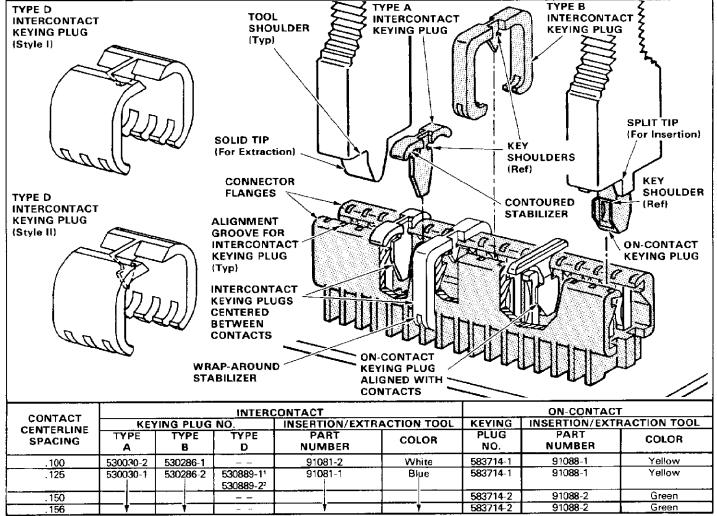




# AMP\* INSERTION/EXTRACTION TOOLS 91081-1, 91081-2, 91088-1, AND 91088-2 FOR AMP TWIN LEAF KEYING PLUGS



REDUCED FOR PACKAGING



TYPE D, STYLE I. TYPE D, STYLE II.

#### 1. INTRODUCTION

This instruction sheet covers the tools and procedures for inserting and extracting intercontact (Type A, B, and two styles of Type D), and on-contact keying plugs used in the AMP Twin Leaf mother/daughter printed circuit (pc) board connectors. Read these instructions thoroughly before using the tools.

NOTE

All dimensions are in inches, unless otherwise stated.

#### 2. DESCRIPTION (Figures 1 and 3)

Each tool has the applicable part number stamped on the handle, and features color coding for easy identification, a split tip for inserting the keying plug, and a solid tip for extracting the keying plug. The contact centerline spacing of the applicable connector will determine the size (thickness) of the keying plug, and the tool to be used.

Fig. 1

Note the four types of intercontact keying plugs. Type A has a contoured stabilizer and the other types have a wrap-around stabilizer. All types can be inserted and extracted with an insertion/extraction tool designed for a particular keying plug.

### 3. INSERTION AND EXTRACTION OF KEYING PLUGS

Determine the contact centerline spacing of the connector, then refer to the chart in Figure 1 and select the applicable tool. Proceed as follows:

NOTE

Insertion of the keying plugs BEFORE soldering connector to the pc board will ease insertion of keys, prevent inadvertent contact damage, and ensure proper key retention.

#### A. Insertion of Keying Plug (Figure 1)

1. Place the keying plug in the split tip of the tool as indicated in Figure 1.

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- 2. Grip the tool handle firmly and align the keying plug with the proper area (alignment grooves on connector flanges indicate proper center for intercontact keying plugs):
  - 1. Center intercontact keying plug between contacts (see alignment grooves).
  - 2. Center on-contact keying plug with center of contacts.
- 3. Push the keying plug *straight* into the connector until bottomed.
- 4. Remove the tool, then check that the key is properly centered, and the shoulder is locked under the connector flanges.

NOTE

Care MUST be used during insertion to prevent intercontact keying plug from twisting. If key becomes twisted, insert solid tip of tool into connector and re-align key. Check for damaged contacts.

### B. Extracting a Keying Plug (Figure 1)

- 1. Position the solid tip of the tool as close as possible to the keying plug.
- 2. Grip the tool handle firmly, then push the tip *straight* into the pc board slot until the shoulders of the tool bottom on the connector flanges.
- 3. Holding the tool in position, grip the keying plug with a suitable tool (needle nose pliers) and pull *straight* out of the connector.
- Remove the tool from the connector.

## 4. PRINTED CIRCUIT BOARD CUTOUT

A slot must be cut in the pc board to accept the applicable keying plug. The slot for the Type A, B,

and D intercontact keying plugs must be centered between the pc board circuit pads. The slot for the on-contact keying plugs must be centered on a pc board pad area. Refer to the dimensions in Figure 2 for the proper cutout dimensions.

#### 5. TOOL CERTIFICATION

The insertion/extraction tools listed on this instruction sheet should be periodically certified with the information provided in Figure 3. It is recommended that each tool be inspected immediately upon arrival in your factory, and at regularly scheduled intervals, to assure that the tool has not been damaged.

Additional tools can be purchased from:

AMP Incorporated Eisenhower Boulevard Harrisburg, Pennsylvania 17105

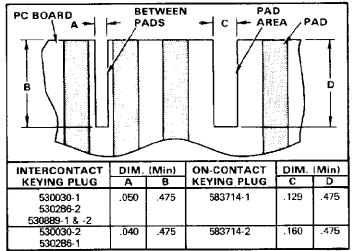


Fig. 2

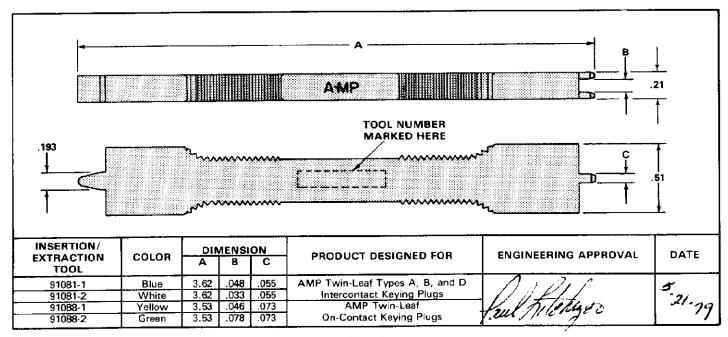


Fig. 3