

# Audi TTRS 8S Stage 2 Intercooler Fitting Instructions

## Tools needed:

- Socket set
- Torx bits (T20, 25, 27, 40)
- Trim removal tool or flat bladed screwdriver
- Hacksaw, belt sander or angle grinder

## Kit Includes:

- AIRTEC MOTORSPORT INTERCOOLER
- Modified crash bar (**OPTIONAL**)
- 2 x Bracket
- 4 x M6 x 12mm Cap head bolts
- 4 x M6 washers

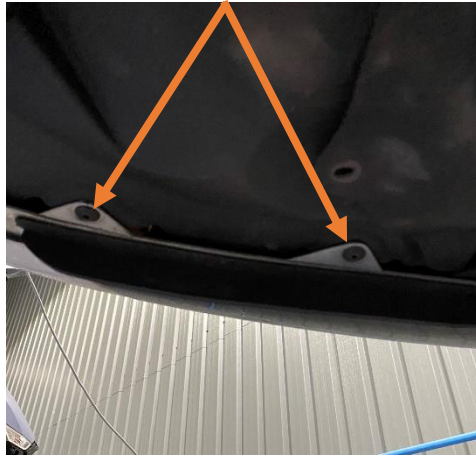
PLEASE THOROUGHLY READ THESE INSTRUCTIONS AND MAKE SURE YOU ARE FAMILIAR WITH THE STEPS BEFORE CARRYING THEM OUT.

IF YOU DO NOT OPT FOR THE MODIFIED CRASH BAR THEN YOU WILL HAVE TO CUT YOUR OWN IN ORDER FOR THE INTERCOOLER TO FIT.

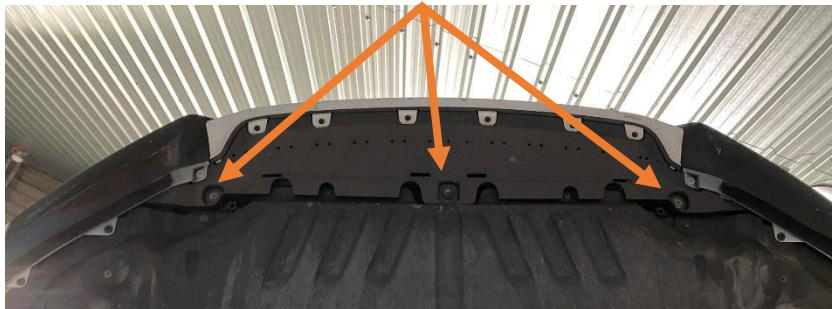


## Instructions:

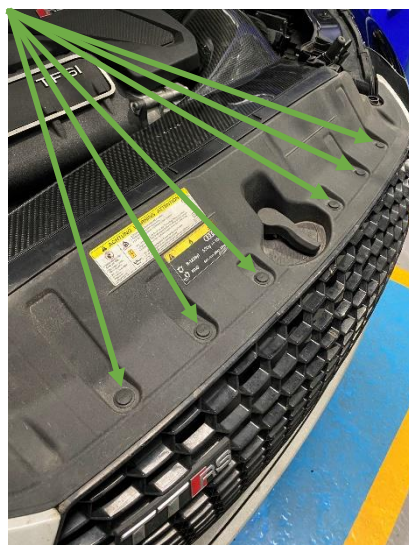
1. Raise the vehicle up in to the air using either a vehicle ramp or jack and axle stands following the manufactures recommendations, open the bonnet and secure.
2. Working under the car start by removing the 2 x T20 each side of the front bumper.



3. Undo the 3 x T25 at the front



4. Working from the top now, use a trim tool to remove the 6 x slam panel clips



5. Remove the bonnet release handle by squeezing in the clip on the back of the handle and pull off.



6. The slam panel can now be removed by pulling it from the edges to unclip it.



7. Undo the T20 on either side holding the top of the bumper on



8. Remove 3 x T20 in each arch



9. Undo the T20 holding the bumper to the wing in each arch



10. Using a second person at this stage pull the edges of the bumper away from the wing to release it, with the bumper pulled forward slightly get the other person to disconnect the plug connecting the wiring from the bumper to the car. Put the bumper safely aside.

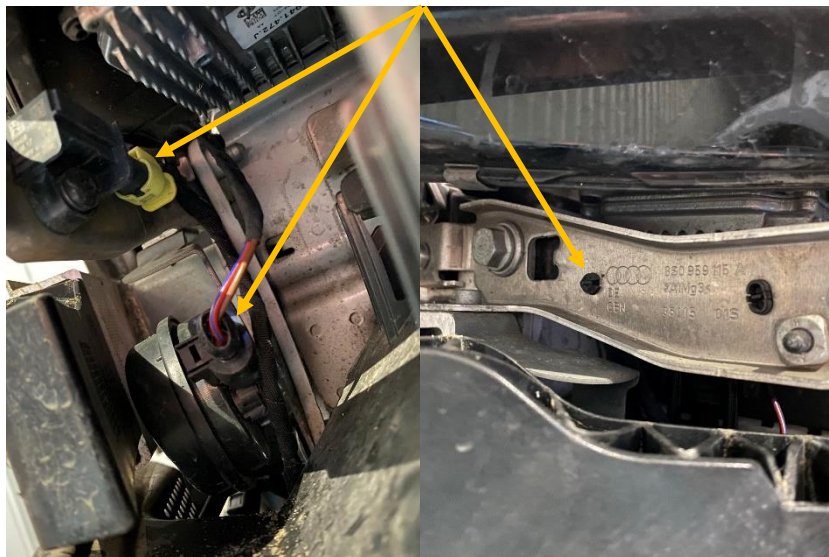


11. The next step is to remove the intercooler and crash bar, firstly undo the 2 x T25 on each side that hold the plastic end on to the crash bar.

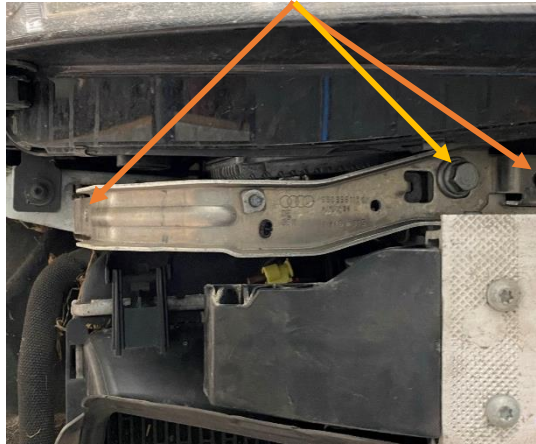


12. Remove the ducting to the auxiliary coolers, It is held in by plastic clips. The top needs to be pushed down slightly to release before it can be pulled out. Take care as the clips can be fragile. On the right hand duct there is wiring attached to it that will need to be unclipped using a trim tool or similar.

13. Unplug the horn and crash sensor wiring on each side and push the wiring clip through to release the wiring from the bracket.



14. Undo the 2 x T25 each side followed by the 16mm bolt holding the bracket to the crash bar. Remove the brackets and set aside.



15. To remove the intercooler firstly loosen the two jubilee clips using a 7mm flexdriver or socket.



16. Undo the 2 x T25 at the top of the intercooler followed by the 2 x T25 at the bottom holding the intercooler brackets to the car.

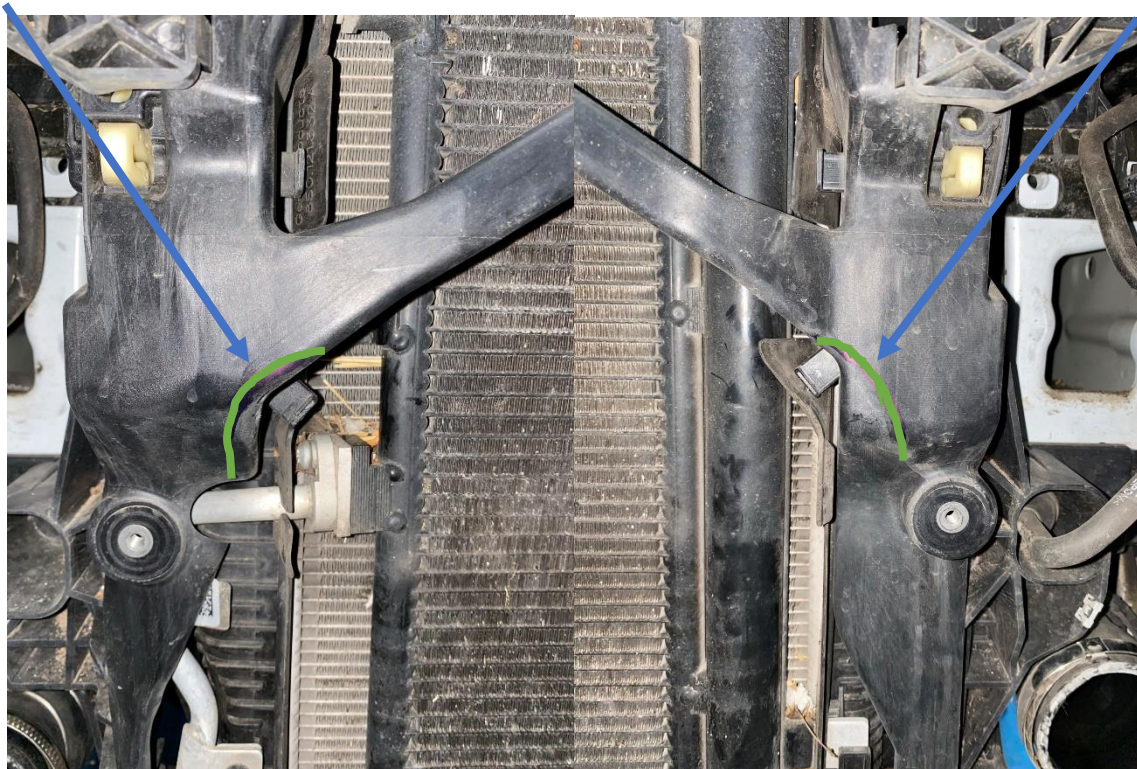




17. Pull the intercooler towards the front of the car to remove, retain the lower intercooler brackets as these are reused when fitting your new AIRTEC intercooler.
18. To remove the crash bar undo the remaining 3 x 16mm bolts on each side and then you will need to lift the crash bar up and twist the top edge forward to release it.



19. To fit the new intercooler you will need to modify the plastic rad pack surround, see the marks on the photo below and using a sander or angle grinder remove material. Be very careful to not catch any pipework to the air conditioning condenser. Start by removing a small amount of material in that area and then lining up the intercooler to check clearance and then remove more as needed.





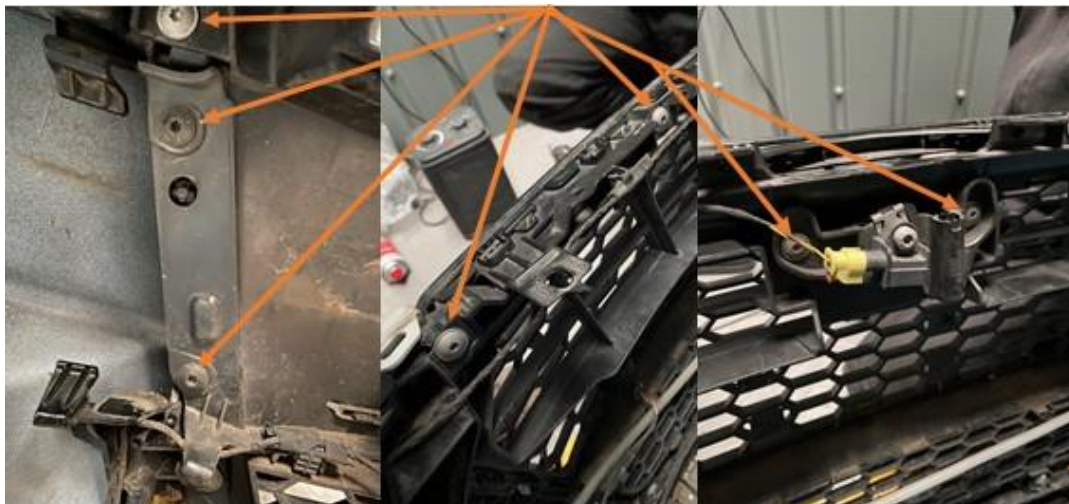
20. On the inside of the bumper you will need to remove the lower pieces of foam, the bottom is held on with metal clips, use a trim removal tool or flat bladed screwdriver to pry these clips. There is also a plastic clip holding in each side piece.



21. The centre piece of foam will need trimming to allow clearance for the top corners of the intercooler, this bit of foam is clipped in. Pull the tubing out of the groove in the foam. **DO NOT DISCONNECT** it at either end, leave it hanging out of the way for now and then push down on the foam by the clips and it will release the foam. Follow the guidelines below to cut the foam to allow clearance, you will need to trim the same part on both sides of the crash bar. When putting the foam back in push the tubing into the groove and leave it where the groove no longer is, it will not foul on the intercooler and so will not cause an issue.



22. If you want maximum airflow to the intercooler then you can remove the centre blocked off section of the front bumper and remove the foam centre section entirely which means you will not need to cut it however this is an optional step, this is done by undoing the T25 torx bits along the top and the bottom, then remove the two T25 torx bolts holding the sensor bracket, then unclip the wiring that goes along the top of the bumper and lay the sensor aside.





23. There is metal clips holding the central piece to the bumper, remove these using a trim removal tool or flat bladed screwdriver.



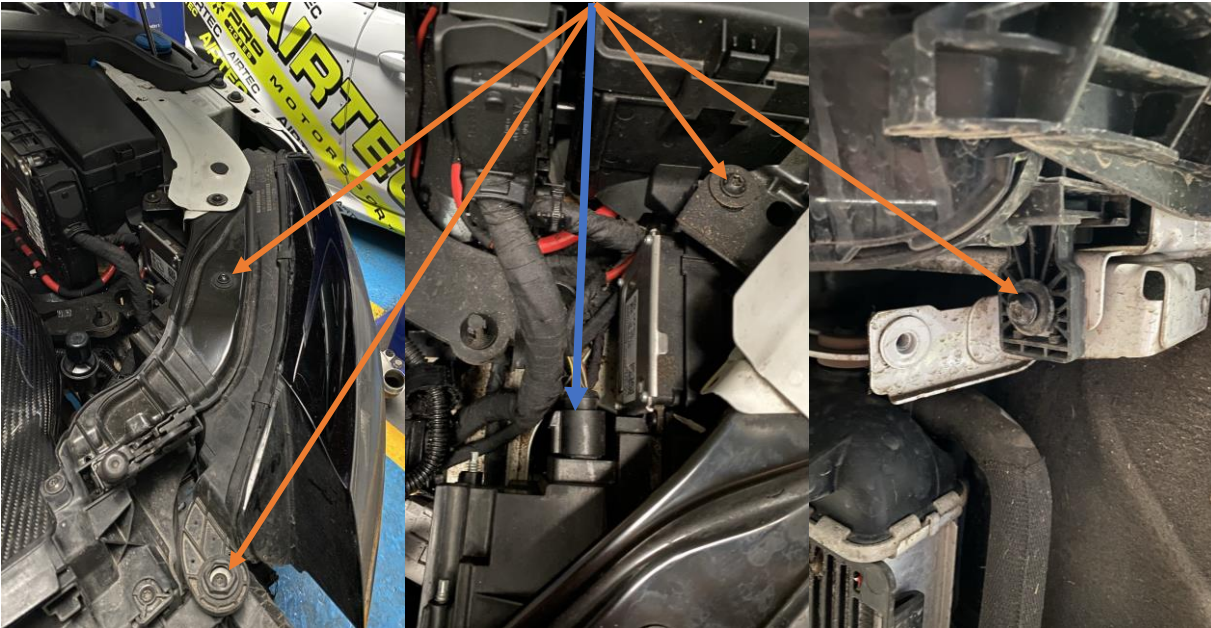
24. Unplug the parking sensors by pulling the grey tab back and then squeezing the clip together and wiggle the clip apart.



25. There are clips going round the entire section that you will need to release in order to release the upper and middle part together. Once you have removed this section as a whole you will be able to separate the upper from the middle and then reinstall the upper back on the car so that you can reinstall the sensor. Route the tubing so that it is not kinked or tight, we would recommend you route it under the parking sensors and the clip that was being used to hold the foam in before plugging the parking sensors back in and then using a cable tie to secure it and then covering it lightly with black tape so that it does not flap around and will also not be visible from the front of the car that way.



26. To fit the new intercooler you will need to remove the headlights, this is done by undoing the 4 x T27 holding in the headlight and unplugging.



27. Before it can be removed you will need to undo the brackets that hold the bumper to the wing, undo the 2 x T27 each side and remove the bracket from the car.

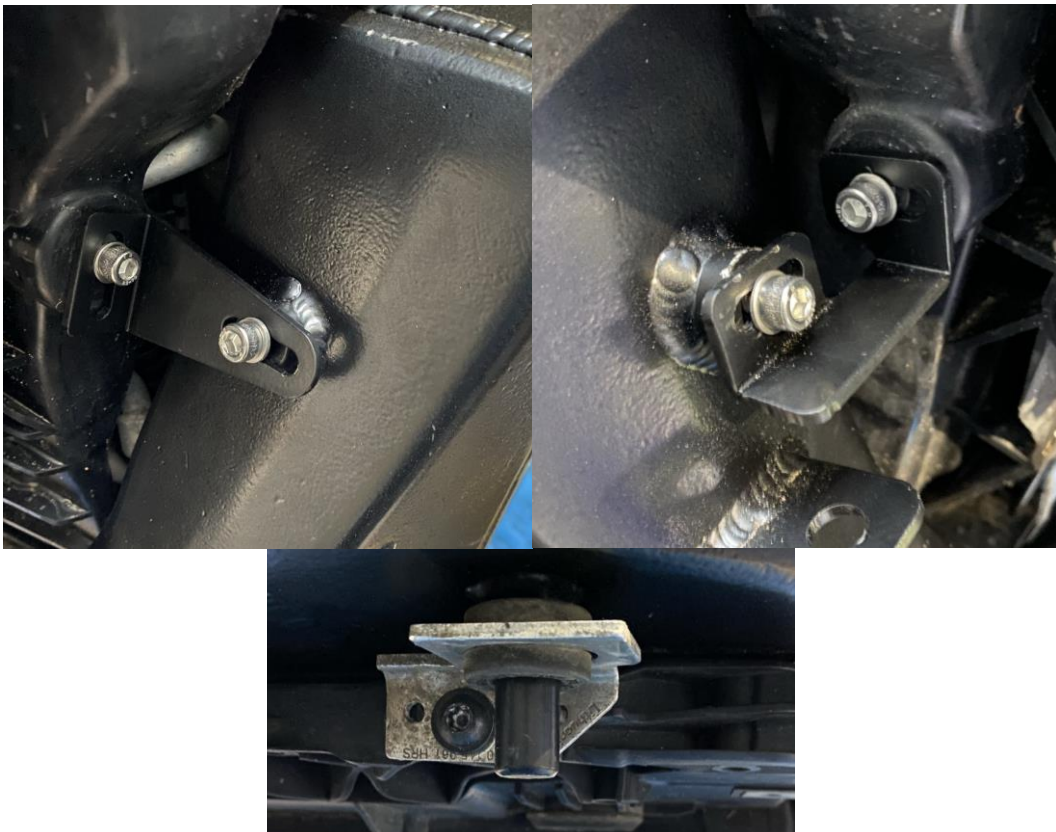




28. Remove the headlight, if it is difficult to remove it can be made easier by undoing the top of the slam panel by undoing the T27. Do this one side at a time as it connects to the rad pack and can cause it to drop so make sure someone is there to support it. Once the headlight is removed reinsert the bolt.



29. With the headlights removed you can now install your new intercooler. Attach the mounts that were at the bottom of the original intercooler to your new intercooler. Then attach the two new brackets provided to the intercooler using the supplied M6 bolts and washers and then to the car. Once happy with the position tighten the brackets.





30. If you have opted to cut your own crash bar then you will need to mark where the original crash bar where it will foul the intercooler and then cut it away. The below photo and the one in **step 31** will give you an indication of where you need to cut. If you have chosen to purchase our already modified crash bar then proceed to the next step.



31. Using a second person to help you guide the crash bar onto the car, you will need to tilt it back first to get it past the front of the rad pack and then tilt it forward to get the bottom to slot in behind the rad pack. Once in position reinstall the original crash bar bolts and tighten the lower mounts.



32. Attach the hoses to the intercooler and tighten the original jubilee clips.
33. Reinstall the air temperature sensor into the bracket attached to the new intercooler.



34. Reinstall the headlights, bumper brackets and then the bumper in reverse of removal.