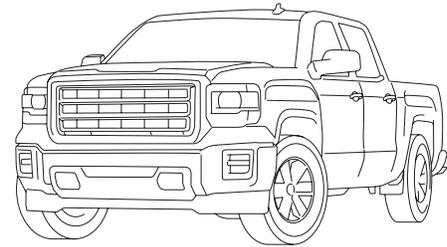


PSS-31GM Speaker System for Chevrolet/GMC Installation Manual



- **Model: Select GM Trucks and SUVs**
- **Model Year: 2014-up Trucks**

(Not compatible with BOSE® Sound System)
 Compatible Vehicles*

	Year	Model	Configuration	Trim
Chevrolet	2014-up	Silverado 1500	Crew Cab	WT, LS, LT, LT Z71, LTZ, LTZ Z71
		Silverado 2500HD	Crew Cab	WT, LT, LTZ
		Silverado 3500HD	Crew Cab	WT, LT, LTZ
GMC	2014-up	Sierra 1500	Crew Cab	Sierra, SLE, SLT
		Sierra 2500HD	Crew Cab	Sierra, SLE, SLT
		Sierra 3500HD	Crew Cab	Sierra, SLE, SLT

- * The specified vehicles have been tested and have met compatibility specifications at the time of testing. Compatibility is not guaranteed if the manufacturer has made production changes to the vehicles listed above. **Factory systems equipped with Bose are not compatible with this system.**
- * Zero space subwoofer has been developed based on Blueprint Acoustics fresh air speaker technology.

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

Introduction

- 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 authorized Alpine 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 is expected to lead to death or serious injury.
	Caution Ignoring the content marked by this indication and using the product incorrectly is only expected to lead to injury or property damage.

Types of Precautions

 Forbidden	Indicates actions that are forbidden (must not be performed)	 Mandatory	Indicates actions that are mandatory (must be performed)
 Forbidden	Indicates that disassembly is forbidden.		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

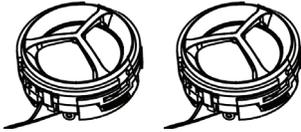
The installation and wiring of this product requires specialized skills and experience. Have the product installed and wired by an authorized Alpine dealer.



Accessory List

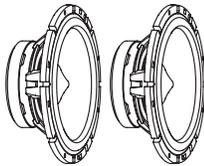
SPT-10T (Front Speaker Kit)

1" Tweeter (2 pcs)



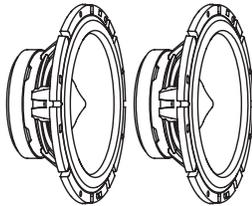
SPT-30M (Front Speaker Kit)

3" Midrange (2 pcs)

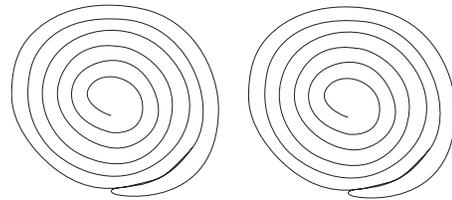


SPT-80W (Front Speaker Kit)

8" Woofer (2 pcs)

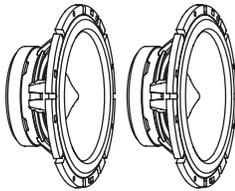


Foam Gasket (2 pcs)

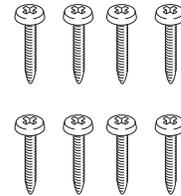


SPT-70 (Rear Speaker Kit)

6-1/2" Coaxial Speakers (2 pcs)



4 x 30mm Screws (8 pcs)

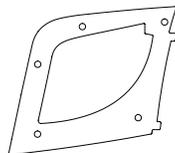


ALP-31GM-POD (Front Dash Pod Kit)

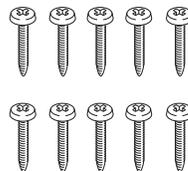
Tweeter Pod Assembly (2 pcs)



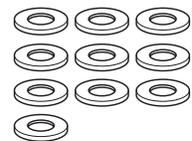
Tweeter Pod Template (1 pc)



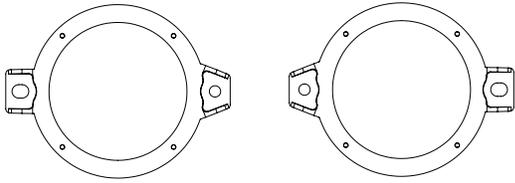
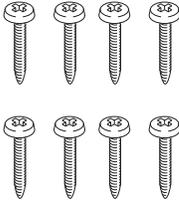
8-16 x 3/8" Screws (10 pcs)



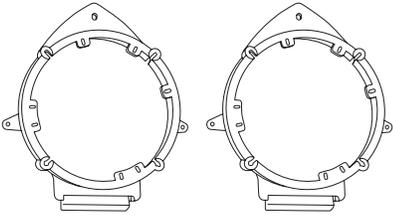
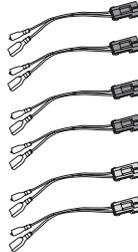
Washers (10 pcs)



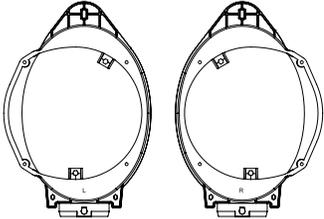
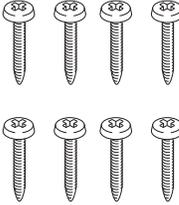
ALP-31GM-MBKT (Front Dashboard Speaker Bracket Kit)

Midrange Speaker Adapters (2 pcs)	#4 x 1/2" Screws (8 pcs)
	

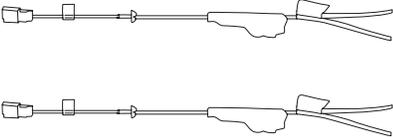
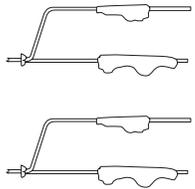
ALP-31GM-SB-SP (Speaker Wire Harness Adapters and Rear Door Speaker Bracket Kit)

Rear Speaker Adapters (2 pcs)	Harness Adapters (6 pcs)	Cable Ties (8 pcs)
		

ALP-31GM-WBKT (Front Door Speaker Bracket Kit)

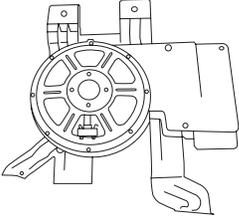
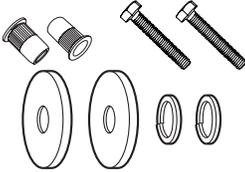
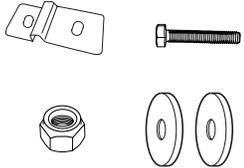
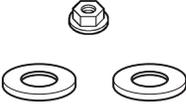
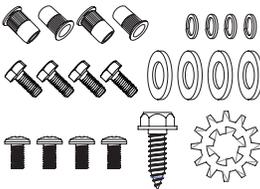
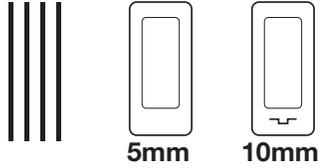
Woofer Speaker Adapters (2 pcs)	#10 x 1" Screws (8 pcs)
	

ALP-31GM-NW (3-Way Speaker Crossover GM)

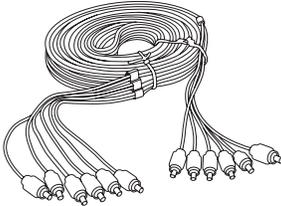
Woofer Crossover (2 pcs)	Tweeter and Midrange Crossover (2 pcs)
	

Accessory List (Subwoofer and Amplifier)

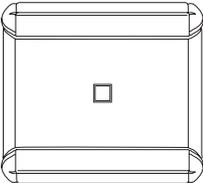
ALP-2131GM-ZSS

<p>Zero Space Subwoofer</p>	<p>Screw Kit-A Upper Mounting Kit</p>	<p>Screw Kit-B Additional Upper Mounting Kit for '14-Up</p>
		
<p>Screw Kit-C Lower Mounting Kit</p>	<p>Screw Kit-D Amplifier/Power Cable Mounting Kit</p>	<p>Foam Duct Gasket (2 pcs) Strip Caulk (4 pcs)</p>
		

ALP-31GM-AUDIO-KIT

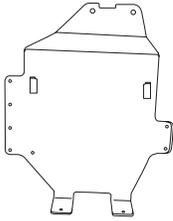
<p>T-Harness</p>	<p>RCA Cable Assy</p>	<p>Cable Ties (10 pcs)</p>
		

MRV-V500

<p>Amplifier (MRV-V500)</p>


ALP-2131GM-ABKT

Amplifier Bracket



Installation Manual

Installation Manual



Warranty Card

Warranty Card



ALP-4GA-AMP-KIT

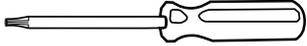
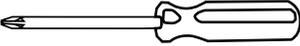
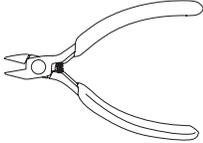
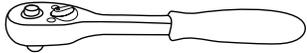
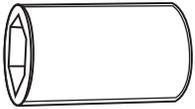
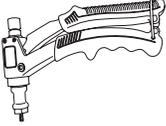
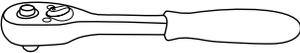
Amplifier Power Harness



8" Cable Ties (10 pcs)



Tools Required

<p>Panel Removing Tool</p>	<p>Pliers</p>	<p>T15, T47 Torx</p>
		
<p>#2 Phillips Screwdriver</p>	<p>25/64" (10mm), 5/32" (4mm) Drill Bits</p>	<p>Wire Cutters</p>
		
<p>7mm, 10mm, 11mm, 1/2" Sockets</p>	<p>Socket Extension</p>	<p>Ratchet</p>
		
<p>18mm Deep Socket</p>	<p>M6 Rivet Nut Tool</p>	<p>Drill</p>
		
<p>Torque Wrench</p>		
		

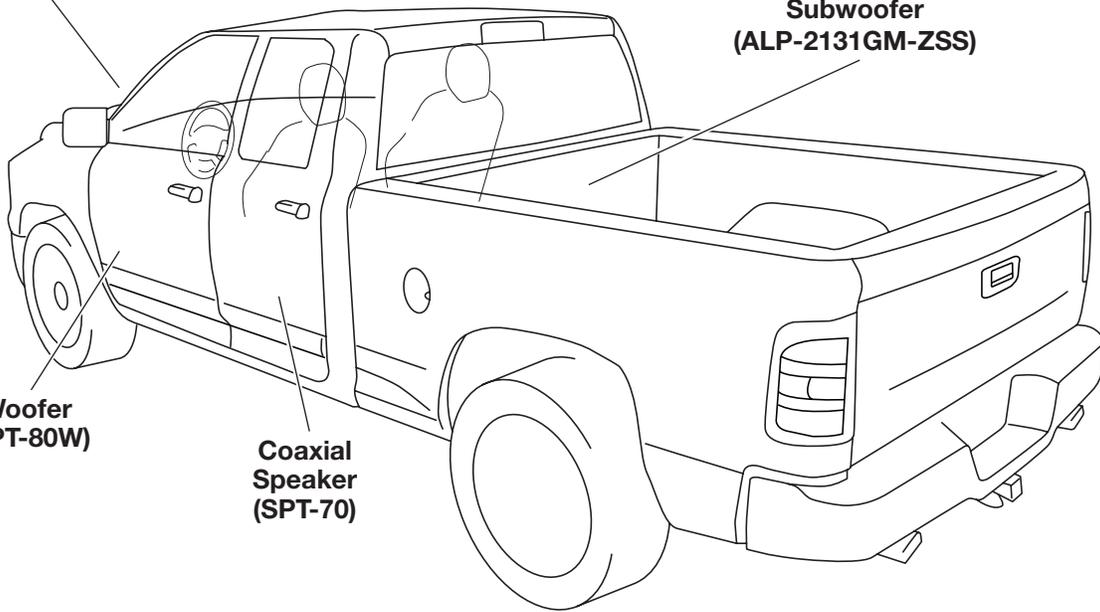
Component Locations

**Tweeter (SPT-10T)
Midrange (SPT-30M)**

**Subwoofer
(ALP-2131GM-ZSS)**

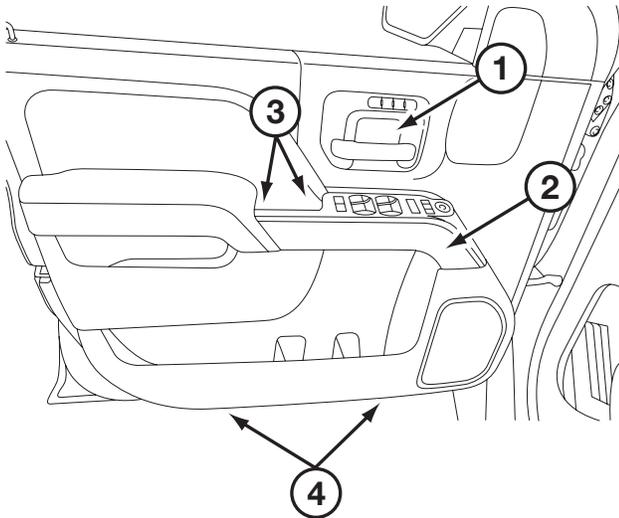
**Woofers
(SPT-80W)**

**Coaxial
Speaker
(SPT-70)**

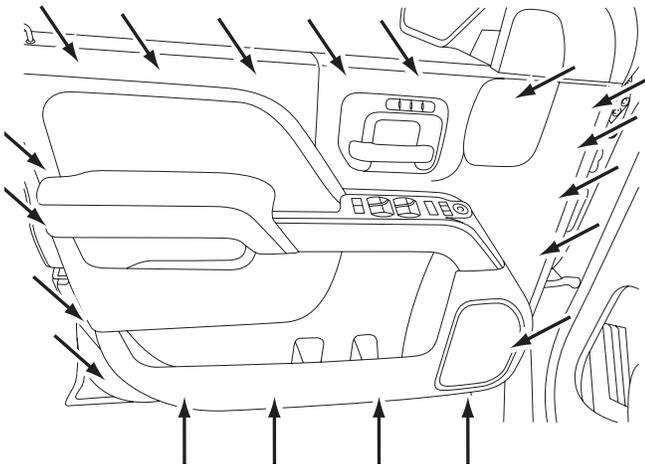


Front Door Panel Removal

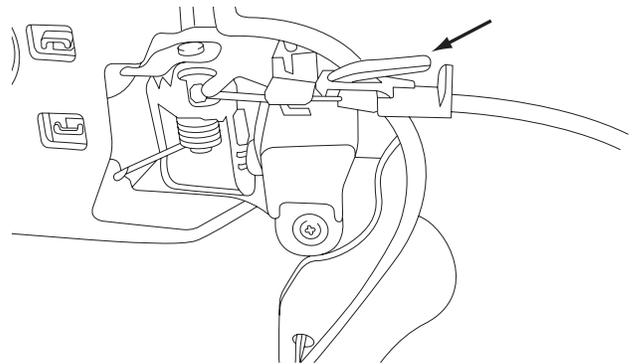
- 1 Remove the door handle cover and extract 1 x 7mm bolt.
- 2 Remove the door trim and extract 1 x 7mm bolt.
- 3 Remove the arm rest cover and extract 2 x 7mm bolts.



- 4 Extract the 2 x 7mm screws at the bottom of the door panel.
- 5 Remove the door panel using a panel removal tool. *Please note clip locations below.*



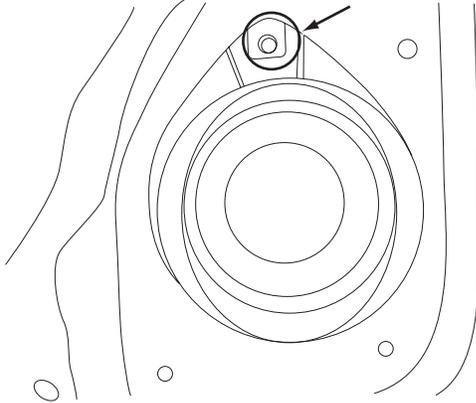
- 6 Press the clip and pull to release the cable ball from the door panel.



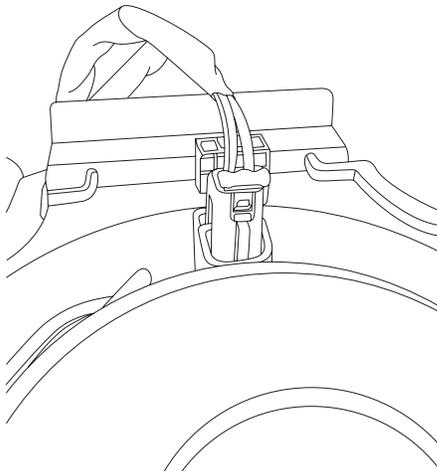
- 7 Unplug the window switch from the back of the door panel.
- 8 Remove the panel completely and set aside.

Factory Speaker Removal (Front Door)

- 1 Remove the factory speaker held by 1 x 7mm screw.
Retain the original screw for the new speaker replacement.

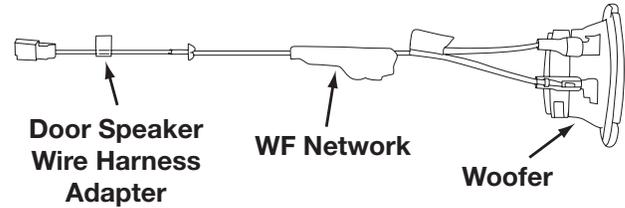


- 2 Unplug the speaker connector from speaker.

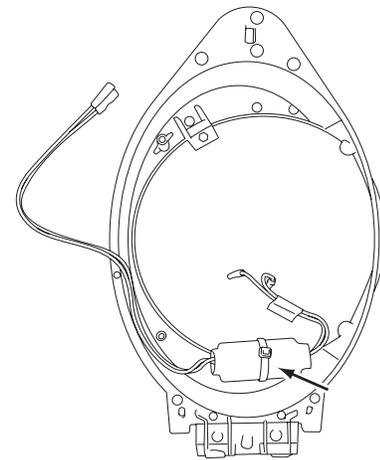


Front Speaker Installation

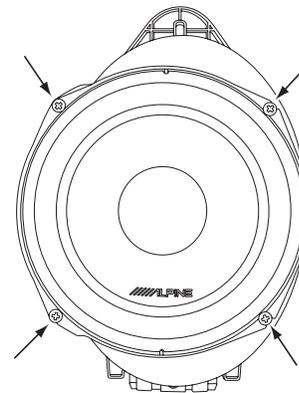
- 1 Connect the door speaker wire harness adapter to WF network.



- 2 Mount the WF Network to the bottom rear tab using the cable tie.



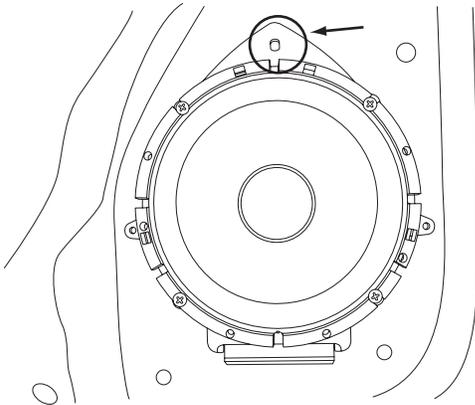
- 3 Apply foam gasket to the rear of the SPT-80W (Woofer).
- 4 Mount SPT-80W (Woofer) to the ALP-31GM-WBKT (Front Door Speaker Bracket Kit) with wire terminals at the bottom using 4 x 30mm screws.



- 5 Connect the network output wires to the speaker terminals. Bundle the cable up and secure using cable tie. Cut extra cable tie length.

- 6 Connect the door speaker wire harness adapter to factory speaker plug.
- 7 Mount the factory speaker plug to the upper mounting tab of the bracket.
- 8 Attach the speaker to the door by inserting the bottom tab first, then use original 7mm bolt to secure.

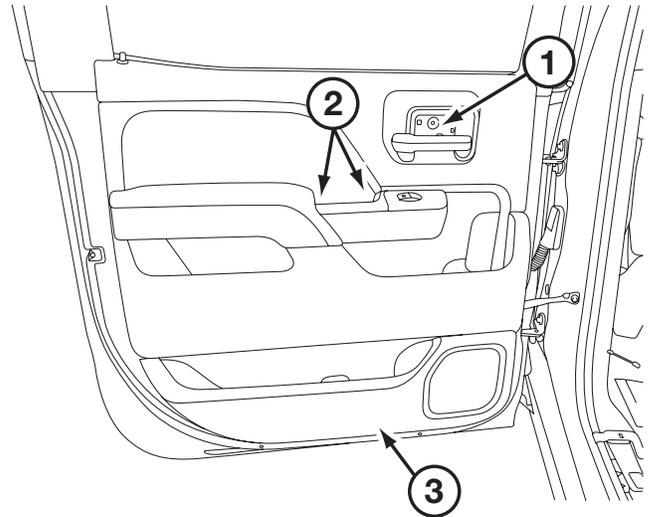
 Ensure that the excess wires do not interfere with door or window components.



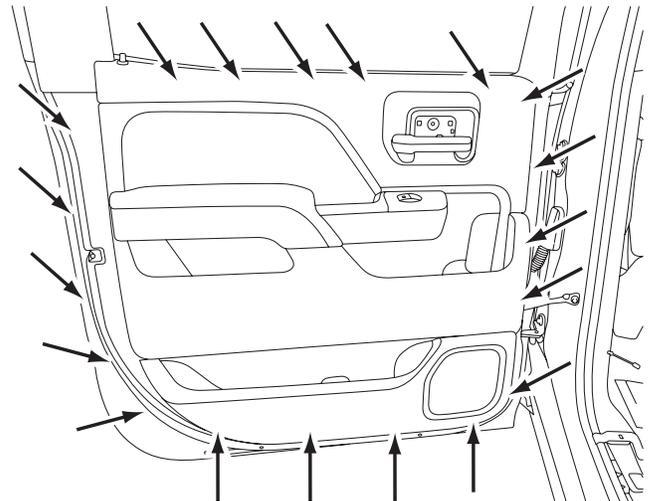
- 9 Install the door panel using the reverse procedures.
- 10 Repeat the process for the other door panel.

Rear Door Panel Removal

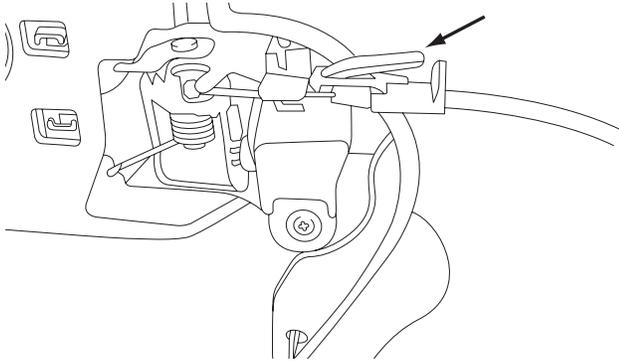
- 1 Remove the door handle cover and extract 1 x 7mm bolt.
- 2 Remove the arm rest cover and extract 2 x 7mm bolts.
- 3 Remove 1 x 7mm bolt at the bottom of the door panel.



- 4 Remove the door panel using a panel removal tool. *Please note clip locations below*



- 5 Press the clip and pull to release the cable ball from the door panel.



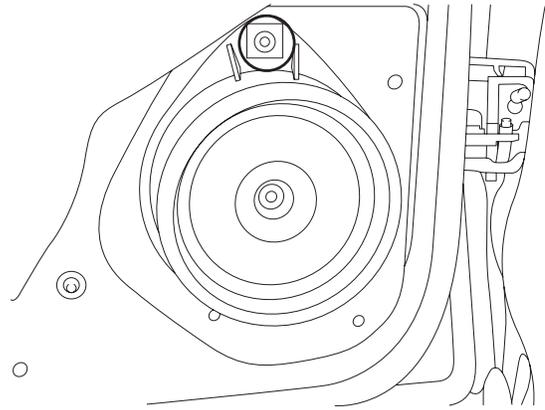
- 6 Unplug the window switch from the back of the door panel.

- 7 Remove the panel completely and set aside.

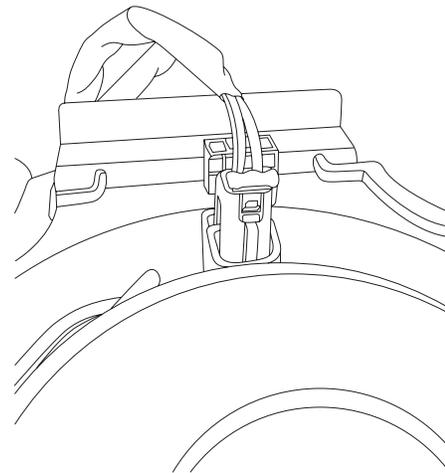
Factory Speaker Removal (Rear)

- 1 Remove the factory speaker held by 1 x 7mm screw.

Retain the original screw for the new speaker replacement.

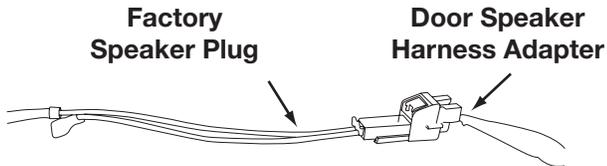


- 2 Unplug the speaker connector from speaker.

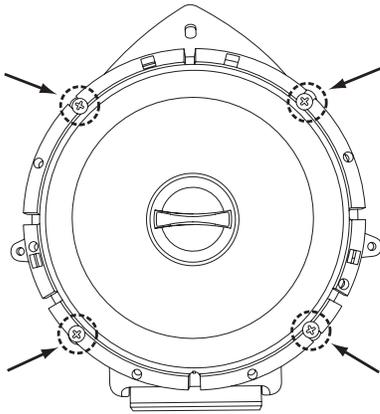


Rear Speaker Installation

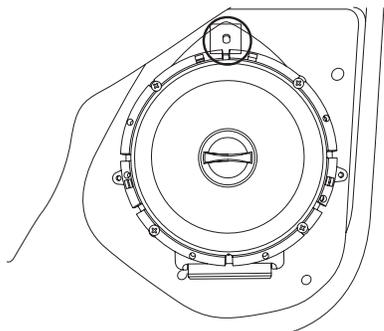
- 1 Connect the door speaker harness adapter to the factory speaker plug.



- 2 Bundle the cable up and secure using a cable tie.
- 3 Cut extra cable tie length.
- 4 Mount SPT-70 to the speaker adapter with terminals at the bottom using 4 x 30mm screws.



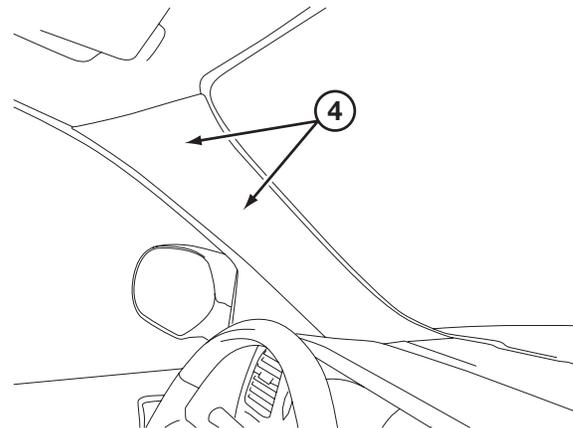
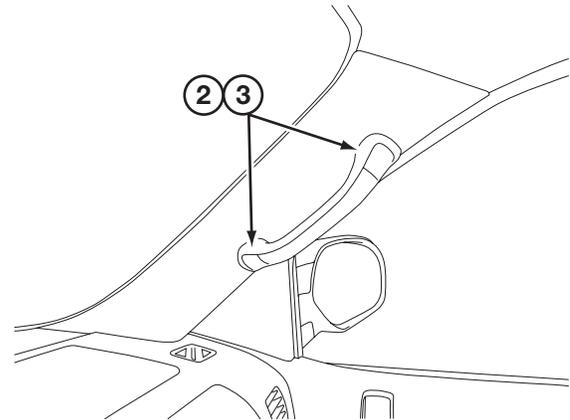
- 5 Attach the speaker connectors to the speaker terminals.
- 6 Attach the speaker to the door by inserting the bottom tab first, then use original 7mm bolt to secure.
Ensure you do not pinch or have the excess wire hanging inside the door panel causing binding of the window when rolled down.



- 7 Install the door panel using the reverse procedures.
- 8 Repeat the process for the other door panel.

Factory A-Pillar Panel

- 1 Remove the A-Pillar cover.
There are slight differences between model year vehicles and options.

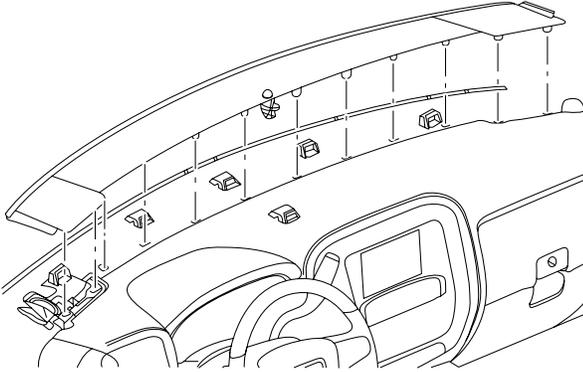


- 2 Remove the A-Pillar screw cover plate.
- 3 Extract 2 x 10mm bolts (Passenger Side).
- 4 Remove the A-Pillar. Carefully unhook the tether clip behind the A-pillar near the top. (Driver Side)

! Tether clip **MUST** be replaced every time the A-Pillar is removed

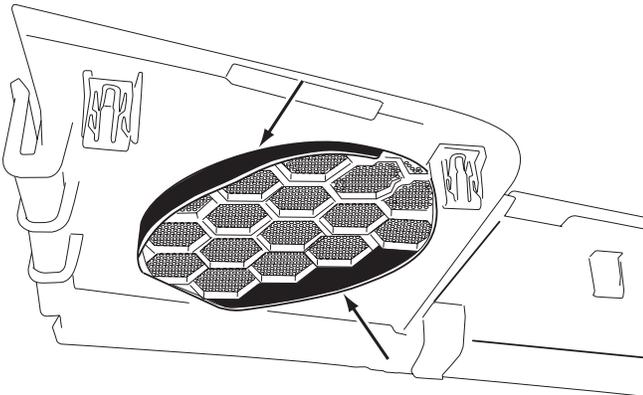
Upper Dashboard Removal

- 1 Use a panel removal tool to disengage the clips of the upper dashboard trim panel. Remove the panel.

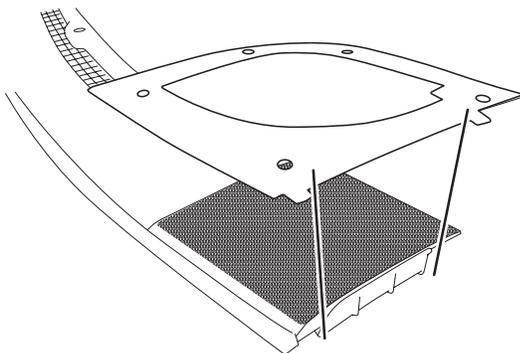


- !** Some models may have a sensor attached. Carefully remove the sensor by twisting counterclockwise.

- 2 Cut the excess plastic underneath the panel (as shown below).

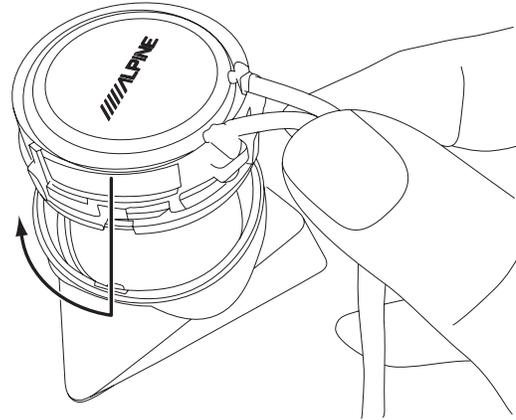


- 3 Align the template on the upper trim panel speaker grills.

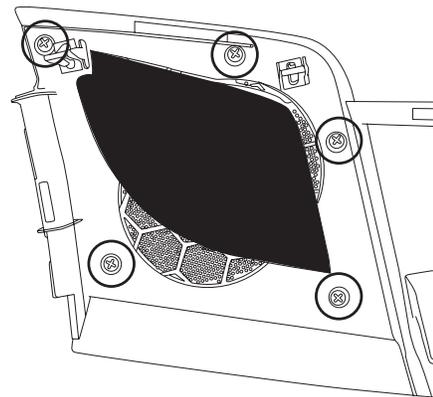


- 4 Mark the holes and area that needs to be cut out.
- 5 Using a cutting tool, cut out the template and use a 5/16 (8mm) drill to cut the holes.

- 6 Install the SPT-10T into the tweeter pod assembly.



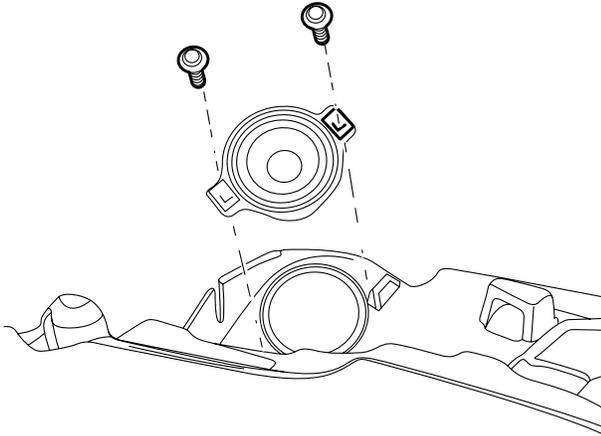
- 7 Align the tweeter pod with the holes and mount using (5 pcs) 8-16 x 3/8" screws and washers. Repeat Steps 4- 6 for the other side using the same template.



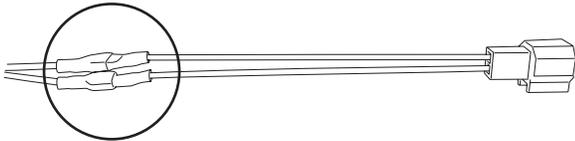
- 8 Repeat for steps for other side.
- 9 Set upper dashboard trim panel aside and continue to midrange speaker installation.

Midrange Speaker Installation

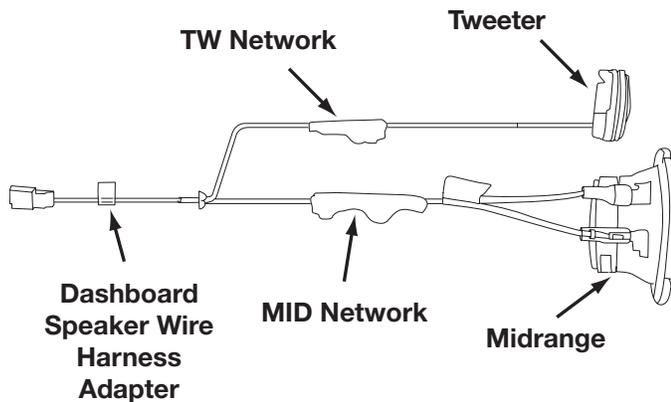
- 1 Remove the factory speaker 2 x 7mm screws then unplug the factory harness.



- 2 Connect the networks to the dashboard speaker wire harness adapter.



- 3 Carefully mount the SPT-30M to ALP-31GM-MBKT (Front Dashboard Speaker Bracket Kit) using the screws provided.
- 4 Connect the dashboard speaker wire harness adapter to the factory speaker plug.



- 5 Connect the MID network output wires to the SPT-30M speaker terminals. Route the midrange speaker adapters to the factory location.

- 6 Secure the MID network and wires with included zip ties. Set aside the tw network cable to connect later.

⚠ Ensure that the network and wiring do not pinch or interfere with any factory parts.

- 7 Mount midrange bracket in the factory location using the 2 x 7mm screws.

Upper Dashboard Panel Installation

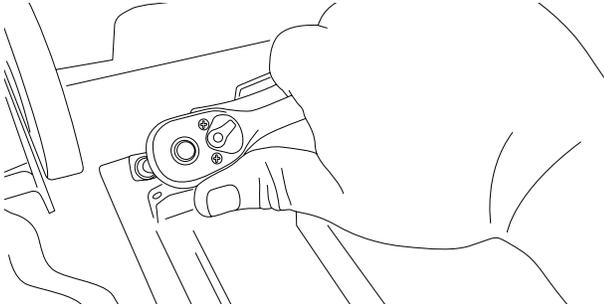
- 1 Connect the TW network output wires to the SPT-10T speaker leads.
Ensure you do not pinch the excess wire under the upper dashboard panel.
 - 2 Secure the TW network and wires with included zip ties.
Ensure that the network and wiring do not pinch or interfere with any factory parts.
 - 3 Install in reverse order
 - Upper Dashboard Trim Panel and sensor (if equipped)
 - A-pillars
 - 4 Install the A-pillar using the reverse procedure and ensure the excess tweeter wires are not exposed.
-  Tighten the handle to 6Nm (53lb/in)
- 5 Repeat the process for the other A-Pillar.

VEHICLE PREPARATION

Battery

! Caution while performing this step do not make contact with the battery terminals.

- 1 Disconnect the ground wire from the negative terminal of the battery.



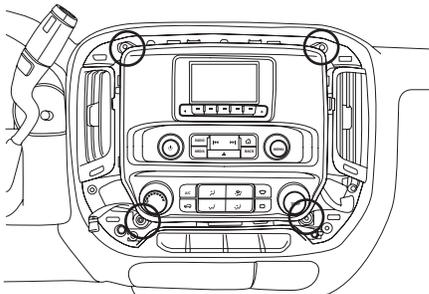
Removing Panels and Seat

Factory Radio Removal Procedure

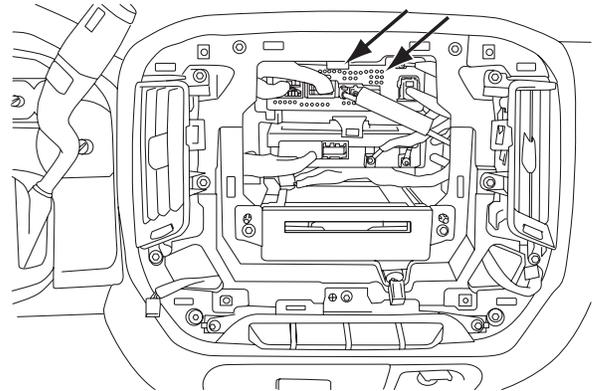
- 2 Unsnap and remove center dash trim piece from around the radio and climate controls.



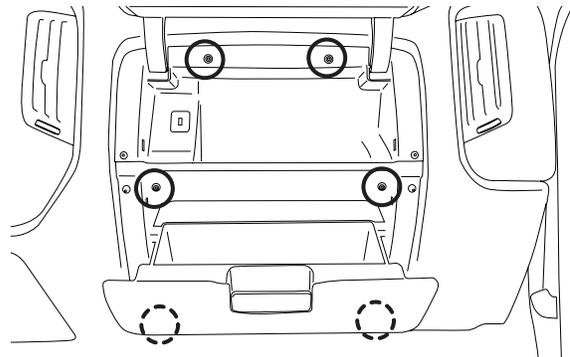
- 3 Remove (4) 7mm screws from the radio and climate control bezel.



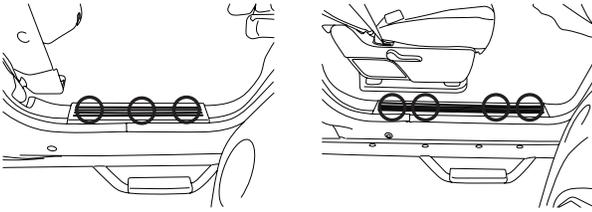
- 4 Please locate one green plug and one black plug. This will be used to connect T-harness in line.



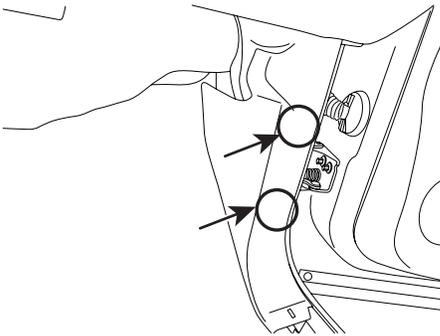
- 5 Remove the passenger's side top and bottom glove box compartments by extracting (6) T15 Torx screws.



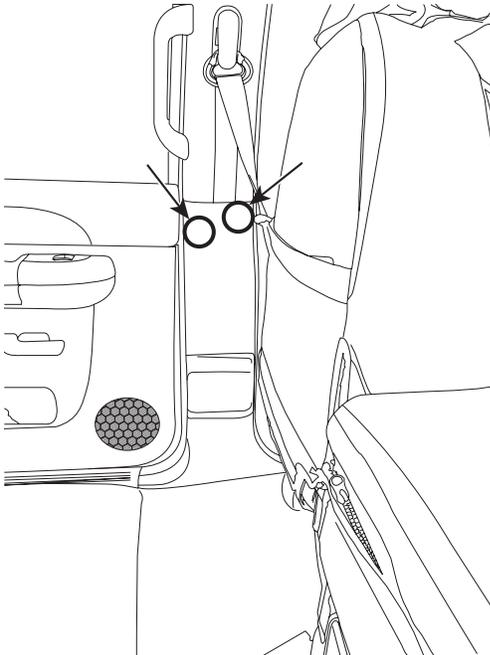
- 6** Remove both the driver and passenger side running board panels by disengaging all clips.



- 7** Remove the driver and passenger kick panel by disengaging all clips.



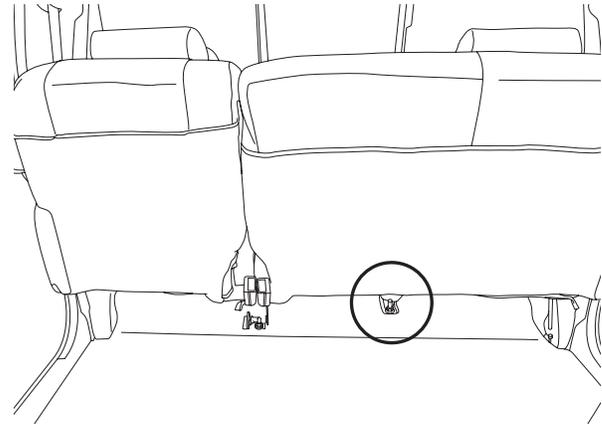
- 8** Remove both the driver and passenger B-Pillar panels by disengaging all clips.



Removing Rear Seat bench (2-sections)

! Some model year vehicles are slightly different mounting points.

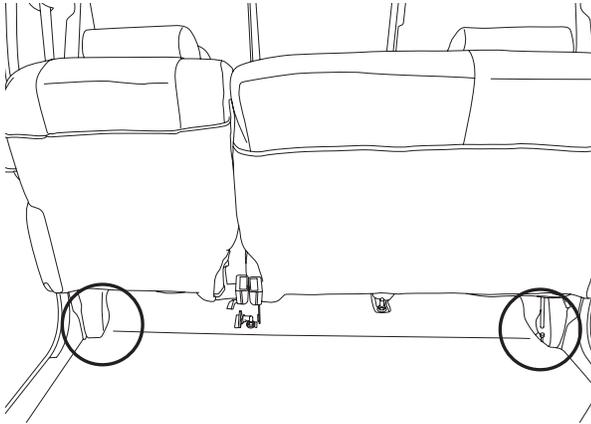
- 1** Fold the rear seats up and use a 18mm deep socket to removed the rear seatbelt anchor. Pull the seatbelt up through the seat.



! During installation process, torque the rear seat belt anchor to 45Nm (33ft/lb).

- 2 Using a 18mm socket, remove the bolts under the rear seat bench.

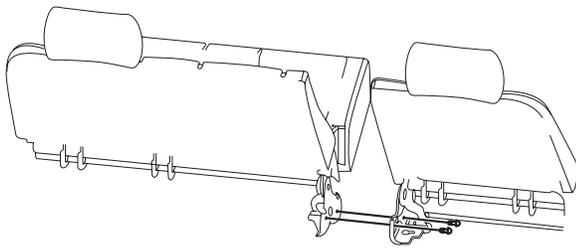
The number of bolts vary on some vehicles.



! During installation process, torque the seat bench to 50Nm (33ft/lb).

- 3 The seat bench is in two sections and held together by 10mm bolts. Remove the two bolts holding the two bench sections together.

Direction of the bolts varies on some vehicles.

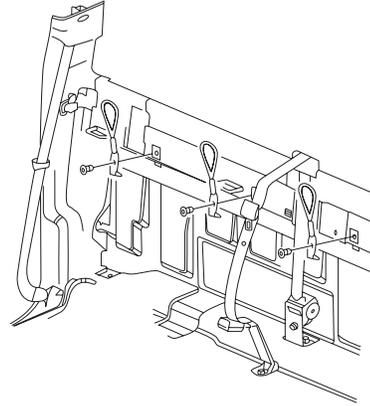


- 3 Carefully remove the seat bench sections from the vehicle by lifting the seats up and away from the back wall.

! Caution: the seat bench sections are heavy and have sharp edges in back and below which could cause injury.

Removing the Child Seat Restraint Cable Loops and Rear Window Panels

Remove the three (3) Child seat restraint cable loop by using a T-47 Torx wrench on the Torx bolts.

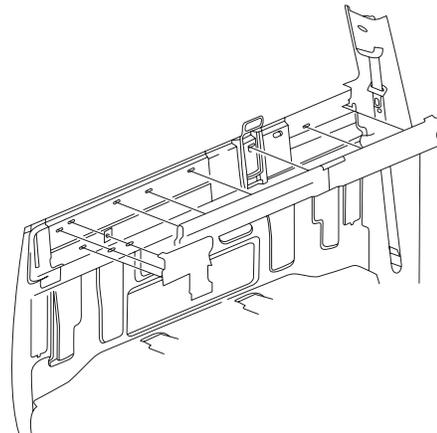


! During installation process, torque the child seat tether to 35 Nm (26ft/lb).

Removing Rear Window Panel

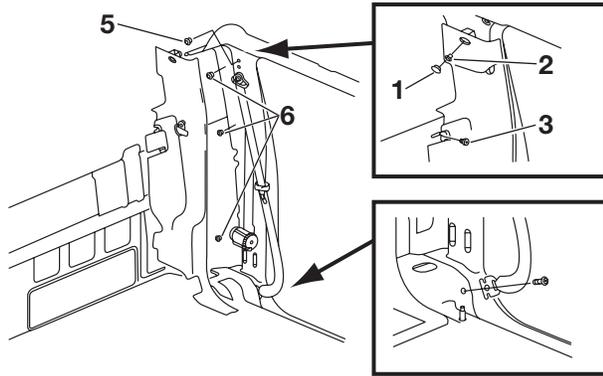
- 1 Remove the back covers by unclipping the seat bench panels.

There are slight differences between model year vehicles and options.

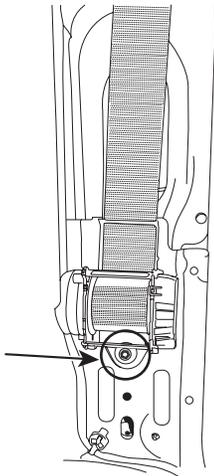


Removing C-Pillar Side Panel

- 1 Remove the bolt covers [#1] at the top of the panels and using a 7mm deep socket, unbolt [#2].
- 2 Remove the plug at [#3] and unclip the panel from [#5 & #6].



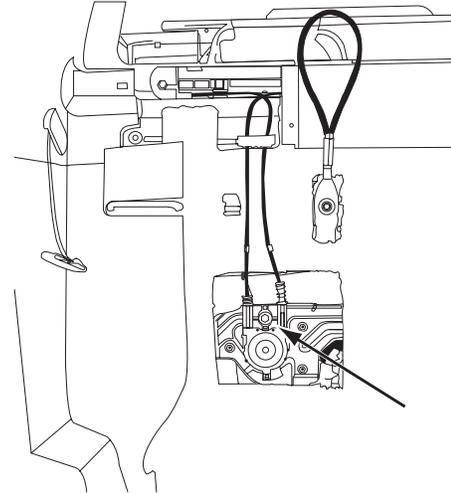
- 3 Disconnect the rear driver seatbelt from the side of the cab by using a T-47 Torx wrench.
- 4 Carefully move the seatbelt out of the way. Removal is necessary for installing the Zero Space Subwoofer.



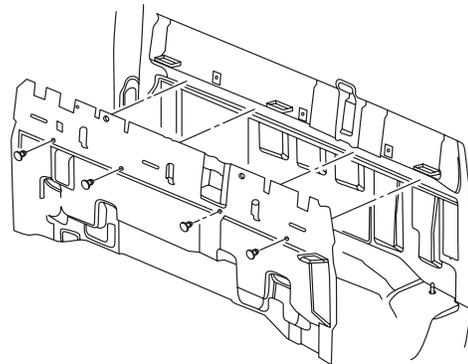
! During installation process, torque the rear seat belt retractor bolt to 45 Nm (33ft/lb).

Removing and Cut the Insulator Pad

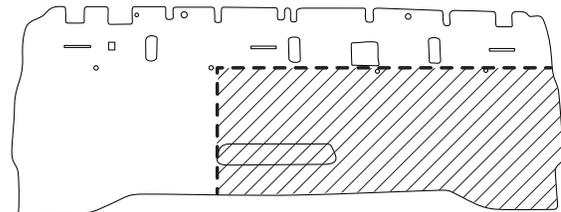
- 1 Locate the window cable assembly, unbolt using a 10mm socket so the insulator pad can be removed. *Some vehicles may not have this option depending on trim level.*



- 2 Remove the rear cab insulator pad by removing the (4) plugs holding the pad. *Vehicles may vary on the plugs and the actual material of the insulator pad.*



- 3 Cut the insulator as shown to accommodate the amplifier and Zero Space Subwoofer.



Removing Rear Carpet

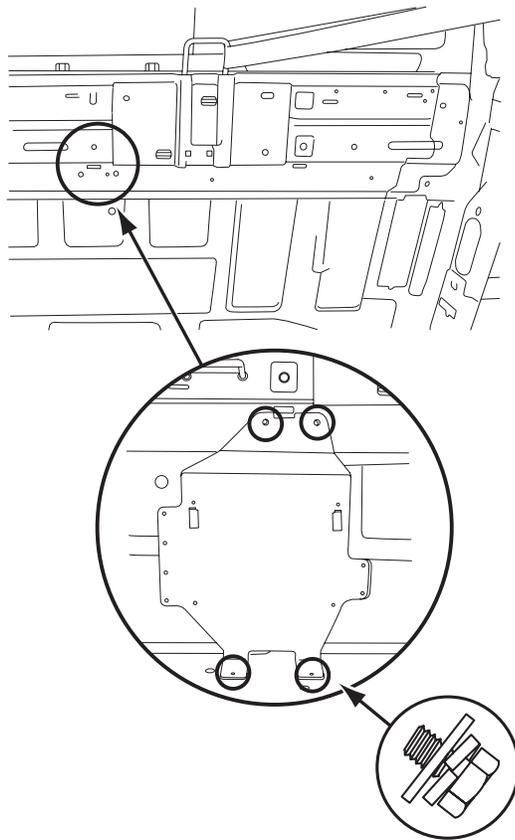
Pull the carpet and insulation back to expose the rear seat floorboard.

AMPLIFIER INSTALLATION

Installing Amplifier Bracket

 A rivet nut tool is required for this installation (not included).

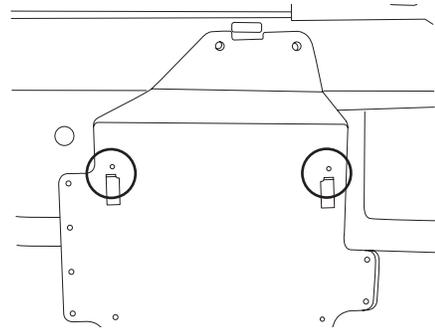
- 1 Position the amplifier bracket to the rectangular opening below the center child seat restraint anchor as shown.



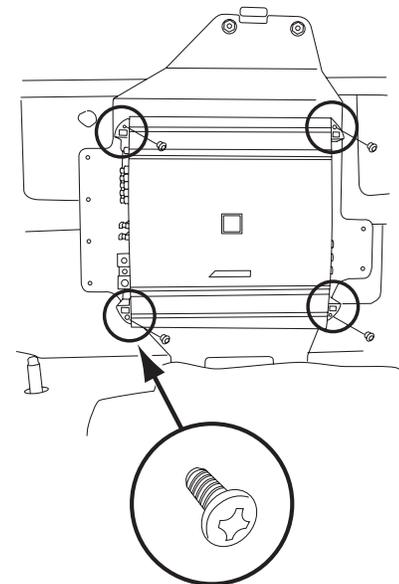
- 2 Mark the rivet nut locations with a punch tool.
Ensure the bracket is aligned top and bottom before marking the holes.
- 3 Remove the Amplifier bracket and use a 25/64" (10mm) drill bit, drill 4 holes in the vehicle for the rivet nuts.
- 4 Clean any metal shavings and sharp edges after drilling.
- 5 Install the M6 rivet nuts per tool manufacturer's procedure.
- 6 Install the amplifier bracket to the vehicle using Screw Kit D (Amplifier Bracket Mounting Kit) apply the washer, lock washer and secure using the 11mm bolt.

Installing Amplifier

- 1 Hang the amplifier to the bracket tabs as shown.

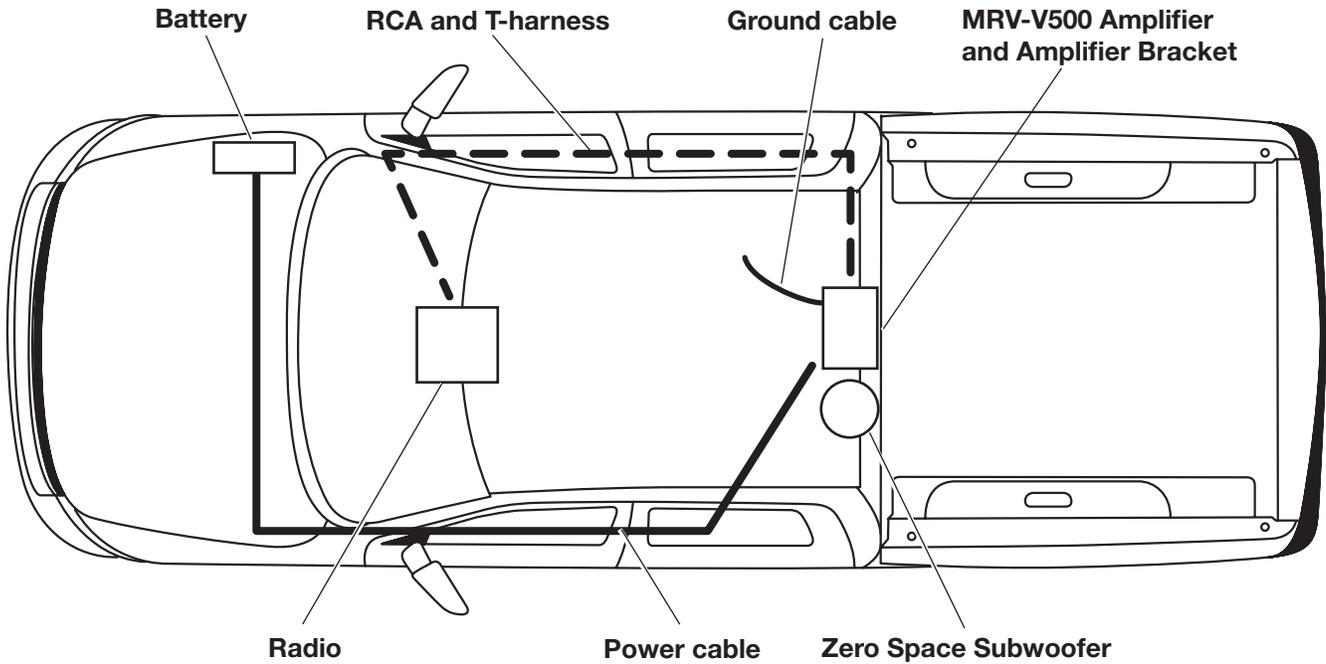


- 2 Mount the amplifier by lifting up and use the supplied (4) M4 pan head phillip screws from Screw Kit D (Amplifier Bracket Mounting Kit) to secure the amplifier bracket to the vehicle.



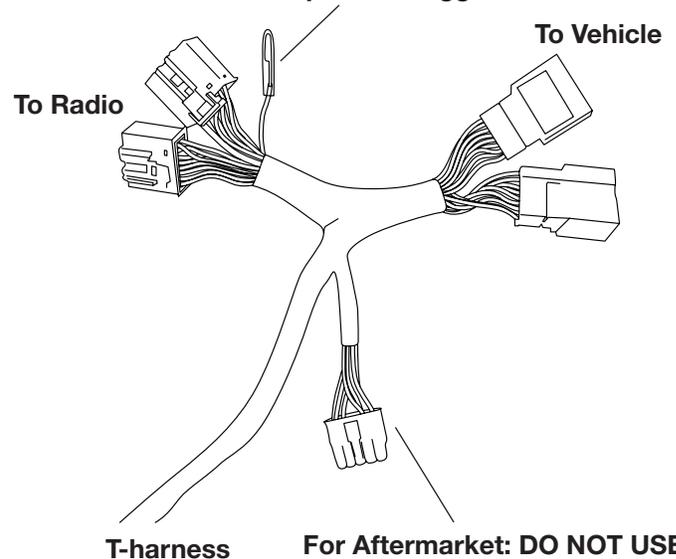
T-HARNESS AND RCA CABLE INSTALLATION

Routing the T-Harness



- 1 Locate the main head unit harness and install the T-harness to the factory connectors.
- 2 Connect the Blue/White lead to the Amplifier turn on (+12v positive trigger) of the headunit.
- 3 Install the T-harness to the factory connectors.
- 4 Route the wires:
 - Start from the head unit opening
 - Behind the glove box
 - Down the passenger kick panel
 - Door sill
 - Along the back wall
 - To the amplifier
- 5 Route the RCA cables by following the T-harness route. use cable ties where necessary.

For Aftermarket: Amp turn on from radio
For OEM: to +12v positive trigger



For Aftermarket: DO NOT USE
For OEM radios: Use a PAC
AUDIO LP3-4 Line Output
Converter (not included)

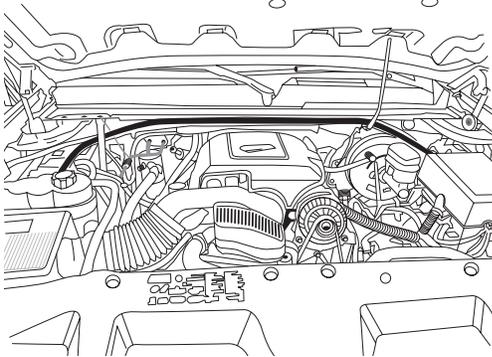
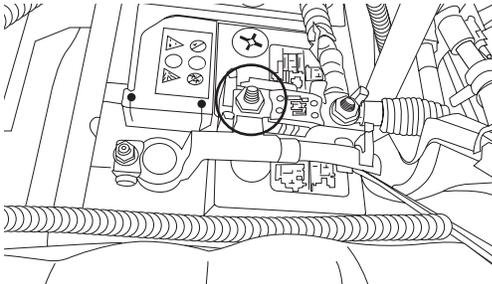
AMPLIFIER POWER HARNESS

Installing and Routing Engine Bay

! Confirm the Negative terminal is disconnected.

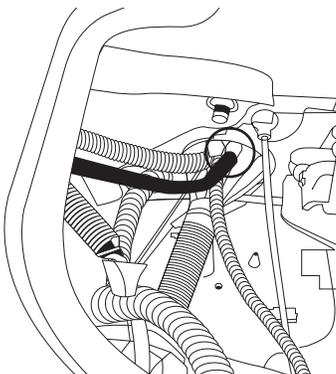
1 Start nearest the battery and route the positive cable throughout the engine bay as shown.

! Do not connect the Power cable to the terminal.



2 **!** Caution: Ensure you do not cut any wires that are already leading into the interior of the cab.

- Leave enough length to attach the ring terminal to the positive side of the battery.
- Route the cable to the driver side grommet at the firewall.
- Pull the power cable from the cabin.
- Tape-up any gaps in the grommet from the power cable that might let in moisture or fumes from entering the interior cab.

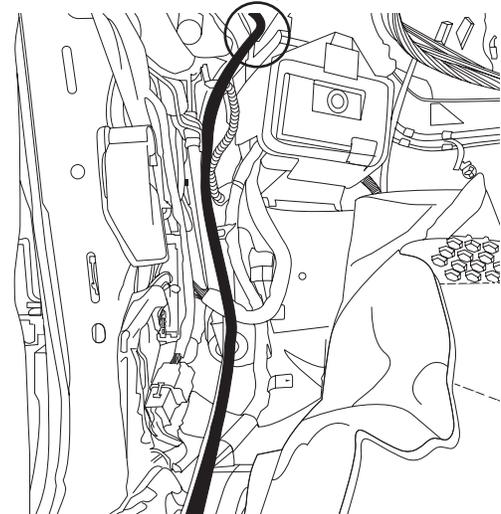
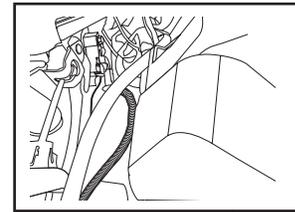


Routing Interior Cab

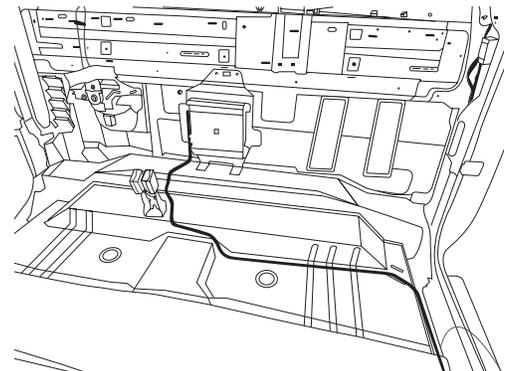
! Ensure that the cable routing does not interfere with any moving parts or vehicle safety equipment.

! Do not attach cable ties to any moving parts or safety equipment harnesses.

1 Route the cable under the dash and along the side of the cabin. Use cable ties to prevent any interference.



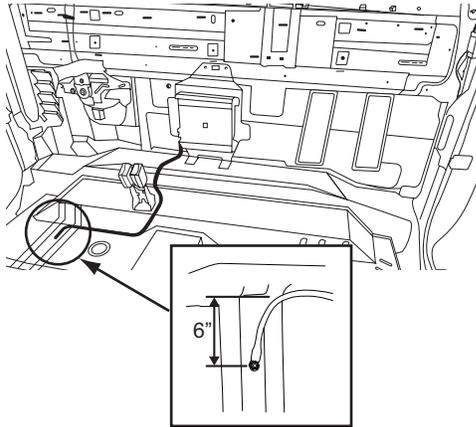
2 Pull carpet back and route the cable to the rear of the cab ensuring it will not be pinched or cut inside the cab. Use cable ties as needed.



3 Route the cable to the amplifier terminals as shown above.

Installing Ground Wire

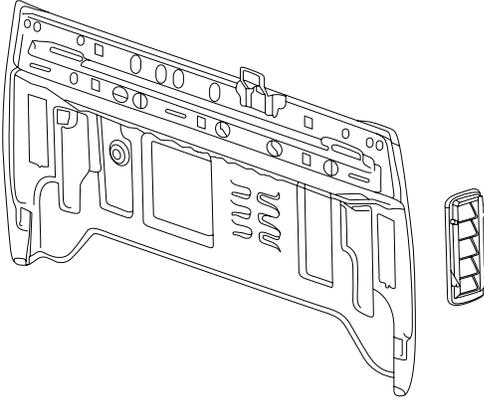
- 1 Start by measuring the position from the hump in the cab (6") and remove the paint until you have bare metal. Attach the ground cable. Removing the paint is crucial for a proper ground point.



- 2 Use a punch tool to mark the hole location.
- !** Confirm that there is nothing underneath the marked hole location.
- 3 Drill a 5/32" (4mm) hole for the sheet metal screw.
 - 4 Clean up the area from metal shavings and debris.
 - 5 Use the sheet metal screw and serrated washer from Screw Kit D (Amplifier Bracket Mounting Kit) and install the ground terminal.
 - 6 Route the negative ground wire around the center seatbelt toward the amplifier terminal as shown.

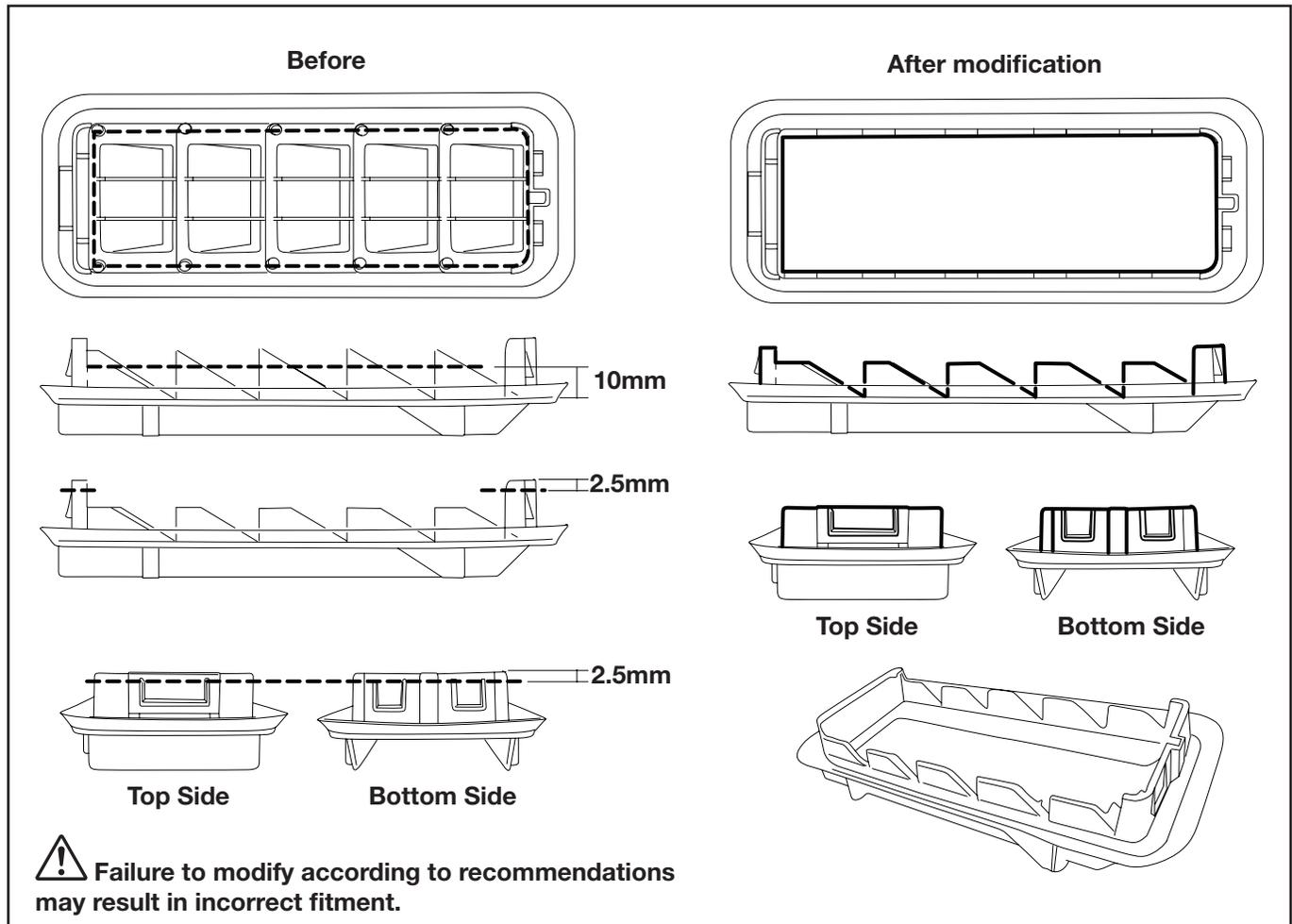
ZERO SPACE SUBWOOFER INSTALLATION

- 1 Remove the driver's side rear cab pressure vent from the vehicle by pressing the tab from the bottom and push the vent through the back. The vent will fall to the ground.



- 3 Reinstall the modified pressure vent by pushing it in from the outside in.

- 2 Cut the vent as shown.

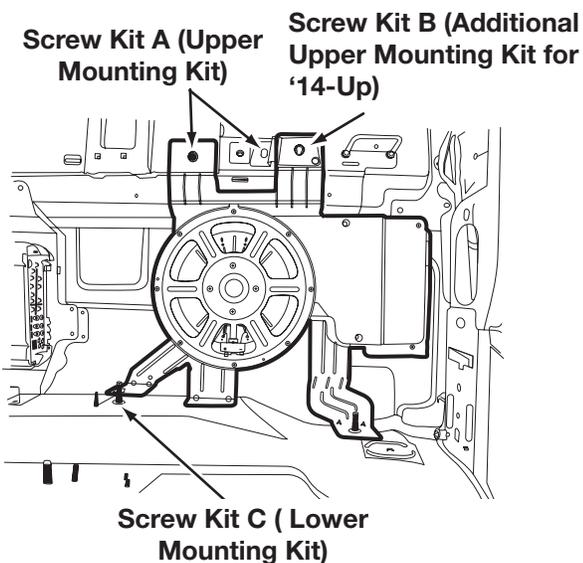


Installing the Rivet Nuts

! A rivet nut tool is required for this installation (not included)

! Please install Screw Kit B (Additional Upper Mounting Kit for '14-Up) before proceeding.

- 1 Align the lower center bracket over the factory bolts on the carpet.
- 2 Press the upper brackets of the Zero Space Subwoofer against the body.
- 3 Using a Punch tool, mark the hole location as shown below.

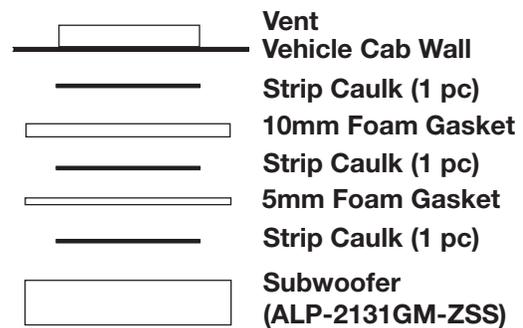


- 4 Remove the Zero Space Subwoofer.

! If the Zero Space Subwoofer is not removed, metal shavings will damage the voice coil and/or speaker.

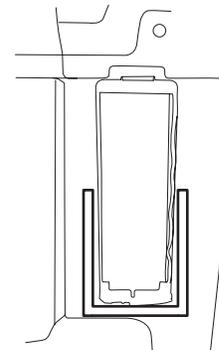
- 5 Use a 25/64" (10mm) drill bit to drill the holes locations. Clean any metal shavings/edges.
- 6 Install the M6 rivet nuts according to the tool manufacturer's instruction.

SUBWOOFER PREPARATION

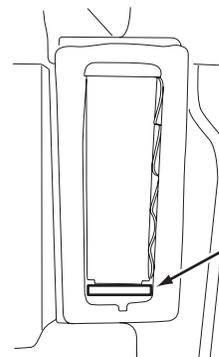


! Due to the unique sealing properties of the foam and compound, it can only be applied once.

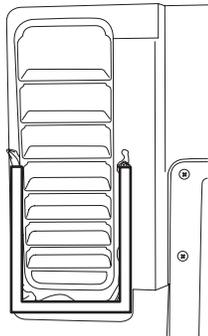
- 1 Apply one piece of the strip caulk to the body of the vehicle 1/2" away from the modified pressure vent opening as shown below.



- 2 Position the 10mm foam gasket over the opening and apply strip caulk to the bottom as shown.
- 3 Fold a piece of the strip caulk and put over the cut out of the gasket.



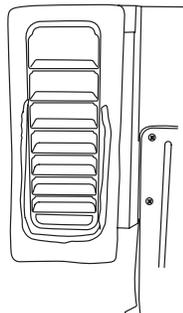
- 4 Apply one piece of the strip caulk around the vent of the Zero Space Subwoofer 1/2" from the edge as shown.



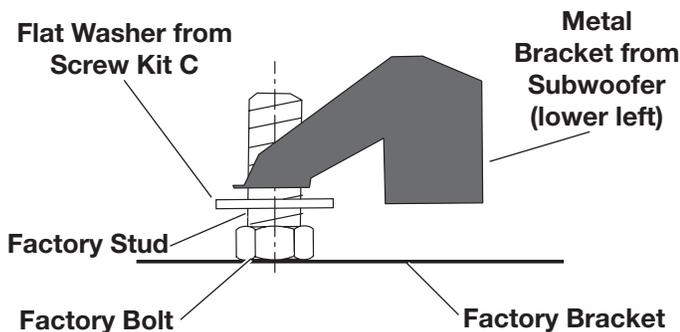
- 5 Position the 5mm foam gasket over the vent and press firmly against the strip caulk.

! Observe that one side is longer at the bottom. The longer side fits over the bottom of the vent.

- 6 Apply one piece of the strip caulk around the vent of the Zero Space Subwoofer 1/2" from the edge as shown.

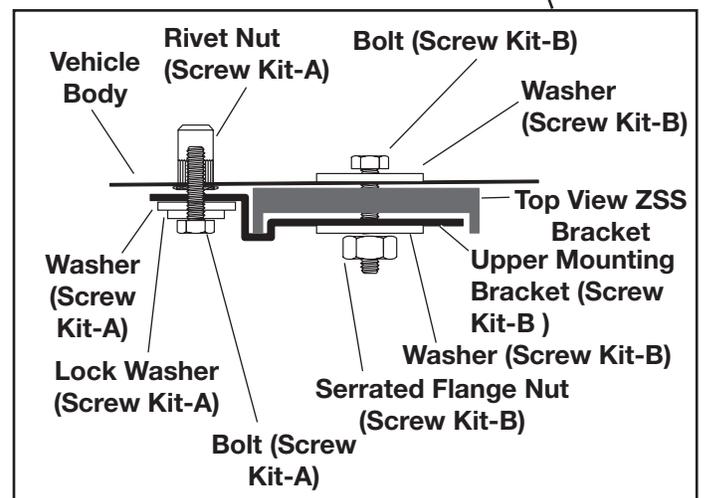
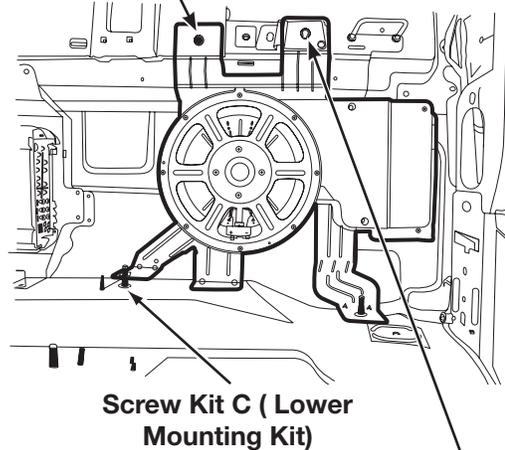
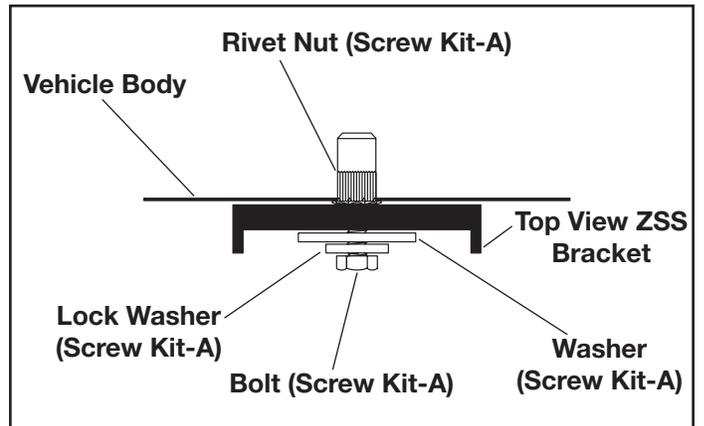


- 7 Install one washer from Screw kit C onto the left side factory bolt.



- 8 Position the Zero Space Subwoofer on top of the carpet over the lower bolts and insert the zero space subwoofer into the modified pressured vent.

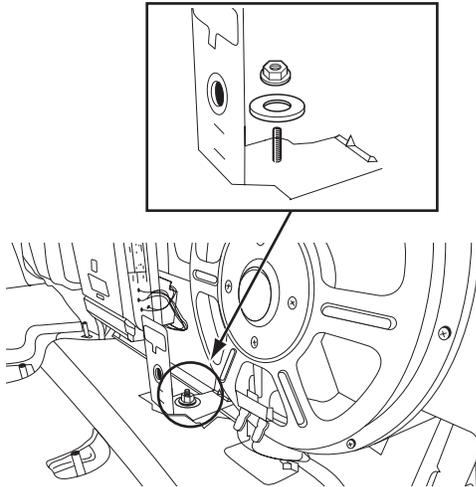
- 9 Gently apply pressure on the upper brackets to position the Zero Space Subwoofer over the rivet nuts.
- 10 Use the Screw Kit A (Upper Mounting kit) apply the lock washer and secure using the 11mm bolt.



11 On the left side bottom bracket, install the washer, then the serrated flange nut from Screw Kit C (Lower Mounting Kit).

The bottom right side bracket will be secured when the rear seat bench is reinstalled.

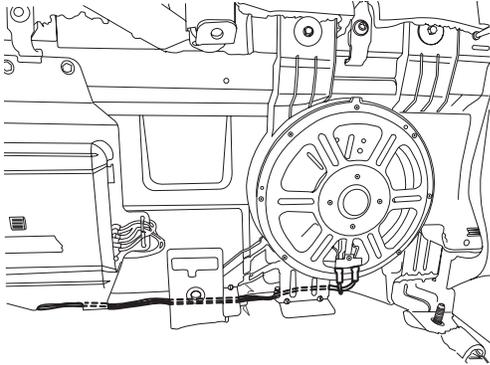
! During installation process, torque the seat bench to 50Nm (33ft/lb).



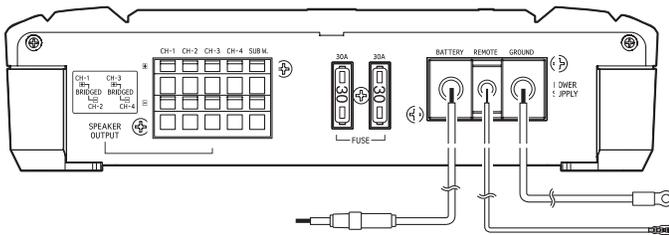
WIRE HOOKUP

Connecting the Subwoofer Cable

- 1 Connect the subwoofer cable to the Zero Space Subwoofer and route the cable behind the subwoofer brackets. Observe the polarity of the wires.



Connecting Amplifier



- 1 Attach the wires and cables to the amplifier:
 - a. Connect the positive and negative power cables to the amplifier.
 Red = +12 Battery
 Black = Ground
 Blue/White = Remote
Speaker wires must be completely secured to the speaker terminals with no visible exposed or stray wires.
 - b. Connect the blue/white stripe remote turn on wire from the T-Harness to the amplifier "Remote" input.
 - c. Connect the T-Harness speaker wires.

Amplifier	Positive	Negative
CH1	White	White/Black
CH2	Gray	Gray/Black
CH3	Green	Green/Black
CH4	Violet	Violet/Black

- d. Connect the Subwoofer wire.

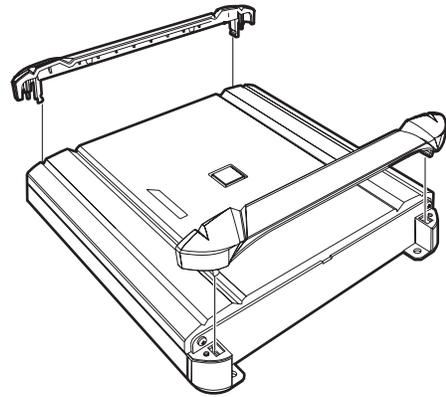
Amplifier	Positive	Negative
Sub-W =	Printing	Non-Print

Ensure the correct wires and polarities are installed correctly.

- e. Connect the RCA cables to the amplifier. Ensure the specific channels are connected correctly.

- 2 Use the 6" supplied cable tie for the separated wire bundles and attach it to the amplifier bracket in its corresponding location.

- 3 Install the left and right amplifier terminal covers to the amplifier.



Connecting Battery

- 1 Remove the 12mm nut from the positive battery post.
- 2 Attach the Ring Terminal from the power cable to the screw post and reinstall the nut.
- 3 Recheck the entire system to see that everything has been properly installed.

TEST THE SYSTEM

Reinstall the Head Unit before performing the test.

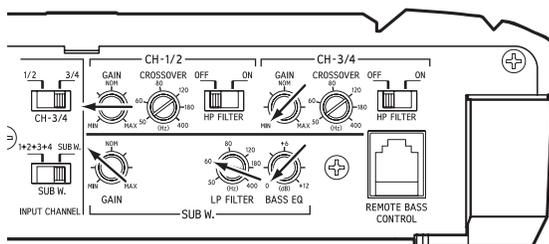
Testing Audio

- 1 Connect the RCA Cable to each specific channel to the head unit:

Head Unit	RCA
Front Right	= F-Red
Front Left	= F-White
Rear Right	= R-Red
Rear Left	= R-White
Sub-W Right	= S-Red
Sub-W Left	= S-White

Attention: Ensure each channels are connected correctly.

- 2 Connect the T-Harness connectors to the head unit side.
- 3 Reinstall the head unit back into the dash and ensure the wires are properly routed not to get in the way of the fan of the head unit or any mechanical functions.
- 4 Reattach the battery's ground wire to the negative side of the battery post.
- 5 Turn on the head unit and ensure all speakers and subwoofer is working.
- 6 Test the fader and balance controls to ensure everything has been correctly installed.
- 7 Set the gain controls and Bass EQ setting on the amplifier to match the head unit output. Alpine recommends setting crossover and gain settings as shown below:



⚠ Caution, incorrect settings of the gain controls may cause damage to the speakers or amplifier.

⚠ For Alpine Tunelt compatible radios, use Tunelt from the Apple App Store or Google Play Store to download vehicle specific tuning.

Checking Vehicle

- 1 Check the vehicle functions; Foot brake, hood latch release, turn signals, emergency hazard lights, A/C controls, etc.
- 2 Disconnect the battery ground wire from the battery.

REINSTALLATION

Reinstalling Vehicle Parts

- 1 Reinstall the insulator pad, seatbelts, child seat anchors, panels, covers, seat bench sections in the reverse order as it was taken out.
- 2 Torque specifications:
 - Rear Seat Anchor Plate Nut: 45 Nm (33ft/lb)
 - Rear Center Seat Belt Retractor Bolt: 45 Nm (33ft/lb)
 - Seat Bench: 50 Nm (37ft/lb)
 - Child Seat Tether: 35 Nm (26ft/lb)
 - Rear Seat Belt Retractor Bolt: 45 Nm (33ft/lb)
 - Front Fender Rear upper Brace: 9 Nm (80 lb/in)
 - Body Lock Pillar Garnish Molding Screw: 2 Nm (18 lb/in)
 - Handle: 6Nm (53lb/in)
- 3 Reinstall the ground battery cable to the battery negative post and torque the nut to the manufacturer's specification of 5 Nm (44lb/in). Reinstall the metal brace.

Final Clean-Up

- 1 Clean up the interior of the vehicle so there are no materials, metal shavings, wire pieces, debris left in the vehicle.
- 2 Make a final vehicle inspection to ensure everything has been properly installed and reconnected to the manufacturer's specifications.

⚠ If there are any questions about the installation process please call Alpine Technical Support 1-800-ALPINE-1 (1-800-257-4631).