

### 114-101036

### 15 MAY 2015

Rev. A1

#### 67WAY, MCON1.2&MCP2.8 HYBIRD, SEALED, PLUG

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#### 1 GENERAL

#### 1.1 Purpose

This specification includes the guidelines for the application and the mounting of the 67POS TCU connector and its accessories.

#### 1.2 Product Drawing

THIS APPLICATION SPECIFICATION IS BASED ON THE LATEST VALID CUSTOMER DRAWING.

C2278584	67POS, MIXED, REC HSG, ASSY, SEALED;
C2278586	67POS, COVER ASSEMBLY;
C2278827	2ND-LOCK FOR MCP2.8
C1452409	2ND-LOCK FOR MCON1.2;
C1355036	AMP MCP2.8 CONTACT SYSTEM
C1534326	MCON1.2CB CONTACT SYSTEM
C828905	SINGLE WIRE SEAL(SWS)
114-94272	INTERFACE DRAWING 67POS

#### 1.3 Product Specification

108-101374	67P Product Specification
108-18513	AMP MCP2.8 CONTACT SYSTEM
108-18782	MCON1.2CB CONTACT SYSTEM
109 SERIES	Test Specification, Requirements for Test Methods.
USCAR-2 Rev 6	Test Specification
ISO 16750-3	Test Specification

#### 1.4 DELIVERY CONDITION PART LIST

67 POS, MIXED, REC HSG, ASSY, SE ALED, TYPE180°	2278584-1	
67 POS, MIXED, REC HSG, ASSY, SE ALED, TYPE45°	PN 2278584-2	



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67 POS, COVER ASSY, TYPE180°	PN 2278586-1	
67 POS, COVER ASSY, TYPE45°	PN 2278586-2	
2 <sup>ND</sup> -LOCK FOR MCON1.2	PN 1452409-2	
2 <sup>ND</sup> -LOCK FOR MCP2.8	PN 2278827-1	
AMP MCP 2.8 TERMIANL	PN 1-968882-X 1-968855-X 1-968857-X	
SWS FOR AMP MCP 2.8 TERMINAL	PN 828904-1 828905-1	
AMP MCON1.2 TERMIANL	PN 1534594-X 1670144-X	

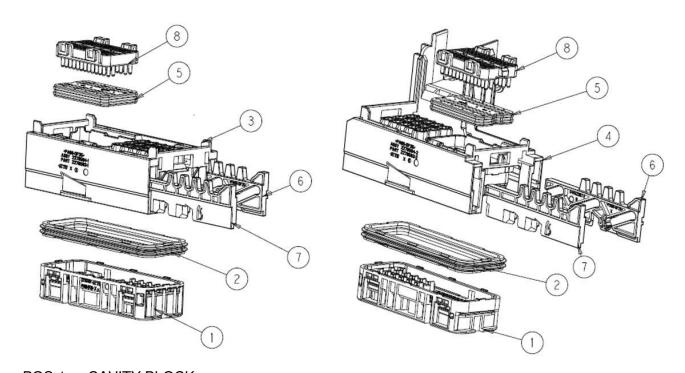


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BLINDPLUG FOR MCP 2.8	PN 0-828922-1	
BLINDPLUG FOR MCON1.2	PN 1-1452424-1	

#### 2. PRODUCT DESCRIPTION

#### 2.1 ASSEMBLY OF THE 67 POS. CONNECTOR



POS.1 CAVITY BLOCK	(
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POS.2 PERIPHERAL SEAL

POS.3 CAVITY BLOCK TOP TYPE180° POS.4 CAVITY BLOCK TOP TYPE45°

POS.5 FAMILY SEAL

POS.6 SLIDE LEFT

POS.7 SLIDE RIGHT

POS.8 COVER FOR FAMILY SEAL

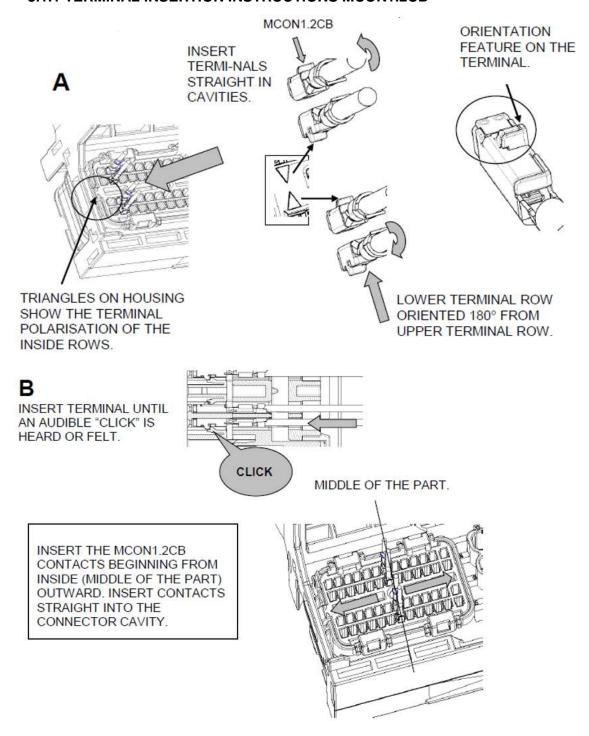


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#### 3. APPLICATOIN DESCRIPTION

#### 3.1 TERMINAL INSERTION / REMOVAL INSTRUCTIONS MCON1.2CB AND MCP2.8

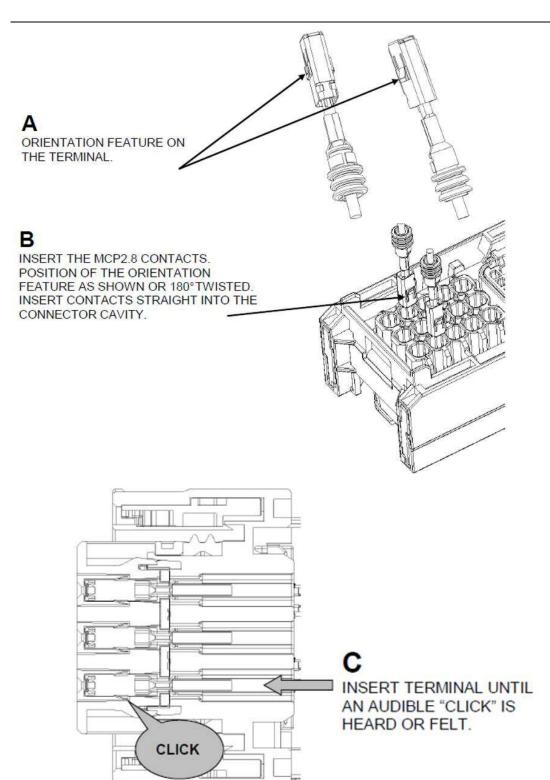
#### 3.1.1 TERMINAL INSERTION INSTRUCTIONS MCON1.2CB



#### 3.1.2 TERMINAL INSERTION INSTRUCTIONS MCP2.8



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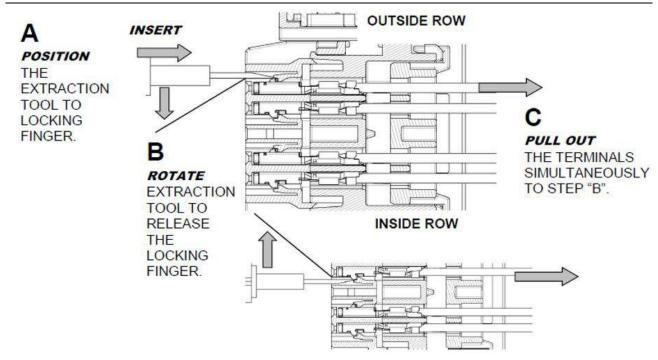


NOTE: DURING THE CONTACT LOADING IN THE HOUSING TAKE CARE THAT THE WIRES ARE LAID ACCORDING TO THE WIRES OUTLET DIRECTION/WIRES OUTLET GUIDE FOLLOW (MCON1.2CB AND MCP2.8 WIRES).

#### 3.1.3 TERMINAL REMOVAL INSTRUCTIONS MCON1.2CB



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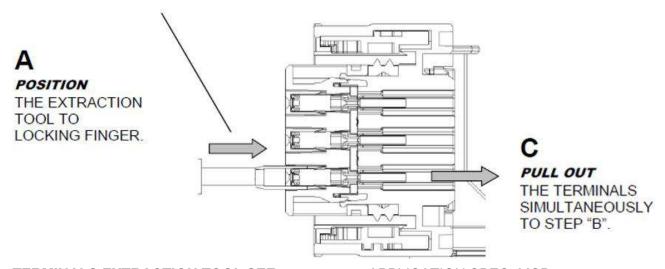
TERMINALS EXTRACTION TOOL SEE: 114-18464 APPLICATION SPEC. MCON1.2CB

#### 3.1.4 TERMINAL REMOVAL INSTRUCTIONS MCP2.8

B

PUSH

THE EXTRACTION TOOL FAR AS POSSIBLE AND CAREFULLY TO RELEASE THE LOCKING FINGERS.



TERMINALS EXTRACTION TOOL SEE: 114-18148 APPLICATION SPEC. MCP2.8

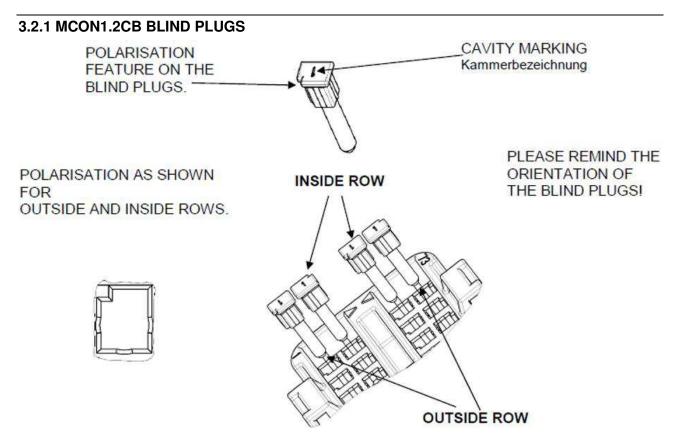
#### 3.2 BLIND PLUGS USAGE INSTRUCTIONS

APPLICABLE BLIND PLUGS SEE CUSTOMER DRAWING

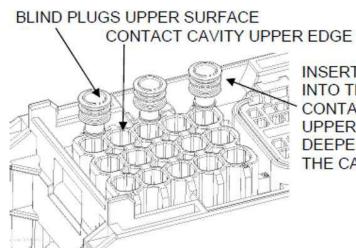


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#### 3.2.2 MCP2.8 BLIND PLUGS



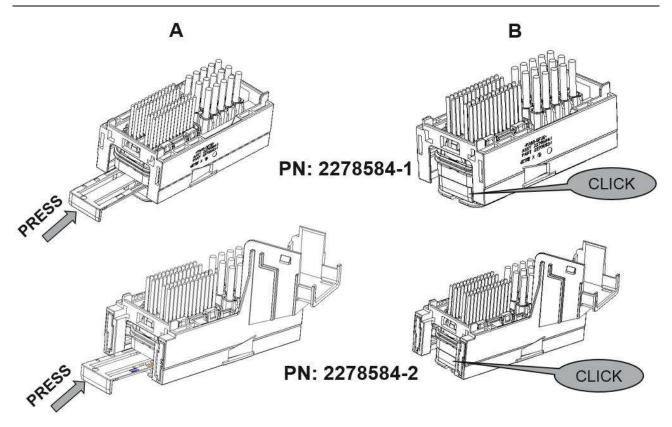
INSERT THE MCP2.8 BLIND PLUGS STRAIGHT INTO THE CONNECTOR CAVITY INSTEAD OF CONTACTS AS SHOWN. BLIND PLUGS UPPER SURFACE MUST BE MIN. 4mm DEEPER THAN THE UPPER EDGE FROM THE CAVITY.

#### 3.3 TPA INSERT INSTRUCTIONS

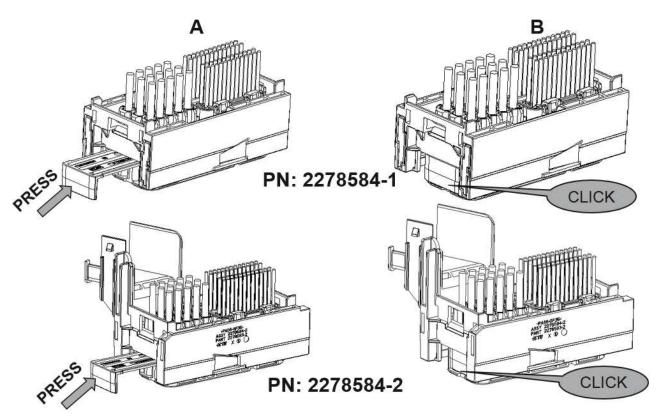
#### 3.3.1 TPA OF MCON 1.2 TERMIANLS



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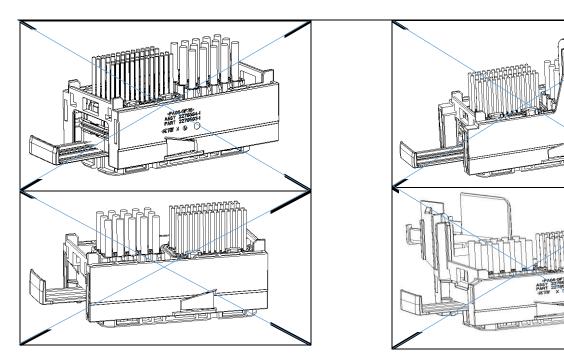
#### 3.3.2 TPA OF MCP 2.8 TERMIANLS



NOTE: TPA'S COULD ONLY INSERT WHEN TERMINALS ARE IN CORRECT POSITION.

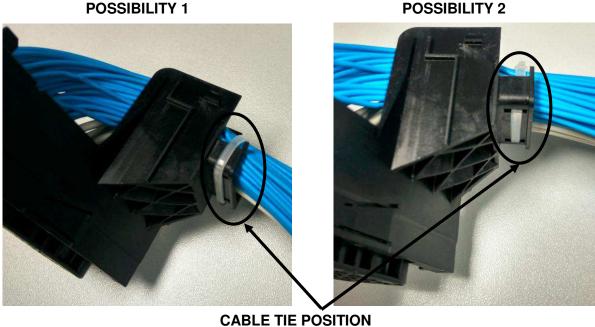


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#### **WRONG TPA POSITION!!**

#### 3.4 CABLE-TIE FOR 67 POS. CONNECTOR **POSSIBILITY 1**



#### 3.5 COVER INSERTION / REMOVAL INSTRUCTIONS

#### 3.5.1 COVER INSERTION INSTRUCTIONS NOTE:

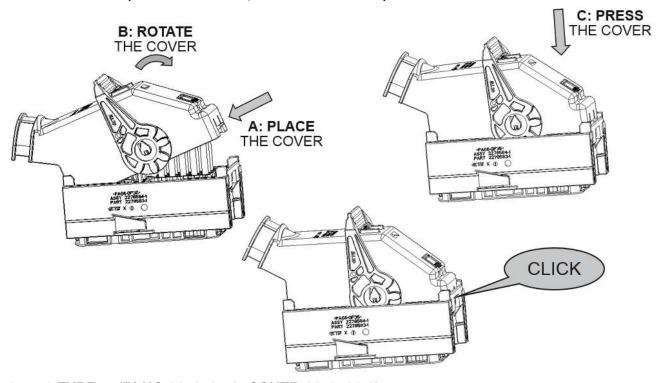
1. PLEASE ASSURE BEFOR MOUNTING THE COVER, ALL TERMIANLS AND TPAS ARE MOUNTED AND IN THE CORRECT POSITION;



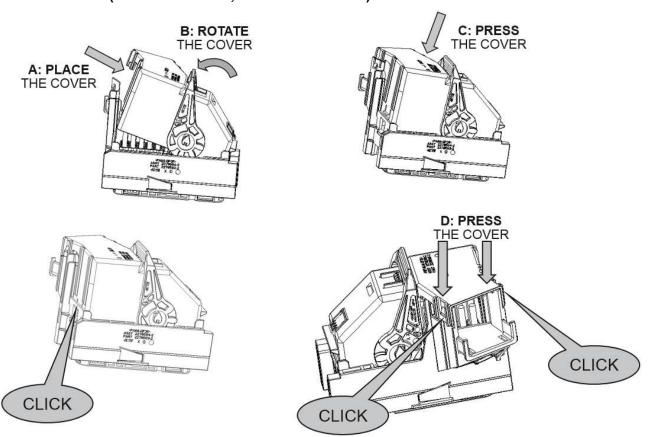
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#### 2. MOUNTING CABLE TIE BEFORE INSERTION COVER;

#### 3.5.1.1 TYPE180°(PLUG:2278584-1; COVER:2278586-1)



### 3.5.1.2 TYPE45°(PLUG:2278584-2; COVER:2278586-2)

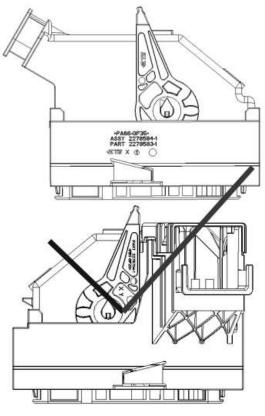


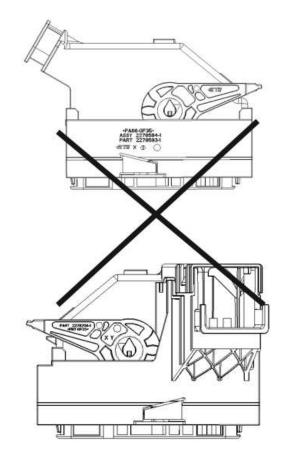


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#### NOTE:

IF NO MATING WITH THE HEADER, IT CAN'T ROTATE THE LEVER TO THE END POSITION. PLEASE ASSURE THE LEVER ARE IN THE PRE-LOCK POSITION.

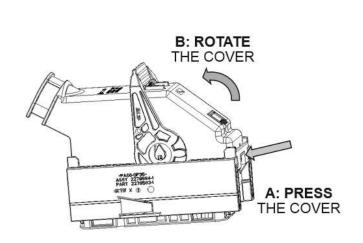


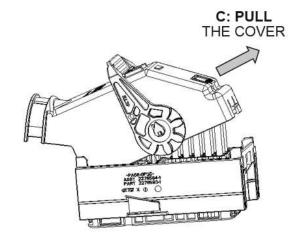


#### 3.5.2 COVER REMOVAL INSTRUCTIONS

#### 3.5.2.1 TYPE180°(PLUG:2278584-1; COVER:2278586-1)

#### **POSSIBILITY 1:**

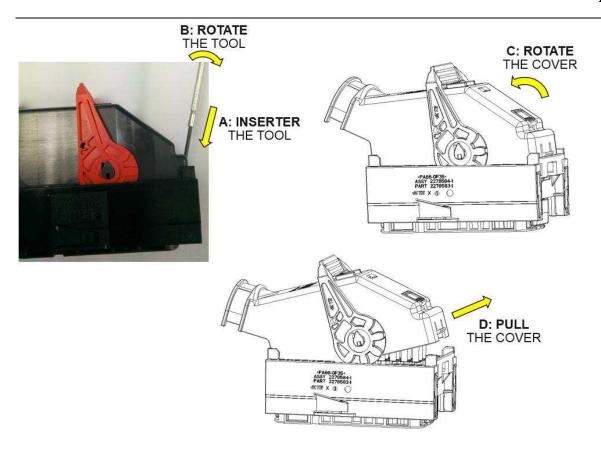




**POSSIBILITY 2: REMOVED BY THE TOOL** 



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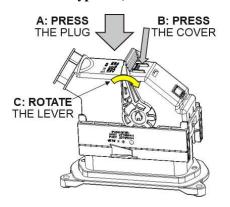


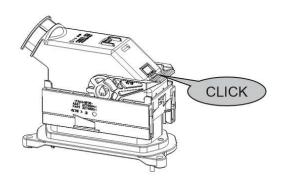
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#### 3.6 MATING INSTRUCTIONS

NOTE: PLEASE ASSURE BEFOR ROTATE THE LEVER, THE PLUG COMPLETELY INSERT THE HEADER.

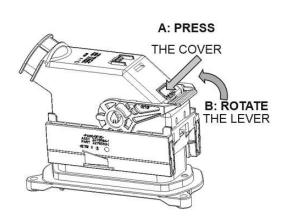
For the type  $45^{\circ}$ , it is the same as below show.

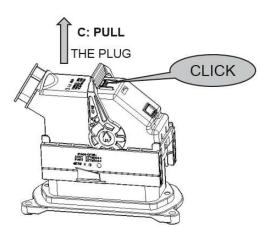




#### 3.7 UN-MATING INSTRUCTIONS

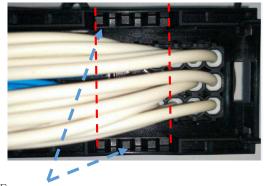
NOTE: PLEASE ASSURE BEFOR PULL THE PLUG, THE LEVER MUST BE IN THE PRE-LOCK POSITION.

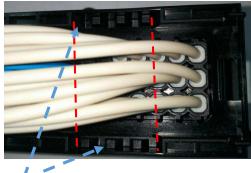




# 3.8 COVER REPLACEMENT INSTRUCTIONS IN CASE COVER IS BROKEN BY ACCIDENT IN FINAL ASSY

NOTES: IN THIS CASE, THE LEVER SHOULD BE IN ENDLOCK POSITION
3.8.1 CHECK THE SLIDE IN PROPER POSITION AFTER REMOVE BROKEN COVER.

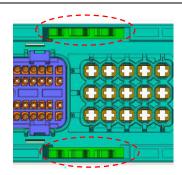


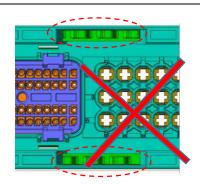


SAME

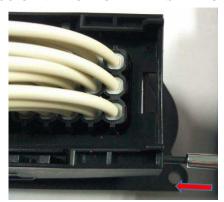


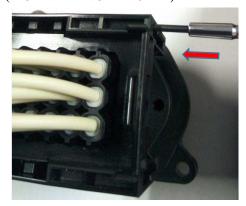
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#### IT ALSO CAN BE CHECKED BY SLIDE GAUGE( ACTIVE LENGTH=15MM)





(TWO SLIDES NOT IN THE SAME POSIOTION)

#### 3.8.2 ADJUST THE SLIDES TO PROPER POSITION

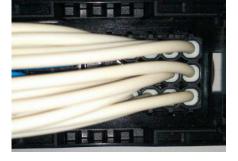
USING SCREWDRIVE TO ADJUST THE SLIDES , THE RIGHT POSITION AS 3.8.1 SHOWN.



PULL FROM SIDE



PULL FROM TOP



(TWO SLIDE ARE IN THE SAME POSITION)



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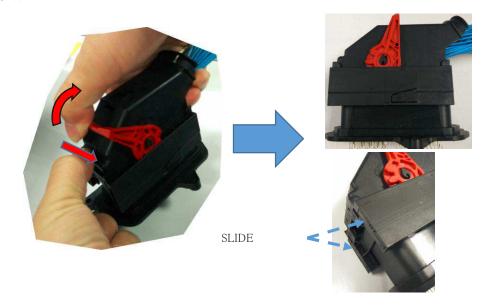
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#### BE SURE THE LEVER IS IN FINAL POSTION.



#### 3.8.4 CONNECTOR RELEASE

HOLD THE COVER AND ROTATE THE LEVER AS SHOWN, UNTIL THE LEVER BACK TO THE OPEN POSITION.



#### 4. WIRE CRIMP

Please see the document as below show:

114-18148 APPLICATION SPEC. MCP2.8

114-18464 APPLICATION SPEC. MCON1.2CB