

FIGURE 1

## 1. INTRODUCTION

This instruction sheet (IS) covers the applicable contacts, tooling, and panel cutout dimensions recommended for the AMPLIMITE non-magnetic HD-22 connector housings listed in Figure 1. Read these instructions, and those referenced, before assembling the connector.

**NOTE**

All dimensions presented on this instruction sheet are in inches, unless otherwise stated.

## 2. DESCRIPTION

Non-magnetic plug and receptacle housings have been designed in accordance with Military Specification MIL-C-24308, and feature gold plated brass shells having a keystone design for polarization. Each shell houses a one-piece diallyl phthalate insert containing beryllium copper contact retention springs. Refer to Figure 1 for the various connector assemblies that are available.

Housings are designed for REAR insertion and extraction of size 22 screw machine contacts. End contact cavities are numbered on the FRONT and REAR to provide circuit identification.

## 3. CRIMPING PROCEDURES

**Selection** — refer to the chart in Figure 2, and then select: (1) wire (stranded only) within the specified

size and insulation diameter, and (2) loose piece pin and socket contacts for hand tool applications, or tape-mounted pin and socket contacts for machine applications.

**Crimping** — hand tool M22520/2-01, with applicable positioner, is recommended for crimping loose piece size 22 contacts. Note that the positioner is determined by the type of contact, and the selector setting is determined by the wire size being used. Refer to AMP Instruction Sheet IS 7516, packaged with the tool, for specific crimping procedures.

The AMP-TAPETRONIC★ Stripper Terminator Machine 599406-6 is recommended for crimping tape-mounted size 22 contacts. Refer to AMP Customer Manual CM 5253, packaged with the machine, for specific crimping procedures.

## 4. INSERTION/EXTRACTION PROCEDURES

Contacts are inserted and extracted through the REAR of their respective connector halves. Pins through the REAR of the plug half, and sockets through the REAR of the receptacle half. Note that each row of cavities is numbered. Make certain the cavity identification on the receptacle half is the mirror image of the identification on the plug half — before inserting the contacts.

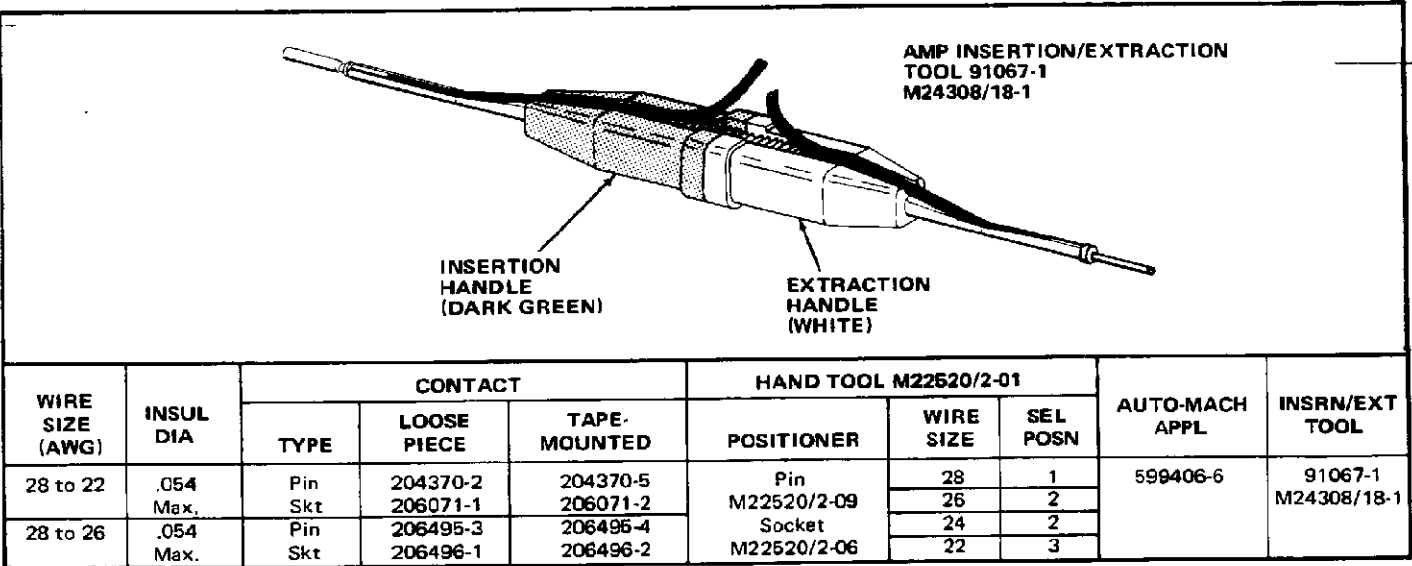


FIGURE 2

AMP★ Insertion/Extraction Tool 91067-1 is recommended for inserting and extracting both pin and socket contacts. Refer to AMP Instruction Sheet IS 7508, packaged with the tool, for specific insertion and extraction procedures.

5. PANEL CUTOUT

These connectors are designed for rack and panel applications. Recommendations are to mount the plug half to the panel and install the receptacle half in

the rack. Note the clearance required to assure fully mated connector halves (see Figure 3).

Before making the panel cutout, determine the number of contact positions in the connector, and whether the connector will be FRONT or BACK mounted. Then, using the dimensions provided in the chart portion of Figure 3, make the panel cutout.

When mounting the connector to the FRONT of the panel, it is recommended that the material indicated by the dotted lines be removed (see Figure 3).

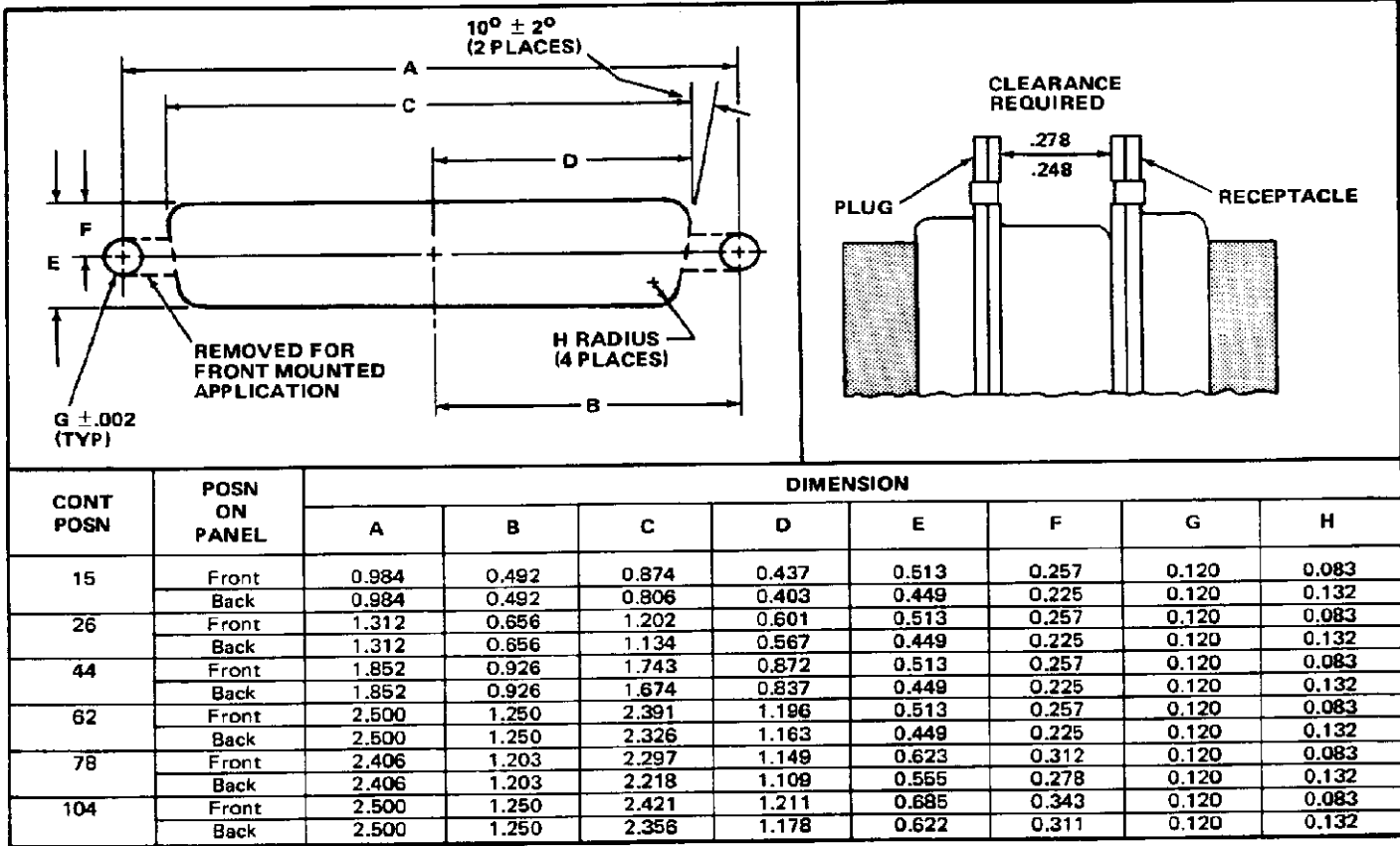


FIGURE 3