

Beat Box Installation Guide (V1.0)

Version	Date	Changes	Released by
1.0	6/30/22	Initial release	AS

INCLUDED HARDWARE

Hardware:

- 30x tip ties
- 8x silver screws (1 1/4" T20)
- 8x black Screws (1/2" #6)
- 6x lower door plastic clips (black)
- 3x door clips (orange)
- 2x adhesive zip tie mounts
- 1x "2 to 1" heat shrink crimp connector
- 1x M6x1 flange nut

Included parts:

- 2x Tweeters
- 2x door speakers with adapters
- 2x door wire harnesses
- 2x speaker adapter
- 1x bass knob
- Sub box assembly

Tools Needed

- Pick set
- Panel removal tool set
- Wire cutter
- Wire stripper
- Insulated terminal crimp tool
- 5/16 Drill Bit
- 10mm Deep Socket
- 16mm Socket
- T20 to T30 Torx bit set
- E12 Socket
- Ratchet
- 6 inch extension

INSTALLATION INSTRUCTIONS:

1. Turn power off and remove seats

1.1. Disconnect chassis battery via quick disconnect and remove fuse #32 (10A) from the side of the driver's seat base. Note: if vehicle is equipped with power seats, move seats forward and tilt back forward for removal before disconnecting power



- 1.2. If the van has aftermarket accessories installed, be sure they are not creating a ground loop by being grounded directly to the chassis battery such that an SRS code would be set when the seats are removed
- 1.3. Be sure all coach or camper external power sources are turned off/disconnected (shore power, house batteries, etc)
- 1.4. Remove driver seat and untangle all wires and modules under the drivers seat



1.5. Remove passenger seat from van

2. Remove Rubber Floor

2.1. Remove the 4 torx screws holding the plastic trim at top of steps (2 screws per side) and remove plastic trim/floor retention



- 2.2. Remove the mat covering the tool kit in front of passenger seat
- 2.3. Remove rubber floor from driver and passenger side



2.4. Remove tool kit from space in front of passenger seat to expose fuse panels



2.5. Unscrew the 3 torx screws holding the plastic cover at the bottom of the center console, and remove by pulling backward



2.6. Unbolt and remove the metal cover going from center of dash back to near passenger seat base



- 2.7. Remove the white plastic cover that is covering the wires going from the driver seat to the passenger seat
 - 2.7.1. Remove 4x bolts with 16mm heads holding the driver seat base to the floor
 - 2.7.2. Cut the 2 zip ties holding the main harness to the underside of the cover
 - 2.7.3. Cut slit in cover to allow the parking brake wire to pass through the cover
 - 2.7.4. Lift up on base and slide out plastic cover
 - 2.7.5. Reinstall and tighten the 4x 16mm bolts for the seat base and make sure no wires get pinched under the base when it is re-secured
- 2.8. Once the plastic cover is removed, trim for ease of installation. As seen in pictures, there are three pieces that need to be removed before reassembly



3. Door Panel Removal

3.1. Using panel tool, remove the plastic piece surrounding door lock shaft



3.2. Remove 5 metal screws (Red) and 3 plastic Screws (Blue). Replacements for the plastic blue screws are included in the kit so do not worry about damaging them. Once the plastic screws are out, remove the "base" of each screw using a pick



- 3.3. Pull door panel from door by pulling on the door panel with a swift motion
- 3.4. Disconnect door latch bar from door panel
- 3.5. Remove all harness connections from the door panel
- 3.6. Remove wires going to door speaker
- 3.7. Tilt door panel away from door and lift off of lower "hinges" that the door panel is supported by.



4. Door Panel Prep

- 4.1. Make sure orange clips are in the door panel and not in the door. If clips are still in the door, remove and transfer to the door panel. If and clips break, replacements are included
- 4.2. Unscrew and remove old speaker
- 4.3. Trim flange flush with ring as shown in pictures



4.4. Install NEW speaker onto adapter flange using 4 screws (black ¹/₂" #6) included in kit



4.5. Install NEW speaker onto door panel using 4 screws (silver with T20 head) included in kit. Make sure speaker is oriented with the terminals facing up as seen in picture



5. Running Door Harnesses through Door

5.1. Cut the purple and gray wires on passenger door 4" from original speaker connector



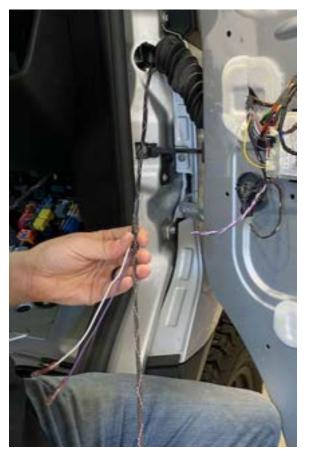
- 5.2. Remove the rubber grommet between the door and the body of the van
- 5.3. Using a pick to manipulate clips from the inside, remove the plastic inserts from the body and the door



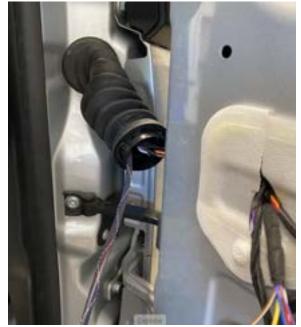
5.4. Insert the plastic pieces back into the rubber grommet, making sure to line up the arrow with the cutout on the plastic piece



5.5. Run the included door harness up through the inside of the van and through the hole in the chassis



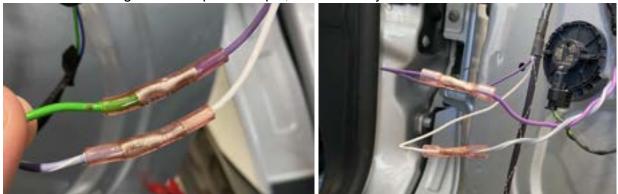
5.6. Pass the wires through the rubber grommet



5.7. Run the wires through the inside of the door and out of the opening in the door such that they can be connected to the new speaker.



- 5.8. Cut, strip and crimp the wires from the new harness with the wires that previously went to the door speakers. Make sure to use a heat gun or lighter to shrink the heat shrink connectors.
 - 5.8.1. Driver side Purple to Green, White to Gray
 - 5.8.2. Passenger side Purple to Purple, White to Gray



6. Door Panel Reinstallation

6.1. Place hooks at bottom of door panel in respective slots at bottom of door



6.2. Reinstall door latch bar. Ensure both white clip and yellow clip are secure so that the interior door handle will work



6.3. Connect wire harnesses to window switch and lock switch (and power seat switch if equipped)
6.4. Plug wire harness onto new door speaker. Support the connections on the speaker when pressing the harness on so that you do not bend/break the connection on the speaker. The blue wire goes to the small terminal, the red wire goes to the large terminal. NOTE: If connections are loose, remove connector from speaker and tighten connector with pliers, and reinstall on speaker prong



- 6.5. Push door panel onto door and make sure all clips are pressed firmly into place
- 6.6. Reinstall all screws reinstall all screw covers
- 6.7. Close door and test operation of latch handle from the inside

7. Tweeter Installation

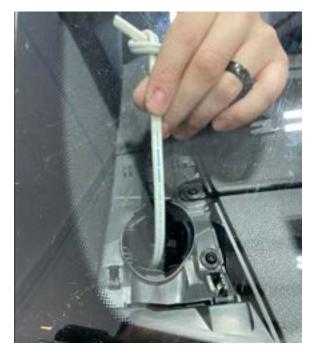
- 7.1. Tweeters are located on dashboard, at the base of the A-pillar
- 7.2. Remove the cover using a panel removal tool



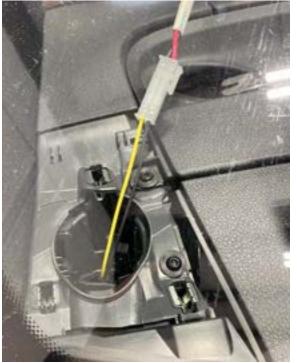
7.3. Using a pick, pull old tweeter from its location



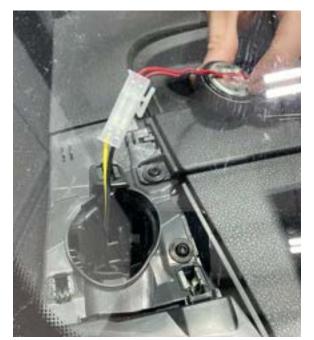
- 7.4. Disconnect the connector for the tweeter. This connector will no longer be used, and can be pushed down into the dashboard
- 7.5. Run tweeter wire pulling tool into hole at the back of the tweeter pocket.



- 7.6.
- Under dash, connect pulling tool to the tweeter connector on the RoamRig Beat Box wire harness Gently pull up on the tool until the connector is above the dash. It may be necessary to gently feed the harness up from below while gently pulling on the tool from above. 7.7.



7.8. Attach new tweeter to harness



- 7.9. Before placing the tweeter in hole, coil excess wire under the tweeter and leave the connector in the pocket. Do not push the connector below the tweeter pocket.
- 7.10. Place tweeter into hole pushing firmly to ensure a secure fit



7.11. Reinstall tweeter cover

8. Center Dash speaker

8.1. Using a panel tool, remove the cover at the base of the windshield. Disconnect the Purple and Grey wires from the speaker.



- 8.2. **DO NOT** disconnect the Green and Grey wire connector from speaker
- 8.3. Reinstall speaker and cover

9. Door harness Routing

9.1. Driver side: Follow the large OEM Mercedes loom that runs over the pedal assembly and across the lower portion of the dashboard you get to the point where the OEM Mercedes loom runs backward toward the driver/passenger seat bases. Use included zip ties as necessary to secure the harness. Clip zip ties flush with a flush cutter.



9.2. Passenger Side: Follow the large OEM Mercedes loom that runs under the fuse panel in front of the passenger seat until you get to the point where the OEM Mercedes loom runs backward toward the driver/passenger seat bases. Use included zip ties as necessary to secure the harness. Clip zip ties flush with a flush cutter.



9.3. Route door harnesses along the large OEM Mercedes wire loom that runs aft toward the passenger seat base and leave the 6 pin connector on each harness in the passenger seat base ready to connect to the subwoofer/amplifier box.



10. Sub box installation

10.1. Before installing the sub box, remove clip holding wires to the floor of the van, stick down adhesive zip tie mounts, and route/zip tie wires as shown in the pictures below. Leave airbag/seat harness LOOSE and not zip tied down.



10.2. Install the sub box under the passenger seat with the sub facing the floor of the van, and the amp facing the passenger door



10.3. Before placing the box in the final position, connect the door harnesses to the connectors on the box
10.4. Run the red and black power wires, small blue wire, and RJ12 (phone cord) outside of the seat base, using the same hole that the door harness wires are run through

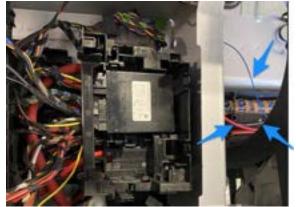


- 10.5. Place the sub box onto the seat base in its final position
- 10.6. Make sure the wire harness for the passenger seat is run through the slot at the rear of the box

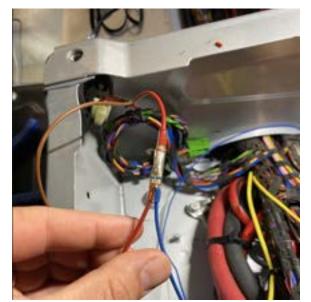


11. Amp Power wires

11.1. The red and black power wires as well as small blue wire need to be routed into the driver's seat base



11.2. Using the supplied butt splice crimp connector, splice the blue (remote) wire with the red with brown stripe wire as pictured (this red with brown stripe wire comes from the 12v power port on the driver seat base). This wire is used as it is ON with the first key press and not the second key press.



11.3. The red (positive) wire gets secured to the second spot from the front on the power distribution panel under the driver's seat base using the supplied M6x1 flange nut. This spot should already have an 80A fuse in it from Mercedes.



11.4. The Black (negative) wire gets secured to a common ground as seen in the picture



11.5. Reinstall all of the OEM Mercedes pieces under the driver's seat base

12. Bass Knob Installation

12.1. Remove mounting plate from the bass knob



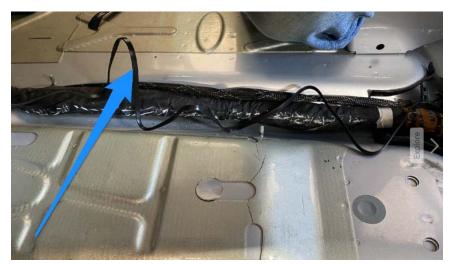
12.2. With panel removal tool, remove cup holders from center console by pulling upwards firmly



12.3. Drill hole, using a 5/16 bit, in plastic, centered on the panel below the cupholder. Install the bass knob through the back side of hole. Install washer and nut onto threads of bass knob. Gently tighten the nut to secure the bass knob with a 10mm socket and reinstall the plastic knob onto the bass adjuster.



12.4. Take the RJ12 that was previously routed outside of the passenger seat base, and run along the door harnesses going forward toward the dash.



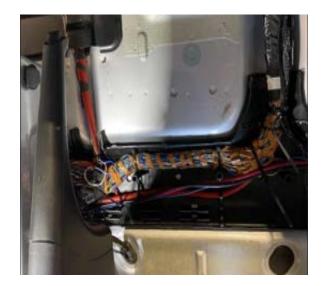
- 12.5. Connect end of RJ12 into bass knob
- 12.6. Zip tie the RJ12 cable to center console with a bit of slack at the bass knob



12.7. Going from under the center console backward to under the passenger seat base, zip tie the door harnesses and RJ12 to the OEM Mercedes harness that runs from the dash to the seat bases. Keep as much wire slack as possible at the passenger seat base to allow for future removal of the subwoofer box if necessary.



12.8. Zip tie the wires ran from the passenger seat base to the driver seat base every 4 to 6 inches



13. Reassembly

- 13.1. Reinstall cup holder in center console
- 13.2. Reinstall panel at bottom of center console
- 13.3. Reinstall white plastic wire cover
- 13.4. Reinstall Black metal wire cover
- 13.5. Reinstall tool kit
- 13.6. Reinstall tool kit cover
- 13.7. Reinstall Passenger side rubber floor
- 13.8. Reinstall Driver side rubber floor
- 13.9. Reinstall the 2 plastic covers at top of steps
- 13.10. Reinstall wires under driver seat
- 13.11. Reinstall driver seat
- 13.12. Reinstall Passenger seat
- 13.13. Reinstall fuse #32
- 13.14. Plug in Negative quick release under dash
- 14. Play music