



CONNECTOR		NUMBER OF POSITIONS
PLUG	RECEPTACLE	
747904-[]	747905-[]	9
747908-[]	747909-[]	15
747912-[]	747913-[]	25
747916-[]	747917-[]	37

Figure 1

1. INTRODUCTION

This instruction sheet describes contact soldering and application for the AMPLIMITE HDP-20 connectors with solder cup contacts listed in Figure 1.

Association of Connecting Electronics Industries (IPC)-S-815, "General Requirements for Soldering Electronic Interconnections" is recommended for establishing quality solder guidelines.

Read these instructions and all referenced material carefully before soldering any contacts.

i **NOTE**
Dimensions on this instruction sheet are in millimeters [with inch equivalents in brackets]. Figures are for reference only and are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 4, REVISION SUMMARY.

2. DESCRIPTION

Each connector is completely assembled with duplex tin/copper finished non-removable solder cup contacts. The metal connector shells are available in either EMI/RFI-shielded or non-shielded. All plug connectors feature grounding indents. The contacts will accept solid or stranded wire with a maximum individual wire size of 20 AWG. The contacts accept tinned leads and will provide secure strain relief for the wires when properly soldered.

The connectors will mate with other corresponding AMPLIMITE connectors regardless of termination type.

3. CONTACT SOLDERING

! **DANGER**
Make sure to follow all local safety practices when working with solder.

1. Ensure that the surfaces of the connector and wire(s) to be soldered are clean and free of any contaminants that may inhibit solderability.

2. Strip the wire(s) to the dimension given in Figure 1.
3. Using a rosin flux and lead-free SAC305 or SAC405 solder, coat the stripped portion of the wire(s) with the flux. Insert a wire into a solder cup until the conductor is bottomed in the cavity.

i**NOTE**

It is common to use heat-shrink tubing over solder joints to insulate the exposed solder connection at the cup. If using heat-shrink tubing, ensure that tubing sections are cut to the proper length and placed on the wire(s) prior to soldering. After wires are soldered, slide the tubing over the solder connections and shrink it with an appropriate heat source.

4. Using a low-wattage soldering iron, heat the solder cup and allow the solder to flow into the cup until the cup is filled, but not overfilled.
5. Continue soldering wires until all terminations are complete.
6. Clean the soldered connections with a suitable alcohol and water rinse to remove flux and solder residue.

i**NOTE**

DO NOT re-use a terminated contact by removing the wire.

4. REVISION SUMMARY

- Updated document to corporate requirements
- Corrected text in Paragraph 3.3