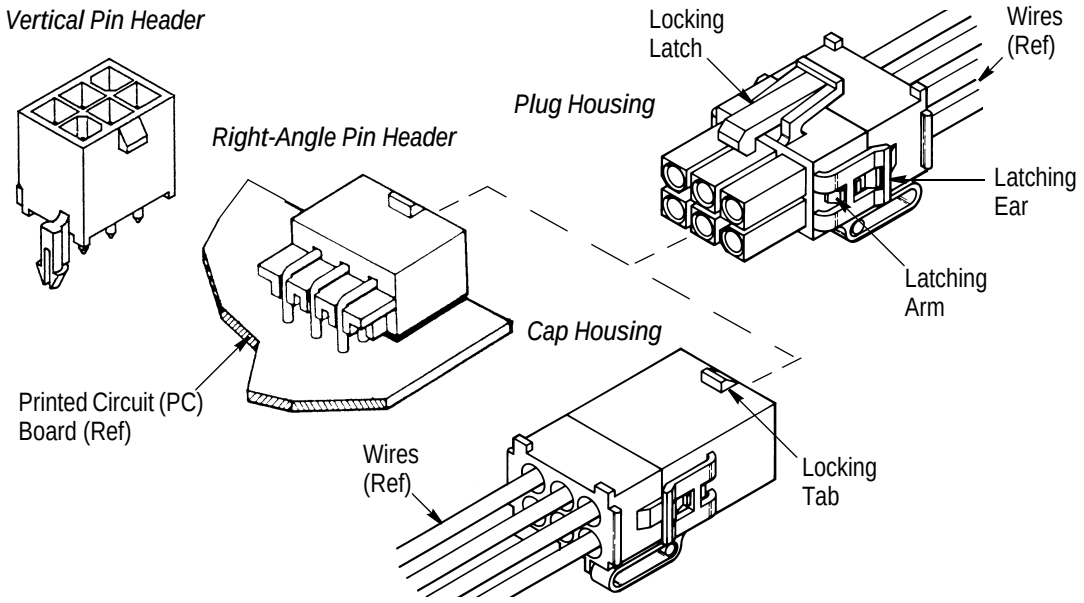
# Mini-Universal MATE-N-LOK* 2 Connectors




| WIRE | | CONTACT | | | |
|---|---|---|---|---|---|
| SIZE RANGE (AWG) | INSULATION DIAMETER RANGE (mm [in.]) | PIN | | SOCKET | |
| | | STRIP | LOOSE PIECE | STRIP | LOOSE PIECE |
| 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 (2) 22 | 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 | 794221-3 | 794231-3 |

*Figure 1*

## 1. INTRODUCTION

This instruction sheet provides assembly and disassembly procedures for Mini-Universal MATE-N-LOK 2 connectors used in free hanging or pc board applications.

NOTE

*Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.*

Reasons for reissue of this instruction sheet are provided in Section 6, REVISION SUMMARY.

## 2. DESCRIPTION (See Figure 1)

The pin header is available in vertical and right-angle configurations. The plug housing and cap housing accept the contacts listed in Figure 1. The housings are polarized for proper alignment when mating. Keying plugs are available to provide additional polarization when mating the connectors. Positive locking features prevent accidental disengagement of mated connectors.

## 3. ASSEMBLY PROCEDURE

### 3.1. Inserting Contacts

1. Select the appropriate pin and socket contacts from Figure 1. Terminate the contacts according to Application Specification 114-1111.

2. Rotate the wire end (back) of the housing 180 degrees along the pivot track until the first tooth of each latching arm engages — the housing is in the open position. See Figure 2.

CAUTION

*The wire end of the housing must be in the open position before inserting the contacts.*

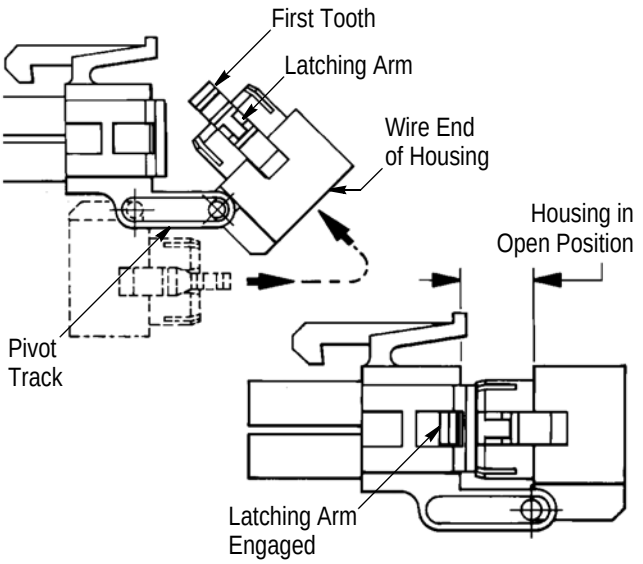



*Figure 2*

3. From the wire end of the housing, align each terminated pin or socket with the appropriate contact cavity. Then grasp the wire directly behind the contact insulation barrel and push the contact with a twisting motion into the contact cavity until the contact stops and the housing cone fingers engage. See Figure 3, Detail A.

NOTE

*Terminated pin and socket contacts are interchangeable between the housings. This or keying plugs can be used for additional polarization when mating the connectors.*

4. After all required contacts and keying plugs have been inserted into the housing, move the housing to the close position. Grasp the wire end of the housing and push it until the second tooth of each latching arm engages as shown in Figure 3, Detail B.

## 3.2. Inserting Keying Plugs

1. Select an empty contact cavity of the housing to be keyed. Ensure that the corresponding contact cavity of the mating housing is empty. If it is not, the keying plug will not engage.

2. With the housing in the open position (refer to Figure 2), insert the keying plug into the wire end of the housing. See Figure 4.

If removal of the keying plug is necessary, manually or using pliers, grip the keying plug, and pull it from the contact cavity using a twisting motion.

*Contact Insertion*

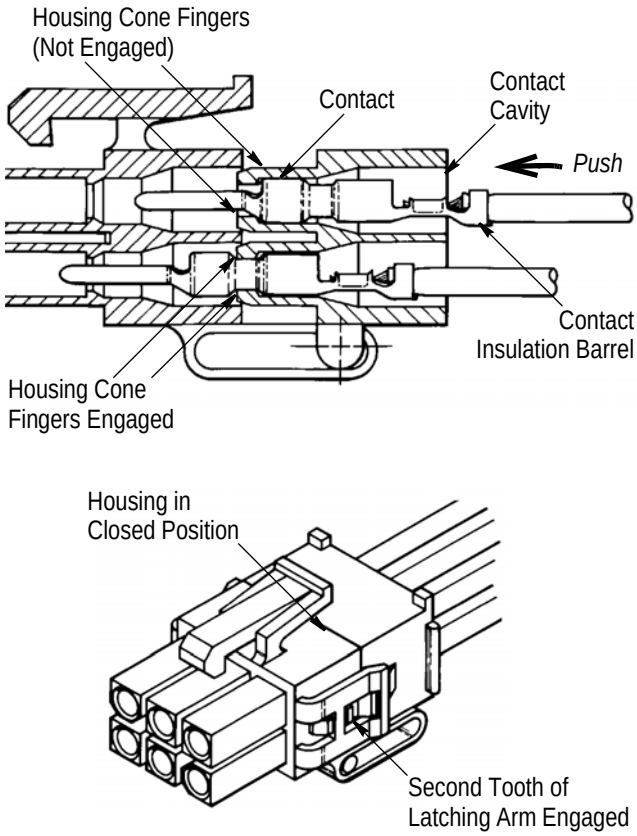



*Figure 3*

3. After all keying plugs have been inserted into the housing, move the housing to the closed position. Grasp the wire end of the housing and push it until the second tooth of each latching arm engages (refer to Figure 3).

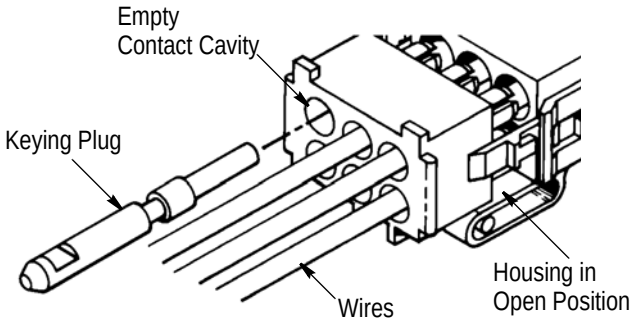



*Figure 4*

## 3.3. Mating Connectors

1. Verify that the contact positions of the mating connectors are identical.

2. Align and push the housing into the mating connector until it bottoms and the locking latch engages with the locking tab. See Figure 5.

*Connector Mating*

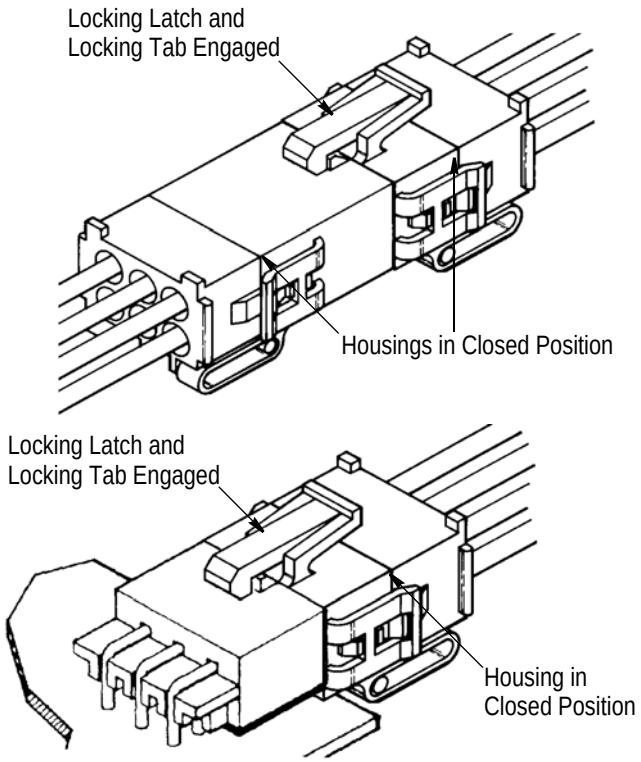



*Figure 5*

## 4. DISASSEMBLY PROCEDURE

### 4.1. Unmating Connectors

Depress the locking latch of the housing and pull the housing straight away from the mating connector. See Figure 6.

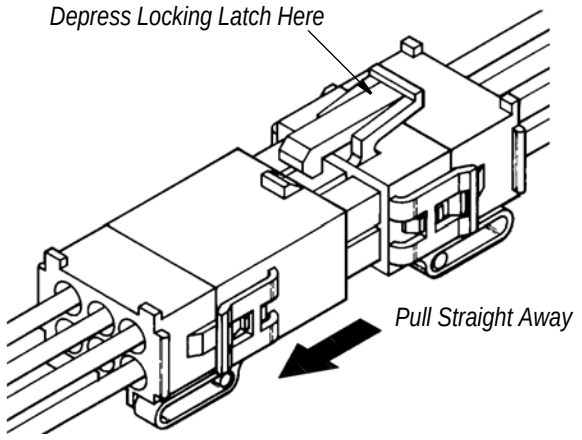



*Figure 6*

### 4.2. Extracting Contacts

CAUTION

*To prevent damage to the connector, the housing must be in the open position before removing any contacts.*

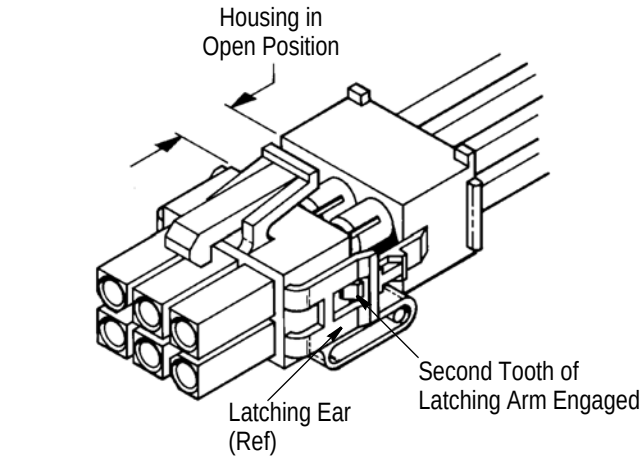
1. Deflect the latching ears one at a time, then lightly pull the wire end of the housing away from the housing until the first tooth of the latching arms engage. See Figure 7.

CAUTION

*Take care not to over deflect the latching ears.*

2. Grasp the contact insulation barrel and pull it using a twisting motion until the contact is free from housing. Refer to Figure 7.

*Contact Extraction*



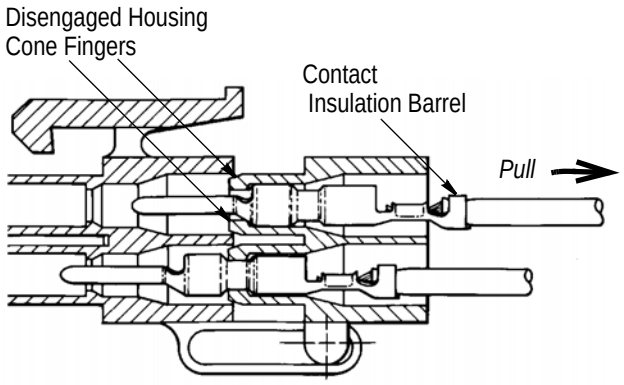




*Figure 7*

## 5. REPLACEMENT AND REPAIR

The connectors and contacts are not repairable. DO NOT use defective or damaged product. DO NOT re-use the contacts by removing the wire.

## 6. REVISION SUMMARY

Revisions to this instruction sheet include:

- Changed company name and logo
- Added Section 5