

050/110/250 46P PLUG ASSEMBLY(2317063)

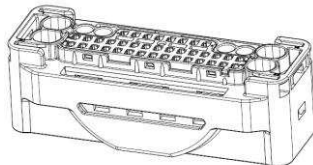
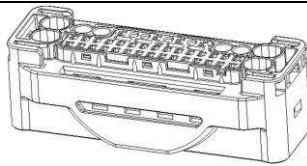
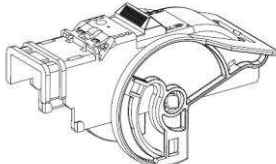
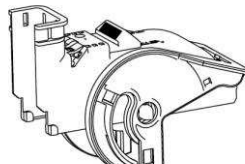
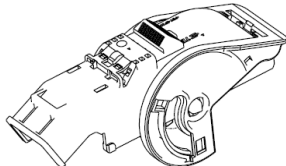
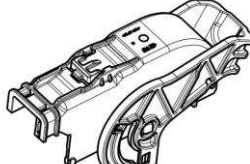
1. Instruction

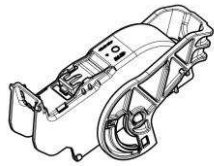
This instruction sheet covers assembly (Inserting terminals into the plug housing assembly, engage the Plug assembly) and disassembly (disengage and extracting the terminal) procedures for the 050/110/250 Hybrid Sealed 46Pos Connector. If there's some conflicting of contents, drawing has priority than document.

2. Part Name and Part Number

★Note : Part number is consisted of 1 digit numeric prefix and suffix with dash. Refer to catalog or customer drawing for specific part numbers for each base number.
When prefix is zero, zero and dash are omitted.

2.1 Housing

Part Number	Description	Remark
x-2317063-x	050/110/250 46P Connector	
1-2317063-x	050/110/250 46P Connector 1.0SQ	
x-2219072-x	Cover Assembly Type A	
x-2219072-x	Cover Assembly Type B	
4-2219072-2	Cover Assembly Type C	
9-2219072-2	Cover Assembly Type D	

Part Number	Description	Remark
9-2219072-4	Cover Assembly Type E	

<Figure 1>

2.2 Contact

2.2.1 Receptacle Contact

Part Number	Part Name	Applicable Wire Range-mm ²
1534594-1	.050 (FEMALE) PRE-TIN	0.3
2005544-1		0.3
A4 2005546-1		1.0 (5,6,8,10 position only for 1-2317063-X)
1241394-1	.110 (FEMALE) PRE-TIN	0.5 ~ 1.0
1241396-1		>1.0 ~ 2.5
1241414-1	.250 (FEMALE) PRE-TIN	2.0 ~ 2.5
1241416-1		>2.5 ~ 4.0
1241418-1		4.0 ~ 5.0

2.2.2 Family Seal(For MCON 1.2mm)

Part Number	Applicable insulation DIA(mm)
2219498-2(Cavity Plug)	N/A

2.2.3 Wire Seal(For MCP 2.8K)

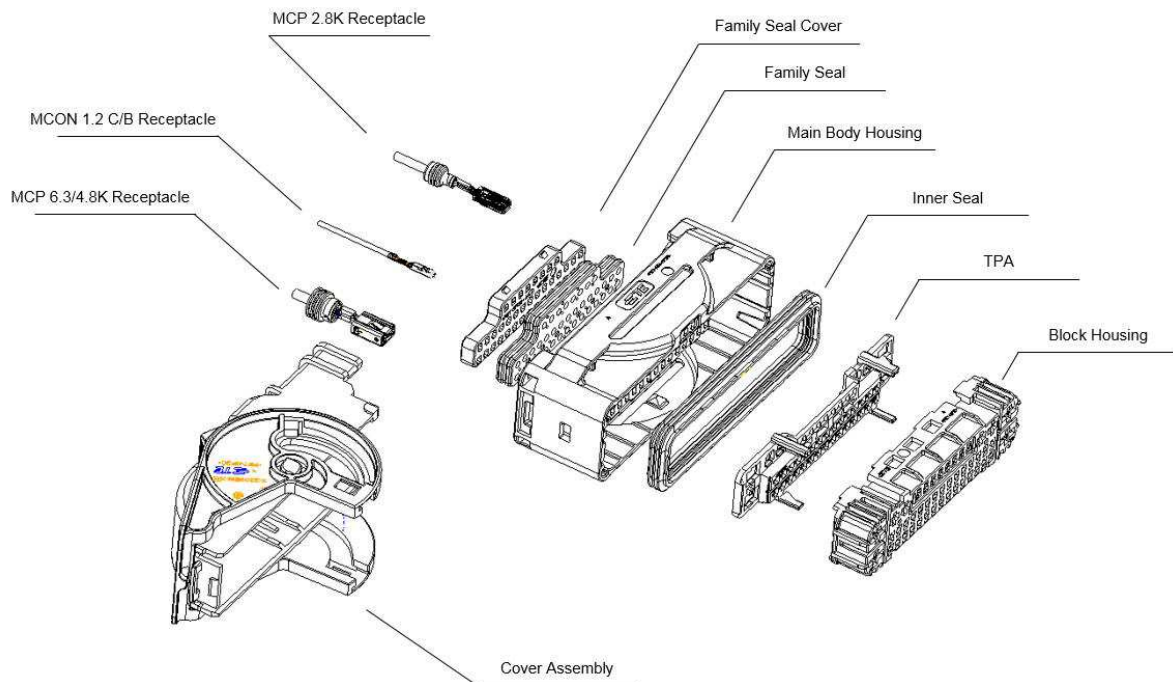
Part Number	Applicable insulation DIA(mm)
963294-1	1.6 ~ 2.1
963293-1	2.0 ~ 2.7
963292-1	2.7 ~ 3.0
828922-2(Sealing Plug)	N/A
828922-1(Sealing Plug)	N/A

2.2.4 Wire Seal(For MCP 6.3/4.8K)

Part Number	Applicable insulation DIA(mm)
*1) 2177018-1	4.0 ~ 4.5
1394511-1	4.6 ~ 4.8(Only AEXF wire Allowed)
1823111-1	3.4 ~ 3.7
1394512-1	2.7 ~ 3.0
	2.6 ~ 2.7

1) See Drawing for the details.

2.3 Components View



<Figure 2>

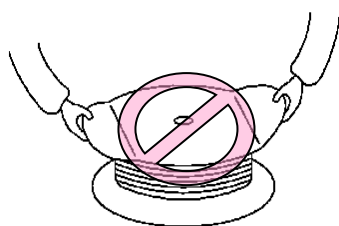
3. Customer Receiving Inspection

We conduct inspections according to our quality control regulations to maintain an over all lot control. In addition, the customers should conduct receiving inspections based on the specific customer drawings.

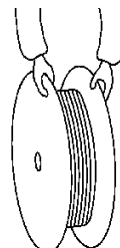
4. Storage and Carrying

4.1 Contact

- (1) Avoid leaving or carrying the contact reel in an open area without wrapping it in proper material.
- (2) Do not lift up and carry the contact reel by gripping one the side of reel, this may result in damage to the reel, and contacts before use as shown in **<figure 3>**.



Do not lift up laterally holding one side only.

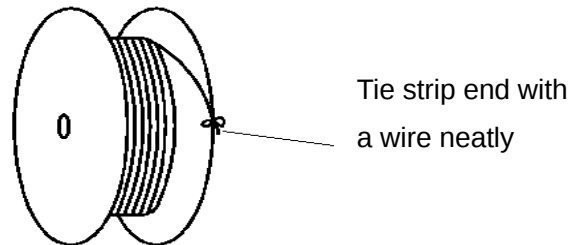


Acceptable

< Figure 3 >

(3) Avoid storing the contact reel in a moist or dusty place. Stock the reel in a comparatively dry and clean place (5~35°C, 45~85%RH) away from direct sunlight.

(4) When removing the contact reel from the machine, fasten the end of contact strip onto the edge of the reel with use of proper string or wire as shown in <figure 4>.



<Figure. 4>

4.2 Housing

- (1) Avoid leaving or carrying the housing in an open area without wrapping it in proper material.
- (2) Do not drop or shock the housing when carrying it.

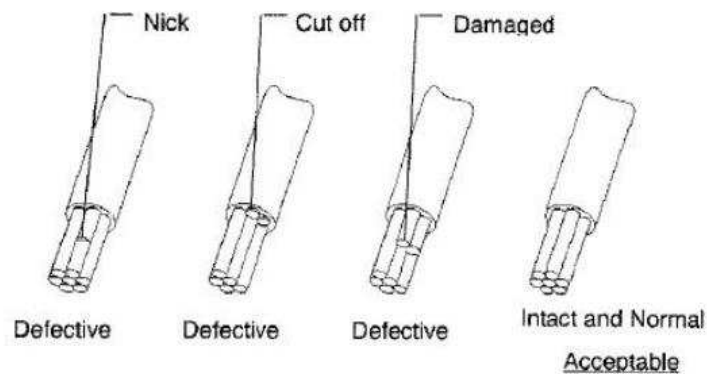
5. CRIMPING OPERATION

5.1 Wire

5.1.1 Applicable Wire(See 2.2 Contact)

5.1.2 Notes for end of Stripping Wire

Wire end must be stripped without cut or damage of wire strands.



<Figure. 5>

5.2 Crimping Specification

See following Application specification for the Terminal.

Receptacle

050(MCON)
110(AMP MCP)

114-18464
114-18387

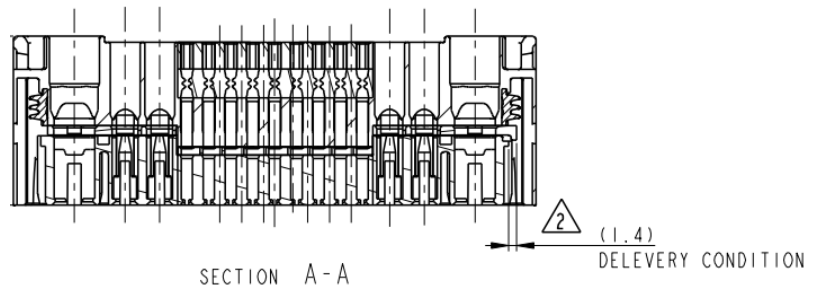
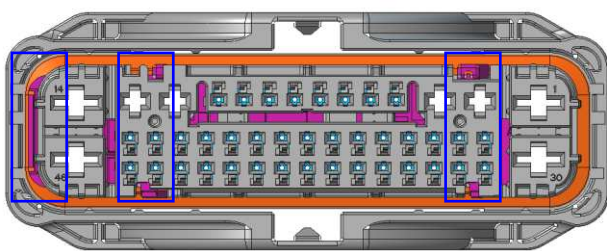
5.3 Storage and Handling of Crimping Products

- (1) Store the products in a clean, dry area cover with proper sheet or paper when placed in an open area until next day.
- (2) Care should be taken for tangle and deform of TML in case of the leads should be in bands.
- (3) Do not stack the products so many layers, It makes electrical connection defective and low contact retention force by catch together or by deform causing the weight of themselves.
- (4) Must no hit tip of the TML to coordinate the bundle, It makes mating or electrical defective.

6. ASSEMBLY

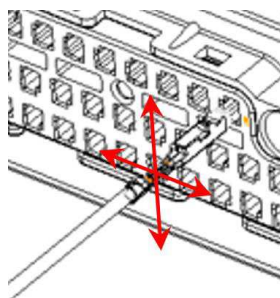
6.1 Terminals Insertion

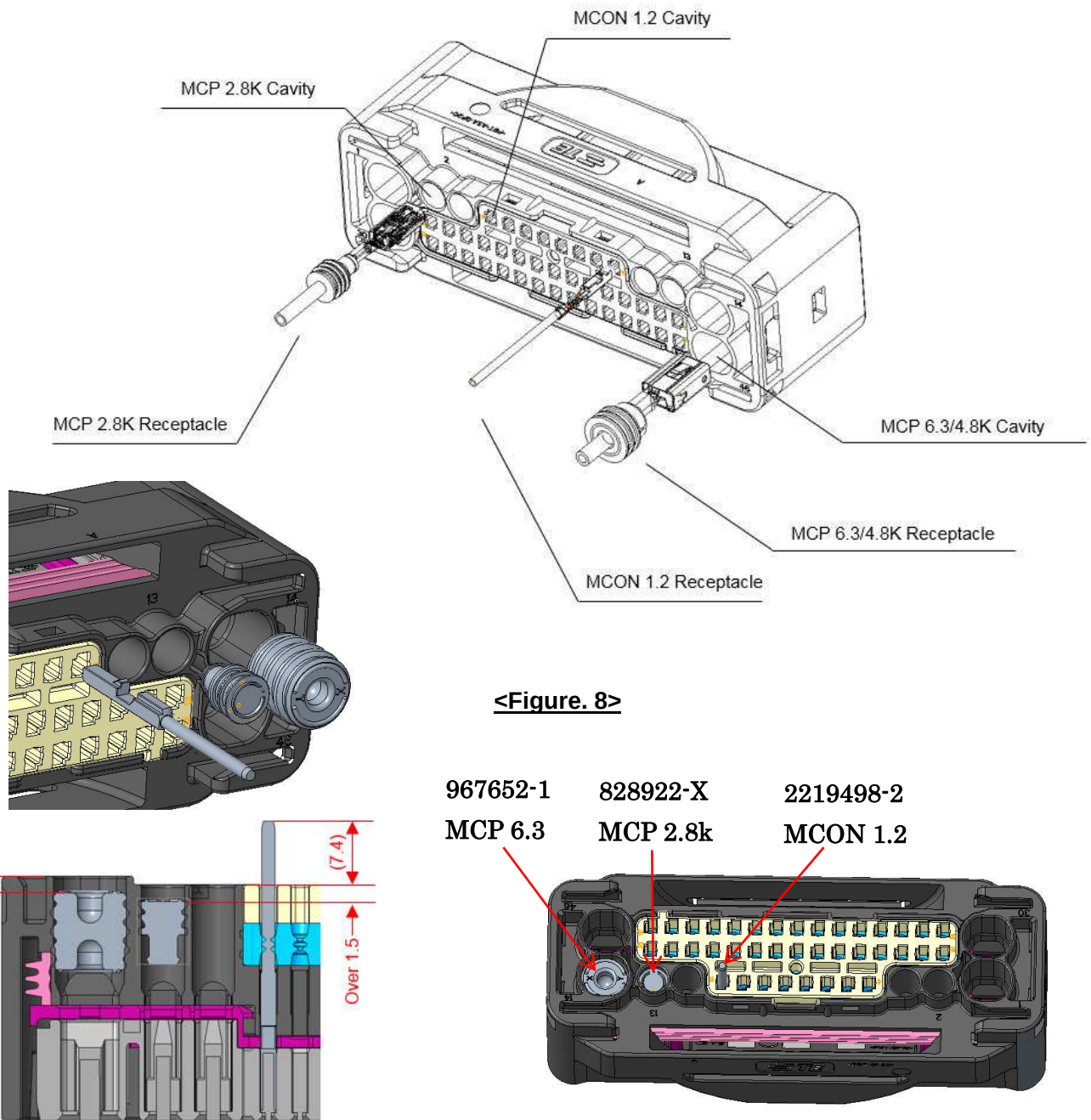
- (1) Ensure the retainer is in pre-lock condition as shown in <figure 7>. If it is not, insert the tip of a small screwdriver and operating TPA to pre-lock condition. If not, Terminal can not be inserted in to hole fully. Refer 4.2 retainer lock for the method.



<Figure. 7>

- (2) Confirm the specific terminal for each terminal series
- (3) Before loading the terminal into the housing, confirm the orientation of the terminal to be inserted into the housing cavity as shown in <figure 8>. Insert the terminal straight into the housing cavity until it stops. There will be an audible “click” at the moment of terminal locked.
- *. Do not force the terminal into the terminal cavity. If there is resistance or the wire “buckles”, pull terminal out, ensure proper orientation and re-insert the terminal.
- * If terminal is not inserted properly, insert the terminal while swaying not to buckling the wire.





<Figure. 8>

MCON 1.2 Cavity Plug

Insert vertically into Housing until Cavity plug is stopped about 7.4mm above surface of the cavity

MCP 2.8K/ 6.3K Cavity Plug

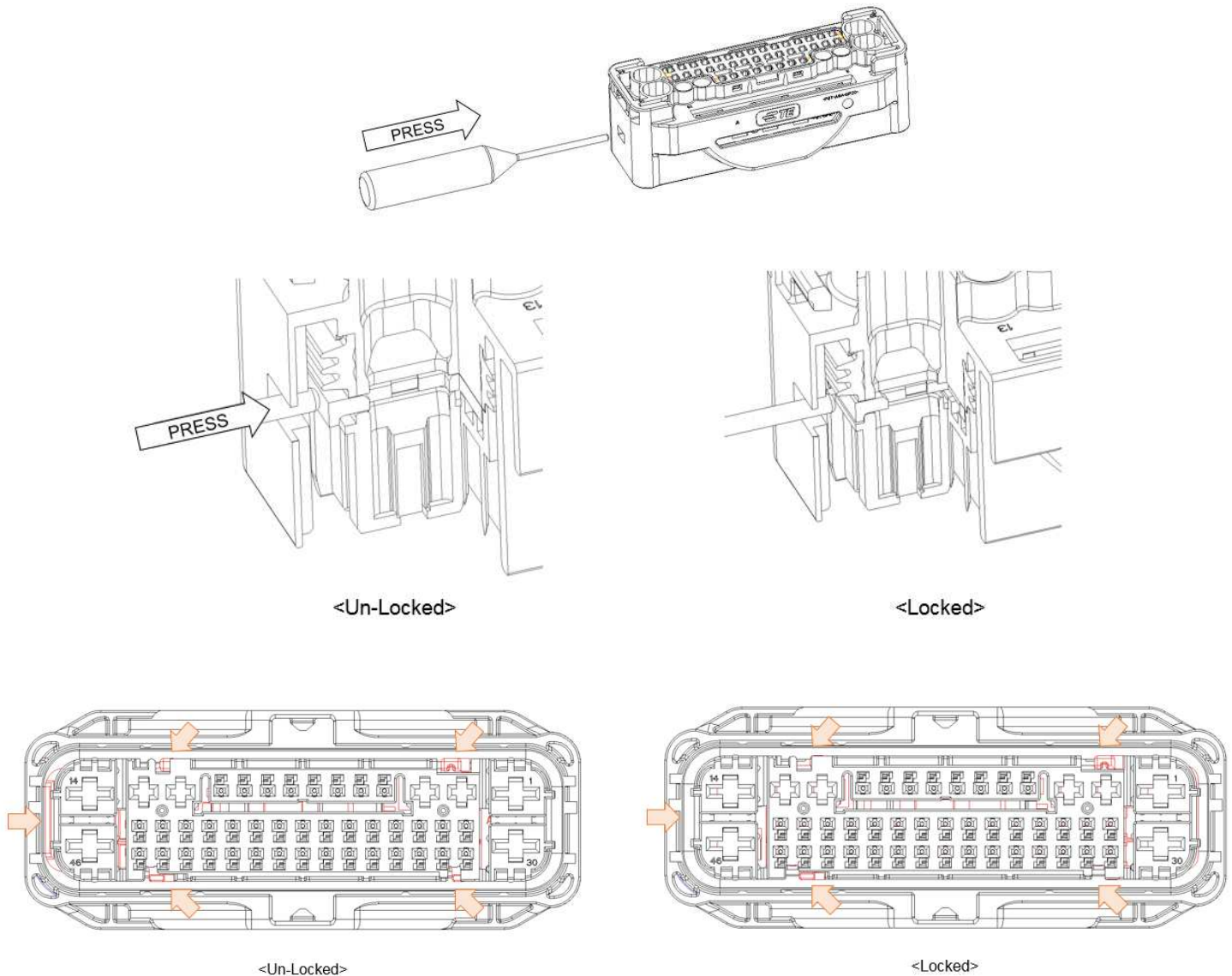
Insert vertically into Housing until Cavity plug is stopped over 1.5 mm below surface of the cavity

Warning : Do not use oil during insertion operating.

NOTE: Housing deformation or break occurs with insertion too strongly. The operation must be conducted carefully.

6.2 Retainer (Secondary Lock) Lock

(1) After all terminals are inserted, push the sides of the retainer into the housing like as shown. The retainer should be inserted in direction of pressed, that is final lock condition as shown in



<Figure 9>

(2) If the retainer is not pressed, ensure that all terminals are fully seated, and then try again.

*.Do not press the retainer to final lock condition if terminal is half inserted state. It is pressed by force, it will become the cause of retainer, terminal and housing damage.

7. CONNECTOR & COVER ASSEMBLY

7.1 Combine connector and cover assembly

Check the each mating point for cover and connector.

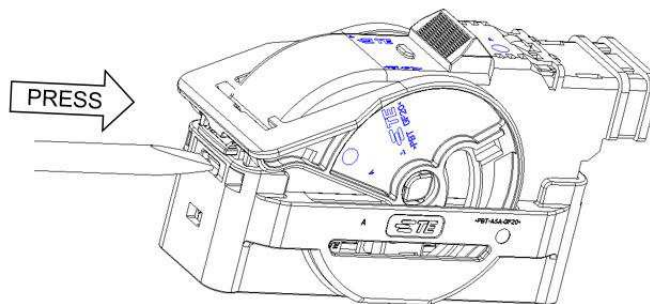
- (1) Assembly cover like as shown
- (2) Push the cover to indicated direction



<Figure 10>

7.2 Disassembly connector and cover assembly

- (1) Press the latch with hand tool same as **<figure 11>**
- (2) Follow the reverse sequence of **<figure 10>**

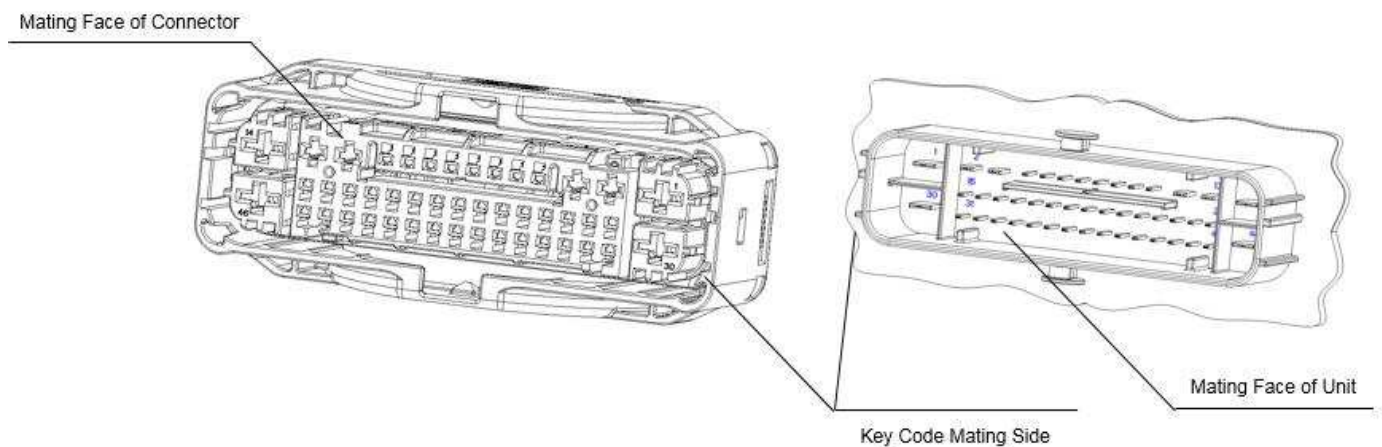


<Figure 11>

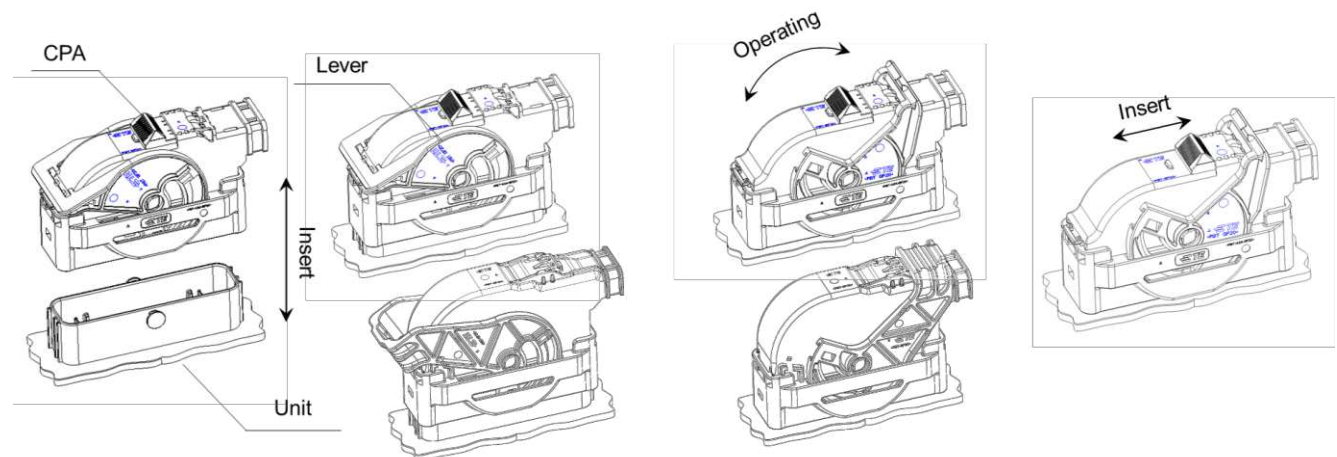
8. ENGAGE, DISENGAGE OF CONNECTOR

8.1 Mating of Connector

- (1) Align the mating faces of the connectors. The key of the unit connector faces the keying slot of the plug connector as shown in **<figure 11>**.
- (2) Check the lever condition is in pre-lock status **<figure 12>**.
- (3) Operating the connectors shown as **<figure 12>**.
 - Insert Connector with correct direction, and operating the lever
 - If connector combined with unit fully, then there will be an audible sound “click”.



<Fig. 11>

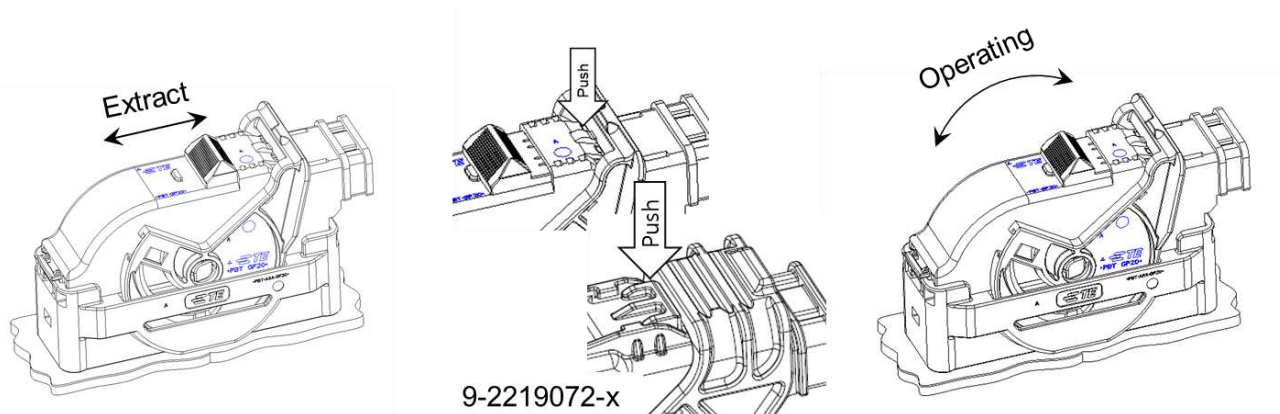


<Fig. 12 Sequence of assembly with unit>

Same as for the W/O CPA products except for CPA insertion

8.2 Un-mating of Connector

- (1) Press the latch of the plug housing as shown in **<Figure 13>**.
- (2) Operating lever to initial lock condition
- (3) Disassembly connector from unit.



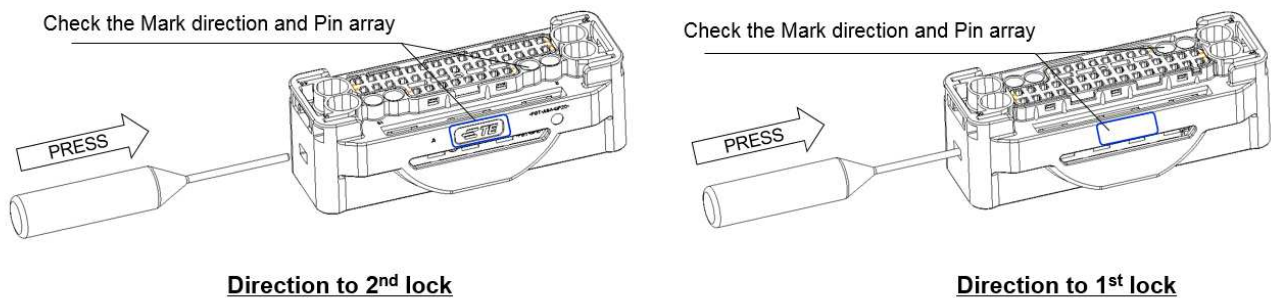
<Fig. 13. Process of un-mating with unit>

Same as for the W/O CPA products expect for CPA insertion

9. DISASSEMBLY

9.1 Retainer Unlock

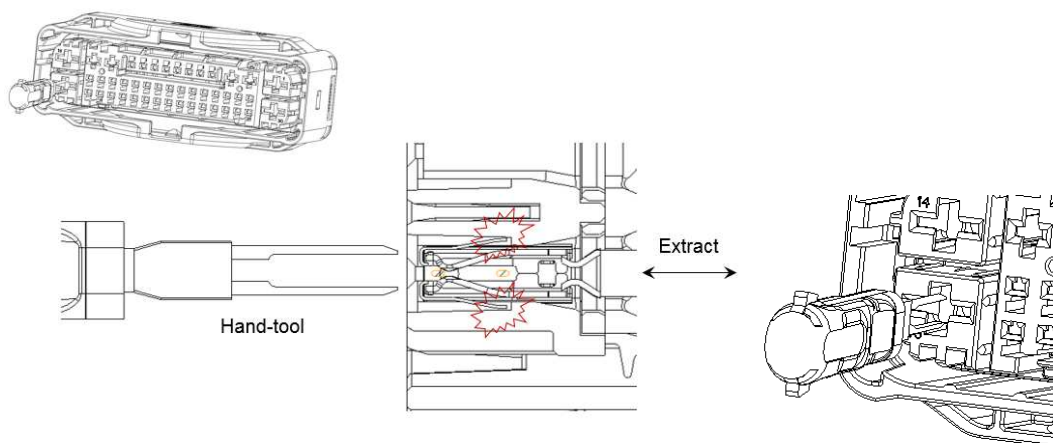
- (1) Insert the tip of a small screwdriver into the slot of the housing as shown in figure 14.
- (2) Push the retainer show as **<Figure.14>**
- (3) Refer to the **<Figure 9>** for Retainer locked, locked position.



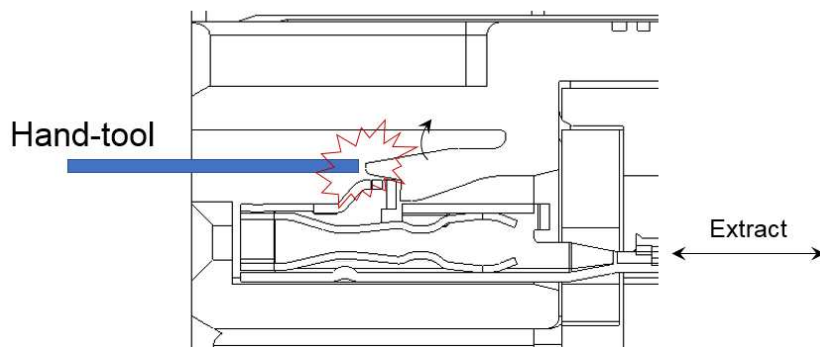
<Figure. 14>

9.2 Terminal Extraction

- (1) Ensure that the retainer is in 1st lock condition. The terminal can not be extracted in final lock(second lock) condition.
- (2) For the MCP 6.3/4.8K, 2.8K series
Insert the tip of a proper extract tool into the insertion hole to the end, press the terminal latch with tool to extract terminal **<figure 15>**.
- (3) For the MCON 1.2 C/B
Insert the tip of a proper extractive tool into the insertion hole to the end, lift up the housing lance by rotating tool to extract terminal **<figure 16>**.



<Figure 15 MCP 6.3/4.8K, MCP 2.8K>



<Fig. 16. MCON 1.2 C/B>

- (4) Extract the seated terminal from the housing while holding the tool, and then pull the wire out until terminal is released.
- *. Do not pull the wire by force when the terminal is not extractive, ensure that the retainer or housing lance is locked

10. REPLACEMENT AND REPAIR

- Do not use any defective or damaged connectors or terminals.
- Do not re-use a terminated terminal by removing the wire.



Rev.	EO	Description	Changed	Date	Prepared
A		RELEASE		22.Dec'17	EW CHUN
A1		REVISED	ADD 9-2219072	18.Dec'19	EW CHUN
A2		LOCAL DOC TYPE Updated		09JAN2024	EW CHUN
A3		ADD CAVITY PLUG ASSEMBLY		12SEP2024	YH MA
A4		ADD 1-2317043-X and Terminal 2005546	ADD 2005546-1	17APR2025	SW KIM