



Pro XP & Turbo R Air to Air Intercooler Kit

SKU(s): 100FP0189

INCLUDED PARTS

(1) Pro XP & Turbo R Air to Air Intercooler Assembly
(1) P43/P50 Charge Tube Kit, Black
(1) Triple Fan Intercooler Install Kit
(1) Coolant Tank Relocation Kit
(1) Triple Fan Install Kit

REQUIRED TOOLS

Screw Driver
Metric Sockets
Clamps
Torx Sockets
3" Whole saw or air Dremel



Step 1: Make sure the vehicle is cold. You can remove the bed by removing (4) T-40 screws.

Step 2: Locate the plenum. Spray the plenum boots with brake cleaner. Remove the charge tube, unplug both map sensors, unplug the coils, remove the fuel line.

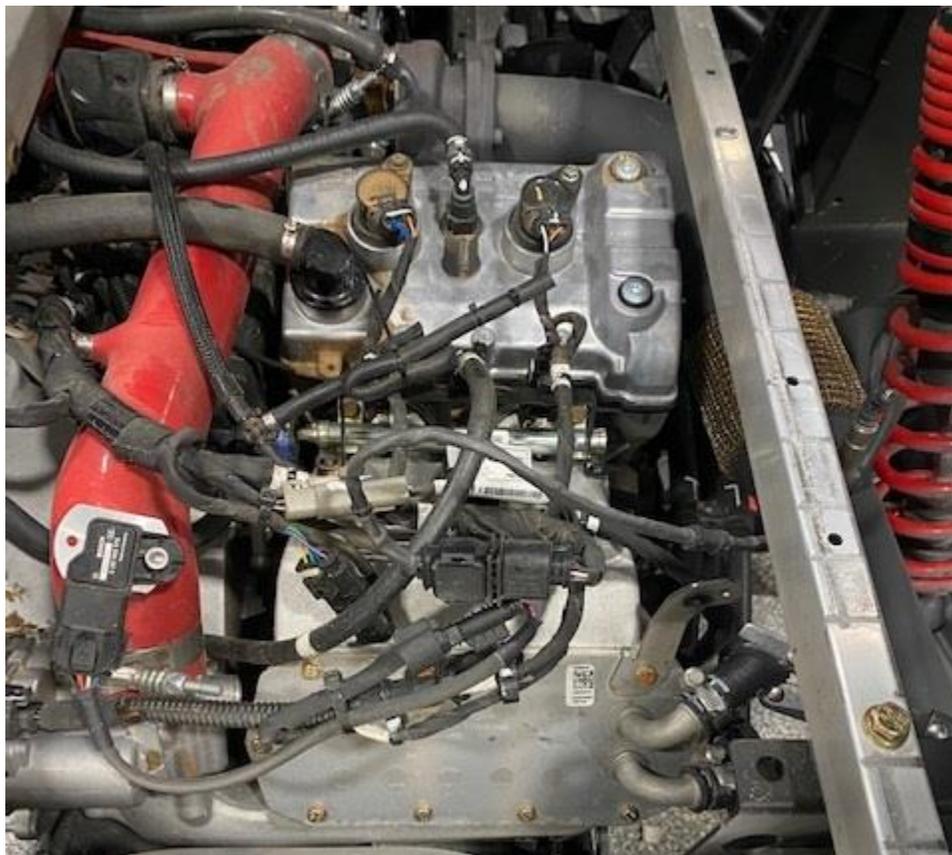


Figure 1

Step 3: You may need to remove the plenum from the vehicle to remove the intercooler. Sometimes you can sneak the intercooler around the frame, but you may ruin the intercooler fins in the process. For these instructions we removed the plenum.

Step 4: Pinch both coolant lines off, going to the intercooler. Remove the hoses from the intercooler. Plug the intercooler for less mess.



Figure 2



Figure 3

Step 5: Remove the 13mm bolt on bottom of the plenum/transmission mount.



Figure 4

Step 6: Remove the intake plenum V-band clamps on the runners, remove the plenum from vehicle.



Figure 5

Step 7: With a 8mm socket, remove (10) screws holding the intercooler into the plenum. Remove the plenum and look for oil/coolant in the bottom of your plenum. Clean any debris that is found in the plenum, the OEM intercoolers are prone to leaking.



Figure 6

Step 8: Install the supplied intercooler block off plate, re-use OEM hardware and bracket.

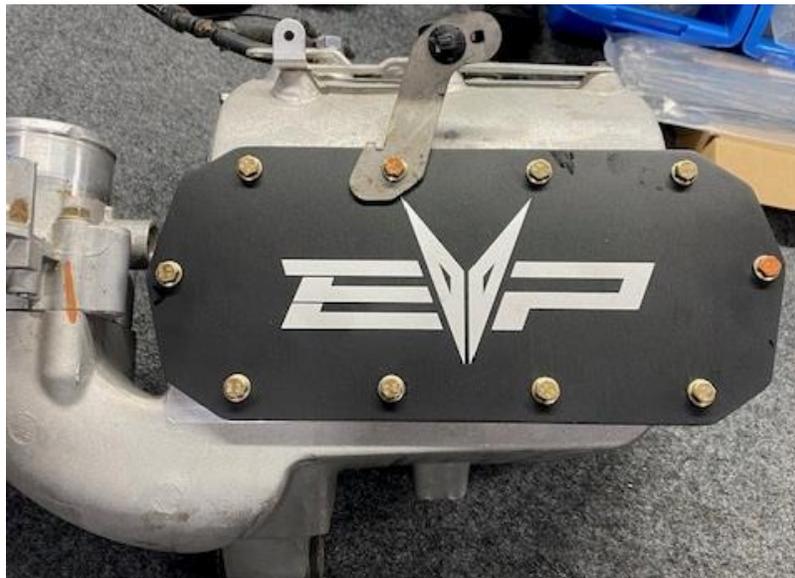


Figure 7

Step 9: Reinstall the plenum into the vehicle. Reconnect everything except the charge tube.



Figure 8

Step 10: This step is totally up to the customer. You can install the supplied 5/8" 90-degree hose barb and tie the coolant hoses together, if you think you may go back to the OEM intercooler at some point. Or you can remove all the soft/hard lines going up to the radiator and remove the radiator.

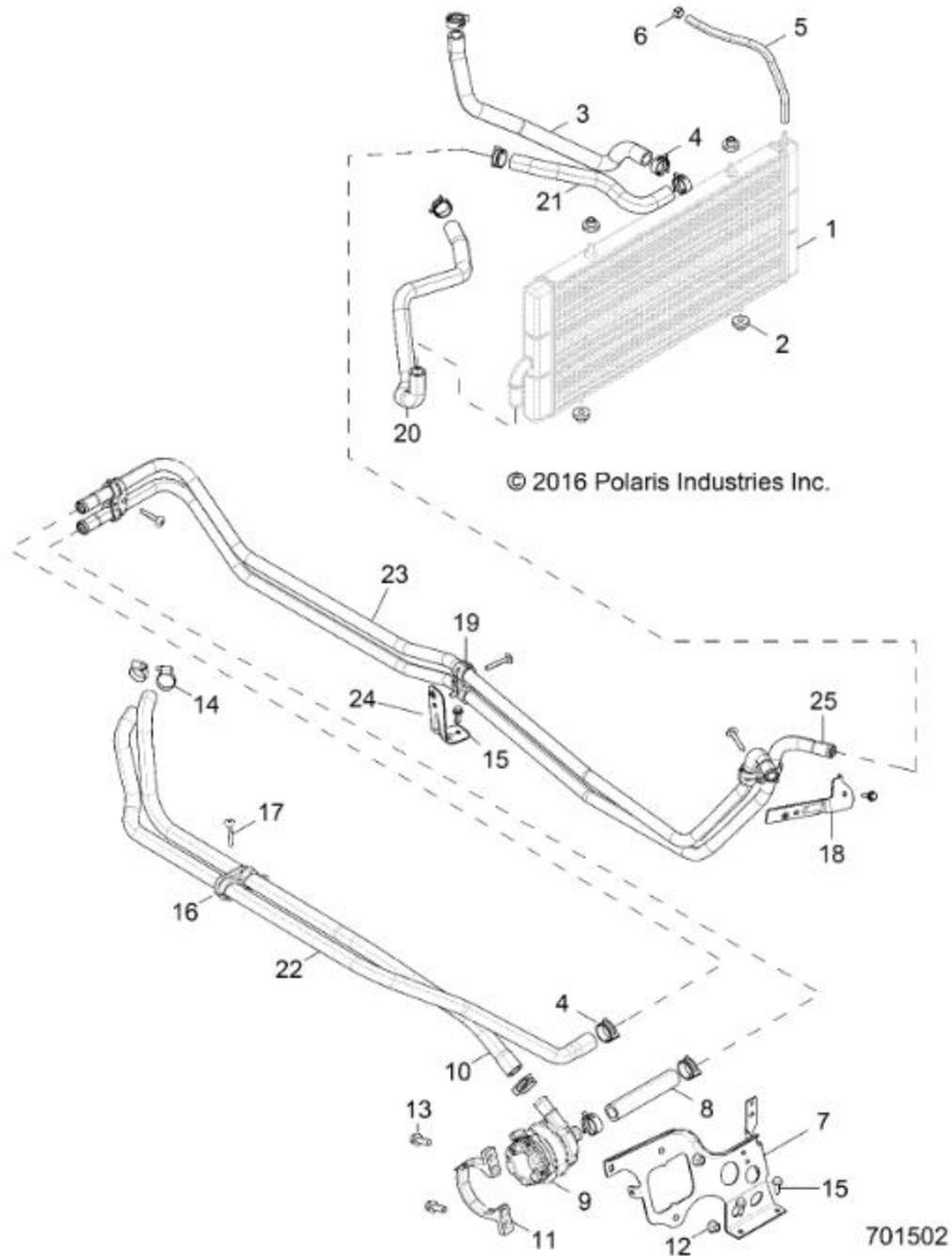


Figure 9

Intercooler Installation

Step 1: Remove the coolant tank reservoir cap. Place a catch pan underneath the coolant tank and remove both hoses to drain.

Step 2: Remove the V-flow from the airbox to turbocharger.



Figure 10



Figure 11

Step 3: Remove the coolant tank reservoir from the upper plastic clip and bed frame rail. One T-30 screw.



Figure 12

Step 4: Remove the (3) hoses from the rear of the coolant reservoir.



Figure 13

Step 5: Locate the intercooler bracket. Unwrap the EVP backer plate (which can be powder coated) and the (2) supports. Install the supports using supplied (10) M6-16mm screws.



Figure 14



Figure 15

Step 6: Install the EVP backer plate using (4) M6-16mm screws.



Figure 16

Step 7: On the back of the vehicle, remove the (6) T40 screws holding the plastic on around the seat belts.

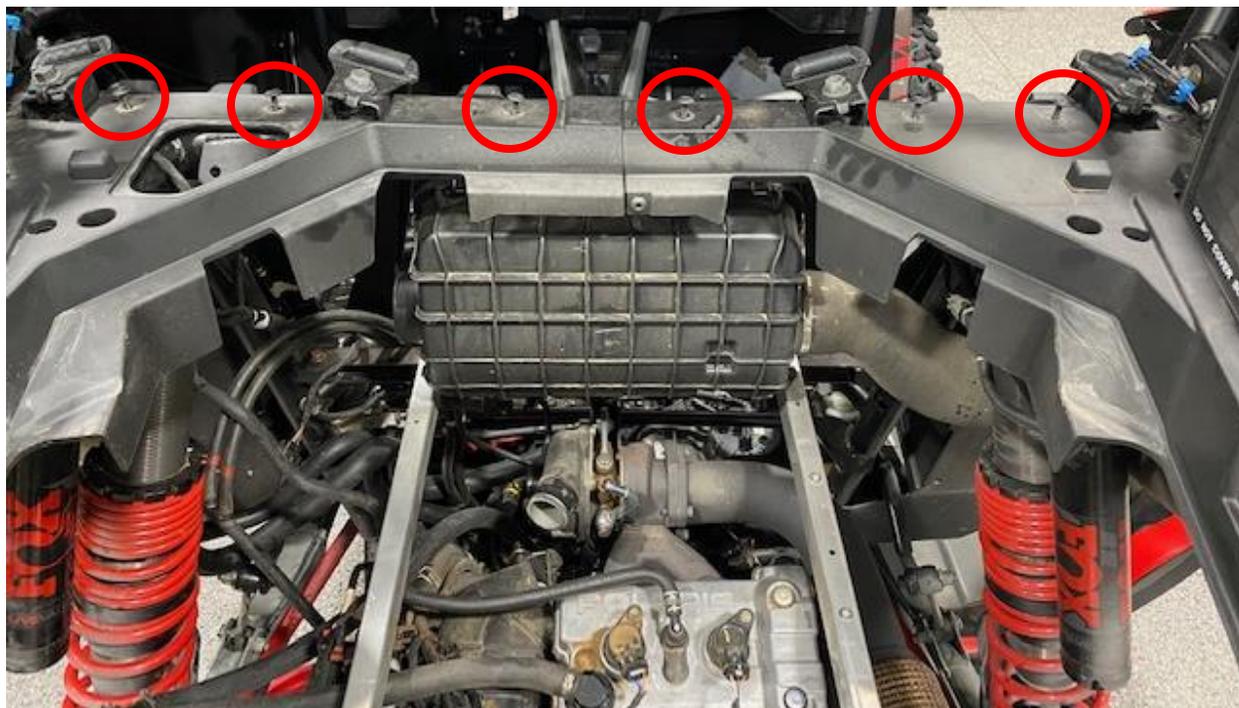


Figure 17

Step 8: Install the intercooler mount onto the car. With the mount centered on the car, outline the (2) charge tube holes with a silver sharpie.



Figure 18



Figure 19



Figure 20

Step 9: Remove the bracket and cut the holes out with air Dremel or 3.50" hole saw and drill. Once cut, sand the edges down and use a small heat source flame to smooth the edges. Reinstall the intercooler bracket onto the car, reuse the OEM hardware. One the back of the mount you will need to use supplied M8-35mm screws with oversized washers for each side.

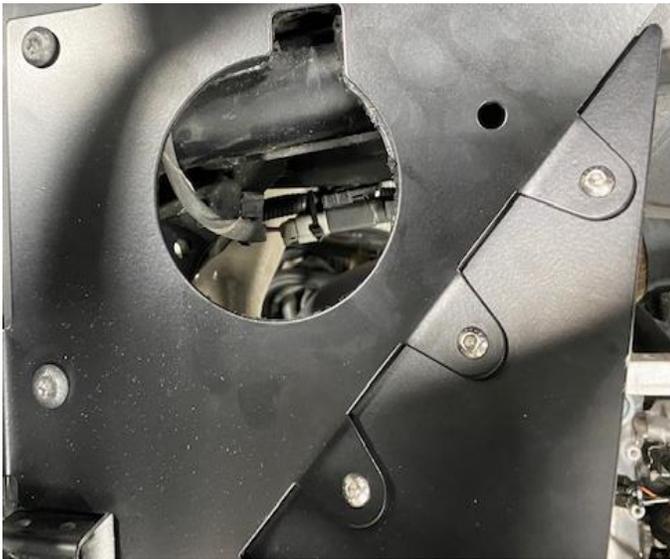


Figure 21



Figure 22

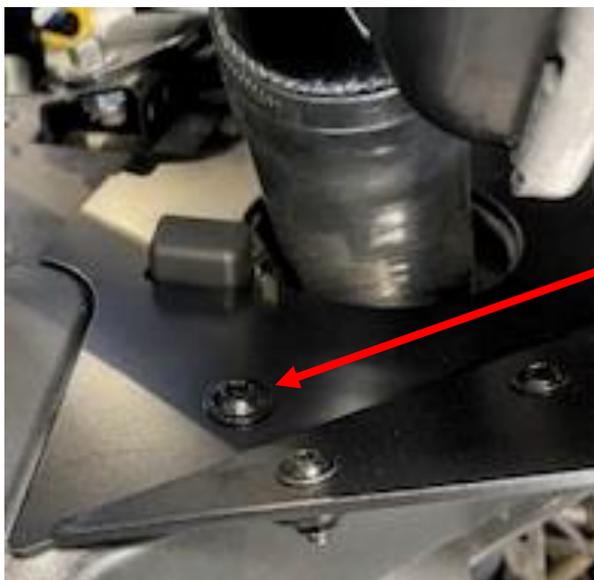


Figure 23

M8x35mm
with
oversized
washers'
underneath

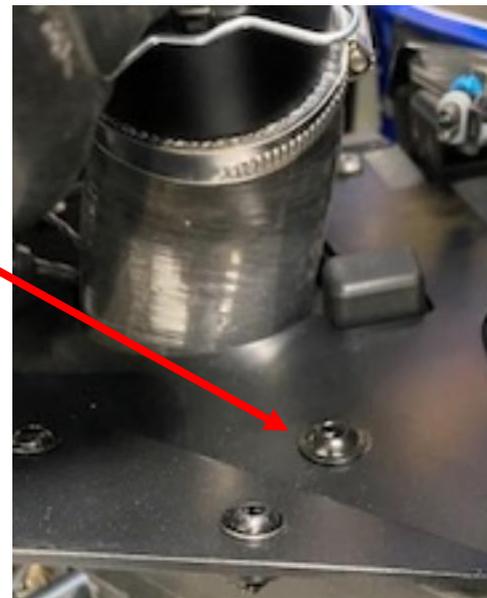


Figure 24

Step 10: Install the intercooler onto the mount. Use supplied M8-16mm flanged screws with spring washers. A total of (6). Make sure the fan harnesses go inside the mount. (photo taken on work bench).



Figure 25

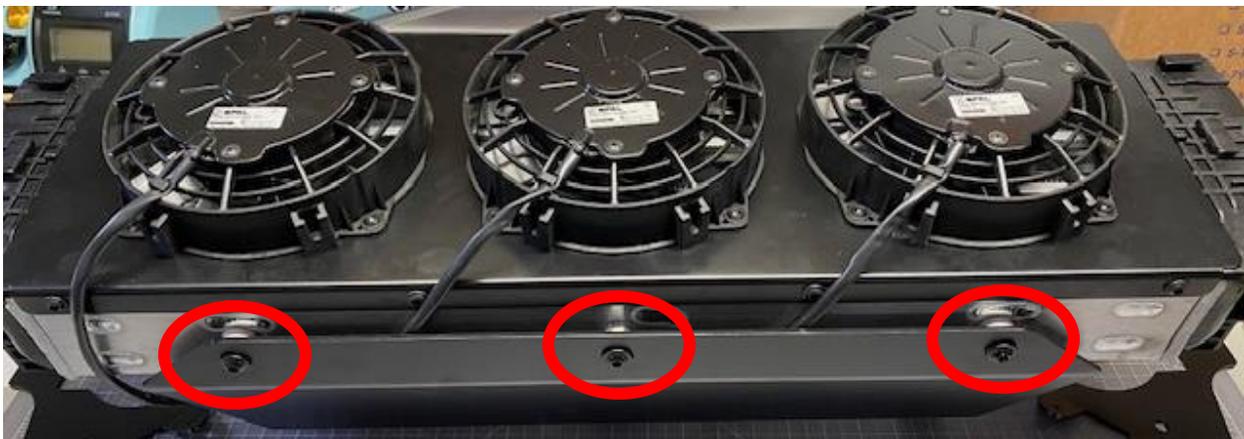


Figure 26

Step 11: located on the plenum is a Black “C” bracket. Remove the (2) 8mm screws and engine harness zip ties. This will not be used.

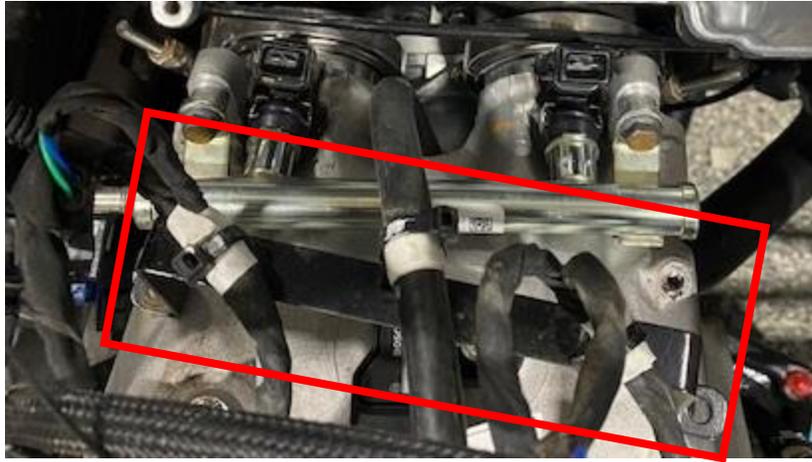


Figure 27

Step 12: Install the charge tube going from the throttle body to intercooler. The tube will go underneath the bed frame rail.



Figure 28



Figure 29

Step 13: Install the other “L” shaped charge tube between the turbocharger and intercooler.



Figure 30

Step 14: Install the O-rings into the billet charge tube connectors. Apply dielectric grease to the O-rings. The O-rings are directional, install as shown below.



Figure 31



Figure 32

Step 15: Install the billet connectors to the charge tubes going into the intercooler. You may need to apply dielectric grease to the outside of the billet adaptor. Use supplied T-bolt clamps to secure the charge tubes to adaptors.

Step 16: Install the billet connectors to the intercooler. Use (3) cotter pins per each side.



Figure 33



Figure 34



Figure 35

Step 17: Install map sensor adaptor plate to the charge tube connected to the throttle body. Use supplied pinch clamp to fasten down. Install the map sensor and secure with M6x12mm screw.



Figure 36

Step 18: Install the BOV or BOV plug into the charge tube. If installing a BOV install the pre filter onto the BOV. Secure it with a supplied zip tie. Install the BOV into the charge tube and secure it with a 25-40mm worm drive. Route the vacuum line back to the plenum barb.



Figure 37

Step 19: Intercooler wire harness below.

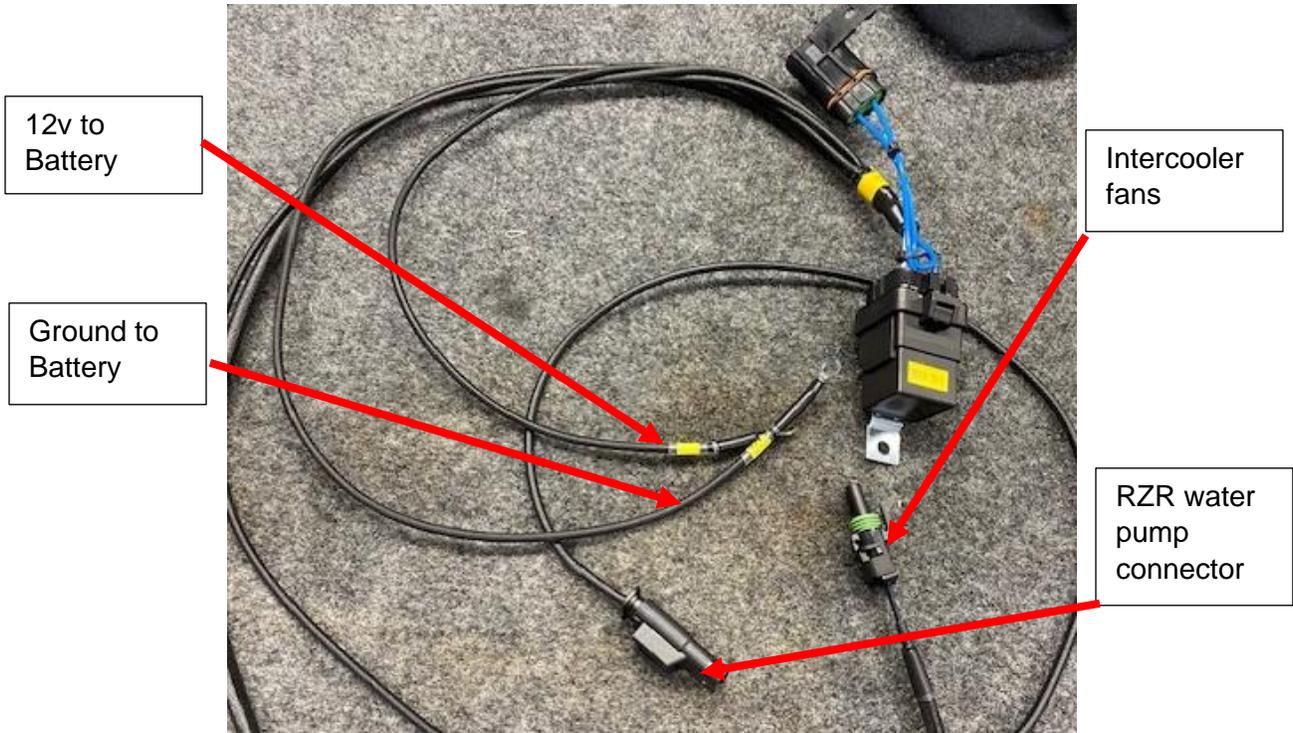


Figure 38

Step 20: Locate the fuse block underneath the center tunnel. Below the glove box. Mount the relay to a push dart. Run the ground wire to the frame or battery. Connect the positive terminal to the battery.

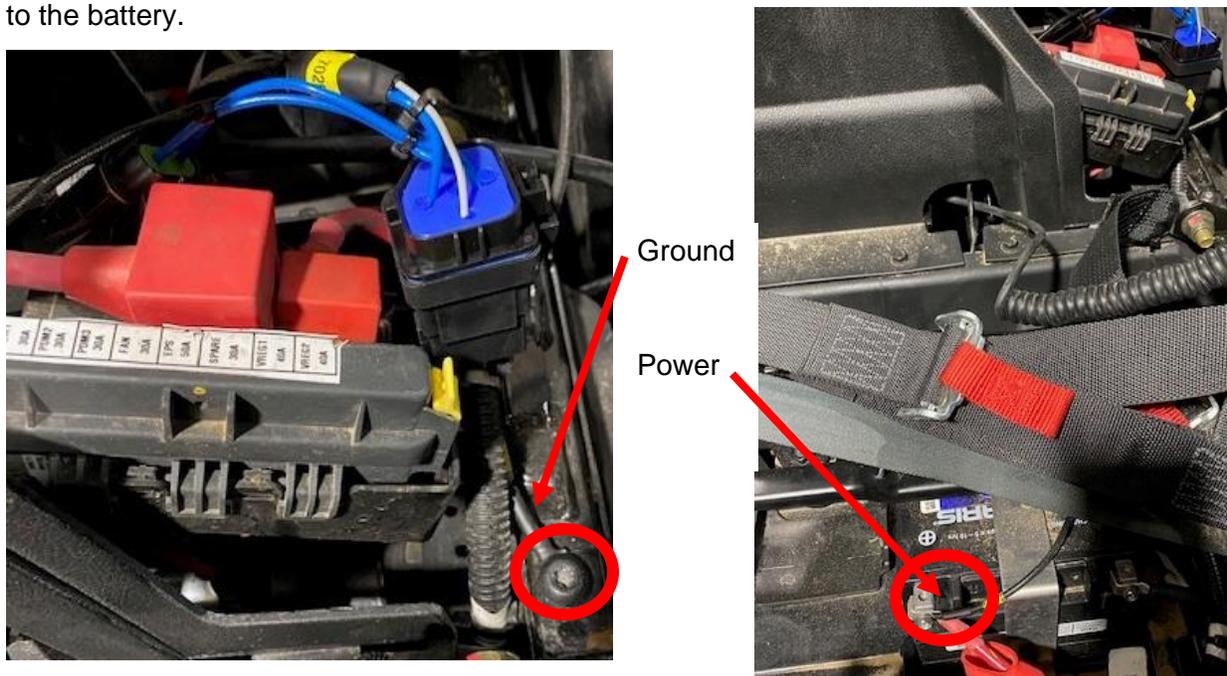


Figure 39

Step 21: Run the other two pigtails through the firewall and into the engine. Remove the water pump connector from the water pump and connect the OEM harness into the intercooler harness. This is located directly underneath the turbocharger.



Figure 40

Step 22: Run the fan harness pigtail behind the passenger seat, zip tie it to the frame rail. Plug in the triple fan harness and route it up to the intercooler. Plug in the fans.



Figure 41



Figure 42

Step 23: Install the heat blanket onto the charge tube above the exhaust downpipe.



Figure 43

Step 24: Zip tie any excess wires underneath the center tunnel, keep wires away from any heat source.

Coolant Reservoir Relocation

Step 1: Behind the driver's seat (left rear passenger if 4 seater) will be the ECU. Remove the (4) T-15 screws and let the ECU rest.

Step 2: On the backside of the firewall, you will use these (3) OEM holes. Remove the upper left T-40 screw and the upper right push dart.

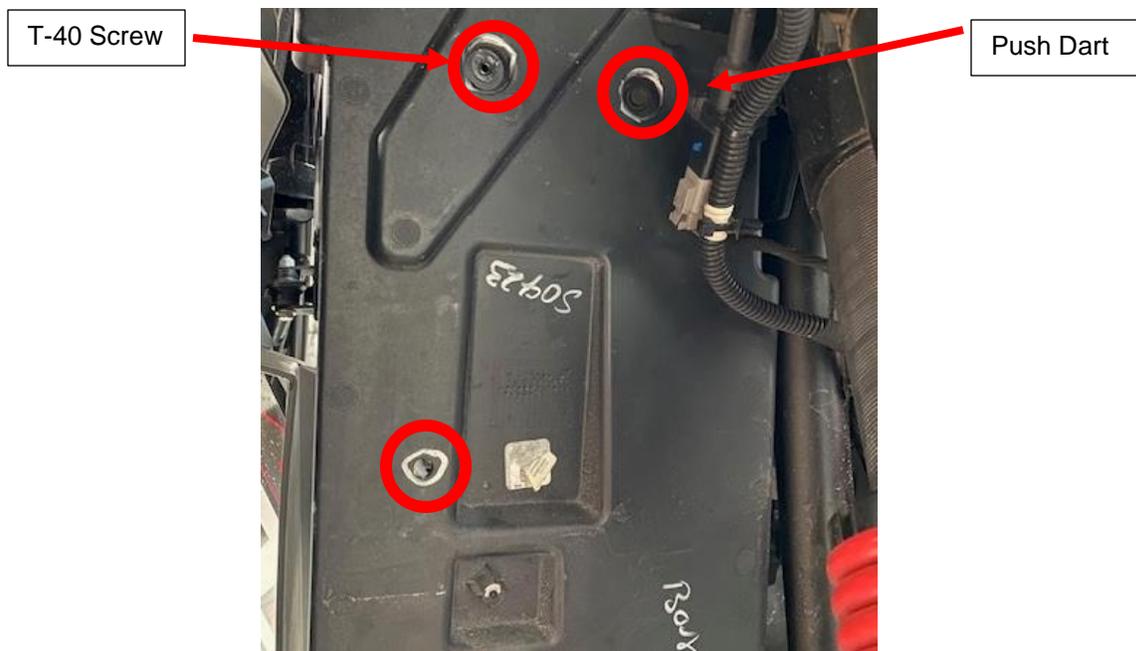


Figure 43

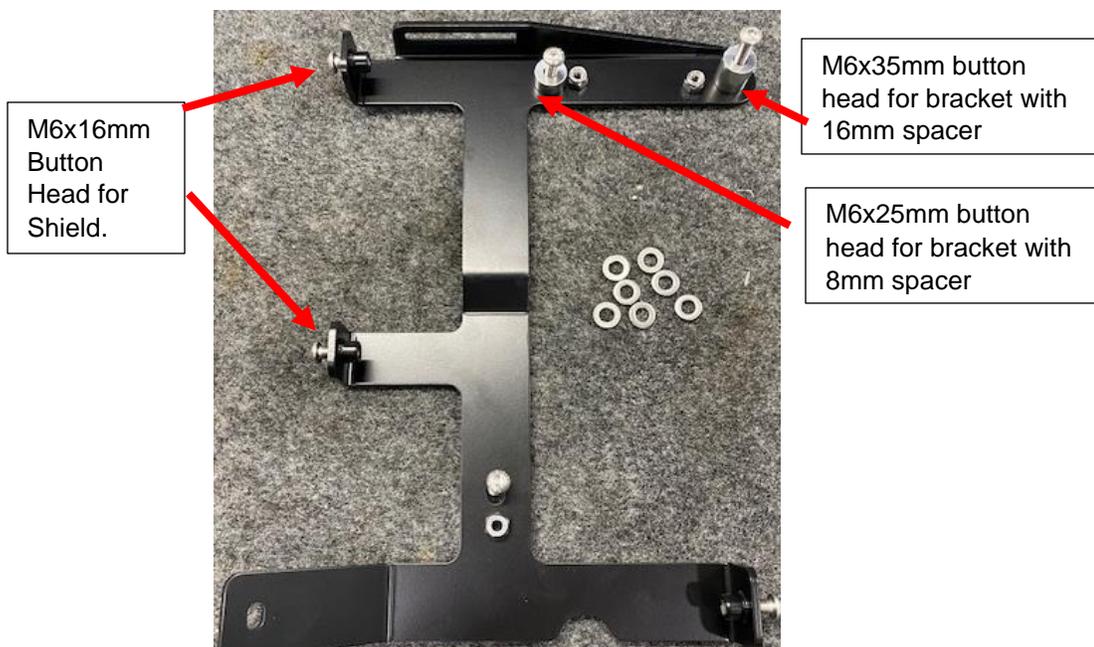


Figure 44

Step 3: Mount the bracket to the firewall using the correct hardware, spacers between the bracket and firewall, washers and nylock nuts. You can reuse the T-40 screw if you don't want to remove the Nutzert.

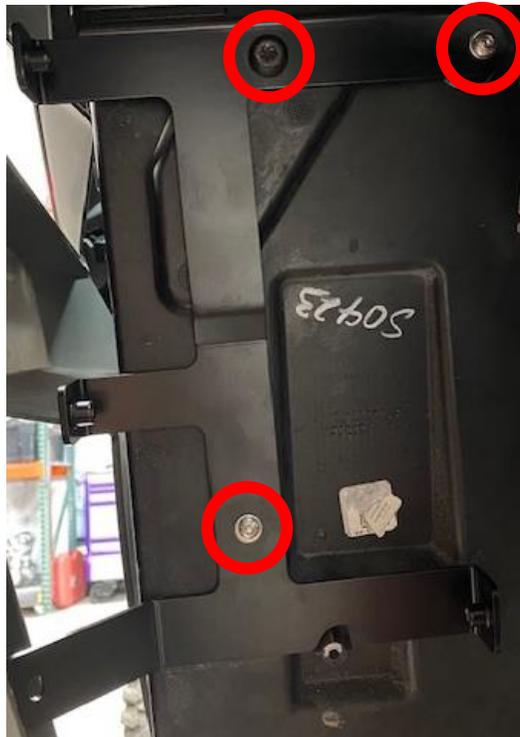


Figure 45

Step 4: Install the 12" piece of fire sleeve onto the 36" of 3/8" water line. Connect the line from the turbocharger "J" fitting to the coolant tank (diagram below). Install (2) 22mm pinch clamps.



Figure 46

Step 5: Remove the pinch clamp and hose from the valve cover. Keep the fitting attached to the valve cover. In the middle of that hose you will find a straight 6" piece. Cut in the middle and disregard. You will reuse the pre-bent part.



Figure 47



Figure 48

Step 6: Install 32" of 5/16" hose to the valve cover fitting. Install a 5/16" straight barb to join the pre bent hose. Use (3) 15.7mm pinch clamps to fasten down.



Figure 49



Figure 50

Step 7: On the firewall frame you will locate (2) small radiator hoses. Cut the zip ties and feed them behind the drivers side firewall. You will also need to rotate the larger hoses in the hard plastic clamps located below.

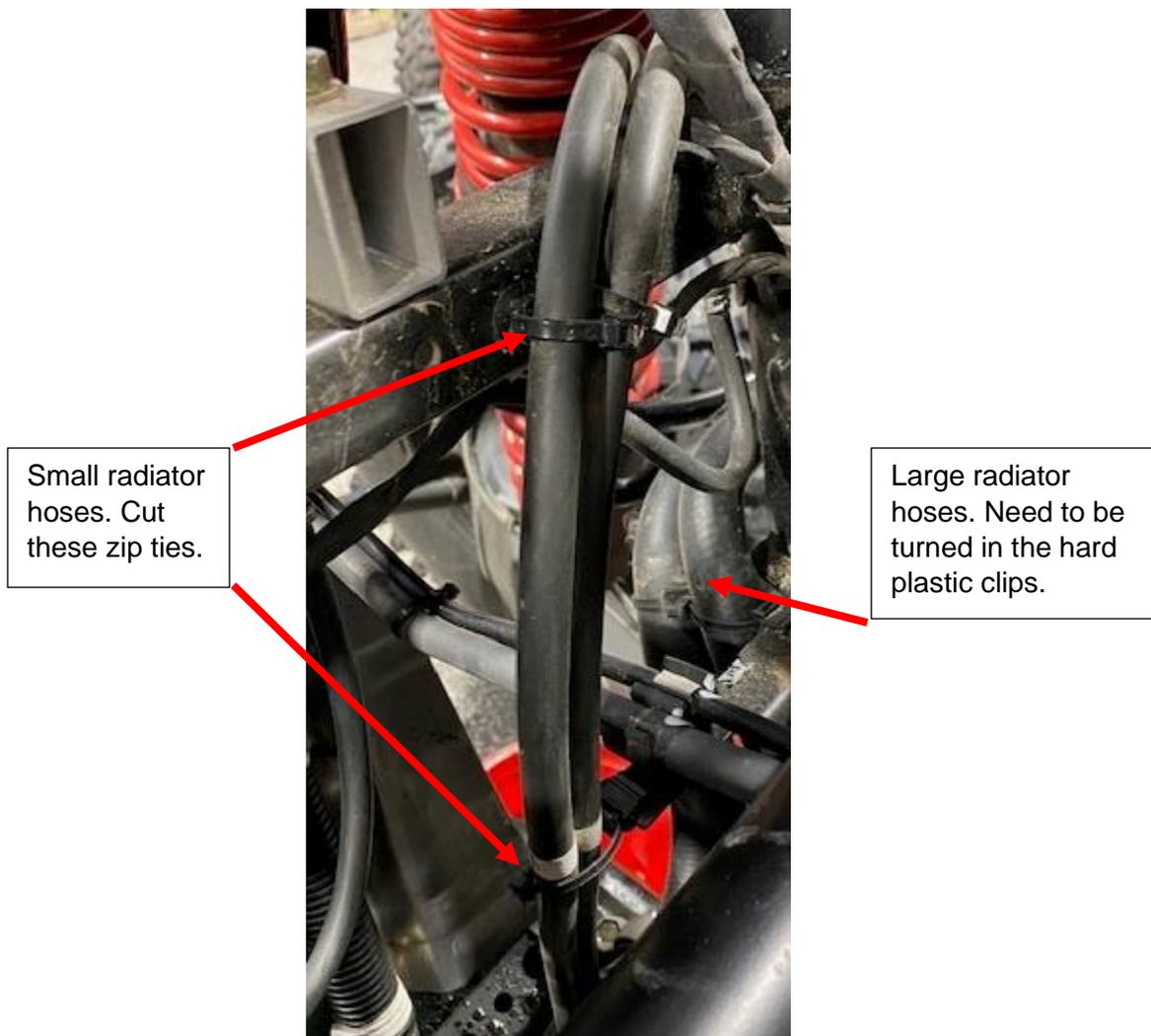


Figure 51

Below is the diagram for all hoses mounted on the coolant tank.

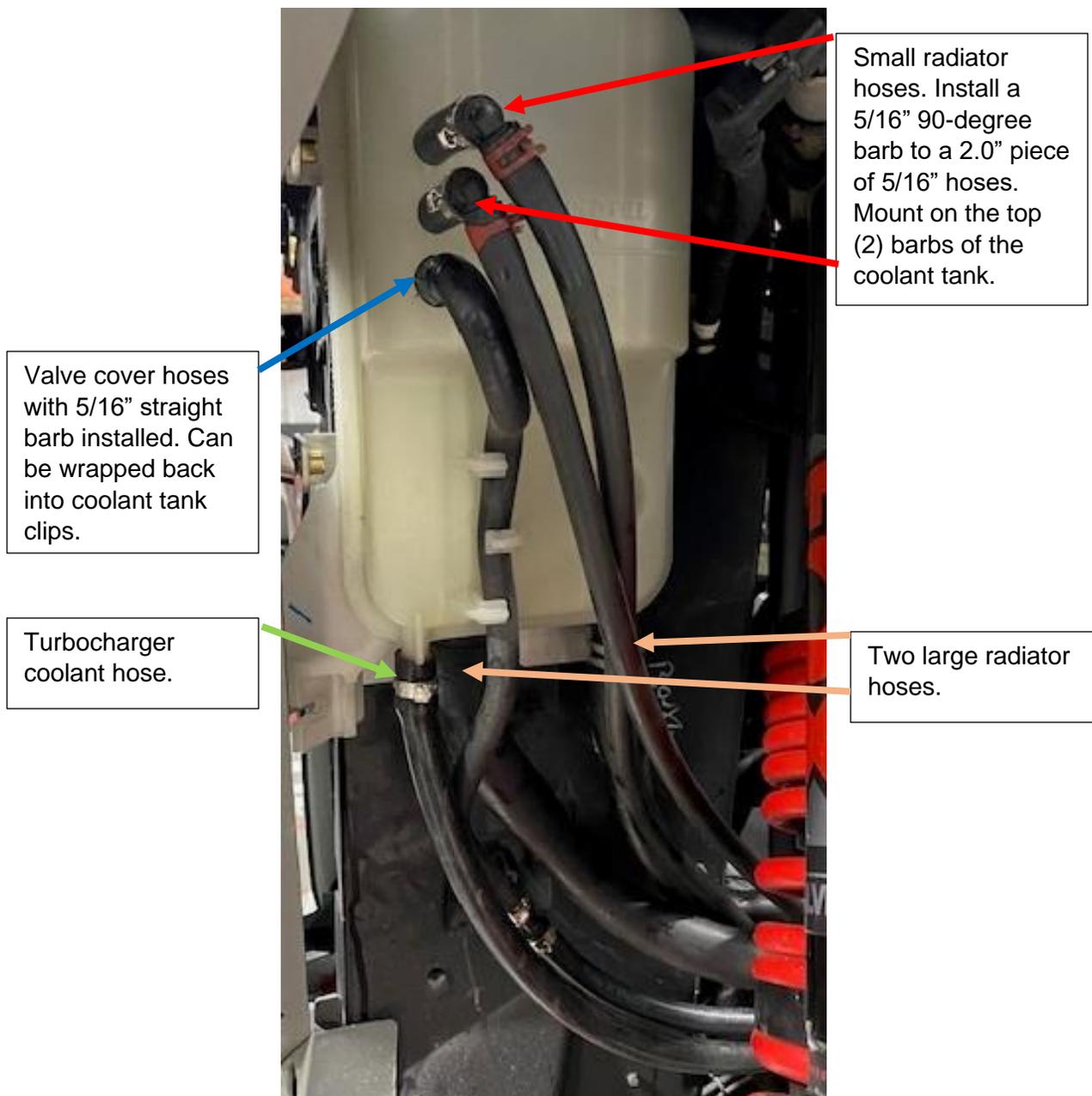


Figure 52

Step 8: Zip tie the coolant hoses together.

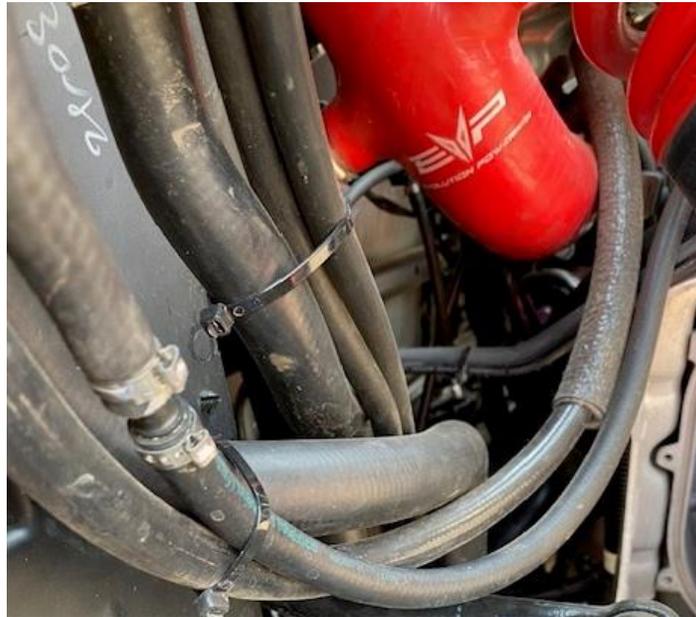


Figure 53

Step 9: Install the coolant tank onto the bracket. The top “L” bracket will slide on top and the bottom will go around the lower leg of the bracket.



Figure 54

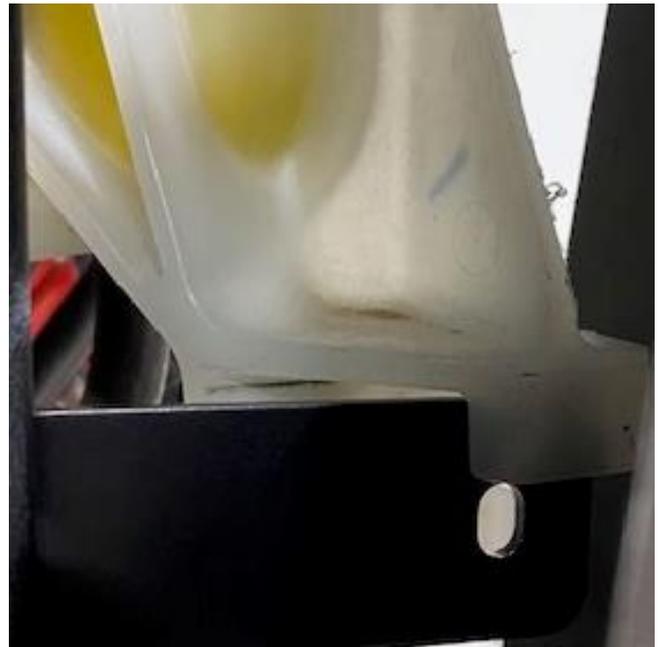


Figure 55

Step 10: Fill your coolant tank up. Install the coolant tank shield using supplied M6x16mm button head screws with washers. You may need to unplug your shock for installation, reconnect when done.



Figure 56

Step 11: Reinstall the V-flow and start the vehicle. Look for any coolant leaks. Make sure your fans are pulling air and NOT pushing air. Reinstall the rest of your vehicle.

Thank you for choosing Evolution Powersports products. If you require further assistance, please call our Tech Support @ (715) 247-3862

Note: *This product is exempt from the emission standards and related requirements of 40 C.F.R. § 1051 as provided by 40 C.F.R. § 1051.620, and California law [e.g., vehicle code §§ 27156 and 38391]. This product is sold only for use in connection with EPA certified, purpose-built, nonroad vehicles used solely for closed course, nonroad competition/racing and not used for any recreational purpose or on public highways or right of ways maintained by and open to the public. This product is sold only in connection with machines that do not fall under state and/or federal noise or emission standards/regulations. Purchasers who/that purchase this product represent and warrant that the product is purchased only in connection with EPA -certified, emission-regulations-exempt and noise-regulations-exempt competition/racing vehicles as interpreted under applicable state and/or federal law. Questions: Call Evolution Powersports at (715) 247-3862.*