

Installation Instructions for TyrolSport UG SM IC.

The first step in installing the UG SMIC is removing the front bumper.

Locate the 4 screws on each side of the vehicle, on the inner fender well liner. Remove them with a Torx T25 bit:





When you are done removing the 4 screws on each side of the car, move on to removing the center grill. Begin by removing the hood latch pull. The hood pull has a small metal clip which must be pried upwards. Once the clip is out of position, insert a flat screwdriver and gently pry the legs of the plastic pull open:



Once the pull is released, it can be removed by pulling straight outwards.

Next, gently pull on the corners of the grill, and the corners will pop out:



Pull outwards and upwards to release the retaining clips along the bottom edge of the grill:



Pull the stock grill off of the vehicle, and place to the side.



Next, you will need to remove the five Torx T30 bolts that were hidden behind the grill:



Once the five bolts are removed, the next step is to remove the lower outside grills. Begin by locating the retaining tabs. :



Push down on the tabs, and remove the lower grills.



Behind each of the lower grills, towards the inside, you will locate one more Torx T30 bolt. Remove it from behind each of the lower grills:



The bumper cover is now ready to be pulled off. Gently pull the bumper cover off by sliding the outside edges forward. After the bumper cover has moved a few inches forward, make sure you disconnect the side marker lights before pulling the bumper completely off of the vehicle. The side marker bulbs simply pull off the light housings:



With the bumper cover now placed safely away from the vehicle, we can begin removing the passenger side headlight. The headlight is held in place by four screws. Two top screws:



And two bottom screws:



Gently slide the headlight out and disconnect it from the factory wiring harness:



A flat blade screwdriver can be inserted into the small rectangular headlight harness clip, and rotated to release the lock.

You will now have a good view of the stock Side Mount Intercooler, which will be removed.

Begin by removing the stock IC shroud:





Next, locate the top and bottom hose clamps which retain the hoses to the stock SMIC:







Loosen the hose clamps so that you may remove the stock hoses from the IC later.

You can now remove the three retaining bolts holding the SMIC to the chassis. Two of the bolts are located just under the windshield washer reservoir:





Next, remove the last retaining bolt, which is on the inside bottom of the intercooler, further towards the rear:



Remove the top and bottom hoses:



Gently remove the intercooler. Disconnect the MAP Sensor connector(located on top rear side of the stock intercooler)as you pull out the IC:



The next part of the installation is the trimming of the plastic/fiber radiator support. Here is a picture of the radiator support, looking upwards from the ground. The dotted line is the suggested trimming area:



You can use many tools to trim this area, as the material is not that difficult to cut. Here we are using a hacksaw blade by hand:



Or you can use a Dremel/Rotary tool:



If you like, you can file off any rough edges for a cleaner installation:



Here is the finished trimming, looking upwards:



Next, we must trim a little bit from the top side of the same area. Here is a picture looking down from the top. We are trimming the area just under where the headlight would go:



Finished top side area, looking up from the bottom:



You are finished with your trimming, and now will begin mounting the UG SMIC. You must first transfer the round rubber bumpers from the stock IC to the UG SMIC. These bumpers just pull out. Next, transfer the MAP sensor from the stock intercooler to the UG SMIC. The MAP sensor is held in place by two screws. You will use the new, supplied hardware to mount the MAP to the UG SMIC. Face the MAP Connector on the UG SMIC towards the center of the vehicle:



WARNING: There are two map sensor sizes on the 1.8T Golf/Jetta. The earlier vehicles (2000-2002), have a larger sensor. The later vehicles (beginning in late 2002) have both a smaller MAP sensor AND a smaller intercooler overall. Your MAP sensor should fit snugly into the MAP sensor boss on the intercooler. If it does not fit snugly, and you can move it around when it is located in the map boss, please contact TyrolSport immediately at (917)626-3368 or Info@TyrolSport, and a new sensor boss will be provided to you. This should not be an issue unless a mistake was made in processing of your order.

Mount the UG SMIC in place, and reuse the three mounting bolts. Given the size of the UG SMIC, it might require some manhandling to get in place. It is a **TIGHT** fit, but it will get in there.

The lower mounting point may need to be “persuaded” into position due to the variance in vehicle builds:



Reconnect the stock hoses:





Connect the MAP sensor(which is now on the front of the intercooler):



Finished installation:



Reinstallation of the bumper cover is the reverse of removal.

Optional step:

You can reinstall the stock IC shroud if you modify it as follows. Cut along the dotted lines:

Modified shroud on the left, top view



Modified shroud on the left, bottom view



In our testing, we did not see any meaningful differences with the shroud in place, so we leave this step up to you.