

### **NAVIGATION SYSTEM INSTALLATION INSTRUCTIONS**

These instructions along with the pictures were performed in a 2007+ full-size truck/suv with the Bose audio system. Please use them only as a reference since they might not exactly match your vehicle's configuration.

If you purchased a special interface or accessory (Lockpick, movie in motion, IPod integration, amp, etc.) please install the navigation system <u>first</u> to make sure it working properly before installing these items.

These instructions also provide steps to install a VSS Kit, if required (page 10). Some vehicles will require a VSS Kit. The Kit was designed to provide signals to your navigation unit, required for it to function properly. These signals aren't normally present in a vehicle that wasn't originally equipped with a navigation system.

## REMOVING THE RADIO BEZEL/TRIM PANEL



Using a plastic trim removal tool or 2 plastic putty knives along with a screwdriver, remove the radio trim bezel. Note: there are no screws to remove and be careful not to scratch your bezel.

## **REMOVING THE RADIO & AC CONTROLS**



Remove all 8 (7mm) bolts to remove radio, a/c controls and lighter panel. Now slide radio out, disconnect all radio connectors (not the AC or lighter panel connectors) and the FM antenna.

# **GPS ANTENNA INSTALLATION**



Using a plastic trim tool or a screwdriver, pry up the top dash panel as much as possible to install the GPS antenna module.

#### NOTE:

Not all of the top dash panels remove as shown. Some require the removal
of the A-Pillar panels first. The A-Pillar panels are the panels that go along
the side of your windshield.

### **GPS ANTENNA PLACEMENT**



Place the antenna in the recessed area just to the right of the center. The metal portion of the antenna will fit into the plastic slot towards the windshield side and then just snap into place. Route the cable down the hole just to the right front of the recessed area as shown in the picture. Be careful not to severely bend the cable since the internal wire can break. Also, keep in mind that window tint can interfere with GPS satellite reception.

# **GPS ANTENNA CABLE ROUTING**



After antenna placement, feed the antenna cable down to the hole where the radio was. Make sure that the connector is fed through the lower left portion of the hole as shown in the picture above. When connecting the antenna to the back of the navigation unit, please push hard to verify a good connection.

## **NAVIGATION HEAD UNIT INSTALLATION**



Connect all of the cables into the back of the navigation unit. This would also include the GPS antenna and FM antenna.

NOTE: This picture is for reference only showing the proper location of all connectors. Your vehicle may not have all of these connectors!

# **COMPLETION & TEST**



Slide the navigation unit in along with the AC controls & lighter panel. Reinstall all 8 (7mm) bolts. Reinstall the bezel/trim panel.

Test the unit – Our units are UNLOCKED meaning they will plug in and play.

### **POTENTIAL PROBLEMS**

# **GPS Has a Red Line/Slash Though It:**

- 1. Drive around to sync the satellites with your unit. This could take up to 24 hours.
- 2. Unplug, then plug your GPS antenna connector push hard to verify a good connection. Do not severely bend the cable since you might break the internal wire.
- 3. Reposition the antenna for better signal reception verify no metal object is above the antenna. Window tint can also affect satellite reception. You could temporarily place the antenna outside of the vehicle just to illuminate any obstructions.
- 4. Change your region: select "DEST", then touch the map (right side of the screen). Now select your region.
- 5. Eject the Map Disc and reinstall it.
- 6. Install a VSS Kit (brown connector).

## **Volume is too Low or Won't Adjust:**

- 1. Check your balance/fade settings (left & right, front & rear)
- 2. Have a GM tech program the unit to properly match your Bose amplifier.

# The Tracking Seems to Lag or I Don't Get the Proper Amount of Voice Commands Along a Route:

1. Install a VSS kit.

# The Nav Displays a Blank Screen with Only the Clock:

1. The Nav unit needs a hard reset. Remove the positive and negative battery cables from your battery, touch them together and then reconnect them to the battery. This will resolve several potential issues with the nav system.

### **VSS KIT INSTALLATION**

Not all vehicles require a VSS kit. The VSS Kit was developed to solve 2 potential problems that might occur after installation.

## 1. GPS Tracking:

- a. The navigation display doesn't accurately follow me down the highway.
- b. My current location vs. what's being displayed on the navigation screen seems to be different.

#### 2. Voice Commands:

a. After I input a destination and while I'm driving to that destination – the navigation system only gives me two voice commands saying "Proceed to the highlighted route" and "You've reached your destination".

If you feel you need a VSS Kit, let our sales department know via email and we'll provide one for only the shipping/handling expense.

# VSS KIT INSTALLATION – GPS TRACKING (BROWN CONNECTOR)



Locate the wiring box under the dash to the left of the brake pedal. Remove the cover. After the cover is removed, flip the box over to expose the wires on the back of the box.



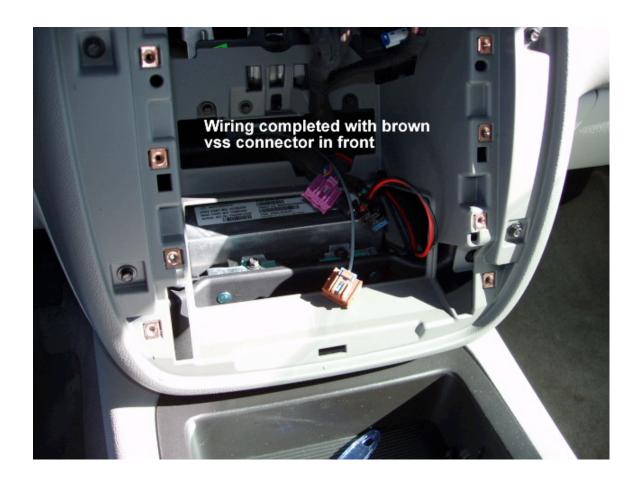
Remove the 2 connectors as shown in the picture to easily flip the box around.



Carefully cut the wire-tie to see the wires more easily. Locate a green with a white striped wire.



This is the vehicle speed sensor wire. The green wire from the VSS Kit brown connector has to be spliced into that green and white striped wire.



Route the green wire (from the brown connector) back up to the radio hole.



Connect the brown connector into the back of the navigation unit (connector # 4) along with the other connectors. Remember, some vehicles don't have all 4 connectors.

## Note:

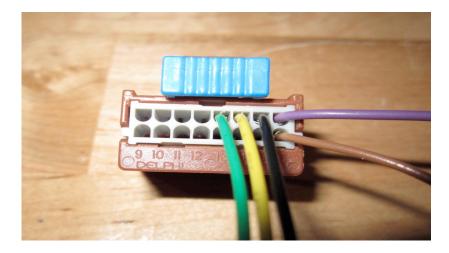
In some very rare cases, the VSS (vehicle speed sensor) signal is too weak for the navigation unit to detect. In that case, you can purchase a VSS signal generator from PAC (NAV-1129). The green wire from the brown VSS connector will then be tied into the NAV-1129.

### **VSS KIT INSTALLATION – VOICE COMMANDS**

(BROWN CONNECTOR - CONTINUED)

(MOST VEHICLES DO NOT REQUIRE THIS PORTION)

(ONLY LUXURY VEHICLES WITH RPO CODE Y91 ON YOUR GLOVE BOX LABEL)

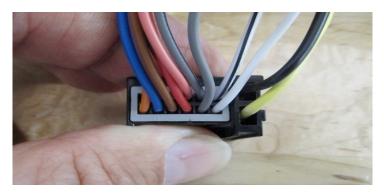


There are 2 additional wires coming out of the VSS brown connector. One is in pin location 8 (purple) and the other is in pin location 16 (brown).

The wire in the pin 8 location has to be spliced into the wire in pin location 2 of the black connector #1 (see picture below).

The wire in the pin 16 location has to be spliced into the wire in pin location 9 of the black connector #1 (see picture below).

In the picture below of the black connector #1 - pin 2 location has a white wire. The wire in pin location 9 is a white with a black stripe.



Above is an example of a typical connector # 1. This is the connector that is most towards the passenger side of the back of the nav unit. Depending on the vehicle, some use different colored wires or a fewer amount of wires.