

## 2010 43QGP Allegro Bus

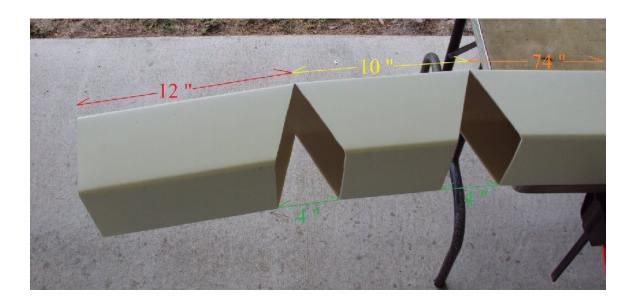
## 9/30/2013

## NINETY-THIRD - coach modification – SEWER HOSE STORAGE.

After listening to other coach owner's descriptions of various methods of carrying and containing the coach sewer hose the following is what I decided to design construct and attach to the bottom of our coaches basement floor. The container was made from a 5" x 5" x 96" white vinyl fence post, two post caps and 2 - 4' chain link fence galvanized bars. I decided to install the post parallel to the chassis lower frame with two 45 ° angles to have the opening at a 90 ° angle to the post.

On this 5" post the 45  $^{\circ}$  angle is made by marking a line on the post perpendicular to the post, on the opposite side 2" was added to the measurement and 2" was subtracted from the measurement. These two measurements are 4" apart and make the inside angle when the post is cut as shown two 45  $^{\circ}$  angles result in making a gradual 90  $^{\circ}$  angle.

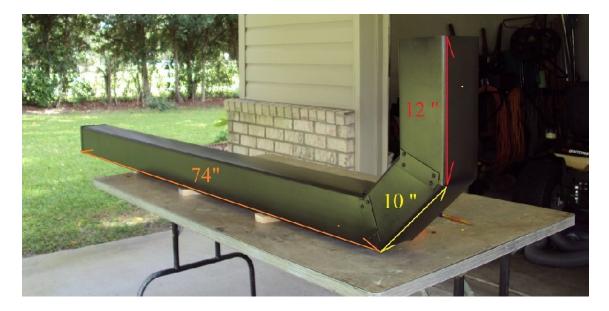




The next step is to cut and install 1/16" thick by 1 1/2" wide by 4" long aluminum strips used to bridge the 2 - 45 ° angle cuts. 24 - # 6 - 32 thread 3/8" long stainless steel bolts and nuts were installed using Lock-Tite blue to prevent the nuts from coming loose.

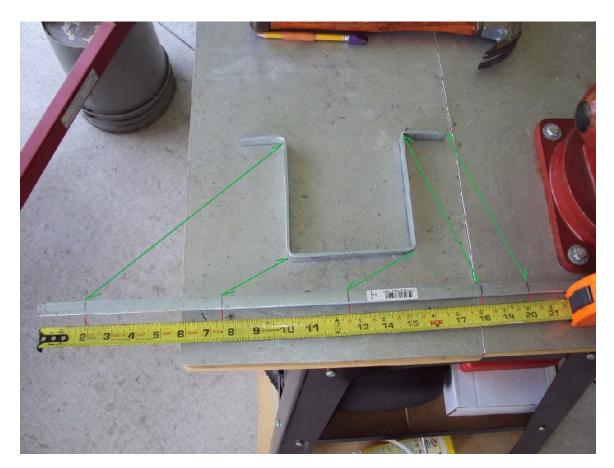


The exposed portion of the post was painted dark brown with a specially formulated paint for use on vinyl material.



To make the post's gradual 90  $^{\circ}$  transition the first cut was made at 12 " on the outside measurement the second cut was made at 22" from the end of the post also on the outside measurement. As seen in the photos ONLY three sides of the post were cut, resulting in cutting out two 4 " wide 45  $^{\circ}$  wedges, leaving the inside of the post uncut. The bridging strips shown above were installed on both sides of the cuts a third bridging strip was installed on the inside of the two cuts.

After all bridges had been installed the forward end cap was installed on the post using 4 - #6 by 1/2" stainless steel sheet metal screws to secure the cap.



Over the years I've found chain link galvanized fence bar works great for many application where the strength of steel is needed however without the mess of painting the steel to protect the material from rusting. The four post hangers were made by cutting two fence bars into two 20" long pieces, the bar was marked at 2, 7  $\frac{1}{2}$ , 12  $\frac{1}{2}$ , and 18 inches as seen in the above photo after marking the bar was clamped in a bench vise where the various bends were made using a hammer. A finished strap is also seen in the above photo. The post is 5" square the vertical portion of each strap was extended an additional 1/2" to provide space for the post cap to be installed and removed.



The above photo shows the under chassis view showing the four hangers. Holes were drilled thru the plywood basement flooring where  $8 - \# 6 - 32 \times 1 \frac{1}{2}$ " Stainless Steel machine screws with Nylock nuts were used to secure everything to the bottom of the basement floor. The completed Sewer Hose Storage hangs ONLY  $\frac{1}{2}$ " lower than the chassis frame making the Sewer Hose Storage unlikely to be hit or damaged while on the road. A Stainless Steel hair pin was made to keep the cap secured. This storage contains a 15 foot section of hose plus the 90 ° threaded elbow used in many campgrounds

