

Boss 302 Intake Manifold (11-13 GT)

Time Necessary: 1-2 Hours

Tools Required:

- ✓ 8mm/9mm/10mm/13mm socket
- ✓ 3/8" and/or 1/4" drive extension (depending on tools you use)
- ✓ Ratchet
- ✓ Torque wrench Capable of 89 inch-pounds
- ✓ 2 sets of Pliers
- ✓ 3/8" Fuel and Disconnect Tool
- ✓ SCT Tuner w/ Custom Tune

Extra Parts:

- ✓ Approximately 2 feet of 3/8" Fuel/Emissions Hose
- ✓ Hose Clamps to fit

Please Note: This installation guide only covers install of the **Boss 302 Intake Manifold** with an aftermarket **Cold Air Intake**. If you are planning on installing this **Intake Manifold** with a stock air box, you require the *Ford Racing BOSS 302 Intake Manifold Install Kit (11-13 GT) Part# M-9444-M50B*

Removal Procedure:

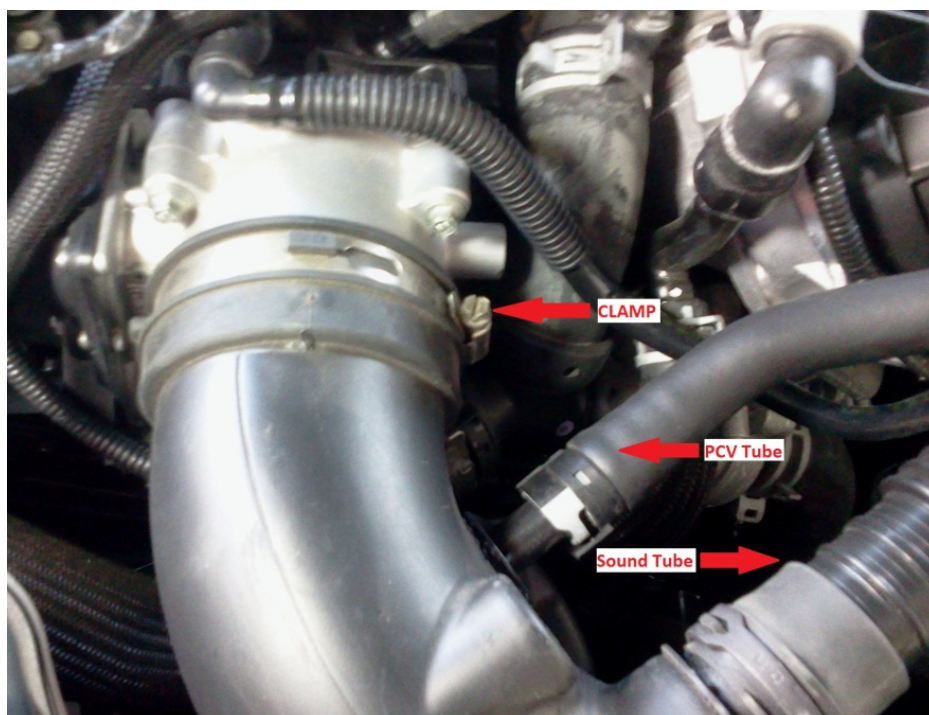
1. Remove the 4 nuts from the **Strut Tower Brace** with **13mm socket** and remove. **Note:** The stock **Strut Tower Brace** will not fit over the **Boss 302 Intake Manifold**.

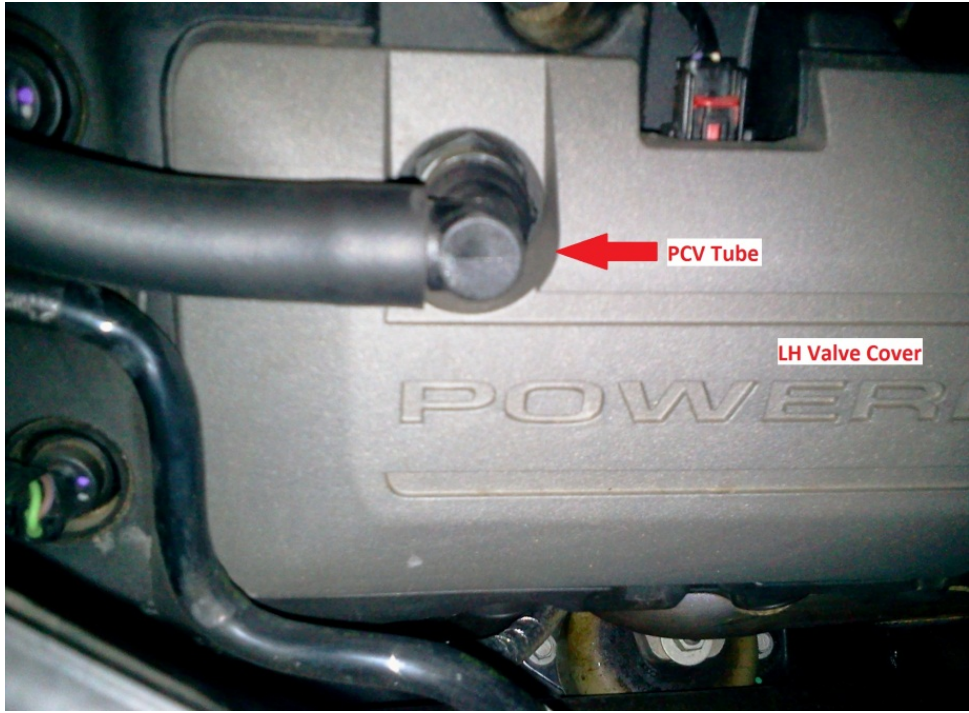


2. Remove your **Intake Cover** simply by pulling up on the cover and unsnapping it.

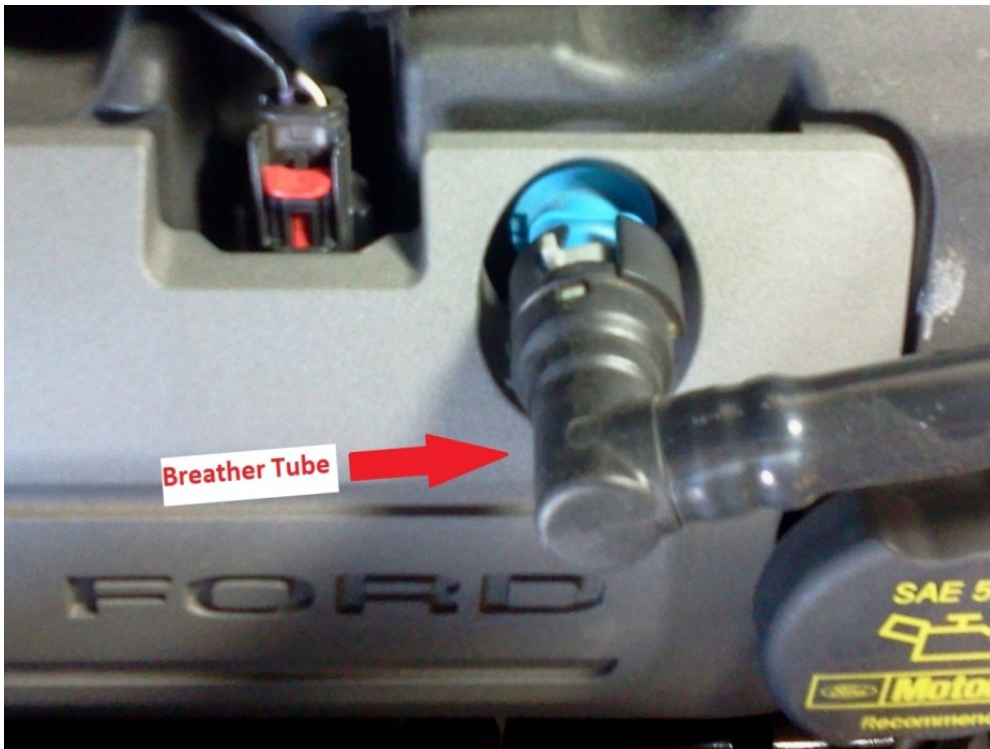


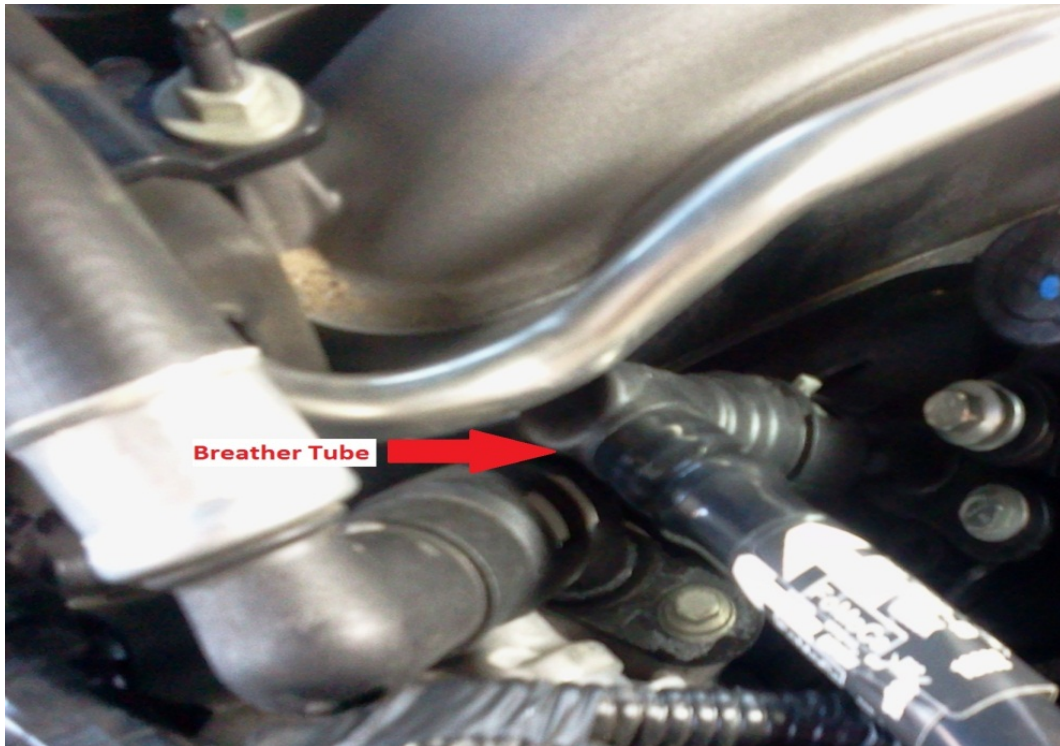
3. Remove your **Inlet Tube** by simply loosening the **clamp** disconnecting the **PCV Tube** and the **Sound Tube**. For convenience, I would recommend disconnecting the **PCV Tube** from the **LH Valve Cover** for the remainder of the removal. The **Sound Tube** is not required for operation; it merely brings the intake sound into the cabin area. I removed mine because it was in the way of my **LH Hood Strut**. An aftermarket **Cold Air Intake** should come with a plug if you choose to remove it.



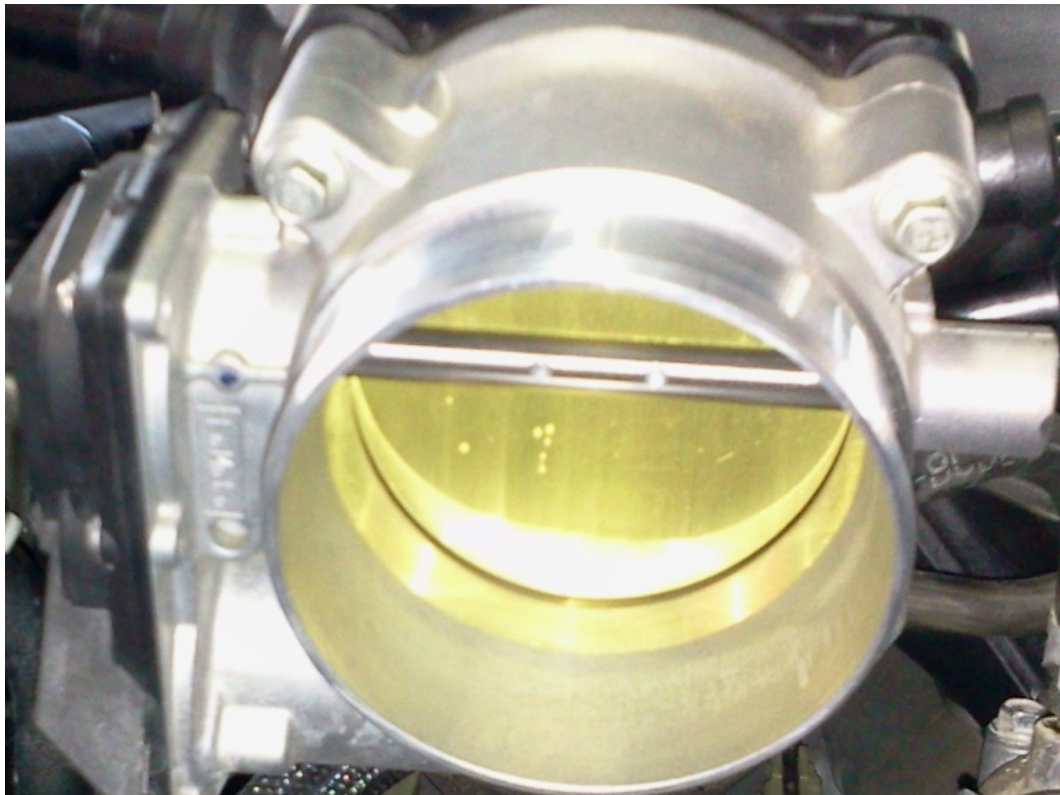


4. Completely remove the **Breather Tube** that runs from the **RH Valve Cover** to the **Intake Manifold**.

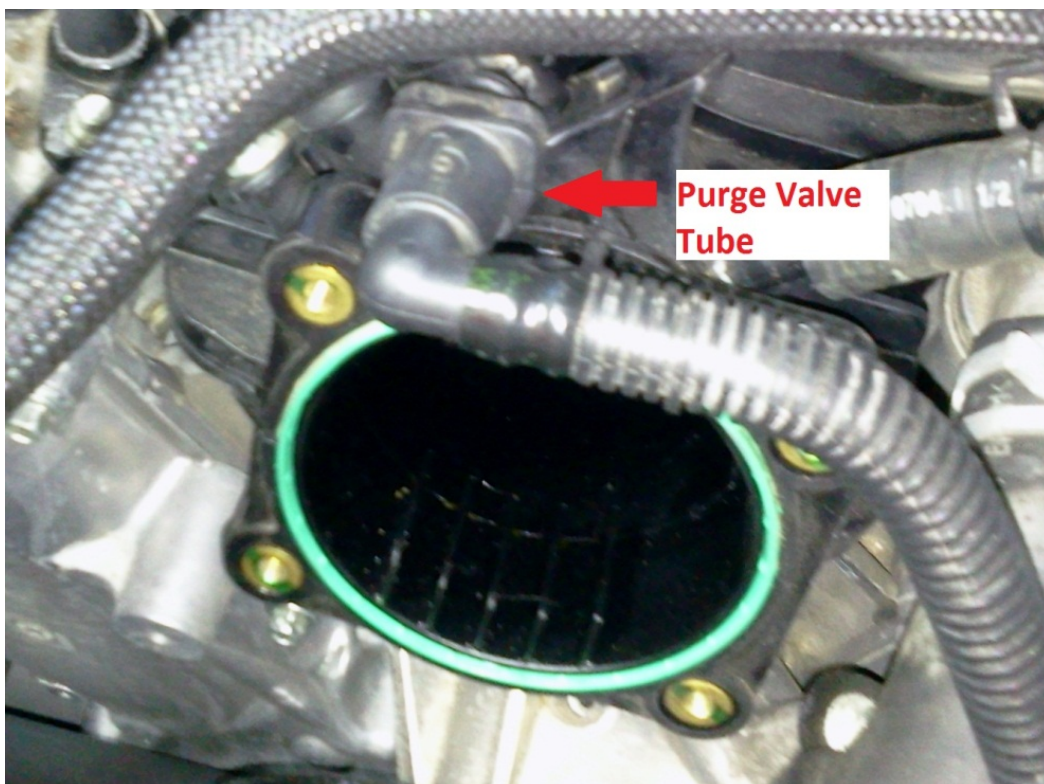
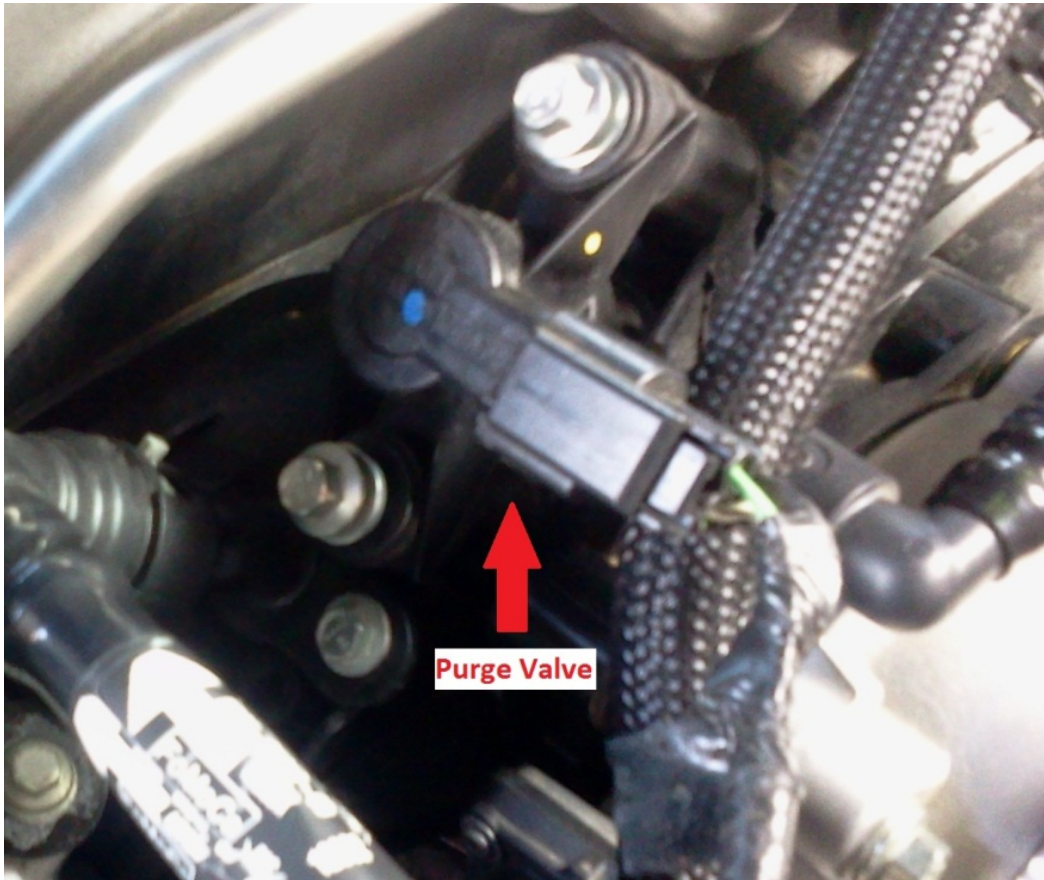




5. Remove the 4 bolts that attach the **Throttle Body** to the **Intake Manifold** using an **8mm socket** and its **electrical connector**.

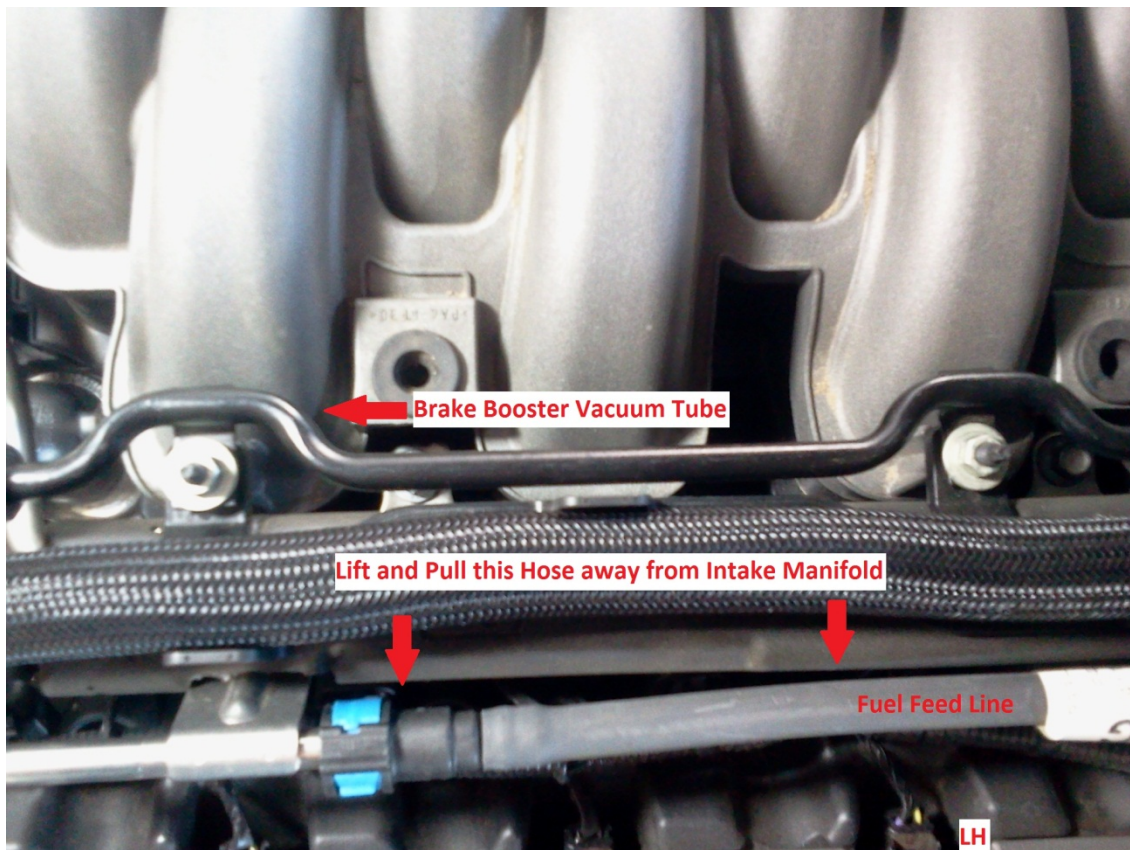


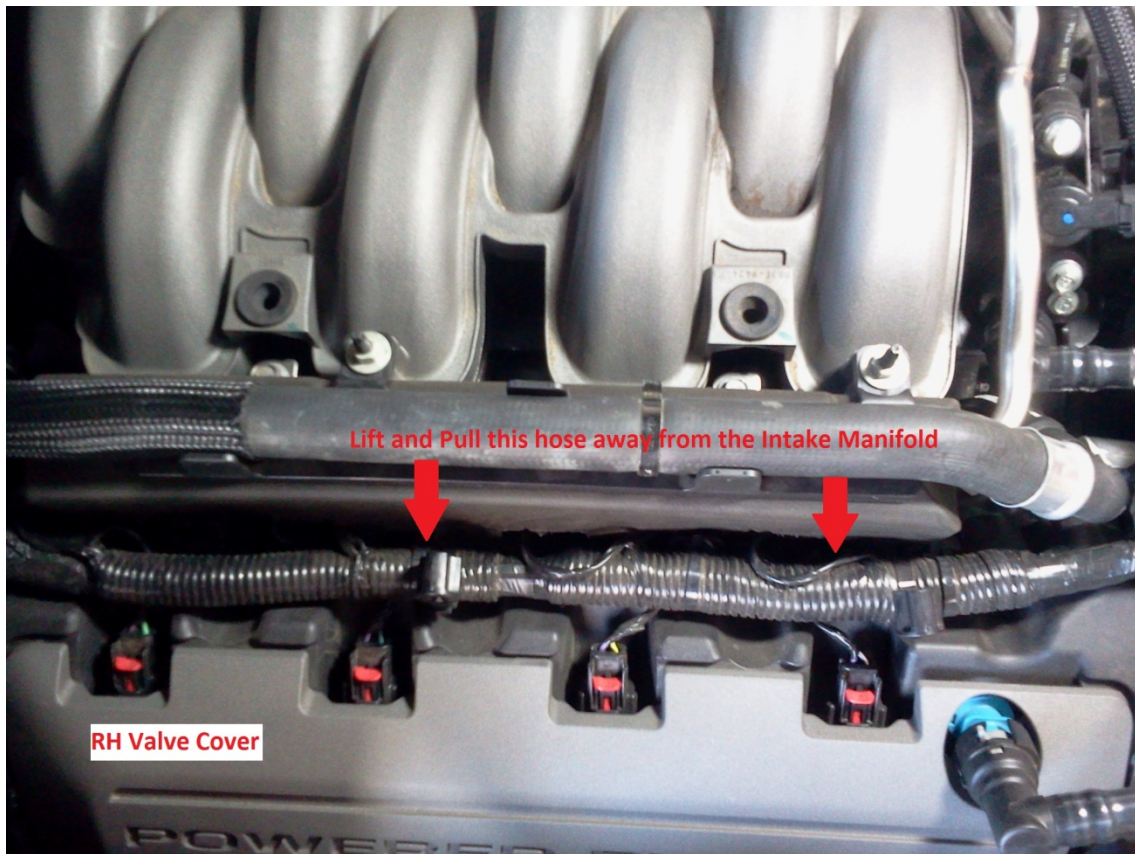
- Remove the two bolts from the **Purge Valve** using an **8mm socket** and its **electrical connector**. Then you will remove the **Purge Valve Tube** using a **Fuel and Disconnect Tool**.



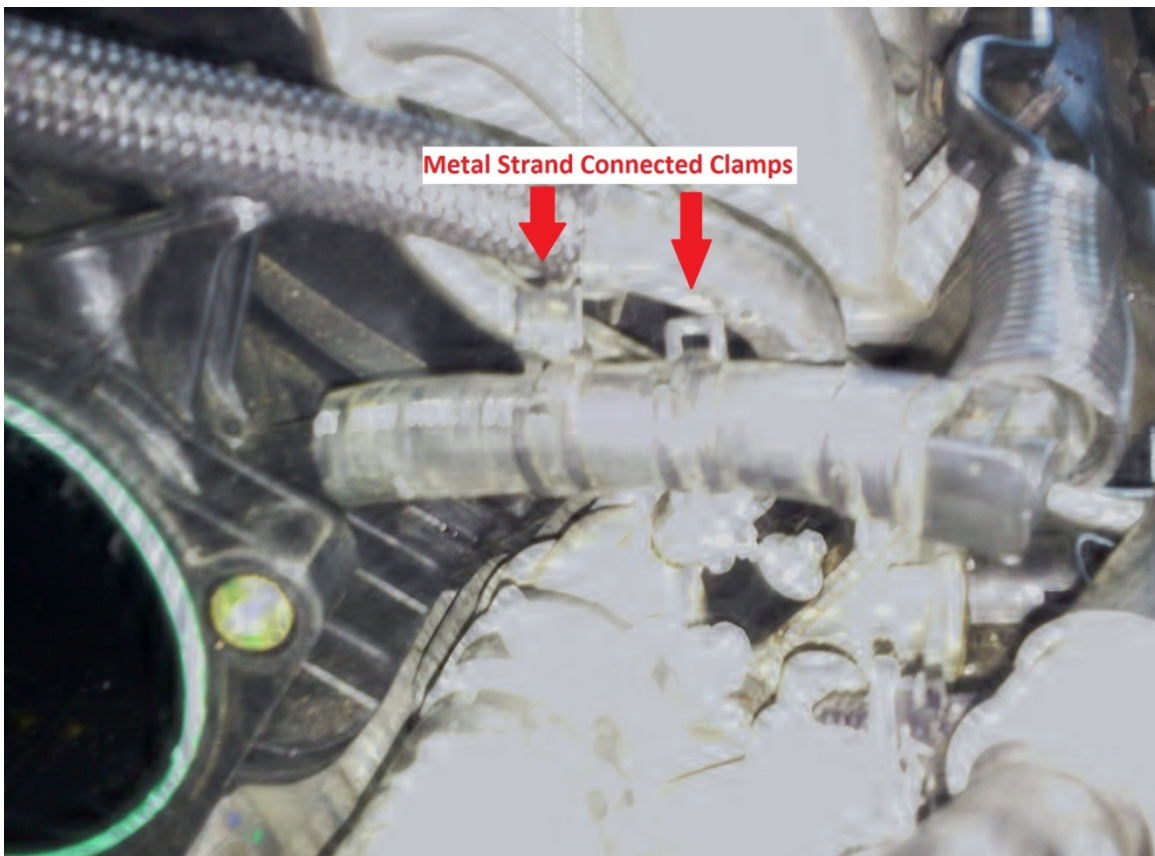


7. On each side of the **Intake Manifold** you will see two large hoses **DO NOT DISCONNECT THESE**, simply lift and pull them away from the **Intake Manifold** as shown below. Underneath you will see (2) nuts holding (2) **plastic hose brackets**, use a **10mm socket** to remove them. Remove and set aside the **brackets**. The **LH Bracket** retains the **Brake Booster Vacuum Tube**.





8. Disconnect the **Brake Booster Vacuum Tube** from the **LH Intake Manifold** utilizing the (2) **Pliers** and a **Friend**. There are (2) **clamps** connected with a **Metal Strap** so they do not move independently. This hose can be quite stuck on the **Intake Manifold**, once separated just pull it out of your way.

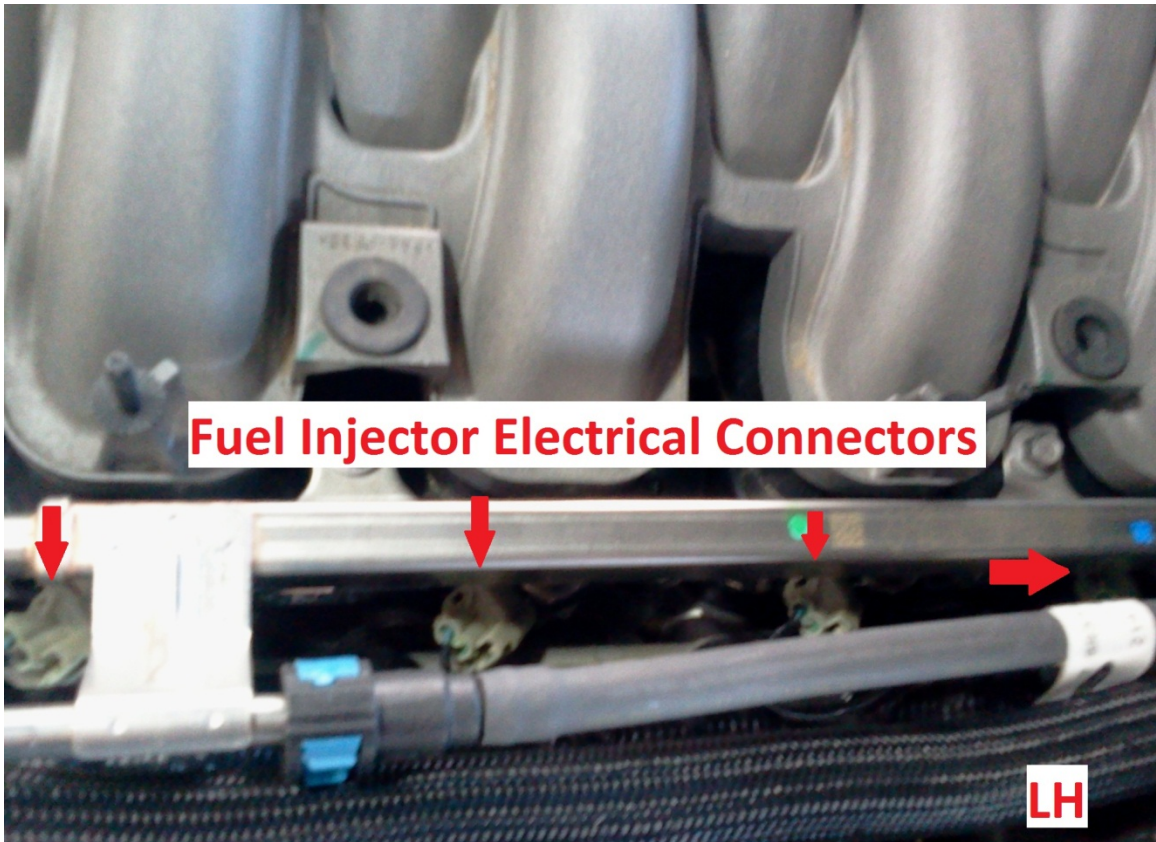


9. Remove the **Foam Sound Deadener** from both sides of the **Intake Manifold** and atop the **Fuel Rails**.

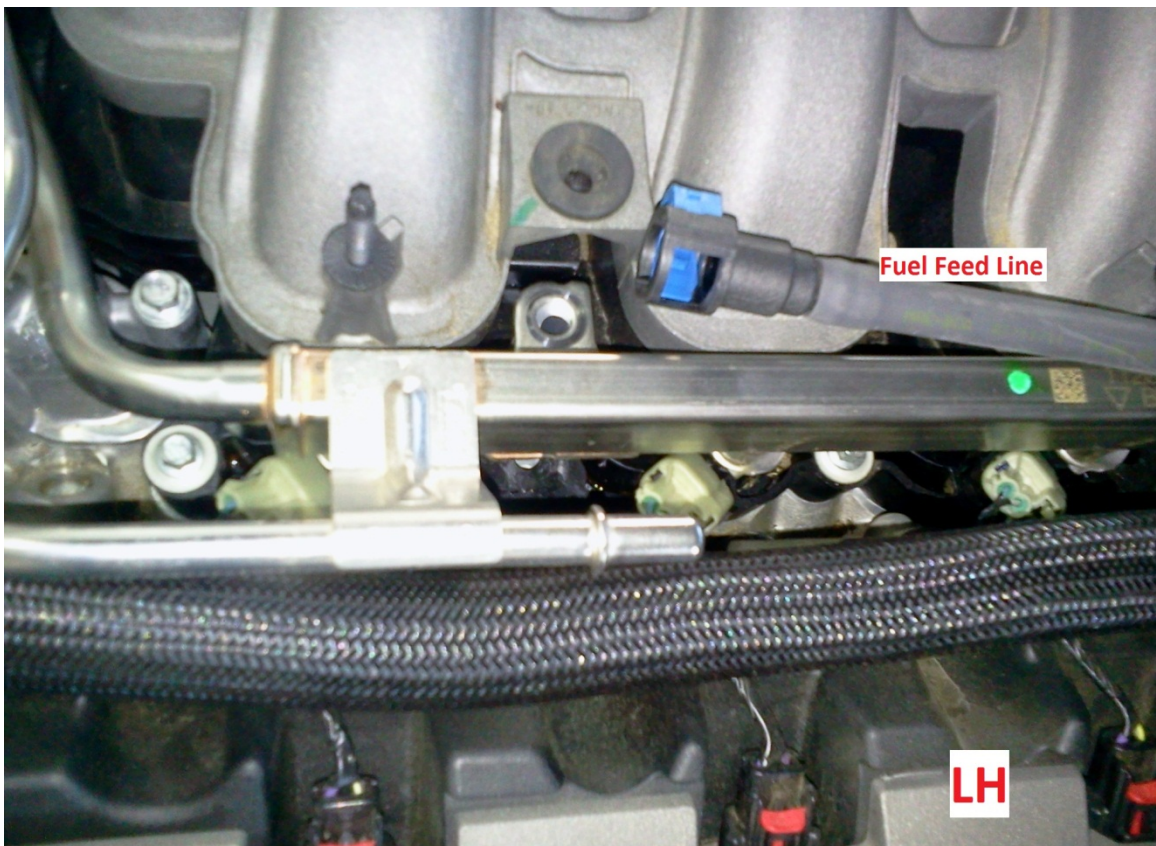


10. Remove the (4) **Fuel Rail Retaining Bolts** using a **10mm socket** and an **extension**. Unplug all (8) of the **Fuel Injector electrical connectors**.



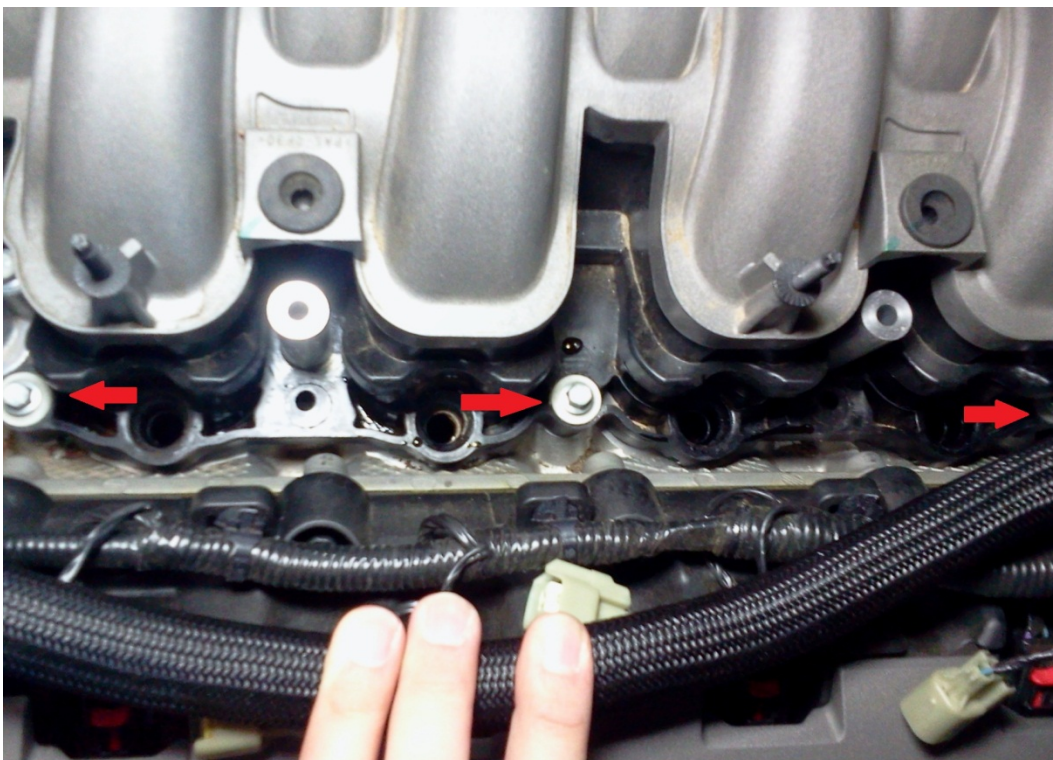


11. At this point you should depressurize your **Fuel System**. **NOTE: SAFETY GOGGLES ARE RECOMMENDED.** When ready to continue, use the **3/8" Fuel and Disconnect Tool** to disconnect the **Fuel Feed Line**. Gently lift on the **Fuel Rails** thus releasing the **Fuel Injectors** from the **Intake Manifold**. There will still be fuel in the **Fuel Rails**. Set aside the **Fuel Rails** and be sure not to set the **Fuel Injectors** on the ground.





12. Now you will remove (6) **retaining bolts (9mm)** that hold the **Intake Manifold** to the **Heads**. There are (3) on each side located the front/ rear corners and dead center. Loosen and Lift all (6) of these, but they are built into the **Intake Manifold** and will not come out. After that, lift up on the **Intake Manifold** and slide it forward slightly. On the very back, there are (4) **Wiring Harness retainers** that need to be pulled free or clipped off of the **Intake Manifold**. Two are located near the Rear Corner **retaining bolts**. Only (3) are pictured because I broke one of mine off. Pull the stock **Intake Manifold** up and out.





It's also a good idea to do a good clean up of the **Head** area, before proceeding with the installation. My car had plenty of oil/fuel/dirt/debris.

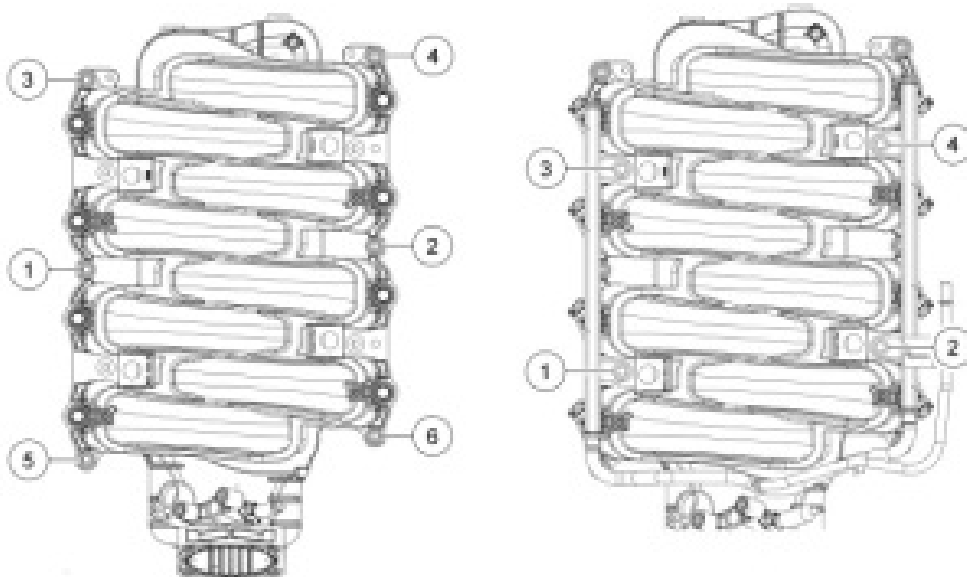


Installation Procedure:

13. Set the stock **Fuel Rails** into place on the **Boss Intake Manifold** and set the **Fuel Injectors** in their respective ports. It has been said that it is easier to torque the **Intake Manifold retaining bolts** before installing the **Fuel Rails**. I did not have a problem installing them together. **NOTE:** This **Intake Manifold** comes with pre-installed **Gaskets** so just set the **Boss Intake Manifold** atop the heads. Only the outer 2 out 4 **Wiring Harness retainers** can attach to the back of the **Intake Manifold**.



Finger tighten the 6 **Intake Manifold retaining bolts** and the 4 **Fuel Rail retaining bolts**, then torque them to **89 inch-pound** in the following respective sequences:



14. Plug in all **Fuel Injector electrical connectors** then connect the **Fuel Feed Line** to the **Fuel Rails**. Reinstall the **Foam Sound Deadeners** around the **Fuel Rails**.



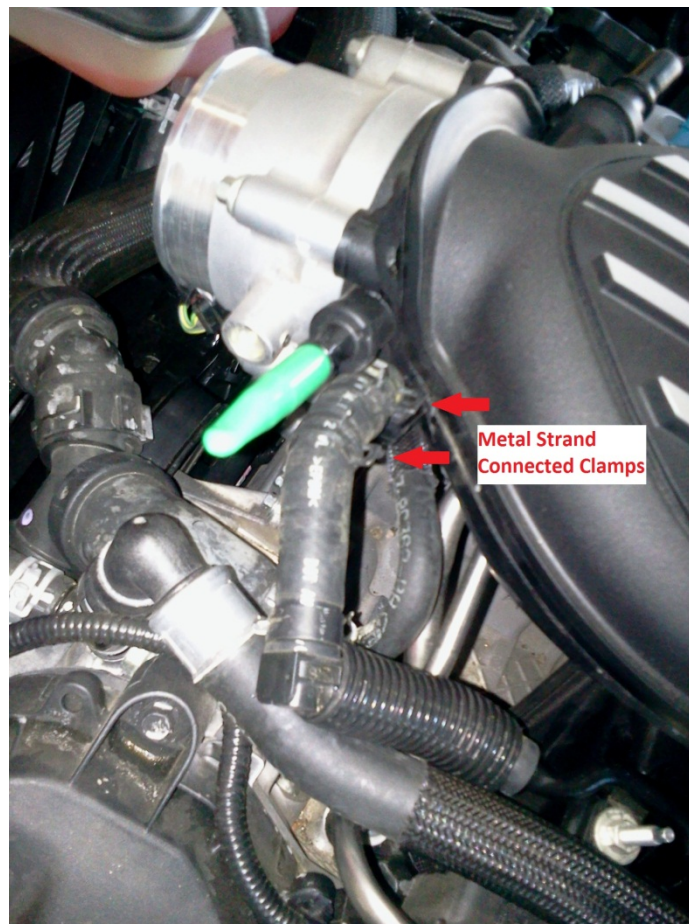
15. Reinstall the (2) **plastic hose brackets** with the (4) nuts (**10mm**) and set their respective hoses back atop them.



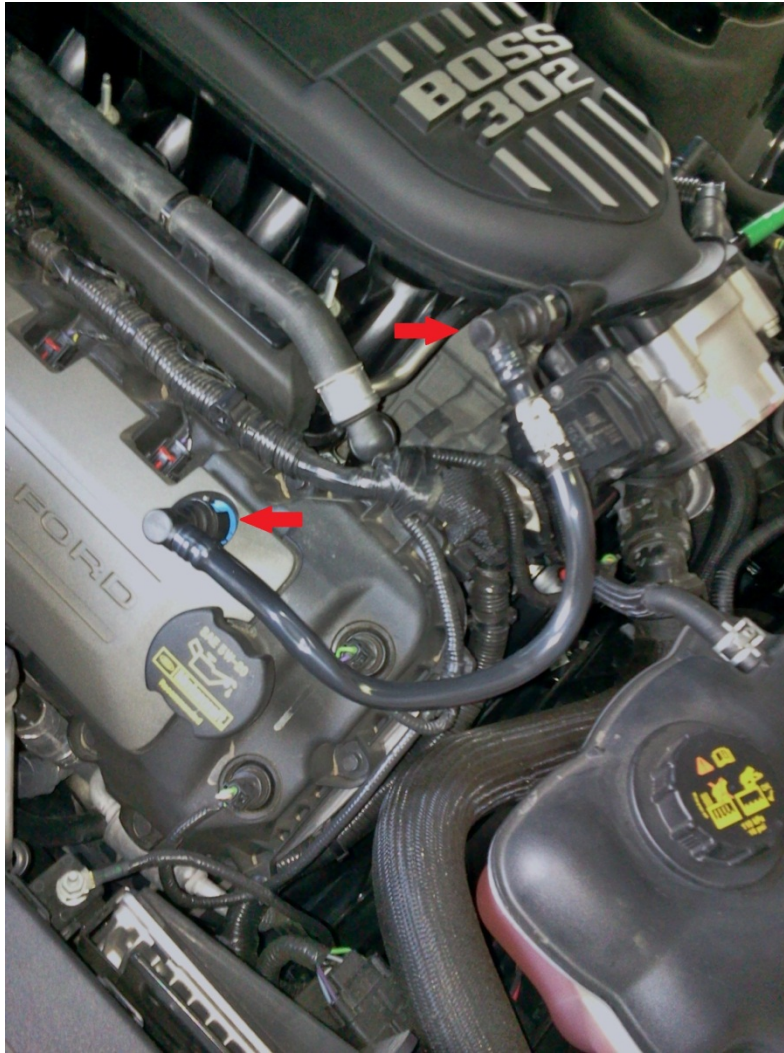
16. Reinstall the **Throttle Body** with the (4) **bolts (8mm)** along with its **electrical connector**.



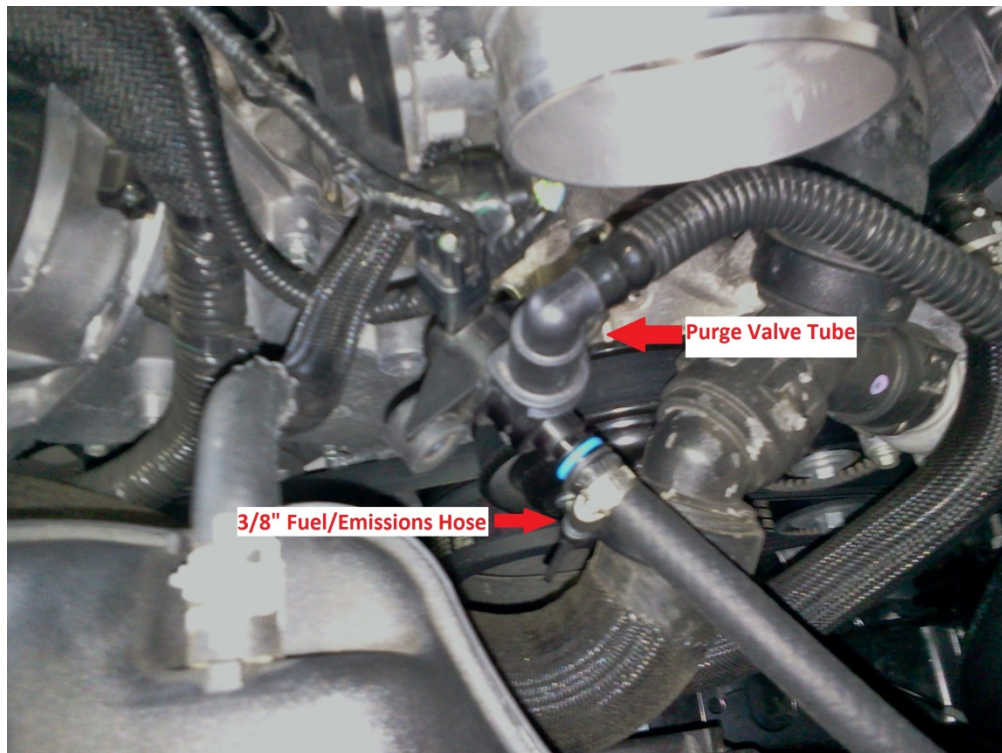
17. Get your (2) **Pliers** and **Friend** back and reinstall the **Brake Booster Vacuum Tube** to the Port on the **LH** front of the **Intake Manifold** just below the **Green Cap** pictured and ensure it isn't kinked.



18. Reinstall the **Breather Tube**.



19. This is the step where you reinstall the **Purge Valve** and the **Extra Parts** listed at the beginning of the guide come into play. The purpose of the **Purge Valve** is to vent **fuel tank vapor** in to the **Intake Manifold** during certain operating conditions. On the stock **Intake Manifold** the **Purge Valve** is mounted directly behind the **Throttle Body**. On the **2012-2013 Boss 302s**, the **Purge Valve** is located at the **LH rear** of the **Intake Manifold**. You can get the correct **Boss 302 Purge Valve** and its corresponding **bracket** from **Ford** for roughly **\$200** when it becomes available. For a temporary solution use a **3/8" Fuel/Emissions Hose** and (2) **Hose clamps** to install from your **Purge Valve** to the **Green Capped Port** on the **LH front** of the **Intake Manifold**. Then reconnect **Purge Valve Tube** and the **electrical connector** to the **Purge Valve** and route the best way you find underneath the **Throttle Body**.



You can also install the **Purge Valve** to the **Engine Block** with a little finagling, a **Bolt**, **Washer**, and **Lock Washer**. Here is the best image I could take of the best place to mount it on the **Engine Block**.



20. Install the **Boss 302 Strut Tower Brace**, if purchased. Your stock **Strut Tower Brace** will not clear.



21. Now install the **Cold Air Intake** of your choosing with that **Intake's** supplied instructions. And remember you can install this **Boss 302 Intake Manifold** with the above mentioned **Boss 302 Intake Manifold Install Kit**. Either way you go, don't forget to reattach the **PCV Tube**. I personally upgraded to the **JLT Cold Air Intake** for **2012-2013 Boss 302s** and the fitment was really great.



22. **DO NOT START YOUR CAR UNTIL YOU HAVE FINISHED INSTALLING THE TUNE**

Installation Instructions written by AmericanMuscle customer Benjamin Connery 7/17/2012