

# PERRIN

## EQUAL LENGTH WRX/STI HEADER

### PSP-EXT-055 & PSP-EXT-056

#### Vehicle Fitment Chart:

2004-2016 SUBARU WRX/STI H4-2.5L Turbo	(no additional parts needed)
2002-2005 SUBARU WRX H4-2.0L Turbo	(requires STI oil pan/pickup to be installed)
2006-2007 SUBARU WRX H4-2.5L Turbo	(requires STI oil cooler to be installed)
2008-2014 SUBARU WRX H4-2.5L Turbo	(no additional parts needed)

2016-09-26

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](mailto:Tech@PERRINperformance.com)

Instant Chat off the main page of [www.PERRINperformance.com](http://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:

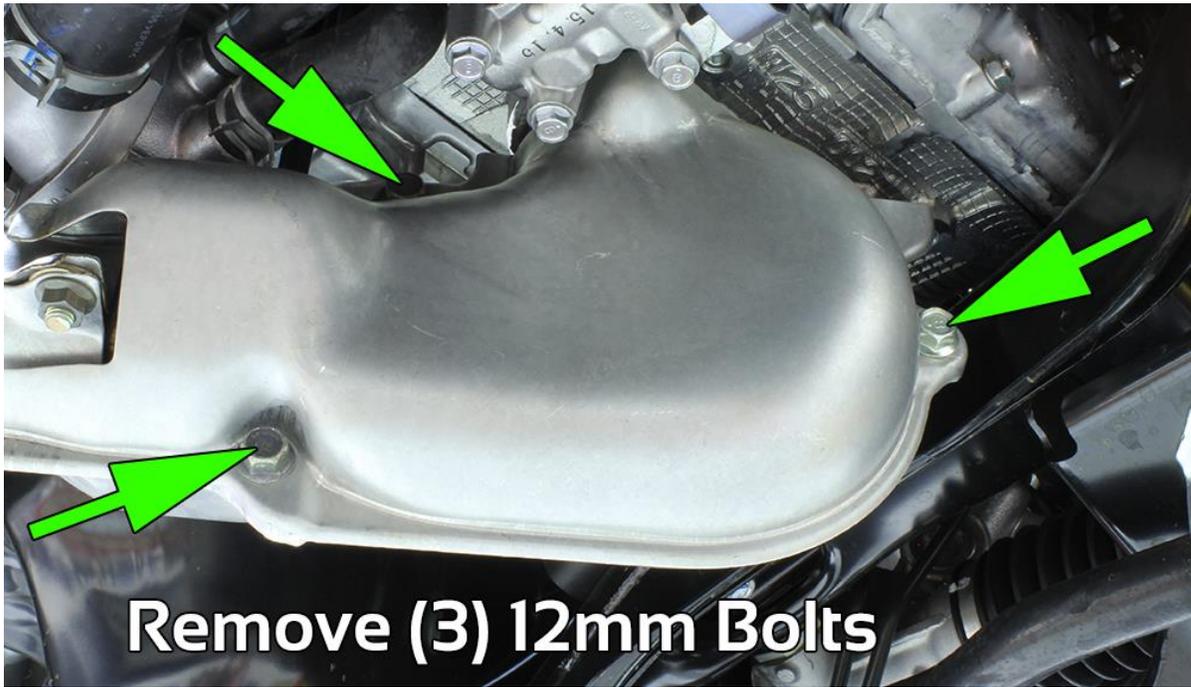
- The use of a factory service manual is highly recommended. These can be purchased online at <http://techinfo.subaru.com>.
- The use of penetrating oil will greatly reduce the chances of galling threads on bolts as they are removed.
- We highly recommend the use of anti-seize on threads of all bolts when reassembling.
- Only use new Subaru gaskets. Using aftermarket gaskets will warp flanges, cause leaks, and will void warranty!
- **SPECIAL NOTES ABOUT EXHAUST WRAP:** Exhaust wrap placed on headers will help contain extreme heat in header and away from important engine parts, however will significantly reduce long-term durability. PERRIN will not warranty parts with header wrap installed. If header wrap is installed, be sure to paint headers with special paint provided by header wrap manufacturer. This will keep oil and other flammable fluids from absorbing into wrap and causing a fire.

#### Parts Included with the PERRIN WRX/STI HEADER:

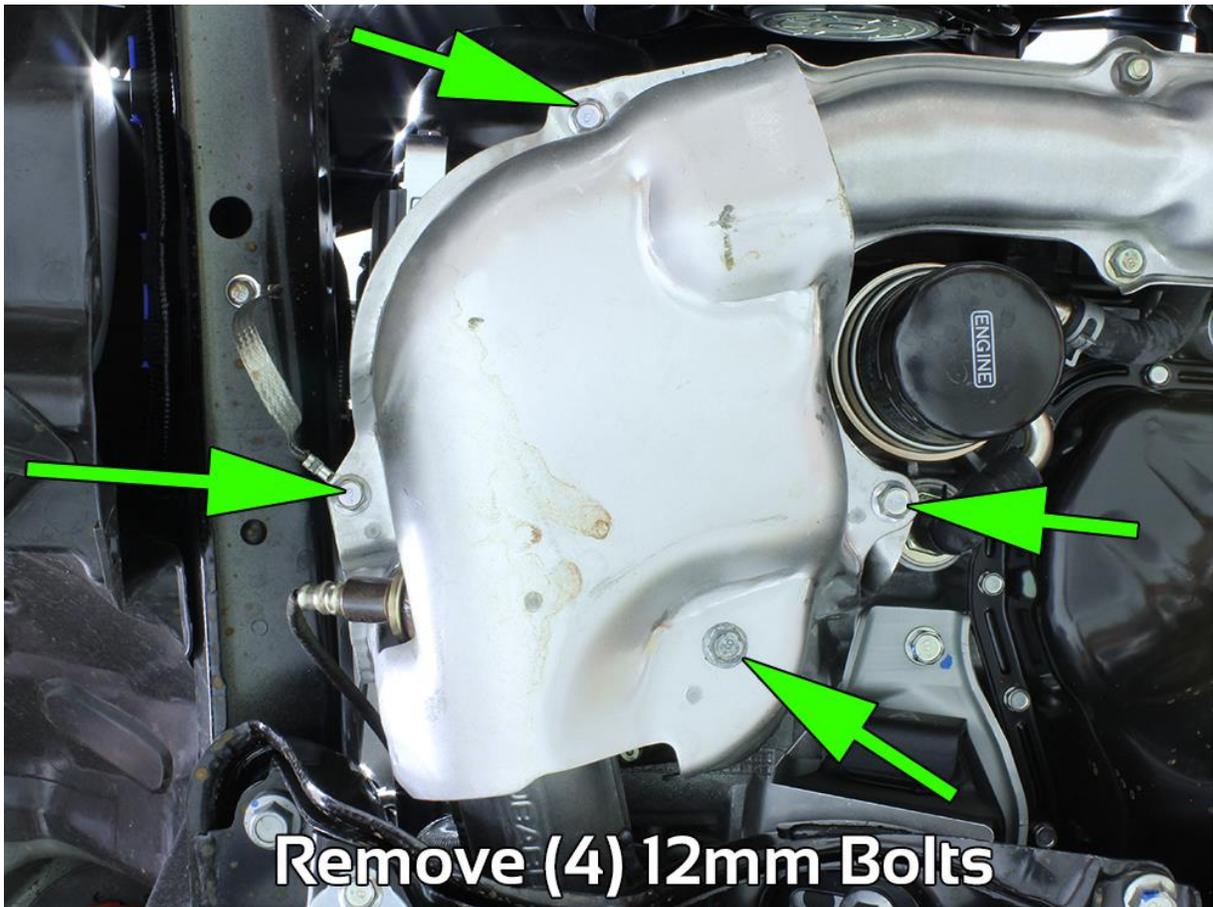
- (1) PERRIN STI Header
- (1) Anti-Seize Packet

#### Removing OEM Exhaust Manifold

1. Raise front of vehicle onto jack stands, making sure to use blocks behind the back wheels. Never support car solely by hydraulic jack.
2. Remove plastic splash guard from lower portion of engine. This step is the same for all cars, but the location of fasteners will vary greatly depending on the year of car. In all cases there are plastic fasteners and 12mm bolts that you will be required to remove.
3. Remove (3) 12mm bolts securing left side exhaust manifold heat shields to manifold.



4. Remove (4) 12mm bolts securing right side, lower exhaust manifold heat shield to manifold. **NOTE: This will not fall from car as O2 sensor will be holding it in place.**



5. Remove front O2 sensor from exhaust manifold using a proper O2 sensor wrench. **Note: Take great care to not damage sensor while removing. Also some wiggling of shield will aid in getting tool over sensor.**



6. Spray (6) 14mm nuts and (2) 14mm bolts with penetrating oil to aid in removal of hardware.
7. Remove (6) 14mm nuts holding manifold to head and (2) 14mm bolts with nuts connecting manifold to uppipe. Replace any bolts or nuts that may have been damaged during removal.
8. Carefully remove exhaust manifold from car in one piece.

## Installing PERRIN Equal Length Header

1. Apply small amounts of Anti-seize to studs on heads and on 14mm bolts removed earlier.
2. Place new Subaru gaskets on studs on head. **Note: Install them slightly at an angle to keep in place.**
3. Place header onto motor and loosely secure with one nut on each side of motor. **NOTE: It's normal to have to tap header over studs on heads in order to install.**
4. Place new Subaru gaskets between uppipe and header, and loosely installed OEM bolts and nuts.
5. The header flange that mates to the uppipe should fit very flat to the uppipe. Due to different turbos, aftermarket uppipes, and installation methods, this may not line up perfectly. It's critical for both the life of the uppipe and the header that these flanges sit flat and line up perfectly. If they do not line up perfectly, remove downpipe and loosen the (2) nuts on brackets connected to uppipe, then proceed to next step.
6. Snug header to uppipe bolts and nuts. Install and snug remaining nuts connecting header to heads.
7. Torque uppipe to header bolts to 35ft-lbs, then tighten all nuts holding header to head to 35ft-lbs.
8. Apply anti-seize to threads of O2 sensor and reinstall O2 into header. Tighten sensor to roughly 20ft-lbs.
9. If turbo was loosened and downpipe was removed, tighten (5) uppipe nuts, and reinstall downpipe.
10. Start car and listen for exhaust leaks.
11. If none are present, proceed to test drive car.

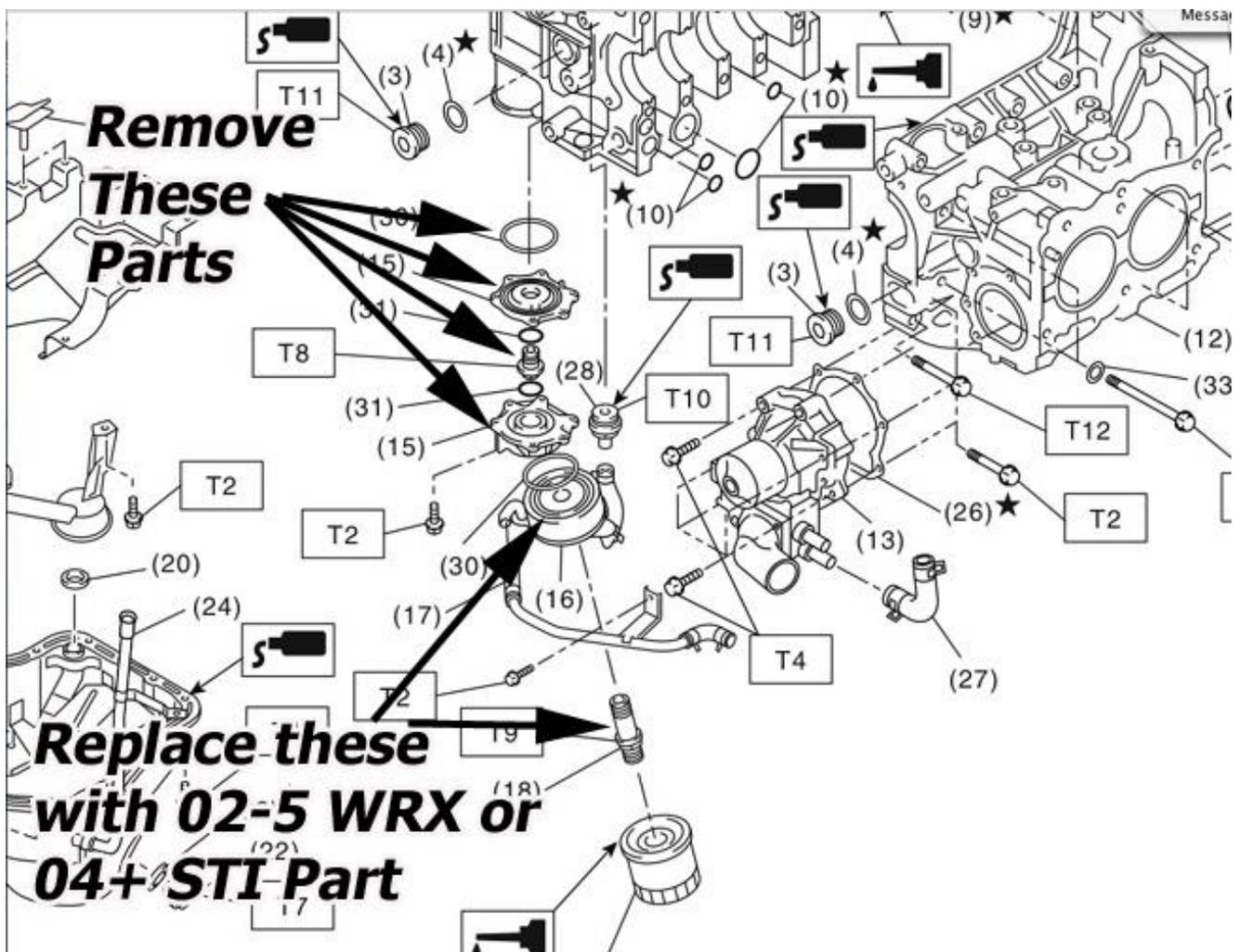
## 2002-2005 WRX Special Instructions

All 2.5L turbo motors have an oil pan that has a relief/cutout to allow for the PERRIN Equal length header to be installed. Older 2.0L turbo motors DO NOT have this relief/cutout, and the PERRIN header will not fit! Purchasing the 2.5L (or STI) oil pan and oil pickup from your Subaru dealer is required to install on the 2002-2005 WRX models. See factory service manual for installation procedures.

## 2006-2007 WRX Special Instructions

The 2006-2007 WRX 2.5L is slightly different than all other 2.5L turbo motors. The oil cooler assembly gets in the way of the header. On these models it is necessary to replace the oil cooler assembly and mount with one from any STI made from 2004 to 2016. These parts are available at your Subaru Dealer and are required for the installation.

Using a factory service manual and the diagram below, remove oil cooler and oil cooler mounting flange from engine. Replace with STI type oil cooler and oil cooler bolt from a 2004-2016 STI.



Questions, Comments and Suggestions Contact: [Tech@PERRINperformance.com](mailto:Tech@PERRINperformance.com)

Visit Our Website for Instant Chat Options at [www.PERRINperformance.com](http://www.PERRINperformance.com)

Call Our Tech Team at 503-693-1702