

PERRIN

Top Mount Intercooler for 2022+ WRX

2023-08-21

PSP-ITR-330

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.



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

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.

Special Notes:

- During the final parts of the installation, you may find you need to align the intercooler to make it level to the ground. If the included spacers and washers do not allow for this adjustment, it may be that you need to loosen the throttle body and/or throttle body to intercooler brackets. Simply loosening the (4) M6 bolts and adjusting the brackets or throttle body can get you additional rotation. This same thing may be needed to help with intercooler clearing an installed strut bar.
- Included are extra M8 washers that can be used to help align intercooler to engine. These can be placed under the supplied bracket to help with fitment.

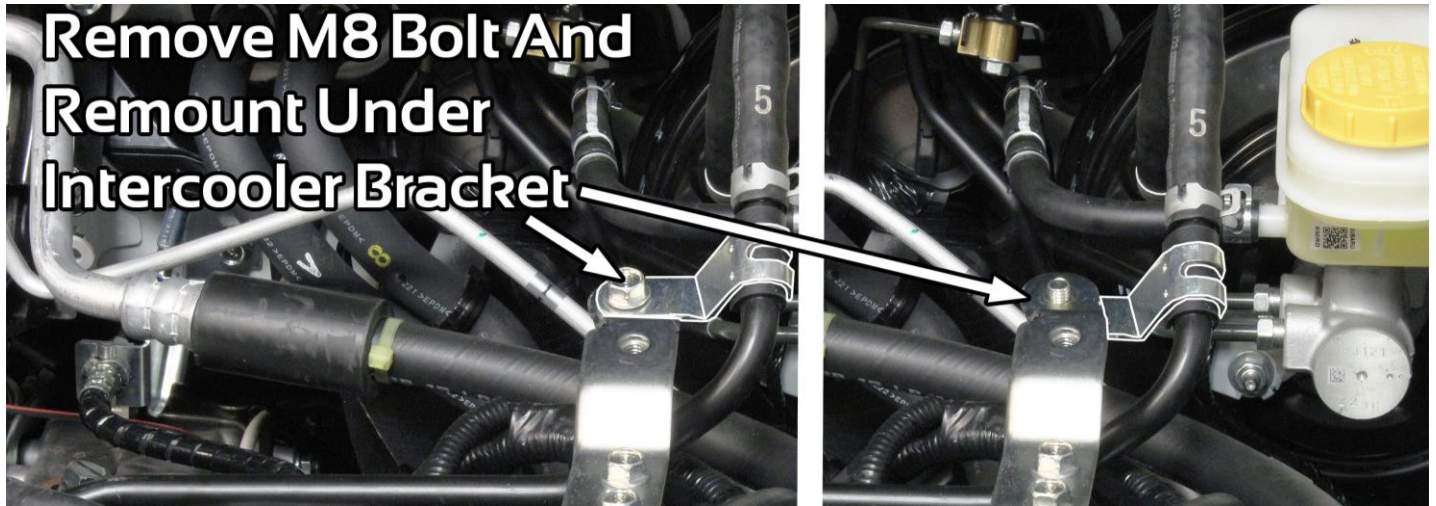
Parts Included With PERRIN Top Mount Intercooler

QTY	Part Number	Part Description
1	X-PSP-ITR-330	Intercooler Top Mount for 2022+ WRX
1	X-PSP-ITR-330-1BK	Coupler for TMIC for 2022+WRX
1	X-PSP-ITR-330-2	Bracket for TMIC for 2022+ WRX
1	X-BLT-232-N70	Size 232 O-ring
2	X-CLAMP-048	Clamp Size 48 or 60-80mm
5	X-BLT-M8X16CSB-SS	M8 X 16 Button Head Cap Screw SS
2	X-BLT-M8X30CSB-SS	M8 X 30 Button Head Cap Screw SS
1	X-PSP-ITR-303	Stencil
4	X-BLT-M8X25WF-Z	M8 Fender Washer
8	X-BLT-M8WF-SS	M8 Flat Washer
6	X-BLT-37WSAEH-ZY	3/8" SAE Flat washer Zinc Yellow

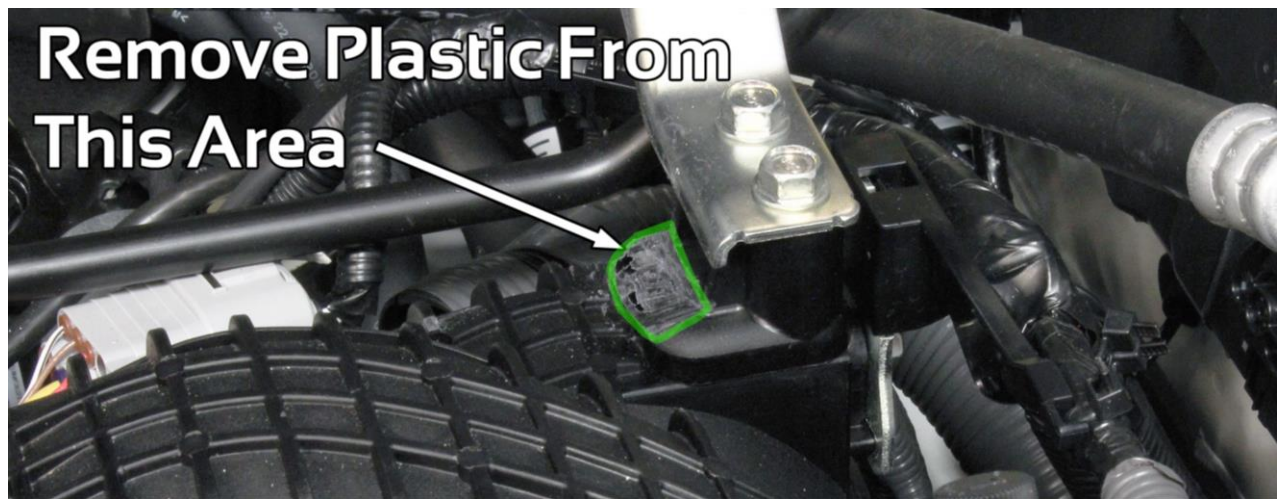


Installation of PERRIN Intercooler

1. Open engine hood and if there is strut bar installed, remove at this time.
2. Locate and remove (5) M8 bolts as shown in picture above then loosen hose clamp securing OEM rubber coupler to charge pipe. Move the intercooler up and down a few times to help free the coupler from the charge pipe.
3. Remove intercooler from engine bay.
4. Place supplied Size 232 O-ring into PERRIN Intercooler making sure it is fully seated all the way around slot. **NOTE: While not required, we recommend applying a small amount of grease or engine oil to O-ring, as this will allow intercooler to slide onto throttle body in future steps.**
5. Locate brake booster pipe and intercooler mounting bracket on left side of intake manifold. Remove M8 bolt and re-mount pipe under bracket as shown.



6. Temporarily install the PERRIN Intercooler to the engine and take note of left side where it contacts the intake manifold. This small corner will need to be removed to allow intercooler to sit flat in engine bay.



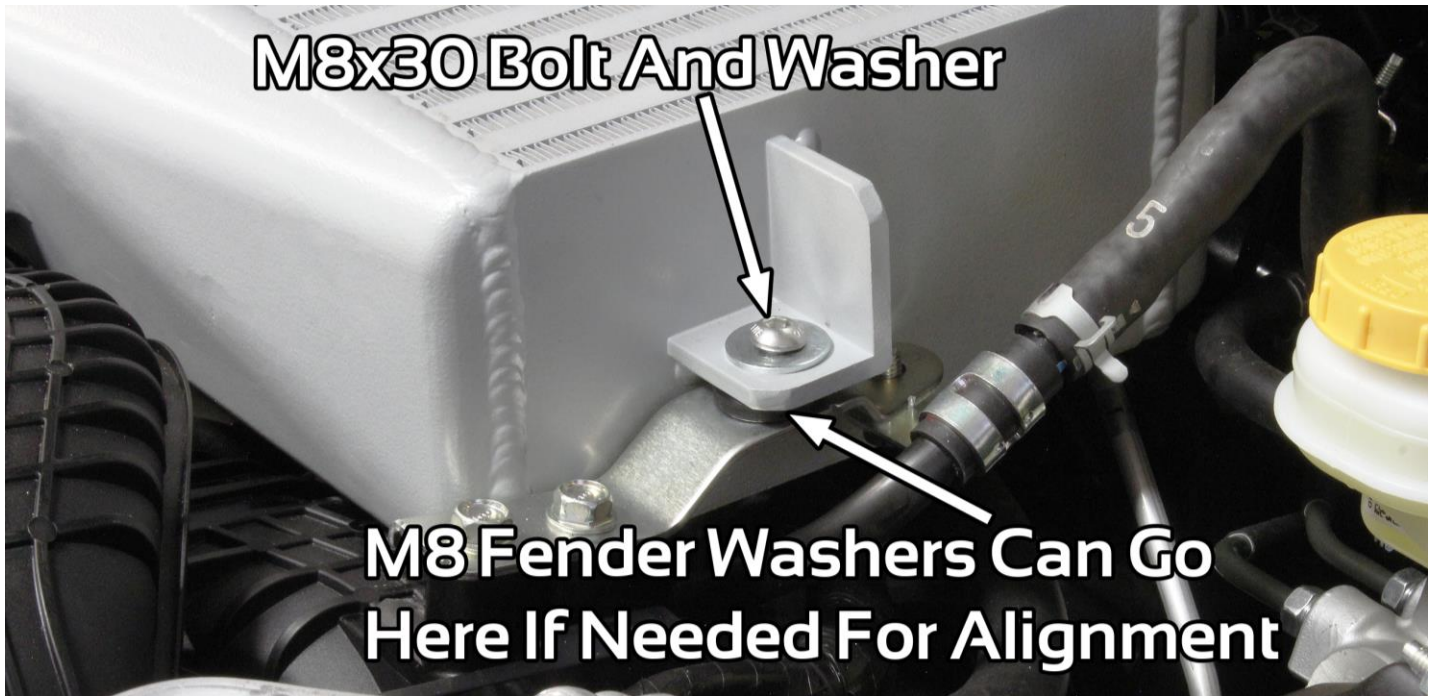
7. Use a Dremel tool or air tool and carefully remove the plastic until you start to break through the first layer of plastic. See the picture above showing what it looks like as you start to break through the first layer. Take great care not to go too far beyond the first layer of plastic as you can cut into the intake manifold. **NOTE: Alternatively, a small sharp chisel and hammer can be used to cut away the plastic.**



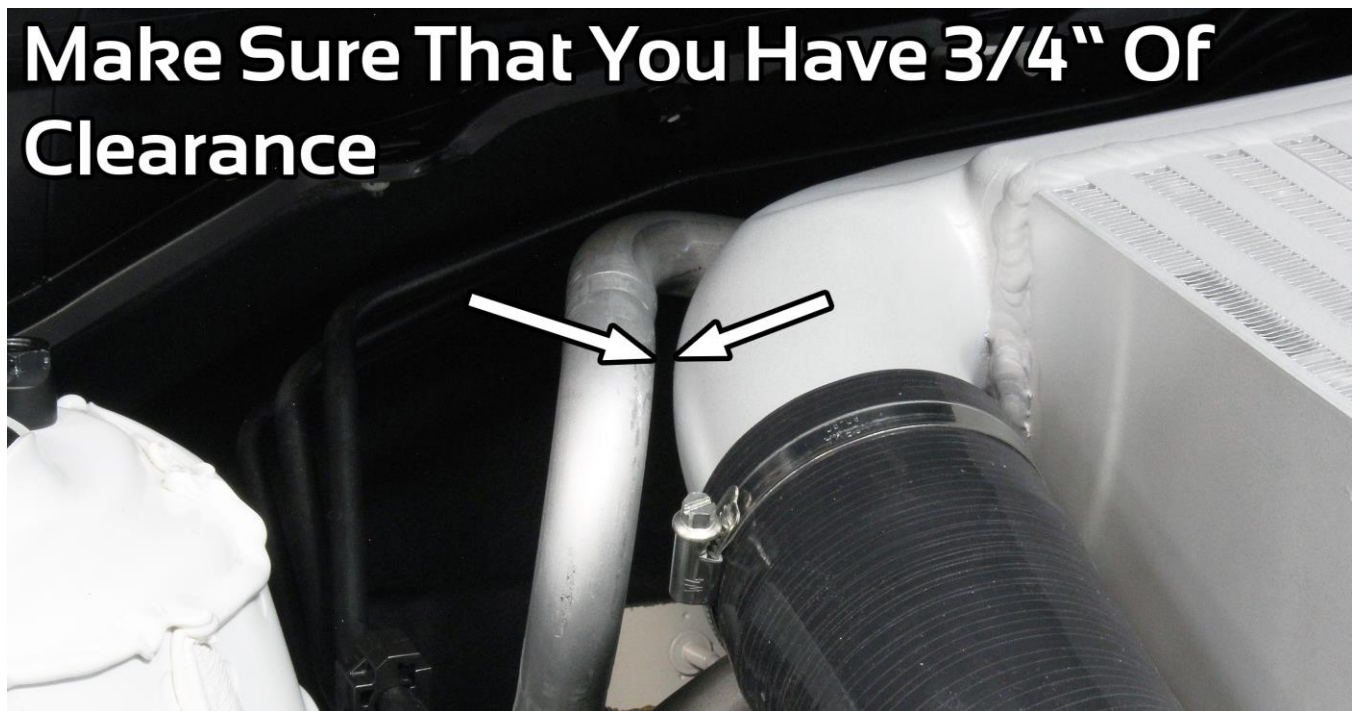
8. Test fit PERRIN Intercooler to engine and verify that you have removed enough material. This may take a few times of installing and removing until enough material is removed.
9. Remove intercooler from engine and install supplied silicone coupler to intercooler onto PERRIN Intercooler at least 3". Slide on (2) supplied hose clamps but leave loose for now.
10. Using (2) supplied M8x16 screws and washers, mount supplied bracket to right side of PERRIN Intercooler. Leave bolts at least 2 turns loose for now.
11. Install PERRIN Intercooler onto engine. Lightly pull up on back of intercooler and install supplied M8x16 bolt and washer into upper throttle body bracket. Then install supplied M8x30 bolt and washer into lower throttle body bracket and hand tighten bolts. **NOTE: These bolts will be tightened later.**



12. Install (2) supplied M8x16 bolts and washer to secure the right side of intercooler to intake manifold but leave loose at this time.
13. Install supplied M8x30 bolt and fender washer to left side of intercooler into OEM intercooler support bracket but leave loose at this time.
14. Hand tighten all (4) M8 bolts securing supplied bracket to right side of intake manifold and intercooler.
15. On left of PERRIN Intercooler, take note of gap between intercooler and OEM intercooler support bracket. Depending on how much plastic was removed and how the throttle body is situated, you may need to use the included M8 fender washers between the PERRIN Intercooler and OEM bracket. If that is the case remove M8x30 bolt, install up to (3) fender washers and hand tighten bolt.



16. Starting at the throttle body, tighten M8 bolts to 12ft-lbs, then tighten all remaining bolts to 12ft-lbs.
17. With intercooler mounted, slide silicone coupler to charge pipe, making sure that the hose is rotated to best clear the intake manifold and other parts. Place supplied hose clamps behind the beads on the intercooler and charge pipe, then tighten clamps.
18. Locate AC pipe as shown below and make sure there is at least 3/4" of clearance between it and the intercooler. If additional clearance is needed, carefully bend pipe away from the intercooler.



19. Locate rubber trim under engine hood and cut each of the (4) corners about 1" long. This allows for rubber to flare out slightly when hood is closed.



20. If strut bar was installed previously, you can now re-install it. **NOTE: The PERRIN Intercooler may or may not clear with the strut bar. Included with the kit are some 3/8" washers that can be used to raise strut bar (even just using 1 washer per side to change the angle of the strut bar). There may also be a way to add room for the strut bar depending on how intercooler was mounted to engine (with the brackets washers and throttle body location). Lastly is the transmission mount that can affect how this fits. If an aftermarket mount is installed, make sure it is specific for the vehicle.**
21. Start car and make sure that car idles smoothly, and no check engine lights appear. If you get a check engine light, double check all plumbing is fully connected, tight, and secure. Clear Check Engine Light. Restart car. If car now idles smoothly and no Check Engine Lights illuminate, proceed to a gentle test drive.
22. If test drive goes properly, simply double check all hose clamps are tight and your installation is complete.

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