1990 Prevost Liberty Coach

"Sand Filter Element Water Line Connection Gaskets "

We recently purchased a 1990 Prevost Liberty Coach and one of the items noted during the prepurchase inspection was that the previous owner had "Winterized" the water system of the bus which rightfully so it was located up north and kept in a nice garage, but to ensure no freezing to any of the water lines would occur he drained the system as required and disconnected the Water Inlet & Outlet line connections to the Sand Filter Element.

During the course of the inspection I had noticed the lines being disconnected at the Sand Filter and when I inquired about them he mentioned it was part of the Winterizing process, and that he had taken the Sand Filter out and kept it in a warm room temperature environment to ensure it did not freeze and bust being it was full of wet sand basically.

I went onto ask if there were some new spare replacement gaskets in order to reconnect the lines or if he had the old original ones from where they had disconnected the lines previously for the winterizing process and he stated that they had been thrown out and he no longer had them, I suppose he didn't realize that these were a rare bear to locate.

After arriving back home with the Prevost Bus I had placed an inquiry on the Prevost Owners Group web site to see if anyone had already encountered this issue previously as I had not seen any articles about it on the web site.

A few members from the Web Site shared various comments about the Gaskets, I called Liberty and they explained that the company that made the Sand Filter had gone out of business and I also heard this from one of the P.O.G. members as well so this confirms that now being the case and I am back to square one, no direct replacement rubber gaskets are available from what I have seen so far.

A couple of the P.O.G. Members stated that I would probably have to wind up looking for them either at the local plumbing supplier or making my own, so I am headed to the local Home Supply retailers and local plumbing supply to see what might work for this application.

During the search for the gaskets I was not able to locate any the same dimensional size locally.

I have now finally solved this by purchasing a 6 inch X 6 inch piece of 1/8" thick rubber sheeting and cut my own to accommodate the replacements.

I have put together some photos and recorded dimensions here to maybe additionally help someone else with this same issue should they encounter it in the future.

I hope that this information will save someone a little bit of trouble and headaches along the way.

Enjoy !

Tom Stallings "Fly-N-Low" Mar 2009

Now on the Technical side of things:





" SAND FILTER ASSEMBLY "

SAND FILTER ASSY INSTALLED

The Sand Filter Element looks as if it has an overall capacity of about 10 Gallons by the size of it. However with the Sand in it is probably half that amount.



The Copper Water Lines which connect the Sand Filter inline with the water system (Inlet Supply & Outlet Lines) on the Bus Side are actually made of Brass with a Plastic / Teflon Shoulder Coupling to secure the line to the Sand Filter Element. (Also Each Line has a Shut-Off Valve "Blue Handle in Photo")



Water Line Connections "Top of Filter"



Right Hand or Forward " INLET SUPPLY LINE " Connection / Coupling



Left Hand or AFT " OUTLET SUPPLY LINE " Connection / Coupling



Outlet Line with Sand Filter Removed



Inlet Line with Sand Filter Removed



Bus Side Inlet & Outlet Line Diameters

(36mm – 1 3/8" inch O.D. "Shoulder Diameter")

(25mm – 1.00" inch I.D. " Opening Diameter ")



Additional Photo with more Measurement Scale Clarity



Sand Filter Inlet / Outlet Connection Diameters

- (38 mm 1.50" inch O.D. Shoulder / Thread Diameter)
- (25 mm 1.00# inch I.D. Opening Diameter)



6.00" inch x 6.00" inch 1/8" Thick Rubber Sheet Material



Rubber Material with Gaskets Trimmed out

The Bigger Diameter Piece of Steel 1.50" inch O.D. used for the overall cut (Left Hand side of Photo)

The Smaller Diameter Piece of Steel pipe with the (Blue Ring on it, Right hand side of Photo) is 1.00"inch O.D. and was used to make the I.D. Cut which will allow for the water passage. Just get it centered as close as possible before cutting, it doesn't have to be perfect, but close as possible, the key here is the outer diameter cut being able to seal the Shoulders of the Couplings

NOTE: If you don't have steel handy this size to use as a cutting guide, you might use a couple of Sockets from a Larger Socket and Ratchet Set as an alternate in a pinch.



Final Cut of New Replacement Gasket

I used a DREMEL Tool on a slow speed with a sanding wheel to clean up the rough cuts on the final product.

I have now Installed these Replacement Gaskets and filled the water system and leak checked the system and they seem to do the trick.