

## AWP-24 Wave Height Gauge

# AWPC-01 Instrumentation Cable Connector Assembly Procedure

**REV: 1.0** 



### 1 AWPC-01 ASSEMBLY PROCEDURE

#### 1.1 Parts list

The AWPC-01 connector that comes with your AWP-24 wave height gauge includes the following parts. Please ensure that you have all the parts.



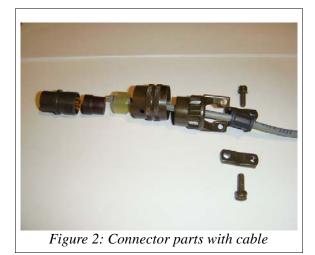
The instructions in this document are illustrated using Belden Cable 8723. This cable has 2 shielded twisted pair wires and a separate inner shield wire.

Please note that the connector shown in this document is the environmental resistant option which includes parts B and C shown in figure 1. If the connector you have does not have parts B and C or you decide that they are not needed, it is recommended to add individual heat shrinks to the wires in step 5 when they are soldered to the pins on part A.

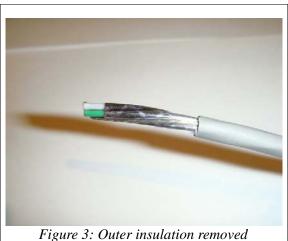


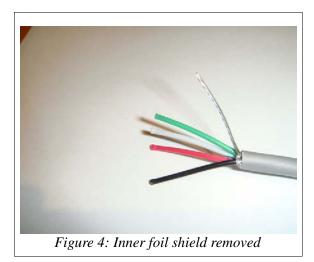
#### 1.2 Assembly Instructions

1. Ensure that all parts are placed over the cable you are using in the order shown in figure 2 prior to assembly.



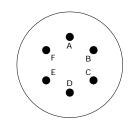
- 2. Using a sharp knife carefully remove about 1.4 inches (3.5 cm) of the outer insulation to expose the individual wires inside. (Figure 3).
- 3. Gently unfold the foil shield that covers each twisted pair, pull back the shield at the the edge of the outer insulation, and remove it (Figure 4). Do not strip the individual wires until after step 4.





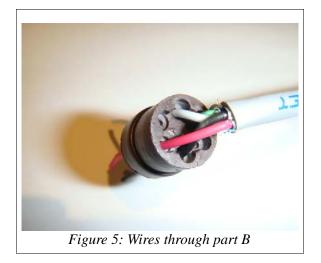
4. Push the 5 individual wires through the small holes in part B and in the order and orientation shown in Table 1 and figures 5 and 6. The holes are sealed but you do not need to drill them. Just push the wires through the holes and they will pass through.



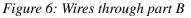


- Pin A N/C
- Pin B Output Signal High (White)
- Pin C Output Signal Low (Green)
- Pin D Shield (Bare Wire)
- Pin E Power Low (Black)
- Pin F Power High (Red)

Table 1: 6-pin Connector connection diagram







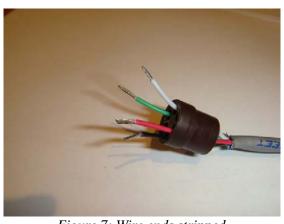


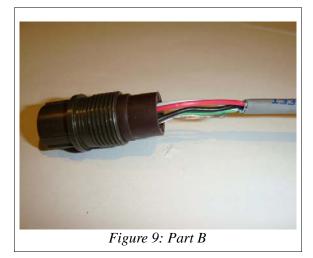
Figure 7: Wire ends stripped



Figure 8: Wires soldered to part A

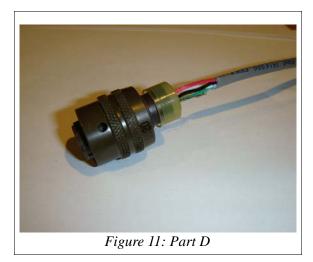
- 5. Using a wire stripper strip the ends of the 4 wires (figure 7) and solder each wire to the copper connectors of part A (Figure 8). Please ensure that the wires are connected as shown in table 1.
- 6. Keeping the wires straight push Part B close to part A and press together as shown in figure 9.
- 7. Push part C over part B and press to fit together as shown in figure 10.

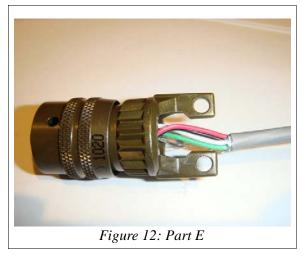






8. Slide parts D and E together and over part A. Holding part A screw part E into part A until the connector is tight as shown in figure 12.





9. The final step is to attach the strain relief to the cable using parts F and G as shown in figures 13 and 14. Please ensure that part F covers the outer insulation of the cable. You may have to push the entire cable closer to the connector to ensure that the outer insulation of the cable is covered by part F.





