

Mini F56 GP intercooler fitting instructions

Tools needed:

- Socket set including torx bits
- 8mm & 10mm spanner (ideally ratchet style)
- Drill and drill bits
- Allen keys
- Small flat bladed screwdriver or trim tools

Kit Includes:

- AIRTEC Motorsport F56 Intercooler
- 2 x M8 x 16mm socket head bolts
- 2 x M8 pan washers

Instructions:

1. Open the bonnet checking that it is secure and then raise the front of the car into the air and make sure that it is secure either using a lift or using axle stands. (Consult the owner's manual as to where the jacking points are.)
2. Remove the front wheels from the vehicle



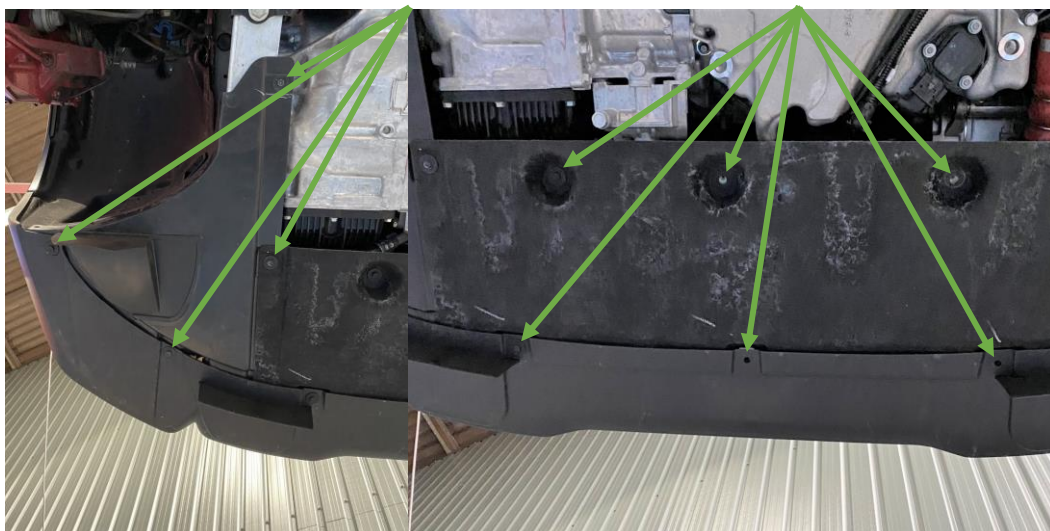
3. Undo the arches by first undoing 2 x 10mm nut and 10 x 8mm bolts each side. 3 of the 8mm bolts are on the underside of the car at the rear of each arch.



4. With the bolts and nuts removed from the arches to remove them you will have to remove 1 x push pin by the front strut on each side, 2 x push pins from each brake duct and then undo 4 clips by pushing the centre through at the front of each arch. With these removed you should be able to pull the arch down carefully so that it is out of the way for you to access the plastic clips holding the outer arches on.



5. Remove the undertray from the car. It separates into 3 pieces, remove the sides first by undoing 4 x 8mm bolts each side and then the tray will pull out, the centre is then held in by 6 x 8mm bolts and will then just come away.



6. The outer arches can now be unclipped at the front to allow the front bumper to be removed. Firstly remove 1 x 8mm bolt that is accessed from the top of the car, it is next to the headlight/above where the arch liner is. A ratchet spanner is ideal here as there is not a lot of space.



7. The next step is to unclip the front bumper plastic trim from the outer arch, there are 4 clips going along the upright edge and 2 along the horizontal join between the front bumper plastic and the outer arch. These clips need pushing in and then they will release (they may require a little force but be careful not to snap them as they are plastic).



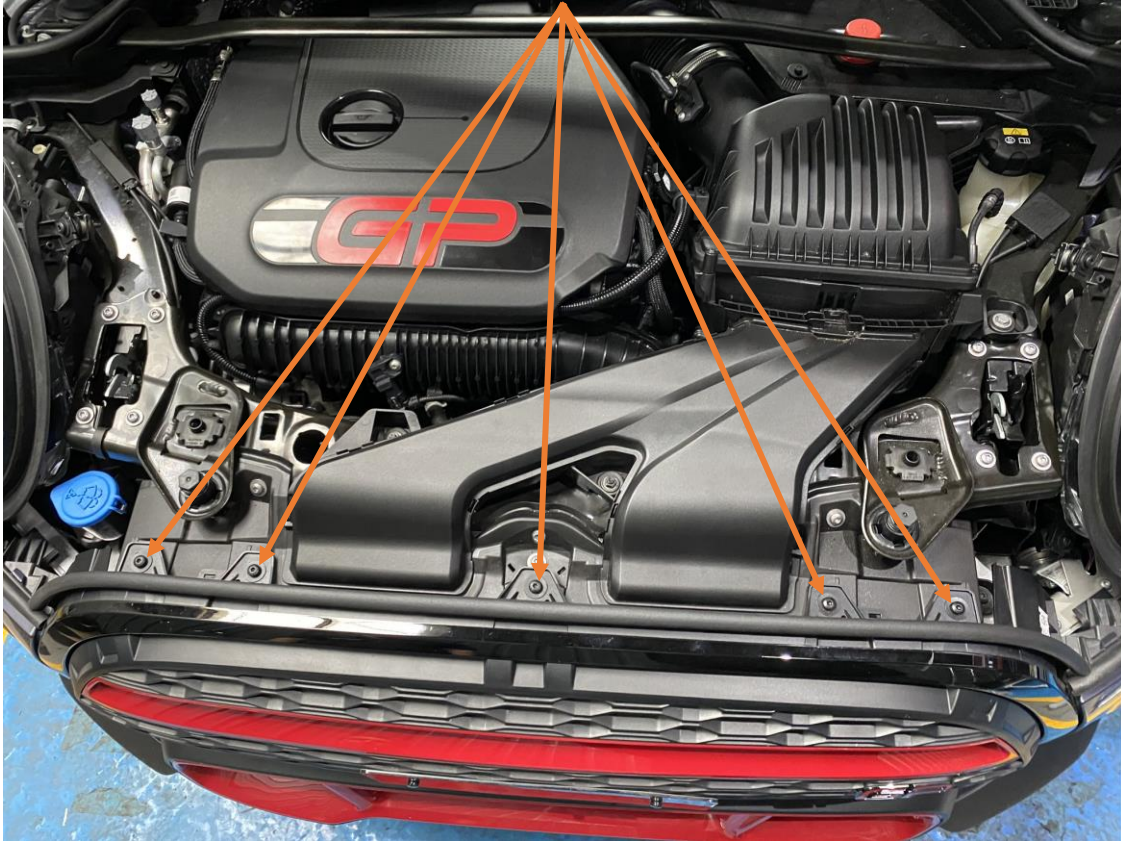
8. There are white plastic push clips that line the outer arch that push through the wing that hold it in place, push the first one on each side from the inside to release it. This should release the exterior arch enough to allow access to the bolt that attaches the side of the bumper to the wing. If you need to release more then again push them from the inside. Be careful not to damage the outer arch when doing this.



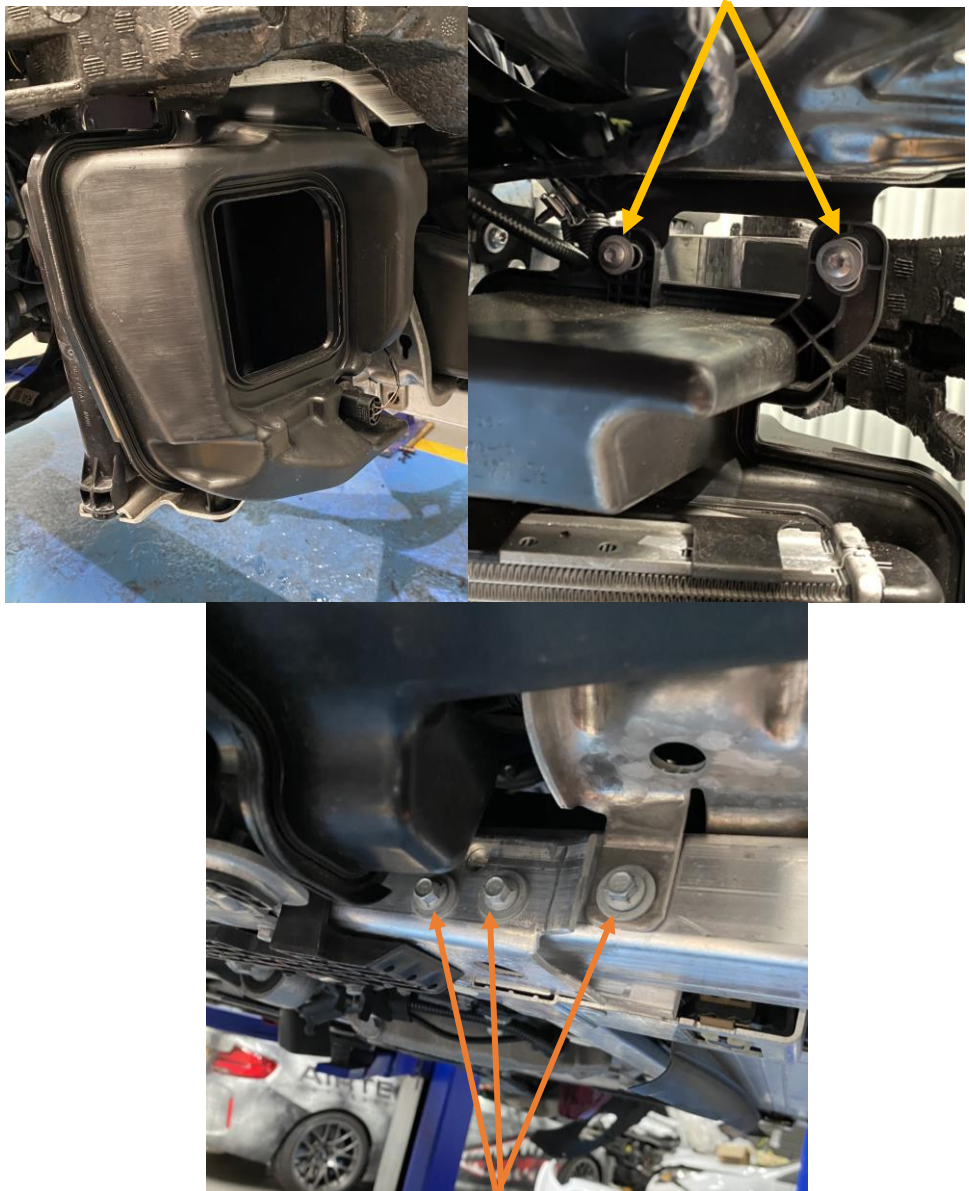
9. Undo 1 x T30 torx each side of the bumper to release from the sides. There is not a lot of space here so ideally you want a T30 torx bit that you can fit a ratchet spanner to which will then allow you to easily remove the bolt.



10. Along the top of the bumper there is 5 x T30 that need to be removed, with the help of a second person to hold the front of the bumper as once undone the bumper will be loose and be able to be put aside, check for any wiring that needs disconnecting before removing the bumper from the vehicle.



11. Remove the lower brace by first undoing 3 x 10mm bolts each side. These are long bolts and so the auxiliary radiator and washer tank bottled on the driver's side of the car will need to be moved. This is done by undoing 2 x T30 torx bolts and then on the cradle for the radiator there is 2 x 10mm bolts. With the help of another person you should then be able to move the washer bottle and auxiliary radiator assembly out of the way whilst the other person undoes the bolts for the brace. Once the bolts are undone then put the bolts back in that were supporting the auxiliary radiator and washer bottle back in hand tight so that it is supported. You will need to move this assembly again to get the bolts back in after fitting your new intercooler. The brace will then slid forwards and away from the car.



12. Undo 1 x T30 each side to remove the air guides either side of the intercooler from the car



13. Remove 1 x T27 each side to remove the brake duct guides from the car.



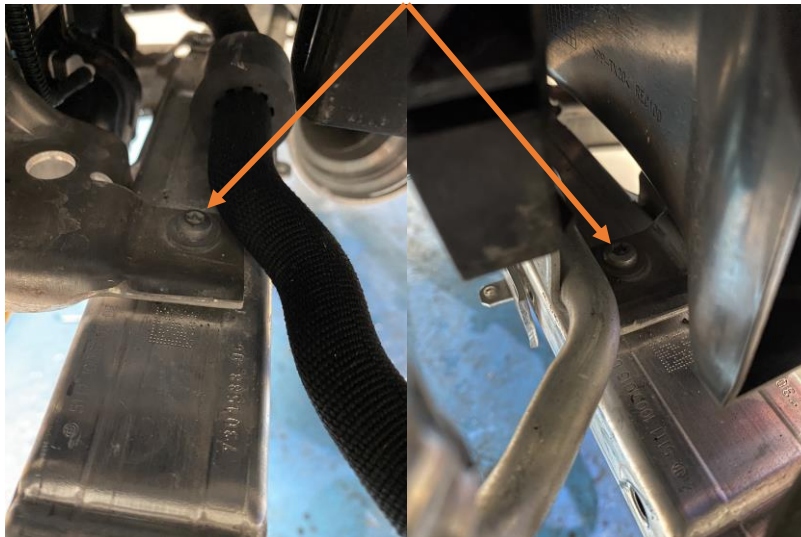
14. Remove 1 x T27 holding the aircon pipework to the right hand side of the intercooler.



15. Put 2 x small screwdrivers in the holes on top of the slam panel to support the radiator cradle.



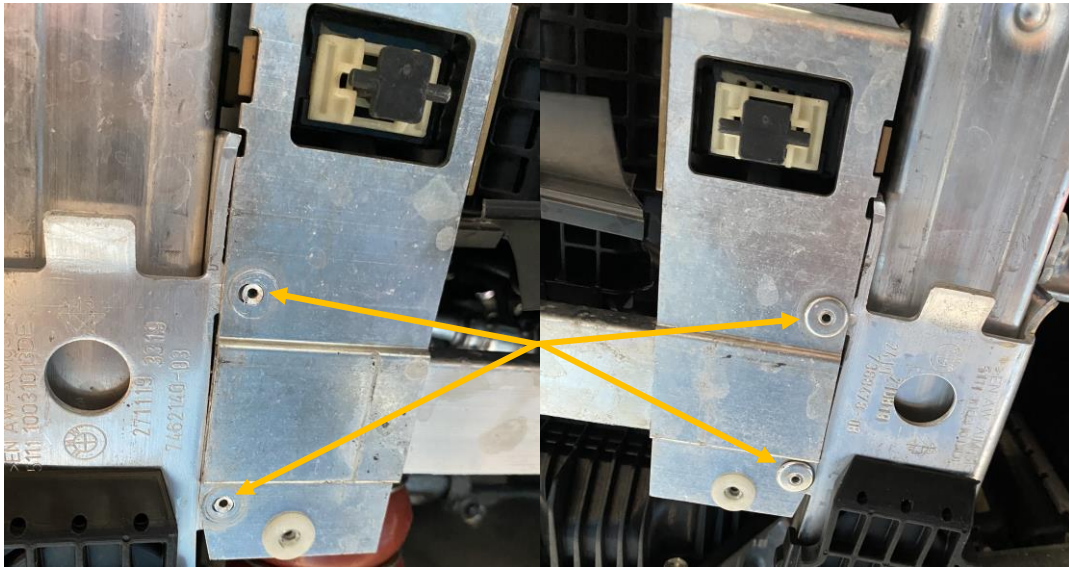
16. Remove 2 x T30 between the radiator cradle and the lower brace.



17. Unclip the standard intercooler fixings by using a screwdriver to push down the clip and then pull the black piece down and then remove the centre of the fitting. These can be discarded as they are not needed when fitting your new AIRTEC motorsport intercooler.



18. Drill out 4 x rivets on the underside of the front brace and remove the brace



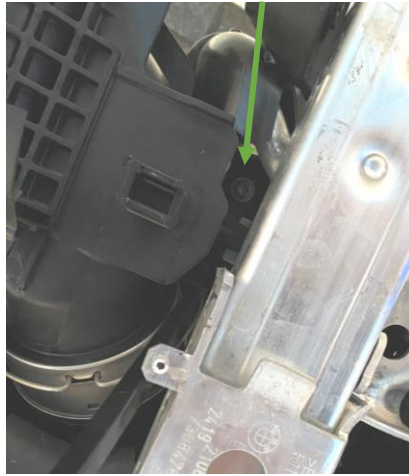
19. Unclip the stock hoses using a screwdriver to pop the top of the clip up allowing the hose to be released.



20. Unclip coolant line from the left hand side of the intercooler when looking at it from the front of the car



21. Undo 2 x T27 holding the intercooler to the radiator and then pull down on the intercooler gently to release.



22. With the use of a second person put the new intercooler in position and then reuse the original T27 bolts from before to hold in position.
23. Reconnect the hoses, this can be done with the clips shut just push the hose onto the cooler until you can hear and feel it clip on. Put the lower brace back on and using the supplied M8 x 16mm bolts and washers tighten the brace to the intercooler.



24. Refit the rest of the parts removed in the reverse order once happy with the fitment of your new intercooler making sure all bolts are tightened.

