

PERRIN

PERFORMANCE

Engine Mounts for BRZ/FR-S

2013-01-31

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@PERRINperformance.com

Instant Chat off the main page of www.PERRINperformance.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:

- The use of a factory service manual is highly recommended for installation. These can be purchased at <http://techinfo.subaru.com>.
- Expect added NVH during all driving situations especially at Idle. Some NVH can be reduced by raising the stock Idle RPM. Roughly 100-200 RPM more than stock is a good starting point. This must be done using an ECU reflash device.
- A threaded type adjustable jack stand placed under the engine, is required to safely install these mounts. These are generally too tall to use typical car jack stands with, which means this install needs to be done on professional type hoist. Failure to use an adjustable jack stand while lifting engine can result in a vary dangerous situation.
- We highly recommend taking these to a shop to install do to having to raise engine and the potentially unsafe working condition from working in a small area.

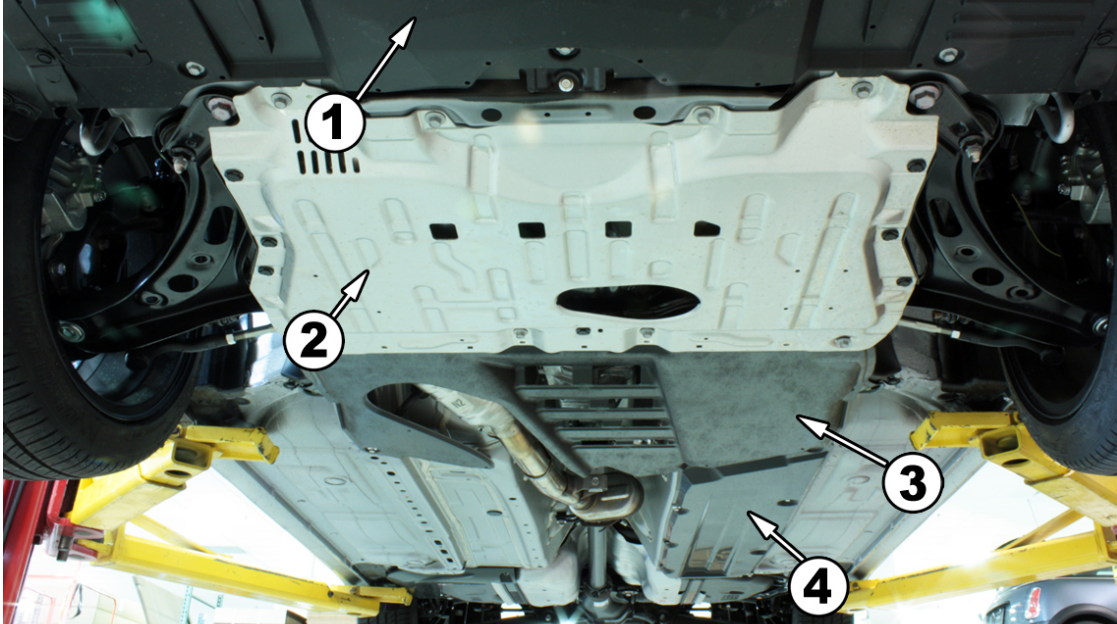
Included Parts with PERRIN Engine Mount Kit:

- (1) PERRIN Left Engine Mount
- (1) PERRIN Right Engine Mount
- (2) Brz/FR-S Spacers
- (2) 7/16" Washers
- (2) 7/16-18x3/4" bolts
- (1) Anti-seize grease packet

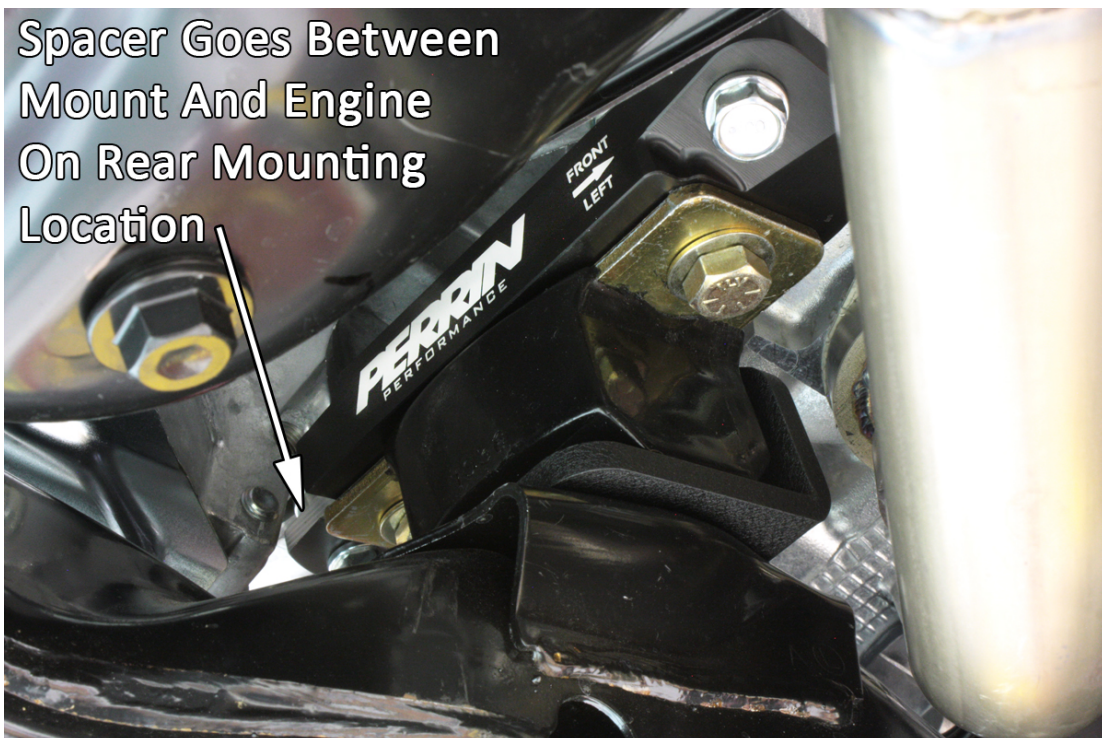


Installation Instructions

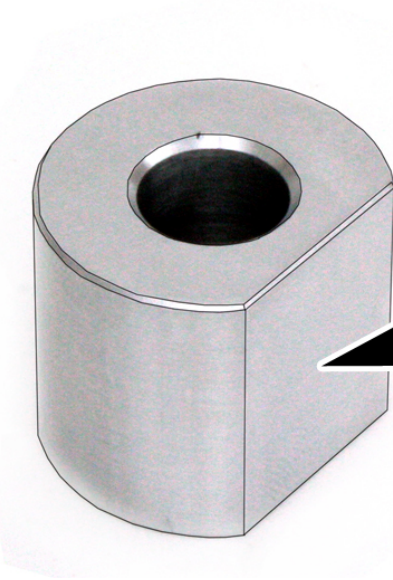
1. Raise front wheels off the ground. The vehicles weight must be supported by jack stands. Death or serious injury could result from an improperly supported vehicle.
2. Unbolt connection where frontpipe and catback exhaust meet. This is done to ensure there is no damage to catback when engine is raised up.
3. If aftermarket transmission mount, or mount insert is installed, unbolt mount from transmission (4) 14mm bolts. **NOTE: If aftermarket mount or insert is installed and engine is raised up, damage to transmission mount can occur.**
4. Using the below diagram, remove lower fiberglass woven shield (#3). Locate and remove (11) 10mm bolts securing it to car.
5. Using the below diagram, remove lower aluminum splashguard (#2). Locate and remove (7) plastic pop-it fasteners, (8) 12mm bolts securing it to car.
6. Locate and remove 14mm nuts on either side of subframe that secure motor mounts to subframe. **NOTE: If aftermarket transmission mount is installed, remove lower connection at tranny crossmember. This is done to ensure no damage occurs to tranny mount while engine is raised up.**



7. Using a jack and a small block of wood, jack up engine from oil pan 2-3". This should be enough room to get motor mounts out from under engine.
8. Locate (4) 14mm bolts securing OEM engine mounts to block. Unscrew rear (2) bolts until they are loose in mount and free from engine. **NOTE: These bolts thread into engine mount as well as block. Only unscrew bolts far enough to free mount from engine block.**
9. Remove front (2) 14mm bolts from mount and remove mounts from car. **NOTE: These can be a little tricky to remove, and additional jacking up of engine may be necessary.**
10. Before installing PERRIN Mounts to engine, test supplied 7/16" bolts through slots in subframe. If bolts are tight fitting, remove some material from the slots using a file or a die grind/dremal type tool.



11. Locate PERRIN Engine Mount marked LEFT and install this to the left side of engine securing front connection using OEM bolt removed earlier. Leave bolt loose for now. **NOTE: Make sure and align mount so the "Front and Arrow" are pointed toward front of car. Tighten bolts to 25.8ft-lbs.**
12. Remove 14mm bolt from rear of OEM mount. **NOTE: Bolt will not drop out of mount, it needs to be unscrewed completely.**
13. Place supplied spacer between PERRIN Motor mount and engine, making sure to line up flat portion with notch in engine. Slide 14mm bolt through PERRIN Mount and supplied spacer and thread into engine.
14. Tighten front and rear motor mount bolts to 25.8 ft-lbs.



Flat Side Faces Transmission

15. Locate PERRIN Engine Mount marked LEFT and install this to the left side of engine securing front connection using OEM bolt removed earlier. Leave bolt loose for now. **NOTE: Make sure and align mount so the "Front and Arrow" are pointed toward front of car. Tighten bolts to 25.8ft-lbs.**
16. Remove 14mm bolt from rear of OEM mount. **NOTE: Bolt will not drop out of mount, it needs to be unscrewed completely.**
17. Place supplied spacer between PERRIN Motor mount and engine, making sure to line up flat portion with the back of the engine (Can only fit one way). Slide 14mm bolt through PERRIN Mount and supplied spacer and thread into engine.
18. Tighten front and rear motor mount bolts to 25.8 ft-lbs.
19. Drop engine down slowly making sure to line up threaded holes in PERRIN Engine mounts with slots in engine cross member. **NOTE: If threaded holes do not line up with slots in subframe, place jack under oil pan and lift up slightly to reduce weight on mounts. Then use a prybar to move engine left to right or front to back.**
20. Install supplied 7/16" bolts w/washers into engine mount making sure to use a small amount of included Anti-seize on the threads. Tighten bolts to 65ft-lbs.
21. Reinstall all the follow items you may have loosened or removed in earlier steps:
 - a. Reinstall aluminum splash guard.
 - b. Reinstall fiber type splash guard
 - c. Reinstall frontpipe to catback exhaust connection.
 - d. Reinstall transmission mount to transmission.
22. Start engine and take car for test drive. Initially you will notice additional noises and or vibrations in the car. This perfectly normal after installation.
23. Periodically inspect mounts to ensure no damage has occurred to them from extreme conditions like drag racing or road racing.

Questions, Comments and Suggestions Contact: Tech@PERRINperformance.com
Visit Our Website for Instant Chat Options at www.PERRINperformance.com
Call Our Tech Team at 503-693-1702