Control No. CB-680E-B

Instruction Manual

2.8mm Sealed Female Connector & 2.8mm Female 2way Dress Cover

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Preface

This instruction manual describes the correct use of 2.8mm Sealed Female Connector. (2way,3way,4way) and the 2.8mm Female 2way Dress Cover.

Symbols used throughout this manual

The following symbols will appear where there is a warning or caution regarding the correct use of these connectors, dress cover and tie strap. Please take note of the following symbols.

 **CAUTION**	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe usage.
 **ATTENTION**	This symbol describes an important safety measure or prohibited action, so as to prevent damage to property or malfunction.
【 SKILL 】	This symbol indicates where a specific operation may be required to correctly assemble the connector.

*** The contents of this manual are subject to change without notice**.

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1. Glossary

・Cavity	A hole in the connector housing into which a terminal is
・Connector	A pair of connector housings with terminals inserted (in finished product status).
・Incomplete Insertion	Incompletely inserted state of a terminal, connector or dress cover.
・Terminal	A pair of electrically conductive connecting parts, consisting of male and female contacts.
・Connector housing	A connector half in sub assembled state before inserting terminals.
・CPA	Connector Position Assurance: A component to warrant
・TPA	Terminal Position Assurance: A component to confirm
・Pre-staged position (TPA)	The position of TPA before terminals are inserted into housing.
・Pre-staged position (CPA)	The position of CPA before connector has been engaged/locked.
・Fully lock position (TPA)	Final lock position of TPA after terminals are inserted into housing.
・Fully lock position (CPA)	Final lock position of CPA where connector and housing are mated and connector lock is engaged.
・Connector Lock	Feature of connector assembly located on arm that is used to lock connector into male device.
・Device Lock	Ramp-shaped lock on device to hold connector lock when connector is engaged.
・Terminal Lock	Locking lance located on housing to hold terminal on correct position.
・Removal Tool	Removal tool used to release terminals and move TPA
・Probe	Electrical testing pin used to check electrical conductiv
・Seal Ring	A silicone component used to seal the interface between male device and female housing.
・Dress Cover	A component used to route wires near exit of the connector.
・Tie Strap	Strain relief wire retainer, strapped around the wire/insulation.

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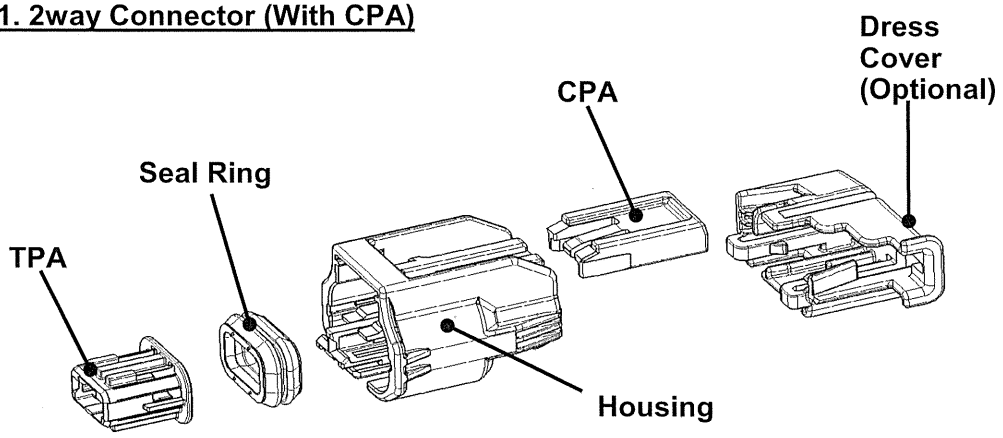
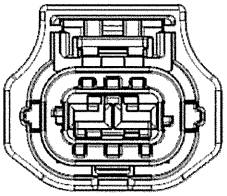
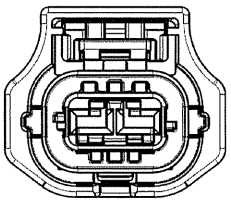
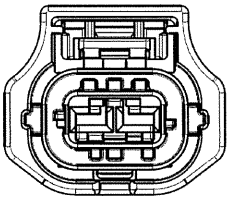
2. List of Components/Connector Overview

2-1. 2way Connector (With CPA)



*1. Without Crush Rib

2way Connector (with CPA)

Description		Part No.	Color	Qty.
 Key A	Connector Assembly (Key A)	6189-7528		
		6189-7867 *1		
	Housing	6185-5218	Black	1
	CPA	6185-5131	Natural	1
	TPA	6910-6852	Natural	1
		6910-7795 *1	Blue	1
	Seal Ring	7135-0658	Light Blue	1
	Dress Cover	6911-6578 (Left)	Natural	1
		6911-6579 (Right)	Black	1
		6911-7141 (Straight)	Black	1
 Key B	Connector Assembly (Key B)	6189-7529		
	Housing	6910-6853	Black	1
	CPA	6185-5131	Natural	1
	TPA	6910-6853	Light Gray	1
	Seal Ring	7135-0658	Light Blue	1
	Dress Cover	6911-6578 (Left)	Natural	1
		6911-6579 (Right)	Black	1
		6911-7141 (Straight)	Black	1
 Key C	Connector Assembly (Key C)	6189-7530		
	Housing	6910-6854	Black	1
	CPA	6185-5131	Natural	1
	TPA	6910-6854	Brown	1
	Seal Ring	7135-0658	Light Blue	1
	Dress Cover	6911-6578 (Left)	Natural	1
		6911-6579 (Right)	Black	1
		6911-7141 (Straight)	Black	1

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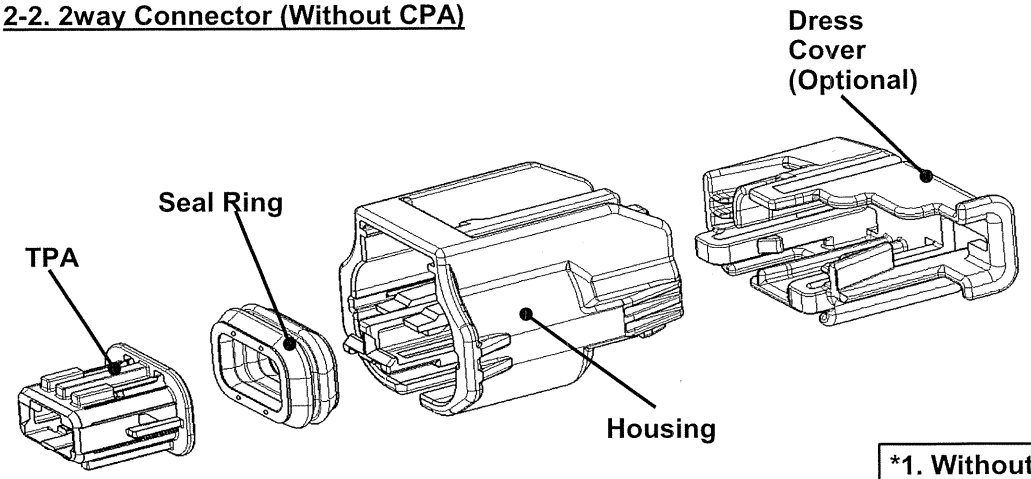
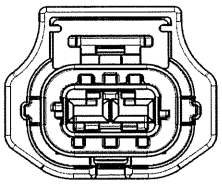
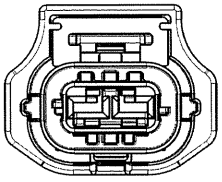
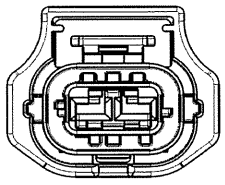
2-2. 2way Connector (Without CPA)



*1. Without Crush Rib

2way Connector (without CPA)

Description		Part No.	Color	Qty.
 Key A	Connector Assembly (Key A)	6189-7680		
		6189-7868 *1		
	Housing	6185-5218	Black	1
	TPA	6910-6852	Natural	1
		6910-7995 *1	Blue	1
	Seal Ring	7135-0658	Light Blue	1
	Dress Cover	6911-6578 (Left)	Natural	1
		6911-6579 (Right)	Black	1
		6911-7141 (Straight)	Black	1
 Key B	Connector Assembly (Key B)	6189-7681		
	Housing	6185-5218	Black	1
	TPA	6910-6853	Light Gray	1
	Seal Ring	7135-0658	Light Blue	1
	Dress Cover	6911-6578 (Left)	Natural	1
		6911-6579 (Right)	Black	1
		6911-7141 (Straight)	Black	1
 Key C	Connector Assembly (Key C)	6189-7682		
	Housing	6185-5218	Black	1
	TPA	6910-6854	Brown	1
	Seal Ring	7135-0658	Light Blue	1
	Dress Cover	6911-6578 (Left)	Natural	1
		6911-6579 (Right)	Black	1
		6911-7141 (Straight)	Black	1

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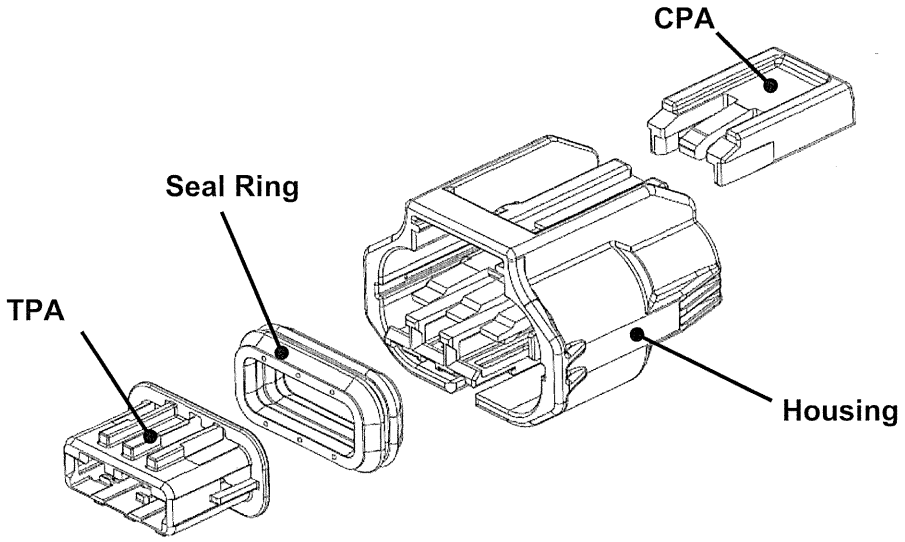
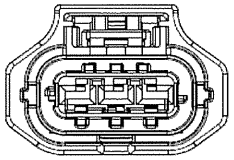
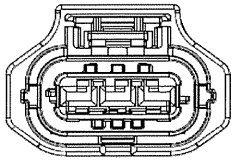
2-3. 3way Connector (With CPA)



3way Connector

Description		Part No.	Color	Qty.
 Key A	Connector Assembly (Key A)	6189-7531		
	Housing	6185-5219	Black	1
	CPA	6185-5131	Natural	1
	TPA	6910-6855	Natural	1
	Seal Ring	7135-0659	Gray	1
 Key B	Connector Assembly (Key B)	6189-7532		
	Housing	6185-5219	Black	1
	CPA	6185-5131	Natural	1
	TPA	6910-6856	Light Gray	1
	Seal Ring	7135-0659	Gray	1

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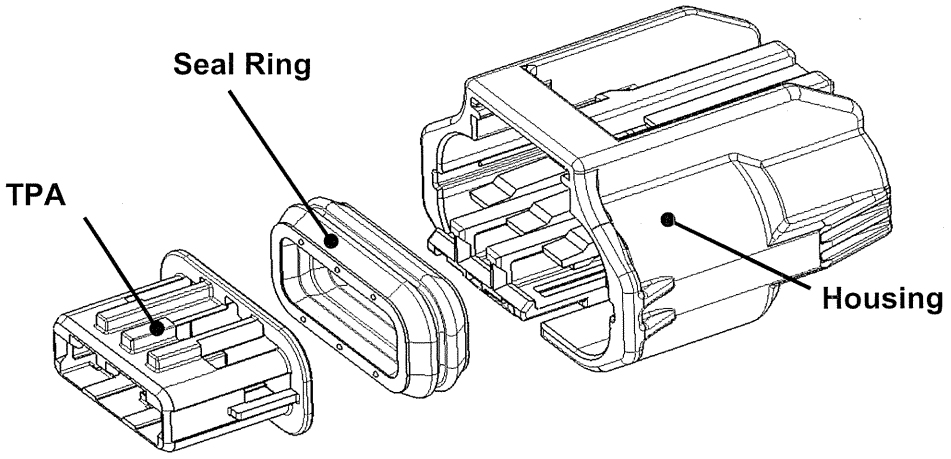
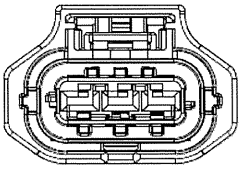
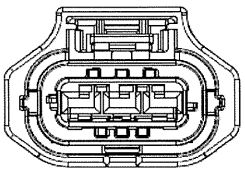
2-4. 3way Connector (Without CPA)



3way Connector

Description		Part No.	Color	Qty.
 Key A	Connector Assembly (Key A)	6189-7683		
	Housing	6185-5219	Black	1
	TPA	6910-6855	Natural	1
	Seal Ring	7135-0659	Gray	1
 Key B	Connector Assembly (Key B)	6189-7684		
	Housing	6185-5219	Black	1
	TPA	6910-6856	Light Gray	1
	Seal Ring	7135-0659	Gray	1

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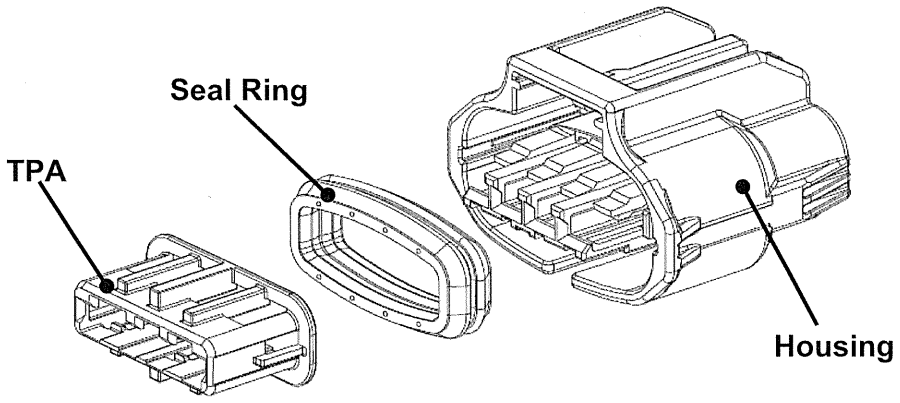
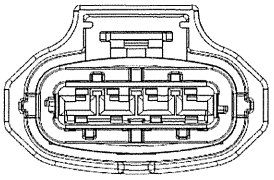
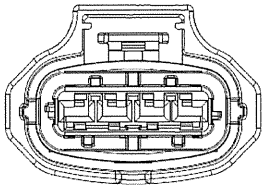
2-5. 4way Connector (Without CPA)

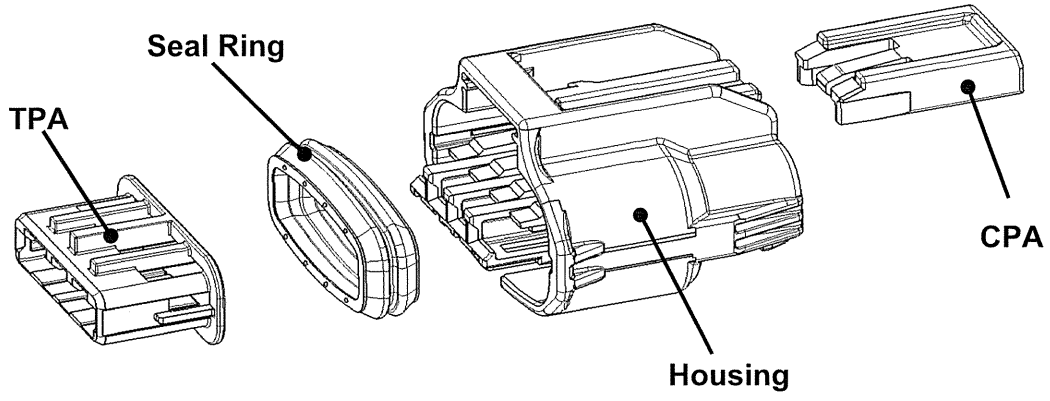


4way Connector (Without CPA)

Description		Part No.	Color	Qty.
 Key A	Connector Assembly (Key A)	6189-8065		
	Housing	6185-5635	Black	1
	TPA	6910-6857	Natural	1
	Seal Ring	7135-0657	Reddish Brown	1

2-6. 4way Connector (With CPA)

Description		Part No.	Color	Qty.
 Key A	Connector Assembly (Key A)	6189-8066		
	Housing	6185-5635	Black	1
	TPA	6910-6857	Natural	1
	Seal Ring	7135-0657	Reddish Brown	1



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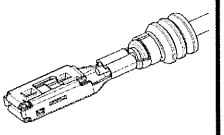
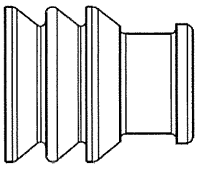
2-7. 2.8mm Sealed Female Terminal

Part	Part Number	Plating	Wire Size	Applicable	Description
Female Terminal	8240-0518	Sn	0.5 ~ 1.0mm^2 AWG20~18	2/3/4way Connector	
	8240-0519	Sn	1.5 ~ 2.0mm^2 AWG16-14		
	8240-0620	Sn (Grease)	0.5 ~ 1.0mm^2 AWG20~18		
	8240-0621	Sn (Grease)	1.5 ~ 2.0mm^2 AWG16-14		
	8240-0520	Ag	0.5 ~ 1.0mm^2 AWG20~18	2way Connector	
	8240-0521	Ag	1.5 ~ 2.0mm^2 AWG16-14		

Part	Supplier Name	Supplier Part Number	Wire Size	Description
Wire Seal	FCI	F676000	0.5 ~ 1.0mm^2 AWG20~18	
	FCI	F576000	1.5 ~ 2.0mm^2 AWG16-14	

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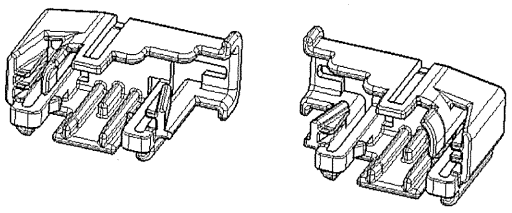
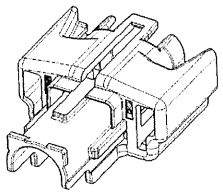
2-8. 2.8mm Female 2w Dress Covers and Tie Straps

Left/Right Dress Cover (For 2way Connector Only)

Part Name	Part number	Dress Covers
FOW280C02FL-NA FOW280C02FR-B	6911-6578 (Left) 6911-6579 (Right)	
Part Name	**Part number**	**Tie Strap**
BAND-W706940	W706940 (FORD) 111-03068 (SUPPLIER) 6912-0418 (SUMITOMO)	

Straight Dress Cover (For 2way Connector Only)

Part Name	Part number	Dress Cover
FOW280C02FS-B	6911-7141	
Part Name	**Part number**	**Tie Strap**
BIND T50ROS-TYT	EU5T-14E047-ZA (FORD) T50ROS (SUPPLIER) 6912-0519 (SUMITOMO)	

***Please refer to information released by HELLERMANN TYTON regarding handling of tie straps**

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3. Instructions for the Safe Use of the Connector, Dress Cover and Tie Strap

3-1. Selection and Usage

Before using this connector, dress cover or tie strap, ensure that these components conform to your components specifications and that these components satisfy quality assurance standard.

Before and after using these components, check for any defects or damage to the connectors. If any defects are found, new undamaged parts should be used.

To avoid using these components incorrectly, please consult with Sumitomo regarding any questions or concerns that you may have.

3-2. Correct Method of Storage

Neglecting to follow the described storage procedure may result in defective or damaged parts. Please store the connectors by using the correct storage method.

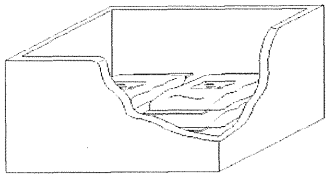
Never store the components in a place where they are exposed to direct sunlight or high humidity.

Do not overload the package, only pack the correct number of bags into the cartons.

Do not mix the connectors of different lots or different codings.

To prevent foreign objects from mixing with the components, always close the container after opening it.

×: Bad　　○: Good



Bad: No stacking

3-3. Use of the Connectors and Transportation

Use the correct cartons and prevent contamination from foreign matter and water.

Do not drop, throw or strike the connectors. If they are dropped, be sure to check the connectors for damage before using them. If there is any damage, replace with a new connector. **Do not use the damaged part.**

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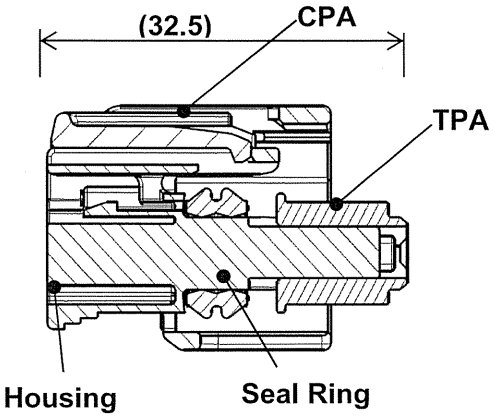
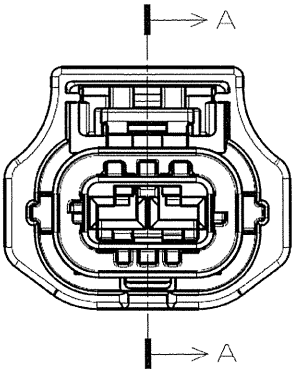
4. Inspection of the Connector and Dress Cover

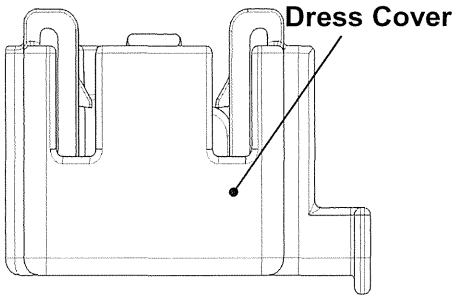
Check that no foreign substances block the terminal cavities.
Check to see if there is any damage to any of the components: (Housing, TPA, CPA, Seal Ring, Dress Cover, Tie Strap).
Check that the TPA is positioned at the Pre-Staged Position.
Check that the CPA is positioned at the Pre-Staged Position.
Check both the housing and Dress Cover locks for cracks prior to mating.

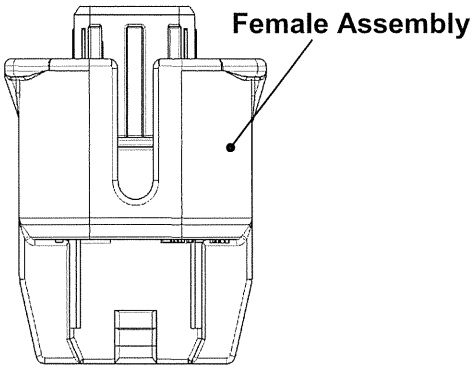
CPA and TPA in Pre-Staged Position





Section A-A





ATTENTION	Do not use CPA and TPA with excessive force. This will cause damage to the connector. If you come across any damage, replace it with a new connector.

ATTENTION	If the TPA is already in the locked position before the terminals are inserted, move the TPA from the locked position to the Pre-Staged position. (See Section 7-3)

ATTENTION	If the CPA is already in the locked position before the terminals are inserted, move the CPA from the locked position to the Pre-Staged position. (See Section 10-5)

ATTENTION	If you find any damage around the locking area, replace the connector and dress cover with a new one.

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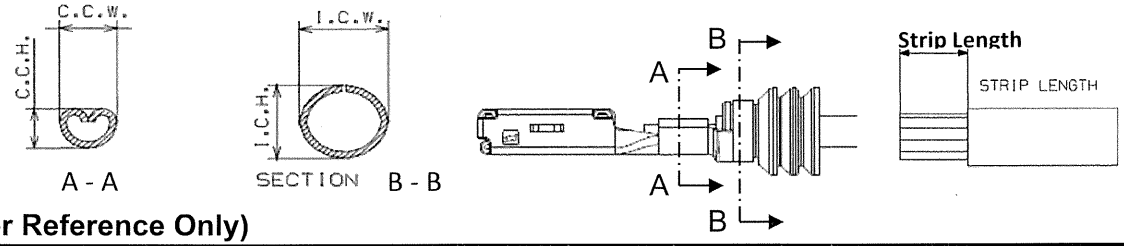
5. Crimp Conditions

Dimensions of the crimped part of the terminals:

Wire barrel (Core wire crimping part)
C.C.H=Conductor Crimp Height
C.C.W=Conductor Crimp Width

Insulation barrel (Insulation crimped part)
I.C.H=Insulation Crimp Height
I.C.W=Insulation Crimp Width



(For Reference Only)

Part Number	Plating	Wire Type/ Size	Wire Seal Supplier/ Number	Wire Strip Length	Wire		Insulation	
					C.C.H	C.C.W	I.C.H	I.C.W
8240-0518	Sn	AWG20	FCI/ F676000	5.0 ±0.5	1.20	1.90	4.10	3.40
		3TBD 0.5mm^2			1.20	1.90	4.10	3.40
		AWG18			1.30	1.90	4.15	3.40
		3TBD 1.0mm^2			1.30	1.90	4.20	3.40
8240-0620	Sn (Grease)	AWG20			1.20	1.90	4.10	3.40
		3TBD 0.5mm^2			1.20	1.90	4.10	3.40
		AWG18			1.30	1.90	4.15	3.40
		3TBD 1.0mm^2			1.30	1.90	4.20	3.40
8240-0520	Ag	AWG20			1.20	1.90	4.10	3.40
		3TADV 0.5mm^2			1.20	1.90	4.10	3.40
		AWG18			1.30	1.90	4.15	3.40
		3TBDV 1.0mm^2			1.30	1.90	4.20	3.40
8240-0519	Sn	AWG16	FCI/ F576000	5.0 +0.5/ 0	1.50	2.35	4.10	4.10
		3TAD 1.5mm^2			1.50	2.35	4.10	4.10
		AWG14			1.60	2.35	4.25	4.15
		3TBD 2.0mm^2			1.60	2.35	4.25	4.15
8240-0621	Sn (Grease)	AWG16			1.50	2.35	4.10	4.10
		3TAD 1.5mm^2			1.50	2.35	4.10	4.10
		AWG14			1.60	2.35	4.25	4.15
		3TBD 2.0mm^2			1.60	2.35	4.25	4.15
8240-0521	Ag	AWG16			1.50	2.35	4.10	4.10
		3TAD 1.5mm^2			1.50	2.35	4.10	4.10
		AWG14			1.60	2.35	4.25	4.15
		3TBD 2.0mm^2			1.60	2.35	4.25	4.15

(Unit:mm)

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6. Inserting the Terminals 【SKILL】

6-1. Terminal Selection

Only Female terminals should be used for these connectors.
The correct terminals that are shown on Page 10 (Section 2-7) should be inserted into each cavity.

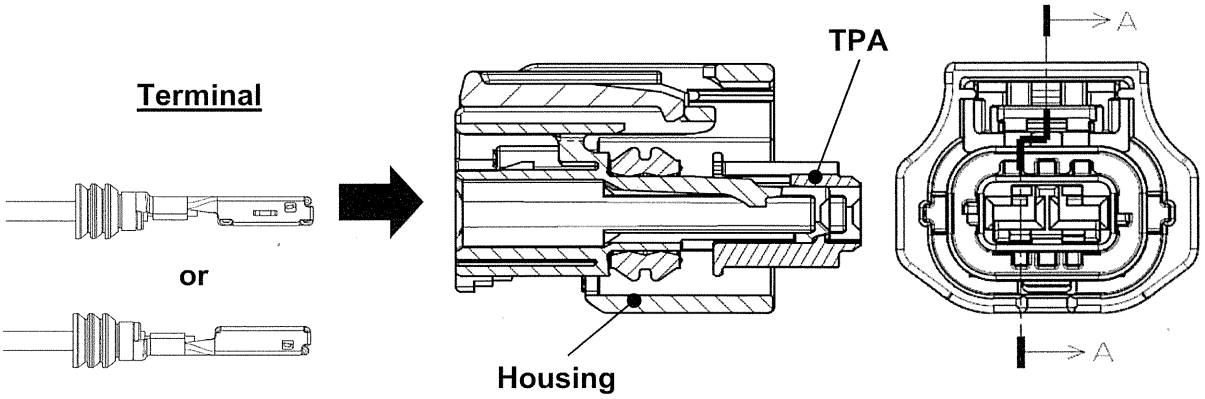
6-2. Insertion

The orientation of the terminals should be as shown in the diagram below.
The terminal can be inserted into the cavity with two orientations (top bottom flipped).

The terminal insertion force shall be 30N (3.0kgf) or less. If abnormal resistance is felt while inserting the terminal, stop the operation immediately and check the terminal, terminal cavity, TPA position and the orientation of the terminal and then reinsert the terminal.

The grip location of the terminal while inserting should be on the wire.
Do not hold the terminal.

Do not insert the terminal at an angle.
Insert the terminal until you feel a light click.



⚠ CAUTION	Insert the terminal as shown in the diagram. If the terminal is inserted at an angle with excessive force, terminal and housing cavity may be damaged and you might injure your finger.

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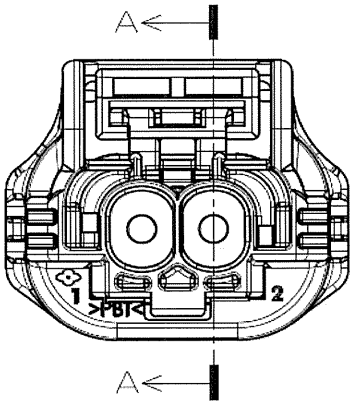
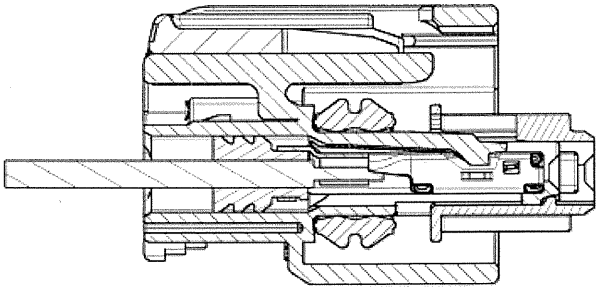
6-3. Checking Insertion Status

Ensure that the housing lance catches the terminal when the terminal is fully inserted. A light click could be felt & click sound could be heard.

After inserting the terminal, pull the wire lightly to check if the terminal is locked. The terminal should be pulled lightly to check.





Section A-A

Terminal Fully Inserted

ATTENTION	Do not force the terminal when the terminal cannot be inserted smoothly. Inserting a terminal with excessive force will cause damage to the housing and the terminal.
ATTENTION	If you experience difficulties when inserting the terminal, check the housing and terminals by using the guidelines in this manual and carry out the operation once again. (See Section 6-2)
ATTENTION	Do not reuse any TPAs or CPAs once they have been engaged. Please use new connector assemblies (TPA,CPA,Housing).

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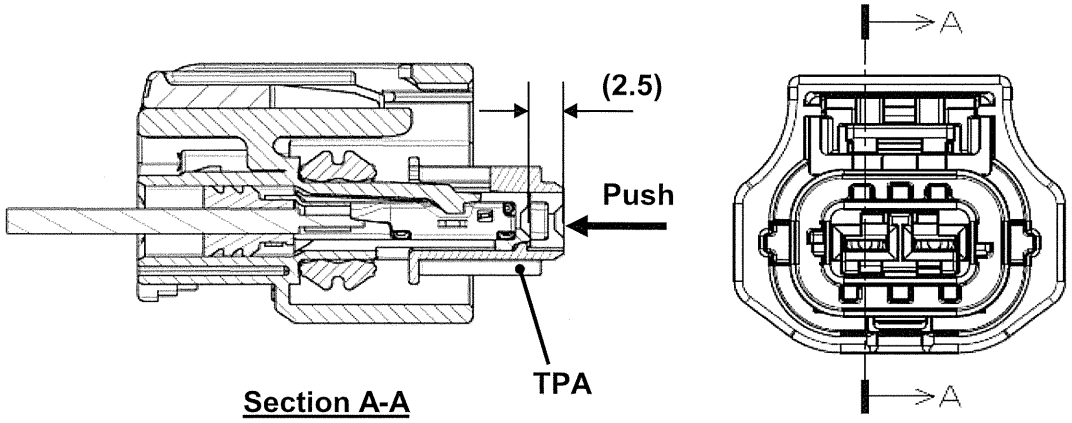
7. Inserting and Removing the TPA 【SKILL】

7-1. Inserting and Locking the TPA

The TPA should fit onto the housings and should be in pre-staged position.
After inserting the terminals, the TPA can be pushed to its final lock position with a push by hand, as shown in the figure below.

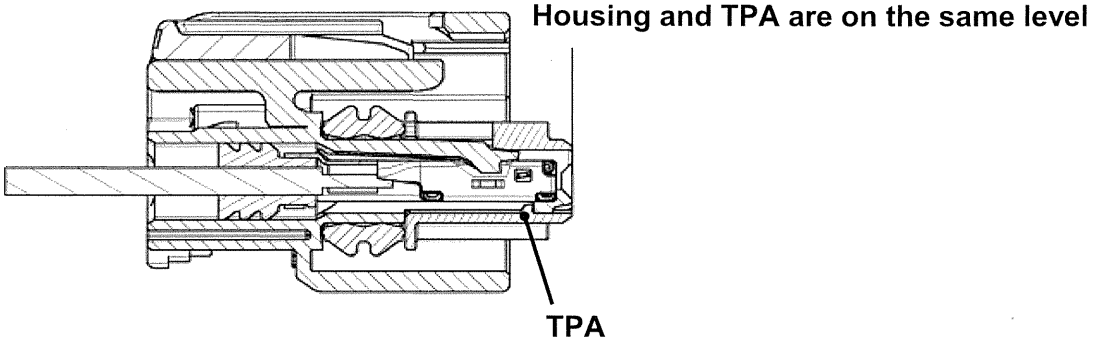
If the TPA is missing prior to assembly, do not use the housing, use a new connector assembly.

If inserting the TPA is difficult, please check to see if the terminals are fully inserted.
If the terminals are half inserted, inserting the TPA would be difficult or impossible.



Section A-A

Inserting the TPA



TPA Fully Inserted

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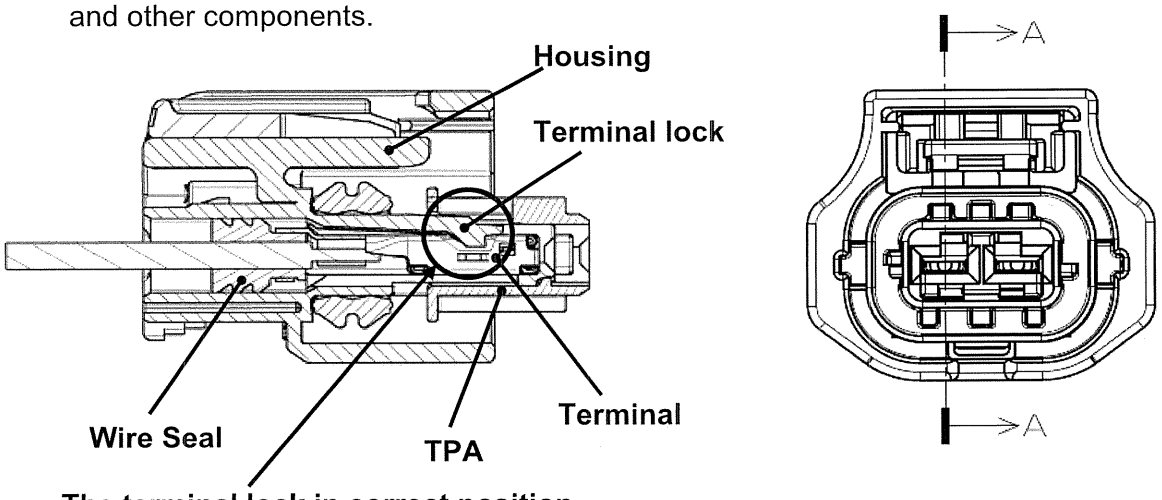
7-2. Cautions When Inserting the TPA

If the TPA requires a high push force to be inserted to its final lock position, the only possible cause is listed below.

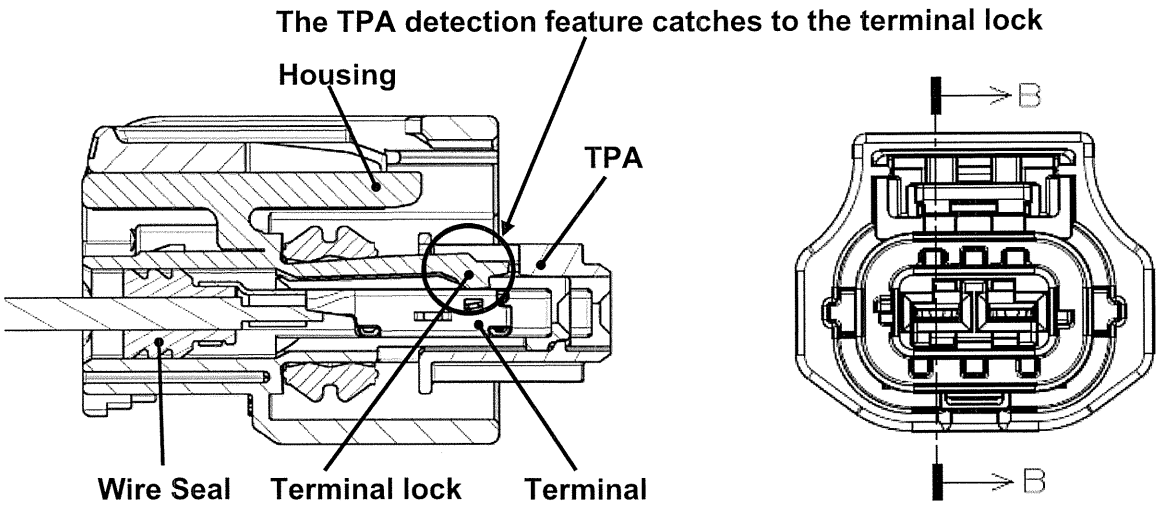
If the terminal is in its half-inserted position, TPA can not be inserted as shown in figure below. Make sure that the terminal is fully inserted correctly.

Inserting the TPA with excess force will cause damage to the terminal lock and other components.



Section A-A

Terminal Fully Inserted-Correctly



Section B-B

Terminal Half-Installed-Incorrectly

ATTENTION	Never insert the terminal when the TPA is at the locked position. It may cause damage to the terminal and housing.

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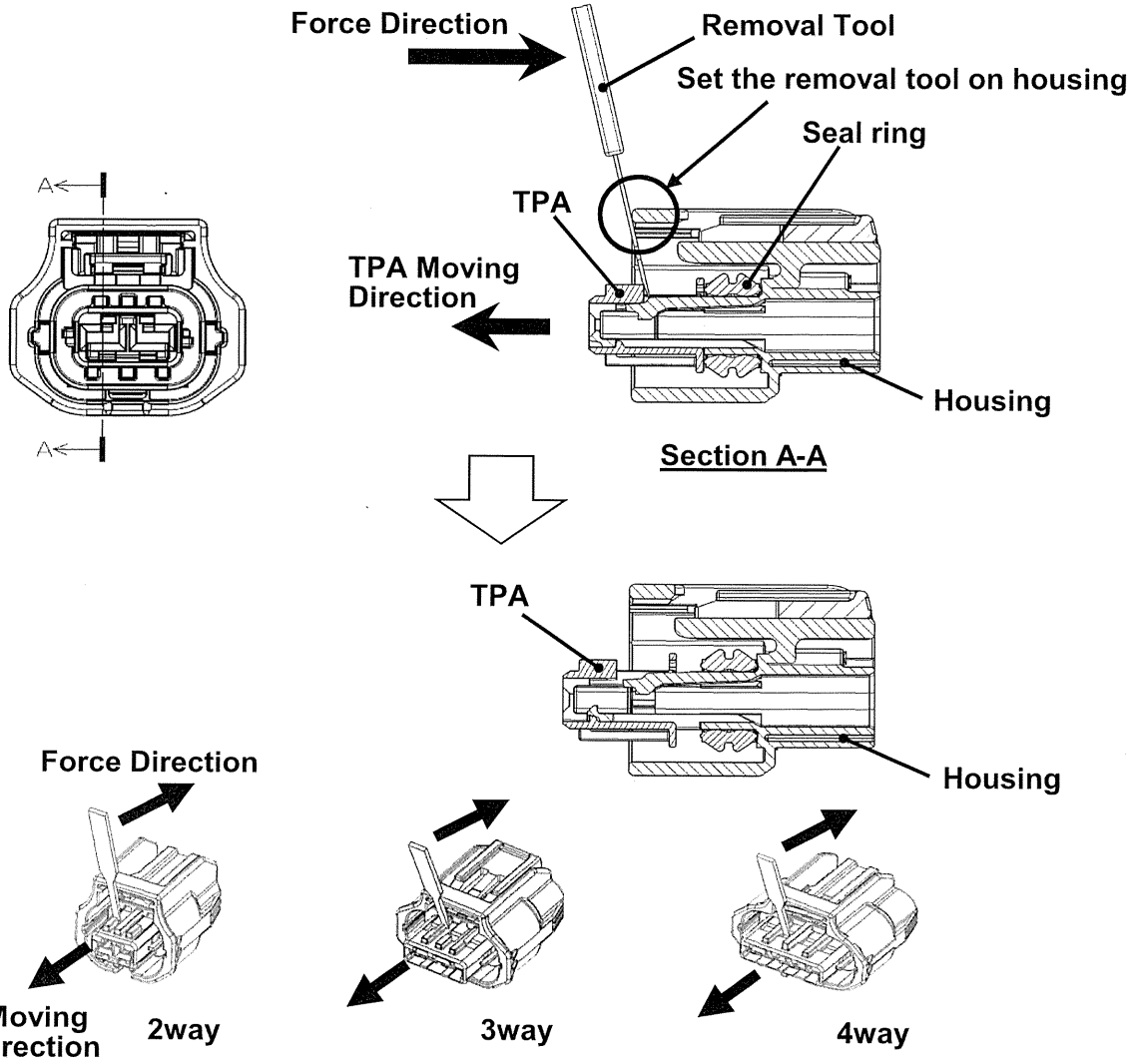
7-3. Moving the TPA from Final Lock Position to Pre-Staged Position

Only the correct TPA removal tool, Sumitomo Part #2373000* (* is division No.) should be used. To release the TPA to Pre-Staged, insert the removal tool to the TPA releasing position and push as shown in the direction in the figure below.

Push the terminal removal tool until the TPA is released to its Pre-Staged Position.



CAUTION	When you are using the removal tool, do not apply excessive force and not bend the tool. Do not use removal tool for other purposes.
ATTENTION	When you move the TPA to its Pre-Staged position, check the seal ring. If the seal ring is scratched, this may affect sealing performance. If you notice any damages, please replace the connector assembly.
ATTENTION	When you move the TPA to its Pre-Staged position, check both the TPA and the housing lock for damage. If you find any damage, replace the connector assembly.

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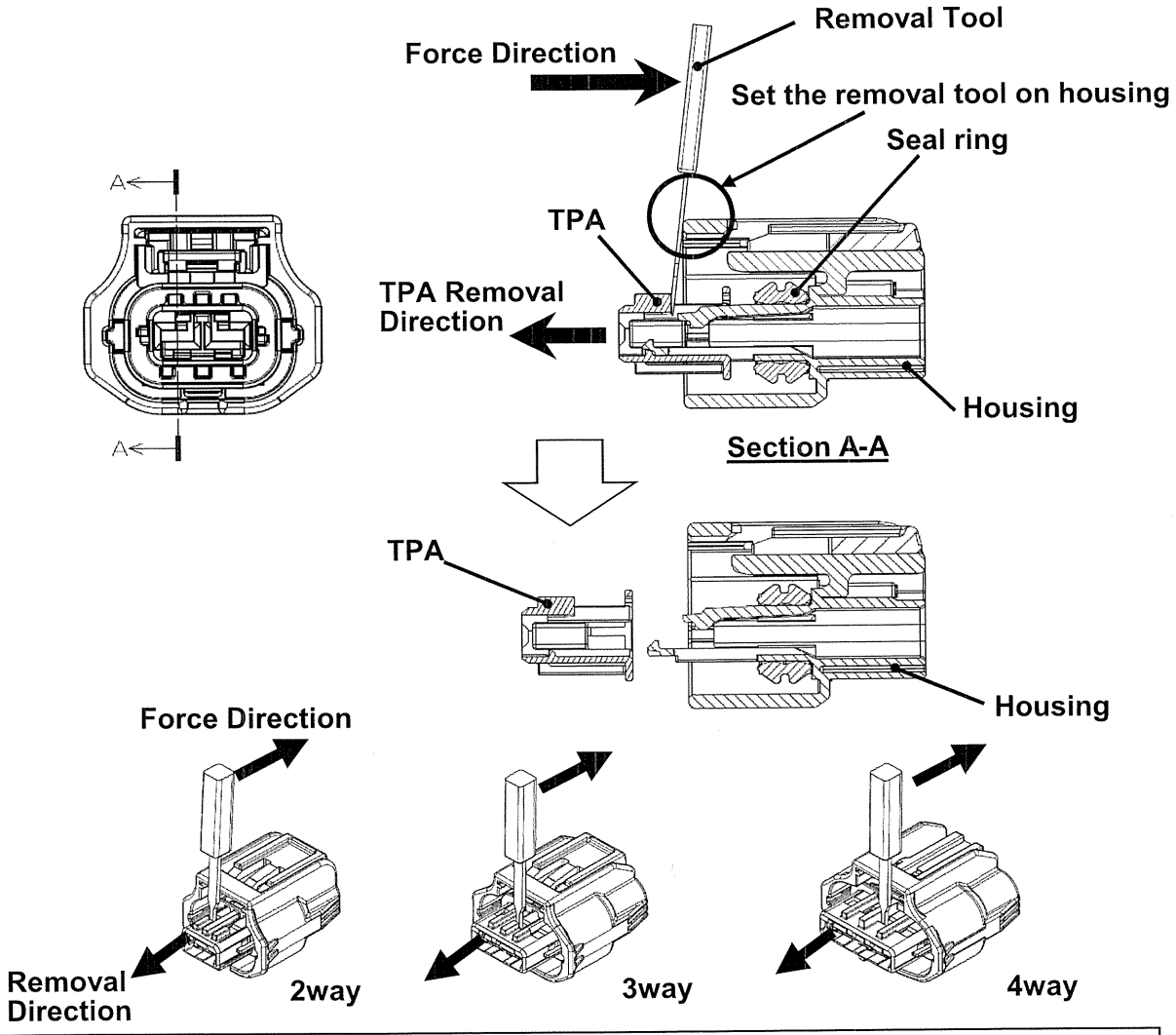
7-4. Removing the TPA from the Connector

Only the correct terminal removal tool, Sumitomo Part #2373000* (* is division No.) should be used. To release the TPA, insert the removal tool to the TPA releasing position and push as shown in the direction in the figure below.

Push the removal tool until the TPA is completely released.



CAUTION	When you are using the removal tool, do not apply excessive force and not bend the tool. Do not use removal tool for other purposes.
ATTENTION	When you completely remove the TPA, check the seal ring. If the seal ring is scratched, this may affect sealing performance. If you notice any damages, please replace the connector assembly.
ATTENTION	When you completely remove the TPA, check both the TPA and the housing lock for damage. If you find any damage, replace the connector assembly.

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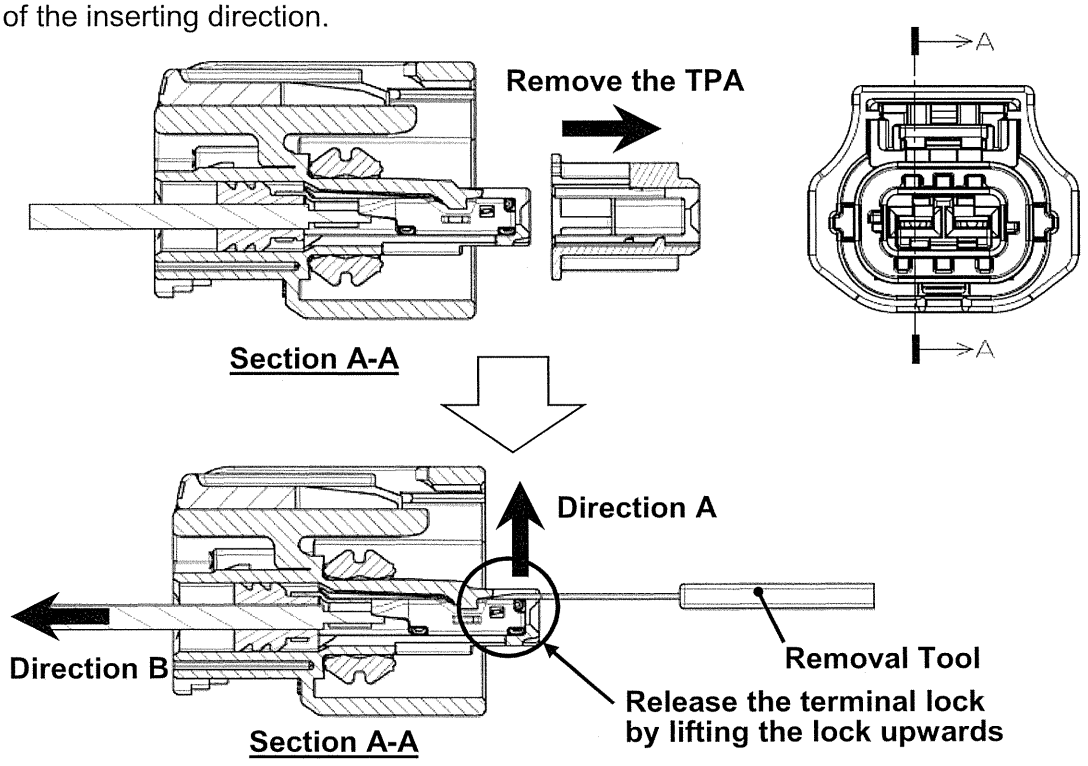
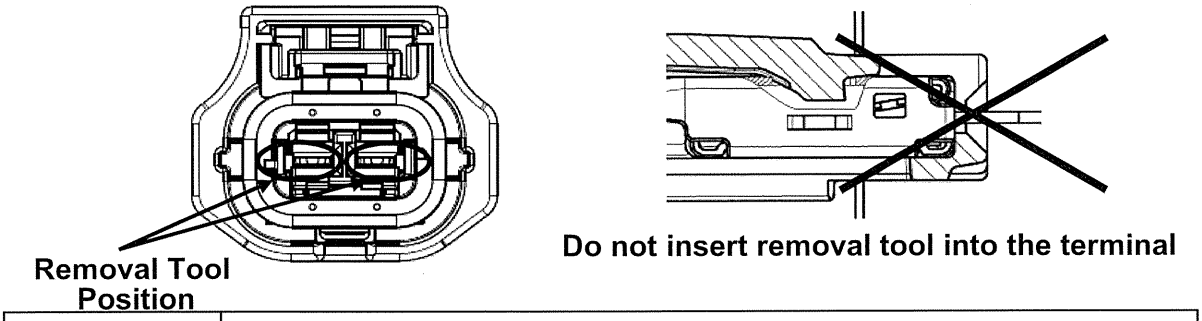
8. Removing Terminals from the Connector 【SKILL】

Remove the TPA.(See Section 7-4)
Only the correct removal tool, which Sumitomo part #2373000* (* is division No.), should be used. Insert removal tool into the correct location shown below.
Push the removal tool lightly to the direction A, and release the terminal lock.
When the lock is released, pull the terminal to the direction B, that is opposite of the inserting direction.





CAUTION	When you are using the removal tool, do not apply excessive force and not bend the tool. Do not use removal tool for other purposes.

ATTENTION	When you remove the terminal, do not deform the housing lance. Insert the removal tool to the correct position then push. When you remove the terminal, do not pull the terminal with abnormal force. If it does not come out, remove the removal tool from the housing and push the terminal a little to disengage. Then start from the beginning. After removing the terminal, check the terminal and connector cavity. If you find any damage, replace it with a new one. Never try to fix damaged components.

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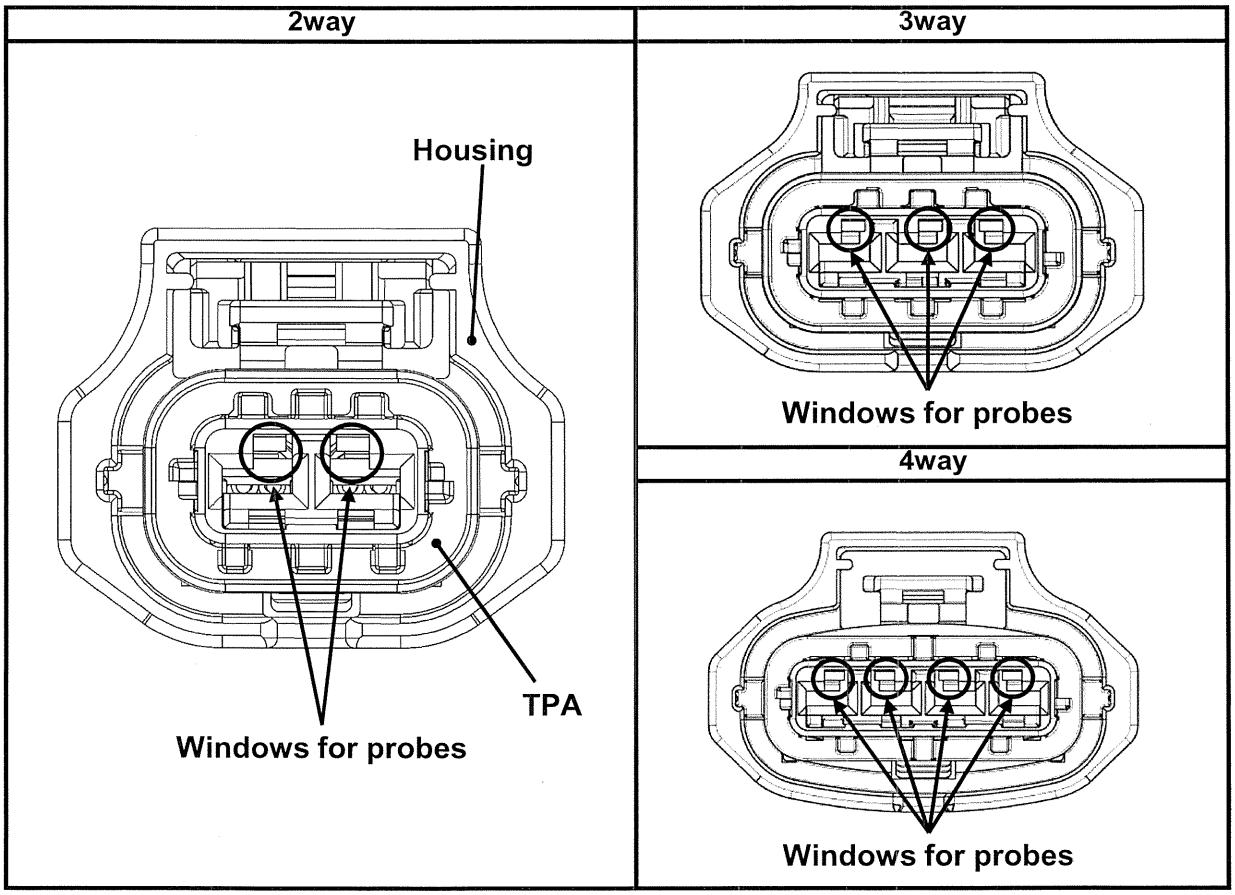
9. Method of Electrical Inspection

When a probe is inserted into a connector for circuit checking, do not deform the contact spring of the terminal. Only insert probe into the designated windows shown in the figure below.

Replace all connectors or terminals if you come across any deformation or damage regardless of the level of damage of the components.
Never reuse these components even if they can be reworked.



ATTENTION	If you find damage or deformations on the connector or the terminal, replace them with new components regardless of the level of damages and deformations. Do not repair and reuse them.

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10. Engaging and Disengaging the Connector and CPA【SKILL】

10-1. Points to Make Sure Before Engaging the Connector

・Make sure that TPA is inserted completely until it is locked in its correct position.
・Make sure that CPA is inserted in its Pre-staged position.

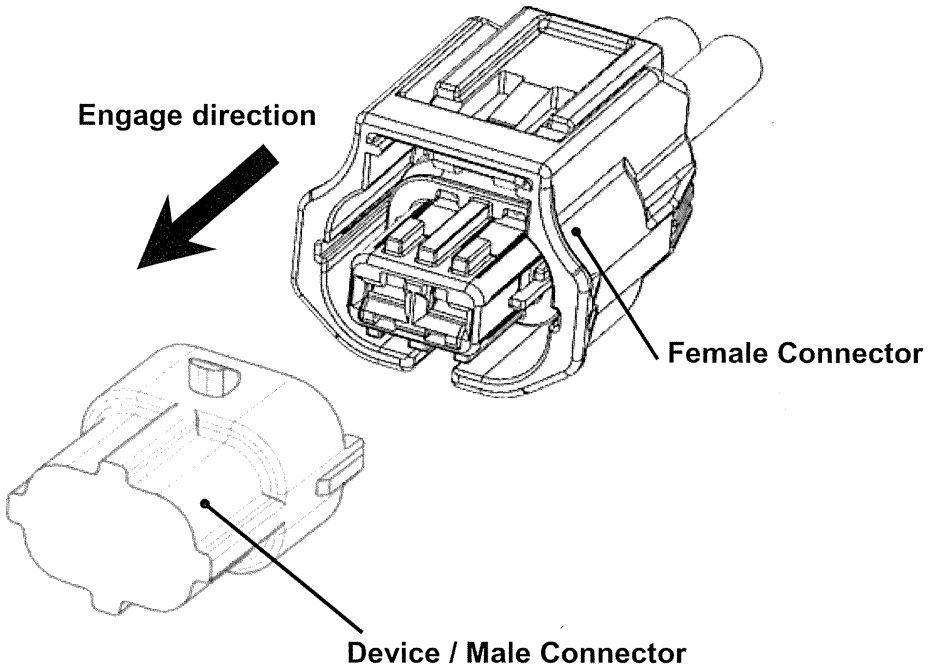
10-2. Engaging the Connector

Align connector as shown in the picture below, then engage the connector gently. Ensure the direction of the force to engage is aligned to the engagement directions of the connectors. Any movement in the horizontal or vertical direction is unnecessary and may cause damage to the terminals or housings.

If the mating of connector is found difficult, check if the TPA is fully inserted, and if there are no other obstacles in the housing.

The force to engage the connector should only be applied onto the housing and not on the wires. Failure to do so could damage the connection and prevent efficient electric conductivity.

If the connector is not fully engaged or not locked properly, the connector might be loose and electrical connection might discontinue. When this happens, please repeat the connector engagement process from the beginning.



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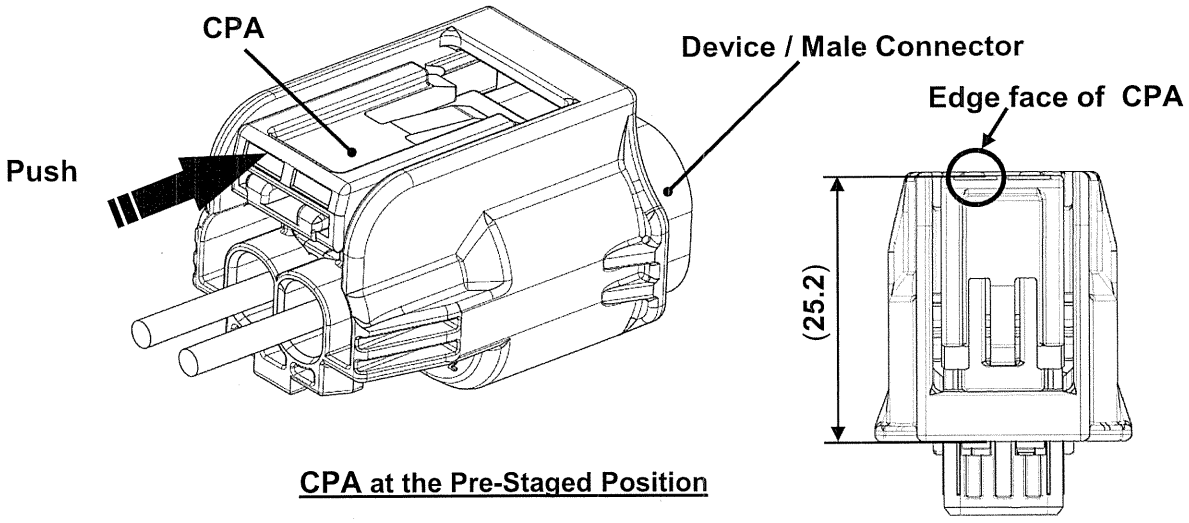
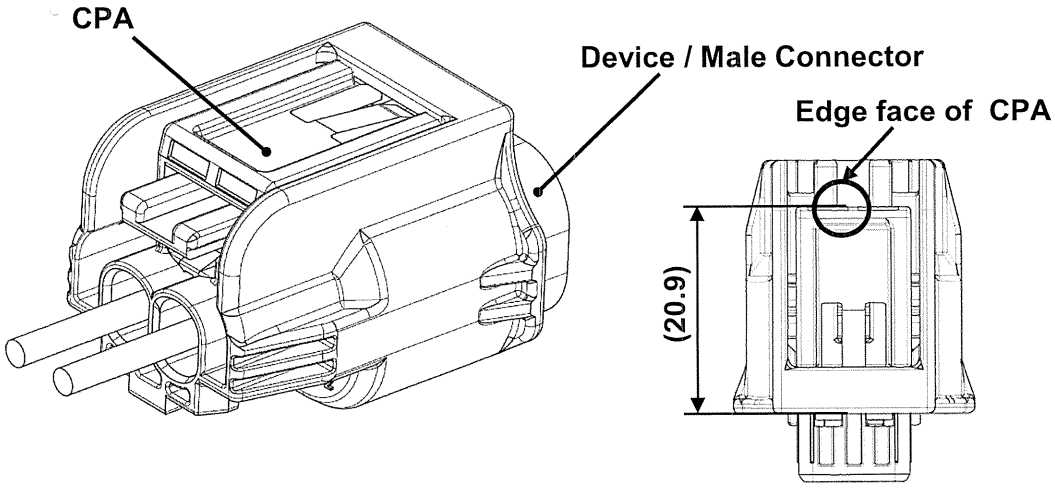
10-3. Inserting and Locking the CPA

The role of CPA is to ensure the connector is properly mated to the device or male connector. The CPA should be assembled on the terminal insertion side of the housing. After mating the connector to the device, the CPA can be inserted to its final lock position with a light push by hand.

If inserting the CPA is found to be difficult in its correct orientation, the connector should be checked if they are fully mated. If the connector is not fully mated, locking the CPA will be difficult or impossible.



CPA at the Pre-Staged Position



CPA at the Fully Locked Position

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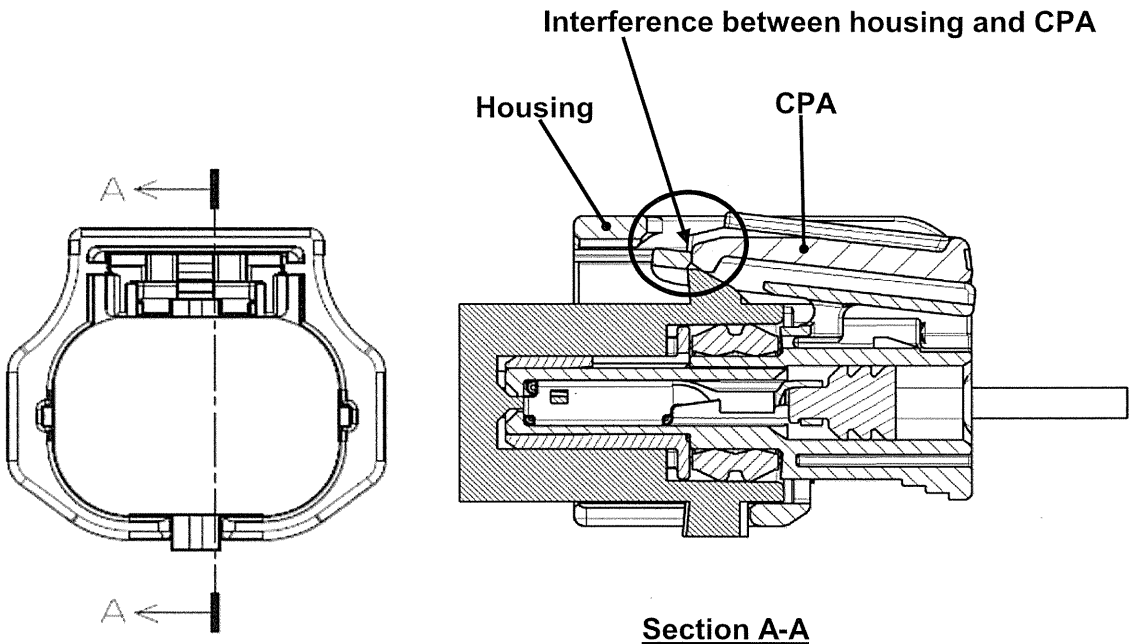
10-4. Cautions when Inserting the CPA

If the CPA requires high push force to be inserted to its final lock position,
one possible cause is that the connector is half mated as shown in diagram below.

If the connector is half-mated, the CPA cannot be inserted.
Make sure that the connector is fully mated and try to insert the CPA again.



Section A-A

ATTENTION	Never apply excess force to lock the CPA when the connectors are half mated. It may cause damage to the CPA and housings of assemblies.

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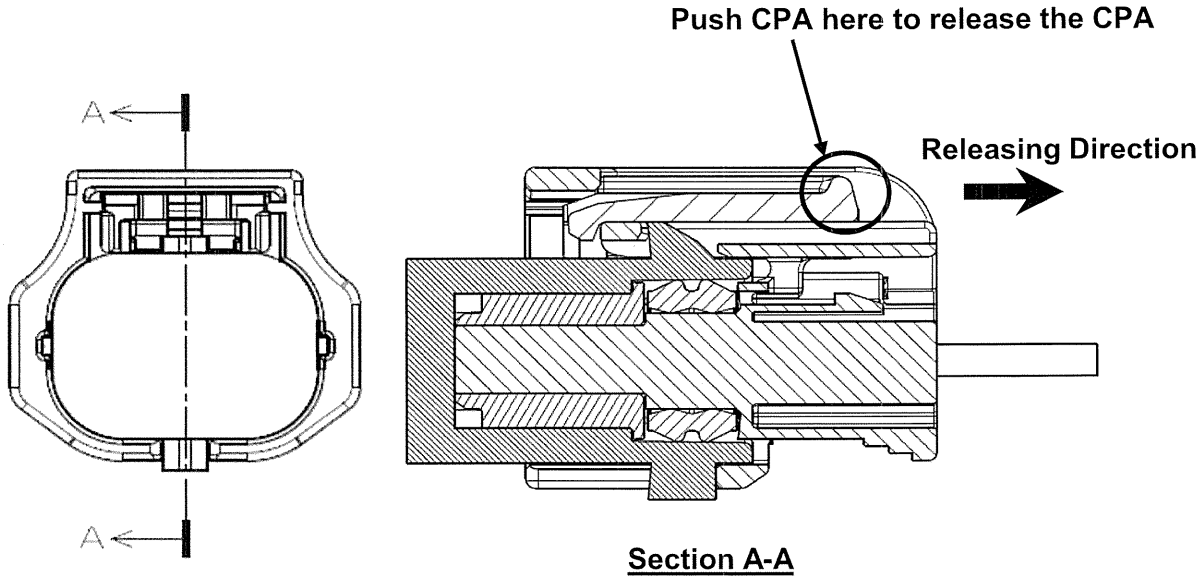
10-5. Releasing the CPA to Pre-Staged Position

To release the CPA, push the CPA at the releasing point shown and angle below. Keep pushing until the CPA is unlocked to its pre-staged position.



Section A-A

ATTENTION	After releasing the CPA, check the CPA to see if the part is damaged. If the CPA is damaged, this might affect CPA function. If the CPA is damaged, the connector assembly should be replaced with a new connector assembly.

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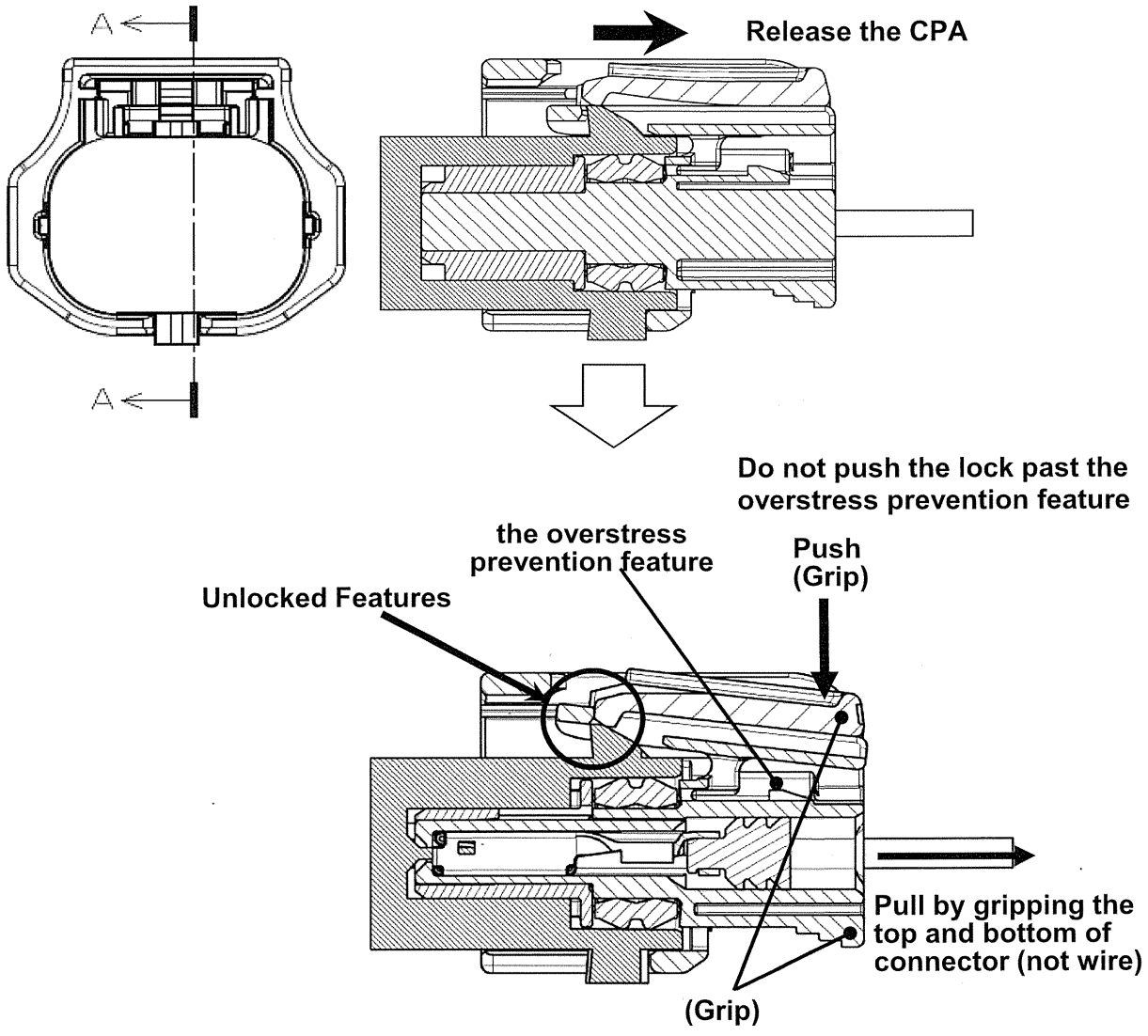
10-6. Disengaging the Connector

Disengaging the Connector by Hand

To disengage the connectors, release the CPA (See Section 10-5). Next, push the connector lock downward to unlatch the device lock. Do not push the lock past the overstress prevention feature shown in the diagram below. Failure of abiding this requirement will damage the connector lock.

While pushing the connector lock, pull the connector assembly to disengage the connector.



Section A-A

ATTENTION	Push the connector lock until it unlatches the device lock. Do not apply abnormal force. It will cause damage to the connector. After disengaging connector, if you find any defects, replace it with a new connector.

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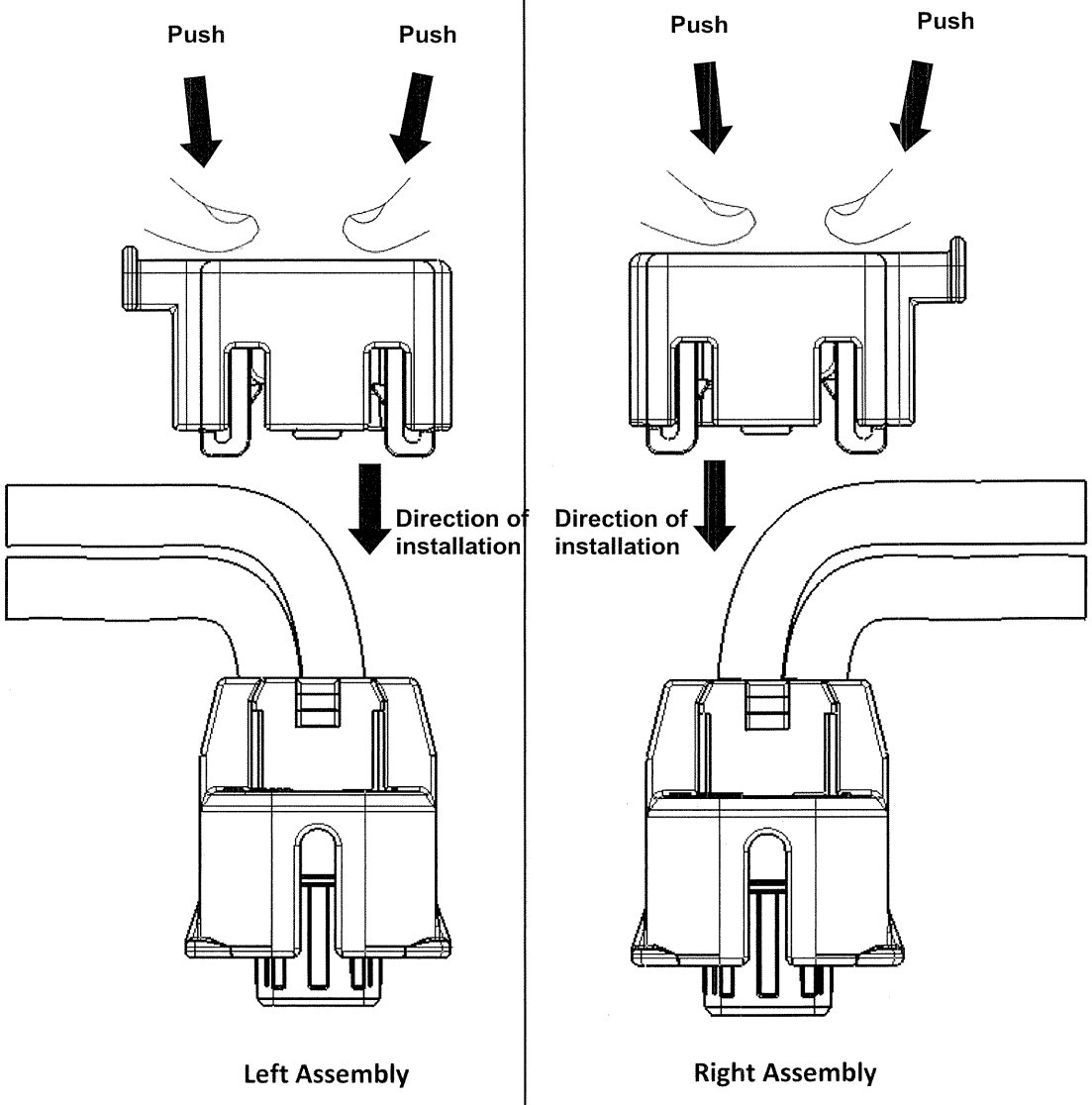
11. Engaging the Dress Covers [SKILL]

11-1 Insertion of the Left/Right Dress Cover

Engage the dress cover completely until you hear the audible click sound.
If the cover is damaged and disengages, replace the cover with a new one.

When inserting the dress cover, route the wires in there intended direction before engaging the cover.

For 2way Connector Only



CAUTION	Push down on the dress cover rear surface as described in above diagram until an audible click is heard. If an audible click is not heard when engaging, the parts may be damaged, use another part.

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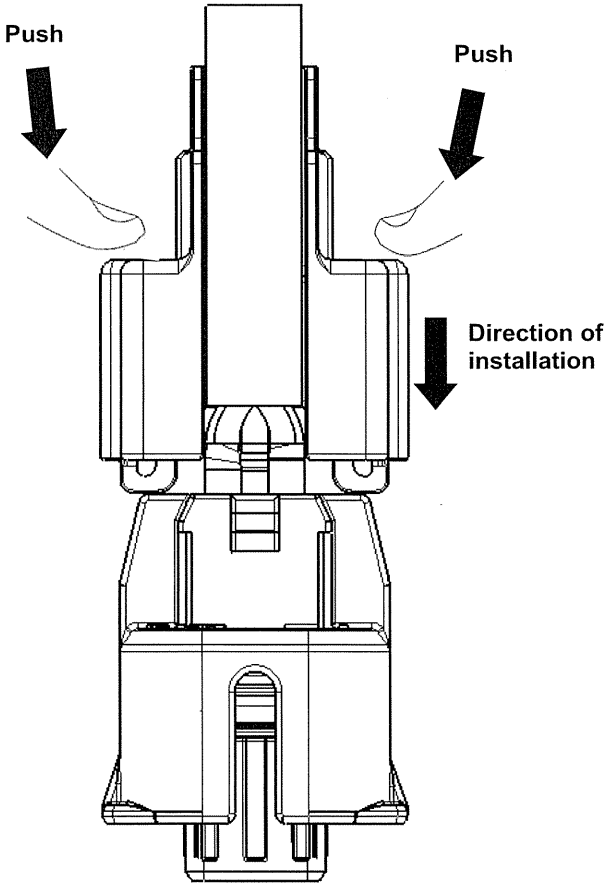
11. Engaging the Dress Covers [SKILL]

11-2 Insertion of the Straight Dress Cover

Engage the dress cover completely until you hear the audible click sound.
If the cover is damaged and disengages, replace the cover with a new one.

When inserting the dress cover, route the wires in there intended direction before engaging the cover.

For 2way Connector Only



CAUTION	Push down on the dress cover rear surface as described in above diagram until an audible click is heard. If an audible click is not heard when engaging, the parts may be damaged, use another part.

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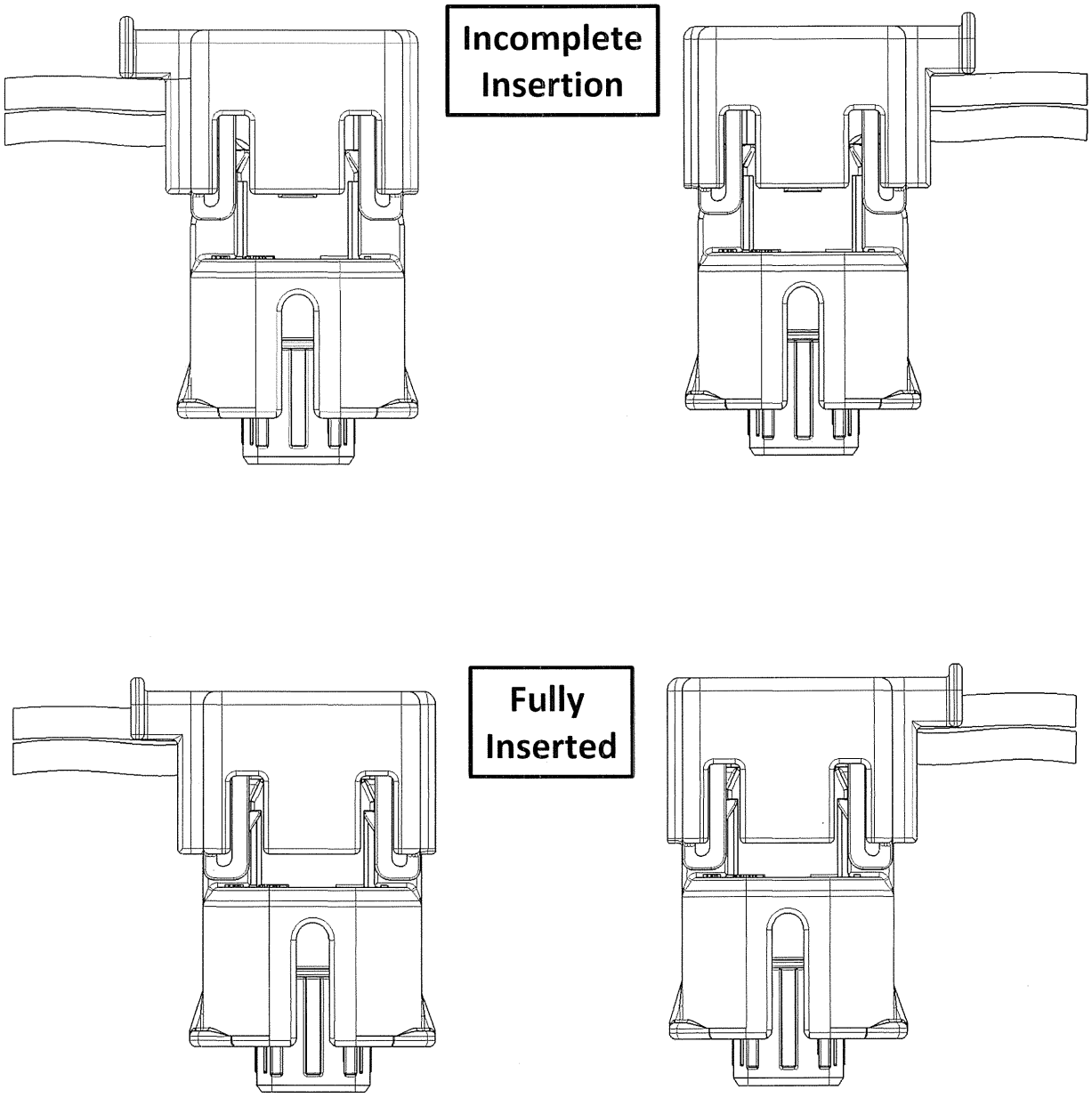
11-3 Final Check of Left/Right Dress Cover (Engagement)

When the Dress Cover is fully engaged, the Dress Cover should be positioned as shown in the figures below:



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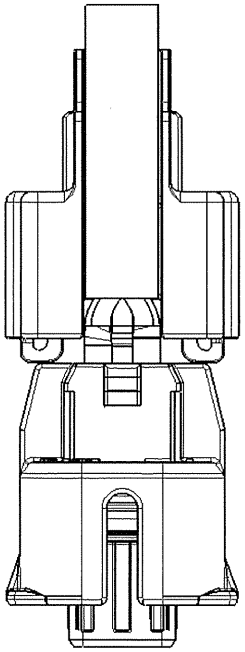
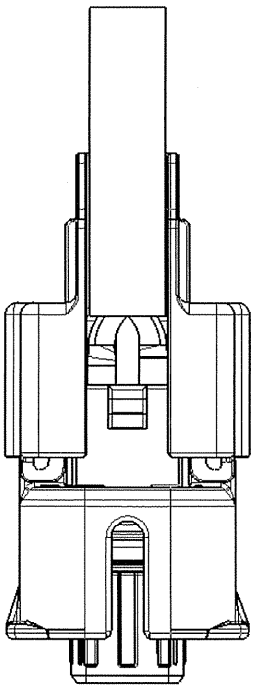
11-4 Final Check of the Straight Dress Cover (Engagement)

When the Dress Cover is fully engaged, the Dress Cover should be positioned as shown in the figures below:



Incomplete Insertion



Fully Inserted

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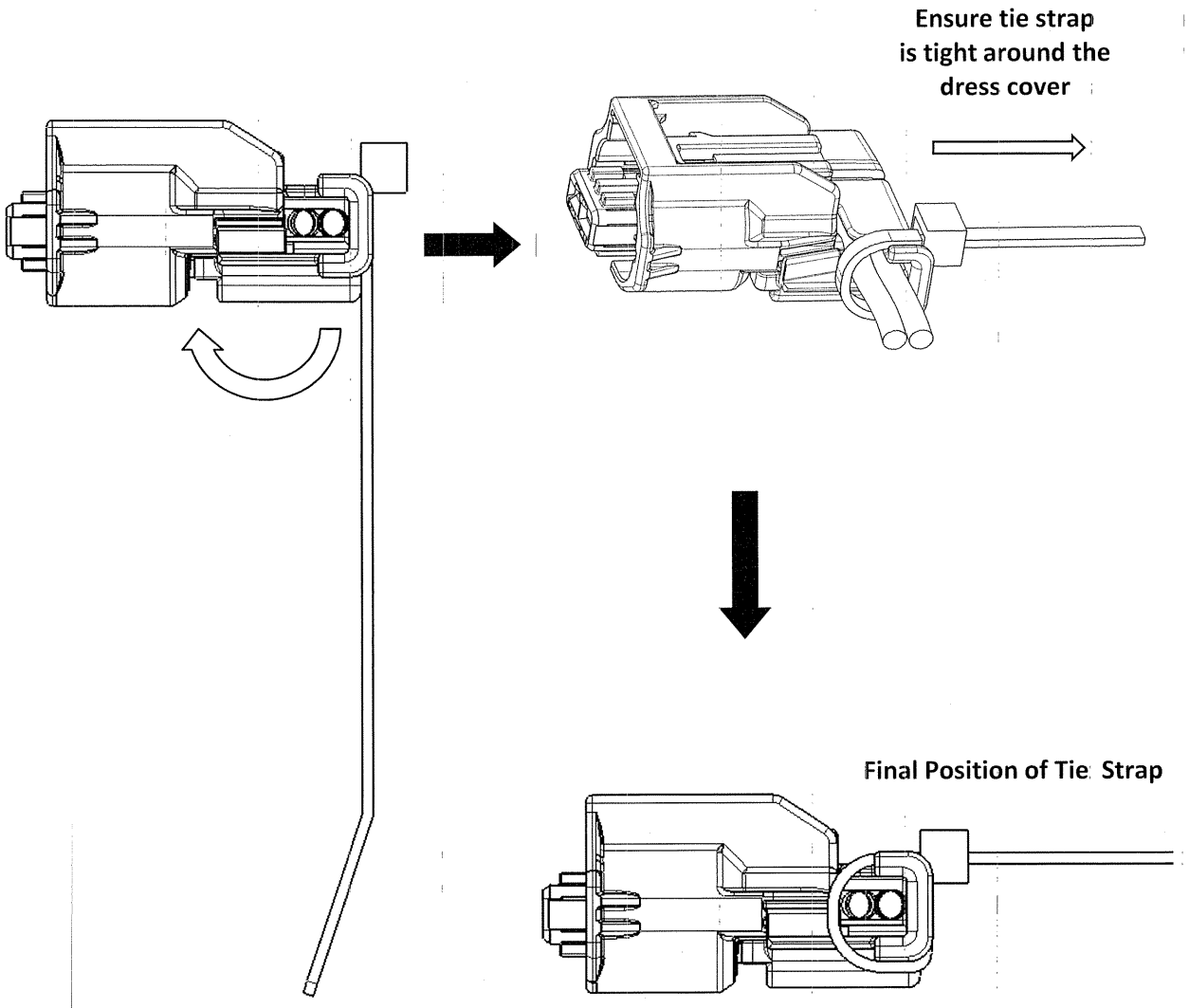
12. Engaging the Tie Strap

12-1 Engaging the Tie Strap for Left/Right Dress Cover

After engaging the dress cover to the female housing, if used, assemble the tie strap as explained below.



ATTENTION	Do not pull on the tie strap as this may result in premature lock damage to the dress cover locks and housing locks.

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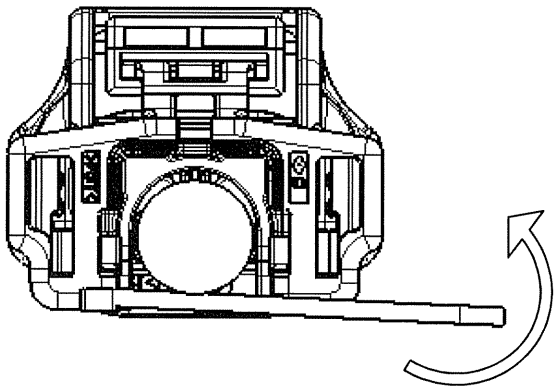
12. Engaging the Tie Strap

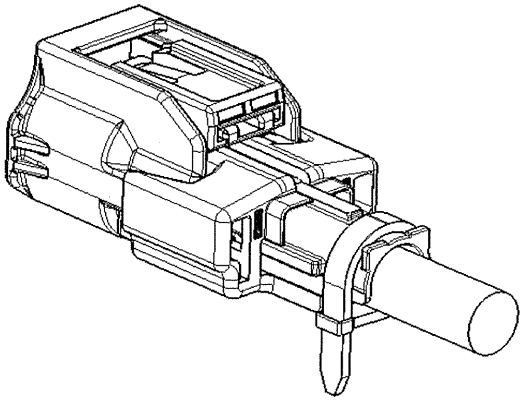
12-2 Engaging the Tie Strap for Straight Dress Cover

After engaging the dress cover to the female housing, if used, assemble the tie strap as explained below.

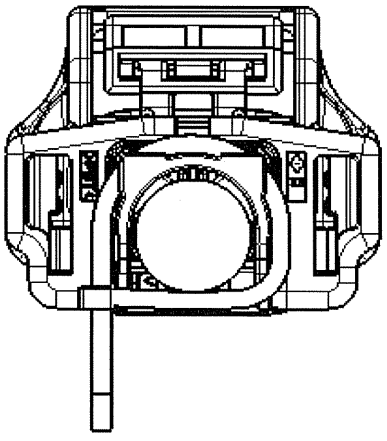
Bend tie strap around the dress cover and wire



Ensure tie strap is tight around the dress cover



Final position of tie strap



ATTENTION	Do not pull on the tie strap as this may result in premature lock damage to the dress cover locks and housing locks.

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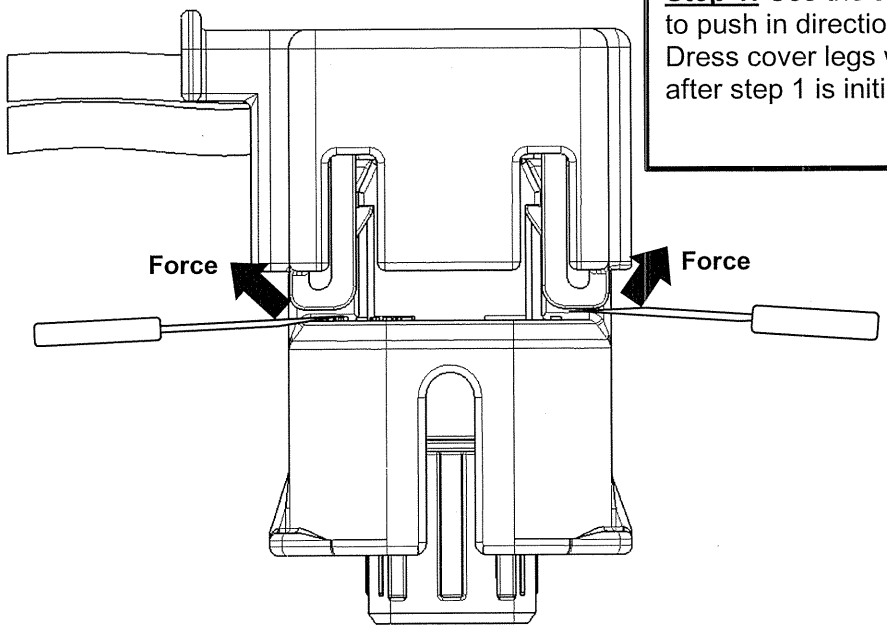
13. Disengaging the Dress Covers [SKILL]

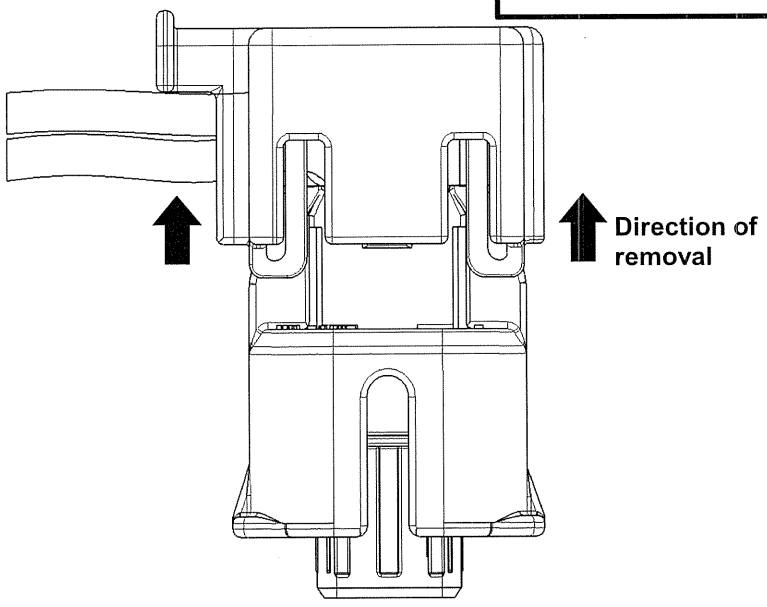
13-1 Disengaging the Left/Right Dress Cover

When the dress cover is fully engaged, Use Jig #17330016 to remove the locking legs one by one from housing lock.

Step 1: Use the Jig listed above to push in directions shown. Dress cover legs will flex outward after step 1 is initiated.



Step 2: As Jigs are being used to remove locking legs, simultaneously push upwards to remove dress cover from housing.



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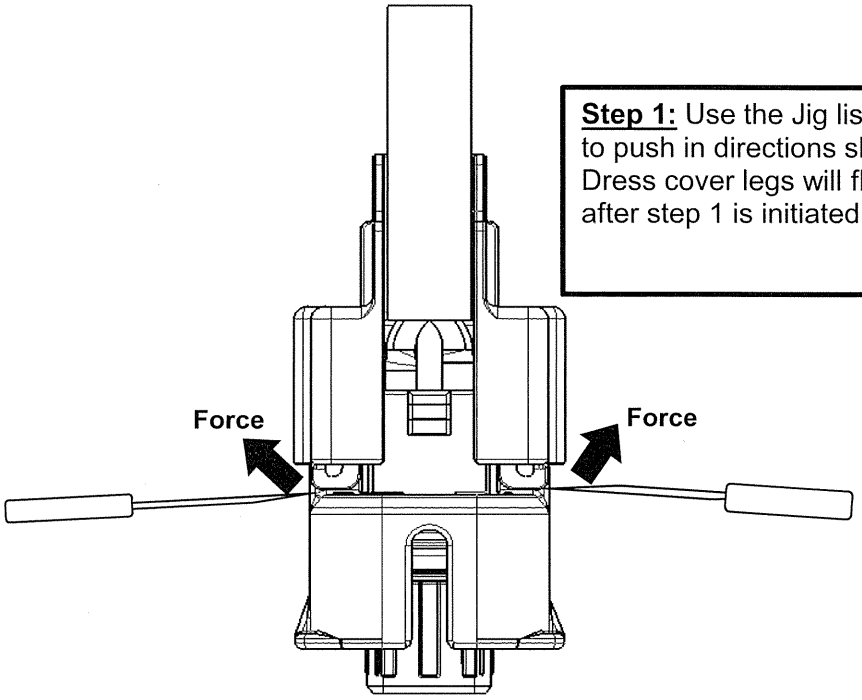
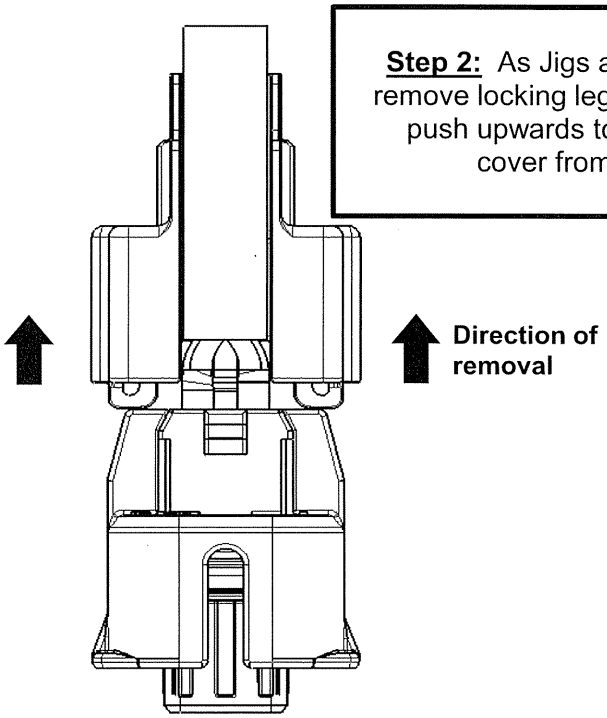
13. Disengaging the Dress Covers [SKILL]

13-2 Disengaging the Straight Dress Cover

When the dress cover is fully engaged, Use Jig #17330016 to remove the locking legs one by one from housing lock.



Step 1: Use the Jig listed above to push in directions shown. Dress cover legs will flex outward after step 1 is initiated.



Step 2: As Jigs are being used to remove locking legs, simultaneously push upwards to remove dress cover from housing.

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14. Handling of Products and Caution Points

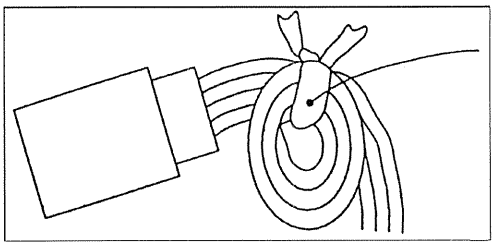
1) Crimped Terminals:

1. Once terminals are crimped, do not store them for a long time.
2. Use them as soon as possible in the next process.
3. The terminals should be protected using a vinyl bag or a plastic cover etc. when carried.

ATTENTION	The terminal may be damaged or its performance may be affected by the presence of foreign matter. Therefore, it is important to follow instructions when storing the terminals.

2) Control of In-Process Components:

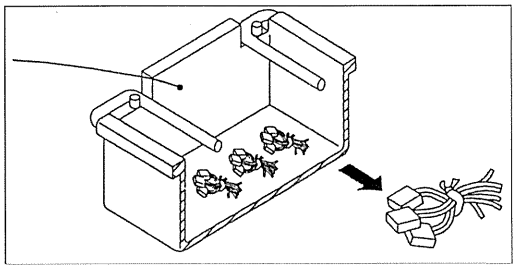
1. To prevent terminals from backing-out and wire disconnections caused by stamping when carrying the in-process (sub assembled) products it is desirable to protect the terminals using vinyl bags, etc. regardless of the length of the carriage duration.



Should be taped

2. Put sub assembled products with short cables in a container as shown below when carrying.

Container



3. Do not leave the products in a place where they are exposed to direct sunlight. Keep them in a dry ,clean, indoor place at a constant temperature and humidity.

4. Use proper containers when carrying to protect the products from dust, dirt, water, etc., and handle them with care.

CAUTION	In-process components may be damaged or their performance affected by bad storage methods. Therefore, it is important to follow instructions when storing in-process components.

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