

Figure 1

### 1. INTRODUCTION

The AMP Insertion/Extraction Tool 91178-1 shown in Figure 1 is designated for Socket Contact 66773 when used in the Electronic Control Module Sealed Connector (ECMSC). The crimped socket contacts are inserted and extracted using the Plug Housing Assembly 776179. Refer to AMP Instruction Sheet 408-3221 and Application Specification 114-2125.

Read these instructions thoroughly before inserting or extracting any contacts.

#### NOTE

Measurements are in metric units [followed by U.S. customary units in brackets].

Reasons for reissue are provided in Section 6, REVISION SUMMARY.

### 2. DESCRIPTION

The tool consists of a metal tip and a plastic handle. The metal tip is designed for both insertion and extraction of the socket contact in the mating face of

the plug insert, by depressing the locking lance of the crimped contact. This action allows the contact to be extracted from the wire-entry face of the plug housing.

### 3. INSERTION PROCEDURE (Figure 2)

1. Insert the tool tip into the desired cavity of the plug housing subassembly until the handle face bottoms on the mating face of the plug insert. The tip will extend slightly beyond the rubber wire seal located on the wire-entry face.
2. Holding the tool handle face against the mating face, start to insert the crimped socket contact into the wire-entry face. The tool tip will deflect the contact's locking lance into the contact body.

#### NOTE

It is important that the tool handle face remains bottomed as the contact is being inserted. This will ensure that the contact's locking lance will be deflected into the contact body at the proper point, thereby preventing damage to the rubber seal.

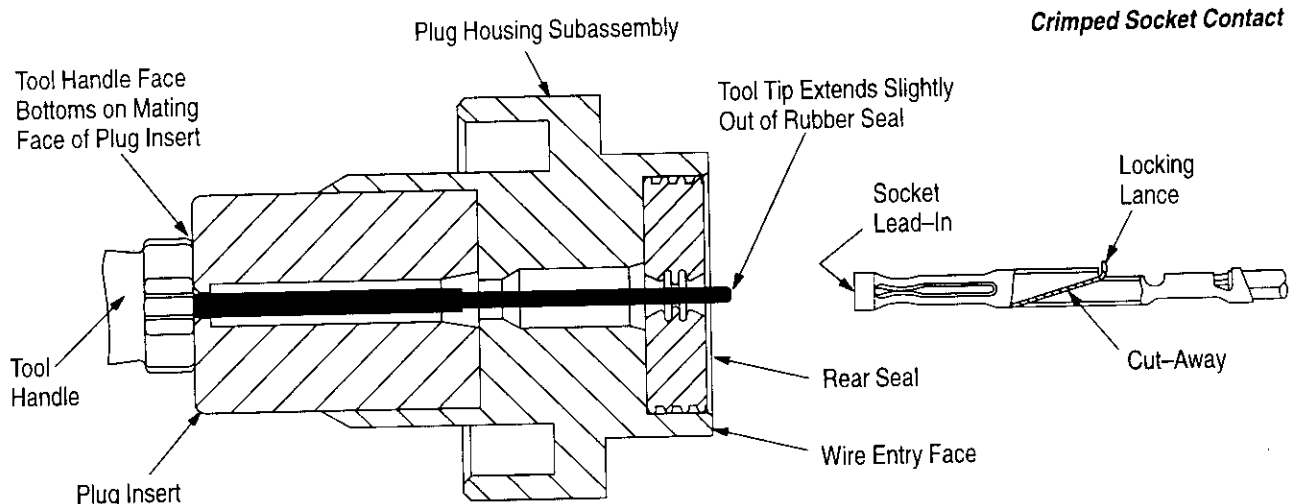


Figure 2

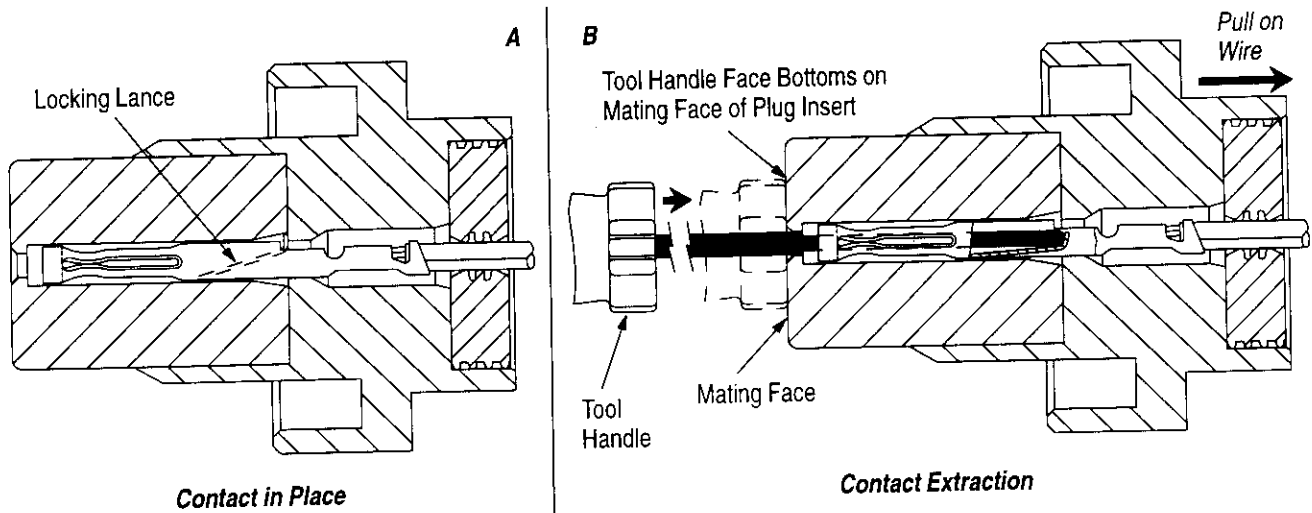


Figure 3

3. Continue to insert the contact by pushing the wire and allowing the tool handle face to gradually move away from the mating face of the plug assembly insert. An audible click will indicate when the locking lance snaps into position, fully seating the contact.

4. Pull firmly on the wire to ensure the crimped contact is fully inserted (a pull of 4 to 9 N [1 to 2 pound force] is sufficient).

**4. EXTRACTION PROCEDURE** (Figure 3)

1. Slowly insert tool tip into contact to be extracted. Push the wire forward (toward mating face) to relieve any pressure on the contact locking lance. Tool tip will depress contact lance. Now slowly pull on wire and continue to gently push tool until shoulder of tool enters the socket contact lead-in and the handle face bottoms on the mating face of the plug insert.

2. Pull on wire to slide contact away from tool tip and out of wire-entry face of insert.

3. Remove tool tip from insert.

**5. MAINTENANCE AND INSPECTION**

To ensure proper operation, the tool should conform to the dimensions provided in Figure 4. It is recommended that the tool be inspected immediately on its arrival and at regularly scheduled intervals. The tool is not repairable and should be replaced when worn or damaged. It is recommended that the tool be stored in a clean, dry place and cleaned with a soft, lint-free cloth.

Additional tools can be purchased from:

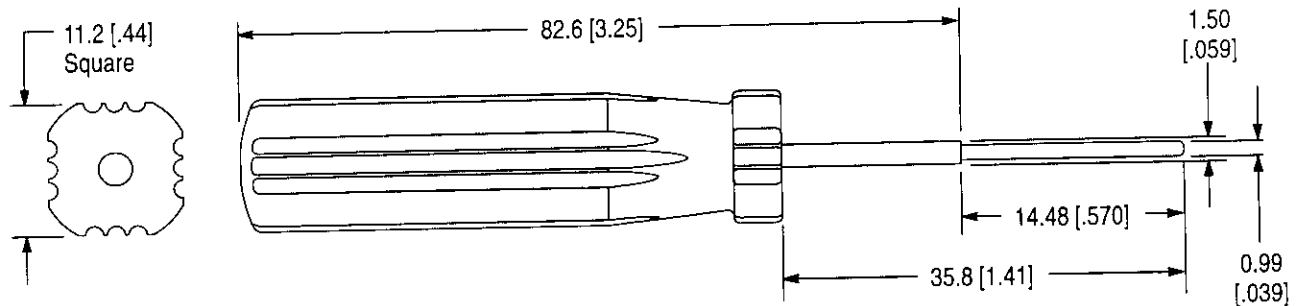
CUSTOMER SERVICE (38-35)  
AMP INCORPORATED  
P. O. BOX 3608  
HARRISBURG, PA 17105-3608

**6. REVISION SUMMARY**

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

Per EC 0150-3420-95

- Changed PN for Plug Housing Assembly from 212992 to 776179



Weight: Approximately 85 g [3 oz.]

Figure 4

NOTE: Not to Scale