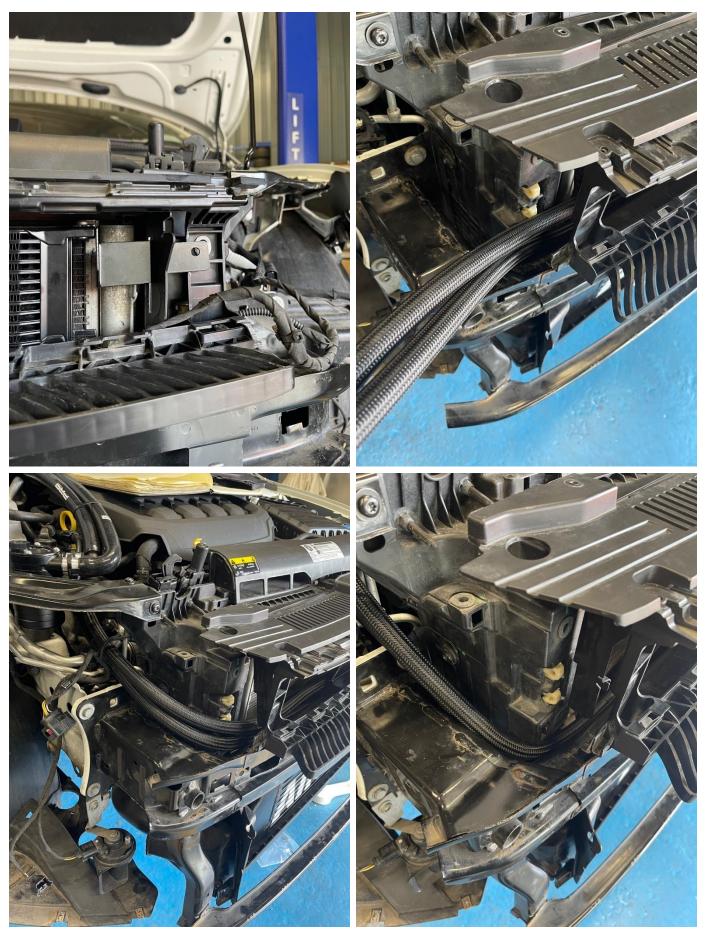
12. Now bolt the oil cooler to the top and bottom mounting brackets using three of the supplied M6 Button Head bolts with nuts and washers both sides. Make sure the oil lines run behind and along the crash bar. These will eventually run under the headlight and up towards the oil filter.



13. Attach the right-hand side bracket to the oil cooler using the remaining two M6 Button Head bolts with Nyloc nuts and washers. This will pass through the slot created in Step 8C. Fully tighten all bracket bolts now.



14. Hook the upper front plastic bumper support removed in Step 6 over the right-hand side bracket but do not bolt it up yet. Push the oil lines down between the crash bar and radiator surround, as shown.





15. Feed the oil lines up towards the engine.

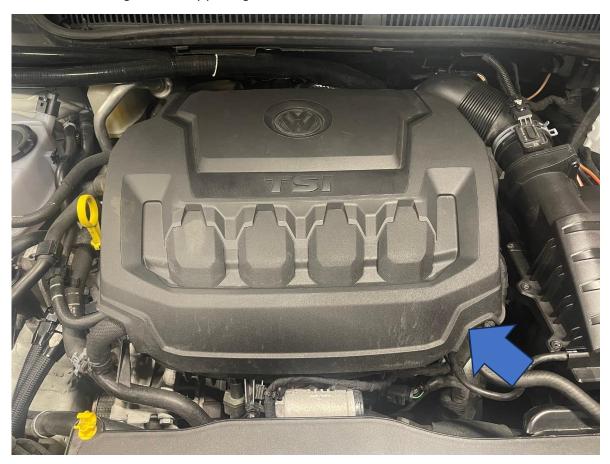


16. Bolt the right-hand side oil cooler bracket with the supplied M6x35mm Socket Head bolt and supplied alloy spacer between the bracket and plastic trim. On the left-hand side, reuse the original bolt removed in Step 6.

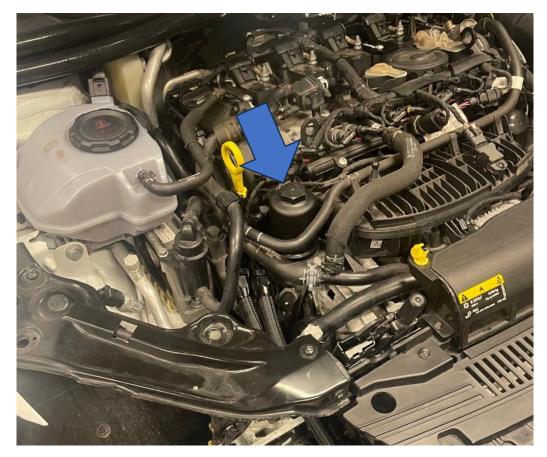




17. Now remove the engine cover by pulling from one corner to release it from its rubber mounts.

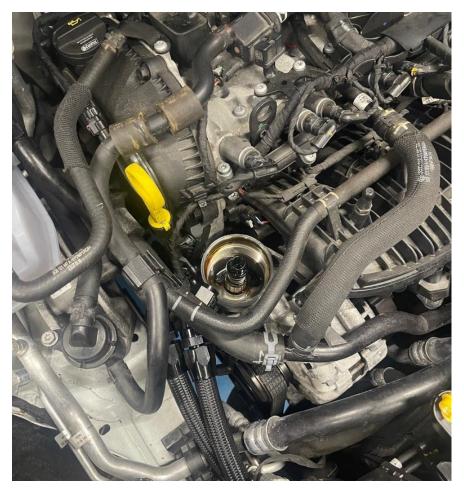


18. Locate the oil filter housing on the left-hand side of the engine.





19. Use a 32mm socket to undo the housing and remove the oil filter. Have something on hand to catch any spilt oil.

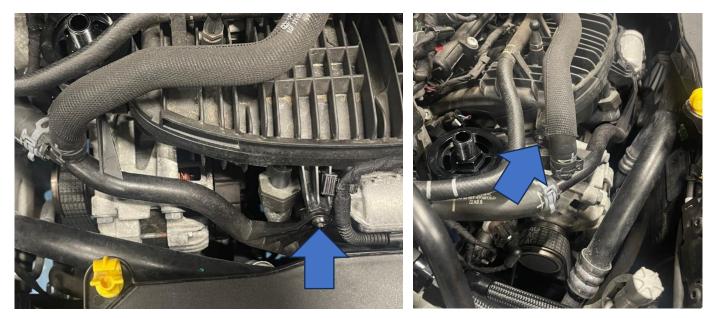


20. Now fit the supplied oil fitting adapter and tighten using a 27mm deep socket.





21. Undo the two bolts holding the plastic pipe highlighted.



22. Once it is free, lift the pipework up to fit the supplied sandwich plate in place.





23. Postion the outlets as shown and fully tighten the supplied centre nut.

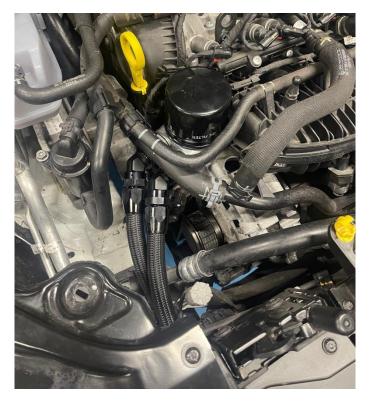


24. Attach both the oil lines in positon (they can go on either take off) and fully tighten them using a hose fitting spanner or adjustable spanner.





25. You can now fit the new supplied oil filter in place.



26. Use the supplied cable ties to secure the lines together at intervals.





27. Add the supplied spacer bracket to the fitting removed in Step 21, reusing the original bolt on the bottom part together with the single supplied M6x16 Socket Head bolt with nut and washers both sides.



28. Finally, top up the car with 500ml of the manufacturer's recommended grade of oil and then reinstall parts removed in the reverse order that enable you to start the vehicle. Allow the vehicle to run up to temperature and check for any leaks, tightening any fittings as necessary.

Once cool, check the oil level and top up as required. When happy with the installation you can then reattach the engine cover and refit the headlights and front bumper in reverse of removal.

Lastly; please make sure to double check the route of the lines to ensure they don't rub or wear on anything sharp, hot or moving. Please consider the engine moves during acceleration, therefore clearances need to be carefully considered.



