

PERRIN

PERFORMANCE

STI/R180 Rear Diff Cover up to 2007

062211

Thank you for purchasing the PERRIN REAR DIFF COVER. Only persons experienced in the installation and proper operation of Subaru drive train systems should perform installation of these parts. *Please read through all the instructions before performing the installation.*

SPECIAL NOTES:

- 6 spd customers will need use roughly 1.3qt's of fluid to fill differential
- Make sure to use high quality synthetic oil suited for Limited slip differentials.
- We highly recommend installing a new gasket with this install.

Parts Included with the PERRIN Rear Diff Cover

- (1) STI R180 Rear diff cover for cars up to 2007

REAR DIFF COVER INSTALLATION:

- 1) Raise vehicle onto jack stands or use commercial vehicle hoist. NOTE: NEVER WORK ON A VEHICLE SOLELY SUPPORTED BY A JACK!
- 2) Remove gear oil from differential, by removing lower plug. Use a 1/2" drive wrench to remove.
- 3) Remove upper plug or temp sensor/plug from cover. These will be reinstalled later.
- 4) Place jack under rear differential, and remove tension by lifting up diff roughly .5".
- 5) Remove 17mm nuts securing differential to cross support.
- 6) Remove studs from differential using the "Jam-Nut" method. Jam (2) 17mm nuts together on each stud. Unscrew stud using wrench on nut closest to diff. If this method doesn't work, use stud-extracting tool. Remove nuts from stud after stud is removed.
- 7) Lower diff from car to locate all bolts securing cover to diff housing. Removing exhaust system will allow diff to drop further.
- 8) Remove (2) 17mm bolts and nuts securing diff cross support to rear sub frame. Remove from car.
- 9) Remove (8) 14mm bolts securing cover to housing. Remove cover from housing by tapping on housing with rubber mallet.
- 10) Wipe out as much excess oil as possible, as this will allow new gasket to seal better. Raising front of vehicle
- 11) Locate differential breather on top of diff cover. Remove carefully by pulling straight up. Install breather into new diff cover.
- 12) Install new gasket to PERRIN diff cover, and loosely install bolts removed earlier. If temp sensor was installed, make sure to install ground behind proper bolt.
- 13) Starting from the top 2 bolts, tighten bolts to 34ft-lbs.
- 14) Install diff cross support into sub frame and tighten (2) bolts/nuts removed earlier to 52ft-lbs.
- 15) Raise diff back into sub frame, and install studs through sub frame, and through diff cross brace, into diff. Thread studs into diff cover until they are bottomed out, or course threads are no visible. Install nuts and tighten to 52ft-lbs.
- 16) Install lower plug and tighten to 36.2ft-lbs. Make sure to use three bond 1105 or equivalent on threads of plug before installing.
- 17) Fill diff with proper high quality gear oil until oil starts to drip from fill hole. Install upper plug or temp sensor if equipped and tighten to 36.2ft-lbs. Make sure to use three bond 1105 or equivalent on threads of plug before installing.
- 18) Lower vehicle from jack stands, test drive car. Check for oil leaks after test drive. If oil leaks persist, reinstall new gasket.

For questions & comments please contact

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