

**PROPER USE GUIDELINES**

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. AMP hand tools are intended for occasional use and low volume applications. AMP offers a wide selection of powered application equipment for extended-use, production operations.

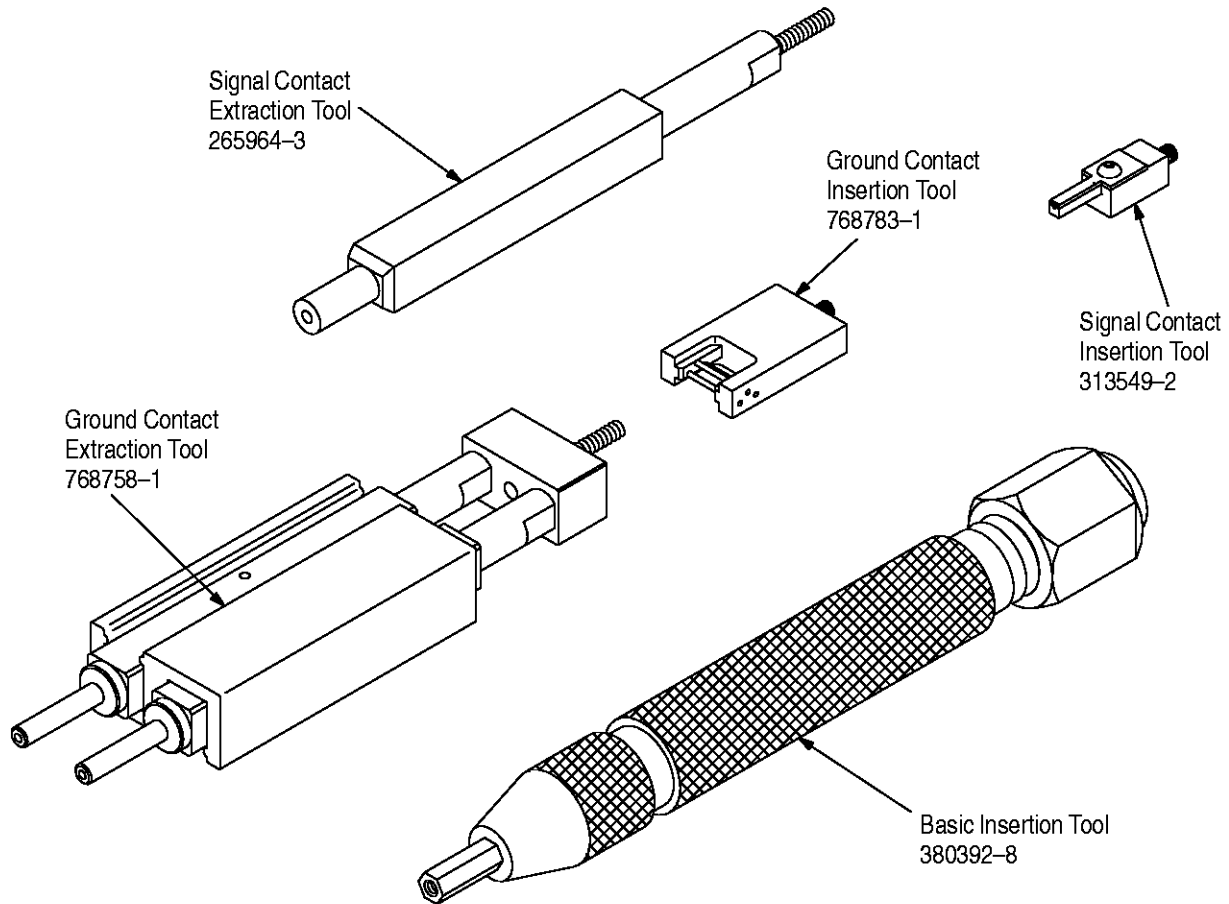


Figure 1

**1. INTRODUCTION**

This instruction sheet covers AMP\* Contact Replacement Tool Kit 768784-1, which is used for the insertion and extraction of signal contacts and ground contacts in AMP Z-PACK Stripline 100 Pin Header Assemblies.

These tools are used to insert signal and ground ACTION PIN contacts or solder lead contacts into printed circuit (pc) boards or panels, or to extract contacts from pc boards and panels.

For application requirements concerning AMP Z-PACK connectors, refer to AMP Application Specification 114-1065.

Read these instructions carefully before using the tool.

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

**2. DESCRIPTION**

Contact Replacement Tool Kit 768784-1 consists of Basic Insertion Tool 380392-8, with a spring-loaded, internally-threaded tip and insertion and extraction tools for ground contacts and signal contacts. See Figure 1. The ground contact insertion and extraction tools, and the signal contact insertion and extraction tools, are threaded into the basic insertion tool.

**DANGER**

To avoid injury, do NOT operate the tool for purposes other than its intended use.

**CAUTION**

To not substitute other contact replacement tools with different dash numbers.

### 3. CONTACT REMOVAL

#### NOTE

**For Solder Lead Contacts Only** – If the contact has been soldered to the pc board or panel, contact removal requires the use of a soldering iron, as well as the tool kit for Steps 3 and 4, below. Hold the hot tip of the soldering iron against the contact to be removed, NOT against the pc board or panel. After the contact is removed, clean the hole for contact replacement.

#### 3.1. Signal Contact Removal

1. Thread the Signal Contact Extraction Tool into the tip of the basic insertion tool.
2. Position the contact extraction tool tip over the square post of the contact from the back of the pc board.
3. Firmly hold the tool perpendicular to the pc board and push the contact straight out of pc board and connector housing.

#### DANGER

To avoid personal injury, keep hands free of extracted contact.

#### NOTE

Do NOT re-use ACTION PIN contacts after they have been removed.

#### 3.2. Ground Contact Removal

1. Thread the Ground Contact Extraction Tool into the tip of the basic insertion tool.
2. Position the extraction tool over the two leads of the ground contact. Be sure that the tool is placed on leads of the same ground contact.
3. Firmly hold the tool perpendicular to the pc board and push the ground contact straight out of pc board.

### 4. CONTACT REPLACEMENT

#### 4.1. Signal Contact Replacement

1. Thread the Signal Contact Insertion Tool into the tip of the basic insertion tool.
2. Orient and start the replacement contact through the top of the connector housing into the appropriate cavity. Make sure contact shoulder is located correctly in the housing.
3. Fit the tip of the insertion tool over the contact until it bottoms on the contact shoulder.

#### NOTE

Be sure that the contact is properly aligned in the contact housing and that the tool is held perpendicular to the pc board.

4. Push the tool until it bottoms on the connector housing and the contact is fully seated.

#### NOTE

When the contact is fully seated, the contact shoulders must be flush with the connector housing.

5. Carefully remove the basic tool straight away from the contact. Do *not* damage the other contacts.

#### 4.2. Ground Contact Replacement

1. Thread the Ground Contact Insertion Tool into the tip of the basic insertion tool.
2. Place the replacement contact into the insertion tool.
3. Orient and start the replacement contact through the top of the connector housing into the appropriate cavity. Make sure the contact is located correctly in the board.
4. Push the tool until the ground contact shoulder bottoms on connector housing. Refer to instructions for Signal Contact Replacement.
5. Remove the basic tool straight away from the ground contact, making sure NOT to damage the other contacts.

### 5. TOOL INSPECTION

AMP Contact Replacement Tool Kit 768784-1 for Z-PACK Pin Header Assemblies with Signal and Ground Contacts is inspected prior to shipment. AMP recommends that the tools be inspected immediately upon arrival in your plant to ensure that the tool kit has not been damaged in transit.

### 6. REPLACEMENT AND REPAIR

Additional tool kits can be purchased 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  
P.O. BOX 3608  
HARRISBURG, PA 17105-3608

For tool repair service, please contact an AMP representative at 1-800-526-5136.

### 7. REVISION SUMMARY

Since the previous release of this sheet, the following changes were made:

Per EC 0990-0674-99:

- Update document to corporate requirements
- Changed tool repair service information in Section 6, REPLACEMENT AND REPAIR
- Added revision summary