



# 10" Beatbox Installation Instructions

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## INTRODUCTION

In this guide we will cover the installation of the RoamRig 10" Beatbox stereo into a VS30 Sprinter chassis.

**Installing the new Beatbox Blackbird?** Many of the installation steps for the 10" Beatbox and the Beatbox Blackbird are the same, so this guide may be helpful. We're currently working on detailed installation instructions for the Beatbox Blackbird. Until they're ready, [please refer to this installation video](#) in addition to the steps in this guide.

## TOOLS:

- [Small Pry Tool Set](#) (1)
- [E12 External Torx Socket](#) (1)
- [Socket Wrench 3/8" Drive](#) (1)
- [Wire Cutters](#) (1)
- [10mm Deep Socket](#) (1)
- [Socket Wrench](#) (1)
- [Long Socket Extension](#) (1)
- [Magnet Pick Up Tool](#) (1)
- [T20 Torx Bit](#) (1)
- [T25 Torx Bit](#) (1)
- [T30 Torx Bit](#) (1)
- [Trim Removal Tool Kit](#) (1)
- [16mm Socket](#) (1)
- [Various Length Extensions for Sockets](#) (1)
- [Drill/Impact Driver](#) (1)
- [Oscillating Tool](#) (1)
- [Wire Strippers](#) (1)
- [Wire Crimpers](#) (1)
- [Heat Gun or Torch](#) (1)
- [9/32" Drill Bit](#) (1)
- [3/8" Drive Extension - 3"](#) (1)
- [Torque Wrench 3/8" Drive](#) (1)

## Step 1 — Center Speaker Disconnection



- Remove the center speaker grill by using a pry tool to lift up one corner, and work the grill cover up the rest of the way by pulling straight up.
- Lift up on the speaker to remove it from its holder to expose the connections on the speaker.

## Step 2 — Center Speaker Disconnection



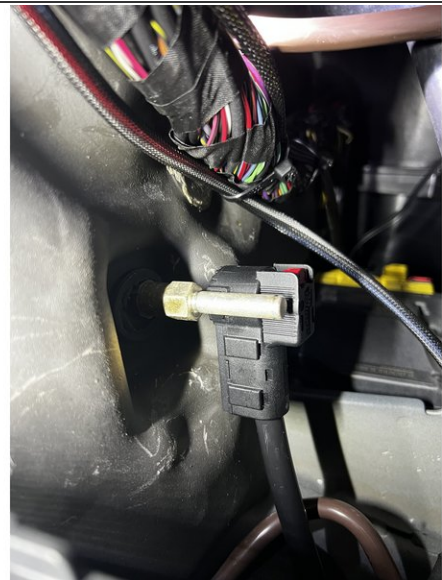
- With the speaker removed, play some music on the radio.
  - While music is playing, disconnect one plug on the side of the speaker. Simply pull on the connector to remove. If the audio stops playing through the speaker, you have disconnected the correct wire.
  - If the audio does NOT stop playing from the speaker with one connector removed, reinstall that connector, and remove the other connector.
- ⓘ Only remove the connector that stops the audio output on the speaker. If the incorrect connector is removed, the SOS function will be disabled.
- ⚠ Depending on when the van was manufactured, the wire color/positions on the connectors may be different. So it may not be the same plug that is removed each time. Make sure to test the speaker each time!

### Step 3 — VS30 Battery Disconnect



- Remove battery ground disconnect access cover to expose battery ground disconnect

### Step 4

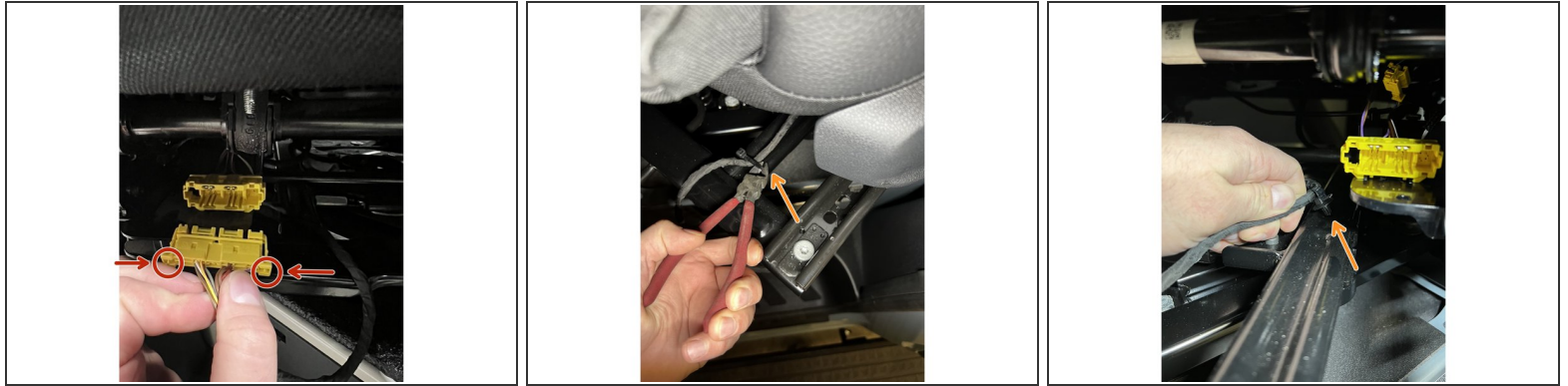


- Depress the red tab on the battery ground disconnect, and pull to remove from ground stud

**Step 5**

- Remove the fuse panel cover from the driver side seat base to expose fuse panel
- Locate and remove fuse #32

## Step 6 — Seat Wire Harness Disconnection



- Disconnect the yellow plug for the seat wire harness by depressing the tabs on each side, and pulling connector out.
- ⓘ Tabs are depressed inwards, towards the center of the plug.
- Remove seat wire harness from seat rails by unclipping securement clips along the seat rails.
- ⚠ If equipped with power seats, you will need to adjust the seats to allow them to swivel PRIOR to disconnecting the battery.

## Step 7 — Disconnecting Power Seat Harness



- ⓘ If you van does not have power seats, skip to the next step.
- Located the harness for power seats on the module under the seat.
- To disconnect the plug, depress the locking tab, and move the locking lever to the right to release the plug from the module.

## Step 8 — Seat Wire Harness Removal



- Route seat wire harness and the power seat harness (if equipped) through the opening in the seat swivel.

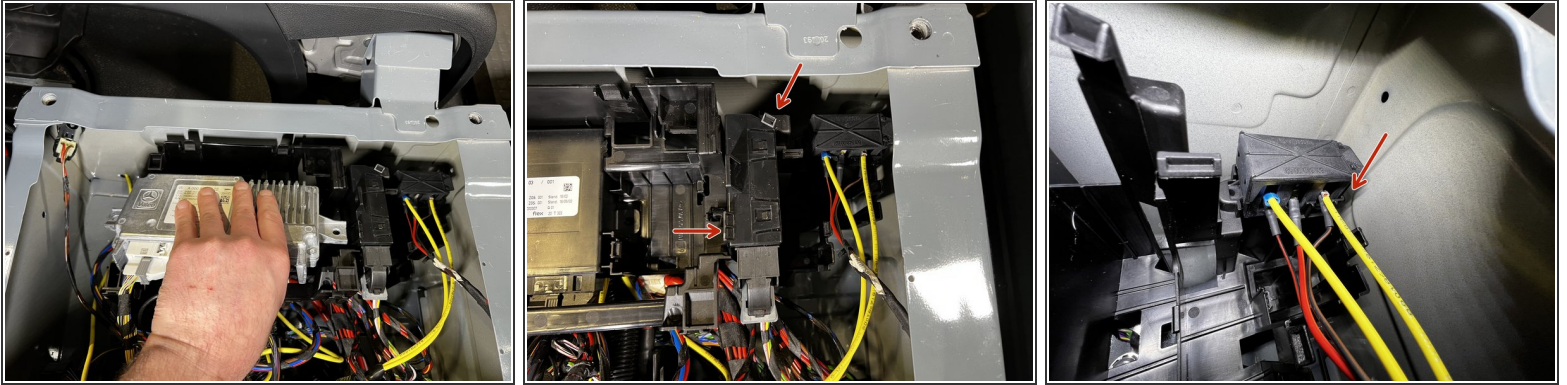


## Step 9 — Seat Removal



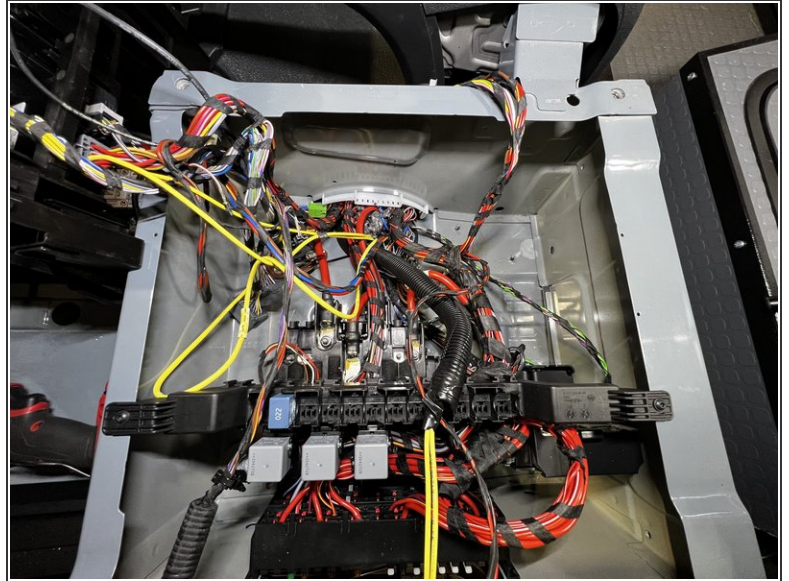
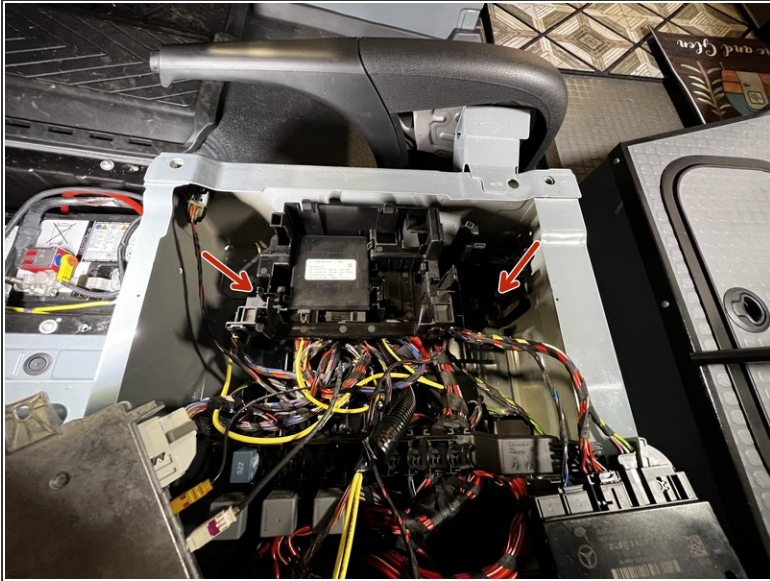
- Using the E12 Torx socket and socket wrench, begin removing the 4 seat bolts that secure the seat to the seat base.
- ⓘ It will be necessary to rotate the seat to access all the seat bolts.
- Once the 4 seat bolts have been removed, the seat can be lifted out of the vehicle.
- ⓘ Adjust the seat back to the upright most position to make the seat easier to remove from the van.
- ⚠ Take care to not scratch the door panel or the B pillar on the van when removing the seat. Masking tape can be used on the seat base to help prevent damage.

## Step 10 — Module Mounting Bracket Removal



- Remove the silver control module by lifting up to release it from the securement clasps.
  - Remove the next module to the right by releasing the locking tabs, and pulling the module straight up.
  - Locate the EK1 terminal all the way to the right. There is a locking tab on the rear most part of the terminal mount. Push the release tab towards the rear of the van, while pulling up on the EK1 terminal to free it from the mount.
  - Once all of the above modules are free from the mounting bracket, position the modules out of the way to gain access to the mounting nuts for the bracket.
- ⓘ Depending on how your van was optioned, there may be an additional module to remove.

## Step 11 — Module Mounting Bracket Removal



- Locate the 2 nuts that secure the module mounting bracket to the floor. Use a 10mm socket and wrench to remove the nuts.
- ⓘ A small magnet grab tool may be needed to retrieve the nuts from the mounting bracket, especially on the rear most mounting point.
- Gently drape the mounting bracket and modules over the front corner of the seat base to give access to the wiring connections and routing pathways under the module bracket.
- ⓘ There will still be a module on the lower part of the mounting bracket. It is not necessary to remove the module as there is enough slack in the wiring to leave it attached.

## Step 12 — Interior Floor Removal - Drivers Side



- Remove the 2 screws that secure the plastic "L" trim using a T25 Torx bit.
- Lift up on the floor mat and remove from the vehicle.

## Step 13 — Interior Floor Removal - Passenger Side



- Remove the 2 screws that secure the plastic "L" trim using a T25 Torx bit.
- ⓘ if your van is a crew van, or equipped with the HVAC ducting for rear seats, please proceed to the following step on how to remove the passenger side floor covering.
- Lift up and remove the passenger side of the flooring, and set aside.

## Step 14 — Duct Removal - Only if Equipped



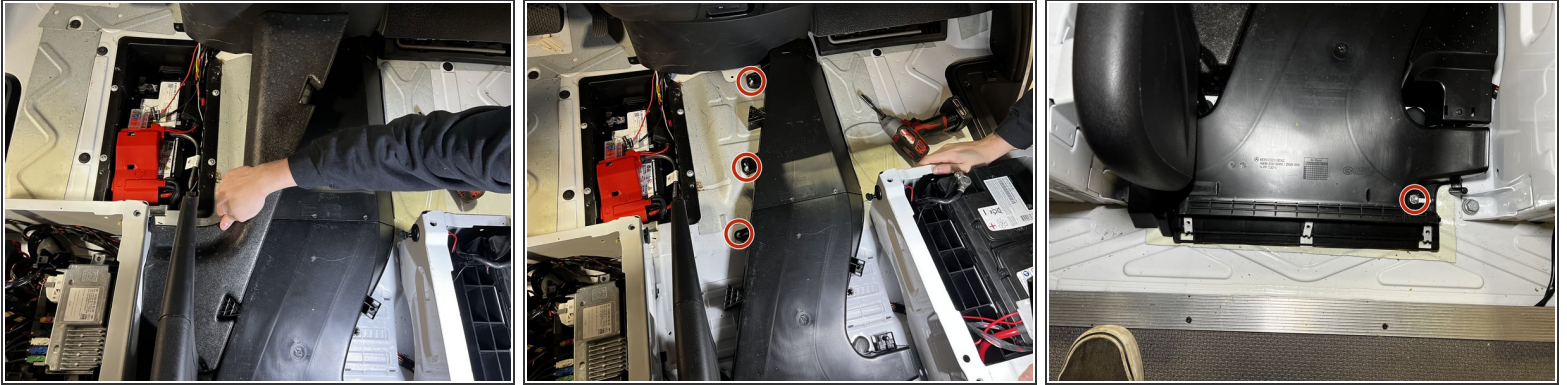
- ⓘ The following steps are only for crew vans. If your van does not have the duct work shown, you can skip over this step.
- Locate the three screws securing the rear HVAC vent cover. Remove the screws using a T25 Torx bit. Set the cover aside.
  - At this time you can remove the passenger side floor covering to expose the duct work.

## Step 15 — Tool Kit Removal



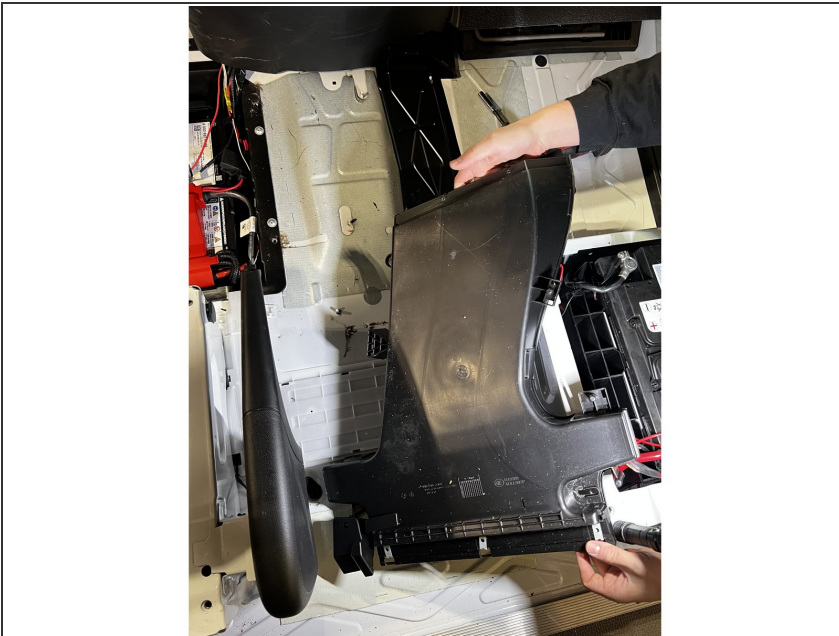
- Using a flat blade screwdriver, twist the locks on the floor covering above the tool kit. Remove the floor covering, and set aside.
- Once the tool kit is exposed, simply grasp the lower portion of the tool kit tray, and pry upward to release from the clasps. Once released, slide the tool kit tray towards the rear of the van to remove.

## Step 16 — Duct Removal - Only if Equipped



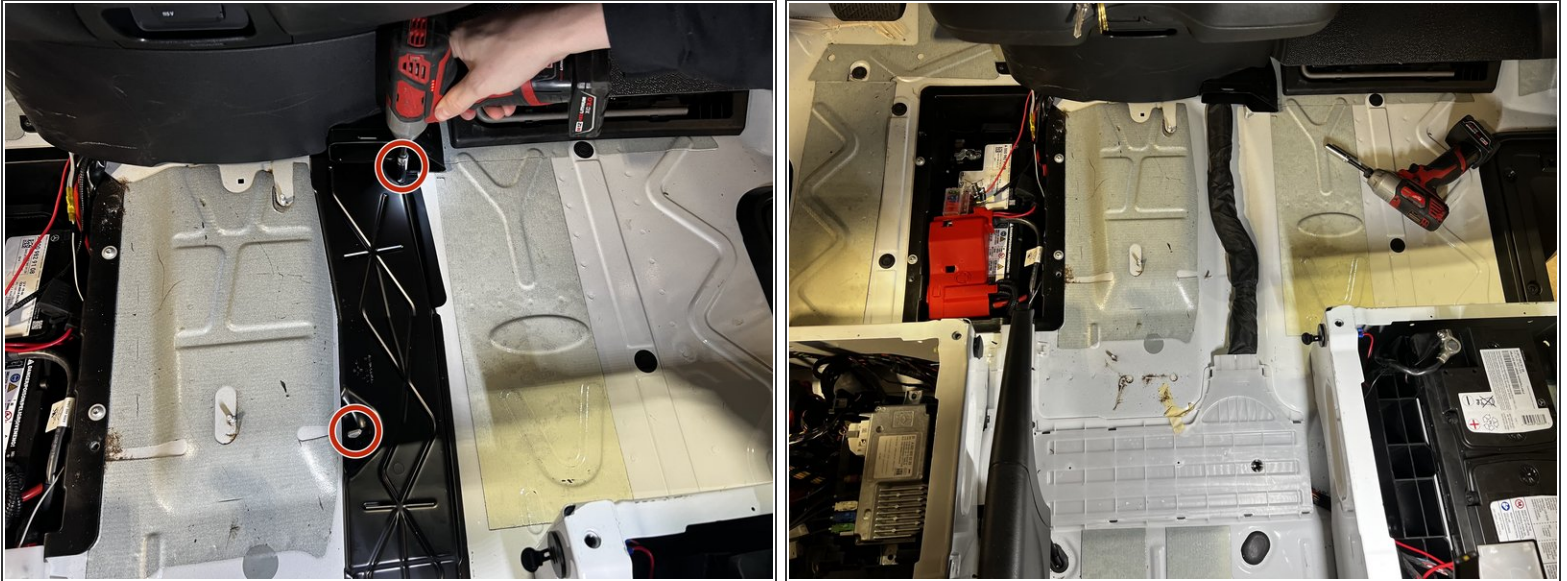
- Lift up and remove the styrofoam support.
- Locate the four nuts securing the two sections of duct work. Remove these nuts using a 10mm socket and wrench. (Three of the nuts are shown in image #2, the fourth nut is shown in image #3)

## Step 17 — Duct Removal - Only if Equipped



- With the fasteners removed, lift up on the forward section, and gently work it free from the connection point under the dash board. Once the forward section is removed, you can remove the rear section. Set both sections aside.

## Step 18 — Forward to Rear Wire Chase Cover Removal



- Remove the two nuts securing the wire chase cover that runs forward to rear using a 10mm socket and wrench. Set the cover and nuts aside.

## Step 19 — Battery Tray Cover Removal



- Locate the 4 screws that secure the battery tray cover. Use a T30 Torx bit to remove the screws. Lift up on the cover to remove.

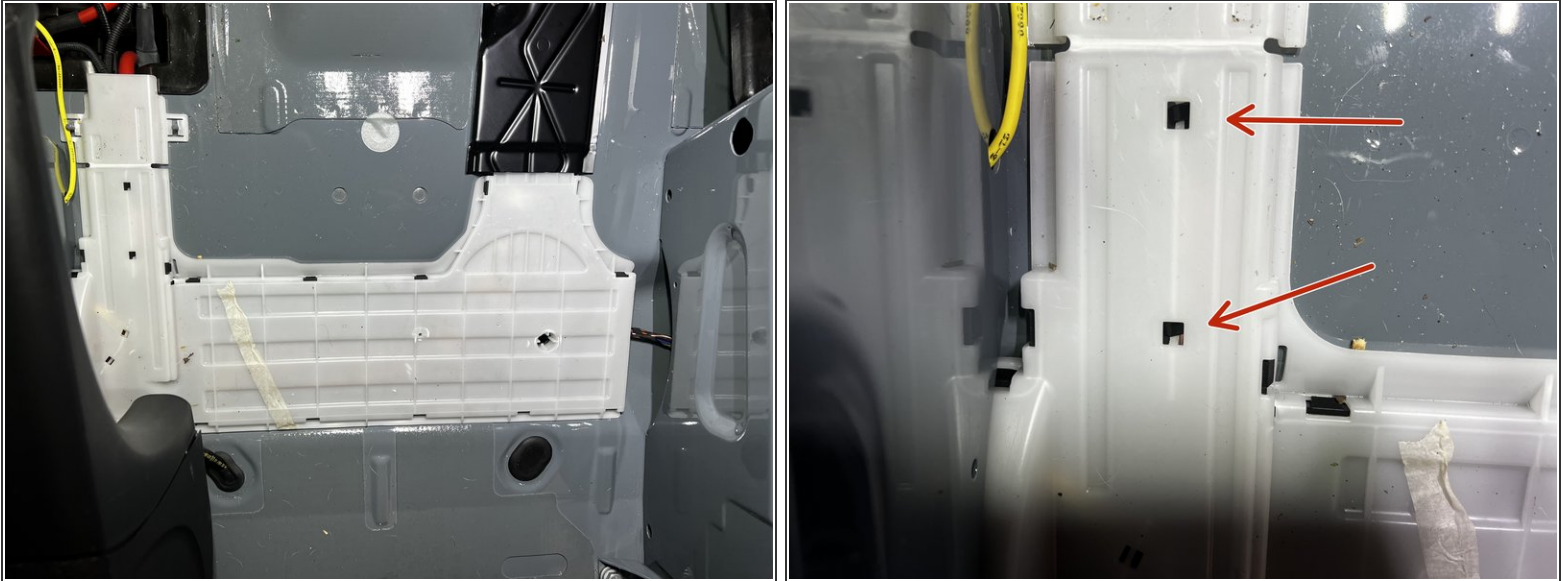


## Step 20 — Lower Dash Removal



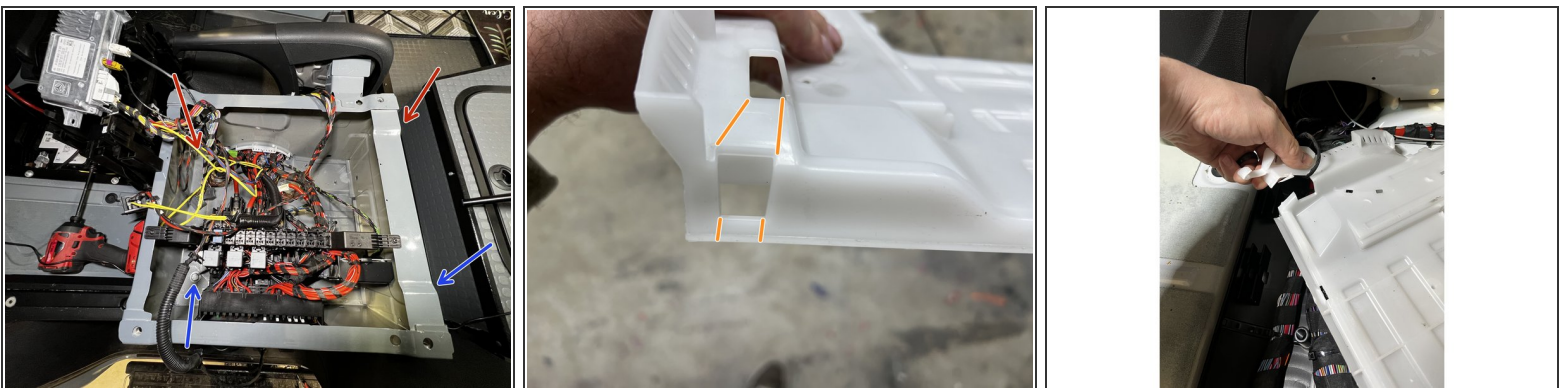
- Locate the three screws that secure the lower dash kick panel. There are two on the driver's side, and one on the passenger side. Use a T25 Torx bit to remove.
- Once the screws are removed, gently pull the lower kick panel towards the rear of the van to release the clips securing the panel in place.

## Step 21 — Left to Right Wire Chase Cover Removal



- Locate the white wire chase cover that runs between the driver's seat and the passenger seat.
- Start pulling the wire chase up near the passenger side to work it free from its mounting tabs. Sometimes significant effort is required to get the chase to free from the clips.
- There are two zip ties that need to be cut that secure the battery cables to the wire chase cover. It is best to lift the chase up, and use a pair of wire cutters from the side to cut the two zip ties.

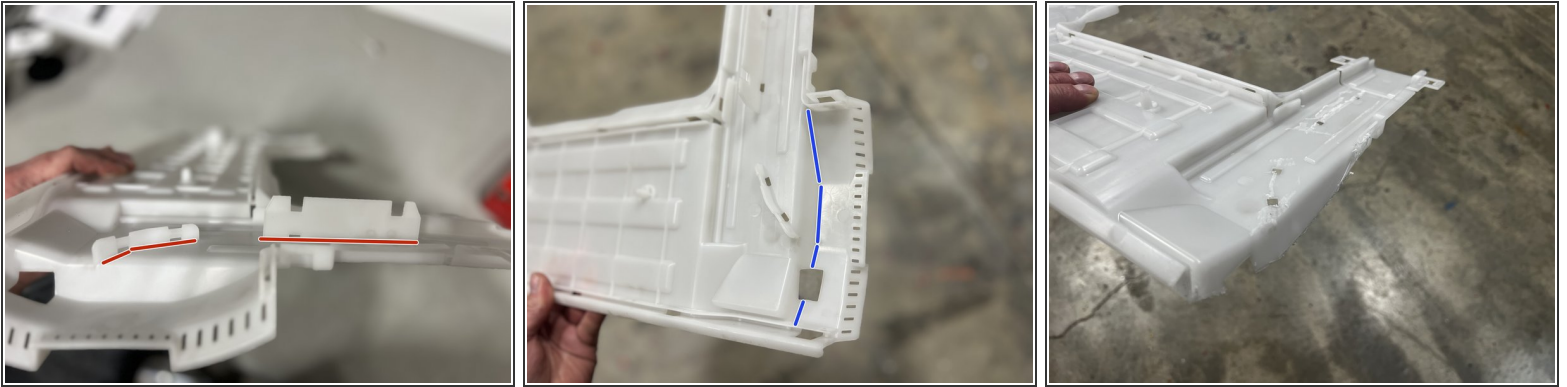
## Step 22 — Left to Right Wire Chase Cover Removal



- To finish remove the wire chase cover, it is necessary to loosen the drivers side seat base to allow the chase to be completely removed.

- Use a 16mm socket and wrench to completely remove two bolts closest to the passenger seat. You will need to remove the small piece of floor covering on the back of the driver's seat base to expose the two rear mounting bolts.
  - Using a 16mm socket and wrench loosen the two bolts closest to the driver's door. It is not necessary to completely remove them, just loosen them enough to allow the seat base to lift up.
  - You should now be able to lift the seat base up, to allow the tabs on the wire chase to clear the seat base. Some of the tabs can be difficult to release, but gentle prying can free the chase cover.
  - With the chase free from the seat base, there will be a wire for the emergency brake handle (if equipped) that passes through the wire chase cover. Use a pair of wire cutters to cut the PLASTIC chase cover, and you then can remove the wire chase cover around the wire. **DO NOT CUT THE WIRE!**
  - With the wire chase completely removed from the vehicle, reinstall the two mounting bolts closest to the passenger seat. Tighten all four bolts with a 16mm socket and wrench. Torque the seat base bolts to 41 ft/lbs.
  - ⓘ The second image shows the wire chase removed for clarity purposes. you will need to cut the part shown in the image to allow the wire to be removed from the wire chase cover before it can be removed.
- ⚠ **Take care when removing the wire chase cover to not damage the emergency brake wire. It is a very small gauge wire and can be torn if excessive force is used.**

## Step 23 — Wire Chase Cover Modifications



- With the wire chase cover completely removed, some modifications can be performed to make it much easier to reinstall, as well as remove in the future if needed.
- Using an oscillating tool, cut the tabs flush with the cover as shown.
- Using an oscillating tool cut the flange that goes under the seat base as shown. this will make it easier to install and remove, as the seat base will no longer need to be removed/loosened to remove the wire chase cover.
- The cuts do not need to be perfect, we are just removing the flange that tucks under the seat base.

## Step 24 — Door Panel Removal



- Using a pick tool, remove the screw covers on the upper part of the panel, behind the door handle, and in the grab handle pocket to expose the fasteners.
- ⓘ On some vans there may be screw covers on the lower mounting screws in the storage pocket of the door panel. You will need to remove these to expose the fasteners.

## Step 25 — Door Panel Removal



- Remove the lock actuator rod cover by using a trim removal tool to work it free.

## Step 26 — Door Panel Removal



- With all the screw covers removed, you can now remove the fasteners securing the door panel to the door.
- Use a T25 Torx bit to remove the upper screw.
- Use a T30 Torx bit to remove the door grab pocket screw.
- Use a T20 Torx bit to remove the screw behind the door handle.
- Use a T30 Torx bit to remove the 2 lower screws above the lower door storage pocket.

## Step 27 — Door Panel Removal



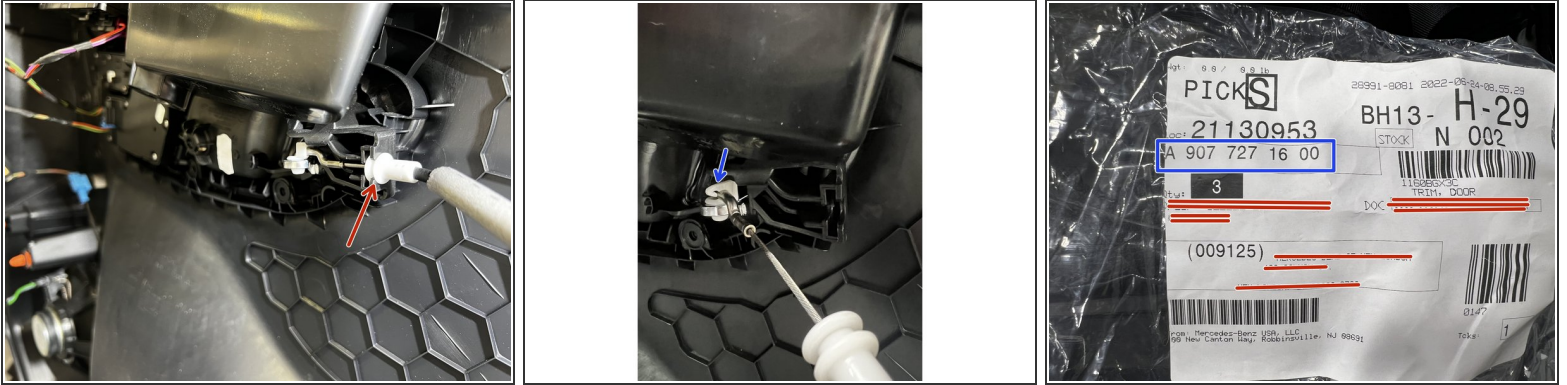
- On the bottom of the door panel there are three plastic fasteners. Use a #2 Phillips bit to remove them.
- Sometimes the plastic screw just spins, and does not come out. If that is the case, you can gently pry them out. These will be reused, so take care not to damage them.

## Step 28 — Door Panel Removal



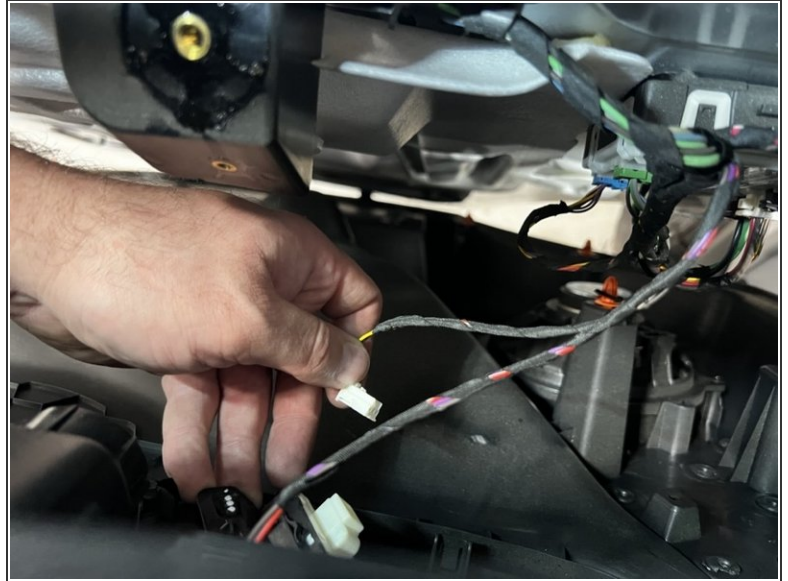
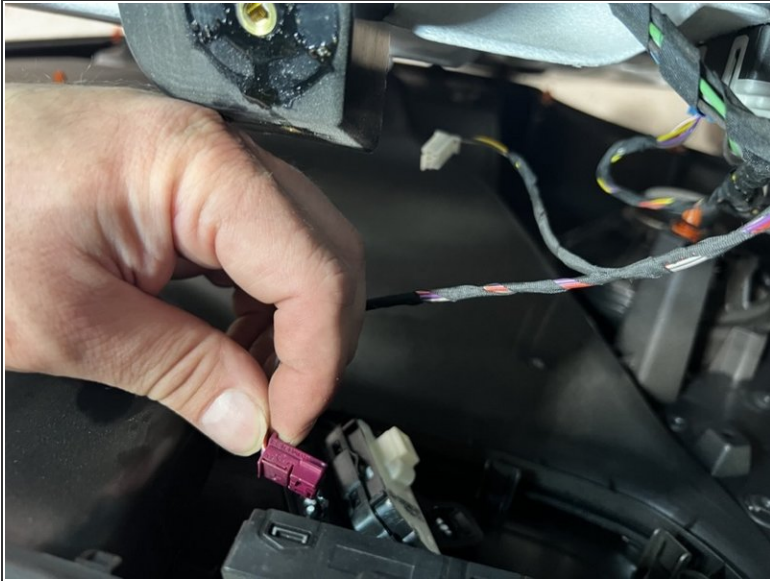
- With all the fasteners removed, you can now remove the door panel. The best way is to firmly grasp the door grab handle, and give the panel a rapid and hard pull. The door panel will pop free.

## Step 29 — Door Panel Removal



- With the door panel popped free, you can now disconnect the cable for the door handle.
  - To remove the door handle cable, pry the stop out from the door panel.
  - Once the cable stop is free, rotate the part of the cable that connects to the door handle bushing.
  - GENTLY pry the locking tab upwards with your thumb, while lifting the cable end out of the plastic bushing.
- ⚠ Extreme care must be taken when prying the locking tab to remove the cable. It does not need to be pried very much to get the cable end out. The plastic bushing is very brittle and easily broken!!
- If you do happen to break the clip, the third image is the OEM part number so you can order a replacement from your local dealer.



**Step 30 — Door Panel Removal - Harness Disconnection**

- Remove the harness for the door locks and window switch by depressing the locking tab and pulling the connector out.
- Depending on vehicle options (power seats, puddle lights, etc) there may be additional connectors to remove. Ensure all wire harnesses are disconnected.

## Step 31 — Door Panel Removal

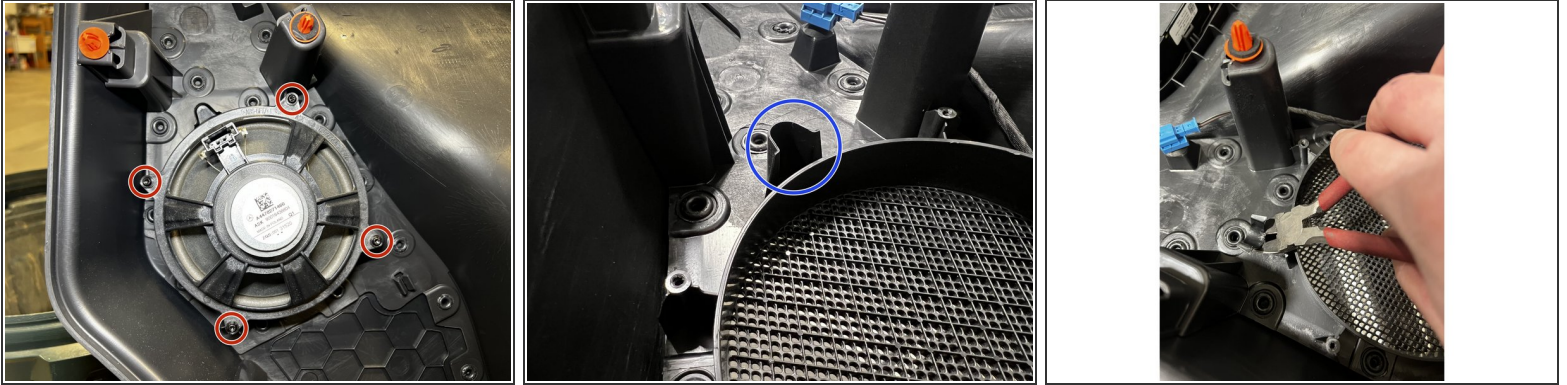


- Lift up the door panel and tilt outwards to remove tabs on the door panel from the mounting slots on the door.
- There may still be some orange door panel clips stuck in the door. Using a trim removal tool, pry these clips from the door. Take care of the orientation of the pry bar. We do not want to leverage the edges of the door and damage them. Have the tool pry point away from the edge. Follow the orientation of the pry tool in the image.
- Place the clips back in the door panel. We do provide several extra of the orange clips if some are damaged during the removal process.
- Repeat the door panel removal steps for the other side.

## Step 32 — Updated Speaker Rings - Please Read



- We introduced some updated speaker rings for version 3.1. Depending on if your stereo is version 3.1 or 3.0 DOWN the steps are slightly different.
- Follow the steps for the correct version of your stereo.
- The version number is printed on a sticker on the side of the amplifier. See images for reference.

**Step 33 — 3.1 Door Speaker Removal and Modification**

- Remove the 4 screws securing the door speaker using a T20 Torx bit. **SAVE THE SCREWS AS THEY WILL BE REUSED!**
  - Using a pair of cutters, cut the locating tab flush with the speaker mount
- ⚠ Ensure you save the T20 screws removed from the original speaker mount. These will be reused.
- ⚠ If you have version 3.0 or EARLIER, proceed to step 25

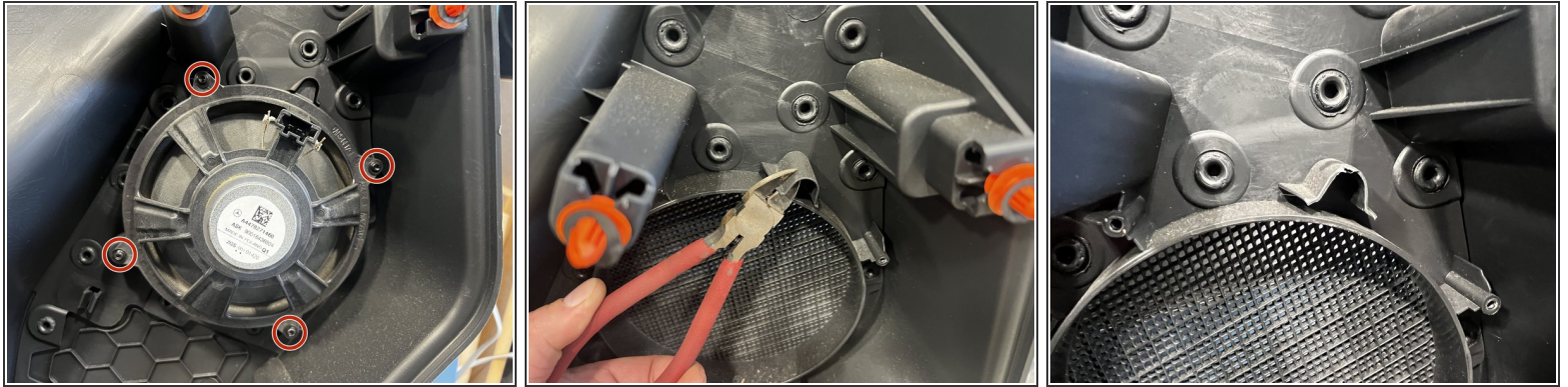
## Step 34 — 3.1 Door Speaker Adapter Ring Install



- Locate the speaker adapter rings and the speakers, along with the 8 #6x1/2" black screws. (These are the small black screws in the install hardware bag)
- The speaker ring has 4 small pilot holes for the screws to secure the speaker to the ring. Position the speaker onto the ring as shown, and line up the hole on the speaker with the adapter ring.
- Install the 4 screws to secure the speaker to the ring as shown. Take care not to over tighten the screws, as we do not want them to strip.
- Install the each speaker ring onto each speaker at this time.

**Step 35 — 3.1 Speaker Install into Door Panel**

- Position the speaker onto the door panel with the spade terminals pointing UP the door panel, and line up the holes on the adapter ring with the mounting points on the door panel.
- Using the 4 T20 screws removed from the original speaker mount, install the new speaker onto the door panel. Take care as to not over tighten the screws, as you can strip the mounting points on the door panel. The screws should be snug.
- Repeat these steps for the other door panel as the steps are the same.

**Step 36 — 3.0 And Earlier Versions Speaker Ring Install**

⚠ These steps are for the 3.0 and EARLIER versions. If you have a 3.1 version, you can skip these steps as you have already set up your speaker rings.

- Remove the 4 T20 screws securing the OEM speaker to the door panel. You can discard these screws as new screws are provided in the hardware kit. (These are the 8 long gray torx head screws)
- Using a pair of cutters, cut this locating tab flush with the speaker mount

## Step 37 — 3.0 and EARLIER Door Speaker Setup



- Take the new speaker, adapter ring, and 4 of the small Phillips head screws. Place the adapter ring around the speaker, and line up the ring so the ring is evenly spaced as shown. Start with the top screw on the speaker, using the dimple marker on the adapter ring as a reference point.
  - Use a #2 Phillips bit to secure the screws to the adapter ring. Do not over tighten the screws. The speaker should be indexed to the adapter as shown.
  - Setup both door speakers at this time.
- ⓘ Some door speaker adapters may be slightly different from the provided images, but the procedure is the same.



## Step 38 — 3.0 AND EARLIER Door Speaker Installation



- Place the speaker and adaptor into the door panel as shown. You want the terminal ends of the speaker facing upwards.
- Install the 4 provided screws into the factory holes using a T25 Torx bit. Take care as to not over-tighten the screws. It is normal for the adaptor ring to flex a tiny bit when the screws are installed.
- Repeat for the other door panel.

## Step 39 — Door Grommet Removal



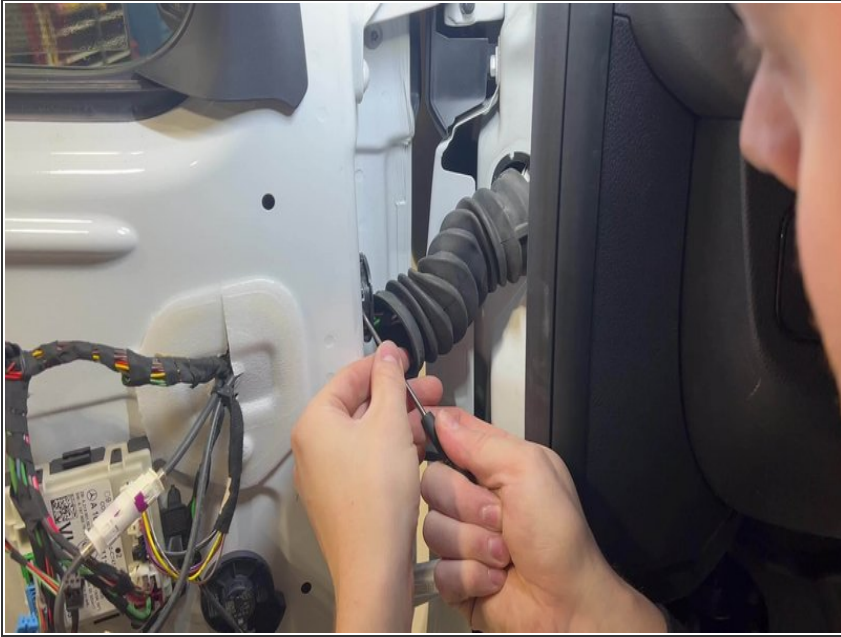
- In order to route the new speaker wire harness, the grommet that runs between the door and van body needs to be removed.
- Grasp the rubber pass thru grommet and pop it free from the plastic collars on the door and the van body.

## Step 40 — Door Grommet Removal



- With the rubber pass thru grommet removed, the plastic collars will be left in the door and the van body. These need to get removed to be able to properly reinstall the rubber pass thru grommet.
- There are three tabs on each plastic collar. You will need to release 2 of them to get the collar to release.
- Gently use a pick tool to insert on the side of the locking tab, and pry upwards to release the tab. Keep outwards pressure on the collar, and rotate it to expose the next tab. Use the pick tool to release the next tab.
- ⓘ Tip: Keep outward pressure on the collar with your fingers to ensure the tab does not get reset when rotating to the next locking tab.
- Once two tabs are released, you should be able to remove the collar from the door or van body.
- ⚠ The tabs are some what fragile. Only gentle prying is needed. However we have found if one tab breaks, the collar can still be used as 2 tabs provides sufficient holding force. Take care to not break more than one tab per collar!
- One the next step there is a video showing the process as well.

## Step 41 — Door Grommet Removal



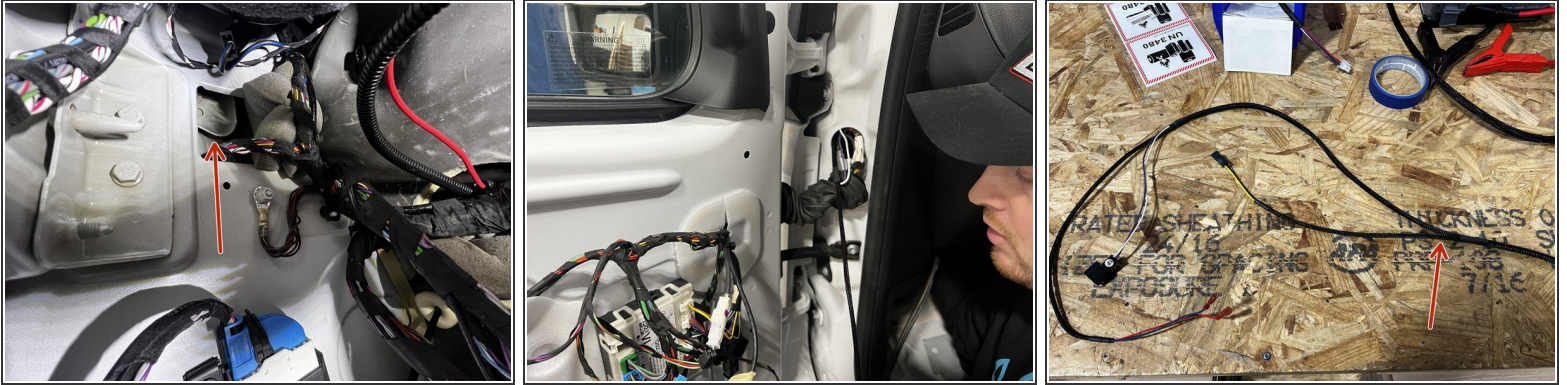
- Here is a video showing the collar removal process as well.

## Step 42 — Door Grommet Reassembly



- With both collars free, now is a good time to reinstall the collars into the rubber pass thru grommet, to make the harness installation easier.
- Line up the arrow on the rubber pass thru grommet with the indent on the plastic collar. Slip the collar inside of the groove on the rubber grommet, and work the grommet around the plastic collar until it is properly set into the groove.

## Step 43 — Door Speaker Harness Installation



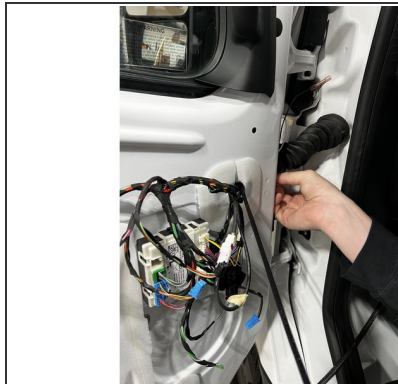
- Locate the door speaker wire harness provided. Both door harness's are exactly the same, and will be secured together during shipment. Cut the zip ties to separate the harness's from each other.
- On the driver's side of the van there is an access path to the door with a piece of foam. Move the foam to the side, and insert the end of the harness with the two butt connectors.
- Feed the harness through the above mentioned hole, and through the opening in the van body as shown.
- Continue feeding the harness through the until you reach the "Y" for the tweeter on the inside access hole where the foam is. The "Y" is indicated by the red arrow in the 3rd image.

## Step 44 — Door Speaker Harness Installation



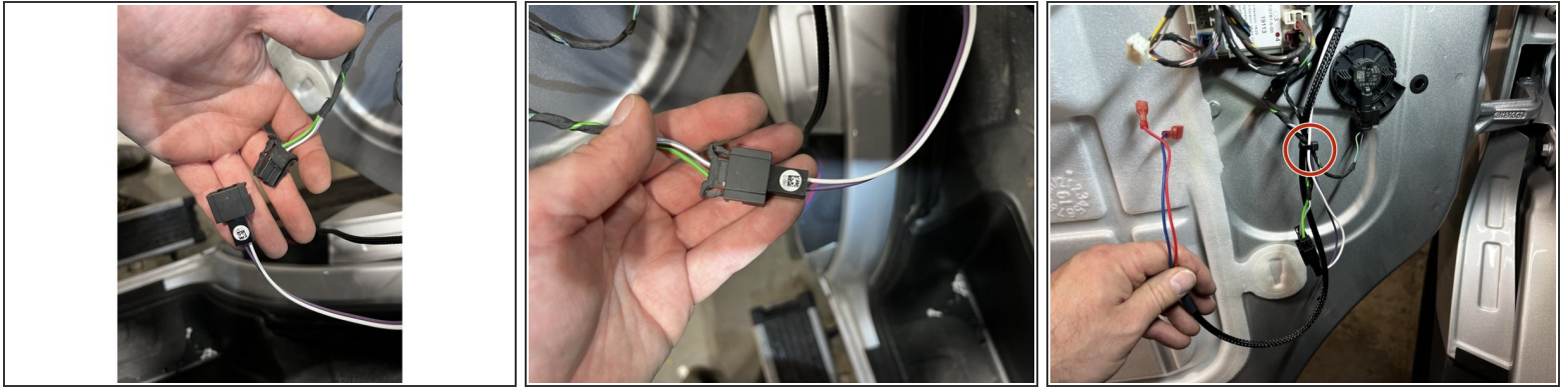
- Feed the harness through the pass thru grommet. This can be a tad challenging, it is easiest to compress the grommet, and use one hand to feed the wires, and the other to try to fish the wires out of the other-side of the grommet.

## Step 45 — Door Speaker Harness Installation



- Once the harness is through the grommet, feed it into the door and out through the opening with the other OEM wires. It may be necessary to tear the hole in the white foam slightly larger to make it easier to feel the wires.
- Once you have the harness through, you can reinstall the pass thru grommet. Just snap it back into place, and rotate the pass thru grommet so it is aligned correctly with the door and body.

## Step 46 — Door Speaker Harness Installation



- Plug the new door harness into the OEM speaker connector. Ensure the connector "clicks" into place. Give the connector a gentle tug to ensure it is fully seated.
- Use one of the provided zip ties to secure the excess door harness to the OEM wiring to assist with door panel reinstallation.
- Repeat the instructions for the other door, as the steps are the same for both sides.

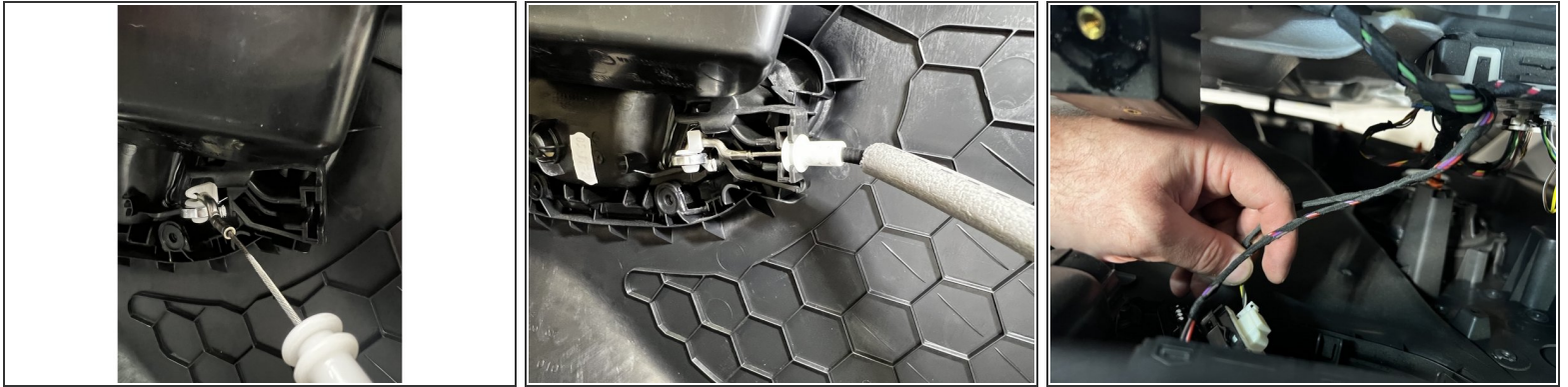


## Step 47 — Door Panel Reinstallation



- Hook the lower door panel tabs into the slots on the door.
- Connect the speaker harness wires to the speaker. The spade terminals on the speaker are different sizes, as well with the harness. Ensure the connectors are installed on their respective terminals on the speaker.

## Step 48 — Door Panel Reinstallation



- Connect the door handle cable to the door handle. Slide the hook end into the bushing, and gently press the rod over the locking tab.
- Insert the collar on the cable end into position on the door panel.
- Reconnect all the OEM wire connectors into their respective positions. Ensure the connectors are fully seated.

## Step 49 — Door Panel Reinstallation



- Line the door panel up against the door. Ensure there are no wires protruding from the side of the door panel.
- Line the clips on the door panel up with the holes on the door. Typically it is easiest to line up the outer corner.
- Firmly press the door panel onto the door to seat all of the clips.

## Step 50 — Door Panel Reinstallation



- With the door panel clipped into place, secure the door panel by reinstalling the hardware previously removed.
- Install the upper door panel bolt using a T25 Torx Bit
- Install the door grab handle bolt using a T30 Torx bit
- Install the bolt behind the door handle using a T20 Torx bit.
- Install the lower door pocket bolts using a T30 Torx bit.
- Install the lower door panel plastic clips. Use the new clips provided if needed.
- These instructions are the same for both doors.

## Step 51 — Tweeter Removal



- Use a pry tool to remove the trim panel over the tweeter.
- Once the cover is removed, use a pick tool to hook the tweeter. Pull the tweeter straight up to remove.
- Once the tweeter is out, simply pull on the tweeter wire to remove it from the tweeter. Push the OEM wire harness down the hole, it will not be reused.
- Repeat for both sides.

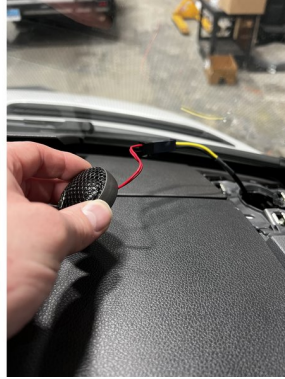
## Step 52 — Tweeter Installation



- Locate the tweeter wire harness fish tool provided in the kit.
- Feed the fish tool (connector side first) through the tweeter opening. There is a space in the front of the tweeter mounting hole that will allow the fish tool to go below the dash.
- Once the tool is fed most of the way into the hole, locate the connector end of the fish tool and the tweeter harness connector. Plug them into each other.

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## Step 53 — Tweeter Installation

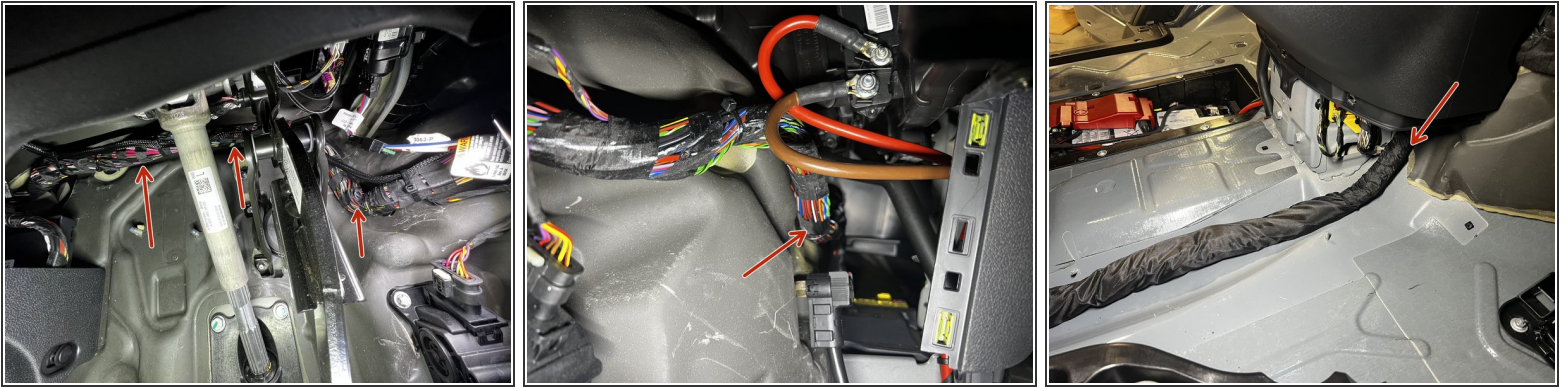


- Pull the fish tool from the top to get the tweeter harness into place. Take care when pulling to avoid pulling too hard and damaging the connector. It was take some wiggling to get the connector to come up through the opening in the tweeter mount.
- Connect the tweeter to the tweeter harness.
- Tuck the extra wire into the tweeter mounting cup. Ensure the connector is resting on the tweeter cup as shown and not pushed down the opening. The connector resting on the cup provides support to the back of the tweeter wire connections.
- Coil the extra wire into the tweeter mounting cup as you place the tweeter into place.

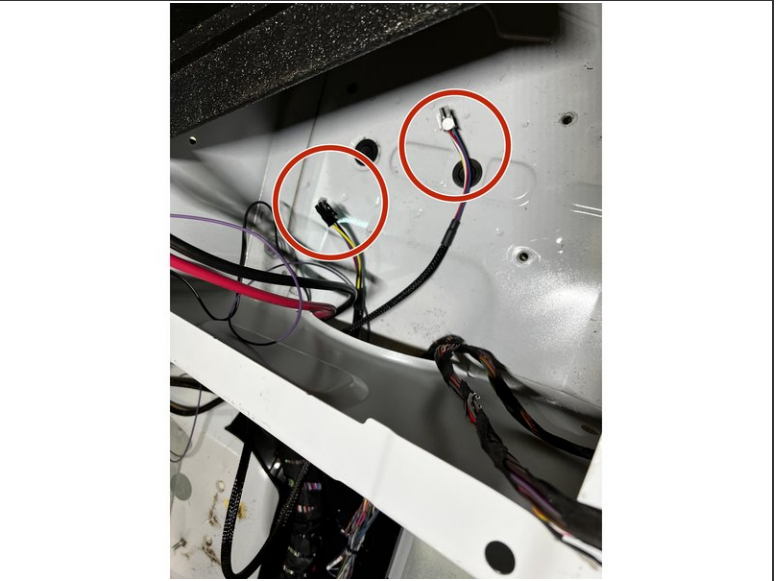
## Step 54 — Tweeter Installation



- Place the tweeter into the mounting cup. The orientation of the logo does not matter.
  - Seat the tweeter into the cup. Use your fingers to press on the EDGES of the tweeter. If you press on the center, you can damage the mesh screen.
  - Once the tweeter is set into place, it should be relatively level, and be fully seated.
  - Reinstall the tweeter cover by placing the cover into place and firmly pressing down until the cover clicks into place.
  - Repeat the previous steps for the other tweeter.
- ⓘ When done with the fish tool, do not discard it. It may be handy in the future incase of any updates or repairs.

**Step 55 — Speaker Harness Routing - Driver's Side**

- Using the supplied zip ties secure the new speaker harness along the large OEM harness that runs above the pedal assembly. Ensure the harness is routed to avoid any interference with the steering shaft and pedals.
- Continue routing the speaker harness along the OEM harness through the lower dash in the center of the van.
- Once to the passenger side follow the fabric covered harness to the passenger seat base.
- Do not secure the speaker harness to the fabric covered harness just yet, the passenger side speaker harness and bass control wire will follow the same path, and will all be secured together.

**Step 56 — Speaker Harness Routing - Passenger Side**

- Run the speaker harness along the OEM harness, going UNDER the fuse panel as shown. Secure to the OEM wire harness using the provided zip ties.
- Follow the fabric covered OEM harness and the driver's side speaker harness, and route both speaker harness' to under the passenger seat base.
- Do not secure the speaker harness to the fabric covered OEM harness just yet, as the bass control wire will be installed shortly.



## Step 57 — Cup Holder Removal



- To install the base knob the center cup holders will need to be removed.
- Use a pry tool starting in one of the rear corners, insert the tool and begin working the cup holders up.
- Once a some of the clips are released, a strong upward pull will separate the cup holders from the dash. It may be very difficult to remove, but some more force may be required.
- ⓘ One some vehicles there may be an overlay on the dash (Winnebago Revel for instance) Ensure the overlay is not caught on the cup holders before using force to remove.

## Step 58 — Bass Knob Mounting Hole Drilling



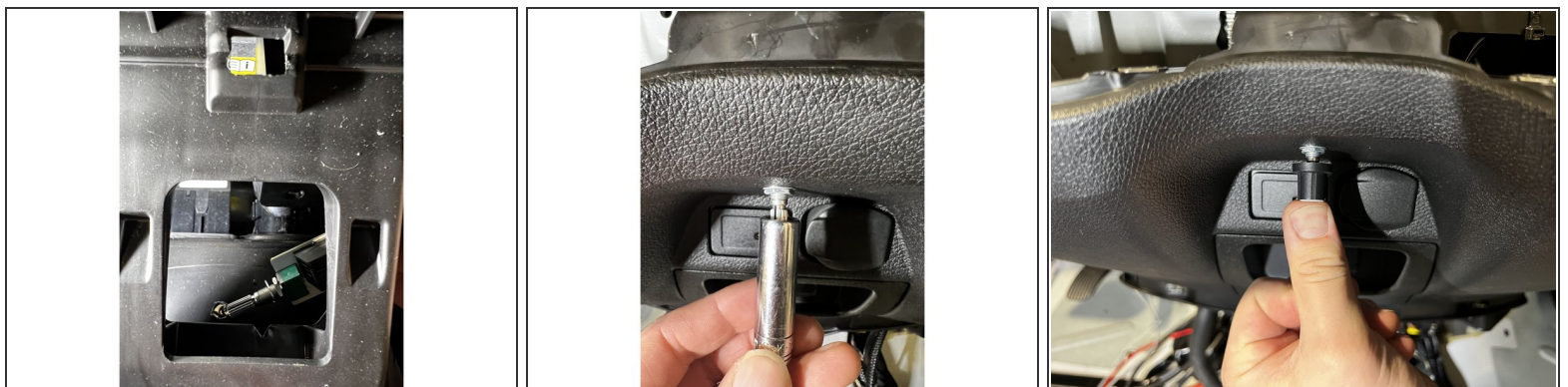
- Locate the position of the bass knob on the center dash near the 12v power plug.
- The hole will be approx. 1" down the top, and in the center of the panel, in between the 12v power plug and the USB C outlet.
- Use a small diameter drill bit to drill a pilot hole.
- Next use a 9/32" drill bit to drill the final hole.

## Step 59 — Bass Knob Install Prep



- Remove the plastic knob by pulling it off the shaft.
- Using a #2 Phillips bit remove the set screw securing the control knob to the mounting plate.
- Use a 10mm deep socket and wrench to remove the nut and washer from the control knob shaft. Slide the control knob off the mounting plate. Discard the mounting plate and the screw.
- Thread the rear most nut and washer all the way down the control knob shaft as shown.

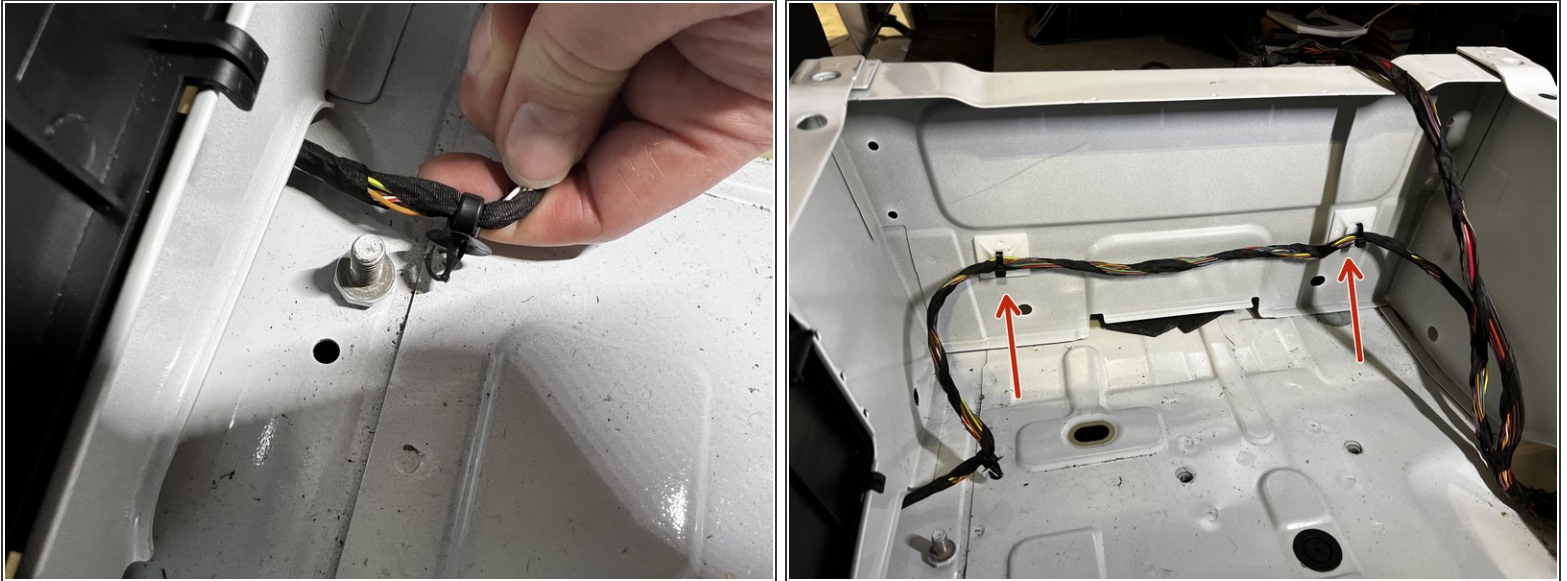
## Step 60 — Bass Knob Installation



- Install the bass knob into the hole previously drilled.
- Install the washer, then the nut and tighten using a 10mm socket. Take care to ensure the nut is tight, and the knob control board has not rotated. But be careful as to not over-tighten the nut, as you could damage the knob assembly
- Turn the knob shaft fully counter clockwise. Slide the black plastic knob onto the shaft, so the reference line is even with the off position.

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## Step 61 — Passenger Seat Base Prep



- Locate the wire harness that runs on the floor of the passenger seat base.
- Use a trim removal tool to pry up the wire mount from the floor.
- Route the harness along the rear of the seat base. Use the provided zip ties mounts and secure the mounts to the rear of the seat base as shown. Ensure the seat base is clean and dry before sticking the zip ties mounts into place.
- With the mounts installed, use the provided zip ties to secure the harness to the mounts as shown.
- ⓘ Secure just the harness that runs along the floor of the seat base and NOT the seat wire harness.

## Step 62 — Seat Base Prep



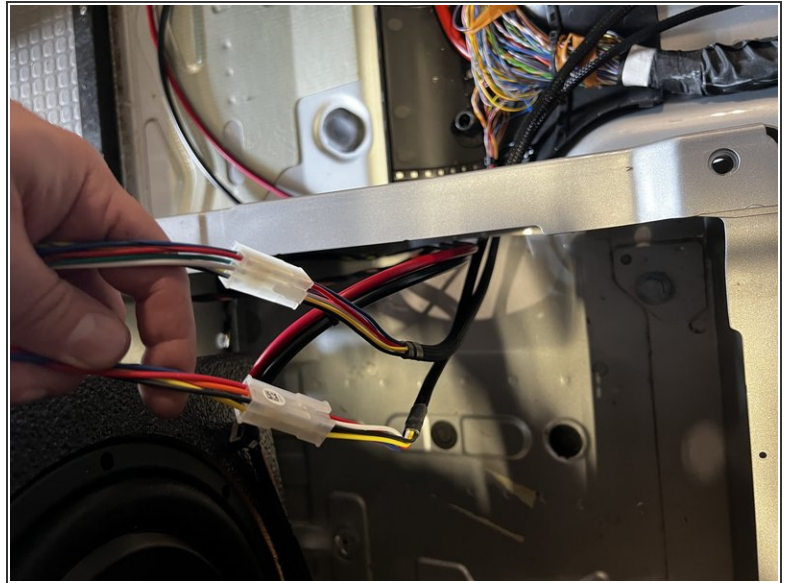
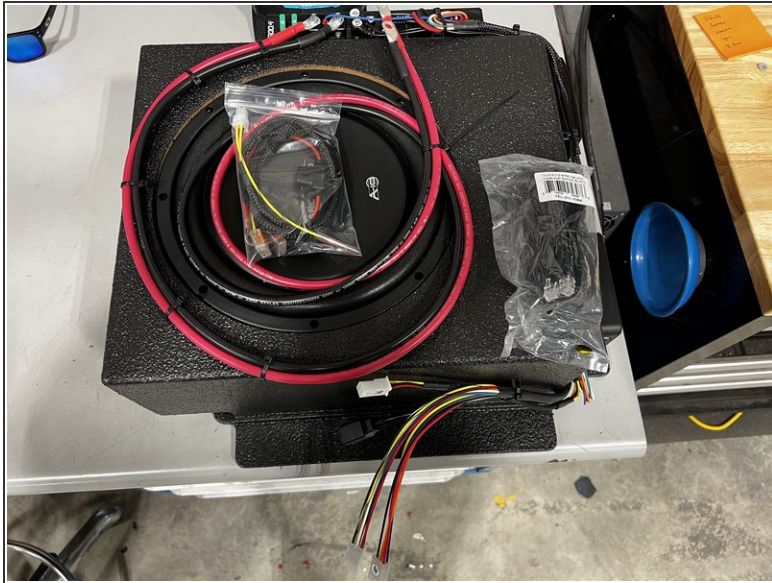
- Remove any items that are screwed to the back of the seat base. Long screws that protrude into the seat base will interfere with installing the sub box fully.
- After the sub box is installed, you can reinstall any items using shorter screws.
- ⓘ Shorter screws are not supplied, and will be up to the installer to supply.

## Step 63 — Updated Sub Box Install - Please Read

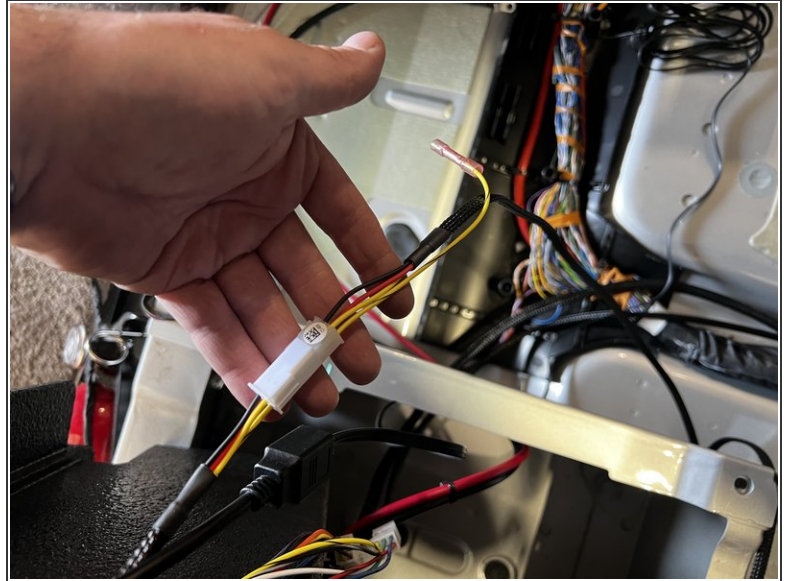
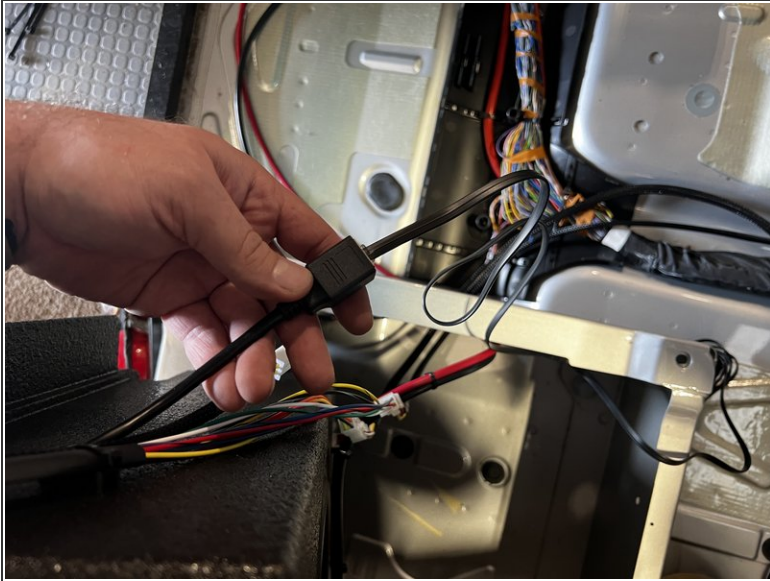


- Version 3.1 of the BeatBox features an RJ12 connector for the bass knob. This makes future service of the BeatBox easier.
- If you have version 3.1 as indicated by the sticker on the side of the amplifier, follow the 3.1 instructions below. If you have version 3.0 or EARLIER follow steps 55-56

## Step 64 — 3.1 Sub Box Install

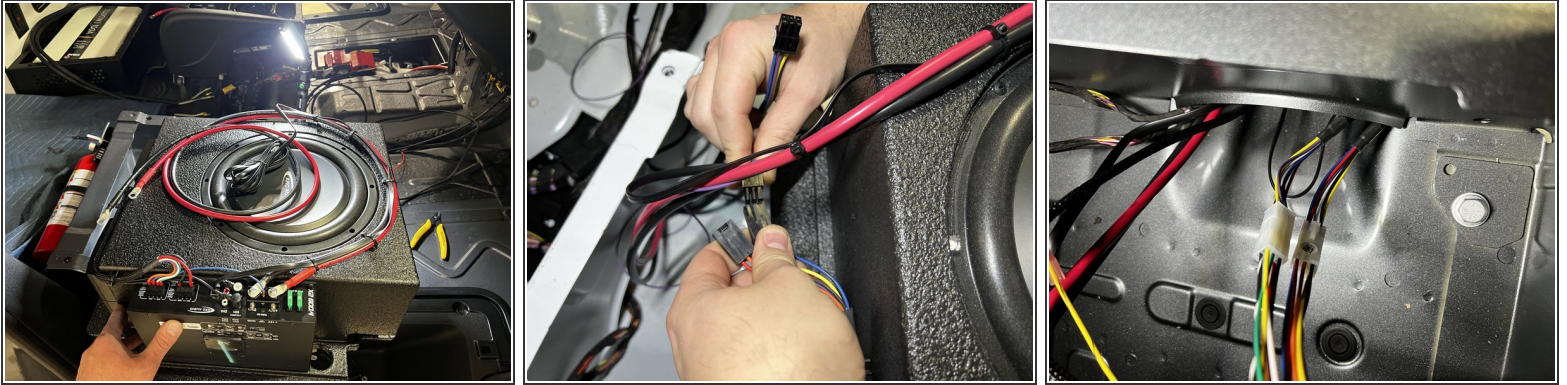


- Unpack the sub box and located the RJ12 cable and the ignition power harness. Cut the single zip tie securing the power leads coiled up. Unpack the RJ12 cable and the ignition power harness so they are ready for the next steps.
- Place the sub box over the seat base. Feed the power wires through the seat base opening.
- Feed the speaker door harness' into the seat base. Connect each harness to the matching connector on the sub box. It does NOT matter which harness connector goes to each connector on the sub box.

**Step 65 — 3.1 Sub Box Install**

- Feed the RJ12 cable into the side of the seat base through the opening. Plug the RJ12 cable into the connector on the side of the sub box as shown.
- Feed the ignition power harness through the seat base opening. Plug the ignition harness into its respective connector on the side of the sub box as shown.
- Once all harness' are connected, proceed to step #57

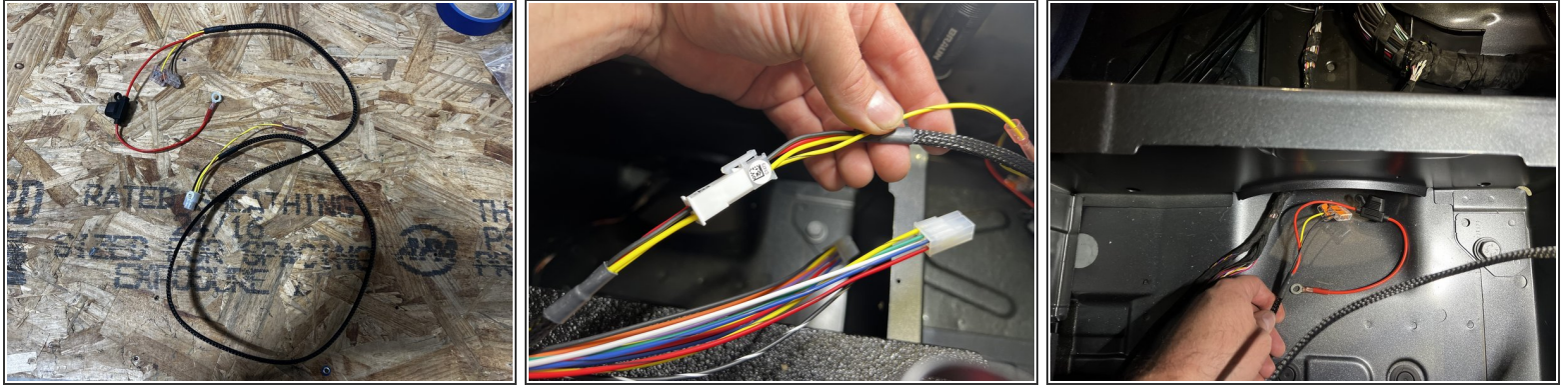
⚠ The yellow and black stripe wire is for an auxiliary source input. We will not be connecting anything to it at this time.

**Step 66 — 3.0 AND EARLIER Sub Box Install**

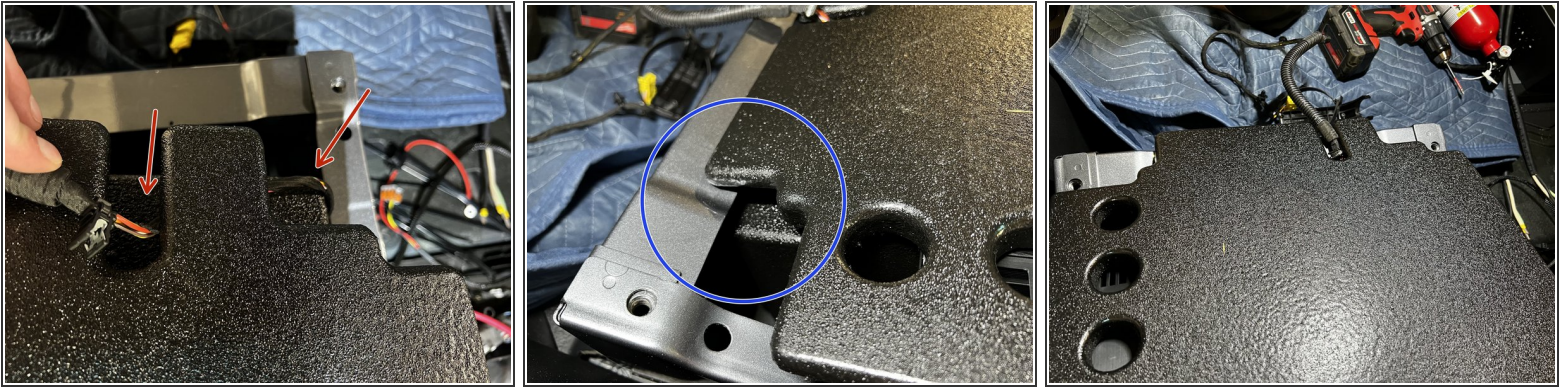
- Take the sub box out of the shipping box. Cut and zip ties securing the wiring coiled up. Do not cut any zip ties on the box, or securing the wire bundles.
- Position the sub box as shown, and feed the positive wire, negative wire, and RJ12 cable through the opening in the seat base.
- Feed the speaker door harness' into the seat base. Connect each harness to the matching connector on the sub box. It does NOT matter which harness connector goes to each connector on the sub box.



## Step 67 — 3.0 AND EARLIER Ignition Power Harness Connection



- Locate the ignition power harness. This is the harness with the 4 pin connector on one side, and a fuse holder and wago connectors on the other side.
  - Connect the ignition power harness to the corresponding connector on the side of the BeatBox. This connector is on the same side as the speaker harness connectors.
  - Feed this harness with the power wires through the opening on the side of the seat base.
- ⚠ The yellow and black stripe wire is for an auxiliary source input. We will not be connecting anything to it at this time.

**Step 68 — Sub Box Install**

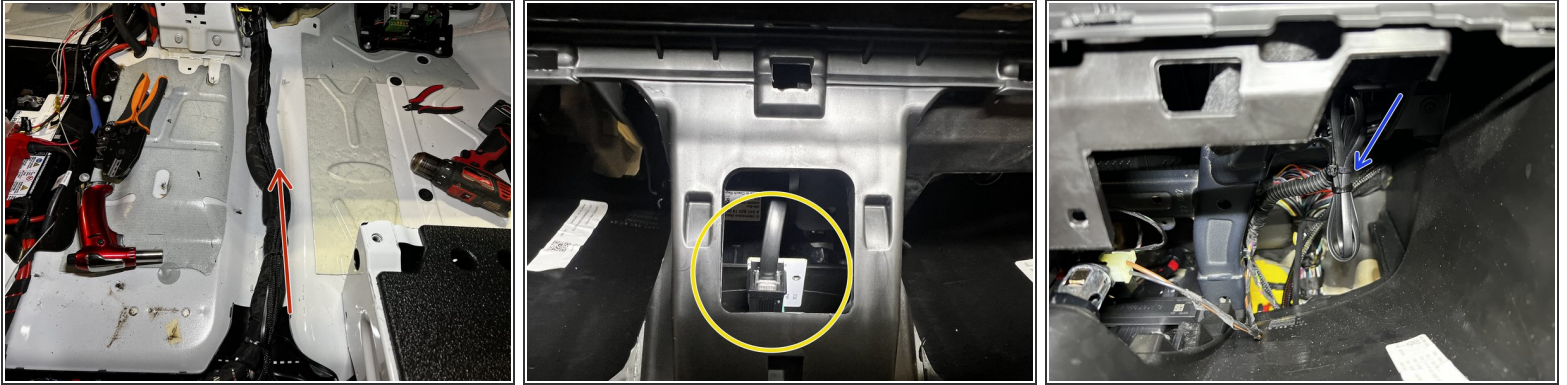
- With the harness' connected, and the wires routed outside the seat base, place the sub box into position. The rear slit in the top of the box goes towards the rear. Angle the box so the seat base flange sits between the upper flange and lower flange of the sub box,
- Take care placing the sub box into the seat base, and route the seat wire harness over the corner of the sub box, and through the slit in the sub box as shown.
- Slide the sub box at an angle to towards the rear of the van so the seat base flange is between the upper and lower flange of the sub box.

## Step 69 — Sub Box Installation



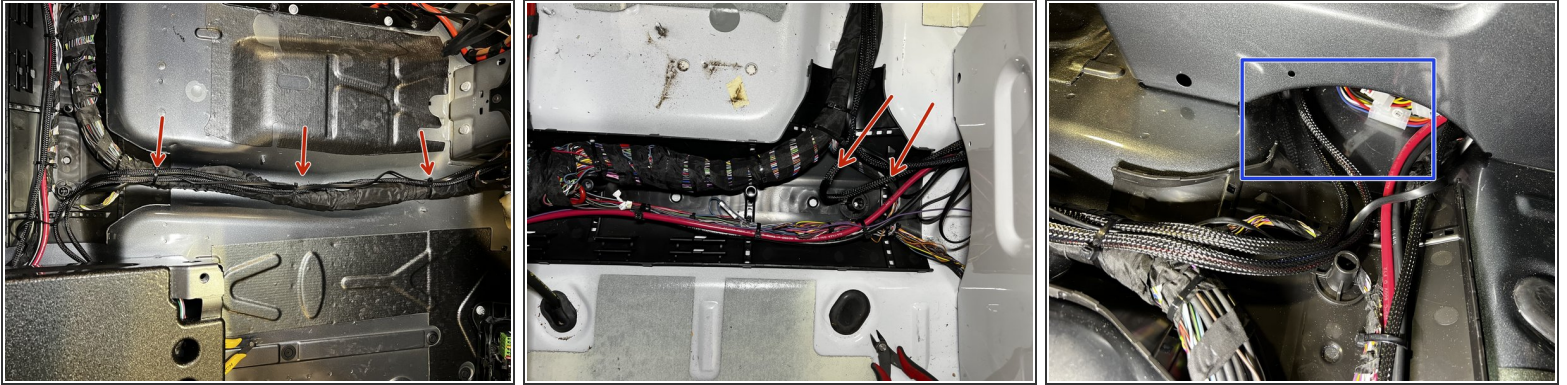
- Once the sub box is pushed all the way to the rear of the seat base, the sub box can be lowered into the seat base.
- ⚠ Ensure the seat wire harness is not being pinched or crushed by the sub box.
- Cut the zip tie securing the clip to the seat wire harness. It is no longer needed, and in some instances is in the way of the sub box seating fully into the seat base.
- The sub box will fit snugly into the seat base, and when it is fully seated the flanged on the sub box will rest on the seat base.

## Step 70 — Bass Knob Wire Routing

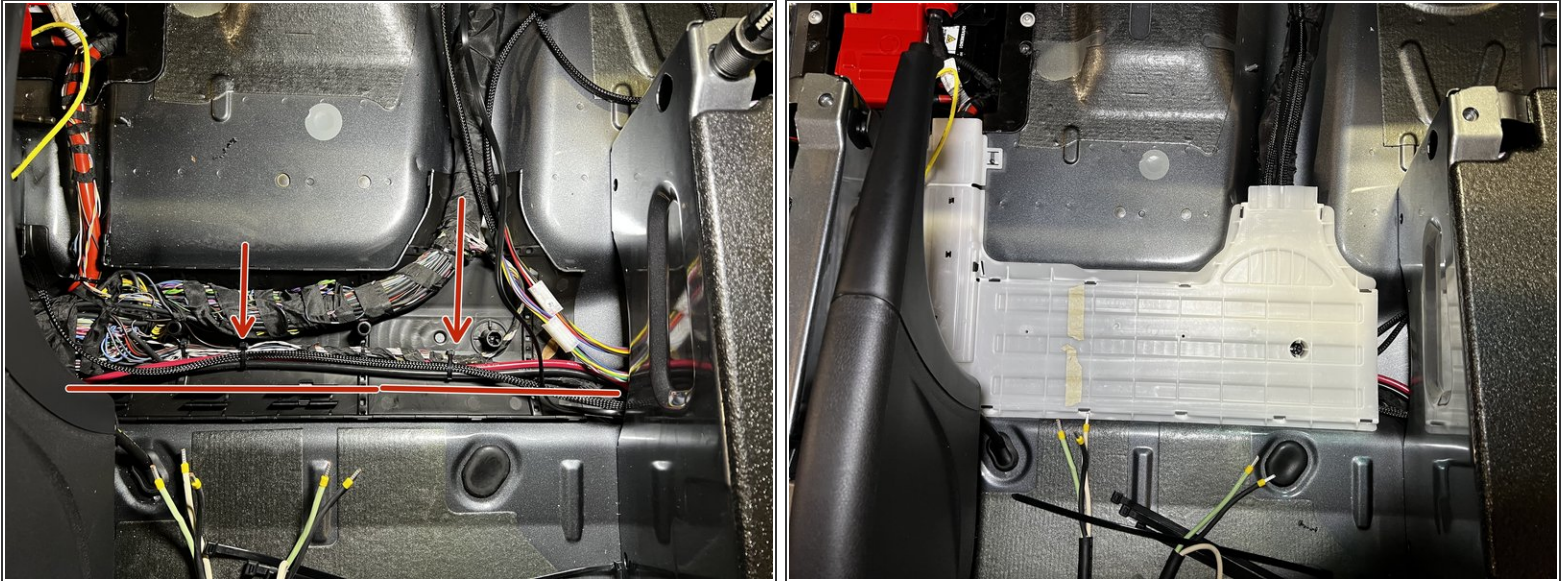


- Route the bass knob control wire (RJ12) along the fabric covered OEM harness, following the door speaker harness wiring to the center dash.
- Route the bass control knob wire up into the center dash, under the cup holder opening.
- Connect the harness to the bass knob.
- Secure any excess RJ12 wire using the provided zip ties in the area under the cup holders.
- ⓘ Ensure the bass knob control wire is not pulled tight on the back of the control knob. This will ensure the knob does not get damaged, end make replacement in the future easier if needed.

## Step 71 — Wire Harness Securement

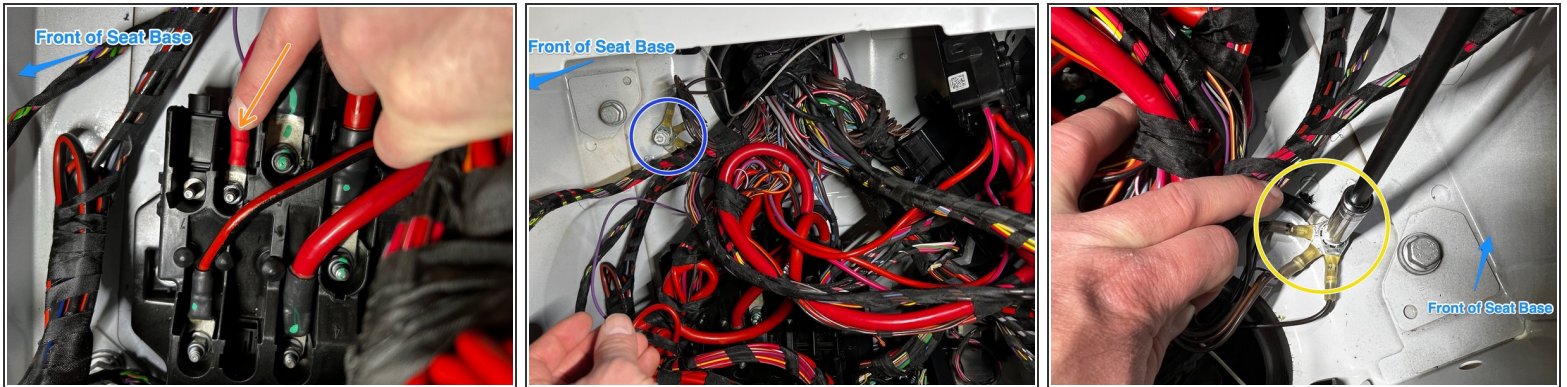


- With the bass control wire run, you can now secure the door speaker harness' and the bass control wire to the OEM cloth covered harness.
- Use the provided zip ties to secure all the wiring. There should be some slack in the harness', which is desired. Take the slack from the door speaker harness' wires and the bass control knob wire and route as shown.
- The slack from the harness can be tucked into the seat base. Ensure the harness' are not under the subwoofer directly, which can result in a rattle during heavy bass. This will make the removal of the sub box assembly easier in the future if needed.

**Step 72 — Power Wire, Negative Wire, Ignition Power Harness Routing**

- Route the positive (red), negative (black) and the ignition power harness through the wire channel and into the drivers side seat base.
- Secure the wires and harness using the zip ties provided.
- Reinstall the wire channel cover when done routing and securing the wires.

## Step 73 — Power and Ground Wire Connections



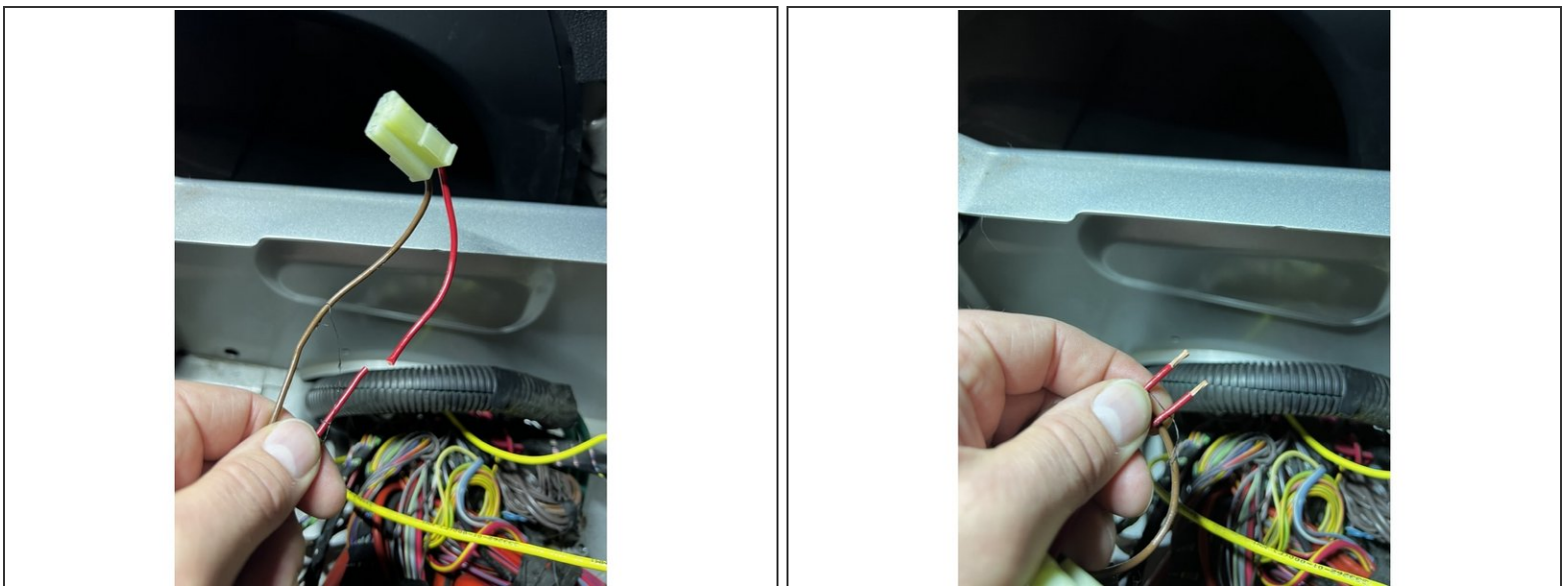
- The power (red) wire will get connected to the distribution block at the bottom of the driver's seat base.
- Place the lug end onto the the open spot second from the FRONT of the seat base. Use the provided M6 nut and tighten the nut using a 10mm socket and wrench.
- ⓘ Take care when tightening the nut to avoid over tightening. You can damage the fuse that is connected to the stud if over tightened.
- Locate one of the ground studs under the seat base. In the image we are using one of the ground studs towards the front of the seat base. Remove the nut using a 10 mm socket and wrench.
- Place the ground wire (black) onto the stud, and reinstall the nut. Tighten until snug.

## Step 74 — Ignition Power Harness Connection



- Locate the black and yellow wire ends of the ignition power harness. These have the orange and clear Wagos installed on them.
- Remove the 12v power plug harness from the power plug on the side of the driver's seat base. Simply just pull the plug out of the connector.

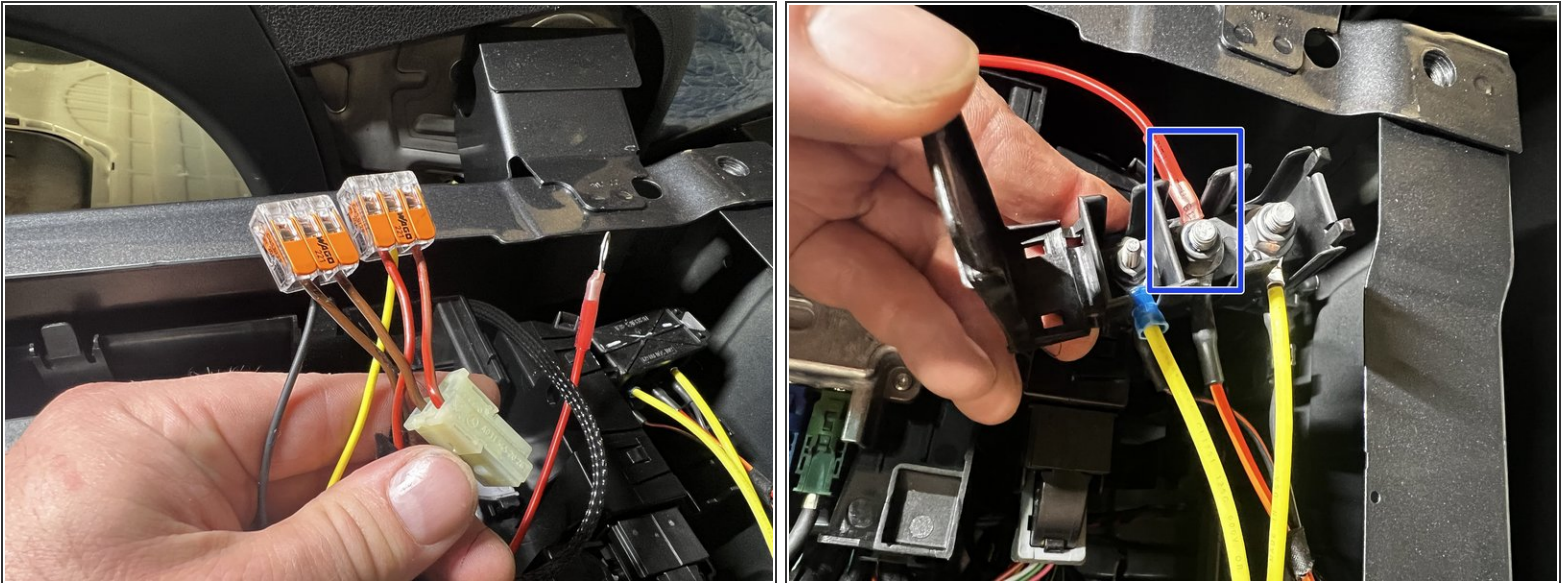
## Step 75 — Ignition Power Harness Connection



- Cut the harness approximately 2 inches down from the plug. Both the red and brown wires will be cut.
- Strip approximately 3/8" of insulation off the both ends of the red and brown wires.

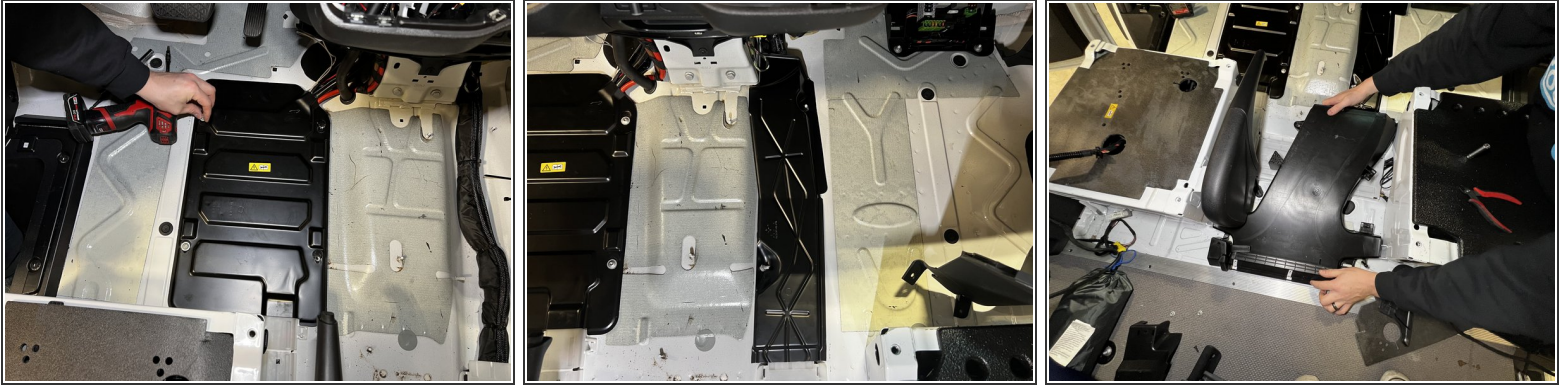


## Step 76 — Ignition Power Harness Connection



- Open the Wago connector by pulling up on the orange tab on the connector.
- Insert both brown wires into the Wago with the BLACK wire from the power harness. Close the tabs on the Wago connector to lock the wires into the connector.
- Insert both red wires into the Wago with the YELLOW wire from the power harness. Close the tabs on the Wago connector to lock the wires into the connector.
- ⓘ Ensure to tug the wires going into the Wago connector to ensure they are secure.
- Locate the red fused wire on the ignition power harness. This will connect to the center stud on the EK1 terminal block. Use a 10mm socket and wrench to remove the nut. Place the ring terminal onto the stud, and reinstall the nut.

## Step 77 — Reassembly of Interior



- Reinstall the battery cover using the hardware previously removed.
- Reinstall the wire chase cover using the hardware previously removed.
- Reinstall any ductwork (if equipped) that was removed.

## Step 78 — Reassembly of Interior



- You can reinstall the cup holders at this time. Place the cup holders back into position, and give it a solid tap to seat it into place.

## Step 79 — Reassembly of Interior



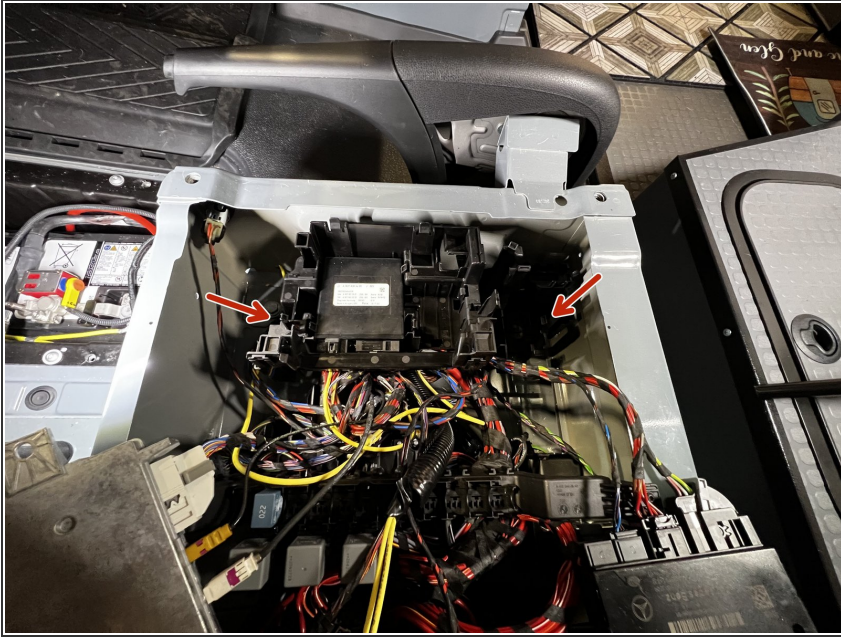
- Reinstall the lower dash panel using the hardware that was removed.
- Reinstall the tool kit tray into place.

## Step 80 — Reassembly of Interior



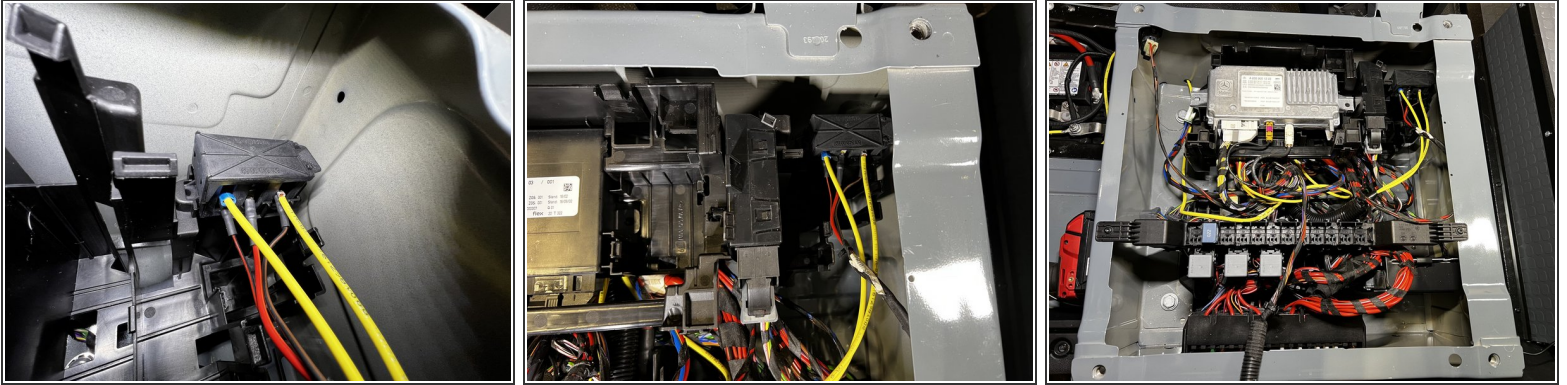
- Place the floor covering back into place on both the driver and passenger side. Install the "L" trim that secures the floor coverings on both the driver and passenger sides using the hardware previously removed.
- ⓘ If your van is equipped with the ductwork, do not forget to secure the vent grill into place on the rear section of the floor covering.
- Reinstall the tool kit cover.

## Step 81 — Module Mounting Bracket Reinstallation



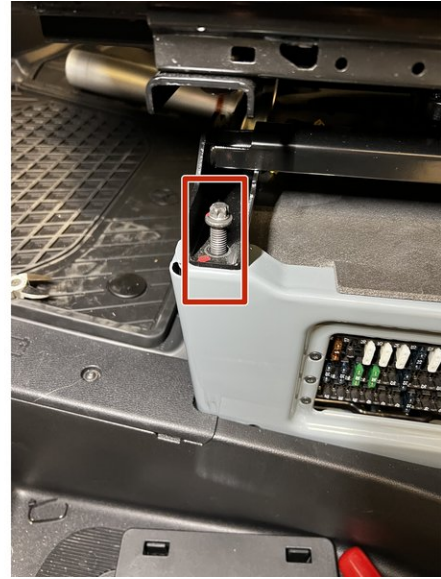
- Place the module mounting bracket back into place. Ensure the bracket is positioned correctly over the mounting studs, and no wires are being crushed/pinched by the mounting bracket.
- Place the two nuts back onto the mounting studs, and tighten using a 10mm socket and wrench. Take care not to over-tighten the nuts and strip the mounting stud.
- Now is a good time to untangle any wires to make removal easier in the future.
- ⓘ Use the magnet pick up tool to assist with installing the nuts. Place the nut onto the magnet, and lower the nut into place on the mounting stud.

## Step 82 — Module Mounting Bracket Reinstallation



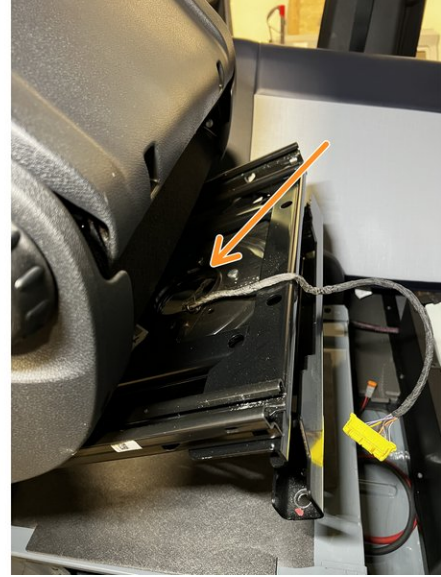
- Reinstall the EK1 terminal first. Place the EK1 terminal in at an angle to hook the tab under the mounting point. Then press the terminal down to snap it into place.
- Slide the black module back into the mounting bracket until it clicks into place.
- Lastly place the silver module back into the mounting bracket. You may have to gently depress it to get the module to click into place.

## Step 83 — Installing Seats Back Into Van



- Lift the seat into the van, and place on the seat base.
- ⓘ Take care not to scratch the seat base when placing seat into van. Masking tape can be used on the seat base to help avoid damage.
- Start the front 2 seat bolts into the base by hand, only a few turns.

## Step 84 — Installing Seat Bolts and Seat Wire Harness



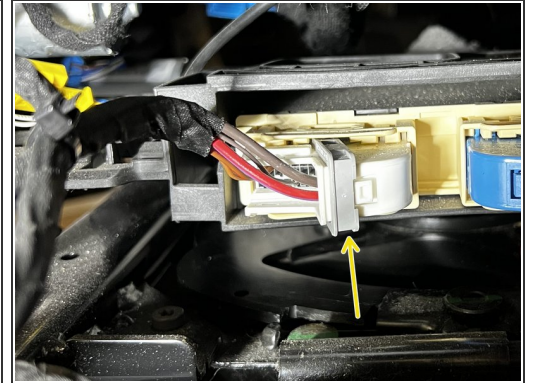
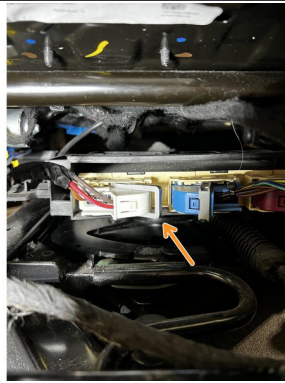
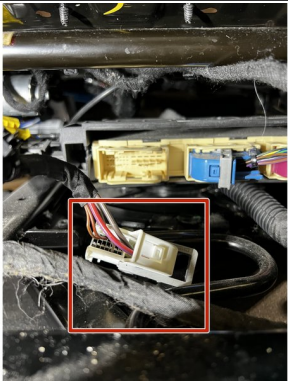
- With the front 2 bolts started, tilt the seat forward.
  - Feed the seat wiring harness through the center hole up through the seat swivel.
  - Lower the seat back onto the base, and start the rear 2 seat bolts by hand.
- ⚠ Take care to start the seat bolts by hand to avoid cross threading the bolt into the nut on the seat base.

## Step 85 — Final Torque of Seat Bolts



- With all the seat bolts started, tighten all the bolts and torque to 29 ft/lbs.
- ⓘ Seat will need to be swiveled to access all the seat bolts.

## Step 86 — Seat Wiring Harness - Power Seats



- ⓘ If your van does not have power seats, skip to step 5
- Route the power seat harness to the control module under the seat, along with the seat wire harness.
- Insert the plug into the module. As the plug is inserted, the locking lever will start to close.
- Once the plug is fully seated, the lever can be moved into the locked position.



## Step 87 — Seat Wire Harness Routing



- Route seat wire harness along seat rails, securing to the seat rail.
  - Connect the plug from the seat wire harness into the connector on the seat.
  - Secure the excess wire to the seat rail using a zip tie and trim zip tie tail.
- ⚠ Ensure there is enough slack in the wire harness to allow the seat to slide forward and backwards, as well as rotate.

## Step 88 — VS30 Battery Reconnection



- Place the battery disconnect terminal back onto the ground stud.
- Push the battery disconnect terminal onto the stud until it clicks. Give the terminal a tug to ensure it is fully seated.
- Reinstall fuse #32
- Reinstall the battery disconnect access cover.

