

# PERRIN

## 2022+ BRZ/GR86 Engine Oil Cooler Tuner Kit

2022-11-10

PSP-OIL-129

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

### 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:

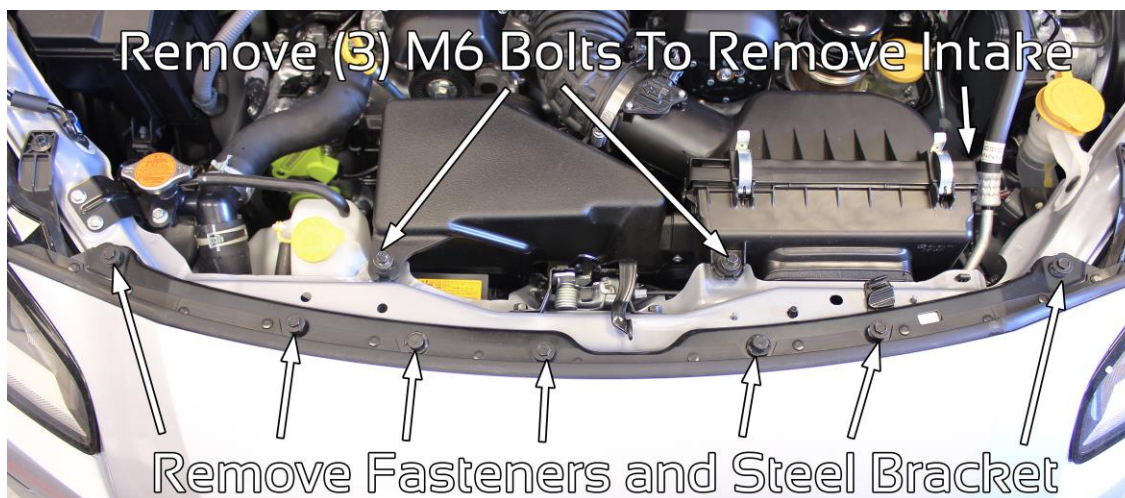
- This kit is designed to mount the PERRIN Oil Cooler to your vehicle and all other aspects of the installation are left up to the customer.
- This kit does NOT include many components to allow this to be installed on a car and function safely and properly. Some of the components that need to be purchased are hoses, fittings, thermostatic adapters, hose adapters, hose protection.
- Hose routing for this kit is left up to the customer to determine the best and safest route. Take extreme care where hoses run by sharp object or by exhaust components. Make sure and use proper hose protection in any area of concern.
- Hoses will move and become very hard after installation, keep this in mind for routing of hoses and fittings.
- An additional quart of oil is needed after installation is complete. Make sure and have oil ready to be added or be prepared to do a full oil change after installation. For additional oil changes, check oil level after adding factory fill level, and add more if needed.
- Using an AN wrench to tighten fittings will greatly aid in being able to install all fittings tight and properly.

### Parts Included with the PERRIN BRZ/FR-S Oil Cooler Tuner Kit:

1	X-PSP-OIL-005P	Oil Cooler Core PERRIN 8 Row x 250mm Wide w/ M22 Inlets
2	X-PSP-OIL-002-2BK	Bracket for PERRIN Oil Cooler 2022+ BRZ/GR86 Black
2	X-BLT-M6X16CS-SS	M6 X 16 Socket Cap Screw SS
4	X-BLT-M8X14CSF-SS	M8 X 14 Flat Head Socket Screw SS
2	X-BLT-M8X25WF-Z	M8 Fender Washer
2	X-BLT-M618WF-SS	M6 x 18 Fender Washer SS
1	ASM-BDY-500	License Plate Frame PERRIN
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.



### Installation

1. Raise front of vehicle off ground using proper jack and jack stands. Never work under a car solely supported by jack, death or injury may occur.
2. Remove front bumper skin from vehicle
  - a. Open hood and locate black steel hood seal/bracket. Remove (2) plastic fasteners and (5) 10mm bolts. Remove bracket from car.
  - b. Starting in each fender well, locate and remove (4) plastic fasteners holding fender liner to bumper skin.



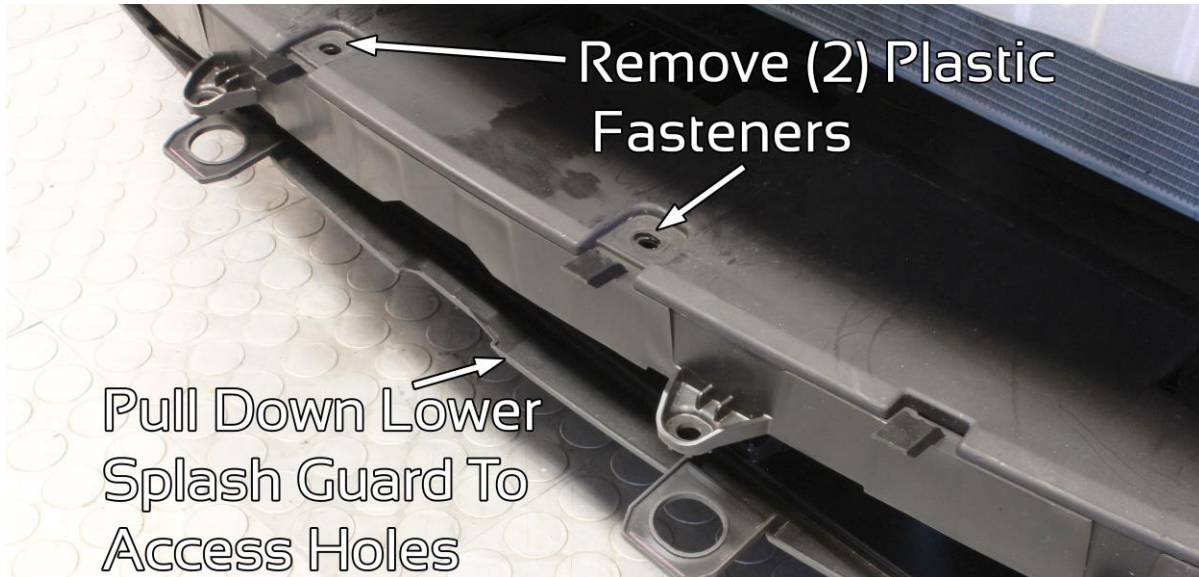
- c. Under car, locate and remove and (8) plastic fasteners holding lower portion of bumper skin to car.



- d. Starting at corners next to side marker lights, pull bumper straight and away from car to unsnap from chassis. Do this to one side then the other before proceeding to next step.



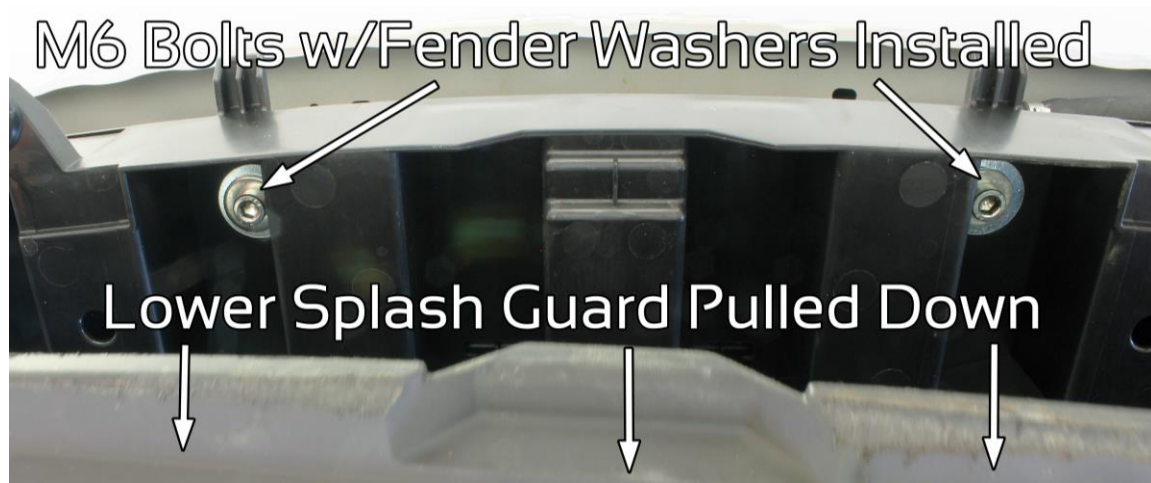
- e. Continue with unsnapping bumper from chassis working from each side marker light toward front of car. During this step the bumper will become fully dislodged from chassis so be prepared to catch. **NOTE: Having a friend help with this step is a good idea to help prevent bumper from hitting the ground.**
- f. Reach behind bumper and disconnect both left and right side marker light harnesses.
3. Install supplied PERRIN mounting brackets to bottom (opposite side of the fittings) of oil cooler using supplied M8x15 flat head screws.
4. Apply motor oil to threads on cooler as well threads on oil line fittings (Not included). Failure to lubricate these threads can cause galling while tightening which could result in an oil leak. **NOTE: A small amount of oil on the top side of the fitting where it spins on the 90-degree bent tube will help with spinning fitting into core.**
5. With oil cooler laying on a flat surface, install your oil lines to the oil cooler. Again, these are customer supplied and not included. **NOTE: Make 100% sure fitting is lined up with core to ensure cross threading does not occur. Take your time with threading in slowing and checking as it is tightened. Dripping a small amount of oil on the thread as well as where the black fitting meets the silver tube, is a good idea to aid in fitting threading into oil cooler.**
6. Tighten oil cooler fittings to roughly 30ftlbs. Since these fittings are not under constant stress, have O-ring seals and are swivel type fittings, the actual ft-lbs you tighten them to are not vital to sealing the fitting. If you are unsure of how tight you made them, double check the tightness after 2 hours of driving.



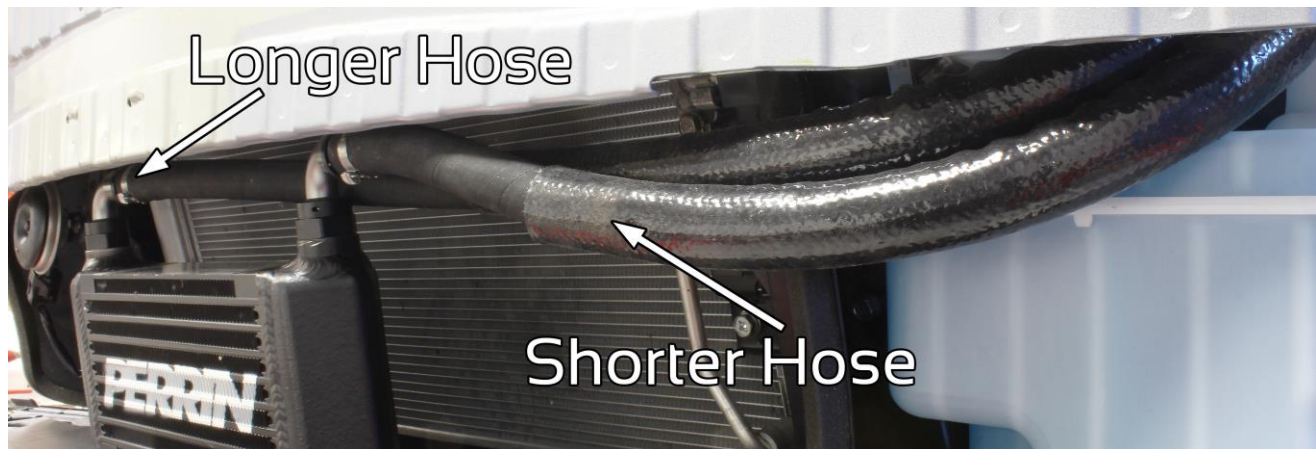
7. On upper portion of splash guard, remove (2) center plastic fittings.
8. Under car, locate lower half of plastic splash guard and remove (2) plastic fittings from the front center area. Pull down far enough to expose holes that pass through to the upper section. **NOTE: Picture shows additional fasteners removed from lower splash guard. This is done for illustration purposes. This is not necessary but can make these holes easier to reach.**
9. Set oil cooler onto upper splash guard so it rests in the small pockets where the plastic fasteners were removed. Make sure the longer hose is on right side of vehicle.



10. Install M6 fender washer then M8 fender washer onto supplied M6 bolts. Pull down lower splash guard and install them up through the holes in the splash guard and into the PERRIN Oil Cooler Brackets. Tighten bolts to roughly 10-15ft-lbs of torque.



11. Reinstall plastic fasteners into lower splash guard.



12. Install all oil lines, brackets, and other necessary items to complete the installation. See notes above regarding some of the components needed and hose routing info.
13. Before starting car, turn key on and apply 100% throttle to your car, then try to start your car with the throttle still at 100% (or floored). Your engine will not start but turn over only. Do this for roughly 5 seconds and wait 10 seconds, then do this one more time for 5 seconds.
14. Start your car like normal and let it run for 10 seconds, then shut engine off. Heavily inspect all oil lines and connections for leaks. If no leaks are found, add your additional QT of oil at this time.
15. Start engine and let it run for at least 5 minute and recheck all fittings and hoses for oil leaks. If no leaks are found move to step 23.
16. Reinstall bumper back to car in the reverse order it was removed.
17. Start engine let it run for at least 5 minutes and check one more time for oil leaks. If no oil leaks are found take car for a 15-minute test drive and recheck all fittings one last time and recheck oil level one last time.

**FOR QUESTIONS & COMMENTS PLEASE CONTACT**

**[TECH@PERRIN.COM](mailto:TECH@PERRIN.COM)**

**503-693-1702**

**Live Chat with us on our website**