

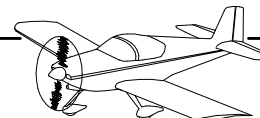
12NPR 04-03-14-1 Reason For Revision

- 1) RV-12 SkyView Touch Avionics Kit
- 2) RV-12 SkyView AP-Knob Panels Kit (58)
- 3) Add instructions for installation of F-00062.
- 4) Allow use of lighter springs on RV-12 throttle
- 5) Improve functionality of canopy latch. Add switch to detect open canopy before takeoff. Re-Write ditching instructions in POH.
- 6) Placarding changes to match KAI and POH to the actual placarding on the aircraft.
- 7) Make a new optional section for installation of a rudder trim tab.

KAI Page 31B-11 REV 2: In Step 3 and Figure 1, added WH-W1114 Canopy Latch Switch Terminal Wire to the wires being separated from WH-00046 Wire Harness and routed up through F-1204 Center Section Assembly to near ELT.

KAI Page 31B-15 REV 3: In Note before Step 3, "jams" was "jambs". In Step 8, regarding the WH-L435 (YEL/PRP) Cockpit Light Power Wire and the WH-L436 (YEL/GRN) Cockpit Ground Wire, deleted "Cover the ends of both wires in heat shrink."

KAI Page 31B-26 REV 1: Replaced blank page with new page: new Steps 1 through 10 and new Figure 1. Added routing of the WH-W1114 Canopy Latch Switch Terminal Wire, WH-L435 (YEL/PRP) Cockpit Light Power Wire, and WH-L436 (YEL/GRN) Cockpit Ground Wire up through roll bar assembly.



Step 1: Lay the remaining WH-00046 Fuselage Wiring Harness wires through the wire notches in all three F-1276C System Blocks then route through the forward snap bushing in the F-1204 Center Section Assembly as shown in Figure 1.

Step 2: Double check that the narrow band of red heat shrink band on the WH-00046 Fuselage Wiring Harness is still even with the F-1202F Bulkhead.

Dress out all of the wiring and add tie-wraps as needed to keep the harness neatly bundled.

Step 3: Find the WH-Q428 (ORN/BRN) Fuel Level Wire, WH-F395 (GRY/PRP) GPS Data Out Wire, WH-P325 (WHT/RED) ELT Power Wire, and the WH-W1114 (WHT) Canopy Latch Switch Terminal Wire.

Route these wires up through the top snap bushing in the F-1204 Center Section Assembly, then into the F-1204Y Wire Run Conduit and out the right end (use the string installed previously, remember to add a new string as you pull the wires through).

Strip the end of the fuel level wire and crimp on a ring terminal per the call-out in Figure 1.

Step 4: Cut two short lengths of heat shrink from the ES HST 3/16X1' Heat Shrink.

Cover the ends of the WH-F395 (GRY/PRP) GPS Data Out Wire, WH-P325 (WHT/RED) ELT Power Wire..

Tie-wrap both wires to the ES RS 279-374 Phone Cable (not shown in Figure 1, see Page 31B-03) and coil for future use.

Step 5: Route the WH-00095 ADS-B Antenna Cable aft through the snap bushings in the F-1206A and F-1207B Bulkheads.

Step 6: Route the remaining wires of the WH-00046 Fuselage Wiring Harness through the aft snap bushing in the back of the F-1204 Center Section Assembly and then aft through the F-1206A and F-1207B Bulkheads. Leave them laying loose in the tailcone area.

Step 7: Remove the left bolt holding down the fuel pump. Final-drill 1/4 the cushioned clamp called out in Figure 1. Slip the clamp around the wires and onto the bolt, slip the ring terminal from the black ground wire coming from the fuel pump over the bolt, then reinsert the bolt.

Step 8: Route the WH-P390 (RED) Fuel Pump Wire through the cushioned clamp.

Strip the end of the wire then crimp on a spade connector as shown in Figure 1.

WH-F395
(GRY/PRP)
WH-P325
(WHT/RED)
(COVER ENDS
IN HEAT SHRINK)

WH-W1114
(WHT)
(LEAVE
UNCOVERED)

ES 421-0107

WH-P390
(RED)

FUEL PUMP BOLT

FUEL PUMP
GROUND RING
TERMINAL

WH-Q428
(ORN/BRN)

F-1207B

WH-00095

F-1206A

MS21919DG10

ES 36154

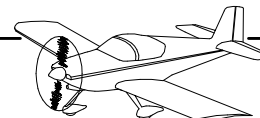
F-1204 CENTER
SECTION ASSEMBLY
UPPER SNAP BUSHING

F-1276C

F-1204Y

WH-00046

**FIGURE 1: FUEL PUMP, FUEL
LEVEL AND ELT WIRES**



Step 1: Route the WH-00045 Options Wiring Harness down through the aft snap bushing in the F-1202B Panel Base. Align the narrow band of red heatshrink with the panel base. See Figure 1.

Route the harness through the cushioned clamp near the left ES CPU FAN then tape the harness in place.

NOTE: Route each wire individually within a harness all the way through the described path. This will help prevent a knotted mess that will cause jams at the snap bushings.

Step 2: Route the WH-00045 Options Wiring Harness over the rudder pedals and through the fuel flow cushioned clamp and through the upper snap bushings in the F-1202F Bulkhead. Center the band of red heat shrink on the F-1202F Bulkhead. See Figure 1.

Step 3: Separate out the twisted wires WH-F429 (GRN) and F430 (BLU), the twisted wires WH-431 (WHT/BLU) and WH-432 (WHT/GRN) and the WH-F696 (WHT/BLK), WH-L435 (YEL/PRP) and WH-L436 (YEL/GRN) wires.

Separate out the longer WH-F454 (ORN/YEL) wire from the shorter WH-F483 (ORN/YEL) wire.

Separate out the longer WH-P455 (RED) wire from the shorter WH-P485 (RED) wire.

Route these wires through the lower snap bushing in the F-1203A Bulkhead. Lay the wires in the wire notches in all three F-1276C System Blocks then route through the snap bushings in the F-1204 Center Section Assembly.

Route the remaining wires from the WH-00045 Options Wiring Harness through the upper snap bushing in the F-1203A Bulkhead.

Step 4: Separate out the WH-L456 (YEL/RED) and WH-L458 (YEL/RED) Nav Power Wires, WH-L457 (WHT/YEL) and WH-459 (WHT/YEL) Strobe Power Wires.

The WH-L458 (YEL/RED) and WH-L459 (WHT/YEL) wires are longer. Route these wires to the right side of the aircraft through the snap bushings in the F-1215 Seat Ribs. Route the two shorter wires to the left side of the aircraft.

Step 5: Separate out the WH-L73 (YEL) Landing Light Pulse Wire and WH-L437 (YEL/BLU) Landing Light Steady Power Wire and route them through the snap bushings in the seat ribs on the right side of the aircraft.

Step 6: Separate out the RZ441 (WHT) Co-Pilot Headset Wires, RZ442 (WHT) Pilot Headset Wires, WH-P600 (ORN/BLK) and WH-P601 (ORN/BLK) Audio Power Wires.

The WH-P601 (ORN/BLK) wire and RZ441 (WHT) wires are longer. Route these wires to the right side of the aircraft through the snap bushings in the F-1215 Seat Ribs. Route the shorter wires to the left side of the aircraft.

Step 7: Separate out the WH-F694 (WHT) wire. This wire is 22 AWG. Do not confuse this wire with the WH-P350 (WHT) Power Outlet Wire which is 18 AWG.

Separate out the WH-P485 (RED), WH-F483 (ORN/YEL) and WH-695 (GRY/PRP) wires.

Route these wires for the autopilot pitch servo through the first three F-1215 Seat Ribs on the left side of the aircraft. See Figure 1.

Step 8: Route the WH-L435 (YEL/PRP) and WH-L436 (YEL/GRN) wires to the location of the ELT following the routing of the ES RS 279-374 Phone Cable. See Page 31B-11.

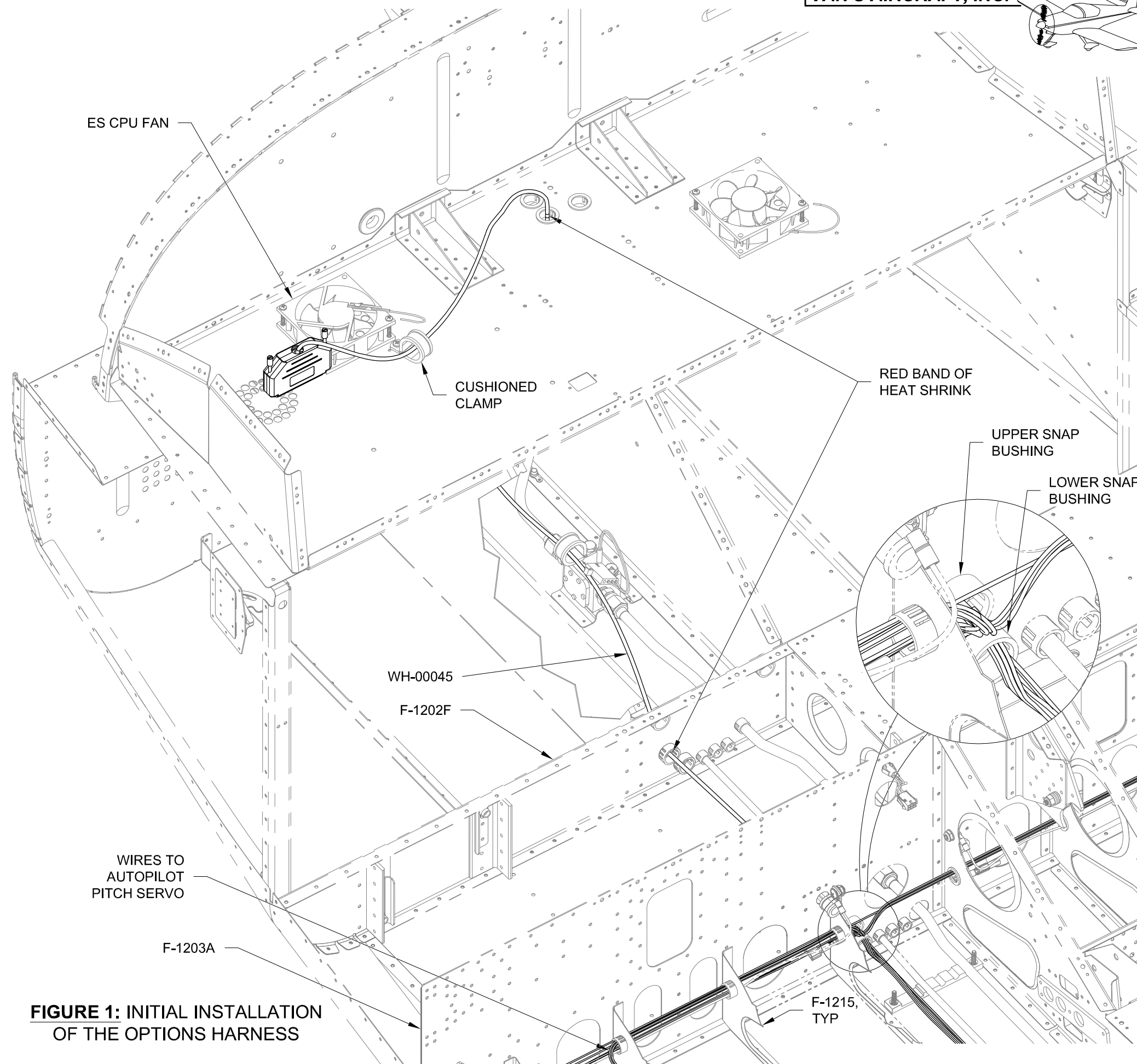
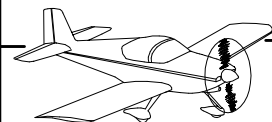


FIGURE 1: INITIAL INSTALLATION OF THE OPTIONS HARNESS



Step 1: Drill #12 a hole in the bottom of the Roll Bar Assembly at the location shown in Figure 1.

Step 2: Insert a snap bushing into the hole just made in the bottom of the Roll Bar Assembly as shown in Figure 1. The flange of the bushing will need to be trimmed away to allow the bushing to fit between the F-1231A-AR & FR Roll Bar Frames and fully snap in place.

Step 3: Use a step drill to enlarge the #30 hole in the F-1205B Roll Bar Attach Plate to $\varnothing 3/8$. The hole will need to be enlarged from the bottom side.

Step 4: Insert a snap bushing into the hole just made in the F-1205B Roll Bar Attach Plate as shown in Figure 1.

Step 5: Uncoil the WH-L435 (YEL/PRP) Cockpit Light Power Wire, WH-L436 (YEL/GRN) Cockpit Ground Wire, and WH-W1114 (WHT) Canopy Latch Switch Terminal Wire that were stowed near the ELT earlier in this section.

Step 6: Slide all three wires through the snap bushing in the F-1205B Roll Bar Attach Plate.

Step 7: Fabricate the F-12126 Wire Tube by cutting a 30 inch long piece of PT-035X1/4 plastic tube.

Slide the wire tube over the WH-L435 (YEL/PRP) Cockpit Light Power Wire, WH-L436 (YEL/GRN) Cockpit Ground Wire, and WH-W1114 Canopy Latch Switch Terminal Wire.

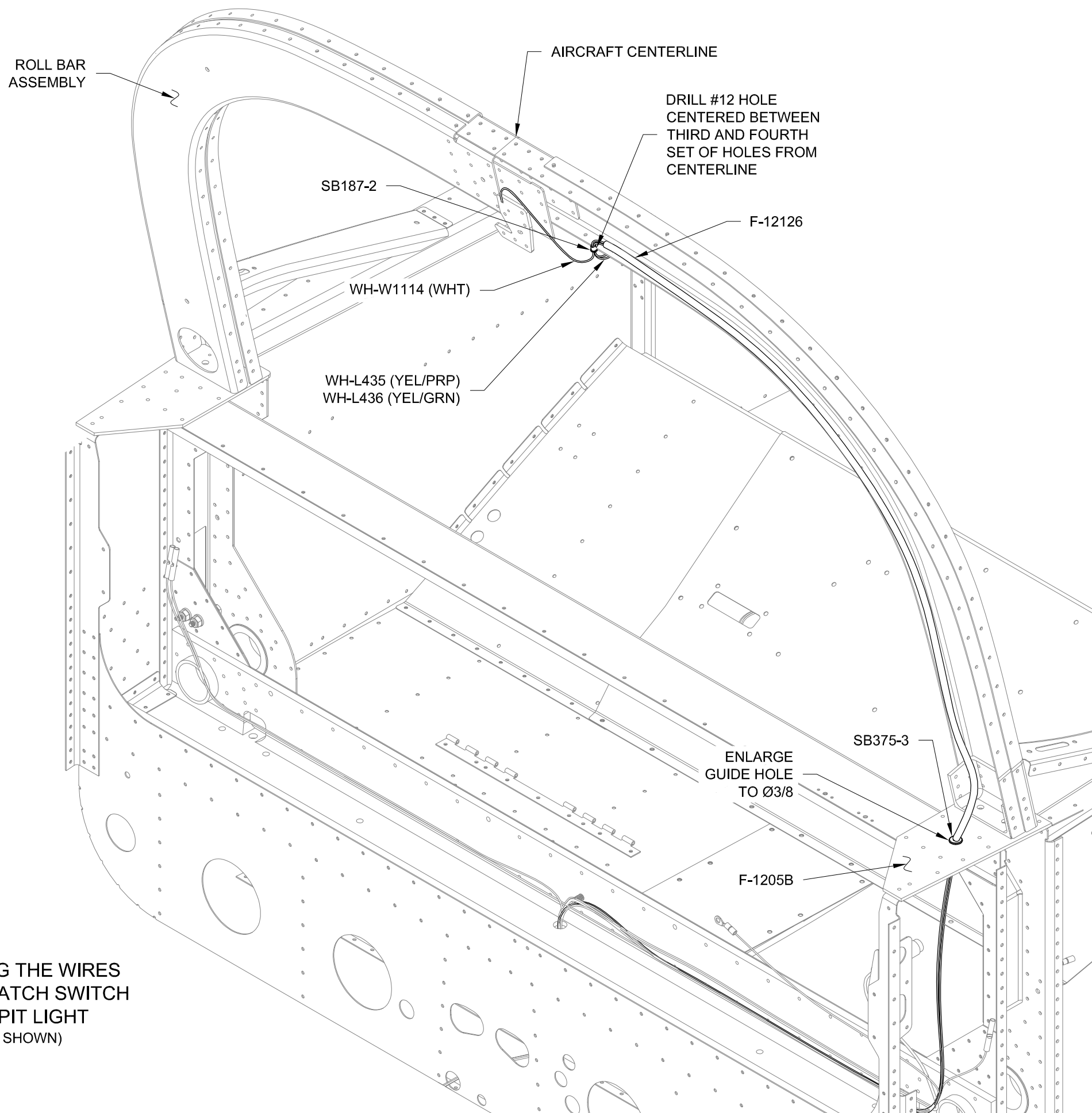
Step 8: Tape the end of a piece of safety wire to cover any sharp edges.

Route the safety wire through the #12 hole made in Step 1 and down through the Roll Bar Assembly to the large hole on the aft side as shown in Figure 1.

Step 9: Tape the end of the safety wire to the WH-L435 (YEL/PRP) Cockpit Light Power Wire, WH-L436 (YEL/GRN) Cockpit Ground Wire, WH-W1114 Canopy Latch Switch Terminal Wire, and the wire tube.

Use the safety wire to pull the three wires and the wire tube up into the roll bar assembly. Stop when the three wires have exited the #12 hole as shown in Figure 1. Remove the safety wire.

Step 10: Attach the ends of the WH-L435 (YEL/PRP) Cockpit Light Power Wire, WH-L436 (YEL/GRN) Cockpit Ground Wire, and WH-W1114 Canopy Latch Switch Terminal Wire to the Roll Bar Assembly with a piece of tape, or equivalent.



**FIGURE 1: ROUTING THE WIRES
FOR THE CANOPY LATCH SWITCH
AND THE COCKPIT LIGHT
(F-1231A-AR NOT SHOWN)**