

VIRTUAL LINK – INSTALLATION GUIDE

Product: Pinnatec Auto Virtual Link

Vehicle Scope: D4 and D4.5 Audi models

Version: v1.2

Pinnatec Auto

<https://pinnatecauto.com>

Support: <https://pinnatecauto.com/support/>

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1. Preamble – Important Information

1.1 About this guide

This install guide is for **D4 and D4.5 Audi models only**. If your vehicle is not a D4 or D4.5 Audi, this guide is not for you. Please read the full guide once, start to finish, before beginning any of the install.

1.2 Terms & acceptance

Installation and use of Virtual Link are governed by the Pinnatec Auto **Terms of Sale, Use, and Liability** at: <https://pinnatecauto.com/terms-of-sale/>. By purchasing, installing, configuring, or using Virtual Link, you confirm that you have read and agree to those Terms.

1.3 What Virtual Link is

Virtual Link is an aftermarket electronic ride-height controller that plugs into your factory air-suspension module and lets you adjust and manage suspension height through our software.

It is not an OEM safety device, not a repair for damaged or failing suspension, and not a substitute for proper alignment, maintenance, tires, or safe driving. You are responsible for making sure your vehicle is safe to drive after any changes.

1.4 Safety & battery

Disconnect the negative (-) battery terminal before starting the installation. This install involves removing a CAN bus junction, and leaving the battery connected while any module connectors are unplugged may result in CAN bus communication issues, stored ECU codes, warning lights, starting issues, or other faults that may require diagnostic equipment or a repair shop to resolve.

After disconnecting the battery, wait 15 minutes before continuing. Do not reconnect the battery until all connectors are fully seated and locked. If you are unsure or uncomfortable with electrical work, have a qualified technician perform the install.

1.5 Tools, time & vehicle condition

Average install time is about **10-90 minutes**, depending on whether the **OEM suspension control module** is already visible in section 2.3 or if you need to move other modules as described in section 2.4. You'll need:

- 10 mm socket and matching ratchet (for the battery negative terminal)
- Flashlight or work light
- A plastic trim pry tool
- **If you need to follow section 2.4:** 8" extension for your 10mm socket to reach the deep nuts on the BCM2 bracket in section 2.4 (check your vehicle to confirm), 12" zip ties, as described in section 2.12.3.

Recommended: a clean, dry, well-lit workspace with the car parked on flat ground. For best results, start with a healthy vehicle (no existing suspension fault codes, no obvious low-voltage or starting issues).

1.6 Genuine product, warranty & support

Warranty and support apply only to **genuine, unmodified** Virtual Link units installed as instructed.

Devices purchased from **pinnatecauto.com** or our listed authorized partners are considered genuine. Units from unauthorized third parties may not be authentic and may not be covered for warranty or support.

If anything looks different from our photos, if the car behaves unexpectedly, or if new warnings appear and do not clear, stop driving and reach out to us at: <https://pinnatecauto.com/support/> Please include photos or video along with your support ticket.

1.7 Data & privacy

Virtual Link products and apps may store local diagnostic and operational logs to support functionality and troubleshooting. If you request support, we may ask you to share logs or screenshots.

Any personal information is handled under our full **Privacy Policy** at:

<https://pinnatecauto.com/privacy-policy/>

2. Step-by-Step Installation

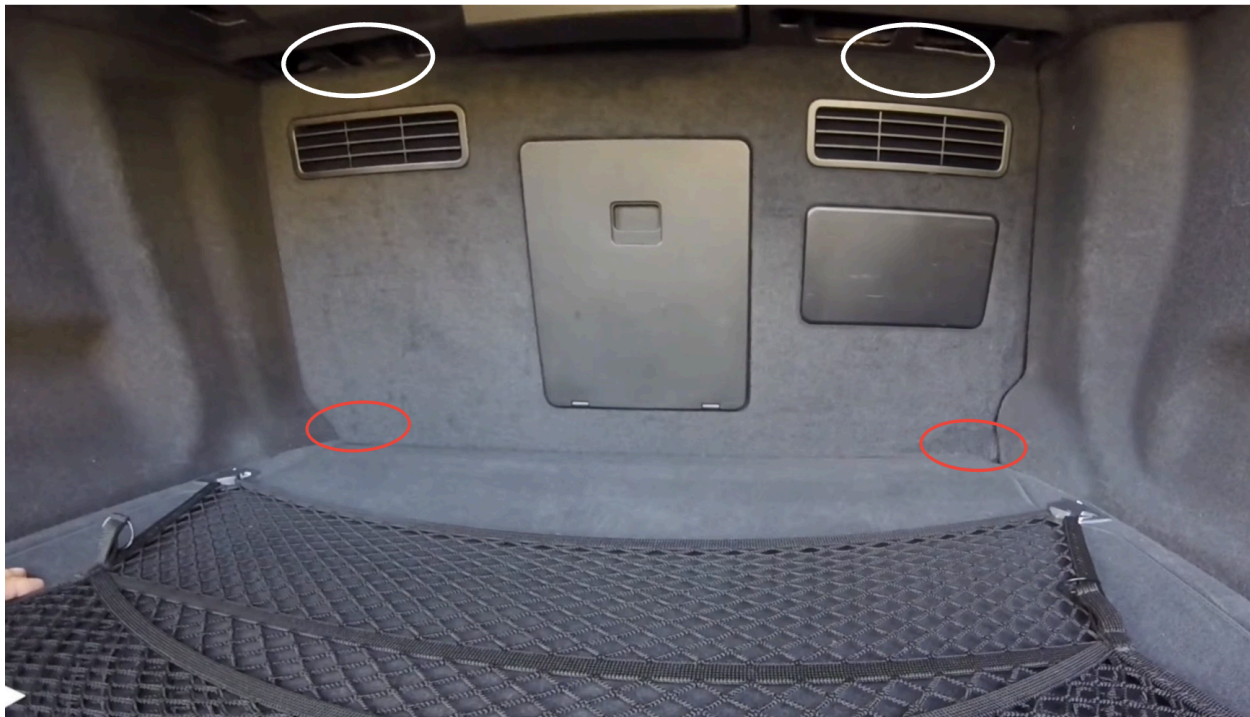
2.1 Prep the car and battery

- Park on flat ground, do not set the parking brake, engine and ignition completely off.
- Follow the battery guidance in section 1.4 (disconnect the **negative (-) terminal**).

2.2 Open the trunk back wall

In the trunk, on the far back wall, reach your hand up to the top right and left (at the locations marked in white) and tug firmly towards you to remove the rear wall.

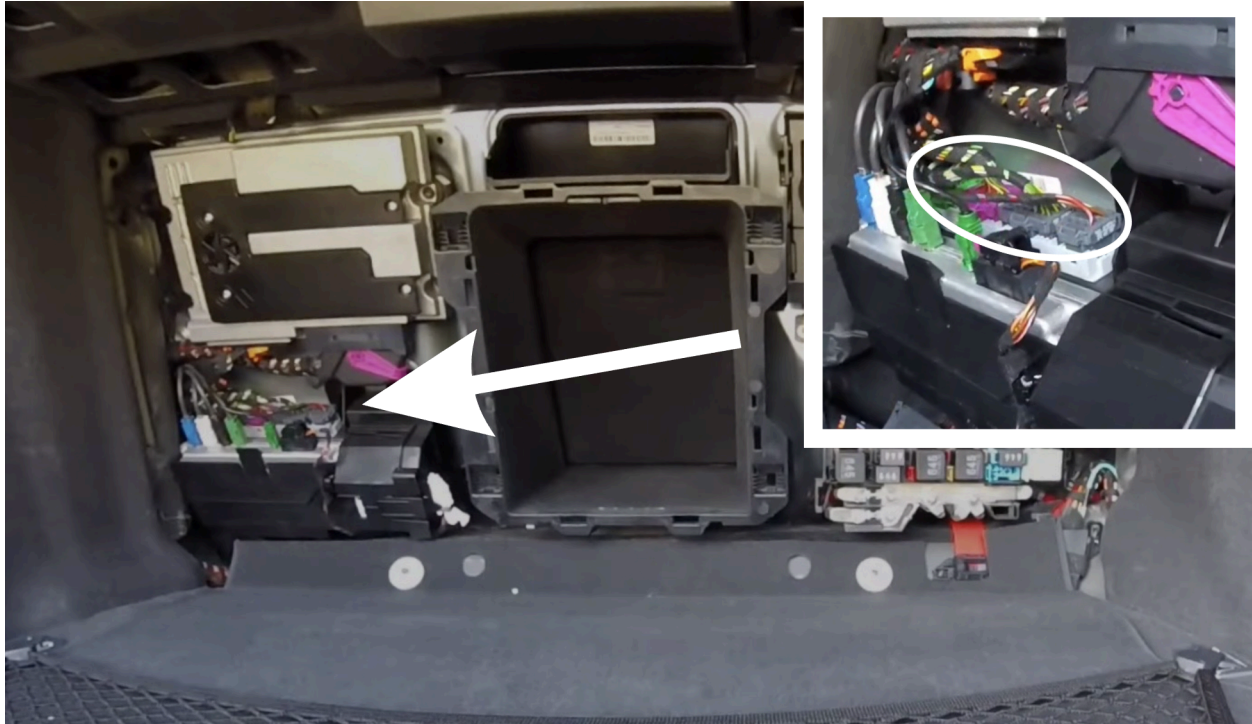
- If the wall comes loose but is obstructed from removal by a black plastic box at the top center, you will instead remove the wall bottom side first by prying loose (at the locations circled in red).



2.3 Check if the suspension control module is visible

With the trunk back wall removed, look in the **bottom left corner** of the opening. You are looking for the **OEM Suspension Control Module** (a rectangular module with 5 plugs on its top face).

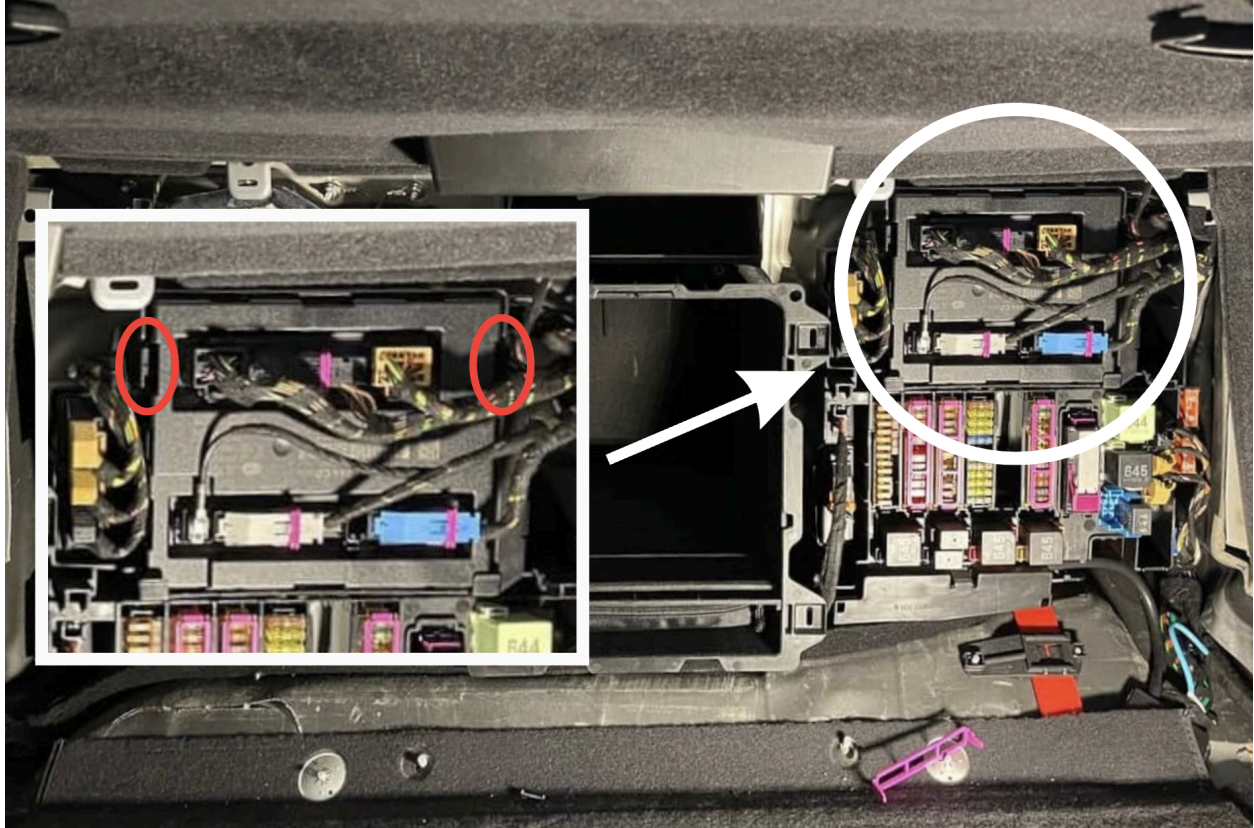
- If you see this module with its 5 plugs: skip to **step 2.5**.
- If you **do not see** the module here: continue with **step 2.4** as the module is located elsewhere.



2.4 Accessing the OEM suspension control module (cars where it's hidden)

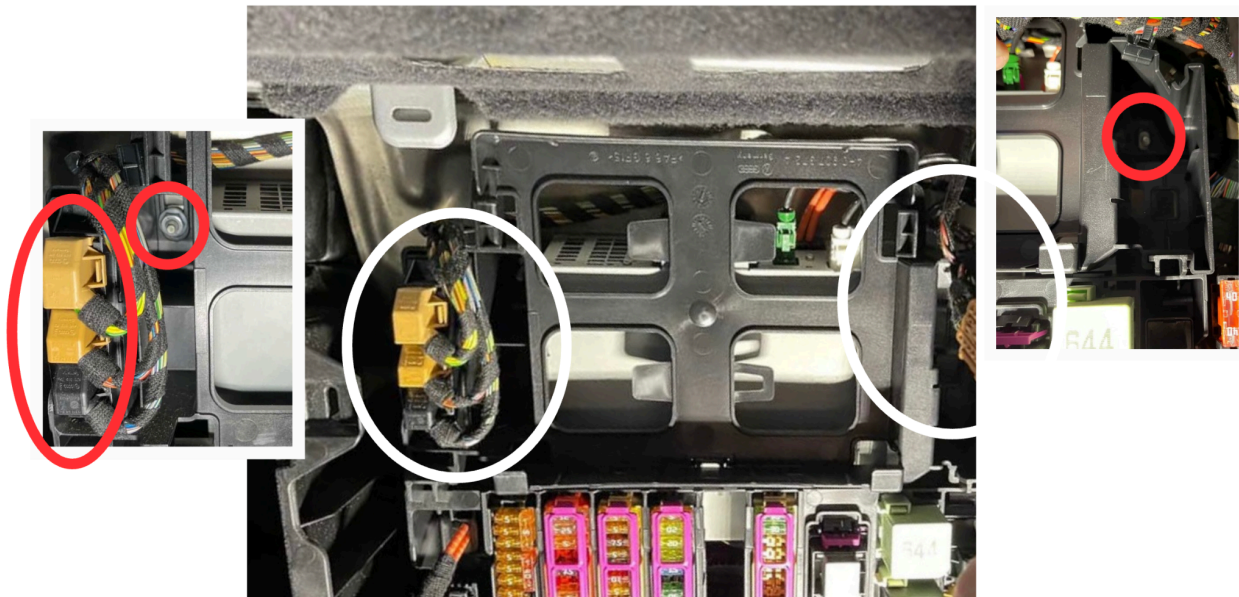
2.4.1 Remove BCM2 Module

Find the **BCM2** in the **top right** of the trunk back wall opening. On the top right and left of the module, you will see two locking tabs holding it in place. Pressing back on both tabs, you should free the BCM2 enough to tilt forward. Continue to tilt it forward with decent force until it is free from the plastic holder and can be placed aside with its cables still attached.



2.4.2 Remove Small Left Module

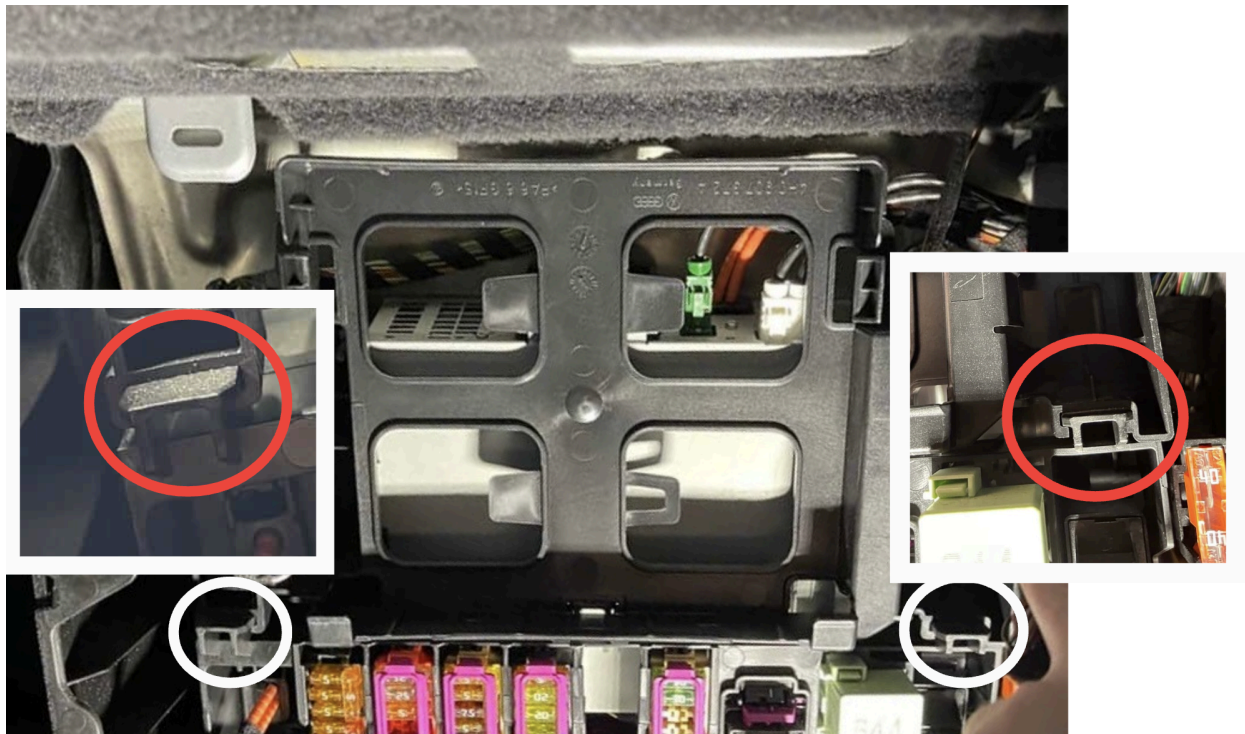
Remove the small module to the left of the BCM2 module (red oval) as well as the two 10mm nuts holding in the BCM2 carrier bracket (circled in red).



2.4.3 Remove the BCM2 carrier bracket

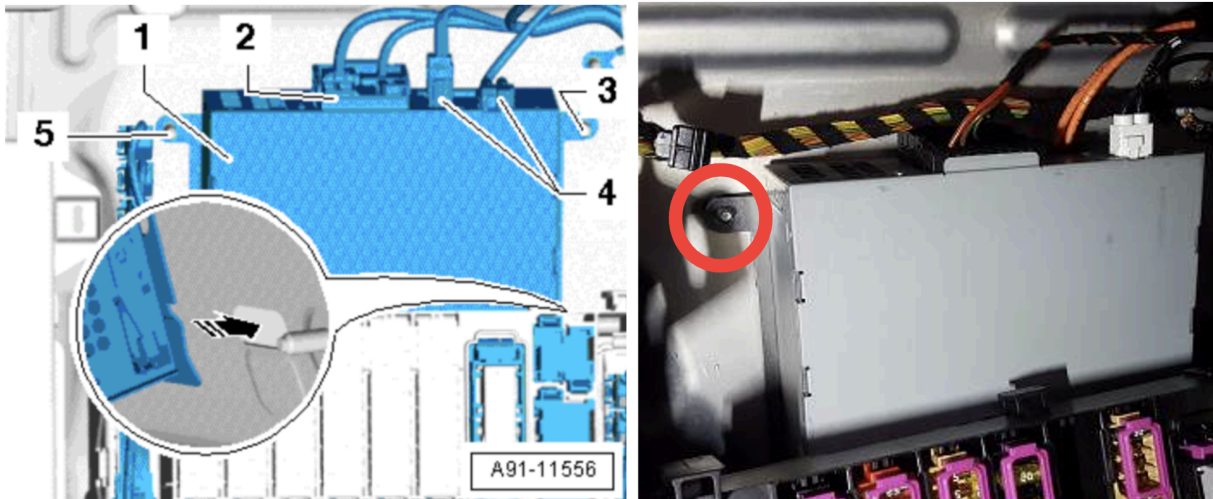
Once the BCM2 bracket bolts have been fully removed, pull the black bracket out being careful to watch

these connection points (circled in red). The plastic is brittle and in there quite tough, so be careful and take your time on this step, use firm and controlled force. Pull the bracket all the way out and disconnect any cable clips that may be still attached.



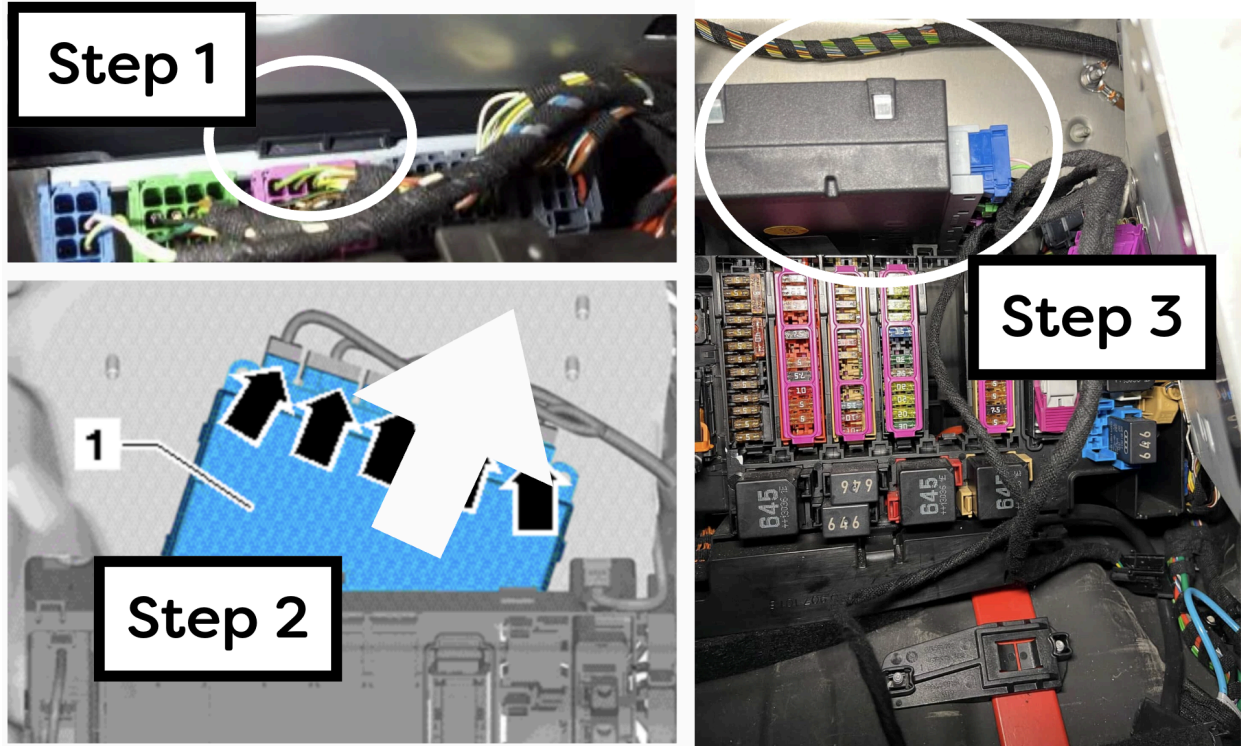
2.4.4 Remove the Radio Module

Once the BCM2 bracket has been fully removed, slide / lift the radio module off of its studs (numbers 3 and 5 in the diagram) and move it out of the way. There is no need to unplug any cables at this step.



2.4.5 Expose the OEM Suspension Control Module

With BCM2 and the radio module moved, see the **OEM Suspension Control Module** behind the fuse panel. Push its locking tab (circled in white) back and free the module. Pull it up and out so you can clearly see and reach its connectors.



Now continue with **step 2.5** (same for all cars).

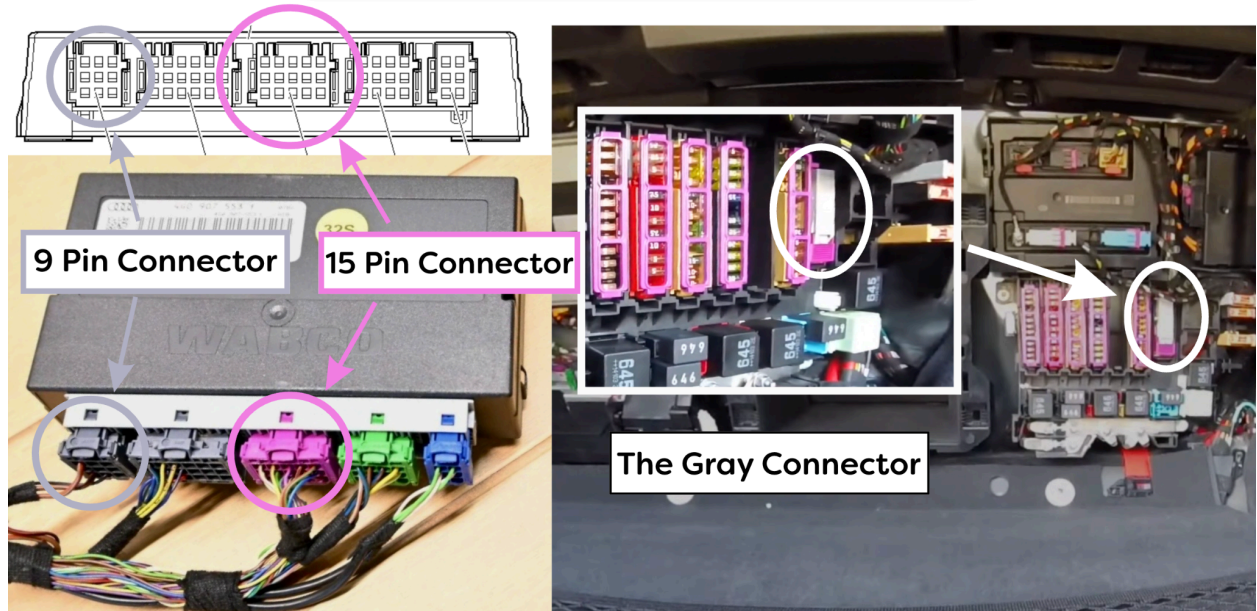
2.5 Identify the three OEM connectors

On the OEM Suspension Control Module, find:

- **9-pin** connector, right most from your point of view
- **15-pin** connector, center of the 5 connectors

To the middle left of the trunk back wall, find:

- Large **gray connector with purple lever**

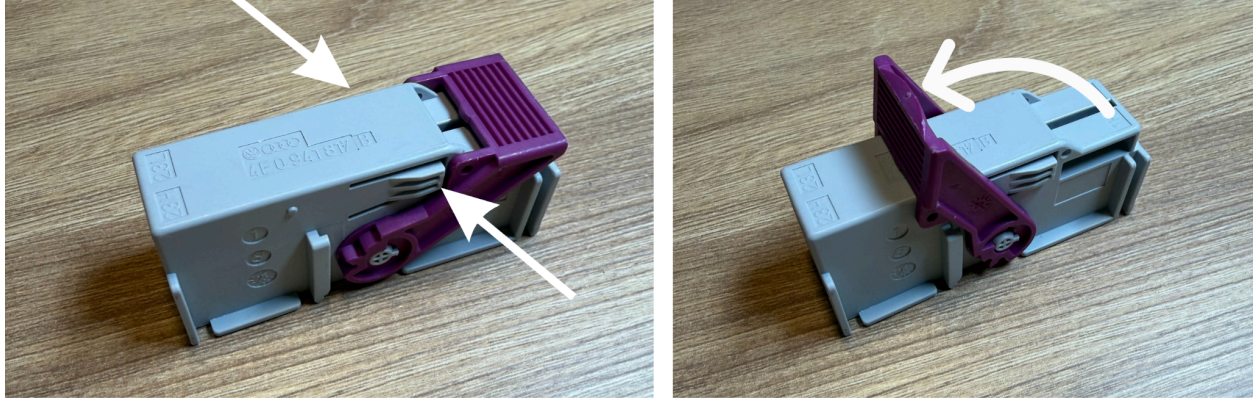


2.6 Unplug the OEM connectors

- **9-pin:** press the tab and pull straight out.
- **15-pin:** press the tab and pull straight out.



- **Gray:** press the sides, lift the purple lever all the way up, then pull the connector out.



2.7 Install the Virtual Link 9-pin and 15-pin

Plug the **Virtual Link 9-pin** into the left 9-pin socket and the **Virtual Link 15-pin** into the center 15-pin socket on the **OEM Suspension Control Module**. Push each until it **clicks**, then give a light wiggle to confirm they don't back out.



2.8 Install the Virtual Link gray connector

With the purple lever up, push the Virtual Link gray connector fully into the car's socket, then flip the lever down to lock.

For this connector, complete the seating process **twice**:

1. Install the connector fully and lock the purple lever down.
2. Remove the connector.
3. Reinstall the connector fully and lock the purple lever down again.

After the second installation, give the connector a gentle wiggle. It should feel solid and should not feel loose, wobbly, or partially seated. If it does not feel fully seated, remove it and reseal it again before continuing.

Important: This gray connector is part of the vehicle's CAN bus junction. It must be fully seated and locked before the battery is reconnected or the car is started. If this connector is loose, partially seated, wobbly, or not fully locked, the vehicle may experience CAN bus communication issues, warning lights, stored ECU codes, starting issues, or other faults that may require diagnostic equipment or a repair shop to resolve. Before reconnecting the battery or starting the car, you are responsible for confirming this connector is fully seated, locked, and firmly in place.



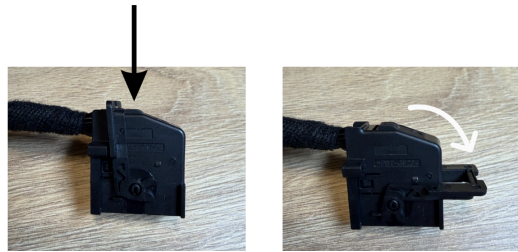
2.9 Connect OEM harness plugs to Virtual Link harness

Plug the **OEM 9-pin** and **OEM 15-pin** connectors you removed in step 2.6 into the matching connectors on the back of the Virtual Link harness until they click and lock.



2.10 Connect the black 18-pin to the Virtual Link module

- Press the button on the top of the **black 18-pin** connector on the harness and flip the lever down.



- Plug the **black 18-pin** connector from the harness into the Virtual Link module and flip the lever back up until it locks.

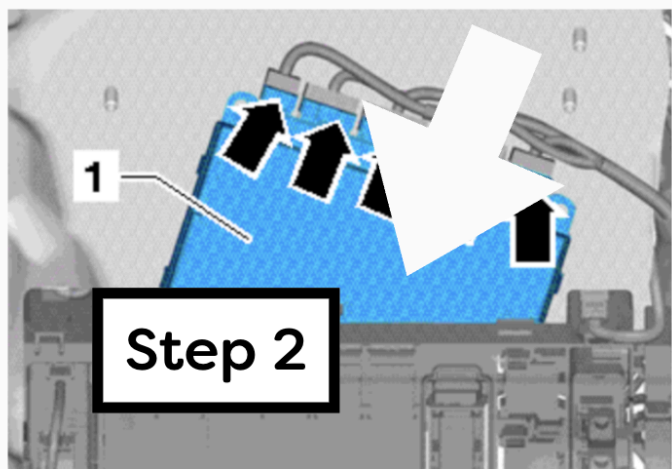
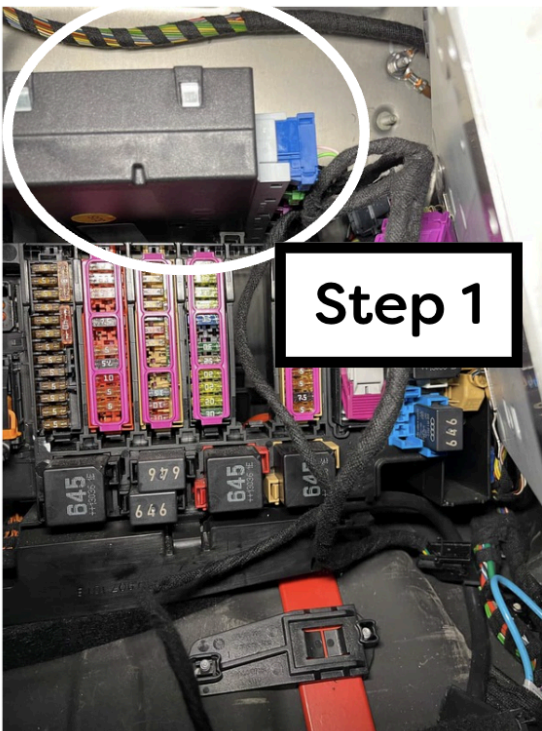
2.11 Tuck the harness and reassemble the trunk

- Tuck the Virtual Link and extra harness into a free pocket so nothing is pinched or rubbing on sharp edges.
- If you completed step 2.4 (moved BCM2 and the radio module), continue here to the next step 2.12, otherwise, skip to step 2.13.

2.12 Reversing Step 2.4 (If you completed step 2.4)

2.12.1 Putting the OEM Suspension Control Module back

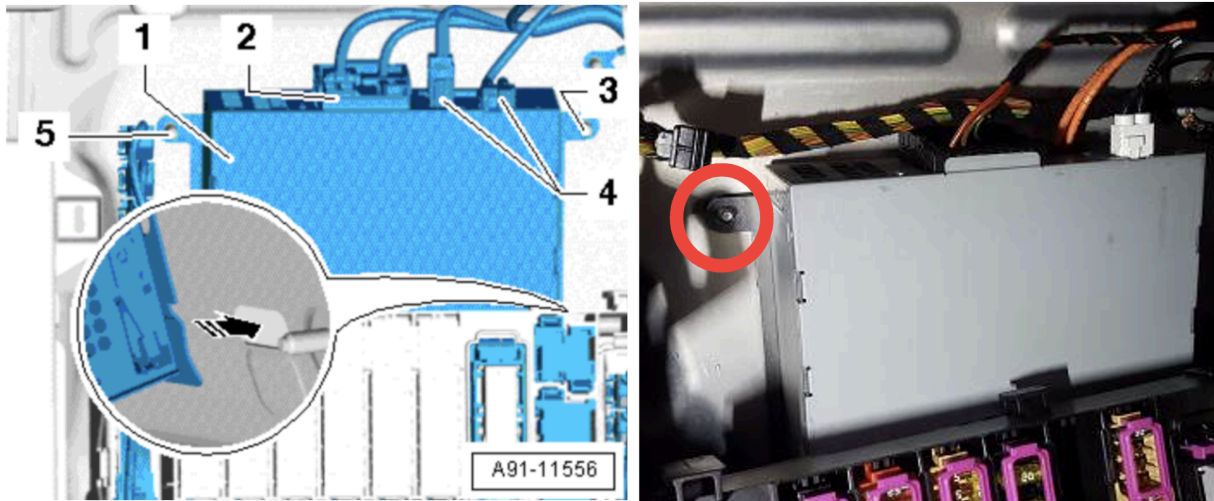
With everything clear, place the **OEM Suspension Control Module** behind the fuse panel. Push back into its home and confirm the locking tab (circled in white in step 3) is clipped firmly over the module.



2.12.2 Replacing the Radio Module

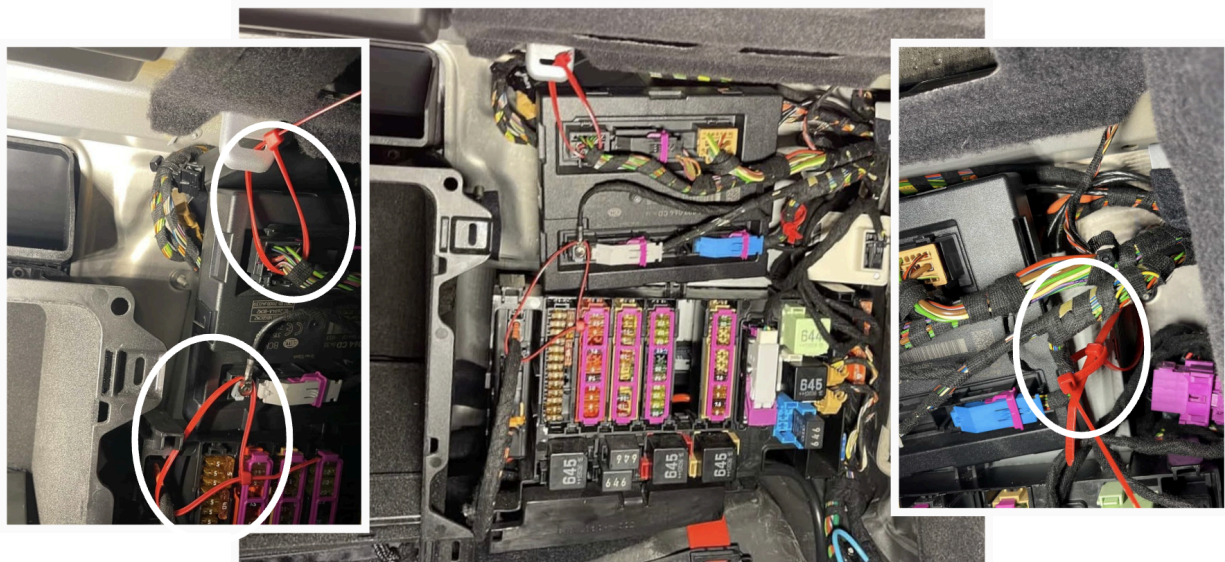
With the Oem Suspension Control Module back in place, and making sure Virtual Link wiring harness is

all out of the way, put the Radio Module back into place confirming it fits on the studs (Numbers 3 and 5 in the diagram). It may be a tight squeeze to fit the radio module back into place. Place the two 10mm nuts back on the studs at that stage as well as we will not be reinstalling the BCM2 carrier bracket.



2.12.3 Reinstalling BCM2 Module and Small Left Module

We will not be reinstalling the BCM2 carrier bracket, so at this stage we are ready to place the BCM2 Module back into its place. Go ahead and place the BCM2 Module roughly where it would be if the bracket were installed, you are free to zip tie the BCM2 back into place, here is an example of how you might secure the BCM2 Module in place with zip ties. Once the BCM2 is secured, tuck the Small Left Module out of the way in a secure place as well.



2.13 Reinstall Trunk Back Wall

- Reinstall the trunk back wall: line up the lower edge, then push along the top edge until all clips snap back into place.

2.14 Power up and check

- Reconnect the **negative (-) battery terminal**, then start the car. The car should start normally and no new warning lights should **stay on** (brief lights that go out are normal).
- If anything seems off, do not drive—recheck the connectors and harness, and contact us at: <https://pinnatecauto.com/support/> with photos or a short video.
- If everything looks normal, continue to the **Virtual Link Pairing / Setup Guide** to connect and configure your system.

3. Troubleshooting & Next Steps

If, after installation, the car does not behave normally, do not drive it. This includes new warning lights that stay on, the car not starting as usual, ride height looking wrong, or multiple CAN bus related warnings appearing on the dash.

Turn the car off and check the following:

- The Virtual Link gray connector is fully seated and locked.
- The gray connector does not feel loose, wobbly, or partially seated.
- The OEM and Virtual Link 9-pin and 15-pin connectors are fully seated and locked.
- The black 18-pin connector is fully seated and locked into the Virtual Link module.
- The harness is not pinched, pulled tight, or rubbing on sharp edges.
- The negative battery terminal is tight.

If the car still does not behave normally, turn the car off, disconnect the negative (-) battery terminal, wait 10–15 minutes, and reseal the gray connector. Reconnect the battery, start the car, and cycle the ignition twice.

If a steering warning remains, the vehicle may be equipped with factory Dynamic Steering and may require steering basic settings to be recalibrated with diagnostic equipment. This can occur if the vehicle is powered on while the gray CAN bus junction connector is loose, partially seated, or incorrectly installed.

If things still do not look right, contact Pinnatec Auto Support at: <https://pinnatecauto.com/support/> with your car model/year, a short description of the issue, and clear photos or a short video of the module area and instrument cluster.

If everything looks normal and there are no new warnings that stay on, continue to the **Virtual Link Pairing / Setup Guide** to connect and configure your system.