



# Subaru Turbo Inlet Hose, 08-14 WRX, 05-08 Legacy – Liberty GT, 08-14 XT Forester

## INSTALLATION GUIDE

Thank you for purchasing a Ryder Racing product. Disclaimer: installation of this product should only be undertaken by a licensed mechanic/technician who has experience with fitting aftermarket automotive parts. If the vehicle is to be raised, the technician should use appropriate rated jack stands or a hoist rated for the country or state, failure to do so may cause injury or death. Upon installing the Ryder Racing product(s) the driver should be aware that aftermarket parts change the driving characteristics of the vehicle and should adapt to them in controlled conditions. See [ryderracing.com.au/T&C](http://ryderracing.com.au/T&C) for additional information. This product has a lifetime warranty if installed by a licensed technician, proof of installation required for all warranty claims. See T & C's for further information.

### PARTS LIST

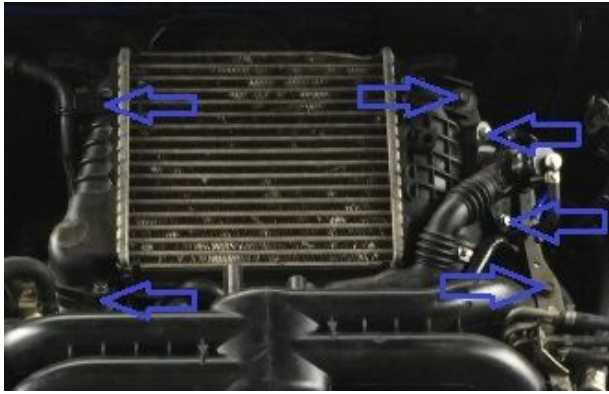
- 1 x Silicone Hose
- 1 x Stainless Steel T-Bolt Clamp
- 4 x Ryder Racing Aluminum Barbed Elbows
- 1 x Stainless Steel inlet adapter
- 1 x Stainless Steel Worm Drive Hose Clamp
- 1 x Ryder Racing Sticker
- 1 x Socket Head Cap Screw
- 1 x Instructions

### How It's Done

- 1) Removing the factory airbox – using an ordinary screwdriver, loosen the worm drive hose clamp on the inlet side of the factory turbo inlet hose. Discard this item unless it's already been replaced. Disconnect the plug from the AFM, unlock the two top tabs on the top of the airbox and place the unit aside (if the vehicle is equipped with an aftermarket CAI see the manufacturer for detailed removal of this section). If any connectors break please see our store for replacement items.



2) Removing the TMIC – Remove the 3 x 12mm bolts from the LHS support bracket and



place aside. Remove the 2 x 12mm bolts from the inlet side of the IC, remove the 2 x 10mm bolts from the bypass valve and set it aside (no further components need to be removed from the bypass valve), loosen the worm drive clamp on the throttle body which connects to the IC, loosen the right hand side IC support bracket, the IC can now be removed.

3) Removal of boost solenoid bracket – Disconnect the EVAP Purge, EVAP vent and boost



solenoid plugs located near the alternator, place the sensor aside to give you more room. Remove the 12mm bolt from the boost solenoid housing, remove the 12mm bolt from the plastic sensor housing, remove the 12mm bolt from under the silver mounting bracket, remove the remaining 10mm bolt and disconnect the hose remembering their locations. Use tape to mark which hose they are.

4) Removal of the plastic turbo inlet hose – Remove the 6mm allen key bolt which secures



the inlet pipe to the inlet manifold, remove the EVAP control hose from the factory inlet pipe, remove the 3 x 10mm bolts from the rear of the inlet manifold. Disconnect the connector from the throttle body and place the connector aside, disconnect the bypass hose that connects to the factory inlet pipe, remove the spring clip from the crankcase

vent hose (section closest to the factory inlet hose) and remove the worm drive clamp from the inlet on the turbo. You can now remove the factory inlet hose.

*Special note: for additional space for removal and installation, loosen completely but do not remove the 8 x 10mm bolts from the inlet manifold which secure the manifold to the TGV, this will allow you to move the manifold approximately 20mm giving you extra space.*

## **INSTALLATION OF THE RYDER RACING TURBO INLET PIPE**

5) Installation of the inlet hose – Place the 13mm barb fitting into the turbo side of the inlet hose, slide the inlet hose under the manifold and connect to the turbo, secure the turbo to the inlet hose using the supplied T-Bolt clamp. Connect the crankcase vent to their original locations including the Ryder Racing 13mm barbed fitting. Install the 16mm barb fitting into the middle of the inlet hose. Cut the larger elbow from the hose as your new connector incorporates the elbow already (this hose will require the stainless steel worm drive hose clamp, be sure to tighten the factory breather to the Ryder Racing elbow not Silicone intake hose to fitting)

6) Solenoid bracket and hoses – Reconnect the bypass hose to the inlet hose. Replace the support rail 3 x 10mm bolts at the rear of the inlet manifold. Reconnect the throttle body connector. Install remaining aluminum elbows into the inlet hose. Connect and re-attach both solenoids to the bracket, connect all the hoses to the solenoids. Using the 2 x 12mm bolts and supplied 5mm socket head bolt, secure the solenoid bracket to its original location. Reinstall the 10mm nut to the bracket.

7) If removed, reinstall the 8 x 10mm inlet manifold bolts ensuring the inlet manifold gaskets are not damaged or misaligned.

8) Intercooler installation - Reinstall the IC, install the 2 x 12mm bolts connecting the turbo to the IC, fit the LHS bracket using the 3 x 12mm bolts, secure the worm drive hose clamp and secure the IC to the throttle body. Fit the bypass valve using the 2 x 12mm bolts and secure the last 12mm bolt on the righthand side.



9) Airbox installation and air leaks – Install the airbox using the 2 clips, connect the AFM and secure the final worm drive hose clamp (if replacing). Start vehicle and check for any air leaks.

**Congratulation you have installed a Ryder Racing Turbo Inlet Hose!**

**Don't forget to complete you warranty registration online @**

**<https://ryderracing.com.au/registration-and-warranty>**