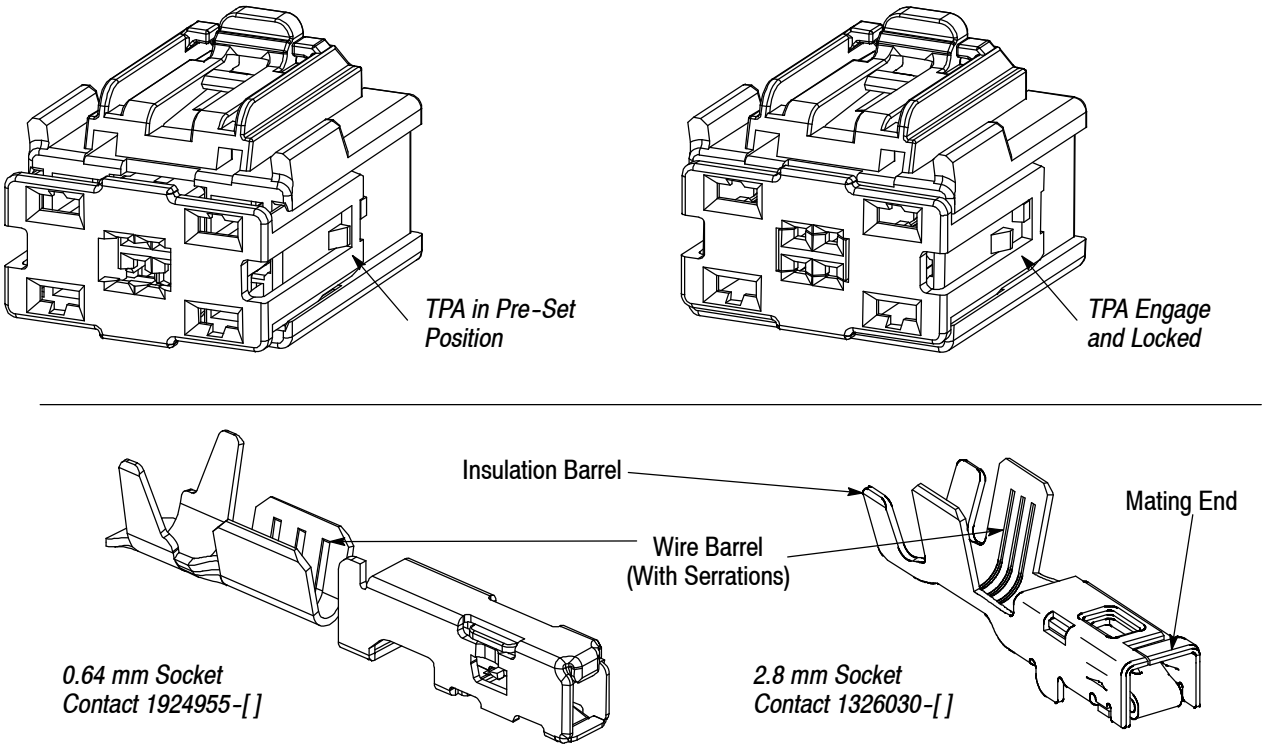


Figure 1

1. INTRODUCTION

This instruction sheet provides information on the assembly procedures for the Generation Y Unsealed Hybrid 0.64 mm/2.8 mm Contacts and Connectors. See Figure 1.

NOTE

All dimensions on this document are in metric units. Figures and illustrations are for reference only and are not drawn to scale.

Read these instructions carefully before attempting any assembly procedures. Also refer to Application Specifications 114-13013 (2.8 mm Contacts) and 114-13183 (0.64 mm Contacts) for termination requirements.

2. DESCRIPTION

Figure 1 provides the components required to make the assembly in this instruction sheet. Contact material is made from a copper alloy, pre-plated with tin or bright tin. The connector housings are made from glass filled thermoplastic materials.

3. ASSEMBLY PROCEDURES

3.1. Tooling

Refer to Application Specifications 114-13013 and 114-13183 for specific manual and semi-automatic termination tooling for the 0.64 mm and 2.8 mm socket contacts.

3.2. Contact Assembly

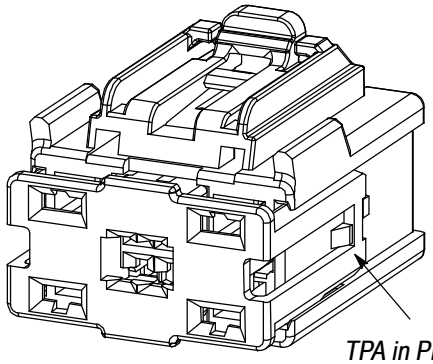
The following procedures provides the details of the contact installation into the connector housing.

1. Terminate the contacts to the correct wire size according the the information provided in the specific application specifications.

NOTE

The connector housings are shipped with the TPA in an open position, however, during shipping, the TPA may become closed. Make sure the locks are in the OPEN position before any contacts can be inserted into those contact cavities. See Figure 2. Refer to Instruction Sheet 408-10134 for information on resetting the TPA.

A



B

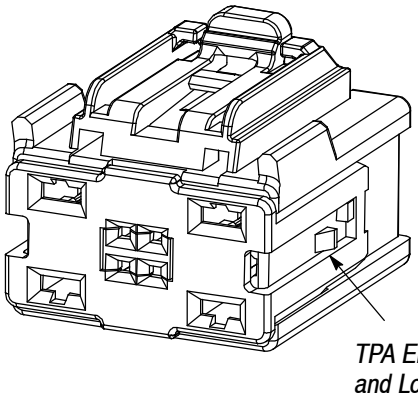


Figure 2

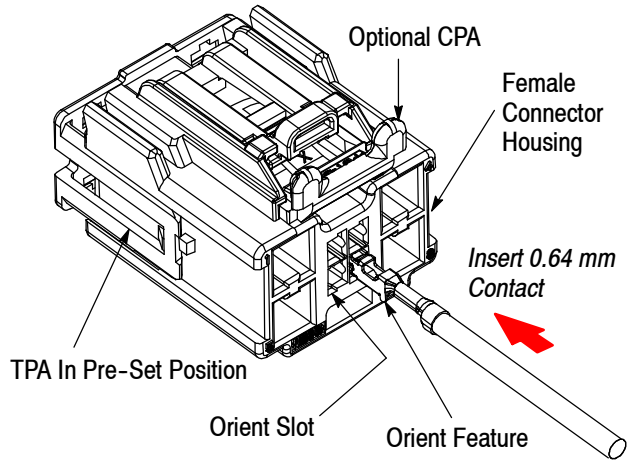
2. The terminated contact must be aligned with the contact cavity at the wire end of the connector and oriented as shown. See Figure 3. Terminals will only easily go into cavity in one orientation.

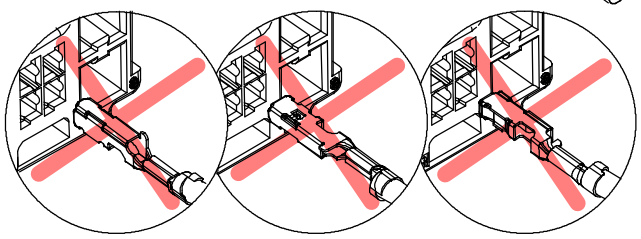
3. Each contact must be inserted into a contact cavity until the connector primary latch engages the contact. See Figure 3. (There should be an audible and tactile click which indicates that the contact has been fully inserted.) Pull back gently to ensure the contact has been locked in place. See Figures 3A, 3B, 3C, and 3D.

4. The TPA is in the CLOSED position when the locking latches are fully secure to the locking tabs. After all desired contact positions are loaded, if the TPA does not snap to the closed position with an audible and tactile feedback, and sit flush with the adjacent surfaces of the connector body, it is likely that one or more contacts are not fully installed. The TPA is the detection for partially installed terminals. Re-open the TPA and push/pull on the wire of each contact to ensure they are fully inserted and engaged with the primary contact latch in each cavity. See Figures 3E and 3F.

Contact Assembly Instructions

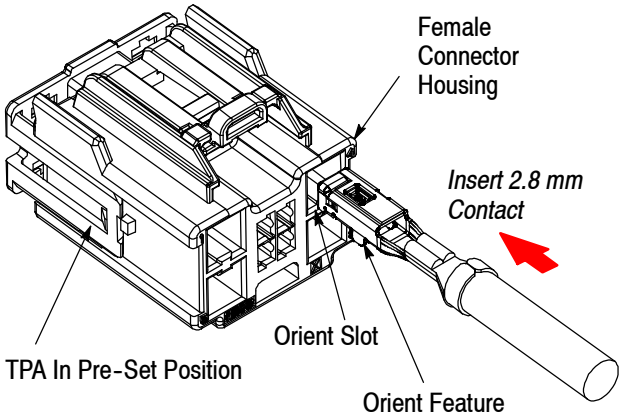
A

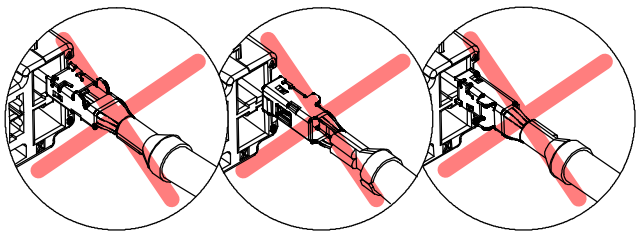




Incorrect Orientations

B





Incorrect Orientations

Figure 3 (cont'd)

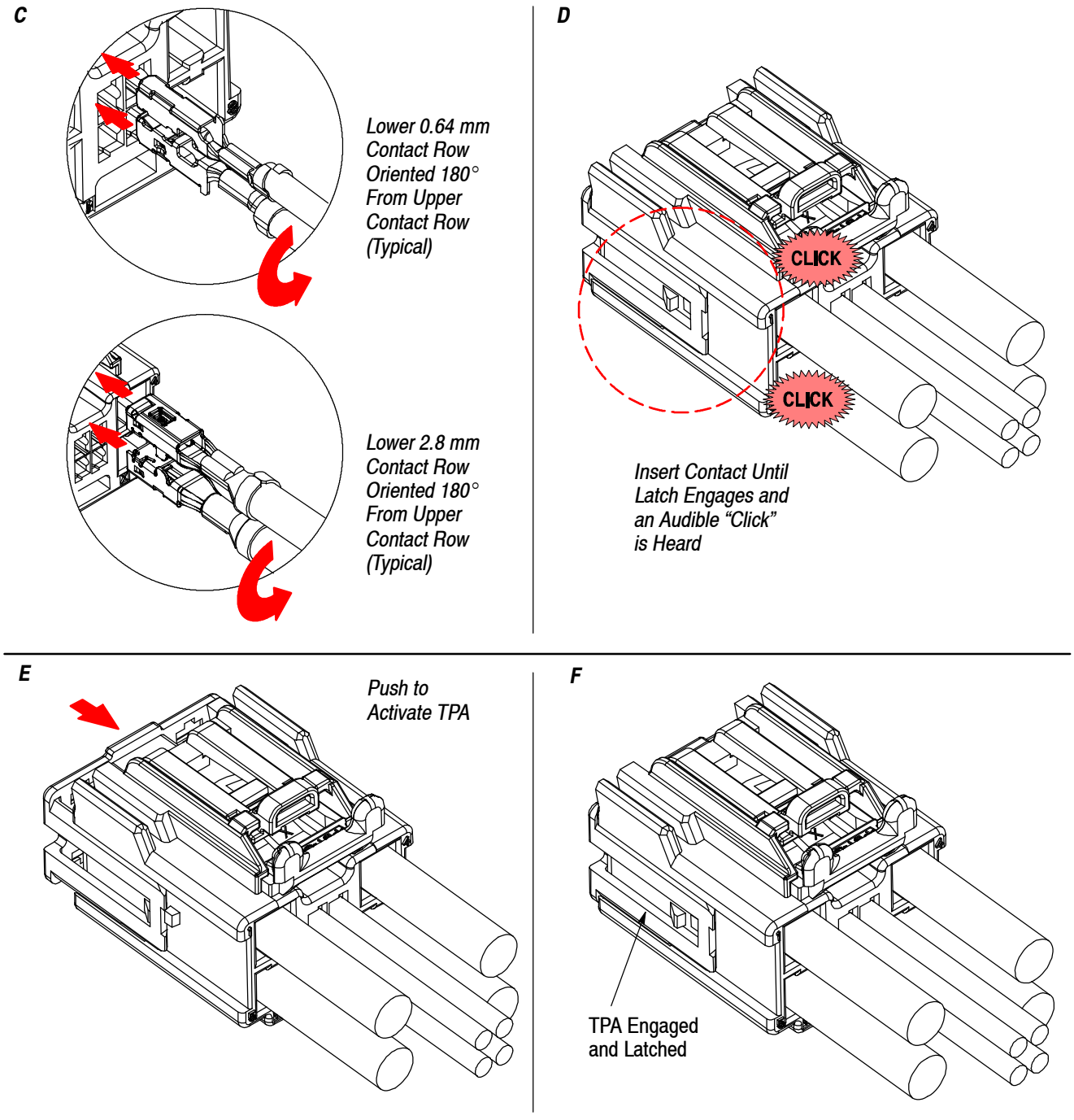


Figure 3 (end)

3.3. Contact Removal

The TPA (for the corresponding contact cavities) must be removed before any contacts can be removed from those contact cavities. The locking latches must be released from the locking tabs to open the TPA (a small jewelers screwdriver with a maximum width of 4.0 mm must be used). The TPA must not be rotated beyond the limit.

CAUTION

Care must be taken not to damage the locking features with the tool.

The locking lance of the contact must be released from the contact cavity before the contact can be removed from the socket connector. A suitable tool, (see Figure 4), must be inserted into the corresponding contact removal window to release the

contact locking lance, and the wire must be pulled *gently* to remove the contact from the socket connector.

1. Insert contact removal tool (as detailed in Figure 4) or a jewelers/flat-bladed screwdriver (1.0 mm width) into the selected exposed contact cavity, as shown in Figure 5.

2. Grasp the wire of the contact to be removed and push the contact forward until it stops.

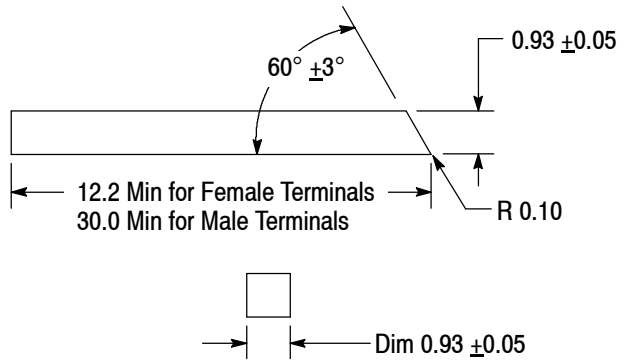


Figure 4

3. Using the contact removal tool or jewelers/flat-bladed screwdriver, gently deflect the retention finger. See Figure 5.

4. Simultaneously pull the wire and contact from the plug housing.

5. Follow Steps 1 through 4 for remaining contacts.

4. REPOSITIONING REMOVAL PROCEDURE

1. Tyco Electronics recommends placing a flat-bladed screwdriver with a 3.0-5.5 mm [.118-.217 in.] width in the gap between the housing and behind the tab on the TPA. See Figure 5.

2. Rotate the tool toward the connector housing to "pop" the TPA into the pre-latched (disengaged) position.

3. Place the tool tip in the gap between the housing and the TPA, pulling the corners forward, individually to disengage the side latches if needed. See Figure 5.

4. To remove the TPA from the housing, repeat Step 3 with TPA in the pre-latched position. Grasp the TPA with your fingers and pull forward while rotating the side latches.

NOTE

Disengage each side before pulling the TPA off.

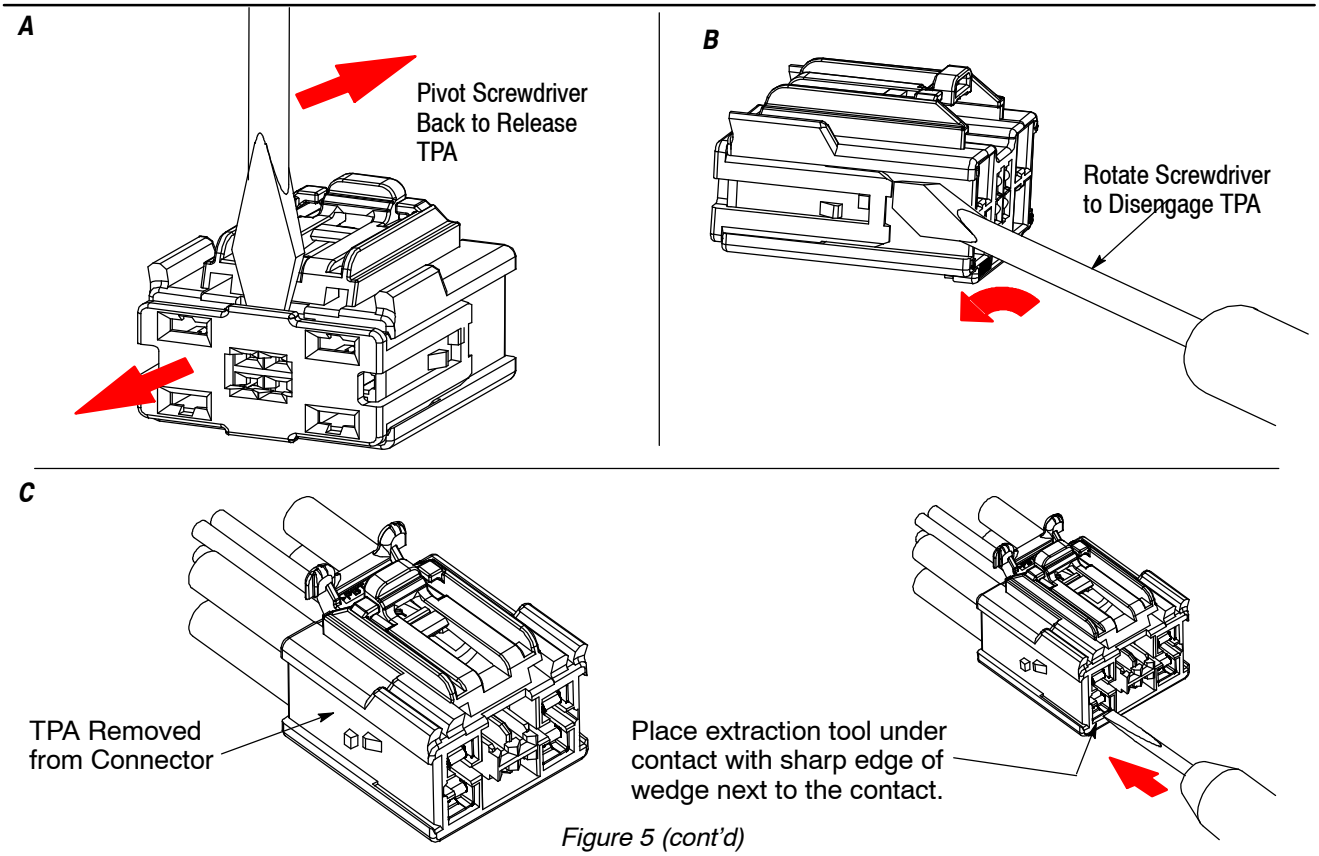
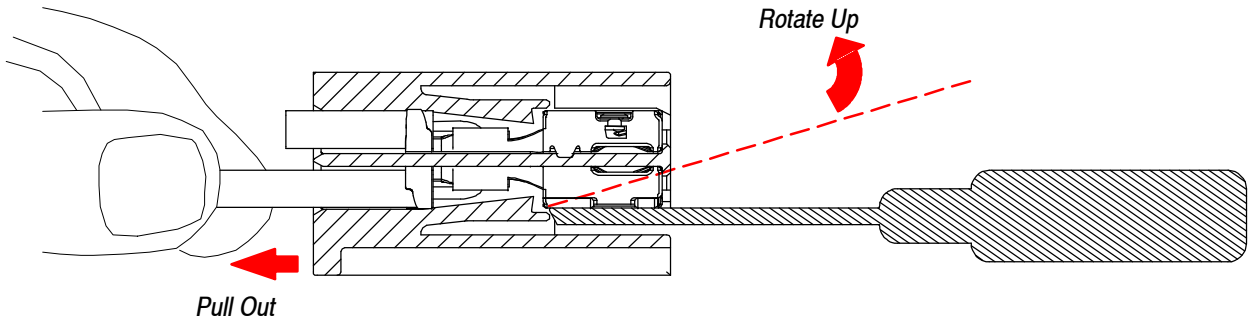


Figure 5 (cont'd)

D



Gently press tool toward the contact latching beam while simultaneously pulling out on wire.

Figure 5 (end)

Mating Instructions - with CPA

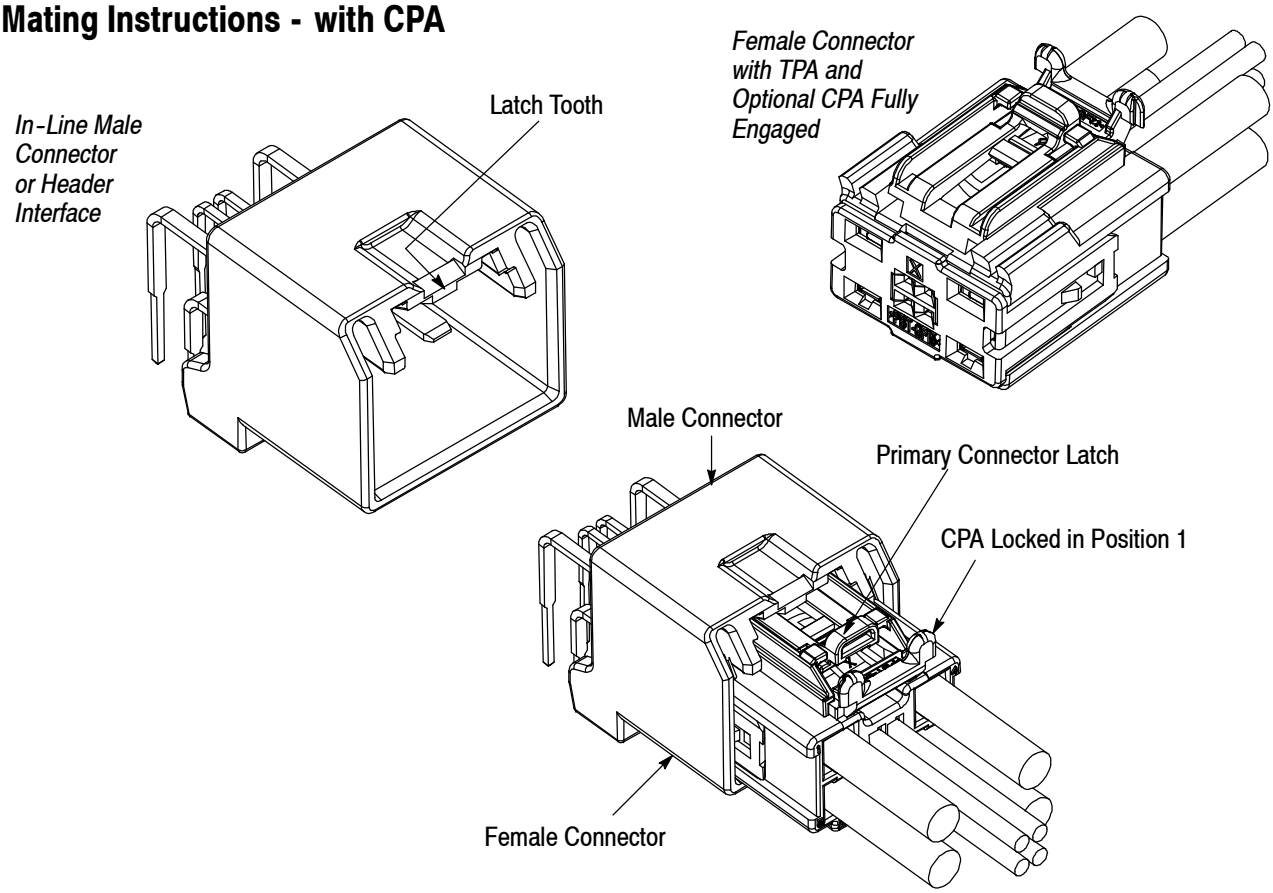


Figure 6

CAUTION

DO NOT re-use damaged or worn contacts. Instead, replace them with new contacts and discard the old ones.

5. MATING AND UNMATING PROCEDURES

5.1. Mating Instructions with Optional CPA

Optional CPA is locked in Position 1 for shipping and handling before engaging the primary connector latch.

CPA can not move forward or backward until the connectors are mated and the primary connector latch “clicks” and engages the interface latch tooth. See Figure 6.

1. The TPA must be in the locked position before connector will move. See Figure 6.

2. To mate connector, push on housing base or sides only. Do not push CPA forward until primary connector latch “clicks” and engages the interface latch tooth. See Figure 7.

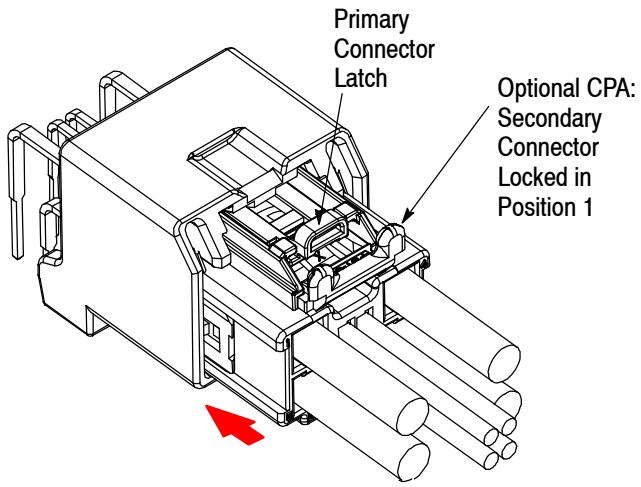


Figure 7

3. To lock CPA after connector mate, push CPA forward until an audible “click” is heard. See Figure 8.

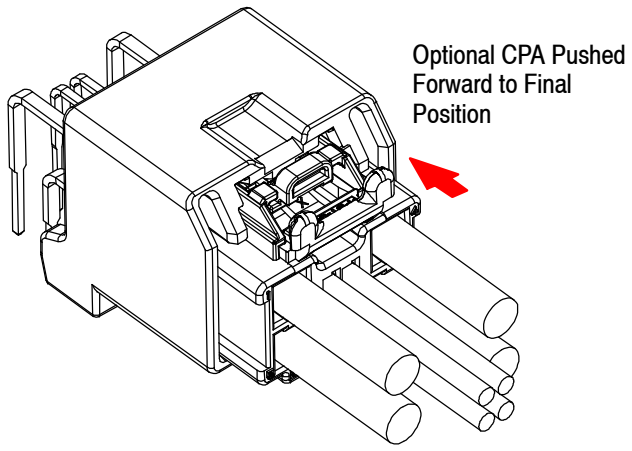


Figure 8

5.2. Unmating Procedures with Optional CPA

1. To unmate the CPA, lightly pull the CPA back to Position 1 (pre-installed position), until an audible “click” is heard. See Figure 9.

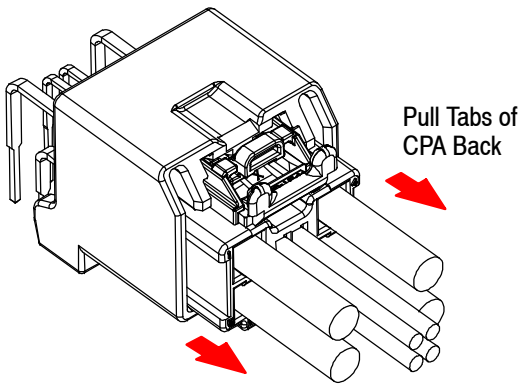


Figure 9

2. To unmate the connector, with the CPA in Position 1, depress the primary connector latch, then simultaneously pull the connector/wires while gripping the housing with the thumb, index finger, and palm (wire bundle). See Figure 10.

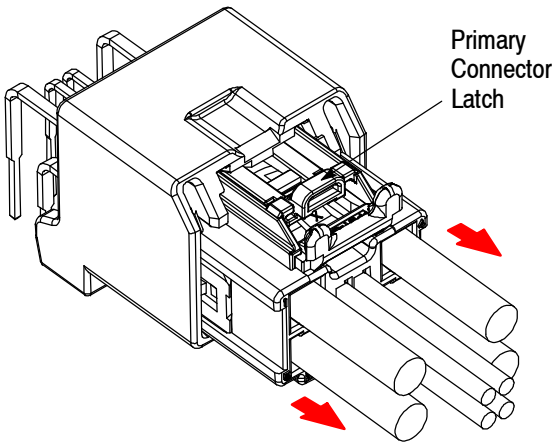


Figure 10

6. REVISION SUMMARY

- Initial release of document