

**James Barone Racing
Performance Aftermarket Parts and Accessories**

**MAZDASPEED 3, 6 & CX-7
Thermal Insulator Gasket Intake and Throttle Body
Installation Instructions**

For Throttle Body Installation Instructions see P.12



It is critical these instructions be followed step by step. This is an involved procedure and care must be taken. Read and thoroughly understand all steps. It is recommended that you read this guide while performing a visual dry run on the car to familiarize yourself with all the components discussed in each step. When the thought, "I don't need to do this" enters you mind, STOP, put everything back together and walk away. Believe me; you'll be doing yourself a huge favor. Now let's get started.

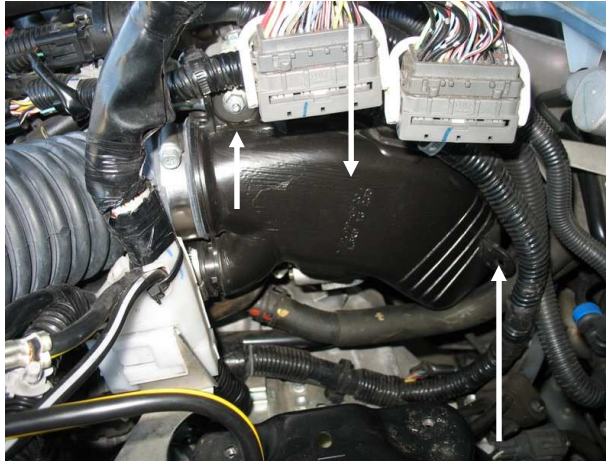
1. Remove the air filter cover and bottom of the air box
 - a. Disconnect MAF Sensor
 - b. Disconnect Valve Cover Breather Hose



2. Remove battery, battery box and ECU
 - a. Disconnect negative terminal first (Always reconnect negative terminal last)



3. Remove turbo inlet pipe
 - a. Remove clamp at the turbo
 - b. Remove vacuum line coming from boost control solenoid
 - c. Remove 1x 10mm nut from bracket
 - d. Remove BPV hose from BPV
 - e. Remove all as one unit.



4. Remove 2x 8mm EGR flange bolts and gasket



5. Remove intercooler cover 2x 10mm bolts



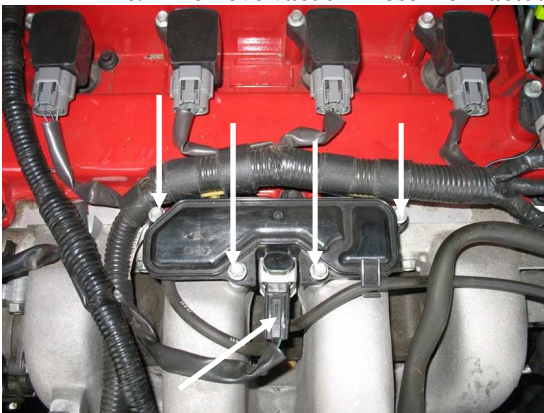
6. Remove intercooler
 - a. Remove 3x 12mm nuts
 - b. Loosen clamps on both boost tubes
 - c. Remove intercooler



7. Remove Throttle Body
 - a. Remove 4x 8mm bolts
 - b. Set throttle body off to the driver's side (do not disconnect coolant lines)



8. Remove Vacuum Regulator module
 - a. Remove 4x 8mm bolts
 - b. Remove 1x electrical connection
 - c. Remove vacuum hose from actuator



9. Remove vacuum hose

- a. Rotate blue clip by the tab counter clockwise until it rotates off
- b. Pull up to remove hose
- c. Put previously removed clip back on to the hose for reassembly later
- d. Set light blue retainer off to the side so it does not get lost, needed for reassembly



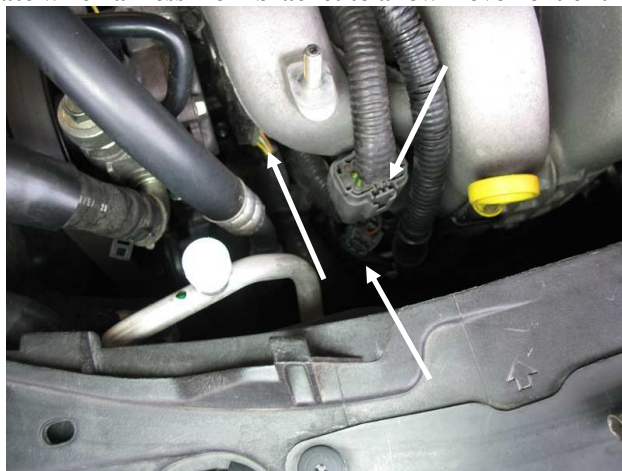
10. Remove brake booster vacuum hose

- a. Remove hose from black plastic retainer
- b. Squeeze metal clamp and slide towards the firewall
- c. Twist and separate hoses



11. Remove 3 electrical connections

- a. Squeeze the tab on the side of each connector and pull them apart
- b. Separate wire harness from bracket to allow movement of the harness



12. Remove the EGR tube flare nut

- a. Use a 22mm open ended wrench or a GOOD adjustable wrench
- b. Remove the tube from the vehicle



13. Remove the vacuum actuator

- a. 2x 8mm bolts for the actuator
- b. Carefully detach the actuator arm with a flat head screw driver



14. Unbolt dip stick bracket from the intake

- a. Follow the tube with your hand from the top of the tube down to locate 1x 8mm bolt



06'-07' MAZDASPEED 6, 07'-09 MAZDASPEED 3 and CX-7 ONLY
Power Steering Pump Partial Removal

Skip steps 15- 16 for 2010 and up MAZDASPEED 3

15. Remove electrical connector and top 2x 12mm bolts



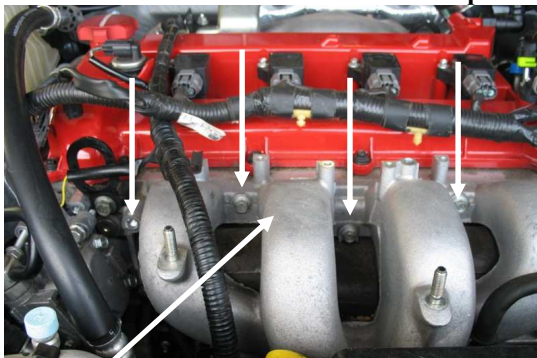
- 16. Facing the motor, loosen bottom left bolt located 3" directly below top left bolt**
- Loosen the bolt about a 1/2" maybe a little more**
 - Pull the power steering pump towards the front of the vehicle**
 - Once the lower right indexing pin is exposed let the pump rotate towards the passenger side of the vehicle.**
 - There is no need to remove the serpentine belt, but you can if you wish.**



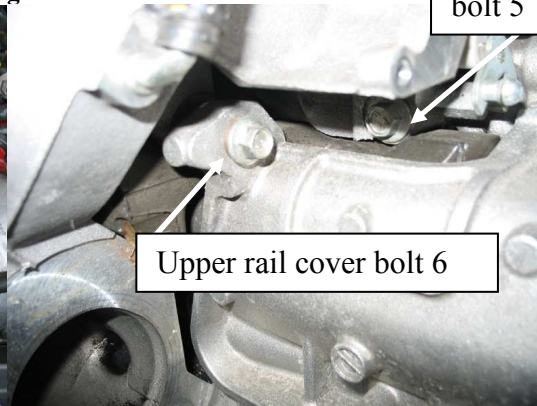
Lower right indexing pin

17. Loosen then remove 8x 10mm intake manifold bolts

- a. Remove the bolts from the passenger side towards the driver's side**



From Passenger to driver's side
1,2,3,4



Closest to driver's side
bolt 5

Upper rail cover bolt 6



Lower fuel rail cover bolt 7

Bolt 8 above starter and behind
EGR passage

18. Slide the intake manifold towards the front of the vehicle and remove the factory intake gasket

- a. Take note of the way the gasket is installed**
b. Remove the gasket

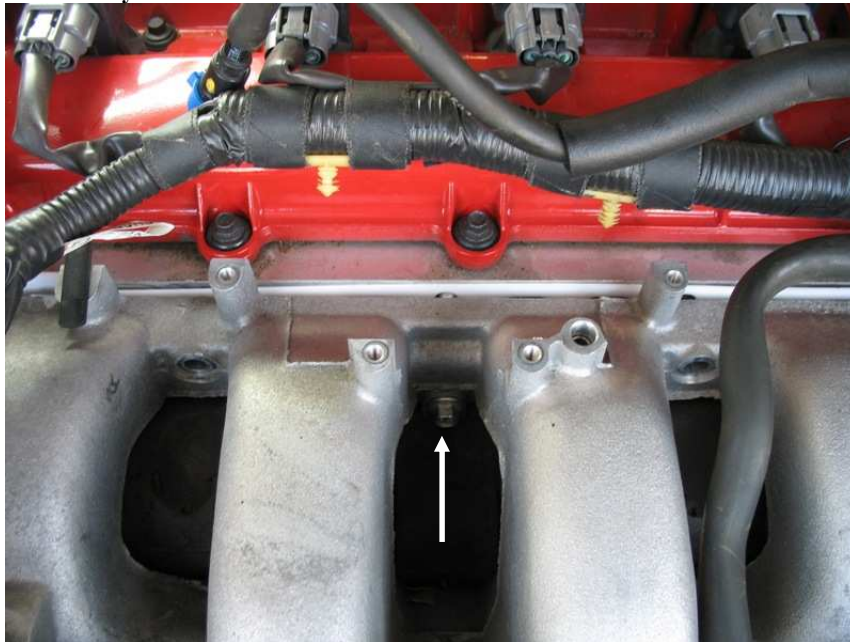


19. Install your new JBR Thermal Intake Gasket the same way the factory gasket was installed

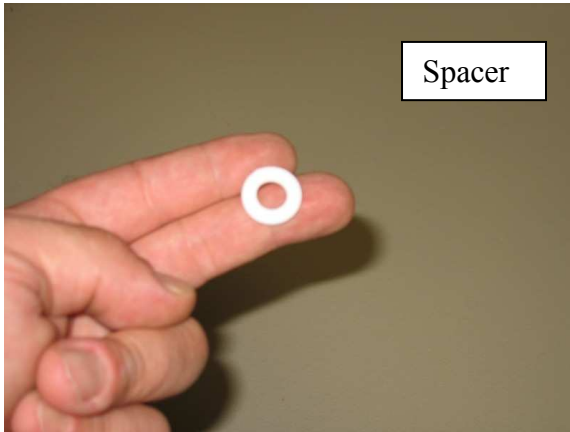


NOW IS A GOOD TIME TO PAY ATTENTION TO EVERY STEP

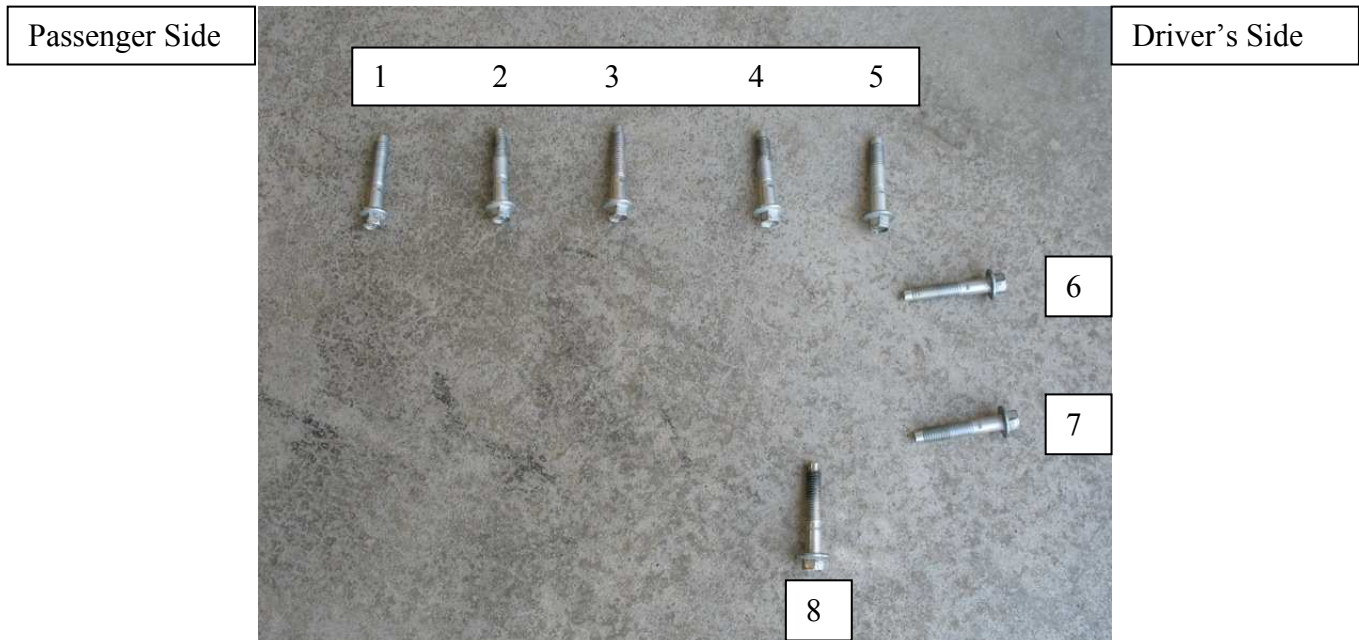
20. Slide the intake manifold back in to position and very loosely install the middle bolt # 3
- Refer to bolt diagram on the following page
 - Carefully line up indexing pins
 - Loosely install bolt #3



21. Loosely install bolt # 8 with thermal intake gasket spacer between intake and the block.
- Refer to bolt diagram below
 - Tie a piece of thread to the spacer (**Seriously do this; you will drop it**)
 - Slip the # 8 bolt through the hole with your left hand
 - Slip the spacer on to the bolt with your right hand
 - Install the bolt half way in to the block
 - Cut thread



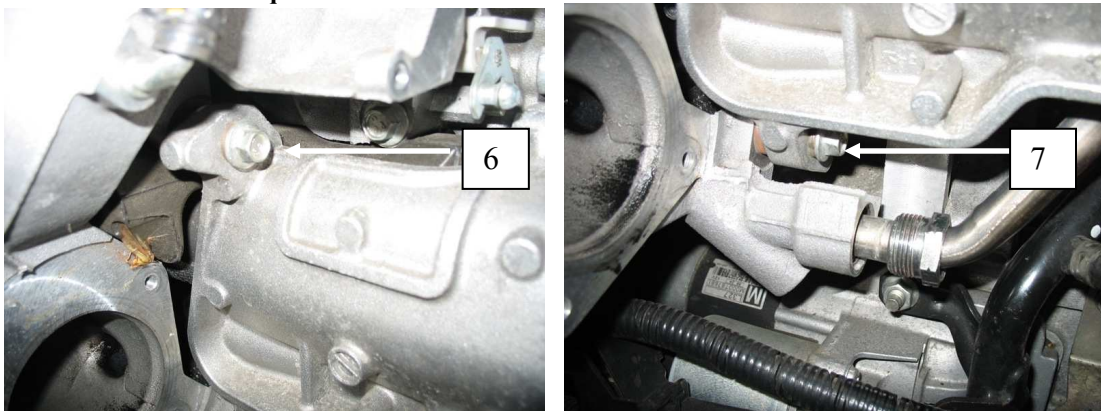
Bolt Installation Diagram



22. Install ONLY bolts 1-5 and #8
 - a. Snug ONLY bolts 1-5 and #8
23. Torque ONLY bolts 1-5 and #8 to 16FT-lbs
24. Loosen rear fuel rail cover bolts 2x 10mm
 - a. **This is an important step don't skip it**



25. Install and torque bolts 6 & 7 to 16FT-lbs



It is highly recommend you re-check and re-torque the intake manifold after a few hundred miles or several heat cycles whichever comes first.

Congratulations!! You've just completed the installation of your new JBR Thermal Insulator Intake Gasket!!

26. Now that you successfully completed the gasket installation, reverse the installation procedures and complete the re-assembly.

Throttle Body Thermal Insulator Gasket & Coolant Bypass Installation Instructions

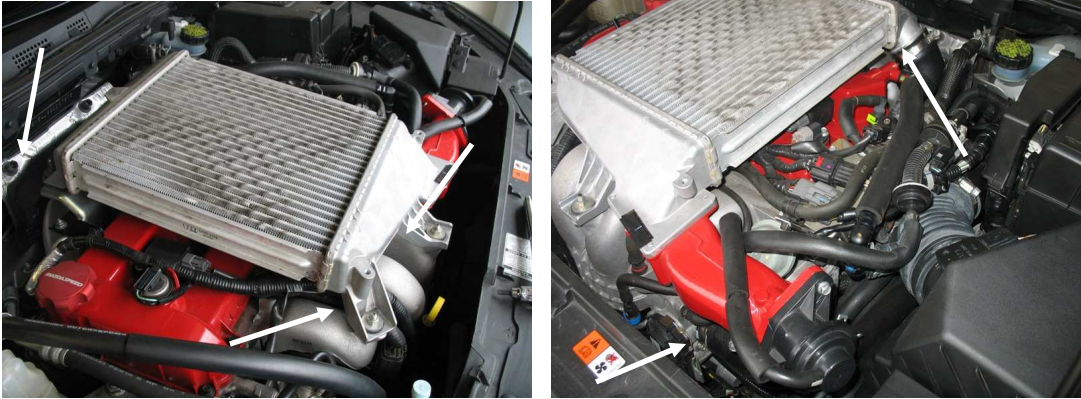
1. Remove the air filter cover and bottom of the air box
 - a. Disconnect MAF Sensor
 - b. Disconnect Valve Cover Breather Hose



2. Remove intercooler cover 2x 10mm bolts



3. Remove intercooler
 - a. Remove 3x 12mm nuts
 - b. Loosen clamps on both boost tubes



4. Clamp coolant lines & remove throttle body
 - a. Remove 4x 8mm bolts
 - b. Remove throttle body and factory gasket from the intake



5. Install your new JBR Throttle Body Insulator Gasket
 - a. Slip the top 2x 1mm bolts through the hole in the throttle body
 - b. Place the gasket on to the 2 bolts with the tab of the gasket in the front upper position.
 - c. Loosely install the top 2x 10mm bolts back on the intake manifold
 - d. Loosely install the bottom 2x 10mm bolts back on the intake manifold
 - e. Torque all 4x 10mm bolts to 10Ft-lbs. in an X pattern



6. **Clamp off and remove coolant lines**
 - a. Use 2 pair of vice grips to clamp off coolant lines (Use just enough pressure to lock the vice grips)
 - b. Use a pair of needle nose pliers to slide the coolant line hose spring clamps back about an inch from the throttle body
 - c. Remove both hoses from the throttle body



7. **Install coolant line barbed coupler and replace clamps**
 - a. Insert the supplied barbed fitting in to the end of each coolant line
 - b. Using a pair of needle nose pliers slip the spring clamps back in to position about an 1/8" from the center of each side of the barbed fitting.



8. Put the 2 included caps over the coolant line ports on the throttle body. (not shown)

**Congratulations!! You've just completed the
installation of your new Throttle Body Thermal
Insulator Gasket & Coolant Bypass Kit**

Failure to carefully follow the installation instructions for your JBR product could result in death, serious injury or damage to your car or your new parts. Please take the time to read and thoroughly understand the instructions prior to installation. The directions are as accurate as possible and may vary slightly from model year to model year.

**Thanks,
Jamie**

Legal Disclaimer

JAMES 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, passenger or vehicle resulting from the operation of a JAMES BARONE RACING product.
PLEASE DRIVE RESPONSIBLY.