

Rear Diff/Subframe Lockdown System

2012-04-19

Thank you for purchasing the Perrin Rear Diff/Subframe/Lockdown System. Persons experienced in the installation and proper operation of suspension systems should only perform installation of these parts. Please read through <u>all</u> the instructions before performing the installation.

SUSPENSION INSTALLATION NOTE

Installation of this product is a modification to the vehicle suspension. As a result, the vehicle may handle differently than that of factory-equipped vehicles. 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 this vehicle safely may result in serious injury or death. Do not drive this 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 your owner's manual, service manual, instructions accompanying this product, and local laws before undertaking these modifications.

You are responsible for the legality and safety of the vehicle you modify using these components.

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:

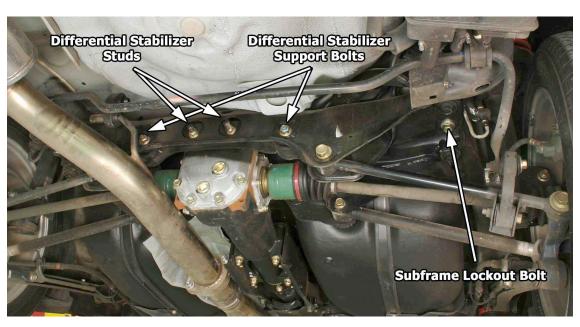
- The use of a factory service manual is highly recommended. These can be purchased or downloaded online at http://techinfo.subaru.com.
- http://subaru.spx.com is a place to buy OEM tools.
- It is critical that all bolts and nuts are tightened, improper tightening can cause serious injury or death.

Parts Included with the PERRIN SUB FRAME LOCK DOWN:

- (2) Differential Support Beam Lockout Bushings (X-PSP-SUS-522)
- (4) Differential Lockout Bushings (X-PSP-SUS-521)
- (2) M12x60mm grade 10.9 bolts
- (2) SS Subframe lock-out bushing (pressed on bolt)

Installing rear differential support bushings

- 1. Park car on a smooth level surface. Using a suitable commercial hoist or jack, raise car and support on jack stands remove rear wheels.
- 2. Support rear differential using jack or adjustable stand. Remove two nuts securing differential stabilizer to differential. Using stud removal tool, or Jam nut technique, remove studs from rear differential cover.



- 3. Remove two bolts and nuts securing differential stabilizer to rear subframe. Lower differential slightly to allow for clearance to remove bolts.
- 4. Remove differential stabilizer from sub frame, install 4 smaller red urethane bushings around the OEM bushings center mounting points. 2 bushings install on each side.
- 5. Reinstall differential support brace into chassis using bolts to hold in place. Don't tighten yet.
- 6. Raise differential back into car, line up stud holes with differential support holes and reinstall studs.
- 7. Tighten differential stabilizer support bolts to 70ft-lbs. Tighten nuts on studs protruding through sub frame to 70 ft-lbs.

Installing rear subframe lock out bolts

- 1. Locate empty threaded holes on rear subframe. Above figure shows location of empty hole.
- 2. Check threads in subframe, if they are rusty, spray with WD40 and clean threads with wire brush before installing lockout bolts. If there corossion is severe, use rethread tool.
- 3. Screw bolt/bushing into empty hole on each side of car. Tighten to 60ft-lbs. Note: Bolt/spacer may make some popping sounds while bolt is being tightened into chassis. This is normal.

Installing differential front support bushing

- 1. Locate differential front support beam and the (2) outer bolts securing it to chassis.
- 2. Remove passenger side large bolt securing front support beam to chassis, and two bolts securing plate to chassis.
- 3. Pull down front support brace until enough room is made to place bushings on top of OEM bushings. (Note: make sure to leave round steel plate on chassis with small tabs facing down)
- 4. Reinstall plate back onto chassis and tighten bolts to 25ft-lbs.
- 5. Install large bolt through bushing and tighten to 100ft-lbs.
- 6. Repeat this process on the driver's side of car.



Common Questions Answered

- A small amount of road noise will be heard with this kit.
- The clunking that occurs during hard launches will be eliminated
- A more positive feel in the drive-train will be noticed