



FMCZTINT – Mitsubishi Colt CZT front mounting intercooler installation



Tools needed:

Drill with 8mm HSS drill bit, hacksaw, dremel/stanley knife

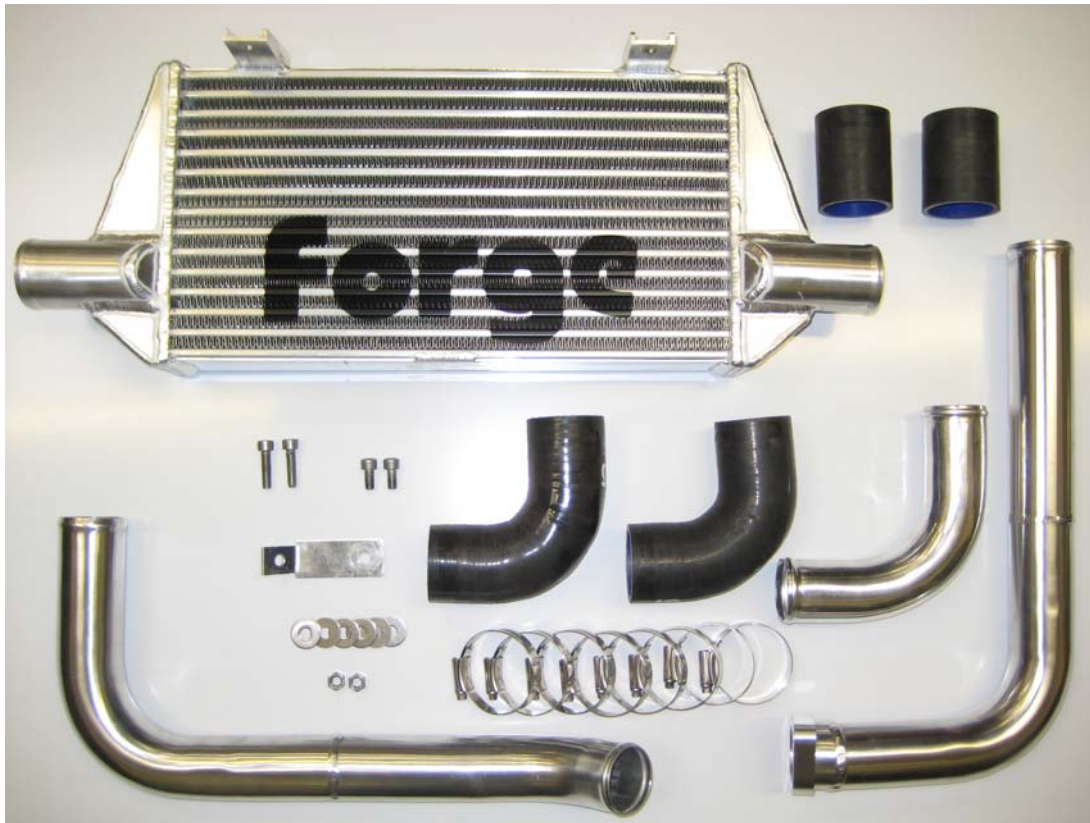
3/8 drive ratchet with extension and 10mm,13mm sockets

Torx T25 and T30 bits

7mm hose clip driver or 7mm socket

6mm allen key or socket

KIT LIST



1x intercooler

1x horn bracket

2x 50mm diameter silicon joiner

2x 50mm diameter 90 degree silicon elbow

1x 50mm diameter 90 degree aluminium elbow

1x custom aluminium pipe with turbo outlet flange on one end

1x custom aluminium pipe with 45 degree bend on one end

8x 45-60mm jubilee clips

6x M8 penny washers

2x M8x40 allen head bolts

2x M8x12 allen head bolts

2x M8 nyloc nuts

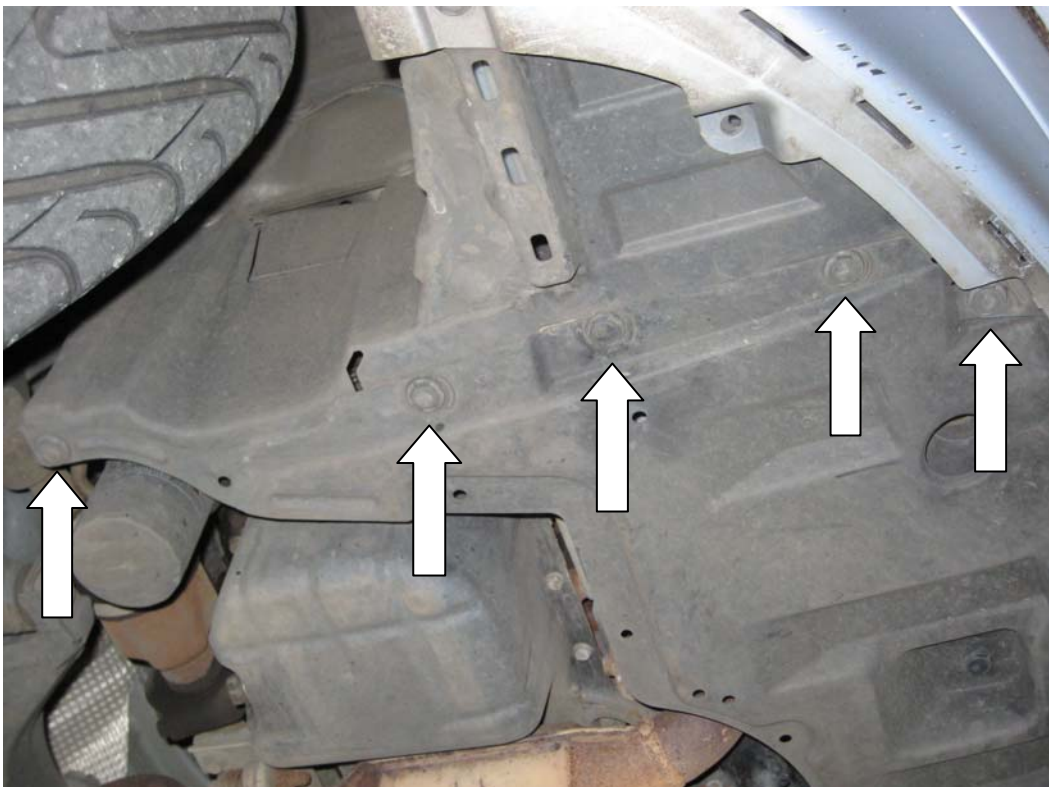
1. Jack the front of the car up in the air and support on axle stands. DO NOT work under the car with just a jack taking the weight. Open the bonnet. Working in the wheel arches, remove the 8mm self tapping screw at the top of the arch and the 'popper' type fixing half way down the arch, by levering under each side of the popper until it can be withdrawn. Do this on both wheel arches.



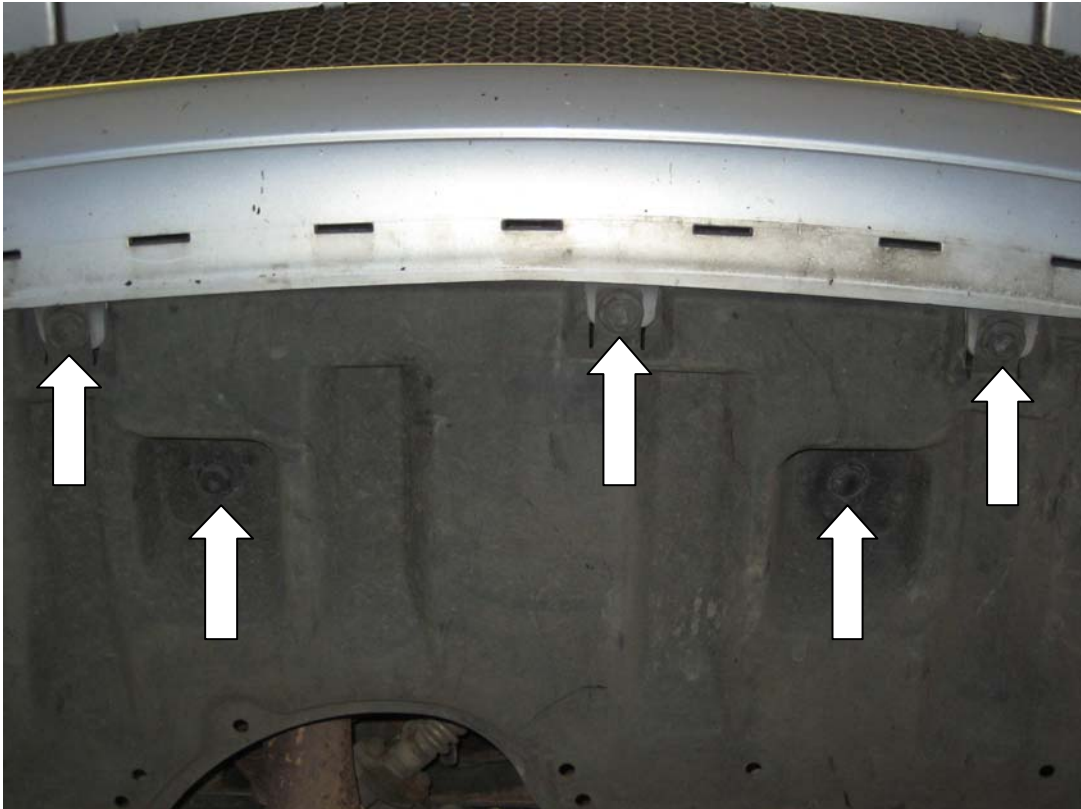
2. Remove the front number plate (ours was stuck on – use heat from a hairdryer to soften the glue and bend the plate off slowly) and pull out the fixing in the middle of the bumper.



3. Working under the front of the car, remove the engine undertray by removing the 15 (yes 15) popper style fixings, 5 down each side....



....and five under the front. The undertray should now pull free towards the back of the car.



4. Still under the car, remove the edges of the bumper form the wheel arch liners, two on each side of the car.



5. Under the bonnet, undo the four T30 screws holding the top of the bumper to the slam panel. TAKE CARE to remove the correct four screws as indicated. **LEAVE THE TWO MIDDLE SCREWS LOOSELY SCREWED IN** – it will stop the bumper from falling off in the next step.



6. Working on the wheel arch, place your hand under the arch liner behind the bumper and pull sharply outwards – the bumper is held firmly in place by three plastic clips.



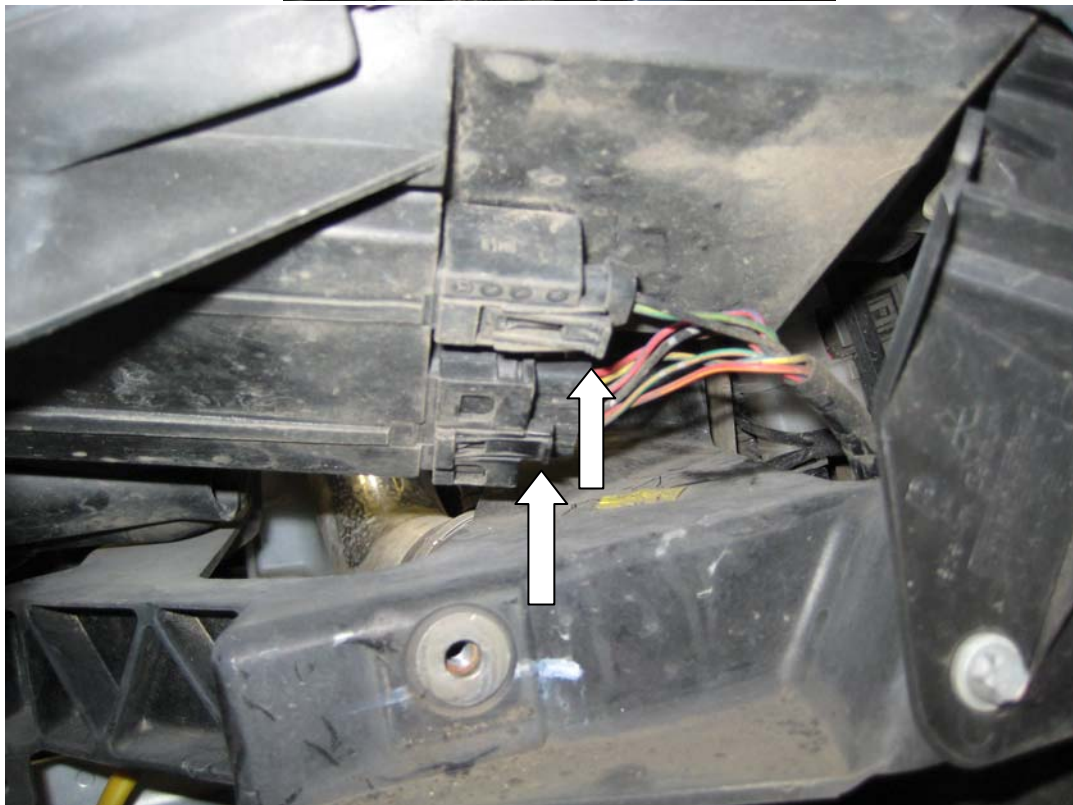
Plastic clips for reference:



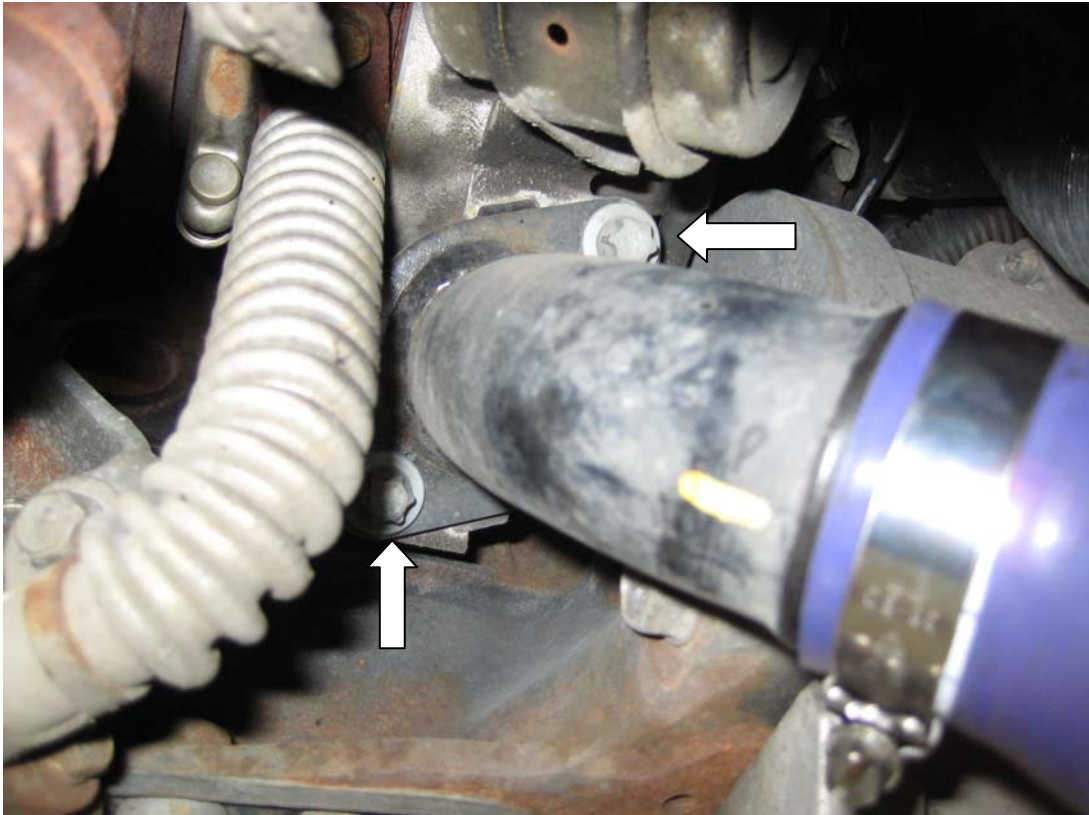
7. Repeat on both side, then remove the two T30 screws you still had loosely screwed in. Support the weight of the bumper, and pull it forward slightly to reach down and undo the wiring to the foglights (simply squeeze the connector to remove it), then remove the bumper and place somewhere safe.



8. Remove the passenger side headlight by undoing the three T25 retaining screws, then release the wiring from the underside by squeezing on the plastic tabs before removing it from the car.



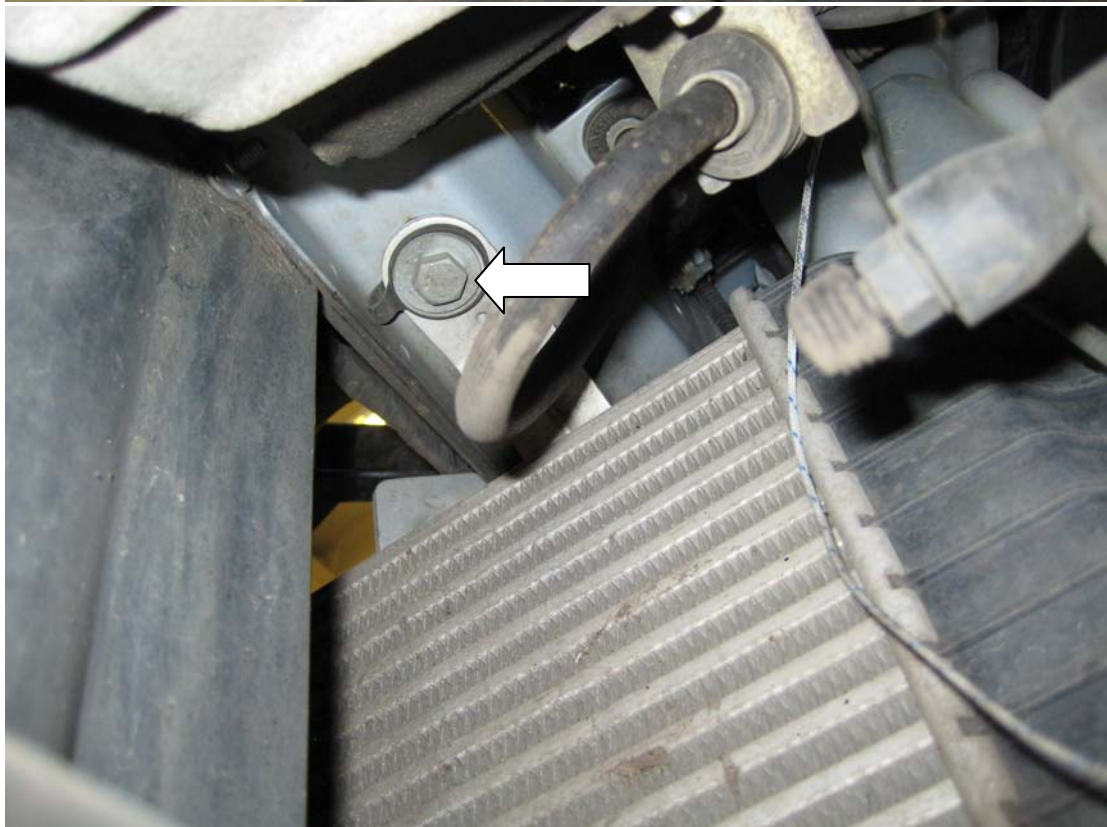
9. Working back under the front of the car, locate the turbo outlet pipe, and using a 10mm socket (ideally a six sided socket) undo both of the star shaped bolts. Retain the gasket for future use.



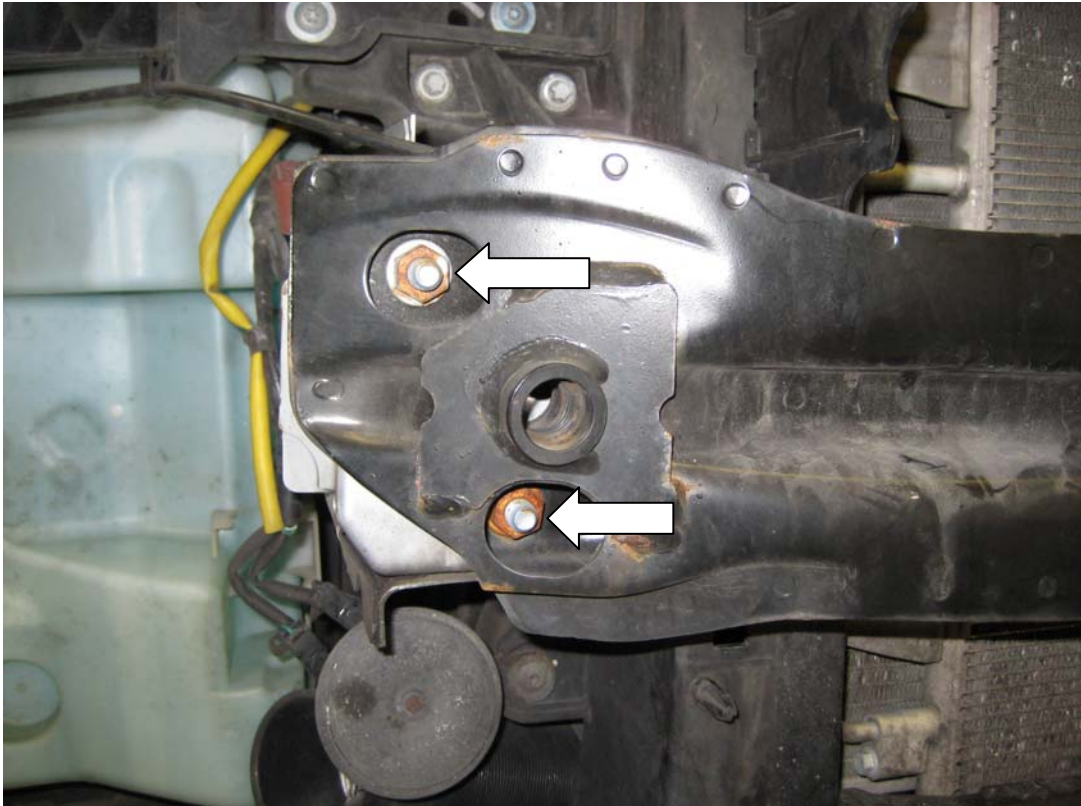
10. Undo the hose clamp holding the intercooler inlet pipe from the bottom of the stock intercooler and remove the whole pipe from the car with the turbo outlet attached.



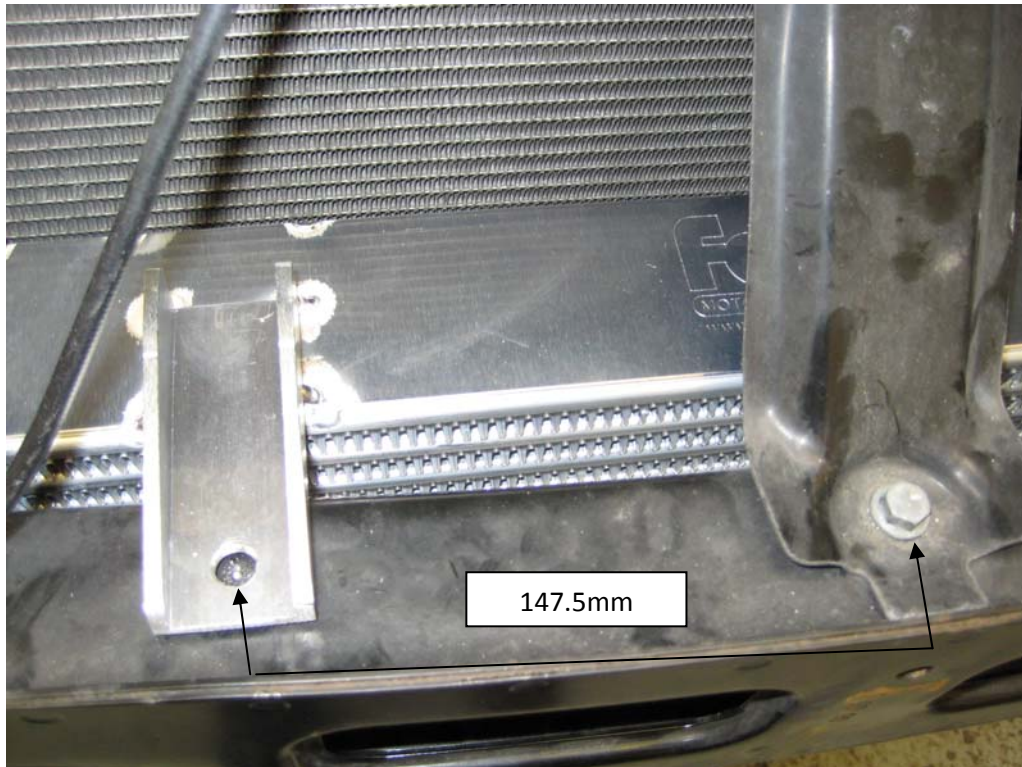
11. Undo the three 13mm retaining bolts holding the intercooler to the chassis. One of them is up around the back of the intercooler and will require a long extension piece on your ratchet. Undo the intercooler top hose (at both ends), and remove the intercooler from the car. Remove the top rubber intercooler hose from the car also.



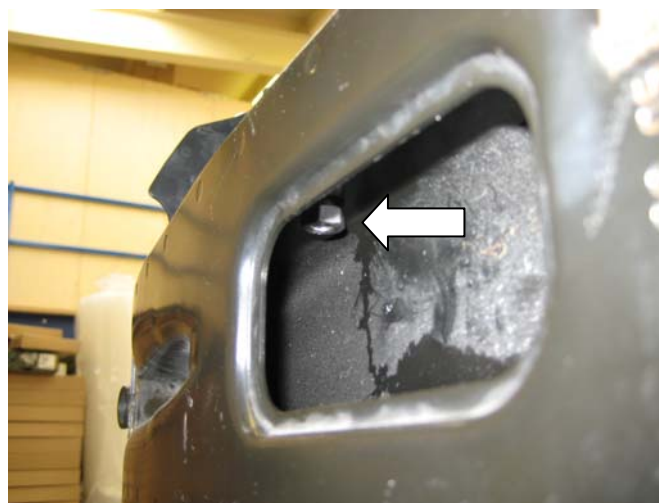
12. You now need to mount the intercooler onto the bumper bar, but you need to remove the bumper bar first. Unclip the bonnet release cable, remove the single 10mm bolt in the centre and the two 13mm nuts on each end of the bar and remove it from the car.



13. Offer up the intercooler to the bumper bar. The mounting holes on the brackets are 295mm apart. Take the 10mm bolt on the top of the bar as the middle, each of your holes needs to be 147.5mm to the left and right of the centre of that hole. Mark two lines on the bar to represent this, then offer the core up. Push the core hard against the back of the bar, with the brackets over the lines you already drew, and mark the middle of the hole for each bracket. This will be where you drill your holes, and if all has gone to plan, the core should be in the middle of the bar.



14. Loosely mount the core to the bumper using the M8x12 bolts. Put a penny washer under each bolt then push through the intercooler bracket, then one penny washer between the bracket and the top of the bumper bar. Secure with the M8 nut in the cavity accessed from the front of the bar.



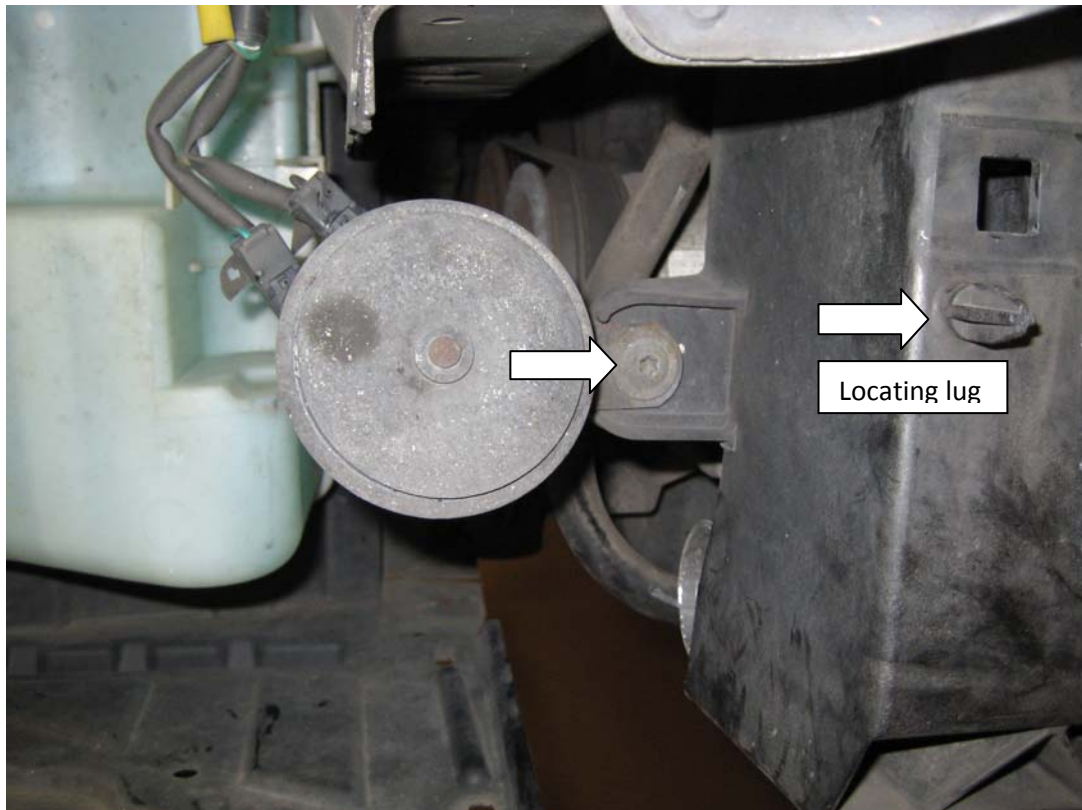
15. Remount the bumper bar to the car, with the intercooler still loosely attached. The intercooler needs to rest on the ledge at the bottom of the radiator cowl, once in place, tighten the intercooler mounting bolts. If the intercooler needs spacing upwards, we have provided two spare penny washers to place between the top of the bumper bar and the underside of the intercooler brackets.



16. Mount the two 50mm silicon couplers to the ends of the intercooler, and then look at the intercooler from the side and mark up the areas of the plastic trim around the cowl that needs to be removed, then remove the trim by pulling it away and cut out the plastic with a dremel or similar (Stanley blade works too).



17. With the trim removed, you also need to cut off the locating lug from the radiator cowling so its completely flush, and undo the T25 screw holding the horn bracket.



18. Undo the 13mm nut from the back of the horn unit, and remove the bracket. Replace with the Forge horn bracket supplied, and remount the horn with the bracket angled towards the back of the car.



19. Using a hacksaw, cut the bottom left (from the front of the car) rear edge of the radiator cowl approx 60mm long and 10mm deep at a 45 degree angle up to the reinforcing in the plastic.



20. Now to install the pipework – find the hard pipe with the CNC'd turbo flange on it, and the gasket you removed earlier from the stock turbo outlet. Using two M8x20 allen head bolts and a suitable allen key, bolt the turbo outlet pipe into position with the outlet pointing to the left (from the front of the car).



21. Join the 90 degree aluminium elbow into one of the 90 degree silicon elbows to form a 180 degree bend. Place two hose clips loosely on the 90 degree silicon bend, and two hose clips loosely both 50mm couplers already on the intercooler from step 16. Observe the orientation of the clips as shown below, which will make it easier to tighten them. Join the turbo outlet hose to the intercooler. You may need to adjust the hoses, and might find it easier to lubricate the silicon hoses with a silicon spray (dashboard cleaner/back to black work well).



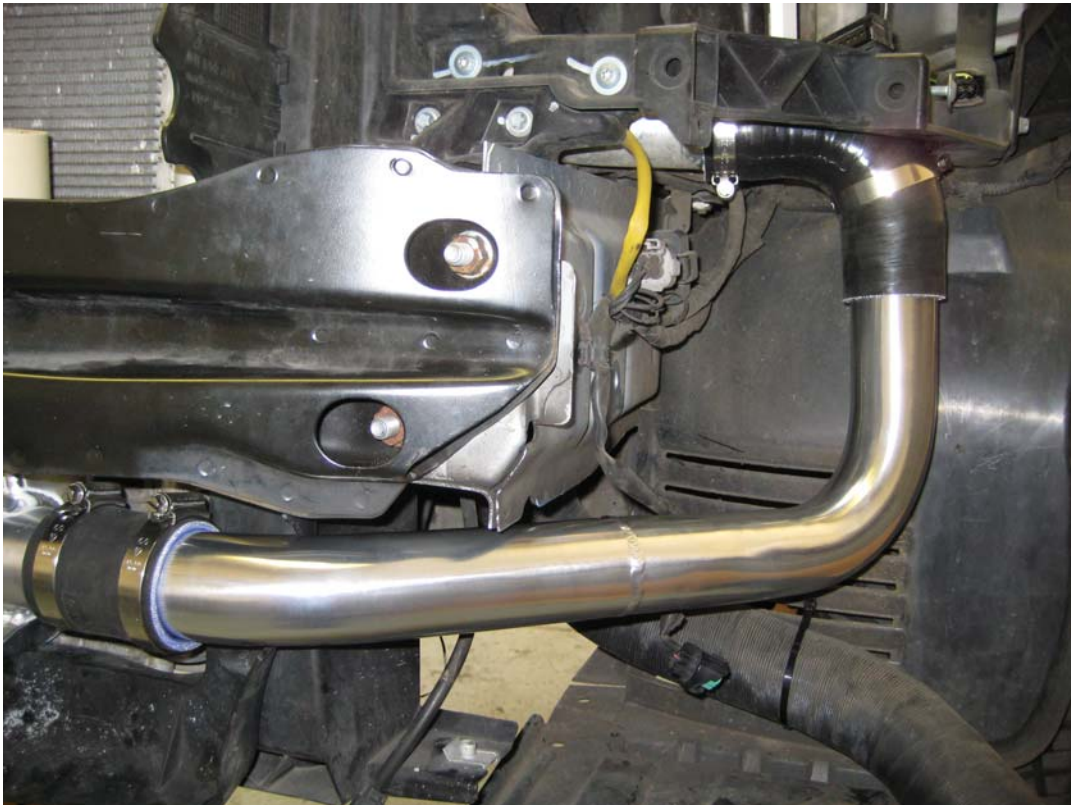
When the pipework is in place and you have at least 20mm of aluminium pipework in each end of the silicon hose, tighten all the clips. You will find it easiest to tighten the silicon to turbo outlet hose from the back.



22. On the other side of the car, place the remaining 90 degree silicon hose on the end of the stock pipework under the headlight, together with two loose hose clips.



Insert the remaining hard pipe into the coupler on the intercooler, and then push it up into the 90 degree bend just added. When it fits well, tighten all the hose clips.



23. Your install should now be complete, and looking like this :



Follow steps 7 to 1 to replace the stock bumper, and enjoy your new intercooler.

ENGINEERED FOR PERFORMANCE

You may also be interested in these other products for the Colt CZT, available from your nearest Forge Motorsport dealer.



FMB SPLTR – Split recirculation/atmospheric valve



FMCZTHS – Polished heat shield cover