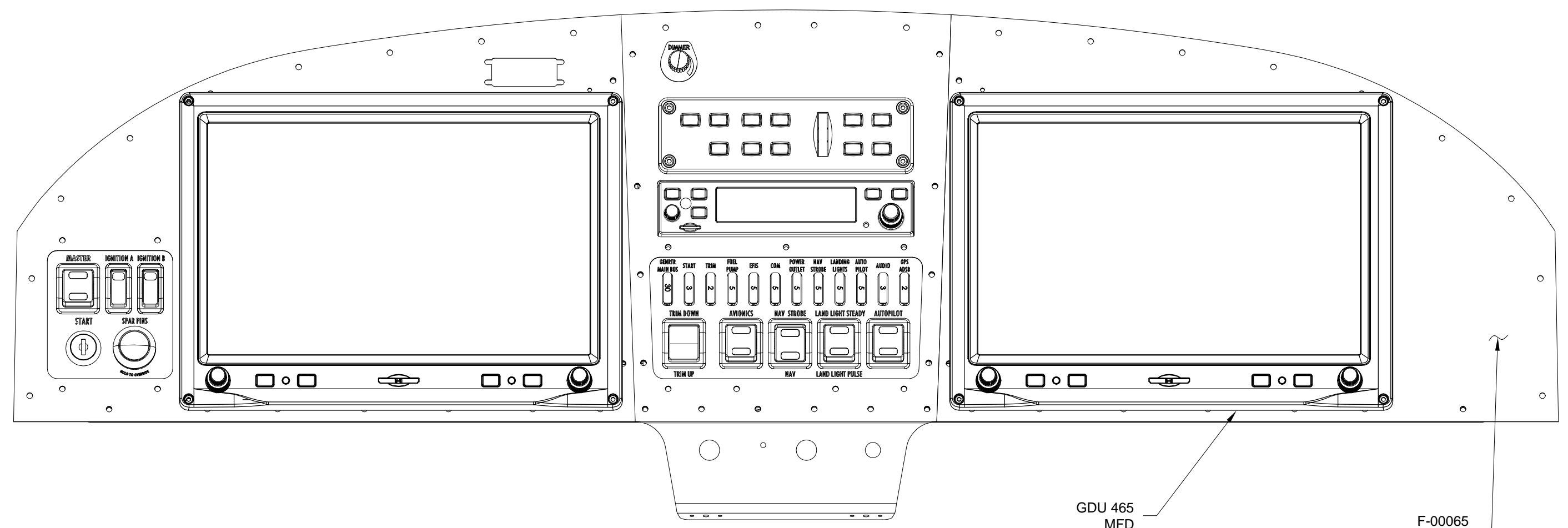


SECTION 43C: G3X TOUCH DUAL DISPLAY



GDU 465
MFD

F-00065
RV-12 PANEL (CO-PILOT)



Step 1: Install the F-1240 Upper Forward Fuselage Skin and F-1202D-R Panel Attach Strip if not already installed. See Section 29A.

Step 2: Remove the F-1202U Instrument Panel Right Mapbox from the panel.

Step 3: Install the F-00065 RV-12 Panel (Co-Pilot) at the former location of the instrument panel right mapbox.

Step 4: Trace the upper right corner of the cutout in the RV-12 panel (copilot) for the G3X display onto the F-1202D-R Panel Attach Strip. See the explode view in Figure 1.

Step 5: Match-Drill #27 the hole indicated in Figure 1 into the panel attach strip.

Remove the RV-12 panel (copilot).

Step 6: Using the line traced in the previous step as a guide, remove material from the panel attach strip to match the G3X display cutout shape in the RV-12 panel (copilot).

Step 7: Remove the specified nutplate from the panel attach strip. See Figure 1.

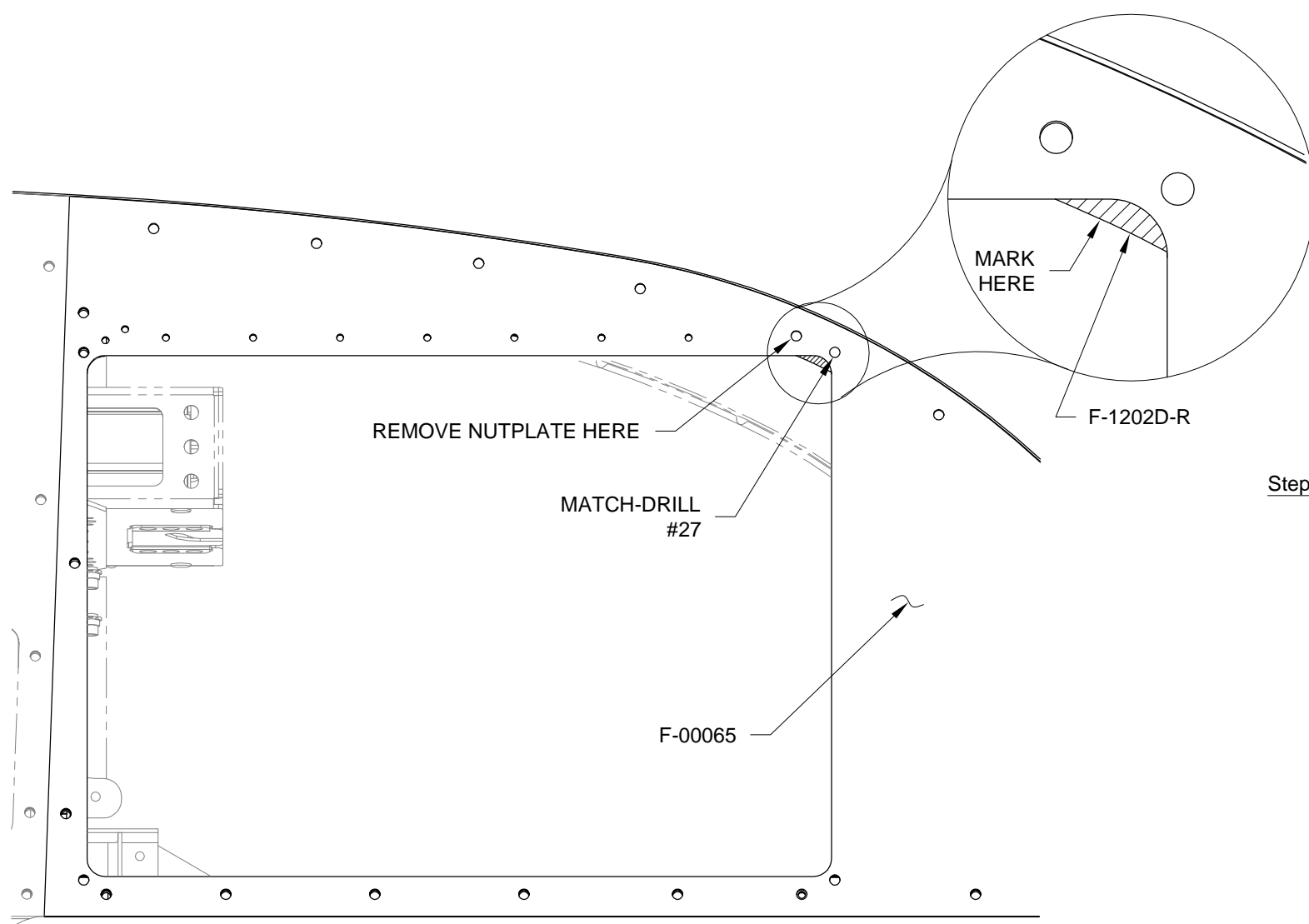


FIGURE 1: MARKING THE EFIS CUTOUT

Step 8: Use a screw to attach the nutplates called out in Figure 2 to the copilot (aft) side of the F-1202D-R Panel Attach Strip using the hole drilled in Step 5. Use the preexisting attach hole to locate the right nutplate. Center the nutplates on the flange of the strip.

Step 9: Match-Drill #40 the nutplate attach holes into the panel attach strip.

Remove the nutplates and deburr the holes.

Step 10: Dimple the nutplate attach holes drilled in the previous step.

Step 11: Dimple the nutplates used in the previous step as a drill guide.

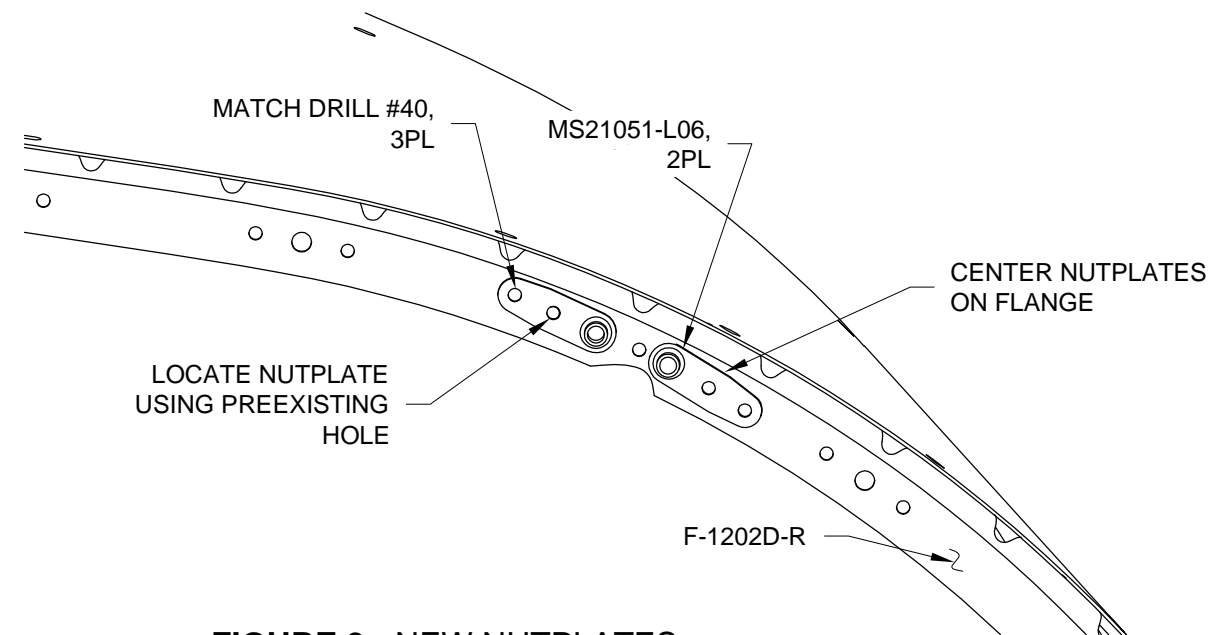


FIGURE 2: NEW NUTPLATES

Step 12: Rivet the nutplates to the firewall side of the panel attach strip. See Figure 3.

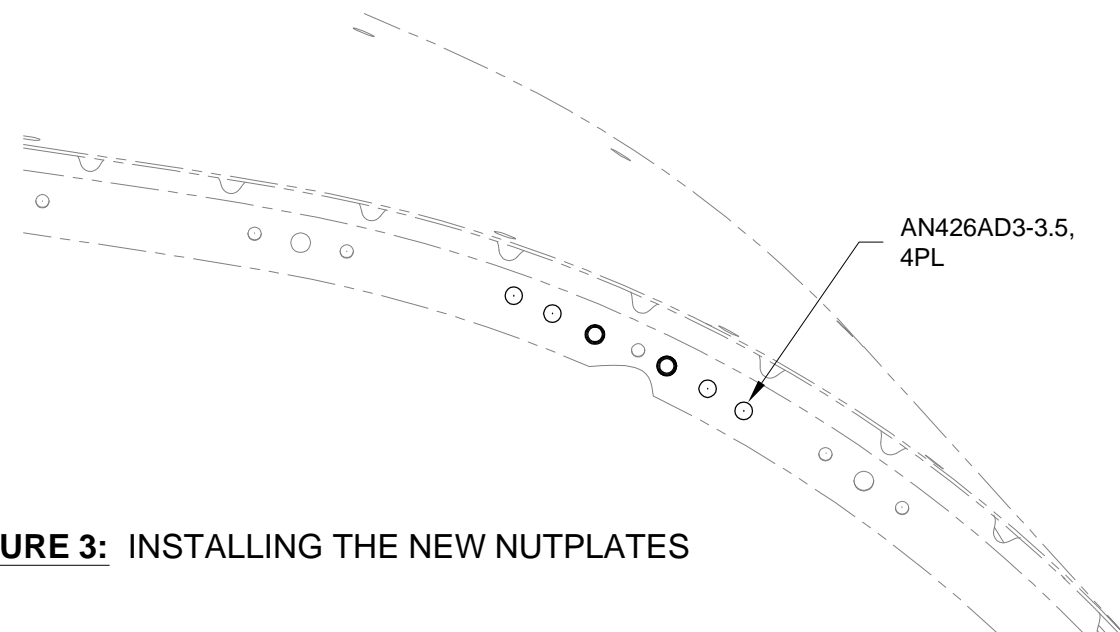
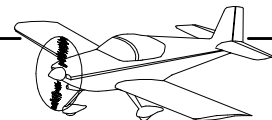


FIGURE 3: INSTALLING THE NEW NUTPLATES



Step 1: Machine countersink all the #27 holes on the copilot side of the F-00065 RV-12 Panel (Copilot) except for the four holes at the corners of the G3X cutout. See Figure 1.

Machine countersink all the #40 holes on the copilot side of the RV-12 panel (copilot). See Figure 1.

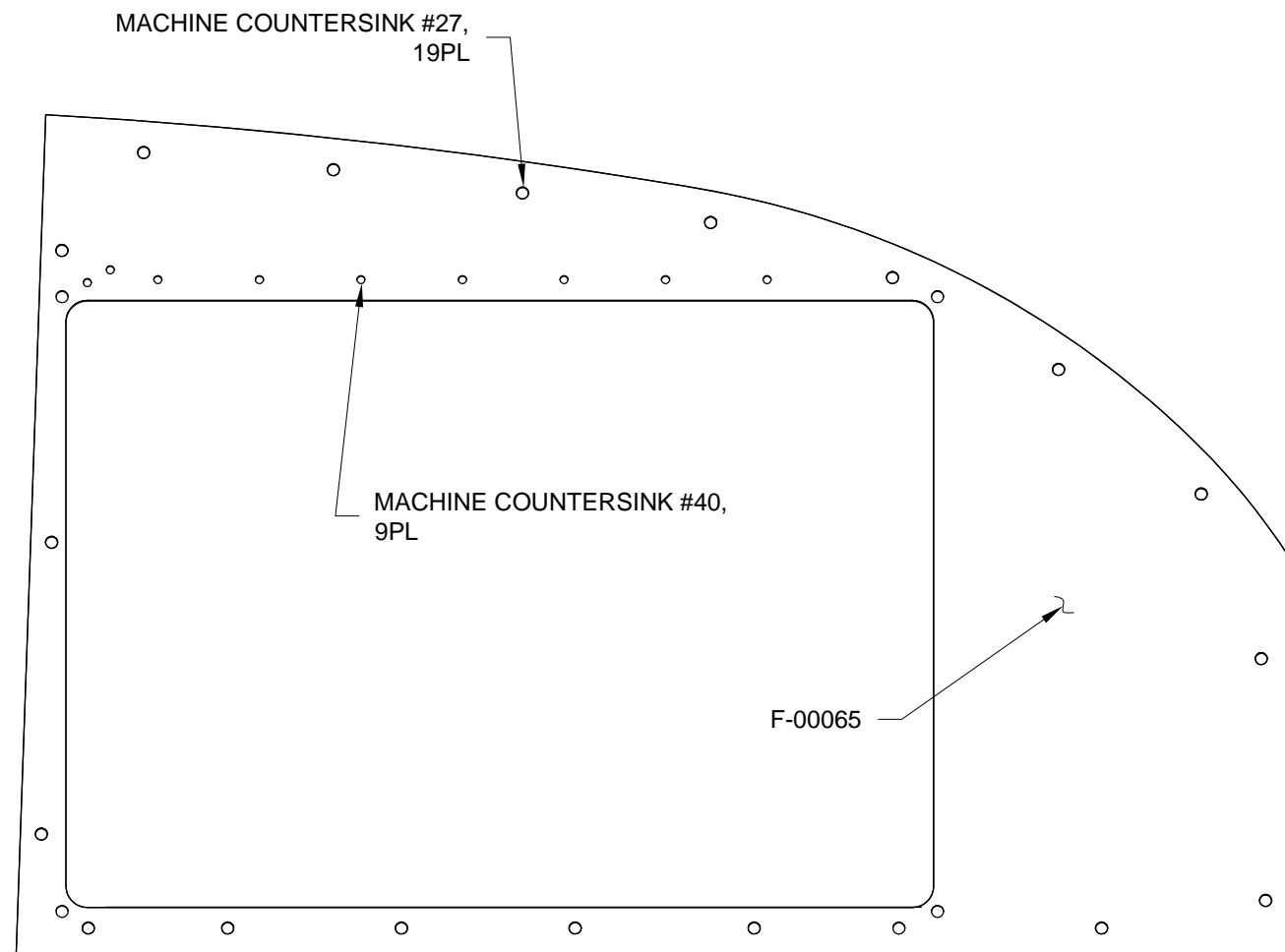


FIGURE 1: PREPARING THE RV-12 PANEL (COPILOT)
(PILOT SIDE SHOWN)

Step 2: Remove the hatched areas shown in Figure 2 from the F-00064 Stiffener Angle.

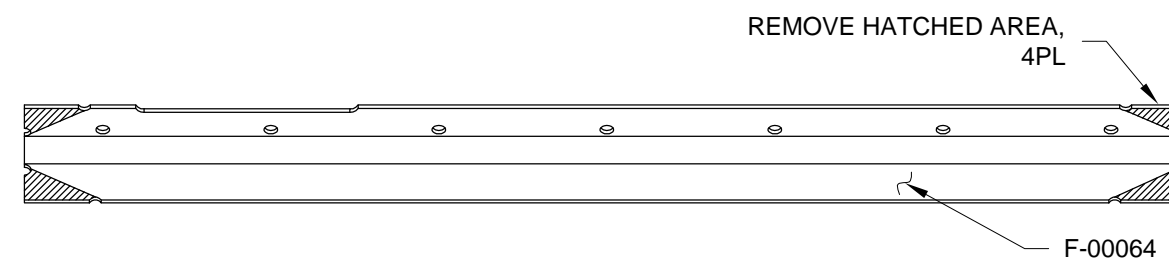


FIGURE 2: PREPARING THE STIFFENER

Step 3: Rivet the F-00064 Stiffener Angle to the firewall side of the RV-12 panel (copilot). See Figure 3.

Rivet the nutplate called out in Figure 3 to the firewall side of the RV-12 panel (copilot).

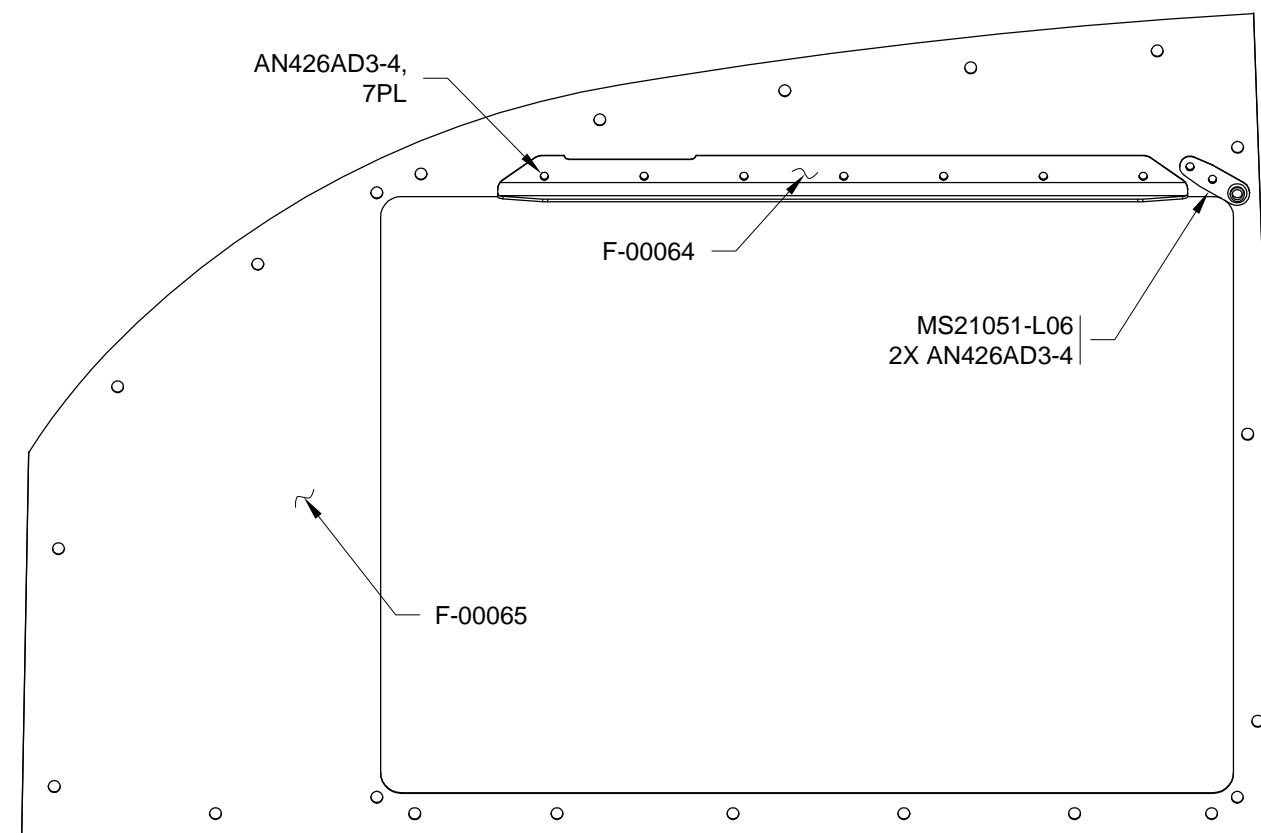


FIGURE 3: PREPARING THE RV-12 PANEL (COPILOT)
(FIREWALL SIDE SHOWN)



NOTE: There is a hole in the F-1202B Panel Base flange that will be ignored. Do not match-drill this hole into the F-00063 Doubler. See Figure 4.

Step 1: Temporarily install the F-00063 Doubler onto the copilot side of the aft flange of the F-1202B Panel Base. Nutplates previously installed in the area occupied by the doubler will need to be removed. Double check using Figure 1 that the doubler is in the correct position. Mark the copilot side of the doubler for future reference.

Step 2: Match-Drill #27 and #40 all hole locations not found in the flange of the Panel Base. Note the two upper screw holes (found near the ears sticking up from the doubler) will make notches in the top edge of the panel base flange. See Figure 1.

Remove the doubler and deburr the holes made in the panel base.

Step 3: Machine countersink the rivet holes in the copilot side of the panel base flange.

Step 4: Machine countersink on the copilot side the four rivet holes that will attach the two nutplates common to only the doubler. These holes are found in the two ears that stick up from the part.

Machine countersink on the copilot side of the doubler, the holes that correspond to the dimpled holes in the aft flange of the panel base. See Figure 2.

Step 5: Rivet the two nutplates common to only the F-00063 Doubler using the hardware called out in Figure 3.

Step 6: Rivet the doubler and nutplates called out in Figure 3 to the firewall side of the aft flange of the F-1202B Panel Base.

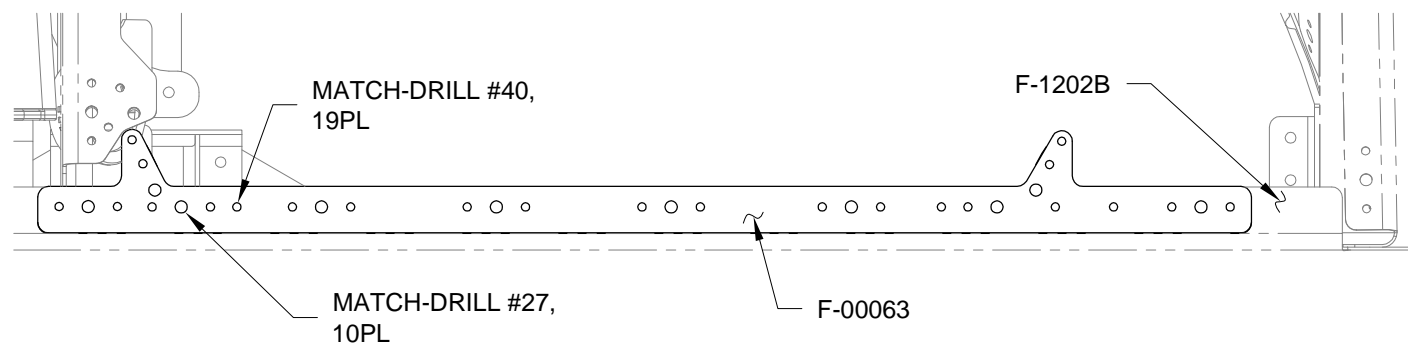


FIGURE 1: MATCH-DRILLING HOLES FOR THE DOUBLER
(COPILOT SIDE SHOWN)

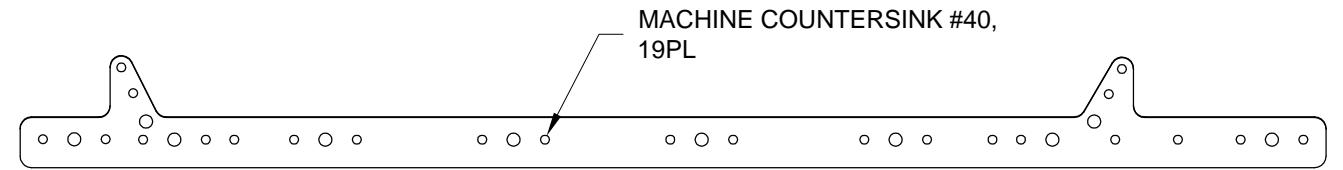


FIGURE 2: COUNTERSINKING THE DOUBLER
(COPILOT SIDE SHOWN)

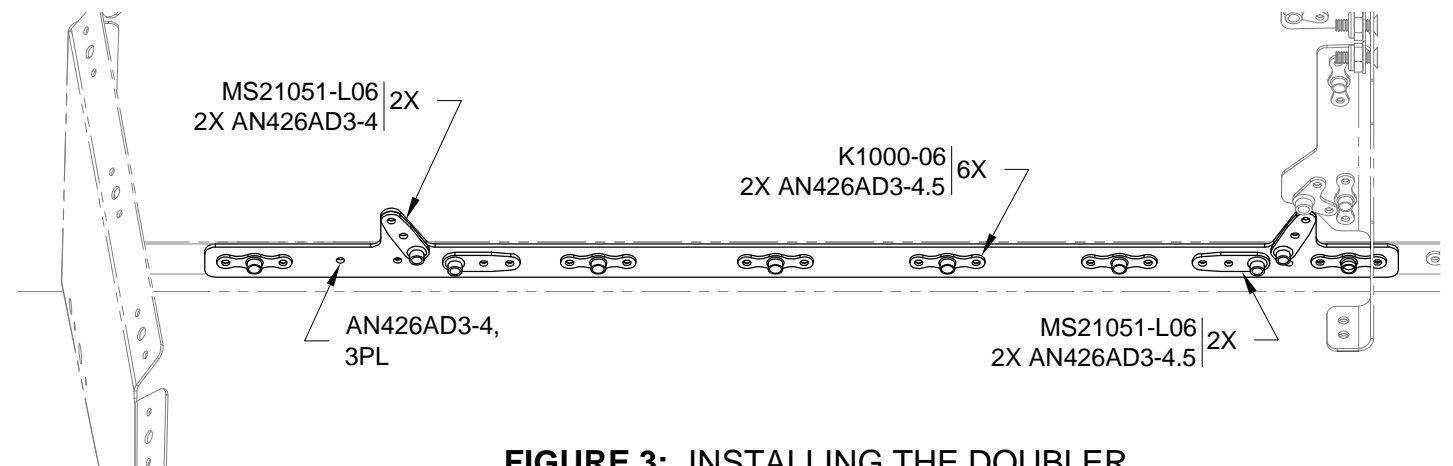


FIGURE 3: INSTALLING THE DOUBLER
(VIEW FROM FIREWALL SIDE)

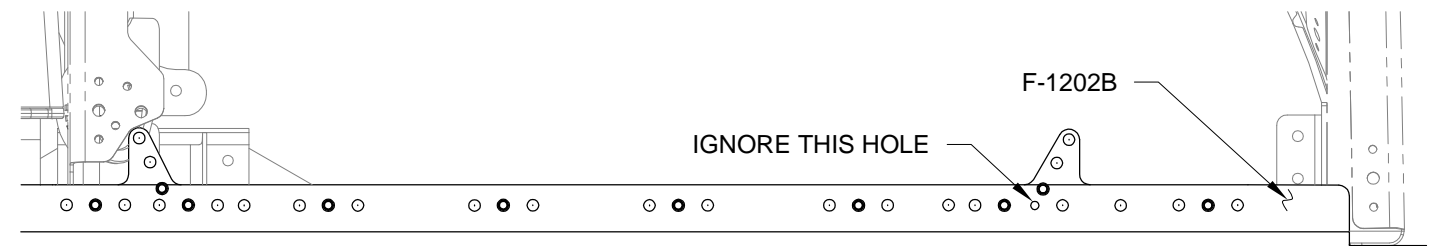
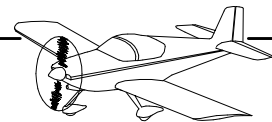


FIGURE 4: IGNORED HOLE
(COPILOT SIDE SHOWN)



Step 1: Install the GDU 465 MFD to the F-00065 RV-12 Panel (Copilot) using the screws called out in Figure 1.

Step 2: Cut the tie-wrap holding the 50-pin D-Sub labeled "MFD" to the F-00055-R Support Bracket. Install the 50-pin D-Sub labeled "MFD" to the receptacle on the forward face of the GDU 465. See Figure 2 and Figure 3.

NOTE: For instructions on installing and routing the Garmin XM Kit see Section 42N.

Step 3: Place a piece of masking tape over the upper left corner of the PFD. Close the canopy and check for interference between the canopy frame and the bezel of the PFD. If interference exists it is permissible to file away the canopy frame to remove the interference. Do not file through the wall thickness of the frame. If this much interference exists contact Van's Aircraft for further guidance.

Step 4: Install the passenger warning label from the F-1200 Interior Label Sheet in the approximate location shown in Figure 1.

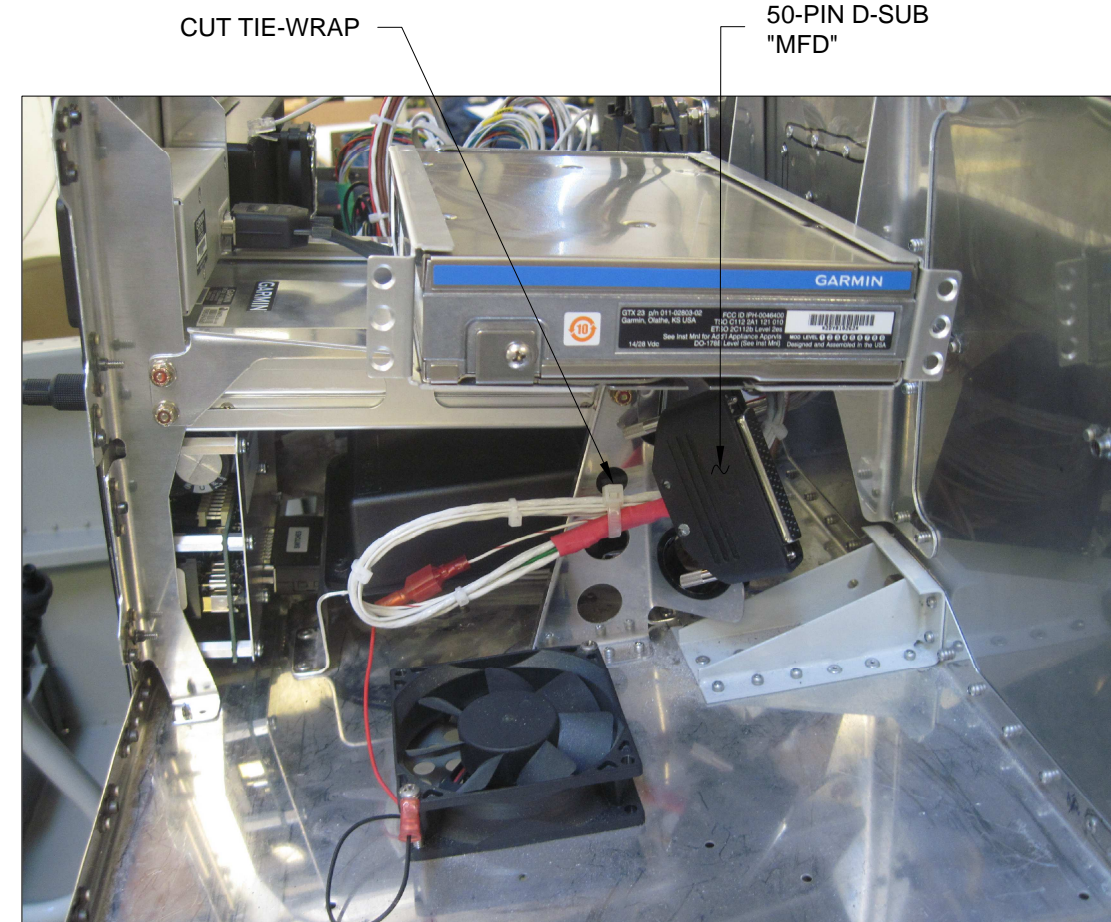


FIGURE 2: LOCATING THE D-SUB "MFD"

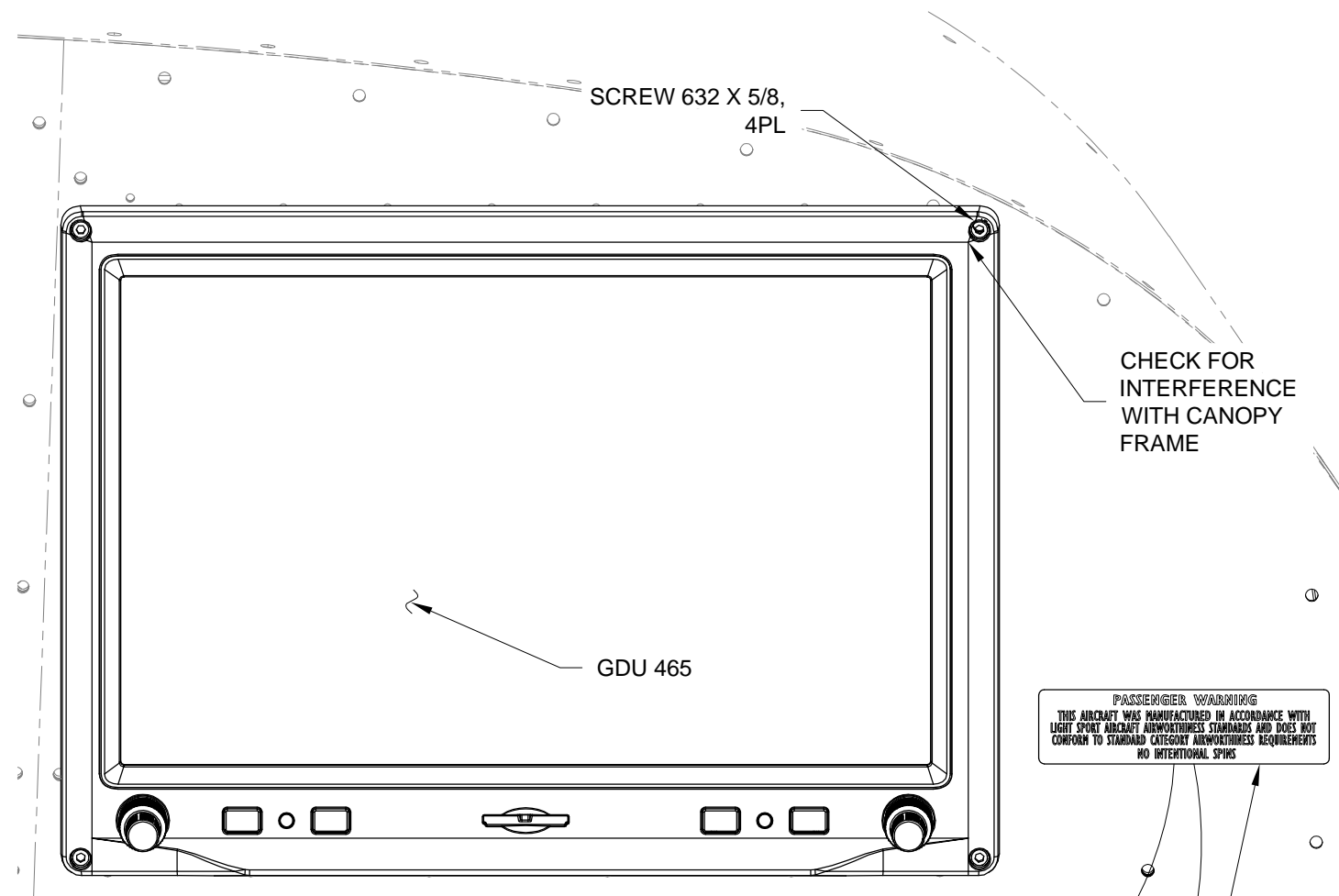


FIGURE 1: INSTALLING THE MFD

PASSENGER WARNING
 THIS AIRCRAFT WAS MANUFACTURED IN ACCORDANCE WITH
 LIGHT SPORT AIRCRAFT AIRWORTHINESS STANDARDS AND DOES NOT
 CONFORM TO STANDARD CATEGORY AIRWORTHINESS REQUIREMENTS
 NO INTENTIONAL SPINS

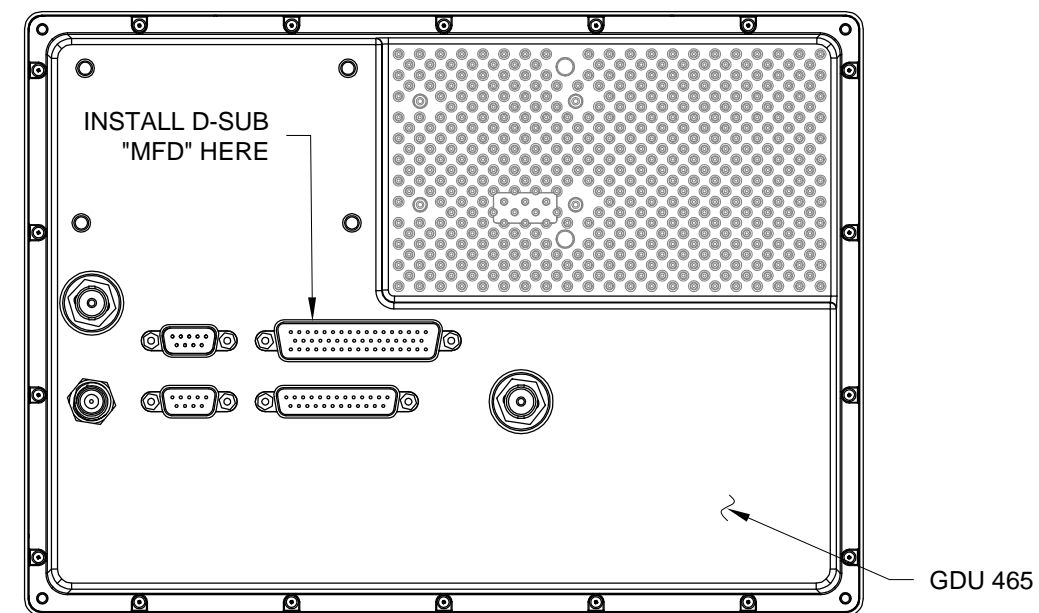


FIGURE 3: INSTALLING THE D-SUB "MFD"

Step 1: Cut through the three bridges in the F-12175 POH Tray as called out in Figure 1. Deburr the edges of both parts. Hereafter refer to these parts as the F-12175A Tray and F-12175B Angle.

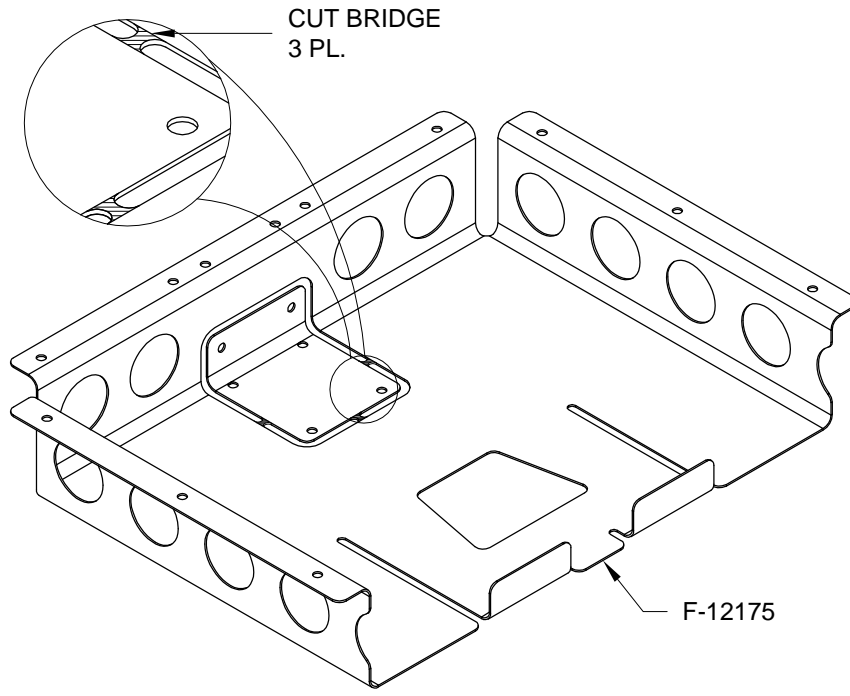
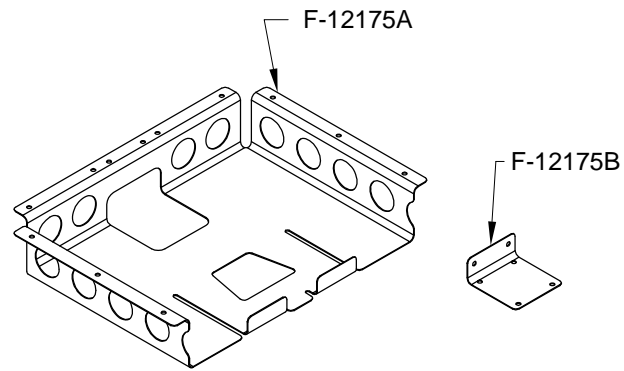


FIGURE 1: SEPARATING THE POH TRAY PARTS

Step 2: Inspect the F-1202B Panel Base for an existing hole pattern which matches that of the F-12175A Tray. If present proceed to Step 6.

Step 3: Cleco the F-12175A Tray to the underside of the F-1202B Panel Base at the one location shown in Figure 2.

Align the tray so that it is parallel with the aft edge of the panel base and clamp it in place.

Match-Drill #30 the panel base using the holes in the tray flanges as guides; insert clecos as you go.

Remove the tray and deburr the panel base.

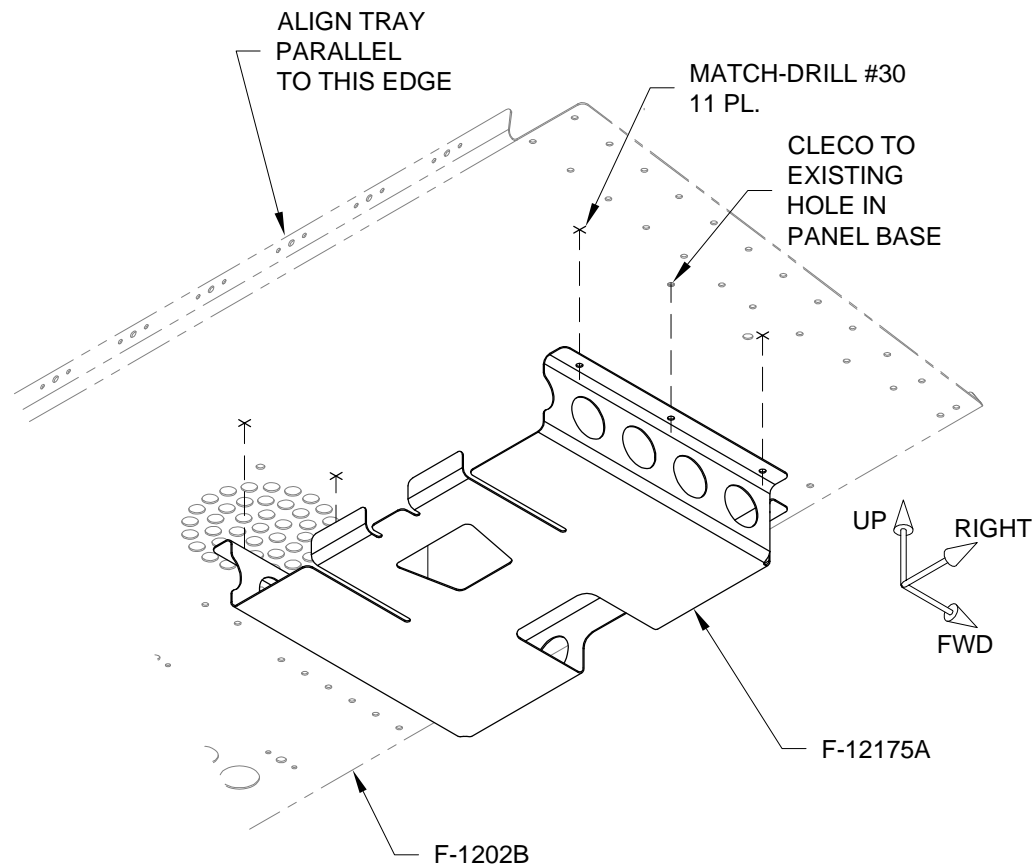


FIGURE 2: MATCH DRILL PANEL BASE

Step 4: Cleco the F-12175B Angle to the underside of the F-1202B Panel Base through the holes shown in Figure 3.

Step 5: Match-Drill #30 the F-1202B Panel Base per the call-out in Figure 3 using the F-12175B Angle as a guide.

Remove the angle and deburr the panel base.

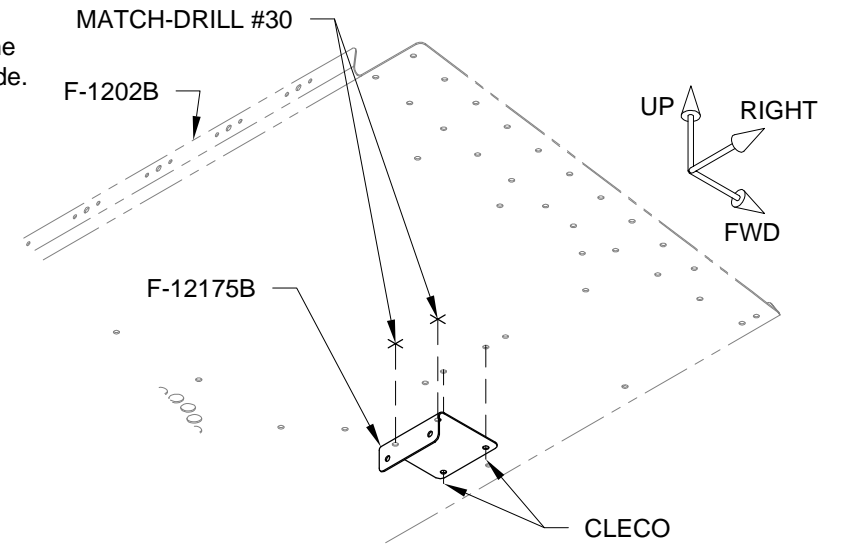


FIGURE 3: MATCH DRILL ANGLE TO PANEL BASE

Step 6: Position the F-12175B Angle on the F-1202B Panel Base as shown in Figure 4 and install one cleco. Note that angle has been rotated.

Step 7: Rivet the F-12175B Angle to the F-1202B Panel Base using the rivets called out in Figure 4.

Rivet the F-12175A Tray to the panel base using the rivets called out in Figure 4.

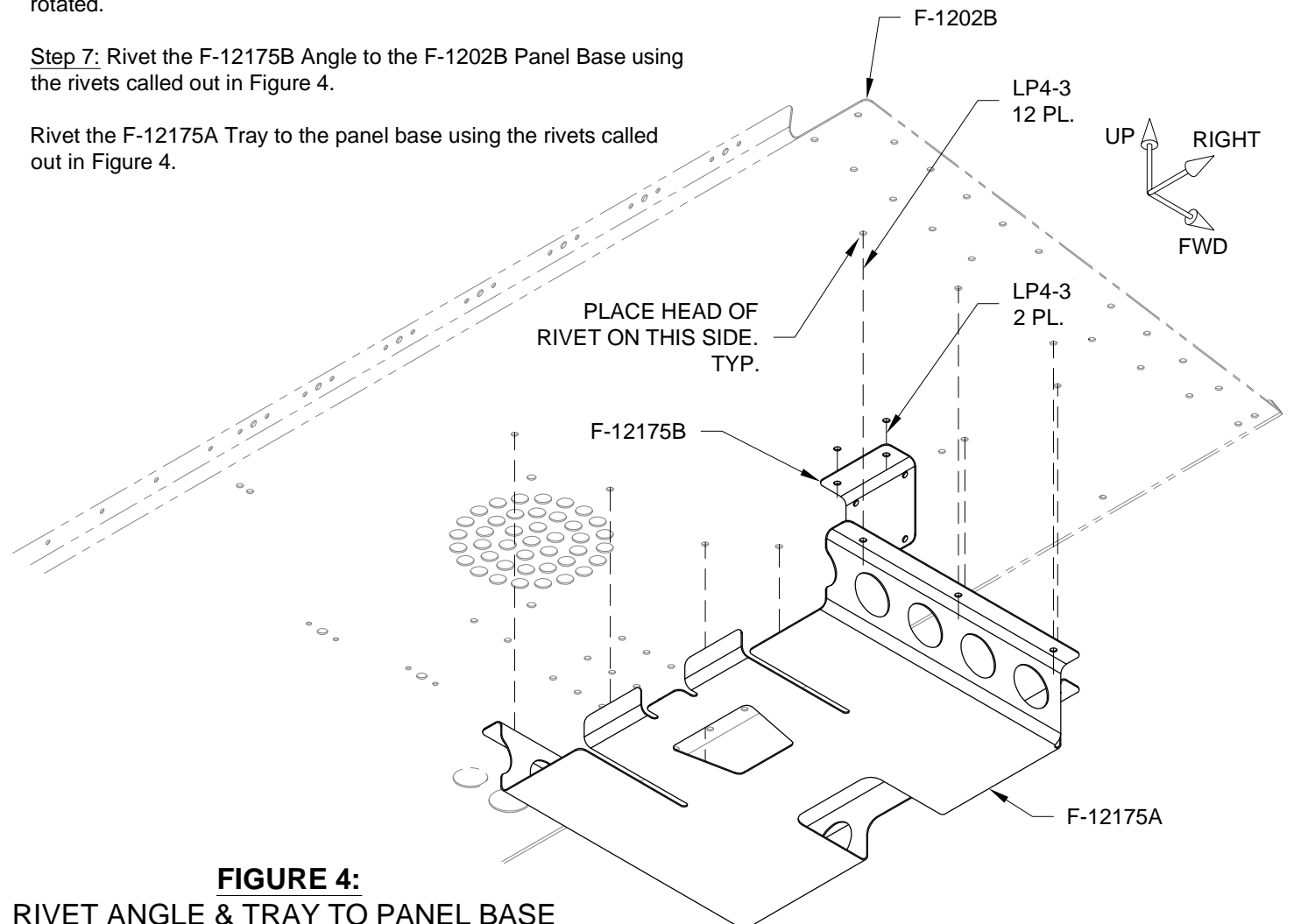
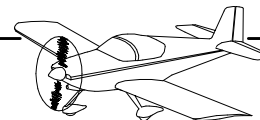


FIGURE 4: RIVET ANGLE & TRAY TO PANEL BASE



Step 1: Remove the 3 amp fuse from the slot in the AV50001 labeled "EFIS" and replace with a 7.5 amp fuse.

Reflect this change with the F-12123A Fuse Holder by replacing the 3 amp fuse in the location labeled EFIS with a 7.5 amp fuse. Use a permanent marker to change the value on the the fuse holder label at this location from "5" to "7.5". See Figure 1.

Step 2: Relocate the fuse holder to the underside of the F-1202B Panel Base using a new F-12123B Double Sided Velcro Tape as shown in Figure 2.

Step 3: Navigate to the Van's Aircraft web site downloads page. Download the G3X-PRE-SETS-READ-ME file. Open the READ-ME and follow the instructions for installing the latest settings to the G3X screens.

Step 4: Download the latest RV-12 overall Electrical Schematic from the Van's Aircraft web site.

NOTE: Any weight and balance information recorded for the aircraft must be updated. Depending on the state of your kit some steps may not be applicable.

Step 5: In the RV-12 Maintenance Manual (MM) "INSTALLED EQUIPMENT LIST" table, add "G3X DUAL DISPLAY" to the "ITEM" column. On the same line add a checkmark to the "INSTALLED" column.

Enter 4.8 lb for "Weight", 57.6 in for "Location/Arm" and 276.43 in-lb "Moment" onto the same line as "G3X DUAL DISPLAY".

NOTE: Steps 6-8 on this page are only applicable if a final weight and balance as specified in the PAP has been completed.

Step 6: In the RV-12 Pilot Operating Handbook (POH) "YOUR AIRPLANE" table, enter the new total values for the arm, weight, and moment of the installed equipment.

Step 7: In the RV-12 POH "YOUR AIRPLANE" table, recalculate and enter new values for the Empty Weight, Empty Moment, and Empty Arm.

Step 8: Make an entry, as calculated in the previous step, on the WEIGHT AND BALANCE RECORD page of the RV-12 Maintenance Manual as follows:

As of this date: ___/___/___ the following values represent current Weight and Balance calculations resulting from the installation of the G3X Dual Display Optional Kit.

Revised Empty Weight: _____ lbs

Revised Empty Moment: _____ in-lbs

Revised Empty Arm: _____ in

Signed: _____

NOTE: The remaining steps on this page are only applicable for aircraft which have passed a final airworthiness inspection.

Step 9 (ELSA): Make an appropriate entry in the airframe logbook. See example below:

Installed the G3X DUAL DISPLAY option in accordance with Van's Aircraft KAI Section 43C and confirmed proper operation.

Signature _____ Certificate # _____

Step 9 (SLSA): Complete the notification N 16-07-27 (available from the Van's Aircraft web site) corresponding to the G3X DUAL DISPLAY installation.

Step 10: Section complete.

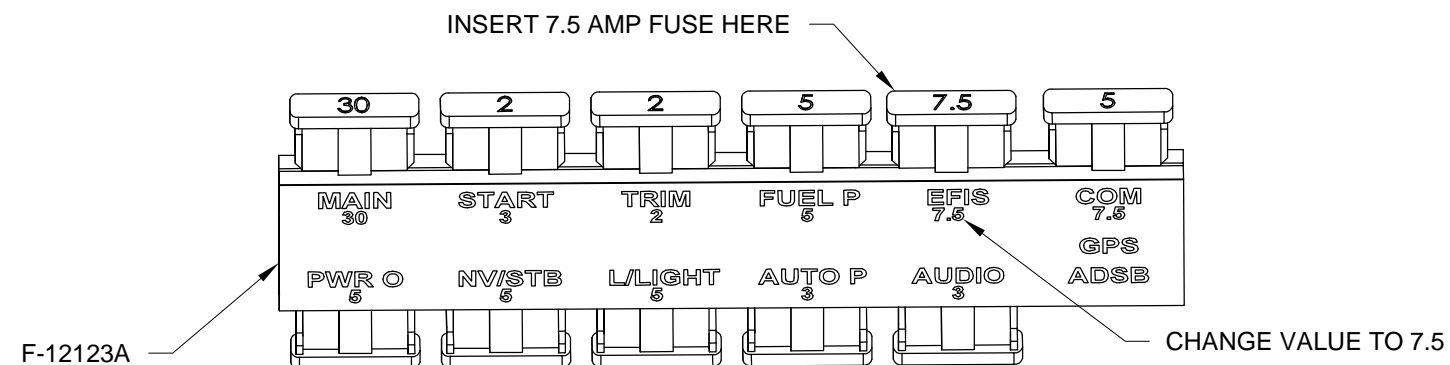


FIGURE 1: MODIFYING THE FUSE HOLDER

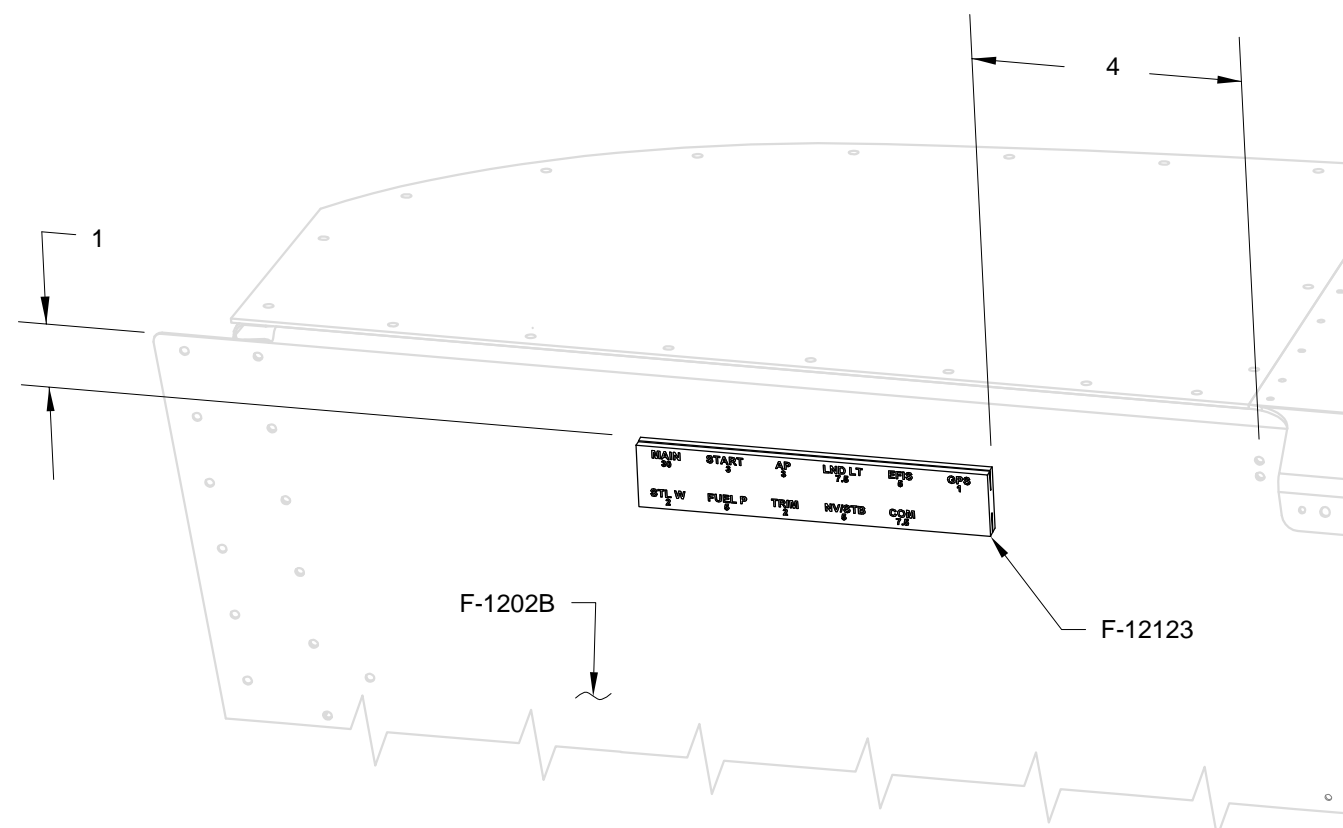


FIGURE 2: INSTALLING FUSE HOLDER ASSEMBLY TO UNDERSIDE OF PANEL BASE (SPARE FUSES NOT SHOWN)



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