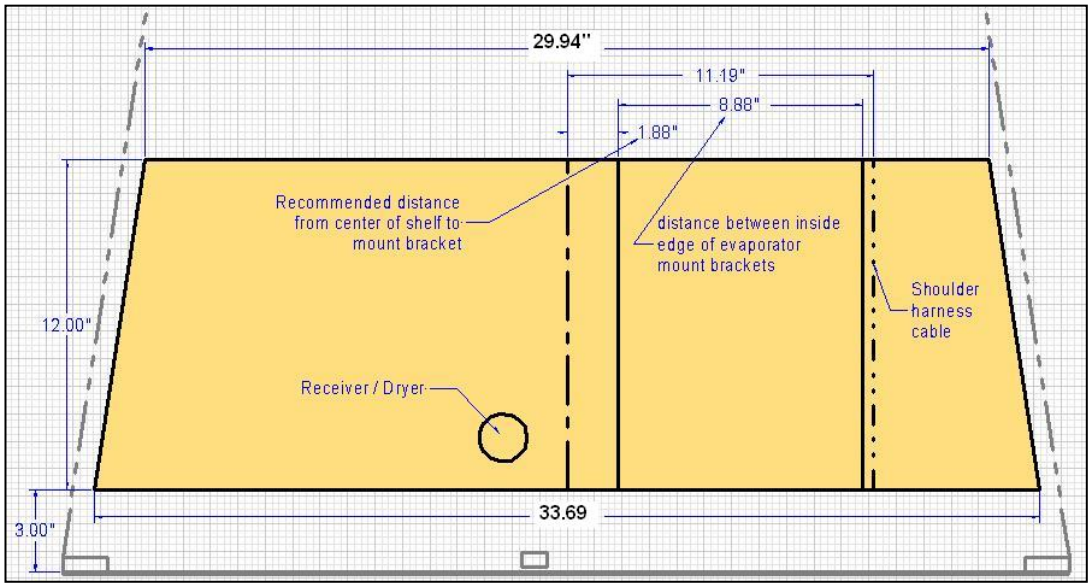
Evaporator Shelf Installation

The evaporator shelf is located behind the baggage compartment bulkhead. The shelf supports the evaporator and the receiver/dryer.

The shelf is oversized and the width will need to be trimmed to fit between the F1032-L/R longerons. This is to allow the shelf to tilt slightly for installation. The aft edge of my shelf is 29 15/16" wide. The fwd edge of the shelf is 33 11/16" wide. The measurements shown should keep the shoulder harness cable outside of the evaporator mounting flange.

The fwd and aft measurements are on my airplane. Your aircraft may be different.

The Shelf Installation shown is a general description of the shelf installation. The RV10 evaporator installation is shown on the "**Evaporator Duct**" link on the previous page.

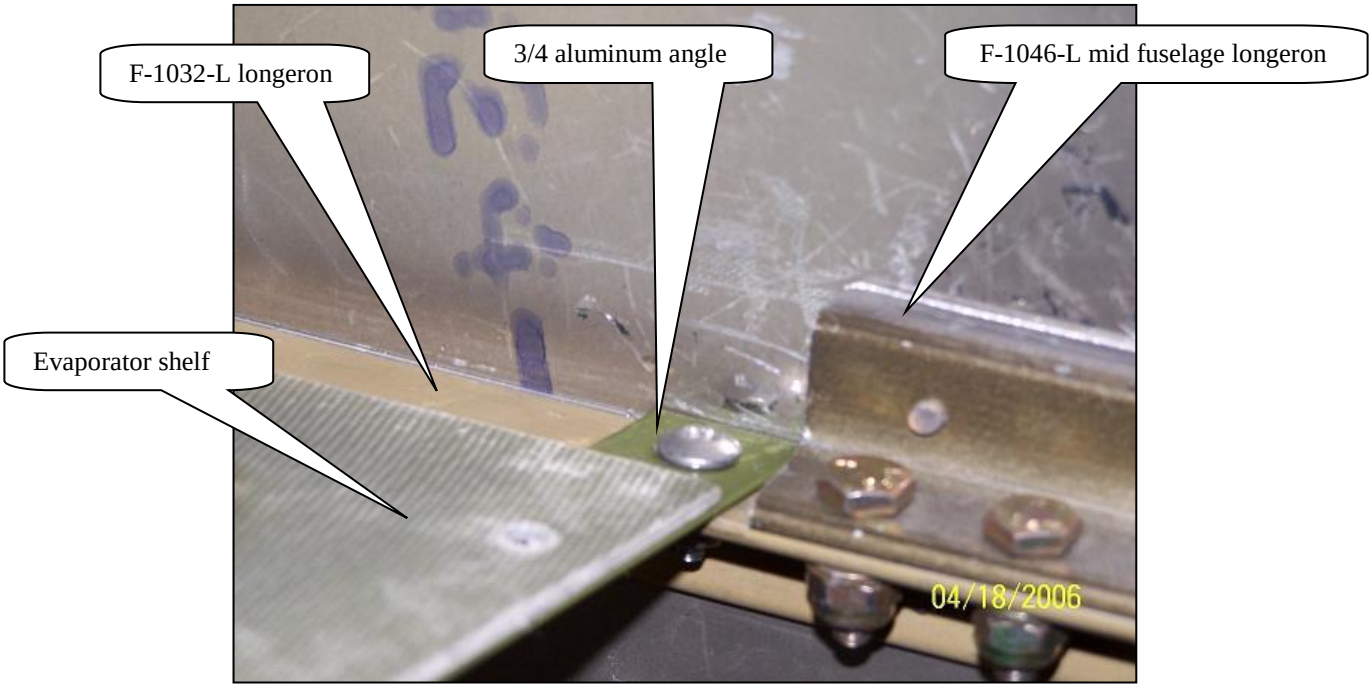


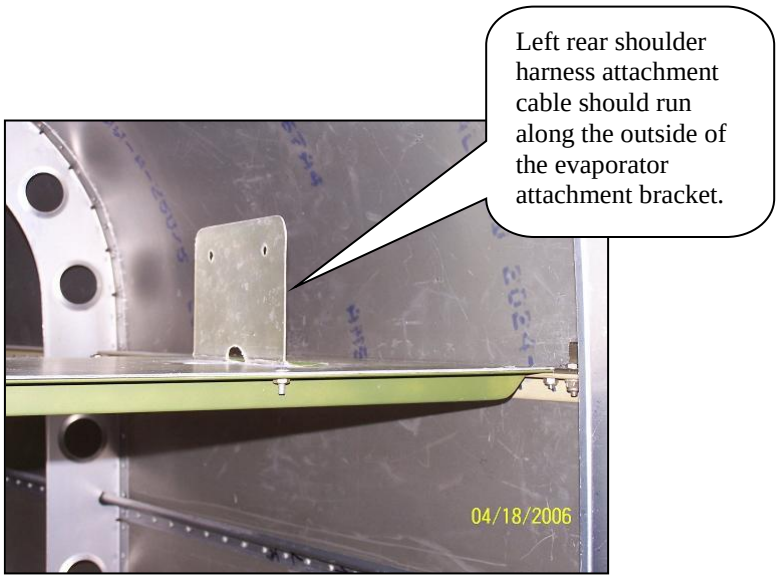
My shelf is supported on the front and back edge by a 3/4" aluminum angle. These angle supports attach to the top of the F1032-L/R longerons. The aft aluminum angle is 31 9/16" long and the fwd angle is 35 3/16" long.

These flanges are not installed on the RV10 shelf. They are for a smaller evaporator.

Note: When positioning the shelf, make sure the left rear shoulder harness attachment cable clears the left evaporator attachment bracket.

I located the shelf just aft of the F-1046-L/R Mid Fuselage longeron. This places the shelf about 3" behind the F-1006-A/C fuselage bulkheads.

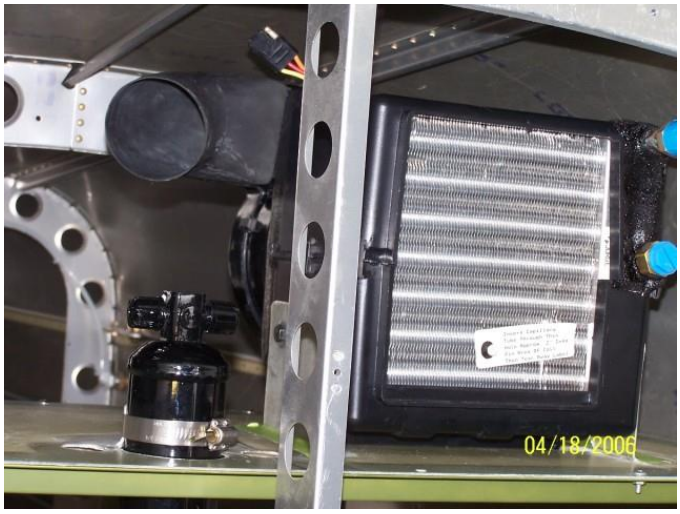




View looking at left side attachment.

View under shelf.

The complete shelf assembly consists of the items shown below. The duct position on the top of the fan is not correct in this picture. The outlet connection has been moved to the side of the fan case.



The output air of the evaporator is routed through a 3" hose from the evaporator fan fwd to the F-1006-D bulkhead. To locate the outlet hole position in the bulkhead, the overhead duct needs to be temporarily installed. (*The duct shown is a customized version of the duct supplied by Airflow*). I installed the forward duct cover with clecos. The aft duct section will need to be trimmed to butt up tightly against the aft bulkhead. Once the duct is in place, draw a line around the duct on the fwd face of the bulkhead. The oval outlet hole will be located inside the duct.

The oval duct's flange will need to be trimmed to allow the duct to fit properly on the aft side of the F-1006-D bulkhead. The nutplate below the duct location was removed. I made a cardboard pattern of the inside opening of the duct and placed it over the bulkhead inside of the outside lines of the duct. After tracing around the pattern, I cut out the oval hole for the duct. Flush pop rivets were used to install the duct to the backside of the bulkhead.