## VW Mk7 Golf R Oil Cooler Fitting Instructions

## **Tools Required:**

- Ratchet and Socket Set
- Torx Sockets
- Drill and 4mm to 7mm Drill Bits
- Hose Fitting Spanner or Adjustable Spanner
- 32mm Socket
- 27mm Deep Socket
- 500ml of Correct Grade Engine Oil

## **Kit Contents:**

- 1x AIRTEC Motorsport Oil Cooler
- 2x AN10 Oil Lines with Fittings
- 1x AIRTEC Motorsport Oil Filter Housing Adaptor
- 1x AIRTEC Motorsport Sandwich Plate
- 1x High Quality Branded Oil Filter
- Fitting kit:
  - 1x Mounting Bracket
  - o 3x M6x16mm Button Head Bolts
  - o 4x M6x14mm Button Head Bolts
  - o 14x M6 Pan Washers
  - o 7x M6 Nyloc Nuts

- o 1x M5x16mm Button Head Bolt
- o 2x M5 Pan Washers
- o 1x M5 Nyloc Nut
- o 1x AN10 Oil Line Separator
- o 2x O-Rings



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



## Instructions:

1. Undo the four T25 Torx bolts on the top of the grille and remove.

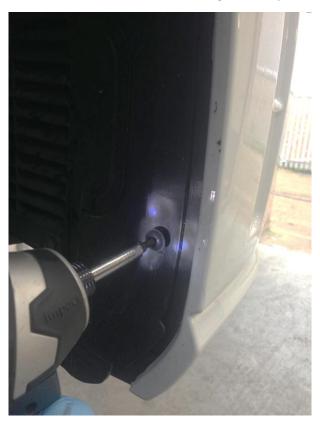


2. This gives access to three T30 Torx bolts that hold the bumper to the crash bar; remove these.





3. In each wheel arch are three T25 Torx bolts that need to be removed, which will allow the arch liner eto be moved enough to give access to a final T25 Torx bolt holding the bumper to the front wing.

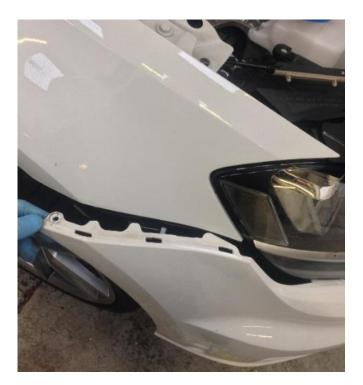


4. Working under the car, remove the three T25 Torx bolts securing the bottom of the bumper.





5. Unclip the side of the bumper and with the help of a second person remove, as you pull the bumper away you will need to disconnect the multiplug and headlight washers, use a suitable container to catch the fluid.







6. Working under the foam on the left-hand side of the crash bar, carefully mark out a hole to drill 10mm up from the bottom of the crash bar and 80mm inwards from the lower foam tab (blue arrow), as shown. Once you have marked the first hole you can use the supplied mounting bracket to mark the other two holes to ensure fitment. When drilling, start with a 4mm drill bit and work your way up to 7mm.









7. With the crash bar drilled, install the bracket onto the car as shown, using the supplied M6x16mm bolts, washers and Nyloc nuts.

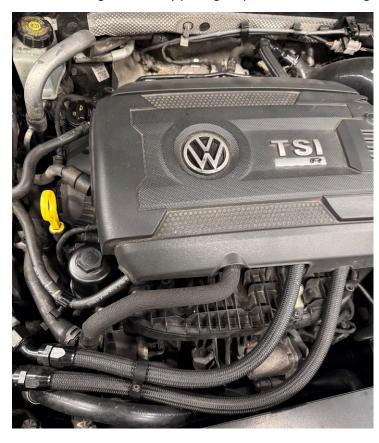


8. Install the oil cooler onto the bracket using the supplied M6x14mm bolts, washers and Nyloc nuts. Install the supplied O-rings between the oil cooler and bracket to reduce the vibration.

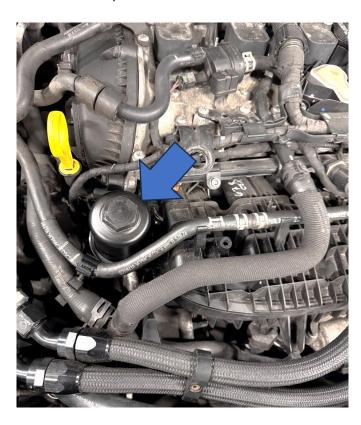




9. Under the bonnet, remove the engine cover by pulling it upwards from one edge.



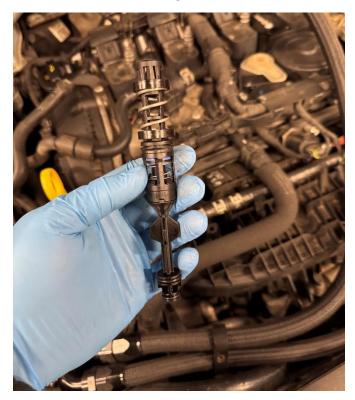
10. Remove the original oil filter housing top using a 32mm socket and then remove the filter and oil filter connection piece centre stem inside.







11. **Please note:** Before refitting the oil filter connection piece centre stem, ensure that you have the newest version (VW part number: 06L-115-678-Q). This was an update from VW, so a majority of cars will have it fitted already, but please check as failure to change to the new version could result in reduced oil pressure.

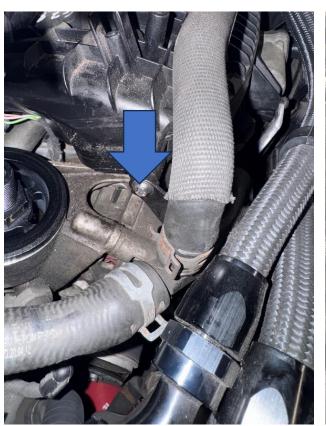


12. Install the oil filter connection piece centre stem under the supplied AIRTEC Motorsport oil filter housing adaptor and tighten using a deep 27mm socket.





13. You will need to remove these two T25 Torx bolts holding the coolant line in place to allow room for the oil lines.



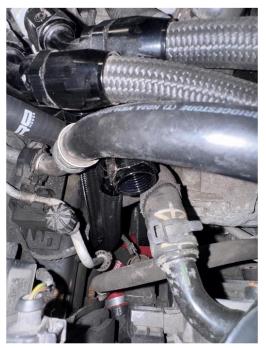


14. Once it is free, lift the pipework up and fit the supplied sandwich plate with centre bolt as shown, but do not fully tighten yet.





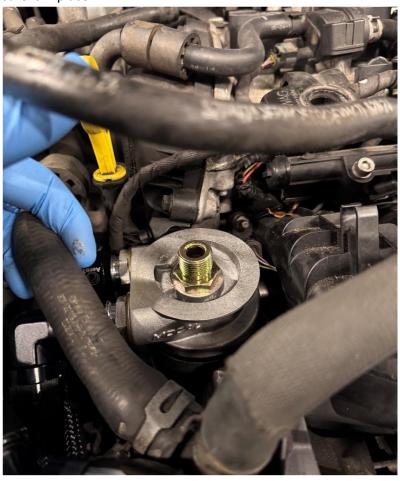
15. Run the oil lines down the side of the chassis leg, making sure to route them away from the belt. Install the longer line onto the far end of the oil cooler and shorter on the near end. Use the supplied AN10 oil line separator to keep the lines together, as shown.







16. Install the oil lines onto the sandwich plate. Rotate it so that it has sufficient clearance and then tighten the centre bolt to secure it in place.

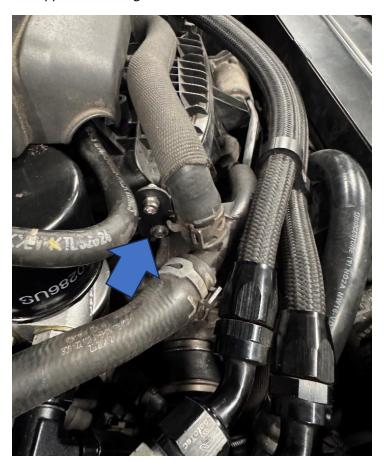




17. Install the new oil filter and ensure all fittings are tight and correctly seated.



18. Install the supplied bracket to position the coolant hose out of the way. Reuse the original Torx bolt fitting at the bottom and the supplied M5 fixings to secure the hose to the bracket.





19. 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 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.



