

PERRIN

2020+ Outback XT/Outback Wilderness & Legacy XT CVT Cooler

2022-09-14

PSP-OIL-201

Thank you for purchasing this PERRIN product for your car! Installation of this product should only be performed by persons experienced with installation of aftermarket performance parts and proper operation of high performance vehicles. If vehicle needs to be raised off the ground for installation, the installer must use proper jacks, jack-stands and/or a professional vehicle hoist for safety of the installer and to protect property. If the vehicle is lifted improperly, serious injury or death may occur! Please read through all instructions before performing any portion of installation. If you have any questions, please contact our tech department prior to starting installation. We can be reached in any of the following methods:

Email Tech@PERRIN.com

Instant Chat off the main page of www.PERRIN.com

Or simply call our tech team at 503-693-1702



WARNING: This product can expose you to chemicals including Lead which is known to the State of California to cause cancer birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov

GENERAL MODIFICATION NOTE

Modifications to any vehicle can change the handling and performance. As with any vehicle extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive a vehicle safely may result in serious injury or death. Do not drive a vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state or country. Consult the owner's manual, service manual, instructions accompanying these products, and local laws before purchasing and installing these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.

SPECIAL NOTES:

- You will need capture all oil from OEM transmission cooler. If all oil is removed, proper CVT oil fill procedures must be followed. Follow factory service manual for proper procedure. The transmission can handle small oil level changes but if all oil from OEM cooler is removed, damage may occur to your CVT transmission.
- Make sure car has not been running for at least 3 hours to ensure oil has cooled off and drained from the OEM cooler.

Parts Included with the PERRIN Outback CVT Oil Cooler:

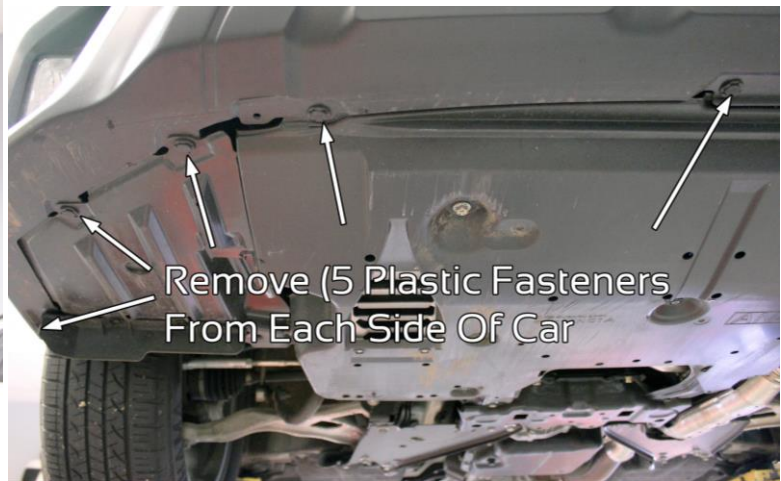
- (1) X-PSP-OIL-201-1 Bracket for CVT Tranny Cooler Lower
- (1) X-PSP-OIL-201-2 Bracket for CVT Tranny Cooler Upper
- (1) X-PSP-OIL-005P Oil Cooler Core PERRIN 8 Row x 250mm Wide w/ M22 Inlets
- (2) X-CON-M22PL06-45 Fitting for M22 45 Degree x -6 Push On Type
- (2) X-BLT-M8X10CSB-SS M8 X 10 Button Head SS Screw
- (4) X-BLT-M8WF-SS M8 Flat washer Stainless Steel
- (1) X-PSP-OIL-100stencil Stencil for all PERRIN Oil Coolers
- (2) X-BLT-M8X16CSB-SS M8 X 16 Button Head SS Screw

WHICH WAY IS THE RIGHT WAY?

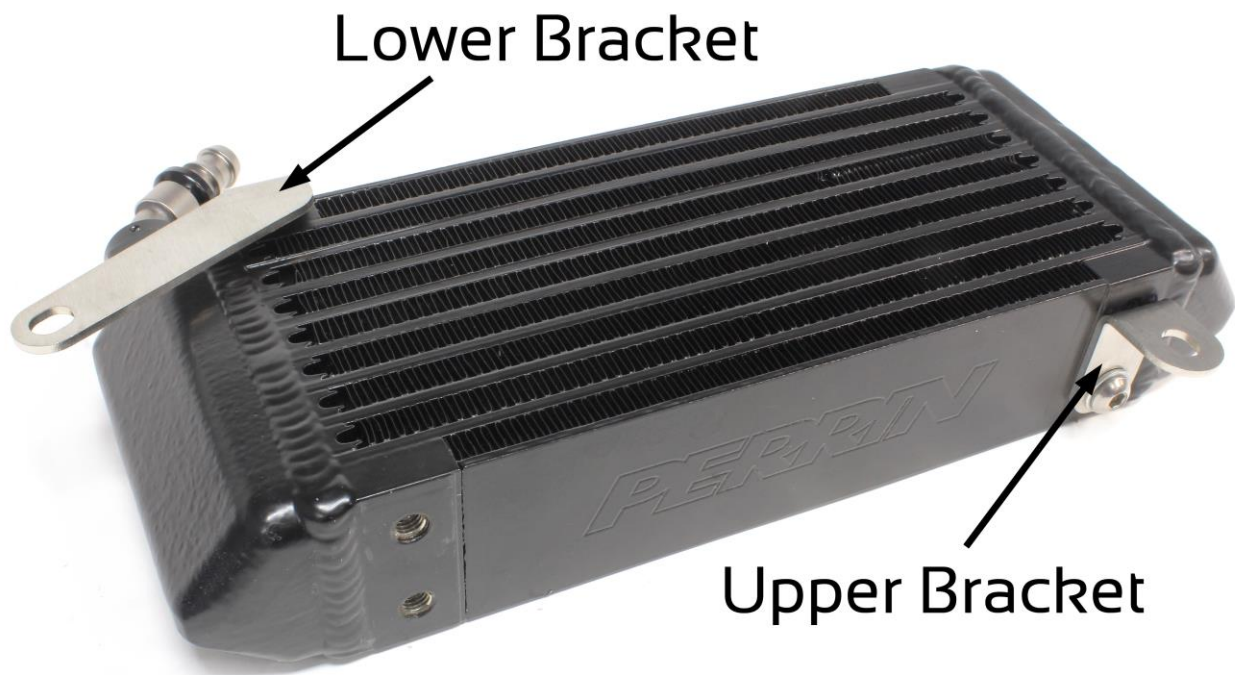
In ALL situations, when describing left and right sides of the vehicle it is always as though you are sitting in the driver's seat looking forward.
Example of a US Market Vehicle: If standing in front of the car, looking at the engine bay, the Drivers side is described as the LEFT side the vehicle.

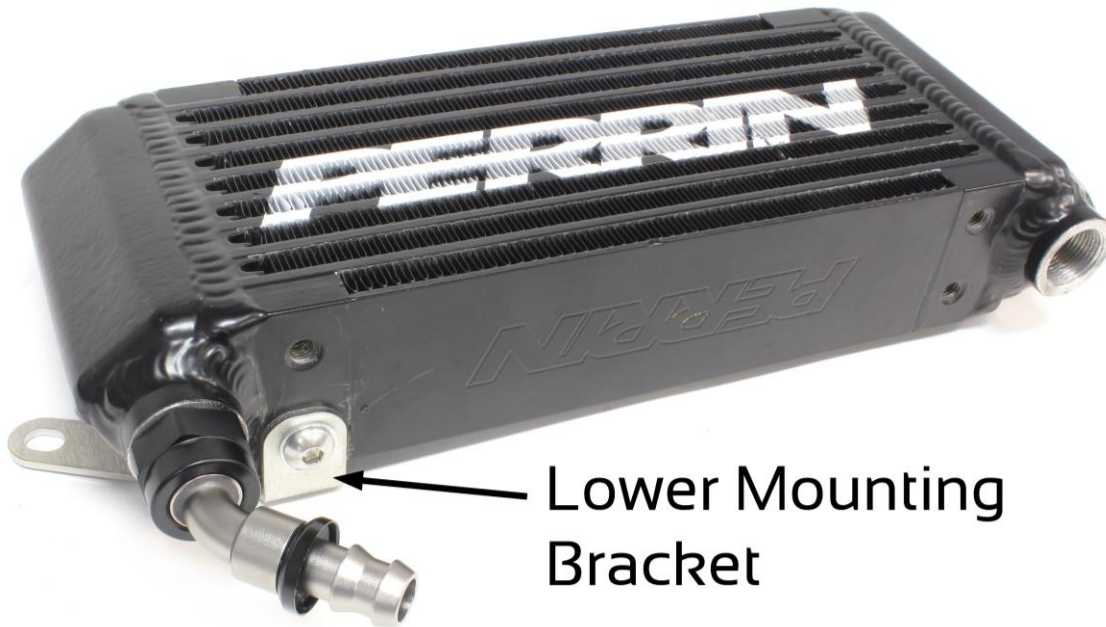
Installation

- Let vehicle cool off for at least 3 hours to ensure transmission oil is cool and will not burn you.
- Remove front bumper from car. Follow factory service manual for more detailed instructions:
 - Open hood then locate and remove (2) black M6 bolts and (4) plastic fasteners holding upper steel bracket to bumper.
 - Locate and remove (3) plastic push-in fastener on each side bumper meets fender in wheel well.
 - Locate and remove (10) plastic fasteners along bottom of bumper.
 - Pull bumper outward on edges near fender well and work your way across front of car



3. Apply a small amount of oil or grease to threads on 45 degree bent swivel fittings and inside of oil cooler, then thread just (1) of the fittings into core and tighten to 30ft-lbs.
 - a. **NOTE 1: What side the fitting is installed to does not matter. This is done to make filling the core up easier in future steps.**
 - b. **NOTE 2: Take time while threading it in, to ensure it does not get cross threaded. The fitting seals using an O-ring and seal as soon as the fitting is bottomed out. Given that info, and that the fittings are hard to get an actual torque wrench on, as long as the fittings are tightened slightly more than hand tight, they will not leak or come loose over time.**





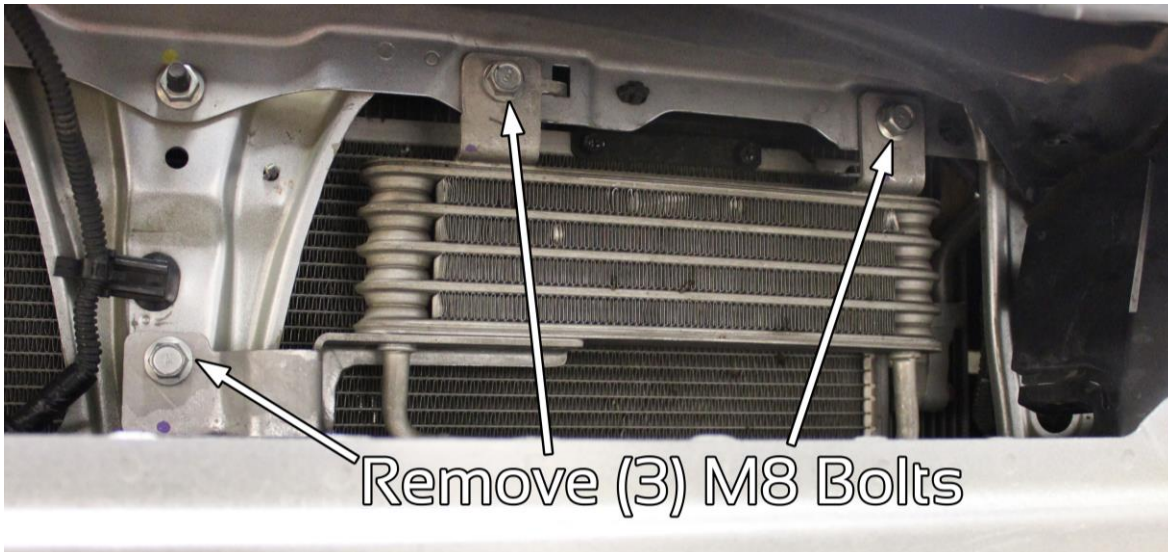
Lower Mounting Bracket

4. Install mounting brackets to PERRIN transmission cooler as shown. Secure brackets using supplied M8x10 bolts (not the longer M8x16 bolts as these will damage the core) and washers Take note of slots in brackets as some adjustments to the fitment may be necessary during the next few steps.



Remove Bolt To Gain Better Access To Oil Cooler Bolts

5. Locate and remove (3) M8 Bolts securing OEM oil cooler to chassis. **NOTE: Depending on the tools that you have, you may want to remove the bolts securing the upper steel bumper support. See picture above showing bolts to remove on either side.**



Remove (3) M8 Bolts

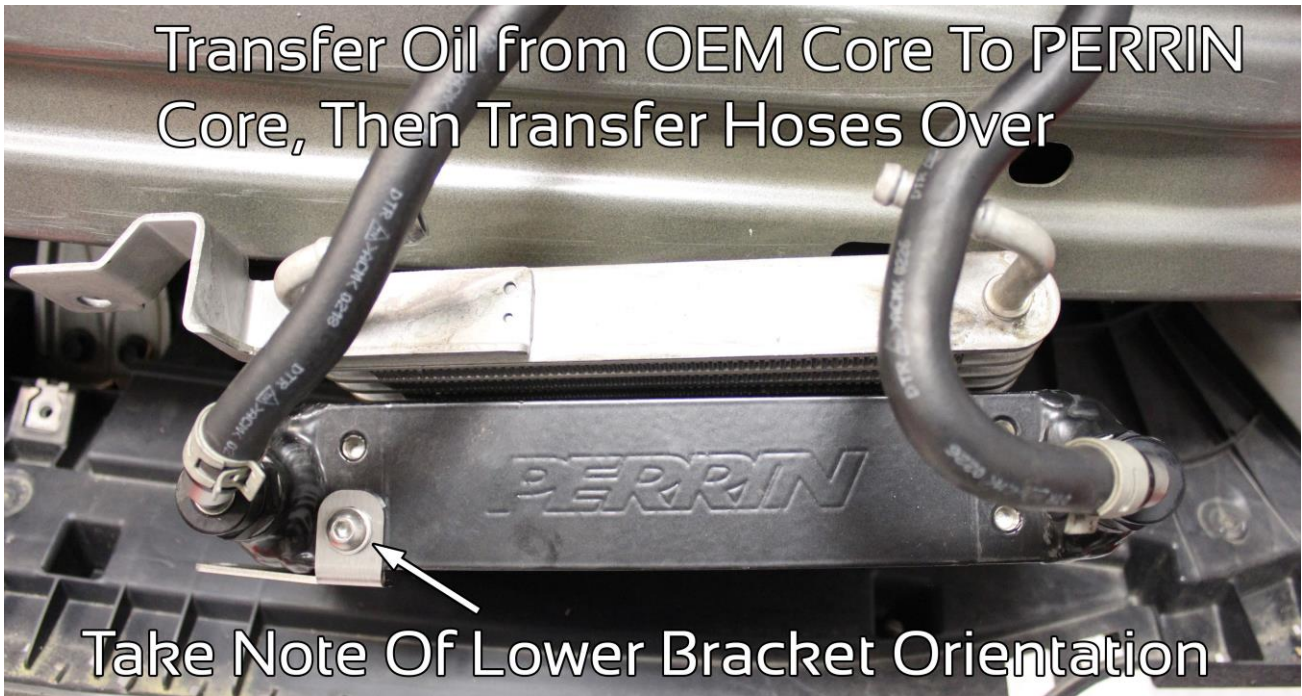
- Pull hoses out of the grooves in the plastic air diverter to allow oil cooler to be moved to the front of the bumper as shown in below pictures.



- Pull oil cooler toward front of car and tip down in such a way that when the hoses are removed, oil will remain in the OEM oil cooler. **NOTE: The fins from the OEM or PERRIN cooler are fragile and can become damaged. Take care in protecting cores from sharp objects while moving them to the front of the bumper.**
- Place PERRIN Cooler in front of OEM cooler as shown. This is done to make transferring hoses and pouring any oil from OEM cooler to PERRIN cooler, easier.



- Disconnect (1) hose from OEM oil cooler and as quickly as possible install it to fitting on PERRIN cooler.
- Pour any excess oil into left open fitting in PERRIN core. **NOTE: Depending on how long the car has sat, will depend on how much you will be able to pour out. It is normal to find little no oil left in OEM core.**



11. Install remaining 45 degree bent swivel fitting into PERRIN core following the instructions above.
12. Remove remaining hose from OEM cooler and place it onto fitting on PERRIN cooler. Secure both hoses with OEM pinch clamps.



13. Move PERRIN cooler back into the same place as the OEM part was sitting and secure using supplied M8x16 bolts and washers.
 - a. **NOTE 1: During the moving of core, some adjustments to the hoses may be needed. You may need to rotated hoses on fittings to allow for a smoother routing.**
 - b. **NOTE 2: During this last step of mounting the core, make any adjustments necessary to align the core and brackets to your desired position. Core may need to be removed in order to make adjustments, make sure to tighten all bolts before reinstalling.**
14. With core mounted, adjust hoses so they follow the path as shown in the picture. The removal of the OEM plastic diverter is shown in this picture to show the hose routing. It is optional to remove this part, but if you choose to leave it installed, we recommend making large cutouts where the hoses pass through. Make sure the cutouts are large enough that the hoses do not touch the plastic.



15. Start your car like normal and let it run for 5 seconds, then shut engine off. **Thoroughly inspect all oil lines and connections for leaks.** If no leaks are found, start engine, let it run for at least 5 minutes, and check one more time for oil leaks.
16. Reinstall bumper back to car in the reverse order it was removed.
17. After roughly 15 minutes of driving, recheck all fittings and hardware to ensure it hasn't started leaking or come loose.
18. If you are unsure how tight you made the fittings on the oil cooler, double check the tightness after 2 hours of driving.

Questions, Comments and Suggestions Contact: Tech@PERRIN.com

Visit Our Website for Instant Chat Options at www.PERRIN.com

Call Our Tech Team at 503-693-1702