

# Toyota Yaris GR Inlet Manifold Fitting Instructions

## Tools Required:

- Ratchet and Socket Set
- Torx Sockets
- Hose Clamp Pliers
- Trim Removal Tool or Flat-Blade Screwdriver
- Jubilee Clip Driver
- AN10 or Adjustable Spanner

## Kit Contents:

- 1x AIRTEC Motorsport Inlet Manifold
- 1x Large Mounting Bracket
- 1x Small Mounting Bracket
- 2x Pro Hoses Silicone Hoses
- 2x M8x55mm Socket Head Bolts
- 1x M6x20mm Socket Head Bolt
- 2x M6x12mm Socket Head Bolts
- 4x M6 Pan Washers
- 1x Aluminium Spacer
- 2x M6x10mm Socket Head Bolts
- 1x M6x25mm Washer
- 3x 20mm Jubilee Clips
- 1x 22mm Jubilee Clip
- 1x Stainless-Steel U-spacer
- 1x Ball Allen Key Socket



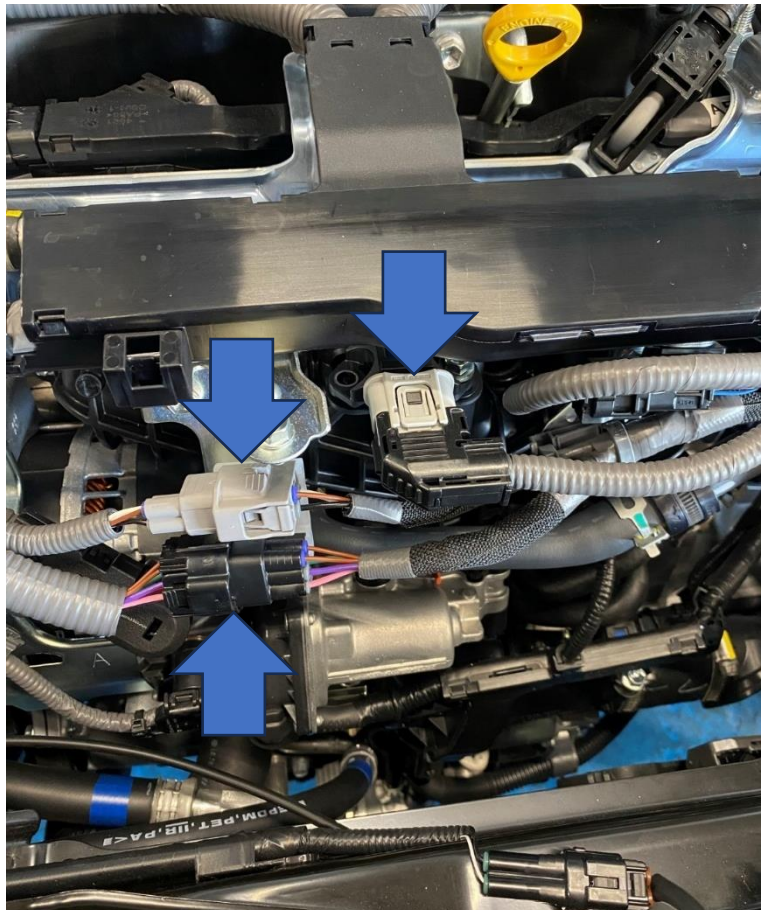
PLEASE THOROUGHLY READ THESE INSTRUCTIONS AND MAKE SURE YOU ARE FAMILIAR WITH THE STEPS BEFORE CARRYING THEM OUT

# Instructions:

1. Start by removing the engine cover by pulling upwards on each corner to release it from its rubber mounts.

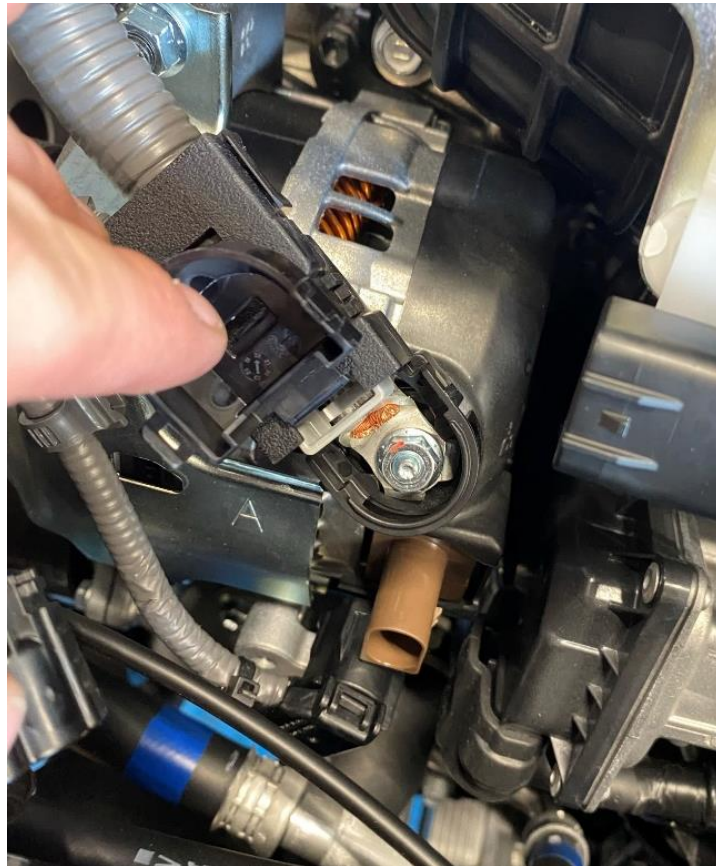


2. Disconnect the three plugs at the front of the car, as shown.

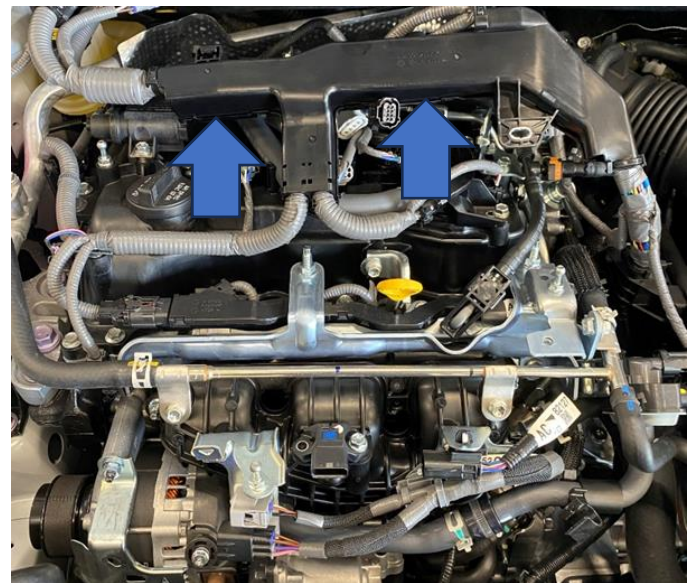
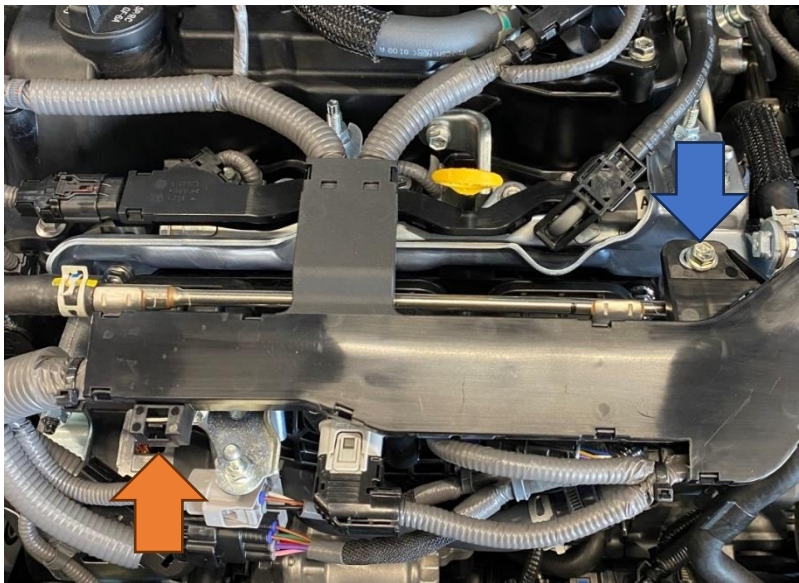




3. Undo the 10mm nut securing the power wire on the alternator and unclip the plug below.  
**Please note:** This is a live cable and so please take appropriate precaution when undoing this and moving the cable out of the way. We recommend you disconnect the battery, which is located in the boot before this step.

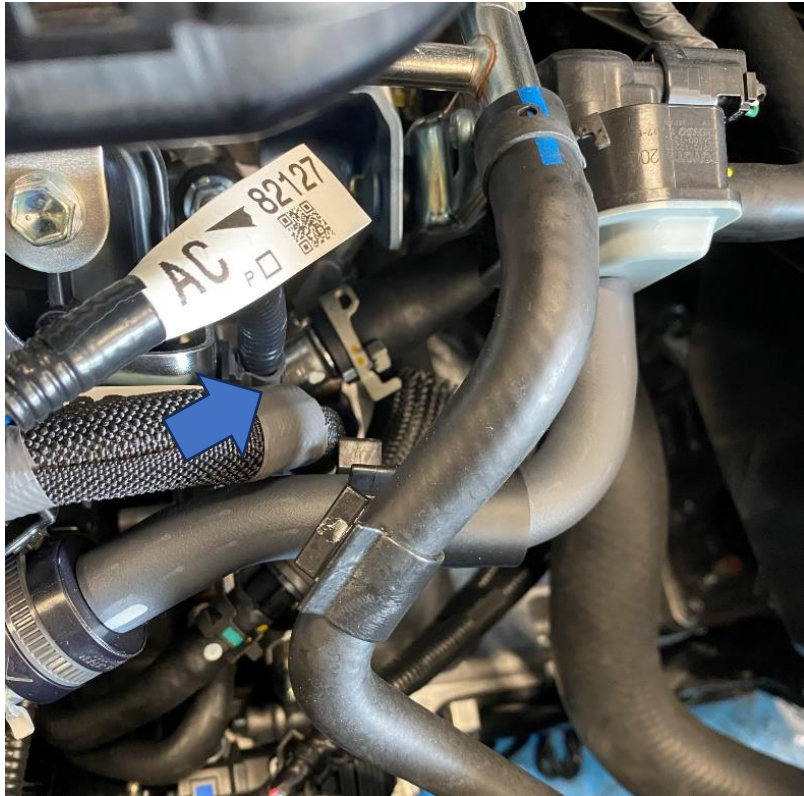


4. Undo the 10mm nut (blue arrow) and then release the clip (orange arrow) holding the wiring harness in place and fold it backwards over the engine so it is out of the way.

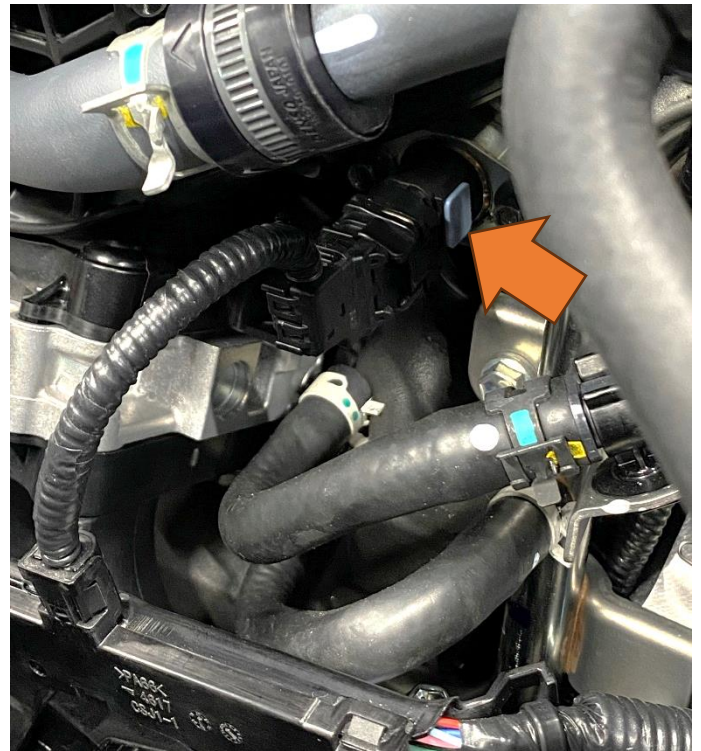




5. Unclip the coolant line from the breather line by removing it from the clip.

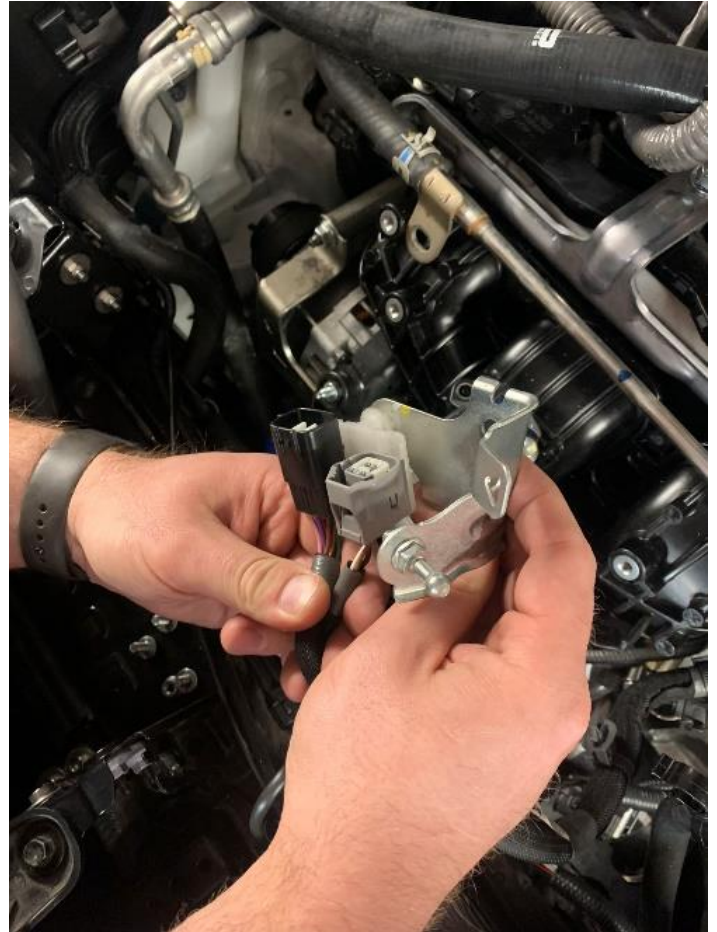
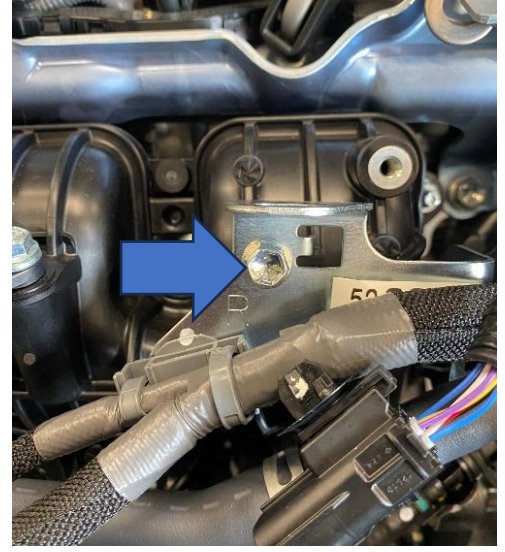
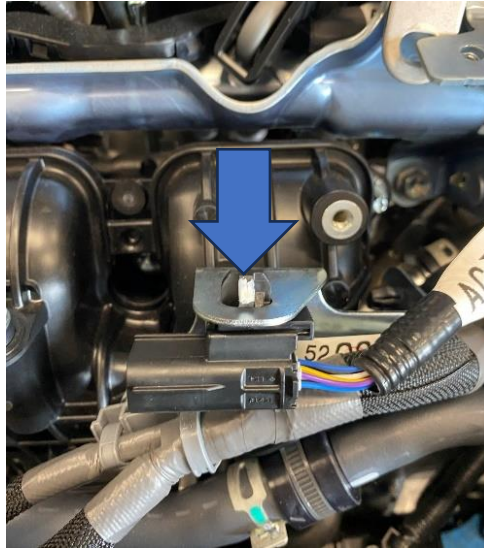


6. Undo the three 10mm bolts (blue arrows) holding the coolant hard pipe above the inlet manifold and move the hard pipe back so that it is out of the way. Then, on the lower right-hand side, locate the wire and plug (orange arrows) and disconnect it by pushing the blue button and pulling it backwards.



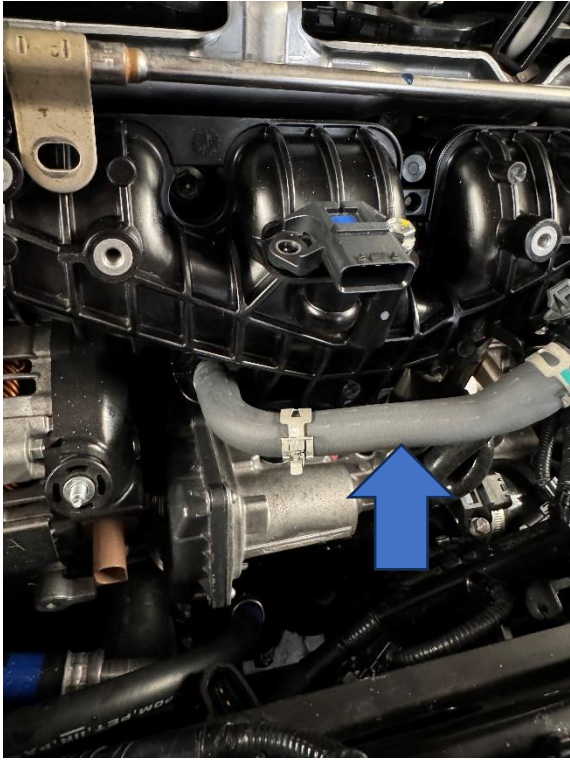


7. At the front of the manifold, remove the bolt holding the left-hand side bracket in place. Then on the right-hand side bracket remove the plug by squeezing the clip and pull it down to reveal the 10mm bolt behind. Remove this and then disconnect the wiring harnesses from the brackets and place the brackets aside, as they will not be reused when installing the new inlet manifold.

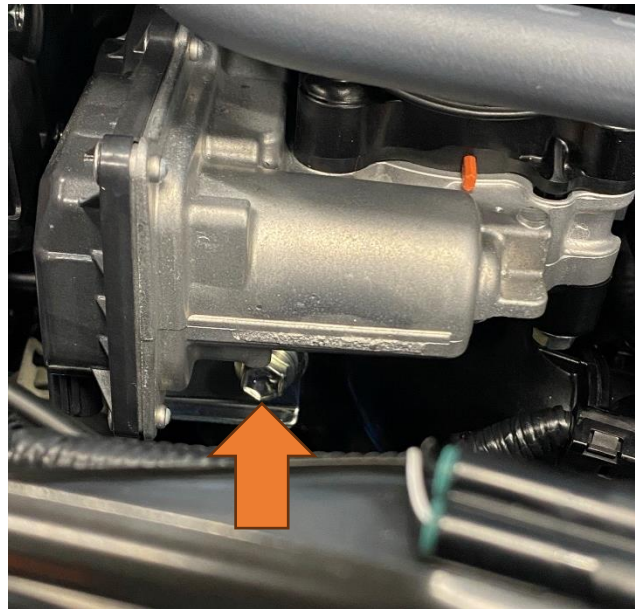
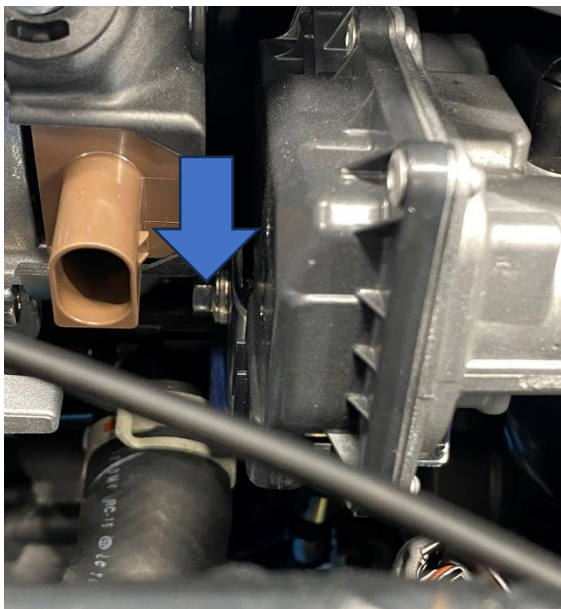




8. Locate the breather hose on the inlet manifold and using hose clamp pliers, disconnect the hose and remove it.

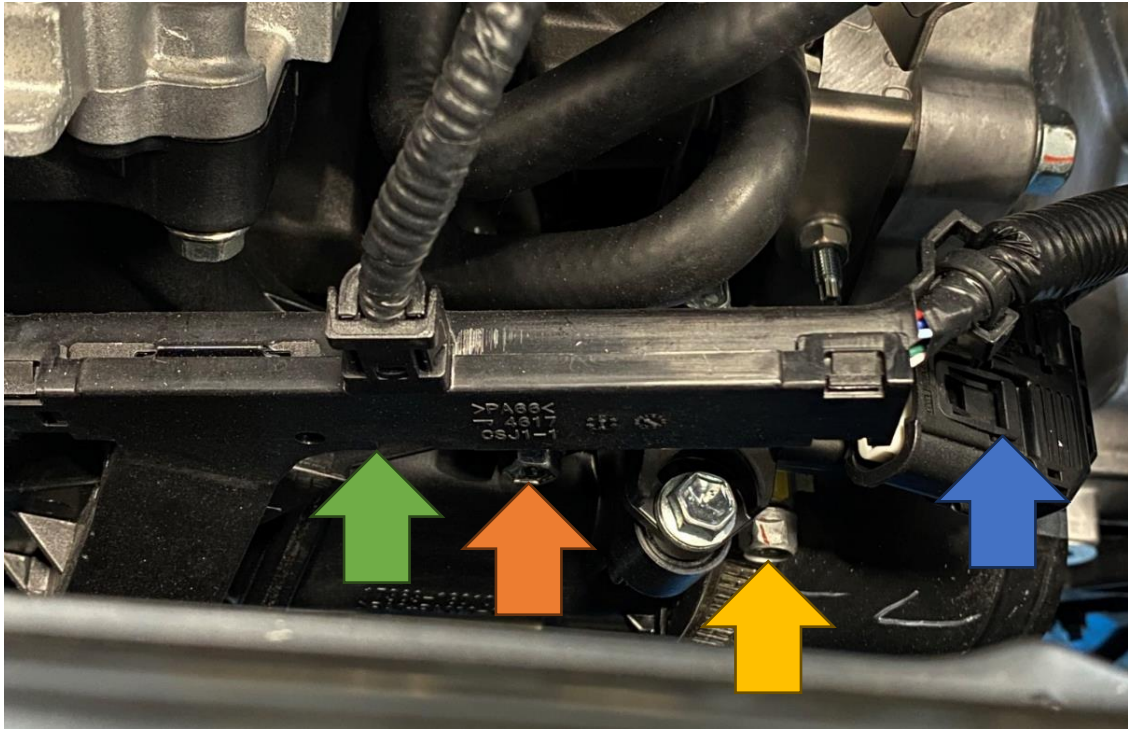


9. Now **loosen but do not fully remove** the 12mm bolt (blue arrow) and **remove** the second 12mm bolt (orange arrow) securing the throttle body elbow in place. The bracket should then move down out of the way. You can then unplug the throttle body wiring.

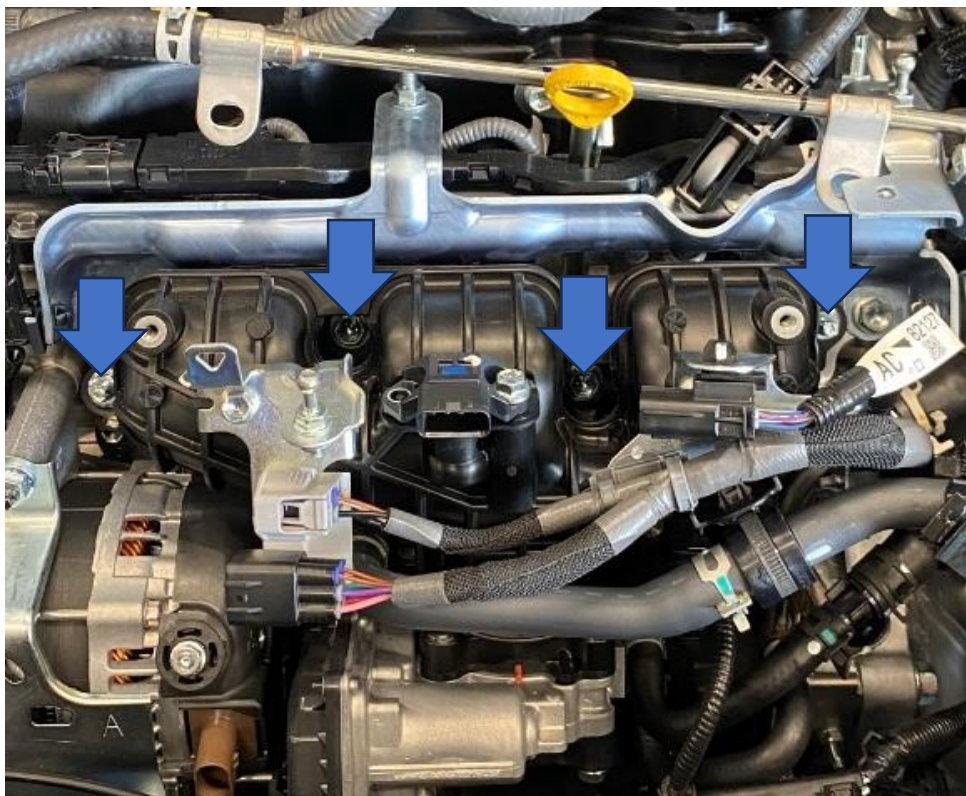




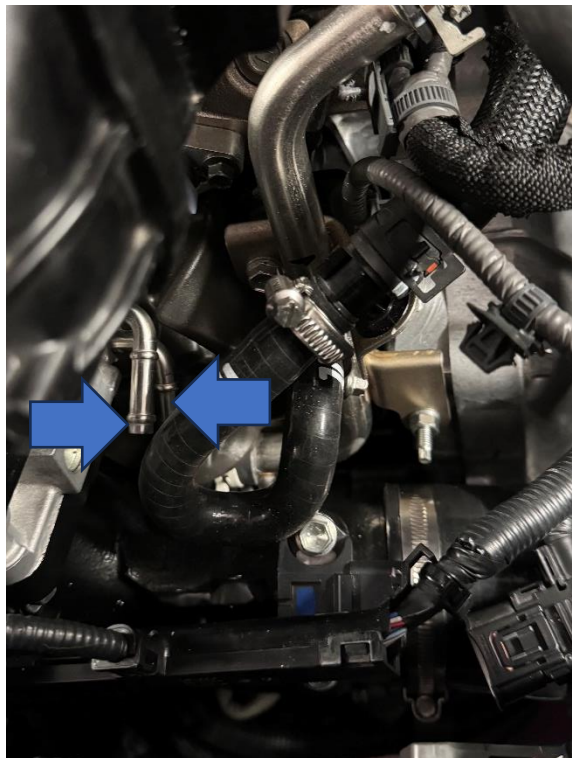
10. Unplug the MAP sensor (blue arrow) and remove the 10mm bolt (orange arrow) holding the wiring harness to the throttle body elbow. Then use a trim tool or flat-blade screwdriver to unclip the wiring harness from underneath (green arrow) and move it forwards and out of the way before using a jubilee flexi-driver to undo the jubilee clip (yellow arrow) attaching the hose to the elbow.



11. Undo the two 12mm nuts and two 12mm bolts to loosen the inlet manifold. The throttle body has coolant lines going to it and so the inlet manifold cannot yet be fully removed from the car at this stage.  
**Please note:** We recommend covering the ports on the cylinder head once the manifold is removed, but make sure to then remove this before installing your new manifold.



12. In order to remove the manifold you will need to disconnect the coolant lines from the throttle body using a hose clamp removal tool. We recommend replacing the coolant hoses with our replacement Pro Hoses silicone hose kit that removes the throttle body from the coolant loop. (Our car is fitted with this kit, so please see blue arrows for location of the standard hoses).

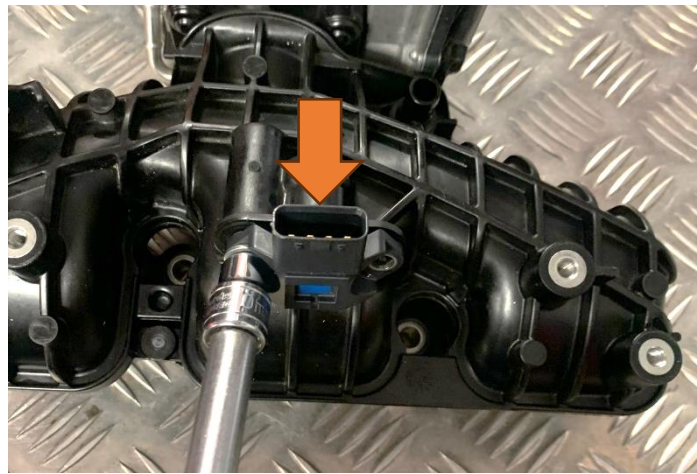
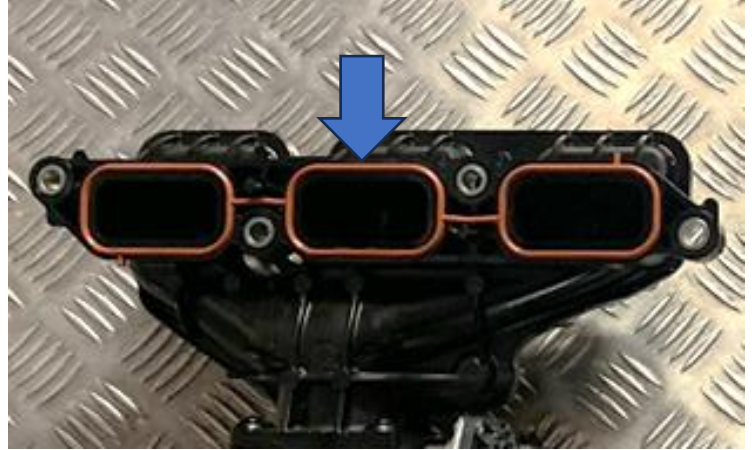
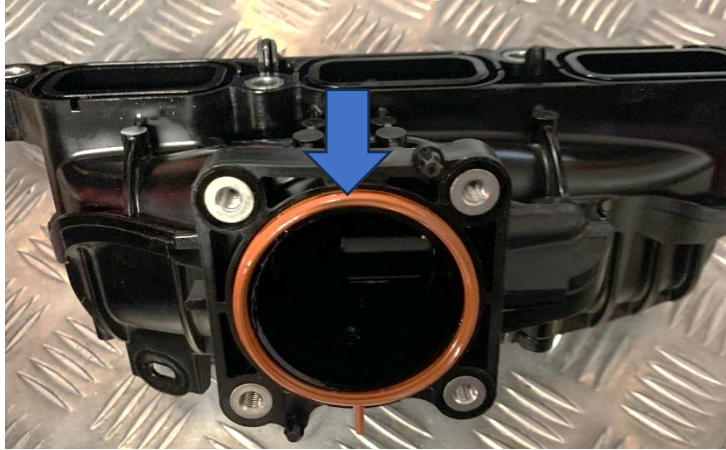


13. The manifold can now be lifted out of the engine bay. Once it is on a bench, the throttle body and elbow can be removed by undoing the four 10mm bolts securing it to the manifold.

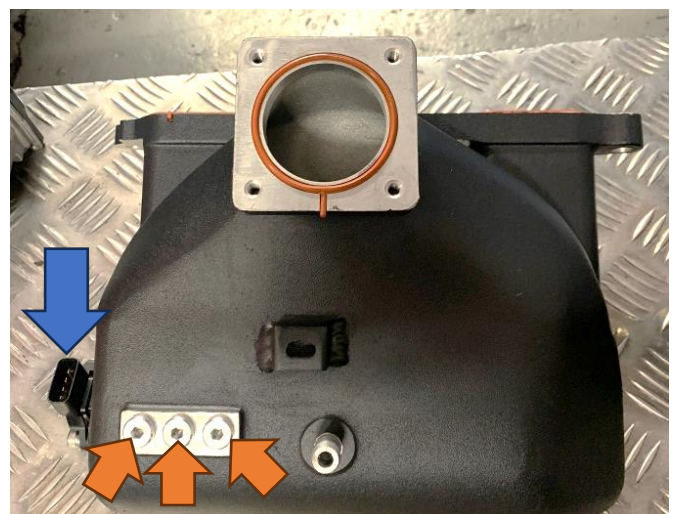




14. Remove the two rubber gaskets from the original inlet manifold (blue arrows) as well as the MAP sensor (orange arrow) by undoing the 10mm bolt securing it in place.



15. Now refit the gaskets to the new manifold and secure the MAP sensor (blue arrow) to the side of the manifold using the supplied M6x12mm bolts with washers. If you are not using of the NPT ports underneath the manifold, then please ensure that the supplied NPT plugs are fitted tightly (orange arrows).





16. The throttle body and elbow can now be reinstalled reusing the original 10mm bolts.

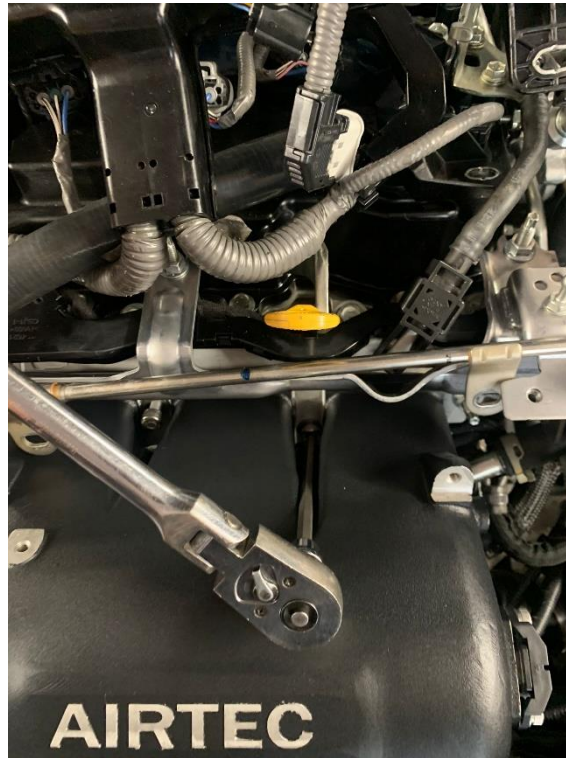


17. With the manifold assembly complete you can reinstall it in the car. Ensure that the tab on the cast elbow goes the correct side of the bracket you loosened earlier and that the elbow goes into the silicone hose. The manifold can then be lined up with the studs on the cylinder head. Before you push the manifold down the studs install the two supplied M8 socket head bolts, you may need to install the right-hand one from underneath the manifold runners. Once in place you can then push the manifold down the studs and into position.





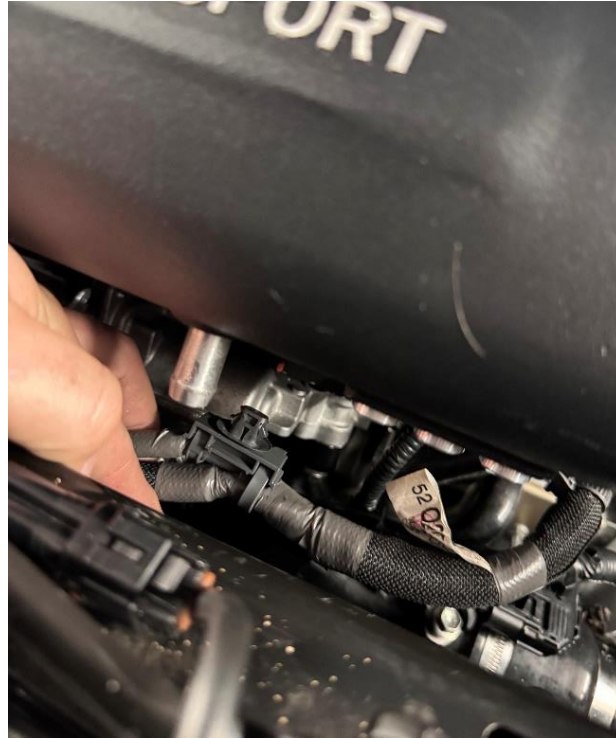
18. Use the supplied bolts to replace the middle fittings and fit using the supplied 6mm Allen Key socket. You can reuse the original 12mm nuts on the outside fixings.



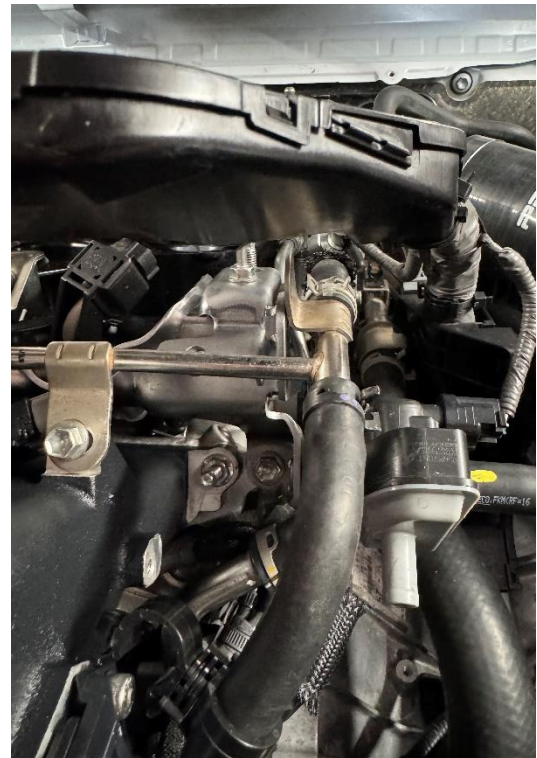
19. You can now start to reinstall the coolant lines, the wiring harness and MAP sensor that attach to the throttle body elbow along with tightening the jubilee clip. The alternator wiring can be reattached, along with the throttle body and plug removed in Step 8.



20. The wiring harness for the two plugs removed from the bracket in Step 7 can be connected to the bracket on the underside of the manifold.

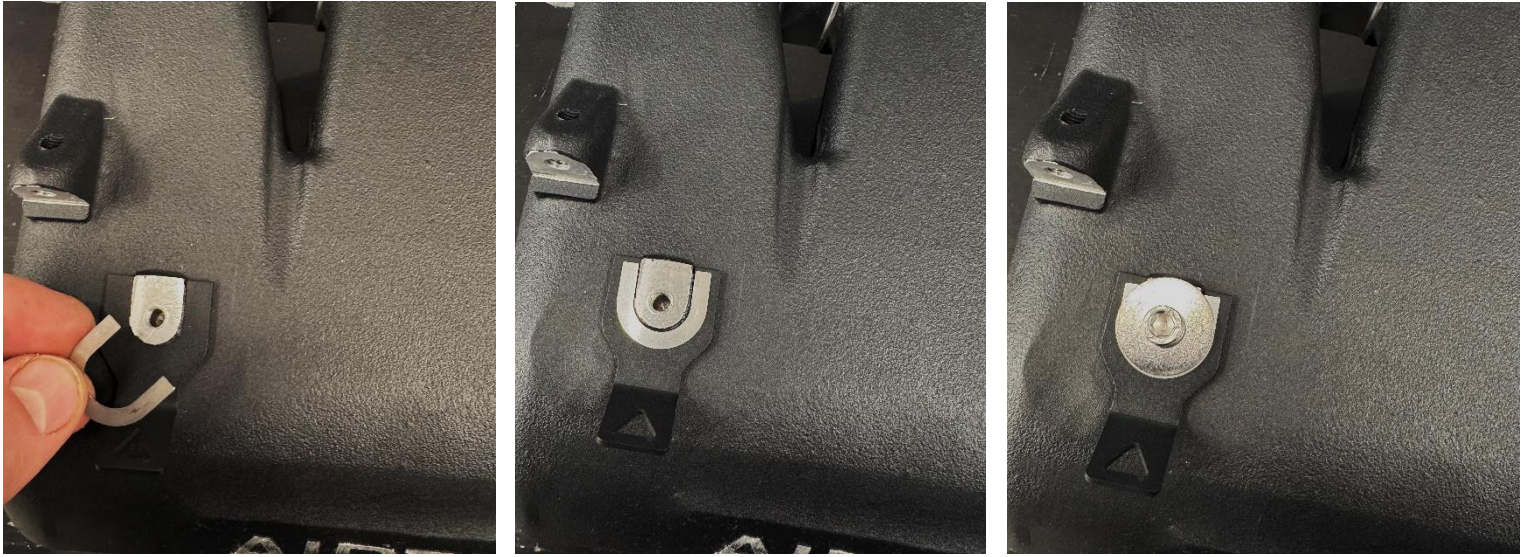


21. Reinstall the coolant hard pipe onto the tabs on the inlet manifold, re-using the original bolts. It will no longer bolt onto the right-hand side.

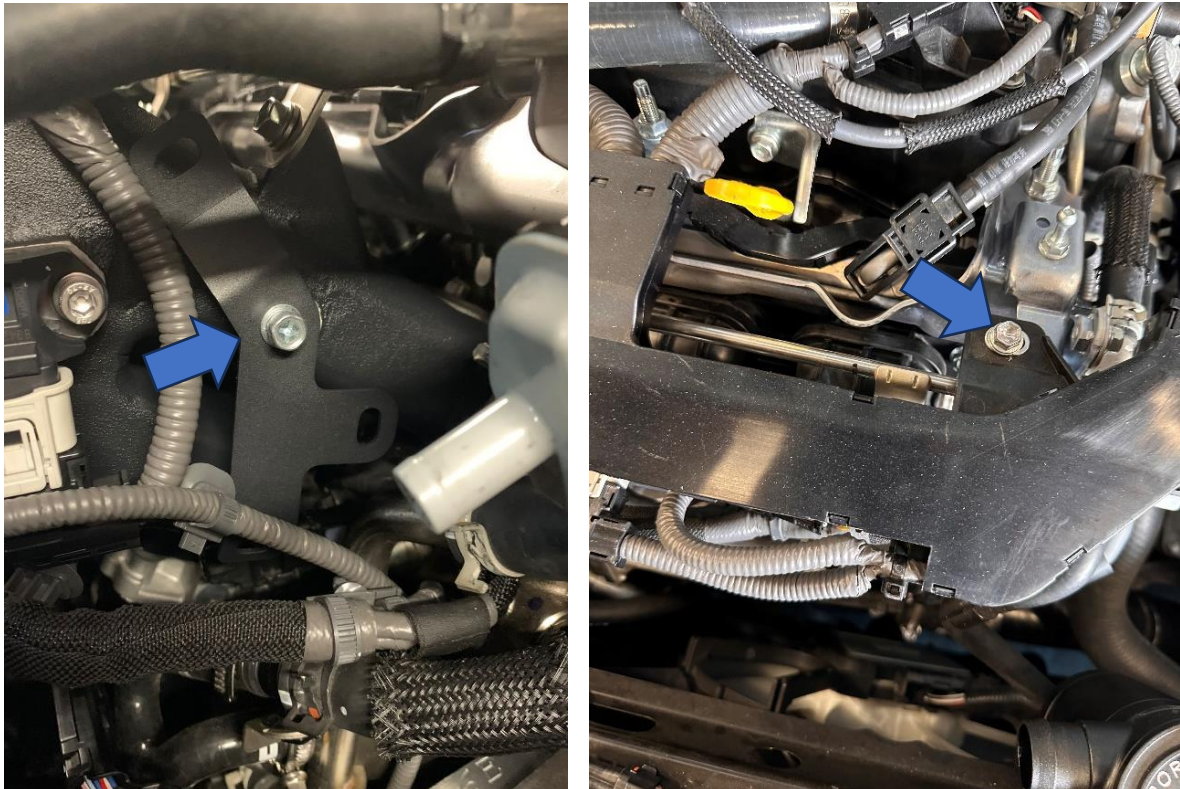




22. Install the supplied U-spacer and smaller bracket onto the top left-hand side of the manifold using the supplied M6 bolt with large washer, as shown.

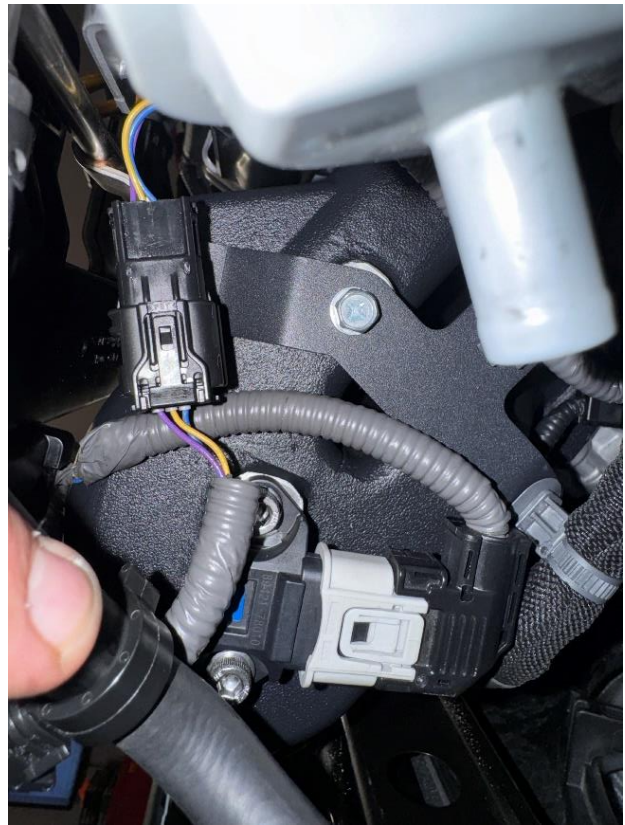


23. Install the long supplied bracket onto the side of the manifold using the supplied M6x10mm Socket Head bolt and washer. The wiring harness can then be placed back on top of the manifold and clipped into the new bracket on the left-hand side. Use the supplied spacer and M6 bolt with washer to attach it on the right-hand side.

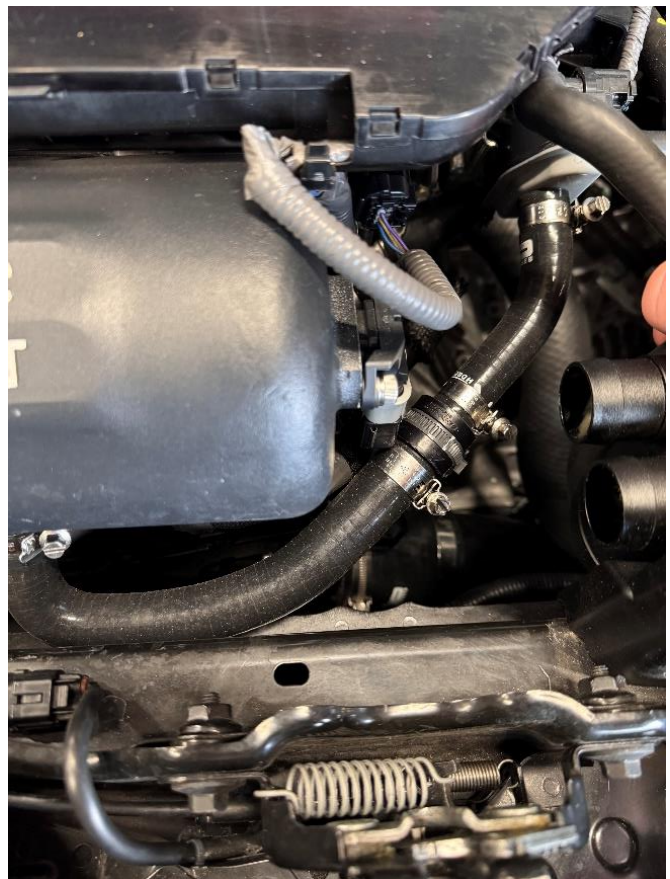




24. Plug the MAP sensor back in and clip the wiring harness into the bracket, as shown.

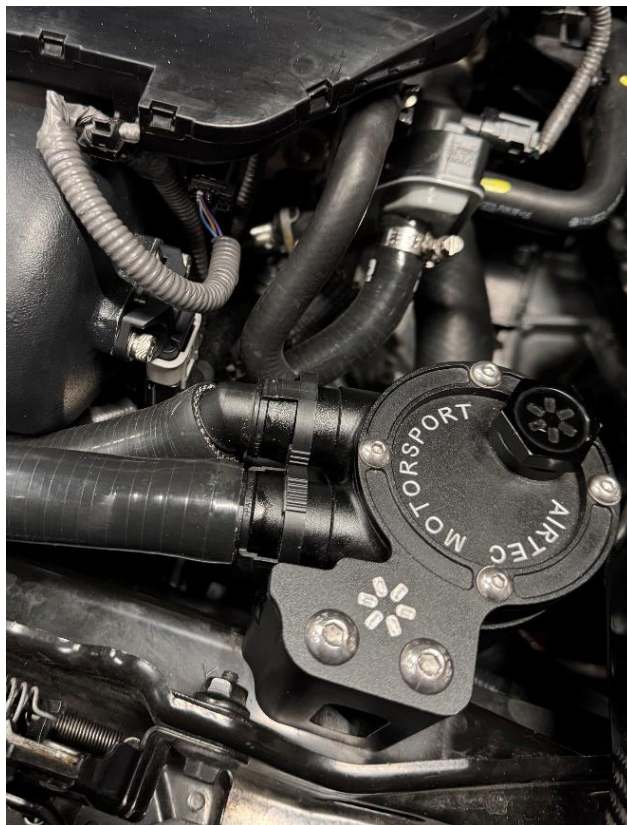


25. Disconnect the one-way valve from the breather hose removed in Step 8 and refit it to the supplied silicone hoses. It can then be fitted back onto the car with the supplied jubilee clips, as shown. **Please note:** The direction of the one-way valve is important: make sur the arrow points **towards** the inlet manifold.





26. If you have our catch can fitted, then you will need to remove the straight push fit connector and use the optional 45-degree push fit connector instead.



27. Ensure all plugs are connected and clips/clamps fully tightened.





28. Finally, if you are reusing the original engine cover, it will require some trimming to the front plastic edge and the foam sound deadening underneath, or you can fit the optional AIRTEC Motorsport replacement cover.

