

# PERRIN

## 2022+ WRX CVT Transmission Cooler

2022-09-14

PSP-OIL-202

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](mailto:Tech@PERRIN.com)

Instant Chat off the main page of [www.PERRIN.com](http://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](http://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 WRX Oil Cooler:

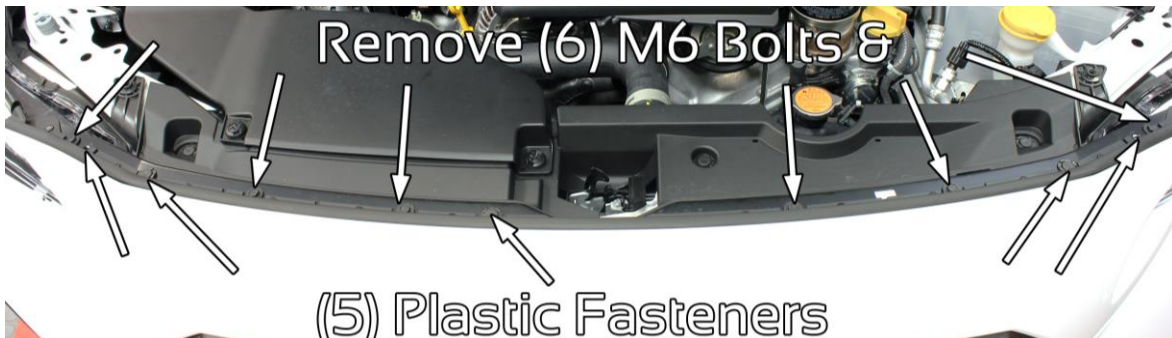
QTY	Part#	Description
1	X-PSP-OIL-013R	Bracket for Oil Cooler, Right Side for 2022+ WRX
1	X-PSP-OIL-201-2	Bracket for CVT Trans Cooler Upper/22+ WRX Oil Cooler Left
2	X-BLT-M8X10CSB-SS	M8 X 10 Button Head SS Screw
2	X-BLT-M8WF-SS	M8 Flat washer Stainless Steel
2	X-BLT-M6X14CSB-SS	M6 x 14mm Button Head Socket cap screw SS
2	X-BLT-M618WF-SS	M6 x 18 Fender Washer SS
2	X-CON-M22AN10-SE	M22 to -10AN Adapter Fitting Black
1	X-PSP-OIL-001BK	Oil Filter Spacer for BRZ/FRS Black Anodized
1	X-PSP-OIL-004-4	Oil Filter Sandwich Adapter Mocal 22mm w/185F T-Stat
1	X-PSP-OIL-005P	Oil Cooler Core PERRIN 8 Row x 250mm Wide w/ M22 Inlets
2	X-PSP-OIL-015	Oil Line Assembly for 2022+ WRX
1	SUB-15208AA130	Oil Filter for BRZ/FR-S & 15+ WRX
1	X-TRM-002	Trim Door Edge
1	X-BLT-M60X4MM-V75	O-ring 60mm ID x 4mm Viton for PERRIN Spacer/Oil Pressure Adapter
1	X-PSP-OIL-100stencil	Stencil for all PERRIN Oil Coolers

### 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.

## Remove Bumper and OEM Transmission Cooler

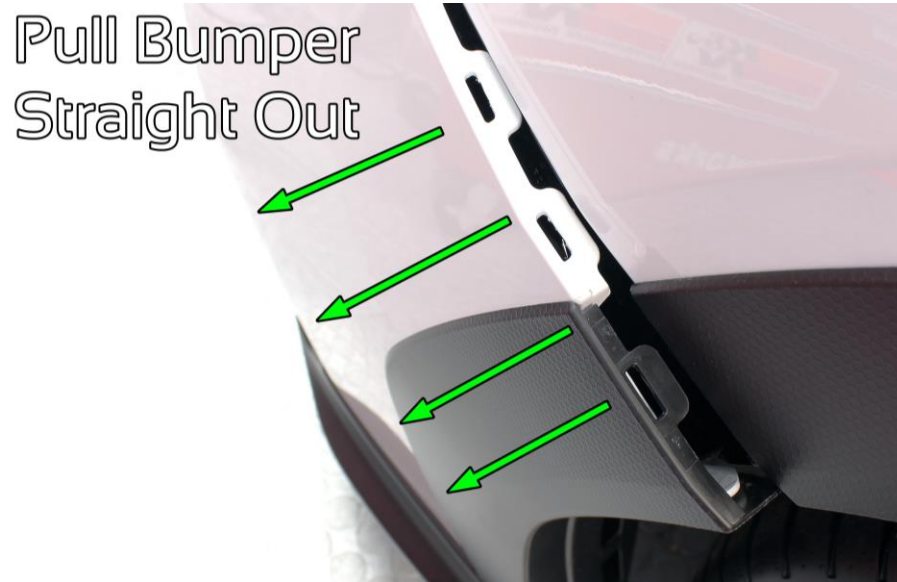
- Raise front of vehicle off ground using proper jack and jack stands. Never work under a car solely supported by a jack, death or injury may occur.
- Let vehicle cool off for at least 3 hours to ensure engine oil and coolant will not burn you. This also gives enough time for all the oil to drain out of the oil filter.



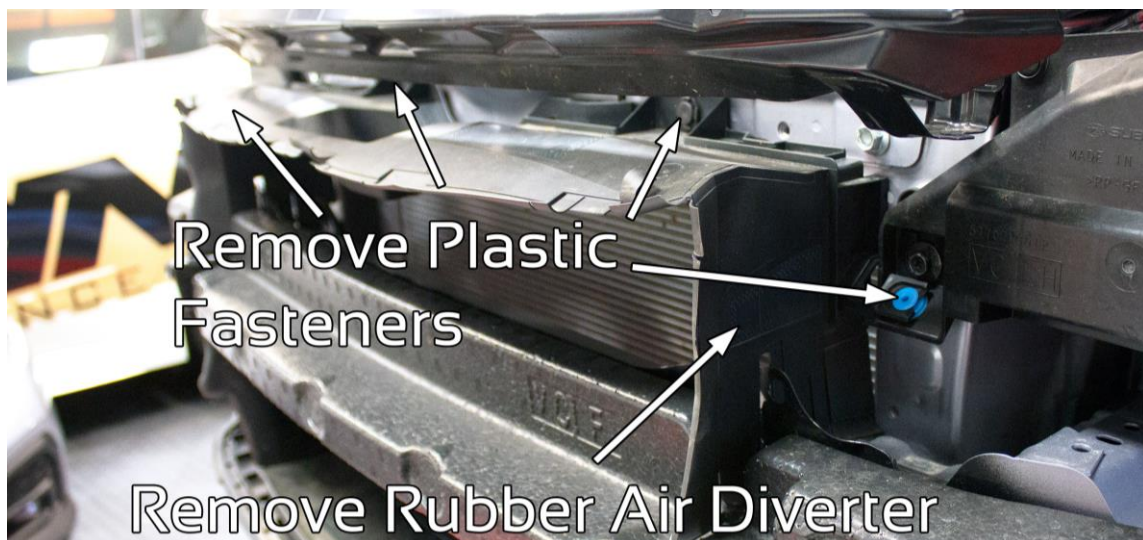
- Remove front bumper skin from vehicle.
  - Remove (5) plastic fasteners and (6) M6 bolts securing the upper portion of the bumper to the car on upper portion of grill. Remove black steel hood trim bracket after these are removed. See diagram above.
  - Locate and remove (2) plastic fittings on inside of each fender well.



- a. Under the car, remove (8) plastic fasteners as shown above. Take note that not all of the plastic fasteners need to be removed.
- b. Starting at outer edges of bumper where it meets the steel fender, pull straight out. Do this on both sides.



- c. Pull bumper from around each headlight to be able to unplug each fog light/blinker. **Note: There are two plugs, one at the fog light and one toward the chassis. Unplug only the one at the chassis as this is easier to reinstall.**
  - d. Carefully remove bumper from car and place in a safe area.
4. Locate and remove (2) plastic fasteners securing rubber air diverter to car. With fittings removed, unsnap corners from headlight brackets and remove rubber air diverter from car.



5. Remove (3) M8 bolts securing OEM transmission cooler to radiator support.

6. Pull OEM core up and away from bumper area to make for easier access of the hoses and clamps, then pinch the clamps and slide down hose in preparation for installation of PERRIN Oil Cooler.

## Install PERRIN Oil Cooler

1. Using supplied M8x10 bolts and M8 washer, secure supplied brackets to oil cooler as shown. Make sure taller/longer leg of 90 degree bracket is NOT mounted to the core. Lightly tighten bolts so the brackets can just barely move with force. **NOTE: Using any other size bolt will cause damage to oil cooler. Only use supplied M8x10 bolts!**

### Mount Brackets As Shown

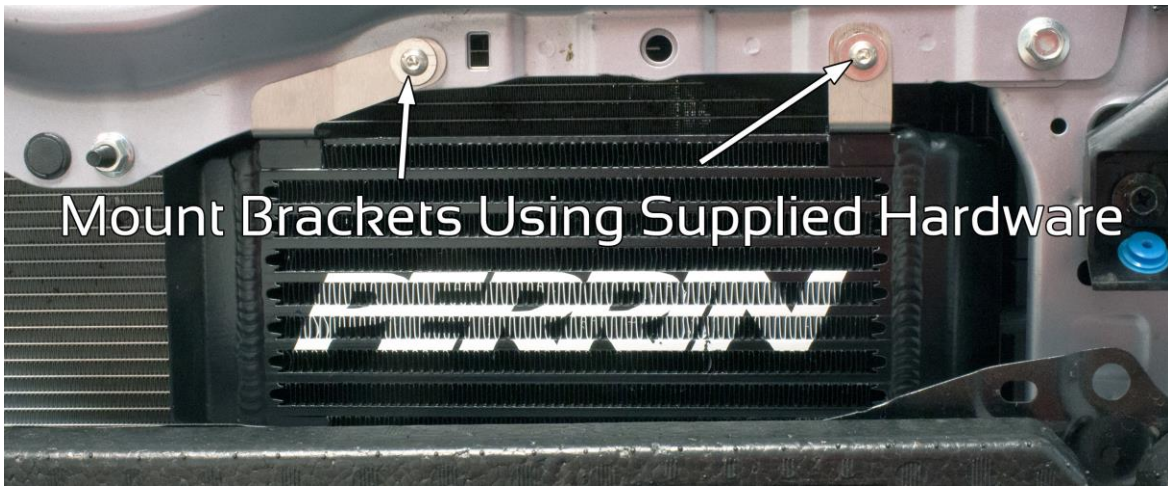


2. Apply a small amount of oil or grease to threads on a 45 degree bent swivel fitting and inside of oil cooler, then install one of the fittings into core and tighten to 30ft-lbs.
  - a. **Installing a single fitting allows oil that might come out of the OEM core to be poured into the PERRIN Oil Cooler.**
  - b. **Take time while threading it in to ensure it does not get cross threaded. The fitting seals using an O-ring and will 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.**
3. Remove (1) hose from the OEM core and transfer it to the PERRIN Oil Cooler. During this step, capture any oil that may come out and pour into the PERRIN Oil Cooler.
4. Install remaining 45 degree swivel fitting and tighten to 30ft-lbs. Then, as quickly as possible, tip core upside down and connect remaining hose to fitting.
5. Using pliers, pinch clamps and slide over fittings to secure.



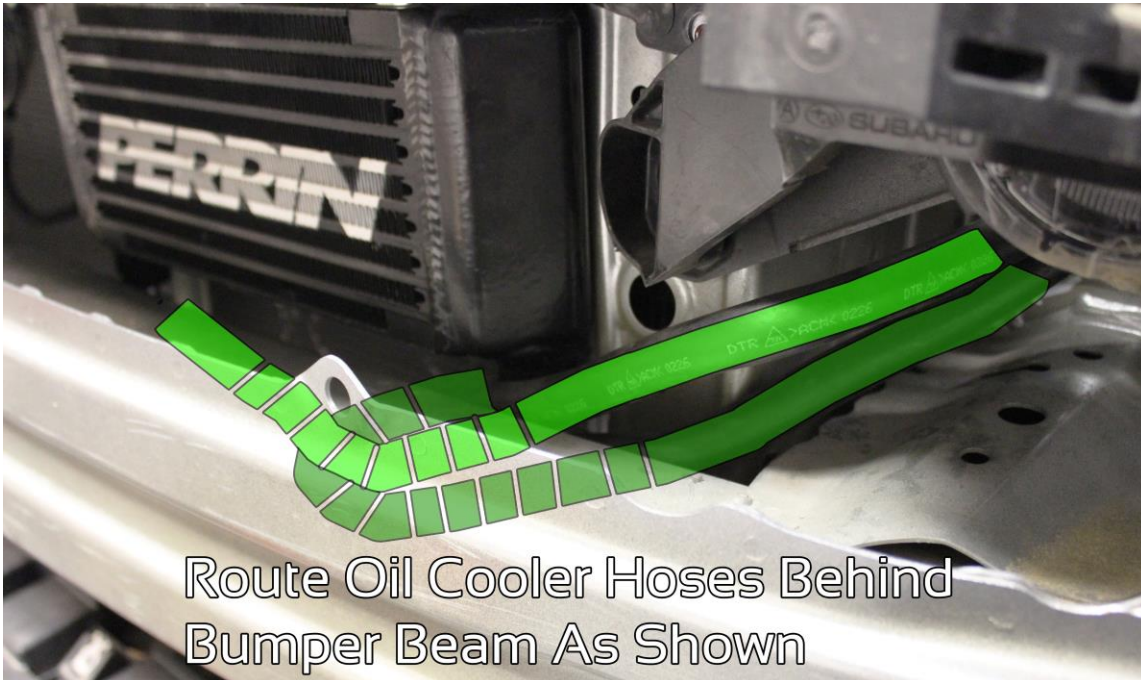
6. Locate upper radiator support and the (2) threaded holes where brackets will be mounted to. Drop oil cooler and hoses behind bumper beam and install oil cooler to core support using supplied M6 bolts and fender washers.





## Mount Brackets Using Supplied Hardware

7. Before tightening any of the bolts, align brackets to oil cooler and radiator support to achieve the desired position. Carefully remove oil cooler with brackets from radiator support and tighten M8 bolts to 15ft-lbs to secure brackets to oil cooler. This step may take a few times until oil cooler is in its desired position.
8. Make sure hoses are routed smoothly from the chassis to the PERRIN Oil Cooler. Make sure there are no kinks or pinched off areas.



## Route Oil Cooler Hoses Behind Bumper Beam As Shown

9. Start your car like normal and let it run for 5 seconds, then shut engine off. Heavily inspect all oil lines and connections for leaks. If no leaks are found, continue to next step. Fix any leaks that are found during this step.
10. Start engine, let it run for at least 5 minutes, and check one more time for oil leaks.
11. Reinstall rubber upper air diverter.
12. Reinstall bumper back to car in the reverse order it was removed.
13. Take car for 5-10 minute test drive, then recheck all fittings and hardware to ensure it hasn't started leaking or come loose.
14. 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](mailto:Tech@PERRIN.com)

Visit Our Website for Instant Chat Options at [www.PERRIN.com](http://www.PERRIN.com)

Call Our Tech Team at 503-693-1702