

## How to install the factory iPod integration kit

Installing the iPod integration kit consists of 4 major steps:

- Head Unit work
- Trunk work
- Passenger floorboard work
- Snaking the wire from the Trunk to the passenger floorboard

I had the installation instructions from Mercedes but spent hours trying to figure out what they meant in various sections so I will go through step by step of what I did.

This section requires you to move the shifter to various positions to facilitate the removal of various components. The Mercedes installation instructions tell you to disconnect the battery before beginning but in order to move the shifter power must be connected. Once the head unit is removed, con

### Head Unit Work

The first thing the Installation instructions tells you to do is remove the ash tray housing, so we will start here.

Remove the shifter boot at the base. Just gently pry it away from the wood shifter cover. I used a paint can opener, use something dull and be gentle it doesn't take much force.

Once you have the shifter boot off, remove the wooden shifter cover. There are two plastic tabs as shown in the photograph on the next page.



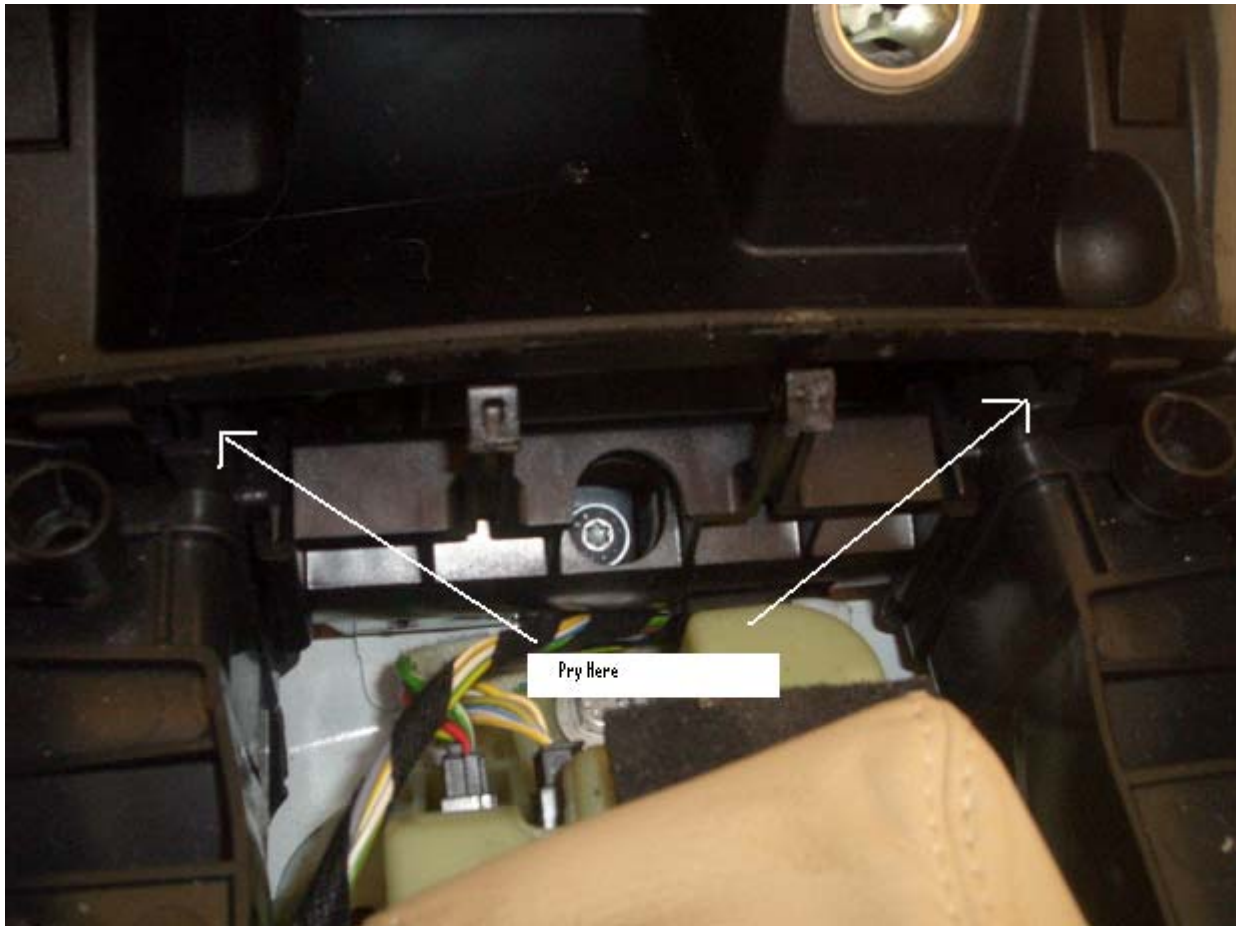
Push the tabs in with a screw driver and pull up by putting you hand inside the opening. It takes a lot of force. Once it is up, don't try to pull the back up. It has prongs and slides forward. I used a small flat blade screw driver and gently pryed it forward to get it started.



Once the Shifter Cover is off, remove the wires and put it someplace safe.

Next the Ash Tray Cover.

There are two tabs that hold the cover in place toward the front gently prying up on the ends with a small flat blade screw driver will pop the ash tray up. The following picture shows where to pry. Just pop one end loose at a time. The shifter needs to be in Drive to get the ash tray out.



Next is the CD changer. Remove the two bolts holding it in and the fiber optic connection and two wiring jacks as indicated in the following pictures. Unfortunately I don't have a picture showing the two screws that hold the CD changer in place but it is fairly obvious. They are under the CD changer and toward the back. The tricky part is removing the fiber optic cable.

It's difficult to see and there is not much room to get your hand in there. The fiber optic cable has a tab to keep the connection secure. You must press the tab to get the cable out.

The following picture shows the connectors of the CD changer with the connections removed just so you know where they are.



The following photograph shows the fiber optic connector and where the tab is.





My thumb is pressing on the tab. When it's in the CD changer the tab is on the left hand side. You must compress the tab to remove the fiber optic connector.

The CD changer will slide out once the two screws and wires are removed. The shifter needs to be in Drive to get the CD changer out.

Next is the head unit. There are two screws underneath the head unit on either side. They do not come out, but instead lower a slide on each side that secures the head unit. Unscrew the screws until they stop turning. It's several turns and it feels like the screws aren't doing anything, but you must unscrew them until they stop.



This is one side, the other side is the same.

Once the screws are loosened until they stop. The head unit will slide out. There are two wiring jacks on the back of the unit a large one and a small one. Disconnect both of them. The small one is the aux input and will be replaced with the one from the iPod integration kit. Take the head unit and CD change and put them somewhere safe.

That's it for the head unit. All this work is so you connect the aux input from the iPod into the head unit once the rest of the install is complete.

At this point put the shifter in Park and disconnect the battery.

## Trunk Work

The majority of my trouble was in this section and the reason I started documenting this project with pictures is at one point I was stuck and started looking for help on the internet. I found the Mercedes Installation guide for an E class which is basically the same, but not much help since I already had the installation instructions for the CLS. It was at this point I decided to press forward and start documenting so if I was successful I could post the instructions for others in the same delima.

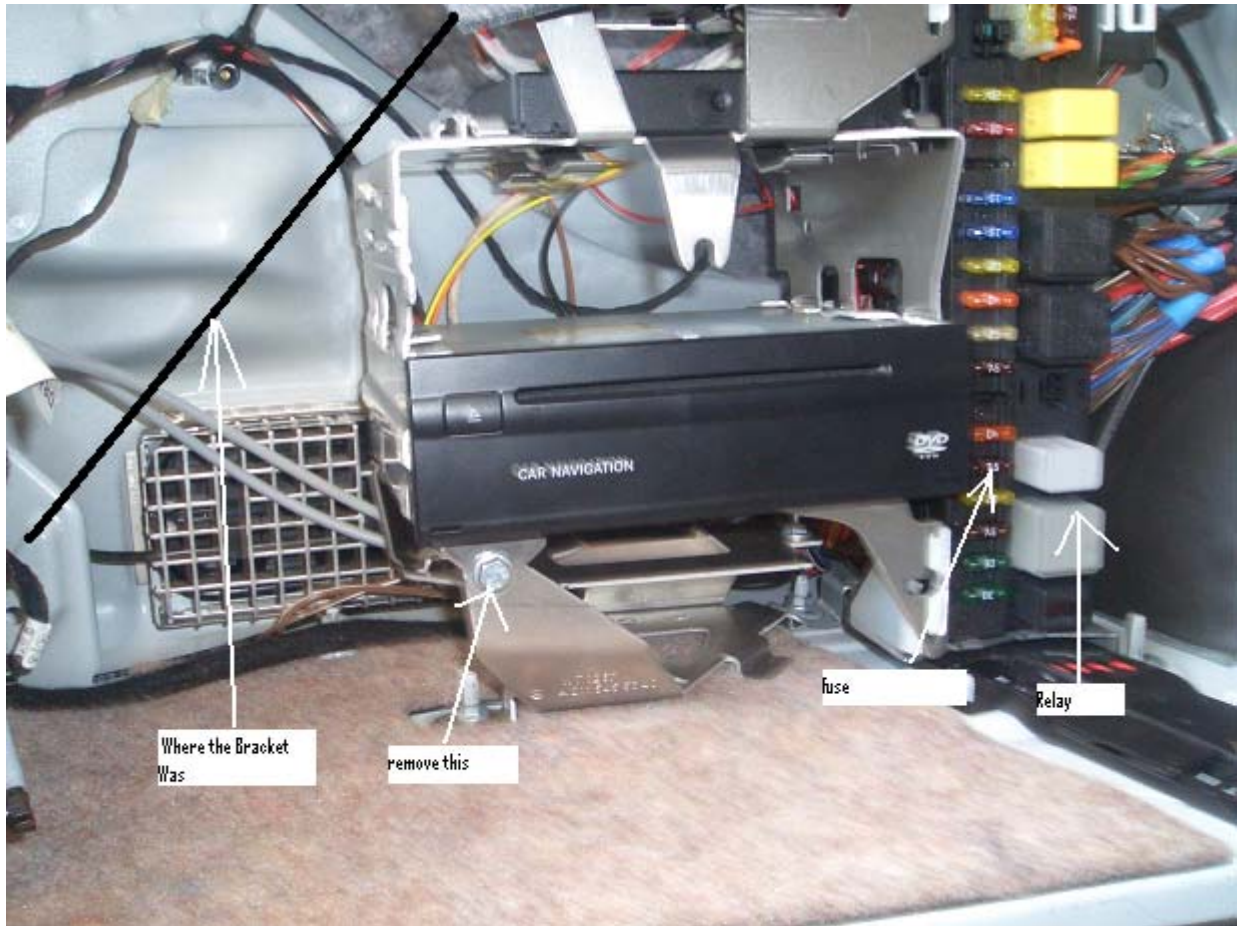
First remove all the paneling in the trunk. There are four screws (two on each side) with little tie down brackes. Remove those. Then each pannel will have some plastic tabs remove those by gently prying them out with a screw driver.

Again I wish I had more pictures but I was well into the trunk before I decided to start documenting this install.

The area you are interested in right now is the rear left portion of the trunk. This picture was taken after I had finished the trunk work, but it shows some key areas. In this picture I had removed a black bracket with something very fragil attached to it. I don't know what it is but they have it packed in some heavy duty foam so be careful with it.

What ever it is, it's clipped to the bracket, just reach behind and feel the clip, it slides strait up and off the bracket. Then remove the bracket so you can swing the nav DVD play away to get to the main audio unit.





The fuse and the relay come with the kit. Plug them in where I have indicated and remove the bolt on the nav DVD and it will swing open to expose the back of the fuse panel.

There is a black box running the width of the trunk that is held in place with two screws. Remove this to allow access to a hole which goes under the right rear seat.



Again I took this picture after the install was complete and I was putting things back together. The rear panel should be removed at this point. The picture shows the black box I am talking about and one of the two bolts holding it in. The box contains electrical stuff. You don't have to remove the box, just pull it back a few inches to gain access to the hole that the wires come into the trunk. You will use this to get the wire from the back seat into the trunk.

### **Running the wiring harness**

There is more trunk work to do, but first you will need to run the wiring harness.

To start remove the back seat on the right hand side (passenger) of the car. If you look there is an indentation close to the door just under the seat. If you push in with your finger and pull up on that side of the seat it will release that side of the seat. There is no indentation on the other side, but you can lift the side you just released and slide your finger across to find the other bracket. It's in approximately the same location on the other side of the seat. You will need to pry the other side of the seat up with a screw driver. Once the other side is free, the seat will just pull out.

There is some foam under the seat, lift it up to expose the existing wires running to the trunk.

Also remove the cloth and rubber trip pieces that run along the bottom and sides of the right (passenger side) front and rear door wells. This will expose a small gap that passes through the door pillar and a small tray along the bottom of each door well.

Pry the plastic and chrome trim piece off on both the front and rear door well.

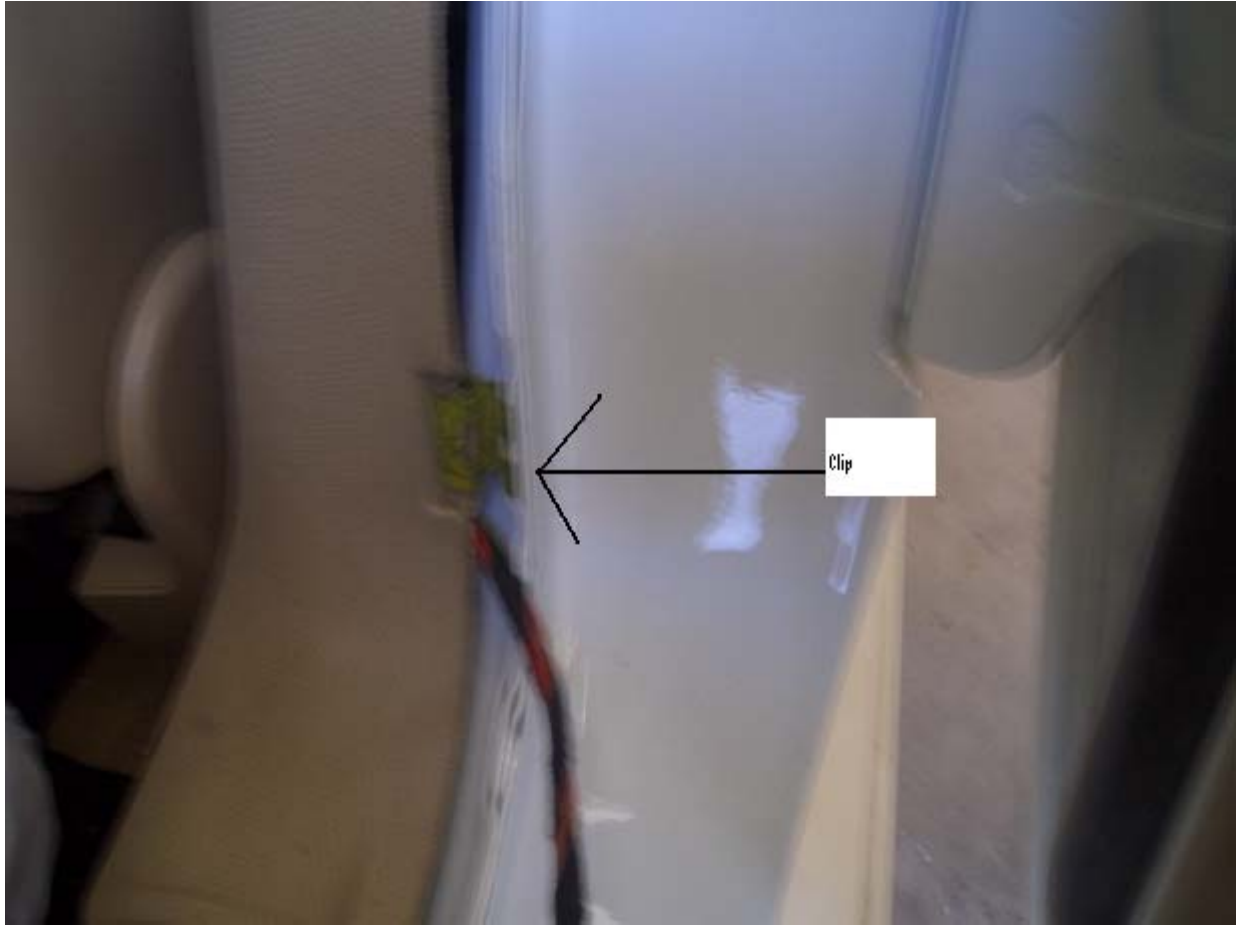
Start by snaking the trunk end of the ipod wiring harness through the gap between the exterior door pillar and the interior trim from the front to the back. You may need to pry the trim out just enough to get the connectors through.

These pictures aren't great and I took them after I had completed this step and decided to start documenting the install.



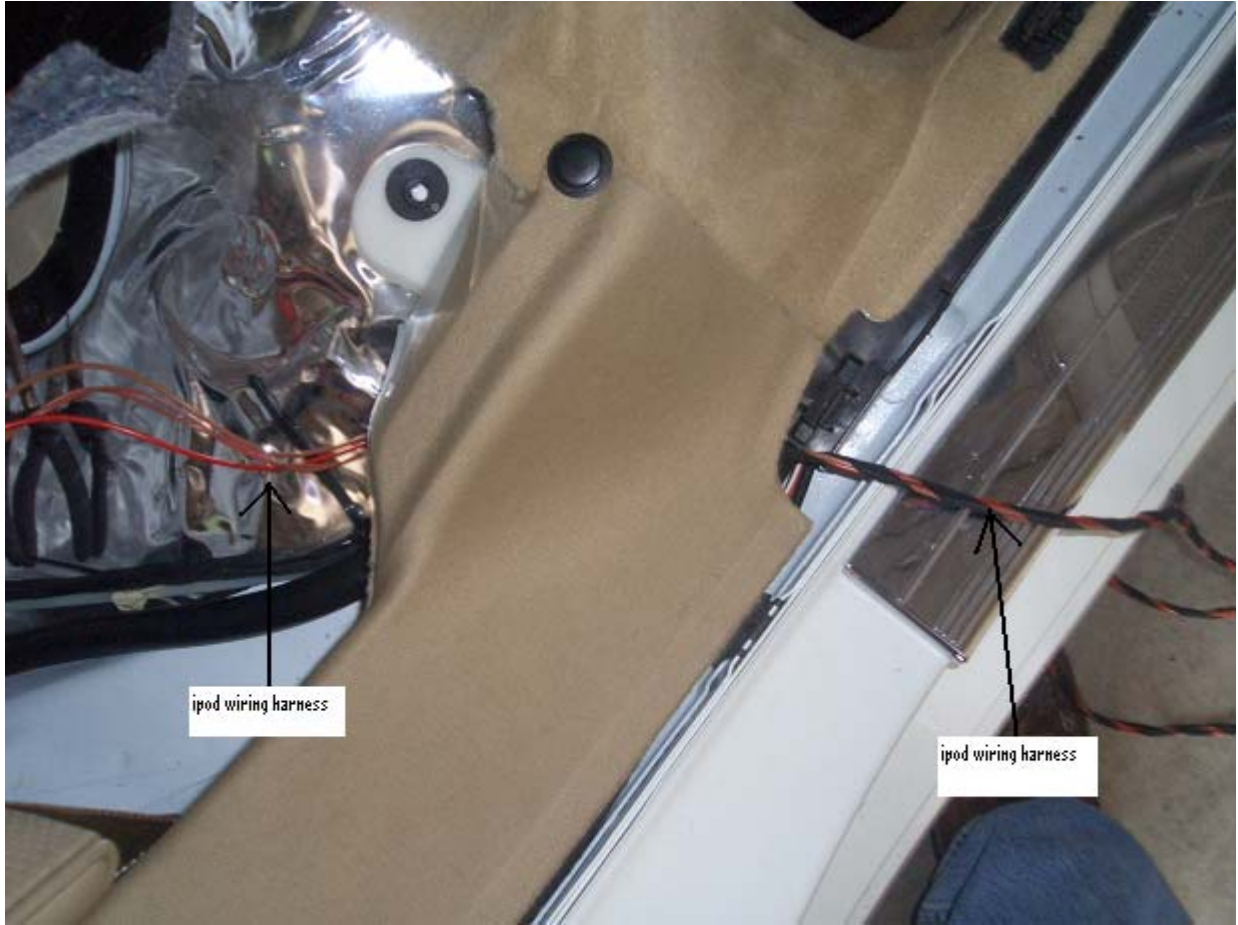
This is taken from the front door looking back. Once snaked through the wire will slide down to the floor area.

There are several clips holding the trim to the body, on by one you will need to pry them up to get the wire under them then tap them back in. A flat blade screw driver worked will for this.



Next you will need to snake the wire under the trim piece into the rear seat well.





ipod wiring harness

ipod wiring harness





This picture shows the hole with the ipod wiring harness already snaked through. I inserted a coat hanger in this hole until I saw it in the back seat pan. I taped the trunk end of the ipod wiring harness to the coat hanger and pulled it through the hole.

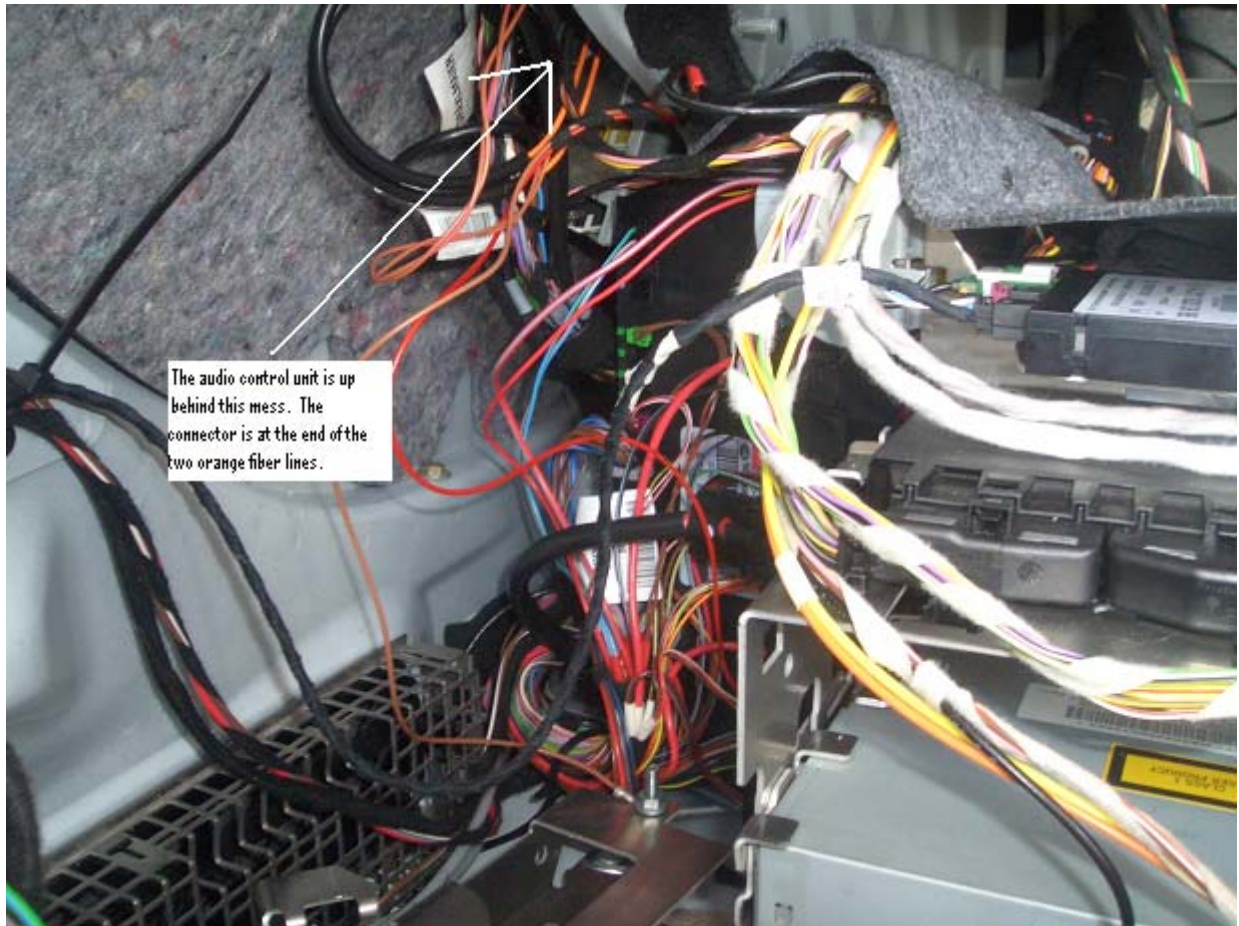
This picture gives some perspective as to where the hole is.



Now you will need to connect the ipod wiring harness to the audio control unit in the trunk. This is where I got stuck. It's very well hidden and the picture in the Mercedes install guide shows some vent holes around where the connector is and mine didn't have any.

It took me a long time to find this connector and once I found it I wasn't sure it was the right one. This was especially concerning because the Mercedes instructions direct you to re-pin the connector with two of the wires from the ipod interface. I didn't have a pin tool but luckily it wasn't an issue. More on this later.

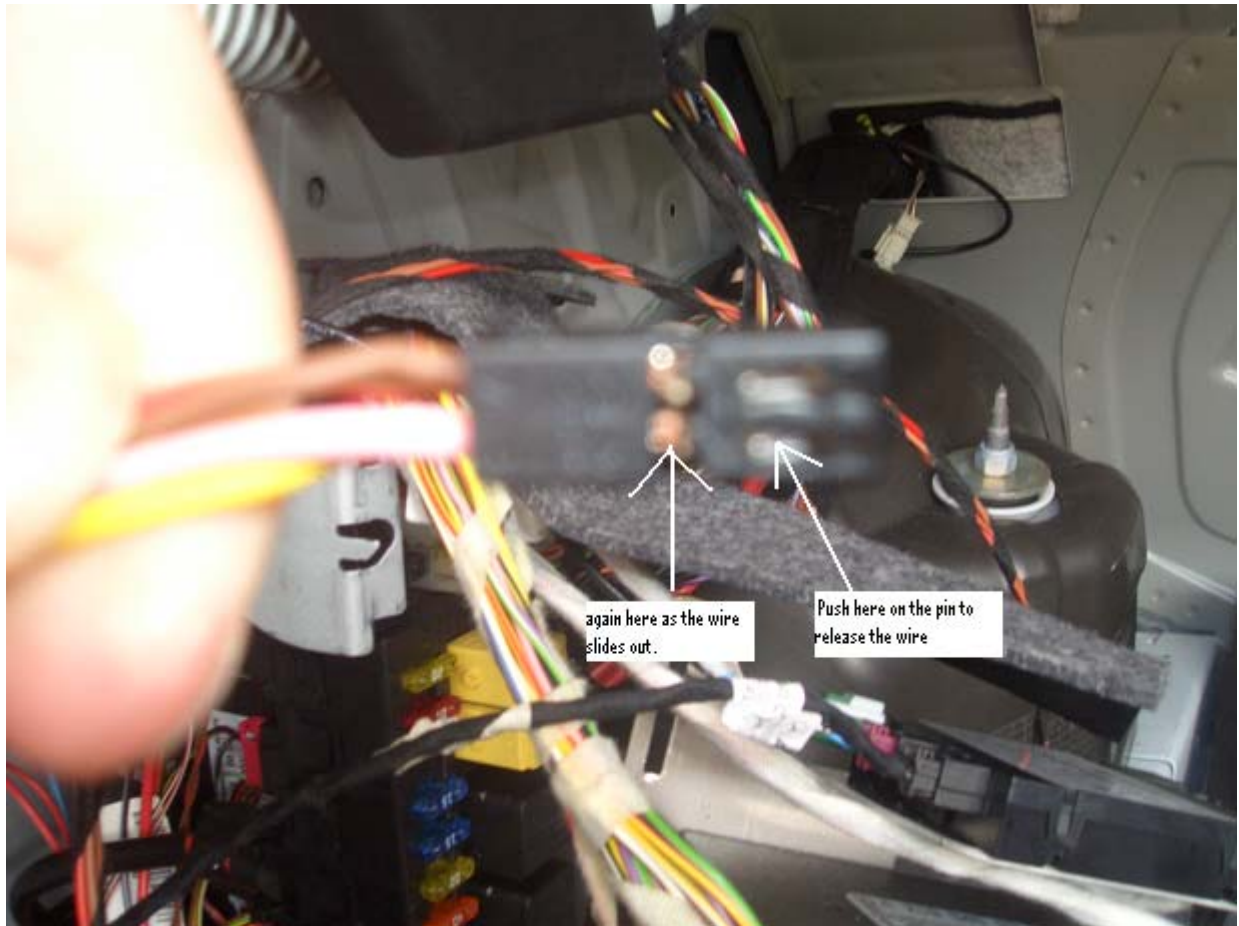
The Audio Control unit is hidden up above and toward the front of the car from the Nav DVD.



The connector you need to remove has both electrical and fiber wires. It has a tab you must squeeze to release it. Once you have it removed you will notice that the electrical portion can be removed from the fiber portion. You will need to remove the electrical connector and this is the one you need to repin.

The ipod wiring harness will have two wires. A brown wire with a pin at the end of it and a brown and red wire with a blue connector. The blue connector is not going to be used to connect to anything, but the instructions tell you to put the wires you remove from the original connector into the blue connector so that they do not short out.

This is the connector that needs to be repined with the wires from the ipod wiring harness I apologize about the quality of this one. I held it a little too close to the camera but you can still see what you need to.

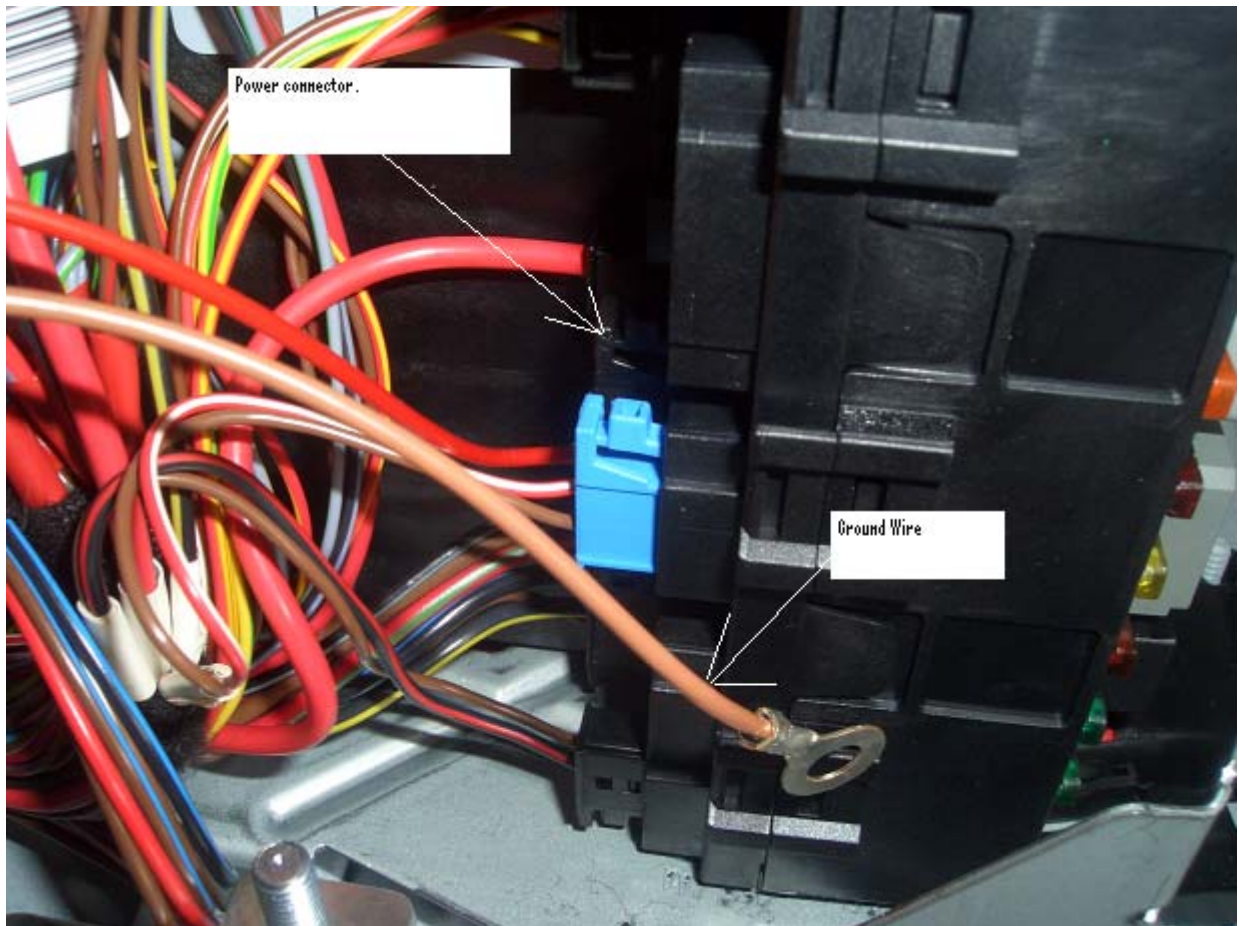


Now the re-pin. You will need a small pointed object. I used a very small flat blade screw driver. This connector has 4 wires, you need to remove and replace two. They are the brown and the brown and red wire. Do them one at a time so you don't get them mixed up. The brown and red wire on the ipod wiring harness has a blue connector you need to remove that. Unfortunately the pin releases were not as accessible on that connector and I ended up breaking it trying to get it off. I ended up individually taping the two original wires to prevent them from shorting out.

Once you have the two wires replaced, place the electrical connector back inside the fiber connector and re-attach it to the audio control unit.

Just two more wires to connect and you are done in the trunk.





This one was especially difficult to locate as well. The ipod wiring harness has a black connector on a red wire. It plugs in to the back of the box you put the fuse and relay in and it is next to an existing connector of the same size and shape. Mine was blue, I don't know if that's true in all cases.

There is a bolt with other ground wires connected to it. Loosen the nut and slide the brown ground wire on the bolt then tighten the nut. It's behind the nav DVD housing which should be swung to the side at this point.



## Passenger floorboard work

At this point you are almost done and now just need to connect the ipod unit, another power plug and the aux plug.

Start by removing the side panel next to the glove compartment. This picture was taken after the install I actually used a larger screw driver. The key here is to use your finger as a fulcrum so you don't damage to soft dash material.



This panel has several fastener clips, just pry next to each one. Once removed the wiring harness should follow the channel up to where the arrow is and end up inside the dash.

Remove the panel under the glove compartment by removing two screws and sliding toward the door. There is an air vent on the left side of the panel that requires you to slide the panel to remove it.



Next remove the side trim of the kick plate. There are two clips you will need to pry loose. Once those are loose there is a clip that connects to the speaker hole. Pull the panel toward the back of the car to remove it.

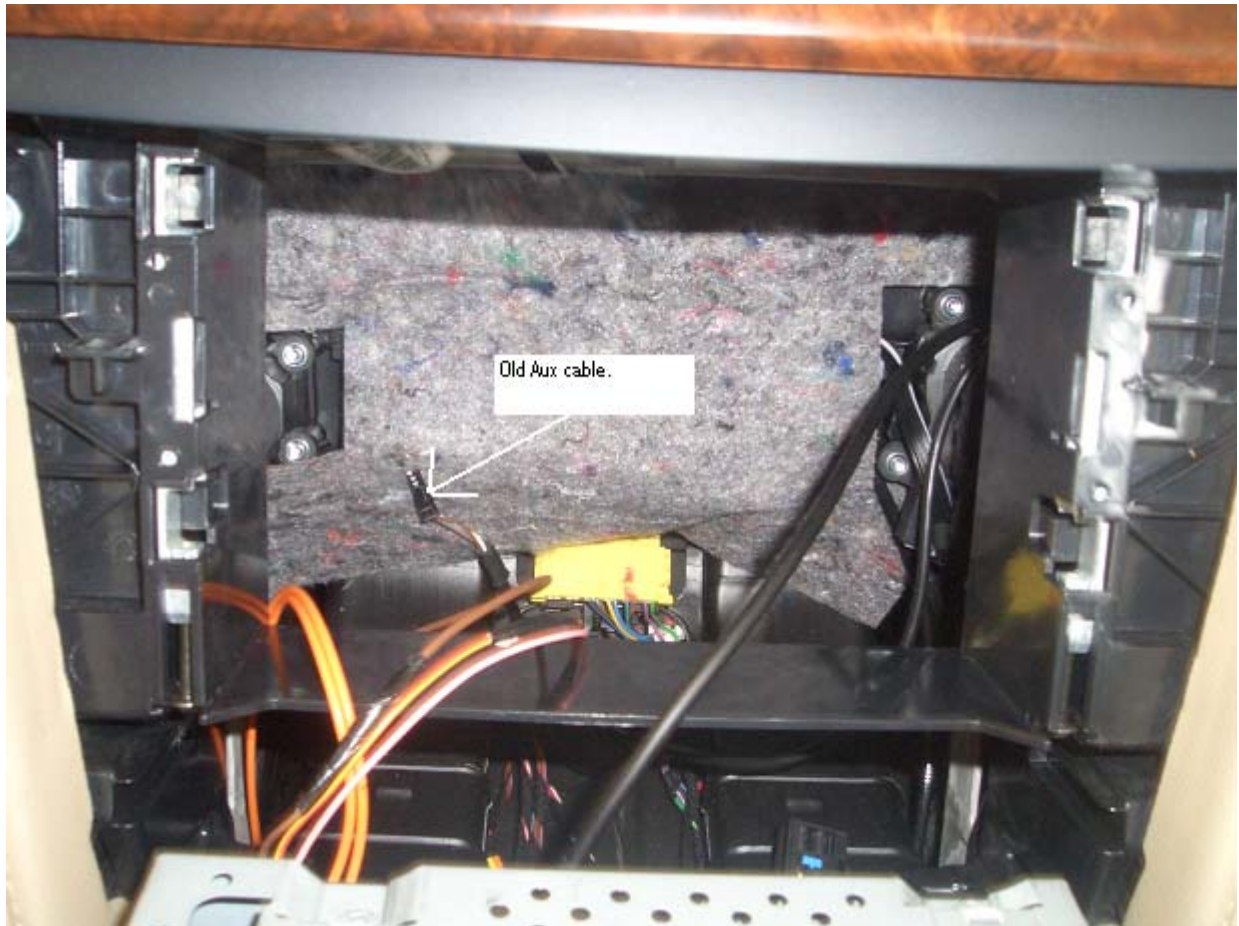
Locate the power block. It's like a power strip (kind of a cool concept)

It may be necessary to expose the forward part of the floor board. The Mercedes installation instructions listed the power block under the front of the floor board, but I found it on my care behind the side kick panel.

Once you have located the power block plug the ipod power cord into an unused power receptacle. The power cable looks just like all the other power cables plugged into the power block.



Now you will need to fish the aux input cable through to the stereo opening. The existing aux cable is already there, I used a coat hanger to follow it trough to behind the glove box and taped the aux cable from the ipod wiring harness to it and pulled it through.



Now you will need to drill a hole in the glove compartment for the ipod interface cable. Sorry I don't have any pictures of this. The Mercedes installation instructions called for a 20mm drill bit. I didn't have one that big so I drilled it with the largest bit I had and increased the size of the opening large enough to accept the grommet with a round file.

The install instructions places the hole on the back wall of the glove box at the lower left corner. There where specific dimensions of where to place the hole, you can probably put it anywhere as long as there is nothing behind it. You can reach up and feel the back of the glove compartment to determine where it is safe to drill.

Thread the ipod interface cable through the hole secure the grommet in the hole and connect the RJ connector to the ipod interface unit.

Connect the ipod to the other end of the cable.

At this point I installed the head unit using the new aux cable and the CD changer. Connect the battery to move the shifter out of the way.

Once the head unit and CD changer are installed test the installation to make sure everything is working.



On your speedometer display you should see Audio please wait. Then you will see the name of the song that was playing on your ipod when you connected it.



If all is good, disconnect the battery and mount the ipod interface unit to the cover you removed from under the glove compartment.

Now the only thing left to do is mount the ipod interface unit to the panel you removed from under the glove compartment. The Mercedes installation instructions tell you to remove some of the foam padding on the side with the air vent and use the Velcro strips included to secure it. In my kit I got 4 pieces of the same side of the Velcro so I left the foam padding in place and placed the interface unit on top of that using the Velcro strips to fasten it to the panel.

That's it. You are done.