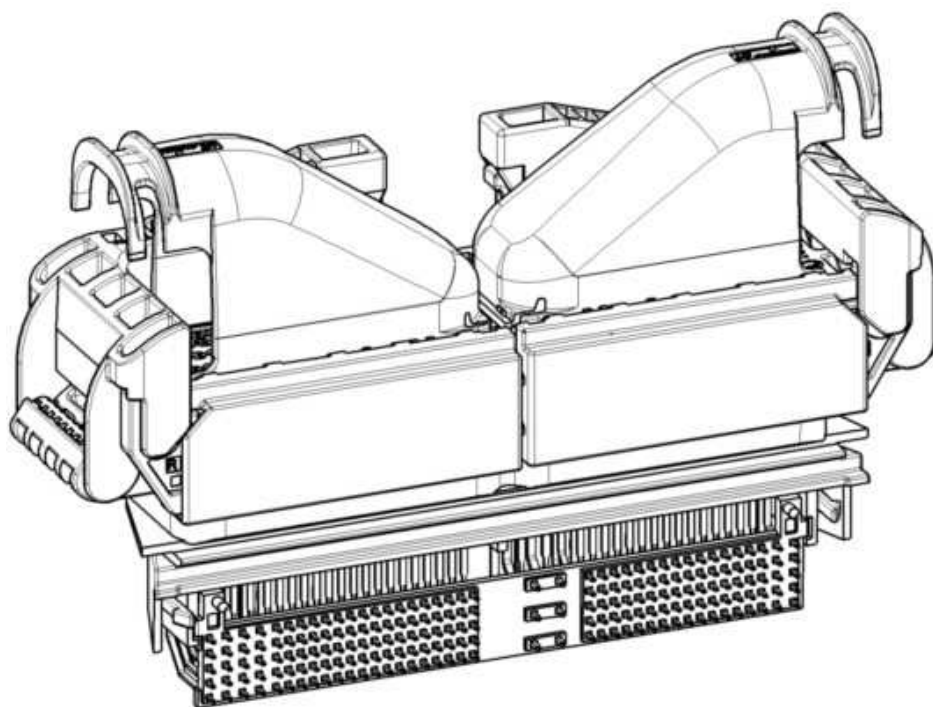


MODULAR CONNECTOR
196(91+105)POS., WATERPROOF
APPLICATION SPECIFICATION



114-61043
GENERAL

A	RELEASE	YH MA/ HG CHO	11-MAR-2011
REV.	DESCRIPTION	DR/CHK	DATE

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1 GENERAL

1.1 PURPOSE

THIS SPECIFICATION DESCRIBE HOW YOU HAVE HANDLE THE 196 POSITION CONNECTOR COMPONENTS.

THIS CONNECTOR SYSTEM IS USED TO CONNECT TWO CABLE HARNESS ONTO AN ELECTRONICS CONTROL UNIT.

1.2 CUSTOMER DRAWINGS

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

C2005465 ASS'Y 91 POS. CONNECTOR

C2005471 91 POS. 2-NDARY LOCK, TYCO 1.2 mm

C2005472 91 POS. 2-NDARY LOCK, MCP 2.8 mm

C2005475 ASS'Y 105 POS. CONNECTOR

C2005479 105 POS. 2-NDARY LOCK, TYCO 1.2 mm

C2005480 COVER FOR TYPE "A" 180 ANGLE

C2005481 COVER FOR TYPE "B" 180 ANGLE, CABLE EXIT SIDE

C2005563 COVER FOR TYPE "C" 40 ANGLE

C2005564 COVER FOR TYPE "D" 180 ANGLE

C2109179 COVER FOR TYPE "E" 180 ANGLE , CABLE EXIT SIDE

C2109180 COVER FOR TYPE "F" 180 ANGLE , CABLE EXIT SIDE

C1452424 BLIND PLUG FOR TYCO 1.2MM

C828922 BLIND PLUG FOR MCP 2.8MM

- BEING VALID TYCO SPECIFICATION

114-61042 INTERFACE DRAWING FOR 196POS. HEADER ASS'Y

114-18387 APPLICATION SPECIFICATION FOR MCP 2.8K CONTACT SYSTEM

114-18464 APPLICATION SPECIFICATION FOR MCON 1.2 CB CONTACT SYSTEM

108-18717 PRODUCT SPECIFICATION FOR MCP 2.8K CONTACT SYSTEM

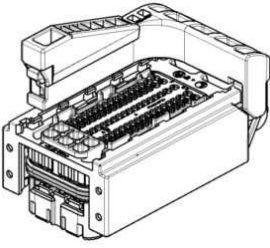


108-18782 PRODUCT SPECIFICATION FOR MCON 1.2 CB CONTACT SYSTEM

108-61119 PRODUCT SPECIFICATION FOR 196POS. HEADER ASS'Y

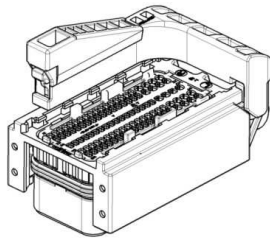

411-61009 INSTRUCTION SHEET FOR 196POS. HEADER ASS'Y

1.3 DELIVERY CONDITION

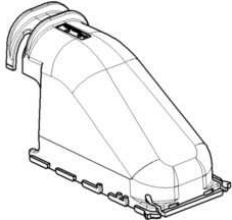

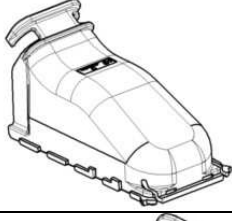

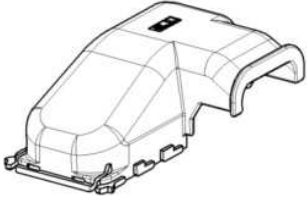
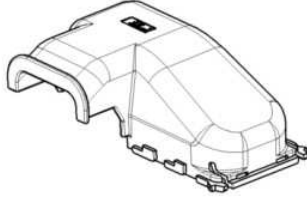
1.3.1 91 POS. CONNECTOR

<p>ASSY 91 POS. CONNECTOR</p>	<p>PN X-2005465-2</p>	
<p>91 POS. TPA OF THE TERMINAL TYCO 1.2 mm</p>	<p>P/N 2005471-6</p>	
<p>91 POS. TPA OF THE TERMINAL MCP 2.8K mm</p>	<p>P/N 2005472-6</p>	



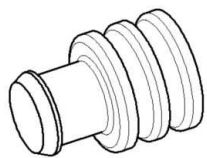
1.3.2 105 POS. CONNECTOR

<p>ASSY 105 POS. CONNECTOR</p>	<p>PN X-2005475-2</p>	
<p>105 POS. TPA OF THE TERMINAL TYCO 1.2 mm</p>	<p>P/N 2005479-6</p>	

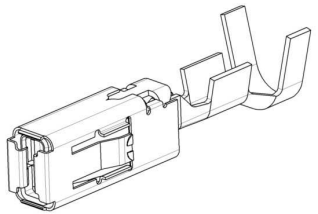
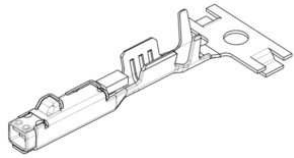
1.3.3 COVER HSG FOR 91 POS. AND 105 POS. CONNECTOR

<p>COVER FOR TYPE "A" 180 ANGLE</p>	<p>P/N 2005480-2</p>	
<p>COVER FOR TYPE "B" 180 ANGLE, CABLE EXIT SIDE</p>	<p>P/N 0,1-2005481-2</p>	
<p>COVER FOR TYPE "C" 40 ANGLE</p>	<p>P/N 2005563-2</p>	
<p>COVER FOR TYPE "D" 180 ANGLE</p>	<p>P/N 2005564-2</p>	
<p>COVER FOR TYPE "E" 180 ANGLE, CABLE EXIT SIDE</p>	<p>P/N 2109179-2</p>	
<p>COVER FOR TYPE "F" 180 ANGLE, CABLE EXIT SIDE</p>	<p>P/N 2109180-2</p>	

1.3.4 BLIND PLUGS FOR 91 POS. AND 105 POS. CONNECTOR

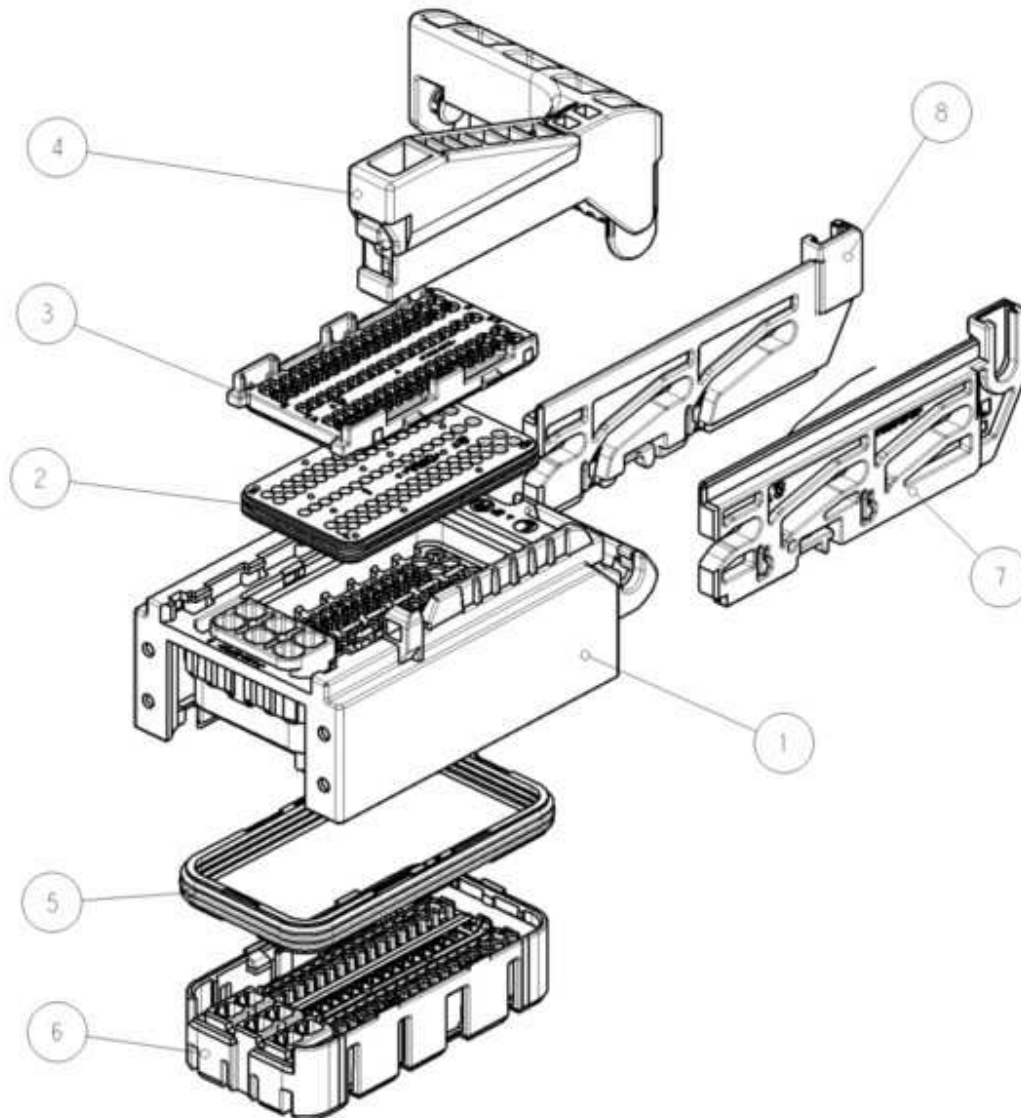
<p>BLIND PLUG 0,5-0,75 mm² FOR 91 POS. AND 105 POS. CONNECTOR</p>	<p>PN 1-1452424-1 COLOR : BROWN</p>	
<p>BLIND PLUG 1,0-1,5 mm² FOR 91 POS.. AND 105 POS.. CONNECTOR</p>	<p>PN 1-1452424-2 COLOUR : BLUE</p>	
<p>BLIND PLUG MCP FOR 91 POS CONNECTOR</p>	<p>PN 828922-1 COLOUR : NATURAL</p>	

1.3.5 TERMINALS FOR 91 POS. AND 105 POS. CONNECTOR

<p>MCP 2,8 TERMINAL 0.5-2,5 mm² FOR 91 POS.. CONNECTOR</p>	<p>PN SEE CUSTOMER DRAWINGS 1241437 (Single wire seal 828904-1, 828905-1)</p>	
<p>1.2 mm TERMINAL 0,3-1,5 mm² FOR 91 POS..AND 105 POS. CONNECTOR</p>	<p>PN SEE CUSTOMER DRAWINGS 1534326</p>	

2 196 POS. CONNECTOR (91 POS. AND 105 POS.)

2.1 HARNESS ASSEMBLY OF THE 91 POS. CONNRCTOR (APPLIES ALSO FOR ASSEMBLY 105 POS. CONNECTOR)

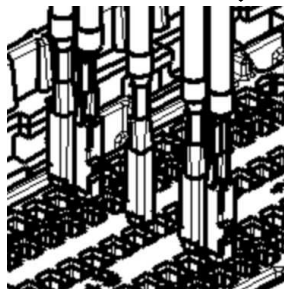


- POS. 1 MAIN BODY HOUSING
- POS. 2 FAMILY SEAL
- POS. 3 HOLDER HSG FOR FAMILY SEAL
- POS. 4 LEVER HSG
- POS. 5 INNER SEAL
- POS. 6 CAVITY HOUSING
- POS. 7 SLIDE LEFT
- POS. 8 SLIDE RIGHT

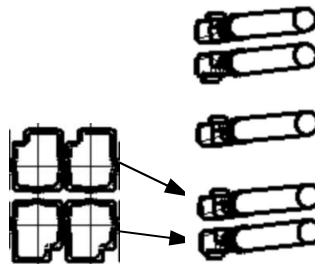
2.2 TERMINAL INSERTION / REMOVAL INSTRUCTIONS 1.2MM AND 2.8MM

Insert the contacts into the housing cavities until the housing cavity lances are released.
 Warning, MCON 1.2(0.3-0,75 mm²) and MCON 1.2(1,0-1,5 mm²) contact insertion position into housing cavities changes between rows.

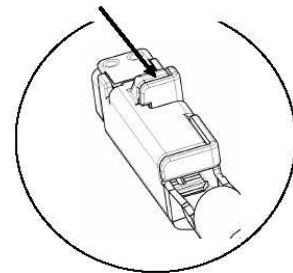
INSERT TERMINALS STRAIGHT IN CAVITIES



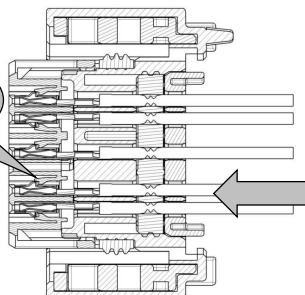
LOWER TERMINAL ROW ORIENTED 180° FROM UPPER TERMINAL ROW



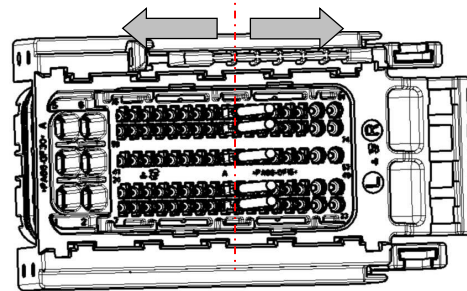
ORIENTATION FEATURE ON THE TERMINAL.



CLICK



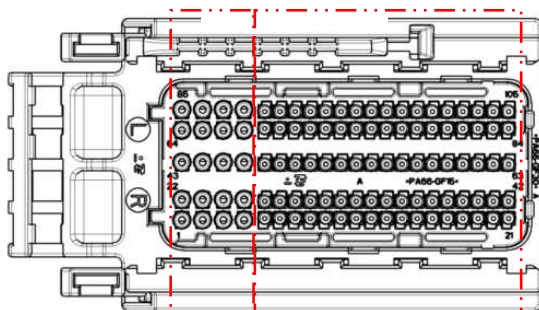
INSERT TERMINAL UNTIL AN AUDIBLE "CLICK" IS HEARD OR FELT



MIDDLE OF THE PART

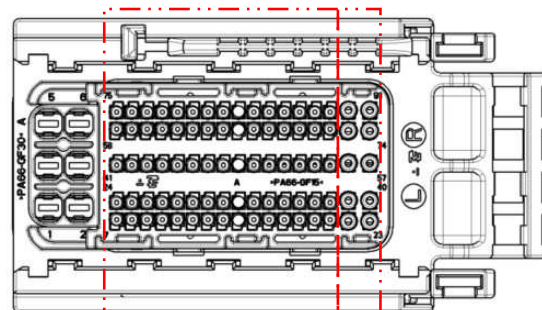
INSERT THE 1,2mm CONTACTS BEGINNING FROM INSIDE (MIDDLE OF THE PART) OUTWARD. INSERT CONTACTS STRAIGHT IN CAVITIES!

105 ways



MCON 1.2 CB (1.0-1.5 mm²)

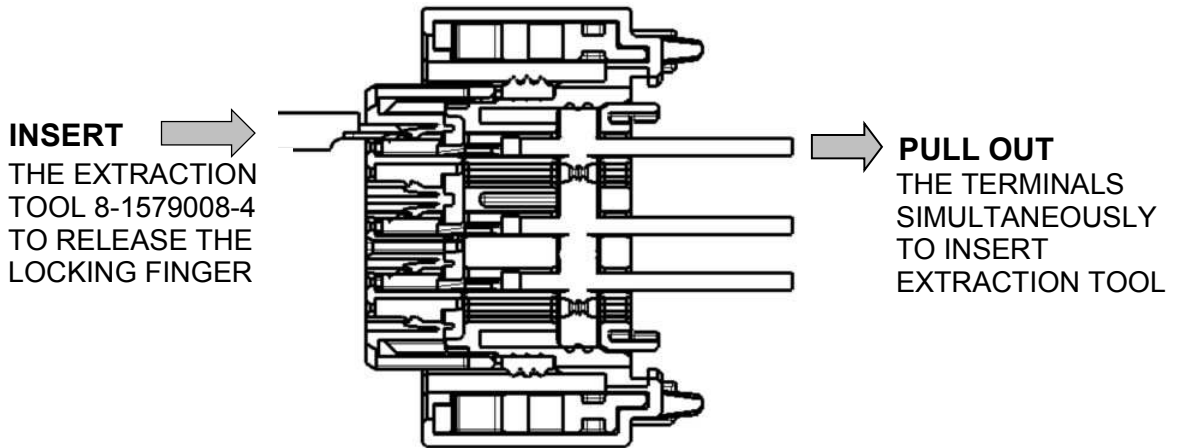
91 ways



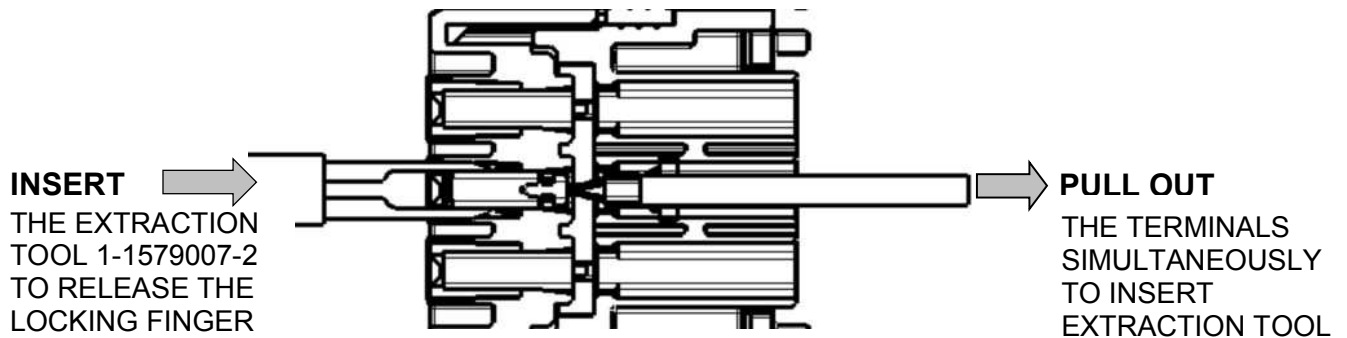
MCON 1.2 CB (0.5-0,75 mm²)

MCON 1.2 CB (1.0-1.5 mm²)

1.2 MM TERMINAL REMOVAL INSTRUCTIONS



2.8 MM TERMINAL REMOVAL INSTRUCTIONS



2.3 APPLICABLE WIRES (91 Pos. AND 105 Pos.)

PLEASE SEE ALSO THE CUSTOMER DRAWINGS

Table 1 – Contacts			
Name	Crimp section(mm ²)	Insulation section(mm)	Part number
MCON 1.2 clean body	0.3 ~ 0.35	ø1.4~ø1.9	1534594-1
	0.5 ~ 0.75		1670144-1
	1.0 ~1.5	ø1.9~ø2.4	1452503-1
MCP 2.8K	0.5 ~ 1.0	ø1.4~ø2.1	1241394-1
	>1.0 ~ 2.5	ø2.2~ø3.0	1241396-1

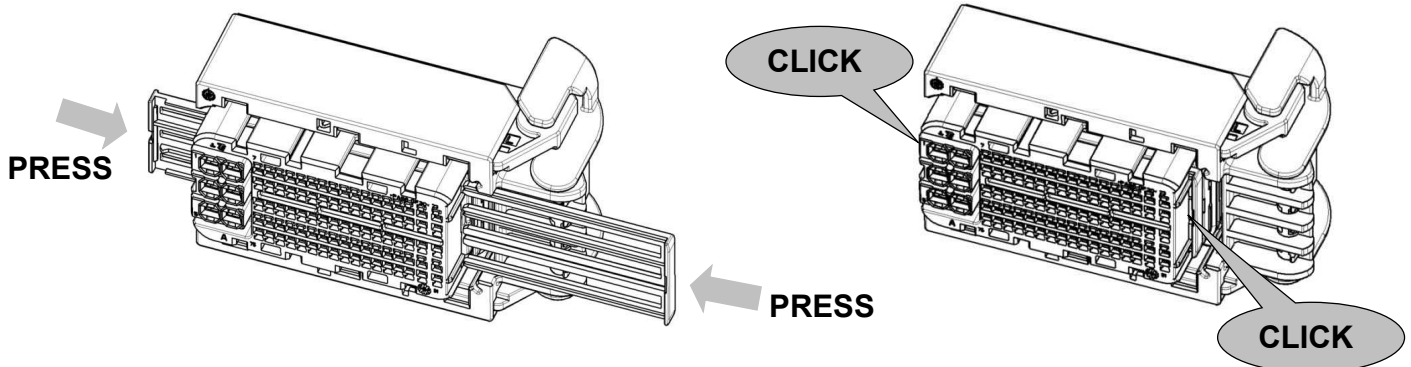
2.4 TPA (TERMINAL POSITION ASSURANCE) INSERTION / REMOVAL INSTRUCTIONS OF THE 91 POS. AND 105 POS. CONNECTOR

INSERT THE TPA FOR TERMINAL 1,2mm Tyco AND MCP 2,8mm

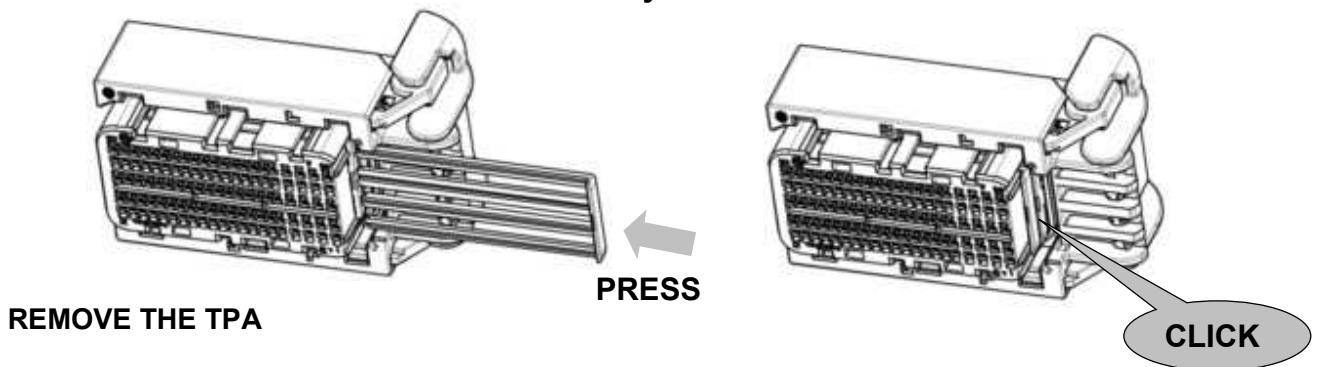
Warning!

If you notice any resistance, don't push more. check the correct contact insertion in their cavities and after proceed to close the device again.

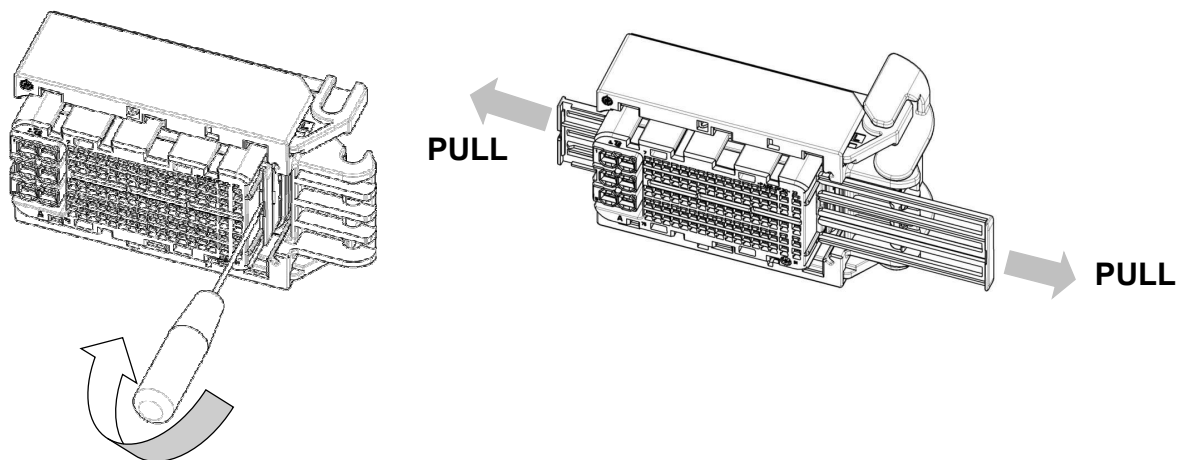
91ways



105ways

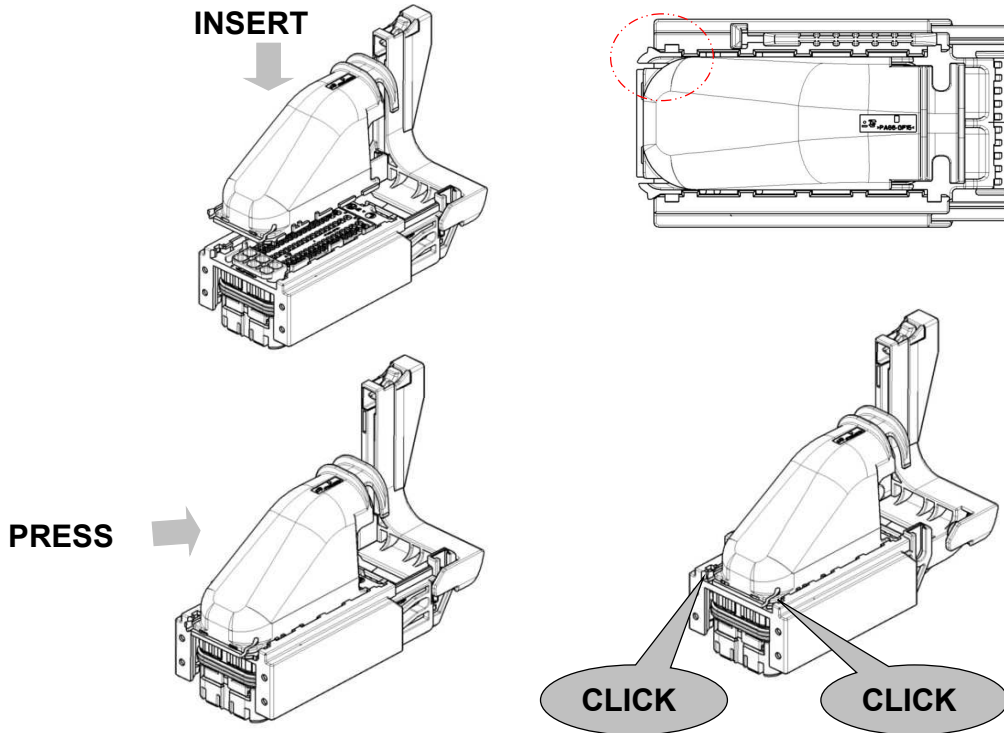


REMOVE THE TPA

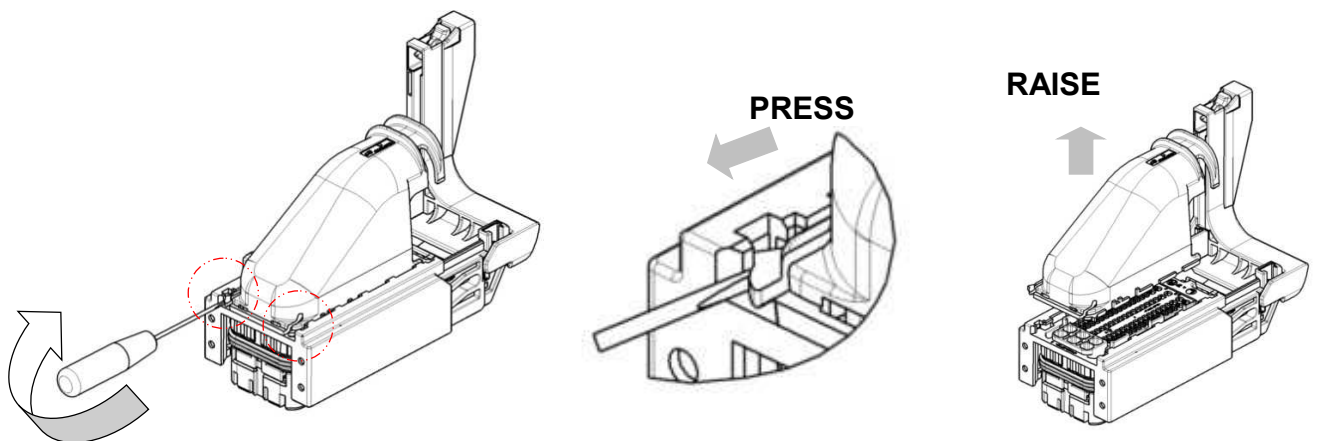


2.5 COVER INSERTION/ REMOVAL INSTRUCTIONS FOR 91 POS. AND 105 POS. CONNECTOR

COVER INSERTION

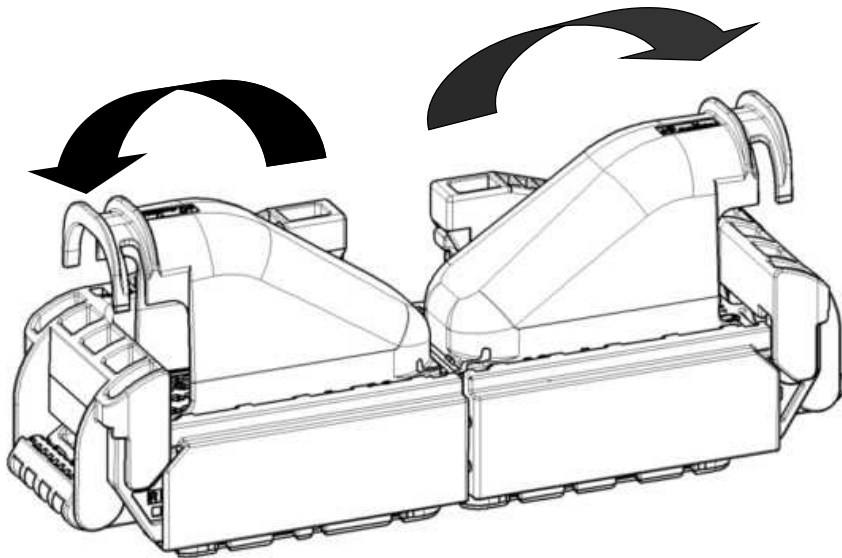


COVER REMOVAL

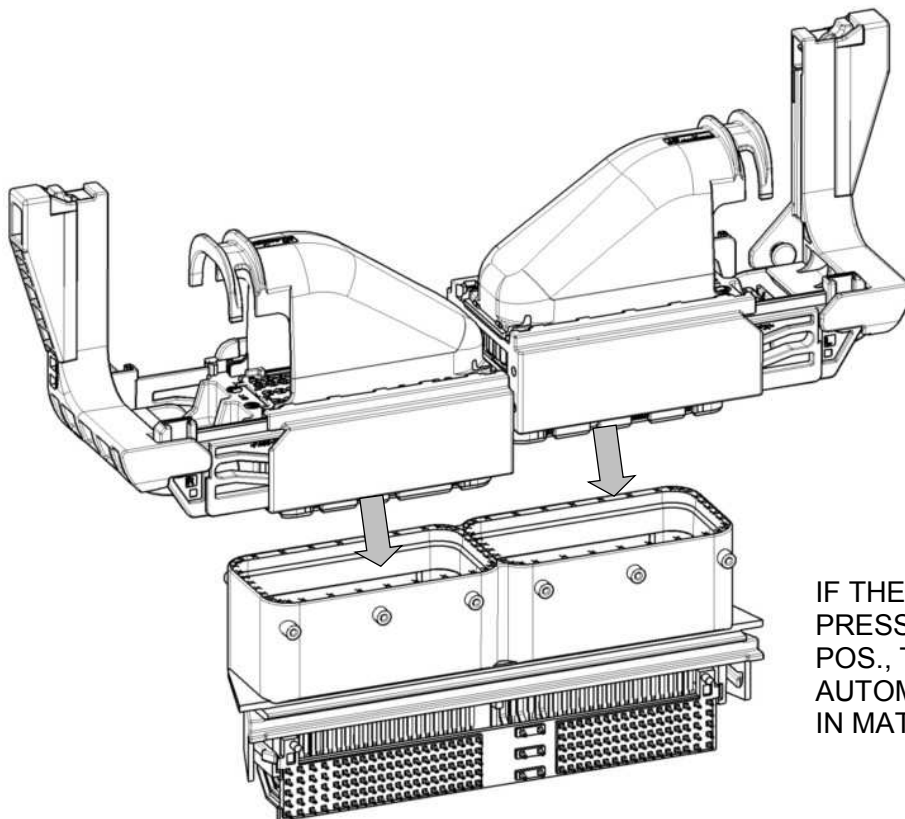


3. MATING AND UNMATING CONNECTOR OF THE 91 POS. AND 105 POS. CONNECTORS

3.1.1 LEVER IN ENDLCK POSITION AFTER MOUNTING OF THE COMPONENTS

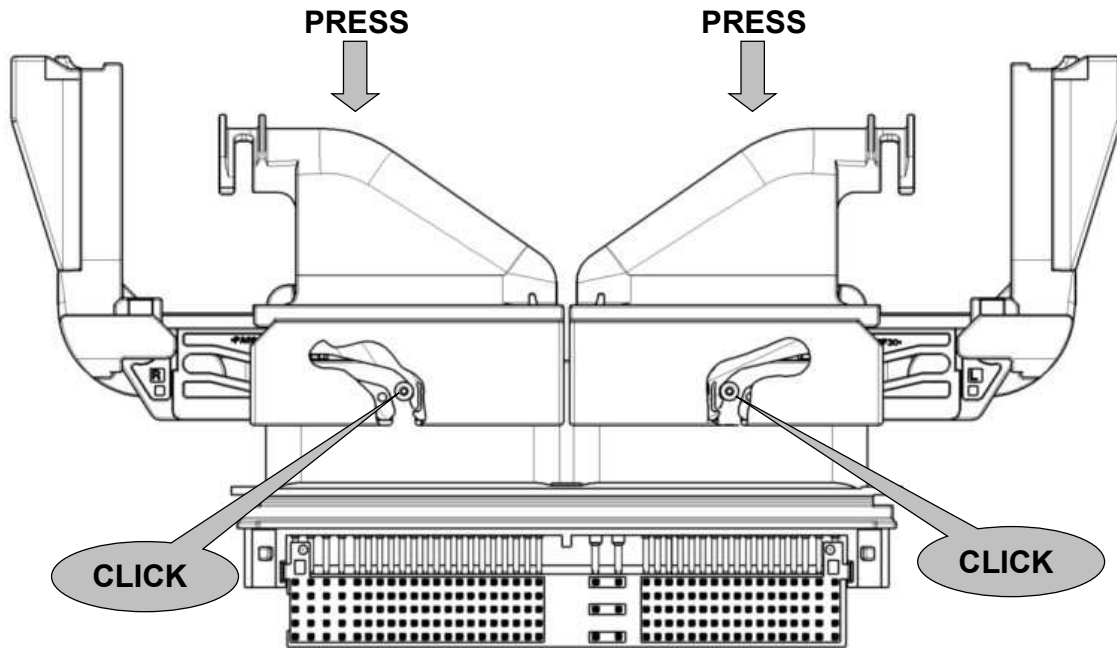


FOR MOUNTING ON THE HEADER, PUSH THE LEVERS IN PRELOCKED POSITION!



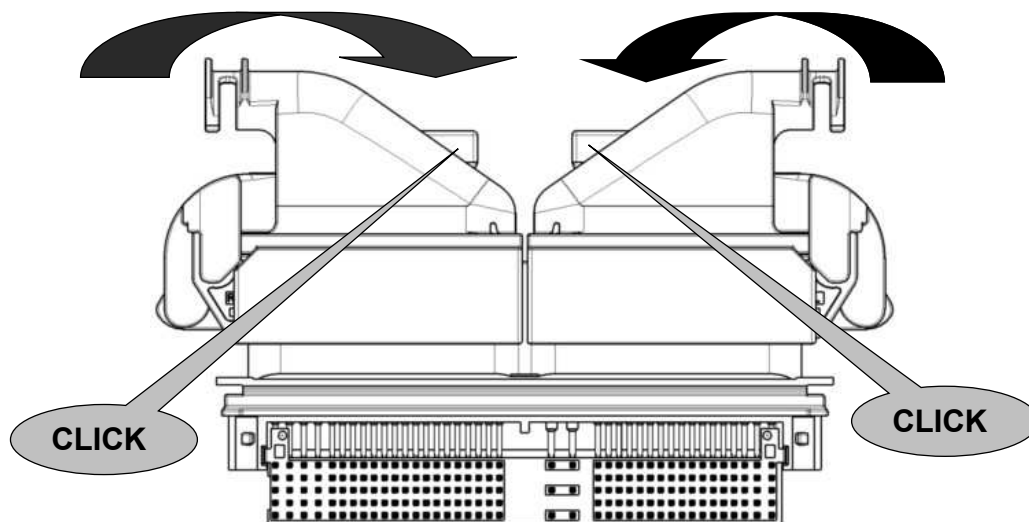
IF THE LEVERS WILL BE PRESSED IN PRE-LOCK POS., THE SLIDES MOVING AUTOMATICALLY IN MATING POSITION.

3.1.2 MATING OF THE CONNECTOR WITH THE HEADER IN PRE-LOCKED POSITION/
OVERHEAD-MOUNTING POSITION POSSIBLE



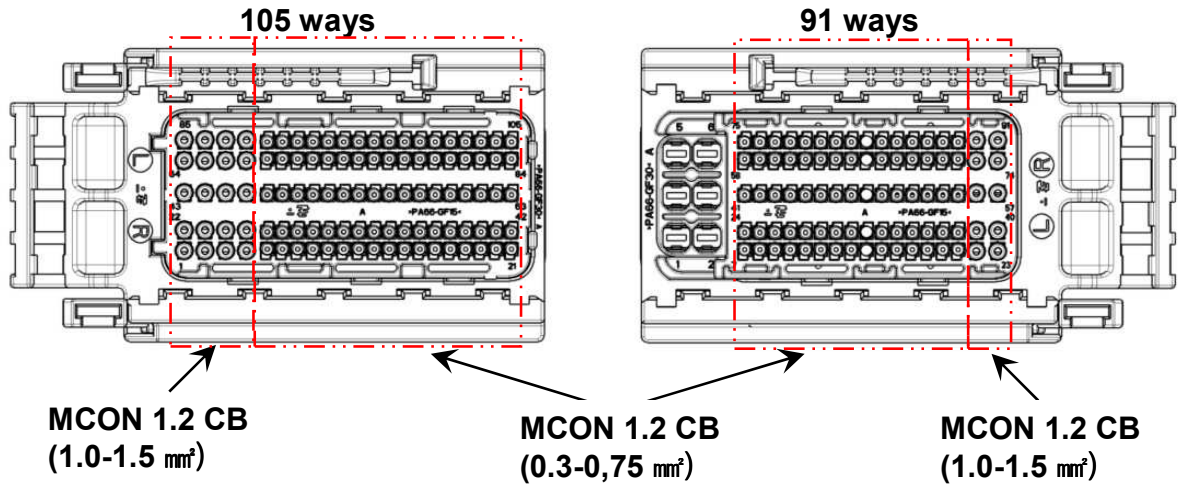
BY OVERHEAD-MOUNTING THE LOCKING-DEVICES HOLD THE SOCKET HOUSING
IN PRE-LOCK POSITION.

3.1.3 MATING OF THE CONNECTOR WITH THE HEADER IN END-LOCKED POSITION

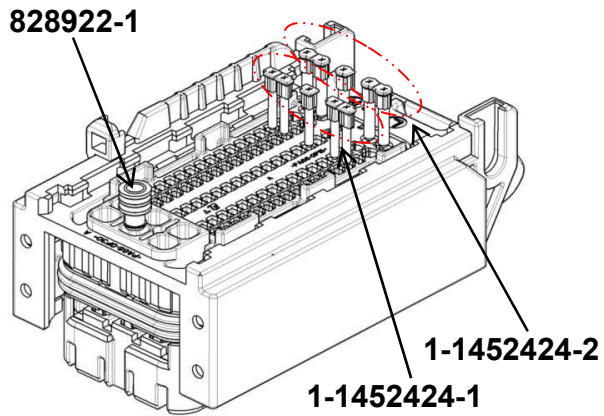


3.2 UNMATING OF THE CONNECTOR WITH THE HEADER
TO UNMOUNT THE HOUSING, FOLLOW THE MOUNTING INSTRUCTIONS INVERSELY.

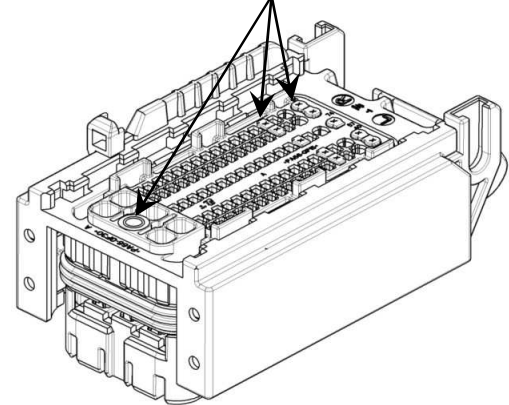
4 BLIND PLUGS USAGE INSTRUCTIONS



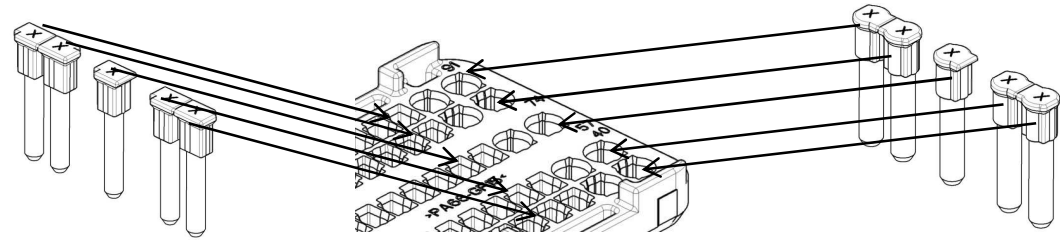
Warning to the cavity position



Final assembly position



Warning : blind plug upper plane P/N 828922-1 aligned with connector top plane.



PLEASE REMIND THE ORIENTATION OF THE BLIND PLUGS! POLARISATION AS SHOWN FOR OUTSIDE AND INSIDE ROWS.