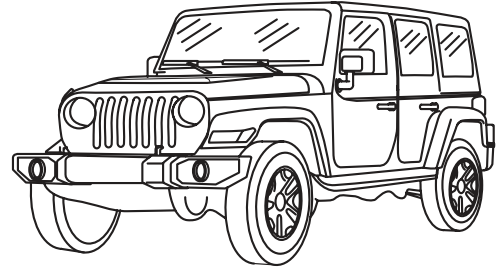


Jeep Wrangler

PSS-23WRA Sound System

Installation Manual



- Model: 4-Door Wrangler Unlimited JL
- Model Year: 2018 –UP

*Not compatible with factory amplified systems

Jeep	Model	Year
	Wrangler Unlimited	2018 – UP

* The specified vehicles have been tested and have met compatibility specs at the time of testing. Compatibility is not guaranteed if the manufacturer has made production changes to the listed vehicles above.

⚠ Warning: Before you begin, remove the ground wire from the NEGATIVE (-) terminal of the battery. Failing to do so can lead to electric shock, injury or damage to equipment.

Introduction

- Congratulations on purchasing the PSS-23WRA. This installation manual is designed to take you through the step-by-step installation of the PSS-23WRA into a 2018 -Up Jeep Wrangler Unlimited. Please familiarize yourself with the owner's manual and if you still have additional questions please call 1-800-TECH-101.

Note

- Design and specifications are subject to change without notice for improvement.





To Ensure Safe Use, Always Follow These Precautions

- The installation of this product requires specialized skills and experience. We recommend that you have the product installed by an Alpine authorized dealer.
- Before you use this product, be sure to carefully read this installation manual and the separate user's manual so that you can use the product correctly. Alpine Electronics bears no responsibility for problems that arise as a result of failure to follow the instructions in the manuals.
- This manual includes a number of symbols that are intended to help you use the product safely, to prevent harm to you and others, and to protect against damage to property. These symbols and their meanings are listed below. Make sure you fully understand these symbols before you begin reading the main text.

Explanations of Injury and Damage That May Result from Incorrect Use

Warning	Ignoring the content marked by this indication and using the product incorrectly may lead to death or serious injury.
Caution	Ignoring the content marked by this indication and using the product incorrectly may lead to injury or property damage.

Types of Precautions

 Forbidden	Indicates actions that are forbidden (must not be performed)
 Forbidden	Indicates that disassembly is forbidden.
 Mandatory	Indicates actions that are mandatory (must be performed)
	Marks content that should receive your full attention.


 **Warning**

Do not disassemble or modify the product. Doing so could lead to an accident, fire, or electric shock. 
Forbidden


Store screws and other small objects where small children cannot reach them. If one of these small objects is swallowed, consult with a doctor immediately. 

When replacing fuses, be sure to use fuses with the specified current rating. Failing to do so could lead to an accident or fire.  
Forbidden Mandatory


Only connect the product to a 12 VDC negative ground car. Failing to do so could lead to an accident or fire. 
Mandatory

Before you begin wiring, remove the ground wire from the negative terminal of the battery. Failing to do so could lead to electric shock or injury. 

Do not cut the insulation on a cord and take power from another device. Doing so could lead to fire or electric shock. 
Forbidden

Do not install the product in a location where it will obstruct the driver's forward view; interfere with the operation of the steering wheel, gearshift, or the like; or pose a threat to passengers. Doing so could lead to an accident or injury. 
Forbidden

When making a hole in the vehicle body, be careful to avoid damaging pipes, the fuel tank, electrical wiring, and the like. This kind of damage could lead to an accident or fire. 

When installing and grounding the product, do not use any of the bolts or nuts of the steering wheel, brakes, fuel tank, or the like. Doing so could make the brakes stop working or lead to fire. 
Forbidden

Do not install the product near the passenger-side airbag. Doing so could interfere with the operation of the airbag and lead to an accident or injury. 
Forbidden

Bundle cords so that they don't interfere with driving. Wrapping cords around the steering wheel, gearshift, brake pedal, or the like, could lead to an accident or damage equipment. 

 **Caution**

Connect the product properly according to the instructions. Failing to do so could lead to fire or an accident. 
Forbidden

Do not sandwich cords between the seat railing or allow them to touch protrusions. Resulting breaks or shorts could lead to electric shock or fire. 


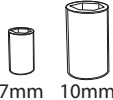
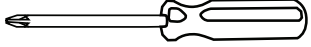

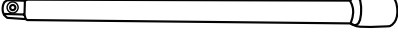
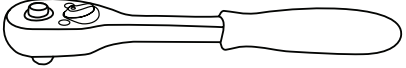
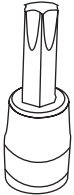
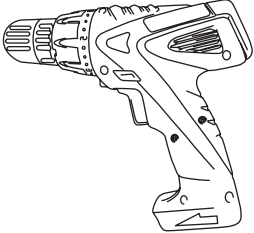
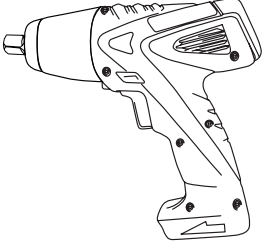
Do not block vents or heat sinks. Doing so could lead to fire or damage equipment. 

Use the accessories according to the instructions, and attach them securely. Failing to do so could lead to an accident or damage equipment. 
Forbidden

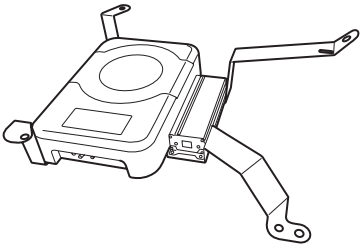
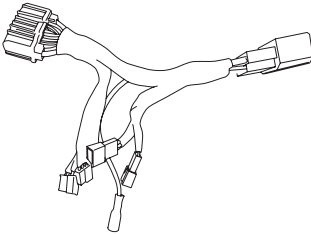
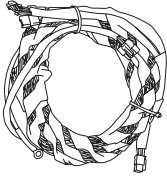


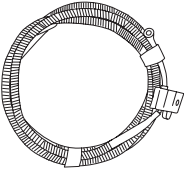
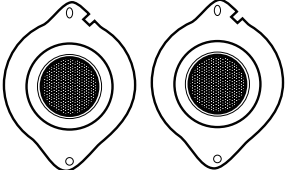
Do not install the product where it may be exposed to water or in a place with high levels of humidity or dust. Doing so could lead to fire or damage equipment. 
Forbidden

The installation and wiring of this product requires specialized skills and experience. Have the product installed by an Alpine authorized dealer. 

Tools Required

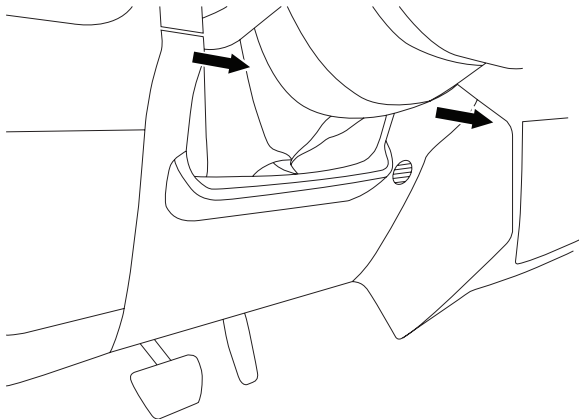
<p>Panel Removal Tool</p> 	<p>Sockets</p>  <p>7mm 10mm</p>	<p>Phillips Screwdriver</p> 
<p>Wire Cutters</p> 	<p>Extension</p> 	<p>Ratchet</p> 
<p>T50 Torx</p> 	<p>Cordless Power Drill</p> 	<p>Cordless Impact Gun</p> 

Accessory List

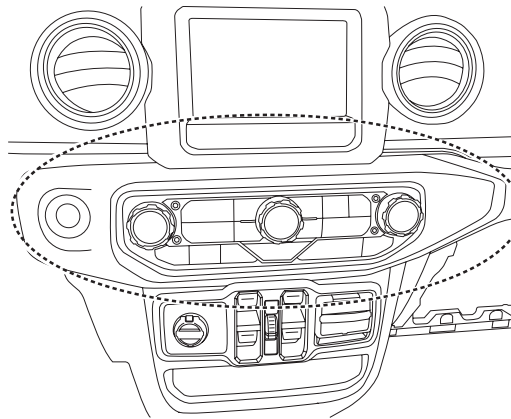
<p>Amplifier Assembly</p> 	<p>T-Harness</p> 	<p>Main Harness</p> 
<p>(10) Cable Ties</p> 	<p>RCA Adapters</p> 	<p>Power Cable</p> 
<p>Front Top Dash Speakers</p> 		

Factory Equipment Removal Process

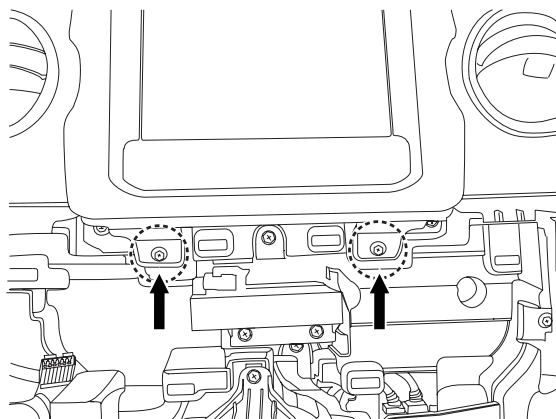
- 1** Use a panel removal tool to release (2) clips on the top of the plastic knee cover and remove it.



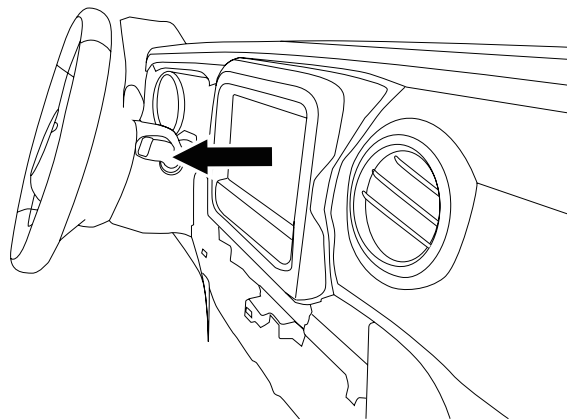
- 2** Use a panel removal tool to release (10) clips on the HVAC control panel, disconnect and remove it.



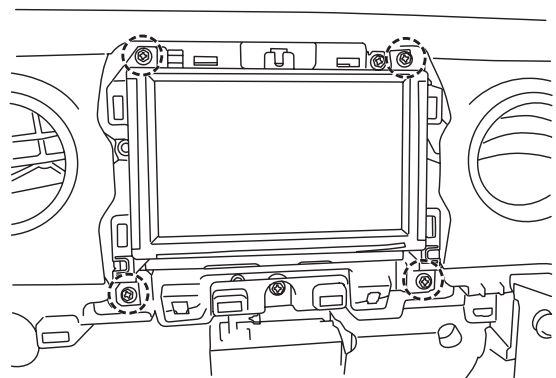
- 3** Extract (2) 7mm/Phillips screws on the bottom of the radio bezel.



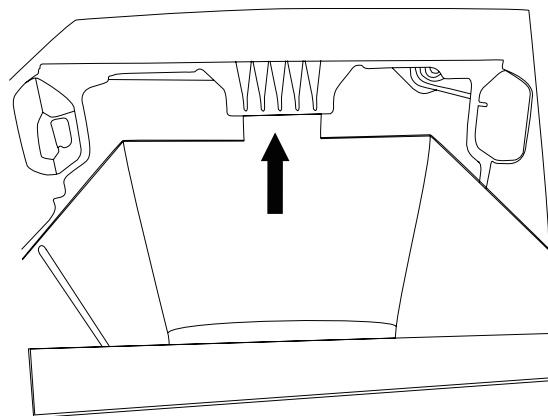
- 4** Use a panel removal tool to release (6) clips on the radio bezel and remove it.



- 5** Extract (4) 7mm/Phillips screws from the factory radio, disconnect and remove it.

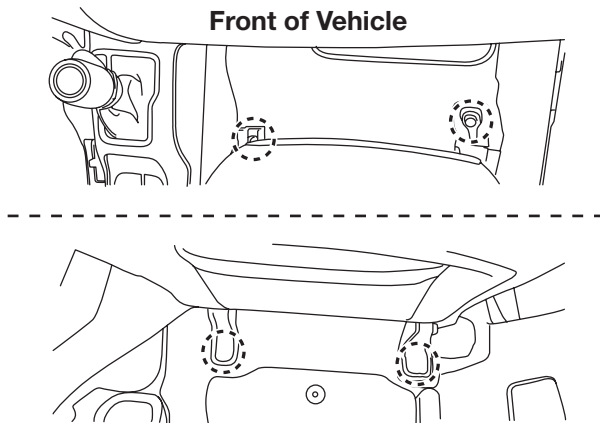


- 6** Lift the middle tab on the passenger side glovebox to release and remove it.

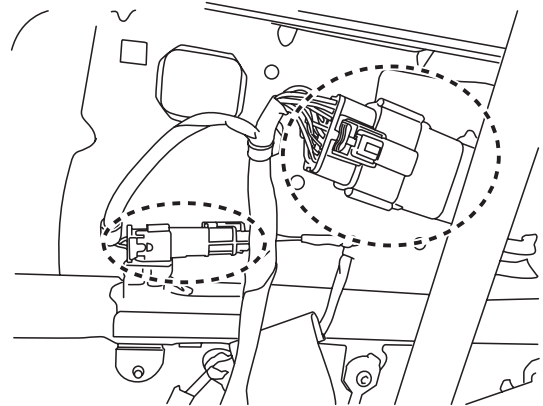


Factory Equipment Removal Process (continued)

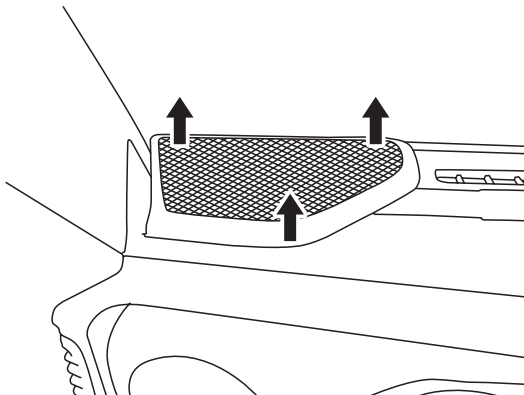
- 7** Extract (4) T50 Torx Screws from the passenger side seat.



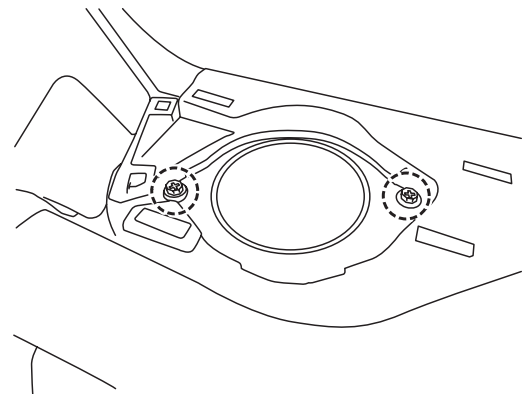
- 8** Tilt the passenger seat towards the back to reveal (2) connectors, disconnect and remove the seat.



- 9** Using a panel removal tool, release the clips on the top dash speaker grilles and remove them.

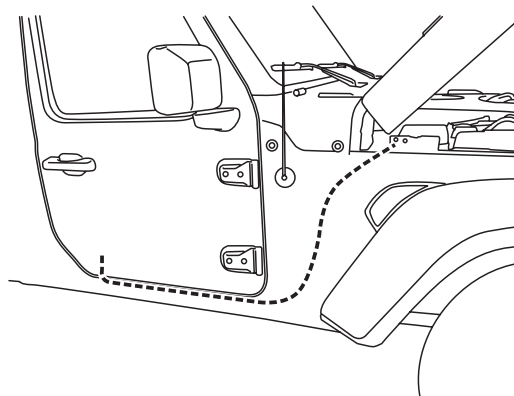
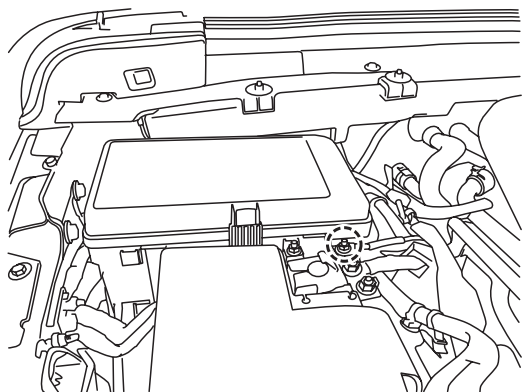


- 10** Extract (2) 7mm screws from each of the factory top dash speakers and remove them.

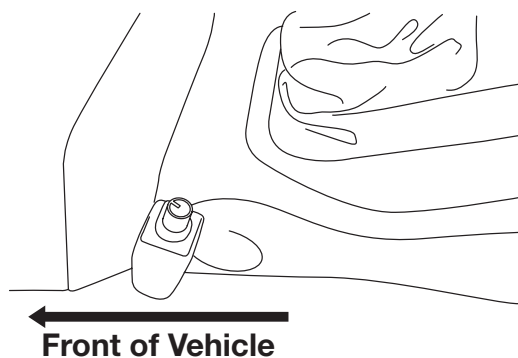
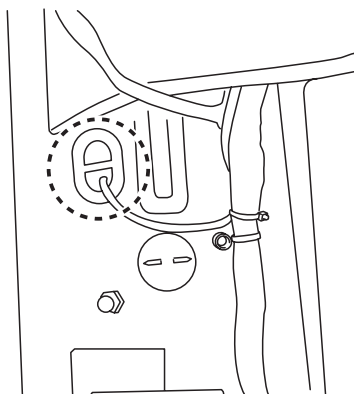


Installation

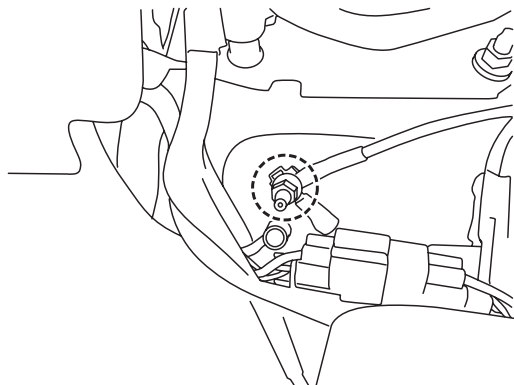
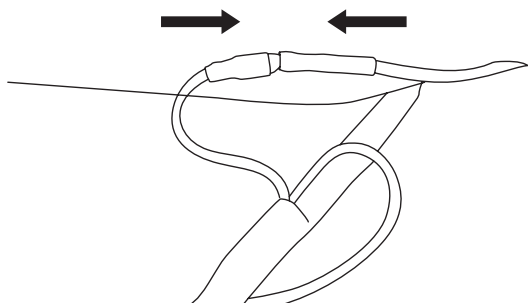
- 1 Connect the power cable to the Positive (+) battery terminal and route the cable down towards frame of the vehicle. **Note: The Negative (-) terminal should remain disconnected until the installation is completed.**
- 2 Route the power cable following the factory harness along the vehicle's frame.



- 3 Route the Positive (+) power cable through the grommet under the carpet and pull the power cable from under the vehicle. **Note: seal the grommet with silicone (not included) to prevent water from entering the cabin.**
- 4 Mount the subwoofer level remote on the center console next to the gear shifter and route the cable to the passenger side seat.

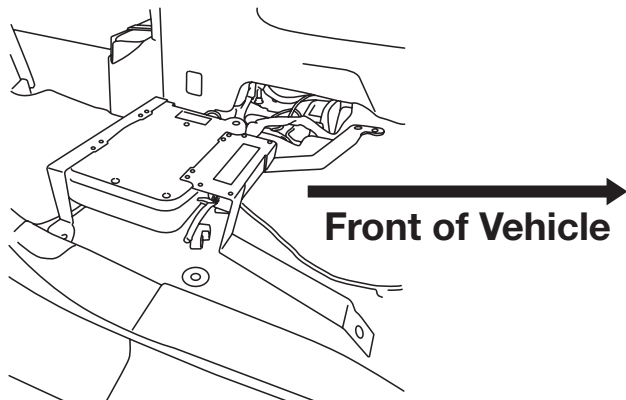


- 5 Connect the power cable to the main harness.
- 6 Attach the Negative (-) ground terminal to the factory ground stud below the center console.

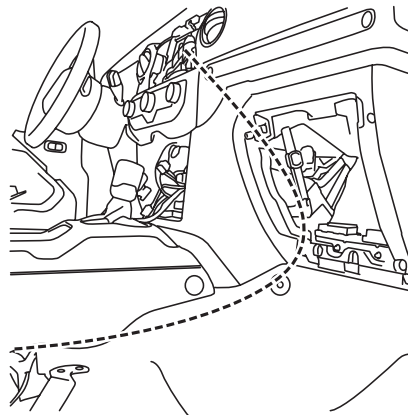


Installation (continued)

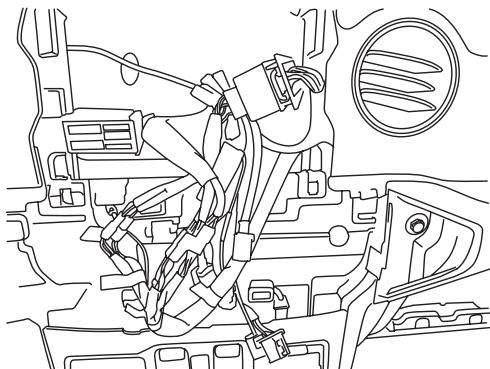
- 7 Connect the main harness to the amplifier assembly and align it to the seat mounting holes.



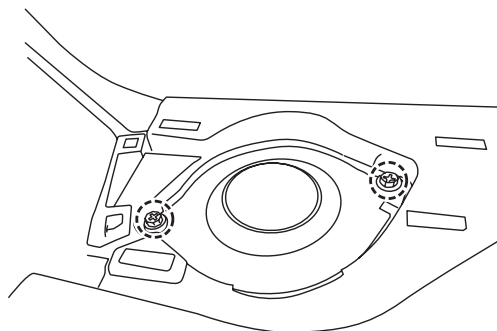
- 8 Route the main harness along the side of the center console to the radio location.



- 9 Connect the T-harness and main harness to the radio. Refer to page 8, 9 or 10 for the corresponding system wiring diagram.

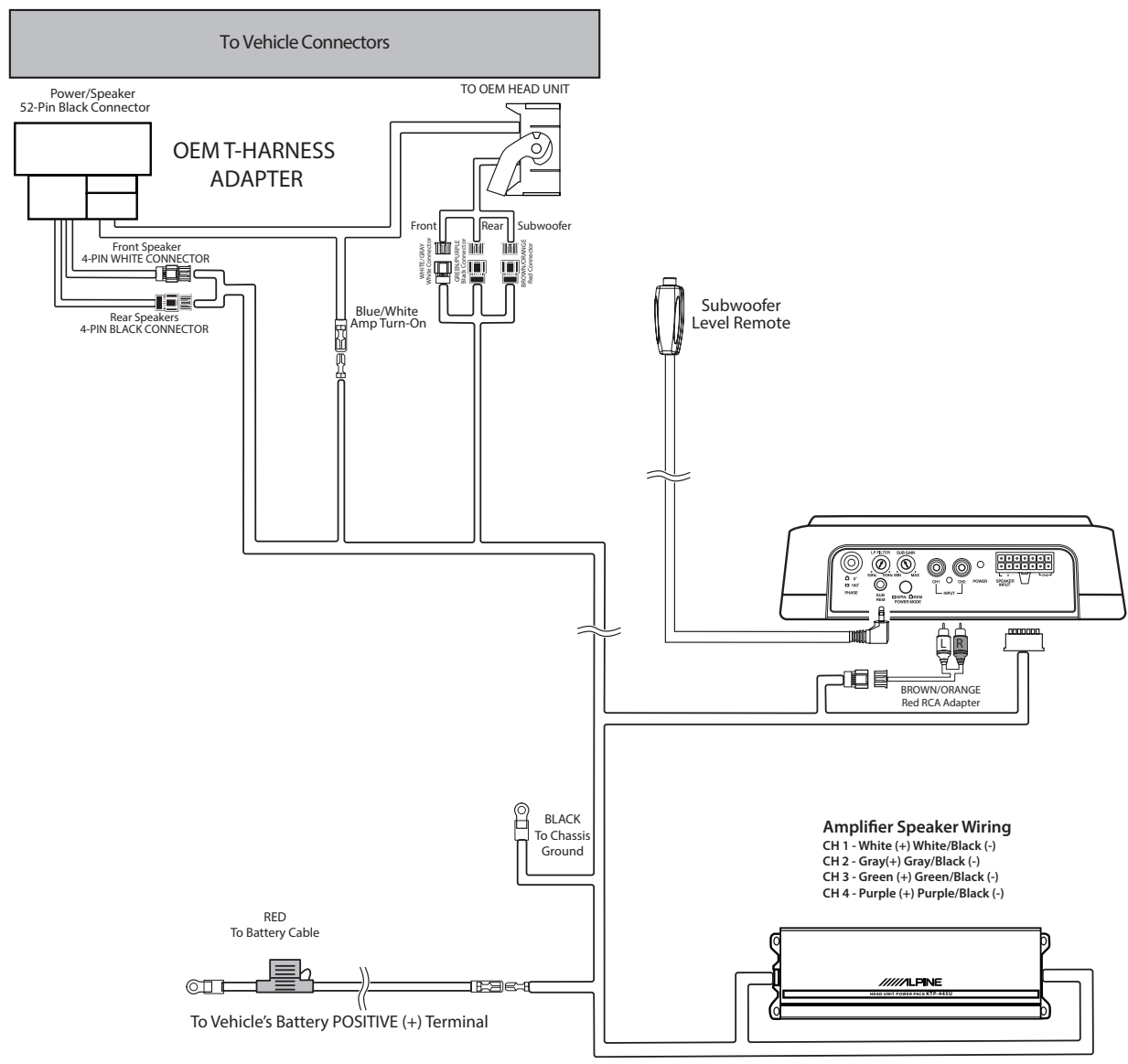


- 10 Connect the replacement dash speakers and mount them using the factory screws.



- 11 Return all removed components to their corresponding location and connect the Negative (-) battery terminal.

OEM Head Unit Wiring Diagram



POWER PACK AMPLIFIER KTP-445U

FRONT HPF: OFF, 60Hz, 80Hz, 120Hz

REAR HPF: OFF, 60Hz, 80Hz, 120Hz

2CH SPKR INPUT

RCA INPUT

FRONT GAIN: MIN, MAX

REAR GAIN: MIN, MAX

SUBWOOFER PWE-S8

LP FILTER: 50Hz, 150Hz, MIN, MAX

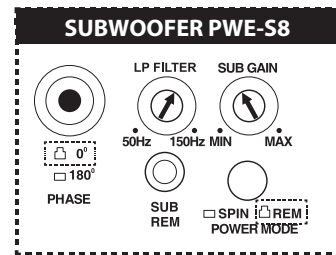
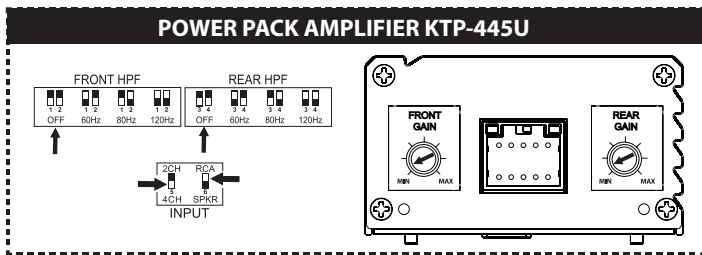
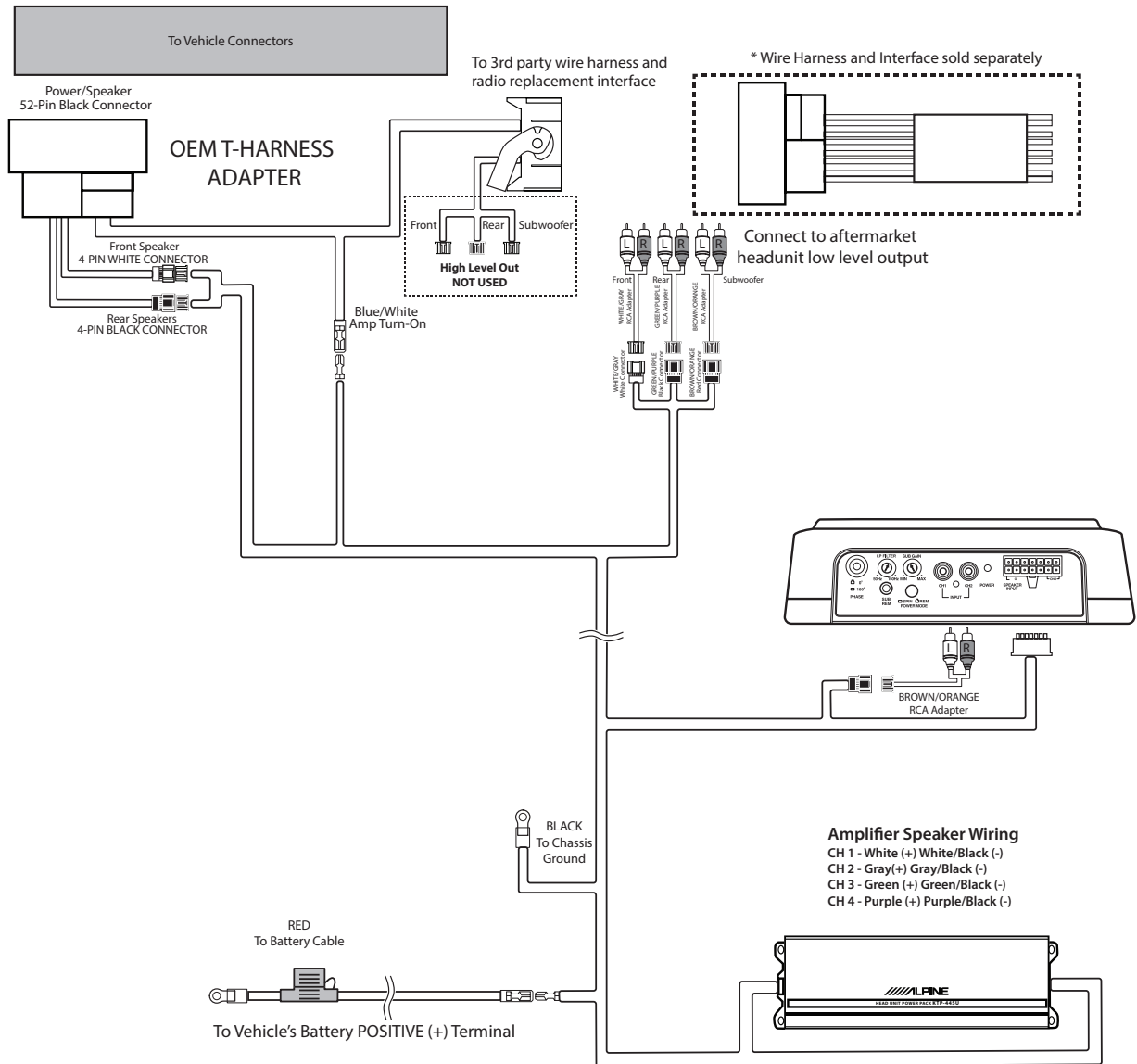
SUB GAIN: MIN, MAX

PHASE: 0°, 180°

SUB REM: SPIN, REM, POWER MODE

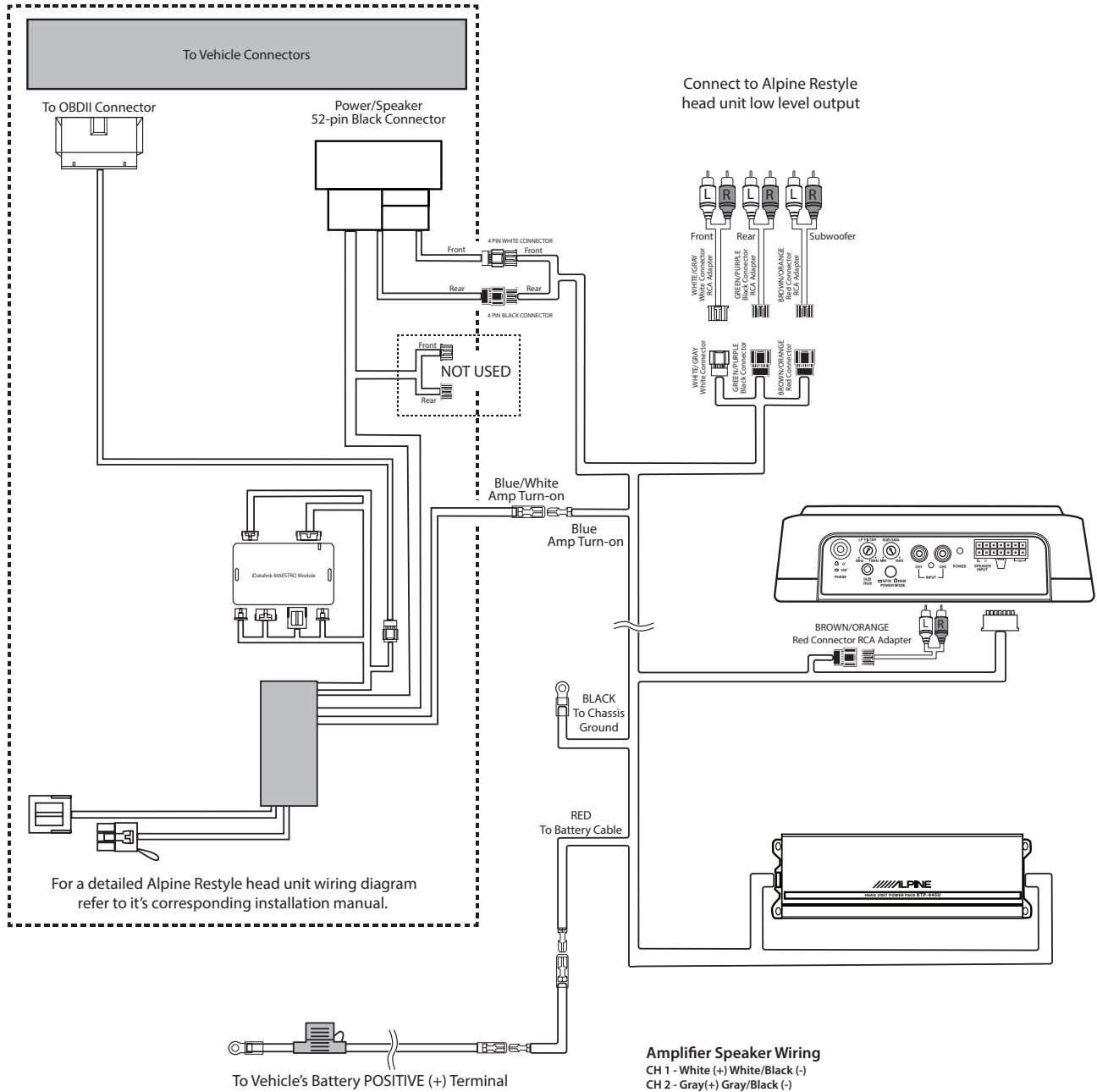
NOTE: FOR BEST PERFORMANCE SET AMPLIFIER AND SUBWOOFER TO RECOMMENDED SETTINGS AS SHOWN ABOVE

Aftermarket Head Unit Wiring Diagram



NOTE: FOR BEST PERFORMANCE SET AMPLIFIER AND SUBWOOFER TO RECOMMENDED SETTINGS AS SHOWN ABOVE

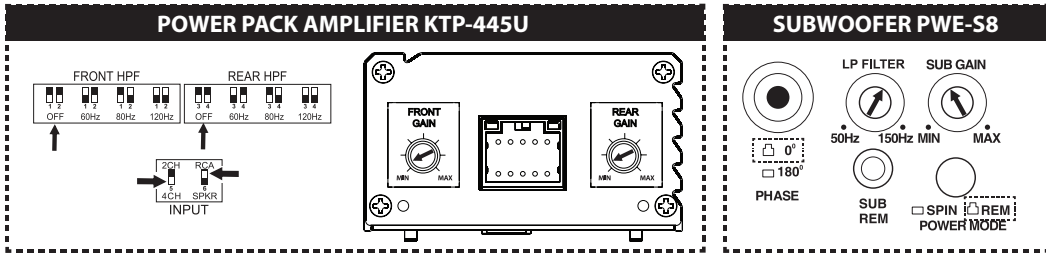
Alpine Restyle Head Unit Wiring Diagram



For a detailed Alpine Restyle head unit wiring diagram refer to its corresponding installation manual.

Amplifier Speaker Wiring

- CH 1 - White (+) White/Black (-)
- CH 2 - Gray (+) Gray/Black (-)
- CH 3 - Green (+) Green/Black (-)
- CH 4 - Purple (+) Purple/Black (-)



NOTE: FOR BEST PERFORMANCE SET AMPLIFIER AND SUBWOOFER TO RECOMMENDED SETTINGS AS SHOWN ABOVE

Troubleshooting Guide

Symptom	Possible Cause	Remedy
1 System will not turn on	Missing or blown fuse at the battery	Insert or replace fuse
	Radio's Remote Turn-On wire may be disconnected.	Verify that Remote Turn-On wire is connected.
2 Volume is too loud with aftermarket headunit.	Speaker level out is connected at the T-Harness.	Ensure that the low level RCA adapters are used in aftermarket headunit system (refer to the corresponding wiring diagram).
	Amplifiers gain control has not been properly adjusted.	Refer to the corresponding system diagram.
3 Subwoofer sounds very low.	Gain level may be down to the lowest setting.	Adjust level to recommended setting (refer to the corresponding wiring diagram).
	Audio Phase may be reversed.	Ensure that the PHASE is set to 0°.
4 One of the speakers has no sound.	Disconnected pin or loose connection.	Check all connections to the speaker, loose pins, disconnected terminals etc..
5 Airbag light is on	Failed to disconnect the battery while working on the vehicle.	Disconnect the battery and re-connect after 5 minutes. If problem is not solved, the vehicle will have to be taken to a Jeep dealer.
6 System turns on only on radio source	Aftermarket Power Antenna wire is connected to amp	Connect the Remote Turn-On wire (Blue/White) to the Blue wire on the amplifier harness.