## Vauxhall Astra Mk6 (J) CDTi Intercooler Fitting Instructions

## **Tools Required:**

- Ratchet and Socket Set
- Torx Sockets including E12
- Trim Removal Tool or Flat-Blade Screwdriver
- Jubilee Flexi-driver or Flat-Blade Screwdriver
- Side Cutters
- Hacksaw or similar for cutting plastic.

## **Kit Contents:**

- 1x AIRTEC Motorsport Intercooler
- 1x AIRTEC Motorsport Pipework Kit (4-piece)
- 1x Pro Hoses Silicone Hose Kit (5-piece)
- Fitting kit:
  - o 3x Mounting Brackets
  - 5x M6x20mm Socket Head Bolts
  - o 2x M6x16mm Button Head Bolts
  - o 2x M6x12mm Button Head Bolts
  - o 2x M6 Nyloc Nuts
  - o 2x M4x 6mm Button Head Bolts

- o 2x M4 Nyloc Nuts
- 4x M4 Washers
- o 11x M6 Pan Washers
- o 8x 70mm Jubilee Clips
- o 2x 60mm Jubilee Clips



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



## Instructions:

1. Open the bonnet and remove the four T25 Torx bolts along the top of the bumper.

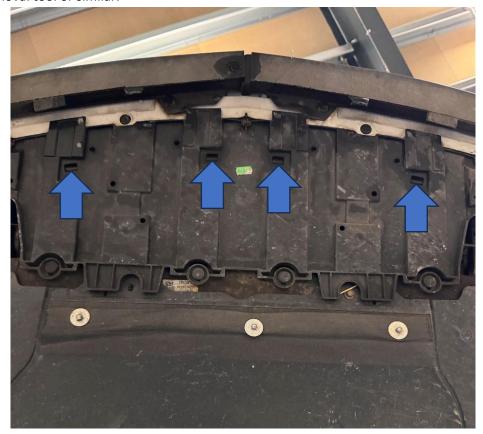


2. Raise the vehicle into the air and locate and remove the four T25 Torx bolts fixings in each arch liner, pull back on the liner to reveal the T25 Torx bolt attaching the bumper to the arch.

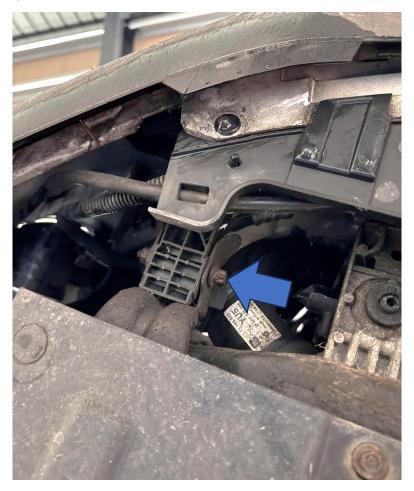




3. Under the car, locate the four plastic clips that secure the front part of the undertray and unclip them using a trim removal tool or similar.

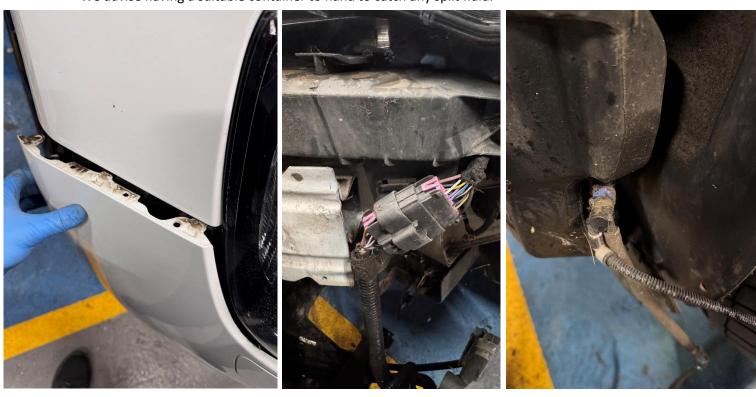


4. Once the undertray is removed, in each corner locate the E12 Torx bolt and remove it.

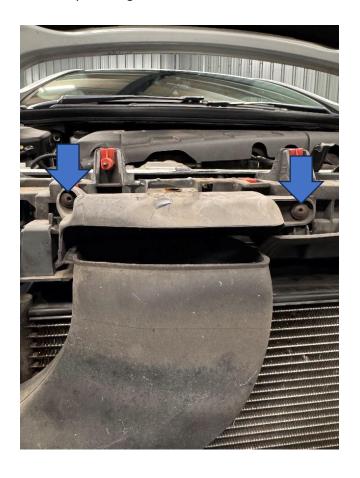




5. To remove the bumper, firmly but carefully pull on each edge to detach it from the car. On the passenger side, locate the wiring multiplug for the front bumper and undo along with the headlight washer pipework. We advise having a suitable container to hand to catch any spilt fluid.



6. Remove the upper air box feed by undoing the two T25 Torx bolts.





7. Remove the plastic push fits securing the side air guides. Then unclip them and rotate them free.

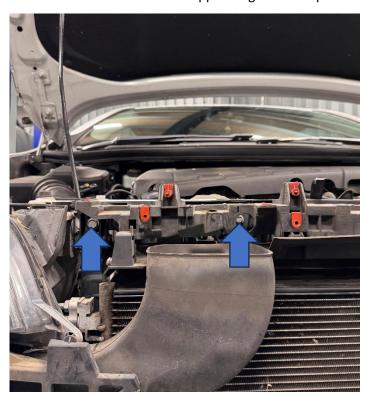








8. Remove the four 13mm bolts holding the upper plastic guide in place and then lift to remove. It will need to be unhooked from the upper air guide on top of the radiator.





9. Undo the 10mm bolt securing the lower air feed and then pull it towards the front of the car to allow the upper radiator air guides to be removed.







10. With a trim removal tool or similar, unhook the air-con radiator and use the help of a second person to lift it up out of the way.



11. Under the car, remove each of the standard boost pipes from the intercooler by releasing the clips using a flat-blade screwdriver. Then unhook the intercooler from the radiator and lift it upwards and out. Take care not to damage the fins on both the air-con radiator and water radiator.

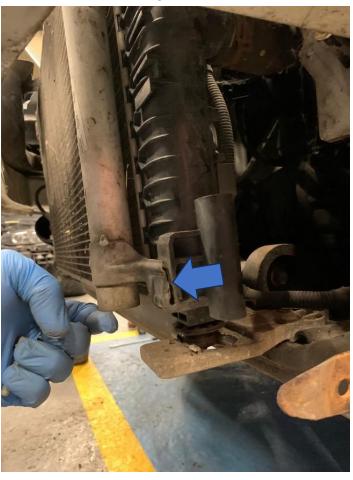






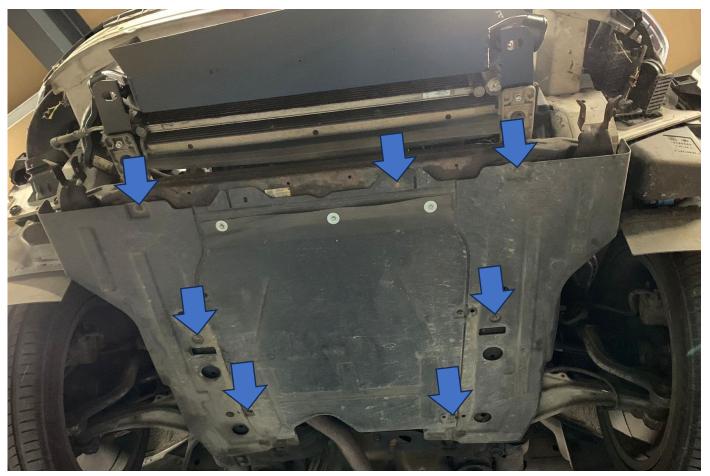


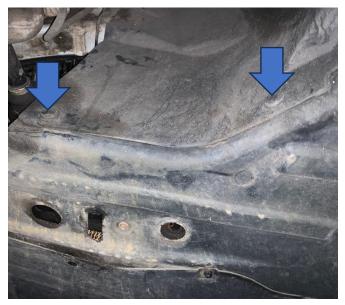
12. Reinstall the air-con radiator onto the mountings on the radiator that used to hold the intercooler.





13. Remove the seven 8mm bolts underneath, along with two push fittings located in each arch liner.









14. Locate the hot side boost pipe from the turbo and cut the metal band that secures it using side cutters or similar. The hose can then be removed from the car.



15. Undo the two 13mm bolts holding the upper section of the radiator in place. This will allow you enough room to rotate the boost pipe out in later steps.

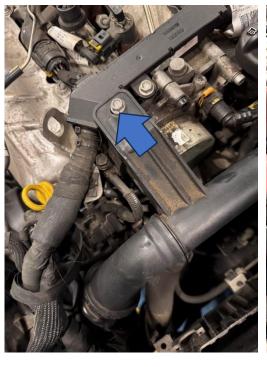




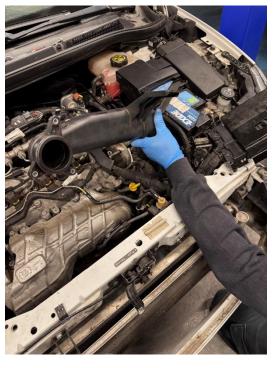
16. Now remove the engine cover and on the right-hand side of the engine, lift the ECU up (blue arrow) and move it aside but **do not disconnect it**. Then unhook the hoses (orange arrow) attached to the boost pipe.



17. Remove the 10mm bolt holding the boost pipe bracket in place, followed by the three T27 Torx bolts holding the flange onto the throttle body. The pipe can then be lifted up and rotated until it comes out, but take care not to get it caught up with any wiring or hoses.









18. Before the new pipework can be installed you will need to trim the nearside (right-hand drive) side of the plastic radiator housing. Do so using a hacksaw or similar, as shown.





19. Install the centre bracket onto the intercooler using the supplied M6 fixings and then hang the intercooler on the crash bar. Use the supplied M4 bolts with Nyloc nuts with washers to go through the existing holes in the crash bar and tighten to secure, as shown.



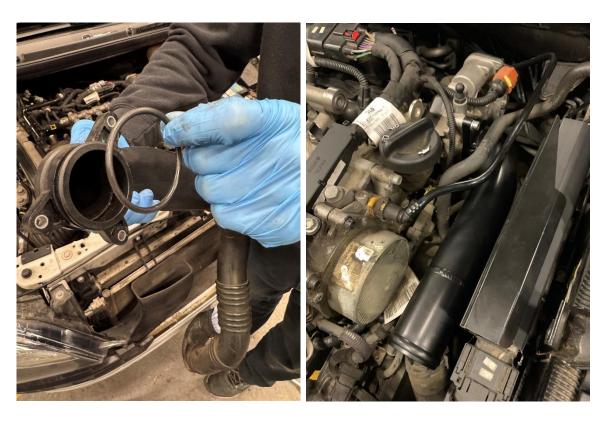




20. Install the two side brackets to the car with the supplied M6 bolts and Nyloc nuts, but do not fully tighten until you have attached them to the intercooler. Once happy with the positioning, tighten all fixings.



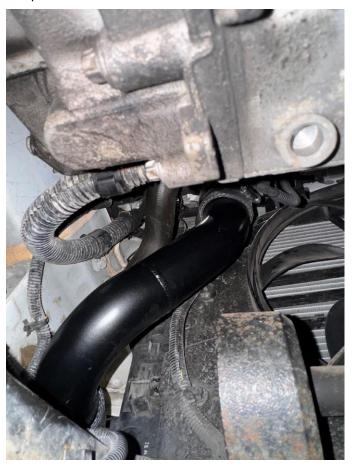
21. Remove the O-ring from the original pipe removed in Step 16 and install onto your new AIRTEC Motorsport pipe. Then fit it onto the car using the supplied M6 fixings.

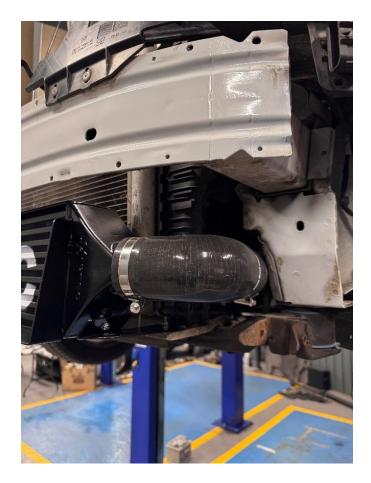




22. Route the cold side pipework with the supplied jubilee clips as shown. Once happy with the positioning of the hoses and pipework, proceed to tighten all jubilee clips.









23. The hot side pipework can now be installed with the supplied jubilee clips, as shown. Once happy with the positioning of the hoses and pipework, proceed to tighten all jubilee clips.





24. Ensure all fixings and clips are tight and then all parts can be reinstalled in reverse of removal - except for the two side air guides removed in Step 7. The left-hand side guide cannot be reinstalled and the right-hand side guide needs to be cut, as shown, before it can be reinstalled.







25. Finally, reinstall the remaining parts in reverse of removal.



