

## **Shifter Bushing For Rear Shift Rod**

071811

Thank you for purchasing the PERRIN Rear Shift Bushing for you WRX/ STI. Only persons experienced in the installation and proper operation of drive train systems should perform installation of these parts. Please read through all the instructions before performing the installation.

## **SPECIAL NOTES:**

- · The use of a factory service manual is highly recommended. These can be downloaded online at http://techinfo.subaru.com
- A slight increase in vibration may be felt in shifter after installation, which in turn will give you much crisper shifting.
- Make sure and put a good amount of grease on rod and ID of bushing before installation.

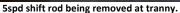
## Parts Included with the PERRIN Rear Shift Rod Bushing:

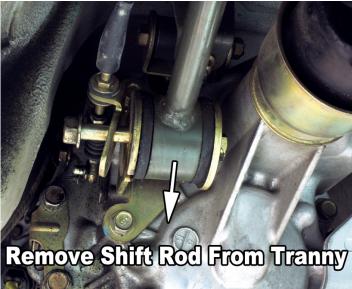
- (1) Rear Shifter Bushing w/sleeves
- (2) M8x40 Hex Bolts
- (2) M8 Fender Washers
- (1) Grease Packet

## **Rear Shift Rod Bushing Instructions:**

- 1) Raise vehicle onto jack stands or use commercial vehicle hoist. NOTE: NEVER WORK ON A VEHICLE SOLELY SUPPORTED BY A JACK!
- 2) Locate Lower Shifter linkage on back of transmission. This linkage attaches to tranny (where shifter bushings go) and to chassis (where Rear shift rod Bushing goes).
- 3) For 5spd customers:
  - Support transmission, using jack. Remove bolts securing transmission braces to chassis. Use both 17mm, and 14mm sockets to remove bolts
    on outside of braces. Remove (2) 14mm nuts securing brace to tranny mount and remove brace from car. You do not need to completely
    remove this piece but its makes for easier installation.
  - Lower transmission down roughly 3" to expose lower shifter bushing.
  - Remove 12mm nut and flat washer from bushing bracket. Slide lower shift linkage and bushing off of bracket.
  - Raise tranny back up into car temporarily. Skip to Step 5.
- 4) For 6spd customers:
  - Option to make install easier: Support transmission, using jack. Remove bolts securing transmission braces to chassis. Use both 17mm, and 14mm sockets to remove bolts on outside of braces. Remove (2) 14mm nuts securing brace to tranny mount and remove brace from car. Leave tranny up at this time.
  - Loosen 14mm bolt until roughly .500" of bolt is exposed. Slide lower linkage out of bushing bracket.

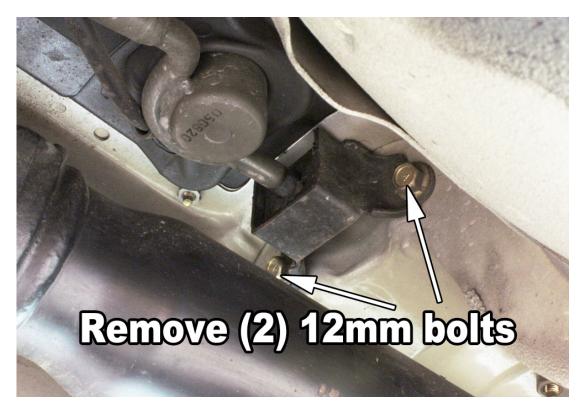






6spd shifter rod being removed from rear tranny bracket.

- 5) Once shift rod assembly is removed from transmission, spray a small amount of lube on the rear part of shift rod where it passes through rear buhsing mount. This will add in removing shift rod from rubber OEM bushing.
- 6) Remove (2) 12mm bolts securing OEM rear Shifter bushing to chassis and pull bushing from shift rod. NOTE: This step can be tricky, but pulling shift rod toward front of car and pushing it down should provide enough room. Take care not to pull shift rod from chassis boot as this requires taking apart inside of car to reinstall boot.



- 7) Clean off rear part of rod and apply supplied grease to end of rod. Apply grease to inside of PERRIN Rear Shift Bushing. Slide PERRIN Rear Shift Bushing onto rod, making sure PERRIN Logo is facing down toward ground. **NOTE: This is a tight fit, some twisting and pulling will be needed.**
- 8) Using supplied M8 bolts and fender washers, secure PERRIN Rear Shift Bushing Mount to chassis and tighten bolts to roughly 15ft-lbs.
- 9) Reinstall lower shifter linkage back onto tranny, and retighten nut or bolt. During this step, raising or lowering the tranny can be helpful to get shifter rod to align to tranny mount. 6spd customers tighten bolt to 15ft-lbs, 5sp Customers tighten nut to 13ft-lbs. NOTE: If you have a 6spd and PERRIN Shifter bushings, because there is no center sleeve to bushing you can tighten bushing beyond 15ft-lbs to make bushing even stiffer. This can create an even more solid feel to shifting.
- 10) Reinstall lower tranny brace and raise tranny with tranny supports back to chassis, and tighten bolts. 17mm bolts, tighten to 103ft-lbs and 14mm bolts, tighten to 51ft-lbs.
- 11) Double check tightness of all hardware and connections, and double check for smooth shifter action.
- 12) Lower vehicle from jack stands, and proceed to test drive car.

For questions & comments please contact <u>TECH@PERRINPERFORMANCE.COM</u>

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