

PERRIN

PERFORMANCE

08+WRX Master Cylinder Brace

2013-10-17

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. These can be purchased or downloaded online at <http://techinfo.subaru.com>.

Parts Included with the PERRIN Master Cylinder Brace:

- **(1) 08+ PERRIN Master Cylinder Support Bracket**
- **(1) 08+ PERRIN Master Cylinder Support Brace**
- **(1) Fuel Line Bracket for Hoses**
- **(1) M4 Allen Wrench**
- **(1) M6 Allen Wrench**
- **(1) M6x25 Stud**
- **(2) M6 SS nut**
- **(4) M6 SS washers**
- **(6) M6 Fender washer**
- **(3) M6x10 SS Button Head Socket ap Screw**
- **(5) M6x14 SS Button Head Socket Cap Screw**
- **(1) M8x20 SS Socket Cap Screw**
- **(1) M8 Fender Washer**
- **(2) M8 Flat Washer**
- **(1) M8 Nut**
- **(1) M12x30 SS set screw**
- **(1) M12 SS jam nut**
- **(4) 8" Zipties**

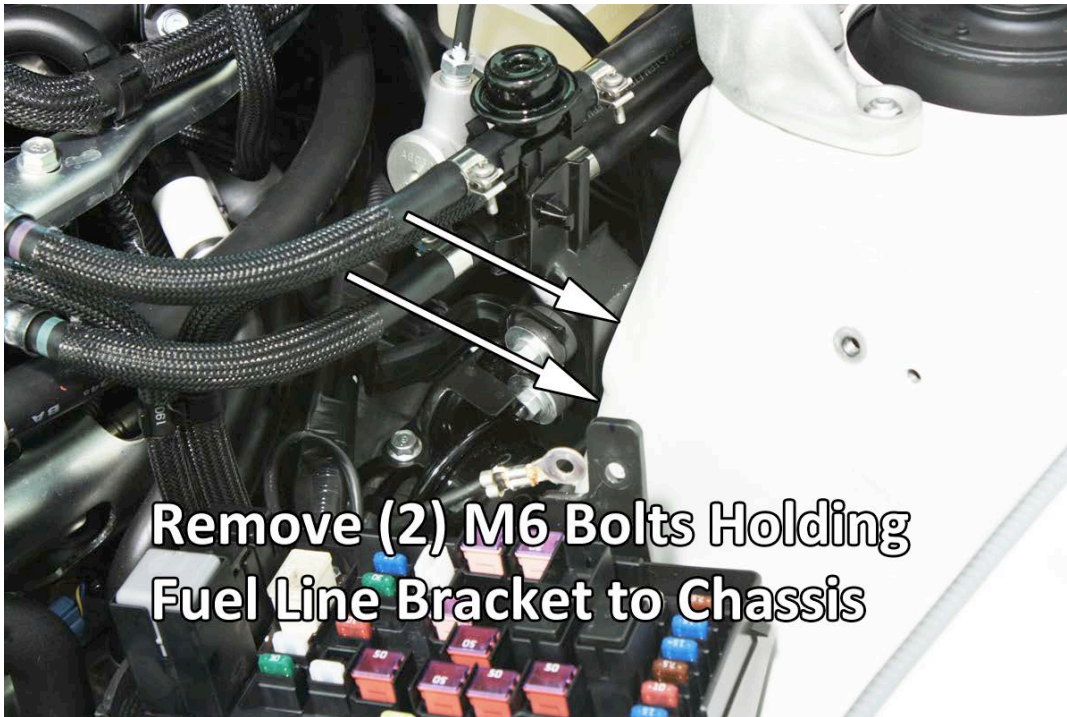
Installation of PERRIN Master Cylinder Brace

1. Disconnect battery and remove from car. This requires a 10mm wrench to remove both terminals as well as battery hold-down bracket.
2. Remove fuse box cover and locate and remove (3) M6 bolts securing fuse box to chassis, and (2) chassis ground bolts.



**Remove Fuse Cover
and (5) M6 Bolts**

3. Pull fuse box forward in car roughly 5" to expose shock tower, fuel lines, EVAP dampener (If equiped), and fuel line bracket.
4. Unclip fuel lines from fuel line bracket. Using (2) supplied zip ties, bundle fuel lines and tie them out of the way toward intercooler bracket as shown below.
5. Remove Fuel Line Support Bracket from shock tower:
 - a. Locate black plastic fuel line holder, and remove from fuel line bracket (this plastic holder holds all three lines together). **NOTE: This will be resued in later steps, do not discard.**
 - b. Locate large power wire attached to fuel line bracket and slide off after releasing tab. **NOTE: This will not be re-attached in later steps.**
 - c. Remove (2) M6 bolts securing fuel line bracket to chassis and remove entire bracket from car. If car is equipped with an EVAP Dampener (Large round black part with two hoses coming out of it), disconnect (2) hoses as fuel line bracket is removed. Take note of these two hoses as these will be reinstalled later, and take note they are different sizes. **NOTE: Alternativly you can remove the EVAP dampener first then the fuel line bracket.**



**Remove (2) M6 Bolts Holding
Fuel Line Bracket to Chassis**

- d. If equiped with EVAP dampener, remove (2) M6 bolts to free EVAP dampener from fuel line bracket.
- e. Install EVAP dampener to PERRIN bracket as shown below. Use (2) supplied M6x14 button head screws and (2) M6 Fender washers to secure to bracket. Tighten bolts to roughly 5ft-lbs.

Fuel Line Bracket and EVAP Dampener Removed



- Using the picture below, locate M6 threaded holes and hole where M8 bolt will pass through shock tower.
- Using high quality jack or vehicle lift, raise vehicle off the ground on drivers side of car and support with high quality jack stands. **NOTE: This step is done to expose the hole where M8 bolt will pass through from engine bay to wheel well area. Alternativly you can turn the steering wheel and use an extension with a universal joint to get to this exposed area.**



- Using (2) supplied M6x14mm button head screws and (2) M6 fender washers (large diameter), install PERRIN Support brace (thin steel powdercoated part) to threaded holes in shock tower showing in middle of above picture. At this time leave bolts slightly loose.
- Using (1) supplied M6x14mm button head screw and fender washer, secure PERRIN support brace and ground cable to front of shock tower as shown below. **NOTE: Only thread into left hole as shown, and put ground cable under fender washer, making sure to leave bolt slightly loose.**

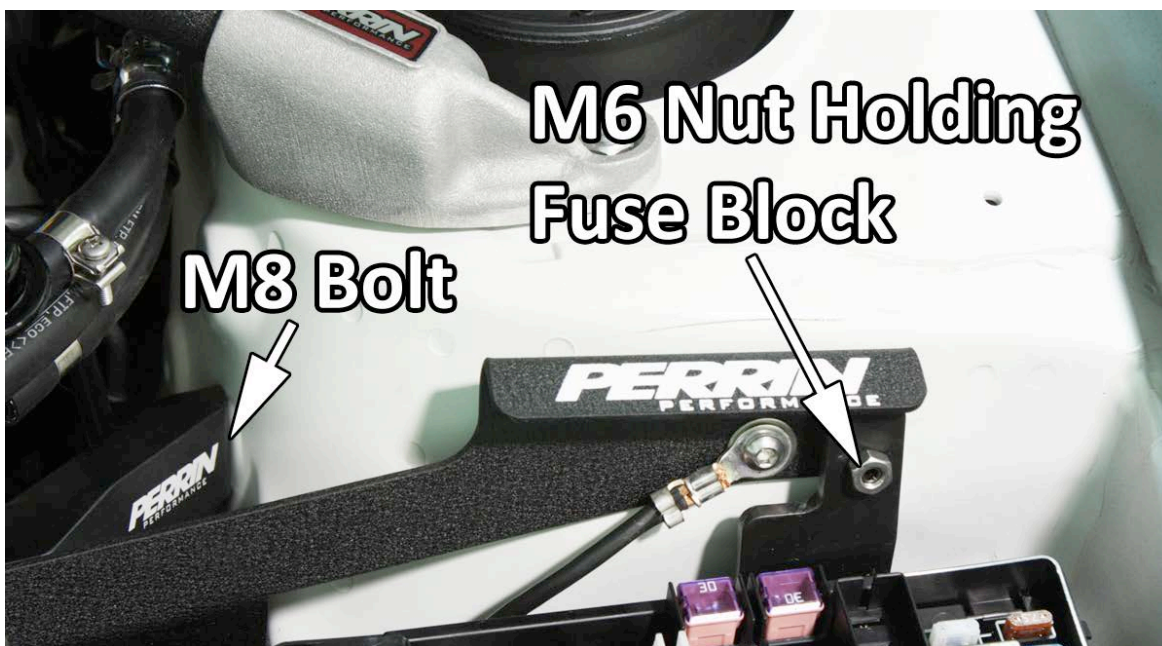
10. Install supplied M6 stud into remaining hole (roughly 4 turns) as shown below.



11. Install PERRIN Master Cylinder support bracket (black aluminum part) to PERRIN Master Cylinder brace using (2) supplied M6x10 button head screws and (2) M6 flat washers. Leave bolts slightly loose for now.



12. Inside engine bay, install M8 socket cap screw and SS washer through PERRIN bracket and through shock tower. Inside of wheel well, install supplied M8 fender washer (large diameter), M8 flat washer then M8 nut onto bolt where it passes through shock tower to wheel well. Thread nut down to hand tight for now. **NOTE: Using a long extension and universal joint can aid in tightening nut in wheel well.**



13. Go through and snug all bolts starting with M6 bolts holding brace to bracket, then M8 bolt going through wheel well, then brace to side of shock tower, then brace to front of shock tower. Go back and torque all M6 bolts to 10ft-lbs and M8 bolt/nut to 20ft-lbs, making sure to follow the same order as before.
14. Install fuse box back to chassis starting by placing upper right tab on M6 set screw coming out of front of shock tower. Use supplied M6 nut and washer to secure as shown in above picture. Reinstall M6 bolts removed earlier into (3) other locations to secure . See first picture to see all locations. **NOTE: Make sure and attach ground to metal tab on chassis.**
15. If car was equipped with EVAP dampener, connect hoses removed from it earlier. **NOTE: Its best to route hose coming from fire wall behind PERRIN Master Cylinder Support, then down toward EVAP dampener.**
16. Cut zip tie holding back fuel lines.
17. Rotate fuel dampeners 180 degrees (small round black things) and clip lines into black plastic fuel line holder that was removed in earlier step.
18. Install supplied Fuel Line holder Bracket to brace as shown in below picture. Use supplied M6x10 screw and washer to secure.
19. Snap fuel lines and black plastic holder into supplied bracket. Adjust bracket until lines are free of vibration and tighten M6 nut.



20. Using supplied M6 wrench, thread supplied M12 set screw into front of PERRIN support until roughly 3 threads are showing on the other side.
21. Install supplied M12 lock nut onto set screw between master cylinder and PERRIN support.
22. Using a 19mm wrench to hold lock nut, thread M12 set screw up to end of master cylinder.
23. Preload PERRIN Master Cylinder Brace roughly 1 to 1 ½ full turn on set screw, then lock down M12 lock nut to body of PERRIN brace. **NOTE: Do not tighten lock nut to master cylinder body as this will not lock it down at all!**
24. Press on brake pedal rather hard a few times to ensure there are no popping noises. If noises occur double check all bolts being tight.
25. Lower car from jack stands.
26. Reinstall battery to chassis and battery hold down brackets to top of battery. Tighten battery hold down nuts to hand tight or until battery no longer can move around. **NOTE: Short "J" rod goes behind battery and longer "J" rod goes in front. Both rods hook to sepecific holes in chassis, which can be a little tricky to get to.**
27. Reattach battery terminals starting with the Positive(Red or +) side then ground connection (Black or -).
28. Installation complete

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