# Hyundai i20N Auxiliary Radiator Fitting Instructions

#### **Tools needed:**

- Ratchet and Socket Set
- Allen Key Sockets
- Trim Removal Tool
- Jubilee Hose Flexi-Driver or Flat-Bladed Screwdriver
- Hose Clamp Pliers
- Side Cutters

#### Kit Includes:

- 1x AIRTEC Motorsport Auxiliary Radiator
- 1x Radiator Air Guide Surround
- 1x Mesh Grille
- 1x Radiator Bracket 1
- 1x Radiator Bracket 2
- 1x Silicone Hose Bracket 1
- 1x Silicone Hose Bracket 2
- 1x Pro Hoses Silicone Hose Kit with Heat Sleeving
- Fitting kit:
  - 1x M10x25mm Socket Head bolt
  - 0 1x M10 Large Washer
  - 1x M8x16mm Socket Head bolt
  - 1x M8 Large Washer
  - O 2x M6x16mm Hex Head bolts
  - O 3x M6x12mm Hex Head bolts
  - O 4x M6x8mm Hex Head bolts

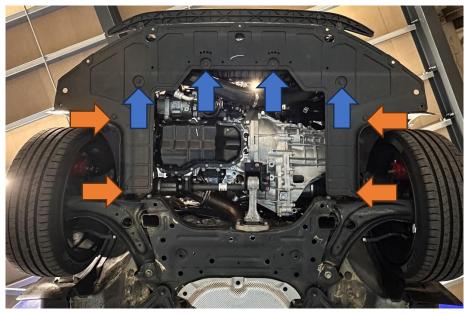
- O 5x M6 Large Washers
- O 4x M6 Pan Washers
- O 4x M5x12mm Button Head bolts
- 0 4x M5 Nyloc Nuts
- 0 8x M5 Pan Washers
- 4x M6x8mm Hex Head bolts
- 4x 30mm Jubilee Clips

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

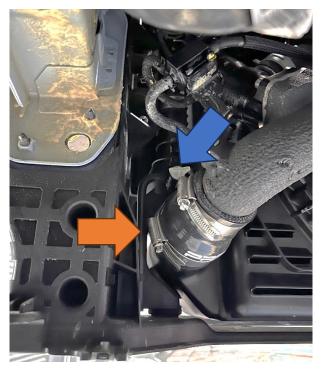


## Instructions

1. Raise vehicle into air and remove the lower plastic tray by undoing the four 10mm bolts (blue arrows) and removing the four plastic clips (orange arrows) using a trim removal tool or flat-bladed screwdriver.

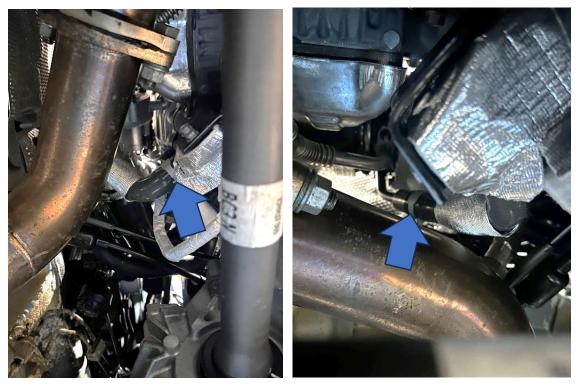


2. Locate the coolant drain plug (blue arrow) and the small tube running down to the bottom of the plastic rad support (orange arrow). Using a suitable container to catch the coolant, undo the expansion bottle cap and then slowly unwind the plug until coolant starts to run out of the tube. Do not loosen the plug too much, as coolant will come out from the back of the rad and will be difficult to collect. Once draining is complete, tighten the drain plug.

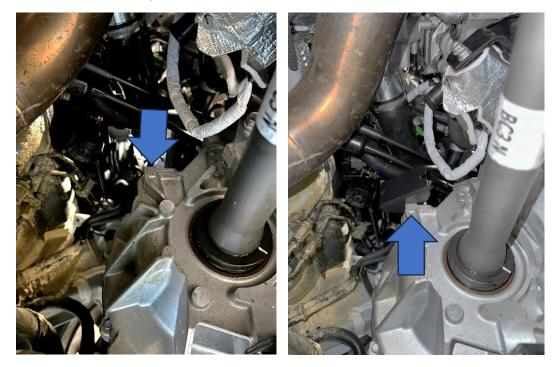




3. At the back of the engine, locate the coolant hose from the turbo and remove the securing clips from both ends. There will still be coolant in the pipe, so expect some fluid to leak.



4. Locate the spare bolt hole boss on the gearbox casing above the driveshaft. Start threading the supplied M6x12mm Hex Bolt and washer, as shown, before using the cut out in the bracket to slide it into position. You can tighten the bolt, but not fully so that the bracket can still be moved for adjustment later.

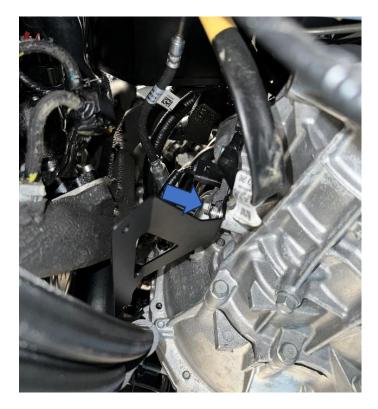




5. Loosen the bolt holding the lower torque mount to the engine so that you can slot the second silicone hose support bracket into position and then retighten the bolt. There is a cutout in the bracket allowing an extension bar to be used.



6. Locate the spare bolt hole boss in the front of the gearbox, as shown and install the upper radiator bracket in position using the supplied M8x16mm Socket Head bolt with a washer, but do not fully tighten at this stage to allow for adjustment.

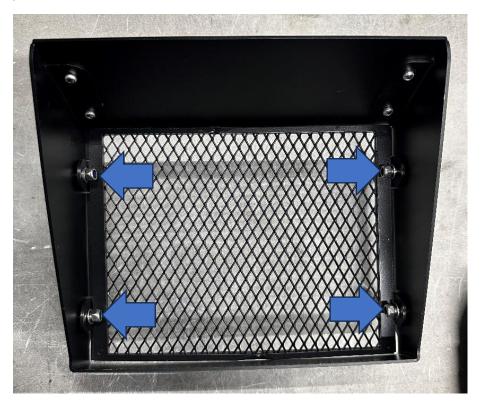




7. Locate the spare bolt hole boss in the bottom of the gearbox and install the lower radiator bracket in place using the supplied M10x25mm Socket Head bolt with a washer, but do not fully tighten at this stage to allow for adjustment.

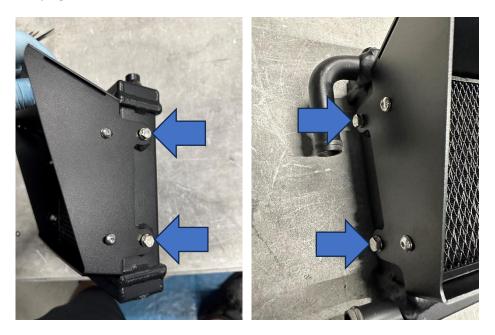


8. Build up the radiator by installing the mesh cover onto the scoop using the supplied M5 Button Head bolts, Nyloc nuts and washers both sides. Install the mesh with the tabs facing away from the radiator face, as shown.





9. Now install the surround onto the radiator using the M6x8mm Hex Head bolts with washers and fully tighten.

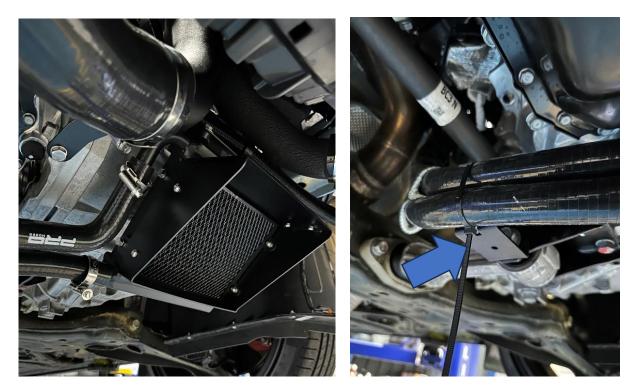


10. The radiator can now be installed onto the car using the M6x16mm Hex Head bolts on the top bracket (blue arrows) and M6x12mm Hex Head bolts for the bottom bracket (orange arrows), both with washers. (If you have the AIRTEC Motorsport oil cooler already fitted, we recommend running the lines above the upper bracket, as shown.)





11. Install the silicone hoses onto the car using the supplied jubilee clips. The upper hose goes to the electric water pump and the lower hose to the turbo outlet. Route them using the brackets attached in Step 4 and 5, and use the supplied cable ties to attach them. Ensure that the heat sleeving is located towards the ends of the hose that connect back onto the car, as this is to help protect them from the heat of the exhaust.



12. Rotate the bracket fitted in Step 6 to help position the hoses away from the downpipe and then fully tighten the bracket.





13. Once happy with the positioning of the silicone hoses, make sure all bolts and jubilee clamps are fully tightened, then trim the ends of the cable ties to neaten them.



14. Finally, reinstall the lower plastic tray in reverse of removal and then top up the coolant and follow the manufacturer's recommendations for bleeding air out of the system. Check the system for leaks once the car has cooled down and tighten any fittings as necessary.



