

# PERFORMANCE BRZ Accessory Pulley Kit

2014-04-30

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**

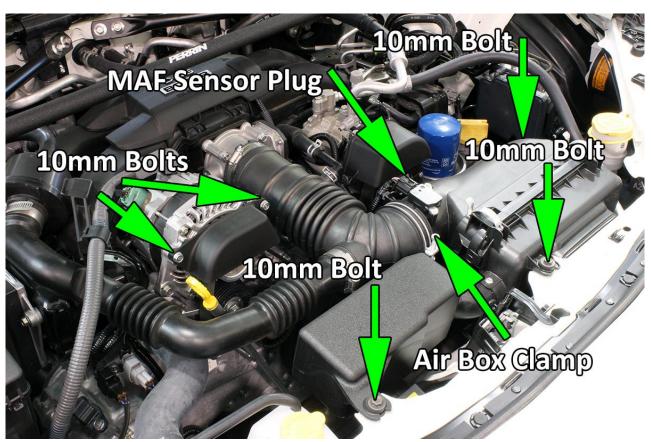
Modifications to any vehicle can change the handling and performance. As with any vehicle extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques 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 and can be purchased or downloaded online at http://techinfo.subaru.com.
- Having an impact gun and a 24mm socket is necessary to easily remove alternator pulley. If you do not have these tools, using a belt strap wrench to hold alternator pulley will be necessary along with a large breaker bar.

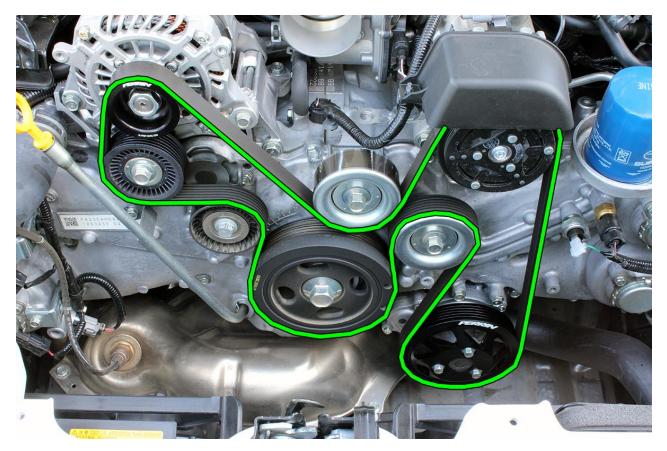
# Parts Included with the PERRIN BRZ Accessory Pulley Kit:

- (1) PERRIN BRZ Water Pump Pulley
- (1) PERRIN BRZ Alternator Pulley



# Installation

- 1. Remove Intake system from engine bay to provide better accessibility to water pump pulley. This step will vary greatly depending on intake system installed. To remove OEM intake system:
  - a. Remove (3) 10mm bolts holding air box to chassis.
  - b. Loosen clamp securing air box to rubber intake hose.
  - c. Unplug MAF sensor and unclip harness from airbox. Note: Do not turn car on with this unplugged.
  - d. Carefully pull air box out of engine bay and set aside.
- 2. Locate and remove (2) 10mm bolts securing plastic alternator belt cover on right side of engine.
- 3. Using an impact gun and 24mm socket, remove large center nut from alternator making to unscrew it counter clockwise. **Note: This may take a couple of hits with the impact gun.**
- 4. Using a 10mm socket, loosen (3) bolts from water pump pulley. Note: Loosen only, DO NOT remove these at this point.
- 5. Locate automatic belt tensioner on front of engine. Using 14mm socket and breaker bar, remove tension from belt and remove serpentine belt from engine. Make sure and take note of belt orientation before you remove belt.
- 6. Remove alternator pulley from alternator and install PERRIN pulley. Temporarily install nut to ensure pulley stays on alternator during the next few steps.
- 7. Remove (3) bolts holding water pump pulley to water pump and remove pulley from car.
- 8. Install PERRIN water pump pulley using (3) bolts removed in previous step. Hand tighten bolts for now.
- 9. Reinstall serpentine belt back to engine and pulleys leaving center pulley (pulley without ribs directly below intake tube) free. Using 14mm socket and breaker bar, relieve tension on automatic tensioner and slip belt over pulley.
- 10. Using the impact gun, tighten nut holding alternator pulley to alternator. The actual torque spec for this part isn't important, but do not impact nut any longer than 2 seconds. If you are able to use a torque wrench on this (making sure to properly hold pulley) torque nut to roughly 55ft-lbs.
- 11. Tighten (3) 10mm bolts on water pump pulley to 10.3ft-lbs of torque.



- 12. Reinstall belt cover back to right side of engine and tighten bolts to 10ft-lbs.
- 13. Reinstall intake system back to engine, making sure to plug MAF sensor back in.
- 14. Start engine and make sure belt is riding completely on all pulleys, and check that all pulleys are running true and not wobbling.
- 15. If no problems are found, take car for test drive. Recheck hardware removed during installation, for being tight.