

| REFERENCE PRODUCT PART NUMBERS OF PLUG ASSEMBLY |                     |                |                            |             |
|---|---------------------|----------------|----------------------------|-------------|
| Plug Housing                                    | Receptacle Terminal | Perimeter Seal | Rear Seal                  | TPA         |
| X-2443729-X                                     | X-2321921-X         | X-2321920-X    | X-2443732-X<br>X-2321922-X | X-2321919-X |

| REFERENCE PRODUCT PART NUMBERS OF CAP ASSEMBLY |              |                            |
|--|--------------|----------------------------|
| Cap Housing                                    | Tab Terminal | Rear Seal                  |
| X-2443725-X<br>X-2443727-X                     | 2443728-1    | X-2443732-X<br>X-2321922-X |

Figure 1

This instruction sheet provides assembly and disassembly procedures for the SDL2.5 waterproof connector listed in Figure 1. Read instructions thoroughly before assembly. Reference product part numbers are given in Figure 1.

A basic connector assembly consists of a plug housing and a cap housing having an identical number of circuit positions. The housing used for Panel Mounting or Free hanging applications and are fully polarized for proper engagement. The positive lock feature prevents accidental disengagement.

Housings are available with 2 through 10 circuit positions. Each contact cavity is numbered on the BACK of plug housing and FRONT of cap housing to provide circuit identification.

For detailed product description and application requirements, refer to application specification 114-143067.



**NOTE**

A complete list of current connectors and contact part numbers cannot be maintained in this document. For all part numbers and their description, refer to the applicable catalog, or call PRODUCT INFO at the bottom of this page.



**NOTE**

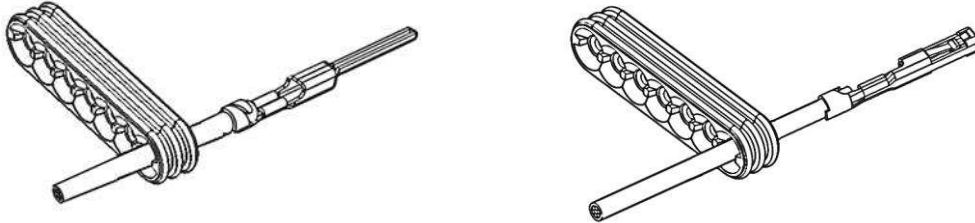
Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.

Reasons for re-issue of this instruction sheet are provided in Section 4, REVISION SUMMARY.

## 1. ASSEMBLY

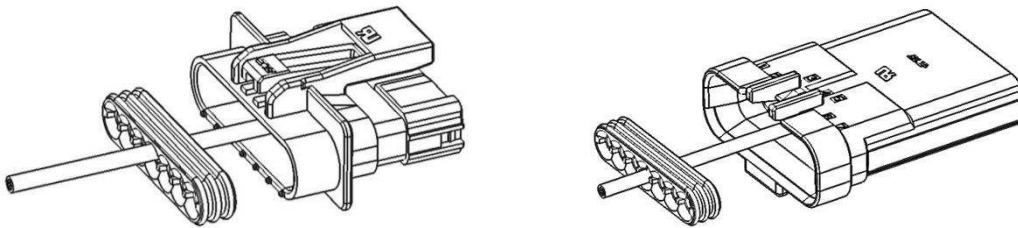
### 1.1. Inserting Rear Seal (Plug and Cap Housings)

1. Put the seal on the wire before inserting the terminal into the Housing. See **Error! Reference source not found.2**



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2. Leave the seal over the wire until the terminal is correctly oriented (squared) in the circuit and latched where it belongs. See **Error! Reference source not found.3**



**Error! Reference source not found.3**

3. Insert the gang seal into the contact cavity at the back end (wire side) of the cap and plug housings as shown in Figure 4. Push seal into the contact cavity until it bottoms in the housing.

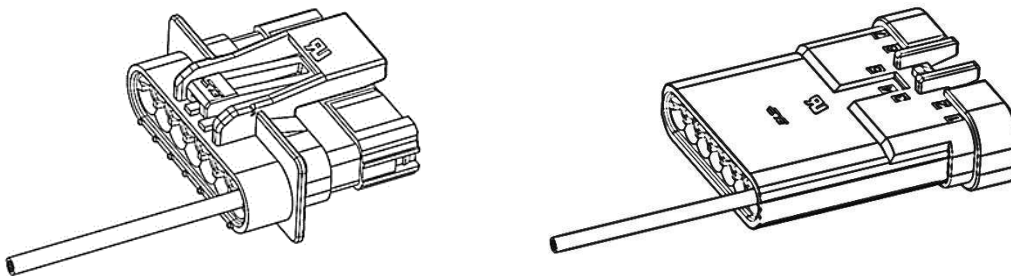


Figure 4



#### NOTE

Rear seal should be free of any damage after inserting. During delivery and operation, no contamination is allowed on rear seal. Meanwhile do not touch sealing surface directly, otherwise sealing performance would be affected due to the removal of oil.

### 1.2. Inserting Perimeter Seal (Plug Housings)

1. Align the perimeter seal with housing at the FRONT (mating side).
2. Install the perimeter seal onto plug housing. Refer to Figure 5
3. Visually inspect that perimeter seal has fully installed in the housing, any fold is not permitted.



**NOTE**

Perimeter seal should be free of any damage and fold after inserting. During delivery and operation, no contamination is allowed on perimeter seal. Meanwhile do not touch sealing surface directly, otherwise sealing performance would be affected due to the removal of oil.

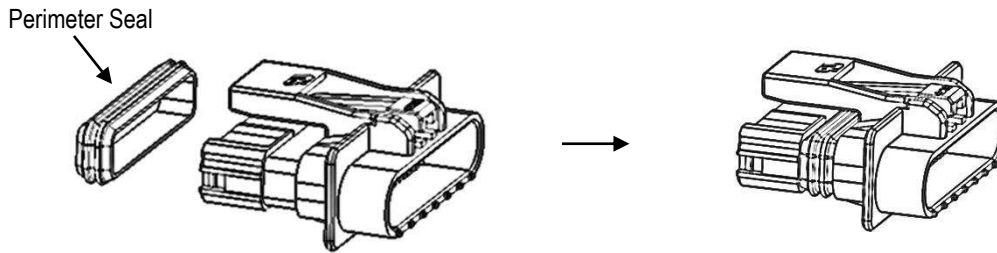


Figure 5

### 1.3. Inserting Contacts (Plug and Cap Housings)

1. Ensure that the contacts are crimped to meet the requirements given in 114-143067. Strip form contacts are designed to be crimped with a miniature applicator in a semi-automatic or automatic machine.
2. Make sure to align contacts with the desired circuit cavity at the BACK of the rear housing section. Grasp the wire-directly behind the contact insulation barrel-and push the contact straight into the cavity until it bottoms (there should be an audible click). Pull back lightly on the wire to be sure the contact is locked in place. Refer to Figure 6.

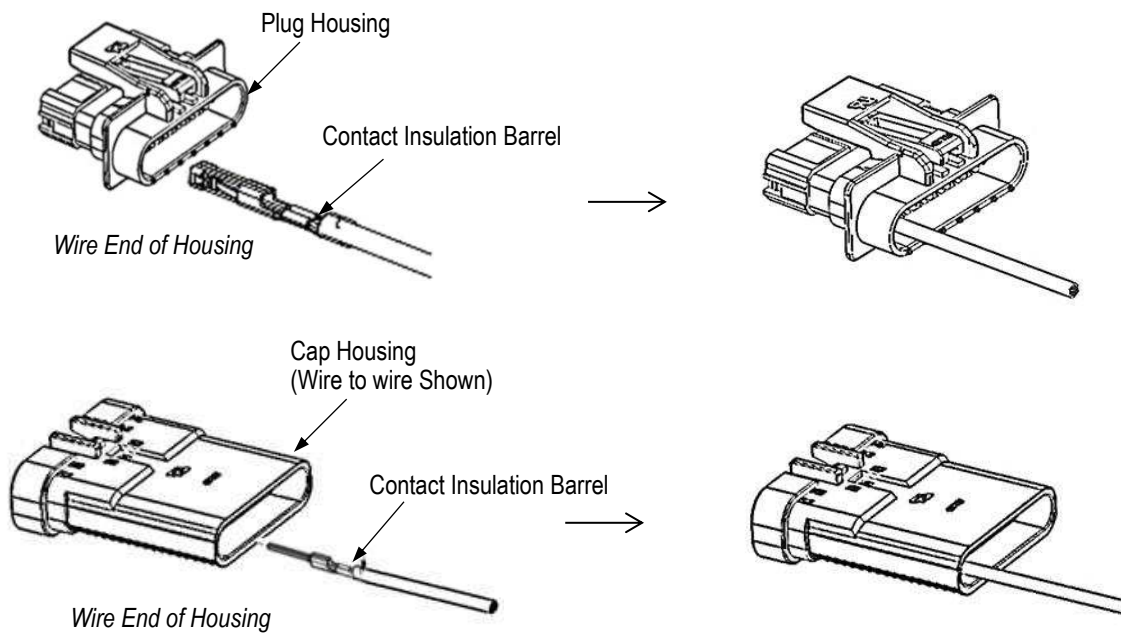


Figure 6

### 1.4. Inserting Optional TPA (Plug Housing)

1. Grasp the TPA and push TPA straight into the plug and cap housing from FRONT (there should be an slight audible click). Refer to Figure 7.

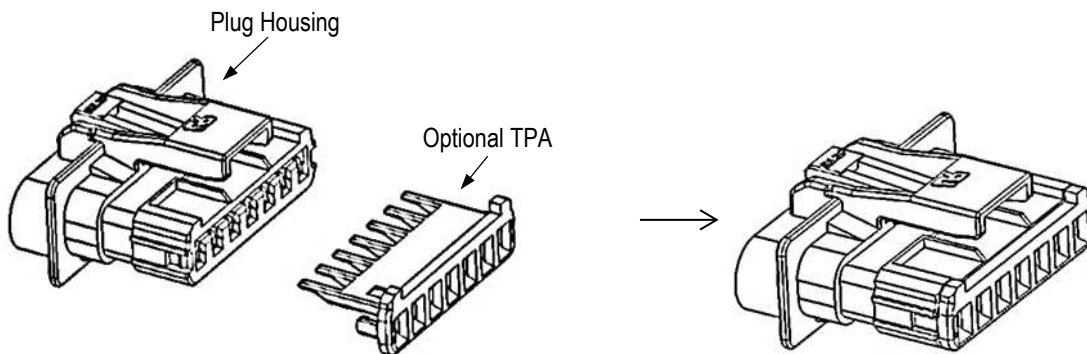


Figure 7

### 1.5. Panel Mounting (Cap Housings)

The cap housing features flexible mounting latches for easy insertion into the panel cutout.

1. Cut a panel having the thickness and dimensions given on corresponding customer drawing.
2. Push the cap housing through the panel in the same direction the panel cutout was made, until it snaps into place. Refer to Figure 8.
3. If removal is necessary, deflect the mounting ears until they clear the panel, then pull the cap housing through either the front or back of the panel.

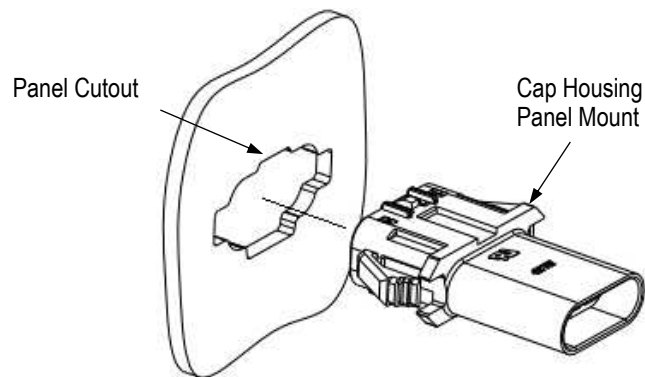


Figure 8

### 1.6. Mating Connectors

Ensure that the mating connectors have identical number of circuits and a pin contact mating with a socket contact. Align the mating faces of the connectors and push them together until the locking latch fully engages the locking tab. Pull back to ensure proper engagement and to prevent any deformation of the locking mechanism. Refer to Figure 9.

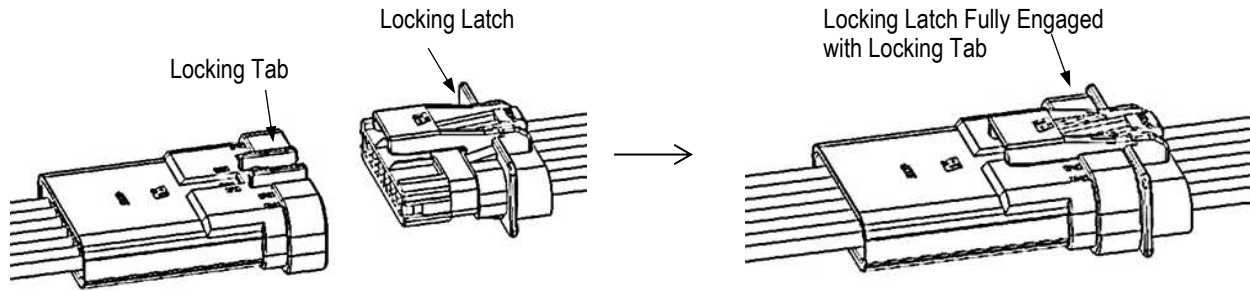


Figure 9

### 1.7 Unmating Connectors

To disengage mating connectors, depress latch of plug housing with thumbnail, and pull the connectors apart. Refer to Figure 10.

**i** **NOTE**  
DO NOT pull the connectors by the wires.

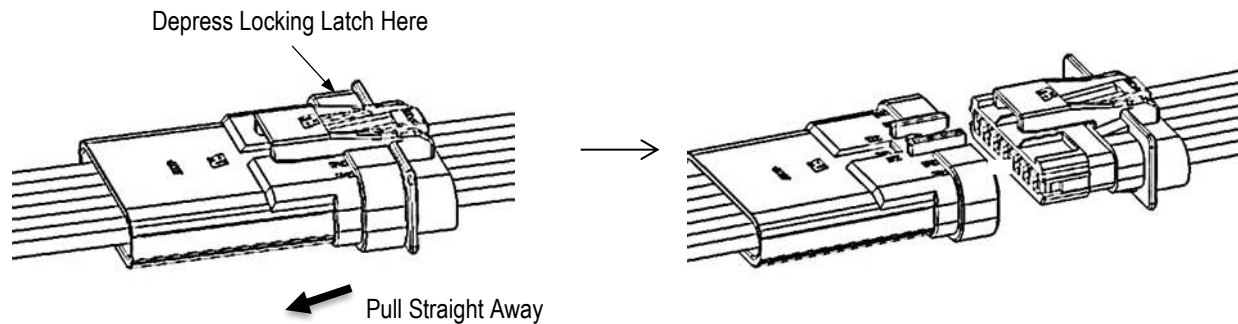


Figure 10

## 1.8 Seal Plug

All circuits are sealed by a diaphragm in the rubber wire seal. During assembly, the diaphragm is pierced as the contact passes through it. Unused circuit cavities, unless accidentally perforated, will remain sealed.

Seal plug is 0413-204-2005 is designed to keep out contaminants if diaphragm is pierced. Holding the sea plug with large diameter end away from the connector, gently apply downward pressure to force the seal plug into housing cavity. Apply pressure and insert seal plug into cavity as far as it will go until seal plug is forced to stop by contact with rear seal. An insertion tool is not required for this procedure, See Figure 11.



Figure 11

## 2. TPA EXTRACTION

TPA can be removed from the plug using extraction tool.

## 3. REPLACEMENT AND REPAIR

Do not use defective or damaged product. These products cannot be repaired. For replacement information, call the number at the bottom of page 1.

## 4. REVISION SUMMARY

Revisions to this instruction sheet include

- Initial release