

## Forge Motorsport Audi S3(8P) Twintercooler fitting guide.



## If these instructions are unclear in any way then please see <u>http://www.forgemotorsport.co.uk/content.asp?inc=media</u> and download the master copy.

Tools required:-vehicle ramp or jack and axle stands, drill and 8.3 or 8.5mm drill bit, T30 torx driver, T25 torx driver, T20 torx driver, 10mm socket/ratchet and extension bar, 5mm hex key, tape measure, jig or blade saw. Safety clothing, footwear and eyewear are also recommended.

1/ Raise vehicle and open bonnet/hood. Remove the 3x T30 screws from the slam panel. Remove the 4x T25 screws from each wheelarch front edge (one of these screws each side is slightly hidden by the plastic wheelarch liner). Remove the 10mm bolt from behind the liner that retains the bumper just below the headlight, see largest picture below. Remove the 7x T25 screws from the underside of the front bumper. The front bumper can now be lifted clear of the car, disconnect the fog lights whilst removing the bumper.



2) Remove the 2x radiator air deflectors. These are fixed with a single T20 screw in each. These will not be refitted later.



3/ Remove the 8x T25 screws in order to remove the complete engine under tray.

Remove both lower standard intercooler hoses; these are just clipped in via a spring clip at one end and clamped at the intercooler end. To remove the clips , prize them away with a flat blade screwdriver then remove the hose from its socket. Although these hoses will not be refitted, the seals are required later so place to one side for now.



4/ Now measure the full length of the crash bar and make a centre line reference point. Measure 290mm either way from this centre line and mark again with a horizontal line. Measure 10mm up from each of these lines and make a centre point for a drill hole. Drill each of these points with an 8mm to 9mm hole. Clean away all the swarf from drilling making sure none enters the open intercoolers or the new hoses.



Fit the supplied brackets to the crash bar with the nuts & bolts supplied. Fit the intercooler to these brackets as shown. Tighten all the brackets and intercooler fixings once the intercooler is positioned centrally.

Depending on the original location of the ambient temperature sensor, it may require relocating to allow the intercooler to be installed. The sensor is removed from its existing bracket and refitted into the 13mm hole located on the side of the alloy intercooler bracket.





5/ Remove the horns from their brackets, now remove each bracket from the car and refit the horns as per the pictures below with the new brackets supplied so they are now sited higher. This is to allow the new hoses a free routing below the horns.



6/ Remove the oil seals from the original intercooler hoses and fit these to the corresponding new aluminium hose couplings as pictured below. , these are different sizes so make sure you fit the correct seal to the correct adapter. Fit the hose couplings into the respective fittings on the turbo outlet pipe and the engine intake pipe. Make sure the spring clips are located securely to prevent these couplings from being blown out of the fixings under boost.





The new hose is fitted to the OEM intercooler with the hose clamps supplied.





7/ Now fit the new hoses to join all the couplings and the new intercooler. The hoses may require a test fit to make sure they do not foul on any other engine or front panel components. A small amount of trimming may be required on the hoses at the new intercooler joints. Once you are satisfied with the fitment then secure all the hoses with the hose clips supplied.

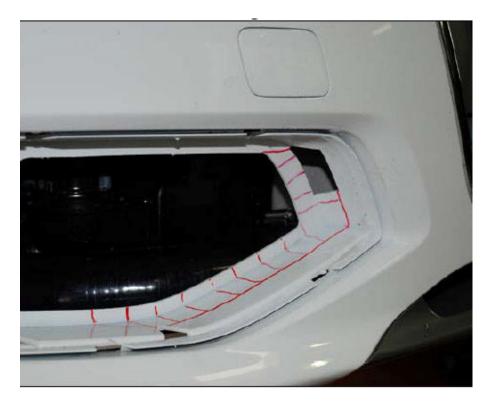




8/ Before the front panel can be refitted it is necessary to trim the panel to increase clearance.



The lower grills need to be removed from the front panel on both sides. Then the grill backing panels are removed, these will not be refitted. Mark the front panel as shown if this picture.



Then cut the panel to allow clearance for the hoses. This is required both sides.

Now mark the centre grill area as shown.



Again remove with a jig saw or open saw blade on both sides. Once the front panel has been trimmed refit it too the vehicle. If necessary trim more from any areas as required. Refit the undertray and bumper in reverse of removal. The lower outer grilles may require a small amount of trimming to be able to fit them back in to place.

Clear away all tools, close the bonnet/hood and lower the vehicle to the ground. You are now ready to enjoy the new found performance of your vehicle.