



**NOTE**

All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Unless otherwise specified, dimensions have a tolerance of  $\pm 0.13$  [ $\pm .005$ ] and angles have a tolerance of  $\pm 2^\circ$ . Figures and illustrations are for identification only and are not drawn to scale.

**1. INTRODUCTION**

This instruction sheet covers the use of the Power Versa-Lock connector system. Instructions for contact and housing assembly procedures and seal assembly procedures are included. Application Specification 114-143082 provides the requirements for application, including wire size range, contact crimp requirements.



**NOTE**

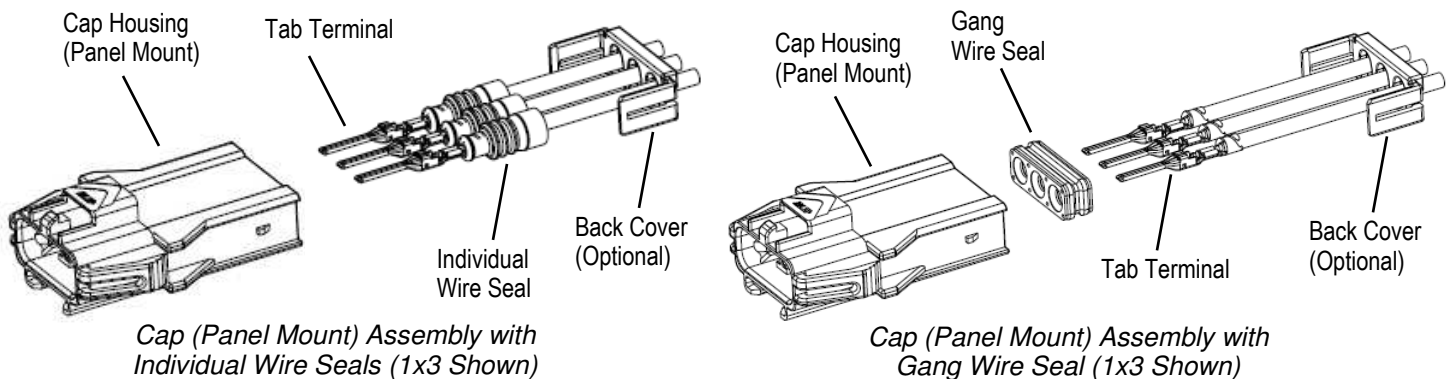
The listing of a drawing or part number in this specification should not be interpreted as an indication of availability. Contact the TE Product Information Center at the number at the bottom of page 1 for product availability.

**2. CONNECTOR ASSEMBLY**

**2.1. Sealed Applications**

**A. Cap (Panel Mount)**

Configurations for sealed panel mount cap applications are shown in Figure 1.



Cap (Panel Mount) Assembly with Individual Wire Seals (1x3 Shown)

Cap (Panel Mount) Assembly with Gang Wire Seal (1x3 Shown)

HOUSING(a)	POSITION	TAB TERMINAL(b)	WIRE SEALS(c)		BACK COVER(f)
			Individual(d)	Gang(e)	
X-2337219-6	2x3	2329907 2329908 2329911	—	2325349-Z	2340648-6
X-2325350-4	1x4		2329020-Y		2324614-4
X-2325350-3	1x3				2334614-3
X-2325350-2	1x2				2334614-2



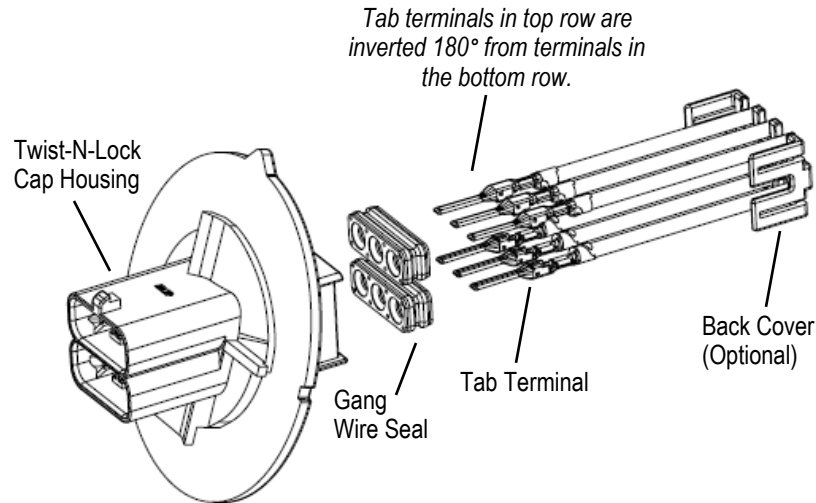
**NOTE**

- (a) See Customer Drawing for applicable dash number (-) based on color and keying configuration.
- (b) See Application Specification 114-143082 for wire sizes, insulation diameter ranges, and crimping information for terminals. For 2 row housings, terminals in the top row must be inverted 180° from terminals in the bottom row.
- (c) Only one type of wire seal shall be selected and used. The individual wire seal selection requires separate seals for each circuit in a housing. The gang seal selection requires a single seal of the corresponding position and configuration for the housing. Housings cannot utilize both individual wire seals and gang seals simultaneously.
- (d) See Customer Drawing for applicable dash number (-) based on insulation diameter range. Individual wire seals cannot be used in 2x3 sealed panel mount cap configurations.
- (e) Assembly requires two gang seals in 2x3 sealed panel mount cap configurations. See Customer Drawing for applicable dash number (-Z) based on wire insulation diameter and number of positions.
- (f) Optional accessory.

**Figure 1**

### B. Cap (Twist-N-Lock)

Configurations for sealed Twist-N-Lock cap applications are show in Figure 2.



Cap (Twist-N-Lock) Assembly with Gang Wire Seal (2x3 Shown)

HOUSING(a)	POSITION	TAB TERMINAL(b)	WIRE SEALS		BACK COVER(e)
			Individual(c)	Gang(d)	
X-2336231-6	2x3	2329907 2329908 2329911	—	2325349-Z	2340648-6



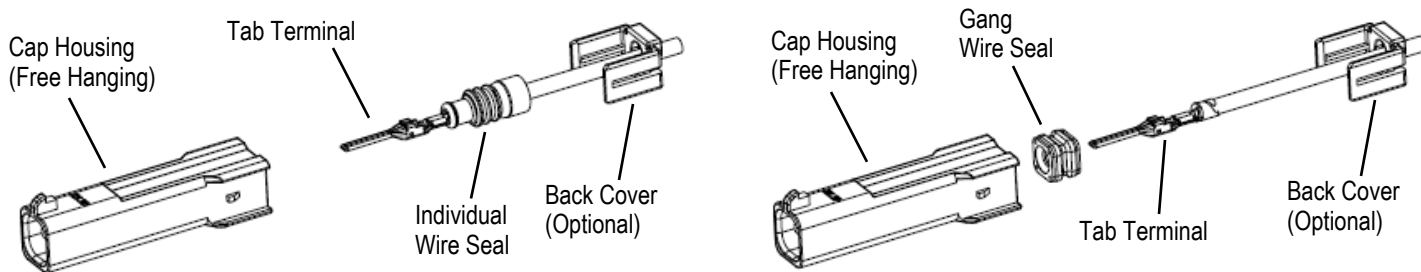
**NOTE**

- (a) See Customer Drawing for applicable dash number (X-) based on color and keying configuration.
- (b) See Application Specification 114-143082 for wire sizes, insulation diameter ranges, and crimping information for terminals. For 2 row housings, terminals in the top row must be inverted 180° from terminals in the bottom row.
- (c) Individual wire seals cannot be used in 2x3 sealed Twist-N-Lock cap applications.
- (d) Assembly requires two gang seals in 2x3 sealed Twist-N-Lock cap applications. See Customer Drawing for applicable dash number (-Z) based on wire insulation diameter and number of positions.
- (e) Optional accessory.

Figure 2

### C. Cap (Free Hanging)

Configurations for sealed free hanging cap applications are shown in Figure 3.



Cap (Free Hanging) Assembly with Individual Wire Seals (1x1 Shown)

Cap (Free Hanging) Assembly with Gang Wire Seal (1x1 Shown)

HOUSING(a)	POSITION	TAB TERMINAL(b)	WIRE SEALS(c)		BACK COVER(e)
			Individual(d)	Gang(d)	
X-2345729-1	1x1	2329907 2329908 2329911	2329020-Y	2325349-Y	2334614-1



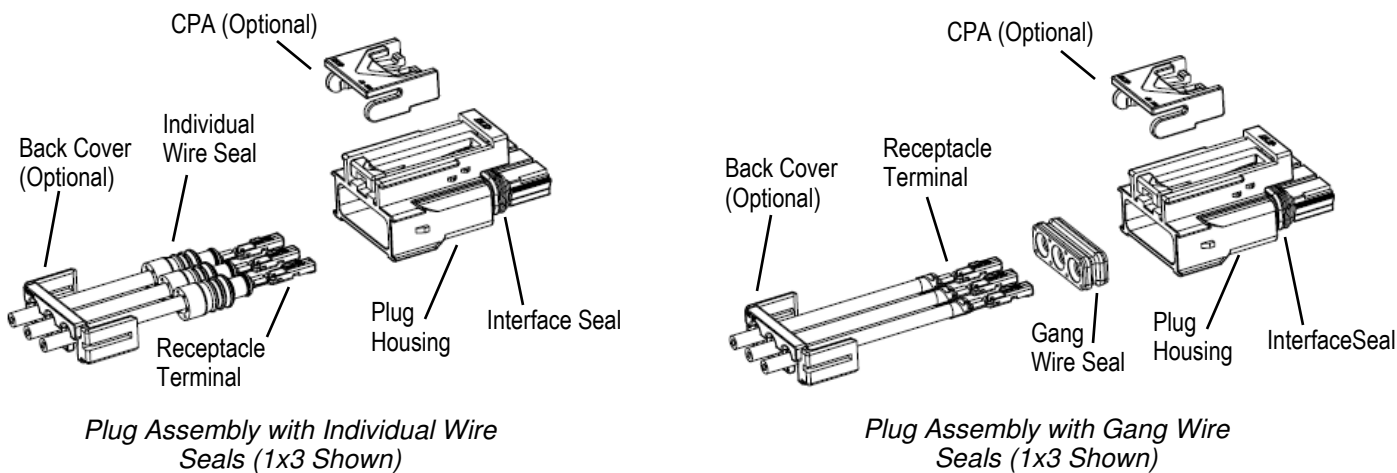
**NOTE**

- (a) See Customer Drawing for applicable dash number (X-) based on color and keying configuration.
- (b) See Application Specification 114-143082 for wire sizes, insulation diameter ranges, and crimping information for terminals.
- (c) Only one type of wire seal shall be selected and used. The individual wire seal selection requires separate seals for each circuit in a housing. The gang seal selection requires a single seal of the corresponding position and configuration for the housing. Housings cannot utilize both individual wire seals and gang seals simultaneously.
- (d) See Customer Drawing for applicable dash number (-Y) based on insulation diameter range.
- (e) Optional accessory.

Figure 3

### D. Plug

Configurations for sealed plug applications are shown in Figure 4.



HOUSING(a)	POSITION	RECEPTACLE TERMINAL(b)	WIRE SEALS(c)		INTERFACE SEAL(f)	BACK COVER(g)	
			Individual(d)	Gang(e)(f)			
X-2336229-6	2x3	2329914 2329916 2329917	—	2325349-Z	2325347-3	2340648-6	
X-2332040-4	1x4		2329020-Y			2325347-4	2334614-4
X-2332040-3	1x3					2325347-3	2334614-3
X-2332040-2	1x2					2325347-2	2334614-2
X-2345728-1	1x1					2325347-1	2334614-1



**NOTE**

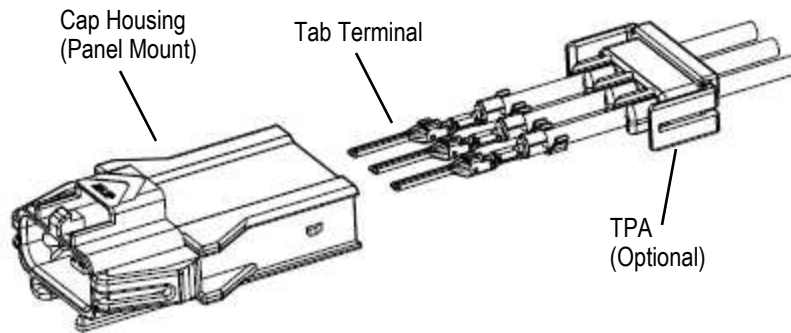
- (a) See Customer Drawing for applicable dash number (X-) based on color and keying configuration.
- (b) See Application Specification 114-143082 for wire sizes, insulation diameter ranges, and crimping information for terminals. For 2 row housings, terminals in the top row must be inverted 180° from terminals in the bottom row.
- (c) Only one type of wire seal shall be selected and used. The individual wire seal selection requires separate seals for each circuit in a housing. The gang seal selection requires a single seal of the corresponding position and configuration for the housing. Housings cannot utilize both individual wire seals and gang seals simultaneously.
- (d) See Customer Drawing for applicable dash number (-Y) based on insulation diameter range. Individual wire seals cannot be used in 2x3 sealed plug configurations.
- (e) See Customer Drawing for applicable dash number (-Z) based on wire insulation diameter and number of positions.
- (f) Assembly requires two gang seals and two interface seals in 2x3 sealed plug configurations.
- (g) Optional accessory.

Figure 4

## 2.2. Unsealed Applications

### A. Cap (Panel Mount)

Configurations for unsealed panel mount cap applications are shown in Figure 5.



*Cap (Panel Mount) Assembly Unsealed Configuration (1x3 Shown)*

HOUSING(a)	POSITION	TERMINAL(b)	TPA(c)
X-2337219-6	2x3	2329906	2337218-6
X-2325350-4	1x4	2329909	2329016-4
X-2325350-3	1x3	2329910	2329016-3
X-2325350-2	1x2	2337139(d)	2329016-2
		2337140	



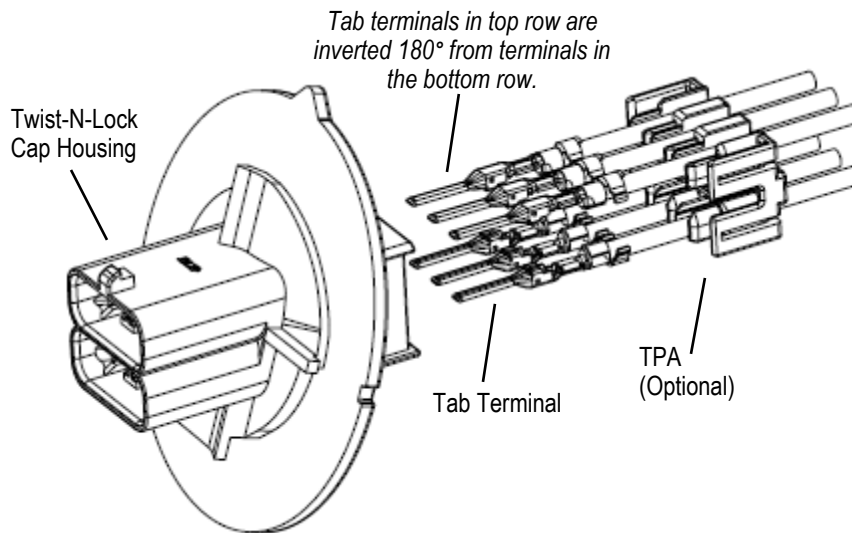
**NOTE**

- (a) See Customer Drawing for applicable dash number (X-) based on color and keying configuration.
- (b) See Application Specification 114-143082 for wire sizes, insulation diameter ranges, and crimping information for terminals. For 2 row housings, terminals in the top row must be inverted 180° from terminals in the bottom row.
- (c) Optional accessory.
- (d) Terminal part number 2337139 can only be used in 2x3 unsealed panel mount cap configurations.

**Figure 5**

### B. Cap (Twist-N-Lock)

Configurations for unsealed Twist-N-Lock cap applications are shown in Figure 6.



Cap (Twist-N-Lock) Assembly Unsealed Configuration (2x3 Shown)

HOUSING(a)	POSITION	TERMINAL(b)	TPA(c)
x-2336231-6	2x3	2329906 2329909 2329910 2337139(d) 2337140	2337218-6



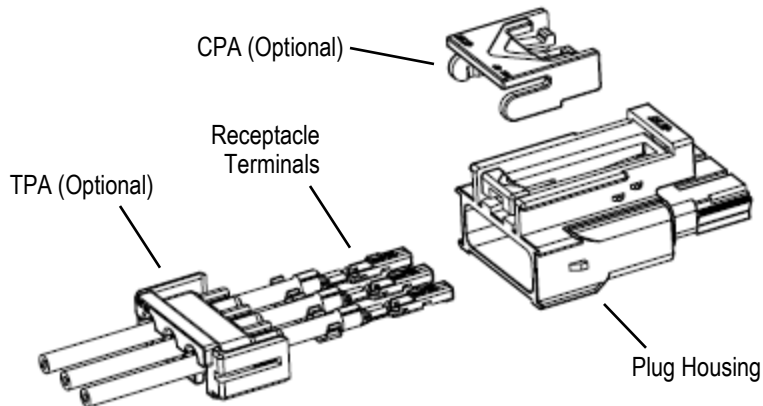
**NOTE**

- (a) See Customer Drawing for applicable dash number (X-) based on color and keying configuration.
- (b) See Application Specification 114-143082 for wire sizes, insulation diameter ranges, and crimping information for terminals.
- (c) Optional accessory.
- (d) Terminal part number 2337139 can only be used in 2x3 unsealed Twist-N-Lock cap configurations.

**Figure 6**

### C. Plug

Configurations for unsealed plug applications are shown in Figure 7.



*Plug Assembly in Unsealed Application (1x4 Shown)*

HOUSING(a)	POSITION	TERMINAL(b)	TPA(c)
X-2336229-6	2x3	2329912	2337218-6
X-2232040-4	1x4	2329913	2329016-4
X-2332040-3	1x3	2329915	2329016-3
X-2332040-2	1x2	2337137(d) 2337138	2329016-2



**NOTE**

- (a) See Customer Drawing for applicable dash number (X-) based on color and keying configuration.
- (b) See Application Specification 114-143082 for wire sizes, insulation diameter ranges, and crimping information for terminals.
- (c) Optional accessory.
- (d) Terminal PN 2337137 can only be used in 2x3 unsealed plug assembly configurations.

**Figure 7**

### 3. SEAL ASSEMBLY PROCEDURE

#### 3.1. Interface Seal Assembly

1. Assemble interface seal over contact silos of the plug housing as shown in Figure 8 until it rests against the mating face of the plug housing as shown in Figure 9.

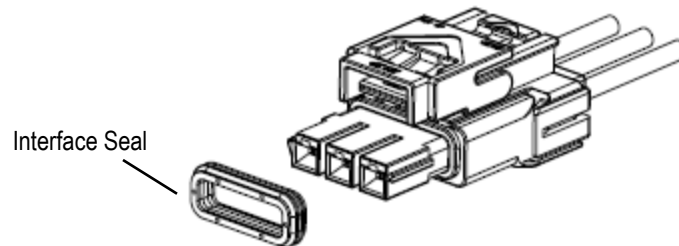


Figure 8

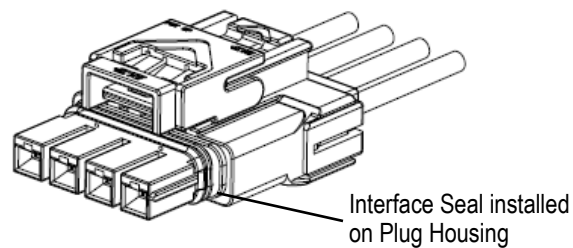


Figure 9

#### 3.2. Gang Seal Assembly

1. Select appropriate contacts, then follow termination procedures shown in Application Specification 114-143082.
2. Insert the gang seal into the contact cavities at the back end (wire side) of the cap and plug housings as shown in Figure 10.

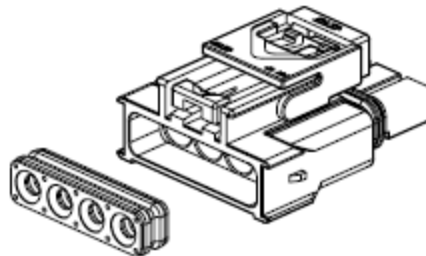


Figure 10

3. Align the terminated tab or receptacle contact with the appropriate cavity at the back end (wire side) of the plug or cap housing. This alignment is to help ensure that the gang seal will not be damaged during the insertion process. See Figure 11.

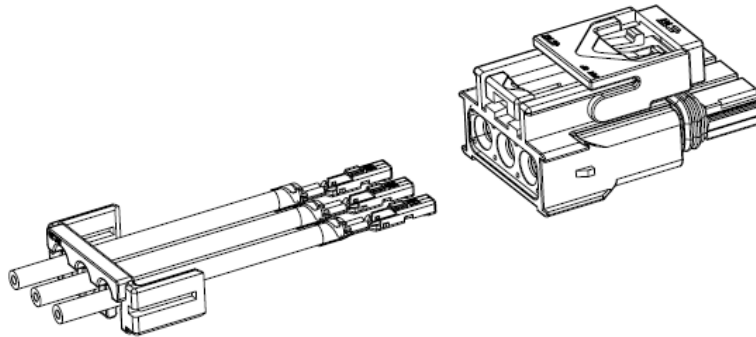


Figure 11

4. Grasp the wire directly behind the insulation barrel and push the contact straight into the housing cavity until contact locks in place. See Figure 12.



**CAUTION**

*Care must be taken to avoid nicks, tears, or other damage to gang seal when inserting contact.*

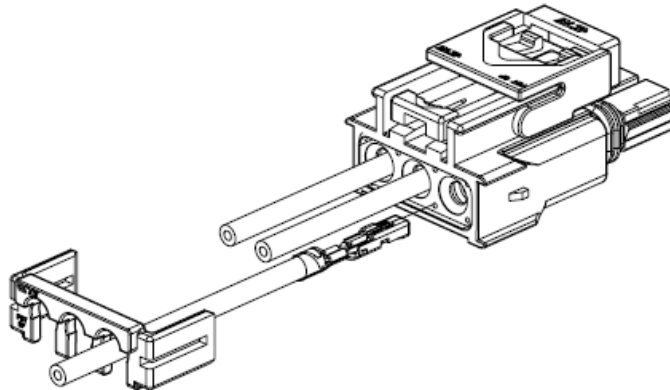


Figure 12

5. Assemble back cover to housing and ensure that locking latches for the back cover are engaged.

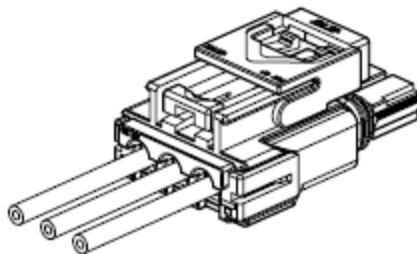


Figure 13

### 3.3. Sealing Plug Assembly

1. Assemble interface seal as indicated in Section 3.1.
2. Assemble gang seal with selectively loaded contacts as indicated in Section 3.2.



**NOTE**

*Sealing plug can only be used in gang seal application configurations. Sealing plugs are not available for use in individual wire seal applications.*

3. Align sealing plug with the appropriate cavity at the back end (wire side) of the plug or cap housing. See Figure 14.

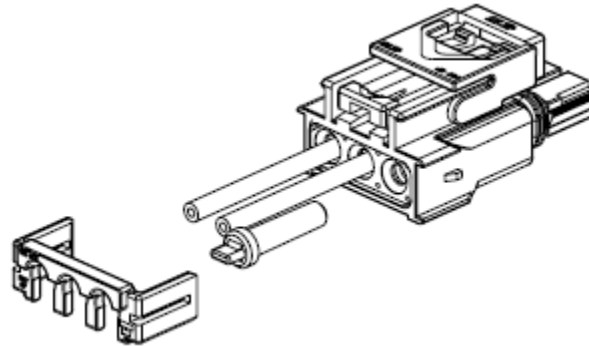


Figure 14

4. Push the sealing plug into the housing cavity until the sealing plug is flush with the gang seal. See Figure 15.

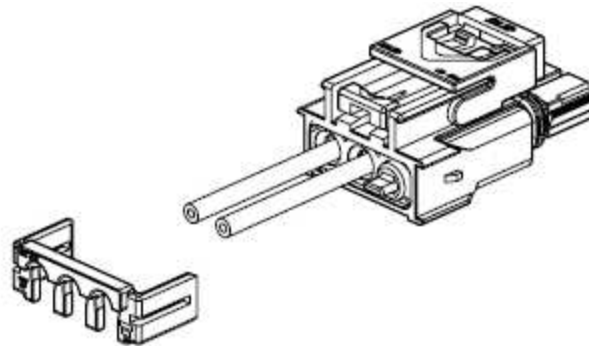


Figure 15

5. Assemble back cover to housing and ensure that locking latches for the back cover are engaged. See Figure 16.

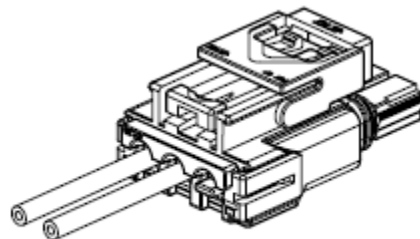


Figure 16