

*The All new Pontiac G8/GXP/, Ram Air system  
(code name Ram air V)*

# *G8 Ram-AIR V Instructions*

Please read the directions through completely “BEFORE” beginning the installation. There are many key items and helpful hints to speed your installation.

Tools needed for installation:

1 Flathead screwdriver (narrow tip, about ¼ inch wide, for prying the inside release of radiator tabs)

1 Allen wrench

1 Pair of Plier's w/cutter

1 Box knife

15-20 min of patience

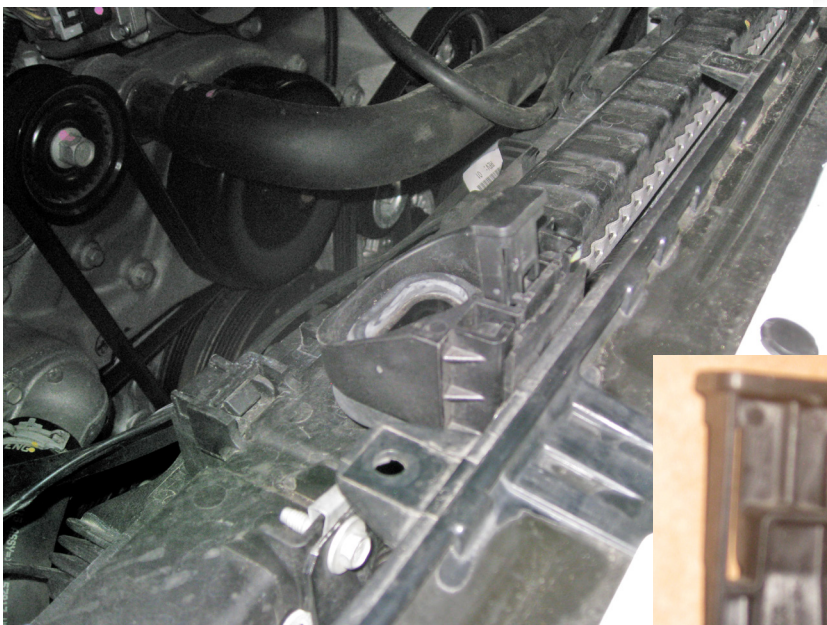


To Start your installation:

1. Remove the factory air box and intake tube, if you still have one.
2. Slide wiring harness (found on passenger side of the back of the radiator shroud, Gray in color) off to the passenger side to allow the radiator to lean back.



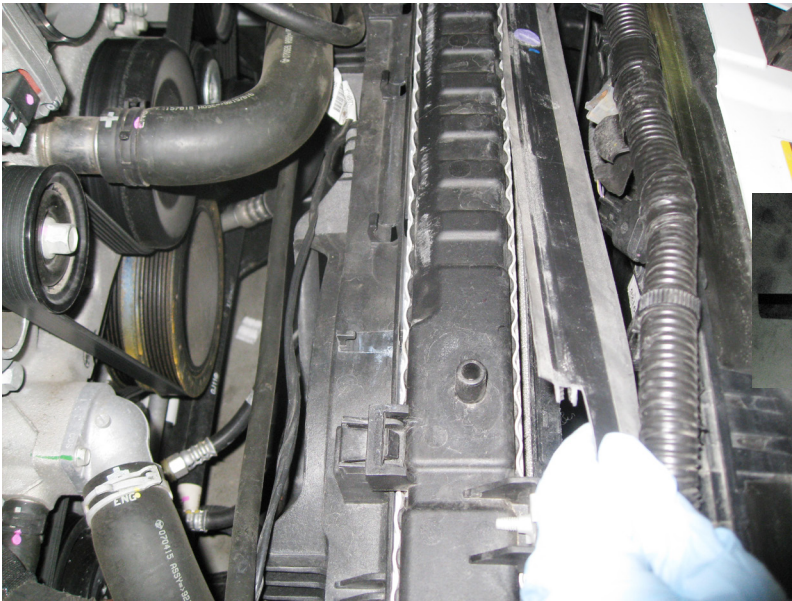
3. Removing radiator tabs – (IMPORTANT READ COMPLETELY THROUGH) don't get confused here.
  - A. Pull UP on the center tab on this bracket. Pull it all the way out.
  - B. Look "INSIDE" the bracket with a flashlight, there is a release in here. Use the flathead screwdriver by pushing it into release tab and pry back on the tab and pull "UP on the main bracket "AT THE SAME TIME" it will come up with ease. You are removing these completely. The new VR system takes there place. (the VR system is designed as a stressed member to become your new radiator support)





C. Lean the radiator back gently, just let it sit back without force.

D. Remove small rubber strip in front of radiator, this is where the VR scoop assembly will sit.



4. Now its time to begin Installing the VR system-

A. Start by Moving the wiring harness that is located on the backside of core support-just above the rubber strip you just removed. This makes installing the VR system as one piece possible.

Simply unclip it on the left and on the right, just pull on the center clips. There is a center wire that is usually wrapped with black tape, just unwrap the tap as shown. This allows more movement in the wire. You will need to pull this up and out of the way as shown until the kit is completely installed in the car.





## Preparing the system for finale installation

Installing the Air meter into the Air box-

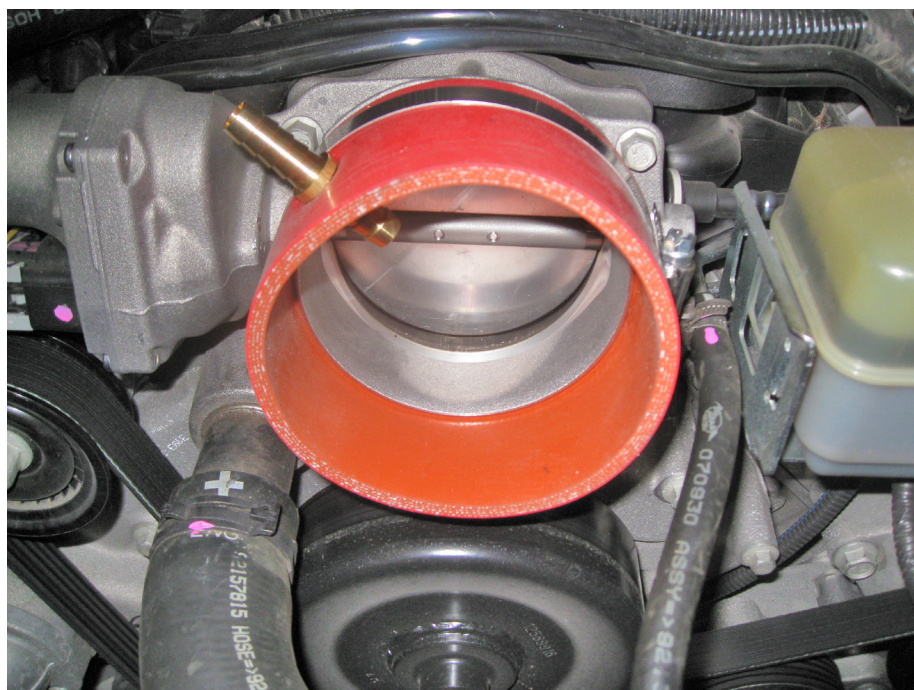
Red hoses- you will find the fallowing hoses one 2 inch ( 4 inch ID) one 1 inch (3.5ID for slip fitting onto MAF meter )

1. Install the air meter directly into the air box neck, counter sink this, we set its length for just this purpose, it should slide in tight . Put one hose clamp on and tighten, NOTE you will retighten this later after you heat soak the engine compartment after the installation.
2. One inch long 3.5ID red hose- slide this onto the tail of the air meter. You are using this as a slip fit.



3. Install the 4.0 ID hose with PCV fitting onto the throttle body ( PCV fitting should be at the 11 O'clock position when standing facing the motor.)

**Tech note:** after installing hose slide the hose clamp as far forward as possible on the throttle body casting to ensure that there is a smooth transition from the inside of the hose to the throttle body casting.



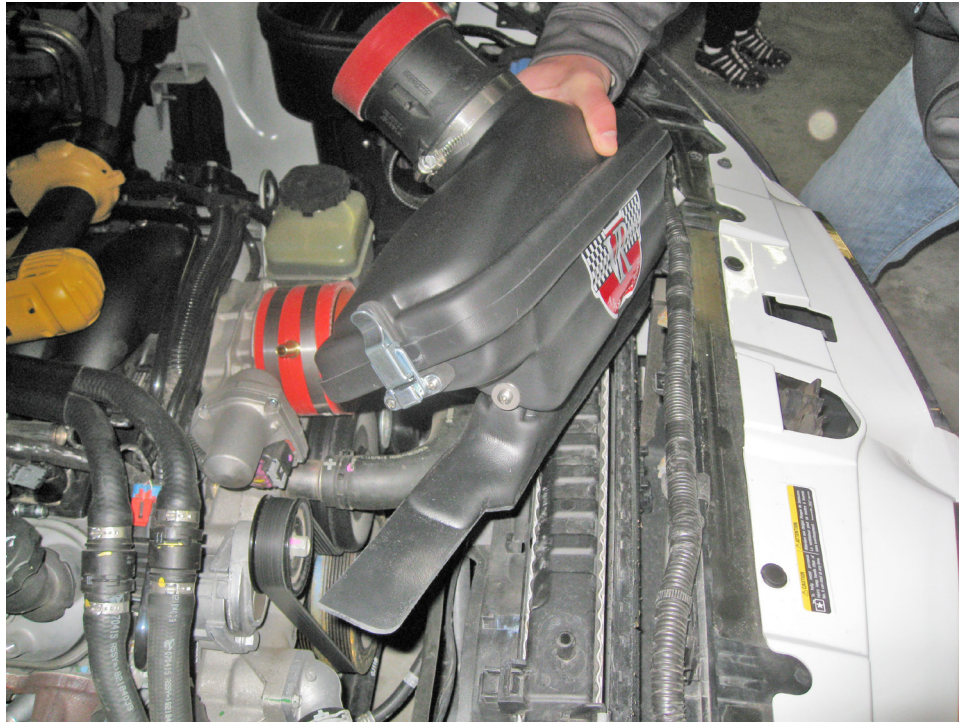


5. Installing the air box (w/air meter attached) into the car.

(You will install the VR system as one unit)

Simply slide the driverside of the front scoop in first as shown in the picture, fitting the passenger side second. The lower radius of the front scoop will rest at the top of the A/C condenser

Now, Simply push the tail of the air meter directly into the red hose on the throttle body . You may need to use a flathead screwdriver here to help slide the hoses over each other. Adjust length accordingly.





6. Take wiring harness and tuck it under the front as shown in the pic.



7. Using the supplied PCV line, Remove your GM line if you have not already done so and install the supplied black PCV hose line and cut to fit onto the brass fitting. Simply press these connections on to fit, no clamp is required as you will note, We have these with very tight tolerances.

**tech note-** make sure to route PCV hose so engine cover will stil go back on the motor properly and cut any access.



## **IMPORTANT NOTE: Check all hose clamps and start the vehicle**

DO NOT REV the Motor just let idle with the hood CLOSED. Allow it to sit and reach operating temp ( 195-210 deg F ) for 5min or so, then lift the hood and retighten the hose clamp that is on the neck of the VR unit. Tighten this with a socket not a screwdriver, this ensures enough torque for a precision fit.

ECU tuning and relearn-

( The following procedure should be used if a custom tune or tuning device is not being used)

Disconnect the negative end of the battery cable for a full two hrs.

The computer in your vehicle needs to learn both high and low speed airflow.

Once you reconnect the battery cable ,drive the car normally for 20-30 miles then do some performance driving, it will take your ECU about 100-150 miles to fully learn this kit ,However, if you do not do or have time to do a complete relearn procedure by disconnecting the BAT it will still learn, it just takes longer.

You will notice an immediate difference in power and throttle response etc.. and it will get better the more you drive.

What will I notice right away?

1. Better throttle response
2. A lot more power and torque everywhere!
3. Once ECU learns you will see some fuel economy improvement
4. Your intake manifold and throttle body will be “COLD” to the touch – remember this is a real ram air system.
5. Lots of Wheel Spin!

What if my check engine light comes on?

First-Do not worry or panic; The VR is a real ram air system that will see 102 kilopascals of MAP pressure at only 48mph! and hold the manifold at 1 Atmosphere or higher any time you are WOT, so double check all connections and the PCV line, make sure they are tight with no leaks ,remember this is a baby Supercharger that is “over” 100% efficient, not just a CAI.

Second-Disconnect the negative side of the battery for two hrs; this will reset the ECU again , ALL vehicles are different they don't always take to the first relearn.

Third-Drive, Drive and drive some more, they usually just need more mileage in both high and low speed conditions to fully dial in

If the light continues call Our Tech dep at 713 899 6456 they will rectify the issue.

## Filter info and Cleaning -

The filter should be cleaned about every 5,000 miles in this kit for max performance. You will want to use a GREEN HIGH PERFORMANCE cleaning kit, "NOT" a K&N etc..

The GREEN unit uses an oil that is air sensor safe . We stock these kits at all times but you can also order one from Green USA.

The filter is a custom made unit just for the G8 system,not an off the shelf filter.

If you have any suggestions or comments we want to hear them so-

Please call us at 713 477 8100 or drop us an Email at [sales@vararam.com](mailto:sales@vararam.com) if you have any suggestions that would help others customers with the installation of this kit.