

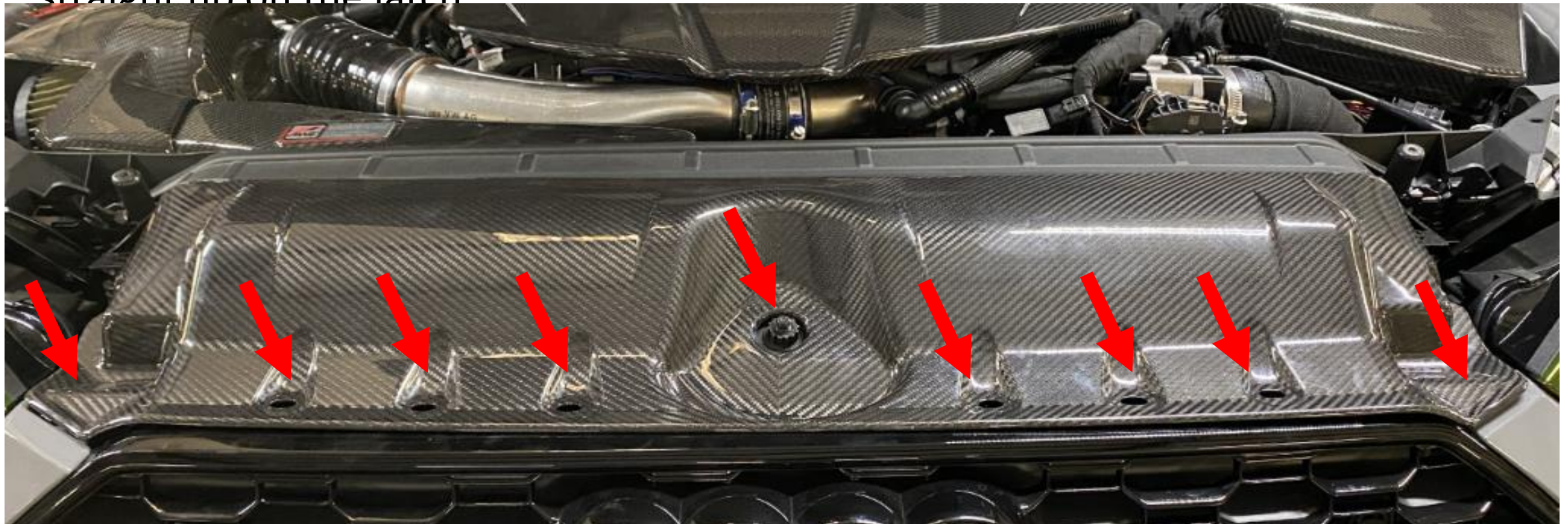
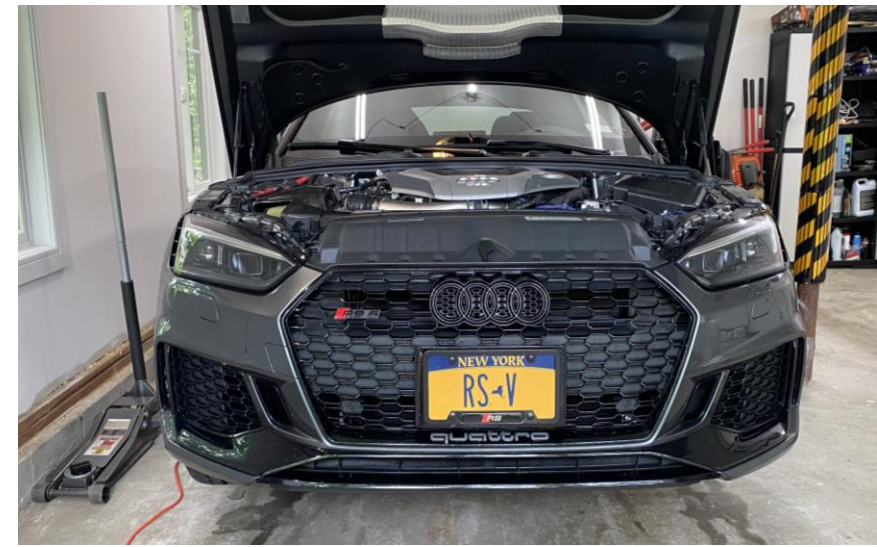
Installation of Merc Racing Heat Exchanger & High Performance Coolant Pump B9 RS5



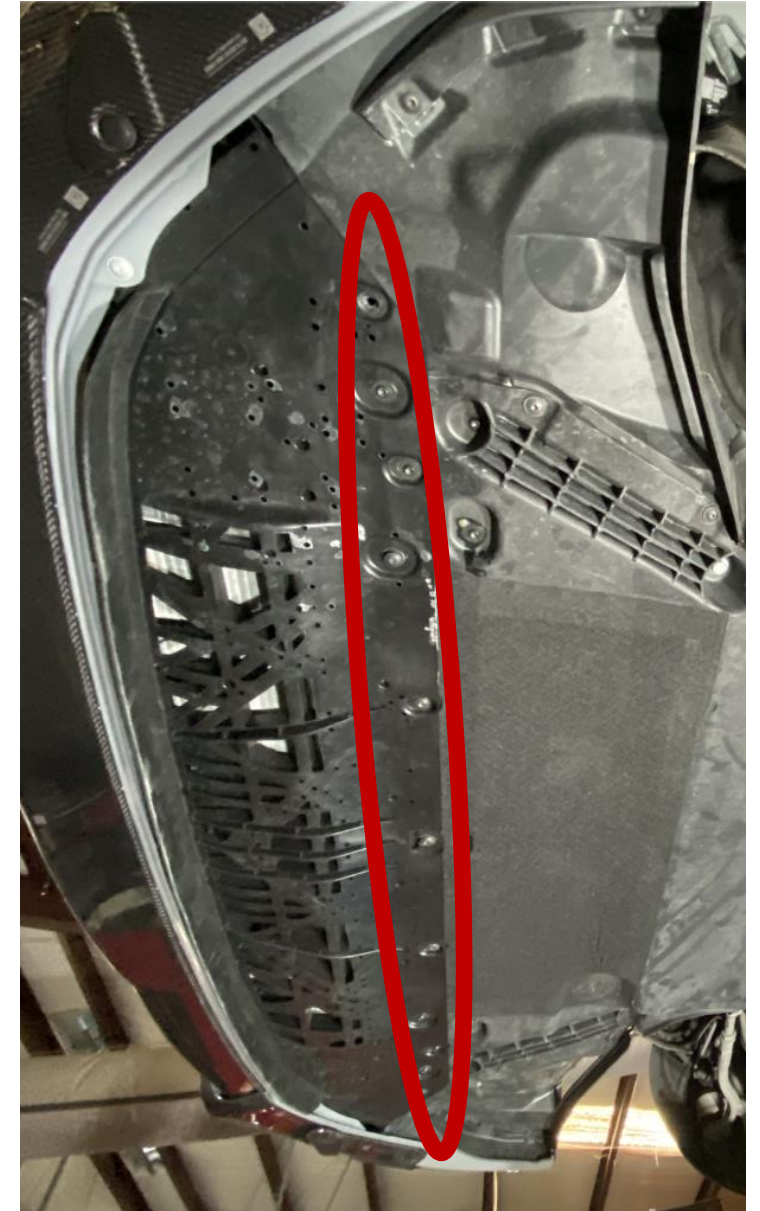
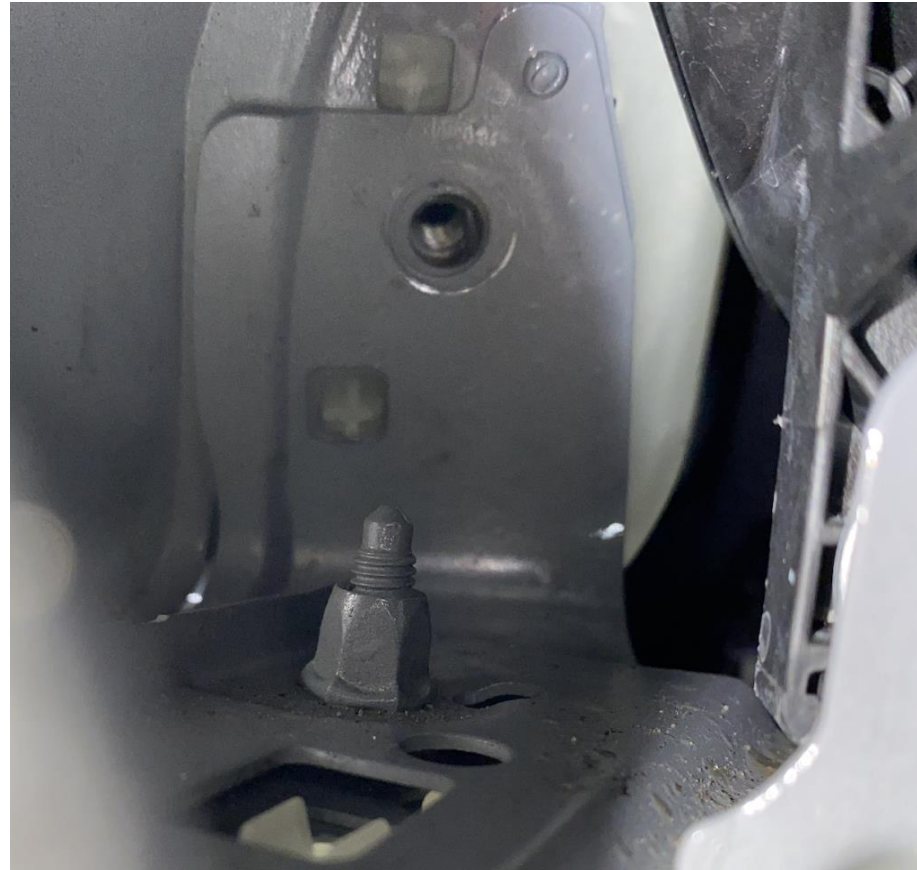
Install kit parts:

- 1 Heat exchanger
- 2 Brackets
- 4 Self tapping screws
- 2 Hose barb couplers
- 6 Stainless steel worm clamps
- 2 Feet of hose
- 1 180-degree hose

1. Engage the emergency brake
2. Jack up the front of the vehicle and put on jack stands
3. Open the hood
4. Remove front shroud cover by lifting the various clips, releasing the hinge clips on either end and removing the hood latch. There's a press clip on the rear of the hood latch that gets released by pushing in and pulling straight up on the latch



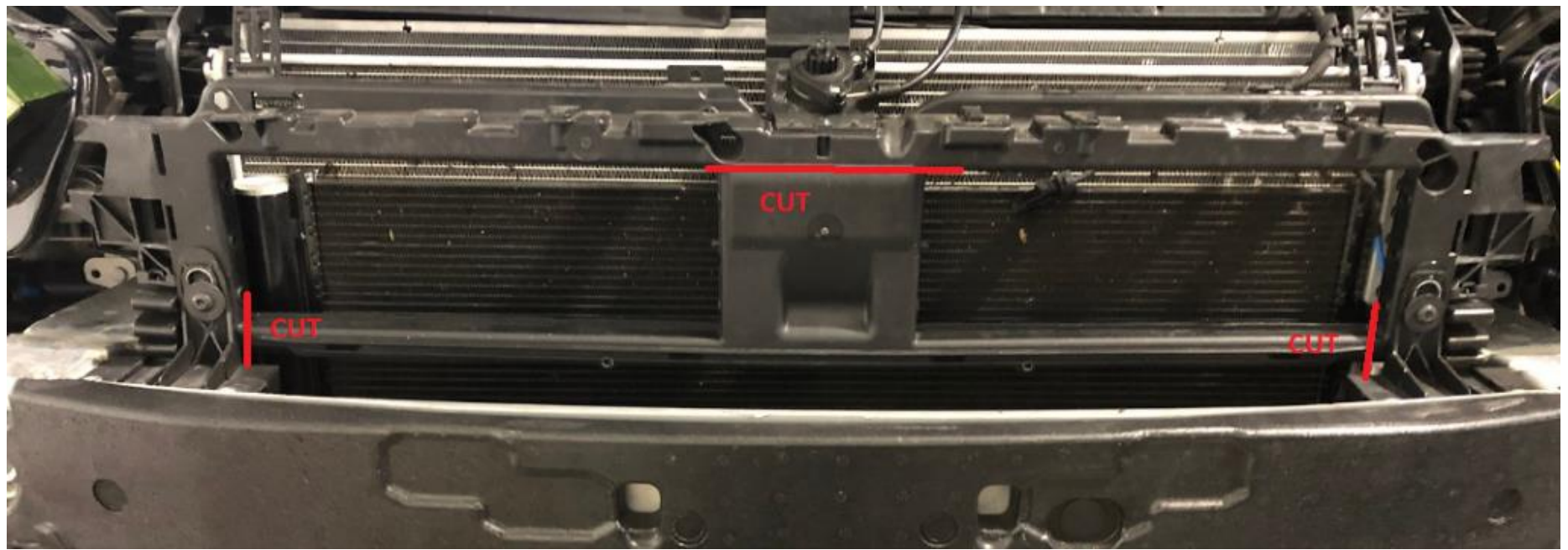
1. Remove both front wheels with 17mm socket
2. Remove the T20 torx screws on the fender liner and pull it back to reveal the bumper hardware
3. With a light look inside the fender where the corner of the headlamp meets the bumper Remove the T30 Torx screw as seen below.
4. Remove various T25 Torx to release under front bumper



1. If front camera equipped, you may find it easier to remove the bolts supporting the camera than removing the harness. See below*
2. Remove Torx screws holding the grill to the support
3. Remove front bumper by gently popping out both sides and the top of the grill. Support the bumper and remove any associated plugs keeping it from being removed completely.
4. Disconnect the washer hose that feeds through the crash bar and unsecure both ends.
5. Remove the front crash bar with two nuts and bolts on either side. Using a pry tool, pry it out by alternating sides a little at a time. Be sure to remove the ambient air temp sensor bracket carefully!



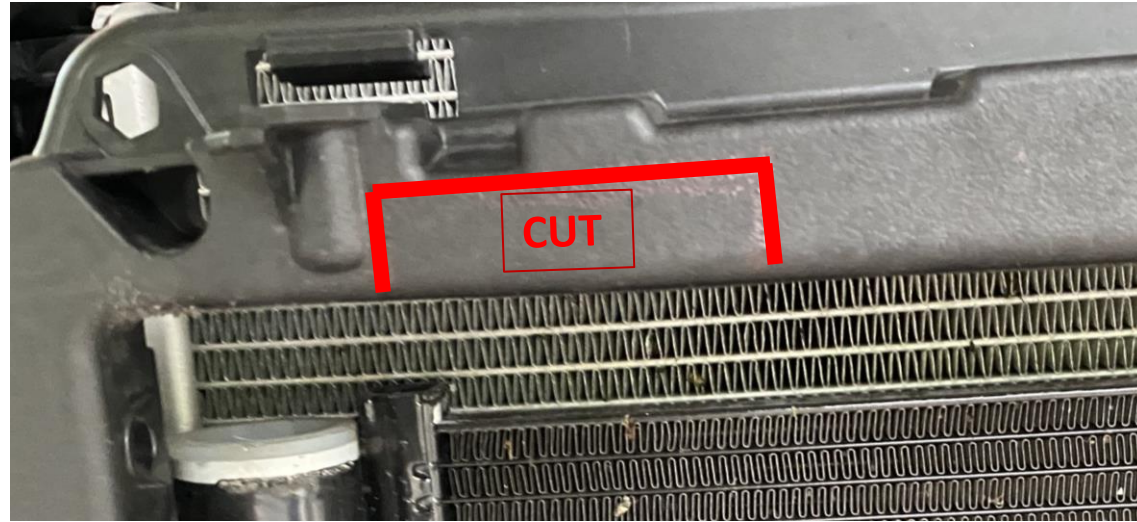
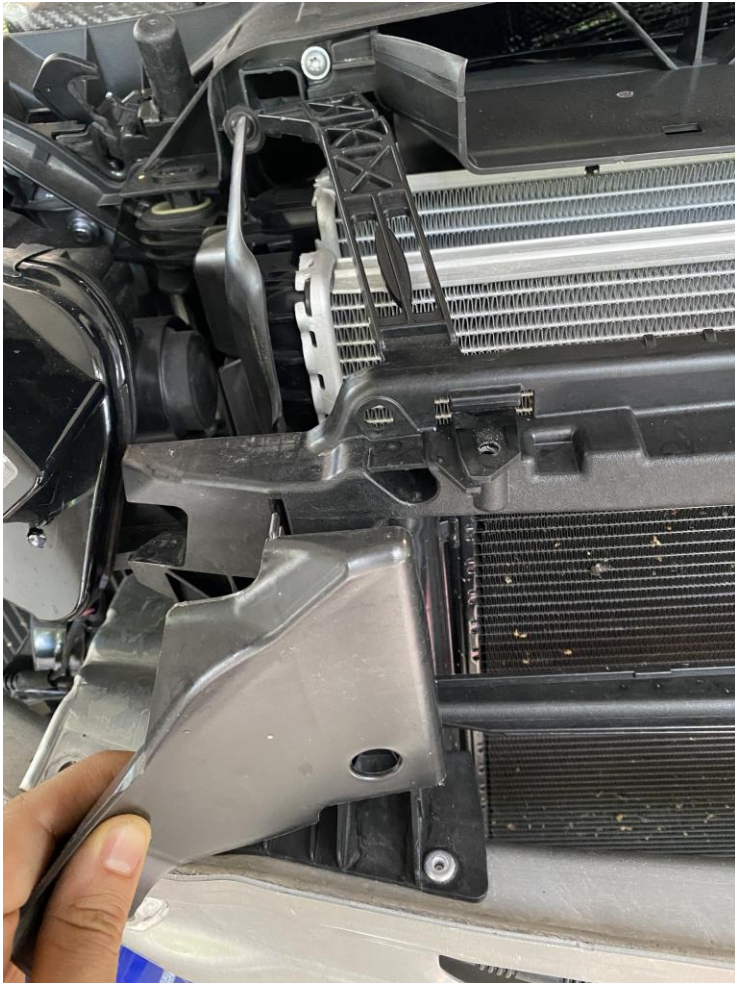
- Using an angle grinder or similar cut along the lines in the picture below to remove the unused portion of the bracket and thus creating room for the H/E




- YOU SHOULD END UP WITH A DISCARD PIECE AS SEEN BELOW. TAKE YOUR TIME AND MAKE A CONTROLLED CUT



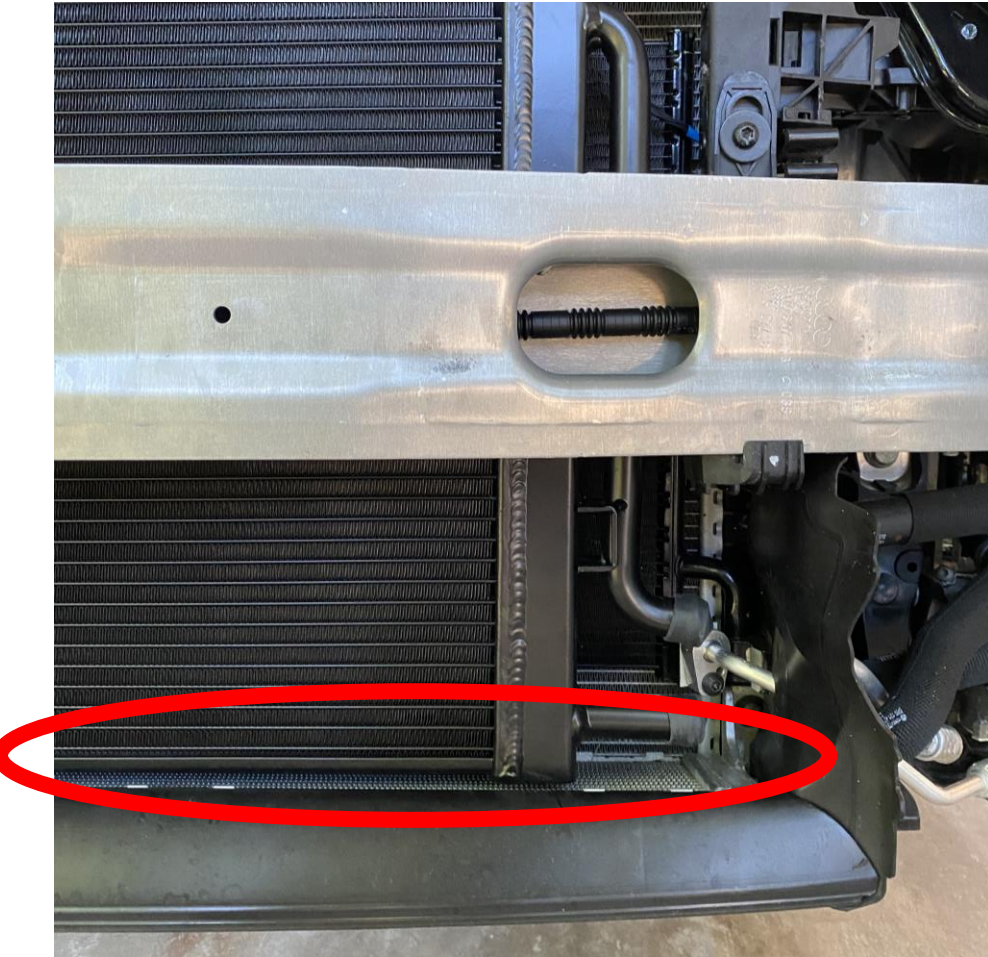
- Remove plastic covers by pulling straight out
- Make a cut on the same support you cut before. This time to create room for the bleeder valve on the top of the H/E See blow.



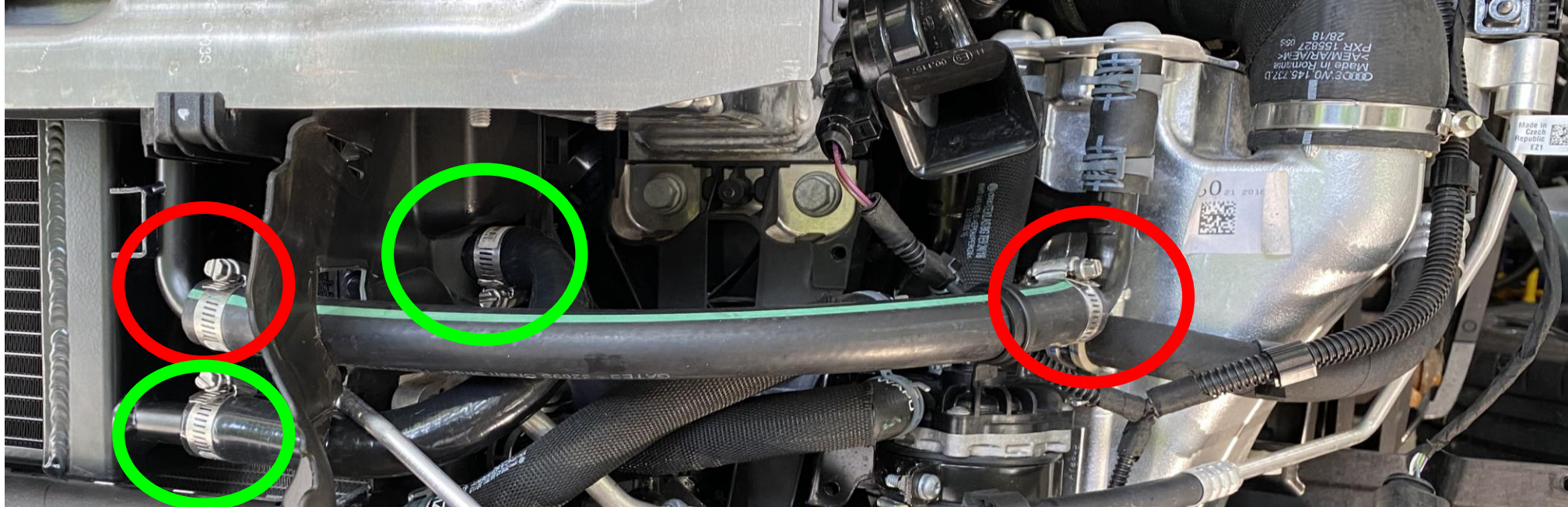
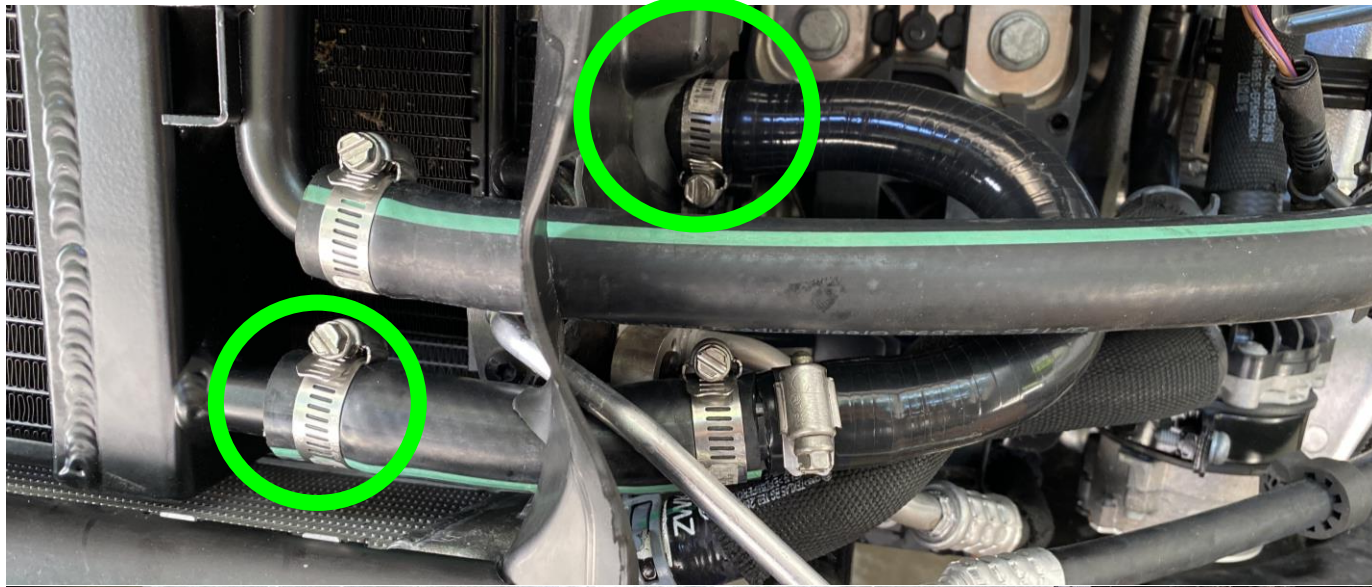
- TEMPORARILY BOLT THE BRACKETS TO THE H/E AS SEEN HERE  SUCH THAT THE ELONGATED HOLES ARE ON THE FRONT OF THE H/E AND THE VENT VALVE IS ON THE TOP LEFT.
- LAY THE H/E FACE DOWN ON THE INSIDE OF THE BUMPER SUPPORT, CENTER IT AND DRAW LINES ON THE OUTSIDE OF THE BRACKETS TO GUIDE WHERE YOU WILL BOLT THEM ON.
- REMOVE THE BRACKETS FROM THE H/E AND BOLT THEM TO THE BEAM USING THE SELF TAPPING SCREWS INCLUDED IN YOUR KIT. BE SURE TO USE THE LINES YOU DREW AS A REFERENCE.,
- ONCE BOLTED ON, CAREFULLY LAY THE BEAM ON TOP OF THE H/E AND BOLT IT ON. YOU MAY NEED TO BEND THE BRACKETS OUTWARD TO ALIGN THEM SINCE THE BEAM IS CURVED.



- Reinstall the crash beam with the h/e attached and check fitment specifically of the valve on the top left and the clearance on the bottom in reference to the lower front h/e see below in red.



- Cross clamp the oem heat exchanger hoses to prevent loss during hose routing.
- Route the hoses that came with the kit as seen below color coded.



- If also installing the high flow pump, skip the next slide and continue to pump installation.
- If installing HE only, continue to next slide and complete the work.

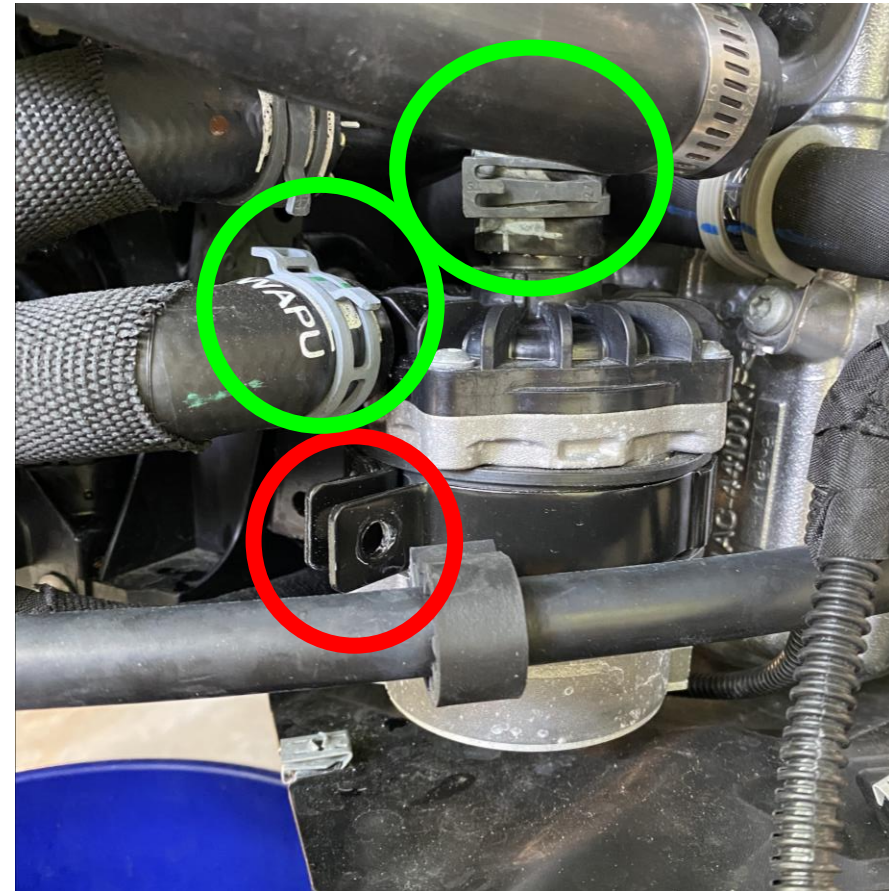
- The installation is complete! Refill the coolant and bleed the system of air.
- Open up all the Bleeders. There is black plastic one on the top right of the OEM HX and a brass one on the top left of Merc HX.
- Start filling the coolant system until it wont take any more coolant
- Start the car let it run for about 15 seconds then turn off
- Fill the system until the bleeders start to leak coolant consistently and no air is coming out
- Close the bleeders
- Start the car let it run for about 15 seconds then turn off
- Refill the Reservoir and open the bleeders to let air out.
- Repeat the Start car procedure and stop and fill again.. Do this until all the air seems to be out.
- Drive the car while monitoring the IAT. High IAT means there is still air in the system. Repeat the procedure for bleeding a few more times. Then with car turned on in idle, and put the heat in the vehicle on the highest temp and lowest fan setting. Monitor the bleeders until very little air comes out if any.
- Reinstall bumper and accessories according to OEM specifications.

CWA100-3 High Performance Pump Installation

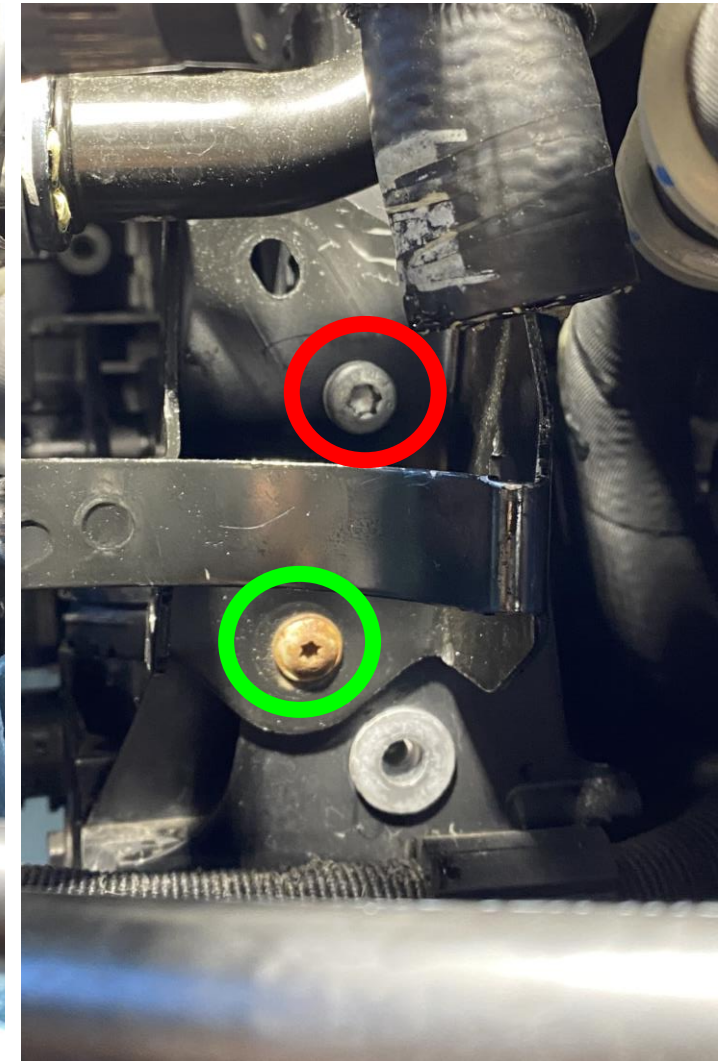
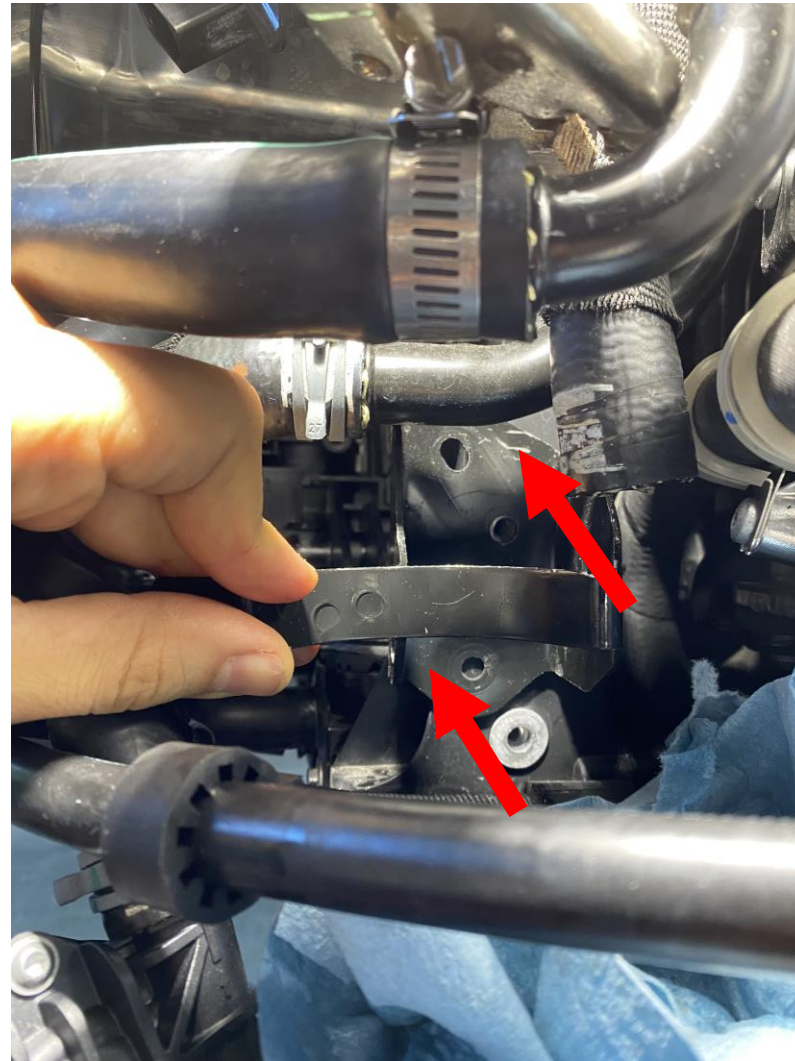
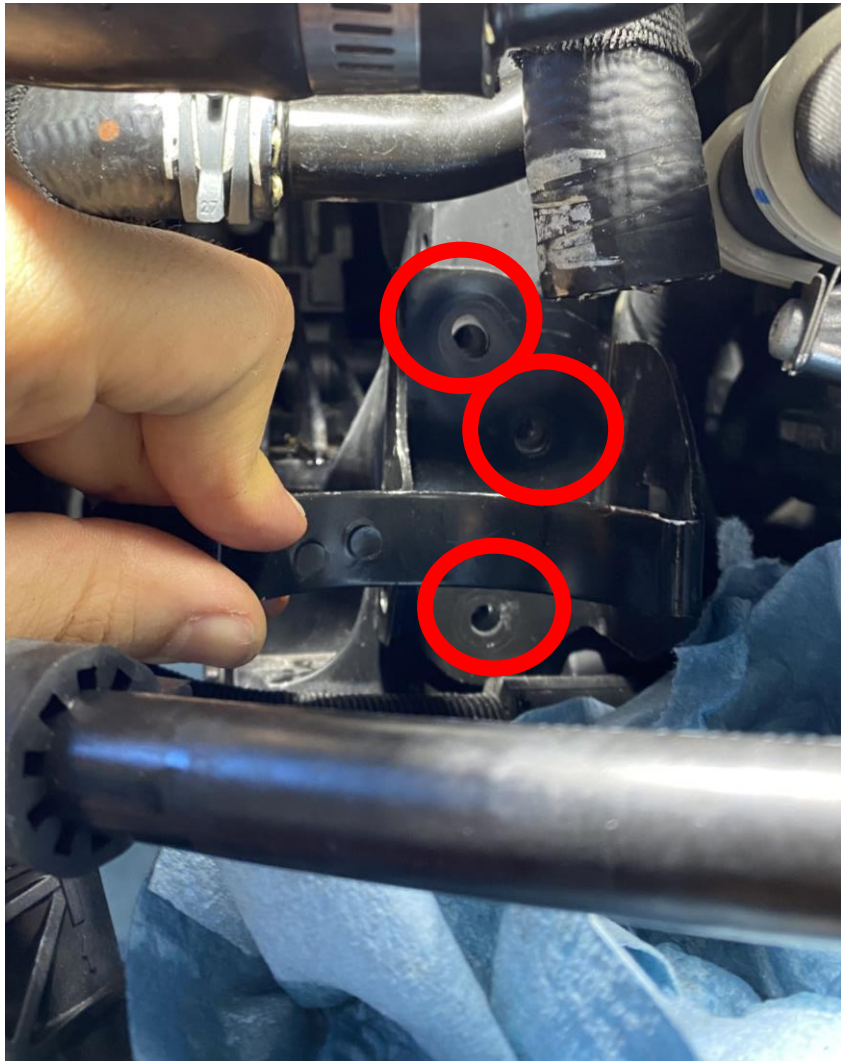
- With the bumper still off on the drivers side where you completed the hose routing for the H/E locate the pump as seen here.



- Remove the T30 torx screw
- Slide the clamps from the top and side hoses over the lip of the pump and clamp the hoses to prevent coolant loss. Note: some will come out of the pump unavoidably.
- The right side of the bracket has a hook on the back and can be removed.



- Remove the pump mounting bracket by removing the 3 T30 Torx screws and move the bracket up by aligning the right most hole with the top hole and put a screw in by hand to hold it in place upright.
- Using the supplied self-tapping screw screw the bottom hole of the bracket to the plastic support on the vehicle.



Install the new pump and affix the hoses and clamps to their respective places and plug the pump in.



- The installation is complete! Refill the coolant and bleed the system of air.
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