

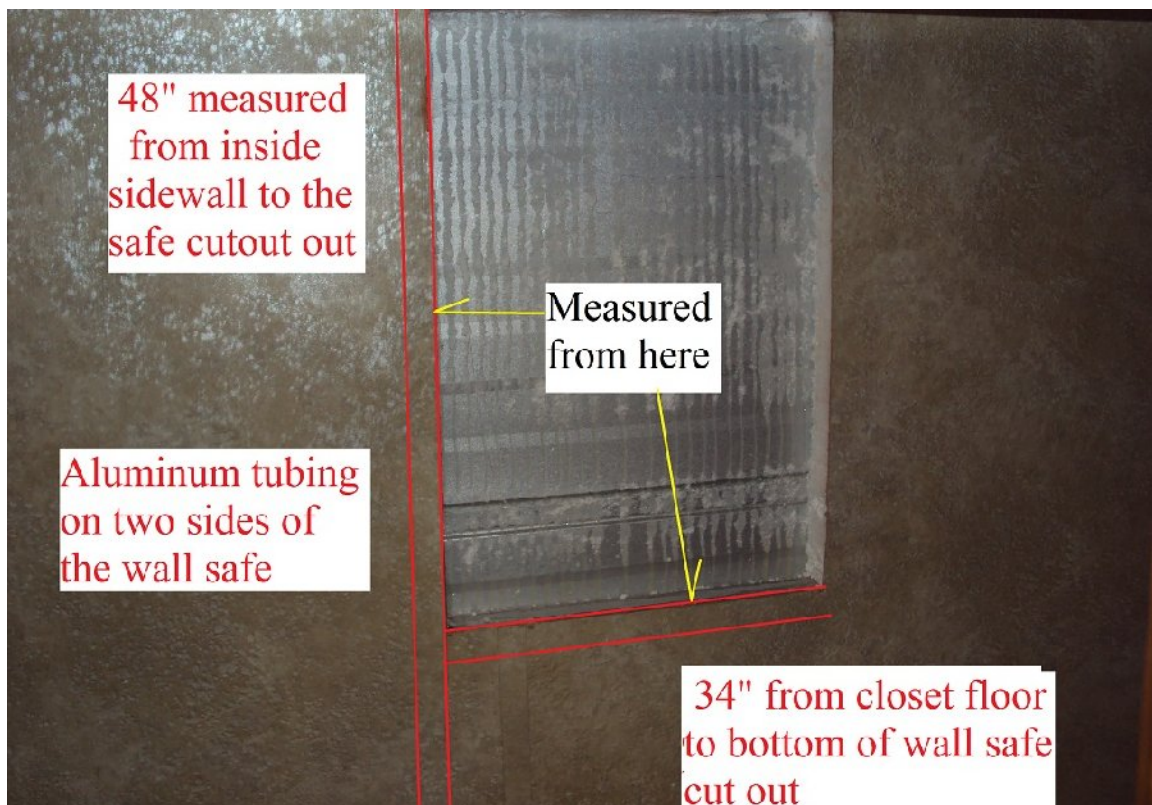


2010 43QGP Allegro Bus

4/19/2014

ONE HUNDRED-THIRD - coach modification – REAR CLOSET WALL SAFE INSTALLATION. This is another project that began by digging through the Tiffin warehouse in search of treasure. Our 2010 Allegro Bus did not come from the factory with the wall safe option. We found a boxed wall safe with one small problem the plastic keyhole cover was missing, that problem solved by robbing a cover from another damaged wall safe.

After spending time researching the aluminum framing of the coaches rear wall in hopes Tiffin built the rear wall and it's framing the same with or without the wall safe option I found after speaking with Don Boyd , Tiffin does not frame for the wall safe unless it is ordered as an option. After receiving that information from Don, I requested a drawing of the rear wall framing for our coach. After another week and many days of attempting to locate the aluminum framing with a stud locator I was able to locate two aluminum frame tubes, one vertical at the center of the closet (48 inches) and another horizontal framing tube at 34 inches from the closet floor.



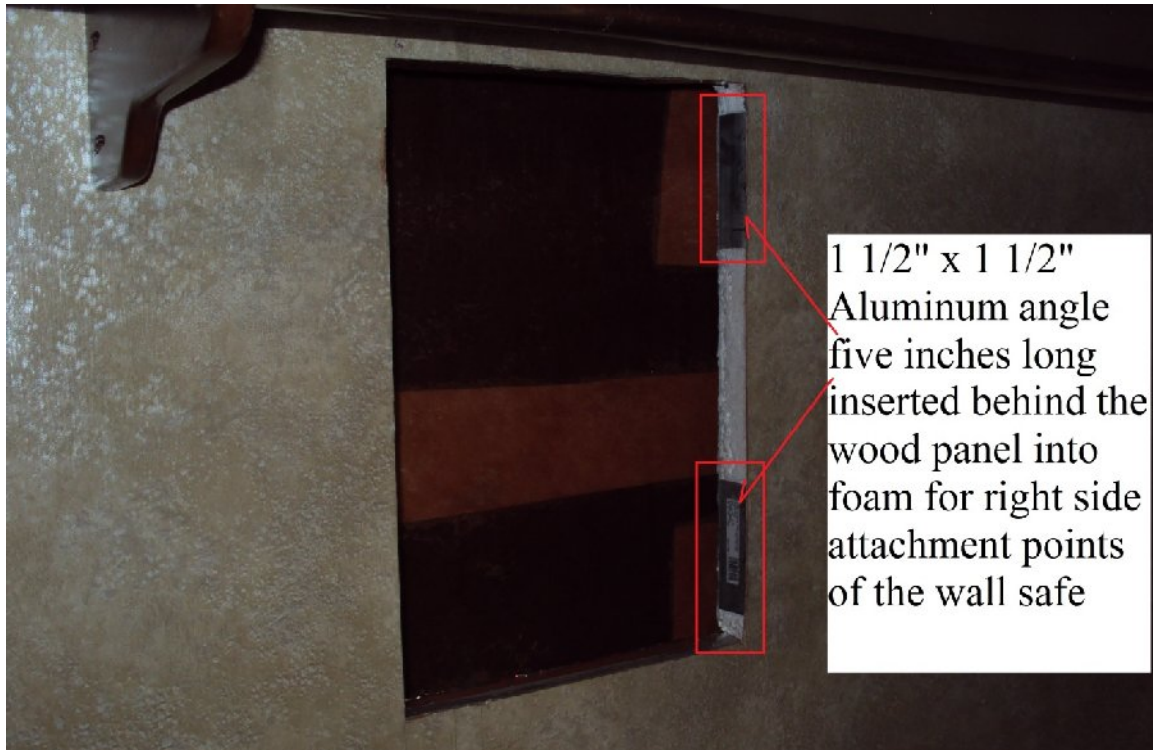
As seen in the previous photo, after locating the two aluminum framing studs the dimensions of the wall safe were outlined on the rear wall, the paneling was cut with a saber saw after first making sure the blade would not cut through the sheet metal on the outside of the rear wall. Why not cut through the rear wall, because the 120 VAC wiring for the three AC/HP units, all in-roof 12 VDC wiring and the three condensate drain lines are all routed behind the wall where the safe will be mounted. After cleaning the foam from the area exposing the sheet metal the center of the metal was carefully cut to allow viewing of the wiring and condensate lines. The wiring and tubing locations can be seen after the sheet metal was carefully removed using tin snips.



At this point I was able to extend my head into the rear cap to locate and remove the metal straps preventing the wiring and PEX tubing from moving. I needed to relocate the straps, wiring and PEX tubing as the wall safe would extend into the rear cap about three inches. After moving the wiring and tubing to the side of the opening the straps were re-installed allowing clearance for the safe to be installed.

Next it was time to get out the big reciprocating saw with a metal cutting blade it was used to remove all of the remaining metal around the edges of the hole.

As the right side of the rear wall did not have any framing just wood panel and foam, I needed to figure a way to add something to screw a couple of safe wall anchor bolts into. Finally decided to install two 1 1/2" x 1 1/2" x 5 inch pieces of aluminum angle behind the closet wall board and over the foam, this would provide a 1/8" aluminum structure for installing two self-drilling screws to secure the right side of the safe.



At this point everything is ready for the installation of the wall safe, well almost. I checked and photographed everything in the rear cap area to document the location of all structures in the event it ever becomes necessary to gain entry into the rear cap for any reason. After installing aluminum foil tape over the framing and the exposed foam the rear wall of the safe was insulated with a 1 inch thick piece of AC duct board which was taped to the safe with foil tape. If this were an OEM wall safe installation the rear of the wall safe would have been covered with aluminum foil insulation and taped with aluminum tape to prevent excess heat from entering the closet through the back of the safe.

Prior to installing the safe, a bead of silicone was applied to the closet wall behind where the lip of the safe would cover it. The safe was inserted and

secured into the wall with four ¼” by 1 inch self-drilling screws, two installed on each side of the safe. The OEM wall safe mounting screw holes were covered with aluminum foil tape to prevent fumes from entering the closet as the wall safe was designed and built for use in a house with at a minimum of 2 x 4 wall studs. Tiffin coach wall safes are installed in a rear wall 1 ¾ inches thick this requires new holes and covering of the original mounting holes. The installation was completed by finishing the caulking around the outside lip of the safe.



Another problem found during this modification was the rear closet rod was dipping/bowing about one inch below horizontal at its center. In order to provide additional support to the rear closet shelf and attached clothes rod two additional shelf supports were fabricated, stained and installed two feet to the left and two feet to the right of the center of the closet.

Above is a photo of the finished product another Crusinator Modification.