



**Step 1:** Route the wires of the WH-RV12-OPTIONAL harness (those coming out of the main 25-pin d-sub connector but not attached to the AP-74 25-pin d-sub connector) through the cushioned clamp near the left ES CPU FAN and lower snap bushing in the F-1202K-L Inst Stack Support. Separate the approximately 22 inch long WH-L80 (YEL/PRP) and WH-L82 (YEL/GRN) wires from the harness.

**Step 2:** Route the remaining WH-RV12-OPTIONAL harness through either of the snap bushings in the forward center region of the F-1202B Panel Base leaving 31 1/2 inches to the main d-sub above the panel base. Tape the optional harness down so that this distance does not change as you route wires.

**NOTE: If not installing the autopilot, ignore the remaining steps on this page, fill the hole for the autopilot disconnect switch with a rivet and store autopilot disconnect for future use.**

**Step 3:** If installing the optional autopilot, use a unibit to enlarge the hole for the autopilot disconnect switch to 1/2 diameter in the F-1202A Instrument Panel for the button on the WH-RV12-APDC Autopilot Disconnect. Install the autopilot disconnect into this hole as shown in Figure 1.

**Step 4:** Route all the wires coming from the back of the WH-RV12-APDC Autopilot Disconnect up through one of the two snap bushings in the F-1202B Panel Base. Crimp **together into the same side** of a butt splice the shorter black wire coming from the autopilot disconnect WH-F178 (BLK) and the WH-L82 (YEL/GRN). Crimp **together into the same side** of a butt splice the red wire coming from the autopilot disconnect WH-F177 (RED) and the WH-L80 (YEL/PRP).

**Step 5:** Make a WH-B179 (WHT) Cockpit Light Power Wire and WH-B180 (WHT) Cockpit Light Ground Wire by cutting two pieces of 22 gauge wire 153 inches long.

**Step 6:** Crimp the WH-B179 (WHT) Cockpit Light Power Wire into the open end of the butt splice with the WH-L80 (YEL/PRP) and WH-F177 (RED) wires crimped in the other end.

**Step 7:** Crimp the WH-B180 (WHT) Cockpit Light Ground Wire into the open end of the butt splice with the WH-L82 (YEL/GRN) and WH-F178 (BLK) wires crimped in the other end.

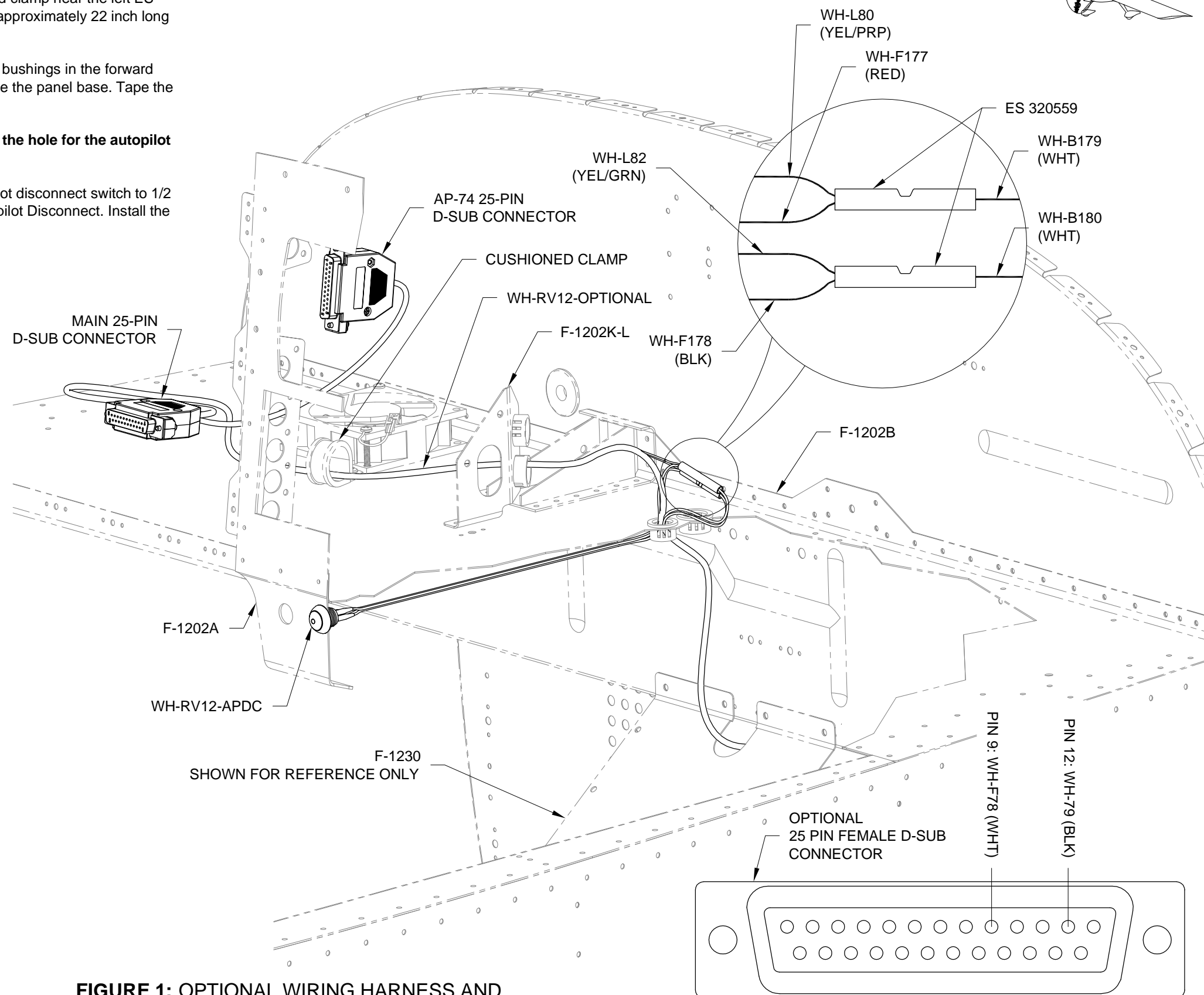
**Step 8:** Route the WH-B179 (WHT) Cockpit Light Power Wire and WH-B180 (WHT) Cockpit Light Ground Wire along the route of the WH-Q54 (ORN/BRN) Fuel Level Wire. Cover the ends of the wires to prevent them from shorting out to the aircraft structure then coil the extra wire for later use. See Page 31-05.

**Step 9:** Route the longer WH-F78 (WHT) and WH-F79 (BLK) wires coming from the back of the WH-RV12-APDC Autopilot Disconnect back through the lower snap bushing in the F-1202K-L Inst Stack Support and cushioned clamp near the left ES CPU FAN.

**NOTE: See Section 5W for notes on backshell assembly.**

**Step 10:** Remove the d-sub backshell from the main 25-pin d-sub connector on the WH-RV12-OPTIONAL harness. Insert the pins on the ends of both WH-F78 (WHT) and WH-F79 (BLK) wires through the heat shrink and into the correct pin locations as shown in Figure 2 in the 25-pin d-sub female connector. Check with a gentle tug that each wire has snapped into place. Slide the heat shrink supplied with the optional harness up the wires until its length is centered about the exit of the backshell then activate the heat shrink. Re-install the d-sub backshell.

**NOTE: If a pin is inserted into the wrong location remove it using the TOOL ICM INSERT/EXTRACT D-sub Tool provided in the kit.**



**FIGURE 1: OPTIONAL WIRING HARNESS AND AUTOPILOT DISCONNECT**

**FIGURE 2: INSTALLING PINS IN THE OPTIONAL D-SUB CONNECTOR (REAR VIEW / PIN INSTALLATION SIDE)**