

# Pitch Stop Mount Support for 2015+ WRX/STI

2016-08-01

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 <u>Tech@PERRINperformance.com</u>
Instant Chat off the main page of <u>www.PERRINperformance.com</u>
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:**

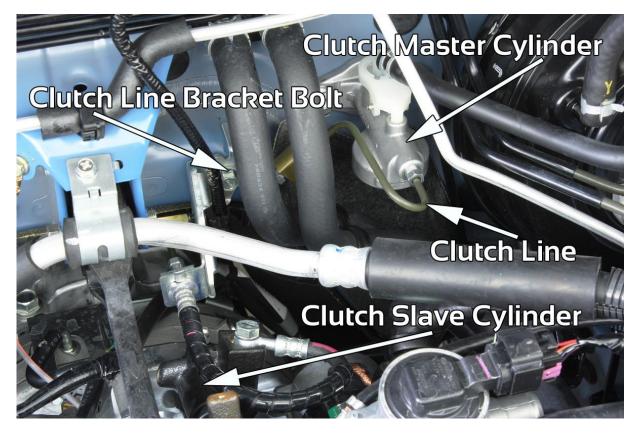
- If your OEM bracket has a small crack in it or has completely failed, consult tech support with pictures to be able to determine if this part is appropriate to install. During each step of the installation, inspect pitch stop mount bracket for cracks or failures. Finding an issue as soon as possible may determine if installation should be completed.
- Be prepared to bleed clutch hydraulic system during installation. This will require proper brake fluid as well as proper tools used for bleeding clutch or brake systems.

#### **Included Parts with PERRIN Pitch Stop Brace:**

- (1) PERRIN Left Side Brace
- (1) PERRIN Right Side Brace
- (1) Clutch Line
- (1) Rivet Nut Tool
- (2) M6 Rivet Nuts
- (2) M6x16 Socket Cap Screw SS
- (1) M6x20 Hex Bolt Grade 10.9
- (3) M6 Fender Washers
- (1) M8x20 Socket Cap Screw
- (1) M8 Washer
- (1) M10 Nut
- (1) M10x90 Hex Bolt
- (2) M10 Washers
- (4) 8" Zip Ties

#### **Installation Instructions**

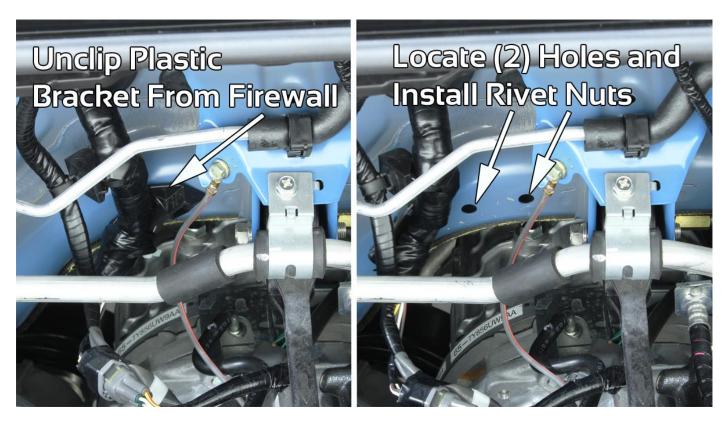
- 1. Remove intercooler from car. This step will vary slightly depending on car and aftermarket parts installed.
  - a. 2015+WRX models need to remove plastic engine cover, (2) hose clamps, and (2) M8 bolts securing intercooler to brackets.
  - b. 2015+ STI models need to remove (2) hose clamps, (2) M8 Bolts and unplug crank case vent hoses.
- 2. Locate and remove wire harness from clutch line bracket. Remove 12mm bolt securing clutch line bracket to firewall.



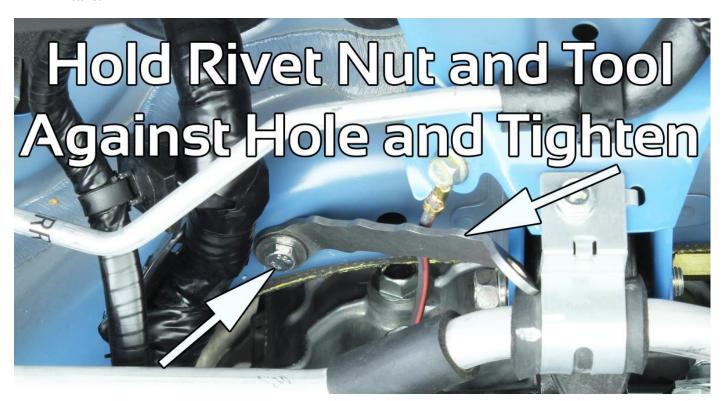
- 3. Remove clutch line from clutch master cylinder (10mm flare nut wrench needed for this) and from clutch slave cylinder (14mm wrench needed for this). Remove clutch line from car. NOTE: As soon as either connection is loosened, hydraulic fluid will start to drip out. Be prepared to catch this with paper towels. Also using some pinch plyers on the rubber hose going to the master cylinder will reduce the amount of fluid coming out.
- 4. Do these steps as quick as possible to reduce the amount of fluid lost. Install adapter to master cylinder as shown and tighten fitting. Install 90 degree bent end of clutch hose to adapter, route in similar direction as shown and snug down. Using OEM washers and OEM banjo bolt, secure banjo fitting end to slave cylinder and snug down.

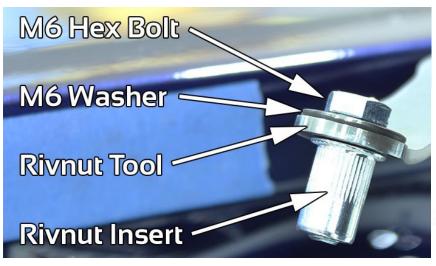


- 5. Loosen fittings and make adjustments so hose routes as shown in picture. Tighten all fittings down and secure with supplied zip ties.
- 6. Using proper vacuum assist hydraulic system bleeder, bleed clutch using fitting on slave cylinder. Note: If you do not have a vacuum bleeder, you can bleed the system using clear tubing and a friend. Directions for this can be found online. Just make sure this is done very thorough and make sure the brake fluid never runs out during this step.

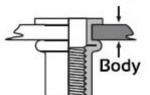


7. Remove plastic wire harness from right side fire wall and locate exposed two holes. These holes are where M6 rivet nuts will be installed.





### Rivet Nut Shown Compressed



## Visual Representation Of When Tool Stops During Installation

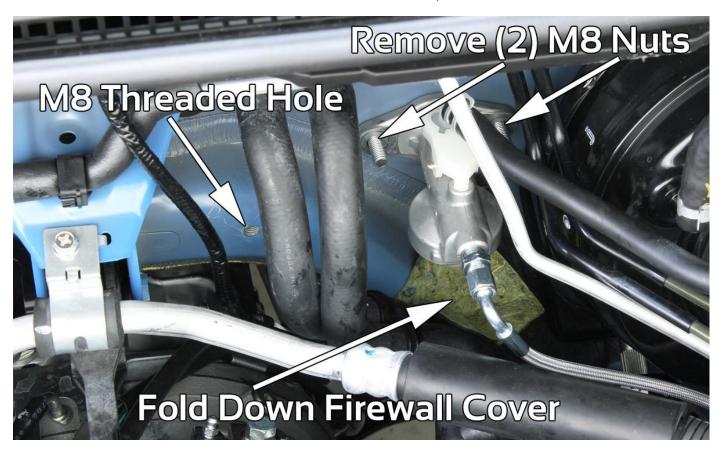
- 8. Using rivet nut tool, rivet nut, supplied M6 bolt and M6 washers install two rivet nuts into holes.
  - a. While holding tool and rivet nut tightly against firewall, slowly tighten M6 bolt. **NOTE: You will feel some force on the wrench for the first couple of turns, then it will get much easier.**
  - b. Continue to tighten M6 bolt (while holding the tool steady) until the turning force becomes much harder, and/or stops. **NOTE: During this stage, the rivet nut is compressing and biting into the firewall from the inside.**
  - c. Once the bolt/rivet nut have hit this stopping point, remove screw, washer, and tool and check that flange of rivet nut is sitting flush with firewall as shown below.



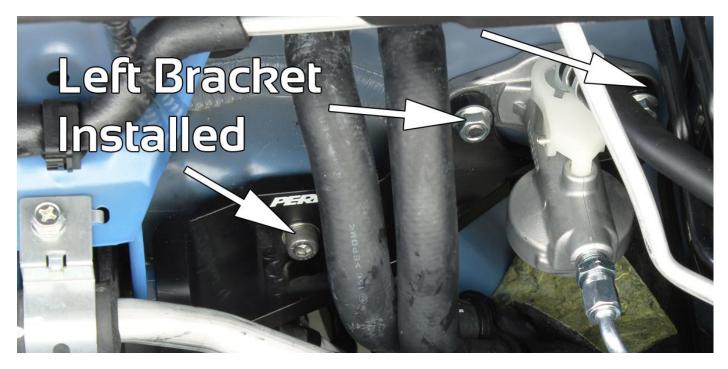
- 9. Remove OEM M10 bolt securing pitch stop mount to chassis.
- 10. With bolt removed, take time and inspect pitch stop mount bracket for crack and/or broken stop welds. If anything is found, stop and call PERRIN Tech Support at 503-693-1702 and be prepared to send pictures to <a href="tech@perrinperformance.com">tech@perrinperformance.com</a>. If nothing is found, continue installation.
- 11. Install PERRIN Right Side Bracket using supplied M6 bolts and washers, and hand tighten. These will be fully tightened in final steps.



- 12. Remove (2) M8 nuts securing clutch master cylinder to fire wall. NOTE: Do NOT push on the clutch until nuts are reinstalled!!
- 13. Fold down fibrous fire wall cover as shown to allow PERRIN Left Brace to fit up to firewall.



- 14. Install PERRIN Left Brace over (2) M8 studs on clutch master cylinder, and leave loose for now.
- 15. Install supplied M8 bolt and washer to middle slot on PERRIN Left Brace, and hand tighten. These will be fully tighten in final steps.



- 16. Install supplied M10 bolt with washer through PERRIN Right Brace, chassis, and pitch stop mount. Start threading bolt into chassis and through PERRIN Left Brace. Tighten bolt to 43ft-lbs.
- 17. Install supplied M10 washer and M10 nut onto M10 bolt where it sticks out of PERRIN Left Brace. Tighten nut to 43ft-lbs.



- 18. Tighten M8 bolt and (2) nuts on left bracket to 15-18ft-lbs. Fold back fire wall cover (or cut off section folded down).
- 19. Tighten M6 bolts on right bracket to 8-10ft-lbs.
- 20. Reinstall intercooler to car.
- 21. Take car for test drive. If any rattles or clunks are found, check tightness on all hardware.

Questions, Comments, and Suggestions Contact: <a href="Tech@PERRINperformance.com">Tech@PERRINperformance.com</a>
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Call Our Tech Team at 503-693-1702