

WIRE SIZE (AWG)	INSUL DIA RANGE	CONTACT PART NUMBERS			
		PIN		SOCKET	
		STRIP	LOOSE	STRIP	LOOSE
30-26	1.52 [.060] MAX.	794216-1	794224-1	794217-1	794225-1
		794216-3	794224-3	794217-3	794225-3
26-22	1.19-1.75 [.047-.069]	794218-1	794226-1	794219-1	794227-1
		794218-3	794226-3	794219-3	794227-3
22-18 or 22 (x2)	1.50-2.79 [.059-.110]	794220-1	794228-1	794221-1	794229-1
		794220-3	794228-3	794221-3	794229-3
20-16	2.01-3.20 [.079-.126]	794222-1	794230-1	794223-1	794231-1
		794222-3	794230-3	794223-3	794231-3

Figure 1

### 1. INTRODUCTION

This instruction sheet provides assembly and disassembly procedures for AMP\* Mini-Universal MATE-N-LOK 2 Connectors. Connector components are listed in Figure 1.

#### NOTE

All dimensions are in metric units [with U.S. customary units in brackets].

Reasons for reissue are provided in Section 8, REVISION SUMMARY.

### 2. DESCRIPTION

Mini-Universal MATE-N-LOK 2 plug and cap connector assemblies may be used in free hanging or printed circuit (pc) board applications. Plug and cap connector assemblies are fully polarized for proper alignment. Positive locking features prevent accidental disengagement of connector assemblies.

### 3. ASSEMBLY PROCEDURES

1. Select appropriate pin and socket contacts from table in Figure 1. Follow termination procedures shown in Application Specification 114-1111.

2. Rotate back side (wire end) of connector housing 180° along the pivot track, until the first tooth of each latching arm engages; this is the open position. See Figure 2.

#### CAUTION

The wire end of the housing must be in the open position before insertion of terminated contacts.

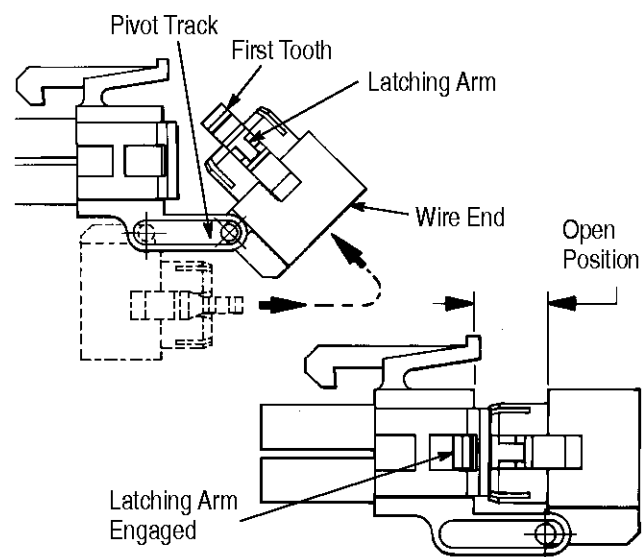


Figure 2

3. Select the appropriate contact cavities. Insert terminated pin or socket contacts into wire side of housing by grasping the wire directly behind the insulation barrel and pushing the contact with a twisting motion into the contact cavity until the contact stops, and the housing cone fingers engage. See Figure 3.

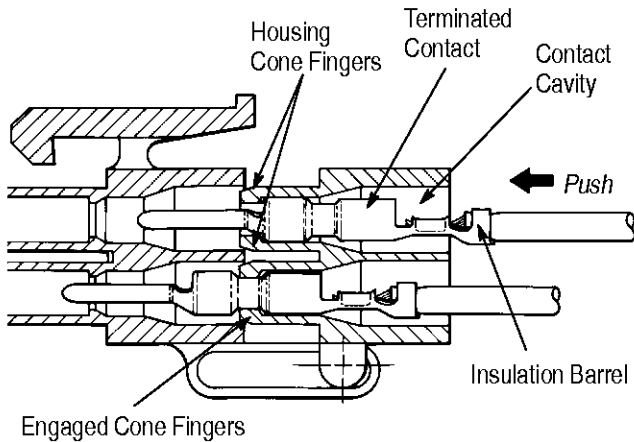


Figure 3

**NOTE** Terminated pin and socket contacts are interchangeable between the plug and cap housing. This feature or keying plugs can be used for additional polarization. For keying plug insertion instructions, see Paragraph 4.

4. After all required contacts and keying plugs have been inserted into the housing, the wire end of the connector must be closed. To close the wire end of the connector housing, grasp the wire end and push forward until the second tooth of each latching arm engages as shown in Figure 4.

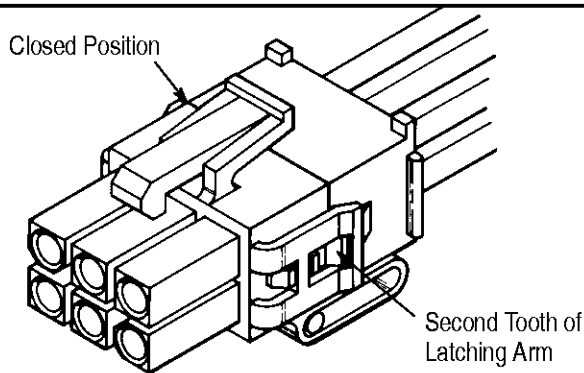


Figure 4

**4. KEYING PLUG**

Keying plugs provide additional polarization for the connectors.

1. Select empty contact cavity of the plug or cap housing to be keyed.
2. With the plug or cap housing in the open position (Figure 2), insert the keying plug into the wire end as shown in Figure 5.

**NOTE** The corresponding contact cavity of the plug or cap housing with a keying plug inserted, must be empty. If not, the keying plug will not engage.

3. If removal of a keying plug is necessary, grip keying plug with fingers or pliers and pull from contact cavity using a twisting motion.
4. After keying plugs have been inserted into the housing, the wire end of the connector must be closed. To close the wire end of the connector housing, grasp the wire end and push forward until the second tooth of each latching arm engages as shown in Figure 4.

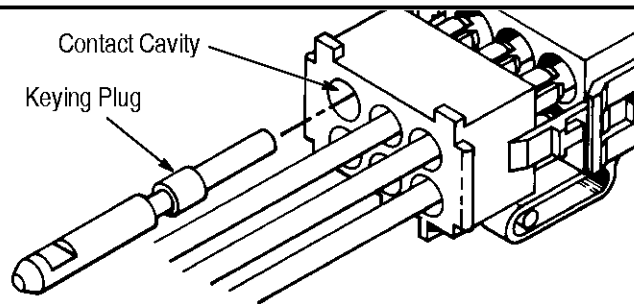


Figure 5

**5. MATING CONNECTORS**

1. Verify the contact positions of the plug and cap connectors are identical.
2. Align and push plug connector into the cap connector until it bottoms and the locking latch engages with the locking tab. See Figure 6.

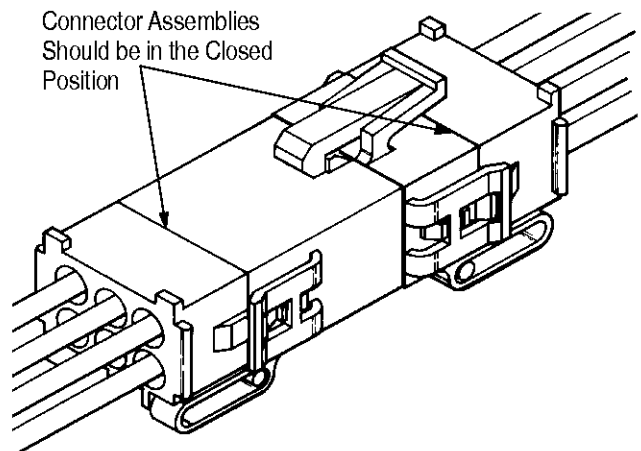


Figure 6

3. Follow Steps 1 and 2 for header plug assemblies. See Figure 7.

Locking Latches and Tabs  
Must be Securely Fastened

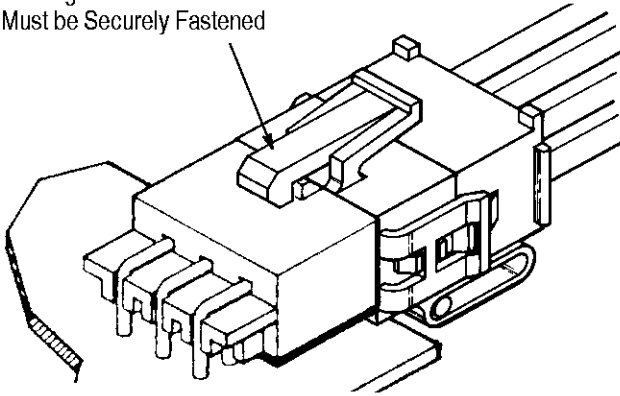


Figure 7

**6. UNMATING CONNECTORS**

To unmate plug and cap connectors, depress locking latch of the plug connector and pull straight away from cap connector. As shown in Figure 8.

Depress Locking  
Latch Here

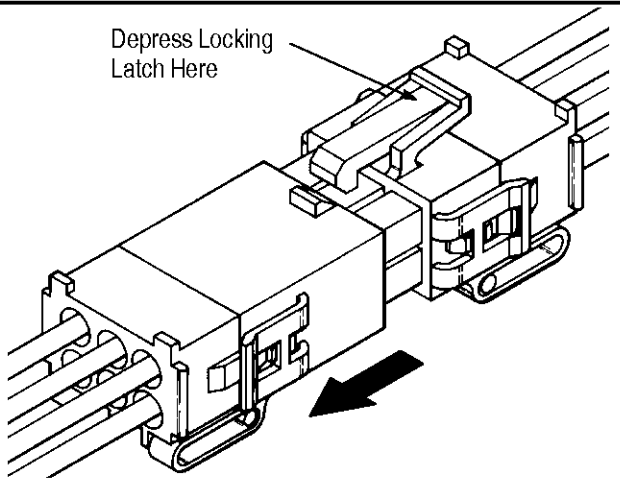


Figure 8

**7. DISASSEMBLY PROCEDURES**

**CAUTION**

To prevent damage to the connector assembly, the wire end must be in the open position before the removal of contacts.

1. Deflect latching ears one at a time, then lightly pull wire end of the plug assembly away from housing until the first tooth of the latching arms engage. See Figure 9.

**CAUTION**

Take care not to over deflect the latching ears.

Open Position

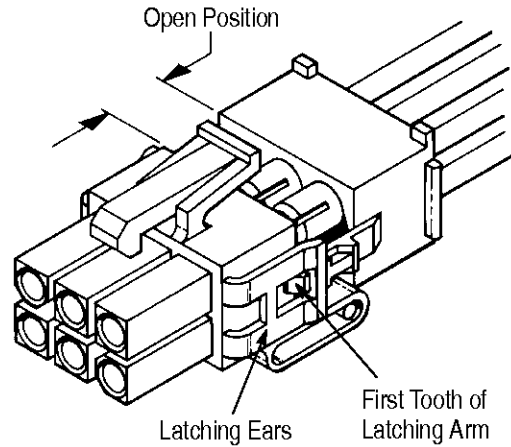


Figure 9

2. Grasp the selected wire by the insulation barrel and pull using a twisting motion until terminated contact is free from housing as shown in Figure 10.
3. Repeat Step 2 for additional contacts.

Terminated Contact

Insulation barrel

Pull →

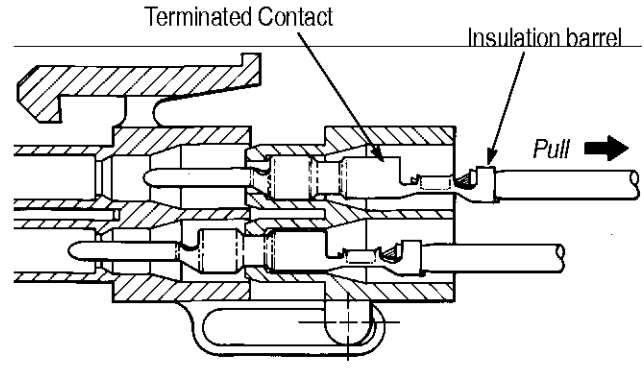


Figure 10

**8. REVISION SUMMARY**

Since the previous release of this instruction sheet, the following changes have been made:

Per EC 0990-1209-98

- Added part numbers to table in Figure 1
- Changed “Latching Lance” to “Latching Arm” in all instances.
- Revised paragraph in section 3.3
- Revised paragraph in section 5.2
- Added CAUTION to section 7
- Revised paragraph in section 7.2



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#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.