2010-Up Prius HB Navigation speedlock override installation guide.

Dash disassembly

Dash disassembly are the same for 2010, 2011, and 2012 Prius Hatch Back. The following is a 2010 Prius III.
Remove the lower glove box.
Remove the cigarette lighter bezel in the lower bridge
2010 Prius III Shown

Stick your thumb into the cigarette lighter and pull gently. You won't get shocked. I promise. Carefully pry the corner of the bezel and work your way around
2010 Prius III Shown

There are no screws holding the bezel. It's all pressure tabs.

If you want to install the switch in the blank spots in the knee bolster, remove the knee bolster.

Radio removal is as followed.

2010 Prius III Shown

To remove the radio, first by prying up the shifter bezel on the left lower corner. Then work your way around the rest of the bezel. Disconnect the plugs for the Park and the drive mode selector and remove the bezel.

WARNING: Do not power up the Prius with these 2 plugs unplugged. You will get a Hybrid system warning on the dash.

2010 Prius III Shown

Open the cup holder and pull the cup holder bezel straight up. Then work your way toward the top of the bezel. There are no screws holding the bezel down. Open the top glove box may help unclipping the bezel.

2010 Prius III Shown

Remove the radio bezel by pulling the right side of the bezel outward first then work your way around the rest of the bezel. Disconnect the clock/Km/h plug and remove the bezel.

2010 Prius III Shown

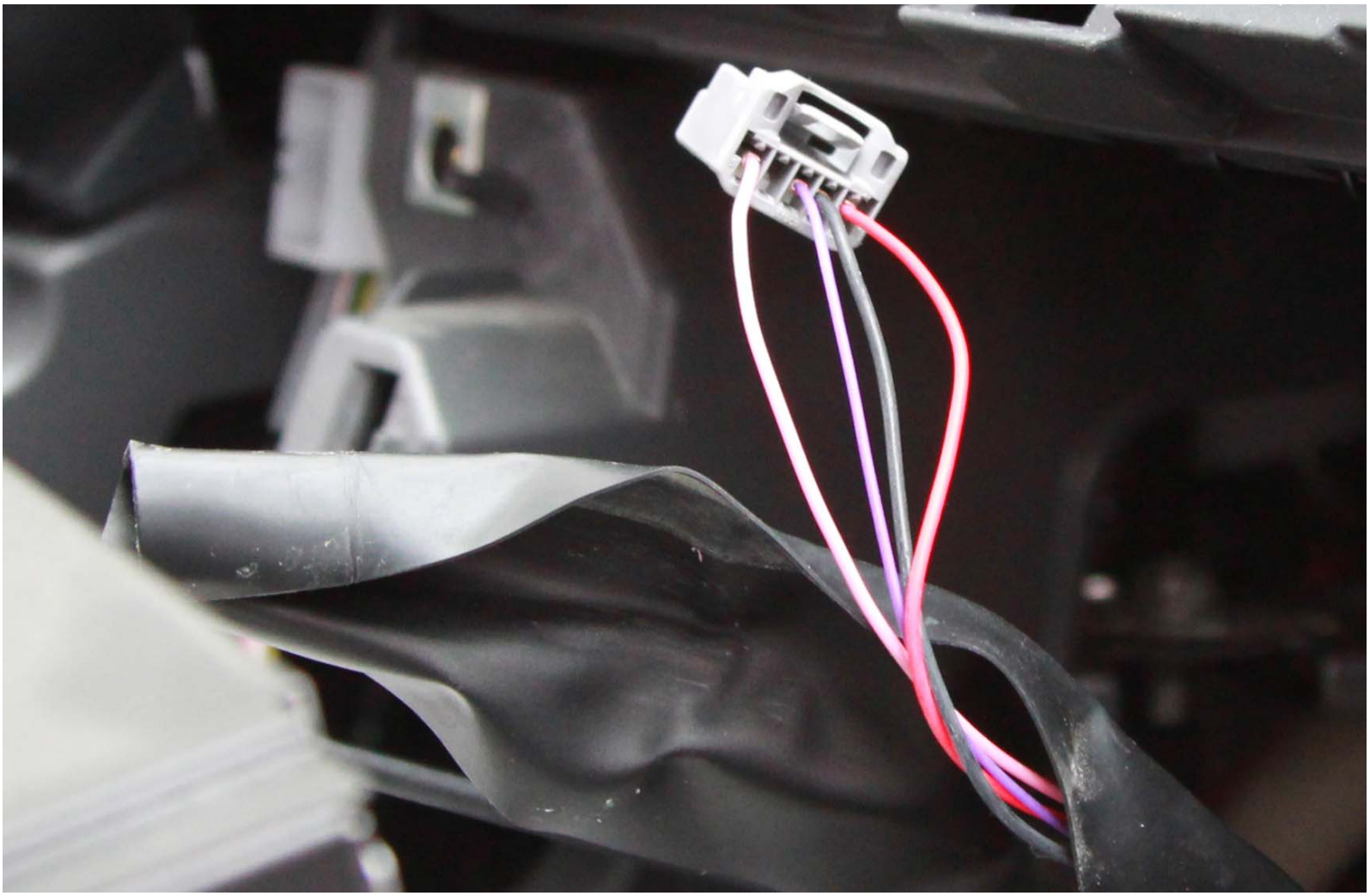
Once the radio bezel is removed, unclip the power button bezel but **do not disconnect it.**

2010 Prius III Shown

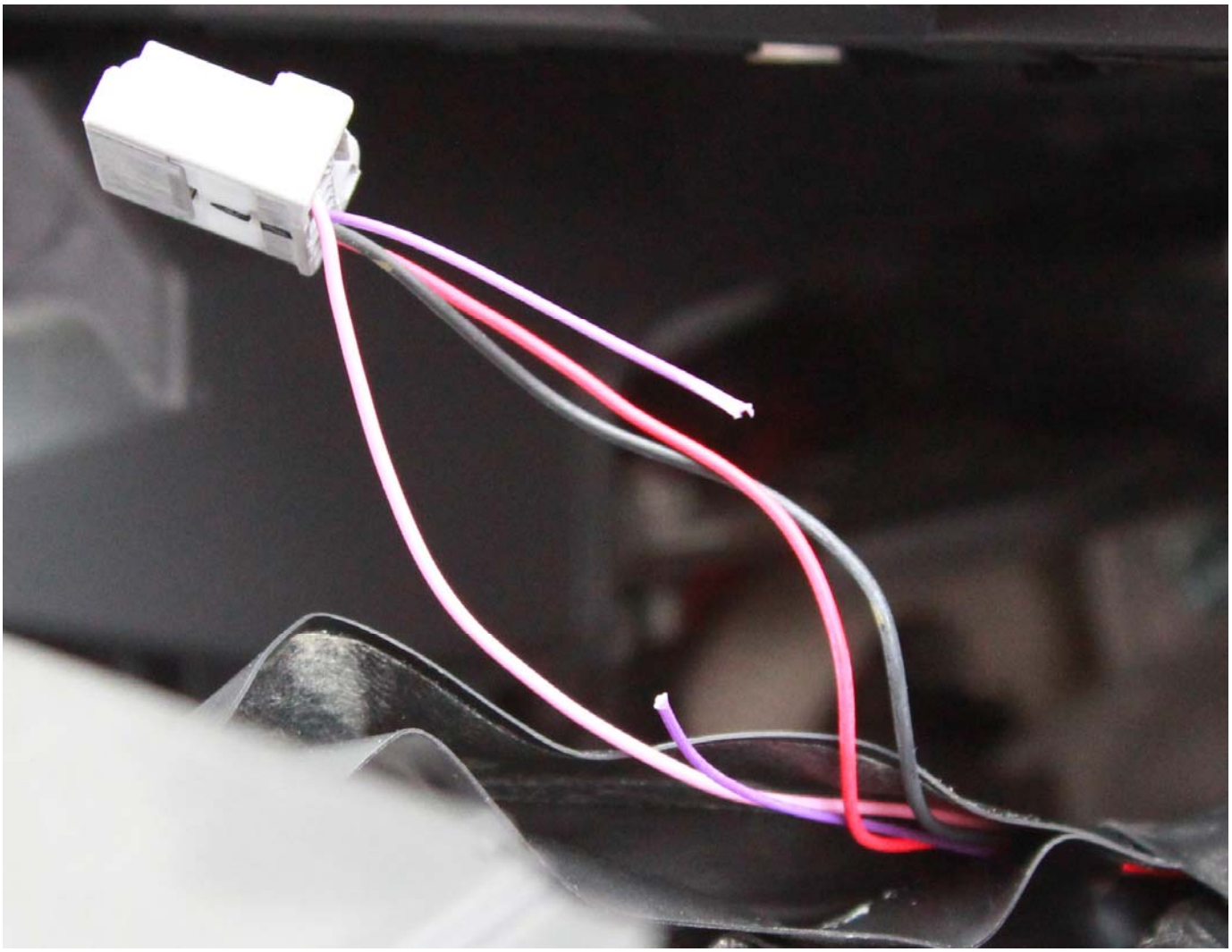
Remove the 4 10MM bolts securing the radio. Place a towel under the radio covering the AC control and the shift knob to prevent scratching and damaging to the AC control and shift knob. Pull the radio out of its cavity and set the radio on the towel.

For 2010-2011

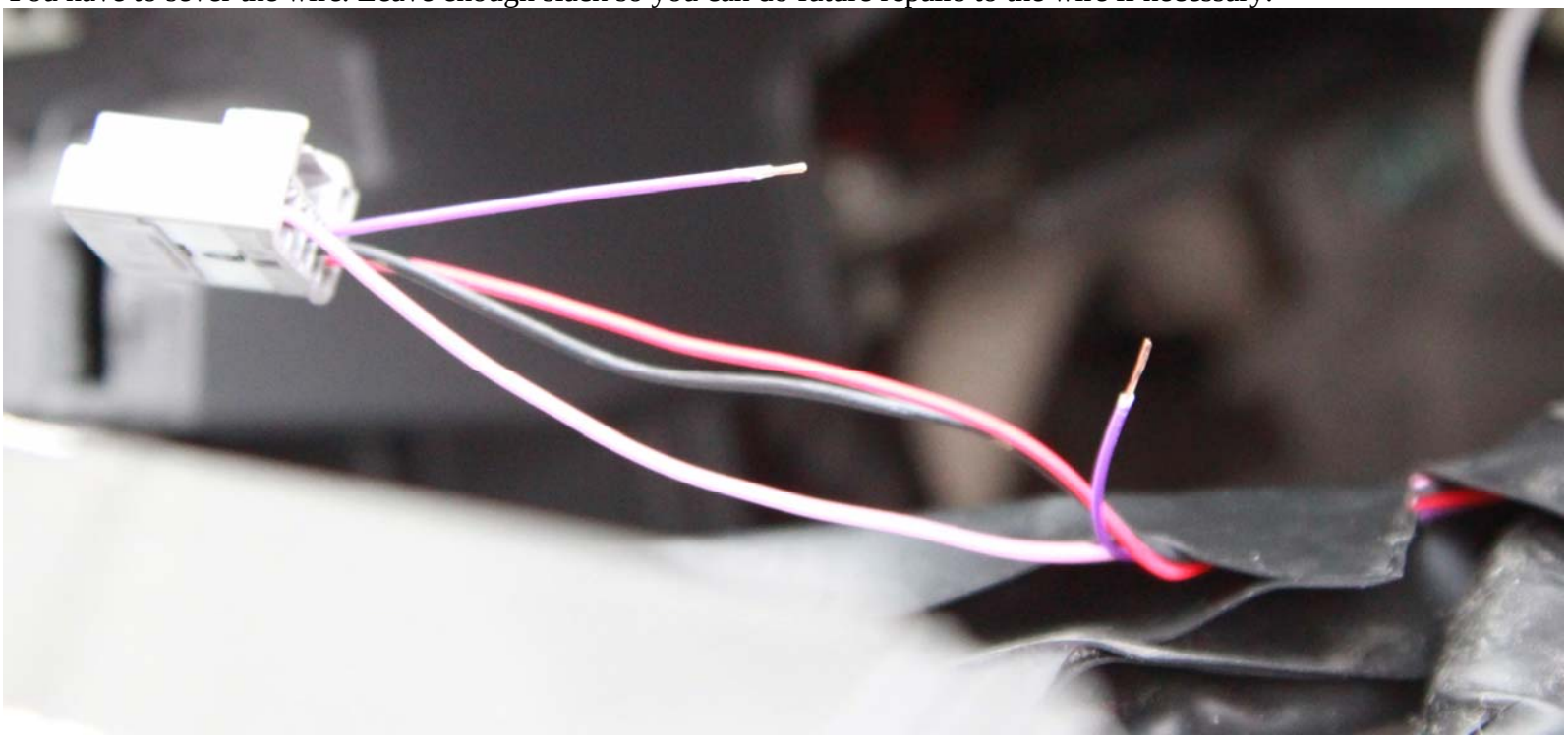
Once the radio is removed, locate the gray plug



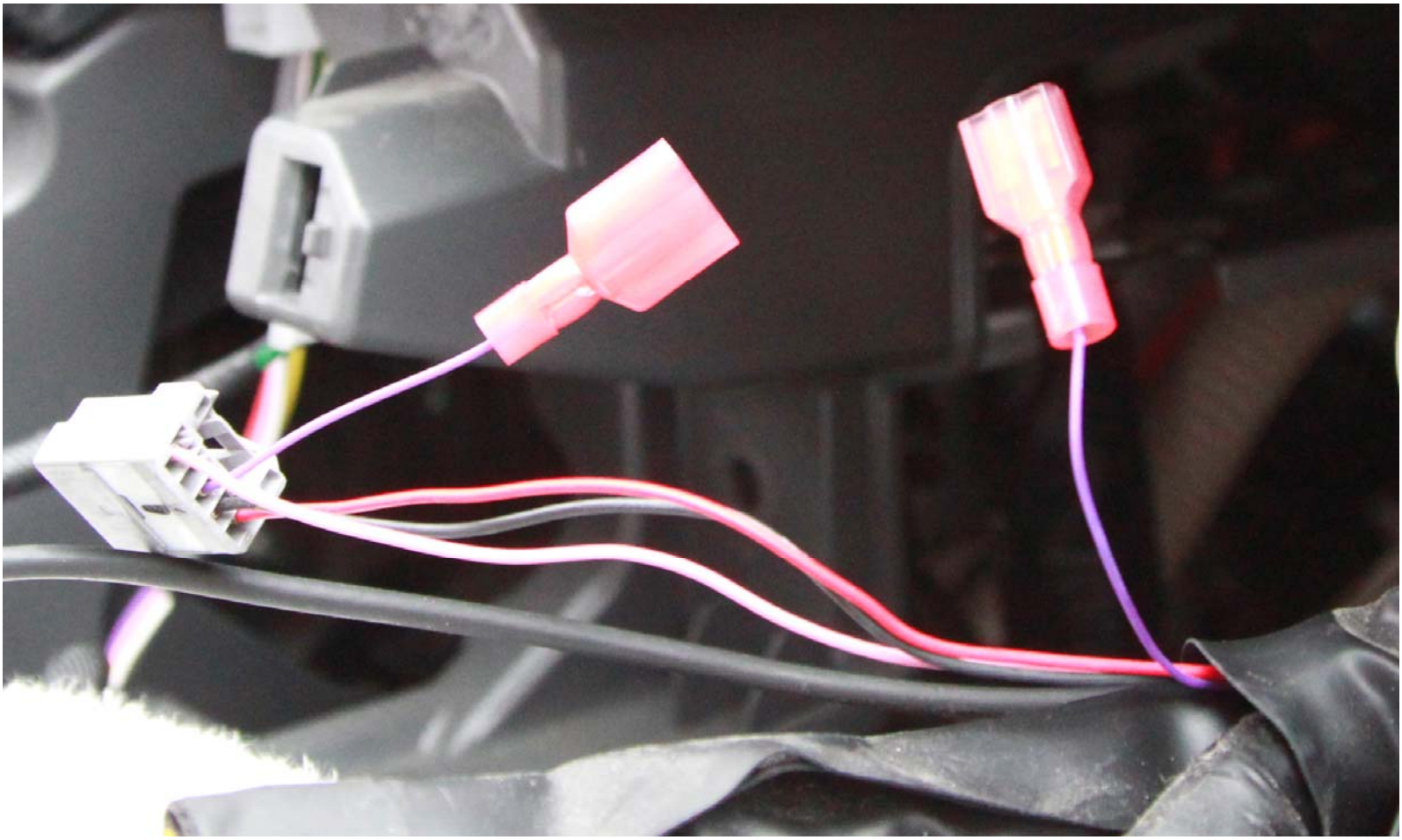
Unwrap the plastic wire cover and locate the Vehicle Speed Sense wire (violet wire) on pin 3. It should be the middle pin.



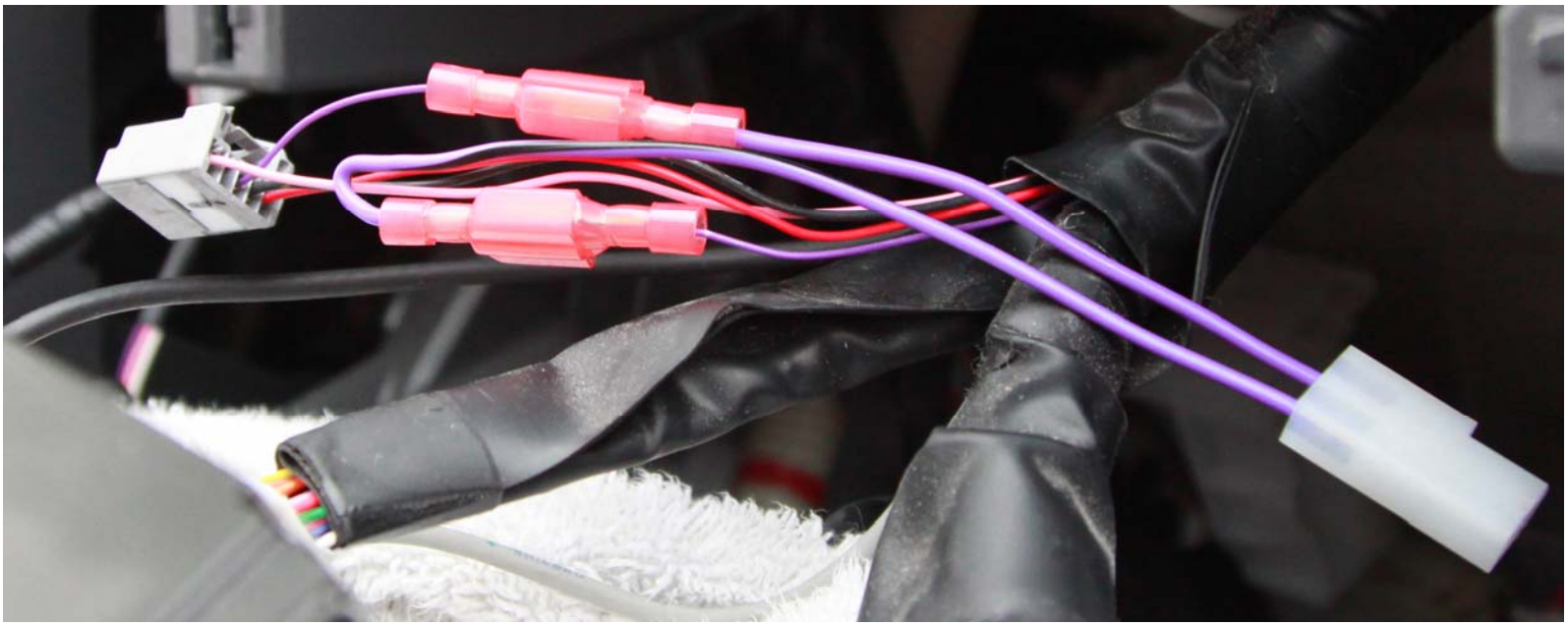
You have to sever the wire. Leave enough slack so you can do future repairs to the wire if necessary.



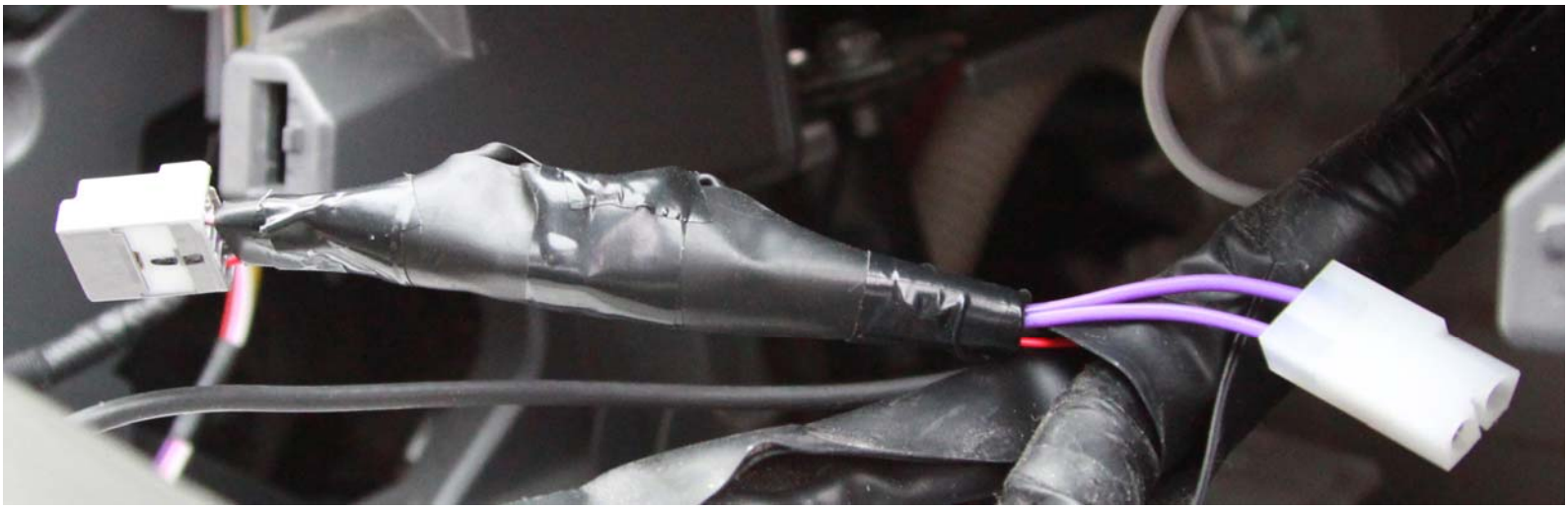
Strip both ends of the wire.



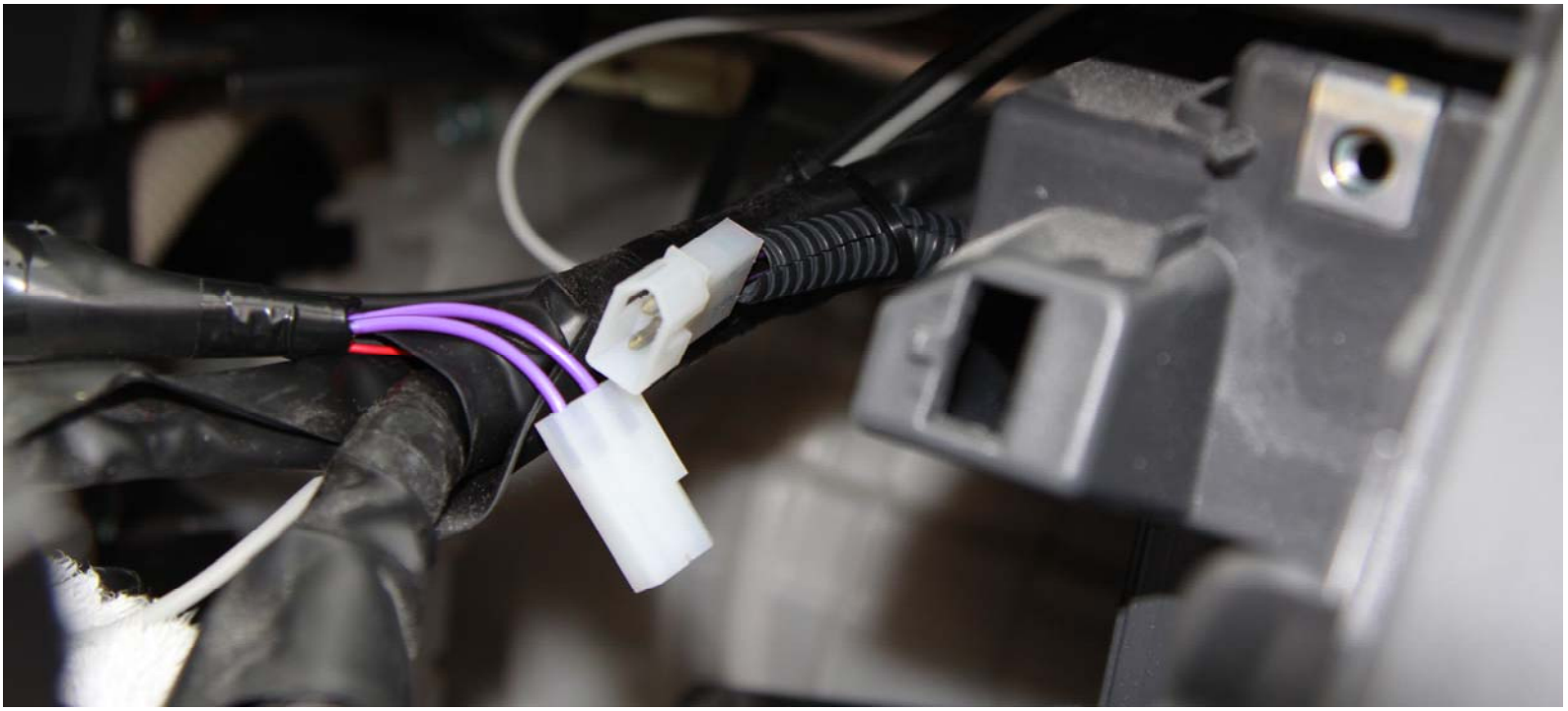
Crimp the quick disconnects on both ends of the wire. Female connector goes to the head unit side and the male connector goes to the harness side or vice versa. The quick disconnects are used for future removal of the bypass so you can reconnect the VSS wire together.



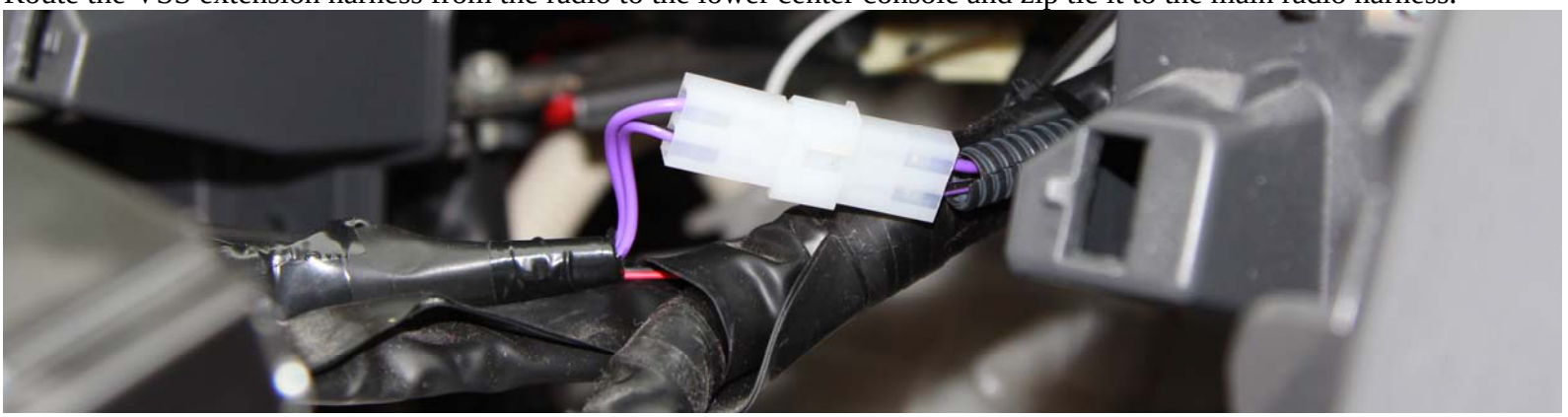
Connect the supplied VSS harness's solid color wire (short wire) to the head unit and the striped wire (long wire) to the harness side. The solid color wire should be on the pointy end of the plug and the striped wire should be on the square end of the plug. Do not reverse the connection (solid wire toward the harness and stripe wire toward the head unit. Possible damage to the vehicle speed ECU may occur)



Rewrap the plastic wire cover and tape both ends and the middle, leaving the VSS plug exposed. You can plug in the gray plug back into the radio.



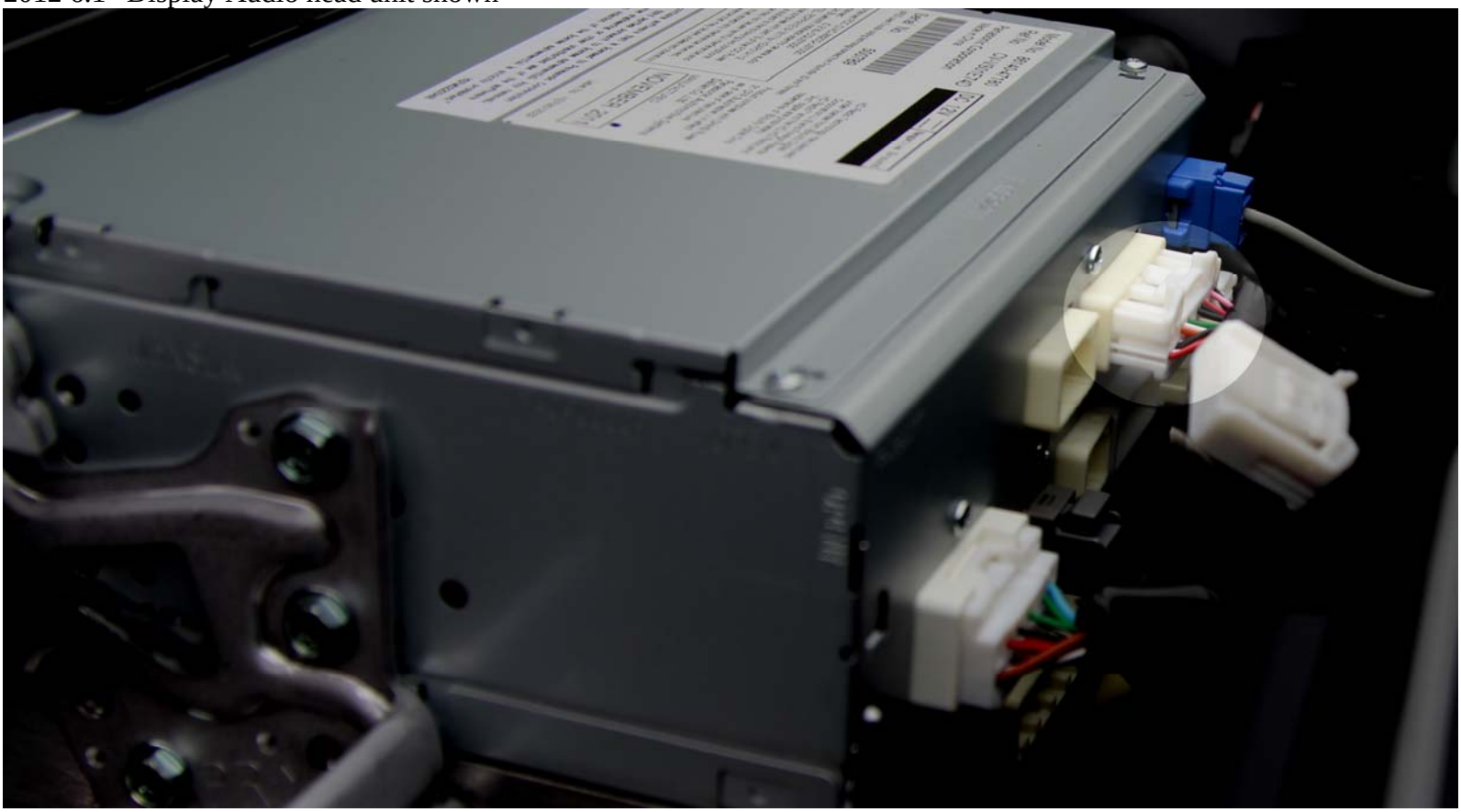
Route the VSS extension harness from the radio to the lower center console and zip tie it to the main radio harness.



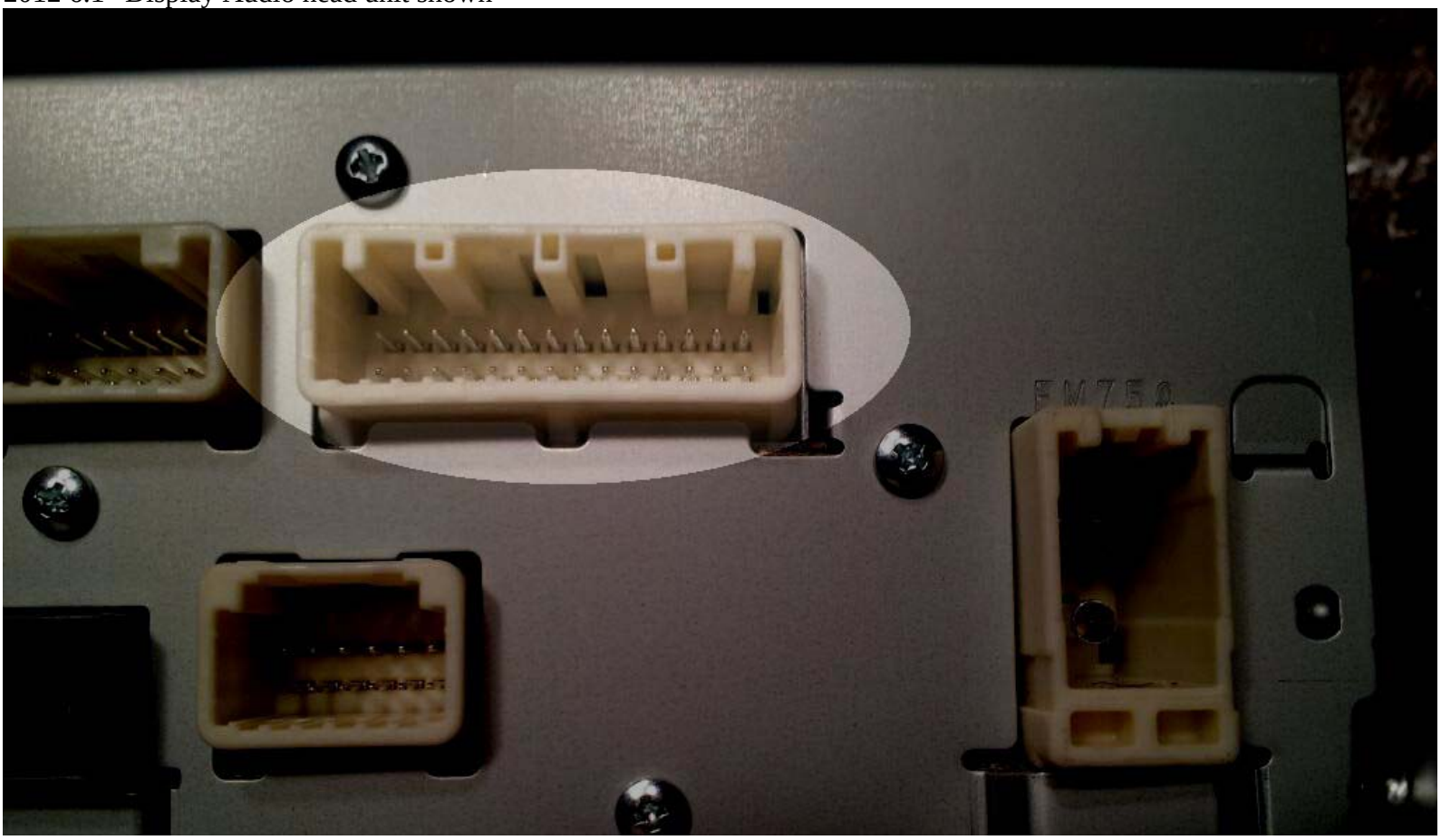
Connect the VSS harness to the extension harness. Reconnect the gray plug back to the head unit.

For 2012

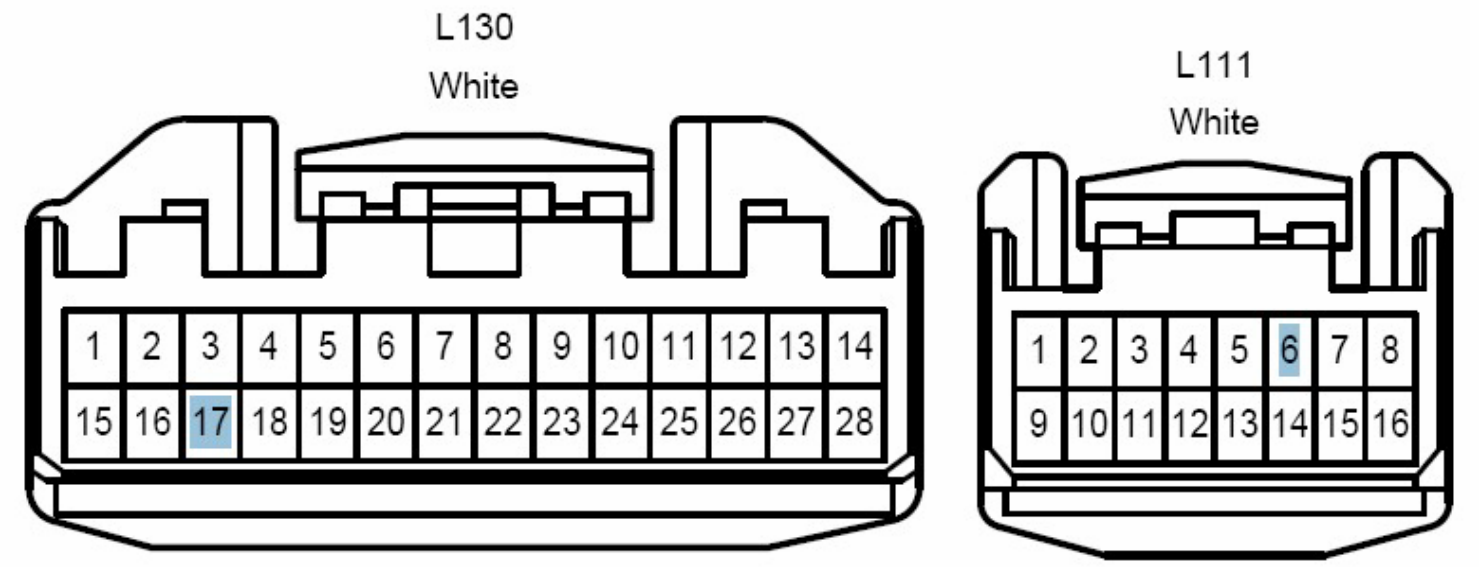
2012 6.1” Display Audio head unit shown



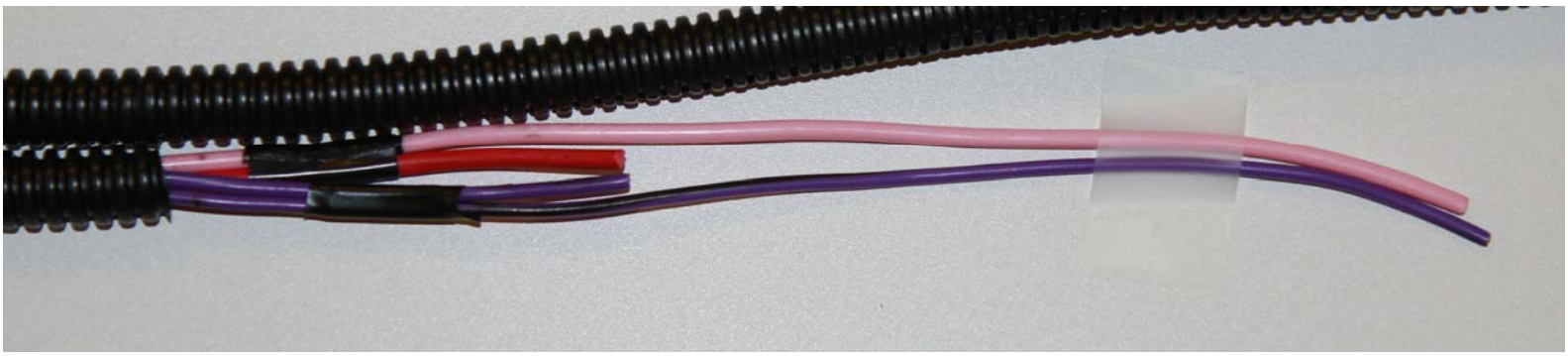
2012 6.1” Display Audio head unit shown



Once you gain access to the head unit harness, the Vehicle Speed Sense wire is pin #17 located in the white 28pin plug . For V#V, the parking brake wire is pin #6 located in the white 16 pin plug.

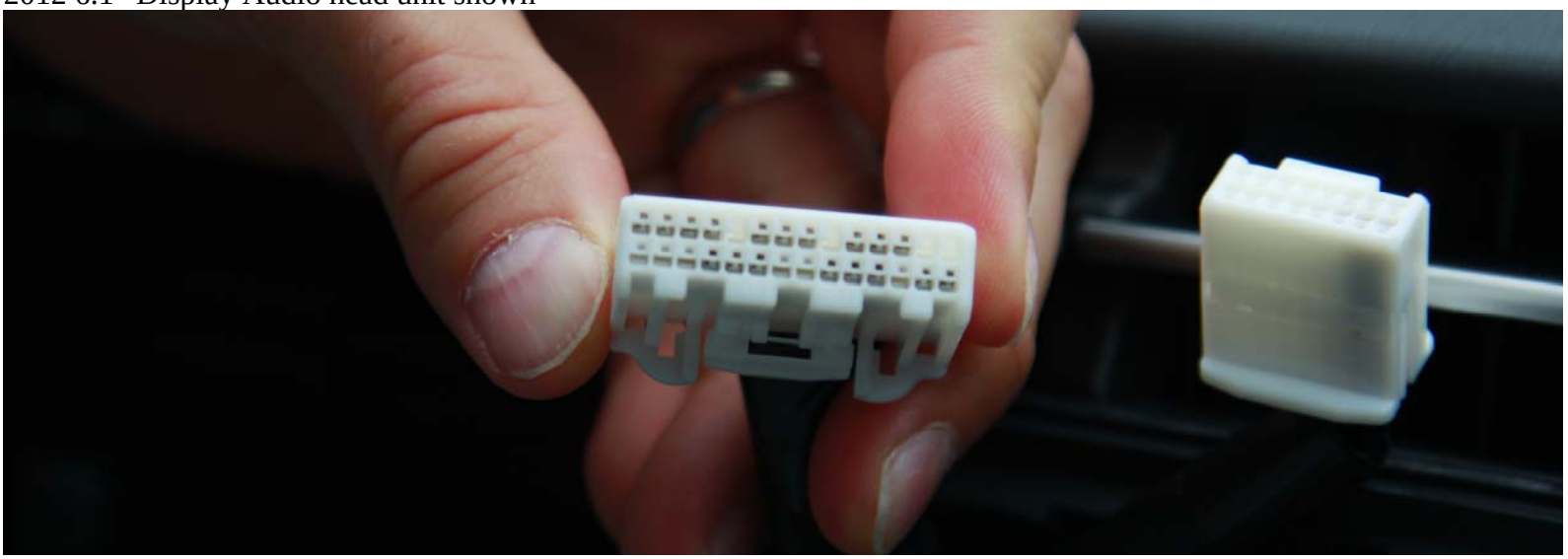


The Vehicle Speed Sense wire is pin #17 located in the white 28pin plug L130
For V#V, the parking brake wire is pin #6 located in the white 16 pin plug L111



The override's VSS wires and parking brake wires connections are
For V# and V#V
Violet (Short Wire) to violet speed sense wire going into the head unit
Violet/black stripe (Long Wire) to violet speed sense wire going toward the harness
For V#V only
Red (Short Wire) to red parking brake wire going into the head unit
Pink (Long Wire) to red parking brake wire going toward harness
If you're installing a V#V override, you have to place the override relay and timer in the lower cigarette lighter cavity and route the VSS harness up toward the head unit cavity.

2012 6.1" Display Audio head unit shown

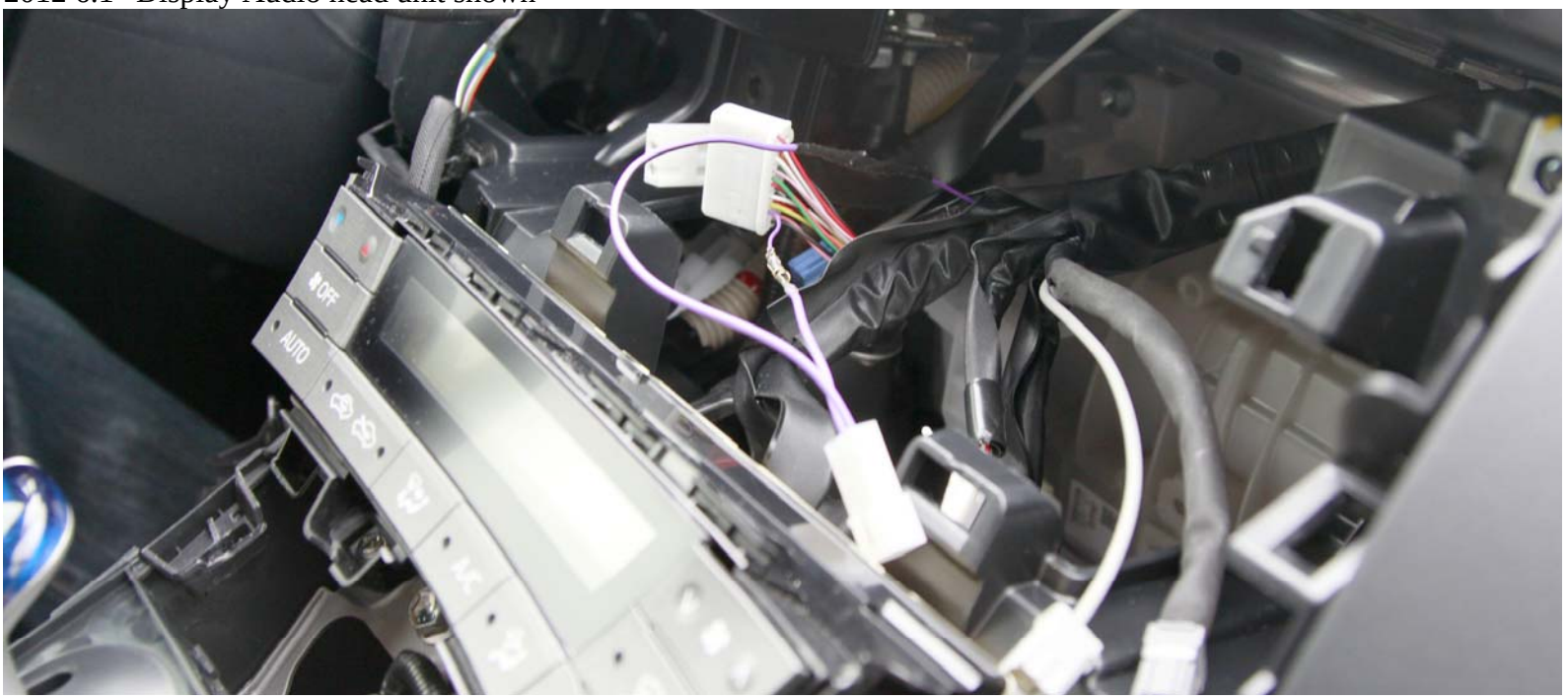


2012 6.1” Display Audio head unit shown

2012 6.1” Display Audio head unit shown

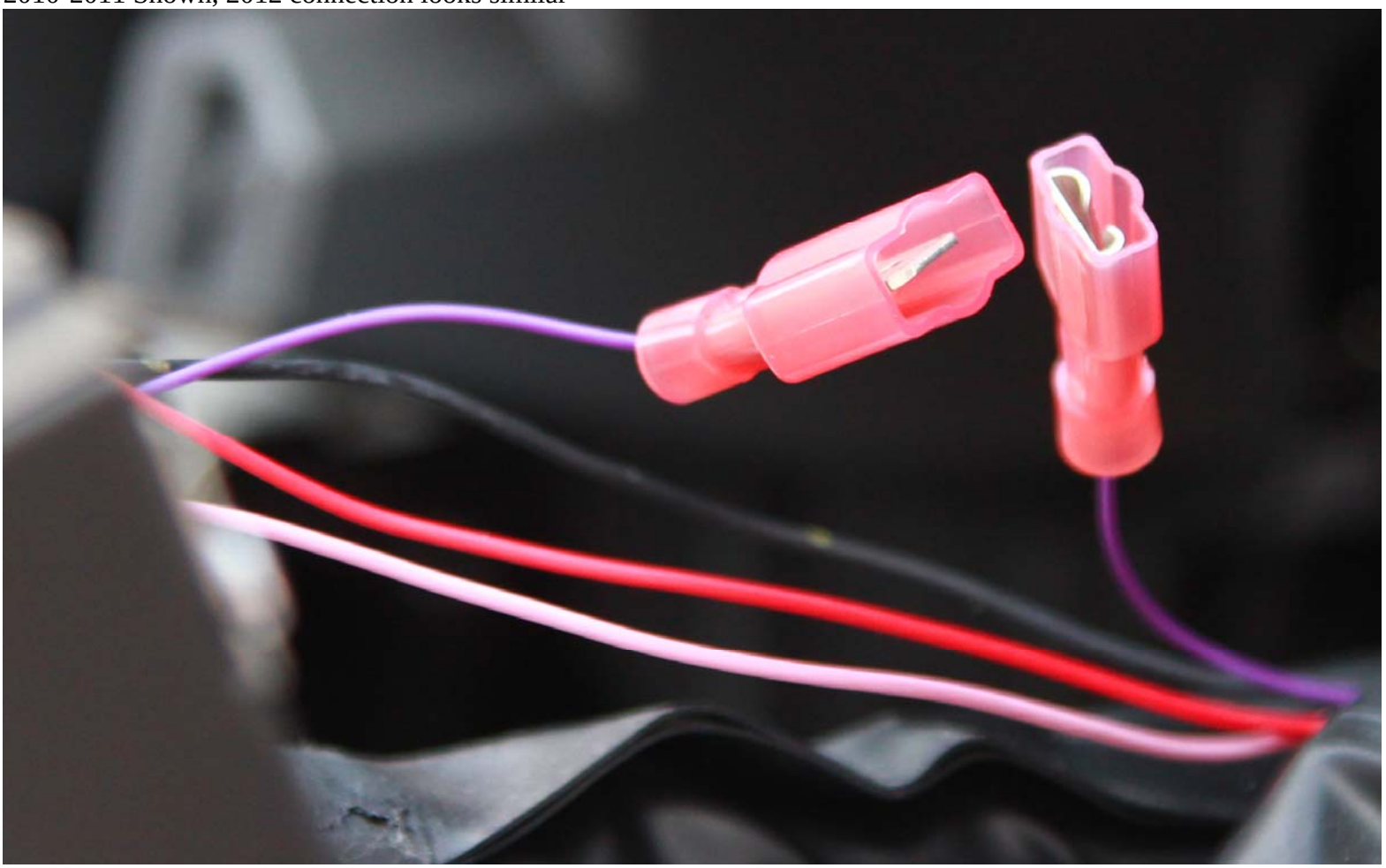
Unwrap the plastic wire cover and locate the Vehicle Speed Sense wire (violet wire) on pin 17.

2012 6.1” Display Audio head unit shown



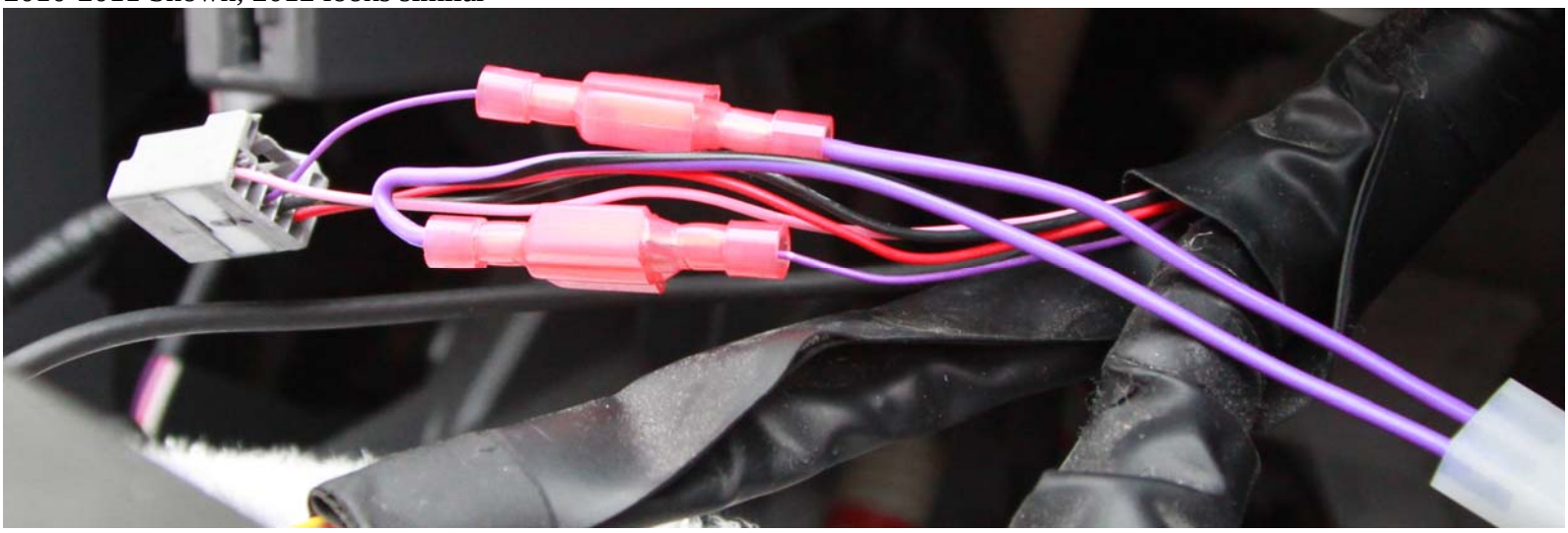
You have to sever the wire. Leave enough slack so you can do future repairs to the wire if necessary. Strip both ends of the wire. Crimp the quick disconnects on both ends of the wire. Female connector goes to the head unit side and the male connector goes to the harness side or vice versa. The quick disconnects are used for future removal of the bypass so you can reconnect the VSS wire together.

2010-2011 Shown, 2012 connection looks similar



Violet Vehicle Speed Sense Wire, Red Parking Brake Wire.

2010-2011 Shown, 2012 looks similar



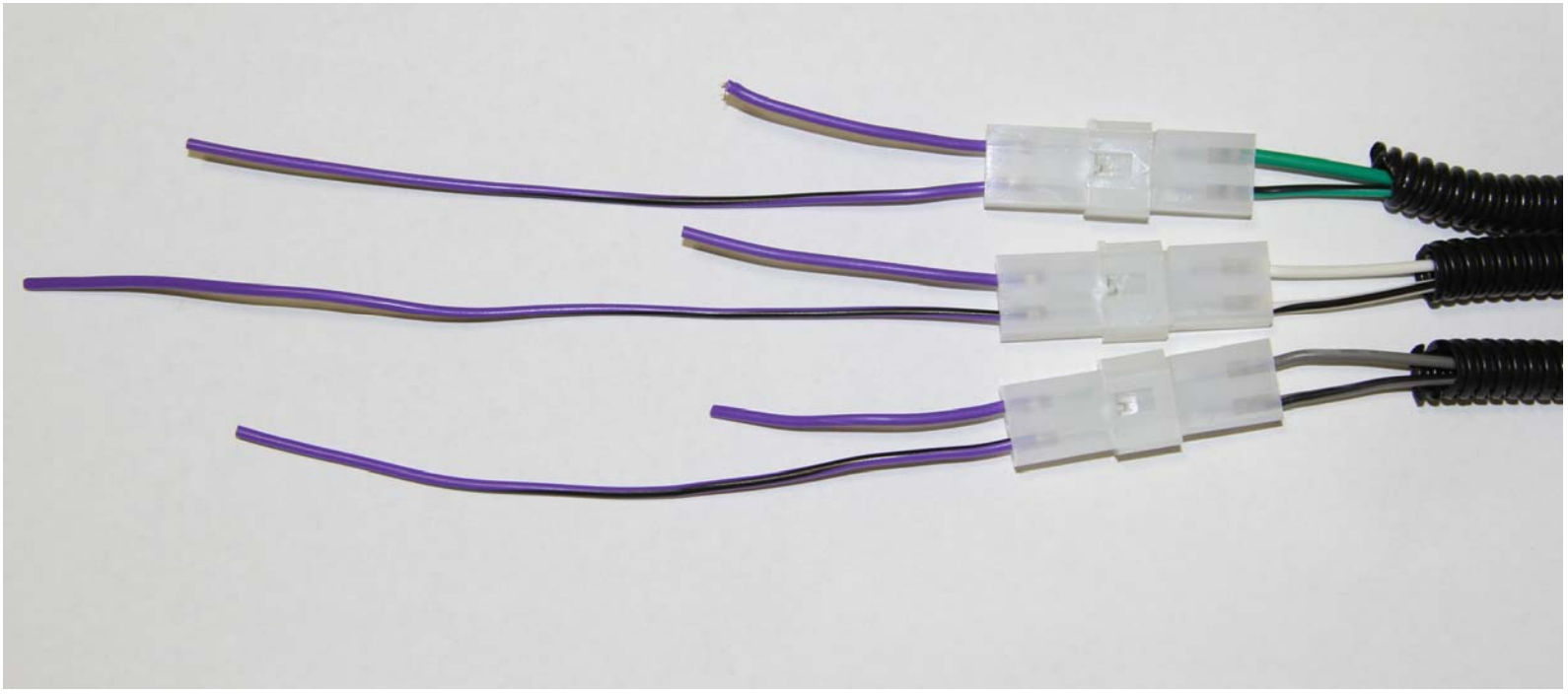
Connect the supplied VSS harness's solid color wire (short wire) to the head unit and the striped wire (long wire) to the harness side. The solid color wire should be on the pointy end of the plug and the striped wire should be on the square end of the plug. Do not reverse the connection (solid wire toward the harness and stripe wire toward the head unit. Possible damage to the vehicle speed ECU may occur)

2010-2011 Shown, 2012 looks similar

Rewrap the plastic wire cover and tape both ends and the middle, leaving the VSS plug exposed. You can plug in the gray plug back into the radio.

2010-2011 Shown, 2012 looks similar

Connect the VSS harness to the extension harness then route the VSS extension harness from the radio to the lower center console and zip tie it to the main radio harness. Reconnect all the plugs to the headunit and place the HU back in the dash.



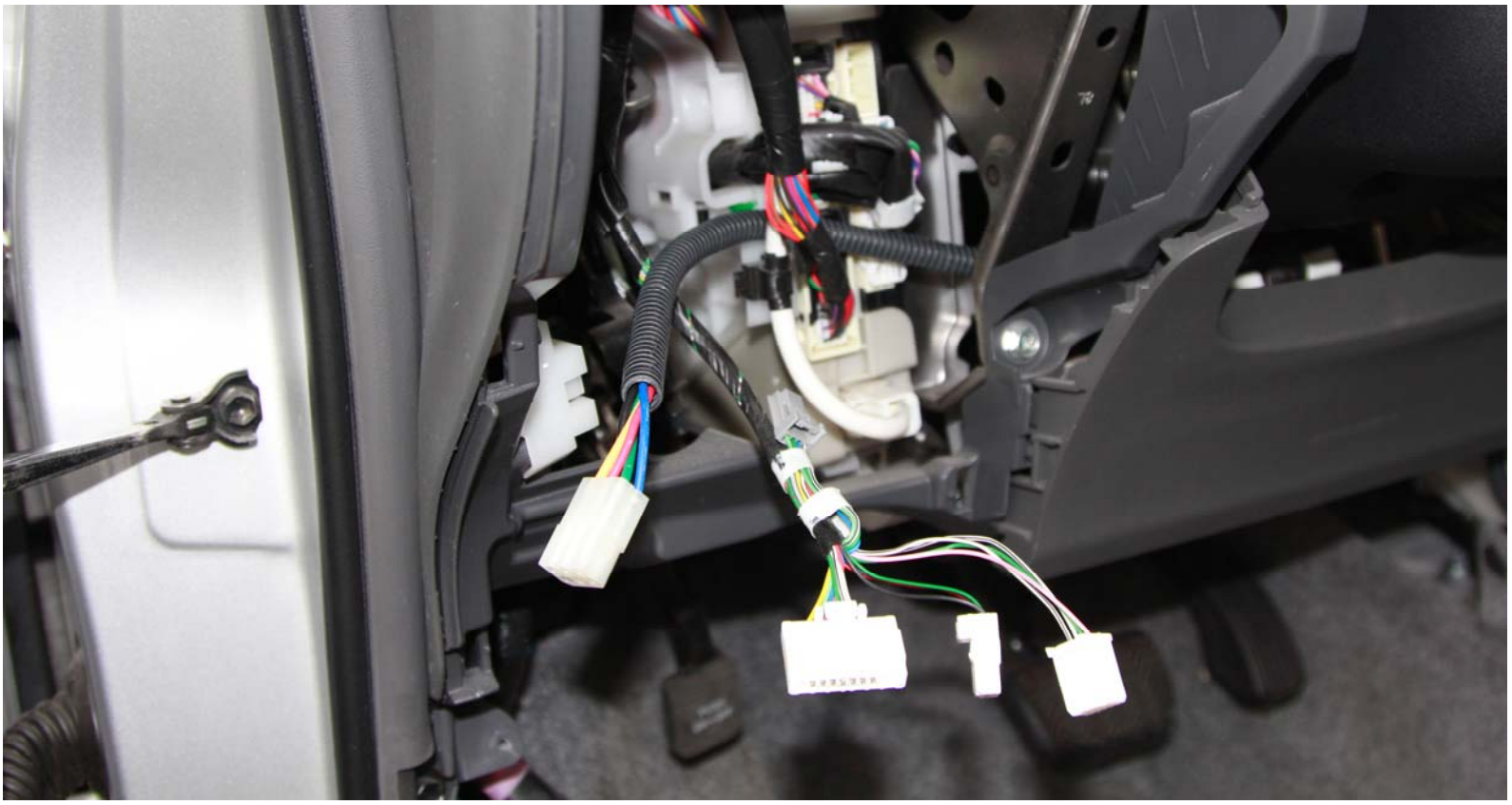
The VSS extension harness's wire colors for V# could be any of the following but they all serve the same purpose.
White – white/black stripe
Gray – gray/black stripe
Green – green/black stripe
The V#V's extension harness is not detachable.

2010-2011 Shown, 2012 looks similar

Route the VSS extension harness to the lower center console. Removing the lower glove box makes the job easier.

2010-2011 Shown, 2012 looks similar

Route the switch extension harness through the lower center console.
For III/Three owners who want to install the switch in the blank panel next to the cigarette lighter, you can skip this step.
For IV/Four owners who want to install the switch in the blank panel next to the knee airbag, route the switch extension harness toward that panel.

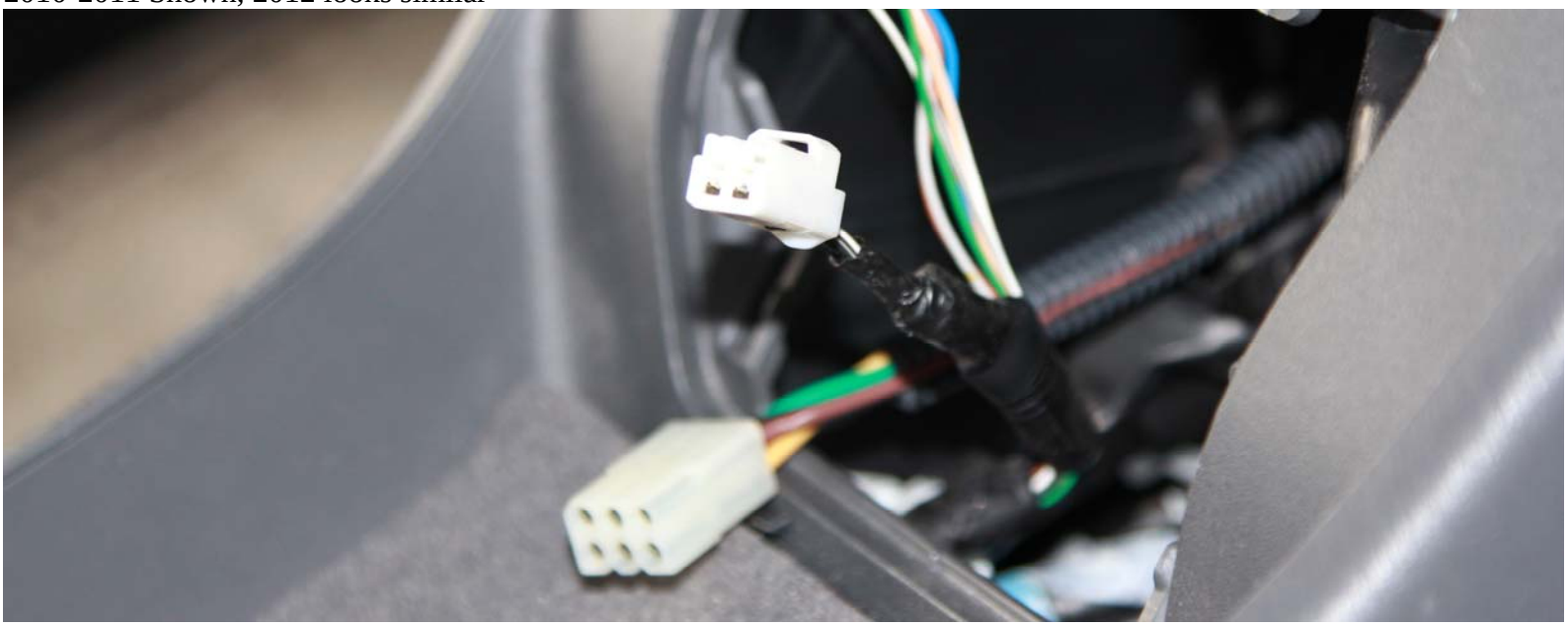


For V/Five owners or III and IV owners who want to install the switch in the knee bolster panel, route the switch extension harness to the knee bolster panel.

2010-2011 Shown, 2012 looks similar

There should be 2 harnesses in the lower center console, the VSS extension harness and the switch extension harness.

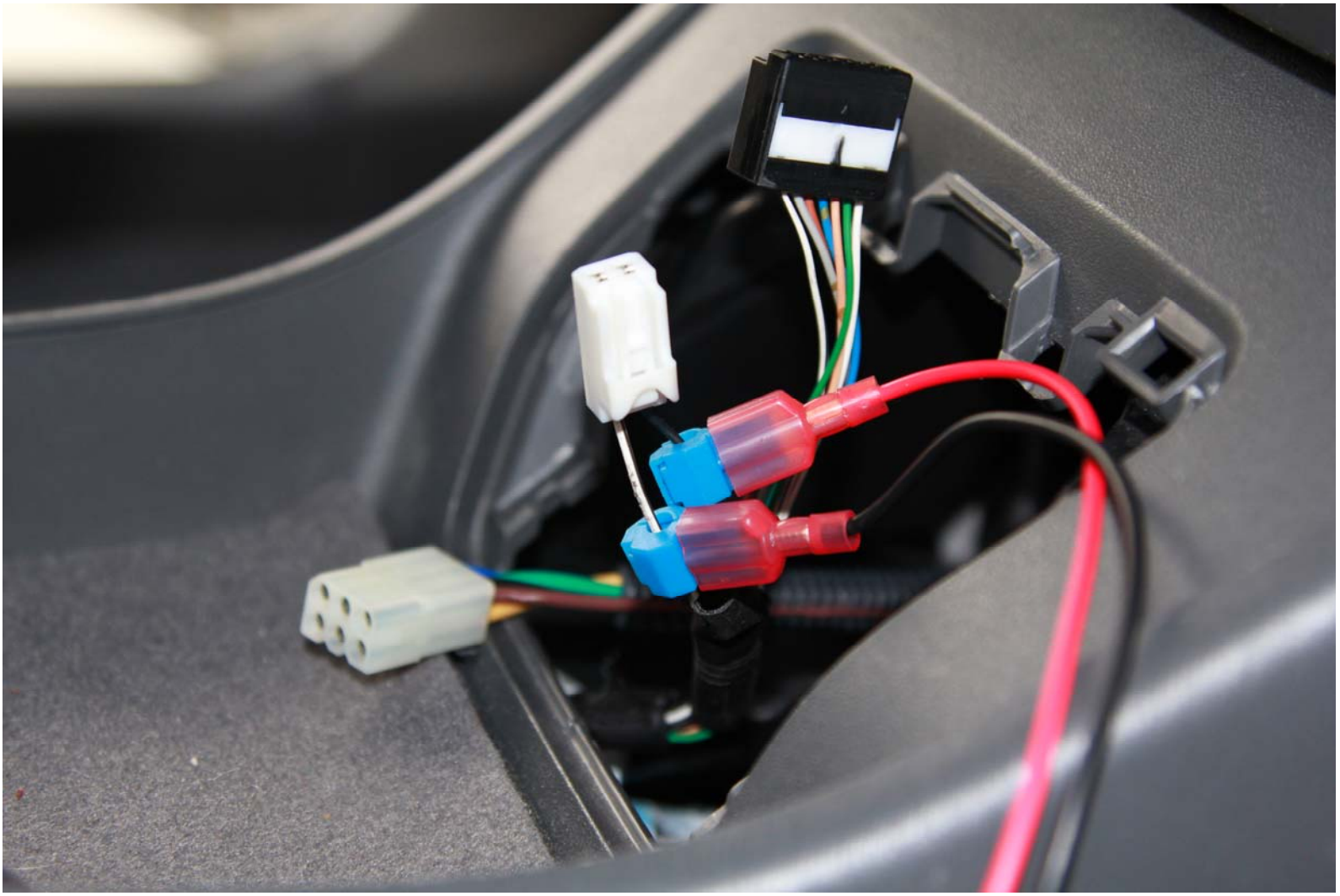
2010-2011 Shown, 2012 looks similar



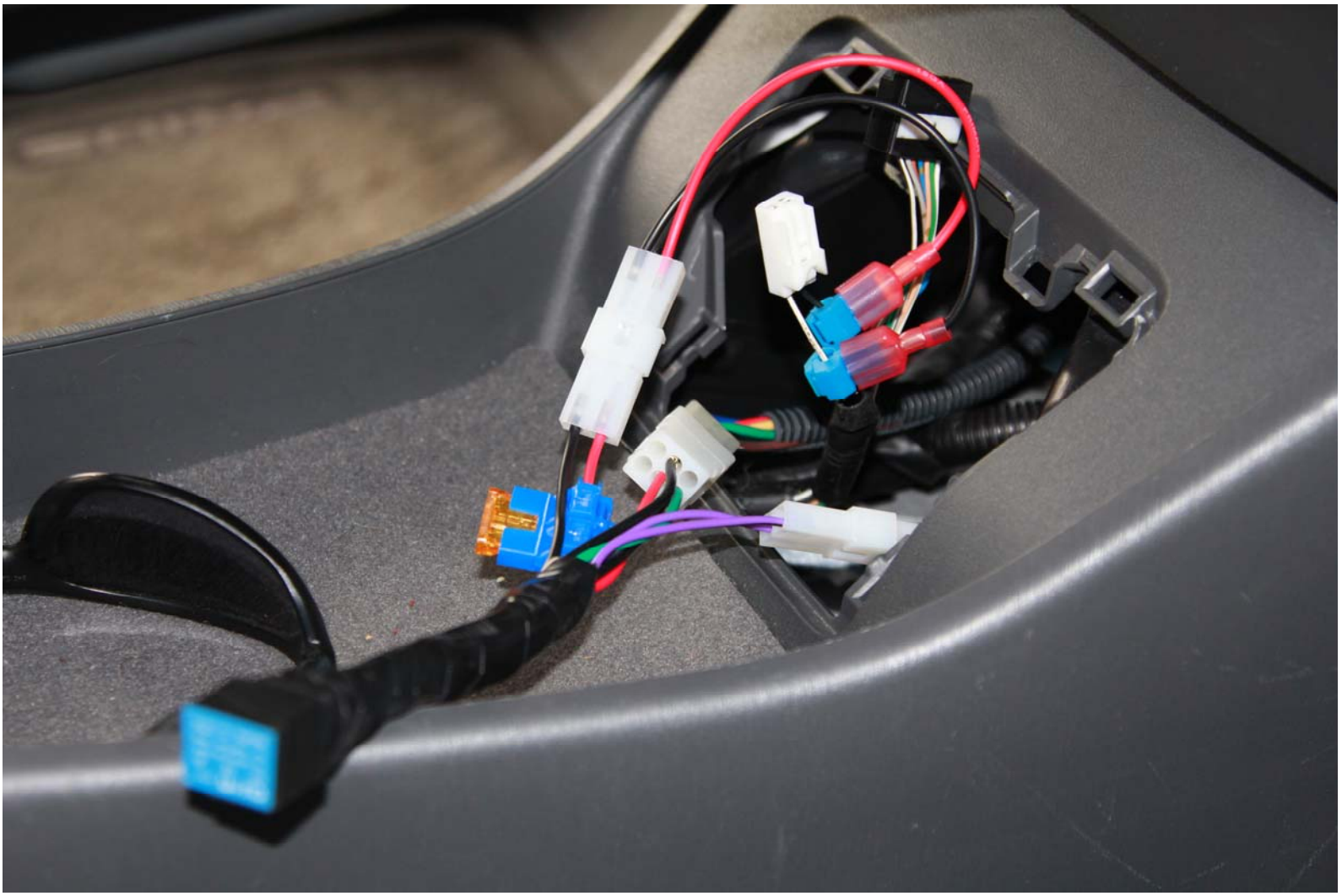
Locate the cigarette lighter harness. There should a solid black wire and a white – black stripe wire.

2010-2011 Shown, 2012 looks similar

Unwrap the electrical tape to gain access to the wires.



T-Tap both wires and connect the red wire on the power harness to the black wire on the cigarette lighter wire. Connect the black wire on the power harness to the white-white/black stripe wire on the cigarette lighter wire.



Connect all the harnesses to the bypass relay.

2010 Prius IV Solar PKG shown. 2012 looks similar.

Route the switch extension harness though a blank plug.

2010 Prius III Nav PKG with Enginer PHEV conversion shown 2012 look similar.

Connect the switch to the switch harness and snap the switch panel into the blank panel.

Testing the bypass before driving.

Turn the ACC-ON on. Enter the service menu by holding down the INFO (2010-2011) SETUP (2012) button and turn the parking lights on and off 4 times. From there, click on the Function Check/Settings then Vehicle Signal. The vehicle speed should be less than 5km/h.

Road testing

WARNING: Make sure the 2 plugs on the shifter bezel Park and drive mode selector are plugged in before powering up the Prius. You will get a Hybrid system warning on the dash if they are not plugged in.

Before reassembling the dash, road test drive the bypass to ensure its functionality. The bypass must function for at least 2 minutes. Once that time has passed, turn off the bypass then turn it back on. The bypass must continue to work immediately afterwards.

In this road test, the actual vehicle speed is 41MPH but the head unit is registering 2km/h. Because the head unit registered a speed of less than 8km/h, all the grayed out buttons are now activated for you to use.

Trouble shooting

Bypass does not work.

Check the vehicle speed in the service menu. It must be below 8km/h. If it's more than 8km/h the bypass will not work. If you have an oscilloscope, you can hook up the bypass output to the scope. It should be less than 4.5hz. Unplug the VSS harness from the override relay and plug in the VSS bypass loop. Cycle the power off then on. The speed should match the dashboard. Reconnect the VSS harness and test the bypass again. Sometimes the nav unit may register false speed due to faulty GPS signal. Reset the head unit will should work.

Reverse camera does not work after installation.

Recheck the gray plug (2010-2011) white 28pin plug (2012) and make sure it is plugged in.

Bypass works for about a minute then stop working.

Recheck the VSS connection at the gray plug(2010-2011) white 28pin plug (2012). It could be reversed (solid wire connected to the harness toward car side, stripe wire connected to the head unit)

The GPS is showing warp speed and the service menu shows the speed 3 to 20 times faster than actual speed.

Reset the radio or cycle the power off and on. The speed should match the dashboard