

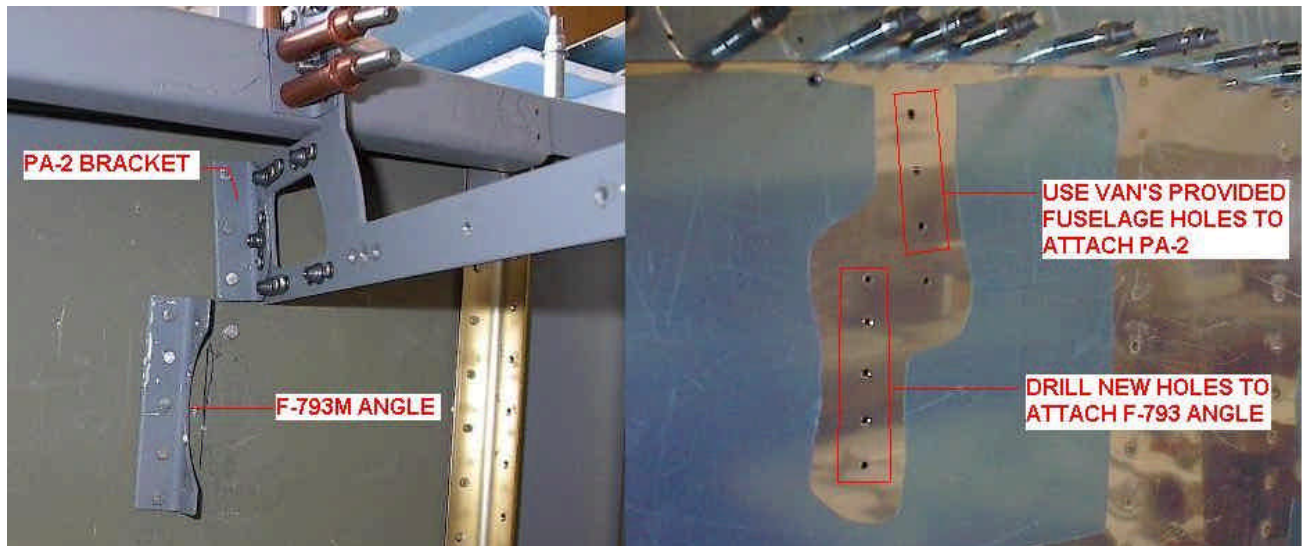
FRAME INSTALLATION

We will begin the installation by clecoing the panel plates to the frame. Using a #19 drill bit, enlarge the holes provided to full size. Afterwards, remove the clecos and store the Panel Plates in a safe location to avoid damage.

Fabricate the PA-1 (Reinforcement Angle) and match drill it to the frame using the factory holes. Before removing the PA-1 from the frame, drill the #40 through the frame and PA-1. Remove PA-1 and place a nutplate and screw at each location shown on Drawing #1 and drill the rivet holes. (DO NOT RIVET THE PA-1 REINFORCEMENT ANGLE TO THE FRAME UNTIL SURE THAT THE FRAME DOES NOT HAVE TO COME OUT OF THE FUSELAGE). The Frame must remain flexible during installation.

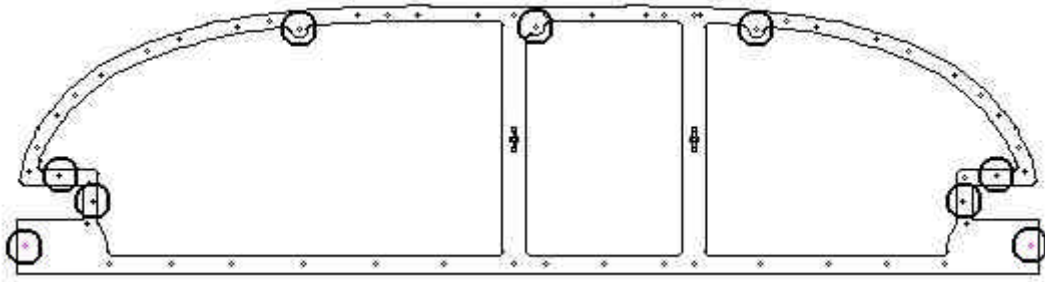
If you are installing Van's air-vents in the stock location, you may want to trim the frame as shown in Option 1 of Drawing #1. Otherwise, if installing the optional Filler Pieces of our kit, modify the frame as shown in Option 2 of Drawing #1 and fabricate the PA-2 (Reinforcement Angle).

The photo below shows the location of the PA-2 angle together with our F-793M bracket if you are installing our Sub-Panel option.



It is not necessary to install nutplates on the F-7103B and F-7103C Attach Angles since the Panel Plates will be attached to the Frame. We have provided in the kit 5/32" rivets to attach these pieces to the Frame. Machine countersink all the locations that will attach the frame to the F-7103B&C and rivet.

To make the frame removable during installation, you must machine countersink the locations that attach the frame to the F-721D angles, F-721C angles, PA-2 angles and the F-7108 & F-7107 ribs to accept countersunk screws. This step will allow the Frame to be removable all the way up until the top skin is riveted to the F7103 B&C Attach Angles. The sketch below shows all of the locations requiring a countersunk screw.



Per Van's drawing, fabricate and install the F-721C and F-721D angles. Install the corresponding nutplates to the F-7107 and F-7108 ribs. Fit the frame to the fuselage and check for fit. If you didn't trim the frame to accept Van's air-vents, you will notice that the frame will bow out toward the cabin. This is because we made the frame $1/16^{\text{th}}$ of an inch wider on either side at the bottom to account for discrepancies in builder's fuselages. Using a file (do not use a power tool here), file the excess away until you achieve the desired fit.

Place the Frame in the fuselage and rivet the PA-1 angle to the Frame.

That's it for the installation of the Frame. If you are planning on a fully loaded center stack, you will have to eliminate/modify the attachment point of the F-7108 Fuselage Rib. This is very simple, but it will be unique to each installation. Take a look at our recommendations on the Center Plate Installation page.