

Figure 1

1. INTRODUCTION

This instruction sheet covers contact insertion and extraction and connector assembly and disassembly procedures for 40-Position Hybrid Harness Connector Assemblies 1488846-[]. These connector assemblies accept 1.5-mm, 2.8-mm, and 6.35-mm contacts.

NOTE Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

NOTE For contact termination requirements, refer to Application Specifications 114-13091 for 1.5-mm contacts and 114-13013 for 2.8-mm contacts. 6.35-mm contacts are manufactured by Lear Corporation (not available from Tyco Electronics).

NOTE For connector assembly mating and unmating procedures, refer to Instruction Sheet 408-8769.

Lear is a trademark of Lear Corporation.

Reasons for reissue of this instruction sheet are provided in Section 5, REVISION SUMMARY.

2. DESCRIPTION

Each connector assembly consists of a housing, terminal position assurance (TPA), and rotating locking lever. Three types of optional wire covers; 90° wire exit (wires exit horizontally from back of wire cover), 180° wire exit (wires exit vertically from wire cover), and 180° WK wire exit (wires exit from wire cover vertically and out from the sides) are available separately. See Figure 1.

The housings provide 40 possible positions (contact cavities) for contact placement: 20 positions for 1.5-mm contacts, 12 positions for 2.8-mm contacts, and 8 positions for 6.35-mm contacts. Some or all of these contact cavities may be used.

The connector assembly is supplied with the TPA and the rotating locking lever in the pre-lock (horizontal) position. A visual inspection of the housing will show small (1.5-mm), medium (2.8-mm), and large (6.35-mm) contact cavities.

3. ASSEMBLY

3.1. Contacts

1. Crimp the contacts according to the requirements given in the applicable application specification (114-series).
2. Position the housing so that the rotating locking lever is on the top and the TPA is on the bottom. Make sure that the rotating locking lever is in the pre-lock position (horizontal and moved out of the way) and the TPA is in the pre-lock position (protrudes slightly from the bottom of the housing). See Figure 2, Detail A.
3. Select the contact cavities for the contacts.
4. Align the locking shoulder of the contact with the contact latch of the housing, and push the contact into the contact cavity until there is tactile feed-back and an audible click. Refer to Figure 2, Detail A.
5. Repeat Step 4 until all contacts are inserted into the housing.

3.2. Locking the TPA

After all the contacts have been inserted, push the TPA until it is flush with the bottom of the housing. There will be a tactile feed-back and an audible click when both sides of the TPA have locked in place. See Figure 2, Detail B.

3.3. Installing the Wire Cover

1. Position the housing so that it is resting on the TPA with the wires exiting from the top of the housing. Refer to Figure 3, Detail A.
2. Ensure that the rotating locking lever is in the pre-lock (horizontal) position (it should already be in this position from when contacts were installed).
3. Collectively move the wires away from the sides of the housing, then position the locking beams of the wire cover over the locking ramps of the housing.
4. Push down on the wire cover until all four locking beams and ramps provide a tactile feed-back and audible click. The wire cover is now secure. See Figure 3, Detail B.

3.4. Locking the Rotating Locking Lever

1. Push down on the front locking latch of the wire cover to release the rotating locking lever of the housing. See Figure 4, Detail A.
2. Rotate the rotating locking lever to an upright vertical position so that it locks behind the top locking latch of the wire cover. See Figure 4, Detail B.

3.5. Installing Strain Relief

Tape, cable ties, or wire ties may be used to provide extra stability for the wire bundle. A typical strain relief application is shown in Figure 4, Detail B.

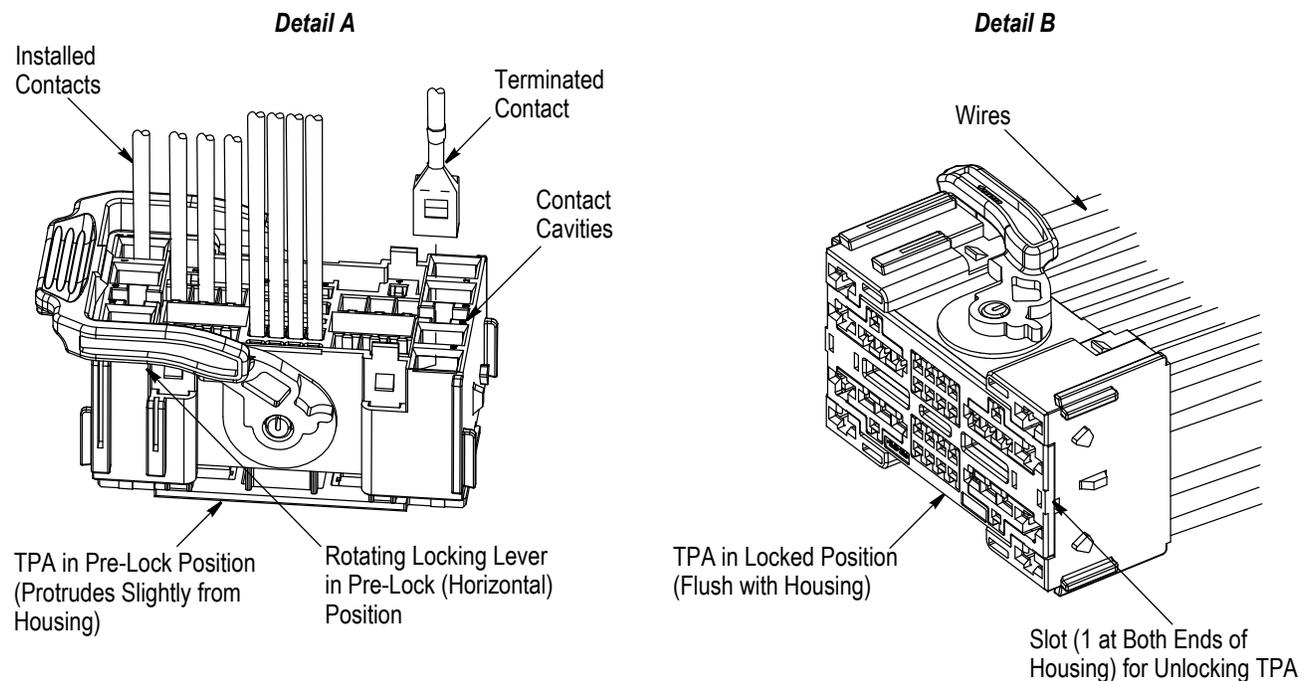
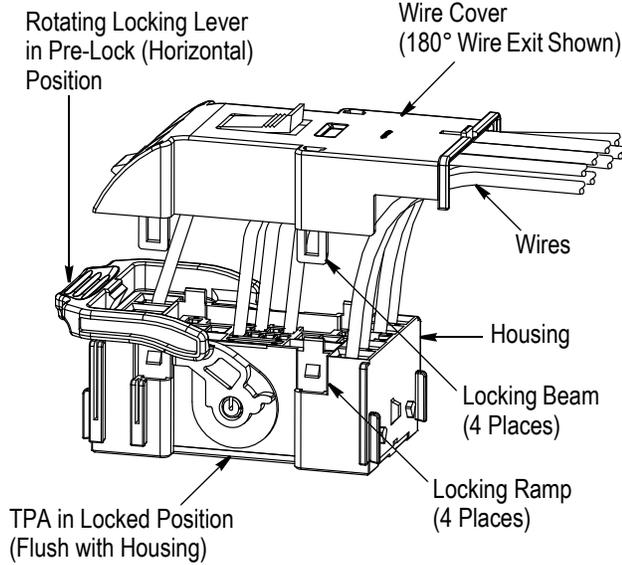


Figure 2

Detail A



Detail B

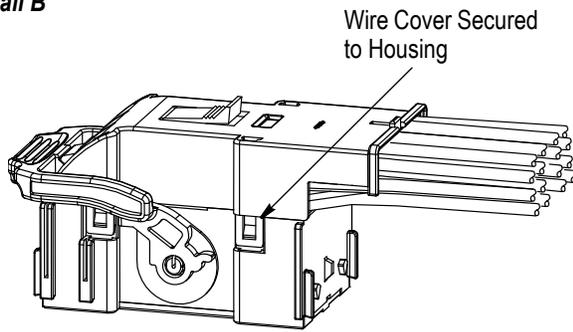
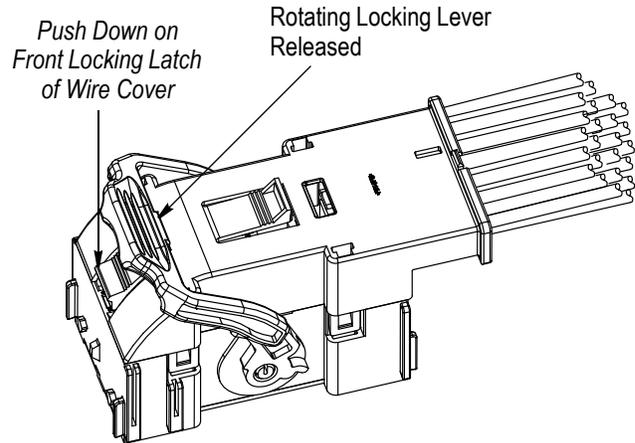


Figure 3

Detail A



Detail B

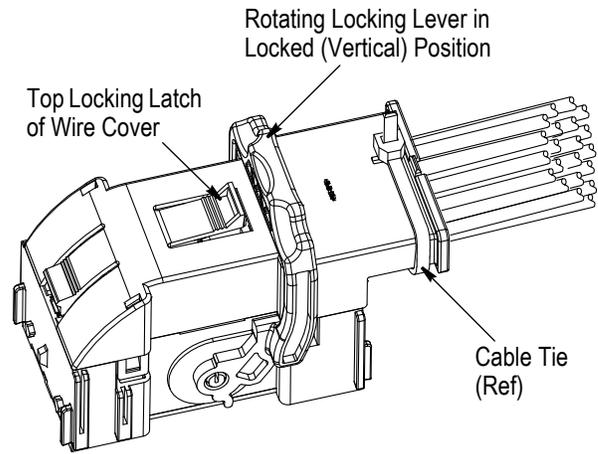


Figure 4

4. DISASSEMBLY

4.1. Unlocking the Rotating Locking Lever

1. If used, cut or remove the strain relief from the bundle of wires.



CAUTION DO NOT nick or cut the insulation of the discrete wires during the removal of the strain relief.

2. With the TPA facing downward, push on the top locking latch of the wire cover to disengage the rotating locking lever (refer to Figure 4, Detail B).
3. Rotate the rotating locking lever to the pre-lock (horizontal) position until it "clicks" past the front locking latch of the wire cover (refer to Figure 4, Detail A).

4.2. Removing the Wire Cover

1. Using Extraction tool 755430-2 or a similar jeweler's screwdriver, carefully pry the locking beams of the wire cover away from the locking ramps of the housing (refer to Figure 3, Detail B).
2. Separate the wire cover from the housing (refer to Figure 3, Detail A).

4.3. Unlocking the TPA

Orient the housing so that the TPA is on top. Using the extraction tool, pry the TPA to the pre-lock (horizontal) position using the two slots located at the end of the housing (refer to Figure 2, Detail B). The TPA will protrude slightly from the bottom of the housing.



CAUTION DO NOT force the TPA; otherwise, it will separate from the housing.

4.4. Removing the Contacts

To remove damaged contacts or re-locate contacts, proceed as follows:

1. With the TPA facing you, insert the tip of the extraction tool into the selected contact cavity and rotate the extraction tool until it disengages the contact latch from the contact. See Figure 5, Detail A.
2. Gently pull back on the wire of the contact to be removed, and pull the contact from the housing. See Figure 5, Detail B.



DO NOT use damaged contacts. If a damaged contact is evident, removed it, cut it from the wire, and replaced it with a new one.

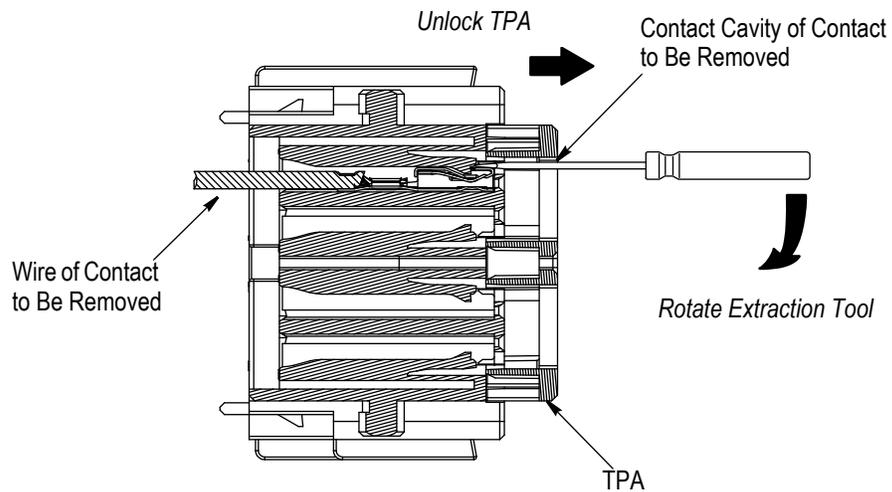
5. REVISION SUMMARY

Revisions to this instruction sheet include:

- Updated instruction sheet to corporate requirements
- Replaced superceded part numbers for connector assemblies
- Corrected part number in Section 1
- Replaced dimension with 'slightly' for TPA position in previous Step 6 of Section 4
- Combined previous Figure 5 with Figure 4
- Combined previous Figure 6 with Figures 2 and 3

Removing Contacts

Detail A



Detail B

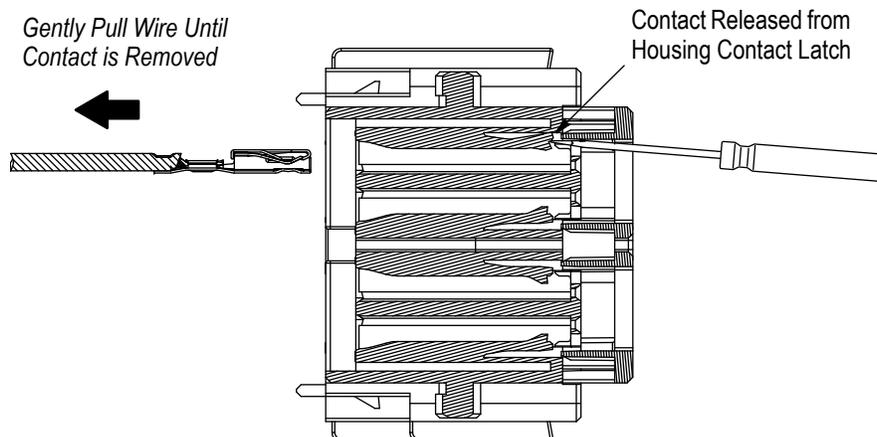


Figure 5