



#### **INSTALLATION GUIDE**

2002-08 Audi B6/B7 A4 2.0T Vent Boost Gauge Kit Congratulations on your purchase of the AWE Tuning Vent Boost Gauge Kit for the 2002-08 Audi B6/B7 A4 2.0T.

Exquisite build quality with industry leading performance distinguishes this gauge kit from all others.

Contact us with any installation questions. 215-658-1670 AWE-Tuning.com performance@AWE-Tuning.com

#### PARTS AND TOOL LIST

- 1 preassembled AWE Tuning vent and gauge pod
- 1 boost hose
- 1 sender unit with wiring harness
- 1 gauge wiring harness
- 1 fume filter
- 1 6mm T-fitting (for B6 2002-05 install)
- 1 10mm T-fitting (for B7 2005.5-08 install)
- 1 1.5" long hose section (for B7 2005.5-08 install)
- 3 10-16mm hose clamps (for B7 2005.5-08 install)
- 1 wiring loop terminal
- 1 red posi-tap connector
- 3 red butt connectors
- 2 female terminal connector
- 1 16" long black wire
- 1 16" long white wire
- 1 16" long red wire
- 4 small zip ties
- 2 fuse tap

#### Required tools and materials:

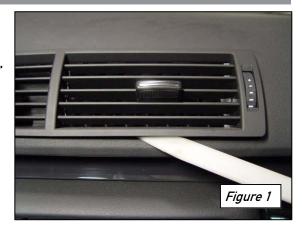
Small flathead screwdriver
Medium flathead screwdriver
8mm, 10mm, 16mm sockets and ratchet
Torx T30 bit
X-acto knife/razor
Scissors
Wire strippers/cutters
Electrical tape
Drill

1/2" drill bit

### Step 1

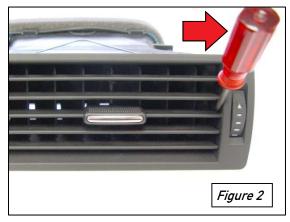
Carefully remove the center dash vent assembly by gently prying around the edge of the housing, as shown in **Figure 1**. You may want to wrap a rag around the tip of a flathead screwdriver, or use a plastic tool as shown in **Figure 1**.

After pulling the vent assembly free, unclip the factory backlighting connector.



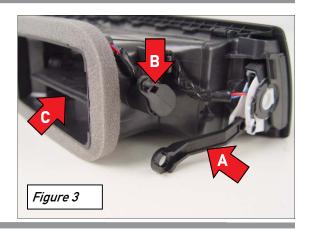
# Step 2

Insert the head of a small flathead screwdriver between the side of the directional slats and the vent housing. Move the screwdriver in the direction of the arrow in **Figure 2** until the slat pops free of the housing. Remove all front and back vent slats.



On the edge of the vent housing, disconnect actuator arm (at **Arrow A**) from post (at **Arrow B**) in **Figure 3**.

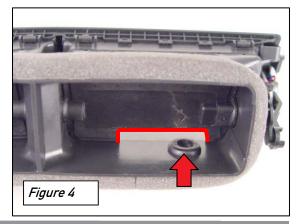
Rotate post as shown to expose the lower edge of the vent flap at **Arrow C** in **Figure 3**.



## Step 4

To allow clearance of the wiring that will attach to the back of the gauge, the vent flap must be cut slightly. Using a razor blade or scissors, remove approximately a 1 3/8" wide section of the soft rubber area on the vent flap edge as shown outlined in red in **Figure 4**.

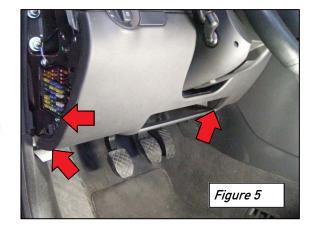
With a 1/2" drill bit, drill a hole at arrow in **Figure 4**. The ends of the gauge and sender wiring harnesses that have the white plastic connectors will feed through this hole later.



## Step 5

Remove the driver side knee bolster below the steering column, and the fuse panel cover on left end of the dashboard. There are three 8mm bolts that fasten the bolster to the dashboard (at arrows in **Figure 5**).

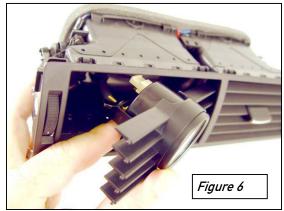
Feed the white connector ends of both the gauge and sender harnesses upwards from under the dash into the vent opening area.



## Step 6

Connect both the wire harness connectors to the back of the gauge. Remove any slack in the wire harnesses and then snap the gauge pod assembly into place: align the posts on the right side of the gauge pod with the vent housing holes first then snap in the left side.

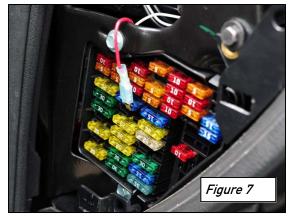
Rotate the vent flap back into its original position and reattach the actuator arm to its post.

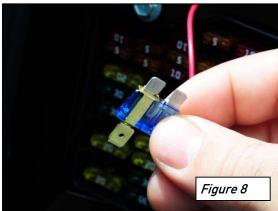


Back under the dash, strip and twist together the red and green wires from the gauge wiring harness. Attach these wires to the supplied length of red wire with a butt connector.

Crimp the supplied female wire terminal on the other end of the red wire and run this wire to the fuse box located behind the cover on the driver's end of the dashboard. Attach this wire to switched 12V power source Fuse #31 as shown in **Figure 7**. Use the enclosed fuse tap and install the tap as shown in **Figure 8**.

(Alternatively, to allow the needle to return to zero with the key off, attach the green wire to a constant 12V fuse power source using the additional enclosed wire terminal and fuse tap.)

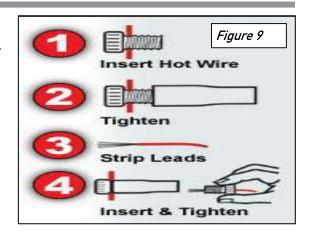




#### Step 9

Remove the headlight switch by pushing switch in, turning clockwise and pulling out. You can leave the wire harness connected.

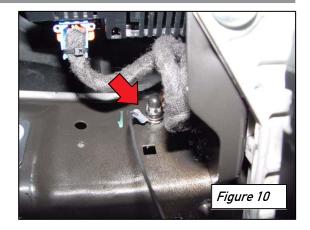
Strip the end of the white wire of the gauge harness and attach the extra white length of wire to it with a butt connector. Run the other end of the white wire to the headlight switch. Using the included posi-tap connector, attach the white wire to the gray and blue wire on the switch harness as shown in **Figure 9**.



#### Step 10

Strip the end of the black ground wire of the gauge harness and attach the enclosed length of black wire to it with a butt connector. Strip the other end of the black wire and crimp the supplied loop terminal onto it.

There is a stud with nut located under the dashboard to the left of the steering column. Unscrew the nut and attach the black wire, as shown in **Figure 10**.



### Step 11

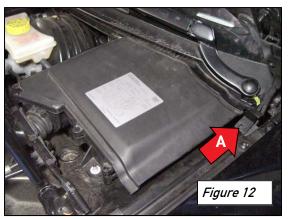
Pop the hood in order to open the ECU housing.

Remove the black, flat perforated trim piece that runs in front of the wind-shield. First remove the rubber weather stripping in front of it by pulling forward to front of car. Then remove the perforated trim by sliding forward and out.



### Step 12

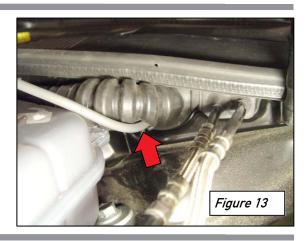
Locate the ECU box in front of the driver side of the windshield. Remove the five Torx T30 head bolts holding down its cover. To access the bolt at the back of the housing loosen the trim beneath the wipers by popping off the silver clip at **Arrow A** in **Figure 13**. Remove the driver side wiper by popping off the round cover at its base and removing the 16mm nut underneath (use a piece of tape on windshield to mark the location of the wiper blade so it can be installed back in the correct location). Lift up the trim to insert a socket wrench behind the ECU box to access the 5th bolt.



### Step 13

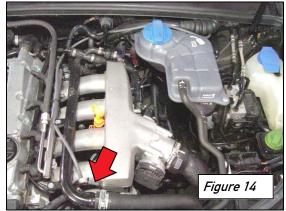
With a light shining into the passenger compartment from the ECU box, you will be able to see from under the dash an opening for the boost hose. Run the boost hose up and into the ECU housing.

Make a small cut of the ECU rubber wire cover to create a hole, shown at arrow in **Figure 13**. Feed one end of the enclosed boost hose into the passenger compartment from the ECU box. Feed the other end through the wire cover and out the hole you cut.



# Step 14

Remove the engine cover. Run the boost hose under the coolant reservoir and along the fuel rail to the front of the car to arrow in **Figure 14**. Use an enclosed zip tie to secure the boost hose to the fuel rail.



#### On 2002-05 B6 A4:

Detach the stock vacuum hose from the intake manifold, at arrow in Figure 14 on previous page.

Cut 1.5" off the end of the boost gauge hose.

Use the enclosed 6mm T-fitting and zip ties to connect the gauge hose, the 1.5" cut piece, and the stock vacuum hose as shown in **Figure 15**.



#### Step 16

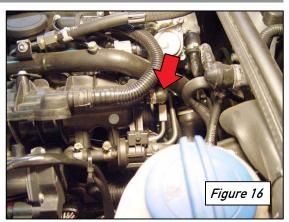
#### On 2005.5-08 B7 A4:

Detach the vacuum cap on end of intake manifold at arrow in **Figure 16** by cutting the factory clamp.

Attach the 10mm T-fitting with enclosed 1.5" piece of 11mm hose to the intake manifold outlet using the supplied hose clamps.

Cap off other end of the T-fitting with the supplied vacuum cap and a supplied hose clamp.

Attach the boost gauge hose to the 3mm outlet of the T-fitting with a zip tie.



#### Step 17

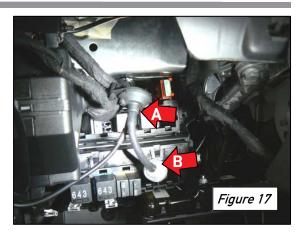
Under the dash, cut a 3" long piece of hose off the end of the boost hose. Attach the cut piece of hose between the oil fume filter, at Arrow A in Figure 17, and the inlet of the enclosed boost sender unit, at Arrow B in Figure 17. Zip tie the sender unit under the dash, with the inlet nipple facing downwards. Discard any remaining hardware in the same bag as the filter.

IMPORTANT: Installation of the oil fume filter as well as the sender orientation pointing downwards is mandatory to ensure long term gauge functionality.

Use two small zip ties to secure the boost hose away from moving parts under the dash. When tightening the zip ties, ensure that the boost hose is not being crushed.

Check for operation of the gauge at this time by starting the engine. You should see ~17-22 in/hg of vacuum at idle, and the gauge lighting should turn on and off with the headlight switch.

If everything is installed correctly, reassemble the dashboard knee bolster, vent housing, and under hood items.



# Troubleshooting Guide

Issue	Remedy
Slow needle response and/or incorrect boost and inHg reading.	Block or kinked boost hose. Check that zip ties are not too tight or that hose is not being crimped.
Needle sweeps at start up but sticks at one boost or inHg reading and will not move.	Block or kinked boost hose. Check that zip ties are not too tight or that hose is not being crimped.
Needle sweeps at start up but returns to –30 inHg mark and will not move.	Disconnected or loose Red Wire connection. Double check installation of that wire.
Needle not at -30 inHg mark when gauge is first received.	Gauge will sweep during initial use and recalibrate itself.

#### **ENJOY**

A boost gauge is a valuable tool in determining your car's state of performance.



Any questions or comments, please do not hesitate to contact us:

1-888-565-2257 AWE-Tuning.com performance@AWE-Tuning.com



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Thank you for choosing AWE Tuning as your performance automotive parts supplier. Please remember that a performance car is only as strong as its weakest link. Therefore, it is vital that you maintain your vehicle to factory specifications.

By installing or using the purchased product, the Consumer accepts this warranty and any specific Manufacturer warranties enclosed.

## **Limited Warranty**

The following warranty is valid only in the United States.

The Manufacturer's full warranty applies to all products sold.

Secor Ltd. (AWE Tuning) warrants to the original retail purchaser (Consumer) this product (Audi B6/B7 A4 Vent Boost Gauge Kit) against manufacturing defects for one year from date of original purchase.

Upon verification of warranty coverage, AWE Tuning will repair or replace the defective product at their discretion, without charge. This is the only remedy the Consumer has for any loss or damage, however arising, due to nonconformity in or defect of the product. This warranty does not cover consequential damage, loss of time or revenues, installation labor costs, inconvenience, loss of use of vehicle, shipping costs, installation labor costs, damage to the vehicle or components, or other incidental or indirect damage.

All warranties are void if the product was not installed by a certified auto mechanic, improperly serviced, modified, or used in a way not intended by the Manufacturer. Use of product in Motorsports or Racing conditions is grounds for warranty denial. Motorsports and Racing is an inherently abusive operational condition, and it is impossible to warranty for this type of usage.

The Consumer is responsible for ensuring that the product is installed in a safe and proper manner, and should cease usage of the product immediately if an unsafe or improper condition is noted. If an unsafe or improper condition is noted, the Consumer should then immediately contact the facility where the product was installed or AWE Tuning directly.

Please contact the original place of purchase for any warranty claims or explanations of this document.