

**WARNING:** These parts are 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. Perrin performance is not responsible for any damages as a result of misuse of this part. Check your local laws prior to ordering.

**USE NEW FACTORY SUBARU UPPIPE GASKETS. THIS WILL ENSURE PROPER SEAL BETWEEN TURBO AND MANIFOLD. NOT USING FACTORY GASKETS CAN RESULT IN A LEAK AT EITHER OF THESE CONNECTIONS.**

## UP-Pipe Fitment Chart

1991-1994 Turbo Legacy (CARB EXEMPTION PENDING SPRING 2004)  
2002-2003 WRX  
2004 + WRX  
2004 + STI (CARB EXEMPTION PENDING SPRING 2004)  
2004 + Forester XT  
2005+ Legacy GT/Outback XT

*Thank you for purchasing the up-pipe. We recommend a professional mechanic perform this installation!*

Raise the rear wheels off the ground. The vehicles weight must be supported by jack stands. Death or serious injury could result from an improperly supported vehicle.

**AGAIN, THIS PART IS FOR OFF ROAD USE ONLY!**

### Tools you will need:

1. Oxygen sensor wrench
2. 3/8 drive ratchet
3. 1/2 drive ratchet
4. Assorted extensions for 3/8 and 1/2 drive ratchets
5. 10mm, 12mm, 14mm sockets 3/8 drive
6. 12mm, 14mm sockets in 1/2 drive
7. 2- 14mm open-ended or gear wrenches
8. 10mm open-ended or gear wrenches
9. Flat head screwdriver
10. Liquid wrench or equivalent lubricant
11. Assorted pliers

### Resistor



This resistor will be used later on in the installation (STI owners will not use this)

## DISASSEMBLY

Make sure to spray all bolts with Liquid Wrench™ or equivalent. Let the Liquid Wrench soak before removing factory parts. The exhaust system is exposed to high heat and pressure. Nuts and bolts may seize during the removal process. Allow lubricant to soak insuring a trouble free installation.



Allow the car to cool for several hours.

Remove the lower plastic splashguard to gain access to the exhaust system from under the car.

### (3) 10MM BOLTS AND 4 POPITS



#### **Remove the air cleaner**

Remove the air cleaner and air box for access to some of the exhaust bolts.

(2) 12mm bolts down low on the chassis.



#### **Remove the intercooler**

Start by removing the blow off valve (2) 12mm bolts then remove (2) 12mm bolts on either side of the intercooler and the hose clamps that attach the boost tubes to the turbo and intercooler.



#### **Remove the intercooler support bracket**

Unbolt the intercooler support bracket from the passenger side of the motor.

(2) 12MM BOLTS



#### **Remove the heat shield from the turbo charger.**

The heat shield is held in place by (7) small 10MM bolts.

**Spray down all of the turbo manifold bolts with Liquid Wrench™ so they will be easier to remove later.**

## ***Lower the engine and tighten the motor mount nut***

The motor does not need to be raised for the installation of the new up-pipe. You can lower the engine and retighten the motor mount immediately after you have removed the factory up-pipe. Place the old gaskets on the up-pipe. Slide up pipe into the car from the top. (This is easier than the removal, since the up pipe has more clearance.) Place up-pipe into the turbo bracket, using one of the nuts to hold it in place.

### **Important!**

When you reinstall the lower exhaust manifold with the old gaskets, don't tighten all the nuts and bolts. Leave them hand tight until all bolts and nuts have been installed. (3) 14mm nuts, (4) 14mm nuts and bolts.



Snug all nuts and bolts down on the manifold, up-pipe, crossover pipe, and brackets. Be sure to snug up-pipe and manifold first. Install and snug the nut on the small turbo bracket (1) 14mm nut.

### ***Torque the nuts and bolts in this order:***

1. Manifold to up-pipe (2) 14mm bolts
2. Manifold to cross over pipe (2) 14mm bolts
3. Manifold to block (3) 14mm nuts
4. Finally turbo to up-pipe (3) 14mm nut
5. Small and Large turbo bracket (2) 14mm nuts

### ***Reinstall all parts in reverse order.***

Start the car to let it warm up and listen for exhaust leaks. It is normal for engine noise to come from the new up-pipe, due to the lack of a catalytic converter and heat shield.



### ***Loosen the up-pipe***

Remove the 5, 14mm nuts that bolt the turbo to the up-pipe and larger bracket. (3) For the turbo, (2) for the bracket. It may be helpful to loosen the one bolt on the larger bracket that holds the bracket to the block.



### ***Remove the heat shield***

Remove the lower exhaust manifold heat shields. (4) 12mm bolts

The exhaust manifold can now be removed. Remove the 7 bolts on the lower exhaust manifold (3) 14mm nuts, (4) 14mm nuts and bolts



### ***Unplug the EGT sensor (STI owners don't have an EGT sensor)***

Unplug the factory EGT sensor. The connector is located on the passenger side shock tower under the removable panel. (2) black wires

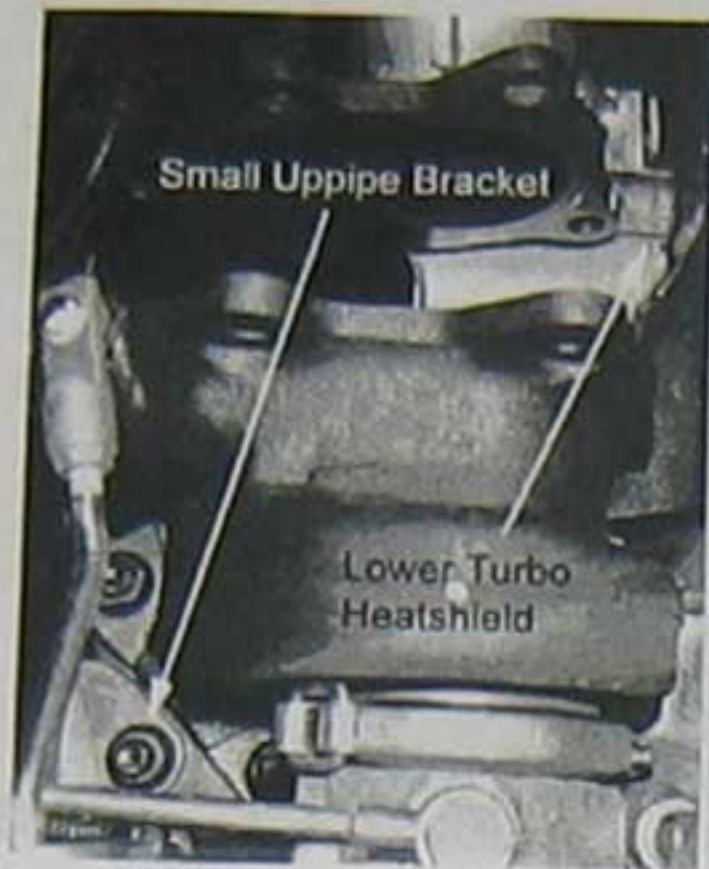
You will now need the resistor in the square box on the front of this document.

Insert the provided resistor into the female end of the plug.



### ***Lift the motor***

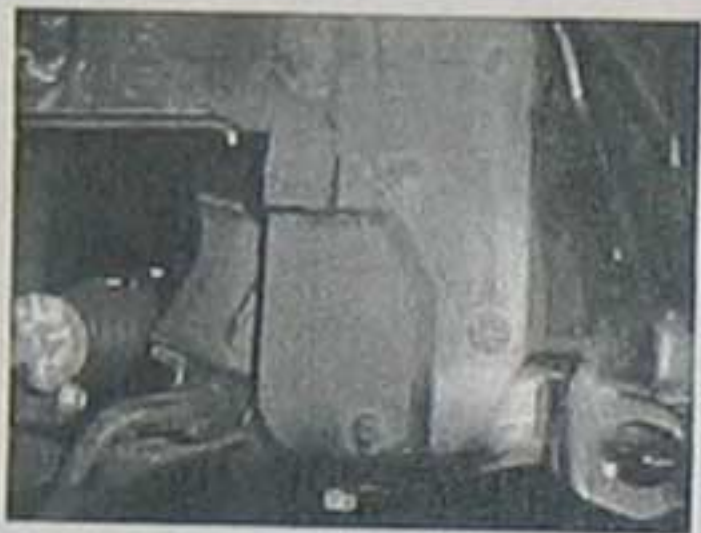
Remove the passenger side motor mount nut & washer. Use a floor jack and block of wood to jack the engine up enough for the up-pipe to be removed out the bottom. You need to lift the engine approximately 2 inches. Be careful not to hit the EGT sensor on the way out.



### ***Remove the exhaust down pipe***

Remove the exhaust down pipe, and 2 mid-pipes. (Aftermarket exhaust could be different) (5) 14mm bolts (turbo) (1) 14mm bolt to transmission case, and assorted 12 & 14mm bolts on the 2 mid-pipes. Be sure to support the mid pipe that contains the rear O2 Sensor.

Remove the lower turbo heat shield at the same time. Mounted to the factory up-pipe with (2) 10mm bolts



### ***Remove the small access panel***

Remove the small access panel in the passenger side wheel well. This will give you access to the Oxygen sensor.



### ***Use an Oxygen Sensor socket for easy removal***



### ***Remove the Oxygen sensor wire bracket***

Remove the 12mm bolt mounted on the #3 cylinder coil This will make removal of the Oxygen sensor easier.

**SPECIAL NOTICE REGARDING**  
**YOUR NEW UP-PIPE**

YOUR NEW UP-PIPE SHOULD ONLY BE INSTALLED IN  
CONJUNCTION WITH A NEW SET OF FACTORY  
GASKETS.

THIS INCLUDES THE UP-PIPE TO TURBO, UP-PIPE TO  
MANIFOLD AND MANIFOLD TO CYLINDER HEAD  
GASKETS.

THESE GASKETS ARE AVAILABLE FROM YOUR LOCAL  
SUBARU DEALER.

*NOT RESPONSIBLE FOR  
EXHAUST LEAKS CAUSED BY FAILURE TO INSTALL NEW  
GASKETS!*

