AIRTEC Focus RS Intercooler Fitting Instructions



Fitting. Depending on selection of tools and mechanical skill about 4-6 hours.

Safety first!

- 1. Always use eye protection whilst using tin snips, electric drills, angle grinders and so on.
- 2. Disconnect battery whilst performing any electrical operation (i.e. whilst removing Charge cooler pump etc!)
- 3. Wear protective gloves if possible

Parts supplied in kit

- 1 x Airtec Huge Focus RS front mount intercooler (100mm core)
- 2 x Battery relocating tray and battery clamps
- *All Silicon hoses, alloy pipes & Stainless jubilee clips included
- *Stainless bolts & washers and nuts needed to fit Intercooler

Fitting instructions step by step

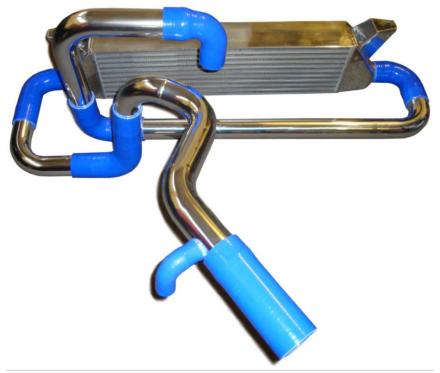
- 1.Remove Battery and Battery tray, the battery tray is held in by 3 x 13mm bolts, also un-clip wiring that is secured onto left hand side of battery tray (battery strap is no longer needed).
- 2. Now Jack up front of your RS and place axle stands underneath (even better if you have a ramp or car lift, lucky bugger!)
- 3. Once jacked up, remove front splash shield.
- 4. Now its time to remove the front bumper make some space to put this as you don't want to get it scratched, it will take about 10-15 minutes. Remove front grill by un-clipping top and the bottom is secured by 2 x 10mm bolts, once removed you have 2 ways of removing bumper.
- a. There are 3 x 10mm bolts that hold the front bumper onto the bottom of the front wings, remove these and the bumper is removed. It is a lot harder with headlights left in! Long extension bar needed.
- b. Remove front headlights which are held on by 3 x 10mm bolts you can see 2 of them and the third can be reached by going underneath front wing, same for both sides. Once both lights are removed you can easily gain access to the 3 x 10mm bolts that hold the front bumper onto the bottom of the front wings, remove these and the bumper is removed. It is a lot harder with headlights in! Long extension bar needed.



- 5. Drain charge cooler coolant by removing the charge cooler radiator pipes, after water has been drained you can also remove charge cooler radiator and its brackets (charge cooler radiator brackets mount onto radiator cradle)
- 6. While you are underneath the car you can also remove charge cooler pump and all associated water pipes, also ones that lead up to the charge cooler (black box 'says Intercooler on it')
- 7. Now its time to remove charge cooler (black box 'says Intercooler on it') First remove the 2 Blue boost hose's then remove the charge cooler 'Black box' its not bolted in just pull it upwards and it will pop out of the rubber bungs (be careful it may have some coolant left in it) Don't forget to remove any other pipes.
- 8. All that should be left now from the old charge cooler unit is the charge cooler coolant bottle, this is simply removed by pulling upwards.
- 9. Nearly ready to fit the front mount intercooler, go to the front of the car where the Old charge cooler radiator was located, just above is the front cross member on the bottom right hand side (passenger side) of the cross member there are power steering pipes located you need remove the bracket that secures these pipes onto the cross member the pipes will lay on top of the intercooler when fitted (protecting foam is provided in kit).
- 10.Hold Intercooler up to the bottom of cross member make sure it is as central as possible without damaging the power steering pipes, if it sits slightly to the right hand side this is correct, then mark your holes with a marker pen.
- 11. Drill the marked holes using a 9mm or 10mm drill bit, once drilled apply some rust treatment primer/paint or just touch up paint (anything is better than nothing)
- 12. Bolt your new intercooler in place with the fixing bolts provided.



13. Its now time to fit all the alloy pipe work and silicon hoses, we have made this hopefully as easy as possible by labelling all the hoses and pipes with corresponding numbers or positions i.e silicon hose no.6 matches up to alloy pipe no.6 and if its going onto turbo or throttle body it will be marked up 'THROTTLE BODY', there is a picture showing pipe work also. (ONLY REMOVE LABLES WHEN YOU ARE HAPPY YOU HAVE THE PIPES IN THE CORRECT POSITION)



14a. Your Gen 2 k&n or similar is to be kept in the same position to stop flat spots happening or poor throttle response which we found when it was moved to under front bumper.



14b. You may need to drill a new hole to mount your k&n air deflector back onto the radiator cradle, please see picture. In your kit you will have longer bolt and machined alloy spacer.

- 15. Getting very close to finishing now!
- 16. New battery tray! This is to be located where the old charge cooler once was (the black box) line up the 3 lugs with the 3 holes and then take the bolts provided and secure from underneath (its very tight and patience is needed) now place battery onto new tray and secure with alloy clamps provided.
- 17. New battery tray cont. for safety reasons at this point it would be a good idea to check that the battery does not hit the bonnet, simple place some cardboard over the terminals and gently place bonnet down.
- 18. Due to battery being moved the wiring is now to short and needs to be re-routed to gain some extra length to reach terminals.
- 19. Live wire. This is the easy one! Simply cut the cable ties around the plastic armoured casing and move the wiring back until it reaches the live terminal, you can re-cable tie and tape for better presentation.
- 20. Negative. A little harder but not rocket science, take the earth which is located from the battery to the inner wing, remove from vehicle and drill the hole that used to be connected to the inner wing out to 9mm, remove one of the 13mm nuts off of the top suspension leg (there are 3 on each side), then place the modified earth lead onto this thread of the suspension leg top and re-tighten (preferably the one closest to the battery!)
- 21. Negative lead cont. The other earth lead is a small lead, you need to cut any cable ties and armoured plastic cable back far enough so that the lead can be re-located so it will reach the battery, once you have got enough extra length you can re-cable tie and tape for better presentation, the battery now is finished.



22. All is left to do now is re-place bumper, grill and headlights (if removed) and splash shield, the splash shield a tight fit but does go on, you may need to move boost pipes slightly to help with fitting.