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Audi B5 S4 Vent Pod Boost Gauge Installation



This pdf is broken into three sections:

- Install the Vent Pod and Gauge
- Run the Hose from the Engine to the Vacuum Transducer
- Connect to Power and Ground

Vent Pod Vacuum/Boost Gauge power and Wiring Connections and transducer **Component Locations** harnesses Audi B5S4 IIII III side cover fuse panel plastic transducer vacuum line filter to keyed hot power harness to ground

Your kit ES2664824 includes:

- boost gauge
- vent pod
- vacuum tee
- rubber vacuum hose
- rigid wall plastic vacuum line
- transducer with integral wire harness
- power harness
- inline filter
- wire terminals

The illustration to the right shows general component locations inside the cabin, and routing of wire harnesses and the vacuum/ boost sensing line coming from the engine to the transducer.

Note: The transducer converts pressure changes into an electrical signal used by the gauge.

In **Section 2**, we'll show how to install the vacuum sensing line from the engine to the underdash area. A separate illustration later in the pdf provides an overview of component locations and vacuum line routing.

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Step 1 - Remove fuse panel cover

Use a non-marring trim removal tool to pry the front edge of the dashboard side panel away from the dash. Pop the snap clips loose, then remove the cover.

Step 2 - Remove the underdash side bolt

Use an 8mm socket to remove the side bolt (arrow) from the underdash panel.





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Step 3 - Drop underdash panel

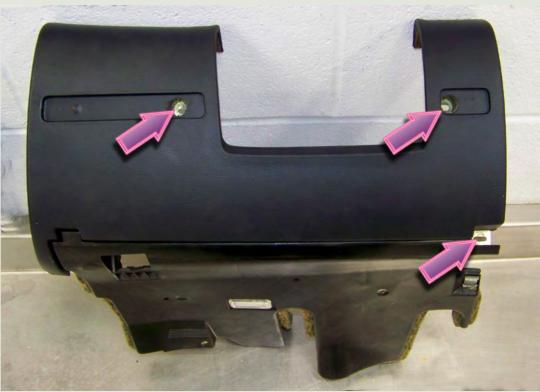
Pry out the two concealment plugs from the underdash panel (arrows) using a small screwdriver or trim removal tool. These flexible vinyl plugs are a "push" fit in the panel; there are no clips or fasteners to fight.

Step 4 - Unbolt the underdash

This photo of the underdash panel removed from the car shows the location of the three remaining bolts that hold it in place.

Use an 8mm socket and short extension to remove the three bolts.





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Step 5 - Drop the underdash

With all the underdash bolts removed, pull the underdash panel toward the driver seat until it pops free, then let it drop down into the left footwell.

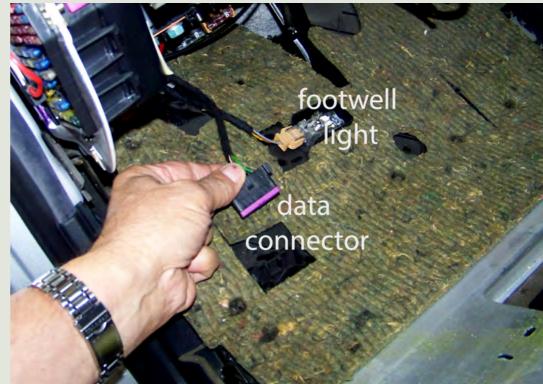
Step 6 - Drop the underdash

Working at the back of the lowered underdash panel, disconnect the footwell light and data link connector.

Service Tip: The data connector is easily removed by squeezing the black plastic tabs at top and bottom, then pulling it straight out of the panel.

Remove the underdash panel from the car and set it aside for now.





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Step 7 - Remove the center vents

Alternately pry at both sides of the center vent assembly to walk it out of the dash.

Service Note: There is an electrical harness connected to the vent housing lights that can remain connected if you work carefully. The connector for the harness itself is located inside the dash, behind the vent assembly, and is difficult to disconnect.



Step 8 - Remove the center vents

Use a similar approach to pry the left vent from the vent housing.



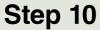
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Step 9 - Install the Vent Pod

Slide the new vent pod into the opening until it clicks in place.

Let the vent assembly hang near the opening for now.



Drill a 12-13mm hole in the left side of the vent duct. This hole will be used to route the transducer and power cables to the gauge.

Exact location is not important. Just be careful to stop the drill as soon as it breaks through the hole to avoid damaging anything outside the duct. The next photo shows the location of the hole we drilled, for reference.





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Step 11

Use the rigid wall flexible plastic vacuum line from the kit to fish the harnesses from the left underdash area, to and through the hole. Push the plastic line through the hole drilled in the previous step. Angle it downward slightly so it comes out beneath the dash on the left side.

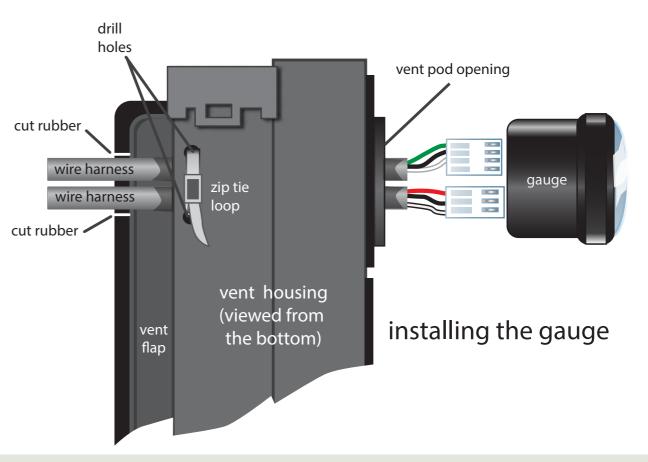
When it comes out beneath the dash, tape the connectors from the power and transducer harnesses to the plastic line. Then pull the plastic line until the harnesses come through.

Service Tip: You may find it easier to pull the lines through individually if they stick or bind when pulled together.

Step 12

- Run the harnesses through the back of the vent housing and through the vent pod opening.
- Plug the harnesses into the back of the gauge.
- Push the gauge into the pod opening.
- Drill two small holes in the vent housing and use them to make a zip tie loop that secures the harnesses to the plastic.
- Use a scissors or sharp knife to cut two slits in the vent flap rubber seal, as shown here. That way, the rubber can flex, allowing the flap to close easily, without rubbing on the harnesses.





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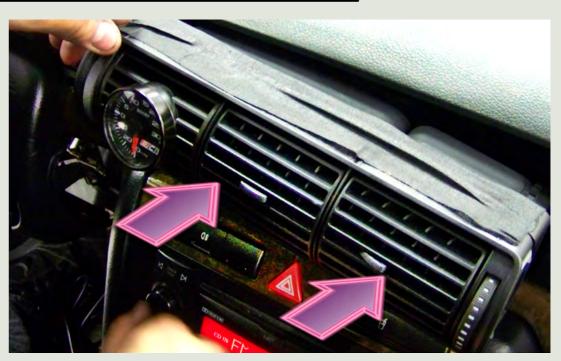
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Step 13

- Push the vent assembly into the dash opening. As you slide the assembly in place, make sure the wire harnesses don't get jammed between the vent and dash.
- You'll probably need to use a trim tool to keep the cloth tape at the top of the vent from bunching as the vent is pushed in place.



Section 2 Install the Vacuum/Boost Line water In this section we will connect the boost sensing tray transducer vacuum/boost sensing hose to a vacuum source at the intake manifold. wire harness Then we will run the line through the to boost gauge to intake firewall, into the cabin area beneath manifold the dash. moisture port filter remove Use the schematic to identify major cover fuel pressure component locations and hose regulator routing. hood release to gauge cable grommet tee

Section 2 Install the Vacuum/Boost Line

Step 1

Open the hood.

Remove the top left engine cover. Use a common tip screwdriver to rotate the retainer clips 90 degrees. With the clips pop up, lift the cover to remove it.

Step 2

Pull the rubber weatherstrip from the front of the plastic rain tray cover. Lift the front edge of the rain tray slightly and pull straight forward to remove it.

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Section 2 Install the Vacuum/Boost Line

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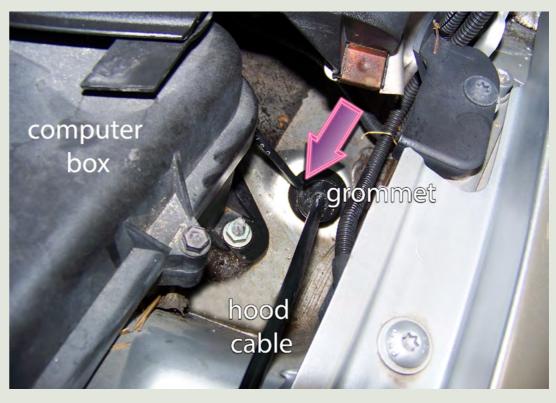
Step 3

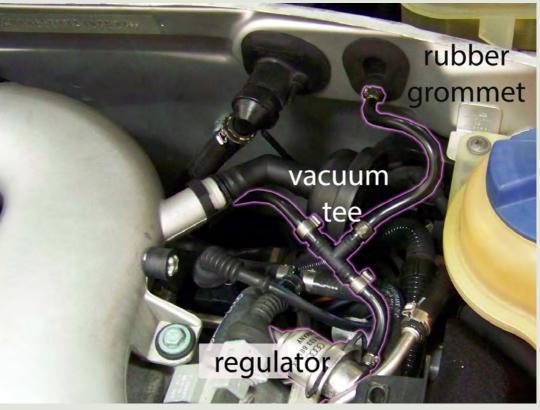
Use a small diameter (5-6mm) punch to poke a hole through the hood release cable grommet, located in the extreme left rear corner of the water tray, next to the computer box.

Push the rigid-wall flexible plastic line from the kit through the grommet hole (arrow). Have an assistant watch under the dash to grab the line as it comes through the grommet and enters the area beneath the left side of the dash.

Step 4

- Route the plastic line across the water tray to the rubber grommet in the front of the water tray, next to the brake booster vacuum hose. (See schematic page 9.)
- Push the line through the grommet into the engine compartment 1-2 inches.
- Locate the vacuum hose at the fuel pressure regulator. Cut the hose and insert the vacuum tee in the line.
- Run a short length of rubber hose from the tee to the plastic line to complete the vacuum connection at the engine.
- Reinstall the water tray, weatherstrip, and the left engine cover.





Section 2 Install the Vacuum/Boost Line

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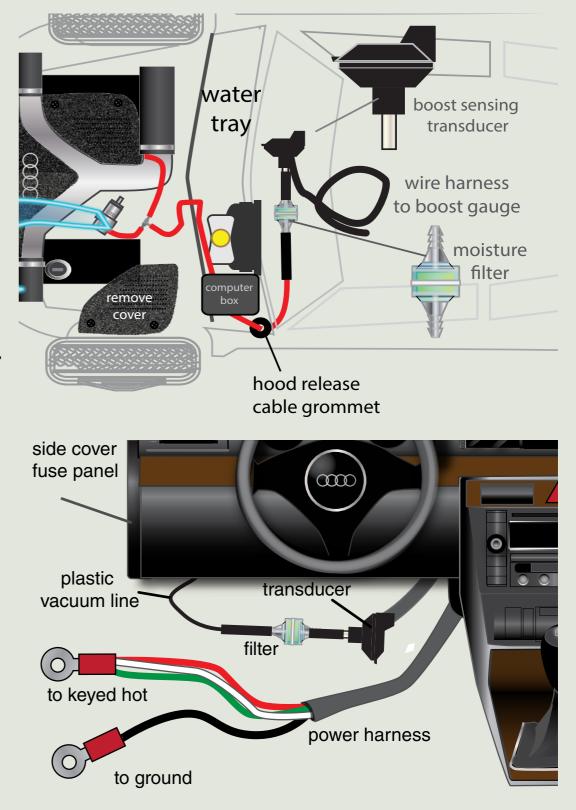
Step 5

Beneath the dash, use a length of rubber hose to connect the plastic line to the inline filter, and another short length to connect the filter to the vacuum transducer.

Section 3 Connect to Power and Ground Step 1

Strip back the insulation from the red, white, and green wires and crimp them securely in the insulated eyelet.

Do the same with the black (ground wire).



Section 3 Connect to Power and Ground

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Step 2

Locate the keyed power terminal at the far left under side of the fuse panel. Look for a threaded stud and nut securing a black wire with yellow tracer (arrow).

Loosen and remove the nut from the stud. Do not remove the black/yellow wire.

Place the eyelet with the red/white/green wires onto the stud and replace the nut. Tighten the nut.

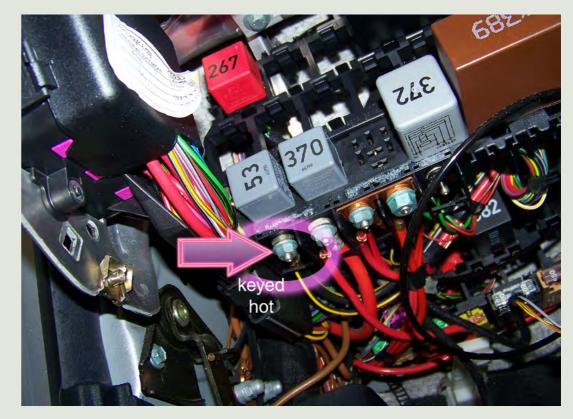
Secure the wires with zip ties in a safe location where they cannot rub.

Step 3

The hood release cable mounting bracket is located just to the left of the fuse box connection made in the previous step (right arrow).

Remove the bolt from the hood release lever mounting bracket (left arrow).

Bolt the eyelet to the metal bracket, routing the wire safely away from the hood release mechanism. Add a zip tie or two to secure the wire safely.





Test Your Gauge

When the ignition switch is turned to the ON position or the engine is started, the gauge should illuminate and go through an initialization:

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- The gauge needle will sweep fully counterclockwise to 30.
- Then the needle will sweep clockwise to 30, pausing briefly at the opposite extreme.
- The needle will return to zero and stay there key-on engine off, or indicate vacuum or boost key-on engine running.

When gauge operation is verified, reinstall the dash panels to complete your vent pod boost gauge installation.

