SECTION 42:
AVIONICS
WIRING
HARNESS

110-773
ANTENNA

F-1205G
ELT BRACKET

452-3042
MOUNT TRAY

453-1101
ELT
CONNECTOR
ADAPTER

ES RS 279-374
PHONE CABLE

611-6013-12
COAX
ANTENNA
CABLE

453-6603
ELT

F-1208
FUSELAGE FRAME

DYNON 100323-000
EDC-10A MAGNETOMETER

F-1208B-L
MAG BRACKET

F-1208B-R
MAG BRACKET

WH-RV12-OPTIONAL
OPTIONAL WIRING HARNESS

453-0023
SELF POWERED
COCKPIT REMOTE SWITCH

AV FC-403-12
PANEL MT ST INTERCOM

F-1201A
FIREWALL
UPPER

F-1202S
GPS MOUNT BRACKET

AV GARMIN 296,396 OR 496
GPS

F-12121
STANDOFF

IF DYNON DEK 180-12
DYNON EFIS/EMS

STATIC LINE

DYNON 100422-000
D-100 SERIES MOUNTING TRAY

WH-RV12-GTX327
TRANSPONDER WIRING HARNESS

WH-RV12-SL-40
COM WIRING HARNESS

WH-RV12-FLTCOM403
INTERCOM WIRING HARNESS

WH-RV12-296-496
GPS WIRING HARNESS

AV CONTROL BOARD 12

GARMIN GXM 30A
XM ANTENNA

F-1201Z
RETAINING PLATE

GARMIN GA 26C
GPS ANTENNA

WD-1221
ENGINE
MOUNT
STANDOFF

AV GARMIN SL-40
COM RADIO

AV GARMIN GTX327
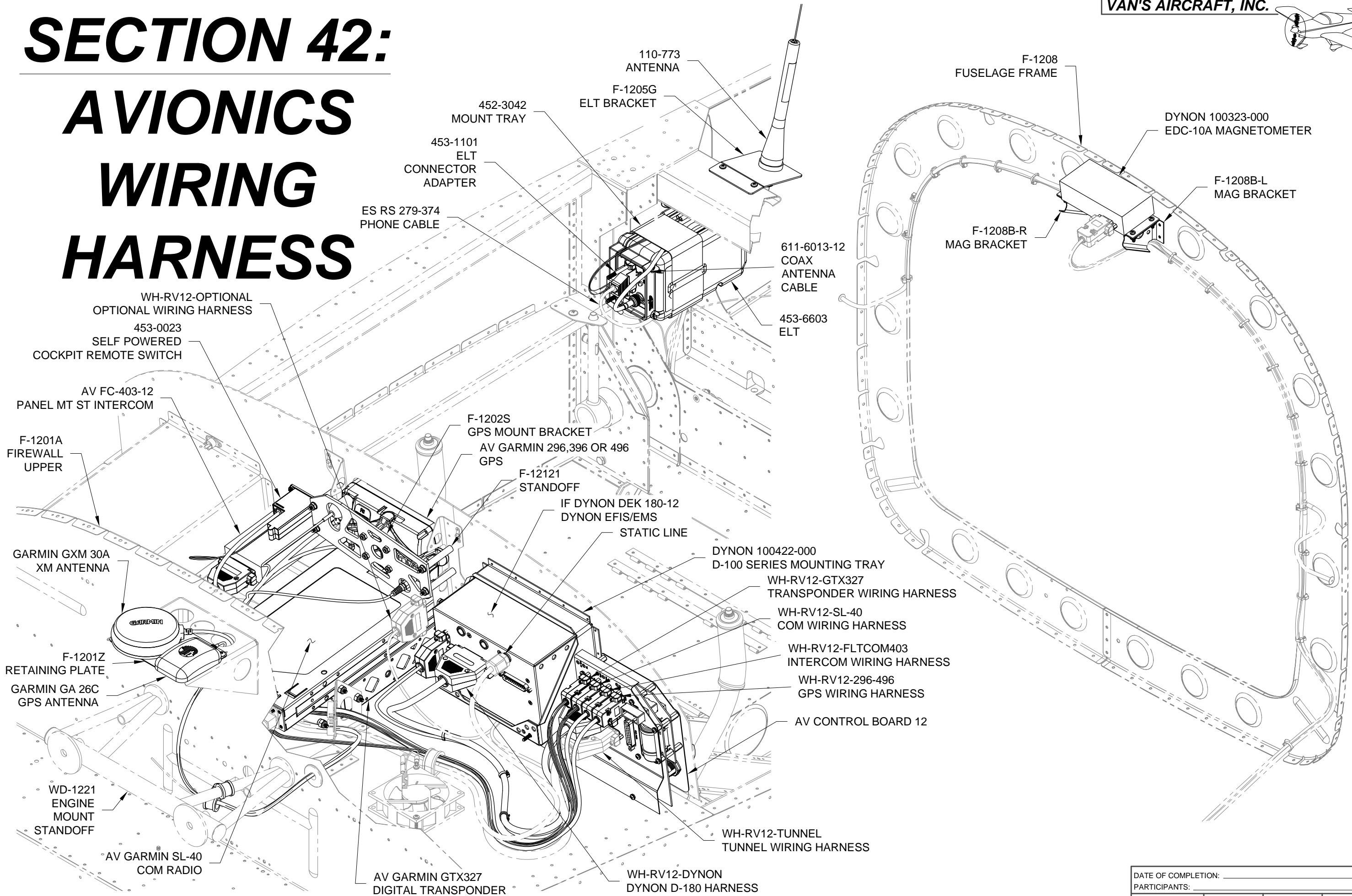DIGITAL TRANSPONDER

WH-RV12-DYNON
DYNON D-180 HARNESS

WH-RV12-TUNNEL
TUNNEL WIRING HARNESS

Step 1: Cut the F-1202W TEXT
Lable Strip into individual lables.

Step 2: Add lables to each D-Sub
cutout, the power cutout and each
potentiometer adjust opening in the
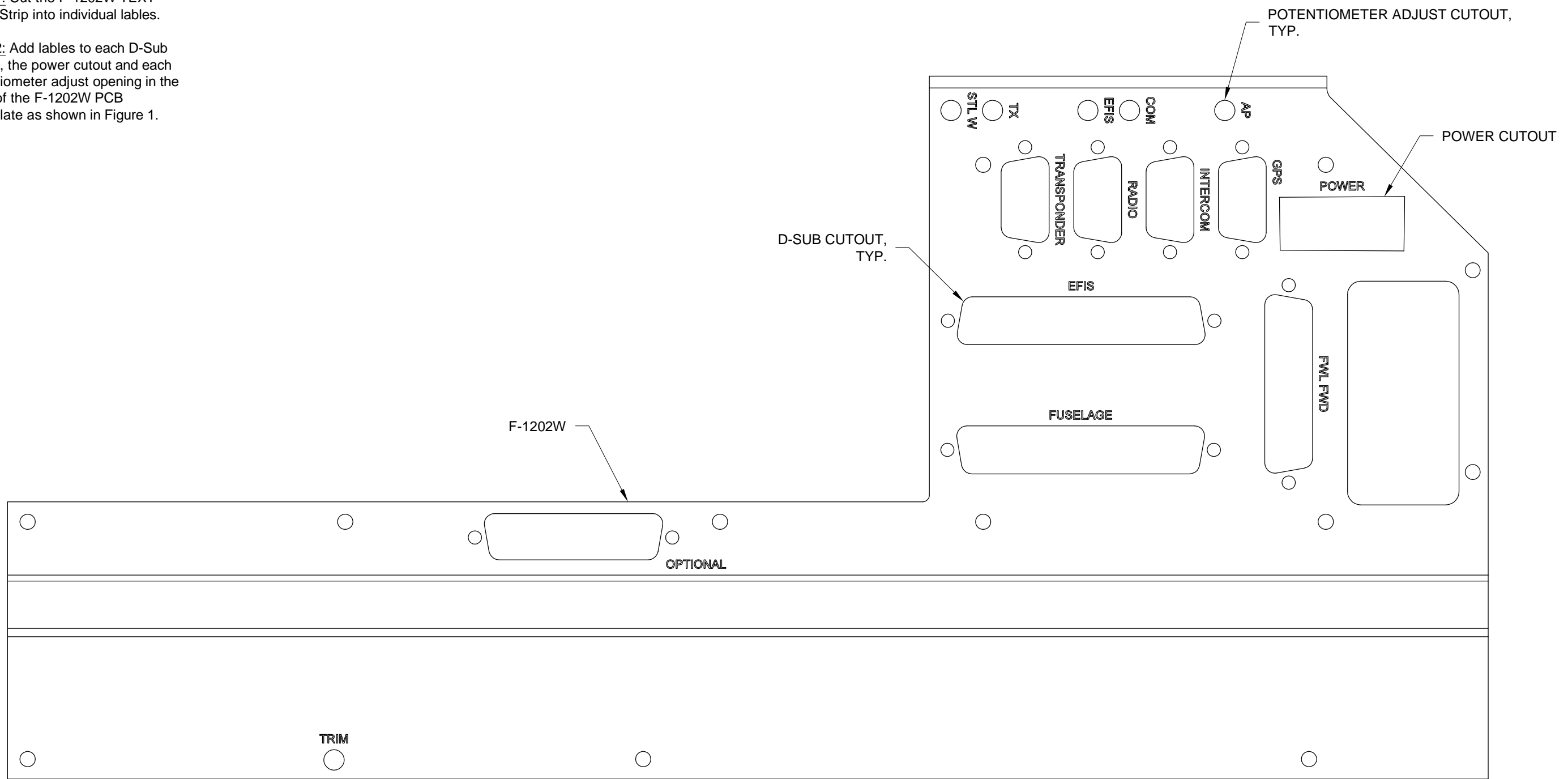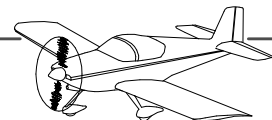back of the F-1202W PCB
Backplate as shown in Figure 1.

POTENTIOMETER ADJUST CUTOUT,
TYP.

POWER CUTOUT

STL W
TX
EFIS
COM
AP

TRANSPONDER
RADIO
INTERCOM
GPS
POWER

D-SUB CUTOUT,
TYP.

EFIS

FUSELAGE

FWL FWD

F-1202W

OPTIONAL

TRIM

FIGURE 1: ADDING LABLES
TO THE BACKPLATE

Step 1: Remove the F-1240 Assembly (forward top skin).

Step 2: Remove the F-1202T Inst Panel Left D-180 (see Page 42-01), then slip the face plate of the AV CONTROL BOARD 12 over flange along the forward edge of the F-1202B Panel Base. See the detail in Figure 1.

WH-RV12-OPTIONAL (AP-74 D-SUB)
WH-RV12-OPTIONAL (MAIN D-SUB)
FACE PLATE
HEX STANDOFF
F-1202B
F-1202B
AV CONTROL BOARD 12

F-1202H-L
NOTE THE AV CONTROL BOARD 12 OVERLAPS F-1202H-L
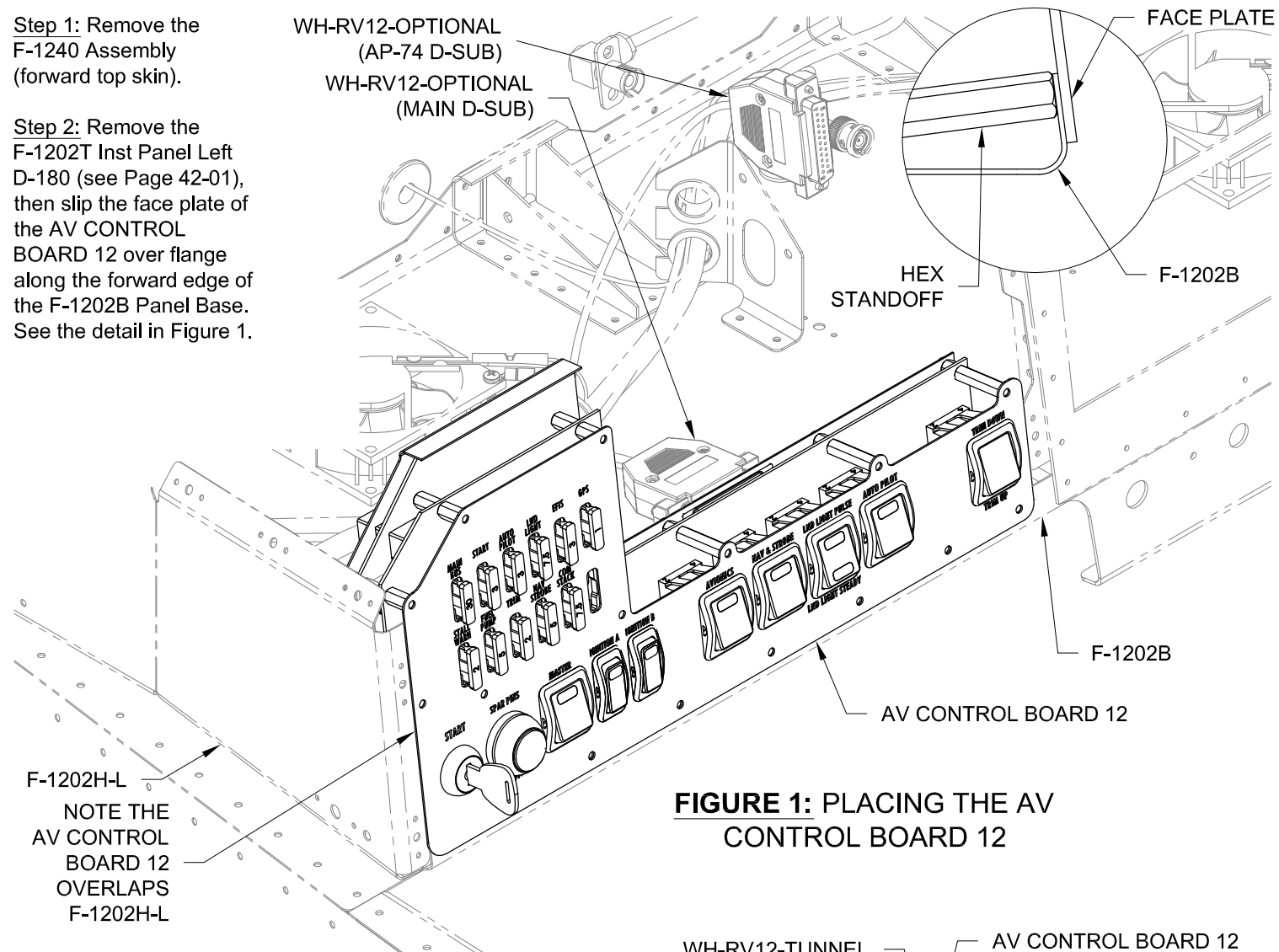
FIGURE 1: PLACING THE AV CONTROL BOARD 12

Step 3: Install the WH-RV12-TUNNEL harness into the d-sub labled fuselage and WH-RV12-OPTIONAL harness into the d-sub labeled optional on the back of the AV CONTROL BOARD 12.
See Figure 2.

Step 4: If not installing the autopilot option, tie-wrap the WH-RV12-OPTIONAL (AP-74 D-SUB) to the main harness wires coming from the WH-RV12-OPTIONAL (MAIN D-SUB).

Step 5: Cut and strip the ends of 22 3/16 inches of #18 AWG wire, then crimp a ring terminal to each end to make the WH-B206 PCB Gnd.

Step 6: Install the WH-B206 PCB Gnd between the screw holding the ES CPU FAN and the middle bottom screw on the AV CONTROL BOARD 12. See Figure 2.
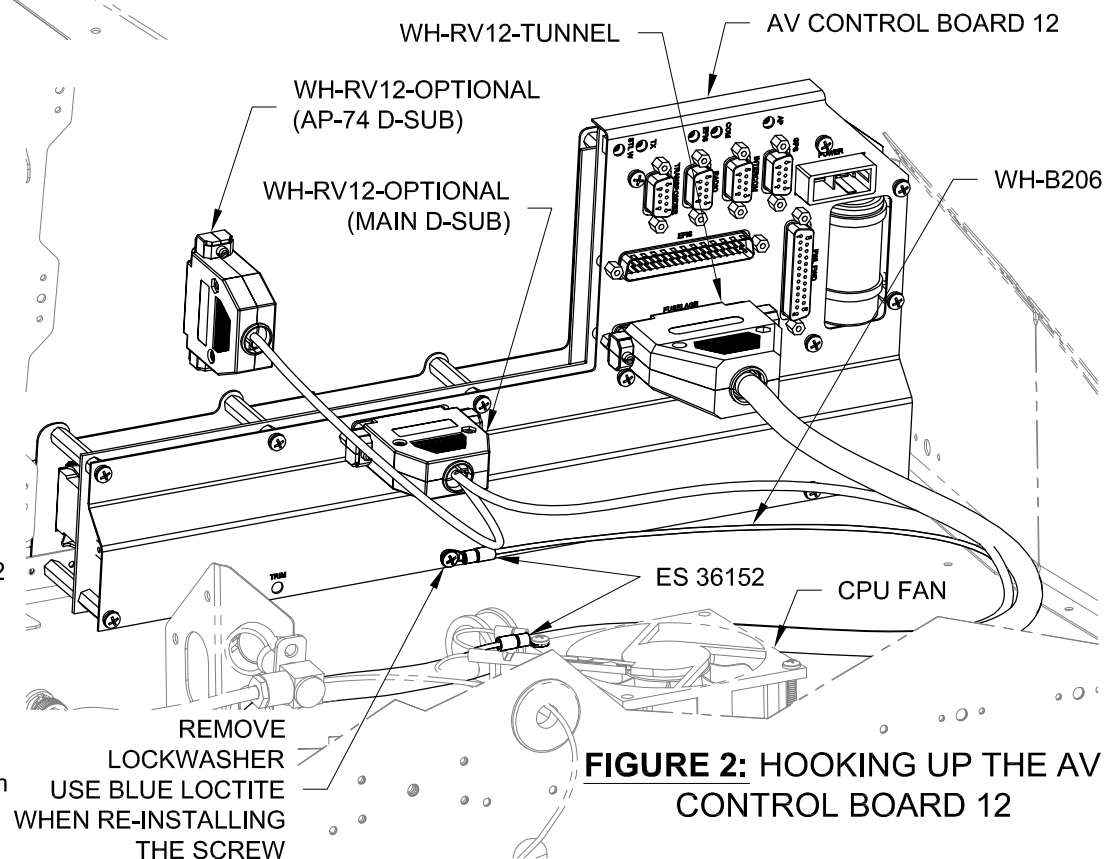
WH-RV12-TUNNEL
AV CONTROL BOARD 12
WH-RV12-OPTIONAL (AP-74 D-SUB)
WH-RV12-OPTIONAL (MAIN D-SUB)
WH-B206
ES 36152
CPU FAN
REMOVE LOCKWASHER USE BLUE LOCTITE WHEN RE-INSTALLING THE SCREW

FIGURE 2: HOOKING UP THE AV CONTROL BOARD 12

Step 7: Install fuses into the AV CONTROL BOARD 12 as shown in Figure 3.

MAIN BUS	START	AUTO PILOT	LND LIGHT	EFIS	GPS
30	3	3	7.5	3	1

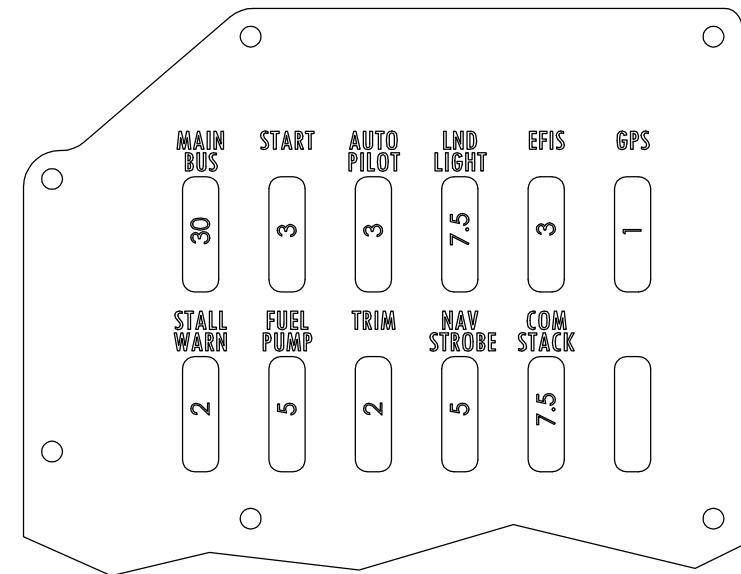| STALL WARN	FUEL PUMP	TRIM	NAV STROBE	COM STACK	
2	5	2	5	7.5	

FIGURE 3: INSERTING FUSES INTO THE AV CONTROL BOARD 12

Step 8: Peel the back off the F-12123C Fuse Holder Label and stick it to the top of the F-12123A Fuse Holder. Peel one side of the F-12123B Double Sided Velcro Tape off and place it on the bottom of the assembly.

NOTE: If installing the Dual Display Optional Kit see Section 43 for F-12123 Fuse Holder Assembly mounting instructions and skip the remaining steps on this page.

Step 9: Peel the remaining side of the F-12123B Double Sided Velcro Tape off and adhere the assembly onto the inside of the Map Box Door as shown in Figure 4.

Step 10: Install a second set of fuses in the F-12123 Fuse Holder Assembly pertaining to the same fuse values shown on the F-12123C Fuse Holder Label.
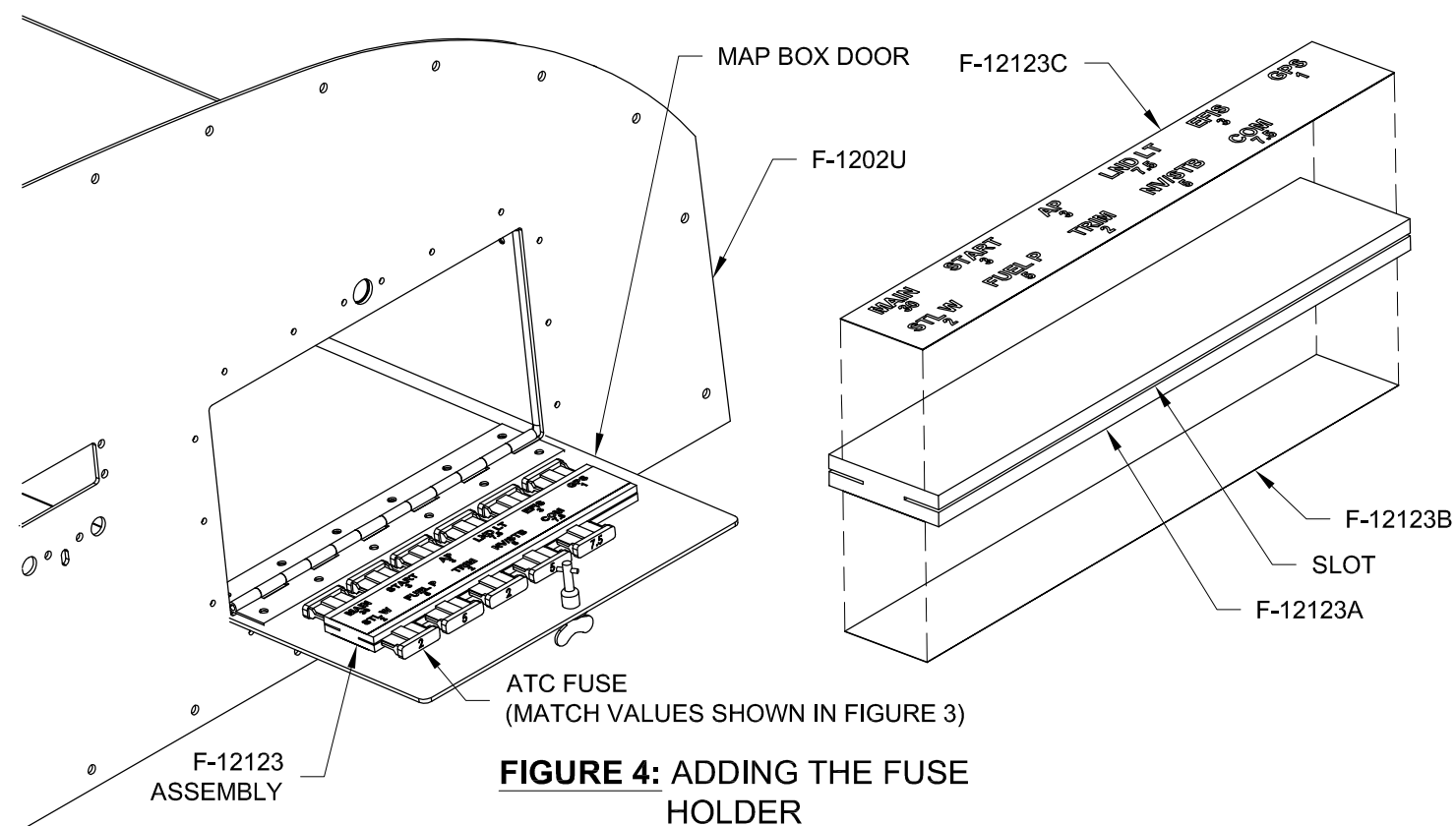
MAP BOX DOOR
F-12123C
F-1202U
WH-B206
F-12123B
SLOT
F-12123A
ATC FUSE (MATCH VALUES SHOWN IN FIGURE 3)
F-12123 ASSEMBLY

FIGURE 4: ADDING THE FUSE HOLDER

Step 1: Place the Dynon 100422-000 D-100 Series Mounting Tray behind the F-1202T Inst Panel Left D-180. Center the tray about the cutout in the panel as shown in FIgure 1. Match-Drill #40 the holes in the inst panel left D-180 into the tray. Cleco each hole after it is drilled. Match-Drill #27 the two larger holes along the bottom edge of the cutout into the tray.

Step 2: Remove and deburr the Dynon 100422-000 D-100 Series Mounting Tray. Machine countersink the #40 holes surrounding the D-180 cutout in the F-1202T Inst Panel Left D-180 for the head of the rivets that will attach the tray. See call-outs in Figure 1.

Step 3: Remove the shaded are around the two #27 holes drilled into the bottom flange of the Dynon D-180 Tray in Step 1. See the detail view in Figure 1.

Step 4: Rivet the Dynon 100422-000 D-100 Series Mounting Tray to the F-1202T Inst Panel Left D-180 per the callouts in Figure 1.

Step 5: Install the AV CONTROL BOARD 12 and F-1202T Inst Panel Left D-180 to the F-1202B Panel Base, F-1202J-L Inst Stack Angle and F-1202H-L Canopy Rib using the hardware removed on Page 42-2, Step 2 (Also see Page 29-07, Step 2) and the hardware called out in Figure 2 on this page.
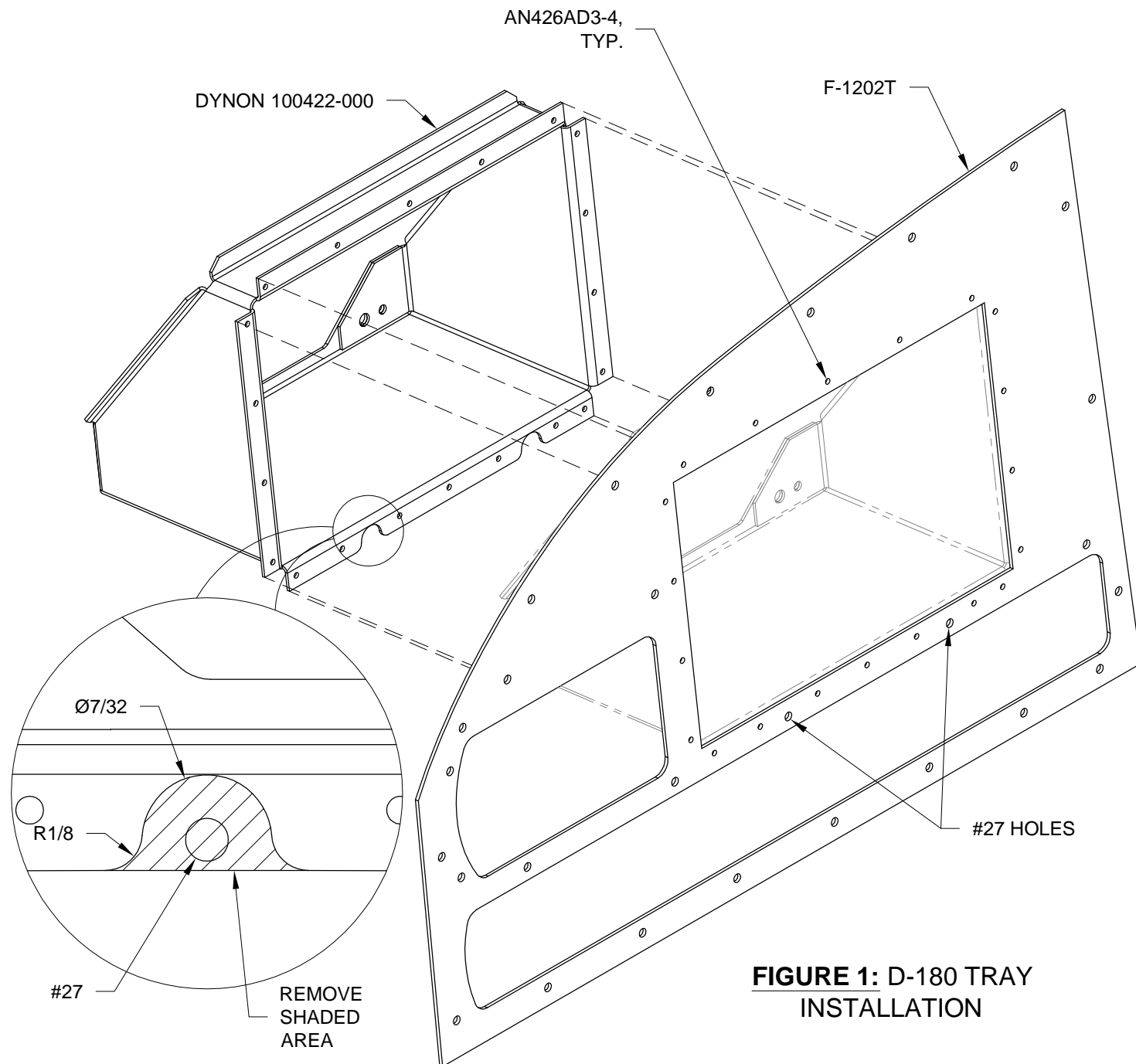
DYNON 100422-000

AN426AD3-4, TYP.
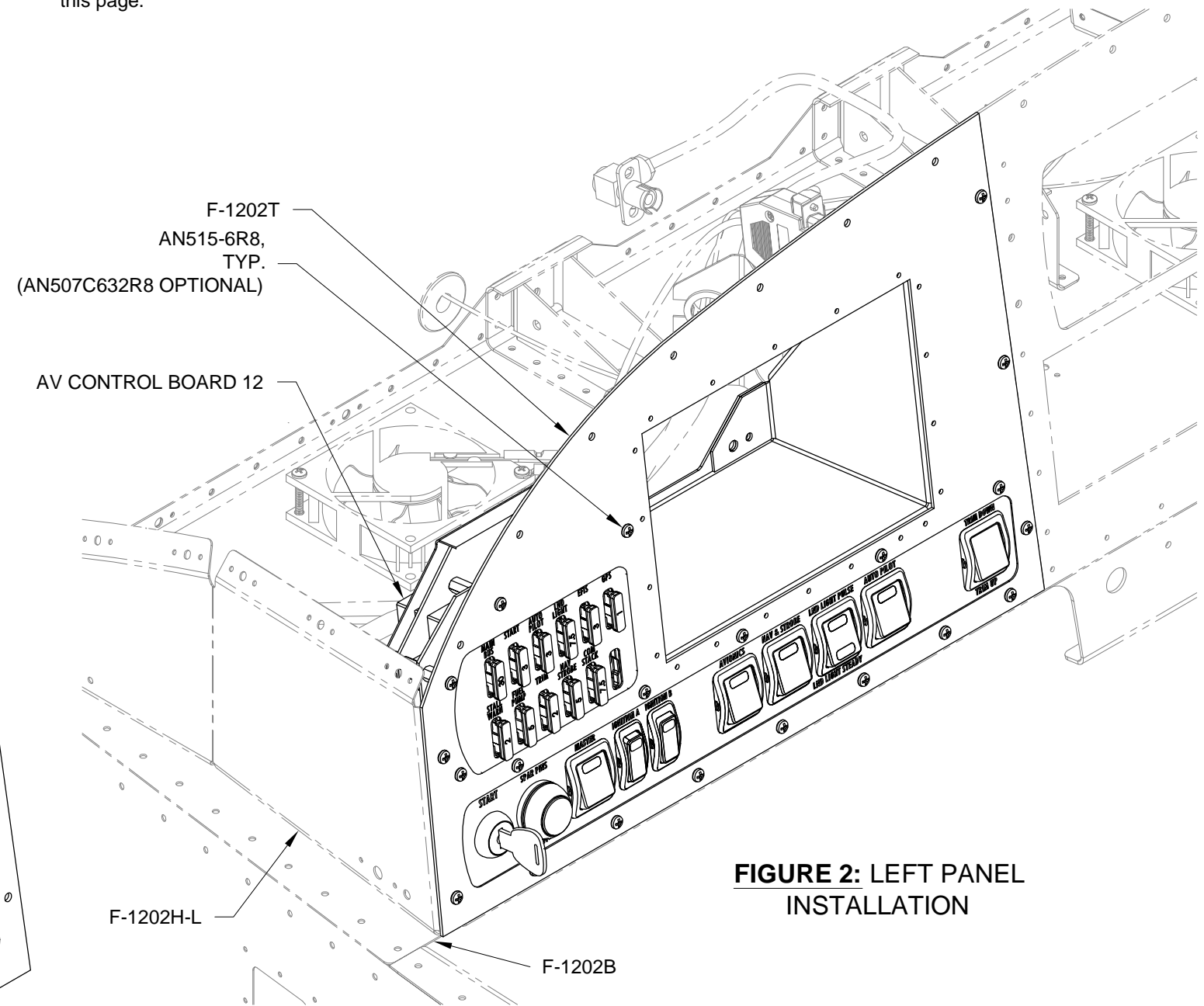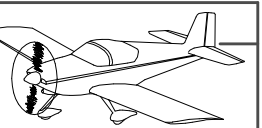
F-1202T

F-1202T
AN515-6R8, TYP.
(AN507C632R8 OPTIONAL)

AV CONTROL BOARD 12

Ø7/32

R1/8

#27

REMOVE SHADED AREA

#27 HOLES

F-1202H-L

F-1202B

FIGURE 2: LEFT PANEL INSTALLATION

FIGURE 1: D-180 TRAY INSTALLATION

Step 1: Install the IF DYNON DEK 180-12 Dynon EFIS/EMS into the DYNON 100422-000 D-100 Series Mounting Tray attached to the F-1202T Inst Panel Left D-180 using instructions and allen wrench supplied by Dynon.

NOTE: Wiring harnesses installed in this section are supplied without backshells. These will need to be installed as shown in Section 5W. The backshell type supplied may not match the backshell depicted in the drawing.

Step 2: Install the WH-RV12-DYNON harness to the back of the IF DYNON DEK 180-12 Dynon EFIS/EMS and the AV CONTROL BOARD 12 as shown in Figure 1.

Step 3: Remove the male nylon fitting from the FN4MC-2 Nylon 1/4 Straight assembly on the end of the static line. Remove the plastic plug from the static port in the back of the IF DYNON DEK 180-12 Dynon EFIS/EMS.

Step 4: Install (hand tight) the male nylon fitting from the FN4MC-2 Nylon 1/4 Straight to the back of the IF DYNON DEK 180-12 Dynon EFIS/EMS as shown in Figure 1.

Step 5: Install the static line onto the male nylon fitting on the back of the IF DYNON DEK 180-12 Dynon EFIS/EMS as shown in Figure 1.

Step 6: Tie-wrap the SERIAL I/O 9 PIN PIGTAIL to the Static Line at a point near the ES 9 PIN BACKSHELL.
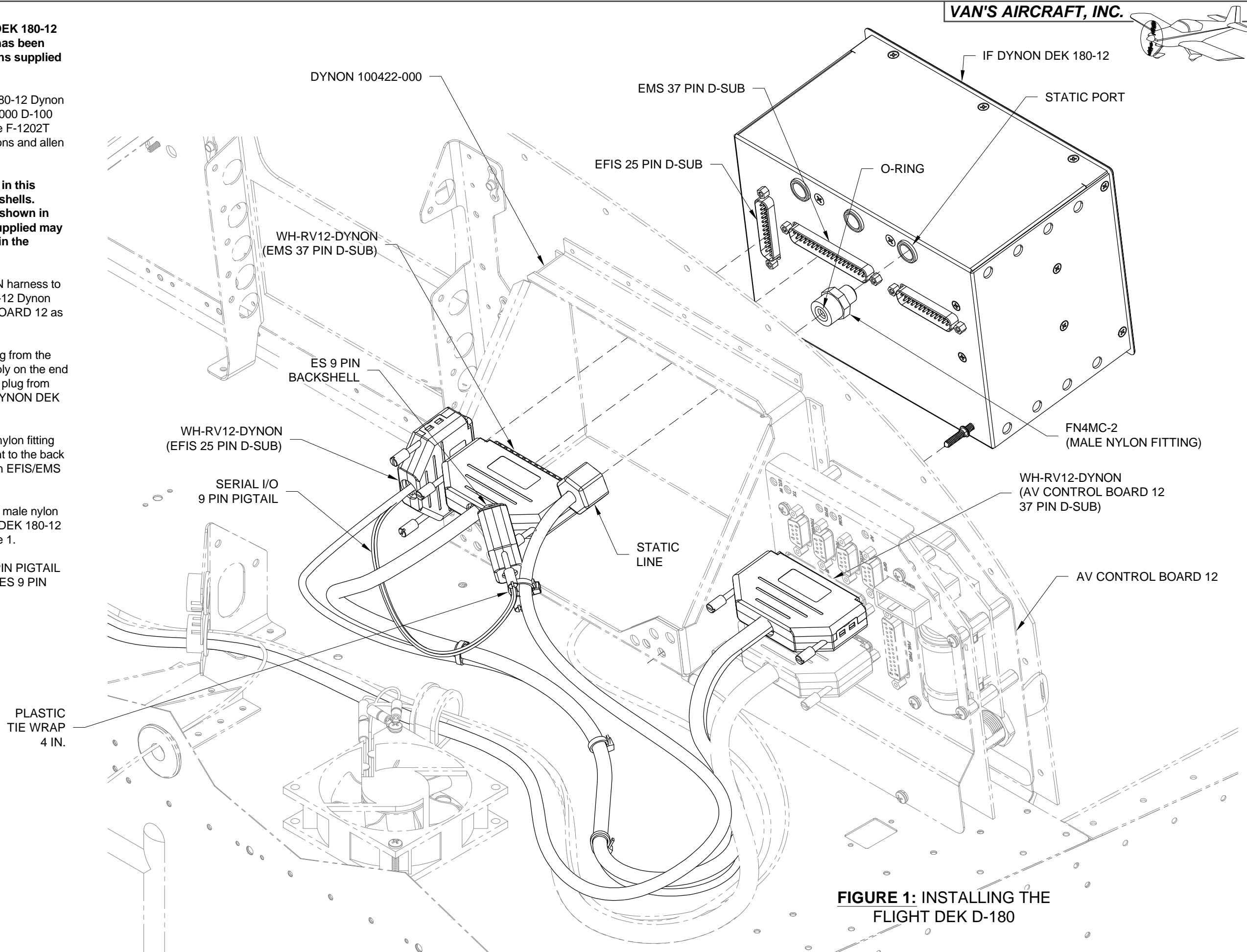
DYNON 100422-000

IF DYNON DEK 180-12

EMS 37 PIN D-SUB

STATIC PORT

EFIS 25 PIN D-SUB

O-RING

WH-RV12-DYNON (EMS 37 PIN D-SUB)

ES 9 PIN BACKSHELL

WH-RV12-DYNON (EFIS 25 PIN D-SUB)

SERIAL I/O 9 PIN PIGTAIL

STATIC LINE

FN4MC-2 (MALE NYLON FITTING)

WH-RV12-DYNON (AV CONTROL BOARD 12 37 PIN D-SUB)

AV CONTROL BOARD 12

PLASTIC TIE WRAP 4 IN.

FIGURE 1: INSTALLING THE FLIGHT DEK D-180

NOTE: For the remainder of this section some items that have been previously installed will not be shown for the sake of clarity.

Step 1: The WH-RV12-GTX327 Transponder Wiring Harness is supplied already connected to the back of the AV GARMIN GTX327 Digital Transponder Backplate. Route the harness through a snap bushing on the F-1202K-L Inst Stack Support and through the cushioned clamp near the left ES CPU FAN. Connect the harness to the back of the AV CONTROL BOARD 12. See Figure 1. Connect the digital transponder backplate to its tray per the instructions provided with the transponder (this may have already been completed).

Step 2: Attach the AV GARMIN GTX327 Tray to the F-1202J-L & -R Inst Stack Angles and the F-1202K-L & -R Inst Stack Supports as shown in Figure 1.

Step 3: Slide the AV GARMIN GTX327 Digital Transponder into the tray installed in Step 2.

Step 4: Attach the WH-RV12-TX-ANT Transponder Antenna Cable to the back of the AV GARMIN GTX327 Backplate as per the instructions supplied with the AV GARMIN GTX327 Digital Transponder and as shown in Figure 1.
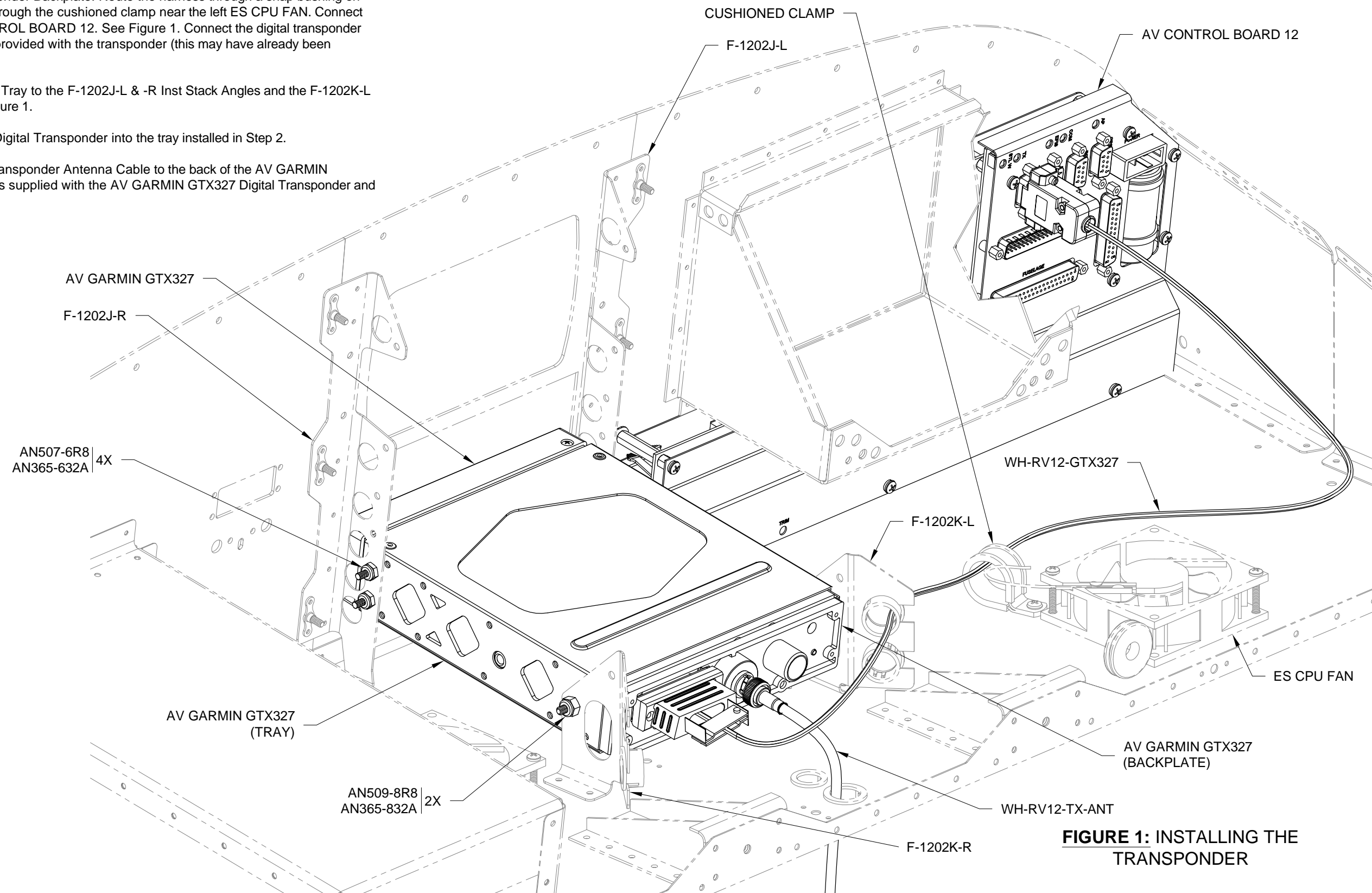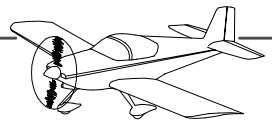
CUSHIONED CLAMP

F-1202J-L

AV CONTROL BOARD 12

AV GARMIN GTX327

F-1202J-R

AN507-6R8 / AN365-632A | 4X

WH-RV12-GTX327

F-1202K-L

AV GARMIN GTX327 (TRAY)

ES CPU FAN

AV GARMIN GTX327 (BACKPLATE)

AN509-8R8 / AN365-832A | 2X

WH-RV12-TX-ANT

F-1202K-R

FIGURE 1: INSTALLING THE TRANSPONDER

NOTE: This page is for builders installing a Garmin GTX328 Digital Mode S Transponder (European customers).

Step 1: Remove the F-1202K-L & -R Inst Stack Supports by drilling out the rivets that attach them to the F-1202B Panel Base.

Step 2: Cleco the F-12328 Brackets to the holes just drilled out in Step 1. See Figure 1.

Step 3: Check that the F-12328 Brackets are perpendicular to the forward and aft flanges on the F-1202B Panel Base. See Figure 1. Match-Drill #30 and cleco the three holes in the forward flange of the brackets into the panel base.

Step 4: Remove the F-12328 Brackets from the F-1202B Panel Base and debur the holes drilled in Step 3.

Step 5: Remove aft section of the F-12328-L & -R Brackets by removing the shaded area shown in Figure 2.
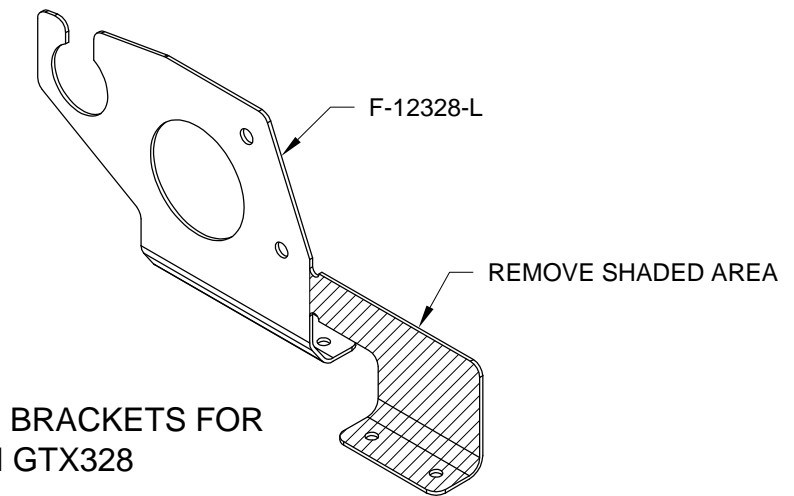

F-12328-L

REMOVE SHADED AREA

FIGURE 2: TRIMMING BRACKETS FOR
THE GARMIN GTX328

Step 6: Rivet the F-12328-L & -R Brackets to the F-1202B Panel Base using the hardware called out in Figure 3.

Step 7: Insert the snap bushings from the F-1202K-L & -R Inst Stack Supports into the F-12328-L & -R Brackets as shown in Figure 3.
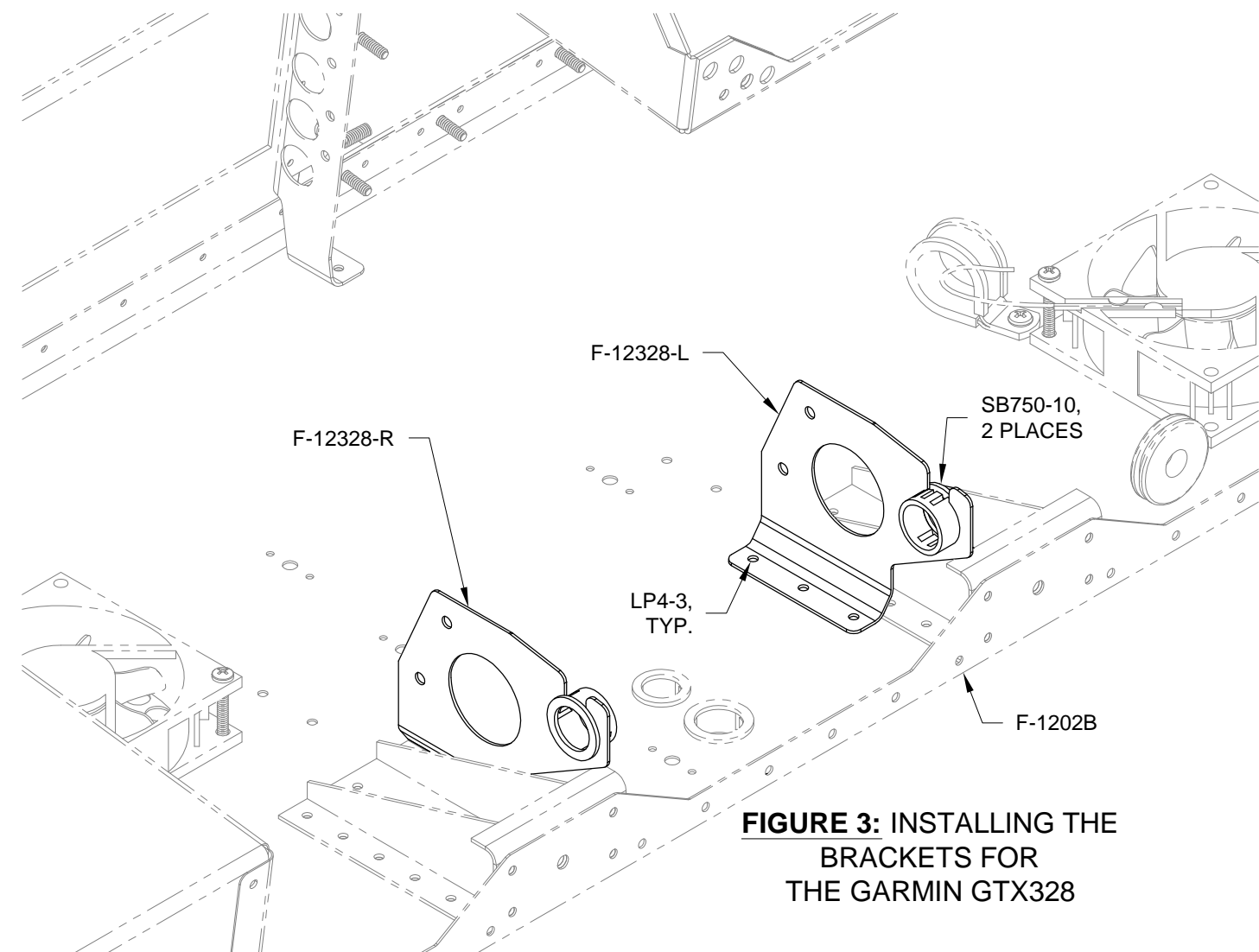

F-12328-R

F-12328-L

F-1202K-R
ATTACH HOLES

THESE EDGES
PERPENDICULAR

MATCH-DRILL

F-1202B

FIGURE 1: MATCH-DRILLING BRACKETS FOR
THE GARMIN GTX328

F-12328-L

SB750-10,
2 PLACES

F-12328-R

LP4-3,
TYP.

F-1202B

FIGURE 3: INSTALLING THE
BRACKETS FOR
THE GARMIN GTX328

VAN'S AIRCRAFT, INC.

Step 1: The WH-RV12-GTX328 Transponder Wiring Harness is supplied already connected to the back of the AV GARMIN GTX328 Digital Mode S Transponder Backplate. Route the harness through a snap bushing in the F-12328-L Bracket and through the cushioned clamp near the left ES CPU FAN. Connect the harness to the back of the AV CONTROL BOARD 12. See Figure 1. Connect the digital transponder backplate to the tray per the instructions provided with the transponder (this may have already been completed).

Step 2: Attach the AV GARMIN GTX328 Tray to the F-1202J-L & -R Inst Stack Angles and the F-12328-L & -R Brackets as shown in Figure 1.

Step 3: Install the AV GARMIN GTX328 Digital Mode S Transponder into the tray installed in Step 2 per the instructions provided with the transponder.

Step 4: Install the ES 5329517 Right Angle 50 Ohm BNC Jack-Plug to the back of the AV GARMIN GTX328 Digital Mode S Transponder Backplate. See Figure 1.

Step 5: Attach the WH-RV12-TX-ANT Transponder Antenna Cable to the ES 5329517 Right Angle 50 Ohm BNC Jack-Plug as shown in Figure 1.
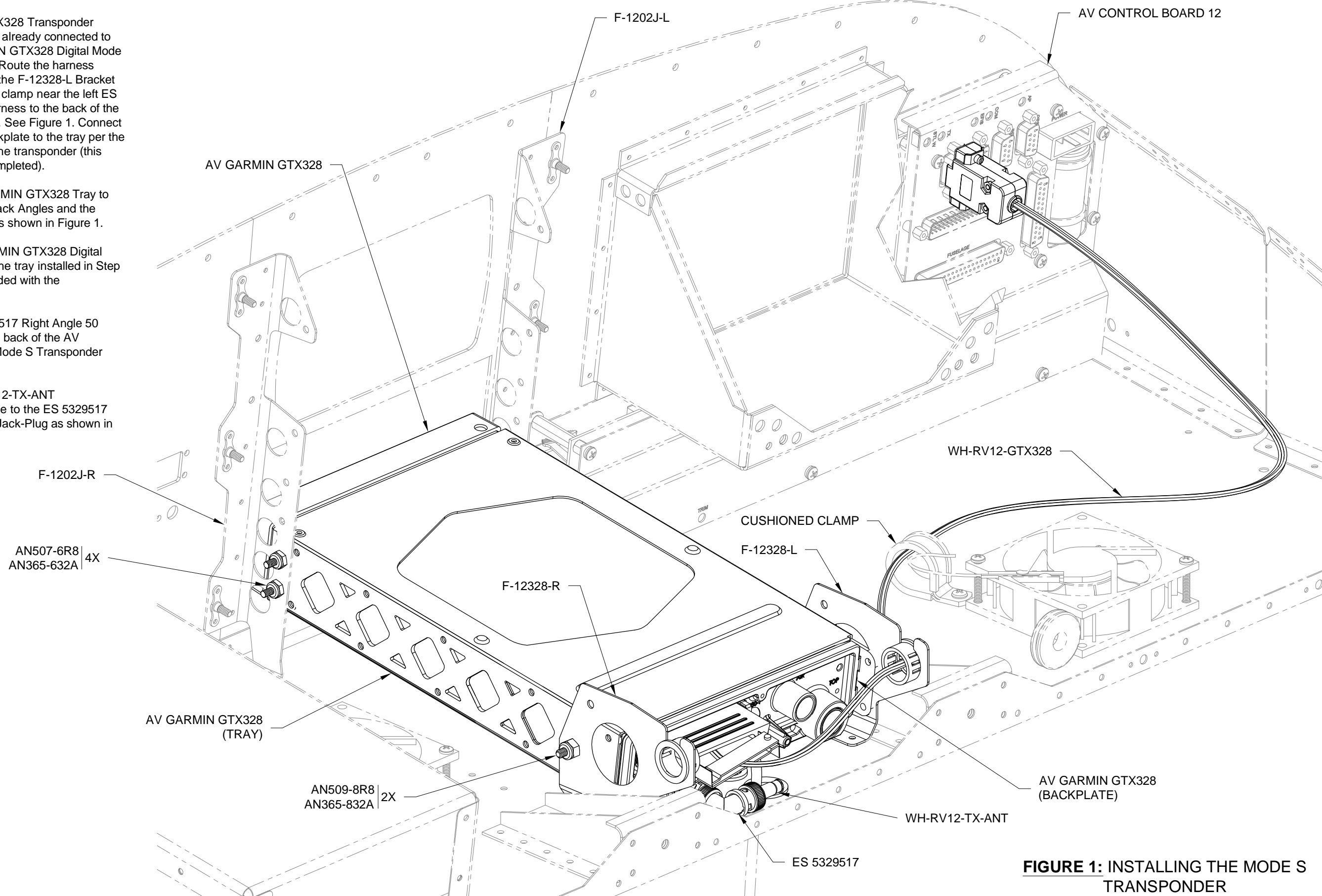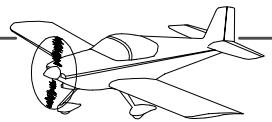
F-1202J-L

AV CONTROL BOARD 12

AV GARMIN GTX328

F-1202J-R

AN507-6R8 / AN365-632A 4X

WH-RV12-GTX328

CUSHIONED CLAMP

F-12328-L

F-12328-R

AV GARMIN GTX328 (TRAY)

AV GARMIN GTX328 (BACKPLATE)

AN509-8R8 / AN365-832A 2X

WH-RV12-TX-ANT

ES 5329517

FIGURE 1: INSTALLING THE MODE S TRANSPONDER

PAGE 42-08   RV-12   REVISION: 0   DATE: 12/21/09

Step 1: The WH-RV12-SL40 Com Wiring Harness is supplied already attached to the back of the AV GARMIN SL-40 Com Radio Backplate. Route the harness through a snap bushing in the F-1202K-L Inst Stack Support and through the cushioned clamp near the left ES CPU FAN. Connect the harness to the back of the AV CONTROL BOARD 12. See Figure 1. Connect the com radio backplate to its tray per the instructions provided with the radio (this may have already been completed).

Step 2: Install the WH-RV12-SL-ANT Com Antenna Cable to the back of the AV GARMIN SL40 Com Radio Tray as shown in Figure 1.

Step 3: Attach the AV GARMIN SL40 Com Radio Tray to the F-1202J-L & -R Inst Stack Angles and the F-1202K-L & -R Inst Stack Supports as shown in Figure 1.

Step 4: Install the AV GARMIN SL40 Com Radio into its tray installed in Step 2.
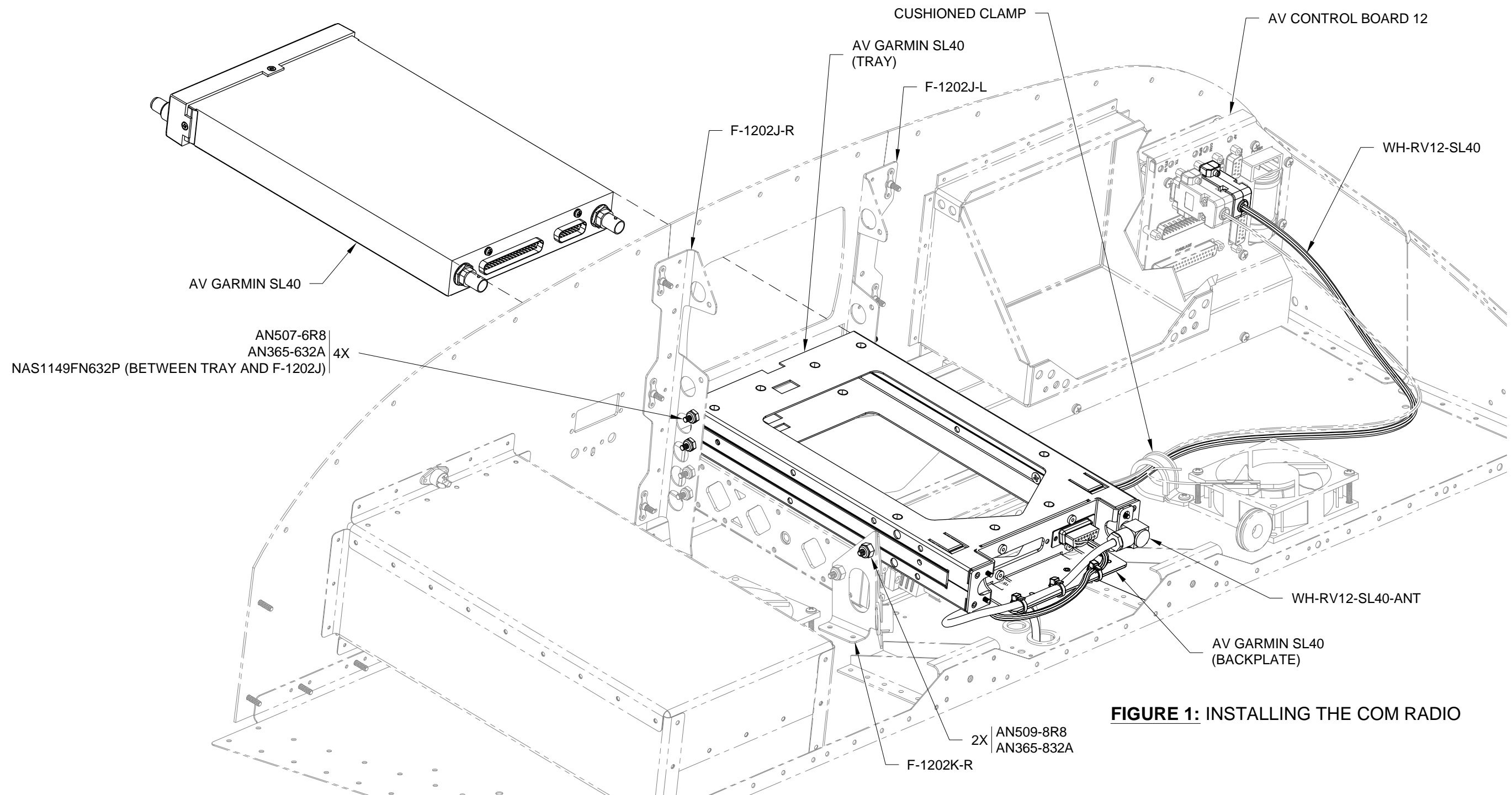
FIGURE 1: INSTALLING THE COM RADIO

Step 1: Attach the AV AV-17 Com Antenna to the F-1276 Bottom Skin using the hardware called out in Figure 1.

Step 2: Attach the WH-RV12-SL-ANT Com Antenna Cable to the AV AV-17 Com Antenna as shown in Figure 1.
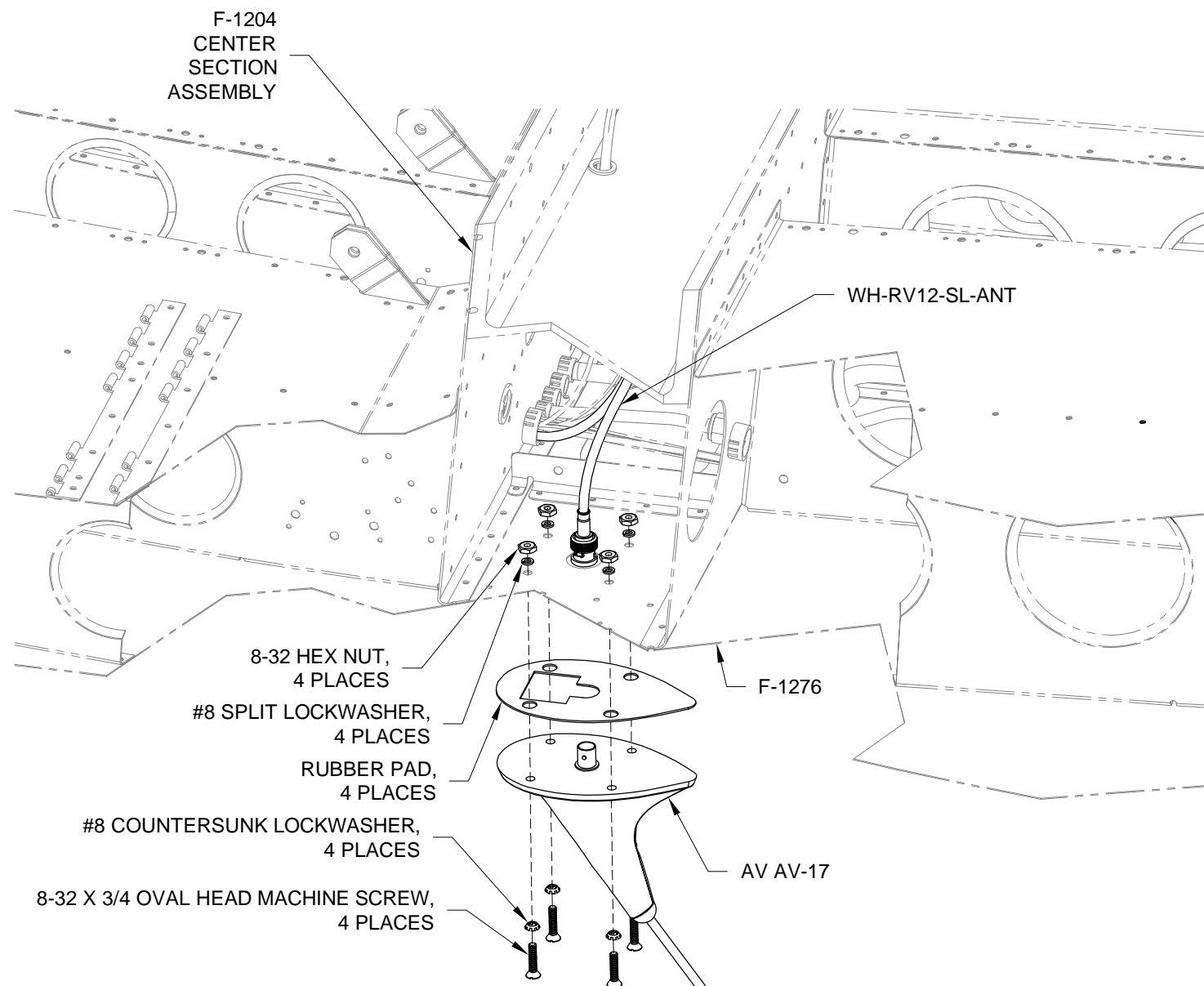
Step 3: Attach the AV AV-22 Transponder Antenna to the F-1272 Fwd Fuse Floor Skin using the hardware called out in Figure 2.

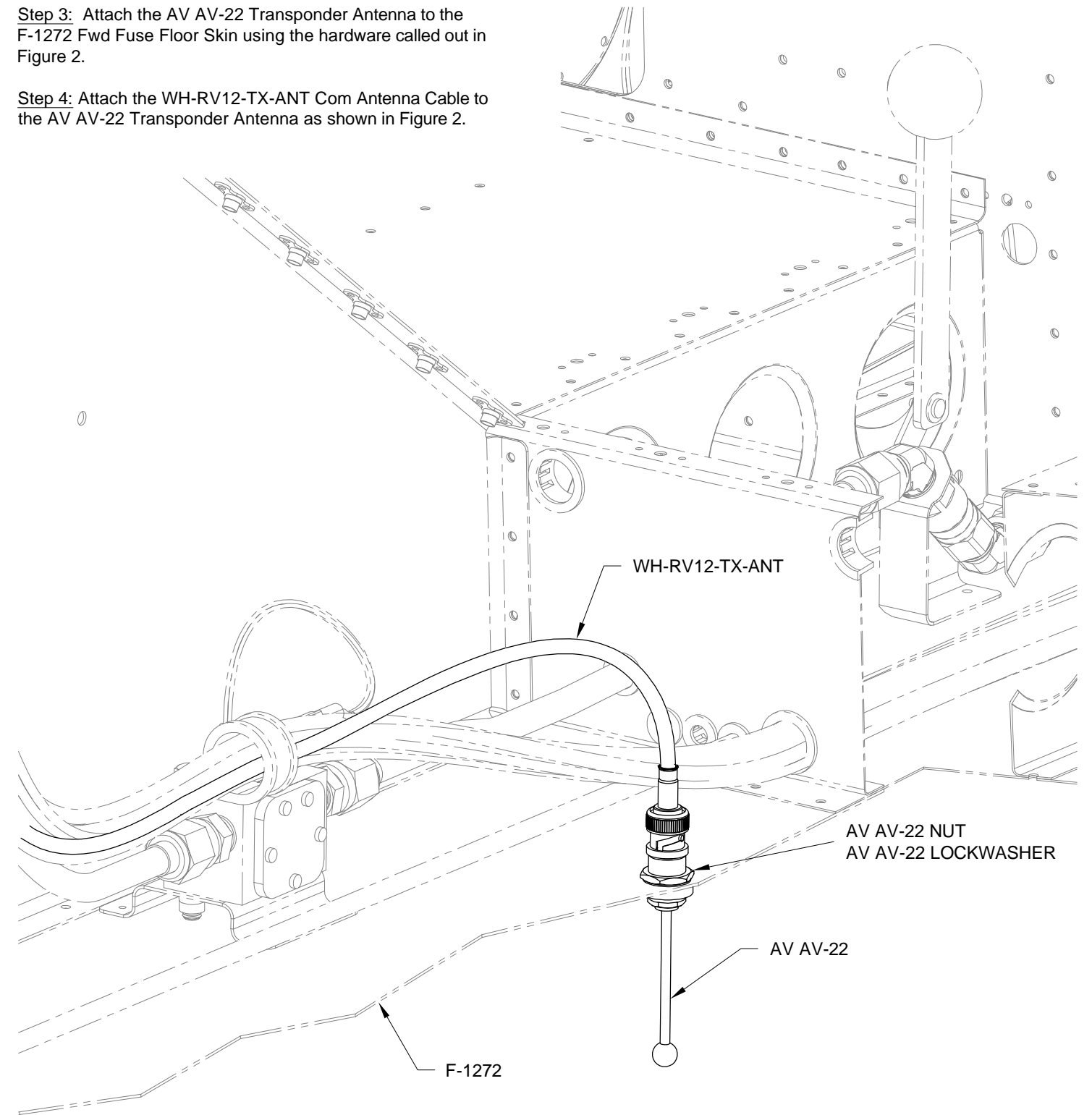Step 4: Attach the WH-RV12-TX-ANT Com Antenna Cable to the AV AV-22 Transponder Antenna as shown in Figure 2.
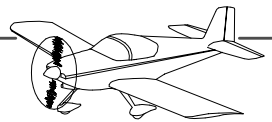
F-1204 CENTER SECTION ASSEMBLY

WH-RV12-SL-ANT

WH-RV12-TX-ANT

8-32 HEX NUT, 4 PLACES

#8 SPLIT LOCKWASHER, 4 PLACES

RUBBER PAD, 4 PLACES

#8 COUNTERSUNK LOCKWASHER, 4 PLACES

8-32 X 3/4 OVAL HEAD MACHINE SCREW, 4 PLACES

F-1276

AV AV-17

AV AV-22 NUT
AV AV-22 LOCKWASHER

AV AV-22

F-1272

FIGURE 2: INSTALLING THE TRANSPONDER ANTENNA

FIGURE 1: INSTALLING THE COM ANTENNA

Step 1: Machine Countersink the F-1201Z Retaining Plate for the head of the screws that will attach the GARMIN GXM 30A XM Antenna and the GARMIN GA 26C GPS Antenna.

Step 2: Install the GARMIN GXM 30A XM Antenna (if used) and the GARMIN GA 26C GPS Antenna onto the F-1201Z Retaining Plate using the hardware called out in Figure 1.
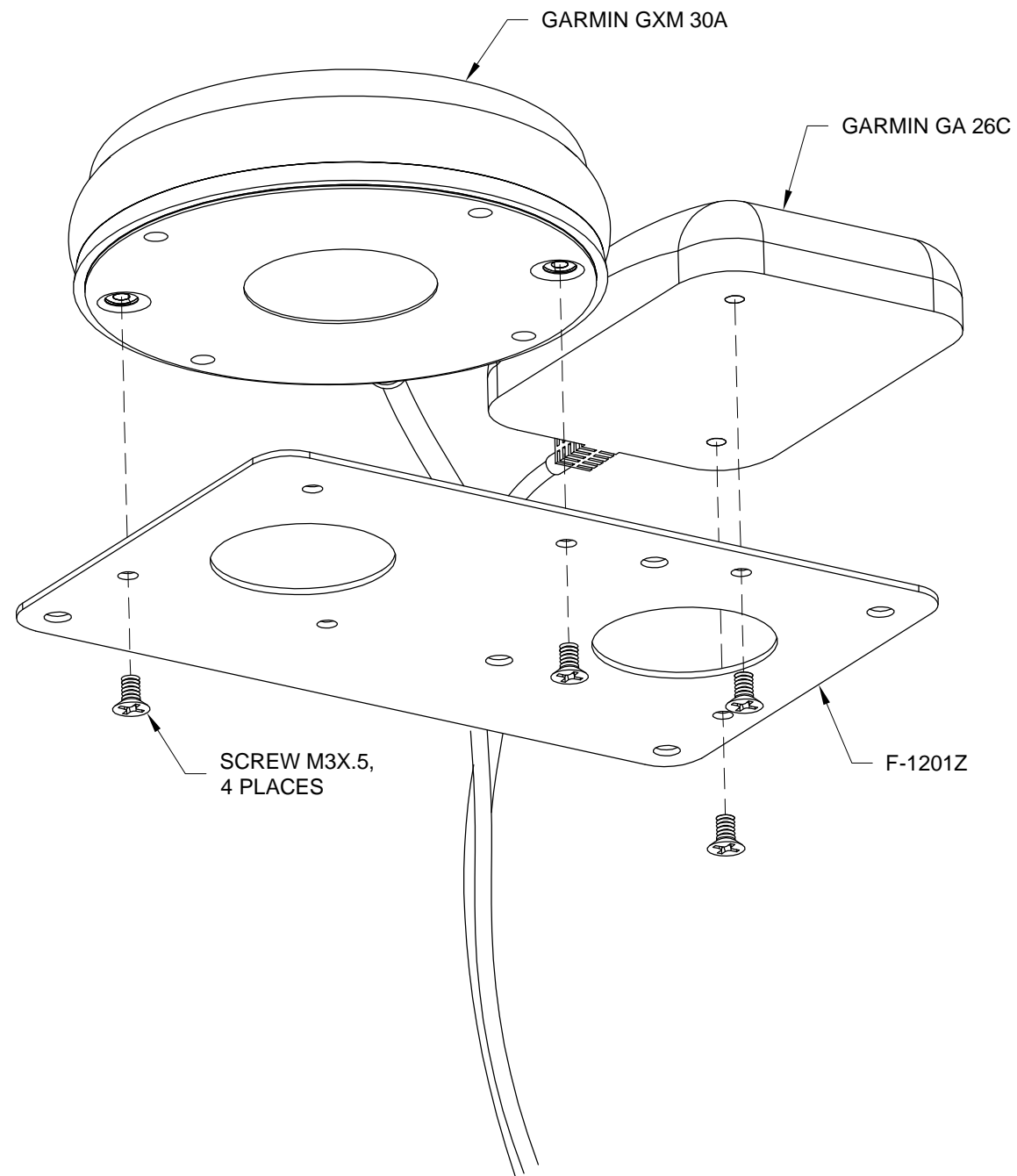
Step 3: Attach the F-1201Z Retaining Plate to the F-1201R Antenna Shelf using the hardware called out in Figure 2.

Step 4: Install two cushioned clamps together and around a tube of the WD-1221 Engine Mount Standoff as shown in Figure 2.

Step 5: Route the GARMIN GXM 30A XM Antenna and GARMIN GA 26C GPS Antenna cables down through the left lightening hole in the F-1201R Antenna Shelf, through the cushioned clamp installed in Step 4 and aft through the rubber grommet for wire penetrations in the F-1201A Firewall Upper.
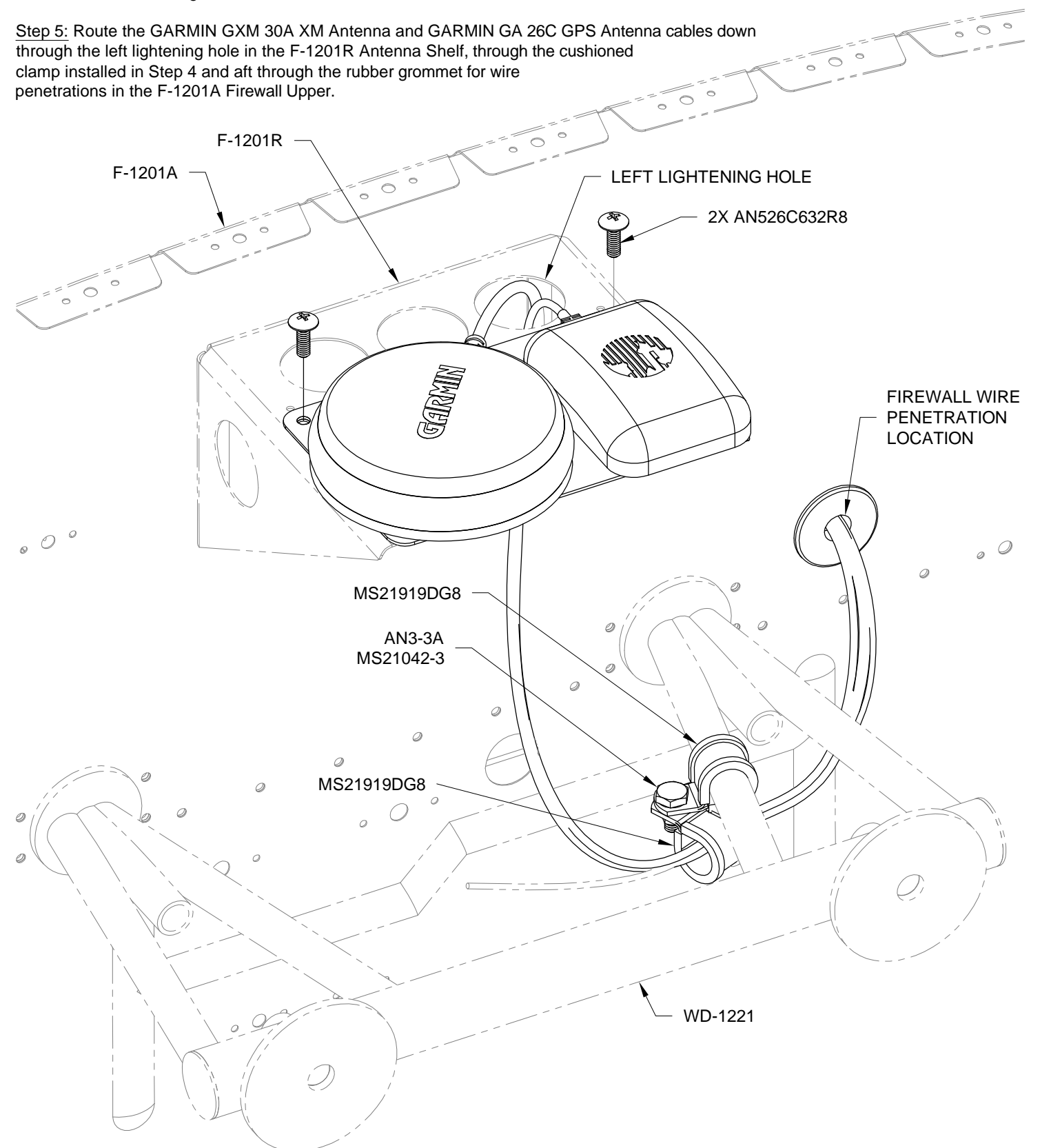
GARMIN GXM 30A

GARMIN GA 26C

SCREW M3X.5, 4 PLACES

F-1201Z

FIGURE 1: INSTALLING THE XM AND GPS ANTENNAS

F-1201R

F-1201A

LEFT LIGHTENING HOLE

2X AN526C632R8

FIREWALL WIRE PENETRATION LOCATION

MS21919DG8

AN3-3A
MS21042-3

MS21919DG8

WD-1221

FIGURE 2: ROUTING THE XM AND GPS ANTENNA CABLES

VAN'S AIRCRAFT, INC.

NOTE: AV GARMIN 296, 396 and 496 GPS's will be referred to as AV GARMIN X96.

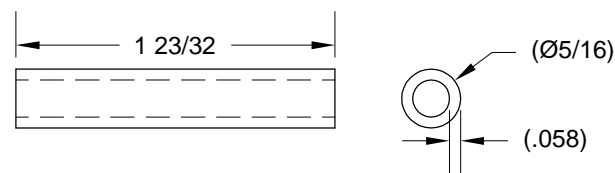Step 1: Make four F-12121 Standoffs from .058X5/16 6061-T6 TUBE per the dimensions in Figure 1.

1 23/32

(Ø5/16)

(.058)

FIGURE 1: MAKING THE STANDOFFS

Step 2: Install the 145-00452-00 Dock supplied with the AV GARMIN X96 GPS to the F-1202S GPS Mount Bracket as shown in Figure 2.
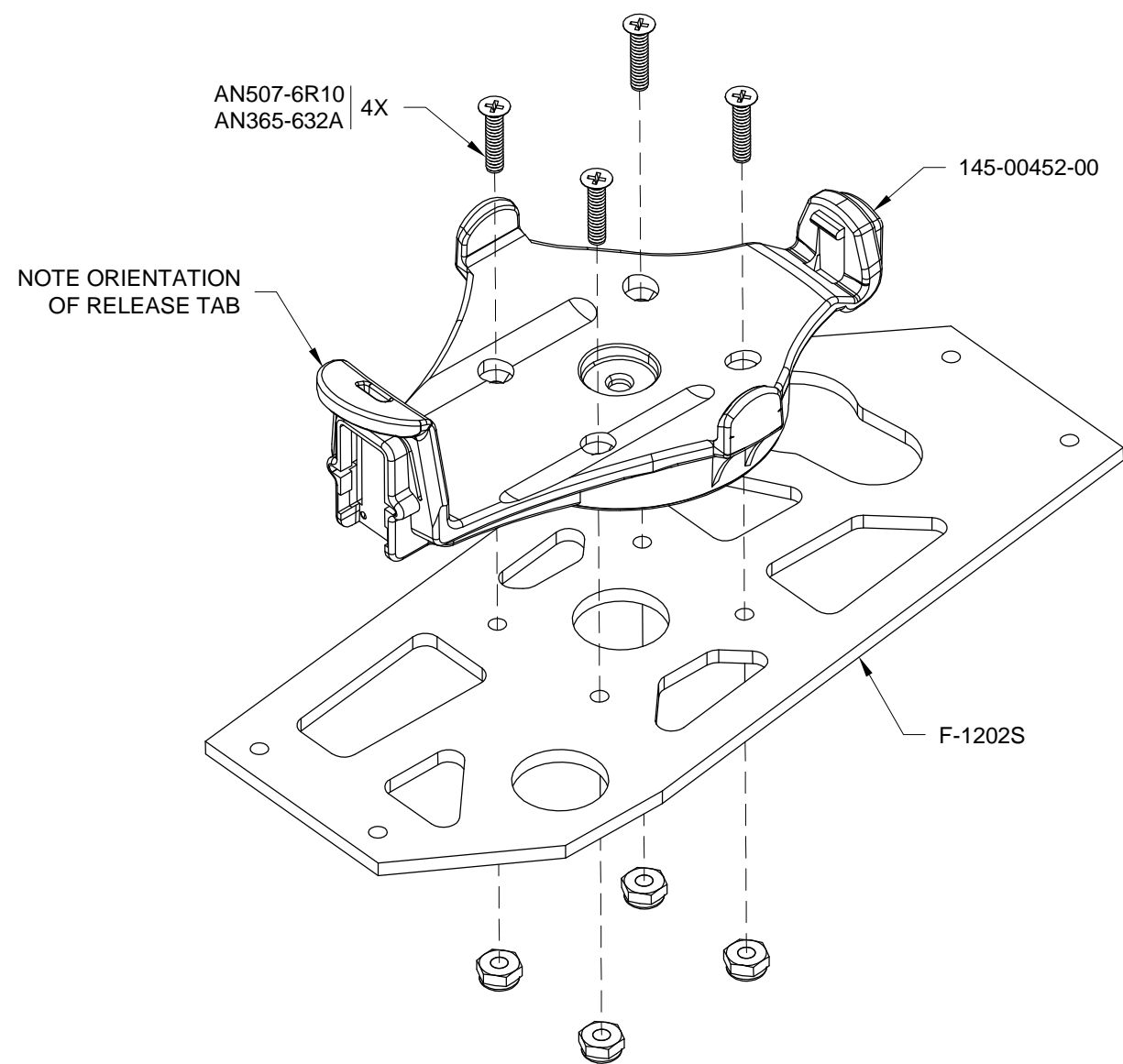
AN507-6R10
AN365-632A | 4X

145-00452-00

NOTE ORIENTATION
OF RELEASE TAB

F-1202S

FIGURE 2: INSTALLING THE DOCK

Step 3: Deburr the cutouts in the F-1202A Instrument Panel. If desired drill #30 for releasing the GPS from the front of the panel per the dimensions in Figure 3. It will also be nessesary to enlarge the hole the GPS fits into.
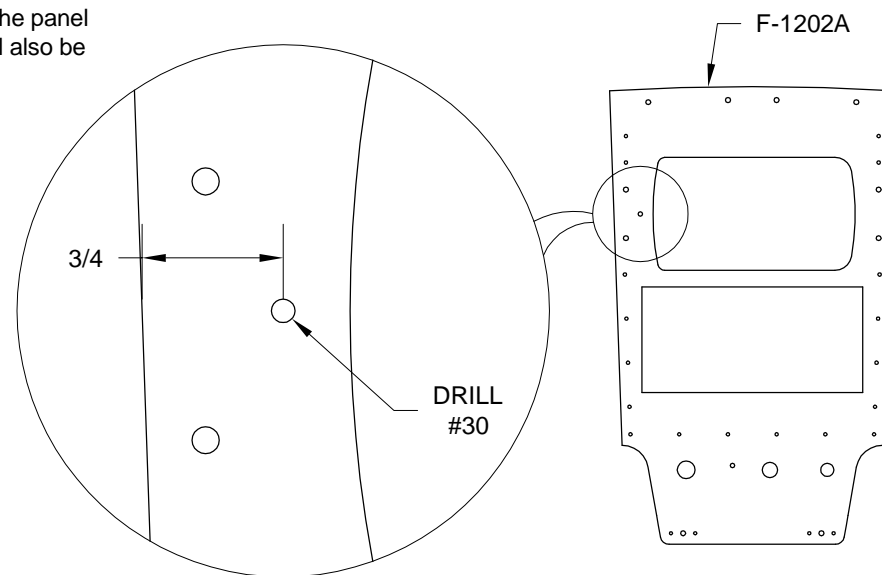
F-1202A

3/4

DRILL
#30

FIGURE 3: GPS RELEASE HOLE

Step 4: Install the F-1202S GPS Mount Bracket to the F-1202A-1 Instrument Panel and F-1202J-L & -R Inst Stack Angles as shown in Figure 4.
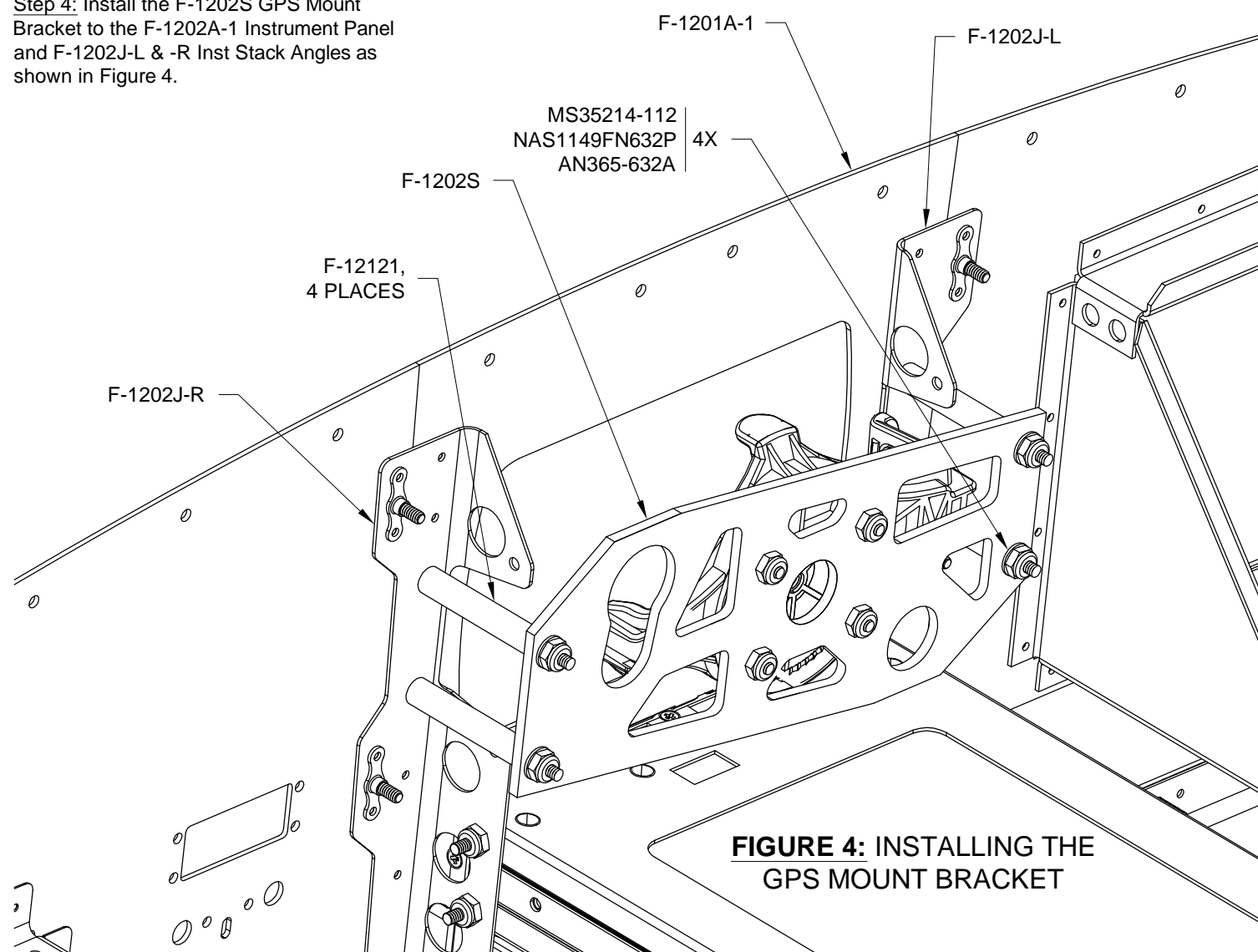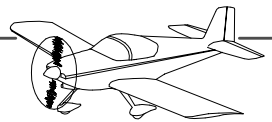
F-1201A-1

F-1202J-L

MS35214-112
NAS1149FN632P | 4X
AN365-632A

F-1202S

F-12121,
4 PLACES

F-1202J-R

FIGURE 4: INSTALLING THE
GPS MOUNT BRACKET

Step 1: Attach the WH-RV12-296-496 GPS Wiring Harness to the back of the AV CONTROL BOARD 12 then route the harness through the cushioned clamp near the left ES CPU FAN. Route the GPS Wiring Harness, GARMIN GXM 30A XM Antenna cable and the GARMIN GA 26C GPS Antenna cable through a snap bushing in both the F-1202K-L & -R Inst Stack Supports (the snap bushing will need to be removed and slit to accomplish this). See Figure 4.

Step 2 (296): Separate out the 1/8 audio plug from the WH-RV12-296-496 GPS Wiring Harness. Coil the 1/8 audio plug wire and tie-wrap it in a secure location.

Step 2 (396,496): Separate out the 1/8 audio plug from the WH-RV12-296-496 GPS Wiring Harness. Route the 1/8 audio plug through the hole in the lower left side of the F-1202S GPS Mount Bracket and plug it into the audio jack on the lower left corner of the AV GARMIN X96 GPS. See Figure 1. If installing the GARMIN GXM 30A XM Antenna install the AV GROUND LOOP in between the GPS wiring harness and the GPS.

Step 3: Route the 90 deg plug WH-RV12-296-496 GPS wiring harness in between the right two F-12121 Standoffs then connect the 90 deg plug to the AV GARMIN X96 GPS. See Figure 1.

Step 4: Route the GARMIN GXM 30A XM Antenna under the F-1202S GPS Mount Bracket and attach it to the AV GARMIN X96 GPS.

Step 5: Remove the bar like remote antenna from the back of the AV GARMIN X96 GPS. Route the GARMIN GA 26C GPS Antenna through the upper right key shaped hole in the F-1202S GPS Mount Bracket and attach it to the AV GARMIN X96 GPS. See Figure 1.

Step 6: Install the battery into the AV GARMIN X96 GPS, then snap the GPS into the 145-00452-00 Dock as shown in Figure 1.

AV CONTROL BOARD 12

CUSHIONED CLAMP

WH-RV12-296-496

F-1202S

145-00452-00

F-12121

AV GARMIN X96

GARMIN GA 26C

WH-RV12-296-496
(1/8 AUDIO PLUG)

WH-RV12-296-496
(90 DEG OR STRAIGHT PLUG)
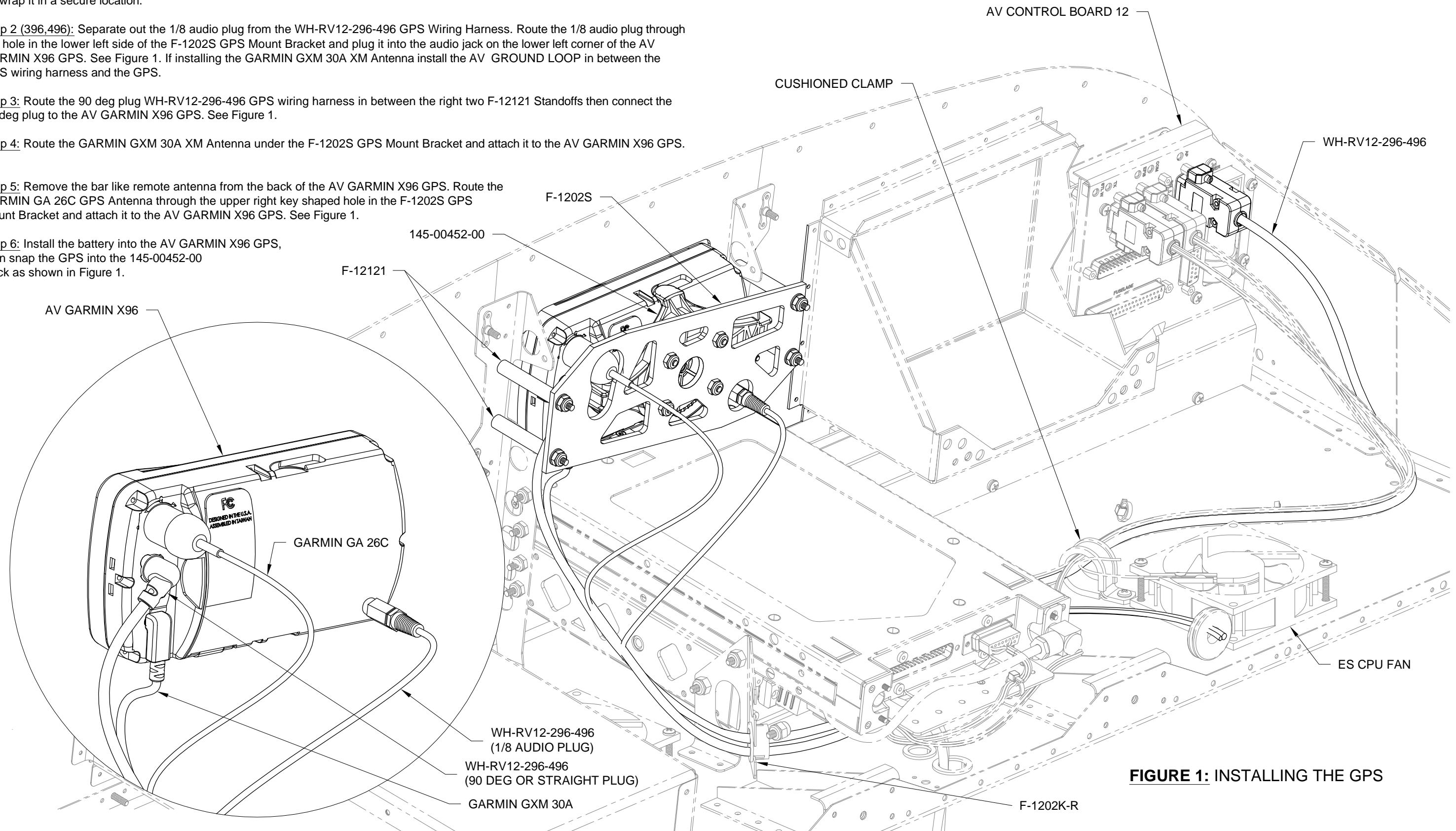
GARMIN GXM 30A

ES CPU FAN

F-1202K-R

FIGURE 1: INSTALLING THE GPS

NOTE: Before installing the AV FC-403-12 Panel Mount Stereo Intercom consult the installation manual supplied with the intercom for setting the mute options to your personal preference.

Step 1: Place the WH-RV12-FLTCOM403 Intercom Wiring Harness near the right ES CPU FAN and route the WH-RV12-HEADSET wiring harness (routed in the Finish Kit) through the heat shrink supplied with the intercom wiring harness.

Step 2: There is a WHT/GRN wire and WHT/BLK wire coming from the WH-RV12-HEADSET pilot harness and co-pilot harness. The WHT/BLK is a 22 gauge wire approximately three inches long attached to the wire shield and the WHT/GRN is a smaller diameter 24 gauge wire coming from inside the harness cable.

A butt splice is attached to pin 1 on the WH-RV12-FLTCOM403 Intercom Wiring Harness (see Figure 1). Crimp **together** in the open end of this butt splice the WHT/BLK wires coming from the pilot and co-pilot harness shields.

In the open end of the remaining butt splice attached to pin 13 on the intercom wiring harness, crimp **together** the two WHT/GRN wires coming from the pilot and co-pilot harnesses.
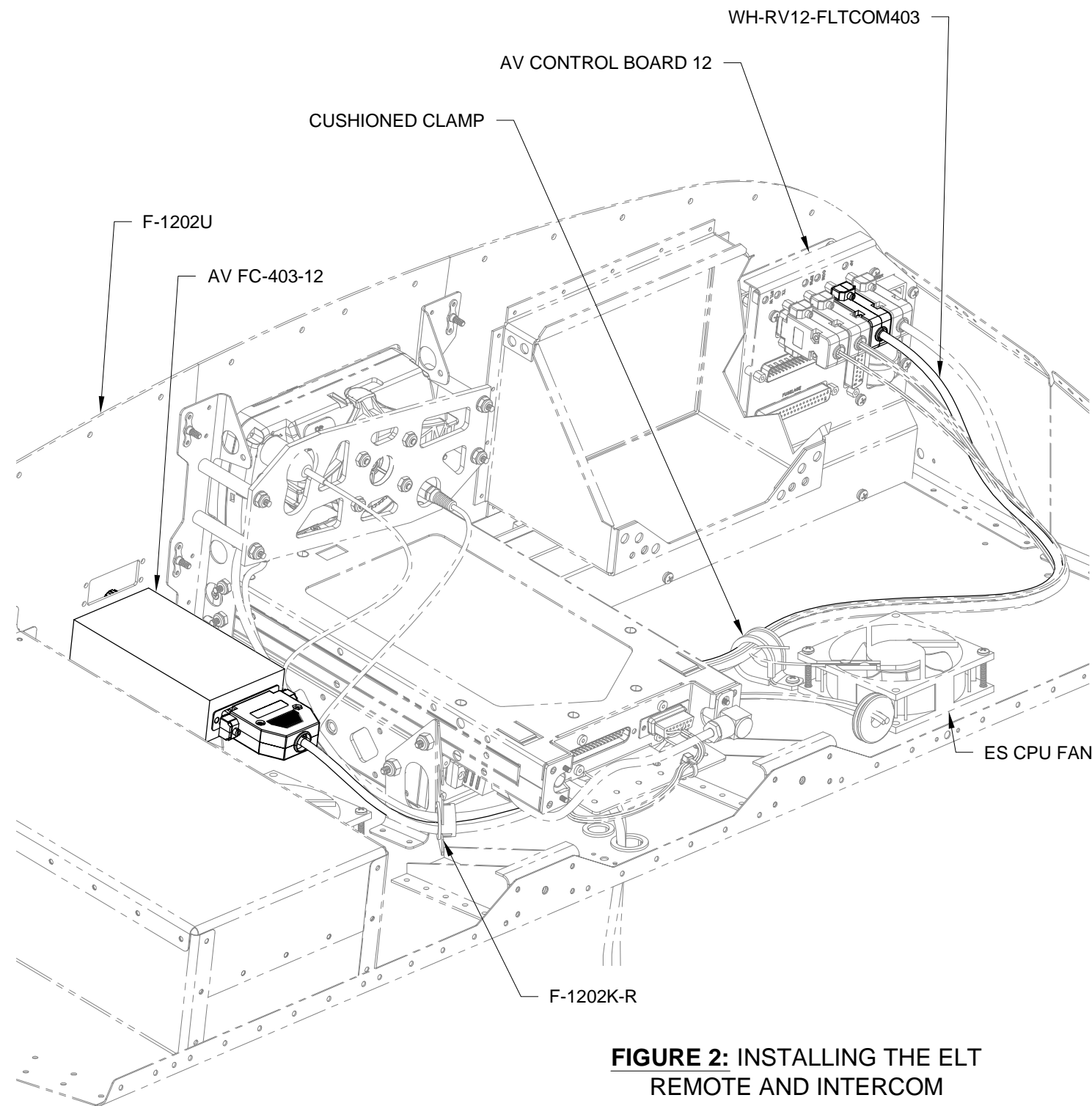
Step 3: There are three remaining 24 gauge wires coming from the end of the WH-RV12-HEADSET pilot and co-pilot harnesses. Insert the pins on the ends of these wires into the correct pin locations on the WH-RV12-FLTCOM403 Intercom Wiring Harness 25-pin d-sub connector as shown in Figure 1. Slide the heat shrink supplied with the intercom wiring harness up the wires until its length is centered about the exit of the backshell, then activate the heat shrink.
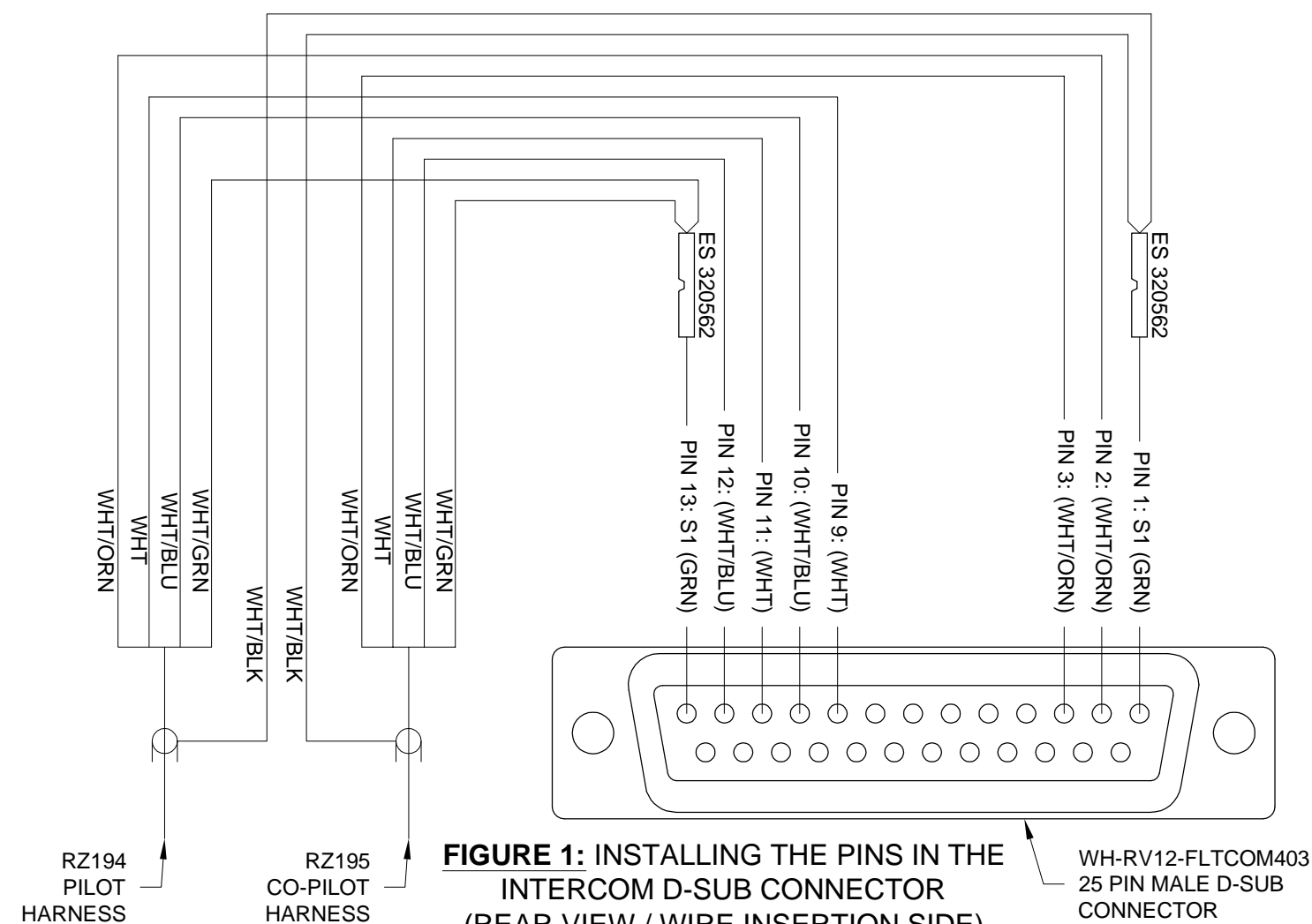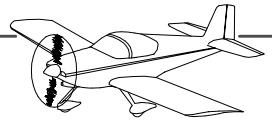
NOTE: If installing the Dual Display Optional Kit omit Step 4 and Step 5.

Step 4: Attach the AV FC-403-12 Panel Mount Stereo Intercom (use the "Small Intercom Faceplate Installation" instructions supplied with the intercom, **do not** enlarge the holes in the panel) to the F-1202U Inst Panel Right Mapbox. See Figure 2.

Step 5: Attach the WH-RV12-FLTCOM403 Intercom Wiring Harness to the back of the AV FC-403-12 Panel Mount Stereo Intercom. Route the harness through a snap bushing in the F-1202K-L & R Inst Stack Supports and through the cushioned clamp near the left ES CPU FAN. Attach the harness to the back of the AV CONTROL BOARD 12. See Figure 2.

FIGURE 1: INSTALLING THE PINS IN THE INTERCOM D-SUB CONNECTOR (REAR VIEW / WIRE INSERTION SIDE)

FIGURE 2: INSTALLING THE ELT REMOTE AND INTERCOM

Step 1: Final-Drill #19 the three rivet holes shown in the detail view in Figure 1. Use a nutplate (centered with a screw run into the nutplate backwards) in each #19 hole to match-drill #40 the nutplate attach pattern into the F-1205A Mid Fuse Brace and F-1205C Mid Fuse Brace Closeout. Deburr all the holes created in this step as well as possible.

Step 2: Rivet nutplates to the F-1205A Mid Fuse Brace and F-1205C Mid Fuse Brace Closeout as called out in the detail view in Figure 1.

Step 3: Attach the 110-773 Antenna to the hole in the F-1205G Elt Bracket as shown in Figure 1.

Step 4: Use screws called out in Figure 1 to attach the F-1205G Elt Bracket to the nutplates attaches in Step 2.

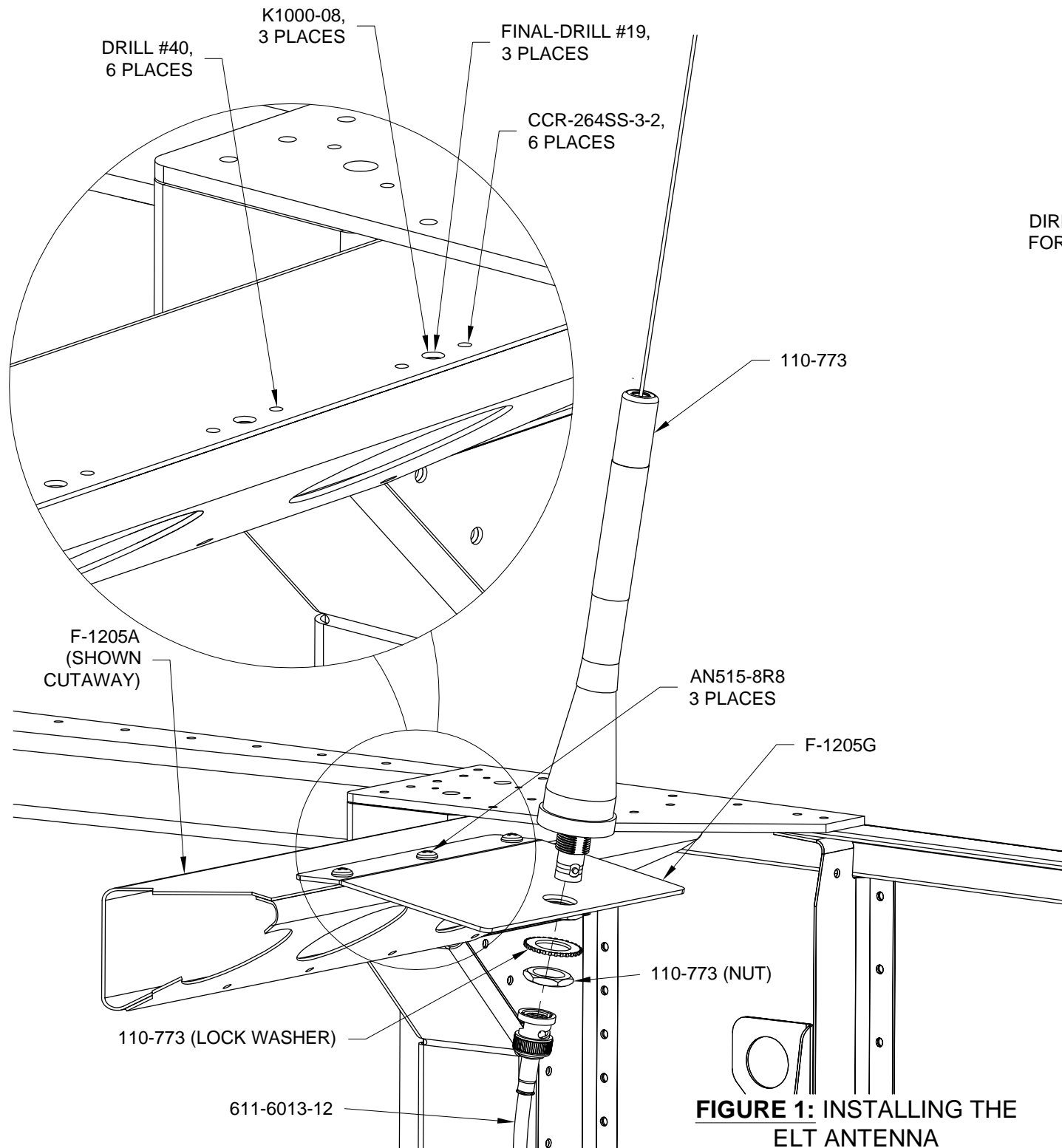Step 5: Attach the 611-6013-12 Coax Antenna Cable to the bottom of the 110-773 Antenna.

Step 4: Cleco the 452-3042 Mount Tray to the F-12122 ELT Bracket in Figure 2. Match-Drill #30 the holes shown filled with rivets in Figure 2 into the F-1204H Bulkhead Cap using the mount tray as a drill guide. Remove the mount tray and drill chips, then deburr the hole from below.

Step 5: Rivet the 452-3042 Mount Tray to the F-12122 ELT Bracket and F-1204H Bulkhead Cap using the hardware called out in Figure 2.

Step 6: Strip the ends of the wires coming from the 452-6505 Buzzer. Crimp a butt splice on to the red wire. Attach the buzzer to the F-12122 ELT Bracket, as shown in Figure 2, with the wires directed forward.

Step 7: Make the WH-B220 ELT Ground Wire by cutting a length of 22 gauge wire 7 inches long. Strip both ends. Crimp a ring terminal on one end. Crimp the other end of the ELT ground wire and the black wire coming from the 452-6505 Buzzer together into one end of a butt splice. See Figure 2.

Step 8: Final-Drill #19 the lower aft 452-3042 Mount Tray attach point. Deburr this hole. Route the WH-B220 ELT Ground Wire behind the 452-3042 Mount Tray then fasten the ring terminal to the hole using the hardware called out in Figure 2.
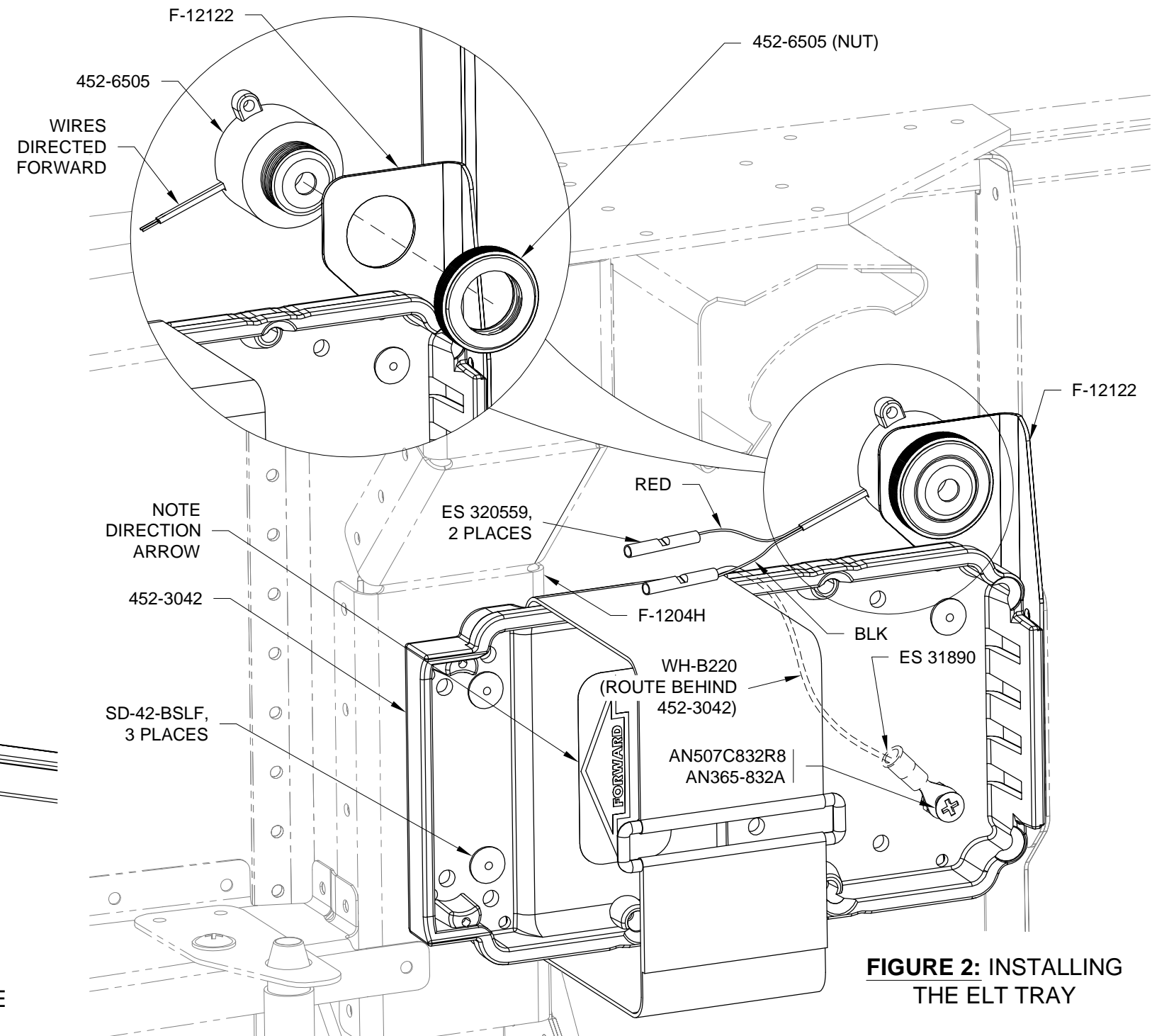

FIGURE 1: INSTALLING THE ELT ANTENNA

FIGURE 2: INSTALLING THE ELT TRAY

Step 1: Strip the ends of the red and black wires coming from the 453-1101 ELT Connector Adapter, the Buzzer Power Wire (RED) and Buzzer Ground Wire (BLK) coming from the 452-6505 Buzzer.

Connect the red and black wires by crimping on butt splices as shown in Figure 1. See Section 5W for more information on wire stripping and crimping.

Step 2 (No GPS Optional Module): Strip the end of the WH-F55 (WHT) GPS Data Out Wire and crimp on a butt splice as shown in Figure 1. Coil and secure the wire to the wiring harness using a tie-wrap. See Section 5W for more information on shielded wires.

NOTE: Purchase and install the optional ME-183 Nav Interface to add GPS position information to the 453-6603 ELT. See the ME-183 Installation Manual for more information.

Step 2 (Optional GPS Module): Strip the end of the WH-F55 (WHT) GPS Data Out wire and crimp on a butt splice as shown in Figure 1. See Section 5W for more information on shielded wires.

Strip the end of the blue wire coming from the 453-1101 Connector Adapter and connect it to the WH-F55 (WHT) wire with a butt splice as shown in Figure 1.
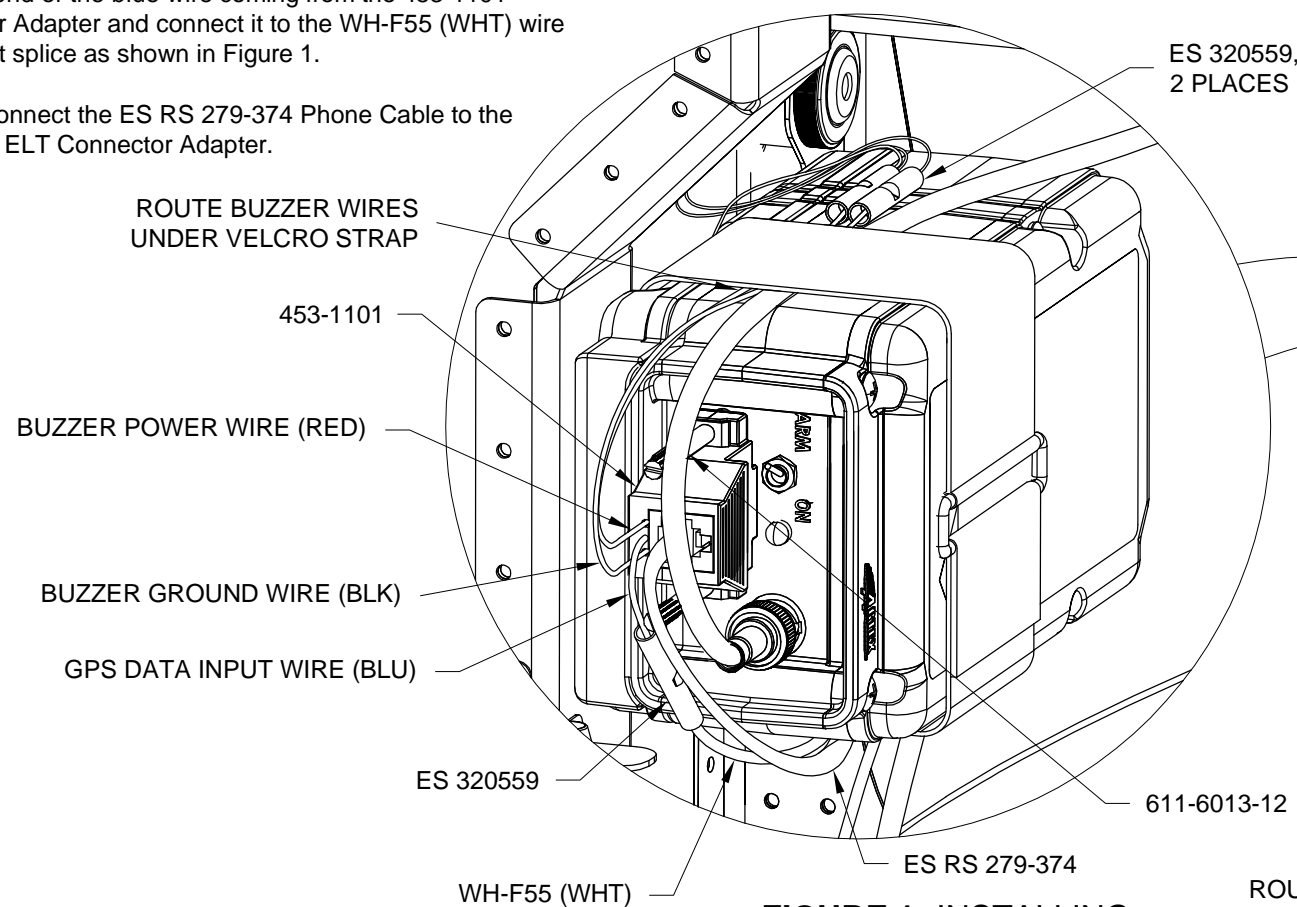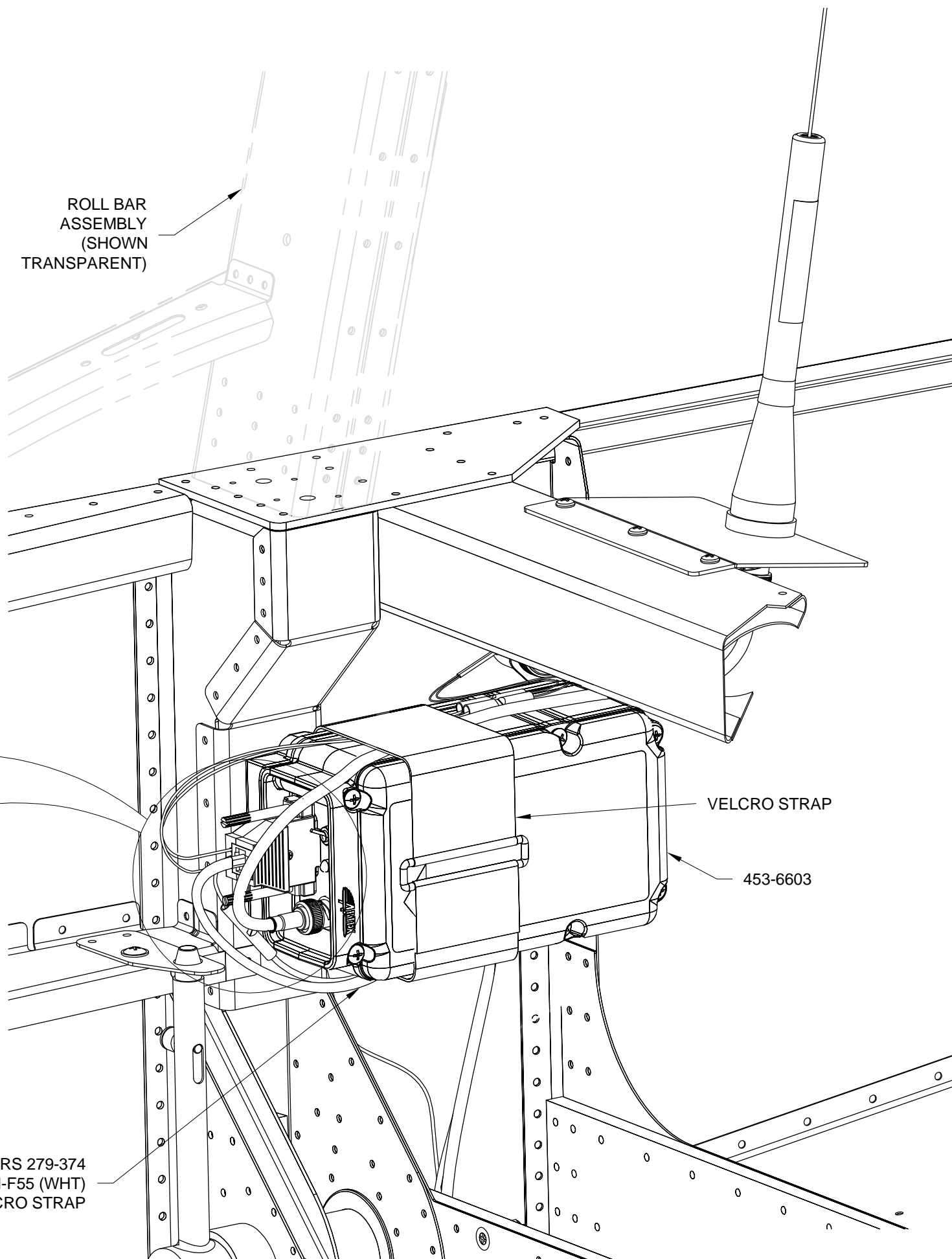
Step 3: Connect the ES RS 279-374 Phone Cable to the 453-1101 ELT Connector Adapter.

Step 4: Insert the 453-6603 ELT into the 452-3042 Mounting Tray (see instructions provided with the AV ME 406) with the 452-6505 Buzzer power and ground wires, WH-F55 (WHT) GPS Data Out wire and ES RS 279-374 Phone Cable routed underneath the velcro strap as shown in Figure 1.

Step 5: Place the two rectangular blue gel sealant strips provided with the 453-6603 ELT on top of the male pins on the 453-1101 Connector Adapter. Connect the 453-1101 Connector Adapter to the 453-6603 ELT.

Step 6: Route the cable 611-6013-12 Coax Antenna Cable underneath the velcro strap on the 452-3042 Mounting Tray as shown in Figure 1. Attach the coax antenna cable to the 453-6603 ELT.
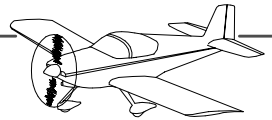
Step 7: Connect the ES RS 279-374 Phone Cable to the 453-1101 ELT Connector Adapter. See Figure 1.

ROLL BAR ASSEMBLY (SHOWN TRANSPARENT)

ES 320559, 2 PLACES

ROUTE BUZZER WIRES UNDER VELCRO STRAP

453-1101

BUZZER POWER WIRE (RED)

BUZZER GROUND WIRE (BLK)

GPS DATA INPUT WIRE (BLU)

ES 320559

WH-F55 (WHT)

611-6013-12

ES RS 279-374

VELCRO STRAP

453-6603

ROUTE ES RS 279-374 AND WH-F55 (WHT) UNDER VELCRO STRAP

FIGURE 1: INSTALLING THE ELT

NOTE: If installing the Dual Display Optional Kit omit this page.

Step 1: Strip the end of the 453-0023 Ground Wire (BLK).

Step 2: Crimp a ring terminal called out in Figure 1 on one end of the 453-0023 Ground Wire (BLK).

Step 3: Refer to the instructions supplied with the ELT for the installation of a battery in the 453-0023 Self Powered Cockpit Remote Switch. Continue to the next step upon completion.

Step 4: Attach the 453-0023 Self Powered Cockpit Remote Switch to the F-1202U Inst Panel Right Mapbox. See Figure 1, using the instructions supplied with the ELT.

Step 5: Attach the ES RS 279-374 Phone Cable to the back of the 453-0023 Self Powered Cockpit Remote Switch as shown in Figure 1.

Step 6: Remove the aft right screw holding the right ES CPU FAN to the F-1202B Panel Base. Place the ring terminal on the end of the 453-0023 Ground Wire (BLK) and the ground ring terminal for the fan over the shank of the screw, then replace the screw.

Step 7: Tie-wrap the 453-0023 Ground Wire (BLK) to the ES RS 279-374 Phone Cable in two places for strain relief as shown in Figure 1.
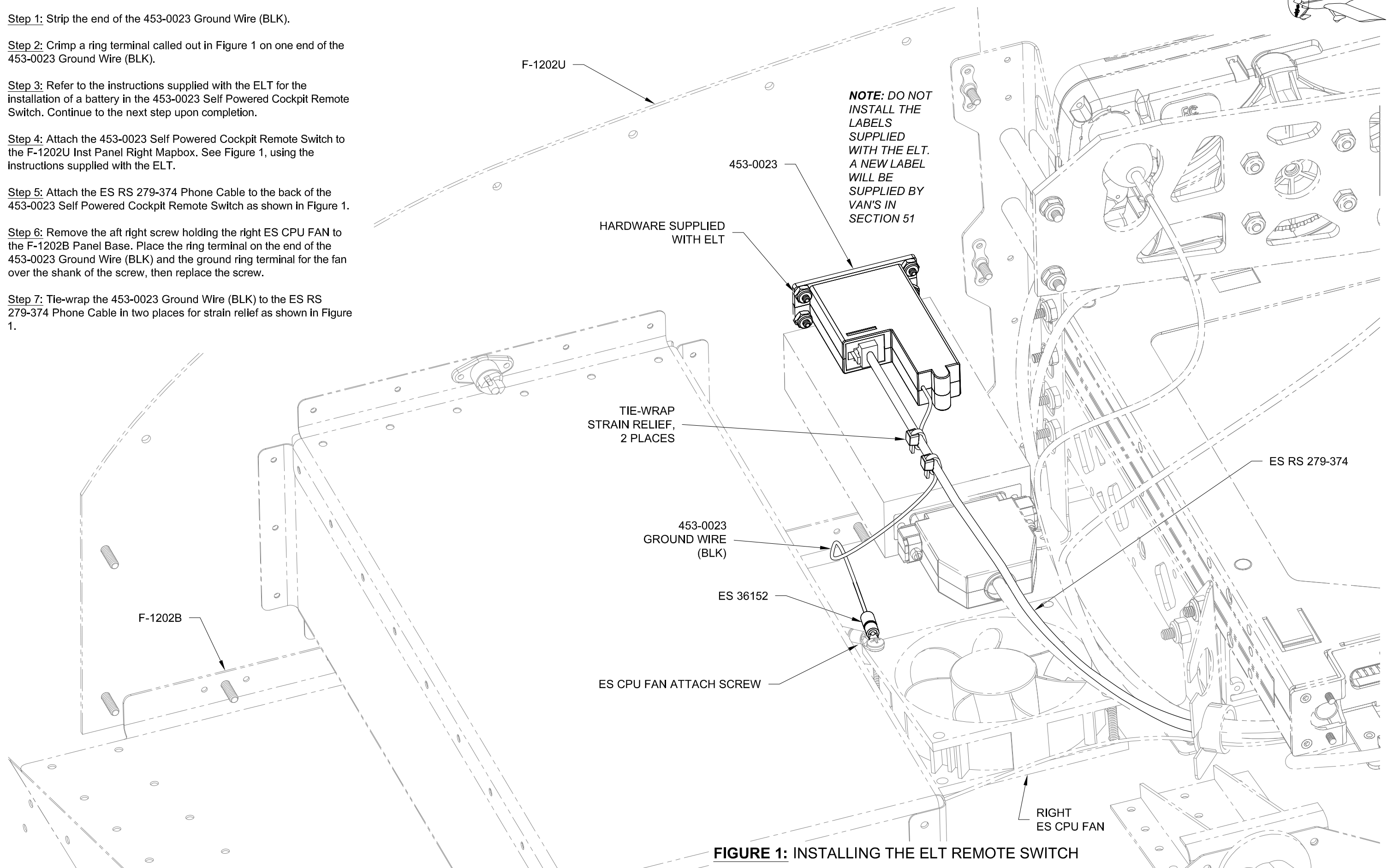
F-1202U

NOTE: *DO NOT INSTALL THE LABELS SUPPLIED WITH THE ELT. A NEW LABEL WILL BE SUPPLIED BY VAN'S IN SECTION 51*

453-0023

HARDWARE SUPPLIED WITH ELT

ES RS 279-374

TIE-WRAP STRAIN RELIEF, 2 PLACES

453-0023 GROUND WIRE (BLK)

ES 36152

F-1202B

ES CPU FAN ATTACH SCREW

RIGHT ES CPU FAN

FIGURE 1: INSTALLING THE ELT REMOTE SWITCH
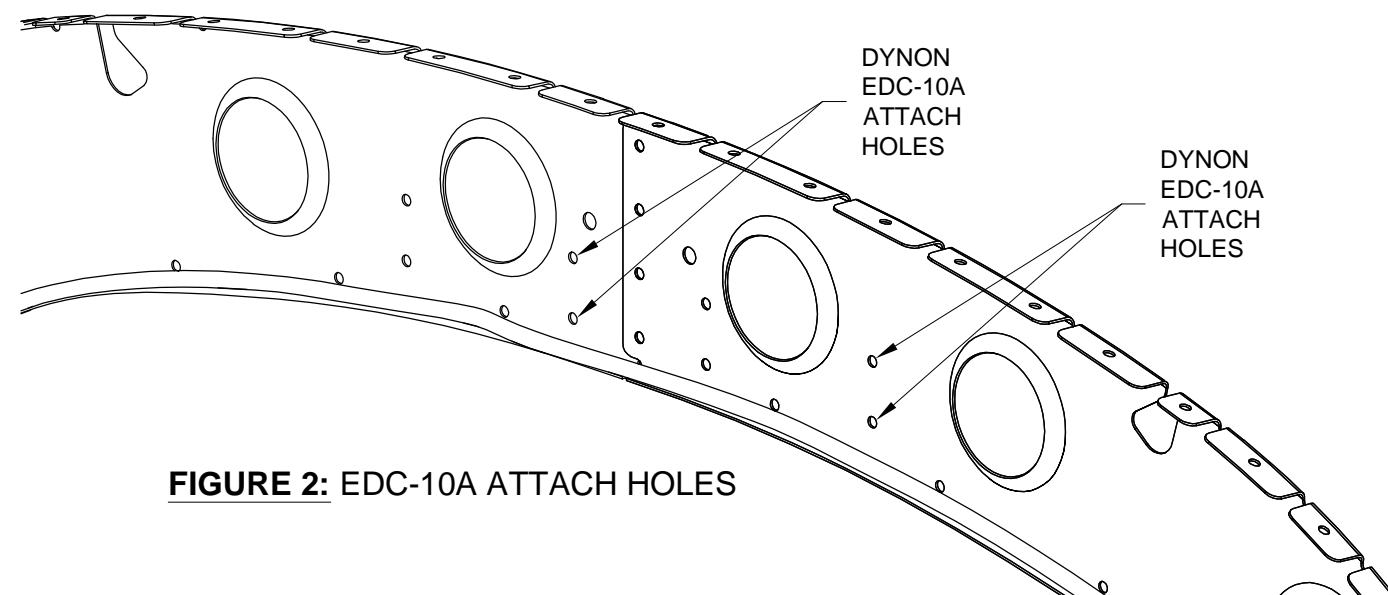
Step 3: Rivet the DYNON 100323-000 EDC-10A Magnetometer and F-1208B-L & -R Mag Bracket Assembly to the F-1208 Fuselage Frame using the hardware called out in Figure 3. See also Figure 2 for the correct attach location.

Step 4: Attach a ES 9 PIN BACKSHELL 2 to the 9-Pin EDC-10A D-Sub Connector. This type of backshell is required. Other backshells with long thumb screws will cause interference with the DYNON 100323-000 EDC-10A Magnetometer.

Step 2: Attach the F-1208B-L & -R Mag Brackets to the DYNON 100323-000 EDC-10A Magnetometer using the hardware called out in Figure 1.

Step 5: Connect the 9-Pin EDC-10A D-Sub Connector to the DYNON 100323-000 EDC-10A Magnetometer as shown in Figure 3.

DYNON 100323-000

4X | MS35214-27
MS21044C06
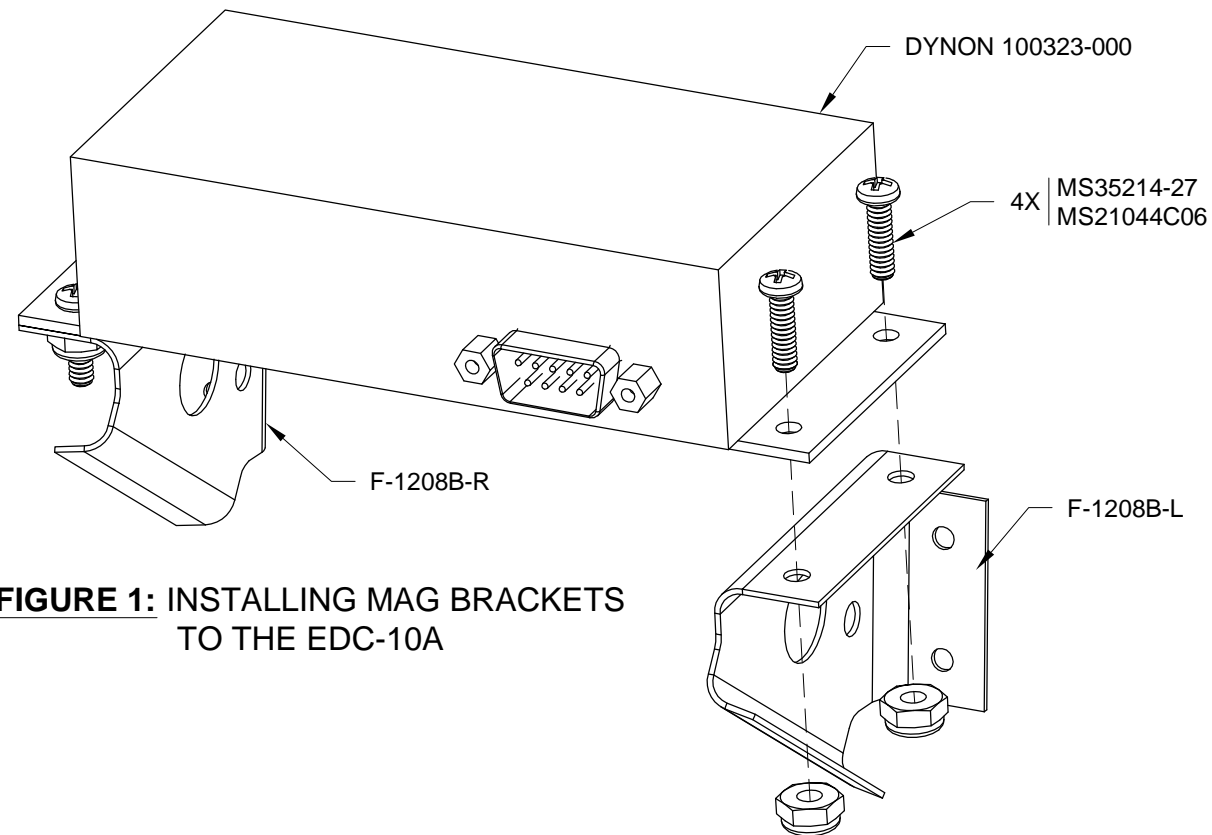
F-1208B-R

F-1208B-L

FIGURE 1: INSTALLING MAG BRACKETS TO THE EDC-10A

DYNON 100323-000

ES 9 PIN BACKSHELL 2

LP4-3, 4 PLACES

F-1208B-L

9-PIN EDC-10A D-SUB CONNECTOR

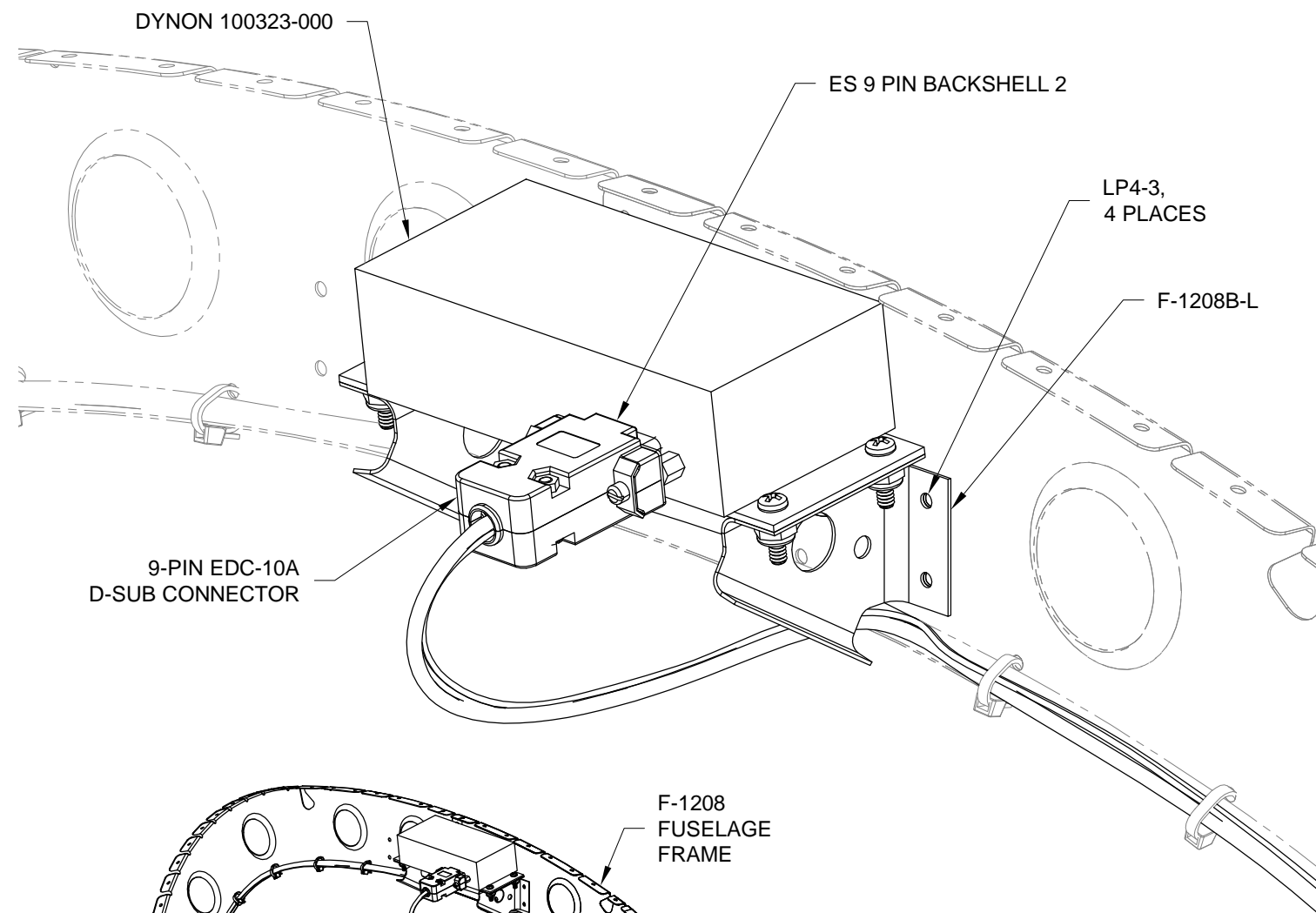F-1208 FUSELAGE FRAME

DYNON EDC-10A ATTACH HOLES

DYNON EDC-10A ATTACH HOLES

FIGURE 3: INSTALLING THE DYNON 100323-000

FIGURE 2: EDC-10A ATTACH HOLES