

# Hyundai i20N Oil Cooler Fitting Instructions

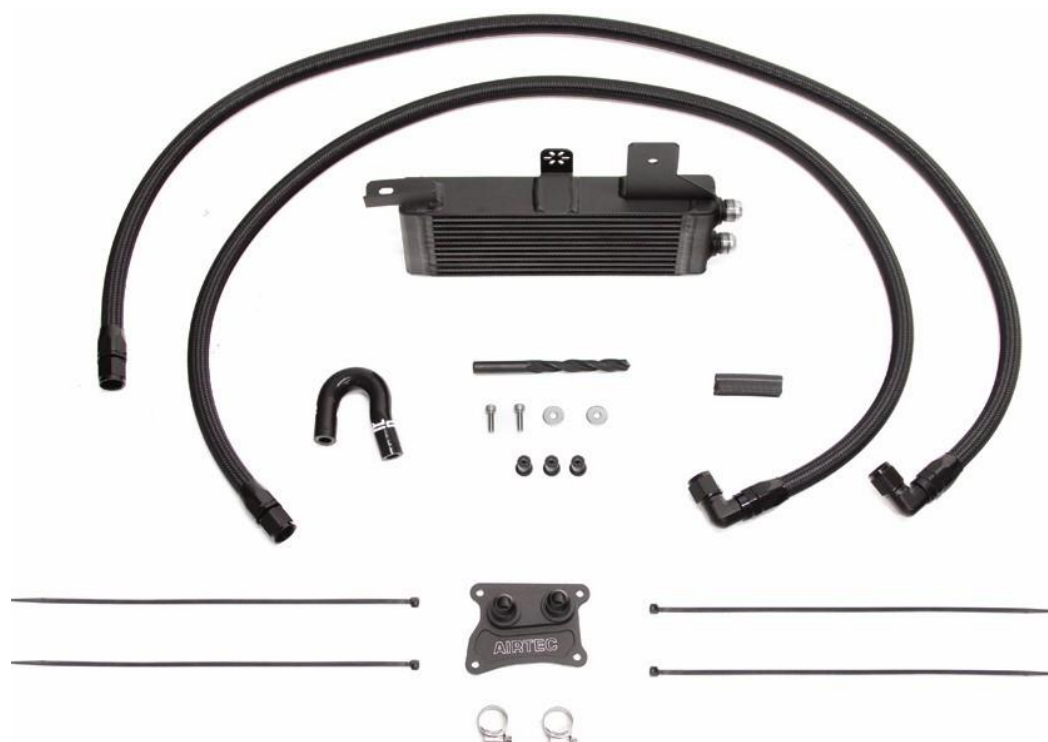
## Tools needed:

- Ratchet and Socket Set including Torx Bits
- Jubilee Driver or Flat-Bladed Screwdriver
- Trim Removal Tool or Flat-Bladed Screwdriver
- Hose Clamp Pliers
- Electric Drill
- Adjustable Spanner or Hose Fitting Spanner
- Correct grade of oil and coolant (to top up once installed)

## Kit Includes:

- 1x AIRTEC Motorsport Oil Cooler
- 1x AN10 Oil Lines
- 1x AIRTEC Motorsport CNC Oil Modine
- 1x Pro Hoses Silicone Hose
- 1x 12.4mm Drill Bit
- 2x M6 Rubber Nutserts
- 2x M6x20mm Socket Head Bolts
- 2x M6 Mudguard Washers
- 4x Large Cable Ties
- 1x Small Rubber Trim (60mm)

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



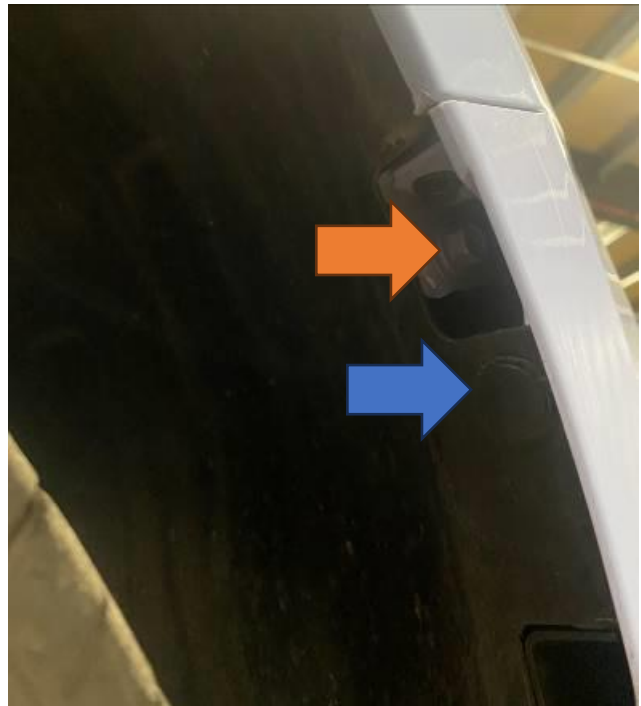
**AIRTEC**   
M O T O R S P O R T

# Instructions:

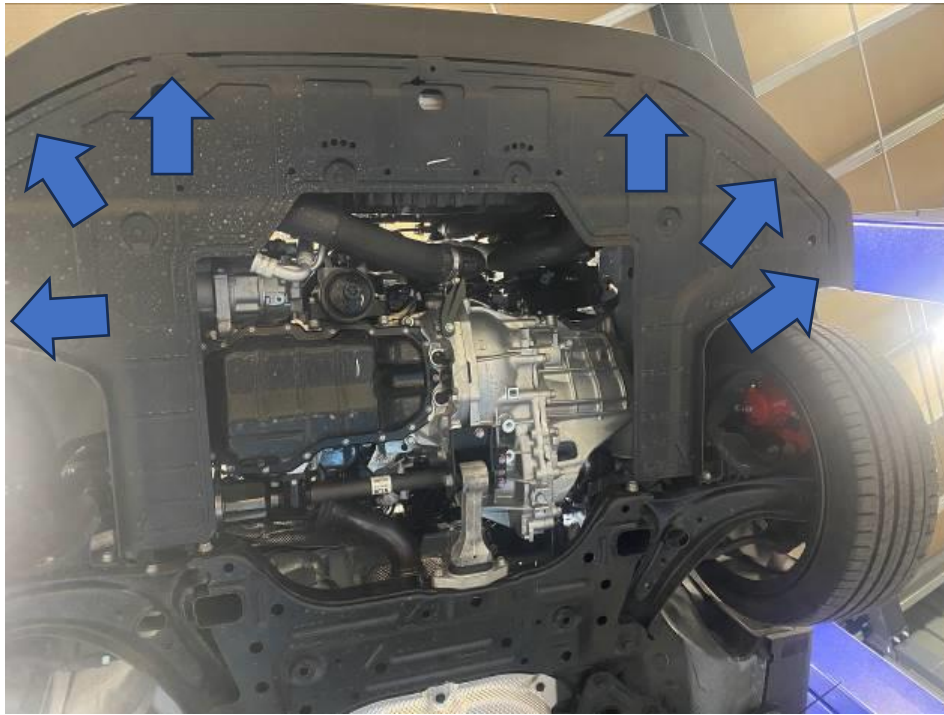
1. Under the bonnet, undo four 10mm bolts along the top of the bumper (blue arrows) and remove the trim clip at either end (orange arrows).



2. Working inside the front wheel arches, remove the three trim clips (blue arrows) followed by the 8mm bolt (orange arrow) that attaches the front bumper to the wing on both sides.



3. Working under the car remove the six trim clips along the front of the bumper.



4. With a second person to help, you can now pull the edges of the bumper out to release it. Whilst one person holds the bumper, the other needs to undo the fog light wiring plugs on either side. The bumper can then be removed from the car.

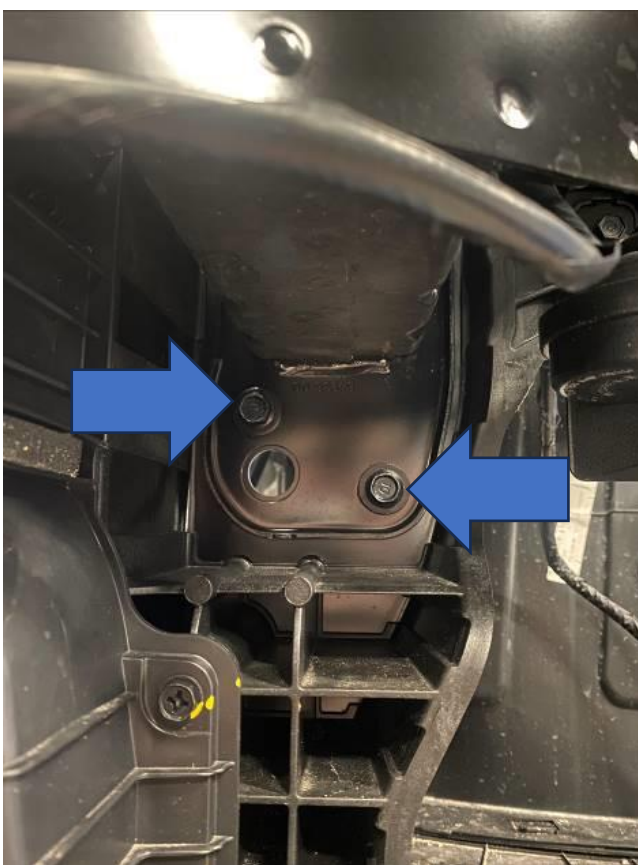
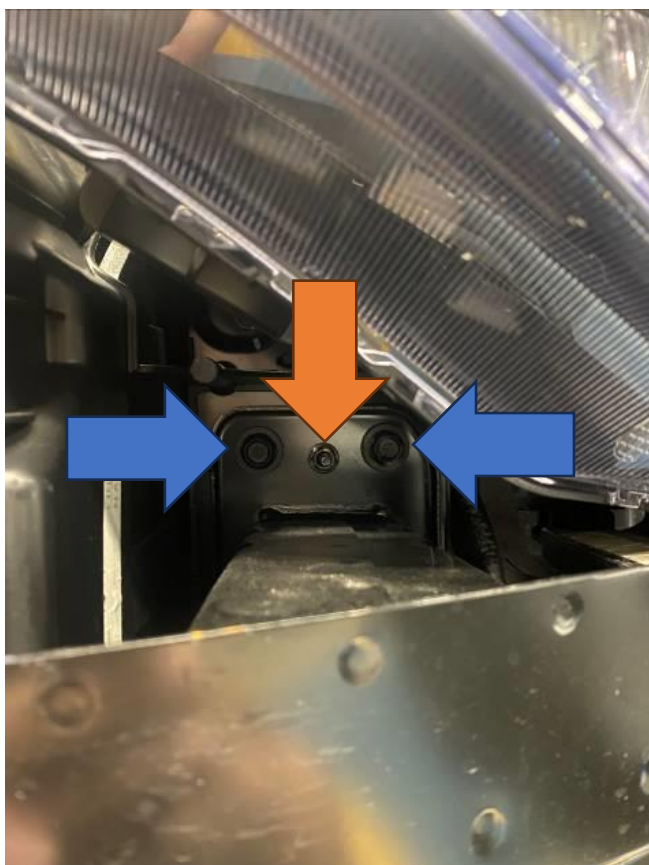




5. Now unhook the temperature sensor and the wiring harness from the crash bar.



6. The crash bar can be now removed by undoing the four bolts (blue arrows) and single nut (orange arrow) on each side.



7. On the crash bar, two of the existing holes need to be elongated using the supplied drill bit so the rubber Nutserts can be installed. One hole is in the centre on the back of the crash bar (blue arrow) and the other is on the upper left-hand side (orange arrow). Once the holes are clean, we recommend painting afterwards to help protect them from rusting in the future.



Centre Hole:



Upper Left-Hand Side:





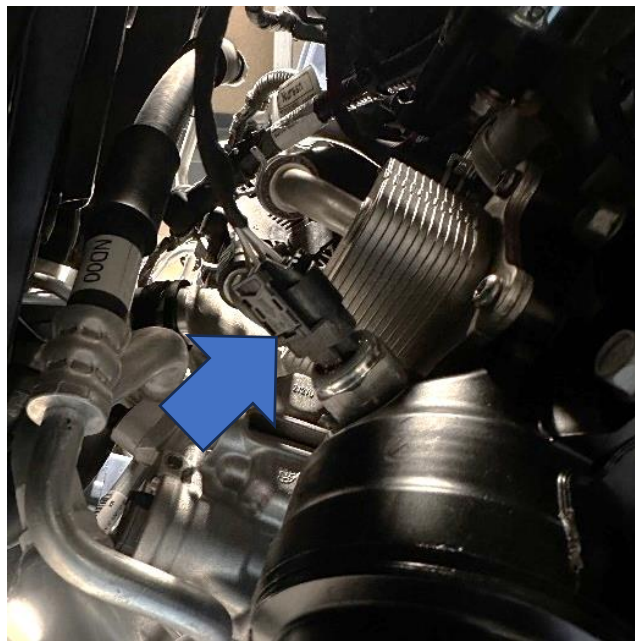
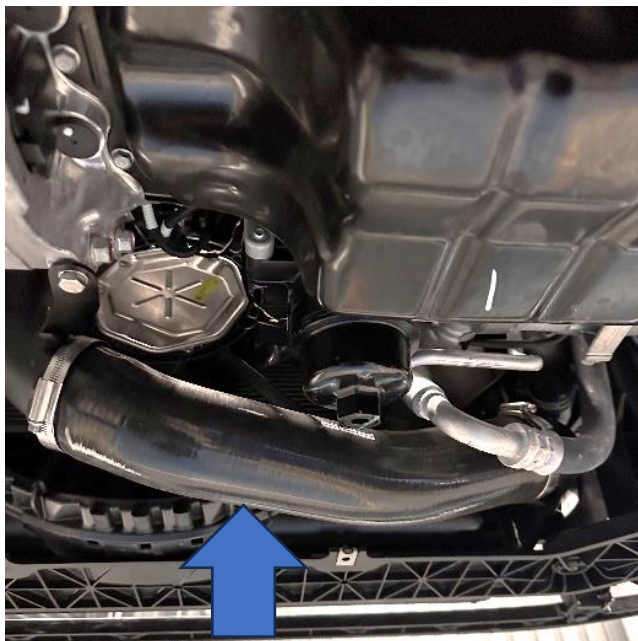
8. Now install the oil cooler onto the crash bar by inserting the supplied rubber Nutserts into the holes and then placing the oil cooler onto the crash bar. Then tighten into place using the supplied M6 fixings with large washers until it's solid; **but do not over tighten**.



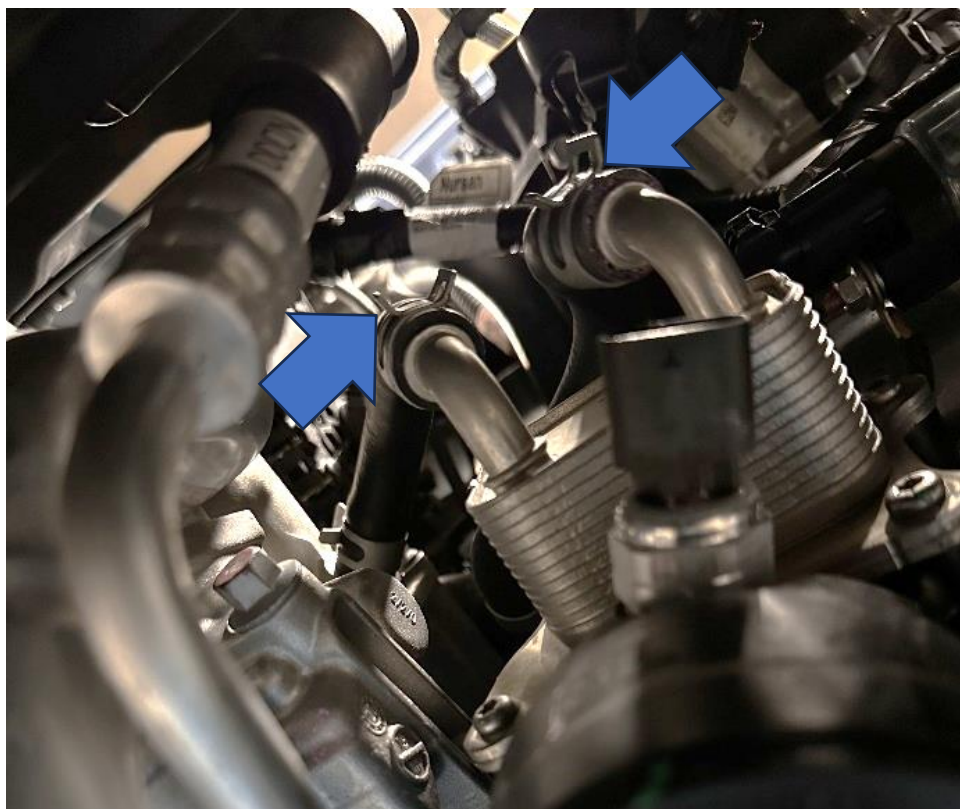
9. The crash bar can be reinstalled onto the vehicle. Before fully tightening the fixings, look to line up the bolts with the witness marks on the crash bar itself from where they were tightened previously.



10. Working under the car, remove the front boost pipe shown (yours may look slightly different) to help gain access to the original oil Modine. Once located, unplug the oil pressure sensor by pulling the tab up before pressing it in as you pull on the connector.

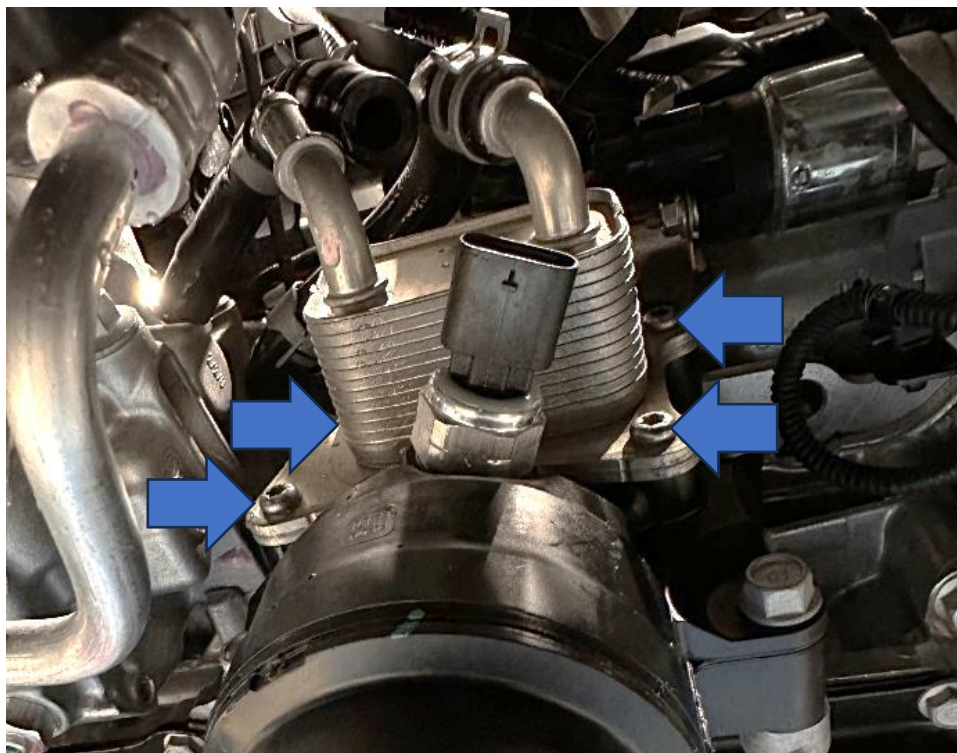


11. You will now need to disconnect the two hoses attached to the original oil Modine by releasing the tension clips. **Please note: be prepared that there will still be coolant inside the system so expect some spillage.**

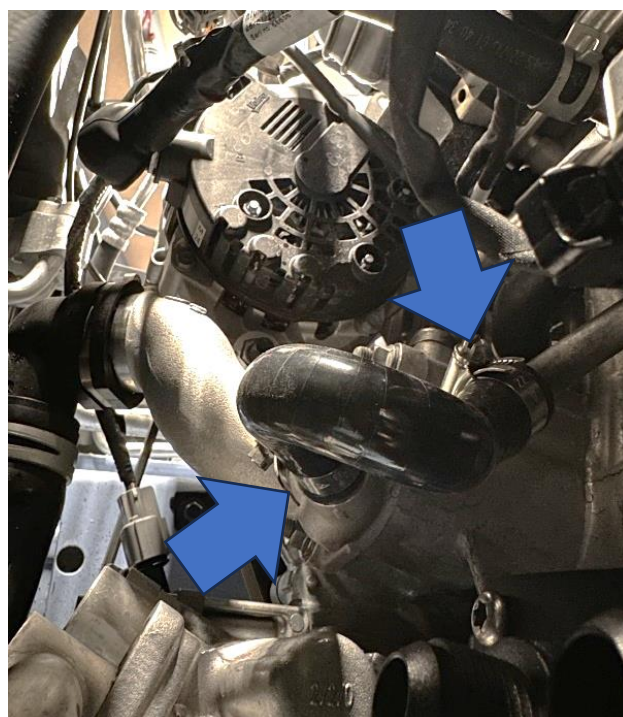
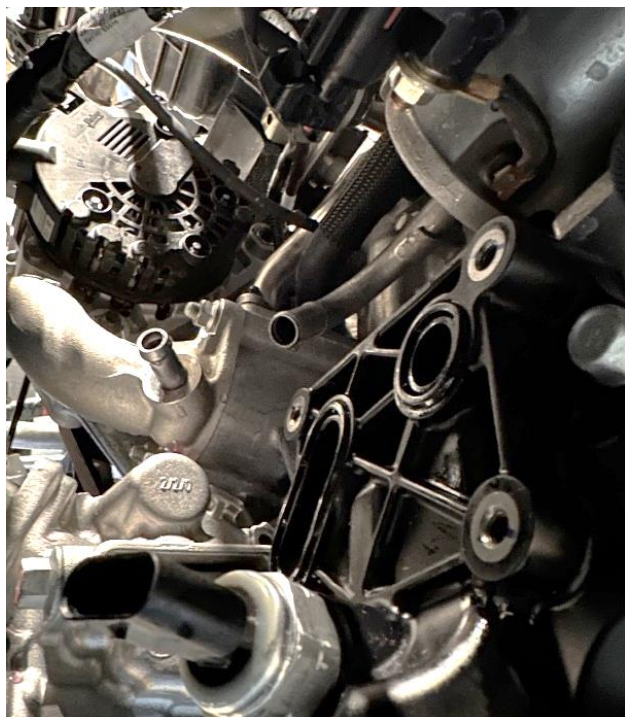




12. The oil modine can now be removed by undoing the four T27 bolts holding it onto the filter housing, it will leak oil as it is removed and there will also be coolant inside so be careful as you take it off the vehicle.



13. Now install the supplied Pro Hoses silicone joiner with jubilee clips to link the two hoses disconnected in Step 13 together, as shown.

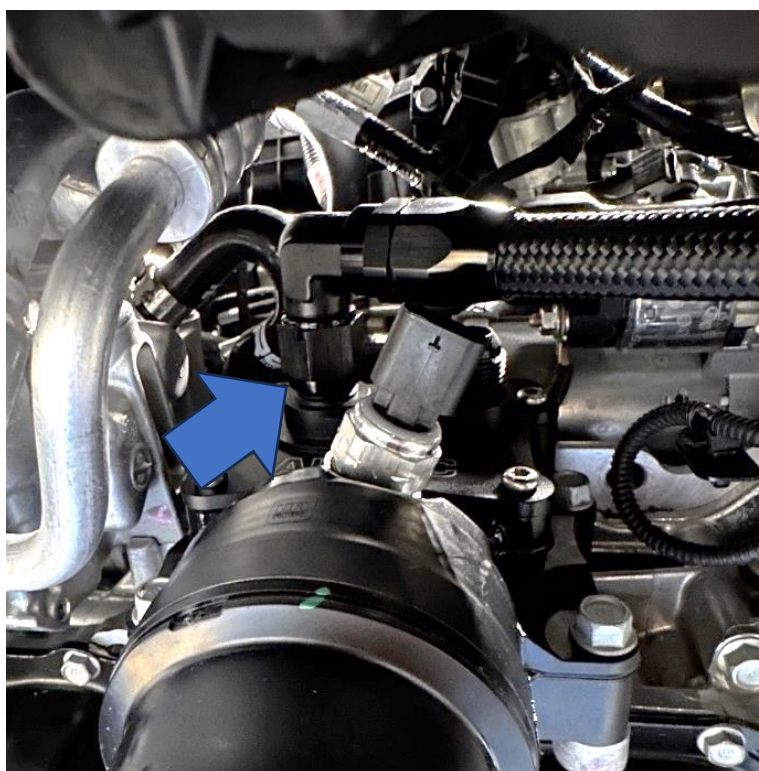




14. Ensure there is no dirt on the original O-rings and then install your AIRTEC Motorsport CNC oil sandwich plate, as shown, reusing the original bolts.



15. Install the oil lines onto the sandwich plate with the longer line going onto the left-hand take off. Use a suitable adjustable spanner to tighten the fitting, taking care not to damage or position the line too close to the oil pressure sensor. Then install the second oil line.



16. Route the oil lines round to the oil cooler through the right-hand side of the car. Install the straight line to the bottom fitting and the 45-degree one to the top and tighten, as shown.

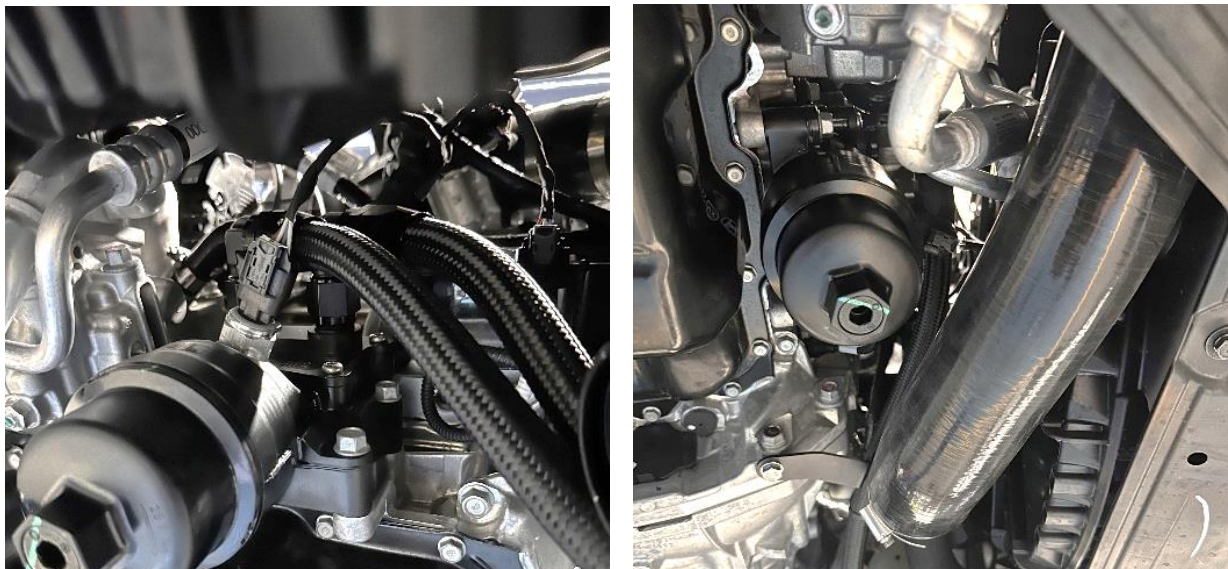


17. Install the small rubber trim supplied where the hoses touch the top of the crash bar and then use the supplied cable ties to secure the oil lines together and to the car. We recommend routing it around the chassis leg before coming down from the crash bar and by the bracket on the back of the radiator.

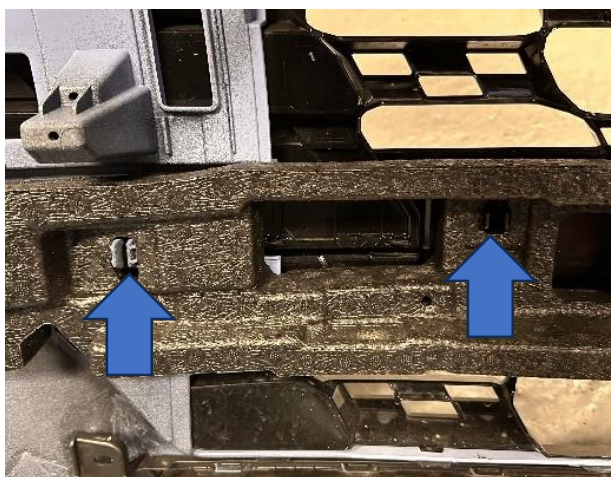
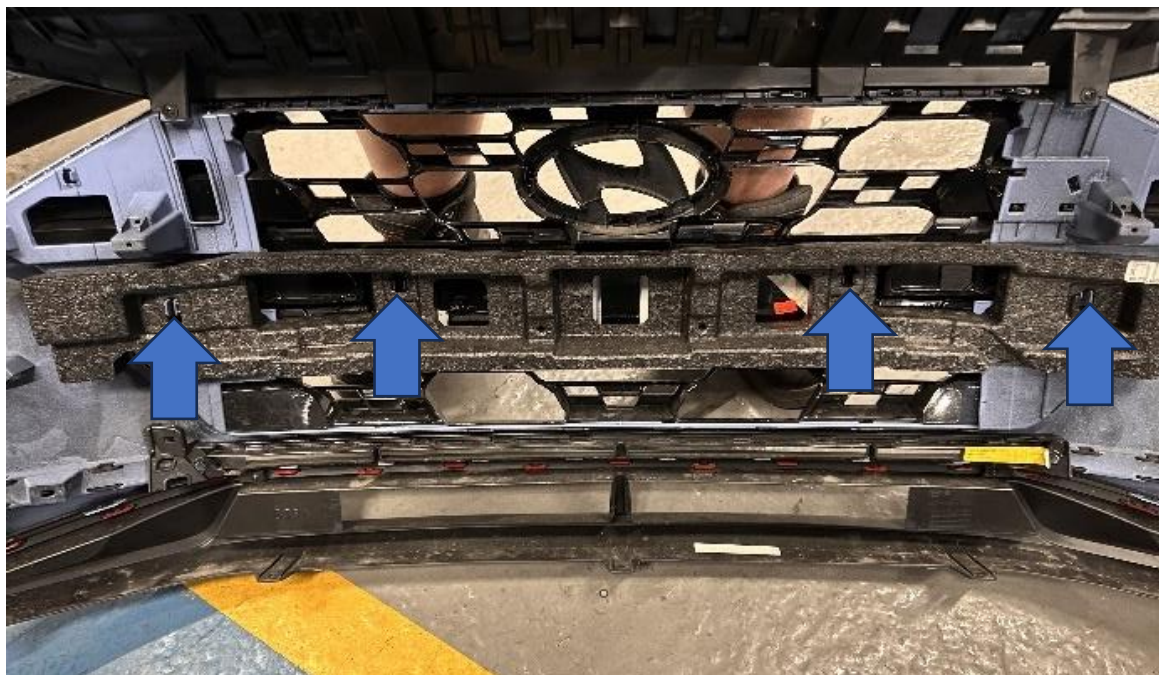




18. Now you can reinstall the oil pressure sensor plug, boost pipe and lower plastic tray.



19. Before the bumper can be reinstalled, the foam insert in the lower part will need to be removed by squeezing the tabs and pulling on the foam to release.



20. Finally, run the car up to temperature and then check the vehicle for any leaks and tighten any fittings as required before reinstalling the front bumper in reverse if removal. Check if the coolant needs topping up as some may have leaked when removing the original oil Modine.

**Please note:** You will then need to top up with the correct grade oil (approx. 0.25 litres) before running the car for 30 seconds to let the oil get around the oil cooler and lines. Once the engine is cool again, top up as needed until it registers full on the dip stick.

