



## **M7 Air Gain System Installation Guide**

Thank you for purchasing the M7 Air Gain System. Please read the complete instructions and gather required tools before starting installation. **NOTE:** Allow yourself plenty of time for first time installation.

### **Required Tools:**

- » AGS Kit
- » Phillips Head Screwdriver
- » 10mm/13mm/8mm Socket Wrenches and Extensions
- » #30 Torx Wrench
- » Flathead Screwdriver
- » Extra Long Needle Nosed Pliers
- » Dremel Tool or Reciprocating Saw
- » WD-40 Spray Lubricant
- » Shop Rags
- » Coolant
- » Something Cold to Drink (Optional)

### **STEP ONE: Removing the Bumper Skin**

First unbolt the following:  
(8) Phillips head screws,  
(3) 10mm bolts, (2) #30 Torx on each side of the radiator, (2) 8mm bolts on the far right and far left of bumper.

At the bottom of the front bumper you will find (8) Phillips screws. Remove them together with the (3) 10mm bolts. There are (2) #30 Torx bolts on each side of the radiator, remove them. Once all the bolts are off, reach in and disconnect the lamp wiring and thermometer wiring. Now remove the front bumper skin off the car.



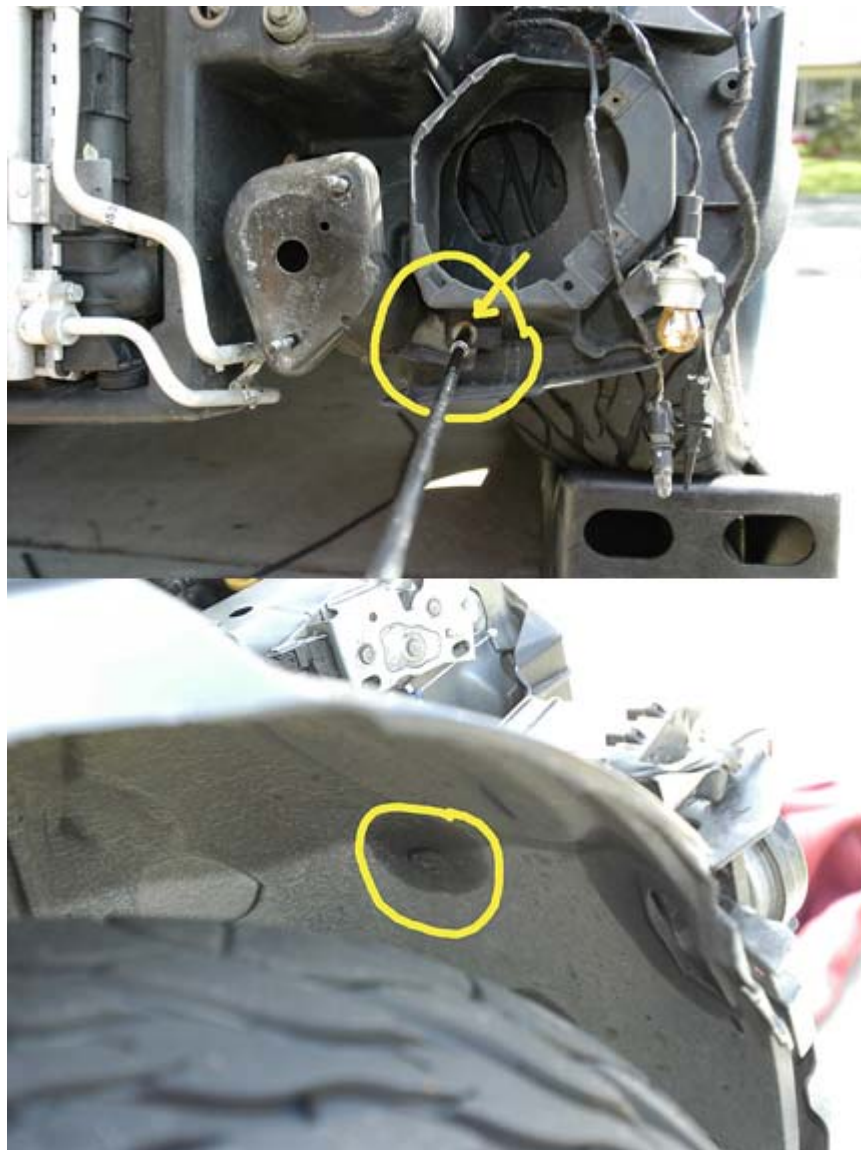


**STEP TWO: Remove the bumper aluminum extrusion.**

Be sure to unbolt the following first: (5) 13mm bolts on each side of the lower portion of the bumper, (2) 10mm bolts below the body extensions arms (black).

Now crank the steering wheel of the car all the way to its furthest position. Reach in the wheel well and remove the (4) plastic Phillips screws attached on each side of the front clip—there will be (8) bolts in total. Make sure to also unbolt the 10mm bolt with a clip that holds the radiator hose to the intake manifold. The front clip with the radiator can now be carefully folded forward.

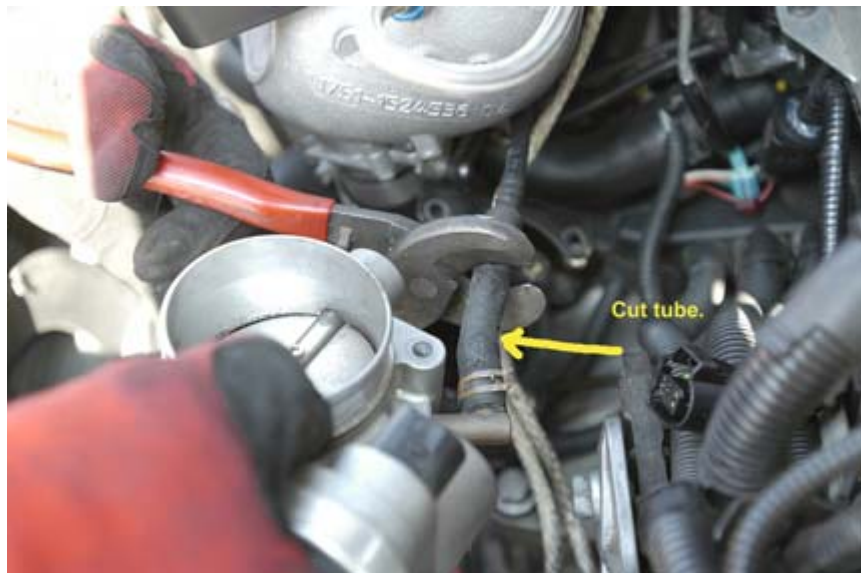




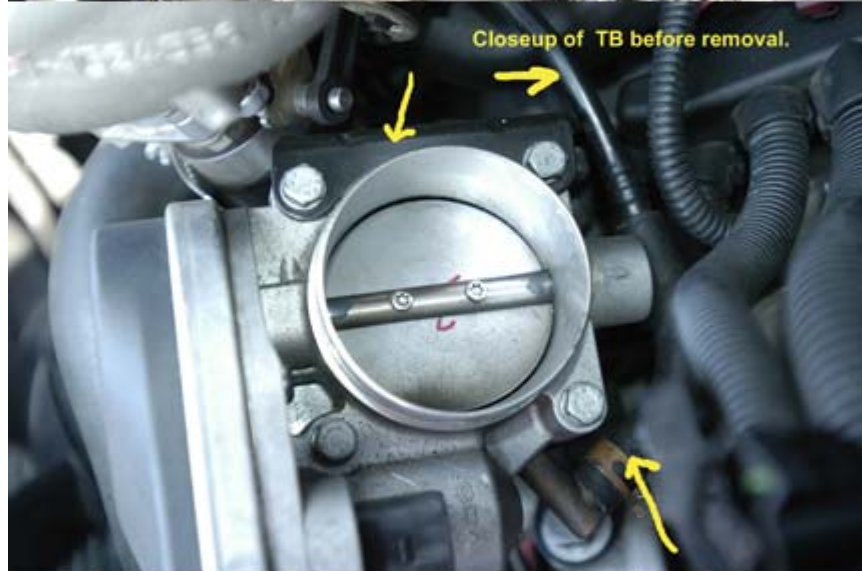
**STEP THREE: Remove the air box rubber hose attached to the throttle body, and the hard plastic tubing that running from the front of the car to the airbox.**

Disconnect the wiring harness from the throttle body and cut the vacuum line going to the throttle body. Unbolt the (4) 10mm bolts and remove the throttle body.

Disconnect the (2) hard-line vacuum hoses going to the super charger tube by pushing down on the red collar—while at the same time pulling on the

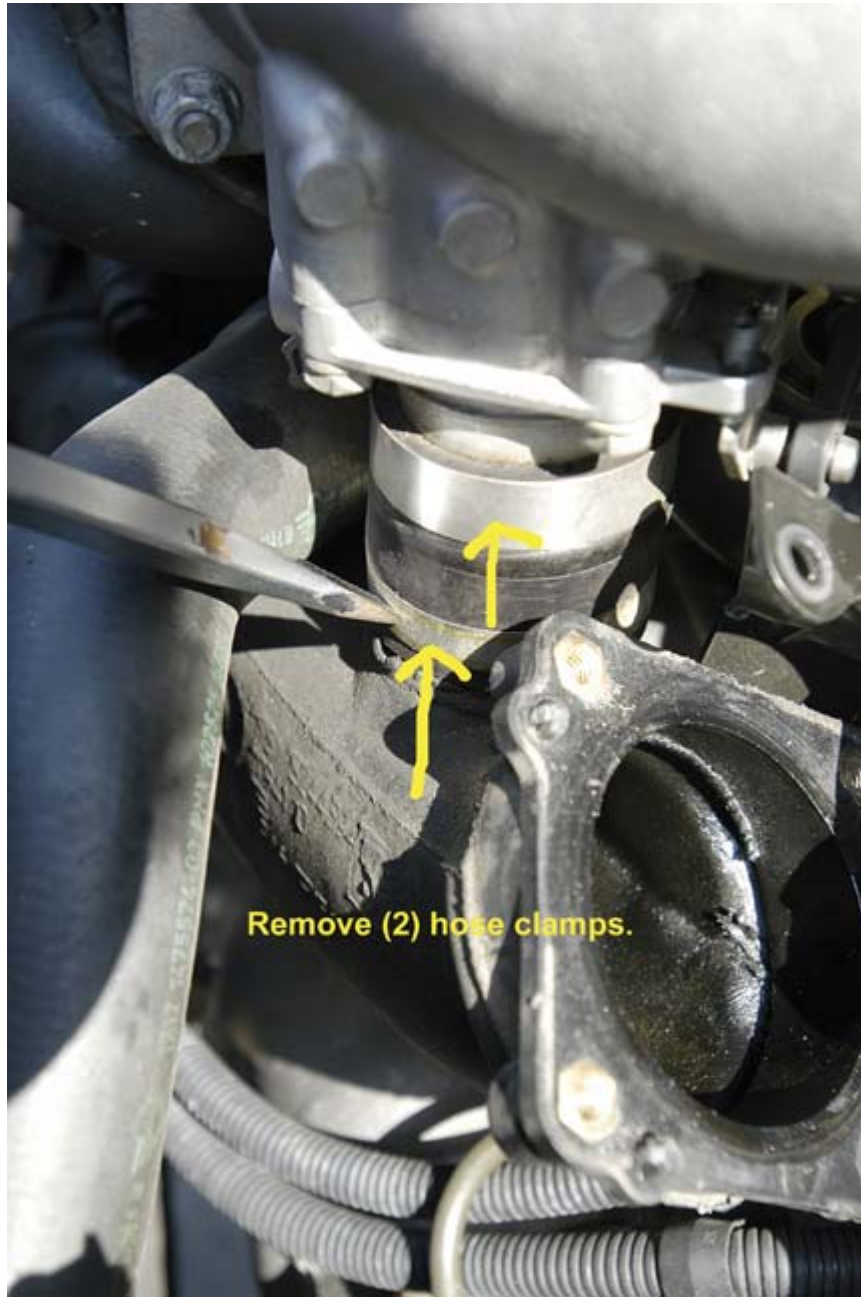


black and gray tubes. We highly recommend using extra long needle nose pliers for this. The black tube needs to be disconnected. To do this, find the quick-disconnect toward the firewall and press the small white tab on the side of the joint. The gray tube is connected to a map sensor. First unbolt (2) #2 Allen screw, now the gray tube can be easily removed.



**STEP FOUR: Remove the (2) hose clamps that connect the super charger tube to the bypass valve.**

Unbolt the bracket that holds the throttle bottle in place - (2) 13mm bolts + (1) 10mm bolt. Remove the stand-up bracket that holds the large connector for the radiator fan electronics and AC recharge/vent tube. You will bolt the AC tube back down and zip-tie the connector back when finishing the job. On the opposite side to the throttle body are (2) AC aluminum tubes held down with a plastic bracket, Unbolt the bracket (1) 10mm bolt and slide down the round tube rubber protector on the aluminum pipe or the filter will not fit properly.





**STEP FIVE: Locate the front clip on the radiator shroud.**

Opposite the throttle body, locate the plastic protrusion that is 1 ½" x 3". Cut this protrusion out using a Dremel tool or a saw and smooth out the surface area. Take the rubber tube connecting the AGS tube and the the bypass valve. Use the ring hose-clamp provided and tighten down securely.



**STEP SIX: Locate the green gasket that seals the super charger tube to the super charger.**

Now take the AGS tube and spray some WD 40 on the gasket side and on the BPV pipe. Position it in place and align the bypass valve tube with the rubber tube and slide it on. Move the tube into alignment with the 10mm bolt-hole on the supercharger. Using the second ring hose-clamp

provided, tighten it around the bypass valve tube. Check to make sure there is no interference between the moving assembly of the valve and the clamp.

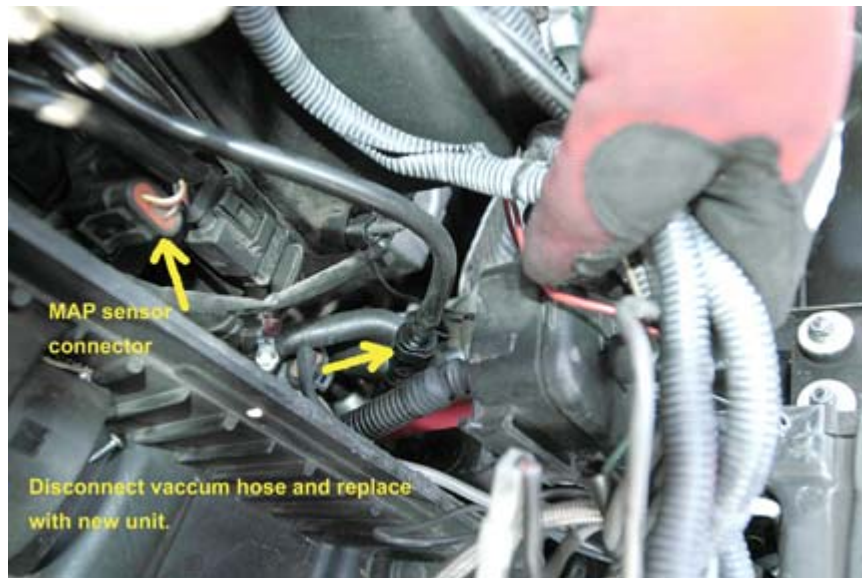


**STEP SEVEN: Replace the vacuum hose.**

Cut the rubber hose at the vacuum hose hard plastic tube and replace it with the new 19" vacuum hose included in the AGS kit. On the throttle body remove the original equipment (OE) vacuum elbow by either forcing it out with a skinny screwdriver or simply tap it sideways back and forth until it comes out. Replace with the AGS



low-profile elbow by tapping it in. Note that the elbow needs to point in the direction of the throttle body rubber gasket. The position of the throttle body should be such that the electrical connector faces the front of the car.



**STEP EIGHT: Connect the new vacuum tube, map tube and radiator hose.**

Now take the replacement black vacuum tube and gray map tube and connect both back into their original positions. Take extra caution not to crimp or squeeze the tubes. Now disconnect the radiator hose from the water pump and cut 4" of the hose. Now attach the hose to the water pump making sure that it is positioned so it slopes upward. Attach the coupler and mate with the original hose and clamp. Route the throttle body hose smoothly around the throttle body and attach to the elbow.



**STEP NINE: Install the new AGS filter.**

First spray the inside collar of the AGS filter with WD-40. Attach it to the throttle body. Now open the T-band clamp and position it around the filter collar so the bolt slides straight up, but do not tighten yet. **Keep clamp loose.** Take the wiring harness extension and connect it to the original equipment (OE) harness and attach to the throttle body. Now tighten the T-band clamp and slide the red silicone cap over the entire bolt assembly to prevent chafing of the wiring harness.



**STEP TEN: Wrap the radiator hose with the silver heat shield.**

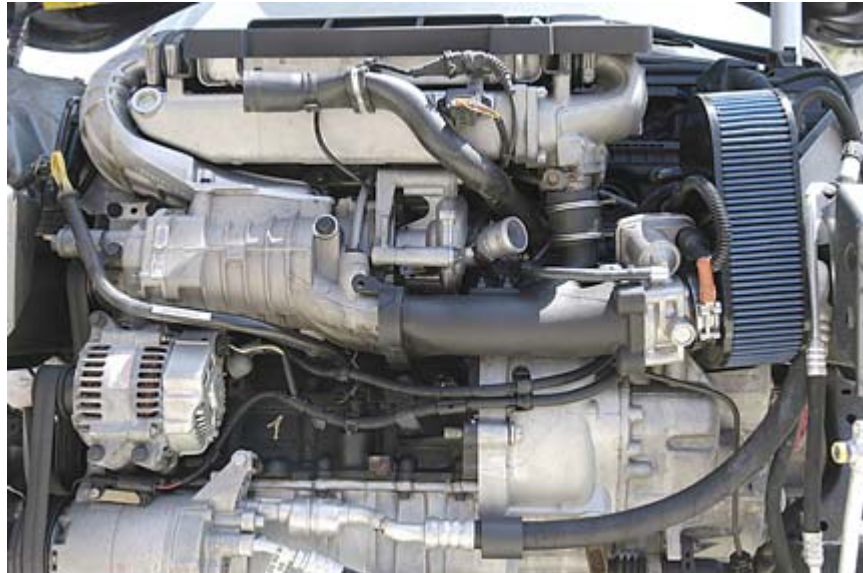
Use the silver heat shield

in the kit to wrap the radiator hose. Make sure to cover most of the area around the location of the AGS filter. Secure with zip-tie wrap. Be sure to fill the expansion tank with coolant at this time.



**STEP ELEVEN: Make sure your AGS is installed properly.**

Before replacing the front bumper and all bolts, start the car to make sure everything is connected and working properly. If the AGS is properly installed, the idle should be steady with no fluctuations. If this is not the case, start troubleshooting by double-checking that all hoses are in proper position, nothing is crimped and all bolts are tight with no air leaks.



**If installing AGS using a LIFT:** If the car is on a lift, it is recommended to refill and vent the radiator system. As the car will lean forward and lose more fluid than would be the case with Floor jacks or ramps.

**If installing AGS using RAMPS or FLOOR JACKS:** If the car is on the ground, it is only necessary to refill the expansion tank with a small amount of coolant.

***NOTE: The AGS has a very distinct sound. It is normal to hear the sound of air rushing into the throttle body.***

Congratulations on successfully installing your M7 Air Gain System! Enjoy the ride!  
If you're running into any problems or need technical help with your AGS installation feel free to call our Tech line...

**M7 Tech Line (562) 608-8123**