

EGR Removal

Tools Needed:

10mm socket 12mm
socket 13mm socket
#6 metric allen
ratchet and extension

Step 1: Drain a half gallon of coolant from the petcock on the bottom of the radiator using the supplied 1/4" hose. Slip the hose over the drain hole and put the other end in a clean gallon jug for re-use. Remove radiator cap and loosen the petcock until it starts draining but don't remove it. It will be a little slow to drain but this way leaves no mess. A half gallon is sufficient, you do not have to drain the entire system.

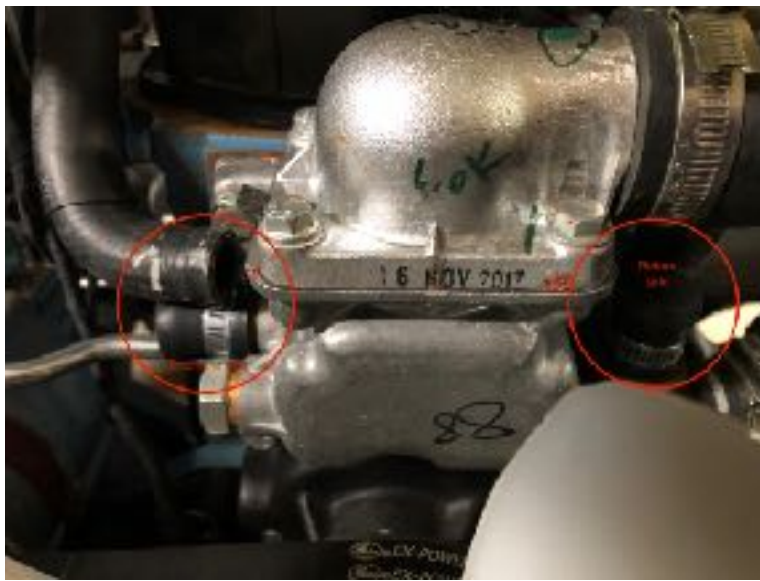


Step 2: Unplug the electrical connectors for the egr valve and the vacuum solenoid. Metal clips must be removed before they can be unplugged. Unhook the vacuum line from the egr valve as well.



Step 3: Using the #6 Allen, remove both bolts from the egr valve at the intake tube. Save the metal gasket and the bolts for re-use with the block off plate. Remove both Allen bolts in the end of the egr cooler facing the front of the engine. You should now be able to remove the egr valve assembly.

Step 4: Remove hoses at the water pump. Follow both hoses going from the egr cooler to the water pump. There will be one on both sides of the pump. Slide both hose clamps back and remove the hoses at the water pump. You do not have to remove the other side at the egr cooler as it can all be pulled out together. Remove the 2 Allen bolts that attach the rear of the egr cooler to the exhaust riser. Next remove the 12mm bolt on the bottom side of the clamp around the egr cooler. You should now be able to remove the cooler assembly.



Coolant caps shown installed above. Egr Cooler shown removed below.



Step 5: Remove the two 13mm nuts that attach the riser to the exhaust manifold. Save them for re-use. Lift the riser off of the manifold leaving the metal gasket in place. Install the block off plate over the gasket and tighten with the 13mm bolts. Don't over tighten!



Step 6: Install the second block off plate on the intake tube using the original metal gasket and Allen bolts. Again, Don't over tighten!



Step 7: Install the supplied 5/8" coolant caps on the nipple on both sides of the water pump and secure using supplied hose clamps, not the original spring clamps. Refill coolant.

Step 8: Remove the small vacuum hose from the vacuum pump on the back of the alternator. Replace with supplied vacuum cap. Next remove the small vacuum line on air intake tube right behind the air filter and replace with the other supplied vacuum cap.



Step 9: Using the 10mm socket, remove the vacuum solenoid and bracket along with the vacuum canister and hoses. Zip tie both electrical connectors that were unplugged in step 2 back out of the way as they are no longer used.

Step 10: Start and check for leaks! If you have any technical questions along the way, please email me at j.gb25@hotmail.com and I will answer as quickly as possible.

