



Pontiac G8 V6 Engine

Air Intake System *Installation Instructions*

Tools Required :

Ratchet	7mm socket
Phillips screwdriver	8mm socket
T30 torx bit	10mm deep well socket
T25 torx bit	13mm socket
7/16 socket	

Removing OE factory air intake

Step 1. Remove crank case ventilation tube. Then loose hose clamps on each end of the air inlet tube assembly.

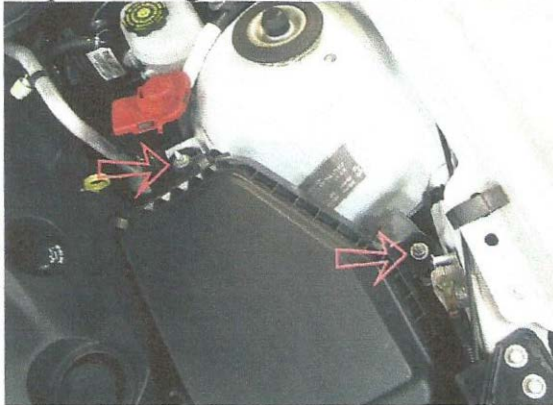


Step 2. Disconnect MAF sensor connector. Using your fingers, squeeze and pull firmly to disconnect the MAF sensor harness and remove MAF sensor.

Step 3. Remove air tube assembly from vehicle.



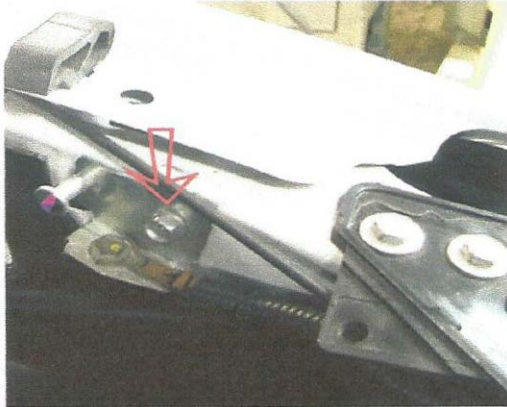
Step 4. Using 10mm socket. Remove 10mm nuts from air box assembly.



Step 5. Remove air box assembly. Using both hands, Pull firmly straight up to remove air box. Note* There is a grommet on the bottom side holding air box in place.

Step 6. Using 10mm socket. Remove bolt holding the windshield washer fluid neck.

Step 7. Using 13mm socket. Remove bolt which holds that battery post bracket.



Step 8. Using T25 torx bit. Remove 2 bolts holding the MAF sensor to factory air box. Remove MAF sensor from factory air box assembly.



Step 9. Using T30 torx bit. Remove lower air box stud. See picture for details.



Air intake installation

Step 1. Locate air box, filter housing, mounting flange, and #11 10-32 machine screws. Insert filter housing as shown in illustrations A1 and B1. Align the five mounting holes of the flange, air box, and filter housing and insert all five of the 10-32 machine screws. Tighten all five screws using a phillips screwdriver. **CAUTION.** Be careful not to over tighten.

* Note: The mounting flange has a "T" stamp which goes towards the top of the air box and faces towards the air box.



* Note: Align notch in flange with the guide on the filter housing. This image shows the raw flange better show the details.

Step 2. Locate MAF sensor mounting flange, along with 2, 1/4-20 x 2 1/2" bolt, 1/4-20 hex nuts, 2, 1 3/4" black spacers, 2, 1/4-20 nylock nuts, 1, 3 1/2" silicone coupler, and 2, 80-100mm hose clamps. Insert bolts through the MAF sensor mounting flange and use hex nuts to secure bolts to flange. Next, slide flange over the filter housing. *Note: align the notch in the flange with the guide on the filter housing. Next, install 3 1/2" silicone coupler on to the filter housing. Then install black nylon spacers. Next, slide the two hose clamps over the silicone coupler. Then align the MAF sensor as shown in the picture below and use the two nylock nuts to fasten the MAF sensor. Align the two hose clamps and tighten.



Step 3. To install the airbox assembly, hold the airbox assembly with your right hand, while using your left hand to hold the ground wire out of the way as shown in illustrations. Lower the airbox into position while aligning the ground wire with the notch located at the front airbox assembly.



Step 4. Place the windshield washer fluid neck back to its original location and hand tighten the mounting bolt. Do not tighten this bolt at this time.

Step 5. Locate #13 M6 bolt. Align air box with lower mounting hole and hand tighten bolt. Locate #12 M6 flange nut and install on mounting stud shown in installation. Only hand at this time.

Step 6. Adjust windshield washer fluid neck to full forward position and tighten bolt with 10mm wrench.



Step 7. **IMPORTANT**. Adjust airbox assembly to its full counter clockwise position and hold in place while tightening mounting bolt and nut. The airbox should be in contact with the windshield washer fluid cap.

Step 8. Install the ground wire bracket back to the original location.

Step 9. Locate air filter with clamp. Fully engage air filter onto the filter housing. Tighten hose clamp using 8mm socket to secure air filter. **CAUTION**. Do not over tighten hose clamp.

Step 10. Reconnect the MAF sensor harness.

Step 11. Locate 3 1/3" Hump hose, and 3, 80-100mm hose clamps, air inlet elbow, silicone step reducer, and 70-90mm hose clamp. Position clamps on each side of hump hose. Install hump hose assembly over the MAF sensor assembly. Align and tighten clamp to MAF sensor assembly. Next, slide two of the 80-100mm hose clamps on each end of the air inlet elbow. Then, install the silicone step reducer on the throttle body side on the air inlet elbow.

Step 12. Insert the elbow into the hump hose. Next, slide the 70-90mm hose clamp over the step hose reducer and slide over the throttle body as show in the pictures below. While holding air tube firmly against the throttle body, align and tighten hose clamps on throttle and the air inlet elbow. It is **IMPORTANT** to assure that the inlet elbow is fully seated against the throttle body.



Step 13. Align and tighten the hose clamp that secures the 4" hump hose to the air inlet elbow. At this time, Double check all of the installed hose clamps for tightness.

Step 14. Install hood seal.

Step 15. Reinstall crank case ventilation tube.



Your installation is now complete!!!!