

air design

air design E9X 335i oil cooler installation guide

This is a quick and dirty guide to installing our oil cooler. A more complete version is in the works once we get some time and a fresh/untouched car to install it on. These pictures were taken on our shop/R+D car, so it is a bit harder to start from scratch and do a proper write-up. If you have any questions, or if anything is not clear, please call us at 303.351.3515. Again, this is just a quick, down and dirty writeup, so please excuse the bad pictures, prototype brackets/parts (this is NOT a production unit), and the very dirty car ☺

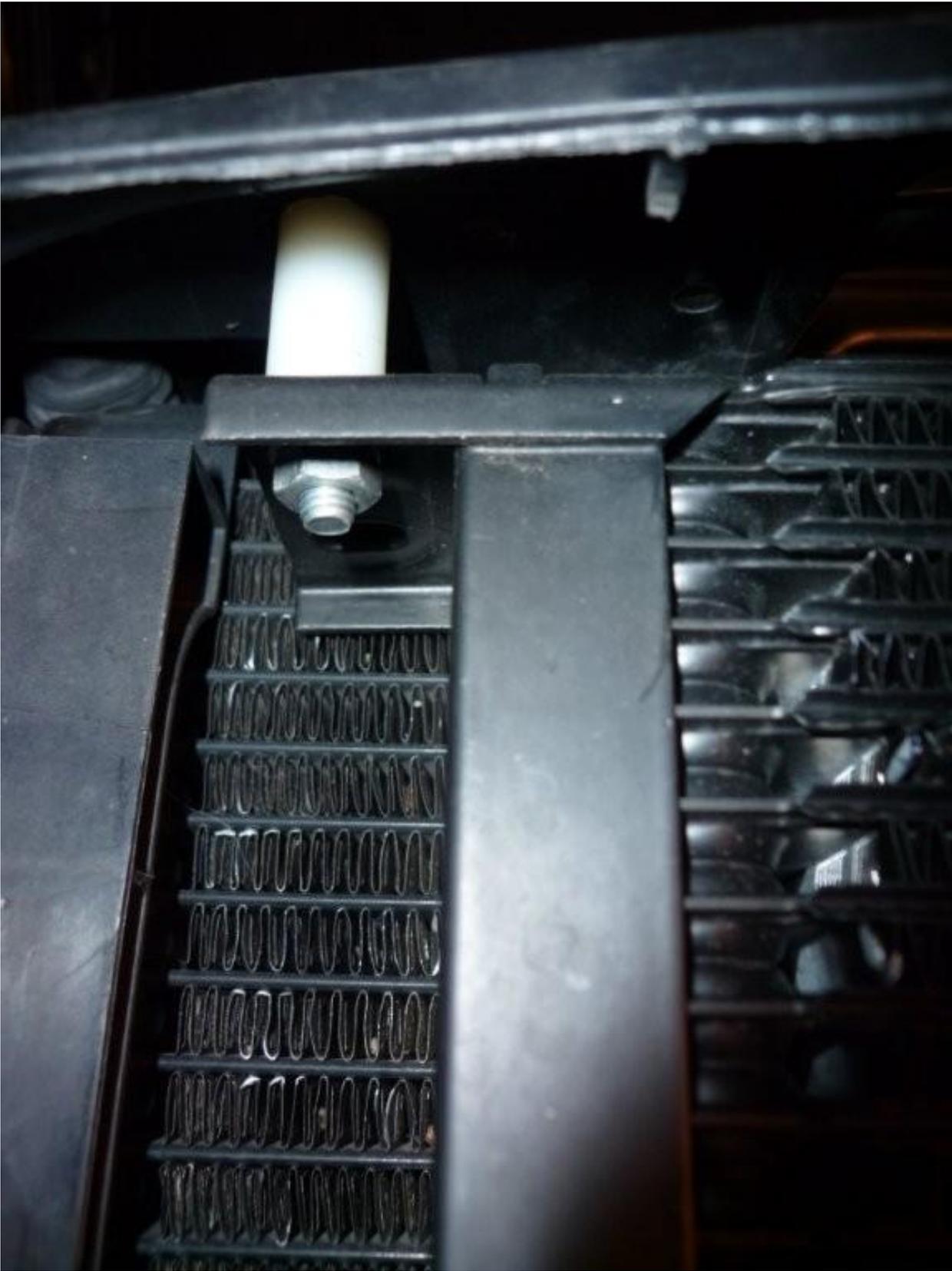
1. Remove front wheels.
2. Remove front fender liners.
3. Remove front bumper.
4. At this point, your front end will look like this, sans the oil cooler, and sans dirt, hopefully ;). Remove the metal brace in the middle and the seal/shroud for the bumper/radiator



5. Now you will need to trim out the center plastic brace. Assemble brackets to oil cooler, drill mounting holes using the oil cooler with brackets as a template. When you are done, it will look like this:



Top Left Bracket with nylon spacer



Bottom left bracket



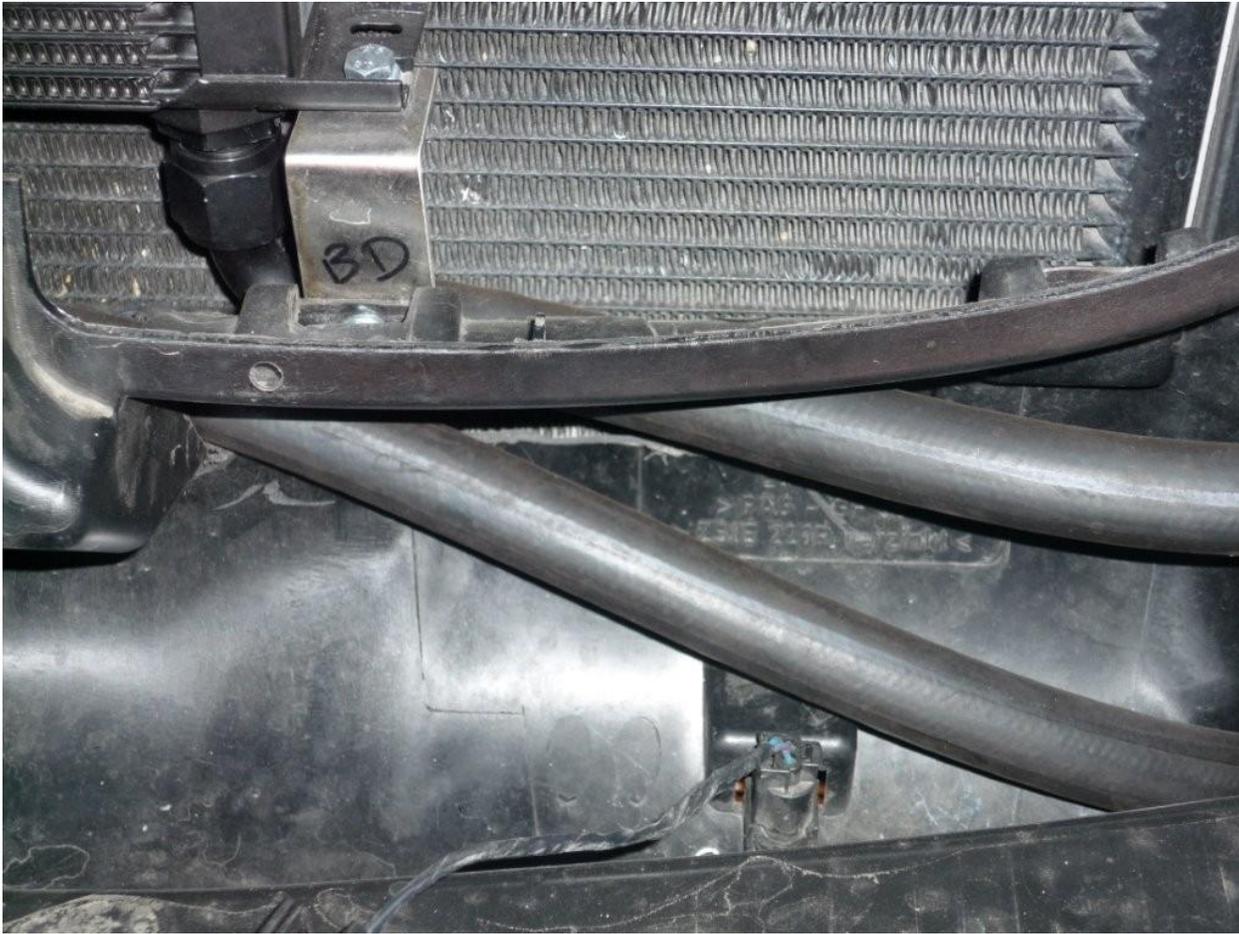
Right side, assembled



View from top looking down on right side, hole is drilled to side of center brace that was trimmed.



Now cut a hole for the two oil lines in the lower portion of the shroud. The hole we cut is much larger than needed, and was partially already there from some other R&D. You can cut it quite a bit smaller. Oil lines are routed in between the radiator and the chassis. There is a nice gap that allows lines to pass.



Lastly, oil filter housing adapter. Take our adapter, slide OEM lines into it, and use the long bolt to attach to OEM filter housing (if you have a retro kit, ignore the OEM lines part as your holes are plugged). Be sure to lube all o-ring fittings with some engine oil, and re-tighten EVERY fitting and line except for the flush plug on the face of the adapter, as we have pre-sealed that with Loctite. We assemble a good portion of the kit for you, but everything **MUST BE RE-TIGHTENED/CHECKED**. This is **CRITICAL!**



DONE! Before re-assembling your front end, start the car and get it up to operating temperature, be sure to check, double check, and check again for any leaks.