

James Barone Racing Aftermarket Parts and Accessories

# 2013: FORD FOCUS <u>ST</u> CHARGE PIPE INSTALLATION INSTRUCTIONS

### **Tools Required:**

- ✓ Jack
- ✓ Lift or ramps
- ✓ Ratchet wrench
- ✓ Various extensions
- ✓ 7, 10 13mm sockets
- $\checkmark$  T-30 torx bit
- ✓ Flat head screw driver
- ✓ 5mm allen wrench
- ✓ WD-40

#### **Cold Side Kit Includes:**

- ✓ 1 Cold side charge pipe W/ Meth Bung (TIAL or HKS Flange Optional)
- ✓ 2 couplers
- ✓ 4 T-bolt clamps
- ✓ 2 Vacuum caps (TIAL or HKS Flange Option)
- ✓ 2 Zip ties (TIAL or HKS Flange Option)
- ✓ 1 spring (TIAL or HKS Flange Option)
- ✓ 36" of vacuum hose (TIAL or HKS Flange Option)

\*Sound symposer delete with vacuum source is required for TIAL or HKS kits.

#### Hot Side Kit Includes:

- ✓ 1 Hot side charge pipe
- $\checkmark$  2 couplers
- ✓ 4 T-bolt Clamps

Begin by parking on a smooth level surface with the emergency brake engaged. Jack up the front of the vehicle and position jack stands underneath both sides.



# Refer to you vehicles owner's manual for proper jack placement and supporting procedures. <u>Never get</u> under a vehicle without the proper support in place.

1. Remove the entire belly pan and front valence using a T-30 torx bit, 10mm socket and a flat head screw driver for the plastic fasteners.



**COLD SIDE PIPE INSTALLATION** – Read through before beginning.

Remove <u>one</u> and <u>loosen</u> other 10mm bolt that hold the lower radiator & intercooler support to the frame on the passenger side of the vehicle. Some vehicles may come equipped with a rivet that will need to be drilled out.
 ➤ If yours has a rivet, you will need a drill and a 3/8" drill bit to drill the head off and remove the rivet.

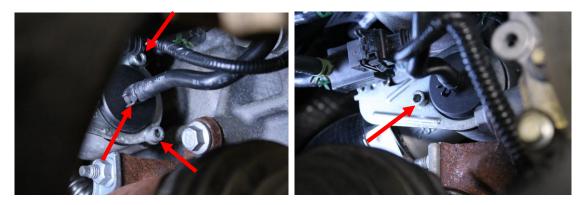


3. Next, remove the 2 clamps securing the OEM cold side hose located on the passenger side of the vehicle with a 7mm socket. One will be located at the intercooler and the other will be located beneath the throttle body. Remove the OEM cold side hose.



If you're installing the cold side charge pipe with ONLY the meth bung skip to step 10

4. Using a pair of pliers, remove the clamp securing the vacuum hose to the OEM bypass valve. The valve is located on the back of the motor at the base of the turbo. Also, remove the 3 socket head screws holding the cover onto the OEM bypass valve using a 5mm allen wrench. Then, carefully remove the bypass valve diaphragm and spring.



5. Put one vacuum cap and zip tie on the OEM bypass valve cover.



6. Replace the OEM bypass valve spring with the one included in your kit and assemble as shown. Then, re-install the assembly back into the vehicle.



7. Remove the engine cover by pulling in each corner.



8. Using a pair of pliers, remove the vacuum hose from the solenoid shown below and replace with a cap and zip tie.



9. If installing a HKS or TIAL kit, install the valve onto your new JBR cold pipe now.

$$_{
m Page}4$$

10. Place the 73-81mm T-bolt clamp (size markings are on the band of the clamp) included with your kit onto the inlet of the <u>intercooler</u>. Spray a good amount of WD-40 into the short leg of the silicone elbow. (the long leg of the elbow has the JBR logo on it) Put the cold side charge pipe into the short leg of the silicone elbow and put one 67-75mm clamp the elbow and leave it as loose as possible.



- 11. Put the remaining two 67-75mm clamps on to the straight coupler. Install the straight coupler onto the throttle body and tighten only clamp securing the coupler to the throttle body
  - You will need to leave the other (lower) clamp as loose as possible. Just tighten it enough that it barely stays on the coupler. The buckles of both clamps should be facing the front of the vehicle and they can be tightened from the driver's side using a long extension and a 10mm socket.



- 12. While pulling the radiator/intercooler lower support towards the front of the vehicle, put the long leg of the silicone elbow onto the outlet of the intercooler, rotate the pipe into position and slip it into the straight coupler on the throttle body.
  - > If you didn't perform step 2, you will scratch the cold pipe badly.



- 13. Adjust the charge pipe in or out of the silicone elbow to get the best clearance between the AC compressor, radiator & intercooler support. Rotating the pipe to achieve the best fit will also be necessary. The clearance will be very close.
  - If installing a cold pipe with a TIAL valve, the bolt head of the vacuum fitting should be located in the center of the indent in the oil pan. The clearance will be close and fine adjustments will be necessary to get the pipe in the correct position.
  - If installing a cold pipe with a HKS valve, the allowances for positioning are greater and less adjusting of the pipe will be necessary to get a proper fit.
  - Make the vacuum connection between the blow off valve and the vacuum port on the symposer delete.



14. Orient the clamps for elbow as shown and tighten the clamps once all the adjustments are made and the fit is good.



This completes the installation of the cold side.

### Hot Side Charge Pipe Installation

15. Remove the clamps at each end of the hot side piping using a 7mm socket. One will be located at the intercooler on the driver's side and one will be located on the outlet of the turbo behind the motor.



16. Using a 10mm and 13mm socket, remove the two bolts that secure the metal portion of the OEM charge pipe to the motor. One is located at the front and one at the rear of the oil pan. Remove the entire assembly as one unit.

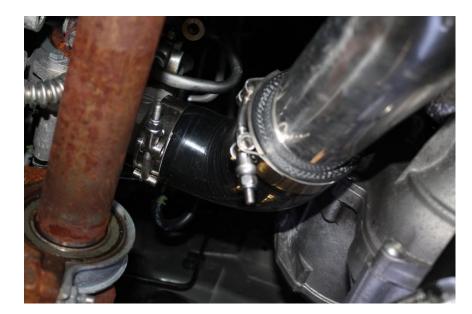


17. Put the straight coupler included with your kit onto the inlet of the intercooler and secure with the 73-81mm T-bolt clamp.



- 18. Spray some WD-40 into the small diameter leg of the elbow, put the 54-62mm clamp on and slip it on to the turbo, angled down and towards the driver's side of the vehicle.
- 19. Put one 67-75mm clamp on each end of the hot pipe and install it into the elbow and the straight coupler. Then, slip the mounting bracket onto the mounting stud at the rear of the oil pan.





- 20. Make the necessary adjustments to the elbow and the pipe. Then tighten all the clamps.
- 21. Reinstall the nut removed in step16 and tighten with a 13mm socket.



# Congratulations!! You've just completed the installation of your new JBR Focus **ST** Charge Pipes!



## **SHIPPING**

All orders are carefully inspected and packaged prior to shipment. The recipient must inspect all shipments for damage and report any damage to the carrier and JAMES BARONE RACING immediately. JAMES BARONE RACING is not responsible for damage that occurs during shipping.

### **RETURNS:**

All sales are final. JAMES BARONE RACING will only except returns in the event of a manufacturer's defect. Defective items will be exchanged for the identical item or repaired at our discretion. Return shipping costs are the responsibility of the purchaser. An RMA # (Return to Manufacturer Authorization Number) Must accompany all returns. In rare cases where a return is accepted a 20% restocking fee will be deducted from the refund or credit. Shipping charges are non- refundable. No returns or exchanges will be accepted after 30 days.

### **DISCLAIMERS:**

Failure to carefully follow the installation instructions for your JAMES BARONE RACING product could result in significant property damage, personal injury, injury to others or even death. Please take the time to read and thoroughly understand the instructions prior to installation. The instructions are as accurate as possible and may vary slightly from model year to model year. Professional installation is recommended.

Neither JAMES BARONE RACING nor any of its employees, officers, directors, or shareholders will accept responsibility for improper use or installation of our products. JAME BARONE RACING is not responsible for the misuse, incorrect installation, or failure of any product we sell. Under no circumstances, including but not limited to negligence, will JAMES BARONE RACING be liable for special or consequential damages that result from the use or inability to use our products. JAMES BARONE RACING does not assume responsibility for any damage to the user, driver, passenger or vehicle resulting from the operation of a JAMES BARONE RACING product. PLEASE DRIVE RESPONSIBLY.

### WARRANTY:

All JAMES BARONE RACING products carry a lifetime warranty to the original purchaser. Warranty is non-transferable. Warranty does not cover damage or failure caused by abuse, misuse, faulty installation or repairs not conducted by JAMES BARONE RACING. JAMES BARONE RACING is not liable for consequential damages arising from the use of our products or any indirect damages resulting in the loss of property, revenue or costs for towing, removal, installation, or re-installation. To receive warranty service you must contact JAMES BARONE RACING to receive an RMA # (Return to Manufacturer Authorization Number) at which time you will be provided with instructions for returning the faulty product

### **CONTACT:**

If you have questions or problems, e-mail us at jamesbaroneracing@gmail.com. Posting questions or problems in the forums or other social media outlets will only delay you from getting the correct answer or personalized attention from us.