INSTALLATION INSTRUCTIONS FOR 1999.5-2004
MK4 VOLKSWAGEN JETTA (BORA) /GOLF 1.8T, 2.0L, VR6, & R32 MODELS
ALSO FITS ALL MODELS OF SEAT LEON & TOLEDO

Thank you for choosing to purchase a Carbonio Intake System. Please take the time to fully read over these instructions before attempting to install the kit. This will greatly speed up the installation process and minimize any difficulties you may encounter.

Tools Required:

- Socket wrench with extensions and 10mm and 13mm socket heads
- Flat headed (slot) screwdriver
- Channel lock (or similar) pliers
- Scissors or wire cutters
- 10mm open-ended wrench
- Phillips head (star) screwdriver
- 3mm Allen (hex) wrench

Kit includes:

1 - Carbon Fibre main intake section
1 - Air filter (pre-oiled)
1 - alloy intake snorkel
1 - silicone coupler
4 - 3” hose clamps
1 - Small breather filter
1 - Small hose clamp
1 - MAF coupling
2 - Black nylon tie straps
1 - Rubber lined steel body fixing clamp

LABOUR ESTIMATE GUIDE

1.25 Hours

Note: These instructions depict images of a MK4 VR6 engine compartment. The 2.0L, 1.8T, & R32 are sufficiently similar in their intake layout to use these images.

Step 1:

Remove the battery by following this order:

1- Remove the top cover of the battery box (snapped in place; requires no tools)
2- Disconnect the negative (-) battery terminal.
3- Disconnect the positive (+) battery terminal.
4- Remove the entire battery box (it is snap fit in place and requires the removal of no fasteners to disassemble)
5- Remove the single 13mm bolt and metal fixing plate that is along the forward facing bottom edge of the battery.
6- Lift the battery out.

Also, using a 10mm socket, remove the 4 bolts that hold the battery tray in place and remove the tray.

NOTE: *Make sure you have your radio code handy and note your radio presets so that they can be re-programmed later if necessary*

Step 2:

Using a Phillips head screwdriver, fully loosen the two screws that are on the backside of the airbox lid. These screws stay in the cover and do not need to be removed.

Step 3:

Disconnect the electrical connecter that leads to the mass airflow meter. Do this by pulling back on the tab on the top of the connector while pulling it away from its socket.

Step 4:

Using a pair of pliers, remove the clamp that connects the mass air sensor to the induction hose that leads to the engine. Do this by compressing the two tabs on the clamp together and sliding the clamp over the hose.

Tip: leaving the clamp over the hose makes it much easier to re-install later.

Step 5:

Separate the hose that leads to the mass air sensor and remove the cover of the airbox by tilting it towards the front of the car to disconnect the two tabs that join the cover to the main box.

Step 6 (may not be necessary on some vehicles):

Remove the corrugated breather hose that is connected to the airbox cover. Do this by squeezing on the ribbed portions of the clamp that surround the hose with your fingers and pulling sharply apart.

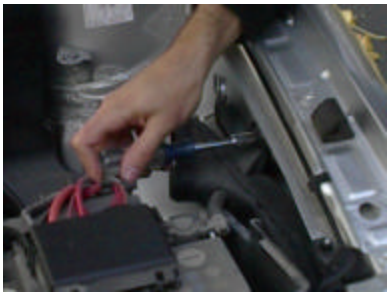
NOTE: Vehicles sold in some countries will not have this corrugated breather hose however they may have a temperature sensor leading to the side of the airbox. If your car has this sensor, you must unclip it from the airbox and, using the black plastic tie straps supplied, fix the sensor somewhere neat and out of the way in the engine compartment. Recommended areas include, passing hoses or wires (not ignition wires). Another point of fixing can be one of the mounting screw holes (no longer used) on the mass airflow sensor.

Step 7:

Using a 10mm socket, remove the two bolts that hold the main airbox in place. Once this is done remove the airbox. Note: There is a pin on the driver's side that the airbox is slipped into. Take note of this when removing the airbox because it can hamper its removal.

Step 8:

Using a 10mm socket, remove the nut holding the intake snorkel on the side of the engine compartment. Note: SAVE THIS NUT!!! It will be used later in the install.



Step 9:

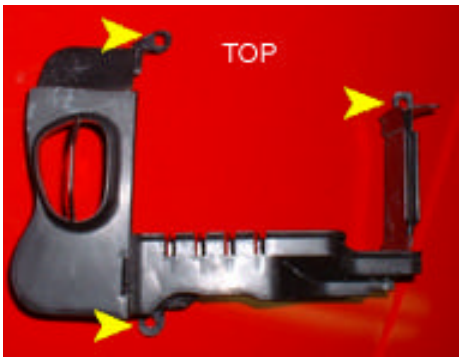
Using a Phillips head screwdriver, remove the two screws on the plastic cover marked with the light bulb. This cover is located directly in front of the battery. Once this is done, remove this cover by pulling it straight out.

Step 10:

Using a Phillips screwdriver, remove the two screws that hold on the shroud in front of the engine (this piece is located next to the cover removed in step 9). Once this is done, pull this piece out.

Step 11:

In front of the battery is a plastic shroud held on by three plastic rivets. These can be very difficult to remove and it is easiest to use a flat head screwdriver and some force to break them off. Tugging on the shroud also helps and if it breaks, this is not a problem because this piece will no longer be needed. If you do not wish to damage the shroud by forcing it off, you can knock out the centres of the three plastic rivets that hold the shroud in place and remove it this way using very little force. This method can be time consuming, as the bottom rivet is very difficult to see.



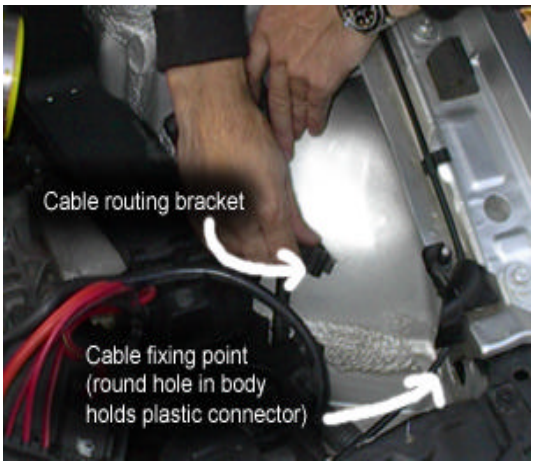
Step 12 (optional in some instances):

In front of where the battery resides, there is a nut with cables leading to it. This is a ground connection and the cables leading from it may be in your way. It is ok to loosen this nut, turn the wires out of the way, and then re-tighten the nut. This will give you some more room to route the intake.

Step 13:

On the inside of the fender, behind the headlight, there is a plastic connector with one or two wires leading to it. Slide this connector vertically off of the plastic bracket that holds it to the inside of the fender and remove the bracket from the inside of the fender (it can be tight). Next, unscrew and remove the cable routing bracket (shown left).

The cable removed in this step, eventually tucks under the carbon fibre intake tube.



Step 14:

Using a Phillips head screwdriver, remove the two screws that hold the mass airflow sensor to the cover of the airbox (removed in step 5). Once this is done, remove the mass air sensor by pulling it apart from the cover.

Step 15:

Slip the included MAF rubber adapter 1” over the **MESH SIDE!!!!!** (This is the side with the square holed grille) of the mass airflow sensor and fix it using a hose clamp. You may tighten the hose clamp at this point.

Step 16:

Using pliers, re-install the mass air sensor. Installation is the reverse of Step #4. Once this is done, re-connect the wire to the mass air sensor that was removed in Step #3.

Step 17 (may not be necessary on some vehicles):

Remove the end fitting from the breather hose removed in step #6. This may be a very tight fit but some firm pulling will separate the end from the hose.

Step 18 (may not be necessary on some vehicles):

Install the small breather filter by pushing its open end into the breather hose. Make sure to push the filter all the way in until the hose touches the base of the breather filter. Use the small hose clamp to fix this assembly together.

Step 19 (may not be necessary on some vehicles):

Using the black plastic tie straps supplied, fix the breather hose somewhere neat and out of the way in the engine compartment. Recommended areas include, passing hoses or wires (not ignition wires). Another point of fixing can be one of the mounting screw holes (no longer used) on the mass airflow sensor.

Step 20:

Slide the rubber and steel clamp over the carbon pipe with its tab facing up and towards the outside of the pipe's curve.

Step 21:

Slip a hose clamp over the rubber adapter on the mass air sensor.

Step 22:

Fit the carbon pipe so that the long end slips into the adapter on the mass air sensor, and the other end runs down next to where the battery goes. **Do not tighten the hose clamp around the silicone adapter at this time.**

Step 23:

In Step #8 the intake snorkel was removed. The stud that this snorkel was mounted to is used to mount the rubber and steel clamp. Fit this stud through both holes on the end of this clamp and fix it using the 10mm nut removed in Step #8. **DO NOT TIGHTEN THIS NUT YET.**

Note: The tabs on the rubber and steel clamp may require a little twisting to fit.

Step 24:

Get in the car and turn the wheels all the way to the left. Using a 3mm hex (Allen) wrench, remove the 12 screws that hold the front driver's side plastic inner fender well on and remove this piece. This will expose the inside of the fender and the mounting location for the filter.

Note: If the vehicle has been lowered or fitted with larger wheels, it may be necessary to jack the vehicle slightly in order to get more clearance. Refer to your owner's manual for directions on jacking the car

Step 25 (Building the lower filter assembly):

Step A:

Remove the clear plastic wrap from around the filter and insert one end of the included alloy induction horn into the filter. Make sure that the horn is at least 1 inch into the filter.

Note: The filter comes pre-oiled and requires no more oil

Step B:

Using a flat headed screwdriver, tighten the hose clamp that is on the filter.

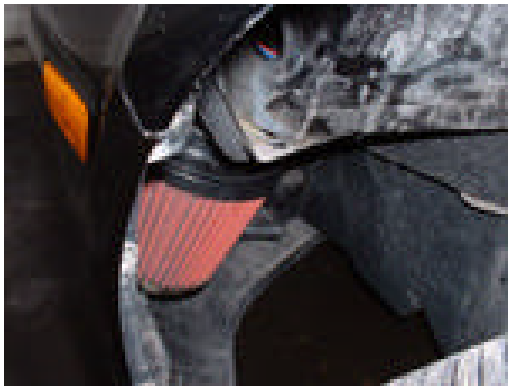
Step C:

Over the other end of the alloy induction horn, slip on the included silicone adapter **(the one that is orange on the inside)** and tighten down with a hose clamp.

IMPORTANT NOTE:

Make sure that the silicone adapter slips on at about 50% depth over the horn. It is important that this adapter is centered between the alloy and carbon fiber components

Step 26:



Kneeling next to the front left tire, grab the filter by the base and feed it up so that the silicone fitting enters the engine bay where the end of the carbon fibre pipe is.

Slip the black silicone fitting over the carbon fibre pipe and tighten the hose clamp to hold everything together. **DO NOT attempt to use any kind of lubricant to make the connection easier**. Once assembled, the black silicone sleeve will rest on the inside body of the car and support the weight of the system.

WARNING: MAKE SURE THAT THE CARBON FIBRE PIPE IS AT LEAST 1" INTO THE SILICONE SLEEVE BEFORE TIGHTENING.

Step 27:

Re-install the plastic inner fender well in the reverse of Step #24

Step 28:

Using a 10mm wrench, tighten the nut installed in Step #23

Step 29:

Tighten the hose clamp where the carbon fibre tube meets the silicone adapter on the mass air sensor.

Step 30:

Re-install the battery and battery box,

Step 31:

Re-install the two plastic shrouds removed in Steps #9 & #10.

Step 32 (Not always necessary):

Refer to the owner's manual for the re-calibration of the power windows and the re-setting of the radio codes and onboard clock.

Step 33:

IMPORTANT: Start the car and let it IDLE (DO NOT REV THE ENGINE!) for 5 minutes to re-calibrate the computer. After this, the vehicle is fully ready to drive.

A NOTE ON FILTER MAINTENANCE

The filter on your Carbonio Intake is washable and will last for many years if cleaned periodically. The best way to clean the filter is to remove it and service it with a commercially available cleaning kit. These kits are very inexpensive and require that you wash the filter and oil it after it has had the opportunity to dry. **DO NOT OVER-OIL THE FILTER. BE SPARING WITH THE OIL AS EXCESSIVE OILING CAN LEAD TO DAMAGE TO THE MAF SENSOR.**