

| CONN POSN | SINGLE ITEMS |                         |               | KITS            |                                   |                  |                      |               |
|-----------|--------------|-------------------------|---------------|-----------------|-----------------------------------|------------------|----------------------|---------------|
|           | INDEX SLIDES | INSERTER AND SLIDE ASSY | PALM INSERTER | INDEX SLIDE KIT | PALM INSERTER AND INDEX SLIDE KIT | ACCESSORY TOOLS* |                      |               |
|           |              |                         |               |                 |                                   | RATCHET RELEASE  | EXTRACTION INSERTION | CARRYING CASE |
| 14        | 229706-1     | 229451-3                | 229451-1      | 229764-1        | 229764-2                          | 229765-1         | 230238-1             | 229710-1      |
| 24        | 229707-1     | -4                      | ↓             | ↓               | ↓                                 | ↓                | ↓                    | ↓             |
| 36        | 229708-1     | -5                      | ↓             | ↓               | ↓                                 | ↓                | ↓                    | ↓             |
| 50        | 229621-1     | -2                      | ↓             | ↓               | ↓                                 | ↓                | ↓                    | ↓             |
| 64        | 229709-1     | -6                      | ↓             | ↓               | ↓                                 | ↓                | ↓                    | ↓             |

\* INCLUDED WITH ALL KITS

Fig. 1

## 1. INTRODUCTION

This instruction sheet (IS) covers the operating procedure for the CHAMP Palm Grip Insertion Tool 229451-1, and the accessory components that are available for the tool. Read this material thoroughly before using the tool.

## 2. DESCRIPTION

The palm grip insertion tool is designed for individual wire terminations in CHAMP 14-, 24-, 36-, 50-, and 64-position connectors. Accessories that are used in conjunction with the tool consist of an index slide and cable clamp which assist in contact to tool alignment. See Figure 1.

Assemblies consisting of a tool and index slide are available for specific connector sizes. Kits consisting of all sizes of index slides, repair tools, and carrying case are available for all connector sizes. Index slides can also be purchased separately. See chart in Figure 1.

## 3. TERMINATING PROCEDURE

1. Determine number of connector positions.
2. Using the chart in Figure 1 select the applicable index slide.
3. Position the connector in the index slide as shown in Figure 2. If wire color coding is used, make sure the connector is oriented so the color codes will match properly with mating connector.

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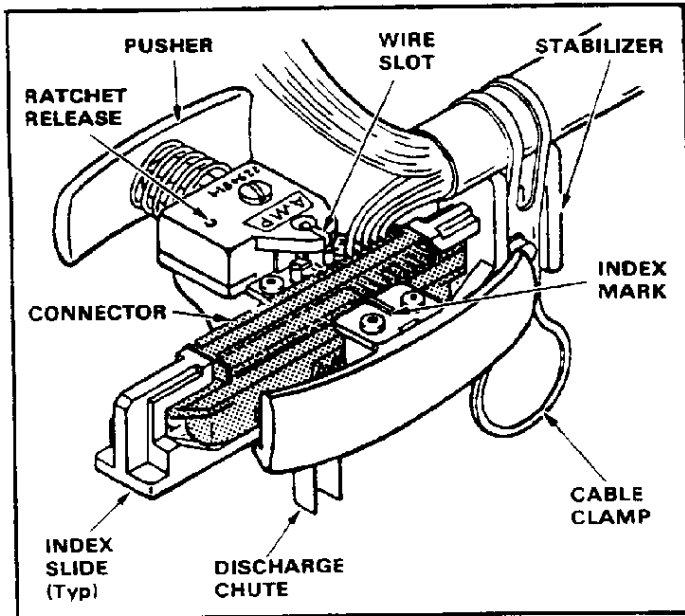


Fig. 2

4. Attach the index slide to the cable with the cable clamp as shown in Figure 2. The cable sheathing must extend approximately 1/2 in. beyond the stabilizer.
5. Orient the palm inserter with the connector . . . make sure the contacts that are to receive the wires are on the same side as the wire slot in the inserter.
6. Insert the index slide into the palm inserter.
7. Align the contact that is to be terminated with the index mark on the palm inserter.
8. Place the palm inserter in your hand with the pusher toward the heel of your hand and your fingers gripping the base (allow discharge chute to extend through your fingers).
9. Select the applicable wire. Insert it through the wire slot and discharge chute until all slack is out of the wire.
10. Make sure the contact and wire are centered on the index mark . . . then squeeze the palm inserter until the pusher is bottomed.
11. Release your grip and allow the pusher to retract.

**NOTE**

*If the palm inserter jams during cycle, the ratchet can be released by applying slight pressure to the pusher to relieve tension on the ratchet release pawl, and rotating the ratchet release CLOCKWISE with a hex wrench (supplied with kit).*

12. Remove scrap wire from discharge chute and discard it.
13. Repeat Steps 7 thru 12 until all contacts are terminated.

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14. With pusher released, remove index slide and connector from palm inserter.
15. If contacts are to be inserted in the other side of the connector, repeat Steps 3 thru 14.
16. After all contacts are terminated, loosen cable clamp and remove the index slide.
17. Inspect all terminations in accordance with Paragraph 4.

**4. INSPECTION OF TERMINATIONS (Figure 3)**

1. Make sure the wire is FULLY inserted into BOTH wire slots.
2. Make sure all wires have been cut to the proper length and no exposed wire strands are visible.
3. Make sure the insulation is NOT cut in any area other than the slot insertion area.
4. Make sure contacts are NOT crushed or deformed.

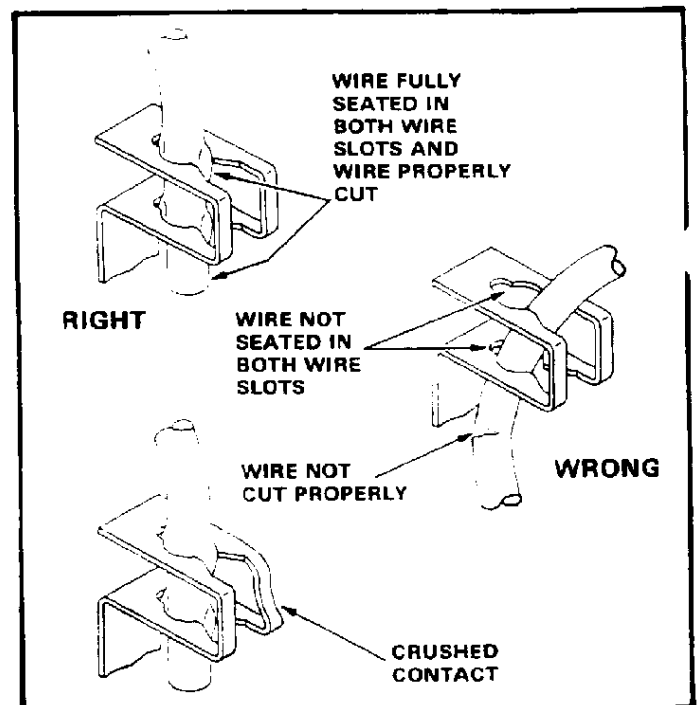


Fig. 3

**5. FAULTY TERMINATION**

In case of a faulty termination, remove the wire and contact from the connector with the AMP Extraction/Insertion Tool 230238-1. Instruction for use of the tool and contact selection are packaged with each tool. See AMP Instruction Sheet IS 7787.

**NOTE**

*Before replacing wire, trim approximately 1/8 in. from end of wire (previously terminated portion).*

Replace the wire using Steps 3 thru 14 of Paragraph 3.