

AMPAMP INCORPORATED
Harrisburg, Pa. 17105AMP* TERMINATING HEAD 231894-1
FOR MATE-N-LOK* CONNECTORS

Instruction Sheet

IS 3186

RELEASED

10-3-86

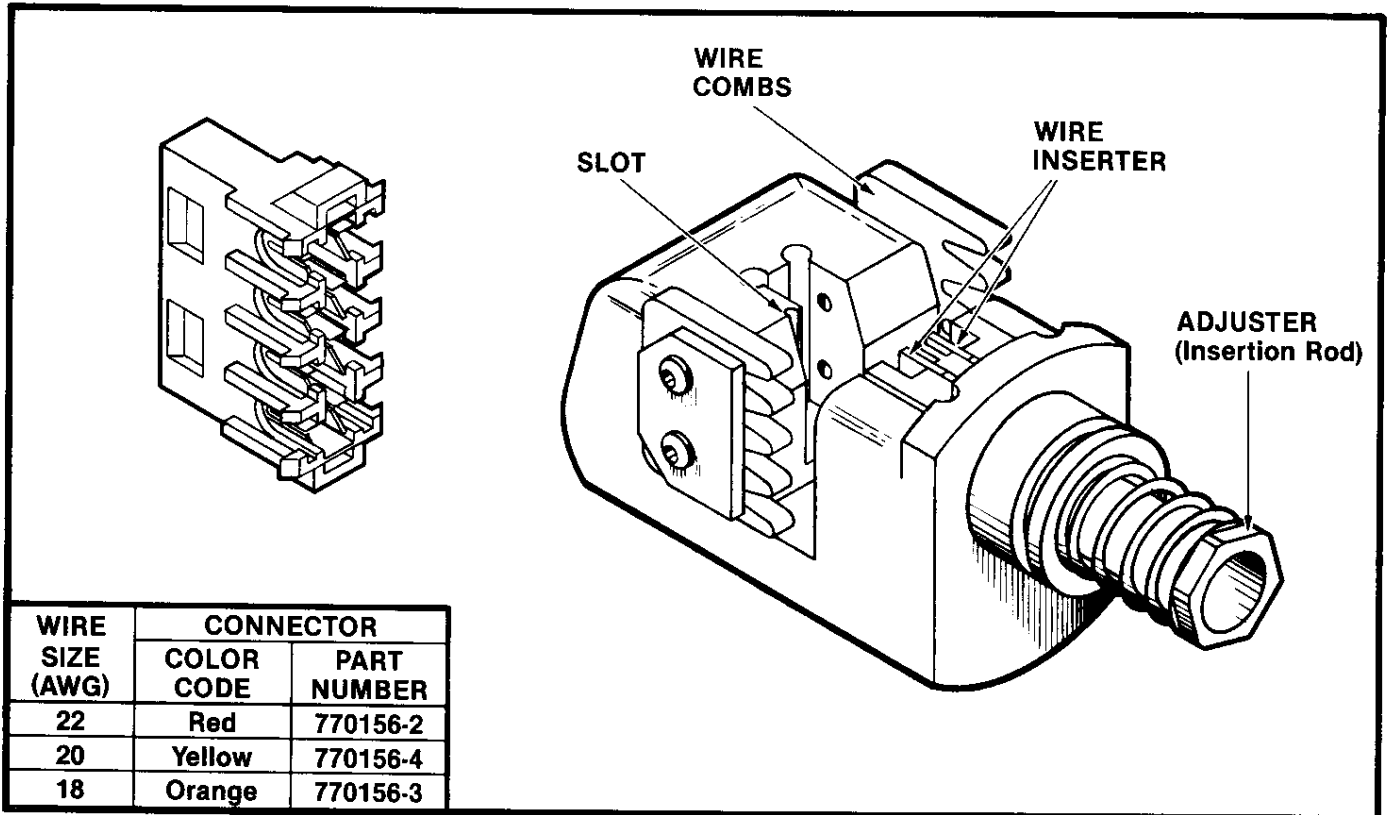


Fig. 1

1. INTRODUCTION

This instruction sheet (IS) covers operation and maintenance of AMP Terminating Head 231894-1. The head is designed to terminate wires in the 4-Position Insulation Displacement Type Commercial MATE-N-LOK Connector having contacts on .200-in. centers. See Figure 1.

The head is used in the AMP Pistol Grip Manual Handle Assembly 58074-1 only. Read these instructions thoroughly before using the head. Refer to Instruction Sheet IS 6790, packaged with the manual handle assembly, for head installation and removal.

NOTE

All dimensions are in inches, unless otherwise indicated.

2. DESCRIPTION

The Insulation Displacement Technique is a method of inserting unstripped wire into a slotted contact beam to form a reliable electrical connection between the wire conductor and the contact.

The head serves as a support for the connector during termination. It is designed to terminate up to

four positions in one cycle. Features of the head (see Figure 1) and their functions are as follows:

Wire Combs — separate and hold the individual wires.

Slot — aligns the connector.

Wire Inserter — forces wires into the two slotted beams of the contacts.

Adjuster (Insertion Rod) — provides and regulates travel of the wire inserter.

3. SETUP ADJUSTMENTS AND TEST

The adjuster (inserter rod) of the wire inserter is preset for wire sizes 18 through 22 AWG.

1. Determine the wire size, and select the appropriate connector. (Connectors are color-coded according to the wire sizes they accommodate.)

2. Place connector in head and make a test termination using procedure described in Paragraph 4, TERMINATING PROCEDURE, Steps 1 through 4.

3. Lift connector out of head.

4. Inspect termination in accordance with Paragraph 5, INSPECTION, Steps 1 through 5.

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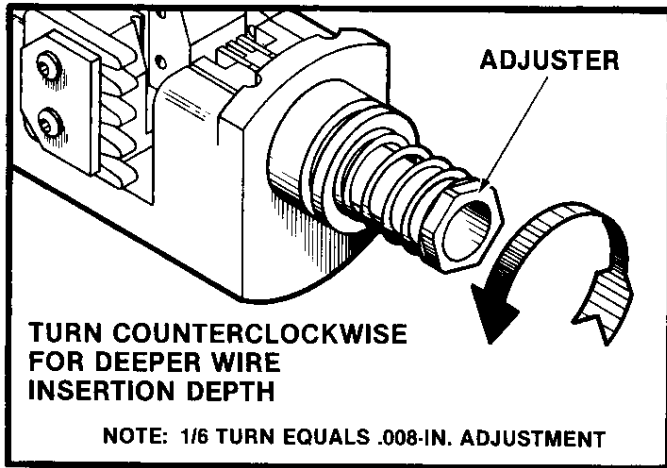


Fig. 2

If the wire is not being inserted deep enough in the contact slot, remove the head and turn the adjuster 1/6 revolution COUNTERCLOCKWISE (see Figure 2). This will increase the wire insertion depth by approximately .008 in. Repeat Steps 2, 3, and 4 above.

4. TERMINATING PROCEDURE (Figure 3)

1. Insert connector into head as indicated. (Note orientation of connector ribs with slot in head.)
2. Dress wires into the wire combs.
3. Squeeze cam handle of pistol grip handle assembly until ratchet releases.
4. Release cam handle. The termination is completed.

5. INSPECTION (Figure 4)

Inspect each termination to ensure the following:

1. Conductor is terminated past the lead-in transition.
2. Contact beams are NOT deformed. If damage is apparent, replace connector.
3. Insulation of wire is NOT nicked or cut in any area other than the two wire slots.
4. Wire extends below the strain-relief features of connector.

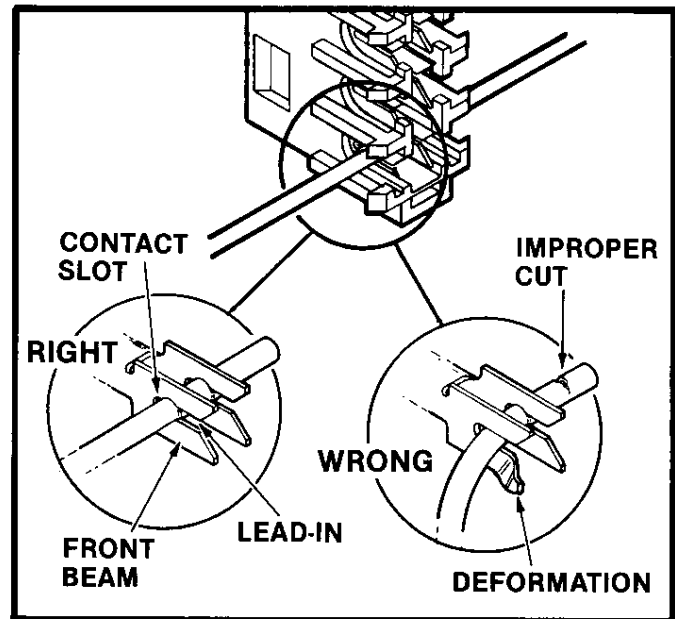


Fig. 4

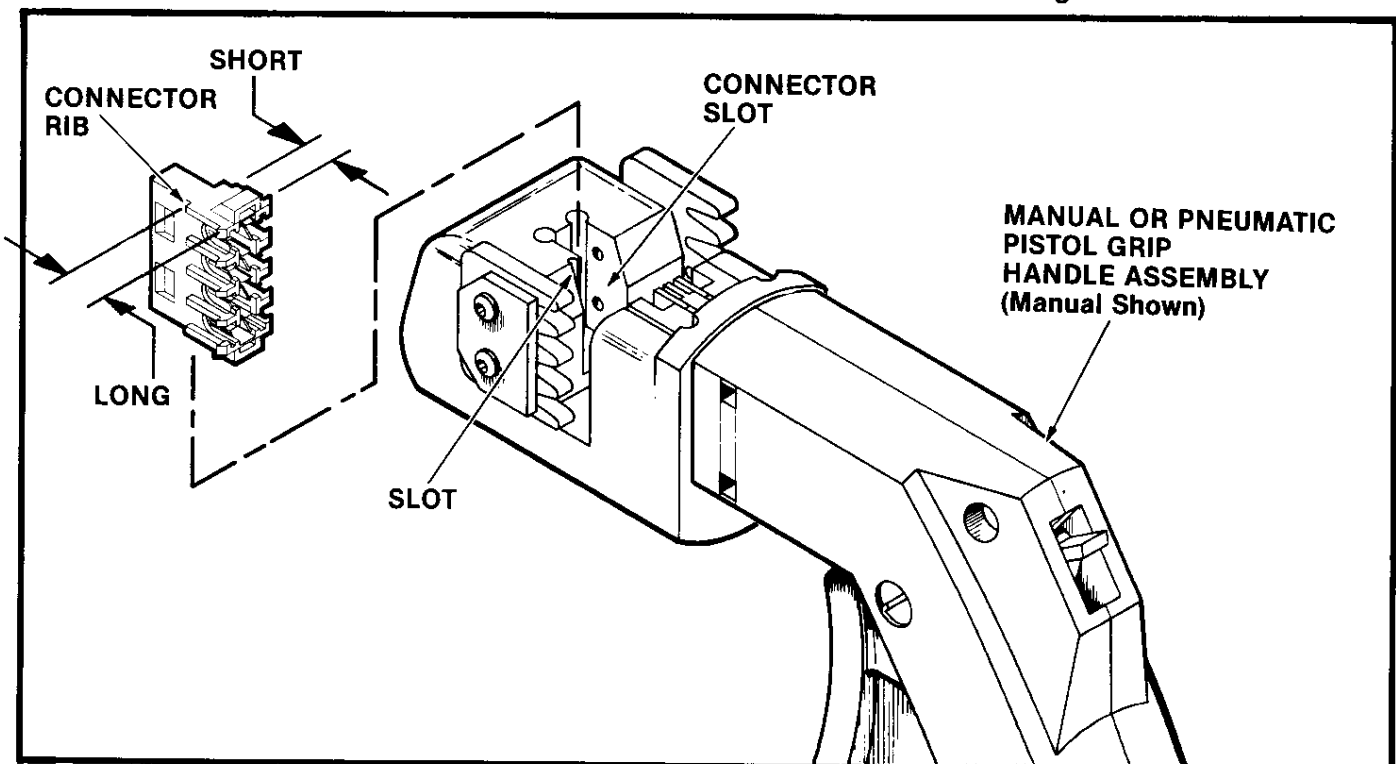


Fig. 3

6. TERMINATING HEAD CERTIFICATION

The procedures described in the following text have been established to assure quality and reliability of AMP terminating heads. A brief check should be made daily, and more detailed inspection should be scheduled by your quality control group.

A. Daily Maintenance

Each operator should be aware of, and responsible for the following:

1. Remove dust, moisture, and other contaminants with a clean brush, or soft, lint-free cloth. Do NOT use objects that could damage the head.
2. Make sure all components are in place and properly secured. (If not, return the head to your supervisor.)
3. Actuate handle assembly to ensure mechanisms inside head move smoothly.

B. Quality Control Maintenance

Regular inspections should be performed by your quality control personnel with a record of quality control inspections remaining with the personnel responsible for the head. We recommend one inspection a month; however, operator training and

skill, amount of use, ambient working conditions, and your company's established standards are all factors in establishing frequency of inspections.

These inspections should be done in the following sequence:

1. Remove any accumulated film with a suitable cleaning agent that will NOT affect plastic material.
2. Make sure all components are in place and properly secured. See Figure 5.
3. Make a few test terminations and inspect the termination in accordance with Paragraph 5, INSPECTION.
4. Check for chipped, cracked, worn, or broken areas. If damage is evident, repair is necessary. See Paragraph 7, REPAIR.

7. REPAIR

Customer replaceable parts are listed in Figure 5. Additional terminating heads can be purchased from:

AMP Incorporated
 P.O. Box 3608
 Harrisburg, PA 17105

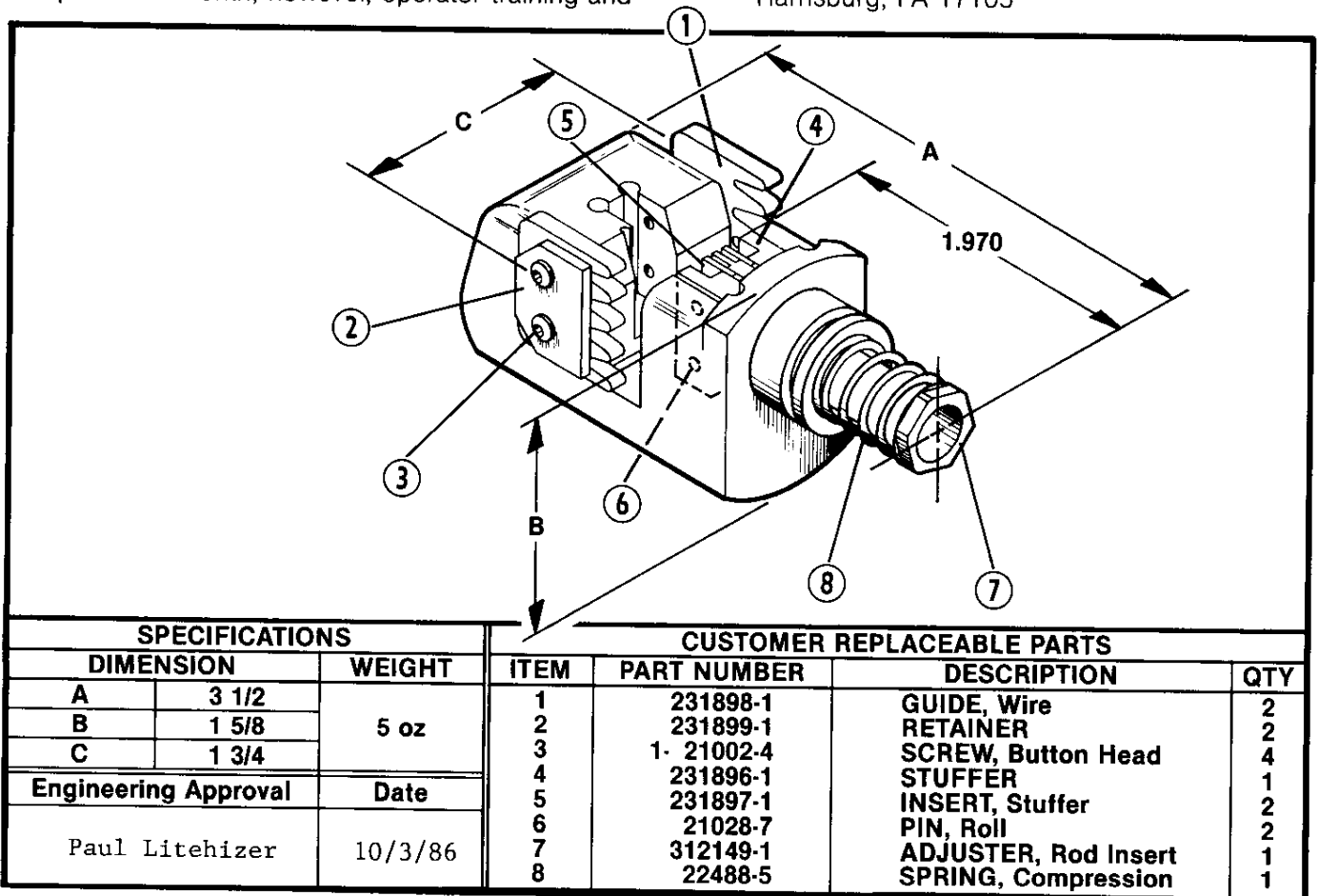


Fig. 5