

PERRIN

Shifter Detent Upgrade for 2004-2021 STI

2024-11-19

PSP-INR-042

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



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

SPECIAL NOTES:

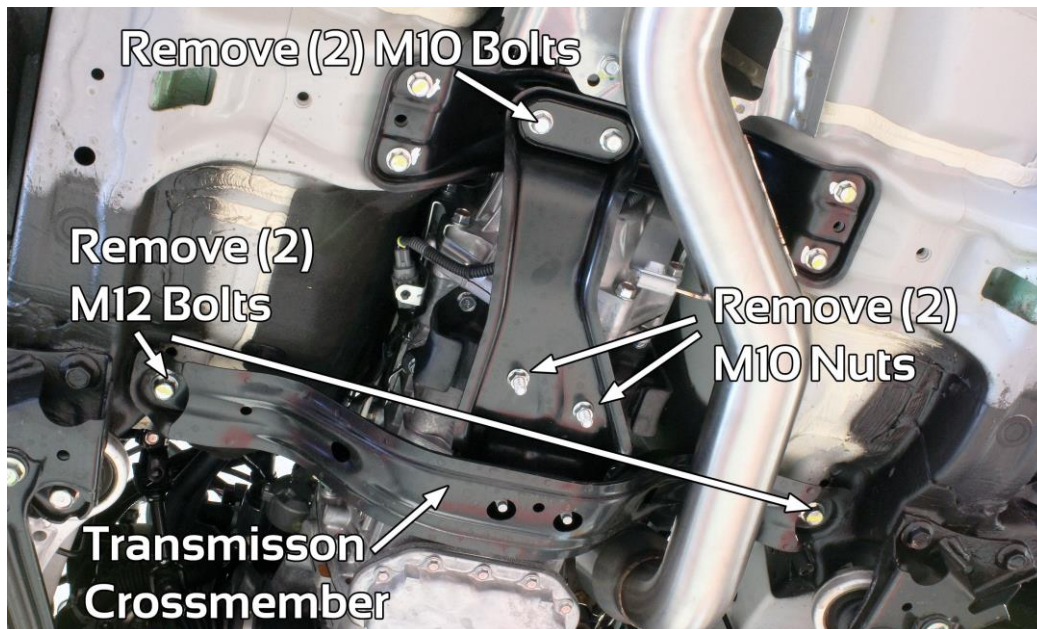
- It will be normal to have some additional force required to shift the transmission, but it is not normal to not be able to select the gears. If you are not able to shift into each gear, remove the parts and return it to stock then contact the tech department.

Parts Included with the PERRIN Detent Upgrade:

QTY	Part #	Description
5	X-PSP-INR-040-1RD	Detent Bolt Large M14 Size Red

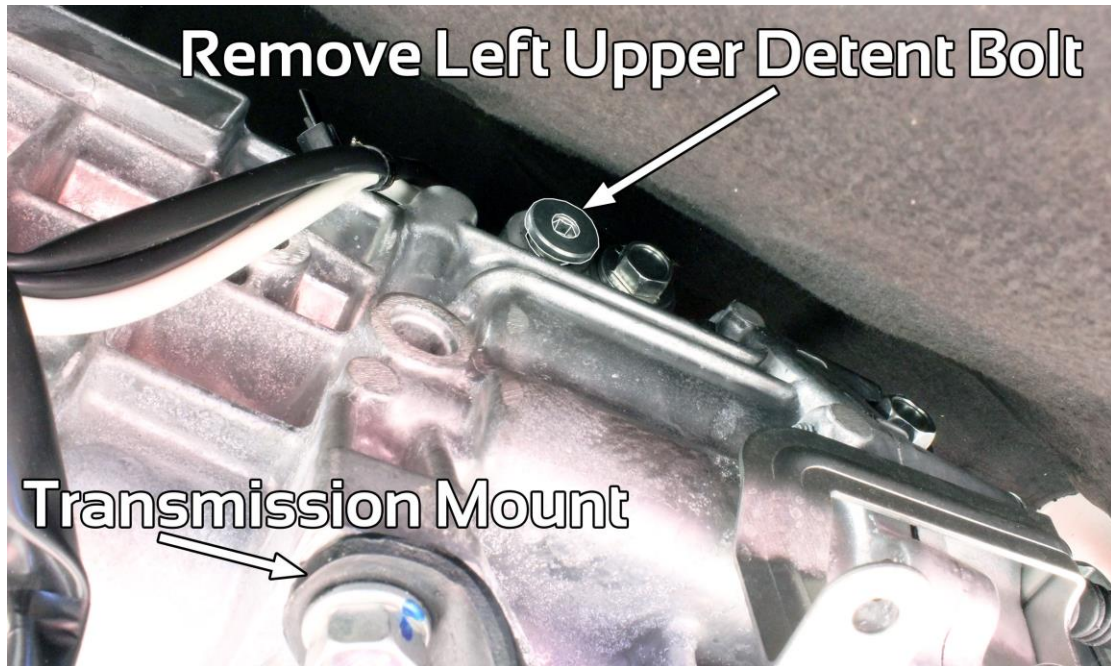
Installation of PERRIN Shifter Detent Upgrade

- Raise vehicle off ground using vehicle hoist or proper jack and jack stands. Never support vehicle with jack as death or injury may occur.
- Place a jack under the transmission case (behind the drain bolt is a good place) to support it for the next two steps. **NOTE: A small amount of tension on it is all that is required.**
- Locate and remove (4) M8 bolts securing transmission exhaust shield to subframe. This does not need to be removed from the car, just loosened to let the transmission drop down.
- If your catback exhaust is stock, uses a donut type gasket, or has a flex joint built into it, you can skip this step. If your catback exhaust has a solid connection without a flex joint or donut gasket, unbolt catback exhaust from front section of the exhaust. **NOTE: This step will vary depending on catback exhaust that is installed on the vehicle.**



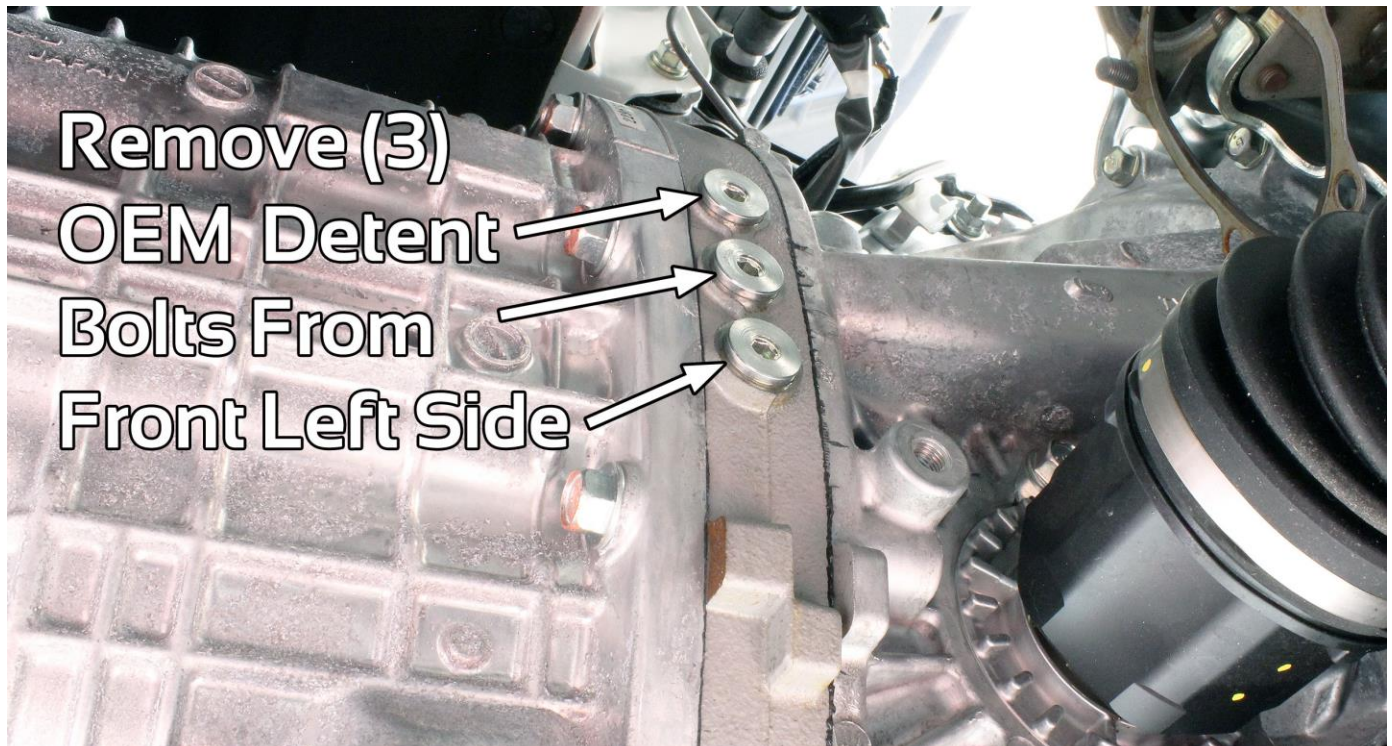
- Locate and remove (2) M10 and (2) M12 bolts securing transmission crossmember to chassis.
- Locate and remove (2) M10 nuts securing crossmember to transmission mount, then remove subframe from chassis.
- If a top mounted intercooler is installed, remove from the engine bay to allow access to pitch stop mount (this may need to be loosened) and one of the OEM detent bolts. If an aftermarket front mounted intercooler is installed, this step can be skipped.
- Slowly release the jack supporting the transmission to allow the transmission to drop down until it stops. This step is done to allow easier access to the larger detent bolt located toward the top of the transmission. **NOTE: Aftermarket pitch stop mounts, and catback exhausts that do not use flex joints**

can affect how far the transmission drops. We recommend loosening (or removing) the pitch stop mount bolts and or unbolting the catback from the exhaust to allow the transmission to drop further.



The above picture shows a 2015+ STI 6spd Transmission

9. For 2004-2014 models, skip to step 14, as the rear shift detent is not applicable on these models.
10. For 2015+ models, locate and remove the large M12 detent bolt that is secured using a 6mm hex key, located on the left side, rear part of the transmission. This is best done with a standard hex key not a socket driven hex key. This bolt is very tight and using some form of an extension is highly recommended. Since this is not a standard type of tool, what works well is a 3/8 ratchet extension and deep socket that fits over an M6 hex key handle. The longer the 3/8' extension the better. **NOTE: The spring that is behind this bolt should stay inside of the transmission, but if it comes out, make sure to reinstall it, then push it in as far as you can before moving to the next step.**
11. Carefully remove the O-ring from the OEM detent bolt and transfer it to one of the PERRIN Detent Bolts and place O-ring next to the flange.
12. Screw PERRIN Detent Bolt into the transmission by hand. It's normal to have to compress the spring slightly to get the bolt started. Then tighten to 10ft-lbs using a 16mm wrench. **NOTE: Since this can be very hard to get a TQ wrench onto, just a little past hand tight is acceptable.**
13. Before proceeding, check inside the car that all gears are still selectable by the shifter and no binding is felt.



14. On the right side, front of the transmission, locate (3) M12 detent bolts. Remove one at a time (these are also very tight) and just as before, remove the O-ring from the bolt and transfer it to one of the PERRIN Detent bolts.

15. Re-install bolts into transmission, then tighten PERRIN Detent Bolt to 15ft-lbs/180in-lbs. **NOTE: Only use a properly sized 1/4" drive torque wrench to tighten bolts. Do not use a 1/2" drive torque wrench, or a torque wrench that the smallest adjustment is 15ft-lbs or 180in-lbs as this will lead to overtightening of bolt and could cause a failure.**
16. Before proceeding, check inside the car that all gears are still selectable by the shifter and no binding is felt.



17. Inside the engine bay, locate upper detent bolt located on the top side of the transmission next to the clutch slave cylinder. Remove this bolt and just as before, remove the O-ring from the bolt and transfer it to the remaining PERRIN Detent Bolts. Then tighten PERRIN Detent Bolt to 15ft-lbs/180in-lbs. **NOTE: Only use a properly sized 1/4" drive torque wrench to tighten bolts. Do not use a 1/2" drive torque wrench, or a torque wrench that the smallest adjustment is 15ft-lbs or 180in-lbs as this will lead to overtightening of bolt and could cause a failure.**
18. Before proceeding, check inside the car that all gears are still selectable by the shifter and no binding is felt.
19. Raise the transmission back up using a jack, then reinstall crossmember back to chassis. Reinstall all hardware and tighten M10 nuts to 25ft-lbs, M10 bolts to 51ft-lbs and M12 bolts to 100ft-lbs.
20. Lower jack down and remove from car.
21. Install exhaust shield to chassis and tighten M8 bolts to 8ft-lbs.
22. Reinstall the catback exhaust to the front exhaust section.
23. Reinstall intercooler and start car.
24. Before driving car, shift through all the gears and make sure there is no binding felt and that all gears are selectable.
25. Take car for test drive and verify there are no clunking noises or abnormal sounds. When installed properly, there should not be any extreme vibration felt. Re-check the installation and re-test.

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