

## Eurojet Front Mount Intercooler TDI install

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This is how I installed my Eurojet Intercooler, hopefully its helpful to you.

### Basic Steps

Removing the bumper fascia

Remove the bumper

Removing OEM intercooler and piping.

Install new intercooler, bumper and piping.

Trim and Re-install bumper fascia

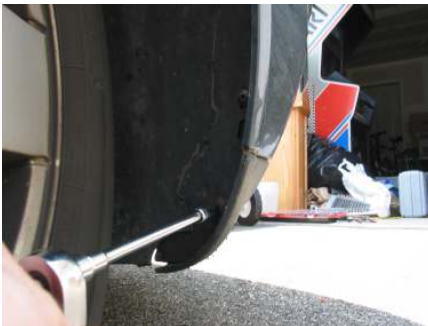


### Removing the front bumper fascia.

Remove the two yellow side marker lights by pressing on the front end of the light (it is spring loaded) and pushing it forward to remove it. Then pull the bulb from the housing.



Locate the 4 torx screws in the wheel well attach to the bumper plastic and remove them.



Disconnect the hood release lever from the hood latch. While slightly pulling in the release, lift the retainer clip out of the way and then place a screwdriver between the plastic fork and prying it apart and freeing it from the latch mechanism. You do not have to pull the lever out of the grill itself.



Remove the front grill by pulling up the corners until they pop free then push down on the center tab with a screwdriver and pulling it away from the car. Pull the top of the grill away from the car slightly and pull upwards, the bottom should pop free.



Locate the 5 torx screws that were hidden by the grill and remove them.



Remove the right and left grills from under the bumper by pressing down on the tabs and rocking out the top and pulling it out.



Behind each find the torx screw that attaches the bumper fascia and remove them.



Now gently pull the bumper fascia straight back and set it to the side.



## Remove the bumper support

Remove the front bumper support by removing the bumper support by removing the 6 screws and then the 4 bolts holding it in place. You may wish to support the plastic surrounding the radiator as it will shift once the screws are removed, making it harder to install the new bumper support. Put the old bumper support aside, you will not be re-using it. Save the screws and bolts you will be re-using them



## Removing OEM intercooler and piping

Remove the passenger side light by first disconnecting the power connector, and removing the 4 torx screws holding it in place, two on the top and two on the bottom. And set the light to the side. This will give you easy access to the intercooler hoses and easy access to the windshield washer bottle.

Remove the upper plastic IC hose by unclamping it from the hose leading to the EGR and unclamping it from the hose leading to the intercooler. set the plastic hose aside, you will not be re-using this part. Keep the rubber hose leading to the EGR and the clamps, you will be re-using them.



Unclamp the hose from the intercooler that leads back to the turbocharger.

Remove the stock IC shroud by unhooking the top clips and the bottom clip, and set that aside (you will not be reusing this part)

unbolt the intercooler and mounting bracket. To unbolt the upper IC mount, first unbolt the windshield washer bottle and tilt it to the side so you can access the IC mount bolts. You may find you need take one of the fuel filter mount bolts partially out in order to do this.



Remove the two bolts holding the IC mounting bracket to the chassis.  
(you will notice from the picture I found out the bracket had to be removed after I had unbolted the IC from it.)



Unclamp the lower IC hose and remove the remaining bolt retaining the intercooler from the bottom inside area of the intercooler.



Carefully remove the intercooler, be aware that there is a wire connected to the map sensor on the backside of the intercooler. Be careful not to damage the map sensor and wire and be aware that the intercooler is probably filled with very dark oil.

Disconnect the map sensor and remove it by taking out the two Philips head screws and pulling it out. Put the map sensor someplace safe as you will be re-using the map sensor. You will not be re-using the IC or its hoses and clamps or the map sensor screws.



You can re-install your windshield washer bottle and headlight.

Remove the plastic hose and the rubber hose that lead from the intercooler to the turbocharger by unbolting the plastic tube that lead from the intercooler back toward the turbocharger from the chassis. Unclamp the rubber hose from the turbo charger and remove. You may wish to unclamp the plastic hose from the rubber hose to make it easier to work, if so, remove the spring clip and pull the plastic hose from the rubber one. Set those parts aside, you will not be re-using them.



### **Install new intercooler, bumper and piping**

#### Mounting the new IC

The intercooler mounts to the two remaining bumper support locations using the two remaining screws from the bumper support. You will notice that the mounting tab on the top of the intercooler is shifted off center front to back. The intercooler is mounted so that the major portion of the intercooler is toward the radiator.



If you want to keep the bottom part of the bumper fascia, you will need to do some additional work. You will need to drill new mounting holes on the intercooler directly below the holes that are already there. If you drill the holes so you have enough room to put on the silicone coupler and the bolt clamp, you will have just enough clearance at the bottom of the intercooler so the front fascia fits under the intercooler. The exact distance you need to drill may vary with your car. So do not go by my measurements. You will also have to break off the lip on the front side of the radiator support so the intercooler can hang straight down, closer to the radiator. I have included them in the pictures for reference.

I did not drill new mounting holes on the intercooler or break off the lip until I was completely done with the install and was test fitting and trimming the bumper. This seemed

to work well. You may wish to wait until then to drill it for the best fit. This way you can be sure about your clearance between the hose and clamp and the bumper support bar. Those pictures are with the toward the end of this document

Bolt on the new bumper support using 2 bolts and 2 screws from the old bumper support. You may find you need to move the plastic around the radiator to make the holes lined up again.(note: the second picture is from test fitting a pipe later in my install, but shows how the new bumper support bolts up)



You will start at the turbocharger. On the passenger side, You will be test fitting the L shaped pipe and the 90 degree silicone adapter (not the L shaped pipe with the mount for the MAP sensor on it). The adapter should be trimmed on the turbocharger end to print the L pipe as high as possible, away from the driveshaft and suspension components. See the pictures.



this last picture is a bit deceiving as one the pipe connected at the other end, the pipe corner is close to the frame rail.

Attach the passenger side pipe to the intercooler with a silicone adapter and a tbolt clamp.



Test fit it to the L shaped pipe going to the turbocharger. In my installation the L shaped pipe had to be shortened. My understanding that this is corrected on the next run of kits. Install the silicone adapter between the two pipes and tighten them down. If you have to trim down the pipe, you may wish to use a length of 2" heater hose if you trimmed it down as there is no lip, this will allow you to put 2 clamps on the end with no lip see the pictures.



Starting at the EGR find the other L shaped pipe with a mounting tab on it. You will need to drill out the hole so it is large enough to fit a M8x1.25x20mm bolt. You will also need a M8x1.25x20mm bolt. Take a moment and check the hole for the MAP sensor. You may find the hole needs to be de-burred. If so just use a file or sandpaper to remove the rough edge so the MAP sensor will fit. Bolt this pipe to the steering pump and attach the hose to the EGR using the original hose and clamps.



Mount the drivers side U pipe to the intercooler. You will find that the horns make for a difficult fit, if you re-mount the horns on the top side of their mounts, it will give you much more clearance.

Pre remounting the horns



Post remounting the horns



Once mounted you will have a rough idea of where the remaining long pipe needs to run. Be patient, this is a tight fit. I had to move part of the wiring harness out of the way as well as my flexible portion of the AC line. In my case I couldn't get a real perfect fit for the passenger side U pipe, but it was close enough that the couplers fit and clamp down well.



Double check all the hoses to make sure they are tight.

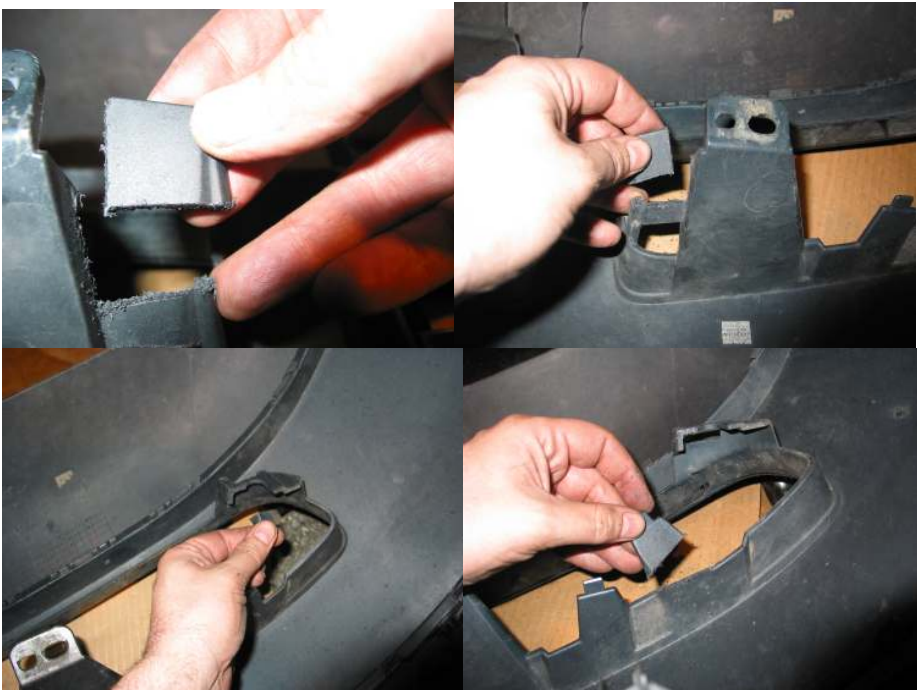
Mount the MAP sensor on the upper L pipe using the supplied screws and attach the connector. You might want to use a little oil on the o-ring to help with the assembly. Be careful how you route the map sensor wire, you don't want it to get caught in the belts. I routed mine around the windshield washer bottle.



Start the car and check for leaks.

### **Trim and Re-install bumper fascia**

Now test fit the bumper. Mark out with a pen where you need to trim. Here are some photos of where I trimmed. Trimming can be done easily with a hacksaw blade.





I cut this tab off too on the passenger side

For the bumper to fit properly, you may need to raise the intercooler. Alternately, it appears it may be possible to remove the lower half of the bumper fascia, which would also give you clearance. Since I want to keep a stock look, I decided to remounting the intercooler.

I did this by drilling 2 new holes. I marked with a pen the height of the new holes, making sure you have clearance between the bumper bar, and the intercooler hose so they do not touch. In addition, to make the intercooler hang straight down, (closer to th radiator) you need to break off the lip behind the intercooler. Doing both gave just enough clearance for the bumper to fit on all the way. You can see the measurements I used, however think it would be wise to test fit and mark it yourself, rather than using my measurements.



You can see after it is all re-assembled and the bumper is placed back on just how close the intercooler is to the bottom of the bumper fascia. In my case it was less than 1/4"



Bolt back the bumper fascia and re install the grills and hood latch pull.

Check the alignment of your headlights. Both of mine had to be re-adjusted.

That's it all done. Hope you find it useful.

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