

SEATING TOOL	EUROCARD RECEPTACLE CONNECTOR			SEATING TOOL	EUROCARD RECEPTACLE CONNECTOR		
	TYPE	POSITION	ROWS		TYPE	POSITION	ROWS
148090-1	M	78	3	535072-1	C	96	3
148090-2		60					
148090-3		42					
148090-4		24					

Figure 1

### 1. INTRODUCTION

This instruction sheet covers application and maintenance for AMP\* Seating Tools 148090-[ ] and 535072-1. These tools are used to insert AMP Eurocard receptacle connectors Type M and Type C with ACTION PIN contacts into printed circuit (pc) boards.

Refer to AMP Catalog 82721 for product part number information. Read these instructions carefully before using the tooling.

Reasons for reissue of this instruction sheet are provided in Section 7, REVISION SUMMARY.

### NOTE

All dimensions on this document are in metric units [with U.S. customary units in brackets].

### 2. DESCRIPTION (Figure 1)

Each seating tool features a push plate, stabilizers, and housing. The push plate, located at the top of the tool, provides the bearing surface for the application tooling which forces the ACTION PIN contacts into the pc board.

The housing holds rectangular blades which push on respective connector contacts. The housing fits over the connector body to align the components for proper seating.

### 3. REQUIREMENTS

#### 3.1. PC Board Support (Customer Supplied)

A pc board support fixture is required to ensure that each connector is aligned with the tool during the seating process, and that contacts are protected during the procedures. Fixtures are not furnished by AMP and must be supplied by the customer.

#### 3.2. Application Tooling

The seating tool is designed for use in AMP applicator assemblies, or similar manual machines with sufficient ram surface and the capability of applying a maximum insertion force of 178 N [40 lbs] per contact. A pneumatic machine can also be used, provided the equipment has positive shut-height stops.

#### 3.3. Seating Height (Figure 2)

The seating height—the distance from the bottom surface of the ram to the top of the pc board when the ram is fully DOWN—must be set at 38.1 +0.25/-0.000 mm [1.50 +.010/-0.000 in.] before starting the seating procedure.

#### NOTE

*In Figure 2, shut height equals seating height plus thickness of pc board and pc board support.*

### 4. SEATING PROCEDURE

When setting up equipment to seat connectors, pay particular attention to the following:

- make sure that the number of rows and positions in the connector is identical to the number of rows and push pins in the tool;
- be sure that the seating tool and connector are properly aligned and set (Figure 2) before cycling the application tooling.

#### CAUTION

*If tool and connector are improperly aligned in the equipment, damage could occur to tooling, connector or both.*

After the tool has been installed and the equipment has been set up with the pc board fixture in place, proceed as follows:

1. Place a pc board with proper hole pattern onto pc board support fixture.
2. Insert contacts of connector(s) into the pc board until the compliant pin areas in the contacts start to enter the board holes.
3. Position the housing of the tool over the connector to be seated.
4. Center the tool and connector under the push surface of the ram.
5. Lower the ram slowly and verify alignment of the tool to the connector.

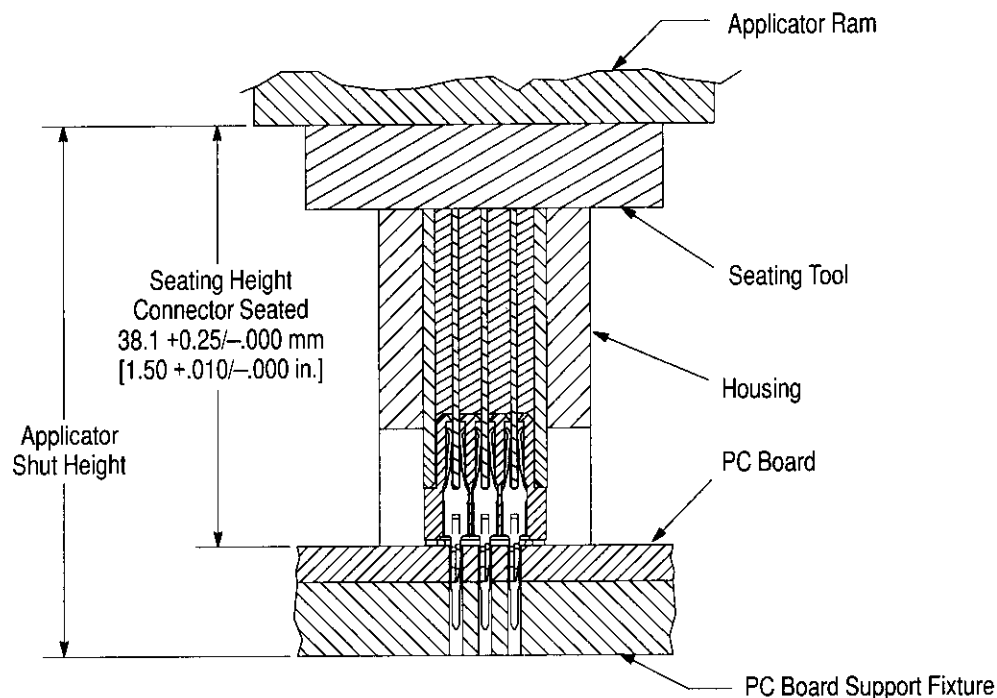


Figure 2

6. Apply force to the tool push plate to seat the connector onto the pc board.
7. Manually retract the ram, and carefully remove the seating tool.
8. Continue seating connectors as described in Steps 3 through 7 until all connectors have been seated.
9. Remove pc board with seated connectors from pc board support fixture.

## 5. MAINTENANCE AND INSPECTION

### 5.1. Daily Maintenance

It is recommended that each operator be made aware of, and responsible for, the following steps of daily maintenance:

1. Remove dust, moisture, and other contaminants with a clean, soft brush or lint-free cloth. Do NOT use objects that could damage the push pins or other tool components.
2. Ensure that the proper screws and push pins are in place and secured.
3. When the tool is not in use, store it in a clean, dry area.

### 5.2. Periodic Inspection

Each tool is assembled and inspected before shipment. It is suggested that the tool be inspected immediately upon its arrival in your plant to ensure that it has not been damaged during shipment.

Thereafter, regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the tool or be supplied

to supervisory personnel responsible for the tool. The inspection frequency should be based on the amount of use, working conditions, operator training and skill, and established company standards.

## 6. REPLACEMENT AND REPAIR

The parts listed in Figure 1 are customer-replaceable. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. Order replacement parts through your AMP representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 1-717-986-7605. or write to:

CUSTOMER SERVICE (38-35)  
AMP INCORPORATED  
PO BOX 3608  
HARRISBURG PA 17105-3608

Tools may be returned to AMP for evaluation and repair. For repairs, send tool with a written description of the problem to:

EUROCARD PRODUCT TEAM  
BUSINESS OFFICE (039-006)  
AMP INCORPORATED  
3711 PAXTON STREET  
HARRISBURG PA 17111-1416

## 7. REVISION SUMMARY

Revisions to this instruction sheet include:

Per EC 0990-0243-96:

- Added Seating Tool 148090-[ ] for Type M receptacle connectors
- Replaced connector part numbers with reference to AMP catalog