

PERRIN

Top Mount Intercooler for 15-21 WRX

2022-03-24

PSP-ITR-325

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.

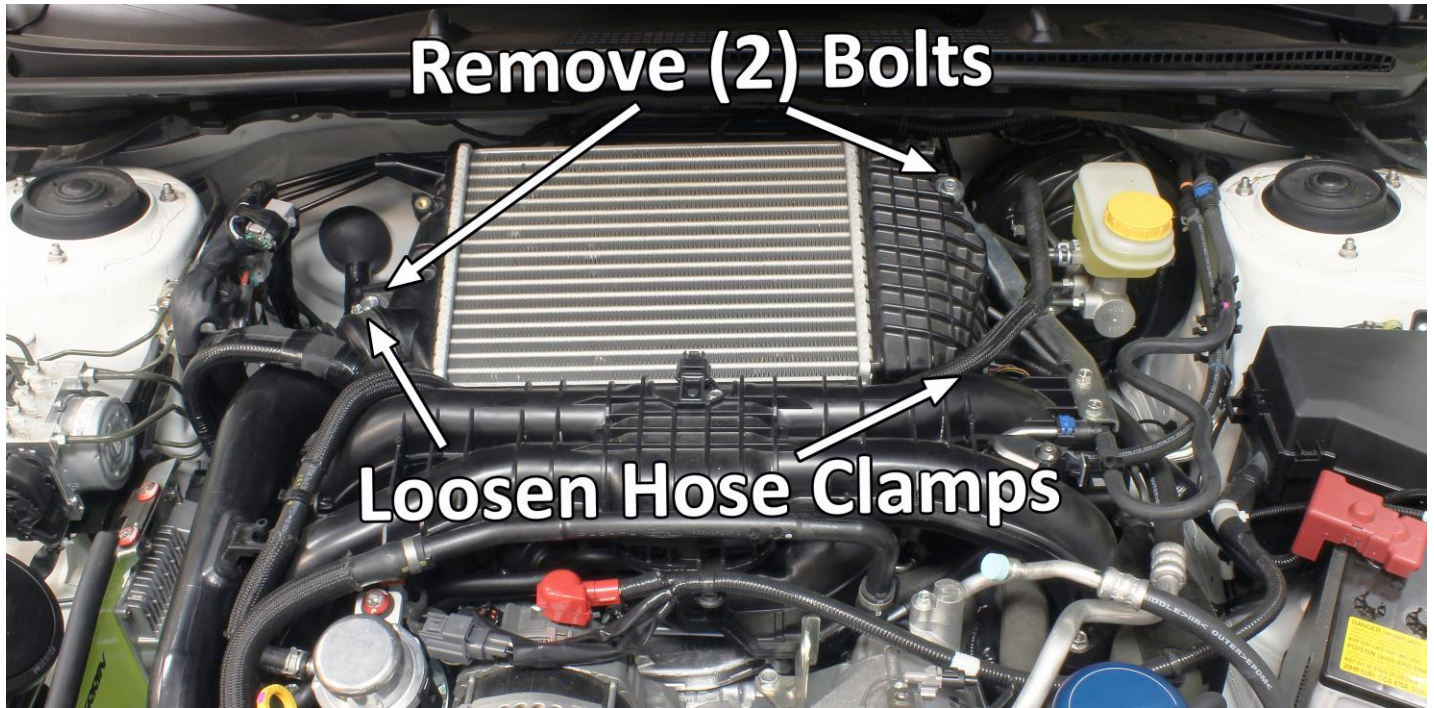
Parts Included With PERRIN Top Mount Intercooler

QTY	Part Description	Part Number
1	Intercooler TMIC for 2015+ WRX Silver	X-PSP-ITR-325SL
1	Coupler for 08-21 WRX TMIC Black	X-PSP-ITR-321BK
1	Stencil for 2015-21 WRX TMIC	X-PSP-ITR-325-5
2	Clamp Size 48 or 60-80mm	X-CLAMP-048
2	Washer For Flat Head M6 Black	X-PSP-ENG-150-3BK
2	Washer for Flat Head M8 Black	X-PSP-ENG-152-3BK
2	M6 x 15mm Flat Head Socket Screw SS	X-BLT-M6X15CSF-SS
2	M8 X 25 Flat Head Socket Screw SS	X-BLT-M8X25CSF-SS

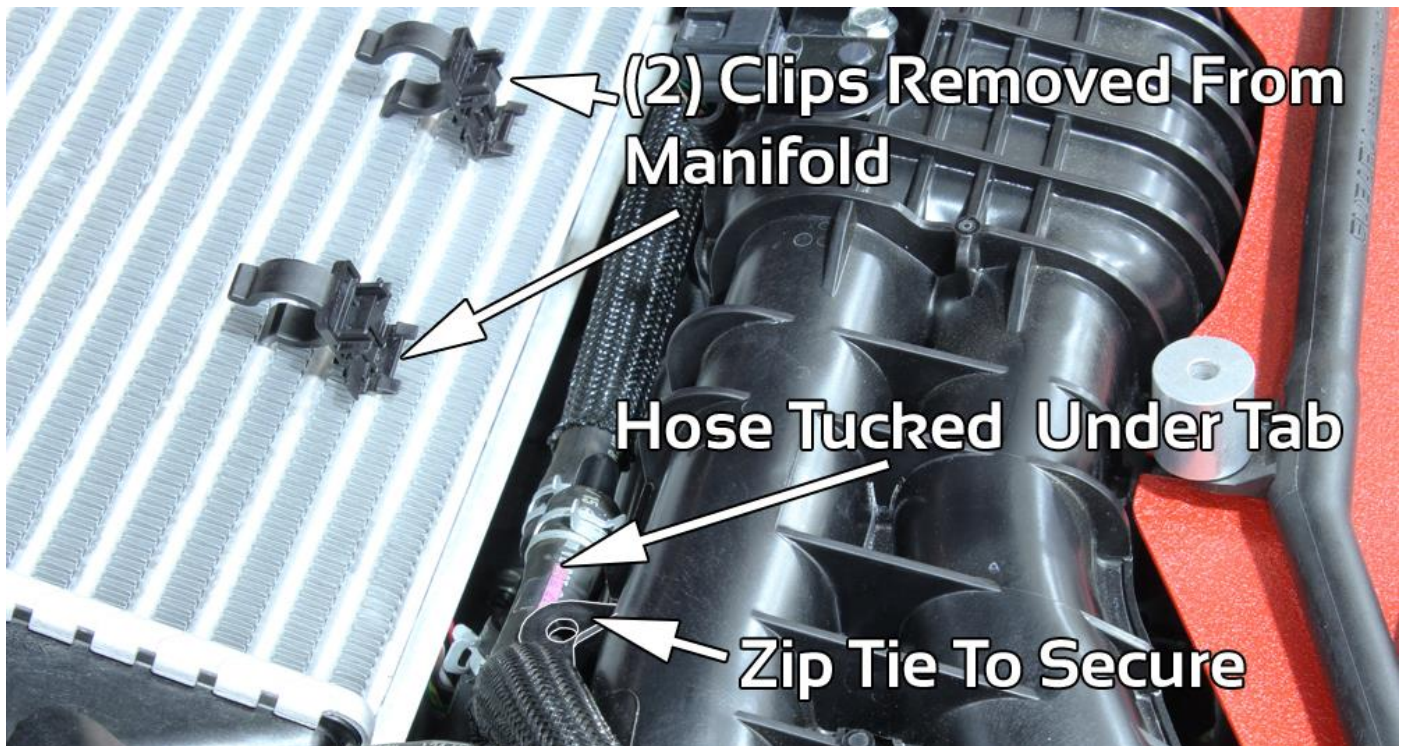


Removal of OEM TMIC

1. If there is strut bar installed, remove at this time.
2. Locate and remove (2) plastic fasteners on the upper section of the engine cover and remove engine cover.
3. Loosen hose clamp holding throttle body coupler to intercooler (left side) and charge pipe to intercooler (right side).



4. Lift up on sides and back of intercooler to free from both the throttle body and charge pipe, then remove intercooler from engine bay. **NOTE: This step can be difficult, make sure that the hose clamps are very loose to ensure they are not holding anything up. Using spray lubricant around connections can aid in removal of intercooler.**
5. With intercooler removed, loosen hose clamp securing OEM plastic throttle body coupler to throttle body. Then remove coupler from engine.
6. Locate and remove small clips (pinched onto manifold) securing hose to back side of intake manifold. This is required to add clearance for larger PERRIN intercooler.

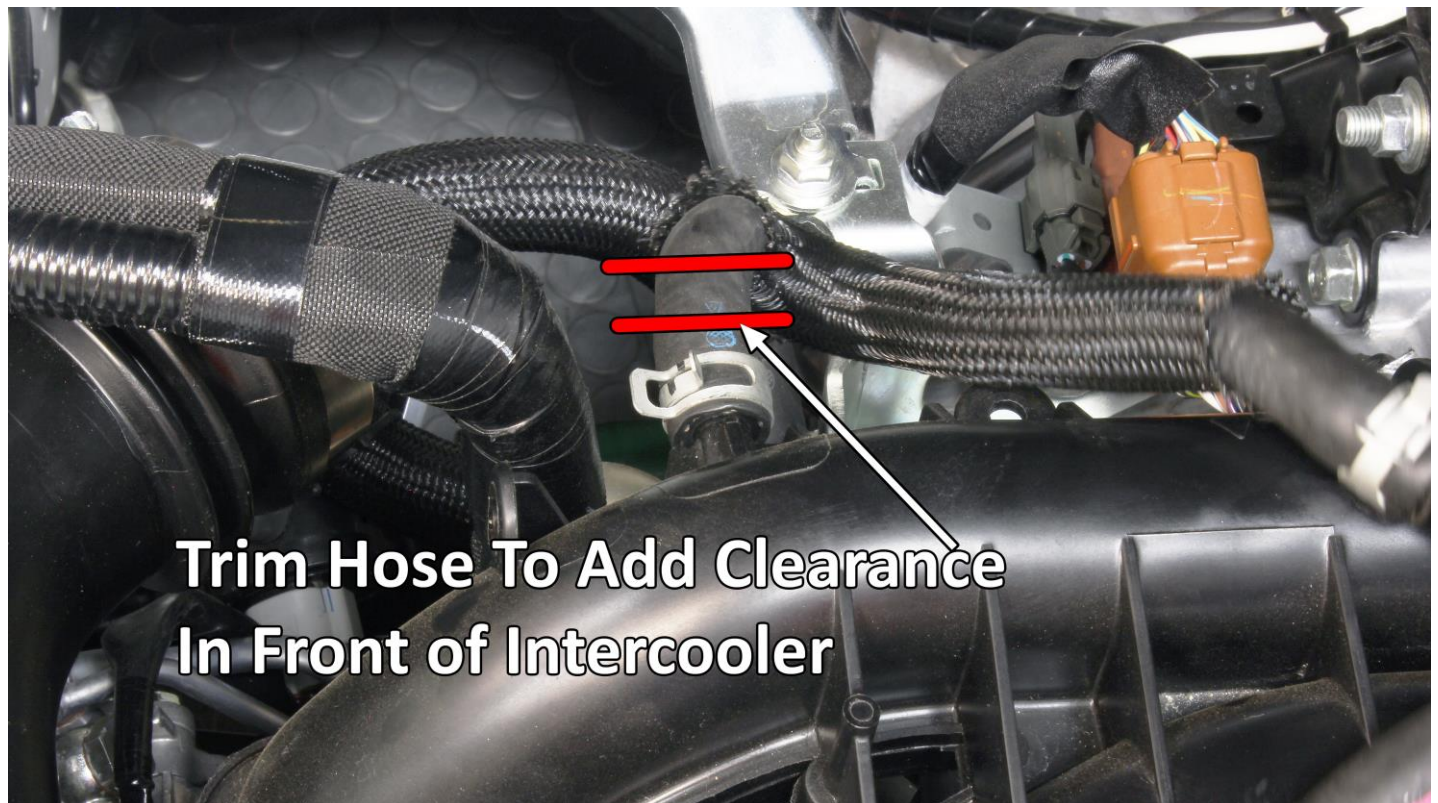


7. Locate (2) 12mm bolts on either side of intercooler and remove. Loosen (2) bolts securing left side intercooler bracket to engine.
8. Loosen M8 Nut securing right side intercooler bracket together with engine mounted bracket. See picture below for reference. This is done to allow some adjustment of intercooler in future steps.

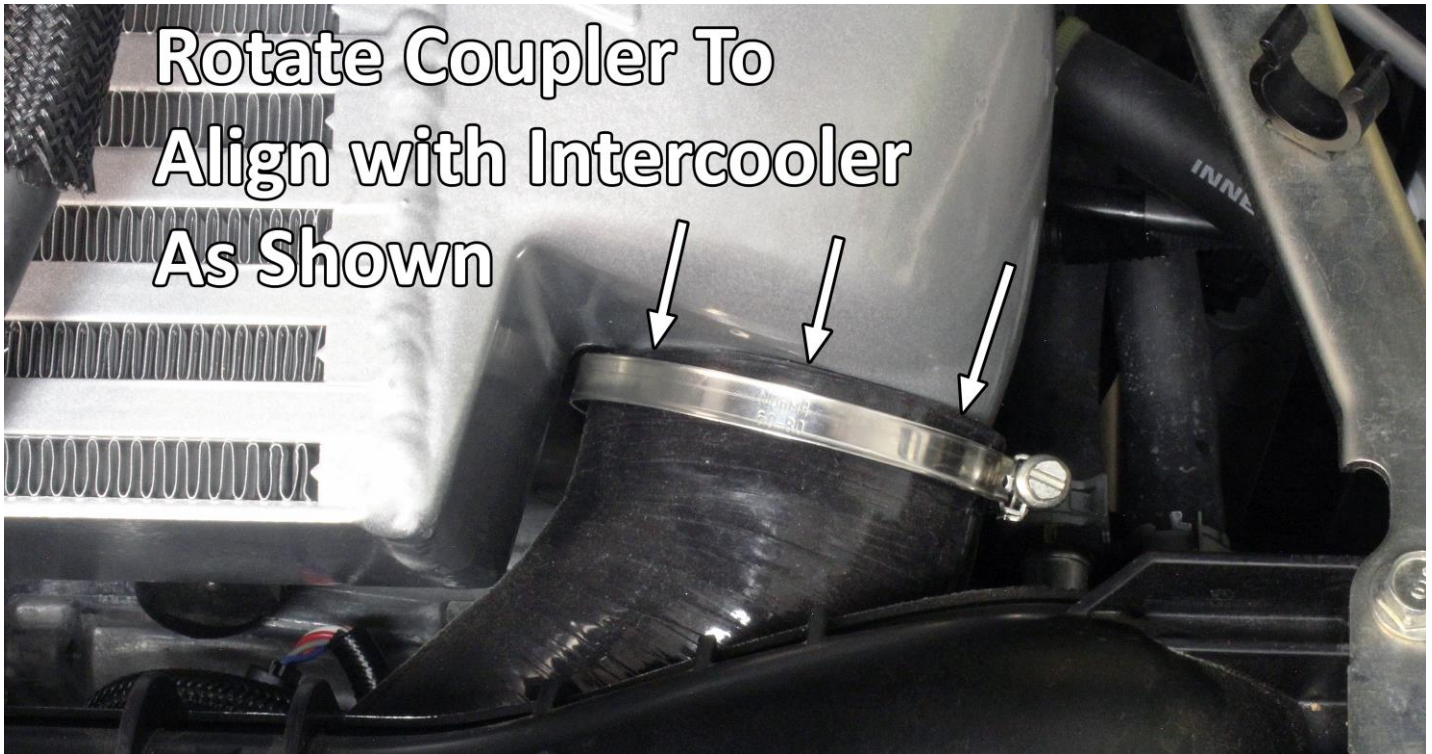


Installation of PERRIN TMIC

1. Install PERRIN coupler to throttle body and install both supplied clamps. Leave both clamps loose until intercooler has been test fit to engine.
2. Locate and remove brake booster vacuum hose on right side of intake manifold and remove roughly 1" from the end and reinstall hose clamp back to hose. **NOTE: Make sure to leave enough of a straight section for the hose clamp to be reinstalled.**
3. Reinstall hose back to intake manifold and secure with OEM hose clamp.

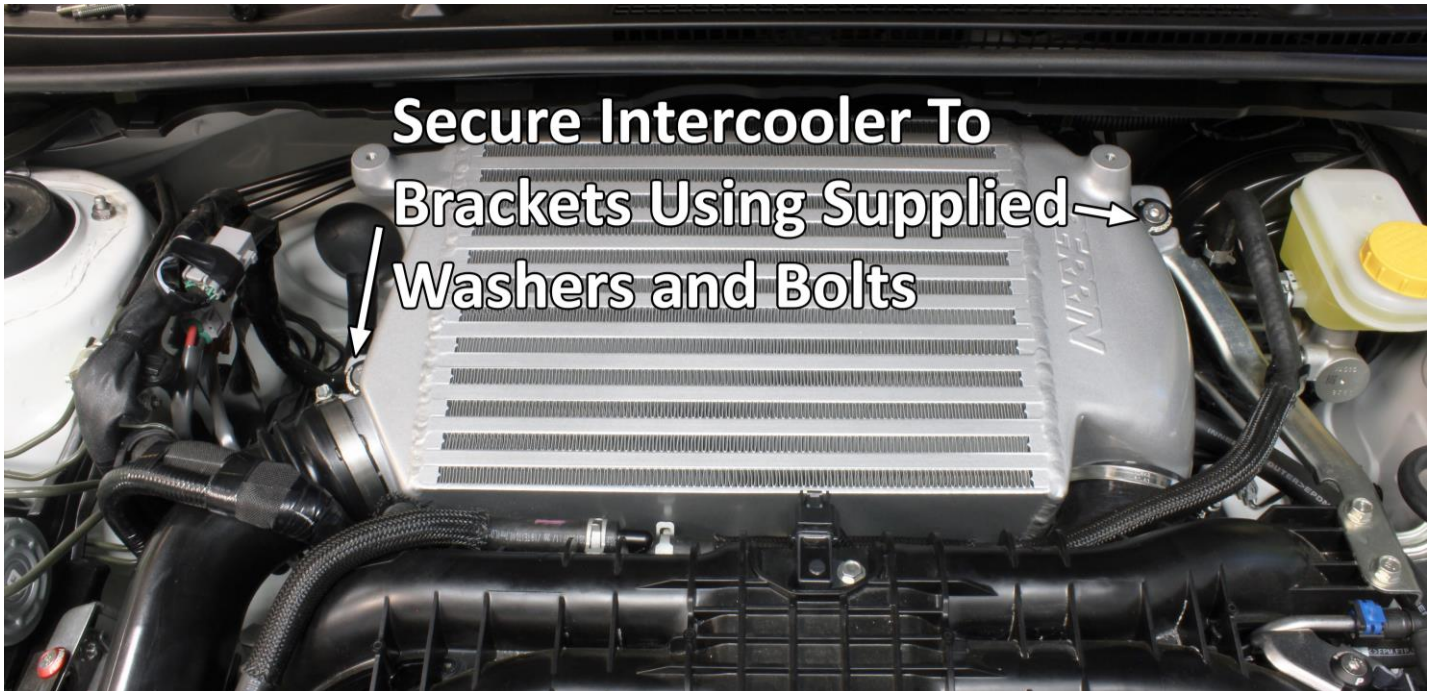


4. Install intercooler to engine temporarily to check fitment of PERRIN Throttle Body Coupler. This coupler will need to be rotated until it lines up with intercooler as shown below. Once aligned, tighten hose clamp on throttle body. If you find no rotation works well, remove intercooler and coupler, then install opposite end of coupler to throttle body.



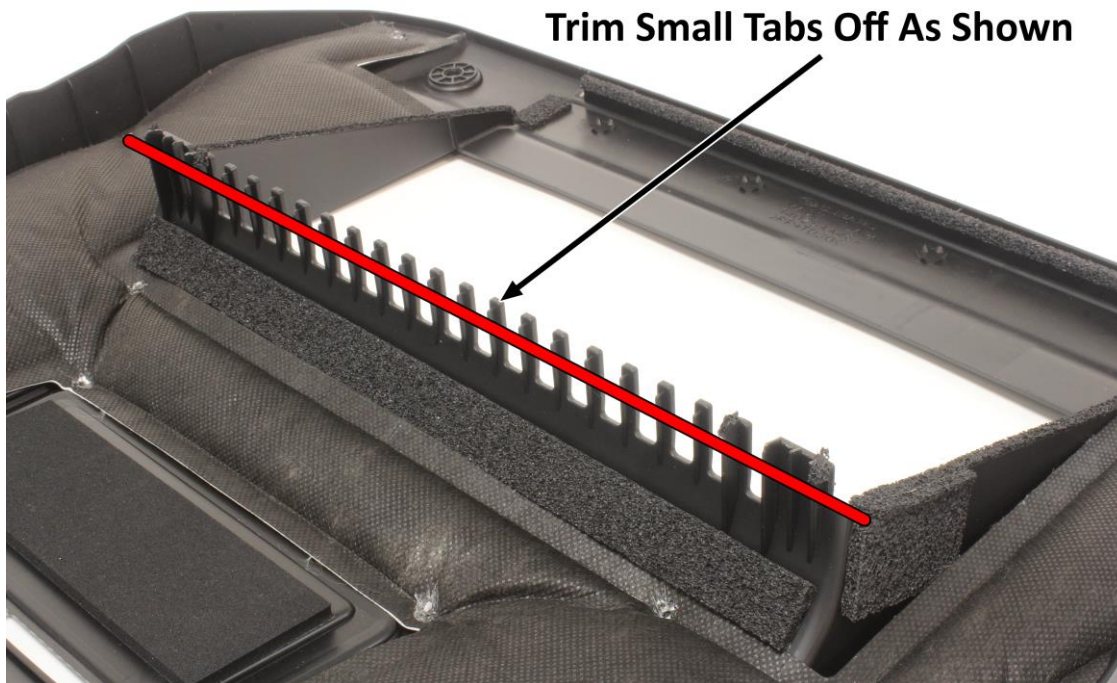
Rotate Coupler To
Align with Intercooler
As Shown

5. With coupler aligned, loosely install supplied M8 Bolts and PERRIN washers to secure intercooler to OEM brackets. Adjust intercooler until it sits squared up to the engine and tighten left side bracket to intake manifold and to PERRIN intercooler. Reach under the right side of intercooler and tighten M8 nut that was loosened previously.
6. With intercooler aligned, tighten remaining hose clamp on throttle body coupler.



Secure Intercooler To
Brackets Using Supplied
Washers and Bolts

7. Reinstall charge pipe to right side of intercooler and secure with hose clamp.
8. Flip over plastic engine cover and locate small tabs as shown in picture below. Using side cutters or sharp utility knife, remove tabs as shown. We suggest using some masking tape to create a straight line to cut against. **NOTE: This step can be skipped if aftermarket engine cover is installed.**



9. Set engine cover onto engine and snap front into rubber mounts.
10. Using supplied M6 bolts and washers, secure rear of engine cover as shown below. **NOTE: If these holes do not line up, some adjusting of intercooler in relationship to the mounts may be required.**



11. If strut bar was installed previously, you can now re-install it.
12. 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.
13. If test drive goes properly, simply double check all hose clamps are tight and your installation is complete.
14. If problems persist again after following Steps 14-15, contact Tech@PERRIN.com.

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