

Z1 D41 FRONTIER KING CAB SPEAKER UPGRADE INSTALLATION MANUAL



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

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 Off-Road D41 Frontier King Cab Audio Upgrade, consult with a Professional Mechanic, or contact Z1 Off-Road for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	2	Front Door Speaker
2	2	Front Door Crossover (LP350)
3	2	Rear Door Speaker
4	2	Dash Speaker
5	2	Dash Tweeter
6	2	Dash Crossover (2W4000)
7	2	Dash Speaker Adapter
8	2	Dash Speaker Ring
9	2	Dash Tweeter Bracket w/ Hardware

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 King Cab Speaker Upgrade 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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FRONT DOOR SPEAKERS:

1. Open one of the Front Doors.
2. Remove the Plastic Trim Piece behind the Door Release. It can be popped out with a Trim Removal Tool or Flathead Screwdriver. *Figure 1.*



Figure 1

3. Remove the Plastic Trim Piece in the Door Handle. It can be popped out with a Trim Removal Tool or Flathead Screwdriver. *Figure 2.*



Figure 2

4. Remove the (2) two 10mm Screws that were hidden by the (2) two Plastic Trim Pieces. *Figure 3.*



Figure 3

5. Grab the bottom of the Door Panel and pull it away from the Door to release it. Once released, slowly work around the sides of the Door Panel to release the rest of the clips.

6. Remove the (2) two Door Latch Cables. They will easily pop out of the Door. *Figure 4.*



Figure 4

7. Disconnect any electrical connectors tethering the Door Panel to the Door.
8. Fully remove the Door Panel from the Door. *Figure 5.*



Figure 5

9. Disconnect the OE Speaker. *Figure 6.*



Figure 6

10. Remove the (4) four bolts securing the OE Speaker to the door and pull the OE Speaker out. Retain the OE Hardware as it will be reused. *Figure 7.*

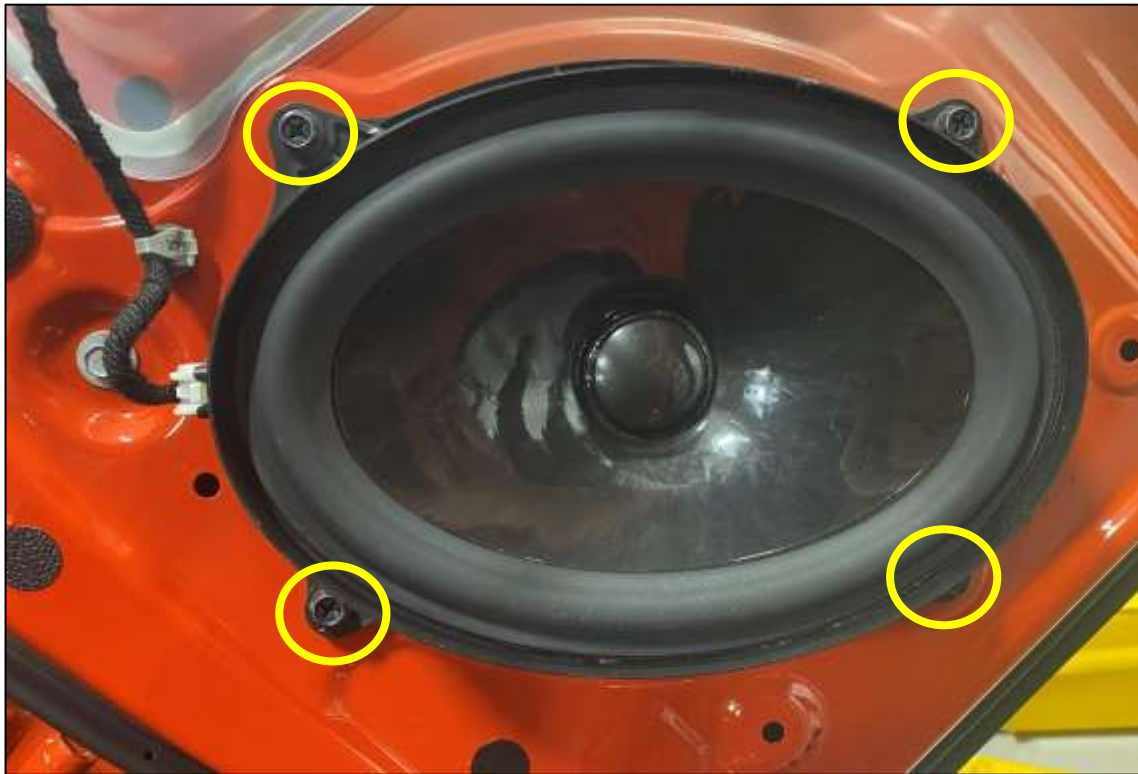


Figure 7

11. Locate (1) one Front Door Speaker. Install it into the door with the Speaker Connector facing upwards and secure with the OE Hardware removed in Step 10. *Figure 8.*



Figure 8

12. Locate (1) one Front Speaker Crossover (LP350). Remove the protective cover from the Double-Sided Tape on the back of the Crossover and stick it to the door above the Front Speaker as shown. *Figure 9.*



Figure 9

13. Connect the Blue/Black Wire connector of the Crossover to the Speaker. *Figure 10.*

14. Connect the Red/Black Wire connector of the Crossover to the OE Speaker Harness on the Door. *Figure 10.*

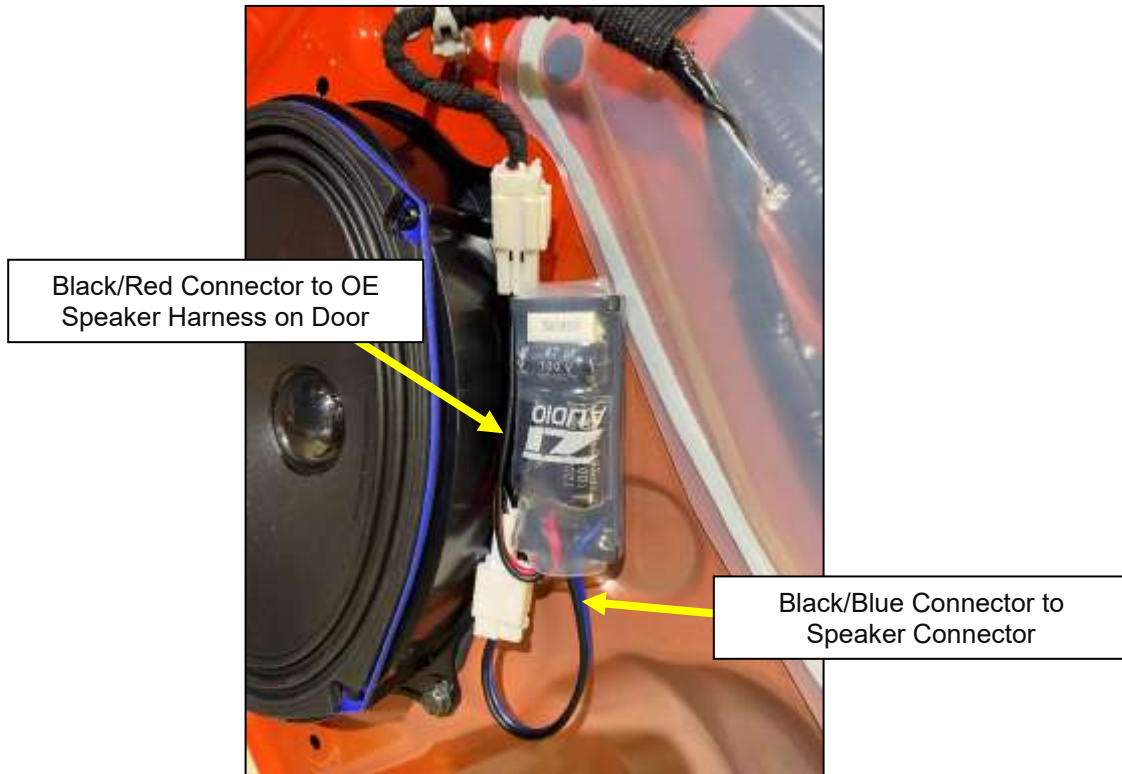


Figure 10

15. Reinstall the Door Panel by following *Steps 2-8* in reverse order.

16. Follow *Steps 1-15* for the other side of the vehicle.

REAR DOOR SPEAKERS:

1. Open one of the Rear Doors.
2. Use a Trim Removal Tool to remove the bottom trim piece of the door. *Figure 11.*



Figure 11

3. Use a Trim Removal Tool to remove the trim piece securing the Seat Belt to the Door. *Figure 12.*



Figure 12

4. Use a Trim Removal Tool to remove the outer trim piece on the Seat Belt Adjuster. If the center piece comes out, it can be reinstalled after the Door Panel is removed. *Figure 13.*



Figure 13

5. Remove the (1) one bolts securing the Seat Belt to the Door. *Figure 14.*



Figure 14

6. Use a Trim Removal Tool to separate the Door Panel from the Door. Once fully separated, it can hang by the Seat Belt. *Figure 15.*



Figure 15

7. Disconnect the OE Speaker.
8. Remove the (3) three bolts securing the OE Speaker to the door and pull the OE Speaker out. Retain the OE Hardware as it will be reused. *Figure 16.*

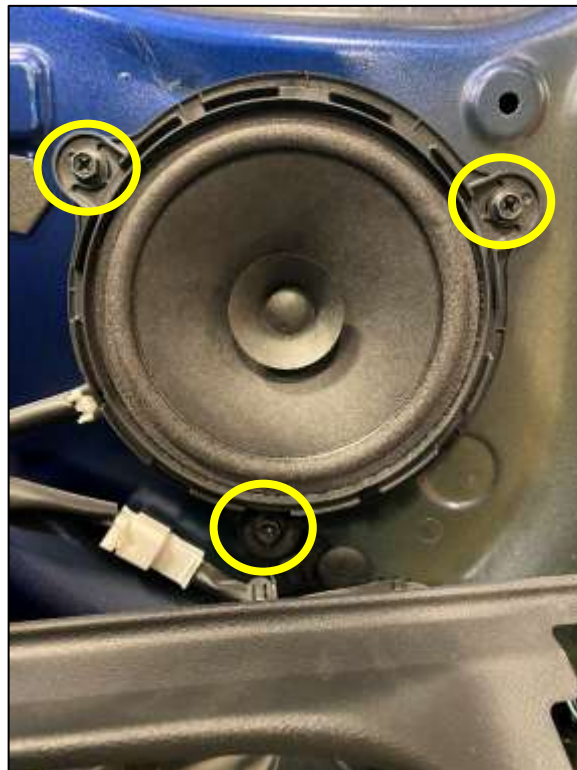


Figure 16

9. Locate (1) one Rear Speaker. Position it into the vehicle in the OE Speaker spot ensuring that the connector is pointing upwards. Secure the Speaker with the OE Hardware removed in *Step 8. Figure 17.*

NOTE: The Speaker installed below is in a Crew Cab model, however the process is still the same.



Figure 17

10. Connect the OE Speaker Connector to the new Speaker.
11. Follow *Steps 2-6* in reverse order to reinstall the Door Panel. If the Adjuster for the Seat Belt was removed, it must be reinstalled **BEFORE** the Door Panel is placed back on. To reinstall it, push the metal tab forward from behind the Door Panel, then slide the Trim Piece on top to secure it. It should be able to pull outward and automatically be brought back upon release when installed correctly. *Figure 18.*



Figure 18

DASH SPEAKERS:

1. Open one of the Front Doors.
2. Remove the Air Inlet Trim Piece from the A-Pillar. *Figure 19.*



Figure 19

3. Remove the (2) two Bolts securing the Grab Handle on the A-Pillar Trim. This only applies to the passenger side of the vehicle. *Figure 20.*



Figure 20

4. Remove the A-Pillar Trim by pulling it away from the A-Pillar. *Figure 21.*



Figure 21

5. Disconnect the Tether on the backside of the Trim and set it aside. This only applies to the driver side of the vehicle.
6. Use a Trim Removal tool to pry up the Tweeter cover in the corner of the Dash. Disconnect the small Tweeter on the Trim and remove the cover from the vehicle. The Passenger Side will have a light sensor that will need to be disconnected first. *Figure 22.*



Figure 22

7. Remove the (3) three screws securing the OE Speaker to the Dash. Retain these screws. *Figure 23.*

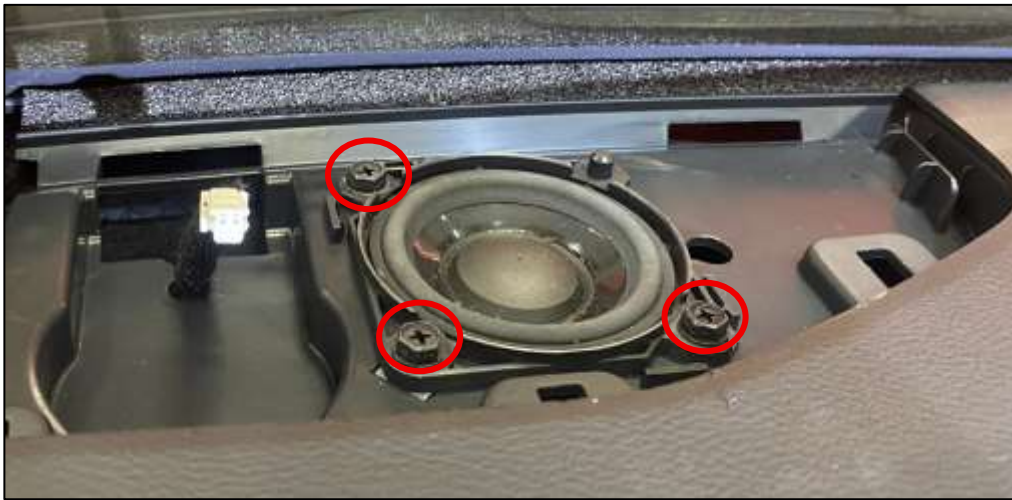


Figure 23

8. Pull the Dash Speaker out and disconnect the Wiring Harness. Remove the OE Dash Speaker from the vehicle.
9. Locate a Dash Speaker Crossover (2W4000). Peel the cover off of the double-sided tape on the back of the Crossover and stick the Crossover to the ledge under the Dash Tweeter. Try to get the Crossover as far down as possible to allow clearance for the Tweeter. *Figure 24.*

NOTE: This cavity can be accessed from below if the Crossover is dropped or an extra hand is needed. Remove the Knee Trim Panel on the Driver's Side or the Glove Box on the Passenger Side if access from below is needed.



Figure 24

10. **IF YOU HAVE THE FACTORY FENDER AUDIO SYSTEM**, locate the adapter Harness. Plug the Brown Connector into the Brown Connector of the Crossover. Connect the Black Connector to the Factory Dash Speaker Harness. *Figure 25.*

If you **DO NOT** have the Factory Fender Audio system, the Crossover will connect Directly to the OE Tweeter Harness.

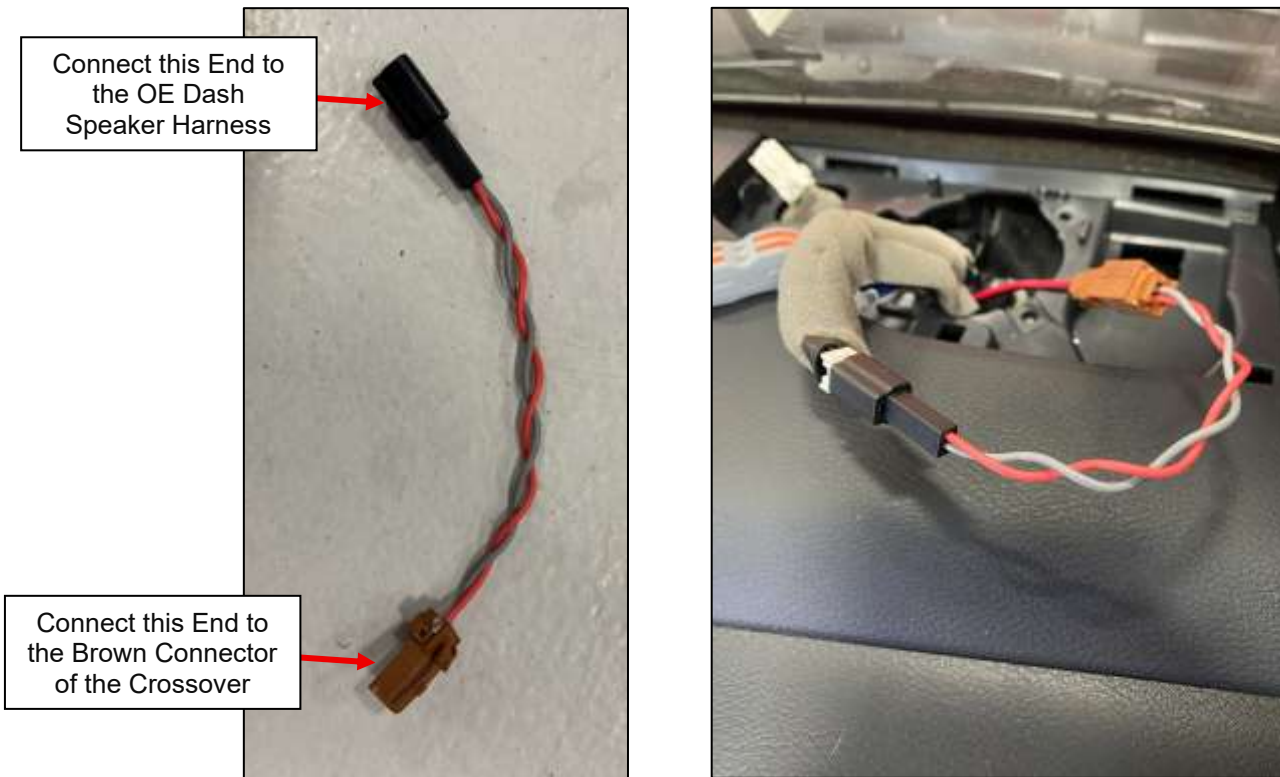


Figure 25

11. Locate (1) one Dash Speaker. Connect the ends of the Wiring Harness to the (2) two Leads coming from the Crossover. Join the Blue Wires to each other and the Black Wires to each other. *Figure 26.*

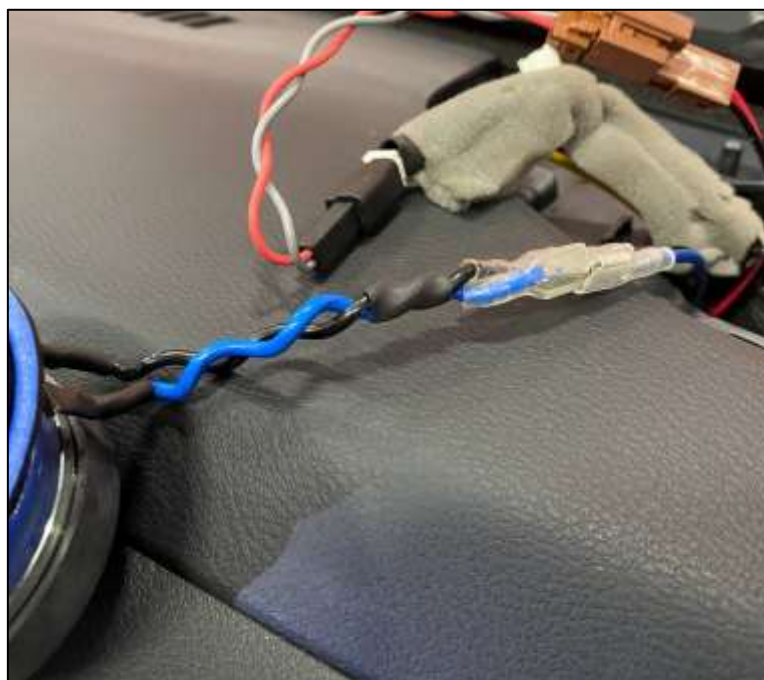


Figure 26

12. Remove the OE Dash Tweeter from the Trim by removing the (2) two Screws securing it. Retain these screws. *Figure 27.*

NOTE: Base Audio Users will not have a Tweeter in this location and can skip this step.



Figure 27

13. Locate (1) one Tweeter Speaker. Remove the Cover from the Speaker by unscrewing the halves from each other. Discard the Aluminum Housing and Rubber Spacer. *Figure 28.*



Figure 28

14. Locate (1) one Tweeter Retaining Bracket and (1) one Foam Pad. Stick a Foam Pad on the front of the Tweeter and position the new Tweeter into the Trim and secure with the Retaining Bracket and OE Screws removed in *Step 12*. Base Audio users will use the included (4) four Self-Tapping Screws to secure the Plate. Run the Wiring Harness from the Tweeter as shown and zip tie the Harness to the Retaining Bracket in the small slot. *Figure 29*.

NOTE: Ensure the Electrical Contacts of the Tweeter are not touching the Bracket. Adjust the Tweeter as necessary to prevent contact.

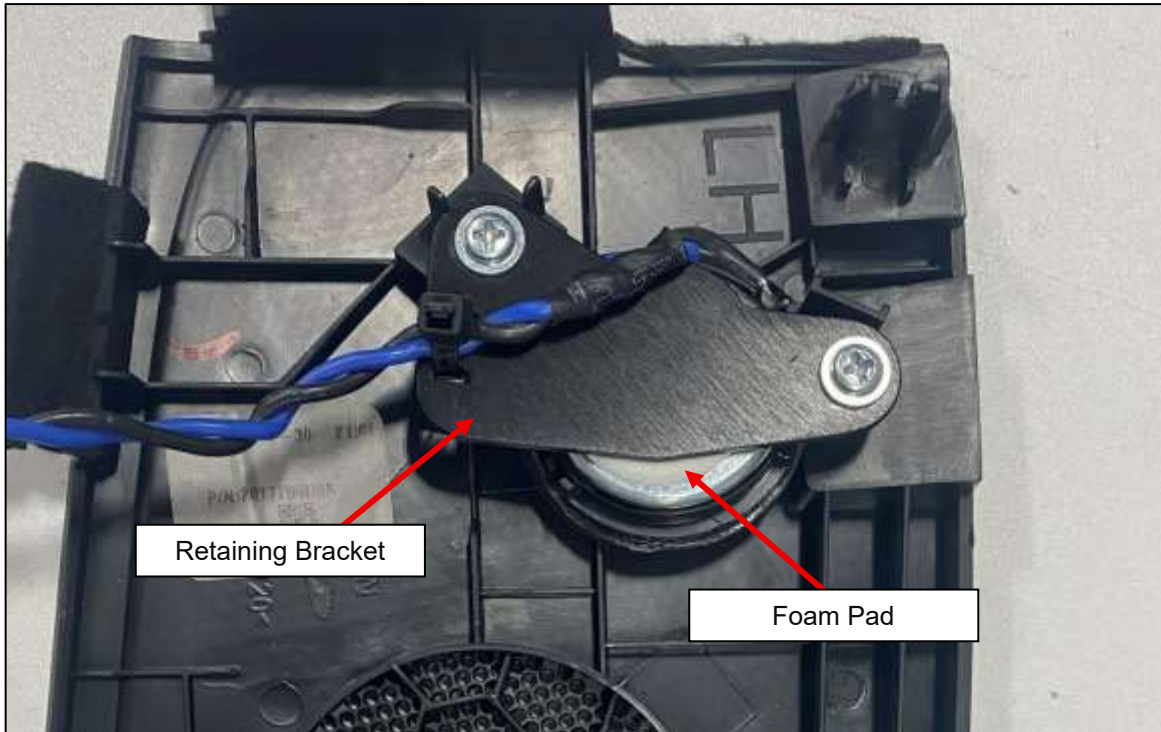


Figure 29

15. Route the Tweeter Connector from the Crossover (Gray Connector with Orange Locking tabs) under the Dash to the OE Tweeter Connector.

16. Connect the open leads of the Tweeter to the Connector on the Crossover. The Black Wire will match up to the Black Wire on the Connector. The BLUE Wire will match up to the other colored wire from the Crossover. It is YELLOW in Figure 30 below. Open the Locking Tabs to insert the wires, then close them to secure wires in place.

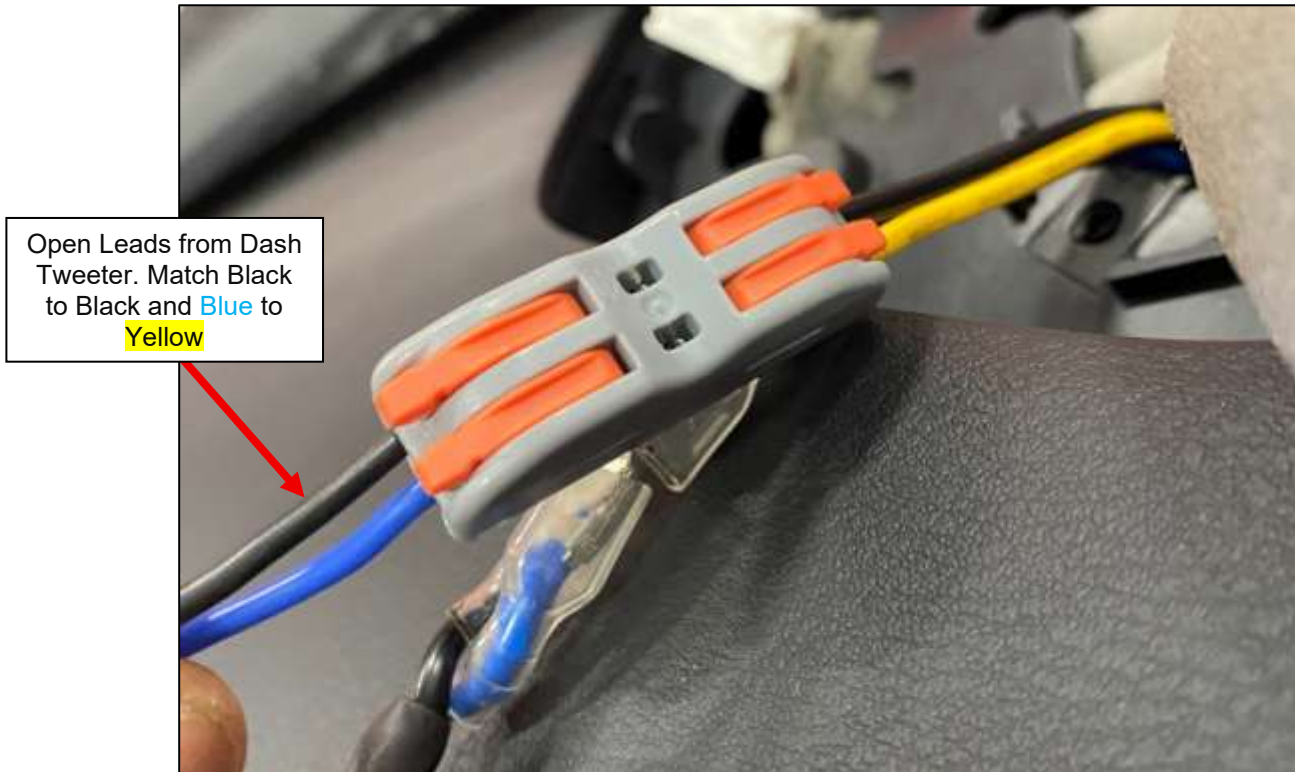


Figure 30

17. Place the Dash Speaker into position on the Dash. Tuck all Crossover Wires neatly underneath. Ensure that the Speaker sits down all the way. If it does not, the wires underneath may need to be adjusted. Figure 31.



Figure 31

18. Locate a Dash Speaker Retainer. Center the Retainer over the Dash Speaker and secure the Retainer and Speaker to the Dash with the (3) three OE Screws removed in *Step 7*. *Figure 32*.

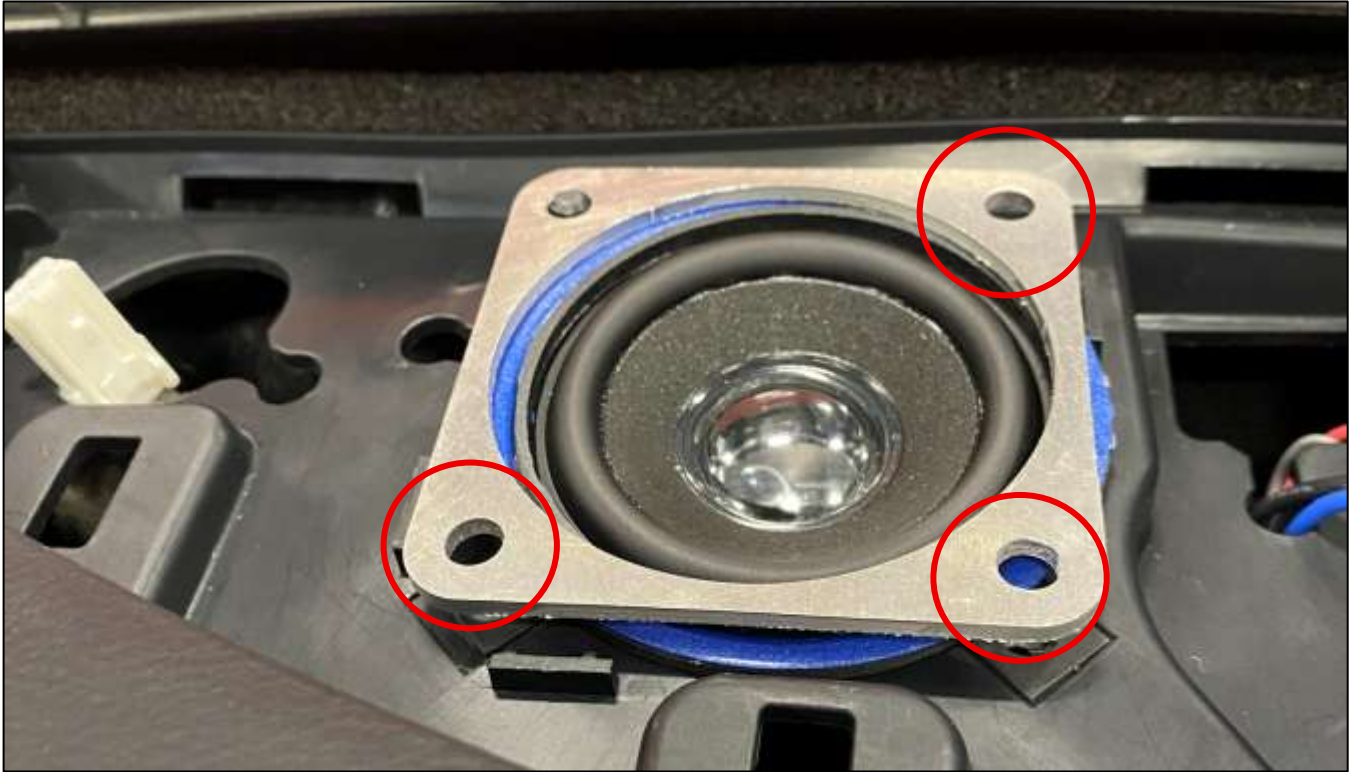


Figure 32

19. Reinstall the Dash Trim and new Tweeter into the vehicle. Carefully tuck the Tweeter Wires under the Dash when installing. For the Passenger Side of the vehicle, feed the Light Sensor Wire up through the hole in the Trim then snap the Trim into place. After the Trim is in place, install the Light Sensor into the Trim piece. *Figure 33*.



Figure 33

20. Follow *Steps 2-6* in reverse order to reinstall the Trim Pieces. Ensure that the Ambient Light Sensor is reconnected on the Passenger Side of the vehicle.

21. Follow *Steps 1-20* for the other side of the vehicle.

AUDIO TUNING:

1. 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 that 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 speakers are brand new can cause damage.

While breaking in the speakers, adjust the Radio Settings to your desired preferences.

END

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