

# STO Beast Mode Fuse Panel Relocation - For Beatbox Installation

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# INTRODUCTION

In this how to guide we will be going over the procedure to relocate the STO Beast Mode fuse panel that is located under the passenger seat base to allow the RoamRig Beatbox to be installed.

The fuse panel will be relocated to under the passenger side of the dash. This requires NO wires to be cut/spliced by simply rerouting the wiring through the van.

THIS IS A SUPPLEMENTAL GUIDE FOR RELOCATING THE FUSE BOX ONLY! THE BEATBOX INSTALL IS COVERED ON SEPARATE INSTRUCTIONS.

## **TOOLS:**

- T30 Torx Bit (1)
- Flathead Screwdriver (1)
- Drill/Impact Driver (1)
- 16mm Socket (1)
- Socket Wrench (1)
- Flush Cut Pliers (1)
- Trim Removal Tool Kit (1)

#### Step 1 — Preface



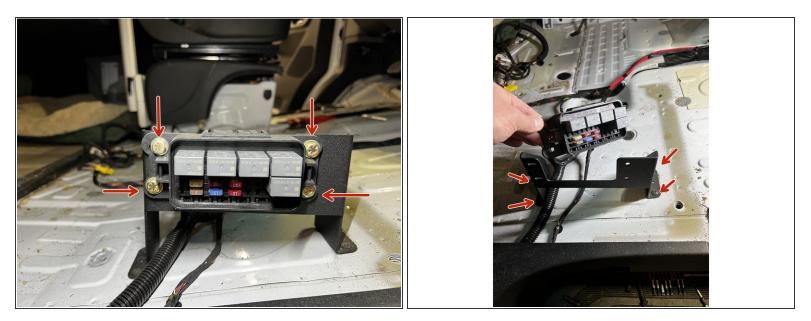
 These instructions/steps assume the flooring is already removed, tool kit already removed, seat already removed, etc. This is a supplemental document in regards to our BeatBox install instructions. You can refer to the BeatBox install instructions for the full install instructions of the BeatBox including interior disassembly.

## Step 2 — Seat Base Removal



- Remove the fire extinguisher from the mounting bracket and set aside. Remove the small portion of the floor covering behind the seat base to expose the mounting bolts for the seat base.
- Remove the two rear mounting bolts and the front two mounting bolts using a 16 mm socket and wrench.
- Remove the seat base from the van and set aside.

## Step 3 — Fuse Panel Removal



- Using a 7/16" socket and wrench remove the 4 bolts securing the fuse block to the mounting bracket.
- Remove the 4 screws securing the mounting bracket to the floor of the van. You can discard the mounting bracket as we will not be reusing it.

### Step 4 — Fuse Panel Removal



• Cut any zip ties securing the fuse panel wiring bundle to the OEM Mercedes wiring loom. The fuse panel wiring bundle runs up to the fuse panel under the passenger side of the dash.

#### Step 5 — Wire Harness Relocation Prep



- Pull the door seal off the body of the van along the B pillar.
- Gently pry the B pillar trim away from the bottom of the B pillar. You will see the wire harness for the fuse panel runs under a tab for the entry step plastic trim.
- Take the fuse panel wiring harness and remove it from under the tab as shown.

#### Step 6 — Wire Harness Relocation



• Pull the fuse panel wire harness out from behind the B pillar trim as shown. There may be some zip ties securing the harness inside the B pillar. You will need to cut those zip ties if that is the case.

## Step 7 — A Pillar Trim Removal



- Using a trim tool pop off the cover on the top of the A pillar. This cover is the one with "Airbag" written on it. Use a T30 Torx bit to remove this screw.
- With the screw removed you can pop off the upper portion of the A pillar trim. There are clips securing the A pillar trim to the body. Once the slips are free, you can pull up on the A pillar trim to remove from the dash area.
- You may need to used some force to pop the clips free. There are two of them that secure the A pillar trim.

## Step 8 — A Pillar Trim Removal



• In some cases this metal tab will be left on the vehicle side. Remove it using a pair of pliers and reinstall it onto the A pillar trim.

## Step 9 — Visor Removal



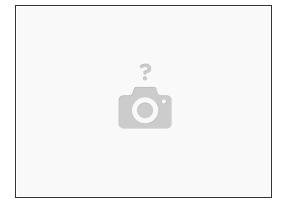
 Unclip the visor from the visor shelf. Using a T30 Torx bit to remove the screw securing the visor to the visor shelf.

#### Step 10 — Visor Shelf Removal



- Use a T30 Torx bit to remove the screw securing the visor shelf that is located on the left side.
- Remove the two remaining screws on the grab handle of the visor shelf using a T30 Torx bit. Pay attention to each screws location, as they are different.
- Once all three screws are removed, remove the visor shelf and set aside.

#### Step 11 — Headliner Shelf Removal



• If you have a headliner shelf installed, you will need to remove it. Follow the manufacturer instructions on the removal and reinstallation of the headliner shelf.

### Step 12 — Side Curtain Airbag Removal



## △ ENSURE THE BATTERY IS DISCONNECTED BEFORE REMOVING THE AIRBAG!!!!!

- The side curtain airbag is held in place by two metal clips. These clips have a tab that locates them onto the mounting points for the headliner shelf.
- Use a flathead screwdriver and insert the tip into the mounting clip on the left side. Ensure you are not in the threads of the mounting point. You need to grab JUST the outer airbag mounting clip with the blade of the screwdriver.
- Lever the screwdriver outwards while putting upward pressure to "unhook" the tab from the van. This may take some practice, so be patient. Care needs to be taken to not damage the headliner.
- We have found once you remove the left side clip, you can slide the airbag to the left to disengage the right side clip.
- ③ Sometimes putting upwards pressure on the side curtain airbag with your palm on your free hand can aide in the process.
- The airbag can just hang when it is removed.

#### Step 13 — Kick Panel Removal



- Remove the trim piece above the kick panel by just pulling straight out.
- Remove the kick panel by removing the two panel clips and the one T20 Torx screw.
- To remove the kick panel after the fasteners are removed, you will need to separate the kick panel from the step cover by prying up on the step cover to have enough space to remove the kick panel tab.

## Step 14 — Fuse Panel Harness Routing



- Ensure the harness is routed in front of the airbag at the B pillar, this will allow the harness to be placed above the airbag as it is routed to the front.
- Continue routing the harness forward going above the airbag and the mounting points for the airbag as shown.

## Step 15 — Fuse Panel Harness Routing



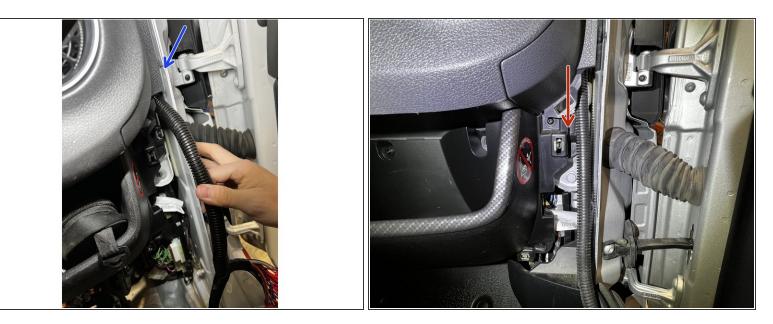
• With the harness routed forward, bring it to the A pillar. Route the harness above the airbag, and in between the headliner and the plastic airbag mounting bracket.

#### Step 16 — Fuse Panel Harness Routing - A Pillar



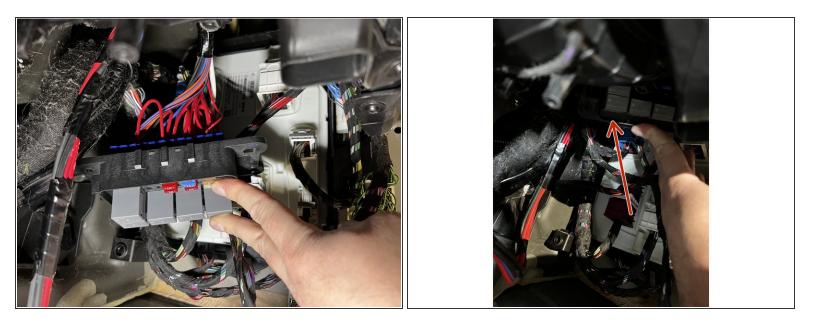
- Route the fuse panel harness down the A pillar as shown.
- Secure the fuse panel harness to the OEM wire harness using zip ties. Cut the tail ends of the zip ties flush.
- Ensure the harness is not blocking the clip mounts for the A pillar trim.

## Step 17 — Fuse Panel Harness Routing - Kick Panel Area



- Place the fuse panel harness behind the dash as shown.
- You will ened to get the harness behind the dash so the cover trim will fit. The area where the harness needs to go is marked in red. This can be tricky, but you just need to get the wire behind the panel.
- Sometimes using a trim tool to help push the wires in helps. You can also remove the screw to gain more room to get the harness behind the dash panel.
- (i) If the harness is not behind the dash panel, the trim panel will NOT fit.

## Step 18 — Mounting Fuse Panel



- Once you have the wire for the fuse panel successfully routed behind the kick panel, you can place the fuse panel as shown. Upside down next to the other modules in the kick panel. Ensure the fuse panel is high enough to allow the kick panel to be reinstalled.
- Use zip ties to secure the fuse panel to the OEM wire harness in the kick panel area. Ensure the fuse panel is secured throughly.

## Step 19 — Rerouting Fuse Panel Wire Harness



- Take the fuse panel harness that runs up the center wire channel of the van and double it back on itself as shown.
- Route the harness as shown following the OEM harness over the OEM fuse block. Secure STO fuse panel harness using zip ties to the OEM harness.

## Step 20 — Kick Panel Reinstallation



- Reinstall the kick panel into the vehicle. Adjust the fuse panel and re-secure as needed to ensure proper fitment.
- Reinstall the dash trim cover above the kick panel along with any hardware that was removed.

## Step 21 — Airbag Reinstallation



- Reinstall the curtain airbag. Place the airbag into position, and press up. The hooks on the airbag mount should clip into the mounts on the van body.
- Ensure you have the headliner BEHIND the plastic trim on the side curtain airbag.

## Step 22 — A Pillar Trim Reinstallation



- Reinstall the A pillar Trim. You want to make sure the clips on the A pillar trim fully engage.
- If you can not get the clips to fully seat, you may have to play with the location of the wire harness.
- Reinstall the T30 screw removed and install the screw cover.

## Step 23 — Visor Shelf Reinstallation



• Reinstall the visor shelf back into place using the T30 Torx screws previously removed.

## Step 24 — Visor Reinstallation



- Installing the visor can be tricky. There is a hook on the visor that needs to hook into the METAL of the headliner area, and not just the plastic on the visor shelf.
- If the visor is not properly hooked into place, you will not be able to install the screw that secures it.
- The next step shows a video of the process.

## Step 25 — Visor Reinstallation



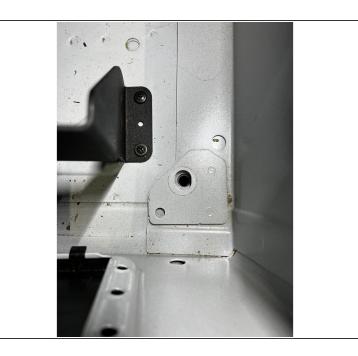
 Hook the visor into the slot, then roll the visor into position. Then push it forward to get it to seat properly into the visor shelf. Once it is hooked in seated, the screw can be installed.

## Step 26 — Door Seal Reinstallation



- Reinstall the door seal around the door frame by firmly pushing it into position around the door frame.
- Ensure the seal is even installed along the door frame and is properly seated.

## Step 27 — Seat Base Reinstallation



- Reinstall the seat base using the 16mm bolts previously removed.
  Align the seat base in the same position it was in previously. by lining up the paint finishes. (you shouldn't see primer under the seat base mounting flanges)
  - Start all 4 bolts before tightening any of the bolts down. Take care as to not lean or put pressure on the seat base as you are securing it. This can cause the seat base to tweak to one side, which will make installing the seat to the base difficult because the seat base will not be "square"
- You can now proceed with the rest of the BeatBox install.