

AMPAMP INCORPORATED
Harrisburg, Pa. 17105APPLICATION AND MAINTENANCE FOR
AMP ★ SEATING TOOLS
91164-1, -2, -3, 91165-1, -2, -3,
91166-1, -2, -3, 91167-1, -2, -3
AND 91168-1, -2, AND -3

Instruction Sheet

IS 9031

RELEASED

7 • 2 • 87

CUSTOMER HOTLINE 1 800 722-1111

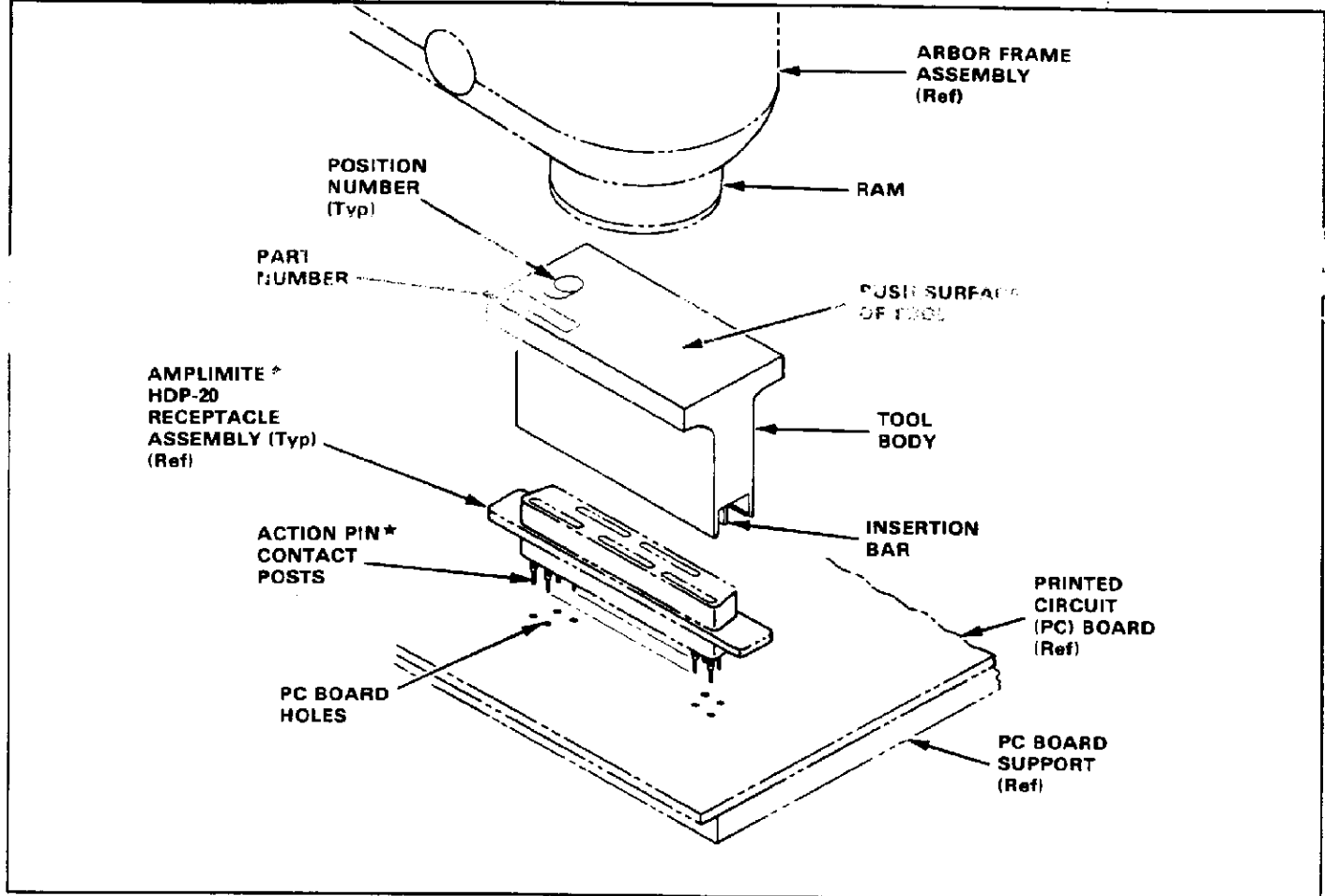


Fig. 1

1. INTRODUCTION

This instruction sheet (IS) covers application and maintenance procedures for the AMP Seating Tools listed in the chart in Figure 2. The tools are used to insert the AMPLIMITE HDP-20 Receptacle Assemblies listed in the chart in Figure 2.

Read these instructions carefully before inserting any receptacle assemblies with the tools.

NOTE

All dimensions presented on this instruction sheet are in inches.

2. DESCRIPTION

The tools are designed to seat the various AMPLIMITE receptacle assemblies listed in the chart in Figure 2. The receptacle assemblies feature molded-in slots in the mating face of the plastic housing which correspond to the appropriate insertion tool and are loaded with ACTION PIN contacts.

The tools are of one-piece, all-steel construction.

Each tool features insertion bars which correspond to the molded-in slots in the mating face of the applicable AMPLIMITE receptacle housings. The housings are seated by using the tools and an appropriate arbor frame assembly.

NOTE

Arbor frame assemblies used to insert ACTION PIN contacts must be capable of exerting 40 lb (max) pressure per contact post.

3. SEATING PROCEDURE

Obtain an appropriately drilled pc board and an appropriate pc board support. See Figure 3 for pc board hole dimensions.

NOTE

Pc board support is customer-supplied. Support must be slotted (.062-in. wide by .500-in. deep) to appropriate connector centerlines, or must have drilled holes (.070 in. dia) on appropriate connector centerlines to exactly match pc board pattern.

SEATING TOOL PART NUMBER	RECEPTACLE ASSEMBLY PART NUMBER			PC BOARD THICKNESS	NUMBER OF CONTACT POSN
	STANDARD MTG HOLES	MTG HOLES W/THREADED INSERTS	MTG HOLES W/FIXED FEMALE SCREWLOCKS		
91164-1 ↓	745335-1	745379-1	745454-1	.093 to .125	9 ↓
	745335-2	745379-2	745454-2	.062	
	745588-1	745601-1	745618-1	.062	
91164-2 ↓	745588-2	745601-2	745618-2	.062	
	747088-1	747090-1	747091-1	.093 to .125	
	747088-2	747090-2	747091-2	.093 to .125	
91164-3 ↓	745511-1	745516-1	745521-1	.093 to .125	
	745511-2	745516-2	745521-2	.093 to .125	
	745581-1	745606-1	745621-1	.062	
91164-1 ↓	745581-2	745606-2	745621-2	.062	
	745450-1	745463-1	745455-1	.093 to .125	
	745450-2	745463-2	745455-2	.093 to .125	
91165-1 ↓	745586-1	745611-1	745626-1	.062	
	745586-2	745611-2	745626-2	.062	
	745336-1	745380-1	745456-1	.093 to .125	15 ↓
91165-1 ↓	745336-2	745380-2	745456-2	.093 to .125	
	745587-1	745602-1	745617-1	.062	
91165-2 ↓	745587-2	745602-2	745617-2	.062	
	747140-1	747141-1	747142-1	.093 to .125	
	747140-2	747141-2	747142-2	.093 to .125	
91165-3 ↓	745451-1	745464-1	745457-1	.093 to .125	
	745451-2	745464-2	745457-2	.093 to .125	
	745597-1	745612-1	745627-1	.062	
91168-1 ↓	745597-2	745612-2	745627-2	.062	
	208089-1	745381-1	745458-1	.093 to .125	25 ↓
	208089-2	745381-2	745458-2	.093 to .125	
91168-1 ↓	745588-1	745603-1	745618-1	.062	
	745588-2	745603-2	745618-2	.062	
	745922-1	745925-1	745926-1	.093 to .125	
91168-2 ↓	745922-2	745925-2	745926-2	.093 to .125	
	745513-1	745518-1	745523-1	.093 to .125	
	745513-2	745518-2	745523-2	.093 to .125	
91168-2 ↓	745593-1	745606-1	745623-1	.062	
	745593-2	745606-2	745623-2	.062	
	208089-1	745466-1	745031-1	.093 to .125	
91168-3 ↓	208089-2	745466-2	745031-2	.093 to .125	
	745598-1	745613-1	745628-1	.062	
91168-1 ↓	745598-2	745613-2	745628-2	.062	
	745337-1	745382-1	745459-1	.093 to .125	
	745337-2	745382-2	745459-2	.093 to .125	37 ↓
91168-1 ↓	745589-1	745604-1	745619-1	.062	
	745589-2	745604-2	745619-2	.062	
	747713-1	747714-1	747715-1	.093 to .125	
91168-2 ↓	747713-2	747714-2	747715-2	.093 to .125	
	745452-1	745466-1	745480-1	.093 to .125	
	745452-2	745466-2	745480-2	.093 to .125	
91168-3 ↓	745589-1	745614-1	745629-1	.062	
	745589-2	745614-2	745629-2	.062	
	745338-1	745383-1	745461-1	.093 to .125	50 ↓
91167-1 ↓	745338-2	745383-2	745461-2	.093 to .125	
	745590-1	745605-1	745620-1	.062	
91167-1 ↓	745590-2	745605-2	745620-2	.062	
	747143-1	747144-1	747145-1	.093 to .125	
	747143-2	747144-2	747145-2	.093 to .125	
91167-2 ↓	745463-1	745467-1	745482-1	.093 to .125	
	745463-2	745467-2	745482-2	.093 to .125	
	745600-1	745615-1	745630-1	.062	
91167-3 ↓	745600-2	745615-2	745630-2	.062	

Fig. 2

Seating procedure is as follows:

1. Place the pc board and support on the base of the arbor frame assembly.
2. Obtain an appropriate receptacle assembly and fit it into the seating tool by entering the insertion bars of the tool into the corresponding slots in the mating face of the receptacle assembly.

NOTE

The receptacle assemblies have a keying feature consisting of molded-in slots in the mating face of the assembly. These slots correspond exactly to the insertion bars of the tool. Do NOT attempt to seat a receptacle assembly into a pc board unless the assembly is correctly fitted into the tool and is bottomed in the tool body.

3. With the receptacle assembly correctly fitted into the seating tool, start the ACTION PIN contact posts into the pre-drilled holes of the pc board until the pin splits begin to enter the holes.
4. Center the push surface of the tool under the ram of the arbor frame assembly by moving the pc board and support.
5. Lower the ram carefully until the receptacle assembly housing bottoms on the pc board.

6. Retract the ram, and remove the seating tool from the seated receptacle assembly using a straight-upward motion.

This completes the application procedure.

4. DAILY MAINTENANCE

Remove all foreign particles from the tools with a clean, soft brush or a clean, soft, lint-free cloth. If foreign matter cannot be removed easily or if insertion bars appear to be bent or out of alignment, return the tool to your supervisor. When tools are not in use, store them in a clean, dry area.

5. PERIODIC MAINTENANCE AND REPAIR

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the tools and/or be supplied to supervisory personnel responsible for the tool.

Tool specifications along with tool weights are listed in Figure 4. If repair of the tool becomes necessary, send the tool, with a written description of the problem to:

AMP Incorporated
Customer Repair
1523 North 4th Street
Harrisburg, PA 17102-1604

or a wholly owned subsidiary of AMP Incorporated.

PC BOARD MOUNTING SPECIFICATIONS

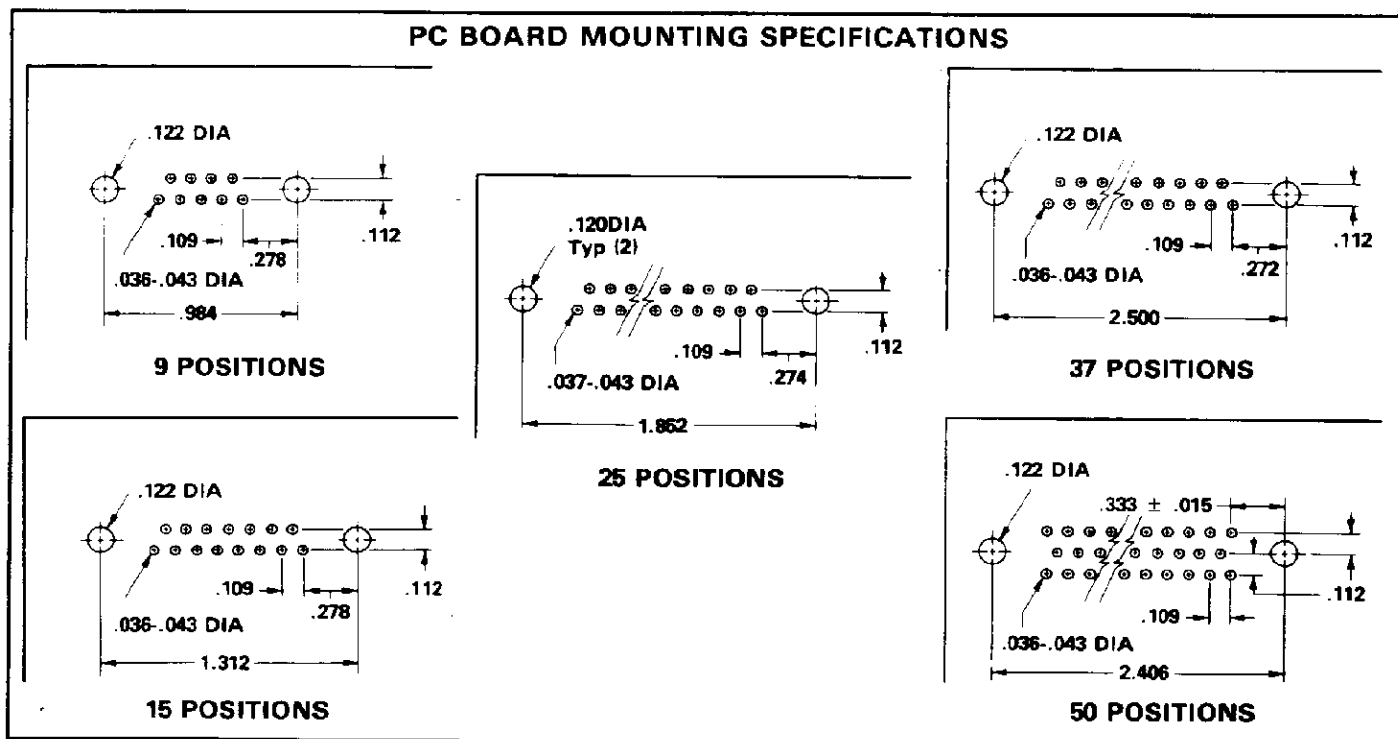


Fig. 3

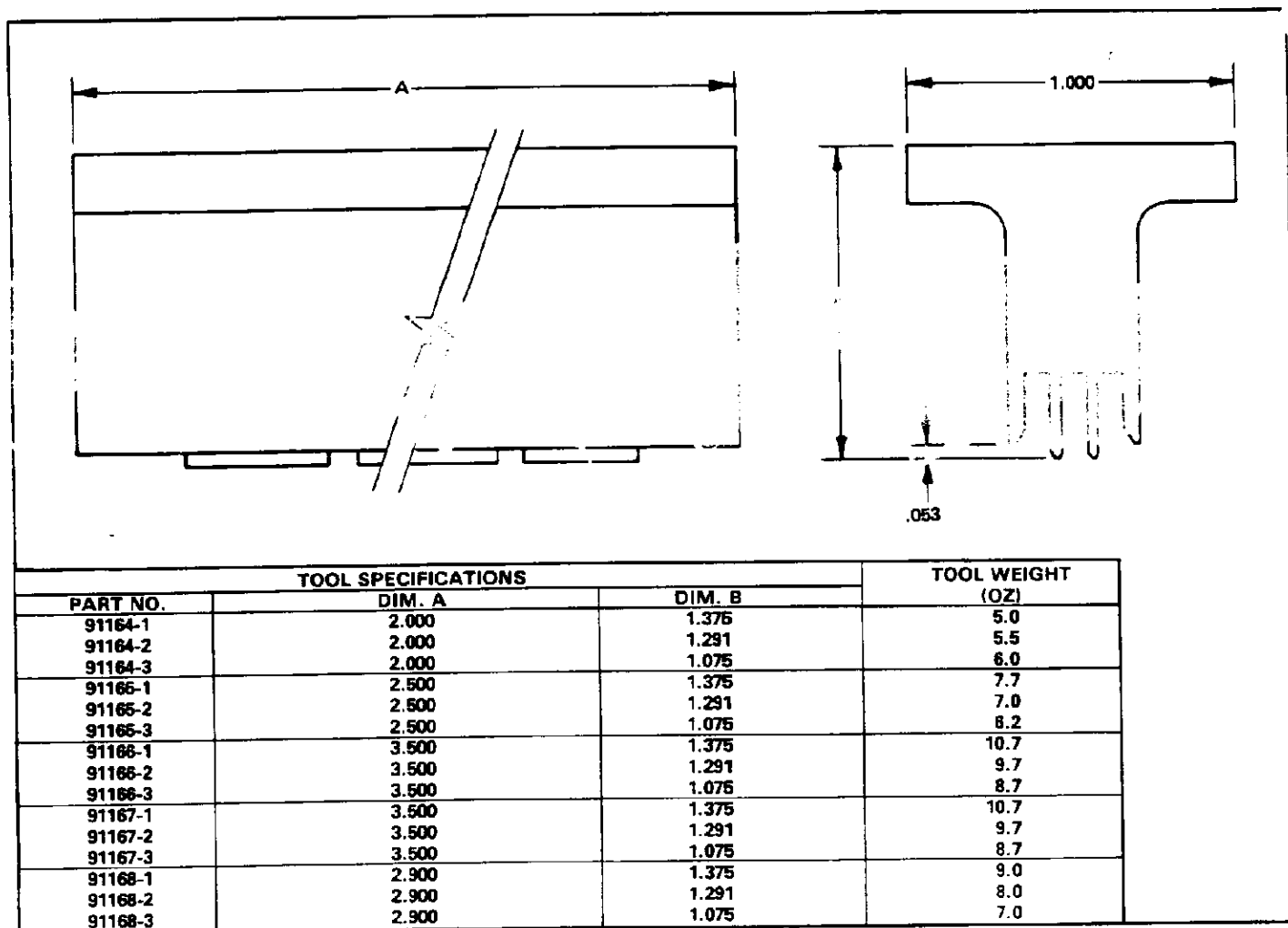


Fig. 4

Mouser Electronics

Authorized Distributor

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[TE Connectivity:](#)

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