

# AMP

# OBSOLETE

## AMPLIMITE\* HD-22

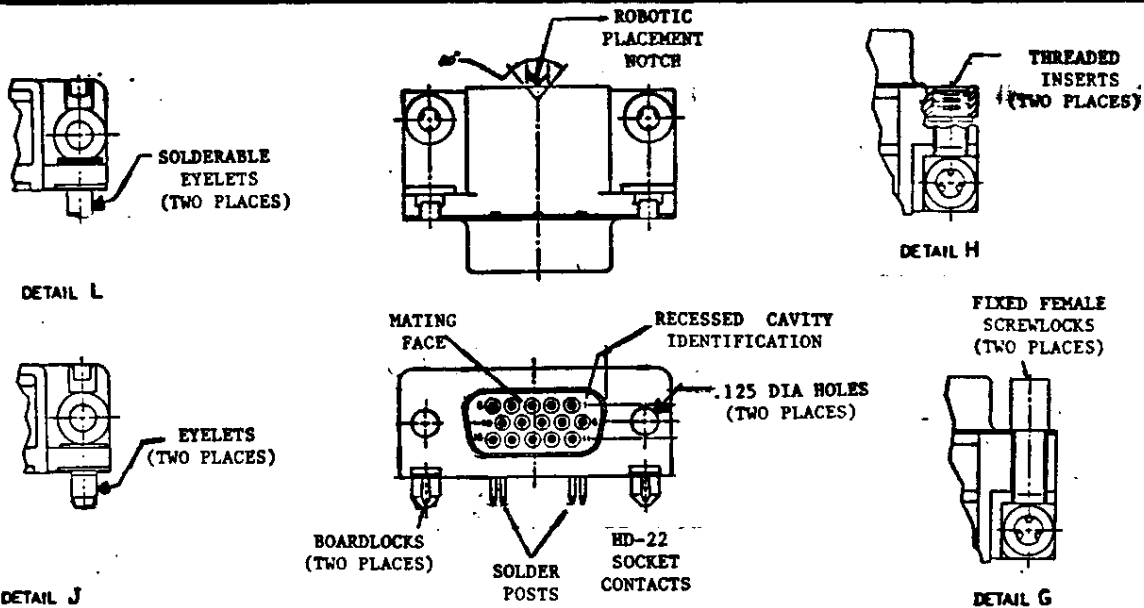
### RIGHT-ANGLE RECEPTACLE ASSEMBLIES FOR COMMERCIAL APPLICATIONS

AMP INCORPORATED  
Harrisburg, Pa. 17105

Instruction Sheet

# IS 9319

RELEASED



NOTES: SEE FIGURE 3 FOR D VALUES; 15-POSITION AMPLIMITE RECEPTACLE ASSEMBLY SHOWN ONLY TO ILLUSTRATE FEATURES.

STYLES	NO. OF POSITIONS					FINISH CODES
	15	26	44	62	78	
.125 In. Dia Holes and Eyelet J	748390-1 (Finish A) 748390-7 (Finish B)	748481-1 (Finish A) 748481-7 (Finish B)	748482-1 (Finish A) 748482-7 (Finish B)	748394-1 (Finish A) 748394-7 (Finish B)	748483-1 (Finish A) 748483-7 (Finish B)	<b>FINISH CODE A:</b> .000100-.000200-IN. TIN LEAD PLATED OVER SOLDER LEAD, ALL OVER .000050-IN NICKEL, ENTIRE CONTACT, .000030-IN. GOLD ON MATING END.  <b>FINISH CODE B:</b> .000100-.000200-IN. TIN LEAD PLATED OVER SOLDER LEAD, ALL OVER .000050-IN NICKEL, ENTIRE CONTACT, GOLD FLASH ON MATING END.  <b>NOTE:</b> ALL METAL SHELLS PLATED WITH .000200-.000400-IN. THICK BRIGHT TIN OVER .000050-.000200-IN. THICK COPPER.
.125 In. Dia Holes and Boardlock	748390-4 (Finish A) 1-748390-0 (Finish B)	748481-4 (Finish A) 1-748481-0 (Finish B)	748482-4 (Finish A) 1-748482-0 (Finish B)	748394-4 (Finish A) 1-748394-0 (Finish B)	748483-4 (Finish A) 1-748483-0 (Finish B)	
.125 In. Dia Holes and Solderable Eyelets	1-748390-3 (Finish A) 1-748390-6 (Finish B)	1-748481-3 (Finish A) 1-748481-6 (Finish B)	1-748482-3 (Finish A) 1-748482-6 (Finish B)	1-748394-3 (Finish A) 1-748394-6 (Finish B)	1-748483-3 (Finish A) 1-748483-6 (Finish B)	
Threaded Inserts, Detail H, and Eyelet J	748390-2 (Finish A) 748390-8 (Finish B)	748481-2 (Finish A) 748481-8 (Finish B)	748482-2 (Finish A) 748482-8 (Finish B)	748394-2 (Finish A) 748394-8 (Finish B)	748483-2 (Finish A) 748483-8 (Finish B)	
Threaded Inserts, Detail H, and Boardlocks	748390-5 (Finish A) 1-748390-1 (Finish B)	748481-5 (Finish A) 1-748481-1 (Finish B)	748482-5 (Finish A) 1-748482-1 (Finish B)	748394-5 (Finish A) 1-748394-1 (Finish B)	748483-5 (Finish A) 1-748483-1 (Finish B)	
Threaded Inserts, Detail H, and Solderable Eyelets	1-748390-4 (Finish A) 1-748390-7 (Finish B)	1-748481-4 (Finish A) 1-748481-7 (Finish B)	1-748482-4 (Finish A) 1-748482-7 (Finish B)	1-748394-4 (Finish A) 1-748394-7 (Finish B)	1-748483-4 (Finish A) 1-748483-7 (Finish B)	
Female Screwlocks, Detail G, and Eyelet J	748390-3 (Finish A) 748390-9 (Finish B)	748481-3 (Finish A) 748481-9 (Finish B)	748482-3 (Finish A) 748482-9 (Finish B)	748394-3 (Finish A) 748394-9 (Finish B)	748483-3 (Finish A) 748483-9 (Finish B)	
Female Screwlocks, Detail G, and Boardlocks	748390-6 (Finish A) 1-748390-2 (Finish B)	748481-6 (Finish A) 1-748481-2 (Finish B)	748482-6 (Finish A) 1-748482-2 (Finish B)	748394-6 (Finish A) 1-748394-2 (Finish B)	748483-6 (Finish A) 1-748483-2 (Finish B)	
Female Screwlocks, Detail G, and Solderable Eyelets	1-748390-5 (Finish A) 1-748390-8 (Finish B)	1-748481-5 (Finish A) 1-748481-8 (Finish B)	1-748482-5 (Finish A) 1-748482-8 (Finish B)	1-748394-5 (Finish A) 1-748394-8 (Finish B)	1-748483-5 (Finish A) 1-748483-8 (Finish B)	

Fig. 1

80-34

## 1. INTRODUCTION (Figure 1)

This instruction sheet (IS) covers a description of and the printed circuit (pc) board mounting practices for the AMP HD-22 Metal Shell AMPLIMITE Connectors listed by part number in Figure 1. These connectors are designated as commercial right-angle receptacle assemblies containing HD-22 socket contacts and are available in five sizes: 15, 26, 44, 62, and 78 positions. Once mounted, they are designed to mate with any compatible plug in the HD-22 AMPLIMITE (or competitive equivalent) series.

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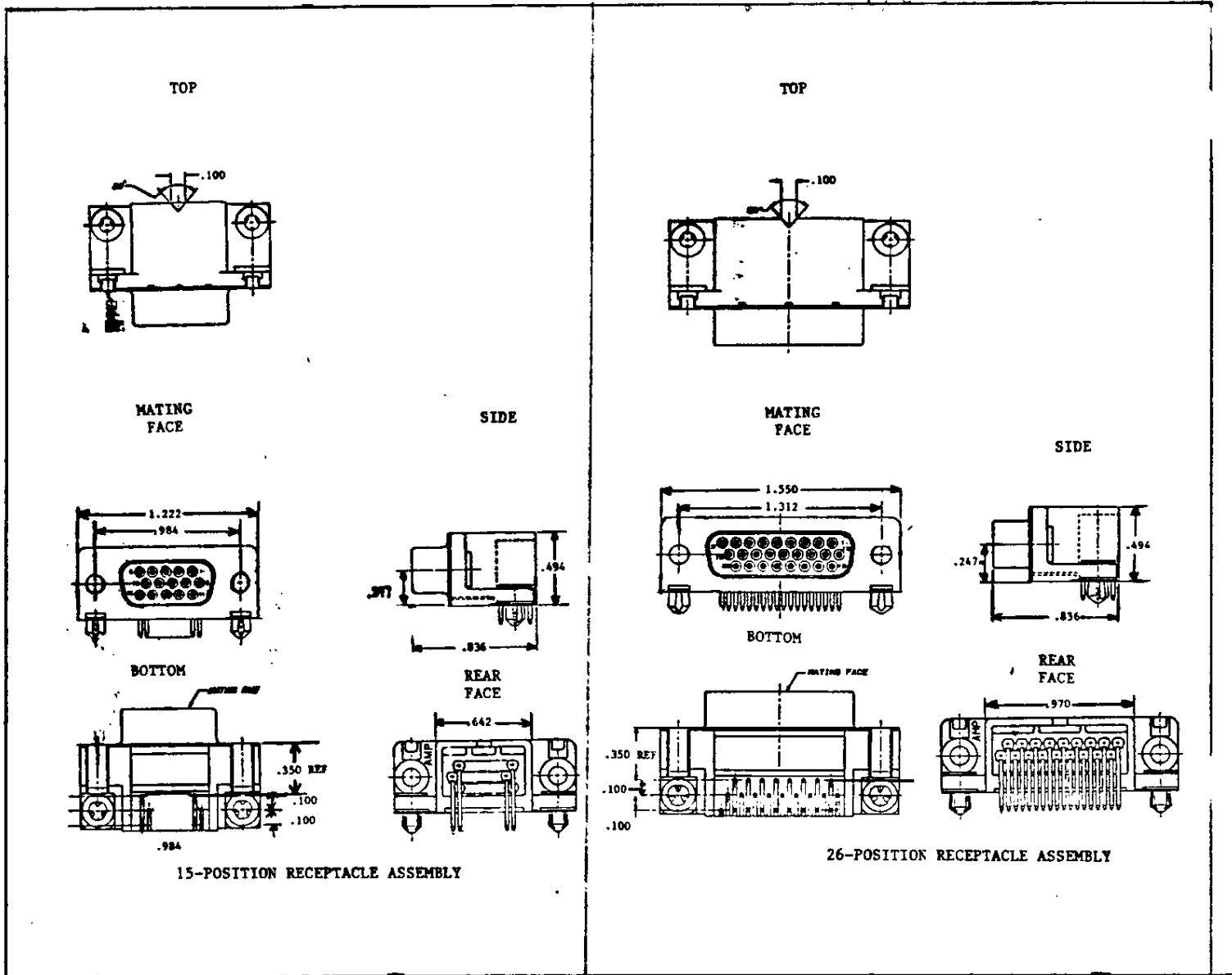


Fig. 2 (Sheet 1 of 2)

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Read these instructions thoroughly before mounting the connectors on a pc board.

NOTE: All dimensions on this instruction sheet are in inches.

## 2. DESCRIPTION (Figures 1 and 2)

Each receptacle assembly listed in Figure 1 consists of a metal shell with a plastic insert containing socket contacts. The mating face contains either (1) .125 in. diameter mounting (through) holes (shown on the mating face, Figure 1), (2) threaded inserts (see Detail H, Figure 1), or (3) fixed female screwlocks (see Detail G, Figure 1). The assemblies with the .125 in. diameter holes accept customer-supplied hardware to mate with the plug connector. The threaded inserts accept 4-40 screws and washers and the fixed female screwlocks are used with hardware kits containing 4-40 screws and nuts supplied by AMP. Each receptacle assembly is also supplied in one of the following styles for pc board mounting: (1) eyelets for .120 in. diameter holes; (2) boardlock eyelets for .125 in. diameter holes; or (3) eyelets for .125 in. diameter holes. Assemblies with the boardlock eyelets are snapped into place on the pc board. The other two eyelet styles "fall into" the pc board holes. All eyelets are brass with tin-lead plating.

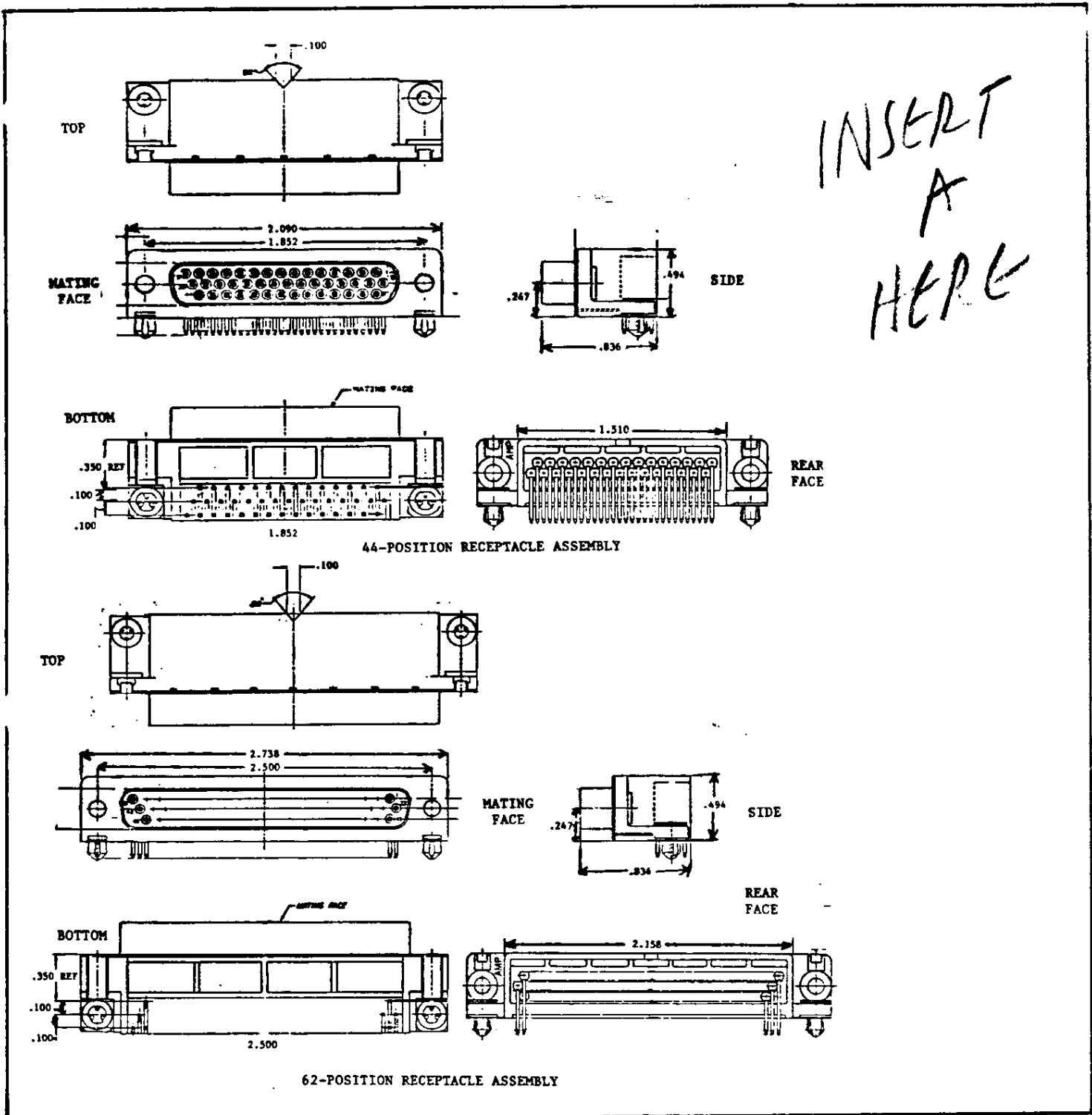


Fig. 2 (Sheet 2 of 2)

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All right-angle receptacle assemblies feature a robotic placement notch to ease insertion into the board using customer-supplied robotic equipment. The receptacle assemblies can be soldered to the pc board using one of three methods: (1) vapor phase reflow; (2) infra-red process; or (3) solder reflow.

The solder posts of the socket contacts are designed for .047 in. diameter holes. Each assembly also features recessed cavity identification on the mating face to aid in circuit location.

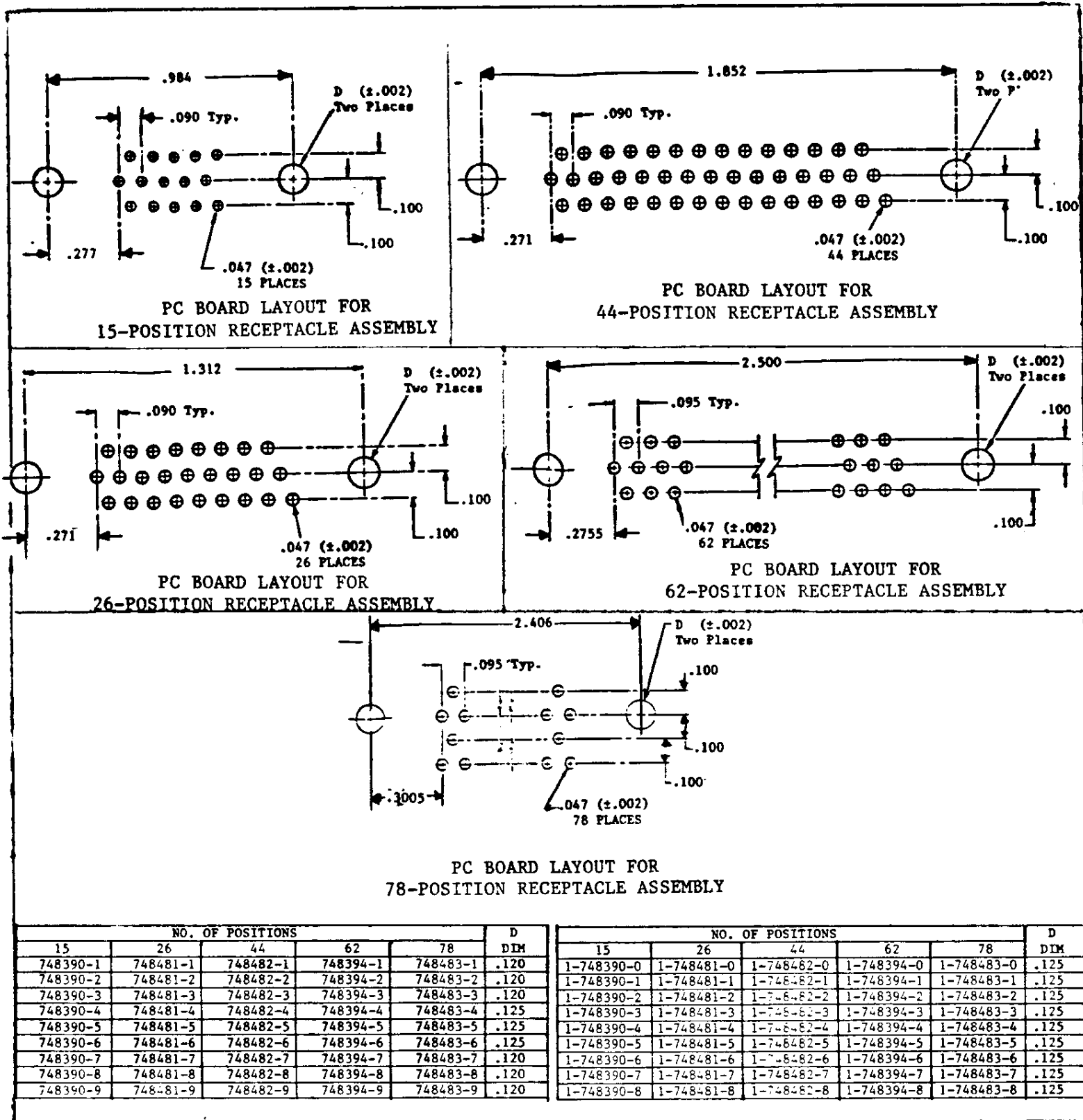


Fig. 3

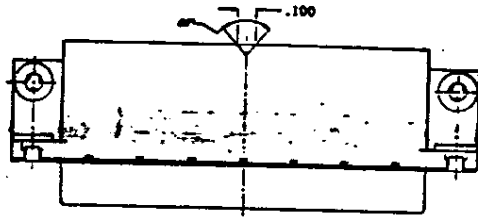
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3. PC BOARD LAYOUTS (Figure 3)

The various pc board layouts for each receptacle assembly are shown in Figure 3.

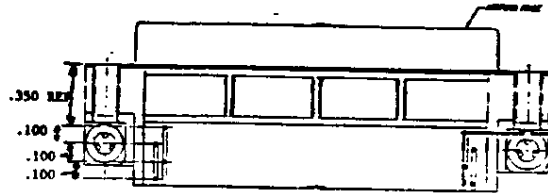
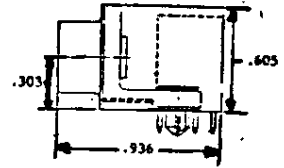
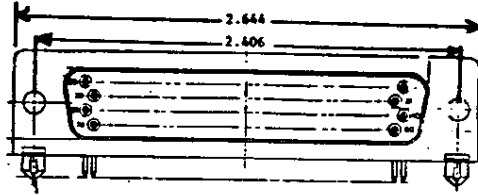
INSERT  
A

TOP

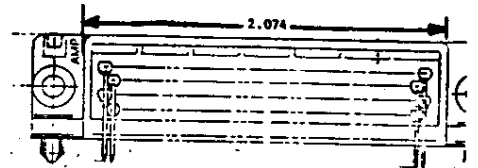


SIDE

MATING  
FACE



BOTTOM



REAR  
FACE

78-POSITION RECEPTACLE ASSEMBLY