

# BMW F8X M3/4 & M2 Competition transmission cooler

*Approximate fitting time: 2 hours*

## Tools needed:

- Socket set
- T25 Torx bit
- 8mm Allen key
- Hacksaw blade/knife (very minor clearance trimming required to plastic)
- Container for catching spilt oil
- PPE is recommended such as gloves, safety shoes and glasses.

## Kit Includes:

- *AIRTEC motorsport transmission cooler*

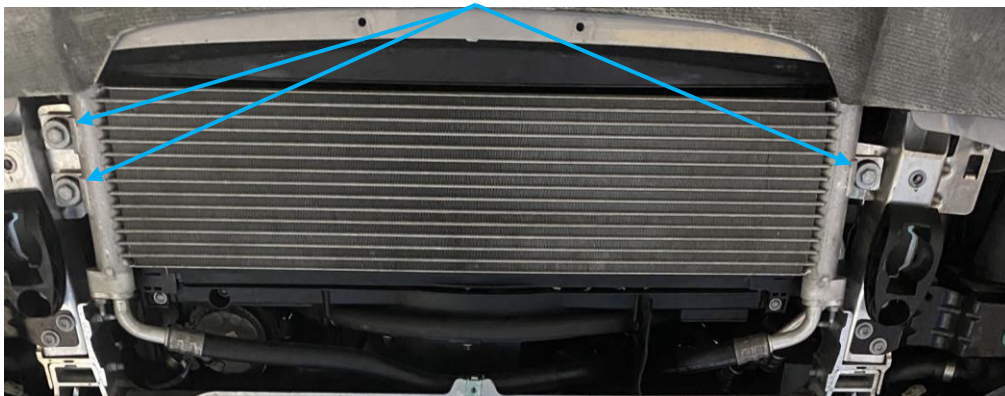


## Instructions:

1. Jack up the vehicle up either with a jack and using axle stands to secure or preferably on a vehicle lift.
2. Start by removing the front undertray from the car by removing 19 x 8mm bolts and 2 x E11 bolts (if you don't have an E11 socket then an 8mm socket can be used but take care not to round the bolts.)



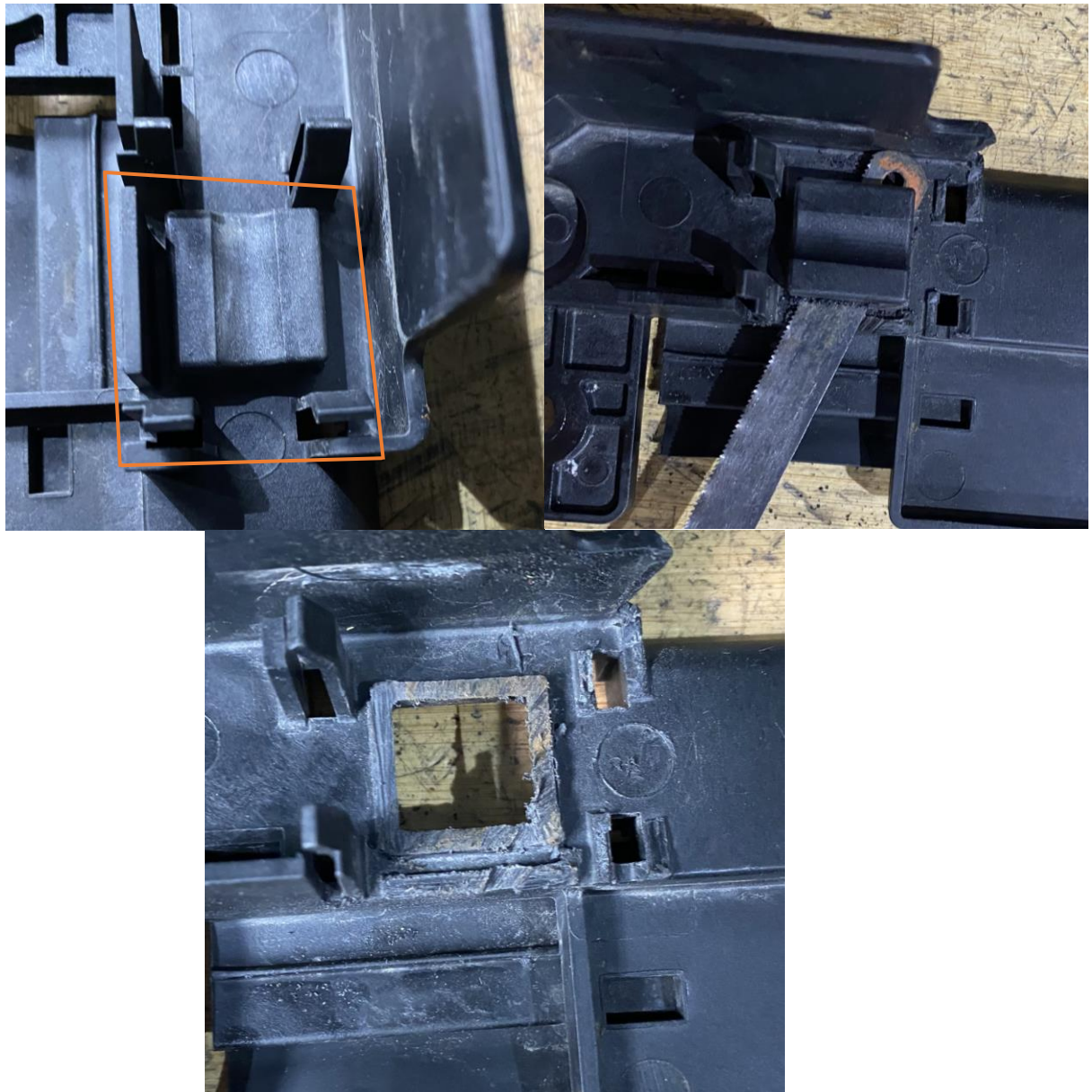
3. Next step is to remove an auxiliary cooler, this is done by removing 3 x 13mm bolts. Once undone leave the cooler to hang out of the way ensuring that the pipes are not twisted or at risk of being damaged. When removing be careful as there will be debris/leaves sat on top of the cooler.



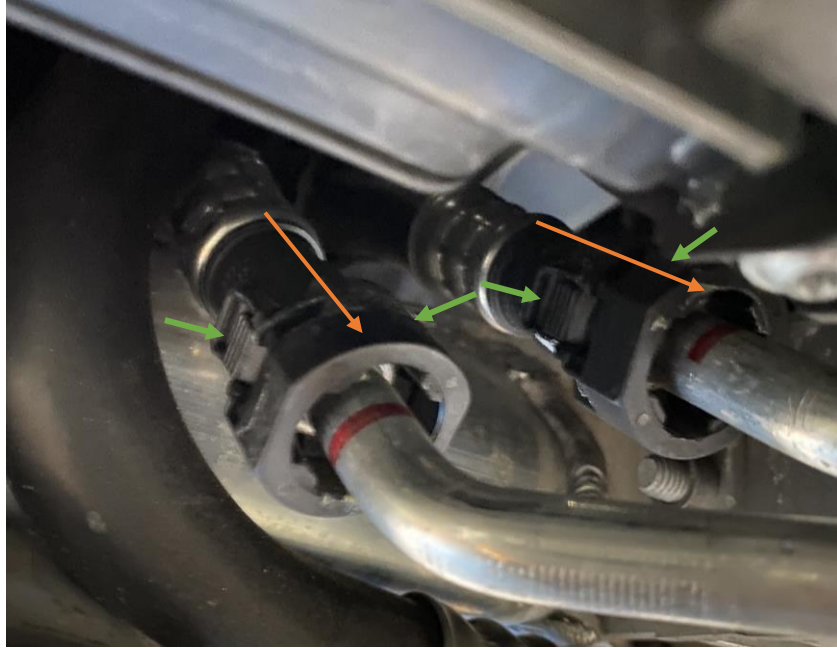
4. Now the plastic carrier for the DCT cooler can be removed, this is done by undoing 2 x T25 Torx bolts and the plastic will slide down, the cooler may drop down with it so take care, again there will be debris on top of this so be careful with your eyes when removing this.



5. The carrier will need to be modified before reinstalling, using a hacksaw blade is best for this stage, cut away at the parts highlighted below to allow clearance when installing your new cooler.



- The connectors for the cooler can now be unclipped and the original cooler. Have the new cooler ready to go so that you can swap it over quickly to minimise the oil lost during the switch over and also have a pot handy to catch any oil that does spill whilst removing the old cooler. (A second person would be useful for this step) The connector is undone by sliding the plastic body down (towards the cooler itself as shown by the direction of the arrow in the picture below) and then squeezing the two plastic tabs either side of each connector whilst pushing the connector up and gently pulling the metal pipework down so that they slide apart. It is best to get both unclipped and pulled off slightly before fully removing them fully as this makes it both easier and reduces the amount of oil that will spill.



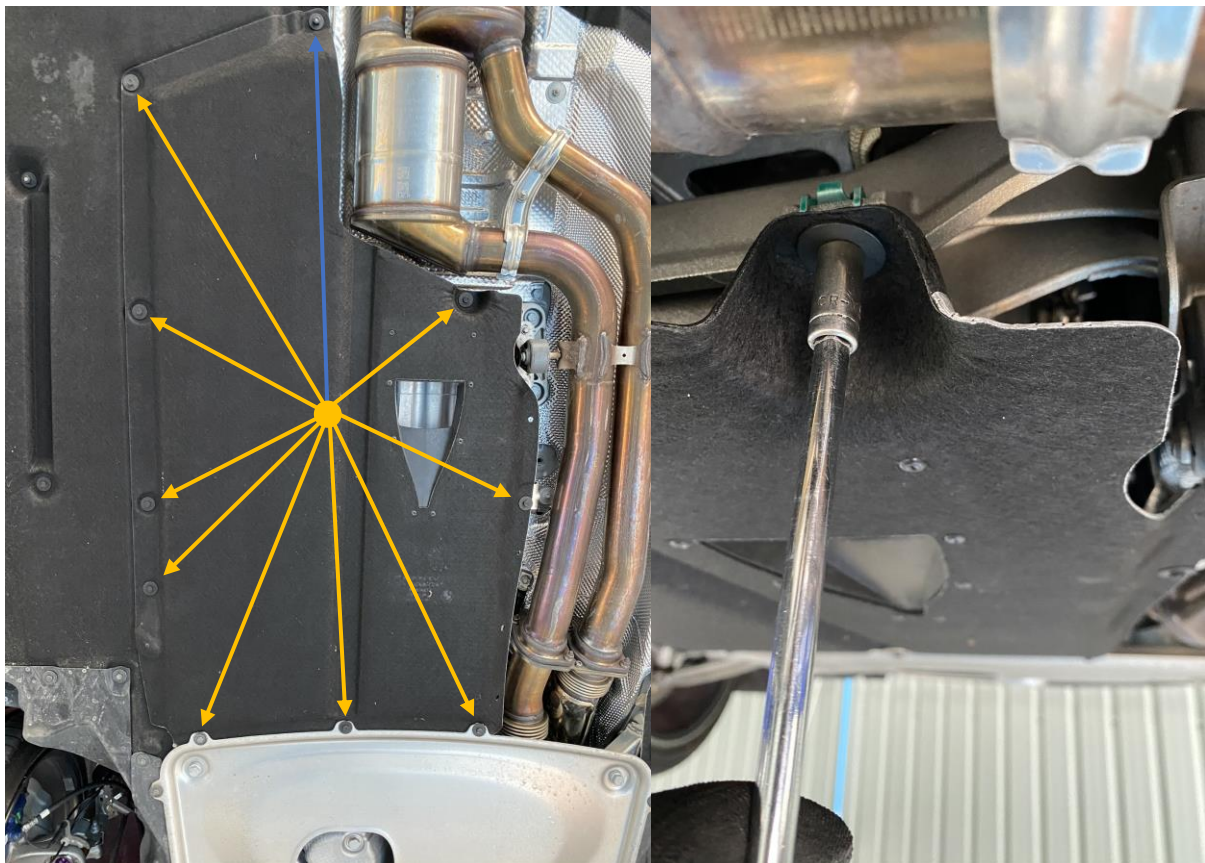
- Install your new AIRTEC motorsport DCT transmission cooler by clipping in the connector and pushing the on until you hear the positive click of the tabs locking over the collar.



8. Refit the now modified plastic surround and reinstall the auxiliary cooler and front undertray in the reverse order of how they were removed.



9. The oil level for gearbox must be checked to ensure that it has not gone under level, ensure the car is in the air and is level. To do this firstly remove the middle undertray by undoing 9 x 8mm bolts and 1 x 10mm plastic nut and put the undertray to one side.



10. The oil level should be checked when the gearbox is between 30° and 40° C (86° to 104° F). To check the level, undo the 8mm allen key and the oil level is correct if oil weeps from the fill hole. If it does not weep then you will need to top up the oil, using a syringe or pump and the recommended BMW transmission oil insert oil until it starts to weep from the fill hole. Tighten back up to 25NM. Start car and leaving in P run engine at 2,000rpm for 1 minute and turn off. Check oil level again, making sure transmission temp is between the specified temperatures and top up if required. Once this procedure is complete then reinstall the middle undertray and the job is now complete and the car can be put back on the ground.

