Installing your new filtered EVO oil feed line

Step 1-

Remove factory oil feed line. Use provided short 10mm x 1.25 bolt and crush washer to plug oil outlet at head. NOTE: This bolt is a specific short length to prevent damage to internal threads or block off oil supply to cam journals, DO NOT use a standard bolt!



Removal of oil filter housing plug-

There are two allen head plugs in the engine oil filter housing, one is prior to oil going thru the filter, one is after oil goes thru the filter, we want the oil supply from the exit side of the filter. Remove the 3/8" BSPT plug from the oil filter housing, this is the plug that is closest to the RF wheel. See pic below for location.



This plug is damn near impossible to remove without breaking the loctite bond by heating to over 400F.

Use a propane, propane/oxy, or oxy/acetylene torch with a small tip, heat the plug itself, DO NOT heat the housing! DO NOT overheat! Apply torch for 30 second to 60 second intervals until the plug can be easily removed using an 8mm or 5/16" allen socket and ratchet. It is not torqued tight, it will break free with minimal pressure once the loctite has been heated enough to break the bond.

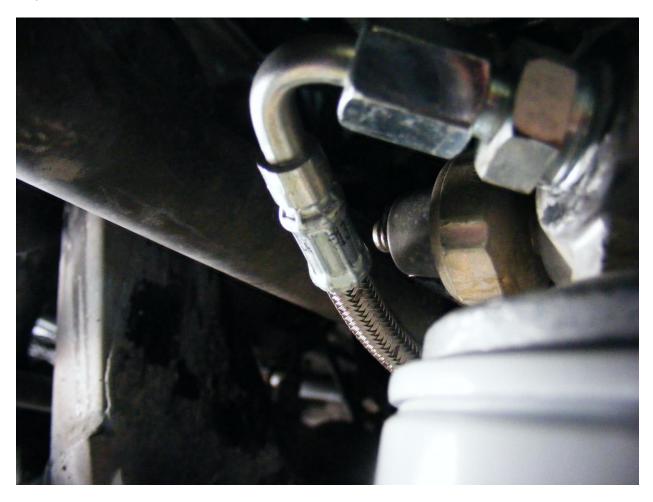
WARNING- If you do not use heat, you will round the edges and make it impossible to remove!

WARNING- If you ignore this instruction and put your ½" air gun on it, you are screwed!

Clean threads, apply thread sealer to provided 3/8" BSPT to ¼" male JIC (-4 AN) adapter, and screw into housing, use approx. 35-40 lbs/ft torque.

There are two hoses provided, one has a 120 deg bend, the other is straight. Bent hose goes from engine oil filter housing to inline filter, straight hose goes from inline filter to turbo. The sharp bend is required to clear the RF axle.

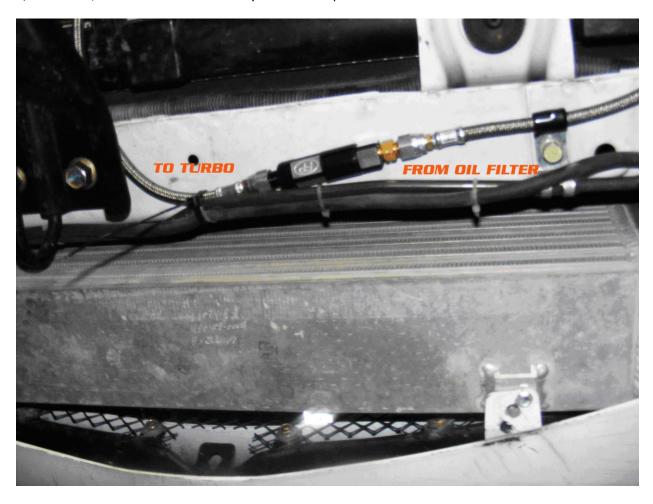
Attach hose with 120 deg bend to this adapter, angle hose to clear, tighten to approx. 20 lbs/ft. Take note that hose will pass very close to low oil pressure warning switch, make sure the metal hose does not touch the switch terminal! If your low oil pressure idiot light stays on after line install, you know why!



Route hose along factory oil cooler lines, attach with zip ties. Make sure hose is kept away from the spinning bits such as the A/C pulley, extra zip ties are provided if you are nervous.



Tighten filter body, JIC ¼" union to filter body, attach filter body to hose end, tighten. Use zip ties and clamp to hold filter under radiator core support. Filter is placed in this position (under radiator area) to allow easier servicing. Filter has a special orifice size for this application, .070". Also note line zip tied to P/S hard line, this allows OEM undertray attachment point to fit.



Attach 12mm x 1.25 banjo fitting to other (straight ends) hose, tighten to approx. 20 lbs/ft. Take care not to damage sealing surfaces (what the crush washer touches) of banjo fitting by clamping in unprotected vise, using wrench across flats, or other dumb move.

FAIL! ERROR! FAIL! ERROR!



FAIL! ERROR! FAIL! ERROR!



ATTABOY! WON'T LEAK NOW! ATTABOY! WON'T LEAK NOW!



Holding the banjo fitting like above you can now tighten the line to it without damage that leads to a leak. You want to tighten the line to the fitting now because wrench access is very limited in that area once the turbo is in the car.

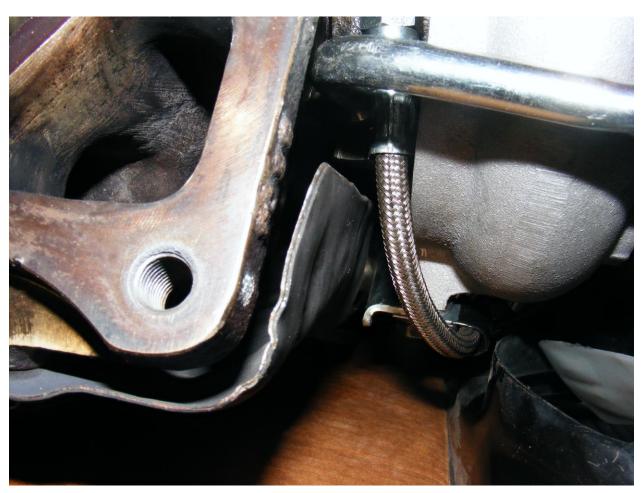
With exhaust manifold heat shield removed, sneak banjo fitting end of hose from front side between compressor housing and water pipe and attach with banjo bolt and 2 crush washers. You may find it necessary to loosen water pipe fitting and rotate line, or bend line slightly. If you need to rotate water line loosen water line banjo just enough to be able to rotate line and you won't lose coolant.

HINT- place one crush washer on top of turbo oil inlet before sliding hose assy above it, then start banjo bolt from above with the other crush washer, start threads by hand several turns to insure they are not crossthreaded. We do not warranty crossthreaded components, we laugh uproariously! Tighten to 25-30 lbs/ft.

You may wish to remove cooling fan for access for the next step, unless you have hands the size and flexibility of a 10 lb Yellow Cheeked Gibbon.

Remove upper WG actuator bracket bolt, attach hose clamp to this, reinstall. Note routing of line.

(some parts removed for clarity, it should not be necessary to remove exhaust manifold unless desired)



For new turbo installation, pre-assemble the upper oil line assy to the turbo as in the pic below-



Be sure and go over ALL points of connection, the lines and individual parts are NOT shipped assembled and tight.