

CONTACT

PART NUMBER	DESCRIPTION	WIRE SIZE RANGE
1924727-1	0.64mm Female Terminal	22-20 AWG
1924727-2	0.64mm Female Terminal	18 AWG
1924727-3	0.64mm Female Terminal	0.13mm ²
1924727-4	0.64mm Female Terminal	0.35mm ²
8100-4443H	2.8mm Terminal (US280, S8)	0.35-0.5 mm ²
8100-4444H	2.8mm Terminal (US280, M8)	0.75-1.0 mm ²
8100-4445H	2.8mm Terminal (US280, L8)	1.50-3.0 mm ²

H Sumitomo product — not available from TE Connectivity

Figure 1

1. INTRODUCTION

0.64/2.8mm Unsealed Hybrid Plug Assemblies 2098067-[] accept the contacts listed in Figure 1 and mate with printed circuit (pc) board mounted or free-hanging receptacle assemblies. These instructions cover assembly (inserting the contacts into the housing and mating the connectors) and disassembly (unmating the connectors and extracting the contacts from the housing) procedures.

Extraction Tool 1452426-1 is required for extraction of the contacts; or a flat blade screwdriver with a tip having a width between 1.2 and 1.4 mm can be used to remove the 2.8mm contacts.

NOTE

Dimensions in this instruction sheet are in metric units. Figures are not drawn to scale.



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2. DESCRIPTION (Refer to Figure 1)

The plug assembly features a housing with a locking latch and a secondary lock plate (SLP), contact cavities for 0.64mm contacts and contact cavities for 2.8mm contacts.

The contact cavities are polarized to prevent the contacts from being inserted upside-down. When inserted into the housing, the contact deflects the housing retention finger, locking the contact into place. After all contacts are inserted, the SLP is used to ensure that the contacts are fully seated and to provide additional contact retention. The plug assembly is shipped with the SLP in the pre-set (OPEN) position. The SLP is actuated when moved to the final-lock (CLOSED) position.

When mating connectors, the locking latch engages the locking tab of the mating receptacle assembly and prevents separation.

3. ASSEMBLY PROCEDURE

3.1. Inserting Contacts

The following procedure assumes that the contacts have been properly crimped. For the 0.64mm contacts, refer to Application Specification 114-13183 for detailed inspection requirements. Proceed as follows:

- If the SLP of the plug assembly is *not* in the OPEN position, move it to the OPEN position (as described in Paragraph 4.2, Step 2).
- Grasp the wire of the terminated contact approximately 19 mm behind the contact insulation barrel. Refer to Figure 2 and align the contact with the desired contact cavity at the wire end of the plug assembly, orienting the contact so that:
 - for 0.64mm contact, orientation tab is aligned with the alignment slot of the contact cavity
 - for 2.8mm contact, the retention window is aligned with the alignment slot of the contact cavity
- Push the contact straight into the contact cavity until it bottoms (there will be an audible “click”).

CAUTION



DO NOT force the contact into the contact cavity. If there is resistance, pull the contact out, ensure proper orientation, and re-insert the contact.

- Lightly pull back on the wire to ensure that the contact has engaged the housing retention finger.

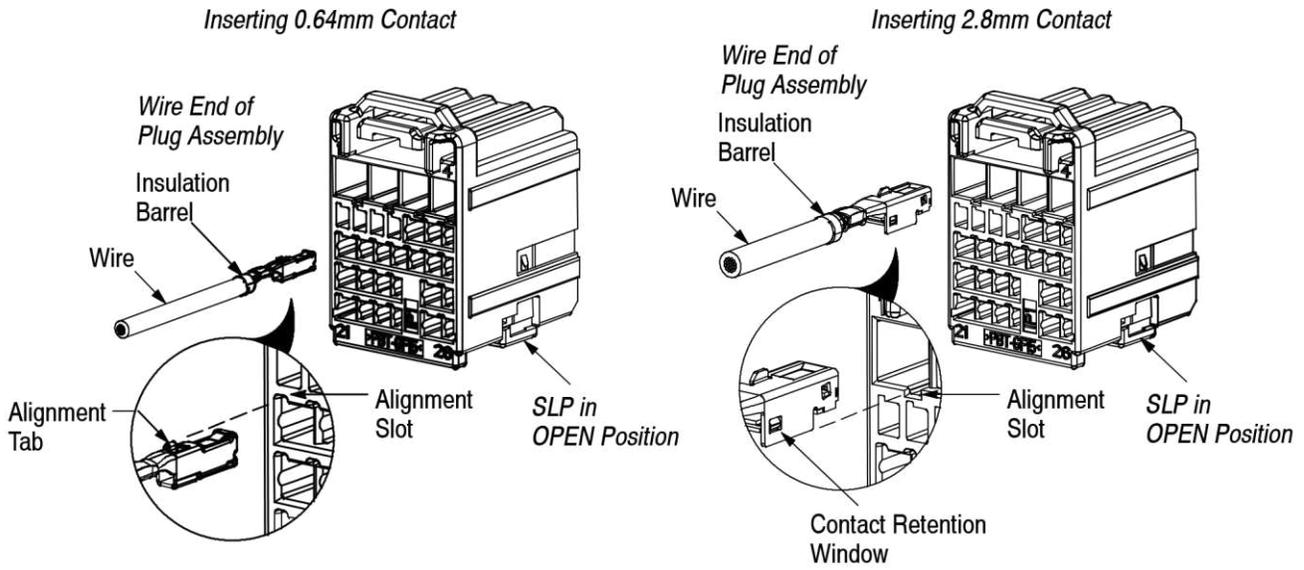


Figure 2

5. After all contacts are inserted, push the SLP into the housing until it is in the CLOSED position. The SLP is in the CLOSED position when it is flush with the housing and the two latches engage the housing. Check to make sure that the entire SLP is seated against the housing, and that there is no gap between each latch and the housing. See Figure 3.

NOTE

If the SLP does not fully close, move it to the OPEN position, ensure that all contacts are fully seated, then try again. DO NOT force the SLP to close.



3.2. Probe Location for Contact Verification

1. Access to the contacts is provided, for any continuity probing, on the mating face of the connector in an area that avoids the contacts separable interface.
2. The flat front of the contact can be accessed through contact removal window. Applies to both 0.64mm & 2.8mm contacts. See figures below.
3. The recommended contact probe/pogo pin should have a flat tip with a diameter of 1.0mm and a max force of 1.0N.

CAUTION



It is not recommended to probe into the contact circuit hole.

Moving SLP to CLOSED Position

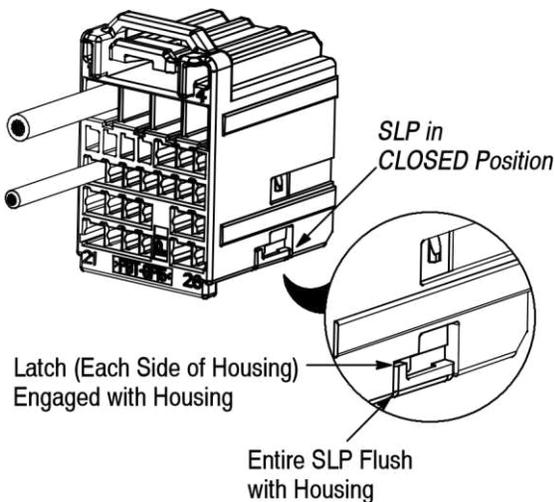
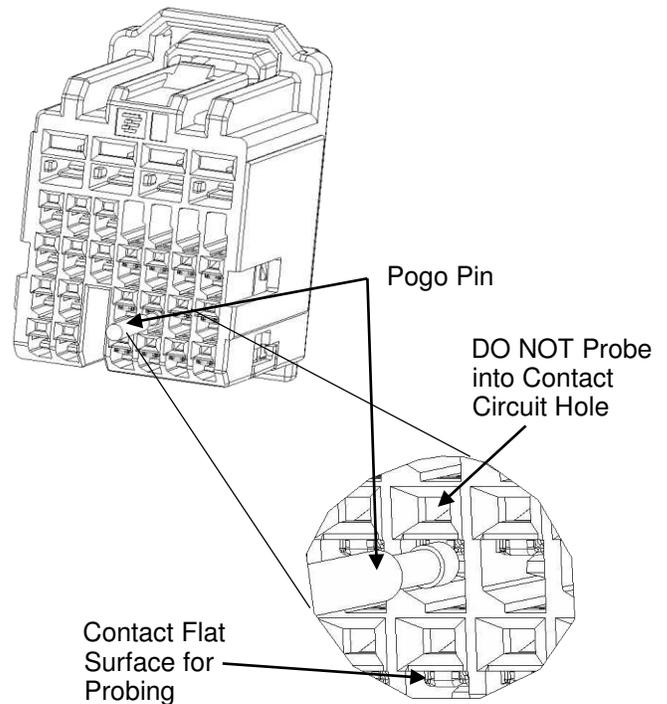


Figure 3



3.3. Mating Connectors

1. Align the locking latch of the plug assembly with the locking tab of the mating receptacle assembly.
2. Push the plug assembly into the mating receptacle assembly, making sure that the key enters the keying slot, until the locking latch and locking tab engage (there will be an audible “click”).

4. DISASSEMBLY

4.1. Unmating Connectors

Depress the locking latch of the plug assembly, and pull the plug assembly straight away from the mating receptacle assembly. See Figure 4.

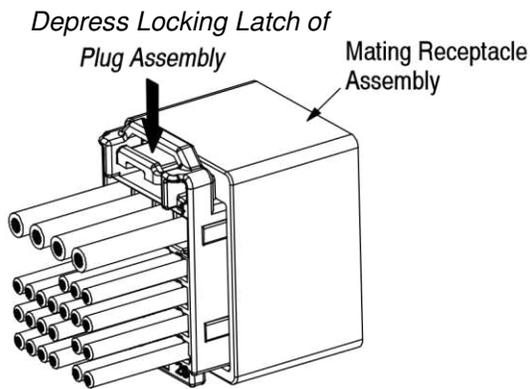


Figure 4

4.2. Removing Contacts

1. Unmate the connectors (as described in Paragraph 4.1).
2. Move the SLP to the OPEN position as follows: insert and slide the tip of the screwdriver into one of the slots of the SLP (located on the bottom of the plug assembly), and pivot the screwdriver *away from* the SLP until the latch is released. See Figure 5, Detail A. Ensure that the latch (on other side of housing) is also released and that the entire SLP protrudes from the housing. See Figure 5, Detail B.
3. For 0.64mm contacts, refer to Figure 6, and proceed as follows:
 - a. From the mating face of the plug assembly, insert the U-shape portion of the tip of the extraction tool into the notched edge of the contact cavity of the contact to be removed until it stops.
 - b. Hold the extraction tool in place, and *gently* push the wire of the contact to be removed toward the housing until it stops (this will relieve the

pressure on the alignment tab and lift the housing retention finger away from the contact retention window).

- c. While holding the screwdriver in position, pull the wire until the contact is removed from the housing.
- d. Pull the extraction tool straight out of the contact cavity.

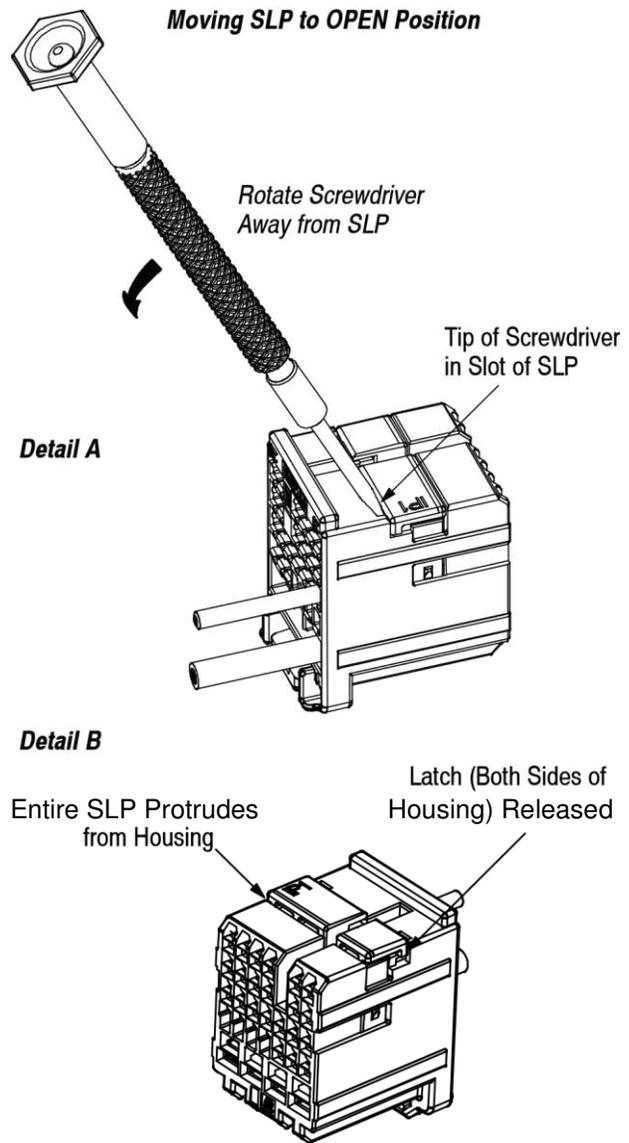


Figure 5

Removing 0.64mm Contact

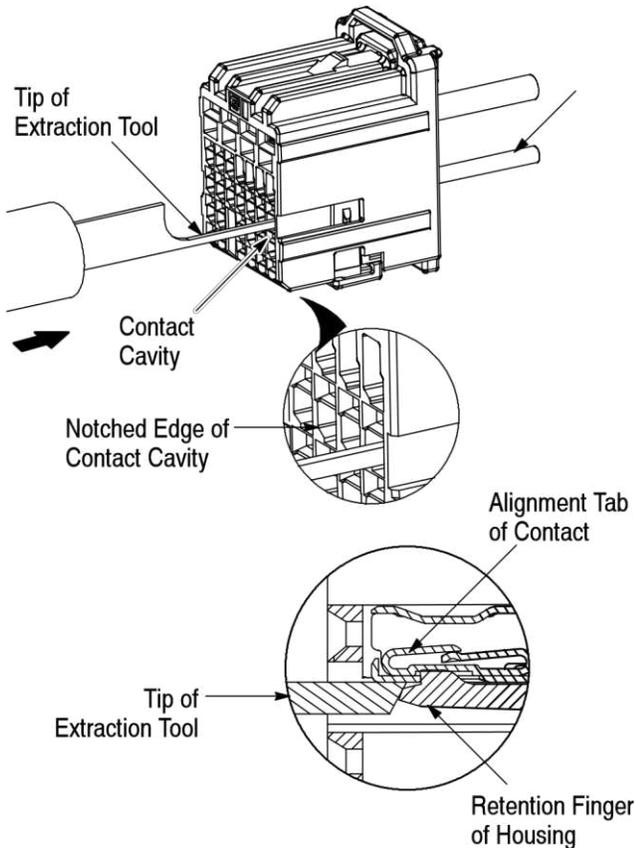


Figure 6

Removing 2.8mm Contact

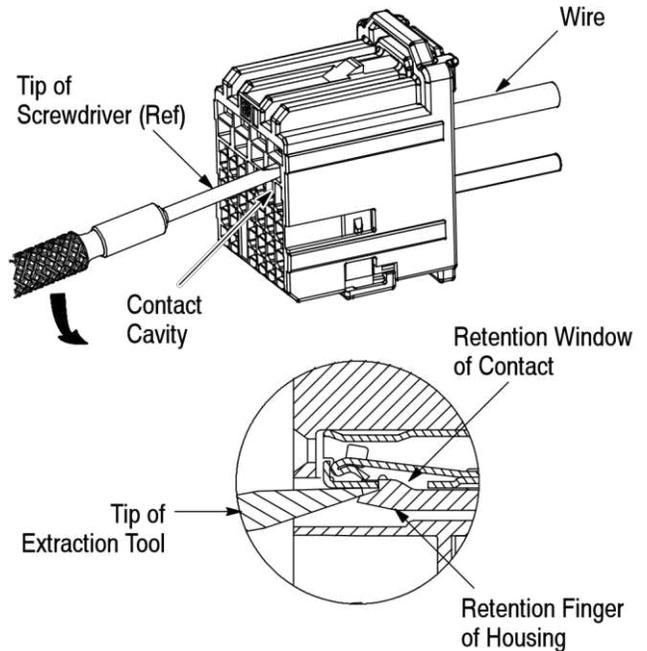


Figure 7

5. REPLACEMENT AND REPAIR

The contacts and plug assembly are not repairable. Discard and replace any defective or damaged contacts or connectors. DO NOT re-use a terminated contact by removing the wire.

6. REVISION SUMMARY

- A. Initial release of instruction sheet.
- B. Updated TE logo and TE Connectivity name. Applicable terminal part numbers updated in Figure 1. Added probing/pogo pin detail on page 2.

4. For 2.8mm contacts, refer to Figure 7, and proceed as follows:
 - a. From the mating face of the plug assembly, insert the tip of the extraction tool (or screwdriver) into the contact cavity of the contact to be removed until it stops.
 - b. Hold the extraction tool (or screwdriver) in place, and *gently* push the wire of the contact to be removed toward the housing until it stops (this will relieve the pressure on the contact retention window).
 - c. Pivot the extraction tool (or screwdriver) toward the bottom row of contact cavities to lift the housing retention finger away from the contact retention window. While holding the screwdriver in position, pull the wire until the contact is removed from the housing.
 - d. Pull the extraction tool (or screwdriver) straight out of the contact cavity.
5. Push the SLP into the housing until it is in the CLOSED position as described in Paragraph 3.1, Step 5.