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Accessory Installation Practice (read before installation)

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the “Accessory Installation Practices” document.

This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.)
- Safety (eye protection, checking torque procedure, etc.)
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.)
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.)

Please see your Toyota/Scion/Lexus dealer for a copy of this document.

Revisions and other installation assets

OEM Audio Plus is committed to providing components and instructions designed for seamless integration. Please visit oemaudioplus.com for the most up to date installation related documents and media,

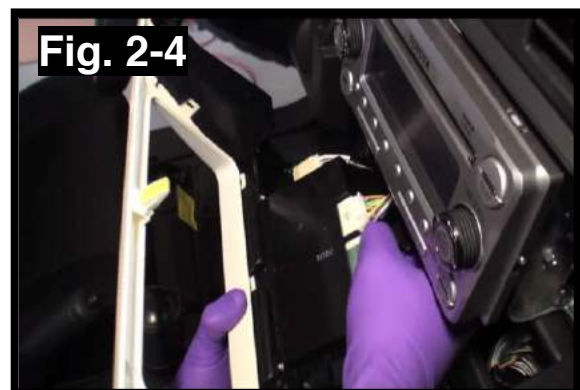
Important Warranty Information Failure to completely and properly fill out online Warranty Registration may result in possible reduction or complete denial of future warranty claims. Complete yours today at: oemaudioplus.com/registration or call: **855 OEM-ODIO** for more details and alternative methods of system registration.

1. **Vehicle Preparation**

- a. Apply parking brake.
- b. Open the trunk and hood of the vehicle.
- c. Disconnect the negative (-) battery cable.
- d. Prepare a protective surface to place all vehicle components on.

2. **Radio removal**

- a. Lay down protective blanket over climate controls and transmission area
- b. Using a #2 Phillips screwdriver remove the 2 screws holding the silver trim on the sides of the white radio bezel. **(Fig. 2-1)**
- c. With a panel tool remove the silver trim gently by prying towards you, separating the locking tabs. **(Fig. 2-2)**
- d. Remove the two #2 Phillips screws holding the white radio bezel in place. **(Fig. 2-3)**
- e. Remove the white radio bezel by pulling directly towards you and disconnecting the two connectors from behind. **(Fig. 2-4)**



- f. Using a 10mm socket wrench, remove the four bolts holding the radio in place. **(Fig. 2-5)**



- g. Disconnect connectors and antenna lead. **(Fig. 2-6)**



- h. Remove radio and store.

3. **Quick-Sync Wiring Harness Installation**

- a. With the quick sync wiring harness in hand, run the yellow power wires, gray, white, and black amplifier connectors, and 10 mm ground terminal, through the radio cavity towards the driver side kick panel. **(Fig. 3-1)**



- b. You will want to run these wires full length to the point where the OEM Audio + 10-pin and 6-pin male and female connectors rest in the radio cavity. **(Fig. 3-2)**



- c. The Wires run through the radio cavity can rest on the driver's side floor for the time being.
(Fig 3-3)

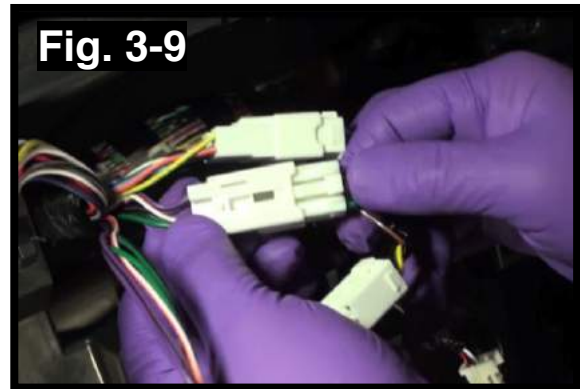


- d. In the radio cavity connect the factory 10-pin male connector to the OEM Audio Plus Quick sync wiring harness female 10-pin connector.
(Fig 3-4)



f.

- g. Plug the rear bypass umbilical cable into your OEM Audio Plus Quick-Sync Wiring Harness 6-pin connector. Run the other side of the rear speaker bypass cable through the radio cavity to the driver-side kick panel area. **(Fig. 3-9)**



- h. Remove Glove box. On the passenger side of the vehicle open glove box and disengage the glove box damper on the right side. Squeeze sides of glove box and pull down and out in one motion to remove. **(Fig. 3-10)**



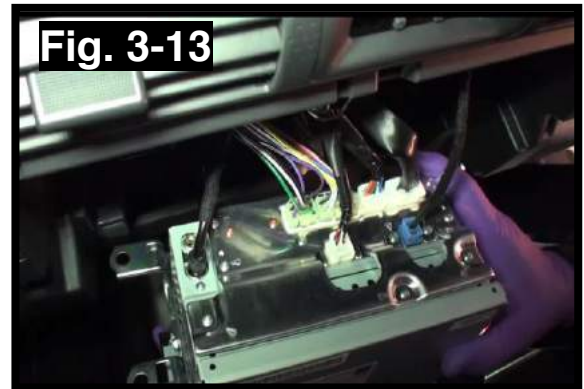
- i. Run the sub umbilical gray connector through the radio cavity to the driver-side kick panel. You want this wire the same length as the black sub amplifier connector. **(Fig. 3-11)**



- j. Run the other side of the sub umbilical (with the white connector) to the passenger-side kick panel area. Run the cable over the air filter avoiding any binding along the way. Wire tie as necessary. **(Fig. 3-12)**

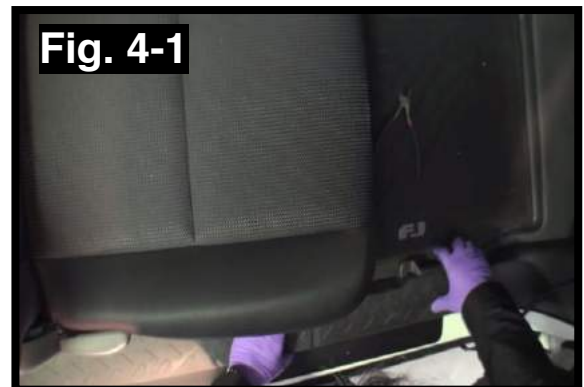


- k. Plug your OEM Audio Plus quick-sync wiring harness connectors into the back of your radio. Plug in the remainder of your radio connectors and reinstalled radio, bezel and trim. **(Fig. 3-13)**



4. *Subwoofer Umbilical Installation*

- a. Remove the passenger side threshold by pulling in an upward motion. **(Fig. 4-1)**



- b. Remove the passenger side kick panel by unscrewing the black locking tab. Pull kick panel away from position to remove. **(Fig. 4-2)**



- c. Run the umbilical cable alongside the factory wiring. Remove white plastic wire clips using the pick tool by pushing away and lifting. **(Fig. 4-3)**



- d. Continue to run the length of the wire alongside the passenger-side threshold. Lock plastic clips after running the wire through. **(Fig 4-4)**

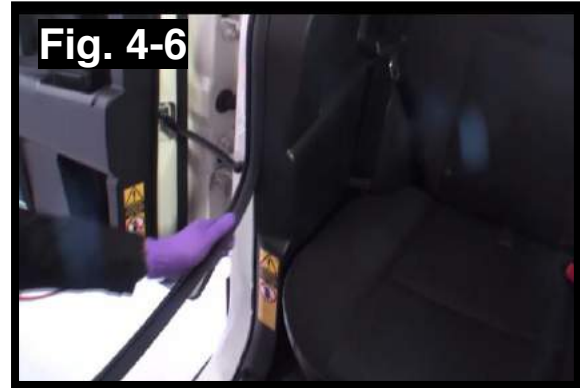


- e. Reinstall glove box.

- f. In the cargo area remove the passenger side panel by pulling directly towards the driver side of the vehicle. **(Fig 4-5)**



- g. Remove the weather-stripping on the rear passenger side door to access the side panel. **(Fig 4-6)**



- h. Apply pressure to the panel pushing towards the driver side to disengage the locking clips. The bottom-locking clip of the panel may require a panel tool to disengage. Position the tool between the tab and the frame of the vehicle and pry open, (the panel does not require full removal.) **(Fig. 4-7)**



- h. You'll need just enough room to run the umbilical cable to the rear cargo tray opening. With the rear cargo tray off you will be able to clearly see the channel where to run the umbilical wire. **(Fig. 4-8)**



- i. Run the wires far as possible on the top side the wheel-well. Then reach from the cargo tray opening to pull the remainder of the cable out. Connector should rest in the center of the opening with about 3 inches of slack. **(Fig. 4-9)**



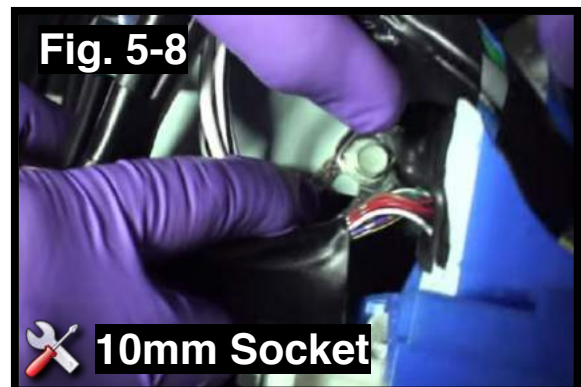
- j. Reinstall your passenger rear side panel, weather-stripping, kick panel and threshold.

5. **Rear Speaker Bypass Cable Installation**

- a. Remove the dead pedal in the driver-side kick panel area. Using the panel tool, wedge this piece out of place and pull directly toward you. **(Fig. 5-1)**
- b. Remove the driver-side threshold and driver-side kick panel by unscrewing the black locking tab. **(Fig. 5-2)**
- c. Run all Wiring and Cables above the accelerator pedal and steering column into the driver-side kick panel. Run neatly and out of the way. Use cable ties as necessary. Leave any extra slack on the floor for now. **(Fig. 5-3)**
- d. In the kick panel area with a 10 mm socket wrench remove the factory speaker module. Loosen with 10mm socket and then pull out directly towards you. **(Fig. 5-4)**



- h. Locate and remove the 10mm ground bolt located in the driver-side kick panel area. (Moving factory wiring just left of the factory speaker module to reveal the ground may be necessary). **(Fig. 5-8)**



- i. Install the harness ground together with the factory ground and then re-install the 10mm bolt and tighten. **(Fig. 5-9)**

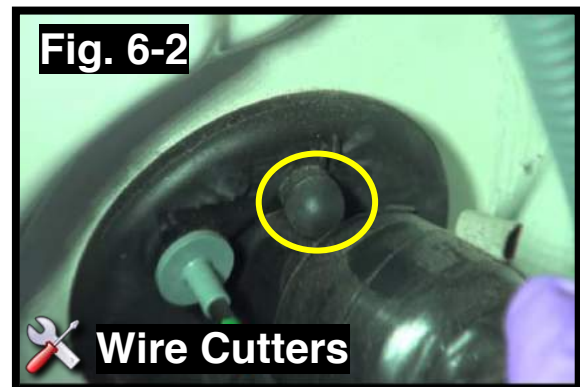


- j. Reinstall the factory speaker module using a 10mm socket wrench. **(Fig. 5-10)**



6. Power wire Installation

- a. Under the hood on the driver-side, locate the grommet for the main factory wiring harness on the driver side of the firewall directly above factory wiring. **(Fig. 6-1)**
- b. Identify unused nipple and slice the tip off to create an opening for the power wire. **(Fig. 6-2)**



- c. Under the dash area on driver-side, lubricate power wire with silicone spray or comparable substitute. Run through the grommet. The wire will only go so far due to the positioning of the factory wiring under the hood. (**Fig. 6-3**)



- d. Once enough slack is visible, pull the **full length** of the power wire through under the hood. You want just enough length to reach your battery. Cut any additional slack. Note: Avoid interference with accelerator and brake pedals (**Fig. 6-4**)



- e. Secure any wire slack to existing factory wiring. Use cable ties as necessary.

- f. Under the hood on the driver-side, use a panel tool to pry open the black fastener holding the factory wiring in place. (**Fig. 6-5**)



- g. Install supplied high-temp corrugated split loom to cover the power wires and insulate against extreme temperature under the hood. (**Fig. 6-6**)



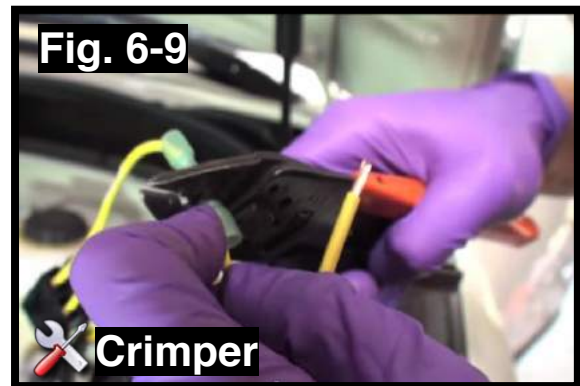
- e. Run power wires to the battery by following the direction of the factory wiring harness towards the battery. Secure using cable ties as necessary. **(Fig. 6-7)**



- f. Use a wire stripper to strip 3/8" off the end of each power wire. **(Fig. 6-8)**



- g. Connect the power wires to the fuse holder by inserting the (smaller) 14-gage stripped power wire into the Blue butt connector and crimp. **(Fig. 6-9)**



- i. Insert the (larger) 12-gage stripped power wire into the Yellow butt connector and crimp.

- j. Apply heat to activate the solder and heat shrink insulator for the best connection possible. **(Fig. 6-10)**



7. *Installation of the Fuse Holder*

- a. Remove the 10mm bolt from the battery's positive terminal. **(Fig. 7-1)**



- b. Install the ring terminal of the fuse holder lead then re-install the 10mm bolt and tighten. Note: Do not install fuses at this time. **(Fig. 7-2)**



8. *Amplifier Installation*

- a. Under the driver-side dash, locate and remove the 10mm bolt (just left of the brake pedal assembly). **(Fig. 8-1)**



- b. Install the "A" labeled bracket together with the 10mm bolt. Positioning the bracket in the mounting location for the amplifier to mount properly. **(Fig. 8-2)**



- c. Remove the outward-facing 10mm bolt used to mount the driver-side lower front dash panel. **(Fig. 8-3)**

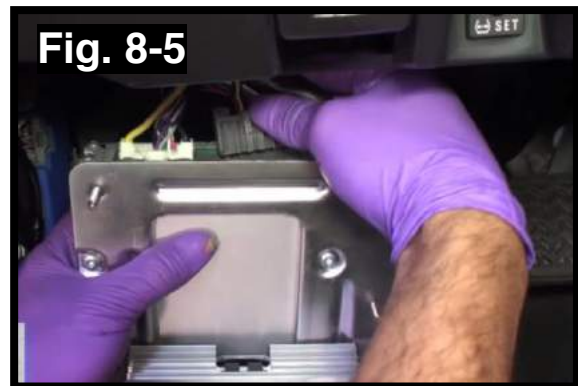


- d. Install the "B" labeled bracket together with the 10mm bolt. Positioning the bracket in the mounting location for the amplifier to mount adjacent to the kick panel. **(Fig. 8-4)**



*** See Series 2 Connectivity Addendum**

- e. Plug the White and Gray 22-pin connectors from the Quick-Sync Harness into their designated receptacles on the DSP Amplifier. **(Fig. 8-5)**



*** See Series 2 Connectivity Addendum**

- f. Plug the 6-pin Gray connector from the Sub cable into its designated receptacle on the Sub Amplifier. **(Fig. 8-6)**



- g. Plug the Black 10-pin connector from the Quick-Sync Harness into its designated receptacle on the Sub Amplifier. **(Fig. 8-7)**

*** See Series 2 Connectivity Addendum**

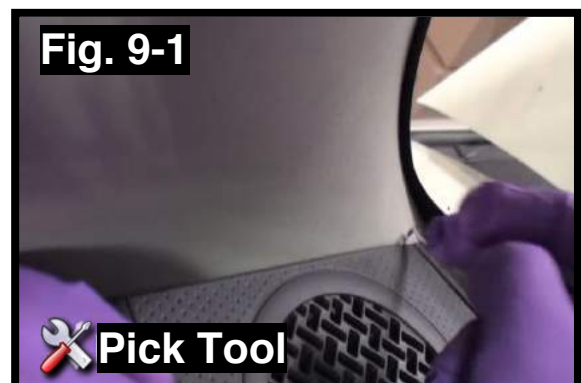


- h. Carefully insert Amplifier Assembly through the bottom opening underneath the diver-side dash. **Note:** Tilt Amplifier Assembly to position into designated mounting location. Brackets and amp assembly are clearly labeled "A" and "B". **(Fig. 8-8)**
- i. Start by threading the Top "A" bracket with provided wing nut and washer. Only partially tighten "A" bracket mounting for the time being. Position Lower "B" bracket into position and tighten. Tighten "A" completely.
- j. Once the Amplifier installation is completed under in kick panel area, secure any wire slack to existing factory wiring. Use cable tie as necessary. **(Fig. 8-9)**



9. Dash Speaker installation

- a. Using a pick or panel tool carefully lift dash speaker grill up out of position. **(Fig. 9-1)**



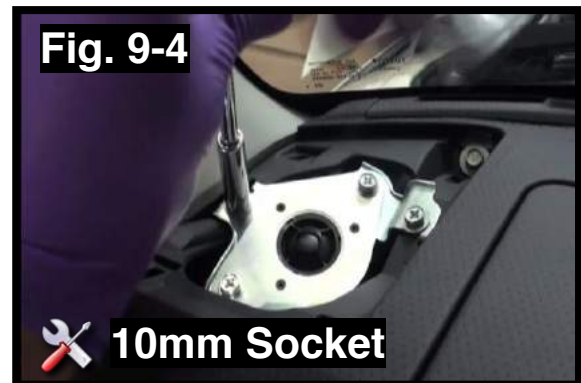
- b. Remove the two 10mm bolts holding the factory dash speaker in place and remove speaker. **(Fig. 9-2)**



- c. Disconnect factory dash speaker and position OEM Audio Plus 1" Tweeter in position and Re-install dash speaker connector. **(Fig. 9-3)**



- d. Mount the OEM Audio Plus dash speaker by using the two 10mm bolts. **(Fig. 9-4)**



- e. Reinstall dash speaker grill and repeat process for other side. **(Fig. 9-5)**



10. Front Door Speaker Installation

- a. Use a pick tool to remove the cover behind the interior door latch. **(Fig. 10-1)**
- b. Remove #2 Phillips screw behind the door latch.
- c. Use a pick tool to remove the cover below door grab handle and remove the #2 Phillips screw behind the cover. **(Fig. 10-2)**
- d. Use a panel tool to remove the window/door lock control panel. **Note:** Insert tool between the rear edge of the panel and the cloth section of the trim to remove. **(Fig. 10-3)**
- e. Disconnect window/door lock control connectors from the panel. Use of a pick tool or precision screwdriver is needed to release connector. **(Fig. 10-4)**



- f. Disengage door locking tab. **(Fig. 10-5)**



- g. Use panel tool to disengage the clips behind the door panel one at a time. Start at the bottom, then the sides and finish at the top. Use gentle force to remove door panel. **(Fig. 10-6)**

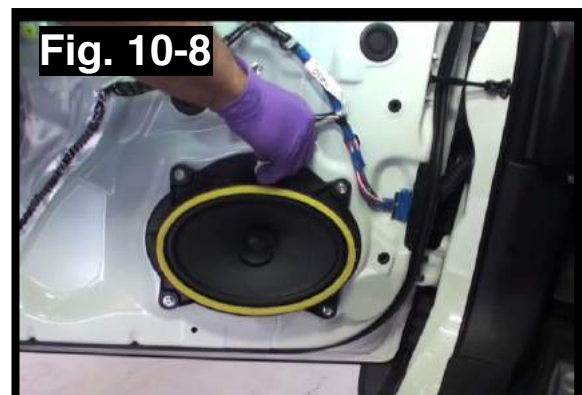


- h. Remove door latch assembly from door panel by unsnapping and lifting the latch connectors. Connectors need to be reassembled in the same orientation (White on top, Green on bottom.) **(Fig. 10-7)**

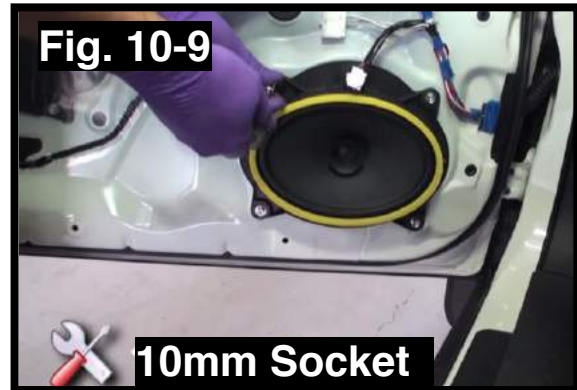


- i. Set Door panel aside

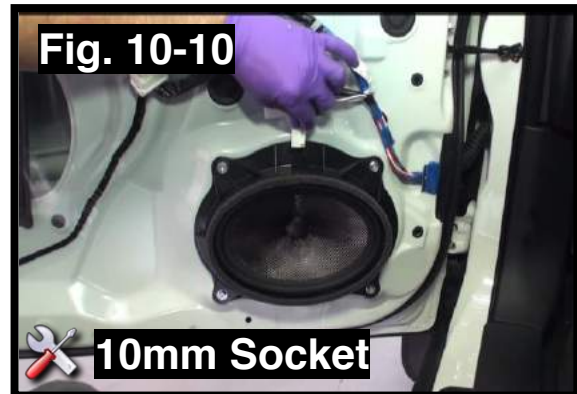
- j. Disconnect the 6X9 speaker connector. **(Fig. 10-8)**



- k. Remove the four 10mm bolts holding the factory 6x9 speaker in place and remove speaker. **(Fig. 10-9)**



- l. Mount the 6x9 OEM Audio Plus speaker by using the four 10mm bolts and re-install 6x9 speaker connector. **(Fig. 10-10)**



- m. Reassemble door in reverse order - Taking time to ensure all clips are engaged. Failure to securely reinstall door panel may result in rattles.

- n. Repeat all steps for the other side

11. Subwoofer Installation

- a. In the cargo area remove the two 10mm bolts securing the cargo net hooks in place. **(Fig. 11-1)**



- b. Install the top subwoofer-mounting bracket together with the 10mm bolts to the passenger side panel of the cargo area. **(Fig. 11-2)**



- c. Install the bottom subwoofer bracket to the OEM Audio Plus Sub Enclosure using two M6 Screws provided. **(Fig. 11-3)**



- d. With the bottom subwoofer bracket installed. Connect the Subwoofer umbilical cable to the OEM Audio Plus Sub Enclosure. **(Fig. 11-4)**



- e. Position the subwoofer assembly, insert and hand tighten the top two M6 Screws. Do not tighten completely at this time. **(Fig. 11-5)**



- f. Install the two provided 10mm bolts into the bottom subwoofer mounting bracket. Tighten lower bracket completely. Tighten top bracket mounting hardware completely. **(Fig. 11-6)**



- g.** Re-install modified rear cargo tray or optional deck side garnish. **(Fig. 11-7)**



12. Fuse Installation

- a.** Insert the 20A fuse for the 14-gage power wire (thinner wire) and the 30A fuse for the 12-gage power wire. **(Fig. 12-1)**



- b.** Connect Battery Ground (-). **(Fig. 12-2)**



This concludes the OEM Audio Plus *Reference 400CF* Installation for the FJ Cruiser



Checklist These points **MUST** be checked to ensure a quality installation.

✓	Check:	Vehicle Function Detail:
	Power Windows	Verify power window controls are functioning properly.
	Power Door Locks	Verify power door lock controls are functioning properly.
	Hazard Lights	Verify hazard lights are functioning properly.
	Clock	Verify proper time on clock.
	Radio	Verify radio is functioning properly.
	Navigation (if applicable)	Verify navigation system is functioning properly.
	Bluetooth (if Applicable)	Verify Bluetooth is functioning properly.

Basic Troubleshooting Tips

In most cases, issues with the OEM Audio Plus sound system upgrade are installation related. We have found that these few simple troubleshooting steps have resolved customer issues.

1. Double-check all Amplifiers and Radio connections - Unplug each connector then re-plug to confirm secure connection. Listen and feel for the locking “click”. **This is the most common issue.**
2. Verify Radio Connections - Make sure that the male factory harness connectors are plugged to female *OEM Audio Plus* harness connectors and the male *OEM Audio Plus* harness connectors are plugged directly to the radio.
3. Check the fuses.
4. Check the Amplifier ground connection.
5. Reset the DSP Amplifier - Disconnect the (-) negative terminal from the battery for one hour.
6. Check the wiring – Look out for pinched or damaged wires that may have occurred during installation.
7. If all else fails - Bypass the *OEM Audio Plus* sound system by restoring the factory connections to the radio and contact the *OEM Audio Plus* technical support line at **1-855-OEM-ODIO ext. 601.**