## VAUXHALL ASTRA J VXR INTERCOOLER FITTING INSTRUCTIONS.



## **Tools Required:**

Access to a vehicle lift or floor jack and axle stands.

Flat blade screwdrivers.

T20 Torxs Driver.

6mm Allen key.

E12 E-Torx socket, 7mm socket, 13mm socket, extension bar & ratchet.

7mm hose clamp driver.

4mm drill bit & suitable drill.

Long cable ties, rivets & rivet gun

Safety eyewear, footwear, gloves and protective clothing are also recommended.

1. Start by raising the car onto a ramp or suitable axle stands. This will allow access to the underside front of the car.



2. Undo and remove 4x T20 Torxs at the top of the bumper.

3. Remove the 4x plastic clips from underneath the bumper using a flat blade screwdriver.



4. Remove 4x T20 Bolts inside both wheel arches, 1x vertical 3x horizontal.



5. Remove 2x E12 Torxs bolts from underneath on both sides of the bumper.





6. Pull the arch liner to one side. Remove the clips on both sides on the bumper inside the wheel arch and carefully remove bumper. Taking caution, unclip the bumper on both sides from underneath the headlight. Carefully pull the bumper away from the vehicle and place away from the vehicle to prevent damage.



7. Remove 4x T20 Torxs screws along the front panel.



8. Using a 10mm socket, undo the 4x bolts on the front panel and unclip.



9. Unclip and rotate the air guides on both sides of the A/C radiator using a flat blade screwdriver.



10. Remove the plastic cover from the top of the A/C and intercooler.

11. Using a 10mm socket remove the 3x nuts securing the power steering cooler and hang from crash bar using a suitable strong cable tie.



12. Remove the 2x bolts and remove the brackets for the power steering cooler using a 10mm socket.



13. Moving to the top of the car, remove the large clip running to the back of both headlights.

14. Carefully remove the rivets using a 4mm drill bit and suitable drill. Unclip the other end and remove the plastic brace from in front of both headlights.



15.Using a 7mm socket undo the 1x screw on the side and 1x screw underneath both head lights.



- 16. Moving to the top of the headlight, using a 7mm socket undo the 2x screws. Lift the headlight upwards to carefully release it. To prevent the headlights from damage, store both headlights in a safe place away from the working area.
- 17. Using a flat blade screwdriver or similar tool remove the spring clips from the couplers at both ends of the intercooler and pull the couple of the intercooler outlets.



18.Undo the 2x radiator top mounts using a 13mm socket. Push the top of the radiator towards the engine, this will give you a little extra space and make it easier to release the intercooler.



- 19. Unclip the top of the A/C radiator and slide it upwards to release it from the standard intercooler. Secure against the crash bar with a suitable cable tie.
- 20. Unclip both sides of the standard intercooler from the radiator and carefully remove it out from between the radiator and A/C radiator.

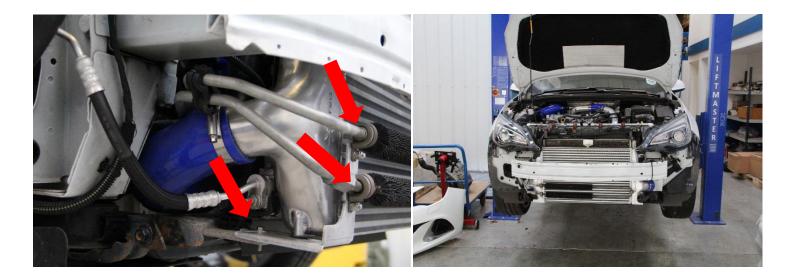


21.Cut the cable ties and carefully push the A/C radiator back into the clips on the front of the standard radiator.

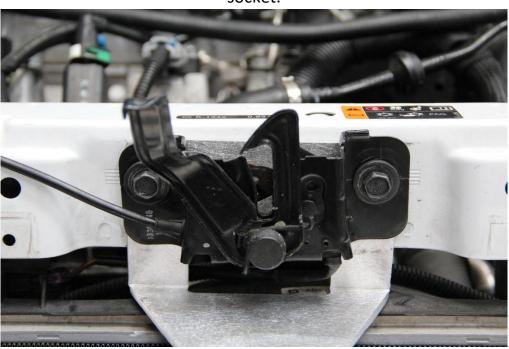


22.Replace the 2x radiator top mounts using a 13mm socket.

23. Install new intercooler into place (at this point it is recommended that you have help to position intercooler whilst installing support brackets). Using the 2x M6 X 16mm bolts, 4x M6 Washers, 2x M6 Nylock nuts supplied bolt the lower intercooler brackets into position, the intercooler will then push into rubber grommets. Bolt the power steering clips to the new brackets using the 3x M6x12mm bolts, 6x M6 washers, 3x Nylock nuts. It is easier to get the boost pipes into position before fully tightening power steering P clips.



24. Undo the two bolts on either side of the bonnet catch using a 13mm socket.



25. Trace the wiring back from the bonnet catch and unplug it. Install the new bonnet catch support bracket, re fit bonnet catch and secure support bracket to intercooler with bolt provided.



26. Moving to the top of the engine. Remove the engine cover carefully. Using the 7mm hose clamp driver undo both hose clamps. Using an E12 socket to undo the 2x bolts on the standard turbo outlet.



- 27. Remove the rubber seal from the standard turbo outlet pipe and carefully insert it into your new Airtec turbo outlet pipe.
- 28.Using the 2x M8 x 20mm Allen cap bolts provided, bolt the turbo outlet pipe in place. Do not fully tighten the bolts until the pipework has been aligned with the rest of the pipe work.

29. Using a 7mm hose clamp driver undo the hose clamps on the standard hoses running to both sides of the intercooler. Remove both hoses.



30. Unclip the pipes on the standard boost pipe, using a 13mm socket undo the hard pipe mounting bolt.



31. Using the 60mm 45 degree silicone hose provided, place the long side on the turbo outlet pipe and secure with hose clamps provided.



32. Place the alloy link pipe into the end of the silicone hose. This will have to be fed under the coolant pipe work and secure to the original mount with M8 x 20mm Allen cap bolt and Nyloc nut provided. Secure the silicone hose with hose clamp provided.



33.Fit the 90 degree silicone hose onto the right hand side alloy pipe, then fit the alloy pipe joiner and install the longer side of the other 90 degree hose to the joiner. The shorter end can now be secured.





## (Please note pipework layout, this will give you a better understanding of pipework positioning)

34. Connect the silicone reducer onto the throttle body then install alloy pipe and silicone hoses as shown below.







35. Check all hose clamps, fixings are done up and in the correct position. Reassemble your vehicle. Follow the disassembly steps in reverse, you will need to re-rivet the under headlight brace to the crash bar.

