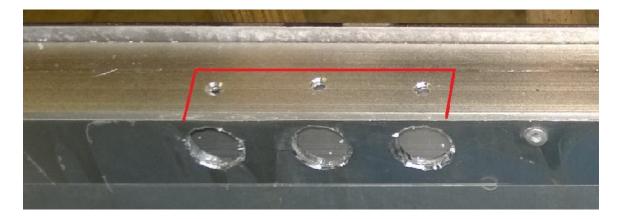


2010 43QGP Allegro Bus

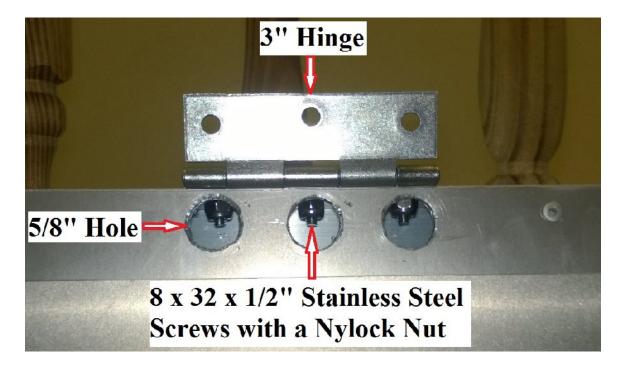
2/26/2015

ONE HUNDRED TWELTH - coach modification – **INSTALLATION OF PS WET BAY DOOR HINGES.** There have been several occasions where being able to open the passenger side wet bay panel for maintenance would make my life easier. While maintaining the coach, I am always searching for ways to make maintenance easier and to add storage, continuing with that effort I've decided to install a set of hinges on the passenger side wet bay door. After removing the door and taking measurements I decided to install four - 3" long narrow width hinges. After looking at several options for securing the hinges to the door using sheet metal screws to secure the hinges thru the aluminum square tubing on the perimeter of the door were ruled out.



So rather than use sheet metal screws, I opted to use stainless steel # 8 x 32 x $\frac{1}{2}$ " machine screws. The problem with using this option was accessing the screw to install and tighten the Nylock nut. That problem was resolved by drilling a 5/8" hole as seen above and below, the holes provided access to install the nuts and to use a box end wrench to hold the nut while the screws were tightened.





After the hinges were installed on the door, the door was reinstalled on the coach using the 4 original side mounting tabs welded to the door. This allowed me to make necessary measurements for drilling the hinge mounting holes in the coach. Using the hinges I decided on presented one problem a ¹/₄" spacer needed to be installed between the coach and each hinge this spacer aligned the door so it would close and at the same time compress the door gasket, sealing the door to the coach when the door is closed.





The photo on the left shows the installation of the four hinges to the wall of the coach basement. Attachment of the hinges to the coach was done using $\# 10 \ge 32 \ge 10^{\circ}$ 1" stainless steel screws and nuts.

It is hard to see in the photo the $\frac{1}{4}$ " spacers between each hinge and the coach however the spacers are there. Installation of three hinges may have worked however as with my modifications I try to add an abundance of safety into each of them. While I did not test the door to determine how much weight the hinges could handle I feel the weight of the door and the addition of the same amount of weight on top of the door would not stress the hinges or the 24 screws used to support the door.

By using this type of hinge the passenger side Aqua-Hot compartment door has to be **OPENED** before the wet bay door can be opened more than a couple of inches otherwise the hinge side of the wet bay door could be damaged. I decided this would not be a problem as opening the Aqua-Hot bay door before opening the wet bay door does not take much effort. The wet bay door will **ONLY** open about 80 degrees before the Aqua-Hot's door gasket prevents the wet bay door from opening further.



As an added benefit if additional heated storage were needed there are several cubic feet of space on top of both black and gray tanks.



As seen above the TWO left side mounting tabs were not removed as those tabs are used with two long screws to secure the door in the closed position.