

### **Installation Procedures**

### **Noise Pipe Bypass Duct Installation**

This tutorial is provided as a courtesy by ECS Tuning.

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

Although this material has been prepared with the intent to provide reliable information, no warranty (express or implied) is made as to its accuracy or completeness. Neither is any liability assumed for loss or damage resulting from reliance on this material. SPECIFICALLY, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS MADE OR TO BE IMPLIED WITH RESPECT TO THIS MATERIAL. In no event will ECS Tuning, Incorporated or its affiliates be liable for any damages, direct or indirect, consequential or compensatory, arising out of the use of this material.

#### **Safety First**

Conventional wisdom says: Disconnect the battery before doing this repair. Our attorney agrees.

#### However...

Disconnecting the battery has a dark side you ought to know about. Doing so erases all volatile memory in your vehicle computer, including driver preferences, antitheft radio code, radio presets and clock, and OBD II emissions data. In some vehicles stored data about electronic throttle control learned positions will also be lost. Affected vehicles will not idle following a power down until throttle position data are restored with a scan tool and the correct vehicle software.

Loss of OBD II data is important if your vehicle is subject to a scan tool emissions test; erasing computer memory resets all OBD II monitors to incomplete, and your vehicle will not pass its emissions test until a drive cycle completes the required number of non-continuous monitors.

#### **Other Cautions**

Work carefully to avoid damaging wires and connectors. Avoid any test procedure that damages wire insulation or creates a short circuit—to voltage, ground, or to another circuit. Failure to follow these and all other safety precautions and approved shop practices can result in costly vehicle damage and serious personal injury.



Estimated Installation Time: 2.0 Hour

#### **Parts Required:**

Noise Pipe Bypass Air Duct Kit - ES6065 (Kit includes bypass duct and cowl plate)

#### **Tools Required:**

3/8 ratchet
10 mm socket
13 mm socket
T-20 and T 27 Torx
Wiper arm puller
Flashlight/worklight

This tutorial demonstrates how to remove the **noise pipe** from your Golf V 2.0T.

The noise pipe is installed at the factory, and has one purpose: to blow air intake noise to the cabin to improve driver feedback. If you're a motorist who prefers peace and quiet, and want to remove the noise pipe altogether, this project is for you!

We will remove the noise pipe and install a new air duct between the intercooler outlet and throttle body. The replacement air duct in the kit eliminates the air outlet for the noise pipe, and sends all boost to the throttle inlet, where it belongs.

#### **Steps Include:**

- Remove the old noise pipe (silhouetted in image below).
- Install a revised air duct between the intercooler outlet and throttle body.
- Install a blocking plate in the cowl area water tray to keep vermin from making nests (and chowing down on your wiring harness!).



Page - 2



#### Step 1.

Let's make room to work. Remove the engine cover/air filter housing.

- Unplug the MAF harness connector.
- Disconnect the air inlet duct from the engine cover.
- Release the metal clips at the air hose that connects the MAF outlet to the turbo.



#### Step 2.

The engine cover/air filter housing is held in place by four rubber grommets that snap over pegs on the engine (arrow). With the ducts disconnected and the MAF unplugged, lift up on the housing at each corner to pop the cover from the grommets. (**User alert:** some muscle may be needed, especially if grommet rubber is dry.)

**Caution:** Cover the turbo inlet to keep foreign objects from falling in! It's a turbo, not a weed eater.



Locate the noise pipe (highlighted). It runs between the air intake duct and cowl area.

We will remove and discard this pipe.







#### Step 4.

Remove the noise pipe fasteners: bolt and screw. Pry up on the hose retainer clips (arrows) located at opposite ends of the sound tube. (These release like radiator hose clips.)

Remove the noise pipe and lay it aside.





#### Step 5.

Next, we need to replace the original air duct between the intercooler outlet and throttle body. The original duct has an extra outlet for the noise pipe (arrow). We will replace it with a new duct that has no noise pipe outlet.

**Note:** Unlike some mods that simply block the sound tube outlet, our new duct will have no plugs to blow out against your closed hood!

**For reference:** The duct is located on the front of the engine, just behind the electric cooling fans, as shown in out image.



**Special Note:** You may notice that the cooling fans are missing from several shots. We experimented and removed the cooling fan assembly after we had already removed the old duct from the front of the motor; just to see if there was any advantage.

**The Good:** Removing the fans made some much appreciated elbow room: it was easier to install the new duct and to take photos.

**The Bad:** With the fans removed, you'll want to take an extra step and protect the backside of the radiator with a cardboard shield so you don't ding any of the fins and tubes with a slip of the wrench.

**The Ugly:** Sliding the fans back in place with the new duct installed is possible, but just barely. It was a shoehorn fit. Bottom line: you may want to work around the fans, even though there is less room.

#### Step 5.

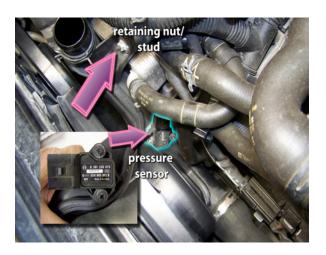
Remove the air duct retaining nut (right arrow) with a 10 mm socket.

Loosen the clamp at the rubber hose connecting the air duct to the base of the throttle body (left arrow).



#### Step 6.

Take your pick: either unplug the pressure sensor located in the air duct, or remove it (two screws). It has to be transferred to the new pipe anyway, and if the electrical connector is hard to disconnect, it may be easier to unscrew and remove the sensor, and let it hang for now.



Page - 5



#### Step 7.

Raise the car and drop the plastic lower engine cover. Many, many screws. Grab your electric screwdriver or power nut driver for this, or bring your lunch.



#### Step 8.

With the car still raised, disconnect the intercooler hose from the bottom of the duct (right arrow).

Remove the lower attachment bolt T27 Torx, left arrow).



#### Step 9.

Slide the old duct out; slide the new one in place. If you removed the pressure sensor earlier, install it in the new duct. Don't forget to plug it in!

- Slide new the duct into the rubber hose at the throttle body (left arrow). Reinstall the clamp.
- Pop the upper grommet over the stud (right arrow). Reinstall the retaining nut.



Page - 6



### Step 10.

- Replace the lower attachment bolt (left arrow).
- Reattach the lower intercooler hose (right arrow).
- Reinstall the lower engine cover removed in Step 7.



### **Install the Block-Off Plate**

### Step 11.

Now we need to remove the rest of the noise pipe from the water tray and block off the hole it leaves.





#### Step 12.

Remove the weatherstrip that retains the front edge of the plastic water tray cover. Just pull back on one end and peel it off.



#### Step 13.

We choose to remove the plastic cowl (water tray) cover rather than simply pry up on its front edge (a shortcut that commonly results in a cracked water tray cover).

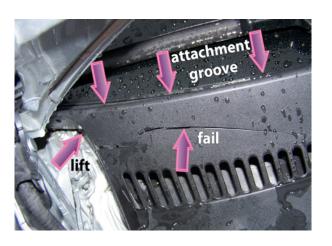
Remove the wiper arms. Pop the plastic buttons and unscrew the wiper arm retaining nuts (inset photo). Then pull the arms using a suitable puller.



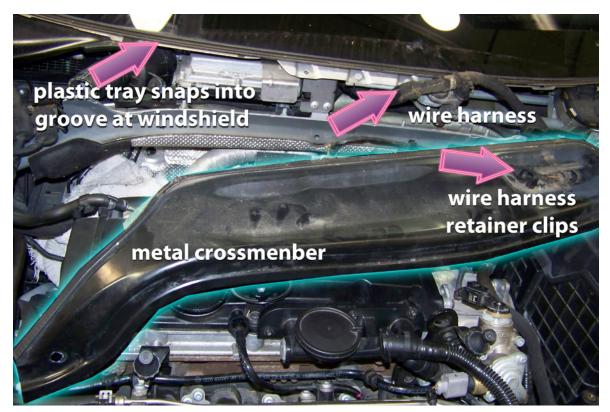
#### Step 14.

Lift on one side of the water tray plastic cover until it starts to pop out of the attachment groove located at the base of the windshield. Work your way *carefully* across the windshield until the tray is free. Remove it and lay it aside.

The plastic is thin and may be brittle, so work carefully. (We snapped a shot of a cracked tray to show what happens when muscle and enthusiasm get out of hand.)







### Step 14.

Unbolt the metal support crossmember and lift it away. We removed the water tray wiring harness from the clips in the crossmember and pulled the crossmember all the way out to make room for photos. You may be able to simply lift the metal crossmember far enough to make working room.

#### Step 15.

- Remove the top locking clip that retains the sound tube and wiring harnesses (arrow).
- Remove the sound tube from the water tray. (Already removed here. See image Step 11 to see tube installed.)
- Wiggle the lower plastic retainer around the wire harnesses and remove it from the water tray.



Page - 9



### Step 16.

- Insert the new blockoff plate as shown to close off the hole where the noise pipe used to be.
- Route the wire harnesses through the opening on the left.
- Slide the new retaining clip down over the wire harnesses until it snaps in place.



#### Step 17.

Retrace your steps.

- Reinstall the crossmember. Make sure the water tray wiring is secured in the harness clips.
- Snap the plastic water tray back in place in the windshield groove. (Clean away all dirt from the groove first.)
- Reinstall the windshield wiper arms.
- Replace the water tray weatherstrip removed in Step 12.
- Replace the engine cover/air filter housing.

This completes the installation of the noise pipe bypass kit.

We have included several parts photos on the next page for additional reference.

Thanks!



Page - 10





Old and new air ducts, side by side.

Water tray original retainer and replacement blockoff.





Pressure sensor hole in air duct. Install sensor carefully to avoid damaging the sensor seal.