

Z1 D41 FRONTIER BASS PACKAGE FENDER INSTALLATION MANUAL



This Installation Manual is intended for the following models:	
2022+	Nissan Frontier (D41)

PROLOGUE:

Study these instructions completely before proceeding to assembly. The installer must have a thorough knowledge of automotive systems operation. If unfamiliar with any of the concepts outlined in this instruction, we recommend the installation be completed by a qualified professional.

WARNING!

Extreme caution should be taken when performing maintenance or performance upgrades to your vehicle. Please observe and abide by any Warning or Caution labels placed on the various components and tools used when servicing your vehicle. If you have any questions regarding installation or the various components included with the Z1 D41 Frontier Bass Package Fender, consult with a Professional Mechanic, or contact Z1 Off-Road for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	Subwoofer with Enclosure
2	1	Side MOLLE Panel
3	2	M10 Peg
4	2	Rubber Grommet
5	1	Subwoofer Harness
6	1	Amp Harness
7	4	M6 Flanged Head Bolt
8	1	Amplifier Bracket
9	1	Amplifier (Model depends on selection)
10	1	Power Cable
11	1	Ground Cable
12	1	Cable Clip
13	4	Zip Tie
14	1	M3 Flat Head Screw, 25mm
15	4	M4 Socket Head Screw, 10mm
16	1	10mm Hex Screw
Fender Audio:		
17	1	Amp Bracket Add-On
18	3	M6 Flanged Head Bolt
19	1	M6 Threaded Spacer

TOOLS REQUIRED:

- Ratchet
- Ratchet Extension(s)
- Assorted Metric Sockets
- Assorted Metric Wrenches
- Trim Removal Tools
- Screwdrivers
- Allen/Hex Keys

SAFETY REQUIREMENTS:

- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Only operate drivetrain in safe space and well-ventilated areas.

BEFORE YOU BEGIN:

Remove contents from the Z1 D41 Frontier Bass Package Fender and verify that ALL necessary hardware is present.

WARRANTY:

All components carry a warranty of (1) one year from date of purchase. Abuse, misuse, or improper installation voids all warranties. Please follow the Installation Manual, break-in, and tuning instructions carefully.

If you are having issues with your Z1 Audio setup, please review the [TROUBLESHOOTING MANUAL](#) to narrow down the problem first. If you have further questions or need a replacement component, please contact our Z1 Customer Service specialists.

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AMP:

1. Remove the (2) two bolts securing the Driver's Seat to the vehicle. You may have to pull up a small amount of plastic trim to access the bolts. *Figure 1.*

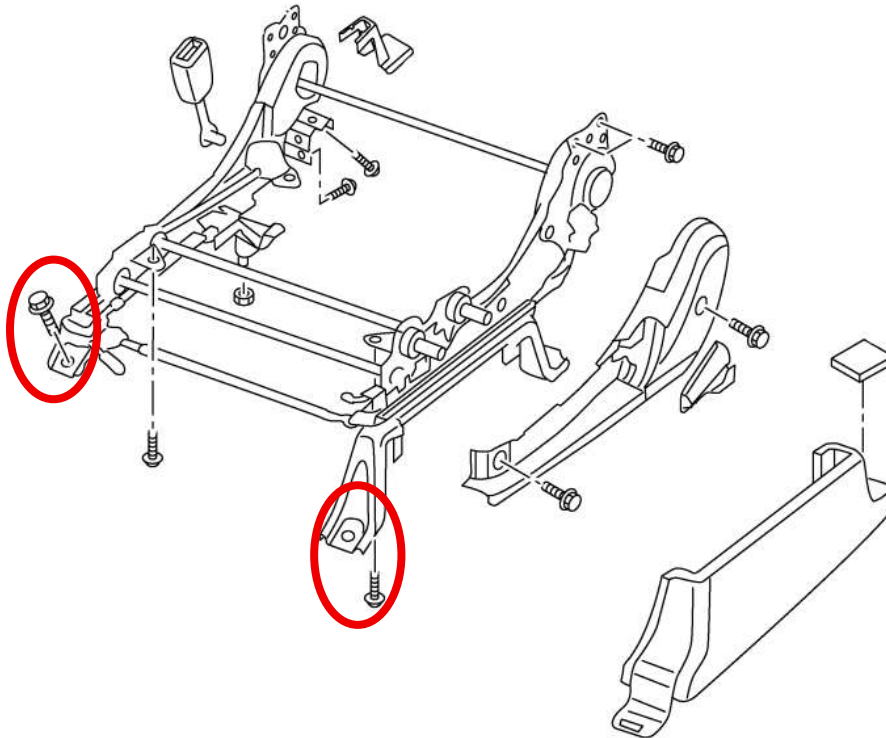


Figure 1

2. Use the seat adjuster to push the Front Seat all the way forward.
3. Remove the (2) two bolts securing the rear of the seat to the vehicle. *Figure 2.*



Figure 2

4. Use the seat adjuster to push the seat back into a normal position.

5. Open and support the hood of the vehicle.
6. Disconnect the (-) **NEGATIVE** Battery Terminal.
7. Lean the Front Seat back and disconnect the (2) two electrical connectors on the bottom of your seat. Older vehicles may have less connectors if they don't have power seats. *Figure 3.*



Figure 3

8. Carefully remove the Front Seat from the vehicle.
9. Disconnect the (3) three connectors from the OE Fender Amp. *Figure 4.*



Figure 4

10. Remove the (4) four screws securing the OE Fender Amp to the floor bracket and set the Amp aside. Retain these bolts. *Figure 5.*

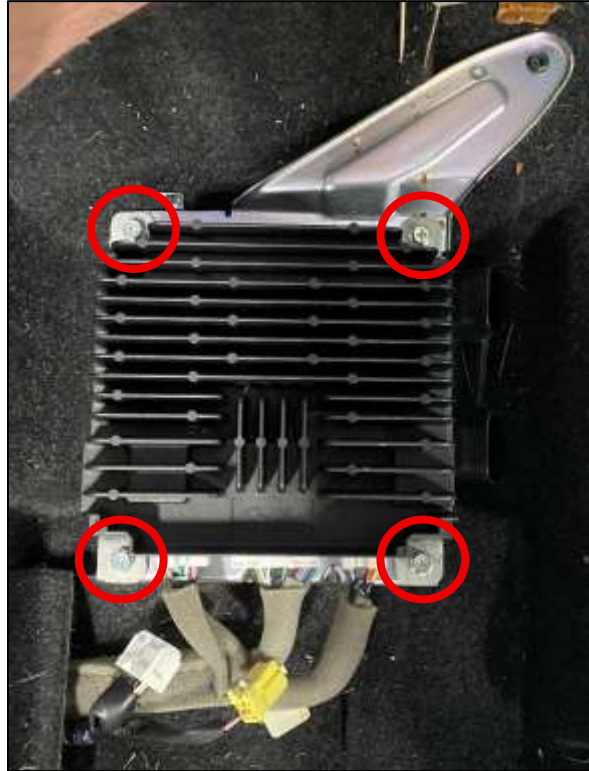


Figure 5

11. Pull the carpet up slightly and remove the (3) three screws securing the Fender Amp Bracket to the vehicle. Retain these screws. *Figure 6.*

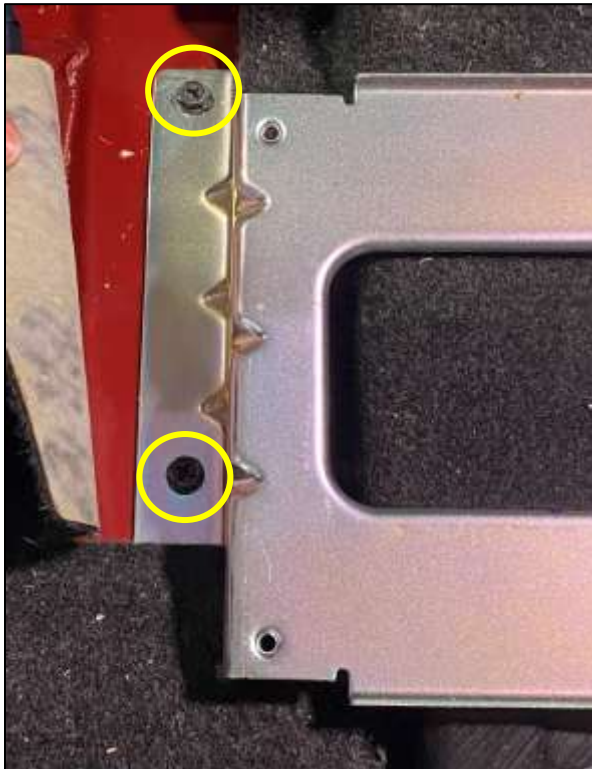


Figure 6

12. Locate the Amp Ground Cable. Lift up the carpet in front of the OE Amp Bracket to locate the OE Grounding Bolt. Remove this bolt to install the Ground Wire here, then reinstall the bolt. *Figure 7.*



Figure 7

13. Locate the small grommet on the Driver's side of the engine bay/footwell. Using a long screwdriver or similar tool, push this grommet out of its mounting hole. *Figure 8.*

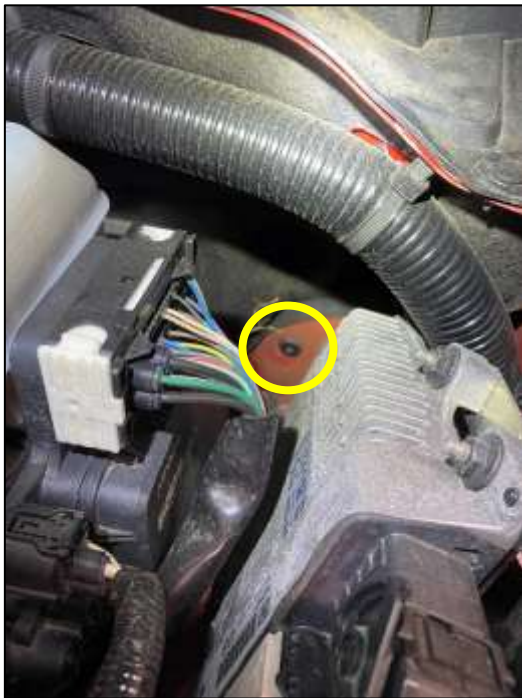


Figure 8

14. Locate the Power Cable. Push the braided side into the grommet hole and into the footwell of the Driver's Side. A small amount of carpet may need to be peeled back to allow the cable to pass through. Push the cable through until the Rubber Grommet on the Cable is against the firewall. Push on the Grommet to seat it. *Figure 9.*

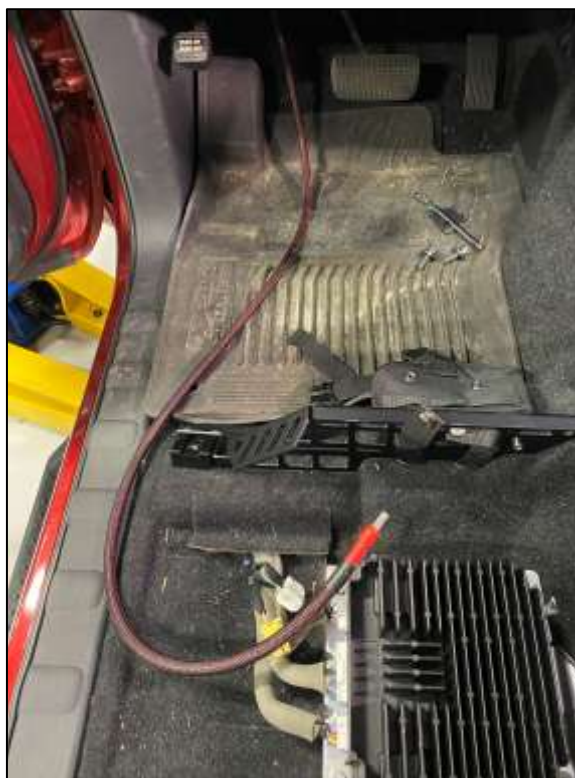


Figure 9

15. Remove the Plastic Kick Plates on the bottom of the car floor by prying them up. The Panel by the hood release will have (1) one Plastic Screw that will have to be removed. *Figure 10.*



Figure 10

16. Route the Power Cable along the side of the car and under the carpet. Run it towards where the OE Amp sat. Make sure the Power Cable is not hung up on anything in the footwell and is secure against the firewall. The Amp Bracket is already installed in the image below. *Figure 11.*

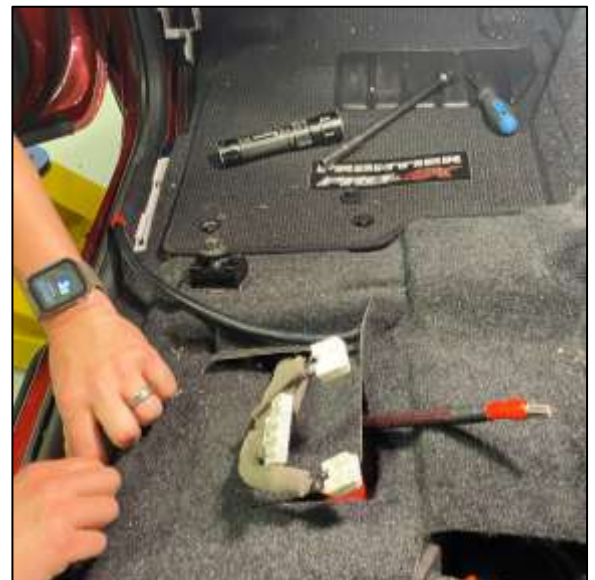


Figure 11

17. Locate the new Z1 AMP Brackets and (2) two M6 Flanged Head Bolts. Secure the Smaller Amp Bracket to the Larger Amp Bracket with the M6 Bolts as shown below. *Figure 12.*

NOTE: This step only applies for users with the Factory **FENDER** Audio System **WITHOUT** the Hifi Setup.

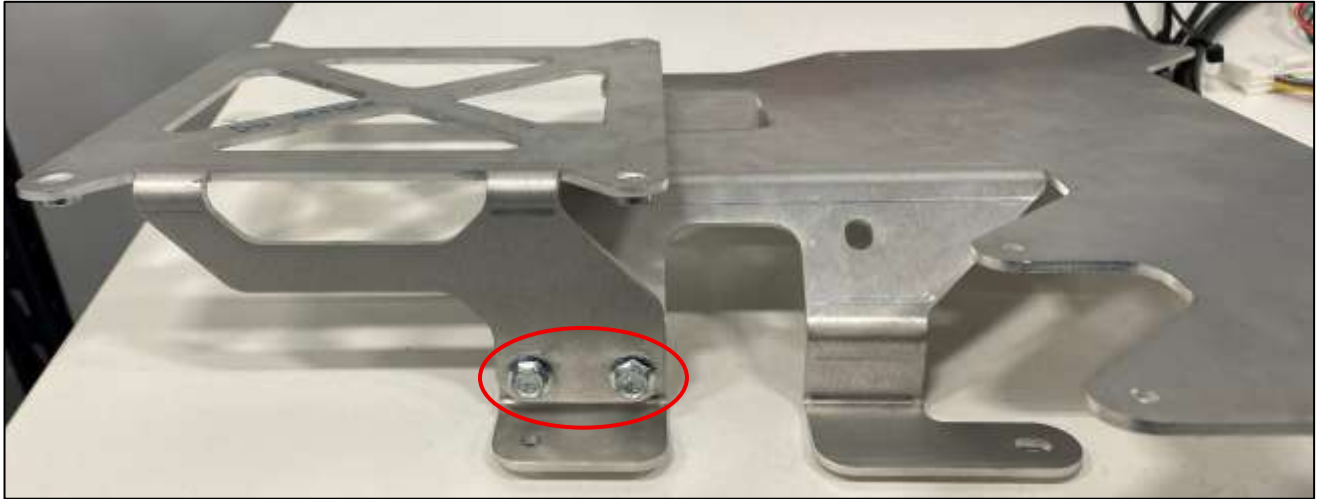


Figure 12

18. Position the AMP Bracket Assembly over the OE Floor Mounting Holes. Loosely secure it to the floor with the (3) three OE Bolts removed in *Step 12*, or use (2) two M6 Flanged Bolts and the 10mm Thread Screw included. *Figure 13.*

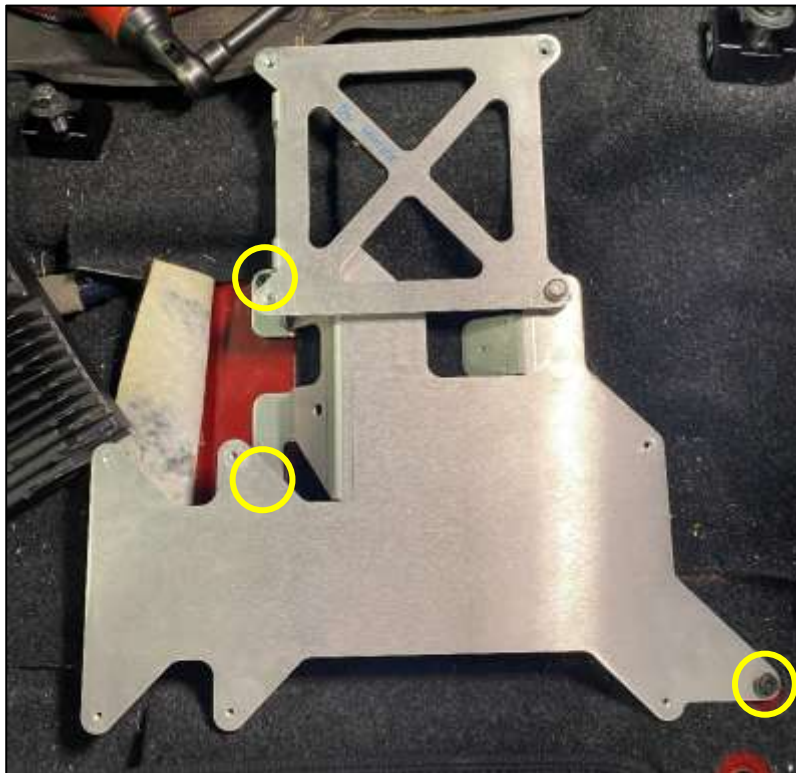


Figure 13

19. Route the Amp Power and Ground Wire up through the Amp Bracket as shown. *Figure 14.*

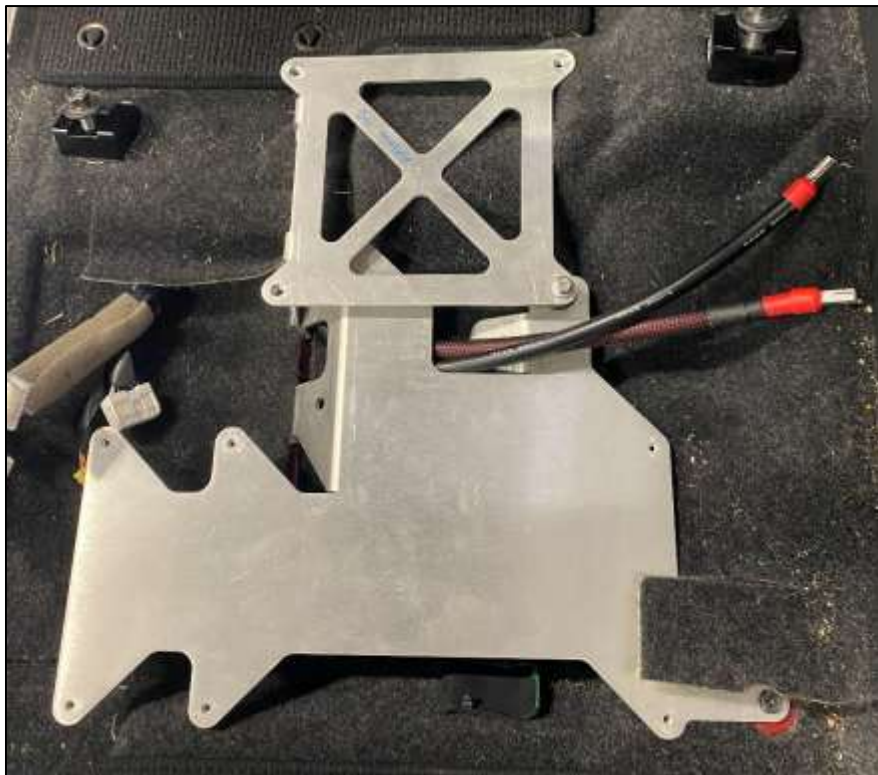


Figure 14

20. Tighten the (3) three Amp Bracket screws to secure the Brackets to the vehicle.

21. Locate the new Amp and (4) four M4 Socket Head Screws, 10mm. Secure the Amp to the Amp Bracket with the M4 Hardware. Make sure the Amp Ports face the front of the vehicle. *Figure 15.*

NOTE: If you are installing the 5 Channel Amp, use the outer most holes for mounting and refer to the [D41 Frontier HiFi Installation Manual](#) for wiring.

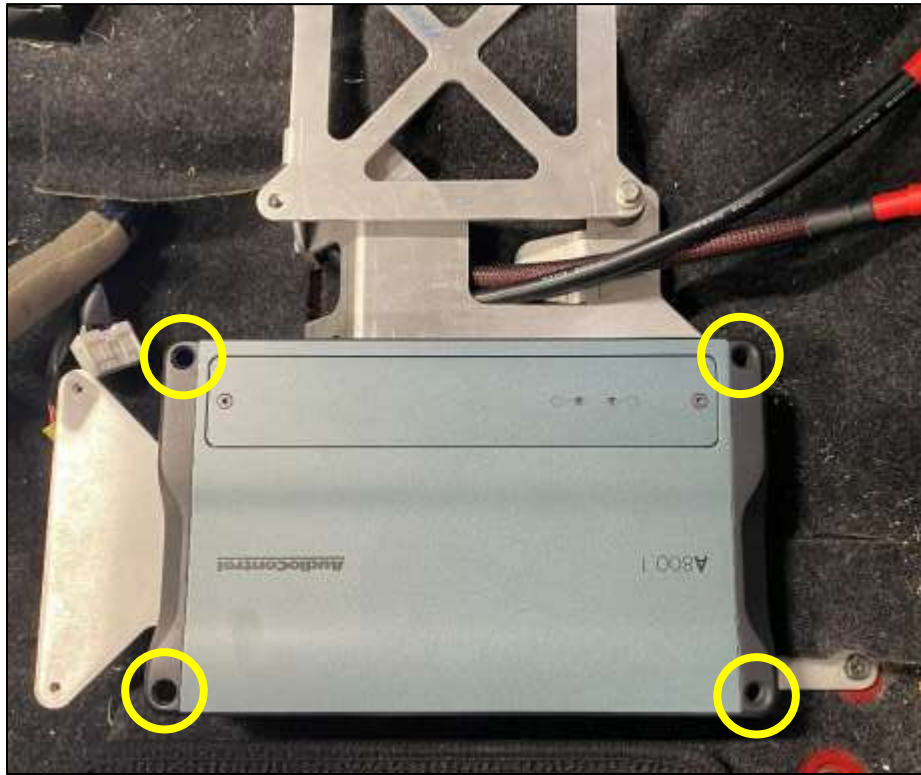


Figure 15

22. Using the Hex Key included with the Amp, remove the (2) two screws securing the top cover to the Amp and remove the cover. *Figure 16.*

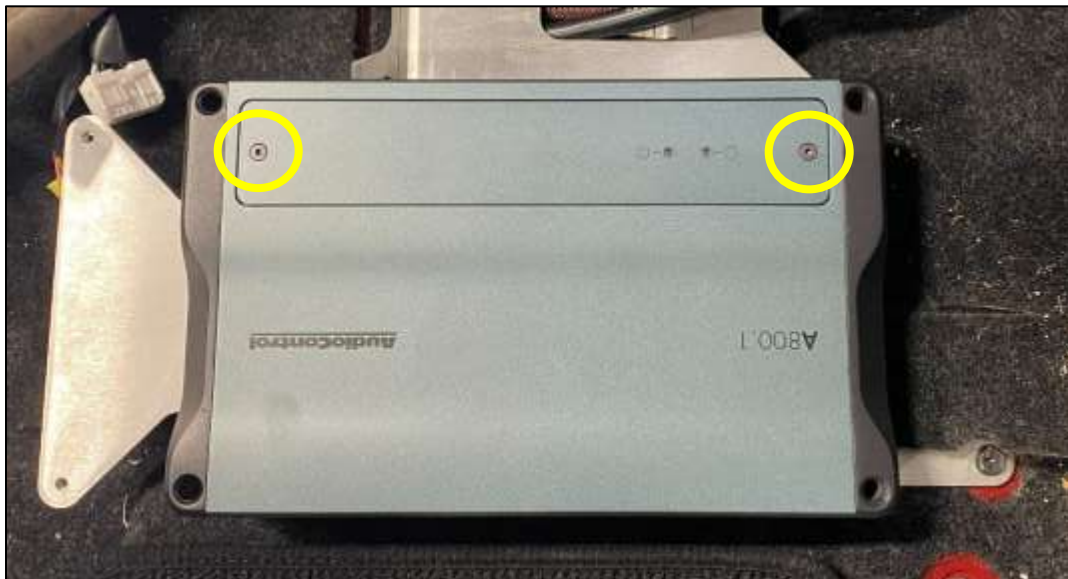


Figure 16

23. Loosen the +12V and Ground Terminals from the top of the Amp. *Figure 17.*



Figure 17

24. Insert the Power Wire and Ground Wire into the Ports on the front of the Amp, then tighten the screws on the top to secure the wires. *Figure 18.*



Figure 18

25. Locate the Amp Harness. Connect the 8 Pin Connector to the Amp. The Female End will connect to the OE Amp Harness. The Male end of the Harness will connect into the OE Amp. *Figure 19.*

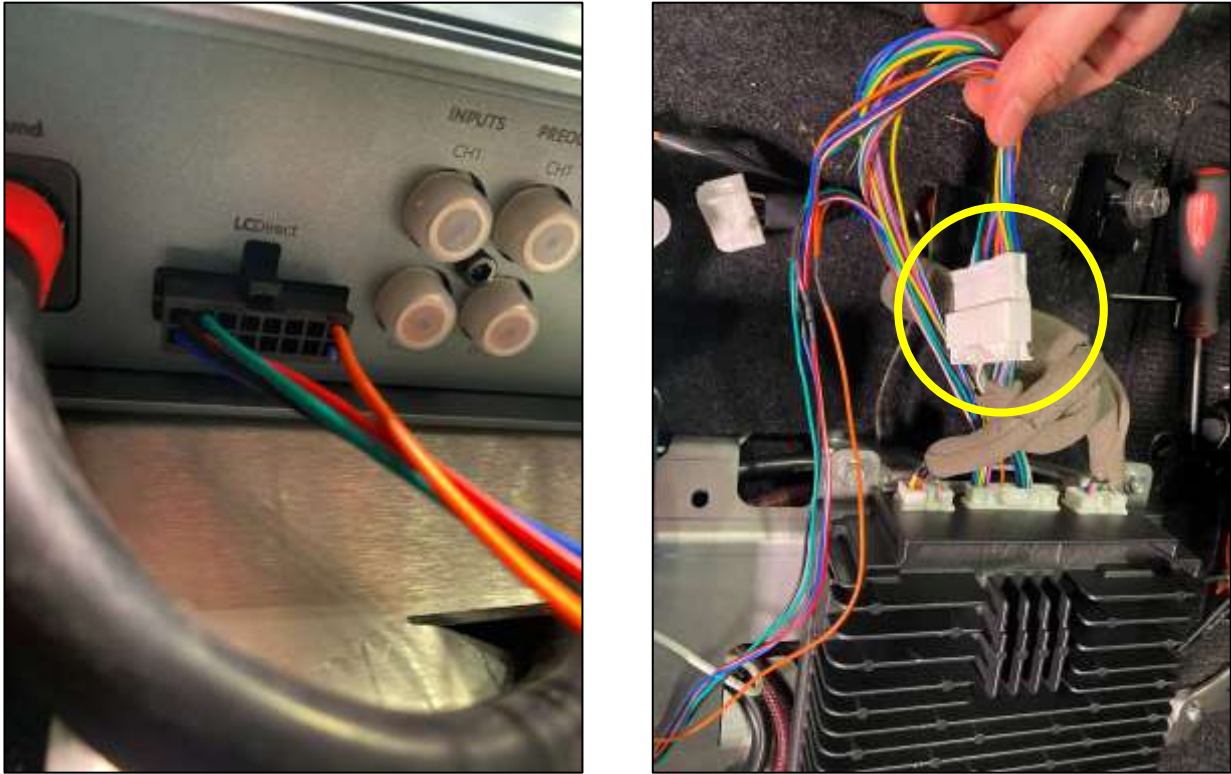


Figure 19

26. Locate the Cable Clip and (1) one M3 Flat Head Screw, 25mm. Install the Clip onto the Large Amplifier Bracket and secure with the M3 Screw. Secure the Power and Ground Cables with the Cable Clip. *Figure 20.*



Figure 20

27. Reconnect the other (2) two OE Harnesses to the OE Amp. *Figure 21.*

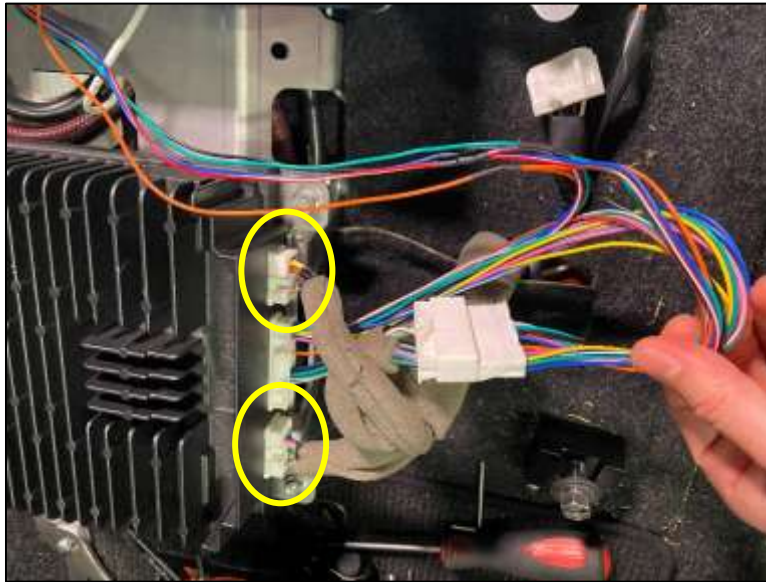


Figure 21

28. Secure the OE Fender Amp to the Bracket with (1) one M6 Flanged Bolt and (3) three OE Screws. The bottom left corner will use an M6 Threaded Spacer between the small Amp Bracket and the larger Amp Bracket and secured by the M6 Flanged Bolt. *Figure 22.*

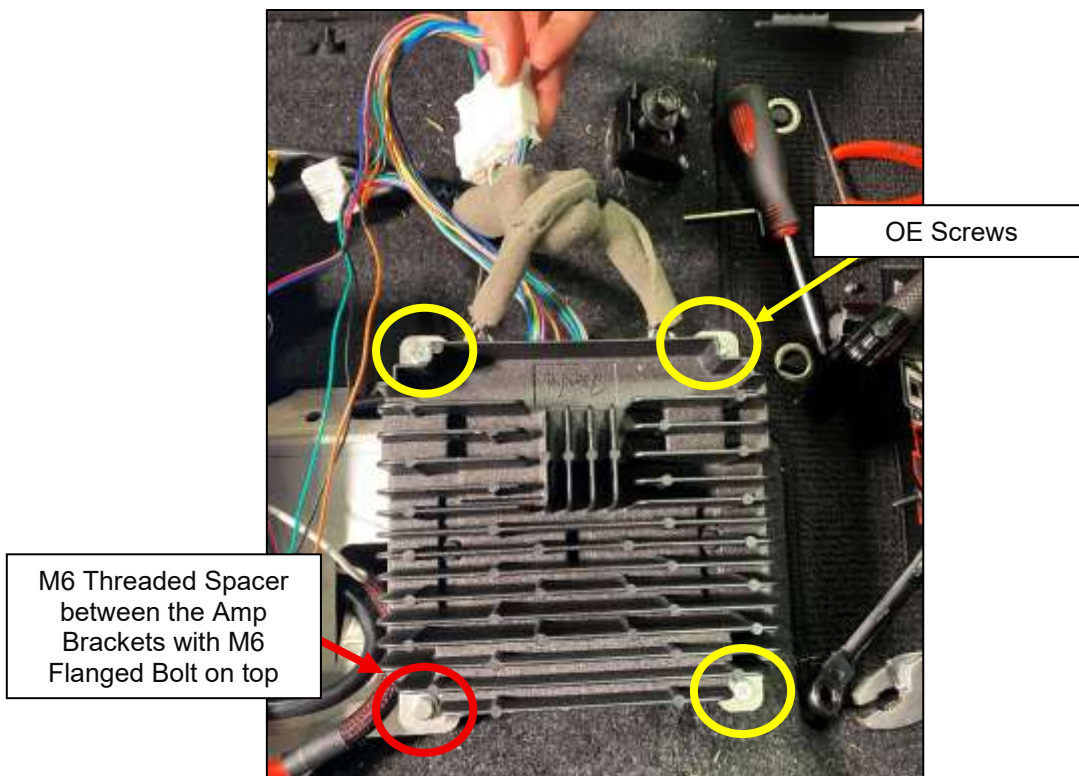


Figure 22

29. In the Engine Bay, route the Power Wire across the main wiring loom and to the Battery. Use Zip Ties to secure the Power Wire. **DO NOT** connect the Power Wire to Battery yet. *Figure 23.*

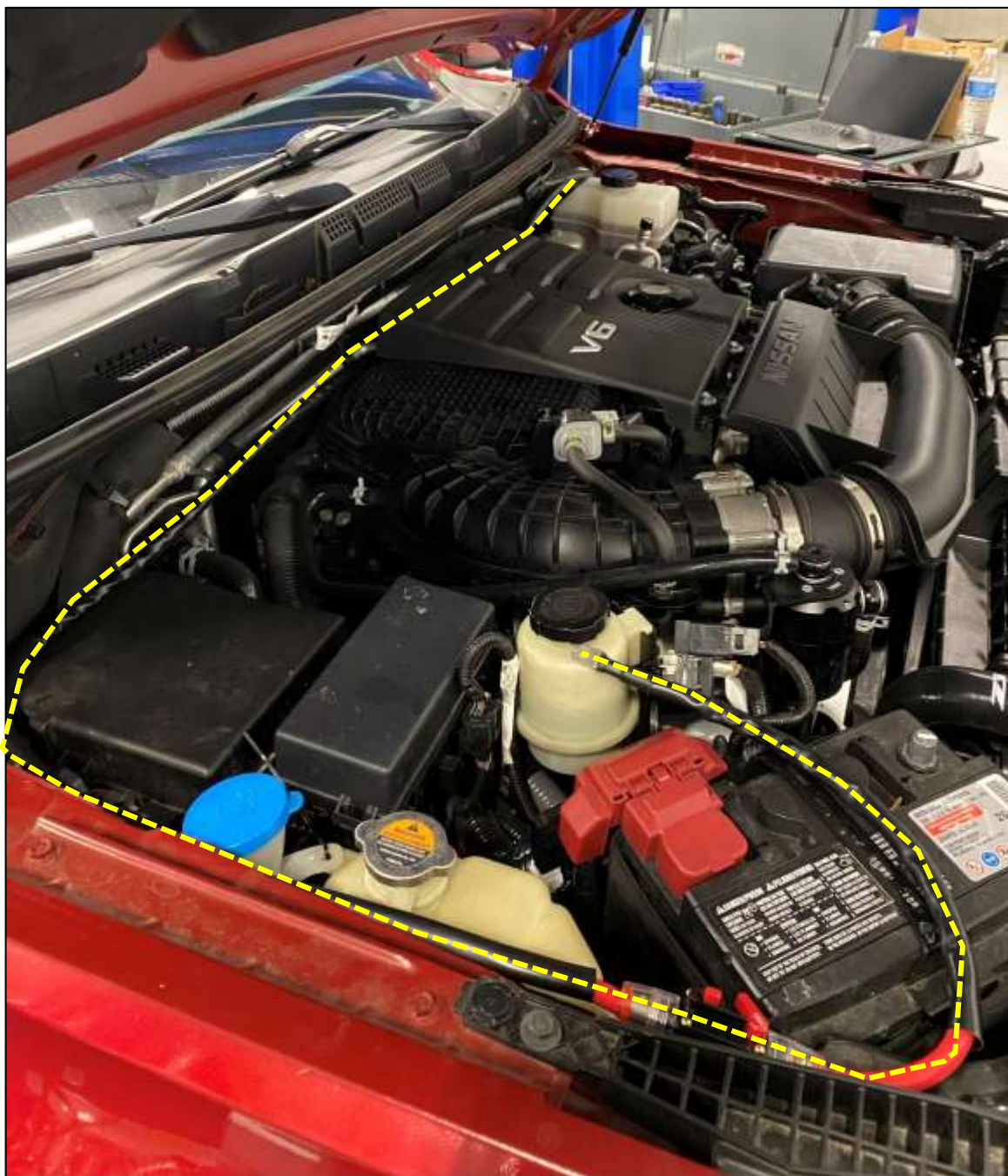


Figure 23

SUBWOOFER:

1. Raise both sides of the rear seats.
2. Twist the (3) three OE Locks in the OE Tray to the “Unlock” position. *Figure 24.*



Figure 24

3. Remove the OE Tray from the vehicle. *Figure 25.*



Figure 25

4. Unbolt and remove the factory Subwoofer on the Driver Side of the vehicle.

5. Locate the Sub Enclosure, Sub Enclosure Bracket and (2) two M6 Flanged Bolts. Attach the Bracket to the Sub Enclosure and secure with the M6 hardware. *Figure 26.*

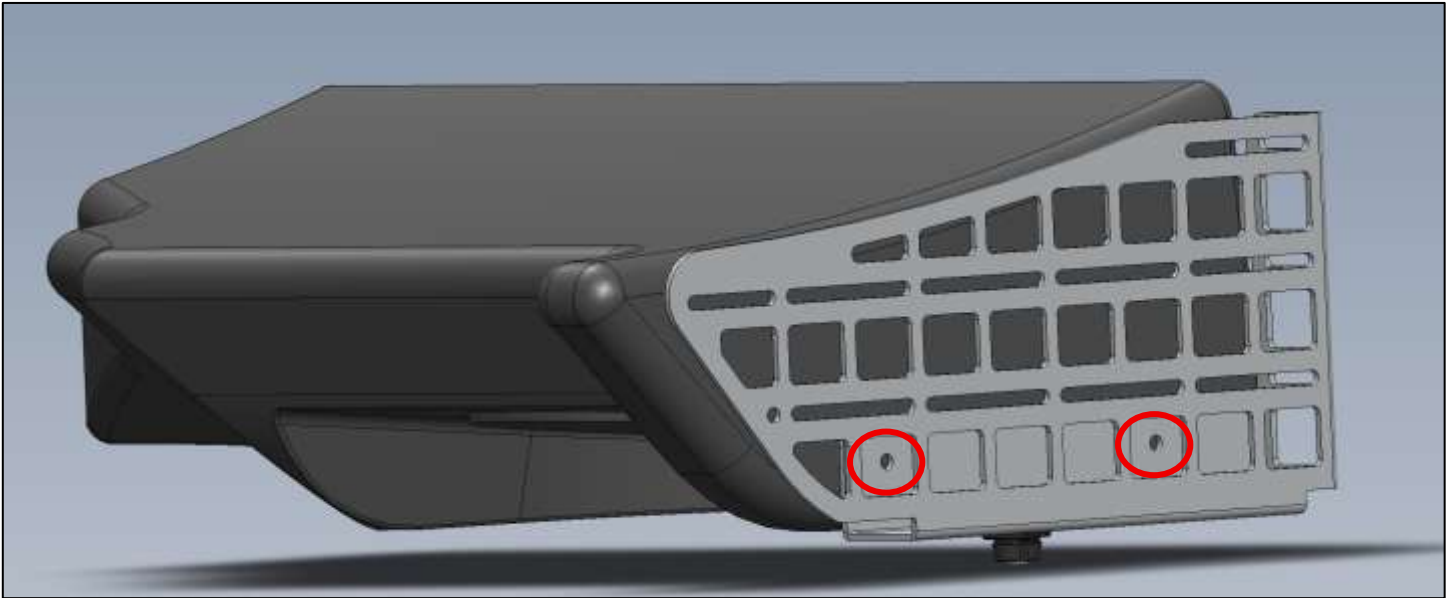


Figure 26

6. Locate (2) two M10 Pegs and (2) two Rubber Grommets. Install (1) one M10 Peg into each Rivnut Insert on the Bottom of the Sub and Sub Bracket. *Figure 27.*

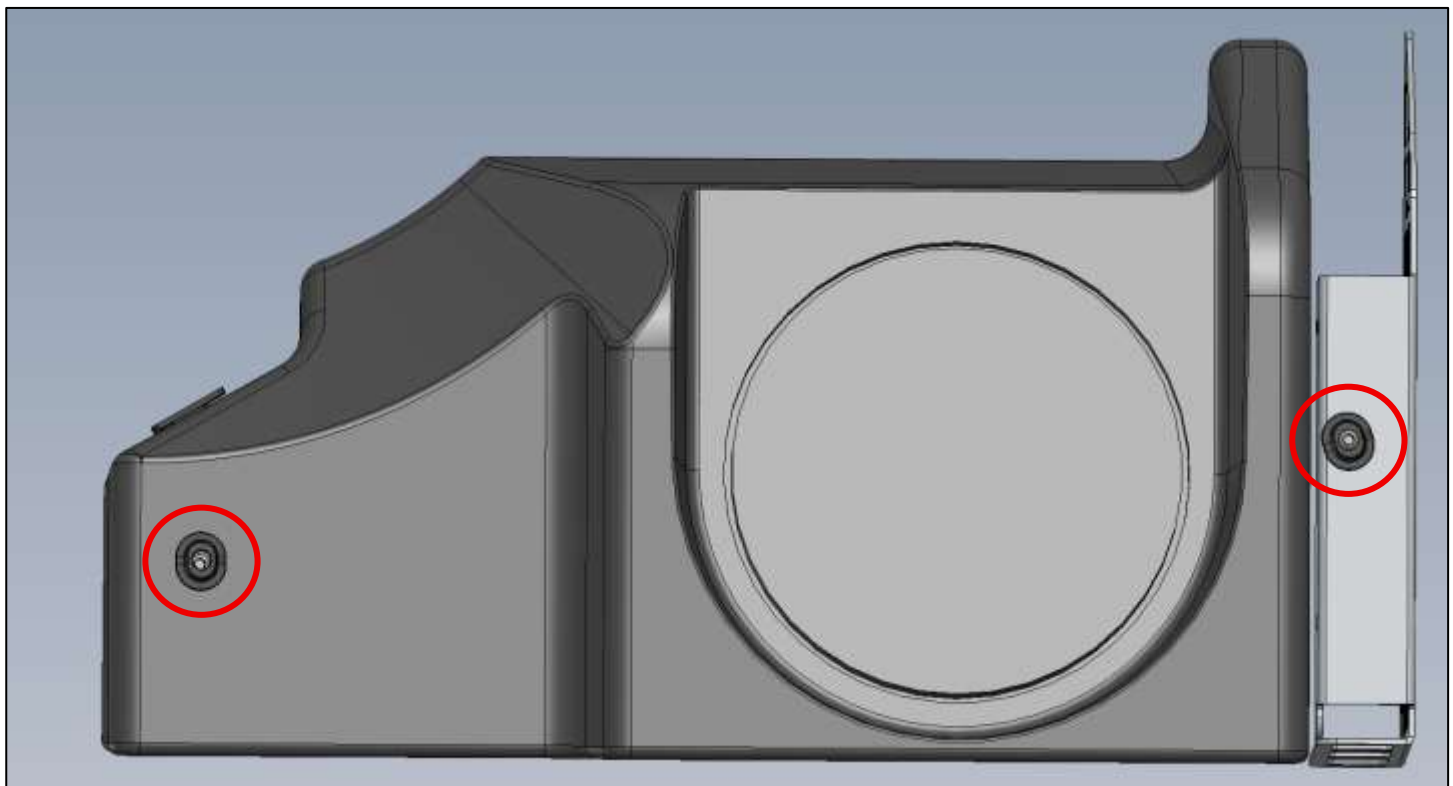


Figure 27

7. Install the Rubber Grommets into the slots in the Floor Pan. *Figure 28.*

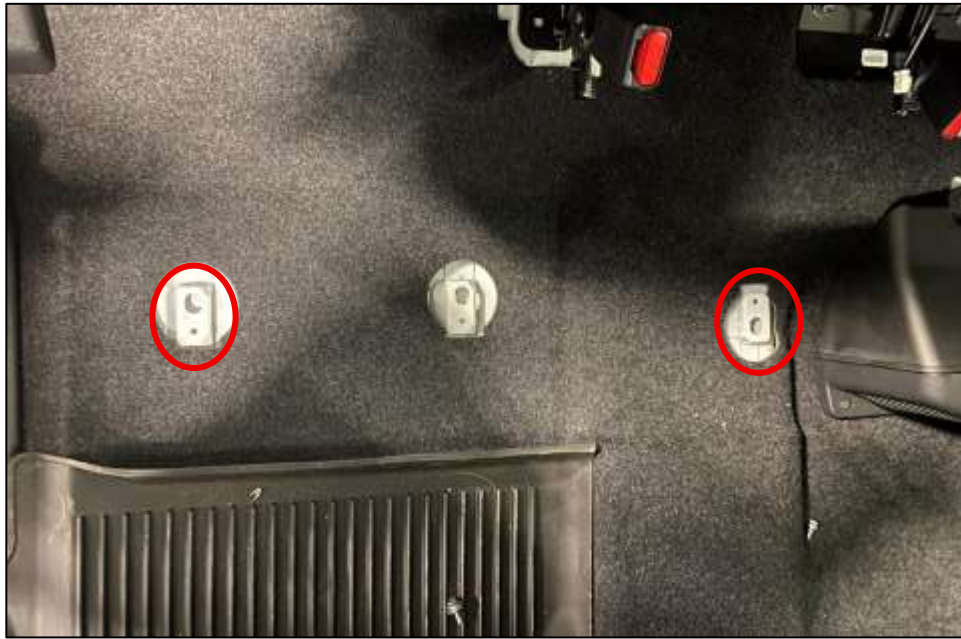


Figure 28

8. Seat the Sub Enclosure into the Rubber Grommets until it sits fully into place and is secure. *Figure 29.*



Figure 29

9. Locate the Subwoofer Wiring Harness. Route it from the new Amp to, under the plastic trim, across the Driver Side Rear Seat and to the new Subwoofer. *Figure 30.*



Figure 30

10. Loosen (1) one + and – terminal on the Amp. *Figure 31.*
11. Look at the Connector End of the Subwoofer Wiring Harness. One side is marked (+) and the other is marked (-). Each side will have a different colored wiring matching the (+) or (-) side. Connect the corresponding wiring to the matching (+) and (-) terminal on the Amp. Tighten the Terminals once the wires are installed. *Figure 31.*

NOTE: This is a test harness. The Production harness will have a **BLACK** Negative Wire and a **BLUE** Positive Wire.



Figure 31

12. Plug in the Subwoofer Wiring Harness to the Subwoofer.

13. In the Engine Bay, make sure the Circuit Breaker is Open then connect the Amp Power Wire to the (+) **POSITIVE** Battery Terminal. Once connected, close the Circuit Breaker. *Figure 32.*

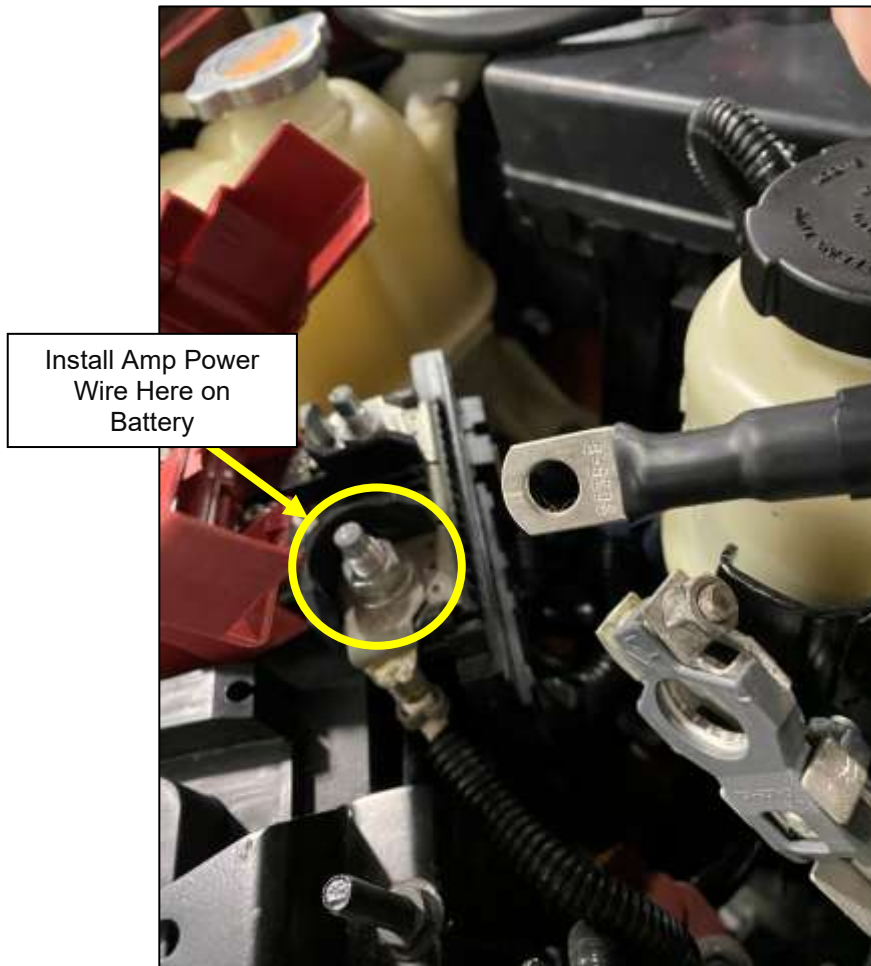


Figure 32

14. Use the double-sided adhesive pad to secure the Circuit Breaker in the Engine Bay. There are a few places to secure it, we chose the top of the Fuse Box.

15. Reconnect the (-) **NEGATIVE** battery terminal. Refer to the upcoming sections for Audio Tuning and Break-In before testing the Audio System.

AUDIO TUNING:

1. Use the recommended settings shown below in the Left Column to adjust the Amplifier. If you have the 5-Channel Amplifier, refer to the Right Column. These are safe settings designed to deliver a clear, natural sound output which you can fine-tune with the radio settings. Refer to the [Amplifier Settings Section](#) to learn more about all of the settings. *Figure 33.*

Input Signal is now more important than ever. The new speakers will allow you to hear any imperfections or poor mixes of the audio.

Monoblock Amp		5 Channel Amp	
Input Level	Low	Input Level	Low
Trigger Mode	Rmt	Input Mode	2 CH
LPF (Hz)	105	Trigger Mode	Rmt
Subsonic (Hz)	25	Filter Mode	Not Used in Bass Package
Gain	10 o'clock Position	Filter Frequency (Hz)	Not Used in Bass Package
ParaBASS (Hz)	Full	Filter Range	Not Used in Bass Package
Level	Full	Gain	Not Used in Bass Package
		Filter Mode	Not Used in Bass Package
		Filter Frequency (Hz)	Not Used in Bass Package
		Filter Range	Not Used in Bass Package
		Gain	Not Used in Bass Package
		LPF (Hz)	105
		Subsonic (Hz)	25
		Gain	10 o'clock Position
		ParaBASS (Hz)	Full
		Level	Full

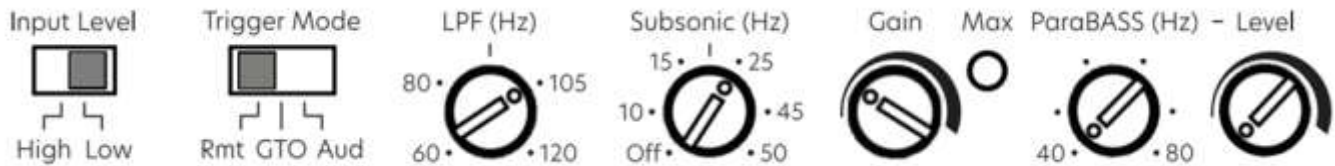


Figure 33

2. To ensure we are providing the cleanest natural input signal possible:
 - a. Set your OEM Radio to the middle (neutral) settings.
 - b. Bluetooth Devices:
 - i. Many phones treat any Bluetooth Audio Output like Bluetooth Headphones, which will negatively affect the sound quality.
 - ii. Turn off **Spatial Audio, Dolby Atmos, Adaptive Sound** or anything along those lines.
 - iii. On Audio Streaming Apps, set the audio quality to **High** or better. Disable any built-in Equalizers. If you can't disable them, set them to *"Flat."*
 - c. For an even cleaner sound, consider using the Aux Input.

AUDIO TESTING:

1. Start the vehicle to test the audio system. Make sure the volume is very low to start.
2. Play music that you are familiar with, ideally with multiple frequencies.
3. Use the Fade and Balance of the Head Unit to move the sound to each corner of the vehicle. Make sure all (4) four corners have sound in the correct positions and they sound as they should.
 - a. For Front Speakers, make sure to listen for the Speakers in the Dash. Move lower to make sure the Door Speaker is working as well.
 - b. If you have Component Rear Speakers, listen to make sure the Tweeter and Door Speaker are both working.
 - c. You may notice the Subwoofer fades away as you shift the sound to the rear of the vehicle. This is normal as the Amplifier is pulling Bass Signal from the front input.
4. If all speakers are functioning as they should, you can begin to reassemble the interior and continue to the Audio Break-In Section. If you have any issues or questions, refer to the [Audio Troubleshooting Manual](#).

AUDIO BREAK-IN:

1. It is highly recommended to start at a low volume and [break in the Speakers and Subwoofer](#) properly. New speakers may sound harsh; however, the sound will smooth out over time. Play a variety of music with different frequencies to fully exercise all of the speakers.

If you are impatient, just keep the volume below 20 for the first 8 Hours of use and slowly raise the volume afterwards. If you notice any cracking or distortion in the speakers, turn the volume down.

Be careful not to turn the Gain up too high, **Gain ≠ Volume**. Too much Gain, especially when the Sub is brand new can cause damage. Refer to the [Amplifier Settings Section](#) to learn more about all of the settings.

While breaking in the speakers, adjust the Amp Settings to your desired preferences. Most Sound Tuning can be accomplished from the radio head unit, here you can adjust the Treble and Bass to your preference.

2. Once the Settings have been adjusted to your liking, reinstall all trim pieces and the Front Seat.

NOTE: When reinstalling the Trim on the rear of the Seat, you will need to trim a portion off to clear the Amp. Measure 3" from the end of the inside and cut the trim with shears or equivalent tool. *Figure 34.*



Figure 34

AMPLIFIER SETTINGS:

Input Level:

- Tells the Amplifier what type of input it is receiving. Vehicles with the Factory Amplifier should use *Low*, those without the Factory Amplifier will use *High*.

Input Mode:

- Tells the Amplifier how many audio signals it receives. Bass Packages use *2ch* and Hifi Packages use *4ch*. The Amplifier will automatically extract the Subwoofer Bass from these channels.

Trigger Mode:

- Tells the Amp what will be used to turn it on.

Filter Mode, Filter Frequency, Filter Range:

- Crossover settings that control which sounds get sent to the Speakers vs. the Subwoofer. *HP (High-Pass)* means frequencies higher than the setting will be allowed on that channel. *LP (Low-Pass)* will allow any frequency lower to be played.
- Z1 Audio recommends *80-90Hz*, which should be low enough to prevent deeper vocals from playing through the Subwoofer.
- These are safe to adjust to your taste through the *80-120Hz* Range.
- Keep them at *High-Pass* and *1X* for the Speaker Channels and *Low-Pass* and *1X* for the Subwoofer Channel.
- Try to keep all three values the same to avoid gaps or overlaps.

Gain:

- Determines how sensitive the Amplifier is to the Input Signal. **GAIN ≠ VOLUME**. Increasing Gain *will* make the Channel louder, but it should not be treated as a volume knob. Increasing the Gain too much can induce static, clipping and overpower the Drivers.
- **CAUTION**: Getting the Gain setting wrong is a quick way to destroy your new Speakers.
- Start at the recommended 10 O'clock position. **ONLY** increase the Gain if you still don't have enough volume when your Radio is at **MAX** volume. Adjustments to Gain are very sensitive, so make small adjustments.
- Setting the Gain too high will cause extra noise and distortion, even at low volumes. This is BAD and can damage your speakers.
- Setting the Gain too low means your system might not play as loud as before; however, this is safe and won't damage anything.
- Try to keep the Gain in the 9-10 O'clock range.
- If you want more Gain from the Subwoofer but the Gain is already at 10 O'clock, lower the Gain on the Speaker Channels and turn the volume up at the Radio.

Subsonic:

- The lowest Frequency the Subwoofer will try to play.
- It is recommended to leave this setting at *25Hz* to protect the Subwoofer as it is not designed to perform lower. It is also rare for frequencies in music to go lower than *25Hz*.

ParaBASS (Hz) and Level:

- Used to supplement the Factory Audio Systems that decrease bass with volume. These are not needed on Nissan vehicles, leave the level at *Full Negative*.

END

Additional Technical Support:
Contact Z1 Off-Road at info@z1offroad.com
Or call 678-839-8019 between 9am and 6pm ET