

20+ GEN3 JEEP ECO DIESEL EGR
DELETE

PRODUCT INSTALLATION
INSTRUCTIONS

REQUIRED TOOLS	1
TORQUE SPECS	2
CARE INSTRUCTIONS	2
STEP 1: CHECK KIT CONTENTS	3
STEP 2: BATTERY	4
STEP 3: REMOVE ENGINE COVER AND INTAKE	5
STEP 4: REMOVE INTAKE HORN	7
STEP 6: INSTALL LOW PRESSURE EGR DELETE KIT	12
STEP 7: REMOVE INTERCOOLER TUBE	15
STEP 8: REMOVE FOAM SHIELD	15
STEP 9: REMOVE INTAKE TUBE AND INSTALL BLOCKER	16
STEP 10: REMOVE EGR EXHAUST TUBE	16
STEP 11: UNDO EGR COOLER BOLTS	17
STEP 12: DISCONNECT FUEL RETURN LINE	17
STEP 13: REMOVE EGR COOLER	18
STEP 14: INSTALL THE EXHAUST BLOCKER	18
STEP 15: REMOVE EGR COOLER MOUNT	19
STEP 16: INSTALL NEW BRACKET	19
STEP 17: INSTALL NEW BRACKET	20
STEP 18: INSTALL COOLANT HOSE	21
STEP 19: REINSTALL SENSORS AND FUEL LINE	21
STEP 20: FINISHING TOUCHES	21
STEP 18: REINSTALL BATTERY	22
STEP 19: COMPLETE	22

REQUIRED TOOLS

- RATCHET
- 10MM SOCKET
- 13MM SOCKET
- 10MM WRENCH
- 5MM ALLEN KEY
- T30 SOCKET
- SMALL AND MEDIUM FLAT HEAD SCREWDRIVERS
- VARIOUS PLIERS

TORQUE SPECS

- N/A

CARE INSTRUCTIONS

- THIS KIT IS MAINTENANCE FREE

STEP 1: CHECK KIT CONTENTS

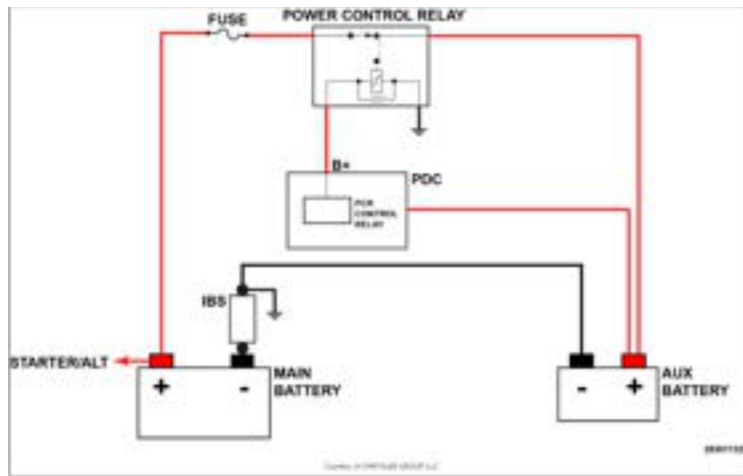
Before starting, please check the contents of your kit:

QUANTITY	PART NUMBER	DESCRIPTION
1	P051-0995	COOLANT ADAPTER
1	P051-0996	INTAKE DELETE PLATE
1	P051-0997	INTAKE SUPPORT BRACKET
2	P051-0998	COOLANT HOSE CONNECTOR
1	-	M6 FLANGE HEAD NUT
2	-	M6 X 25MM LONG ALLEN BOLTS
1	-	8MM NIPPLE PLUG
	P023-0129	3.0 ECOBOOST EGR DELETE INTAKE BOP
	P023-0130	3.0 ECOBOOST EXHAUST BOP
	P051-1004	ECODIESEL STAND PIPE SUPPORT
3	-	M6 x 20MM FLANGE HEAD HBOLT
3	-	#8 (5/8 TO 15/16IN) LINED STAINLESS STEEL HOSE CLAMP
2	-	M6 FLANGE NUT TOP LOCK DEFORMED THREAD
1	-	1/8IN NPT MALE SHCS PLUG
1	-	1/8IN NPT MALE TO 3/16IN BARB
1	-	1/8IN ID VACUUM HOSE CAP
2	-	M6 FLANGE HBOLT x 25MM
2	-	8IN NYLON CABLE TIES
2	-	M6 x 12MM FLANGE HEAD HBOLT
1	-	3/4IN ID HEATER HOSE
2	-	#12 LINED STAINLESS STEEL HOSE CLAMP
2	-	M10x 20MM GR8.8 BOLT
1	-	117 O-RING (13/16 ID x 3/32 THK IN)

STEP 2: BATTERY

DUAL BATTERY:

WHEN DISCONNECTING A DUAL BATTERY SYSTEM, BOTH BATTERIES MUST BE PROPERLY DISCONNECTED AND ISOLATED IN ORDER TO PREVENT WIRING DAMAGE OR AIRBAG DEPLOYMENT UPON RECONNECTING. PLEASE USE CAUTION.



1. TURN THE IGNITION OFF.
2. WAIT AT LEAST 5 MINUTES FOR THE MAIN MODULES TO GO TO SLEEP.
3. DISCONNECT AND ISOLATE THE AUXILIARY BATTERY NEGATIVE CABLE FROM THE MAIN BATTERY NEGATIVE CABLE END. THIS WILL ISOLATE THE AUX BATTERY GROUND.
4. DISCONNECT THE MAIN BATTERY GROUND CABLE FROM THE NEGATIVE TERMINAL.
5. DISCONNECT BOTH BATTERY POSITIVE TERMINALS AND REMOVE BATTERY FROM VEHICLE.

SINGLE BATTERY:

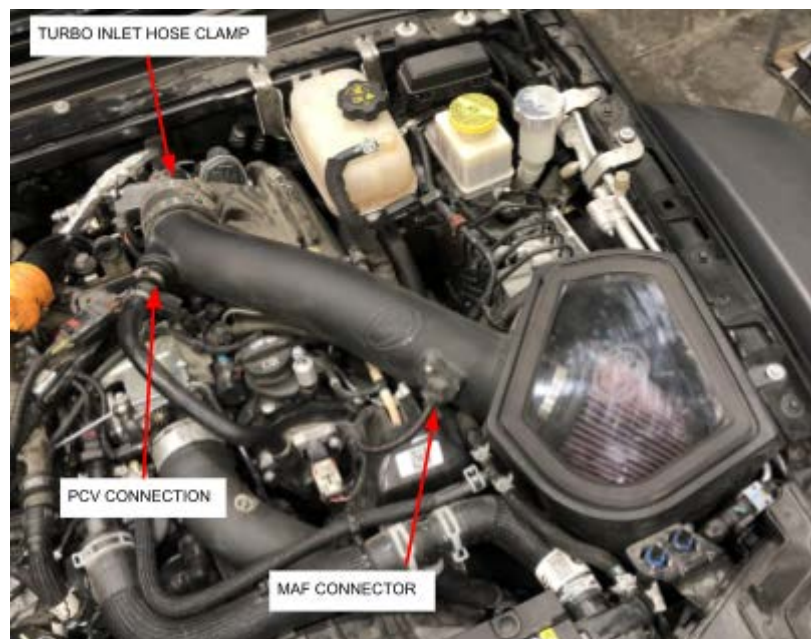
1. TURN THE IGNITION OFF.
2. WAIT AT LEAST 5 MINUTES FOR THE MAIN MODULES TO GO TO SLEEP.
3. DISCONNECT THE MAIN BATTERY GROUND CABLE FROM THE NEGATIVE TERMINAL.
4. DISCONNECT MAIN BATTERY POSITIVE TERMINAL AND REMOVE BATTERY FROM VEHICLE.

STEP 3: REMOVE ENGINE COVER AND INTAKE

REMOVE (2) 10MM BOLTS FROM ENGINE DRESS COVER. LIFT COVER UP AND PULL FORWARD TO REMOVE 2 PUSH LOCK PINS AT THE REAR. REMOVE COVER FROM ENGINE BAY.



LOOSEN INTAKE HOSE CLAMP AT TURBO INLET ELBOW USING A FLAT HEAD SCREWDRIVER. LOOSEN PCV HOSE CLAMP FROM INTAKE PIPE AND REMOVE PCV TUBE FROM INTAKE. REMOVE MAF SENSOR PLUG FROM INTAKE PIPE. TO REMOVE, PULL BACK GREY LOCK TAB (USE A SMALL SCREWDRIVER GENTLY IF TIGHT), THEN DEPRESS TAB AND PULL PLUG BACK TO REMOVE CONNECTOR. LIFT UP ON AIRBOX TO RELEASE 2 PUSHLOCK PINS, THEN REMOVE INTAKE SYSTEM FROM VEHICLE.



REMOVE (2) 10MM BOLTS RETAINING FOAM COVER ON TOP OF THE VALVE COVER.

GENTLY REMOVE THE FOAM INSERT AND PLACE ASIDE FOR LATER.



REMOVE (2) 10MM NUTS HOLDING THE COOLANT RESERVOIR TO THE ENGINE BAY COWEL. USING A FLATHEAD SCREWDRIVER, DISCONNECT HARDLINE FROM RETAINING CLIP ATTACHED TO THE RESERVOIR. PULL UP ON RESERVOIR TO DISCONNECT FROM 1 PUSHLOCK FITTING UNDERNEATH, AND SWING RESERVOIR TO THE FRONT OF THE VEHICLE TO GIVE ACCESS TO THE EGR SYSTEM.

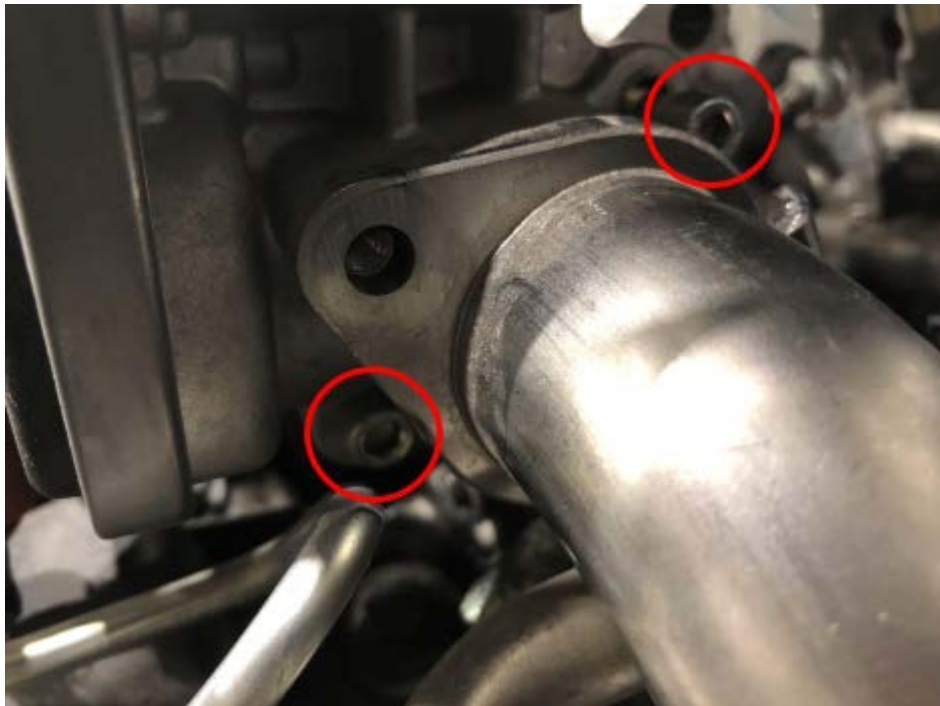


STEP 4: REMOVE INTAKE HORN

REMOVE (2) T30 BOLTS BETWEEN THE EGR PIPE AND THE THROTTLE BODY.



REMOVE (2) 5MM ALLEN BOLTS BETWEEN THE THROTTLE BODY AND THE TURBO INLET ELBOW.



REMOVE (1) 10MM NUT AND (1) 10MM BOLT HOLDING THE ELECTRIC CABLE TO THE TURBO ELBOW. REMOVE (1) 10MM STUD HOLDING CONTROL VALVE TO INTAKE ELBOW

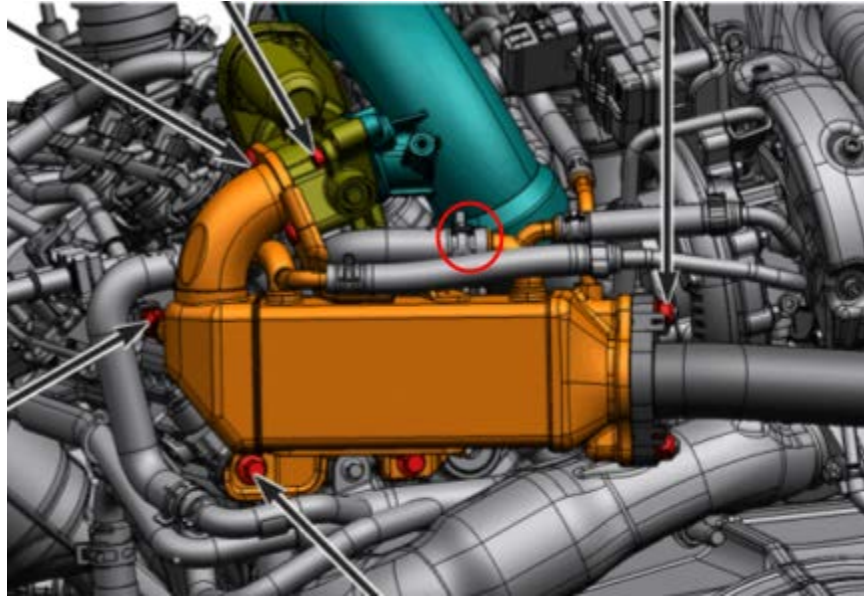


DISCONNECT AND REMOVE HOSE FROM CONTROL VALVE WHERE CONNECTED TO INTAKE ELBOW. REMOVE INTAKE ELBOW FROM ENGINE.

MAKE SURE TO PLUG TURBO INLET TO PREVENT DEBRIS FALLING IN DURING INSTALL.



MOVE HOSE CLAMP AND REMOVE HOSE FROM EGR COOLER AS BELOW. HAVE A CATCH PAN READY FOR ANY COOLANT THAT WILL DRAIN OUT.

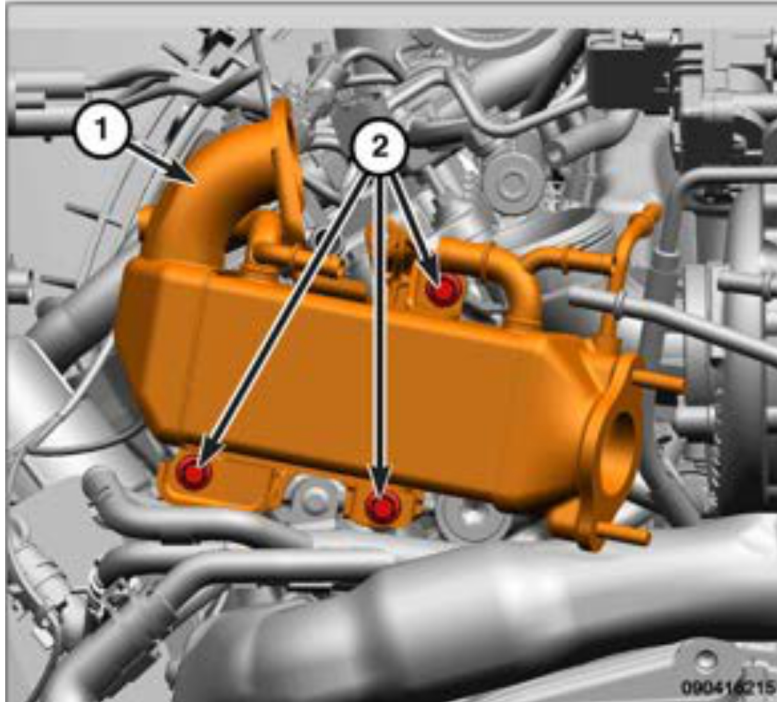


REMOVE (1) 10MM BOLT FROM BACK OF THROTTLE BODY. RELEASE YELLOW LOCK TAB ON THROTTLE CONNECTOR BY PULLING IT BACK, THEN DEPRESS AND REMOVE CONNECTOR. REMOVE THROTTLE BODY FROM ENGINE.

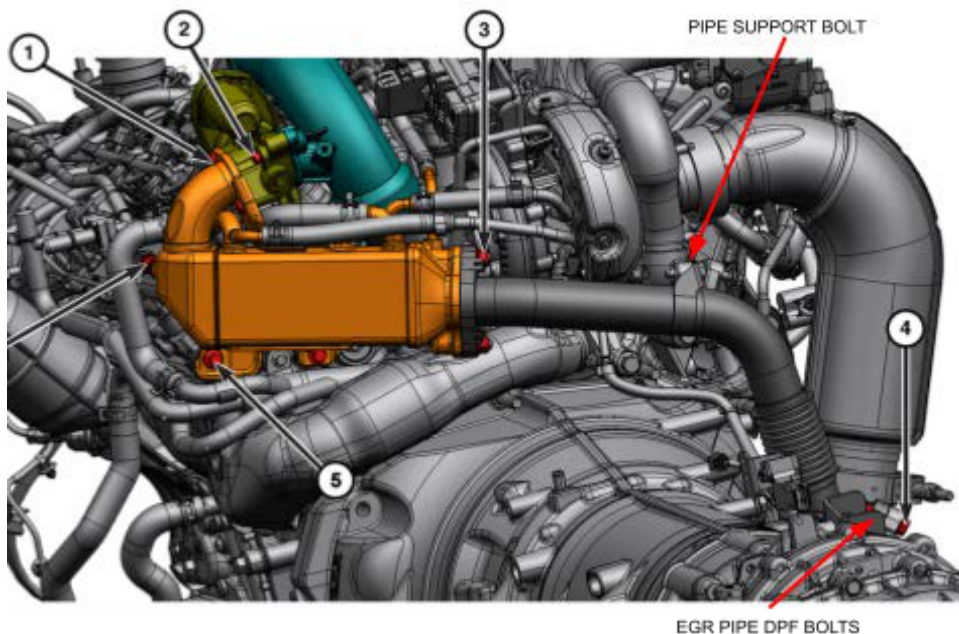


STEP 5: REMOVE EGR COOLER

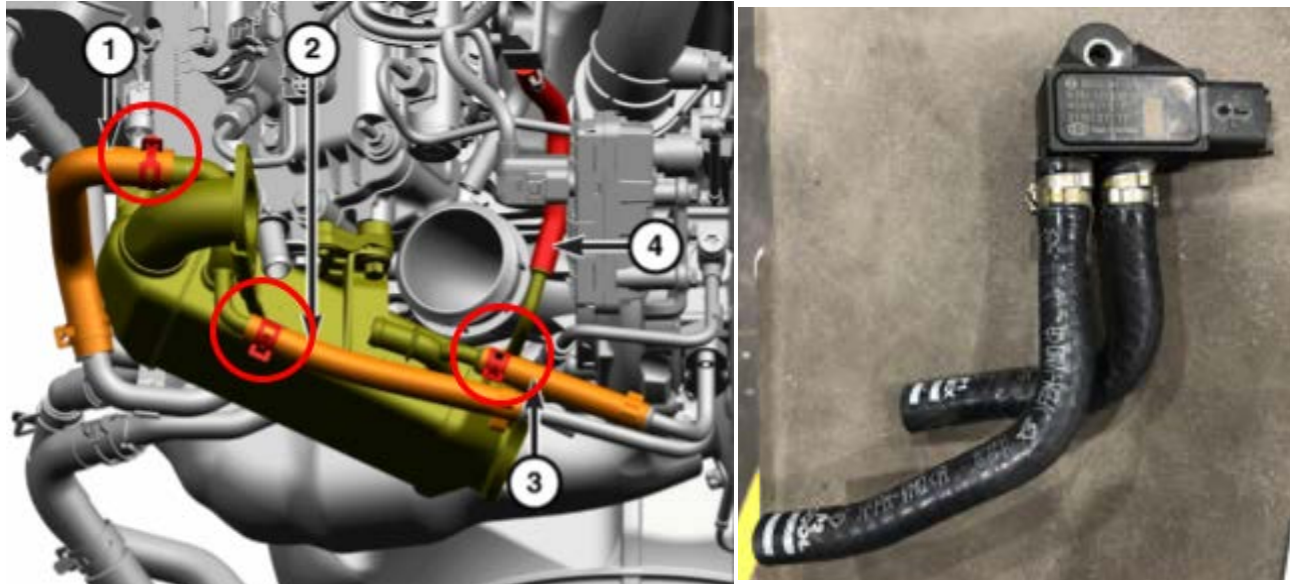
REMOVE (3) 10MM EGR COOLER BOLTS. SEE DIAGRAM BELOW FOR BOLT LOCATIONS.



REMOVE (1) 10MM BOLT FROM EGR PIPE SUPPORT BRACKET. ACCESS IS BEST FROM THE PASSENGER SIDE. REMOVE (2) 13MM NUTS FROM THE EGR PIPE TO THE DPF OUTLET ON THE EXHAUST IF NOT DONE SO ALREADY.



REMOVE (3) REMAINING COOLANT HOSES FROM EGR COOLER. REMOVE EGR COOLER SPACER BRACKET BETWEEN EGR AND ENGINE. REMOVE ACTUATOR HOSE FROM COOLER (#4 IN PIC) AND UNPLUG AND REMOVE ACTUATOR FROM ENGINE.



COMPRESS WHITE TABS ON COOLANT HOSE QUICK RELEASE ON THE DRIVER SIDE OF THE ENGINE. PULL UP TO REMOVE COOLANT LINE. THIS WILL GIVE EXTRA ROOM WHEN REMOVING THE EGR COOLER.

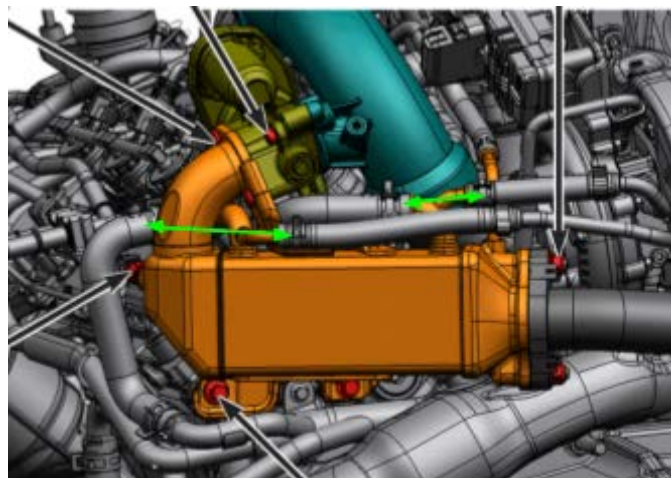


GENTLY REMOVE EGR COOLER AND EGR PIPE FROM BEHIND THE ENGINE. THIS WILL COME OUT THE TOP SIDE OF THE ENGINE BAY. YOU MAY NEED TO REMOVE THE (2) 13MM NUTS HOLDING THE EGR PIPE TO THE INLET OF THE EGR COOLER ONCE THE ASSEMBLY IS HALF OUT TO BE ABLE TO MANIPULATE THE EGR PIPE OUT THE REST OF THE WAY. THESE ARE ALL THE LOW PRESSURE EGR SYSTEM PARTS THAT SHOULD NOW BE REMOVED FROM THE ENGINE.



STEP 6: INSTALL LOW PRESSURE EGR DELETE KIT

INSTALL 2 NEW COOLANT HOSE ADAPTERS TO THE EGR COOLANT LINES PER THE PHOTO BELOW



INSTALL NEW INTAKE SUPPORT BRACKET AND BLOCK OFF PLATE TO INTAKE ELBOW PER THE PICTURE BELOW WITH SUPPLIED 5MM ALLEN BOLTS. INSTALL NIPPLE PLUG ONTO INLET ELBOW BUNG.



REMOVE TURBO INLET PLUG AND REINSTALL INTAKE ELBOW, THE ELBOW IS JUST A PUSH FIT O-RING SEAL ON THE COMPRESSOR INLET. ALIGN THE SUPPORT BRACKET SLOT OVER THE APPROPRIATE VALVE COVER STUD. SECURE BRACKET TO STUD WITH SUPPLIED 6MM HEX NUT.



INSTALL FOAM INSERT OVER VALVE COVER AND SECURE WITH (2) 10MM BOLTS. REATTACH COOLANT RESERVOIR TO COWEL AND SECURE IN BOTTOM PUSH LOCK BEFORE SECURING (2) 10MM NUTS UP TOP. REATTACH HARDLINE TO RETAINING CLIP.

REINSTALL INTAKE TUBE AND AIRBOX TO VEHICLE. ENSURE AIRBOX IS SECURED IN PUSH LOCKS CORRECTLY. REATTACH PCV LINE AND MAF CONNECTOR. SECURE ALL CLAMPS.



THE LOW PRESSURE SIDE IS NOW DONE!

REMOVE HIGH PRESSURE EGR SYSTEM

STEP 7: REMOVE INTERCOOLER TUBE

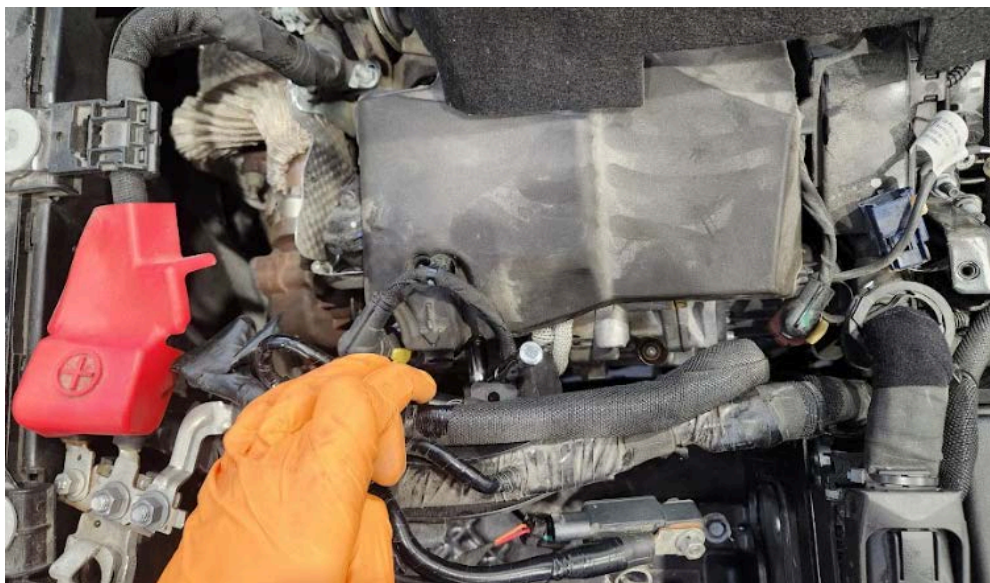
REMOVE THE PASSENGER SIDE INTERCOOLER TUBE



STEP 8: REMOVE FOAM SHIELD

THE BRACKET THAT HOLDS THE FOAM ON IS JUST ALONG THE SIDE OF THE ENGINE.

YOU CAN JUST MAKE OUT THE 10MM SOCKET AND RATCHET ON THE SIDE THERE.



STEP 9: REMOVE INTAKE TUBE AND INSTALL BLOCKER

USING AN 8MM SOCKET, REMOVE THE BOLTS ON BOTH SIDES OF THE EGR INTAKE TUBE. INSTALL THE RED BLOCKER PLATE WITH (2) M6 x 16MM FLANGE HEAD HBOLT.



STEP 10: REMOVE EGR EXHAUST TUBE

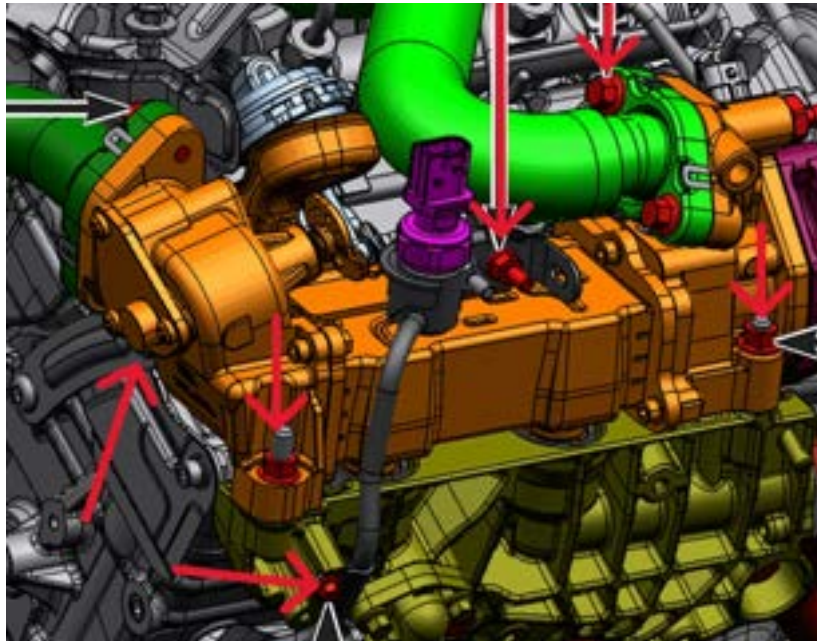
UNDO THE EXHAUST TUBE ON THE EGR COOLER SIDE. GENTLY BEND IT OUT OF THE WAY AS REQUIRED. IT WILL LIKELY BE EASIER TO WAIT UNTIL AFTER THE NEXT STEP TO REMOVE THE TURBO SIDE OF THIS PIPE, SO FEEL FREE TO LEAVE IT THERE.



STEP 11: UNDO EGR COOLER BOLTS

REMOVE TWO NUTS ON TOP OF THE COOLER. A SENSOR NEEDS TO BE MOVED OUT OF THE WAY AS WELL, VERY GENTLY BEND IT OUT OF THE WAY ONCE BOTH THE TOP AND SIDE FASTENERS ARE LOOSE.

THE BRACKET ON THE BACK REQUIRES A T40 BIT. IF IT STRIPS, THERE IS ROOM TO USE A SAWZALL TO CUT THE BRACKET IN HALF



STEP 12: DISCONNECT FUEL RETURN LINE

BEFORE YOU TRY TO REMOVE THE COOLER, IT IS HIGHLY RECOMMENDED THAT YOU DISCONNECT THE FUEL QUICK CONNECT FITTINGS ON TOP OF THE INJECTORS. THEY ARE EASY TO REMOVE, BUT EVEN EASIER TO ACCIDENTALLY BREAK DURING COOLER REMOVAL. COVER THESE PORTS WITH SOMETHING.



STEP 13: REMOVE EGR COOLER

EVERYTHING SHOULD BE SEPARATED FROM THE UPPER PART OF THE EGR COOLER NOW. YOU MAY HAVE TO BEND A HEAT SHIELD OUT OF THE WAY, AND SQUISH SOME WIRES OUT OF THE WAY. PULL IT STRAIGHT UP TO REMOVE IT. PREPARE FOR SOME COOLANT TO SPILL.

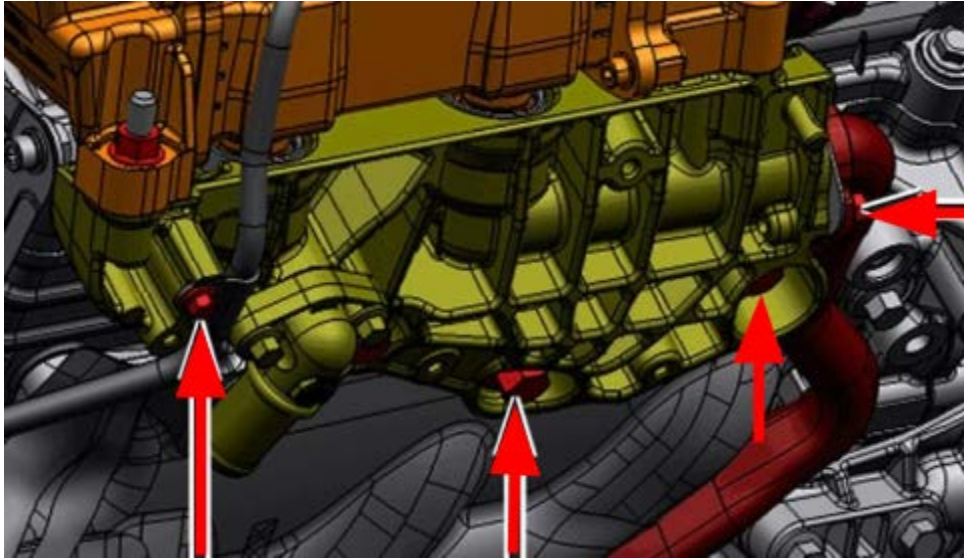
STEP 14: INSTALL THE EXHAUST BLOCKER

AFTER COMPLETE REMOVAL OF THE EXHAUST EGR TUBE, USE THE SUPPLIED (3) M6 x 20MM FLANGE HEAD HBOLT, INSTALL THE SS PLATE WITH THE OEM GASKET. ALTERNATIVELY, WAIT TO DO THIS AFTER STEP 12 FOR A BIT MORE ROOM.



STEP 15: REMOVE EGR COOLER MOUNT

REMOVE THE M6 BOLT HOLDING THE SENSOR TUBE NEAR THE FIREWALL ONTO THE BRACKET. VERY GENTLY BEND THIS TUBE OUT OF THE WAY. REMOVE THE M6 BOLTS HOLDING THE COOLANT STANDPIPE ONTO THE FRONT OF THE BRACKET. FINALLY REMOVE ALL THE M10 BOLTS HOLDING THE BRACKET TO THE BLOCK. PREPARE FOR SOME COOLANT TO SPILL.



STEP 16: INSTALL NEW BRACKET

USING THE SUPPLIED M10 BOLTS, INSTALL THE TWO BEND BRACKET IN THE FORWARD TWO HOLES PREVIOUSLY USED TO HOLD THE EGR COOLER BRACKET. THE STANDPIPE SHOULD LINE UP PRETTY CLOSE TO IT.

ENSURE THE O-RING IS PROPERLY SEATED IN THE COOLANT ADAPTER, NOW ALIGN THE BRACKET, STANDPIPE, AND COOLANT ADAPTER, FROM FRONT TO BACK AS SHOWN BELOW



STEP 17: INSTALL NEW BRACKET

THE SENSOR TUBE YOU UNBOLTED PREVIOUSLY CAN NOW BE -VERY- GENTLY FORMED TO MOUNT ONTO THE SUPPLIED BRACKET. RIGHT NEAR THE SENSOR, THE 90 DEGREE TAB NEEDS TO BE STRAIGHTENED OUT. VERY METHODICALLY USE PLIERS TO ACHIEVE THIS. YOU SHOULD USE VISE GRIPS TO HOLD ONTO THE TAB AT THE BASE. DO NOT APPLY ANY FORCE TO THE TUBE OR THE WELD HOLDING THE TAB ONTO THE SENSOR BLOCK.

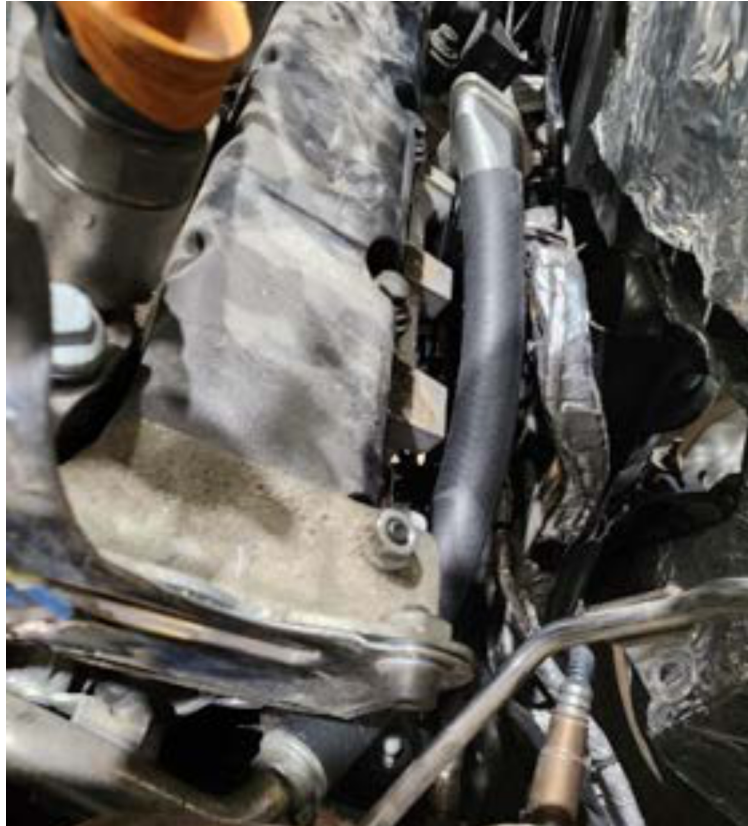


ONCE THE TAB IS STRAIGHTENED OUT, THE TUBE CAN BE MOUNTED ONTO THE SUPPLIED BRACKET USING AN M6 BOLT AND NUT



STEP 18: INSTALL COOLANT HOSE

USING THE #12 HOSE CLAMPS, INSTALL THE PRE-CUT HOSE ONTO THE OPEN COOLANT PORTS.



STEP 19: REINSTALL SENSORS AND FUEL LINE

REINSTALL THE SENSOR WIRES, THE RETURN FUEL LINE QUICK CONNECTS, AND ANY OTHER BITS YOU MAY HAVE REMOVED TO GET TO THIS POINT.

STEP 20: FINISHING TOUCHES

REINSTALL ENGINE DRESS COVER AND SECURE WITH 2 PUSH LOCKS AND (2) 10MM BOLTS.



STEP 18: REINSTALL BATTERY

STEP 19: COMPLETE

ENJOY YEARS OF EGR RELIABILITY, POWER AND EFFICIENCY!