Top Mount Intercooler 08+ WRX, 05+Legacy GT & Outback XT

2/3/12

Thank you for purchasing the PERRIN top mount intercooler system. Installation of this system should only be performed by persons experienced in the installation and proper operation of SUBARU engines and related systems. WARNING: PERRIN performance is not responsible for any damages as a result of misuse of this part.

WARNING: This part is designed, manufactured, and sold solely for use on off-road and racing vehicles not controlled by federal and or local emissions laws. It is not intended for use on vehicles that operate on public streets and highways. Use of this part on emissions controlled vehicles may be in violation of federal or local law! ASMC, LTD. is not responsible for any damages as a result of misuse of this part. Check your local laws prior to use or installation.

SPECIAL NOTES:

- The use of a factory service manual is highly recommended. These can be purchased or downloaded online at http://techinfo.subaru.com.
- This intercooler might have some fitment issues with some aftermarket turbos. Re clocking of turbo may be necessary do to the incorrect placement of turbo outlet flange.
- For LGT customers, take time when trimming plastic shroud, this will pay off with a professional looking install.

Parts Included with the PERRIN Legacy TMIC:

- **(1) Legacy GT Top Mount Intercooler**
- **(2) M8x40mm Hex head bolts**
- **(2) M6x25mm SS button head bolts**
- **(4) M6 SS washers**
- **(2) M8 SS washers**
- **(2) M6 SS nuts**

PERRIN™ Intercooler Installation:

1) Raise hood and disconnect battery.
2) For Legacy GT customers, remove engine cover secured by (4) plastic pop-it fasteners.
3) Remove (2) bolts (10mm head) securing BOV to intercooler. Remove (1) bolt (12mm head) securing intercooler to bracket on left side of vehicle. Remove (2) bolts (12mm head) securing intercooler to turbo outlet.
4) Loosen hose clamp securing intercooler outlet to short rubber boost tube. An 8mm socket and extension is best used to reach this clamp.
5) Remove intercooler from car, take care not to damage fins while removing.
6) Remove short rubber boost tube from throttle body, take note as to orientation of coupler.
7) Remove both rubber caps (lightly glued on) from either end of short boost tube. NOTE: Removing the rubber caps allows for easier adjusting and installation of Intercooler.
8) Reinstall short rubber boost tube back onto throttle body in same orientation as it came off, and tighten clamp at throttle body. Locate wire harness directly bolted to intake plenum (In front of previously installed intercooler) with a black plastic cover. Trim harness cover or remove it to add additional clearance to front side of PERRIN™ Intercooler.
9) Remove OEM O-ring from OEM intercooler and place into groove on PERRIN intercooler. The O-ring should snuggly press into groove, and small tab should line up to small groove in PERRIN intercooler.
10) Using supplied M8 bolts, install PERRIN™ Intercooler onto turbo/engine. Tighten to roughly 12-15ft-lbs. Be careful while installing bolts as they can be cross-threaded easily if the intercooler is not align properly. **NOTE: Its possible that intercooler may need to be aligned with engine. If intercooler doesn't align (horizontal to ground), or if intercooler is contacting clutch master cylinder, slight re-clocking of the turbo compressor housing may be necessary. This is done by slightly loosening small bolts around the compressor housing and twisting it until it is in the desired position. Do not loosen the bolts on the compressor housing more than 1 full turn!! Once adjusted, make sure to tighten bolts back down.**
11) Reinstall BOV using factory bolts removed earlier. Tighten to 5ft-lbs.
12) Remove rubber donut and steel sleeve from OEM intercooler mount and place into PERRIN intercooler on side with groove. Install OEM bolt removed earlier through intercooler and bracket. Tighten to 12ft-lbs
13) For Legacy GT customers, before factory engine cover is installed, trim inside edge of plastic cover until it sits flush with the intercooler. Once lined up, drill (2) .25" holes in tabs on either side of the PERRIN intercooler. Use supplied nuts and bolts to secure plastic shroud to PERRIN Intercooler.
14) Reconnect battery.
15) Start engine and while under hood listen for any audible signs of vacuum/boost leaks.
16) Proceed with test drive. Again, if foreign whistles or sounds are noted re-check all connections.

For questions & comments please contact TECH@PERRINPERFORMANCE.COM
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Instant Chat Available on Website