



rear view CAMERA VW MKVI Golf/GTI Installation Instructions



ES2562622

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This tutorial demonstrates how to install a rear view camera in your MKVI Golf or GTI. This camera can be installed with an RNS315 or RNS510 radio.

The tutorial is presented in four sections:

- Radio Connections
- Camera Installation
- Run the Cable and Power Wire
- Coding

Kit Contents

- rear view camera
- wiring harness
- inline fuse holder harness
- coaxial cable
- drain tube
- zip ties

Tools Used

- T20 and T25 Torx screwdrivers [ES11417](#)
- non-marring trim removal tools [ES2500877](#) or [ES517779](#)
- laptop computer with Ross-Tech VAG-COM software and data link connector cable interface



Radio Connections

Step 1

Use a non-marring trim removal tool to pry around the edges of the radio trim bezel to release the metal snap clips that hold it in place.

Remove the bezel to expose the four radio mounting screws beneath.



Step 2

Use a T20 Torx® driver to remove the four radio screws.



Radio Connections

Step 3

Place a soft cloth or fender cover over the shift knob and console. Then slide the radio head straight out of the dash.

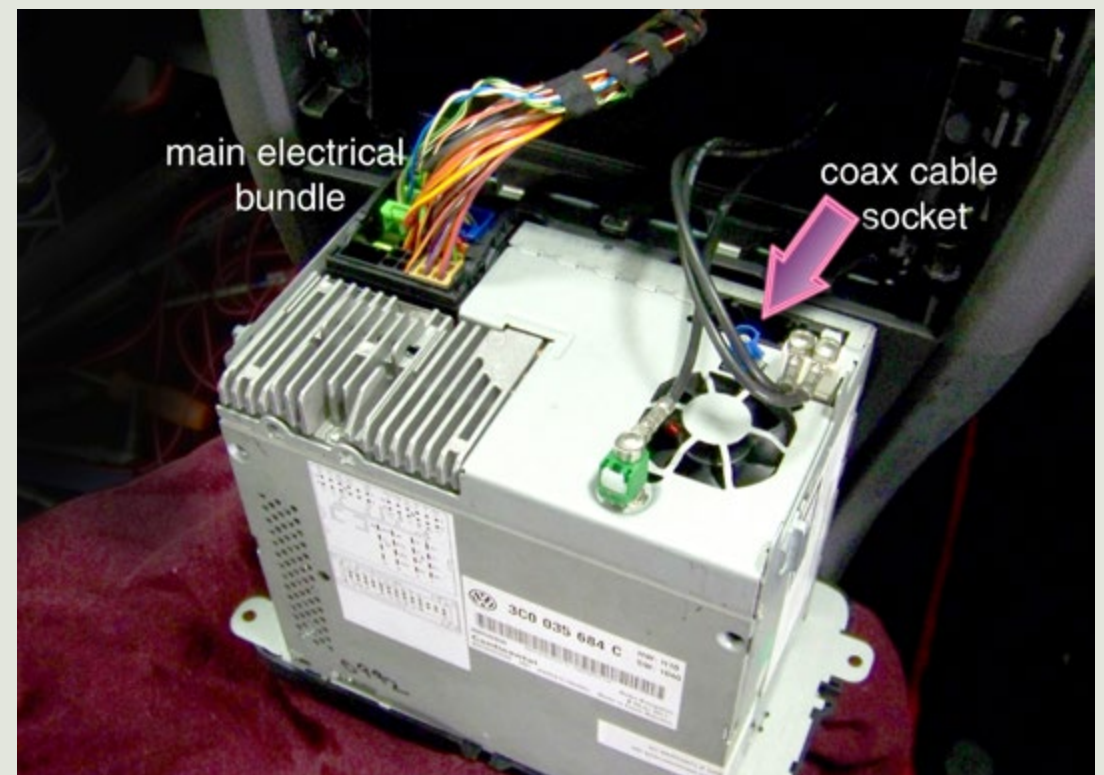
Note: There is enough wire in the radio wiring harness to let you pull the head all the way out and tip it face-down to expose the rear of the unit.



Step 4

The main electrical power cable wiring bundle is located at the left rear of the radio.

The rectangular socket for the coax cable connector is located on the right side (arrow).

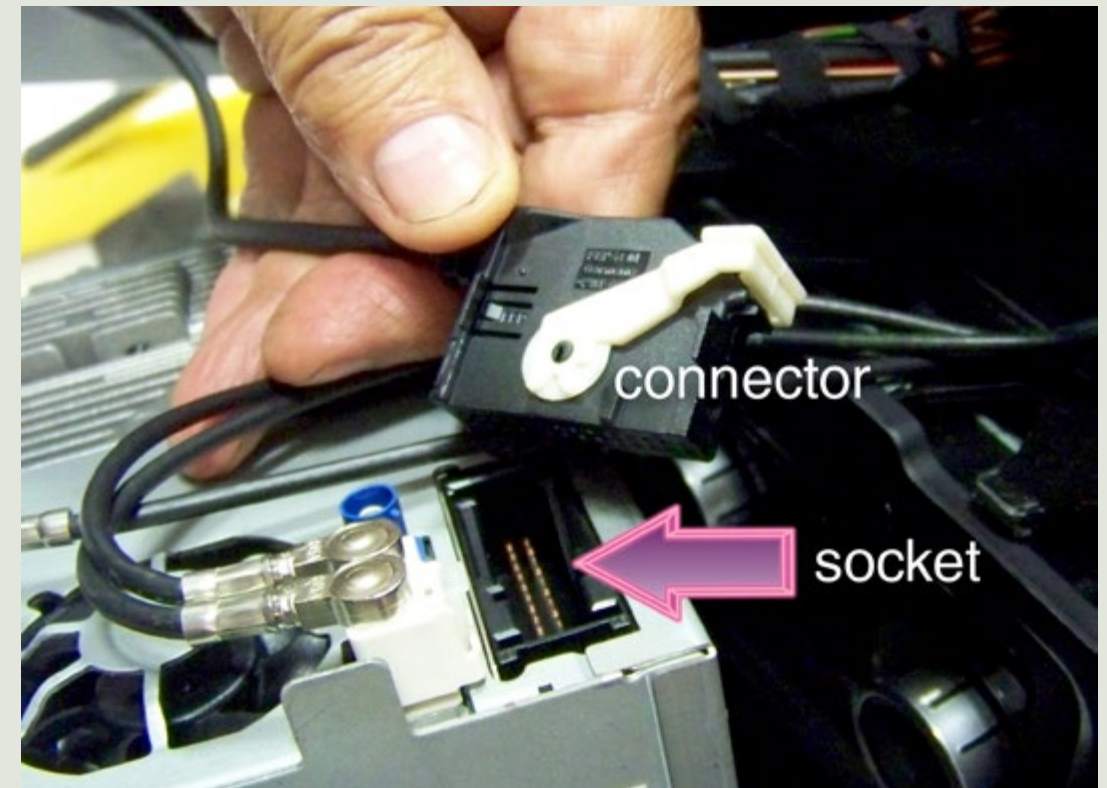


Radio Connections

Step 5

The coaxial cable in the kit comes with an exact-fit cable end that plugs into the coax socket.

Pivot the white lever so it points away from the cable, as shown here.



Step 6

Place the coax plug into the socket with the cable pointing toward the center of the radio.

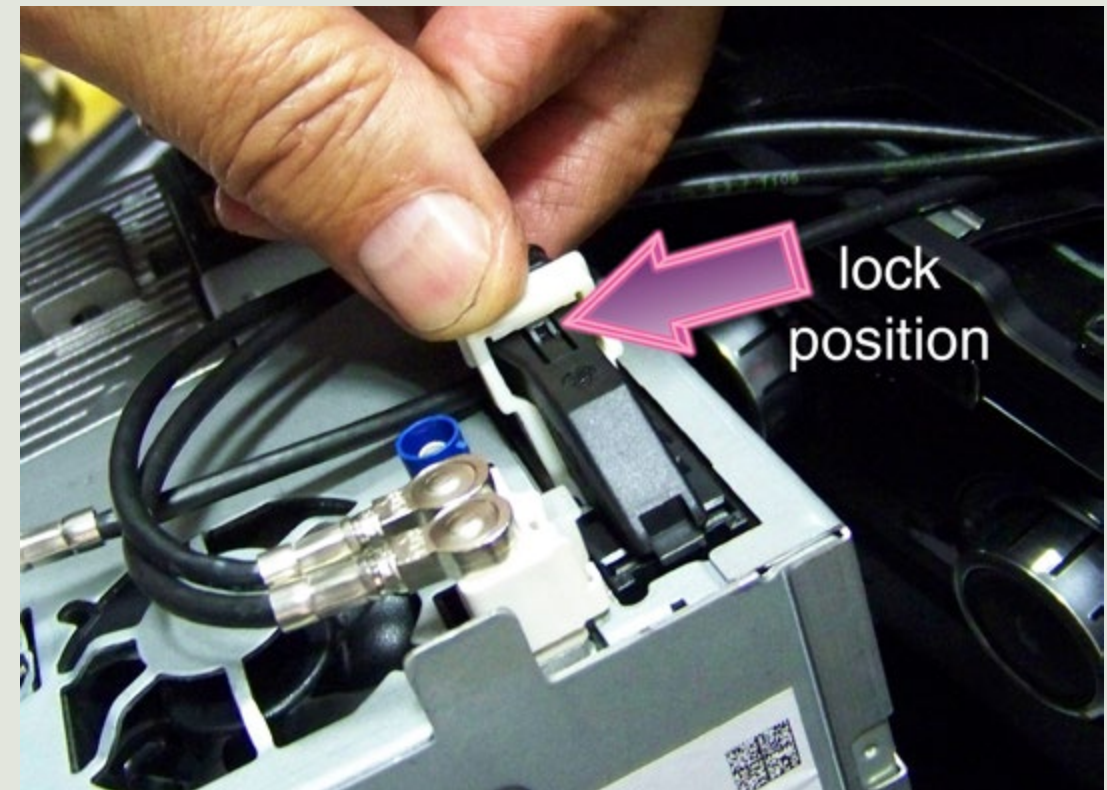
Start the cable plug in the hole, but don't push it all the way in.



Radio Connections

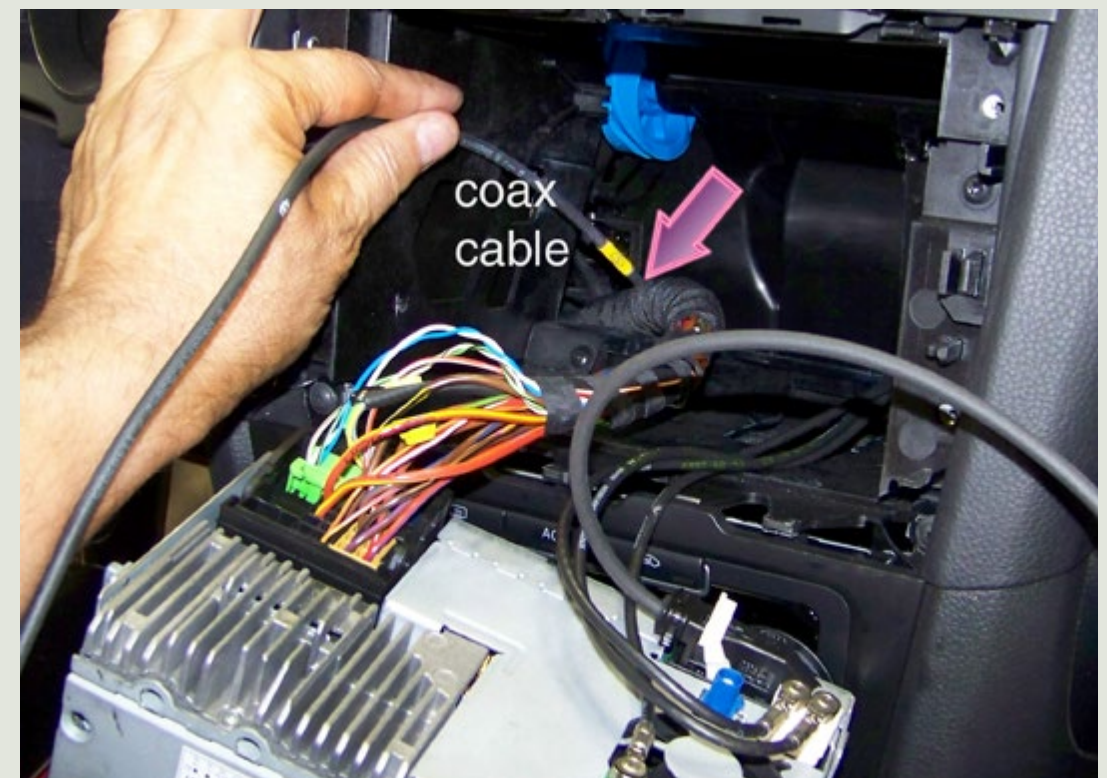
Step 7

With the coax cable plug started in the hole, pivot the locking lever toward the cable. This pulls the plug into the socket and locks it in place in a single motion. Push the locking lever until it snaps over the small black plastic lock tab (arrow).



Step 8

Feed the coax cable through the opening in the dash to the underdash area on the driver side. Pull the cable through and let it hang beneath the dash in the driver side footwell.



Radio Connections

Step 9

Install the fused power harness.

Locate the two large orange wires with yellow tracers in the main wiring bundle at the rear of the radio.

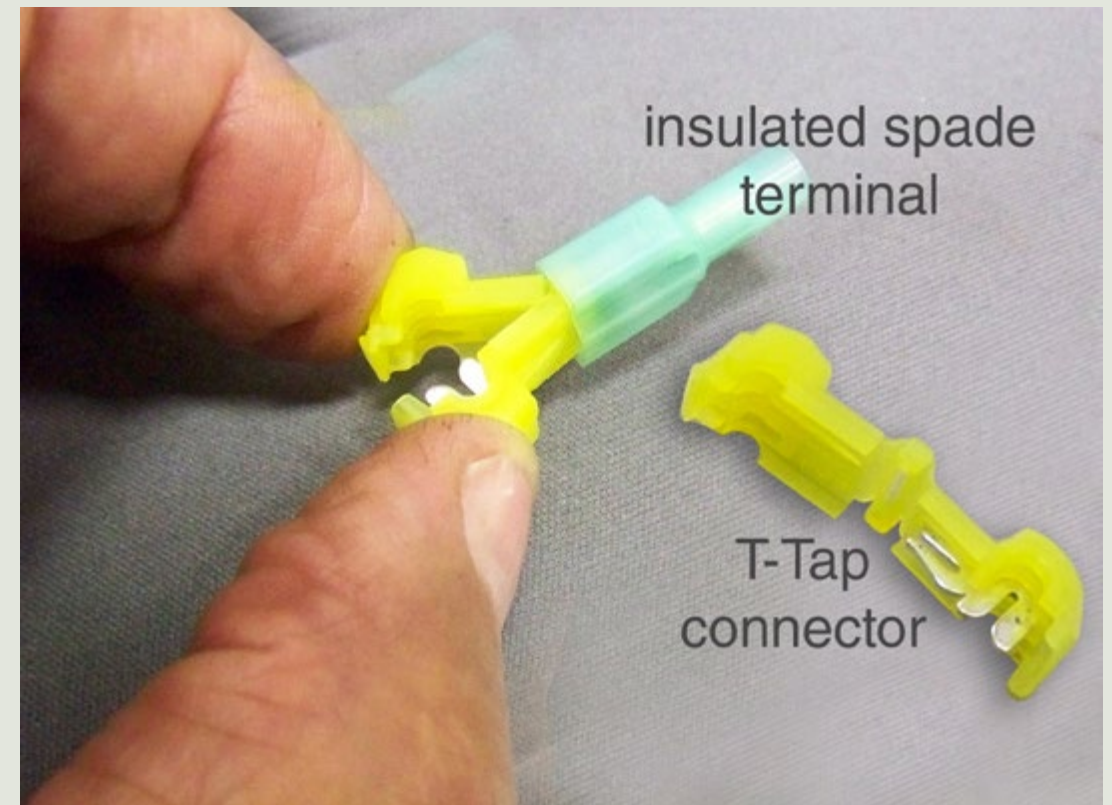
These 2.5mm² (13 gauge) wires are both hot, and either will work as the power source for our camera.



Step 10

Your kit contains two electrical connectors. Fit the yellow T-Tap connector around one of the orange wires with the yellow tracer. Fold it over the wire insulation and squeeze it together with pliers until it grips the wire and the lock tab engages to hold the connector closed.

Note that the T-Tap accepts a spade terminal connector. This is where we will plug in the fused power harness.



Radio Connections

Step 11

Plug the short fused power harness from the kit into the T-Tap connector. Push it in all the way.

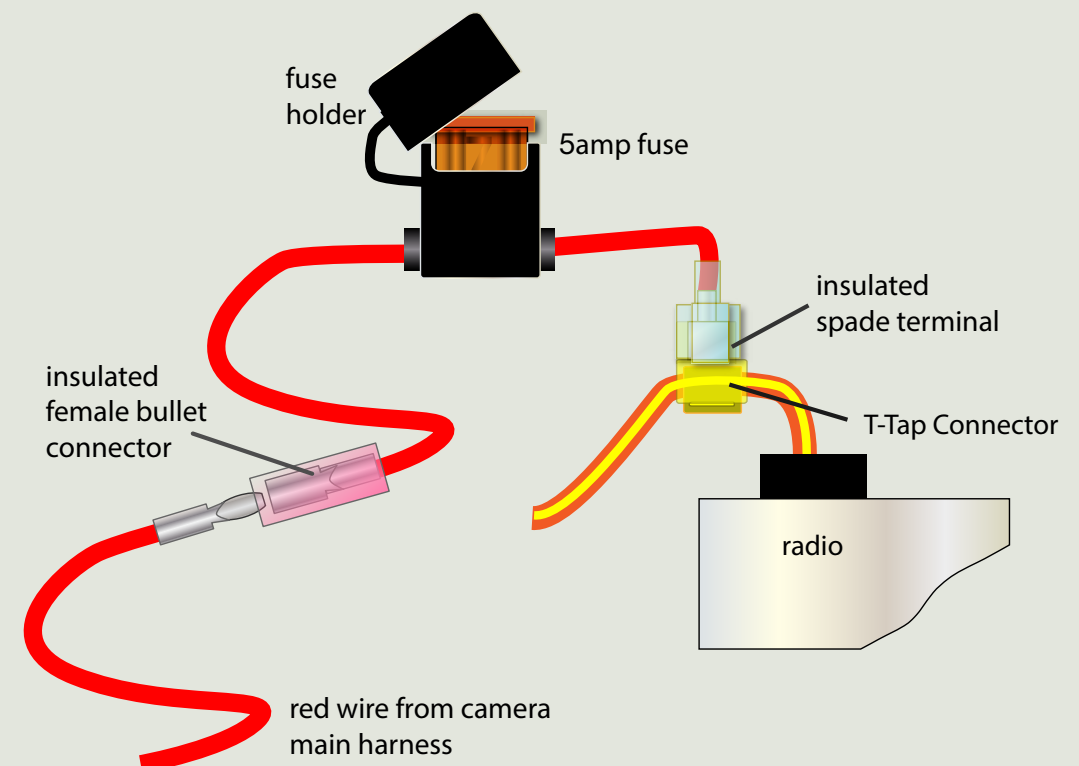
See the schematic in the next step for connection details.



Step 12

Plug the power harness spade terminal into the T-Tap connector. The 5 amp inline fuse is rated for the camera load and wiring.

With our fused harness and coaxial cable connected to the radio, it's time to mount the camera inside the rear hatch. Later, we'll run the red wire from the camera to the front of the car and plug it into the fused harness.



Camera Installation

Step 1

Open the rear hatch.

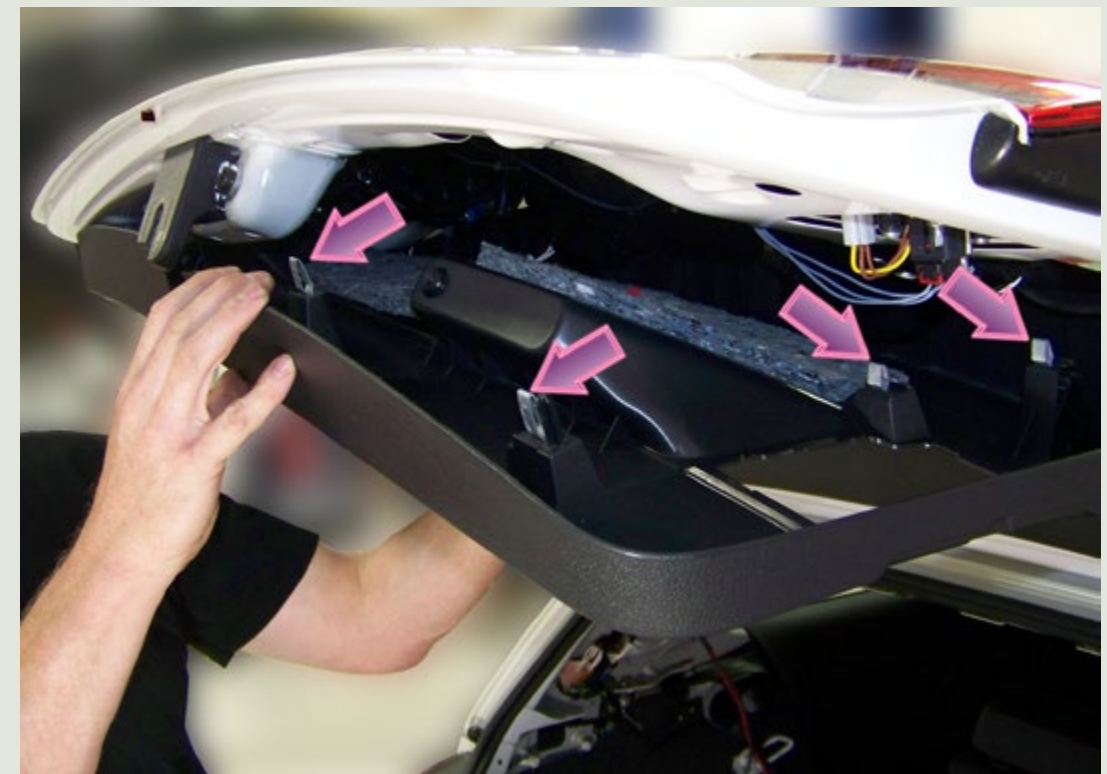
Remove the two Torx screws from the molded pull handle recesses in the hatch panel.



Step 2

Use a non-marring trim removal tool to pry between the edges of the panel and hatch body.

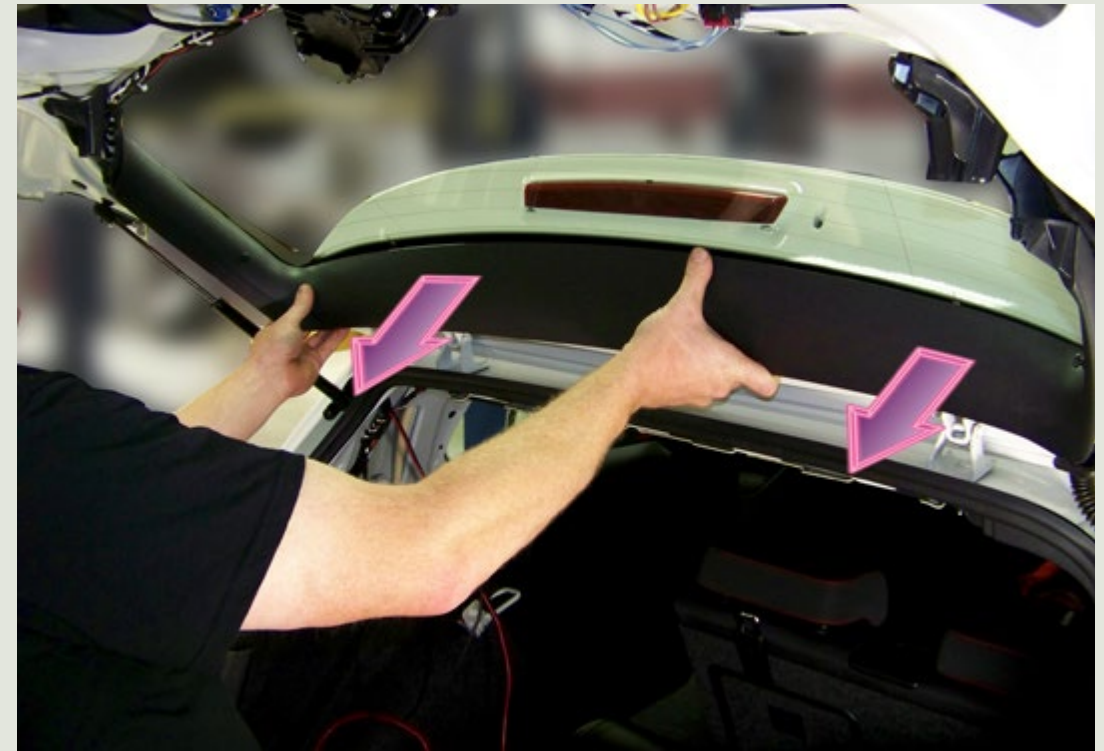
Work your way around the perimeter of the panel, releasing the metal clips (arrows) until the panel can be removed.



Camera Installation

Step 3

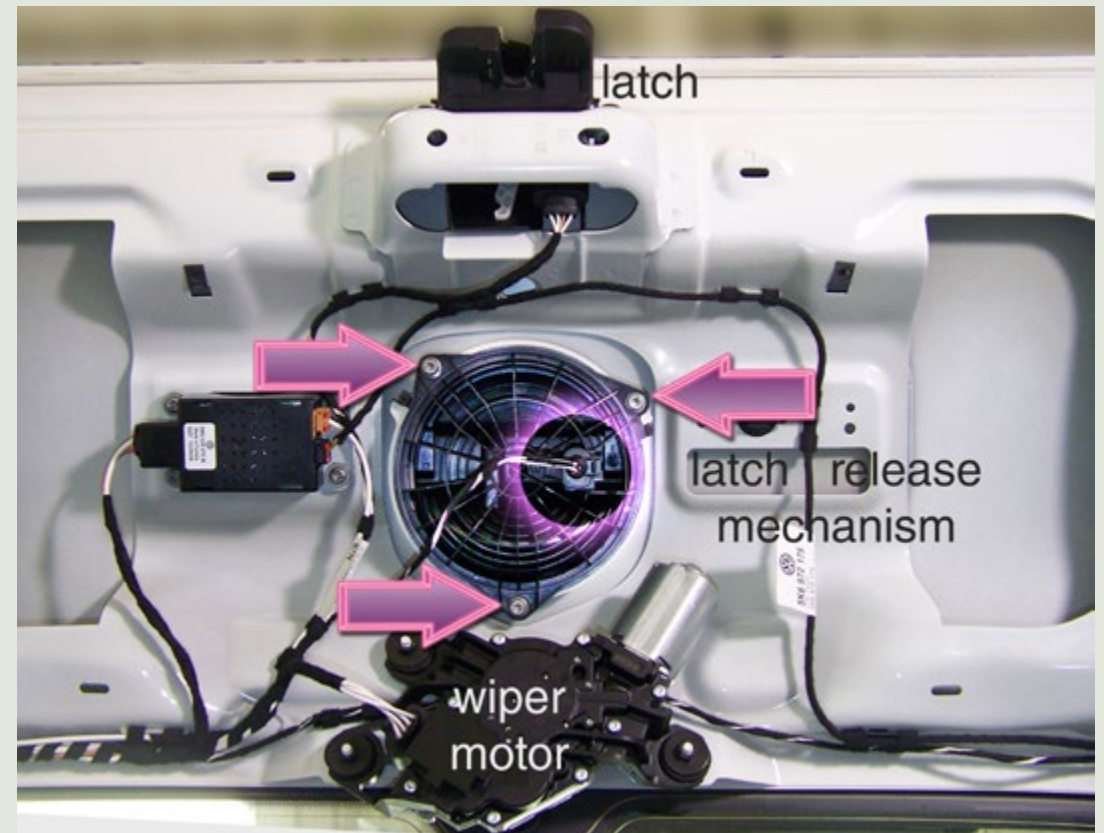
Remove the retainer screws at the sides of the rear window trim panel. Then pry with a trim removal tool to pop the panel from its retainer clips.



Step 4

Remove the hatch release mechanism. Unplug the electrical connector (highlighted) and remove the three Torx screws (arrows).

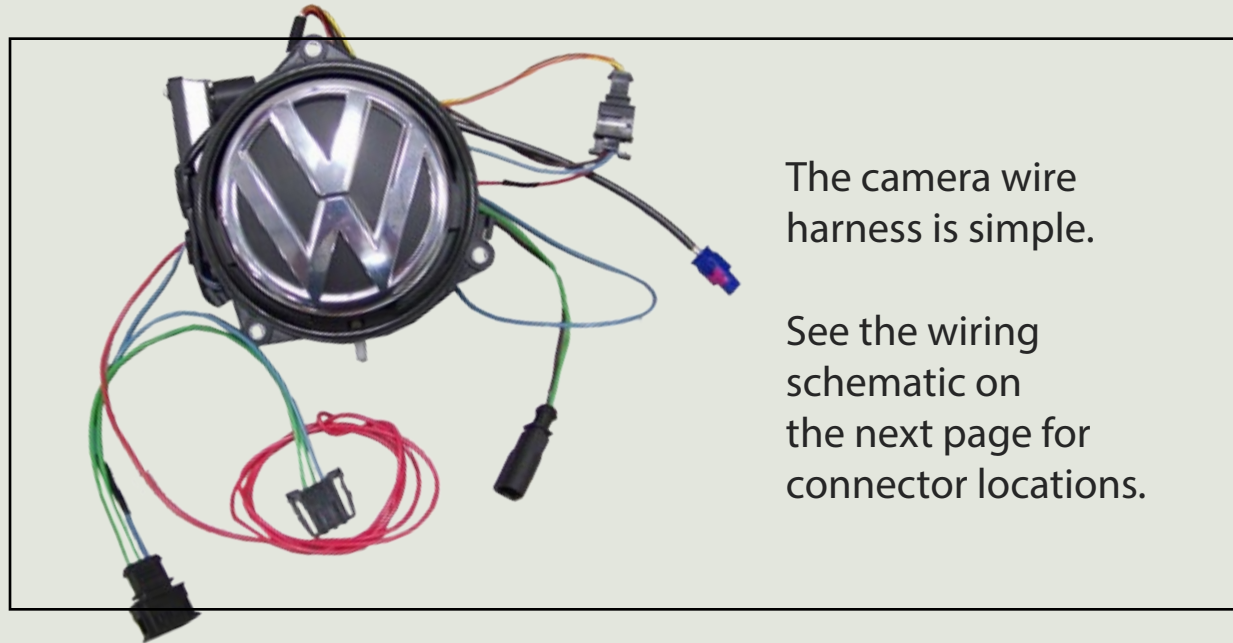
(Other components are labeled here solely for reference.)



Camera Installation

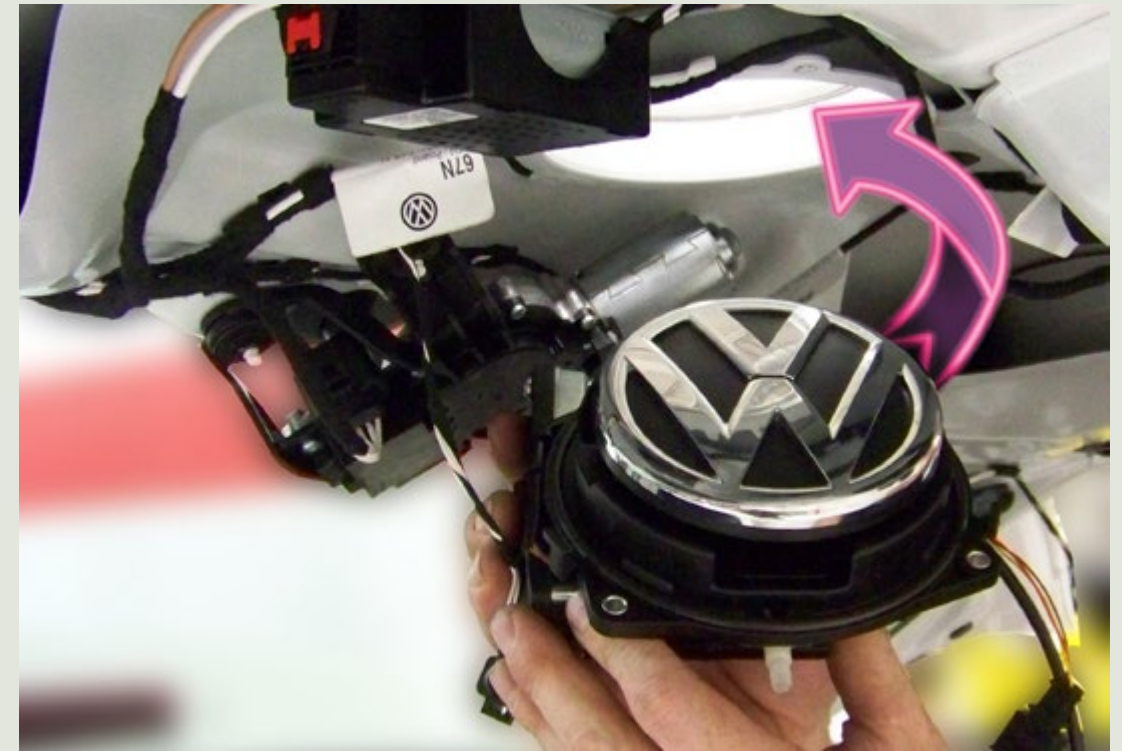
Step 5

Install the camera into the hatch opening. The camera is an exact fit replacement for the original hatch release. Install it and hand tighten the three Torx screws.



The camera wire harness is simple.

See the wiring schematic on the next page for connector locations.



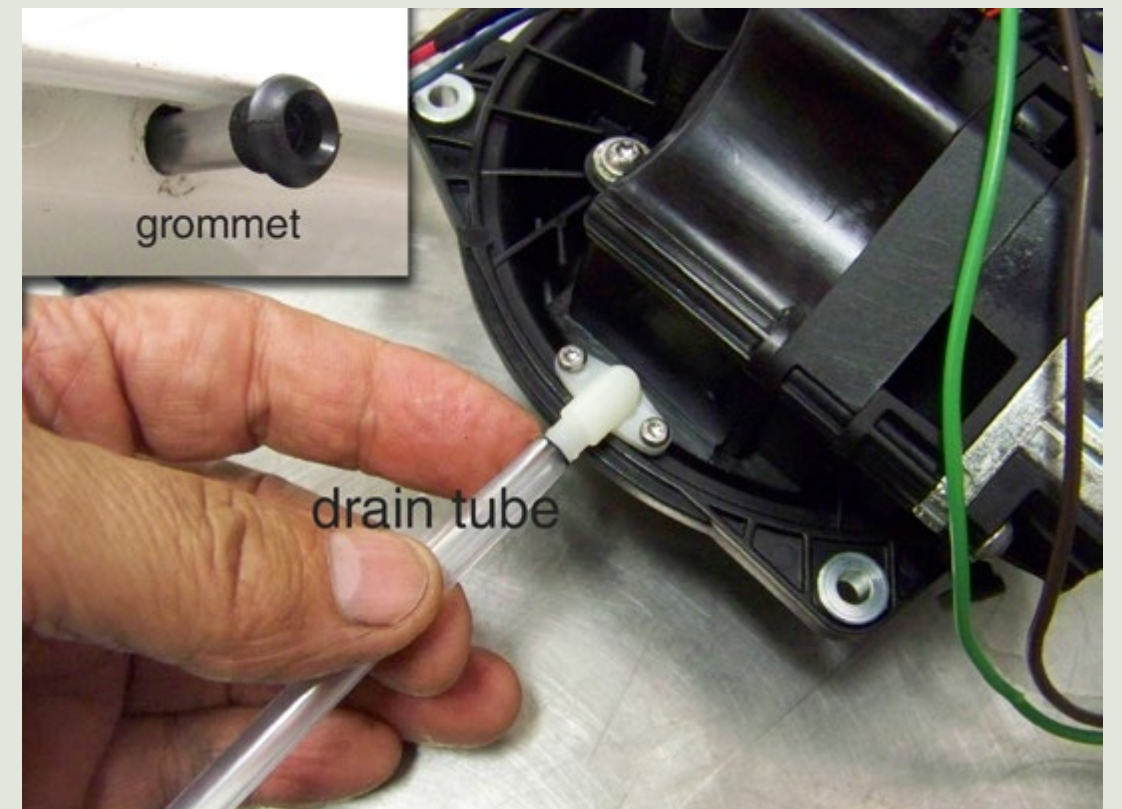
Step 6

Install the camera drain tube.

Remove the rubber plug from the round drain hole at the base of the hatch.

Push the clear plastic tubing through the hole and slide it over the drain nipple at the base of the camera body.

Push the rubber grommet on the tube it into the drain hole (inset photo).

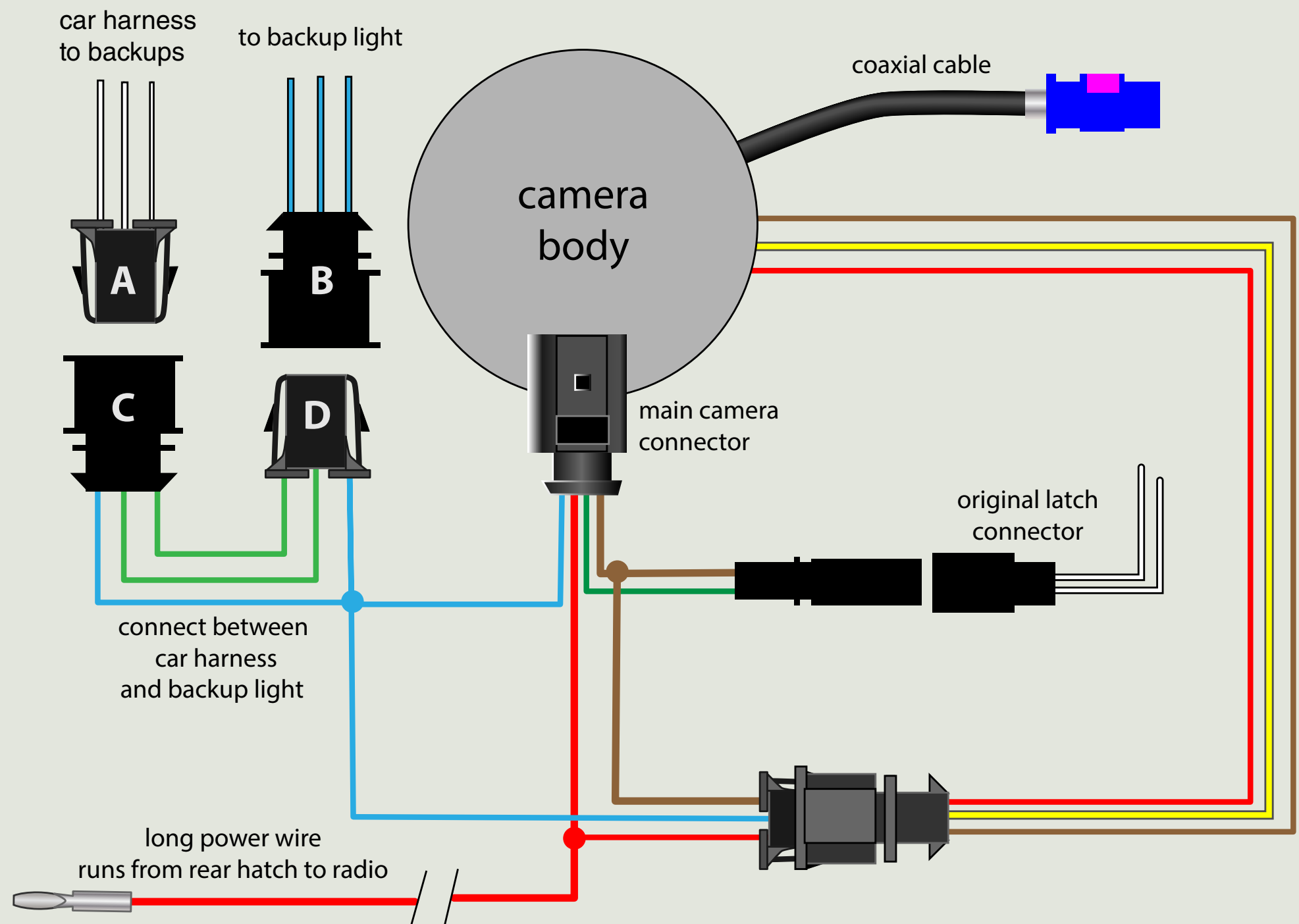


Camera Installation

This schematic shows the camera connectors. The wire colors shown here match those on your camera harness.

- Disconnect connectors A and B.
- Plug harness connector C into A and connector D into B.
- Plug the original latch connector disconnected in Step 4 into the black connector with the brown and green wires.

With the camera installed and connected, it's time to run the coax cable rearward from the radio to the camera, and run the red power wire forward from the hatch to the radio.



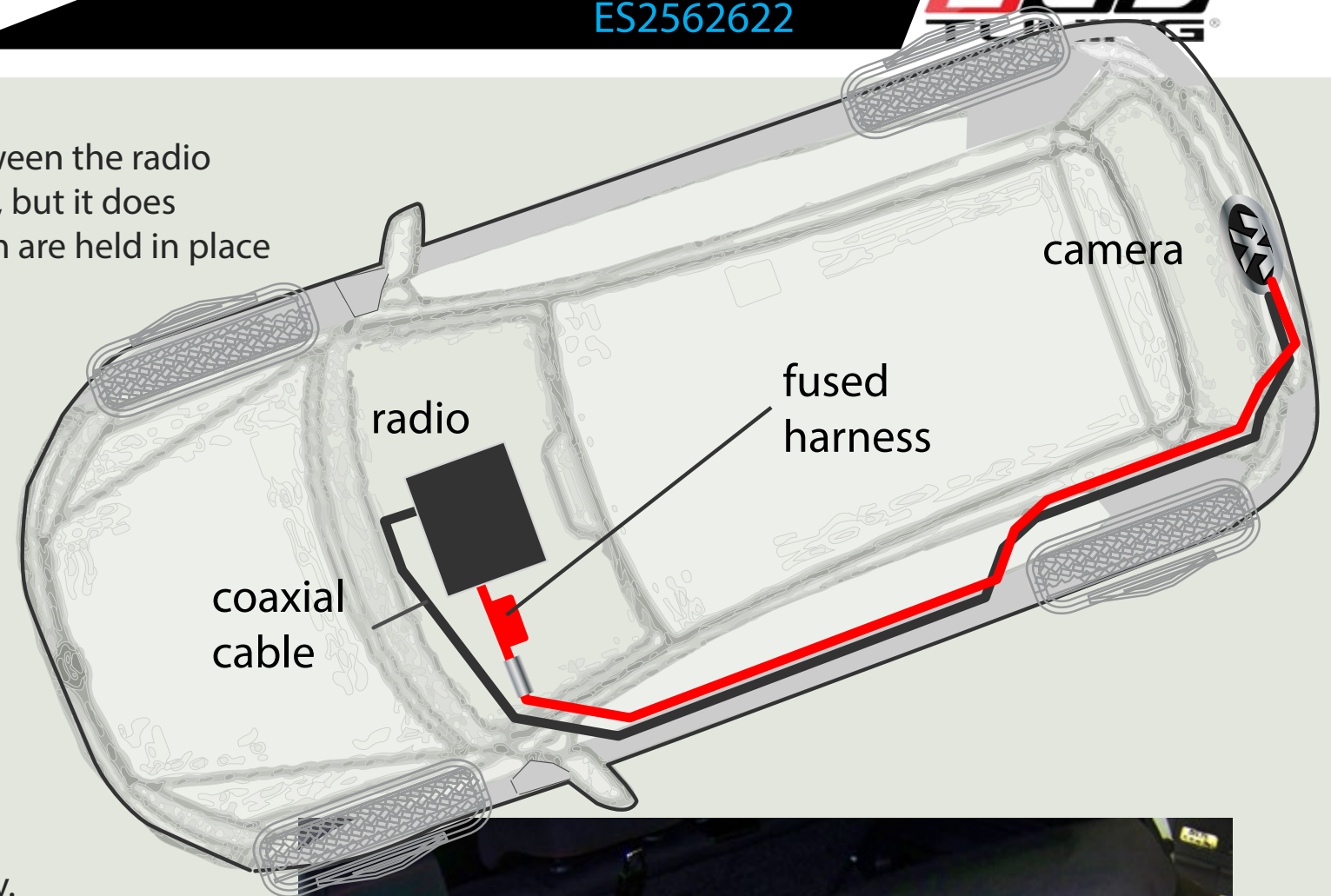
Run the Cable and Power Wire

The coax cable and red power wire must be run between the radio head and rear view camera. This is not a difficult task, but it does require removal of several interior panels, all of which are held in place by snap clips and a few screws.

We'll start at the hatch and move forward to show which panels need to be removed.

Step 1

If you haven't already done so, remove the parcel tray.



Run the Cable and Power Wire

Step 2

Pull down and remove the trim strip above the hatch opening.

Service Tip: A non-marring trim removal tool will help free the push clips. There are no screws in this panel.



Step 3

Remove the lower cargo area trim panel from the left quarter panel.

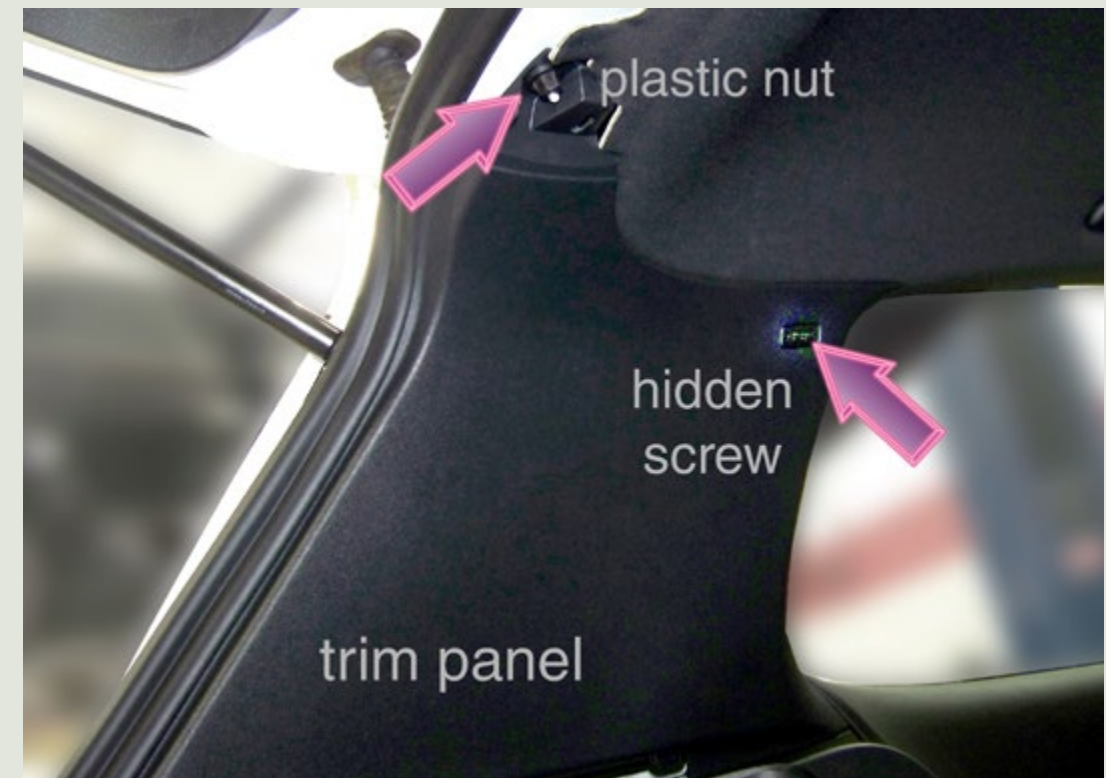
Two screws (arrows).



Run the Cable and Power Wire

Step 4

Remove the two fasteners from the upper quarter panel trim. There is a plastic nut near the roof line at the rear (left arrow) and a Torx head screw hidden behind a small rectangular concealment plug (right arrow).



Step 5

After removing the fasteners, lift out the upper trim panel.



Run the Cable and Power Wire

Step 5

Lift up on the front edge of the rear seat cushion until the metal retainers pop out of the floor (arrows).

Pull the cushion forward and remove it.



Step 6

Pry up and remove the sill panel. No screws; just clips.



Run the Cable and Power Wire

Step 7

Remove the left kick panel; one screw behind the hood release handle and several clips.

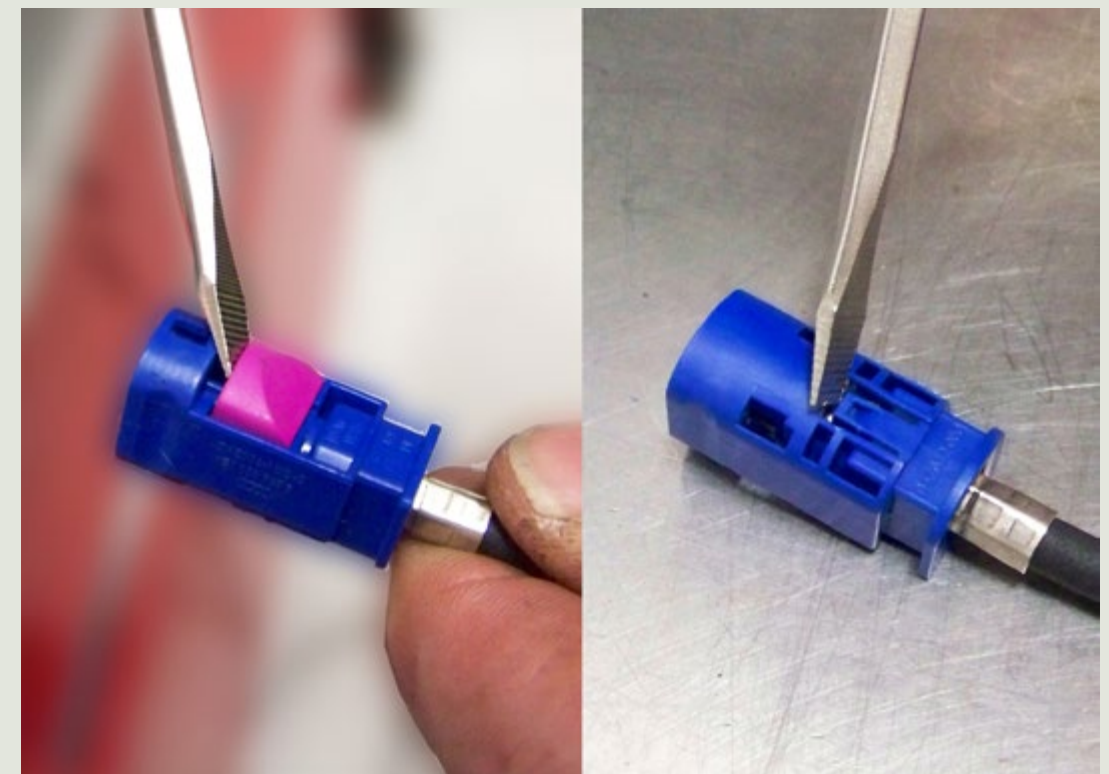


Step 8

Retrieve the end of the coaxial cable from the driver footwell (see Step 8 on page 6).

Service Tip: It will be much easier to route the coaxial cable if the blue protective collar is temporarily removed.

To remove the collar: Pry up on the pink release clip and remove it. Then pry on the small lock tab (right photo) and slip the collar off the cable. Save the collar and clip and reinstall them later, after the cable is routed to the camera.



Run the Cable and Power Wire

Step 9

Route the coax cable across the underdash area to the left kick panel area, then rearward between the sill and carpeting toward the quarter panel.



Step 10

Fish the cable through the body side panel and pull it rearward to the C-pillar.



Run the Cable and Power Wire

Step 11

Pry the rubber ends of the main wiring conduit from the hatch and body to expose the wiring.



Step 12

- Fish the coax cable through the conduit and run it parallel to the car harness into the hatch.
- Replace the blue plastic coax cable end removed in Step 8 and reinstall the lock clip.
- Plug the coax cable into the mating connector at the camera cable.

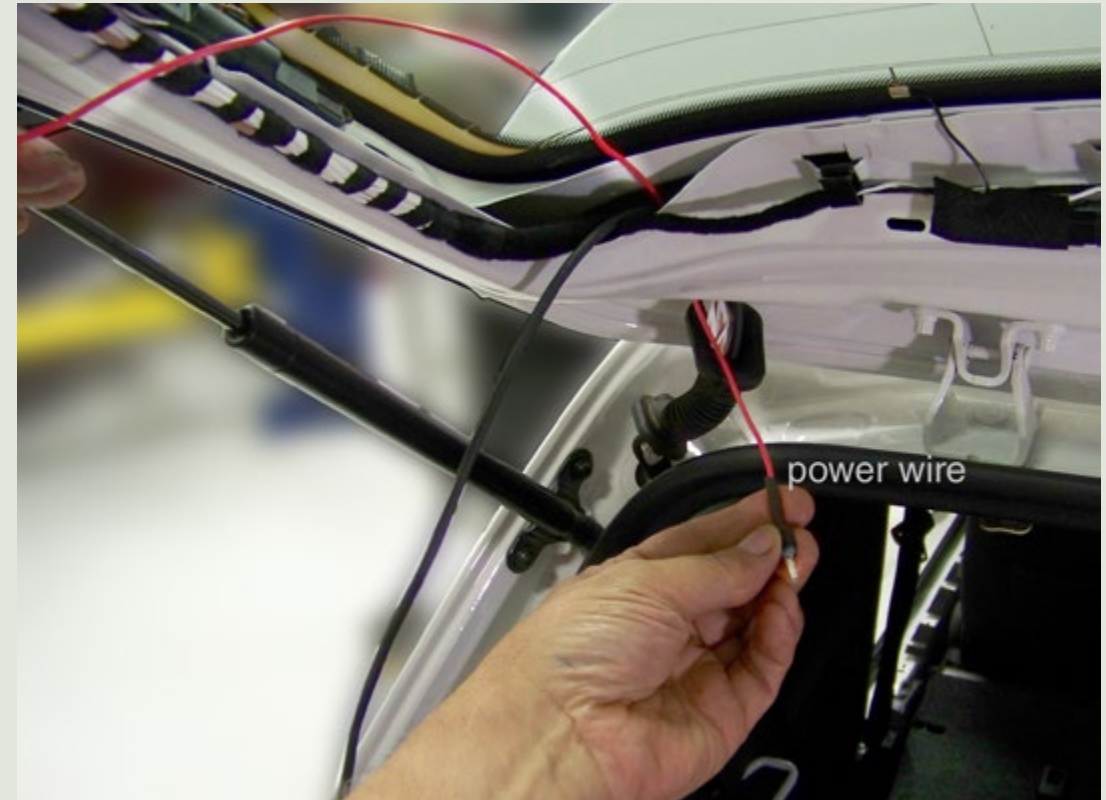


Run the Cable and Power Wire

Step 13

Now work in the opposite direction.

Fish the red power wire from the camera harness back through the conduit.



Step 14

- Run the wire parallel to the coax cable and zip tie them to the factory wiring in several places.



Run the Cable and Power Wire

Step 15

- Run the power wire forward inside the car, parallel to the coax cable, all the way to the radio.
- Tidy up: Zip tie the power wire and coax cable together and position them in safe locations inside the vehicle.
- Reinstall all interior trim panels in reverse order, being careful not to pinch any wires or the coax cable.



Step 16

- When you've run the power wire all the way to the front of the car, fish it back through the opening behind the radio.
- Plug the bullet connector into the fused power harness at the rear of the radio.
- Secure the coax cable and power wire with zip ties. (Make sure all wiring is properly secured in a safe location where it can't rub, pinch, or chafe.)
- Reinstall the radio and trim panel.



Coding

Step 1

With the camera installed and connected, it's time to code the radio to recognize the camera.

Connect your scan tool to the vehicle data link connector.

We're using the Ross-Tech VCDS (VAG-COM Diagnostic System).



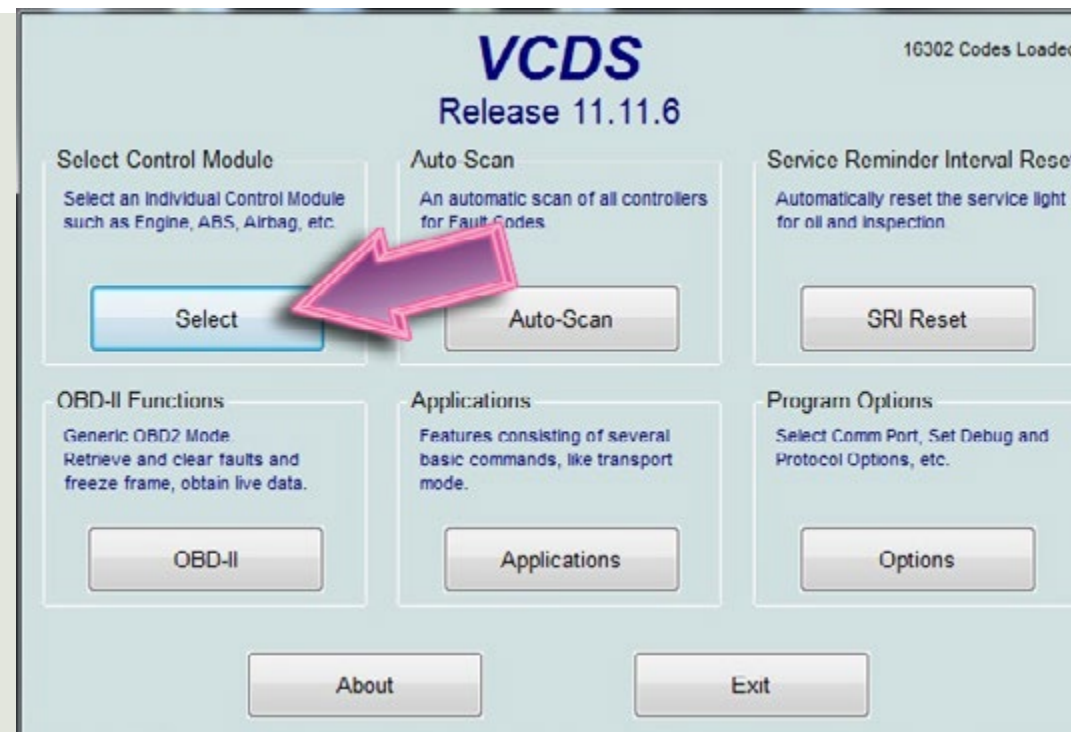
Step 2

Key-On Engine-Off the radio display confirms communications between the scan tool and vehicle.



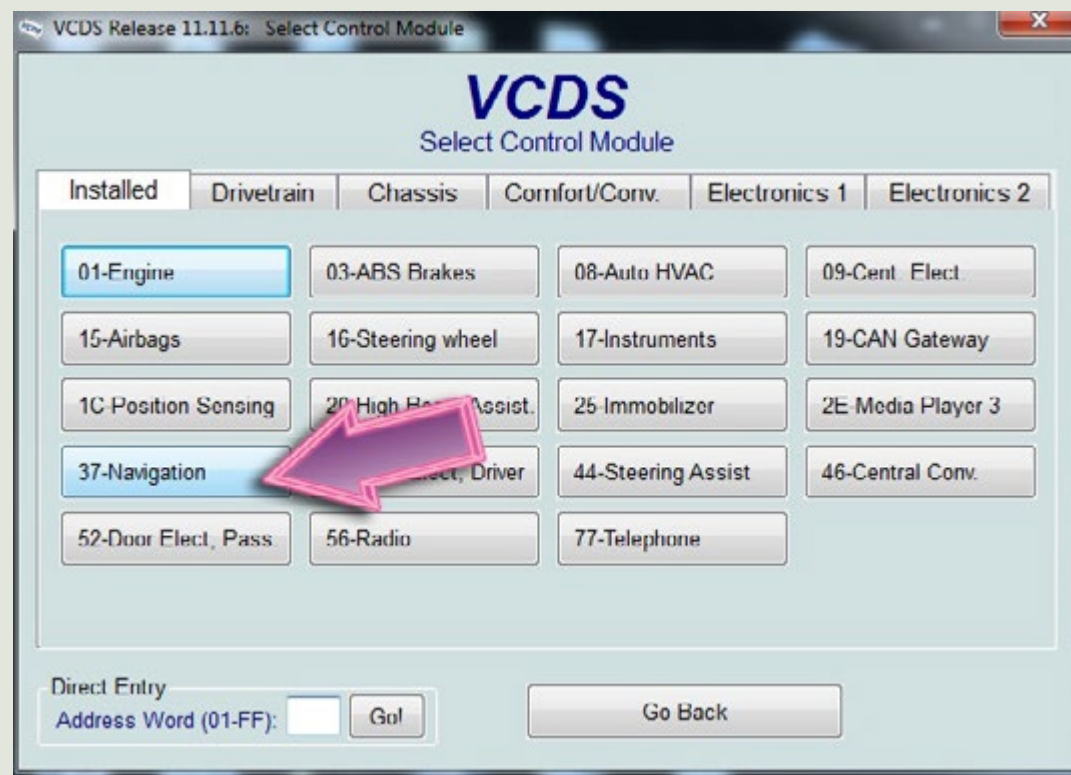
Step 3

Click on the "Select" button to open the control module list.



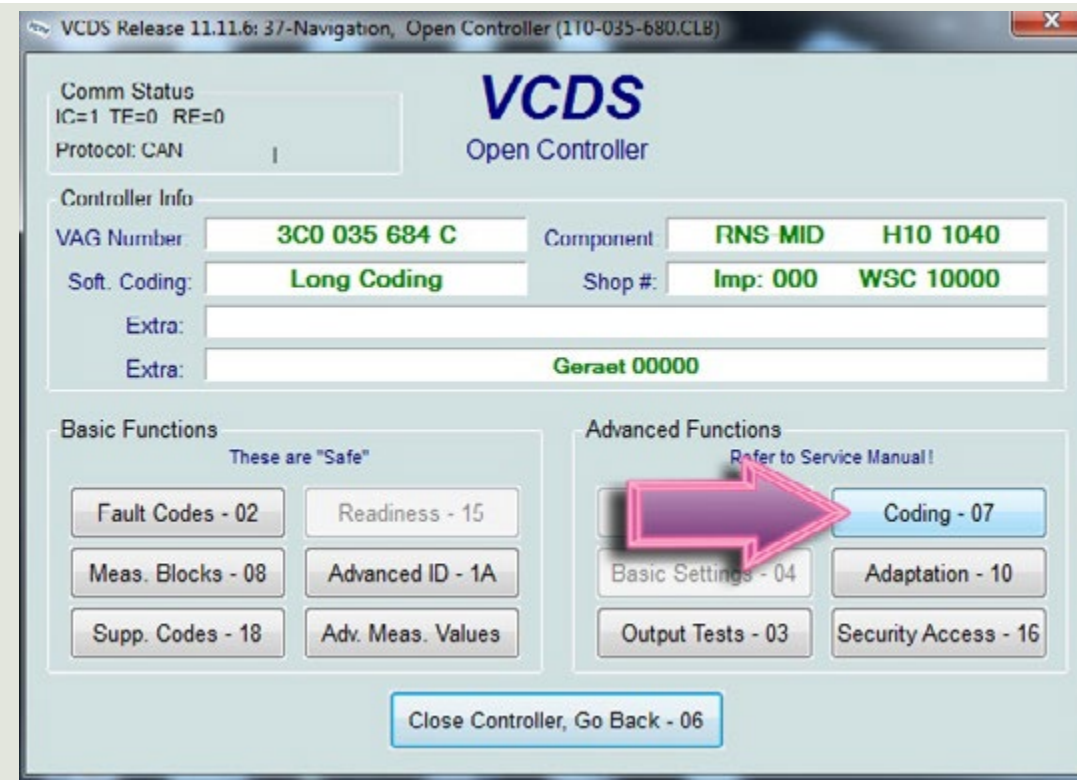
Step 4

From the Control Module screen, select 37-Navigation.



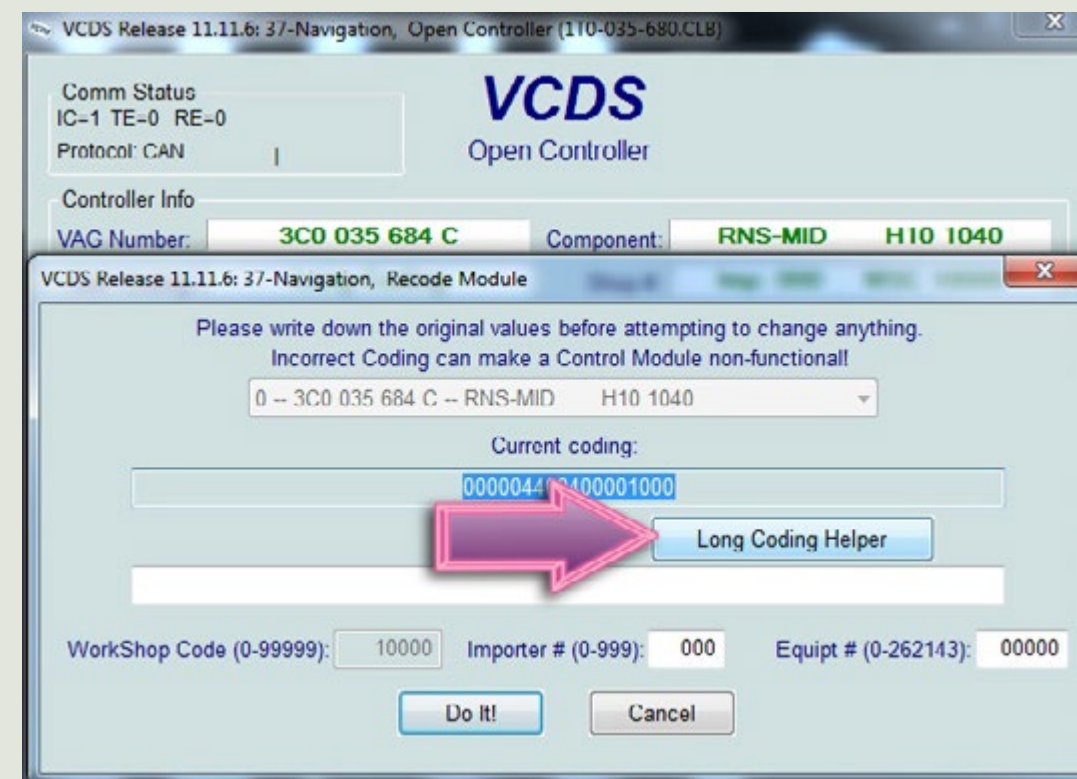
Step 5

On the Navigation screen, select Coding - 07.



Step 6

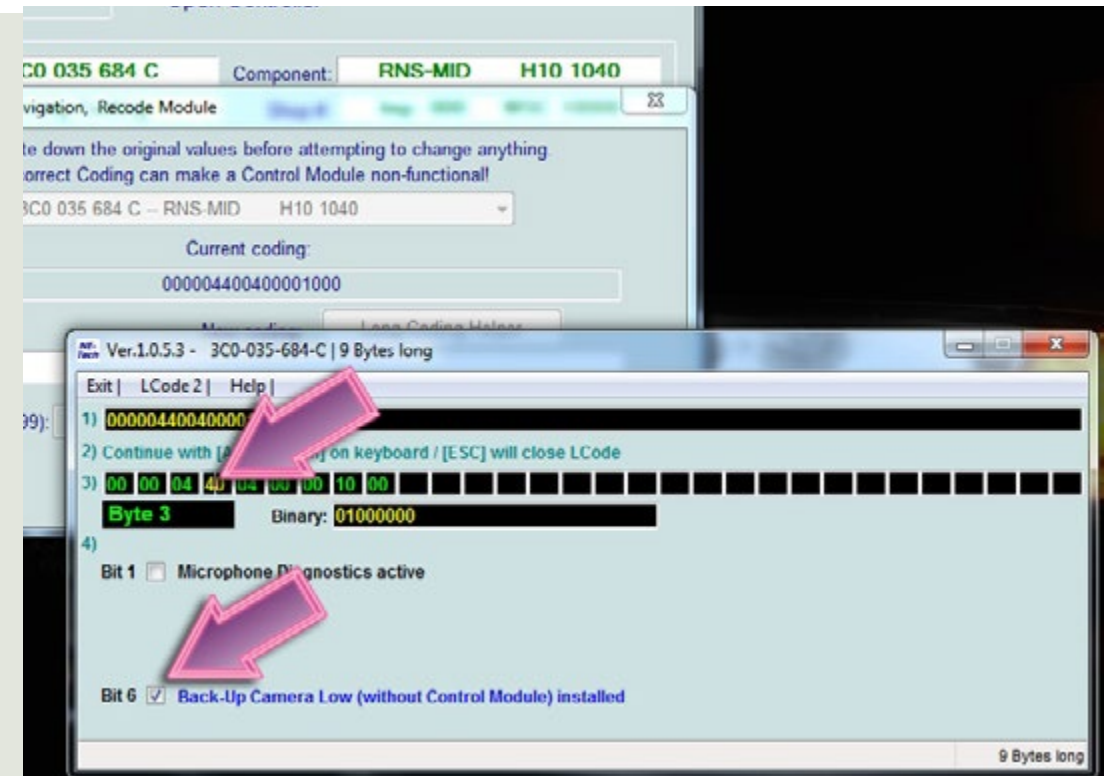
Select Long Coding Helper.



Step 7

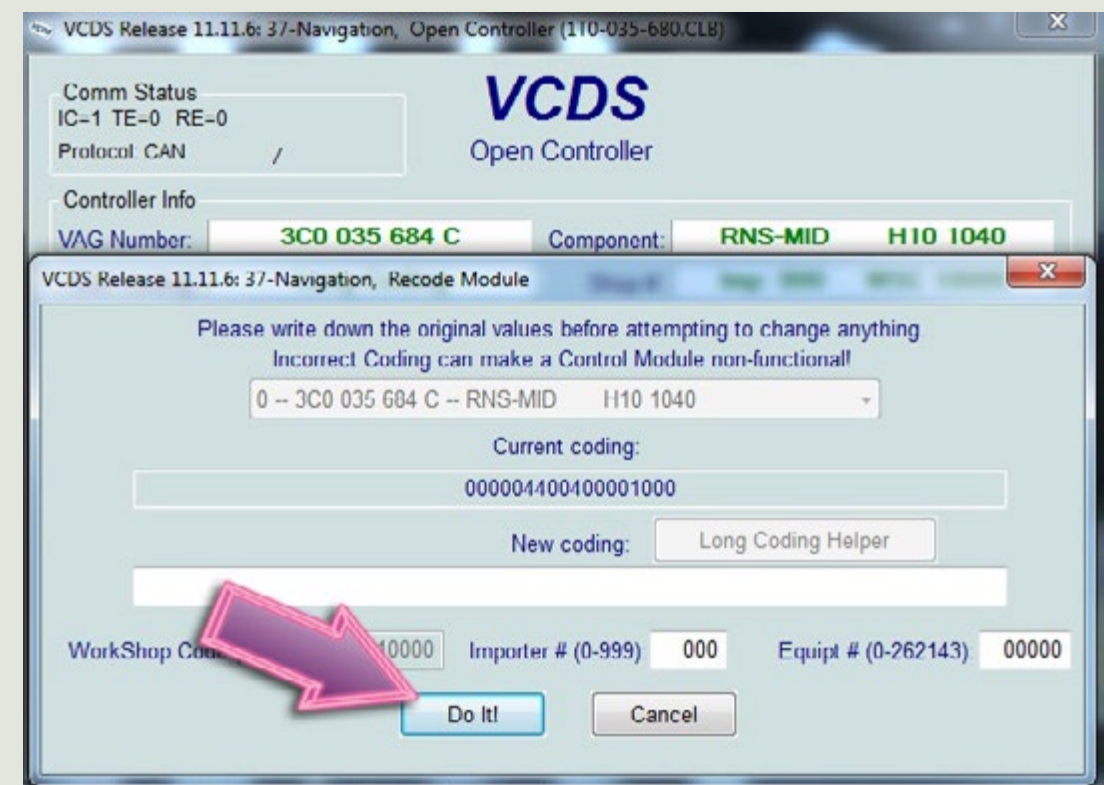
- Place your cursor in the fourth coding box from the left (top arrow).
- With Byte 3 selected, select the Bit 6 check box Back-Up Camera Low (without Control Module) installed (lower arrow).

Service Note: Each of the black blocks in row 3 represents a Byte number. We want Byte 3, but since the Byte numbering starts with Byte 0, we need the fourth box from the left.



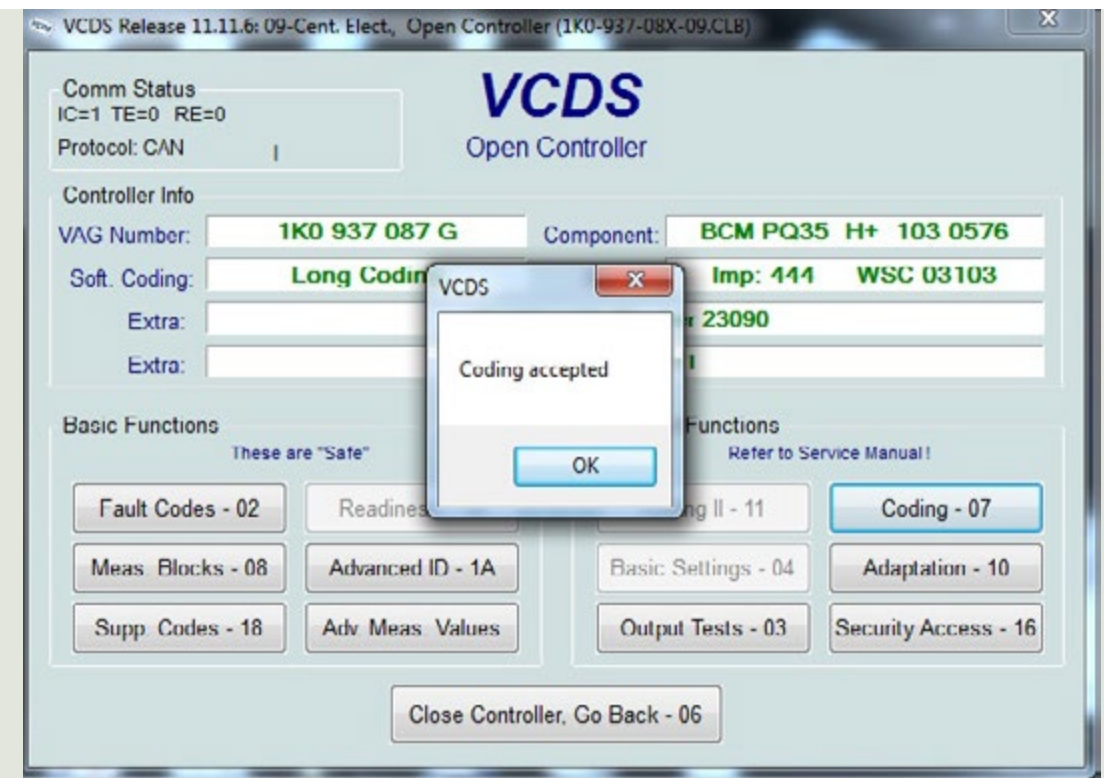
Step 8

Select Do It to save your choice.



Step 9

- The program will confirm your changes.
- Select Close Controller, Go Back - 06.
- Back out of this page and close out the scan interface.



Step 10

The camera is now coded and ready to test.

- Turn the ignition to the ON position.
- Select reverse gear to activate the rear view display.





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Thanks for purchasing your Rear View
Camera from ECS Tuning.

We appreciate your business,
and hope this tutorial has
been helpful and informative.