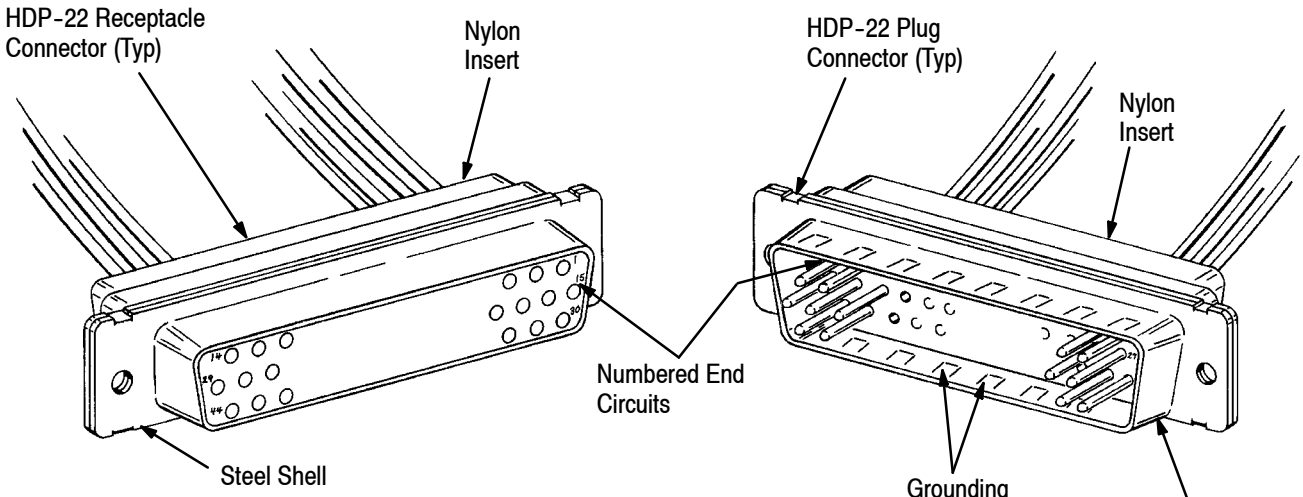
AMPLIMITE* HDP-22 Connectors (Plugs and Receptacles) with Crimp-Type Contacts



SHELL SIZE	NO. OF POSN	PLUG PART NUMBER	RECEPTACLE PART NUMBER
1	15	748364-1	1658681-1
2	26	1658671-1	1658682-1
3	44	1658672-1	1658683-1
4	62	1658673-1	1658684-1
5	78	1658674-1	1658685-1

***NOTE**: Connectors with clinch nuts, assembled in the same manner as those shown in these instructions, are also available.*

Figure 1

1. INTRODUCTION

This instruction sheet covers basic assembly procedures for AMPLIMITE High Density (HDP-22) plug and receptacle connectors listed in Figure 1. Read these instructions and other references carefully before assembling any connectors.

NOTE

Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are for reference only and are not drawn to scale.

Reasons for reissue are provided in Section 6, REVISION SUMMARY.

2. DESCRIPTION

AMPLIMITE HDP-22 plugs and receptacles feature tin-plated steel shells and black nylon inserts with plastic contact retention tines. Plug housings also feature grounding indents. Housings are designed for rear insertion and extraction of precision-formed, crimp-type Size 22 contacts: pin contacts for plug housings and socket contacts for receptacles. End cavities at each contact row are number coded (FRONT and BACK) to aid in contact location.

Note that each HDP-22 plug connector can be mated to any HD-22 receptacle connector having the same shell size.

3. ASSEMBLY PROCEDURE

3.1. Contact and Wire Selection

Refer to the chart in Figure 2 and select the correct contact type (pin or socket) and form (strip or loose piece). Make sure that the wire size (AWG) and insulation diameter for the application are within the acceptable ranges shown in Figure 2. Strip wires 5/32 3.96 [.156]. Do NOT cut or nick the conductor.

3.2. Crimping Contacts

Strip-form contacts are designed for crimping with semi-automatic or automatic machines and applicators. Consult your local TE Sales or Field Representative concerning the machine and applicator for a specific application and production level.

Loose-piece contacts (LP) listed in Figure 2 are designed for crimping with Hand Crimping Tool 91520-1. Refer to Instruction Sheet 408-8547, which is packaged with the tool, for specific contact crimping procedures.

CONTACT TYPE	WIRE SIZE RANGE, AWG	INSULATION DIA. RANGE	PIN CONTACT NUMBER		SOCKET CONTACT NUMBER	
			STRIP	LP	STRIP	LP
High Density 22 DF	28 to 22	0.76-1.02 [.030-.040]	1658670-1, -3	1658670-2, -4	1658686-1, -3	1658686-2, -4

Figure 2

3.3. Contact Insertion and Extraction

NOTE

Insertion/Extraction Tool 91285-1 is designed for the installation and removal of contacts used in AMPLIMITE HDP-22 Connectors. For detailed information on use of the tool, refer to Instruction Sheet 408-9404 which is packaged with the tool.

After contacts have been crimped to wires, insert contacts into the BACK of the connector until they snap-lock into place. Pull back lightly on each wire to make sure that the contact is fully seated. If all cavities are not used, TE suggests that contacts be evenly distributed throughout the connector.

NOTE

Damaged product should not be used. If damaged products are evident, they should be replaced with new ones.

4. HARDWARE

AMPLIMITE HDP-22 plugs and receptacles will accept all AMPLIMITE HD-22 and HD-20 external hardware designed for the same shell size. For detailed information regarding the description and application of the hardware, refer to Catalog 82068 and Application Specification 114-10001.

5. PANEL CUTOUT

NOTE

Refer to Application Specification 114-10001 for cutout dimensions and clearance requirements for AMPLIMITE HDP-22 Connectors.

AMPLIMITE HDP-22 connectors are designed for rack and panel applications. Plugs are mounted in the panel, and receptacles in the rack. Before making the panel cutout, determine the shell size of the connector (number of positions and rows), mounting requirements (FRONT or REAR), and the type of locking device (cable clamp or slide latch) for the application. Then, using the appropriate dimensions, make the panel cutout.

6. REVISION SUMMARY

Revisions to this instruction sheet include:

- Updated document to corporate requirements.