

# HYUNDAI i30N AIRTEC OIL COOLER FITTING INSTRUCTIONS

## Tools needed:

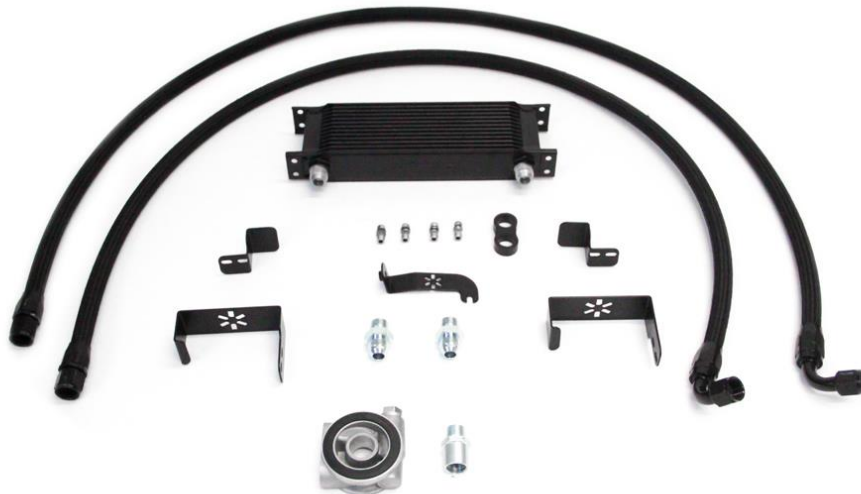
- *Socket set*
- *10mm spanner*
- *Oil filter wrench*
- *5mm Allen key*
- *Trim removal tool*
- *Container to catch used oil*

## Other parts needed:

- *Fresh oil of the correct grade, as per owner's manual (minimum required = 1-litre)*
- *New oil filter (recommended)*

## Kit Includes:

- *Oil Cooler*
- *2x oil lines*
- *Thermostatic sandwich plate*
- *2x dowty washers and 2x -10 oil line fittings*
- *Oil cooler brackets*
- *Oil line bracket*
- *Oil line separator*
- *8x M6 pan washer*
- *4x M6 x 16mm bolts*
- *4x M6 Nyloc nuts*



## Instructions:

1. Open the bonnet and secure, then jack the car up either with a jack and using axle stands to secure or preferably on a vehicle lift.

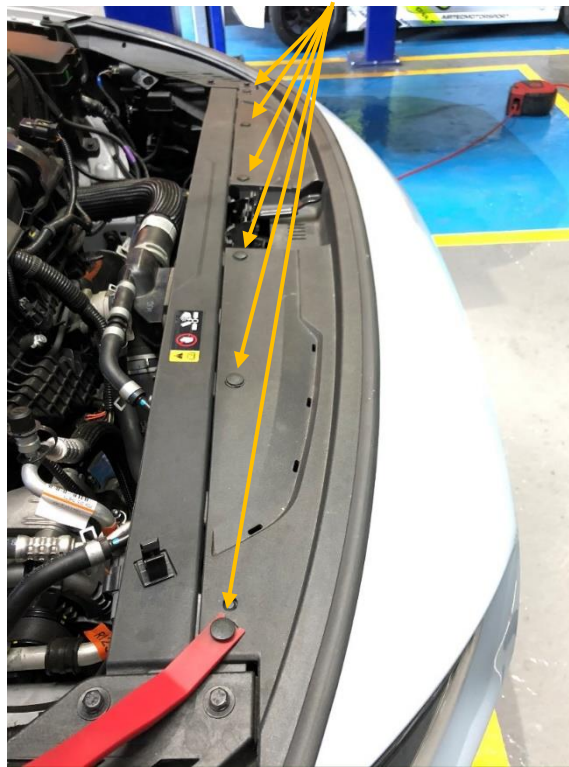
2. Start by removing the undertray from the car by removing the 12 plastic clips using a trim removal tool or flat-bladed screwdriver, followed by seven 10mm bolts. The undertray can then be removed by sliding it towards the front of the car.



3. In both wheel arches there are three plastic clips that need to be removed using a trim removal tool. There is also a single 8mm bolt higher up that needs removing (orange arrow).



4. There are six plastic clips to be removed along the top of the bumper under the bonnet.



5. The edges of the bumper can now be released, best achieved by gently pulling from the top corner edge where the bumper meets the wing, and then working forward as it pops out. It is advised that another person supports the other side so that once both sides are pulled forward, one person can support the bumper whilst the other disconnects the three electrical connectors left to un-plug: two on the near-side and one on the off-side. The bumper can now be fully removed and put aside safely.



6. Remove the crash bar by un-doing the two 10mm nuts followed by the four 12mm bolts located each side. You can then tilt the bar forward to remove. This would be easier if another person can support the crash bar whilst it is being un-done.



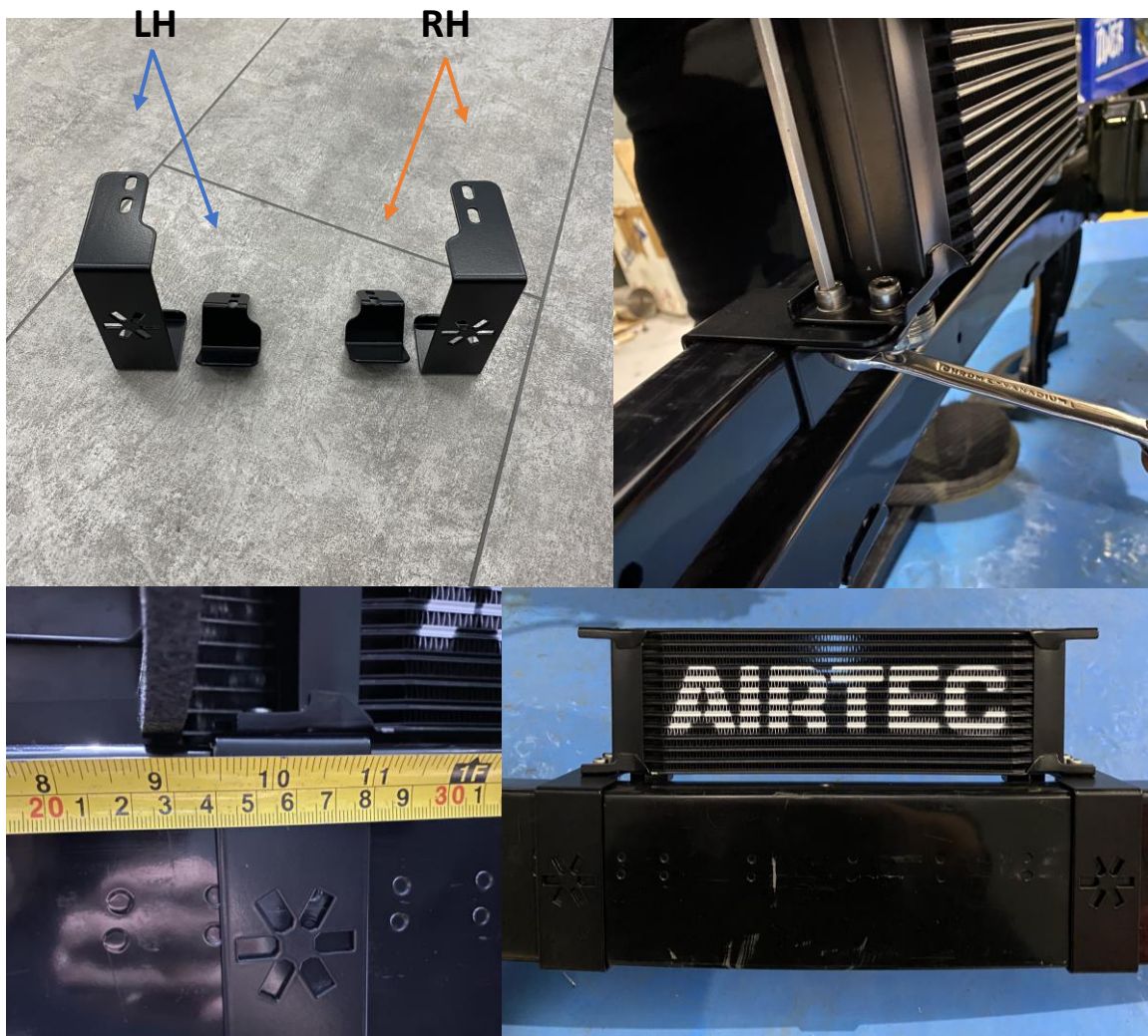
7. Remove the oil filter and catch the waste oil.
8. Fit the sandwich plate using a dab of fresh oil on the seal and tighten the bolt using a 26mm socket. Attach oil line fittings with the supplied washers and tighten.



9. Fit the new oil filter, again using a dab of fresh oil on the seal and tighten by hand.
10. Attach the oil lines to the oil cooler ideally using an AN-10 aluminium spanner, which is recommended in order to avoid damage to the finish on the hose connectors. However an adjustable spanner can be used but it is recommended to put some electrical tape around the connectors to minimise the risk of scratching.

11. Fit the oil cooler to the crash bar by hooking the larger of the left-hand (LH) brackets under the crash bar and pushing it up so that it clips onto the front of the bar. Then place the oil cooler on the top of the bracket, locate the smaller LH bracket and place the two M6 x 16mm bolts with washers through the holes. Using another washer and Nyloc nut, tighten by hand so that the assembly cannot come apart. Repeat the process for the right-hand (RH) brackets the same as the other side and secure the oil cooler and then tighten using a 5mm Allen key and 10mm spanner.

***Please note: Ensure that the distance from the left-hand side of the crash bar to the first bracket is exactly 240mm so that the oil cooler clears the surround.***



12. Route the oil lines over the right-hand air duct as shown below.

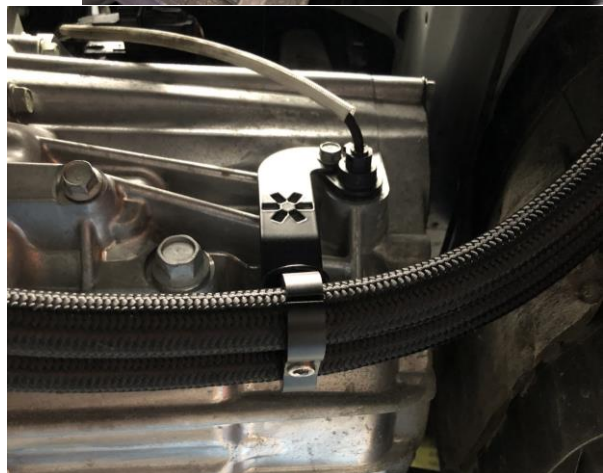


13. Re-attach the crash bar using the original fittings, this is best achieved with help from another person so that they can keep the oil lines in the correct place whilst the crash bar is re-fitted and secured.

14. Attach the lines to the sandwich plate, again using either an AN-10 aluminium spanner or adjustable spanner.



15. Use the supplied bracket to clip the oil lines onto the gearbox by loosening the 10mm bolt so that the bracket can fit between the gearbox housing and the bolt. Once happy with the positioning, you can re-tighten. Use the supplied oil line separator to attach the lines to the bracket with the supplied bolt.



16. Top up the engine oil.

17. Start the car and let it run up to full working temperature while stationary so that the oil flows through oil cooler. Then visually check each of the fittings for any kind of leak and tighten if necessary. Then check oil level again and top up as required.

18. Once happy that all is tight and secure with no weeping, then replace the undertray and front bumper in the reverse of steps 1-3.

