

AIRTEC MOTORSPORT Fitting Instructions

Vehicle:	BMW 320d E46
Product:	Intercooler
Part number:	ATINTBMW1



Kit Contents:

<ul style="list-style-type: none">• 1x AIRTEC Motorsport Intercooler• 2x Pro Hoses Silicone Hoses• 2x M8 Nyloc Nuts	<ul style="list-style-type: none">• 2x M8 Washers• 1x Jubilee Clip 70mm• 3x Jubilee Clips 60mm
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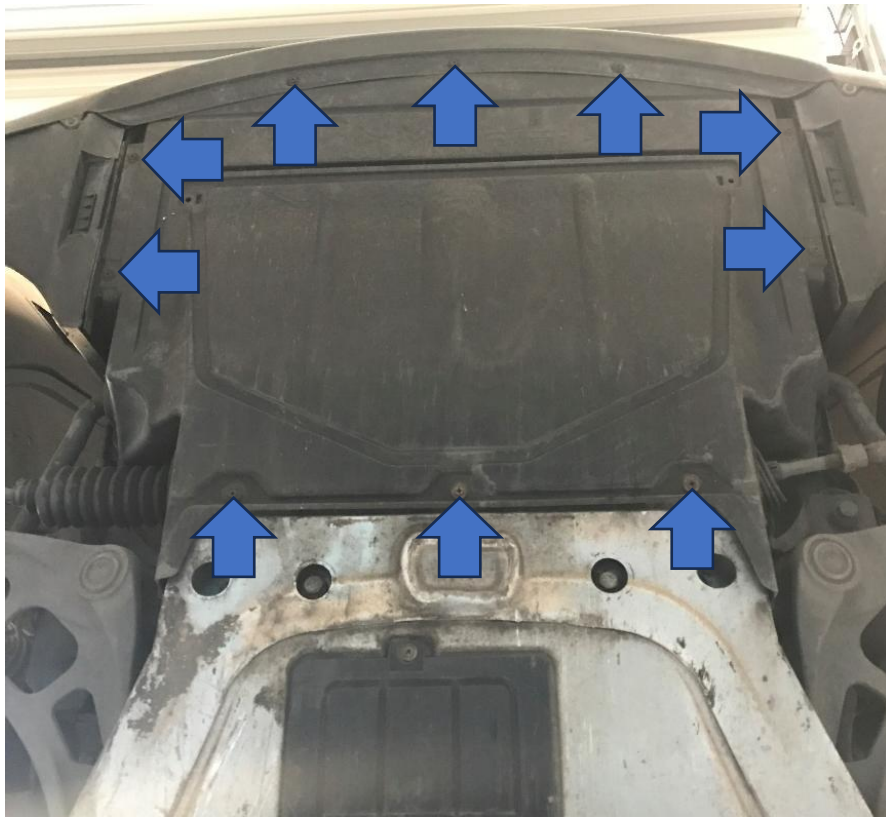
Tools Required:

<ul style="list-style-type: none">• Ratchet and Socket Set• Torx Socket Set• E8 Torx Socket• Small Flat-Blade Screwdriver	<ul style="list-style-type: none">• Jubilee Clip Flexi-Driver• Cross Head Screwdriver• Cutting Tool (Hacksaw or Dremel)
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PLEASE THOROUGHLY READ THESE INSTRUCTIONS AND MAKE SURE YOU ARE FAMILIAR WITH THE STEPS BEFORE CARRYING THEM OUT

Instructions

1. Raise the vehicle into the air and remove the lower undertray by undoing the cross-head screws.



2. Remove the two 8mm bolts attaching the lower part of the bumper to the arch liner on each side.



3. The final fixings to remove the bumper are two E12 Torx bolts located on the inside of the bumper. These can be accessed from underneath using a long extension bar.



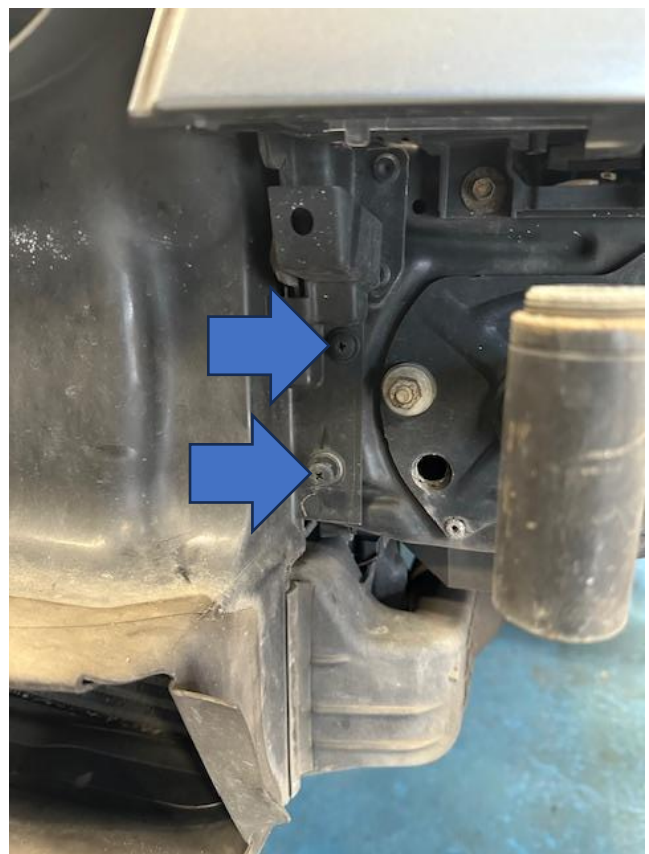
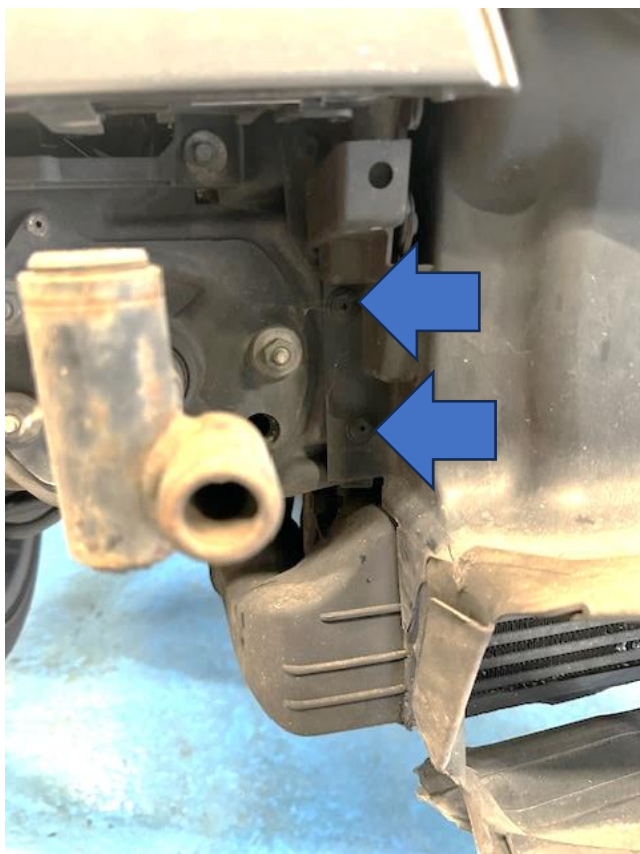
4. Now carefully unclip the edges of the bumper and pull it forwards. You will need a second person to help you unclip the horns and fog lights before you can remove it from the car.



5. Remove the air guides on both sides by undoing the two 8mm bolts under the chassis rails.



6. Remove the four cross-head push fittings and pull the radiator air guide forward to release it.



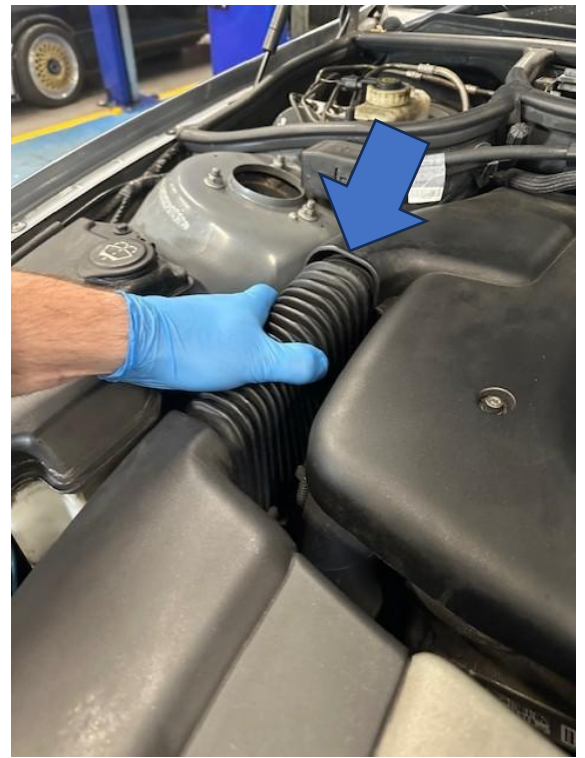
7. From under the car, remove the boost pipes from the intercooler using a small flat-blade screwdriver to release the spring clip.



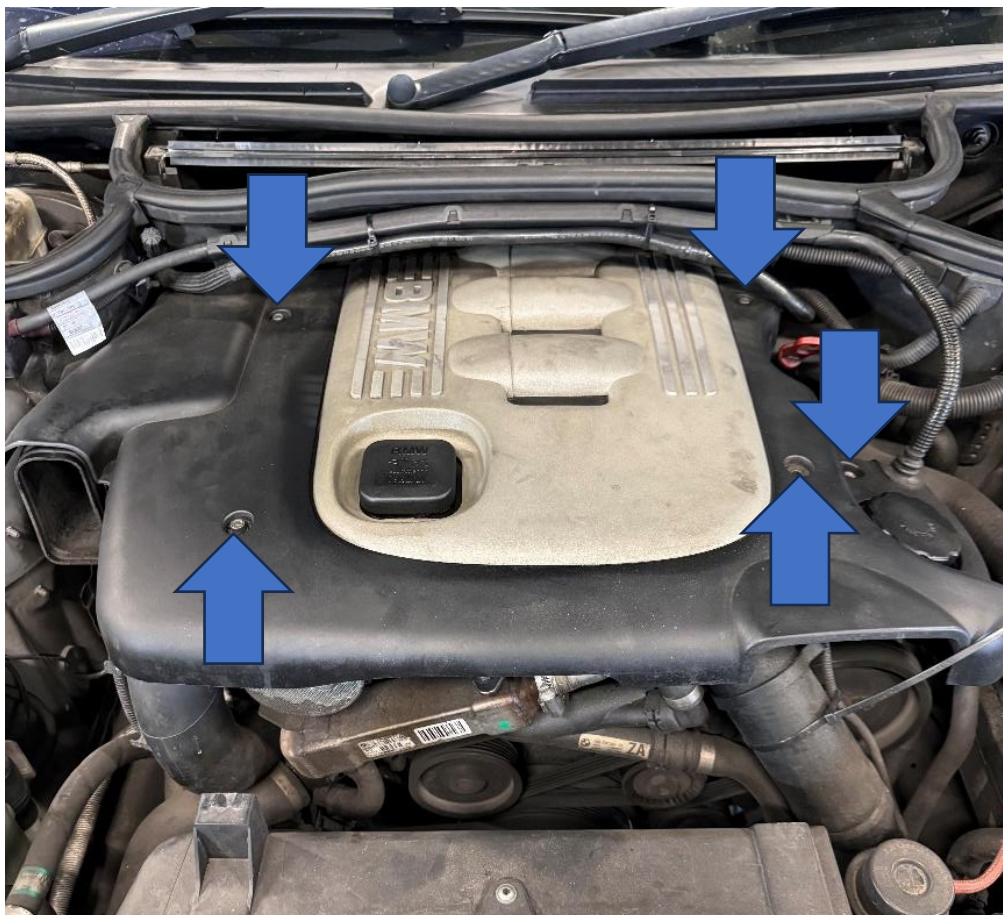
8. Underneath the intercooler there are two T20 Torx bolts securing it the bottom of the radiator. Remove these and the intercooler will release from the car.



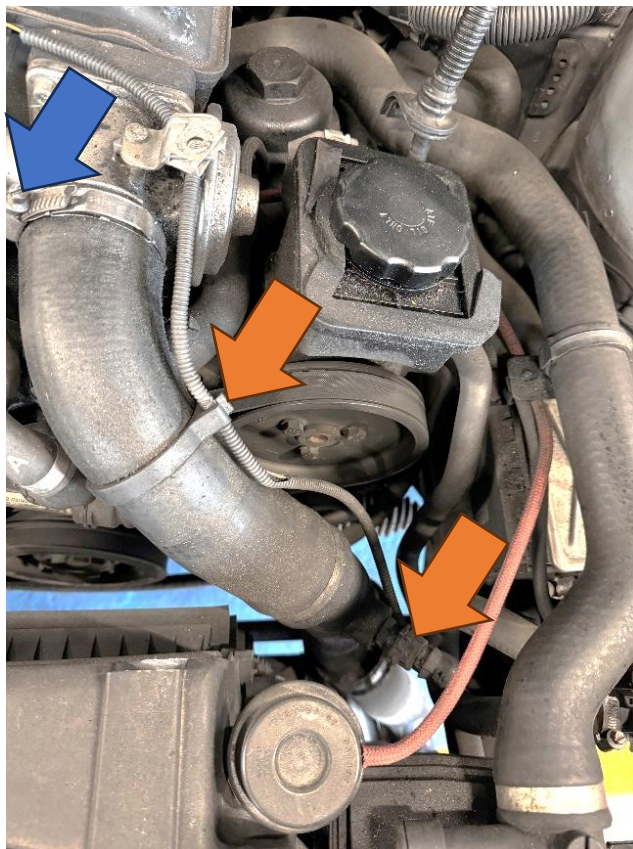
9. The original boost hoses will need removing so that the new silicone hoses can be installed. To access the cold side hose, you need to remove the air box feed by undoing the two fittings on the slam panel and then pulling the hose out before pushing it back and lifting it out.



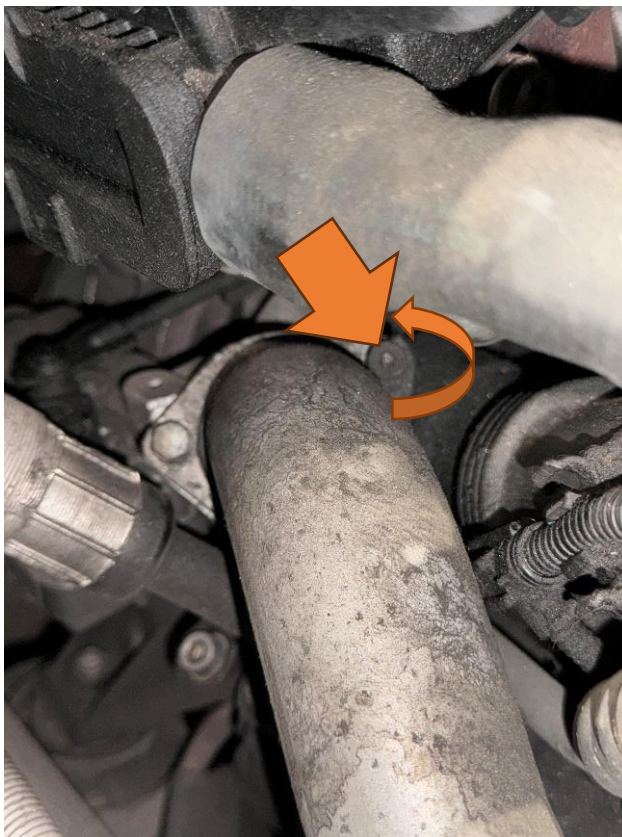
10. The engine cover can be removed by undoing the five 5mm Allen Key bolts.



11. With the engine cover removed you can undo the boost hose's top jubilee clip (blue arrow). Then disconnect the wiring and temperature sensor (orange arrows). The hose can then be removed from underneath.



12. With the air feed and engine cover removed you will also be able to access the fixings holding the hot side pipe onto the turbo outlet. The left-hand bolt (blue arrow) needs to be removed fully but the right-hand bolt (orange arrow) can be just loosened, as the clamp will rotate clockwise so the pipe can be removed.



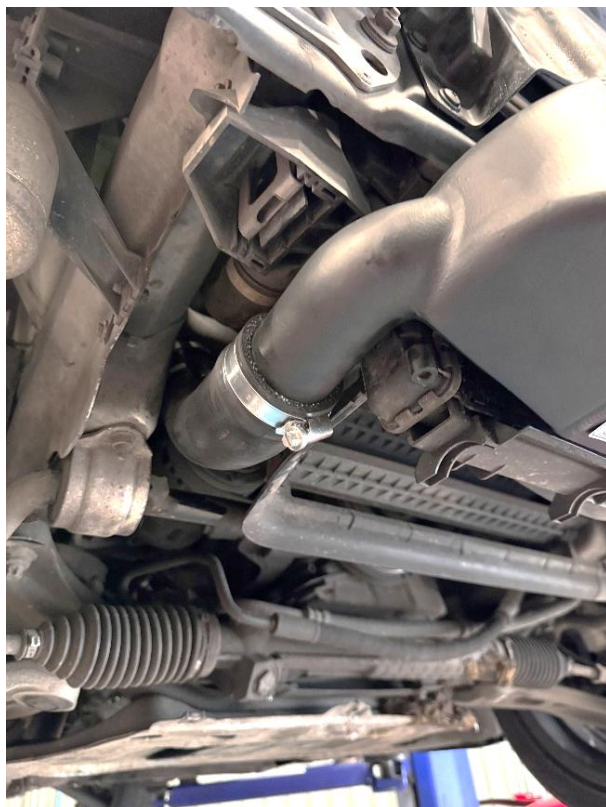
13. The hot side hose is held on with a spring clip (blue arrow) and you will need to separate this to remove the hose. The cold side hose clamp (orange arrow) needs to be carefully cut off using a Dremel tool or similar. With the original hoses removed you can now install the replacement Pro Hoses silicone hoses supplied to the hard pipes with jubilee clips to secure and refit onto the car in reverse of removal.



14. With the hoses installed, fit the intercooler onto the car using the spare M8 threads to mount the brackets to, as shown. Install using the supplied M8 Nyloc nuts with washers, but do not fully tighten at this stage.



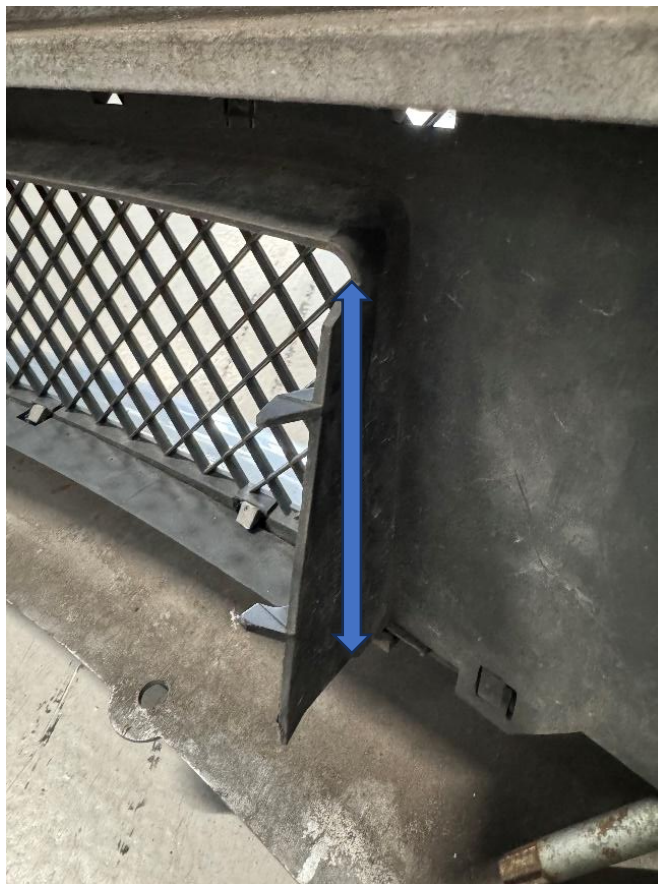
15. Connect the hoses to the intercooler and once happy with the fitment, fully tighten all jubilee clips together with the two M8 Nyloc nuts at front.



16. Before the radiator guide can be reinstalled it will need to be trimmed. Mark across the face in line with the side brackets as shown, and then cut using a suitable tool.



17. Depending on the model of car the intercooler is being fitted to, you **may** need to trim the inside of the bumper where it meets the intercooler, as shown. Please check before attempting refitting.



18. Finally, check all connections are tight and secure, and then refit all parts removed in Steps 1 to 10.

