



49, 50, 22 & 38POS. SEALED CONNECTOR

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1 GENERAL

1 综述

1.1 Purpose

1.1 目的

This application specification includes the guidelines to be followed during assembly, installation and disassembly of 49, 50, 22 & 38Pos. sealed connector.

本规范用于指导. 49, 50, 22 & 38Pos.密封连接器的组装,安装和拆卸。

1.2 Drawing Manuals

1.2 客户图纸/文档

These drawings are based on the latest valid customer drawings.

本规范依据有效的最新版本客户图纸。

2301238	PLUG HOUSING ASS'Y, 49POSN. FAKRA TYPE
2301239	TAB HOUSING ASS'Y, DTB 49POSN., FAKRA TYPE
2298002	SECONDARY LCOK, MQS/MCON1.2 DTB CONNECTOR, 50POSN.
2301240	SECONDARY LOCK, MCP2.8K/FAKRA DTB 49POSN.
2301241	SECONDARY LOCK, TAB HSG, MCP2.8K/FAKRA DTB 49POSN.
2297522	PLUG HOUSING ASSY, DTB 50POSN.
2297523	TAB HOUSING ASSY, DTB 50POSN.
2298002	SECONDARY LCOK, MQS/MCON1.2 DTB CONNECTOR, 50POSN.
2298003	SECONDARY LOCK, MCP2.8K DTB CONNECTOR, 50POSN.
2298567	22POSN., PLUG SIDE, HSG ASSY MCP 2.8K, MCON1.2CB, MQS 0.64
2298566	22POSN., TAB SIDE, HSG ASY MCP2.8K, MCON 1.2CB, MQS 0.64
2298573	RETAINER, MCP2.8K, DTB 22POSN.
2298574	RETAINER, MQS 0.64/MCON1.2 DTB 22POSN.
2351078	PLUG HSG, DTB 38POSN., TWO FAKRA TYPE
2351079	TAB HSG, DTB 38POSN., TWO FAKRA TYPE

These specifications are also reference for the application.

以下文档作为此应用规范的参考文件

114-18464	Application Specification MCON 1.2 Contact (MCON1.2端子应用规范)
114-18051	Application Specification MCP 2.8 Contact (MCP 2.8端子应用规范)
114-18148	Application Specification MCP 2.8 Contact (MCP 2.8端子应用规范)
114-18021	Application Specification MQS Contact (MQS 端子应用规范)
114-18025	Application Specification MQS Contact (MQS 端子应用规范)
114-18622	Application Specification FAKRA Contact (FAKRA端子应用规范)

The 'Extraction tool' as below PN's. However, it can be replaced by similar tool

以下是端子退出工具，类似结构的退出工具经验证也可作为替代工具

2-1579008-1	MCON1.2 Extraction Tool (MCON1.2退出工具)
1579007-1	MCP2.8 Extraction Tool (MCP 2.8退出工具)
2-1579008-1	MQS Extraction Tool (SOCKET) (MQS退出工具)
x-XXXXXXX-x	MQS Extraction Tool (PIN) (MQS退出工具)

2 Product Description

2 产品说明

The inline 49, 50, 22 & 38P sealed connector system is used for the connection inside the vehicle.

Inline 49, 50, 22 & 38P 密封连接器系统用于连接车辆的车身控制单元及仪表等的信号及电流传输

2.1 49 Pos sealed connector

2.1 49 位密封连接器

The connector contains below parts. As Figure 1 & Figure 2

连接器包含以下零件,如图 1 和 图 2

Figure 1

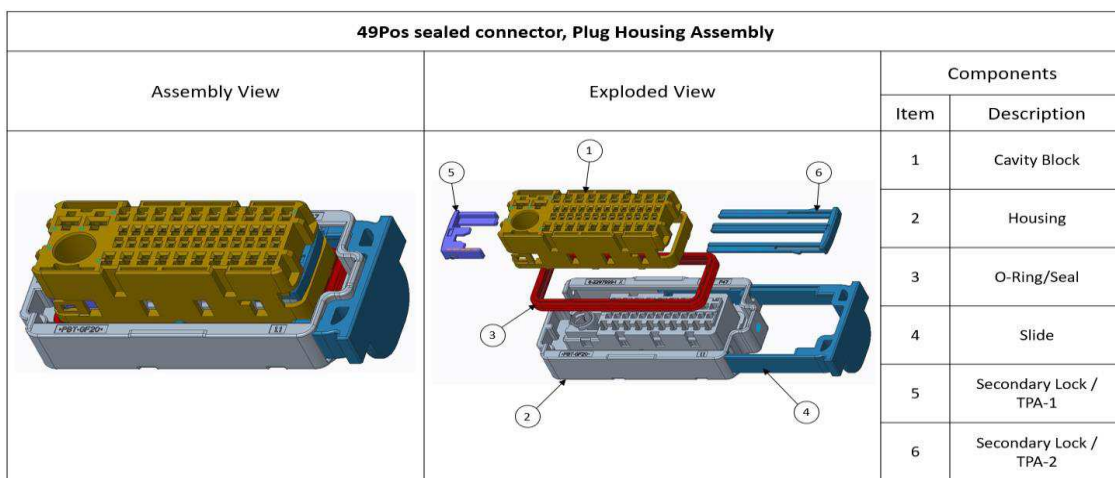
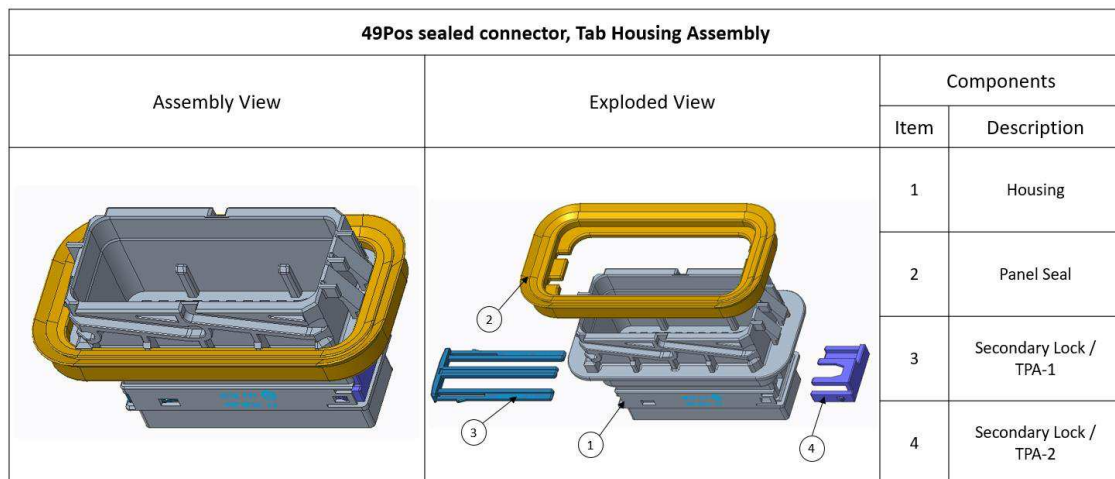


Figure 2



2.2 50Pos sealed connector

2.2 50 位密封连接器

The connector contains below parts. As Figure 3 & Figure 4

连接器包含以下零件,如图 3 和 图 4

Figure 3

50Pos sealed connector, Plug Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Cavity Block
		2	Housing
		3	O-Ring/Seal
		4	Slide
		5	Secondary Lock / TPA-1
		6	Secondary Lock / TPA-2

Figure 4

50Pos sealed connector, Tab Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Housing
		2	Panel Seal
		3	Secondary Lock / TPA-1
		4	Secondary Lock / TPA-2

2.3 22Pos sealed connector

2.3 22 位密封连接器

The connector contains below parts. As Figure 5 & Figure 6

连接器包含以下零件,如图 5 和 图 6

Figure 5

22Pos sealed connector, Plug Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Cavity Block
		2	Housing
		3	O-Ring/Seal
		4	Slide
		5	Secondary Lock / TPA-1
		6	Secondary Lock / TPA-2

Figure 6

22Pos sealed connector, Tab Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Housing
		2	Panel Seal
		3	Secondary Lock / TPA-1
		4	Secondary Lock / TPA-2

2.4 38Pos (TE Fakra A) DTB connector

2.4 38 位(TE Fakra A) DTB 连接器

The connector contains below parts. As Figure 7 & Figure 8

连接器包含以下零件,如图 7 和 图 8

Figure 7

38Pos (TE Fakra A) DTB connector, Plug Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Housing
		2	Cavity Block
		3	Slide
		4	O-Ring
		5	Fakra Socket
		6	Secondary Lock / TPA 1
		7	Secondary Lock / TPA 2

Figure 8

38Pos (TE Fakra A) DTB connector, Tab Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Housing
		2	Panel Seal
		3	Fakra Socket
		4	Secondary Lock / TPA 1
		5	Secondary Lock / TPA 2

2.5 38Pos (Rosenberger Fakra3) DTB connector

2.5 38 位(Rosenberger Fakra3) DTB 连接器

The connector contains below parts. As Figure 9 & Figure 12

连接器包含以下零件,如图 9 和 图 12

Figure 9

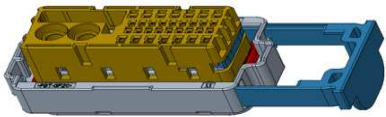
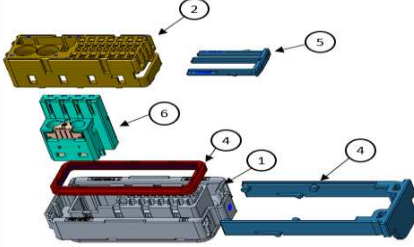
38Pos(Rosenberger Fakra3) DTB Connector, Plug Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Housing
		2	Cavity Block
		3	O-Ring
		4	Slide
		5	Secondary Lock / TPA
		6	Fakra Socket

Figure 10

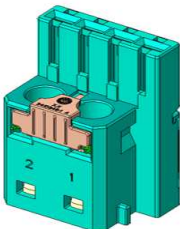
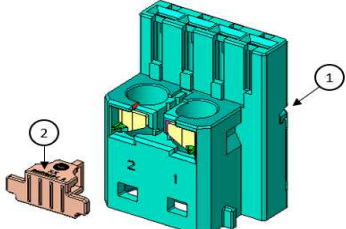
38Pos(Fakra Socket) DTB Connector, Plug Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Fakra Socket
		2	Secondary Lock

Figure 11

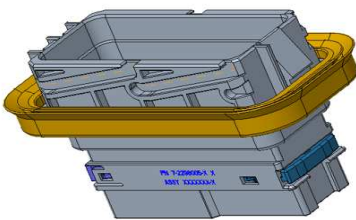
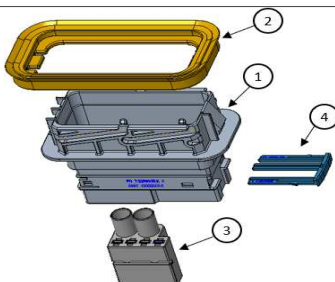
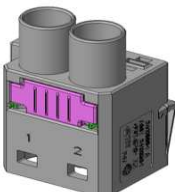
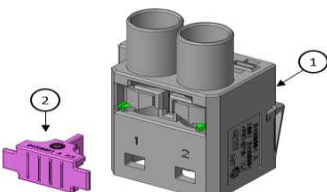
38Pos (Rosenberger Fakra3) DTB Connector, Tab Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Housing
		2	Panel Seal
		3	Fakra Socket
		4	Secondary Lock / TPA

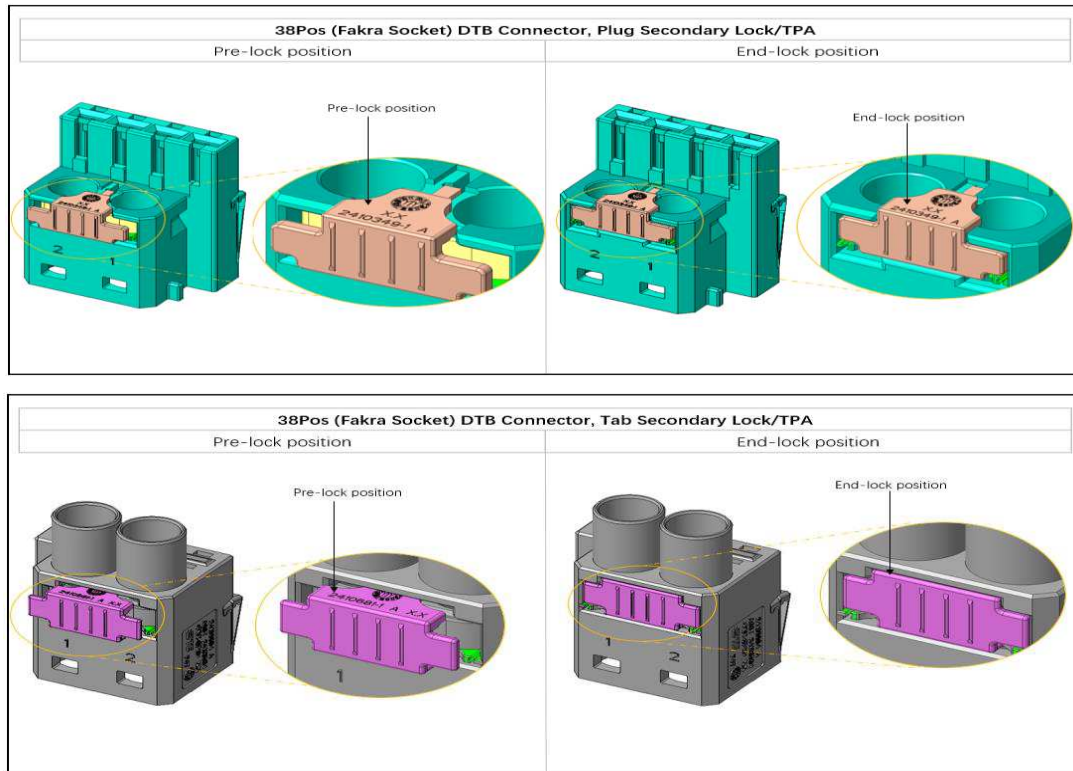
Figure 12

38Pos (Fakra Socket) DTB Connector, Tab Housing Assembly			
Assembly View	Exploded View	Components	
		Item	Description
		1	Fakra Socket
		2	Secondary Lock

2.6 Delivery status

2.6 出货状态

The connector、Fakra Socket 、Clip two Fakra TYPE and the Secondary lock/TPA are sold separately



3 49, 50, 22 & 38 Pos sealed connector assembly & installation

3 49, 50, 22 & 38 位密封连接器组装和互配

3.1 Terminal insertion

3.1 端子插入

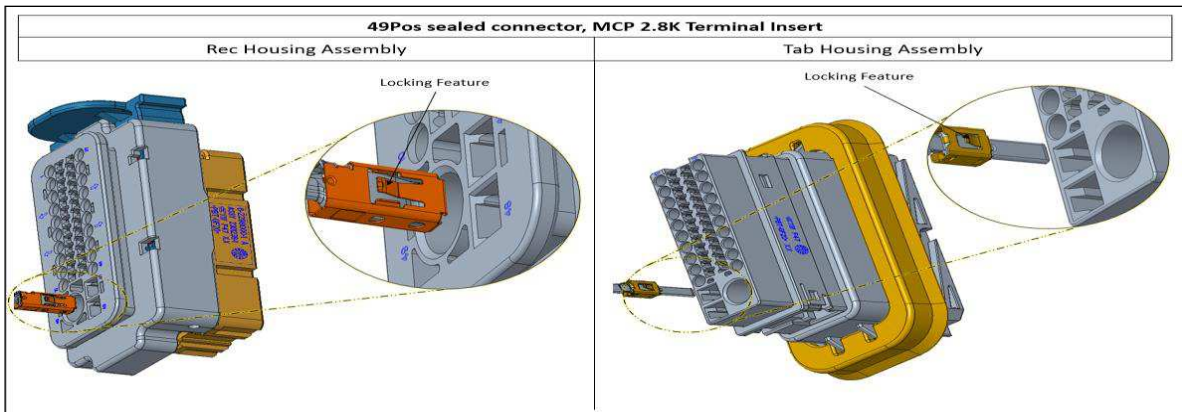
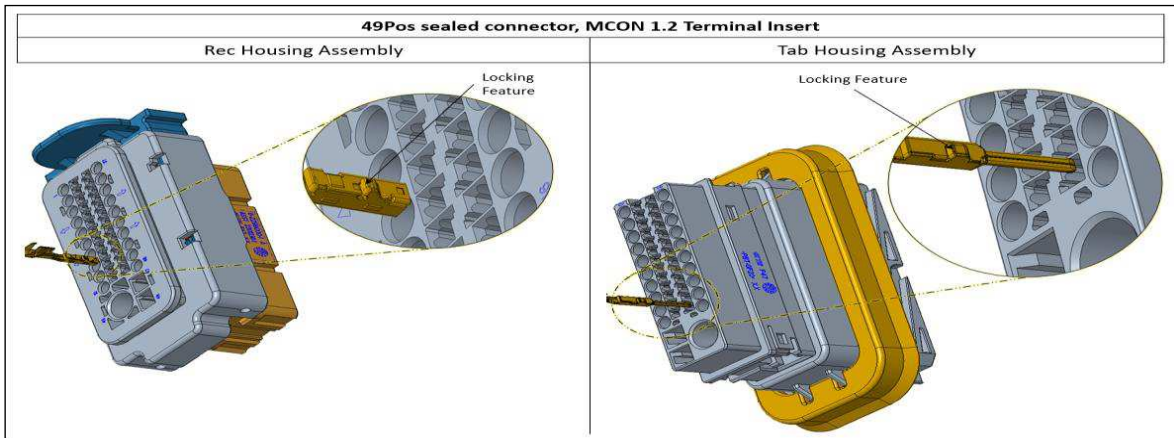
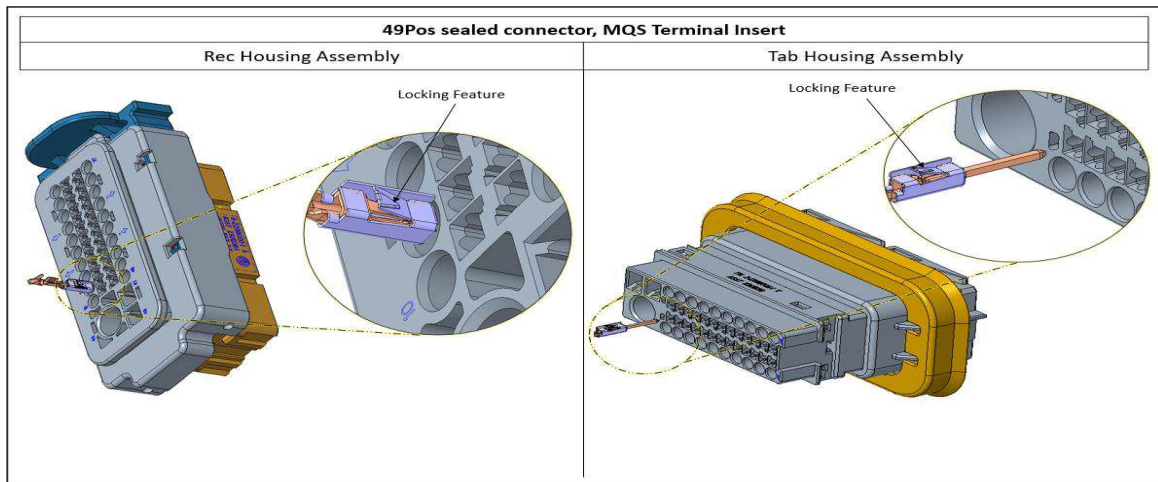
The contact cavities are polarized to prevent from being inserted in incorrect direction.

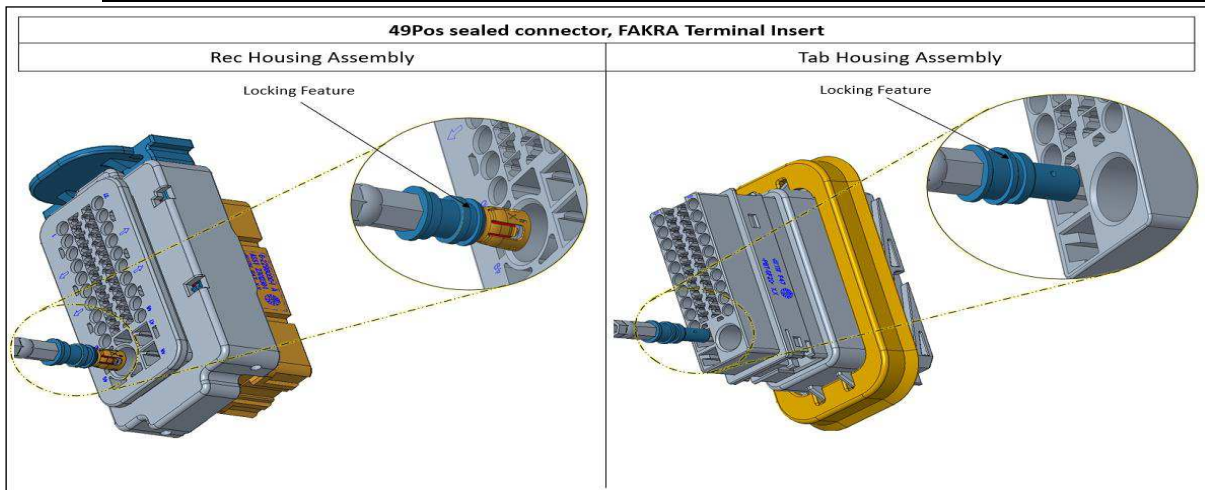
—3.1.1 49Pos sealed connector terminal insertion

3.1.1 49 位密封连接器端子插入

Insert terminals in right direction until an audible click and terminals completely engaged. Complete locking can be examined by gently pulling back the terminals.

按照正确的方向插入端子，直到有轻微咔嚓声插入到位。可轻微回拉线束检查确保插入到位。



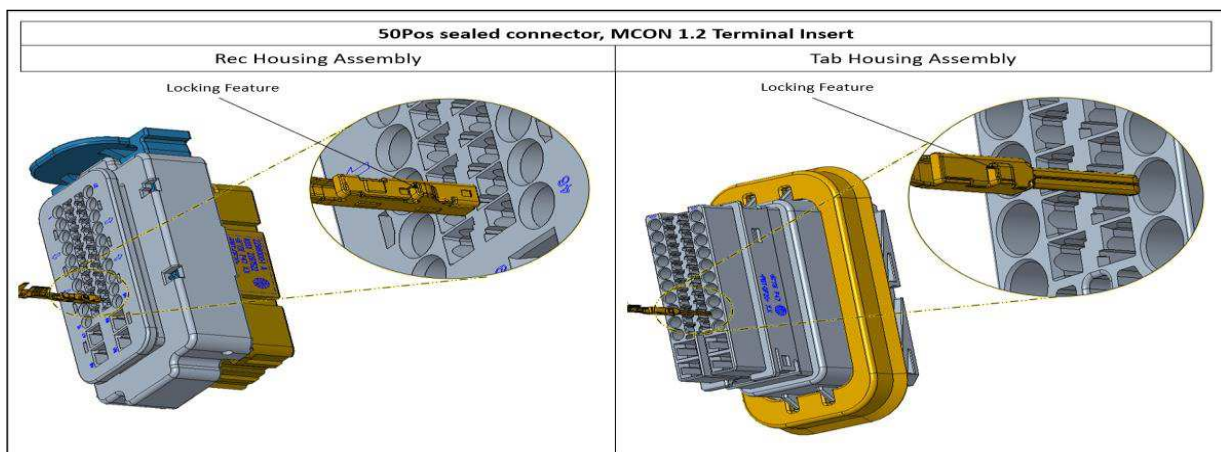
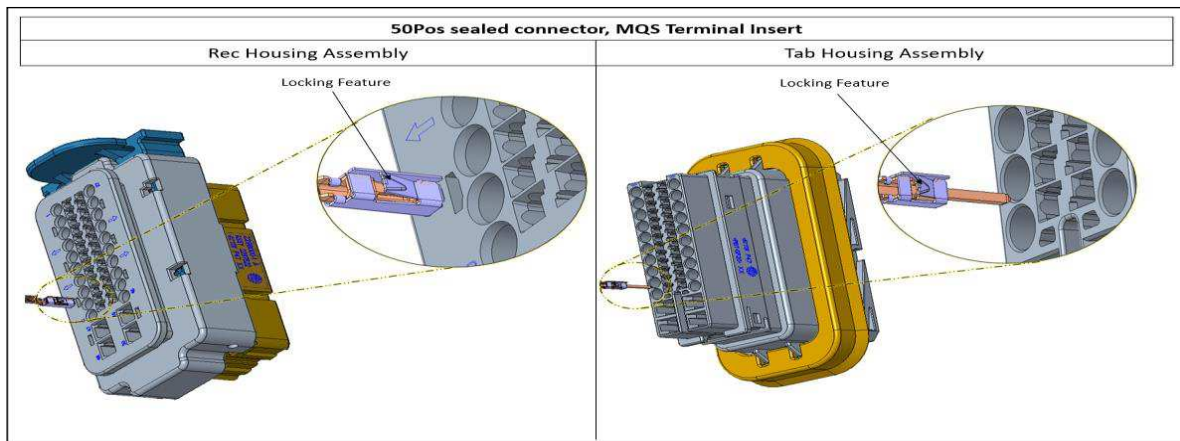


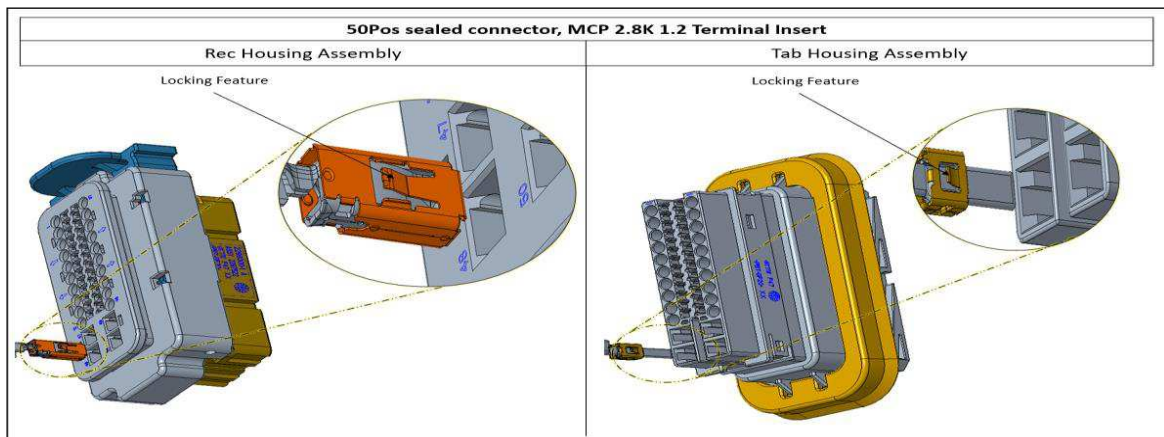
3.1.2 50Pos sealed connector terminal insertion

3.1.2 50 位密封连接器端子插入

Insert terminals in right direction until an audible click and terminals completely engaged. Completely locking can be examined by gently pulling back the terminals.

按照正确的方向插入端子，直到有轻微咔嗒声插入到位。可轻微回拉线束检查确保插入到位。



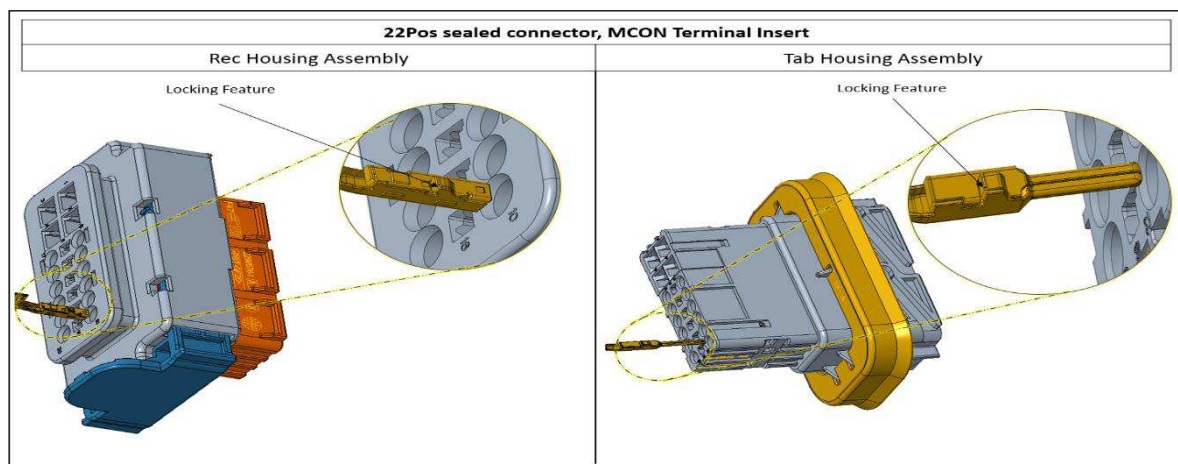
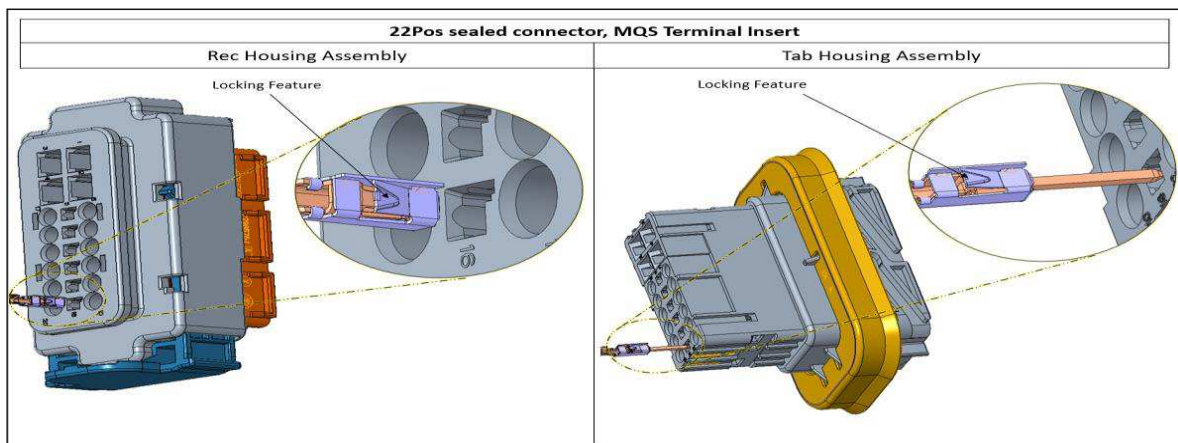


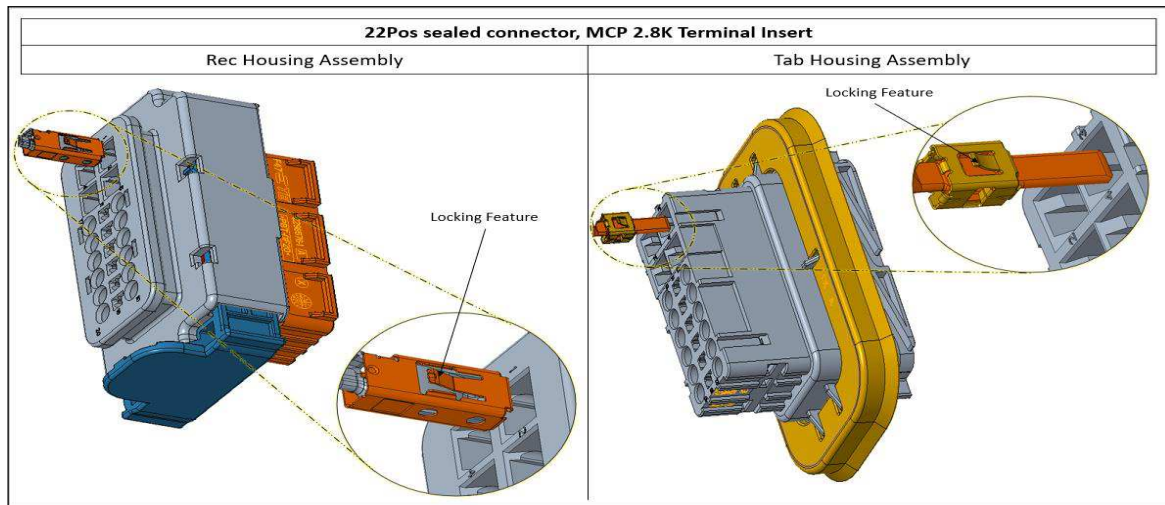
3.1.3 22Pos sealed connector terminal insertion

3.1.3 22 位密封连接器端子插入

Insert terminals in right direction until an audible click and terminals completely engaged. Completely locking can be examined by gently pulling back the terminals.

按照正确的方向插入端子，直到有轻微咔嗒声插入到位。可轻微回拉线束检查确保插入到位。



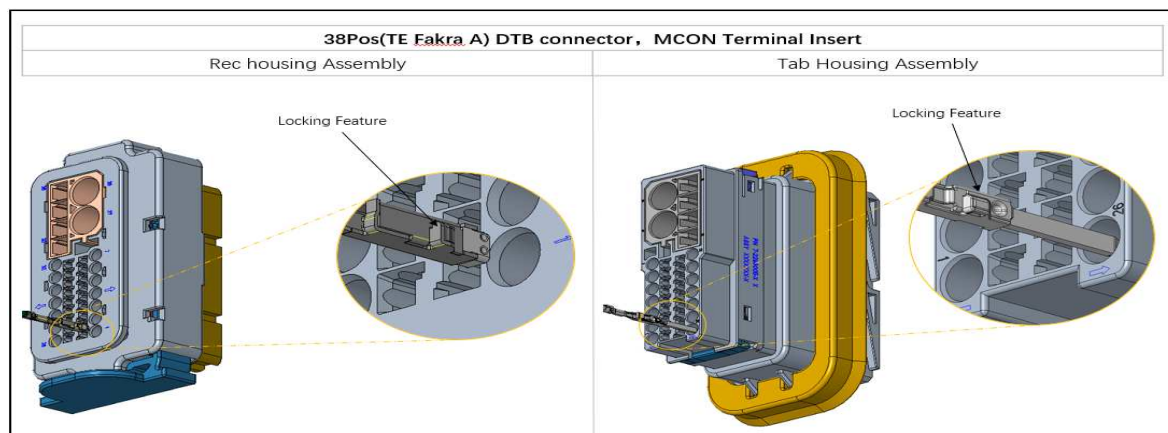
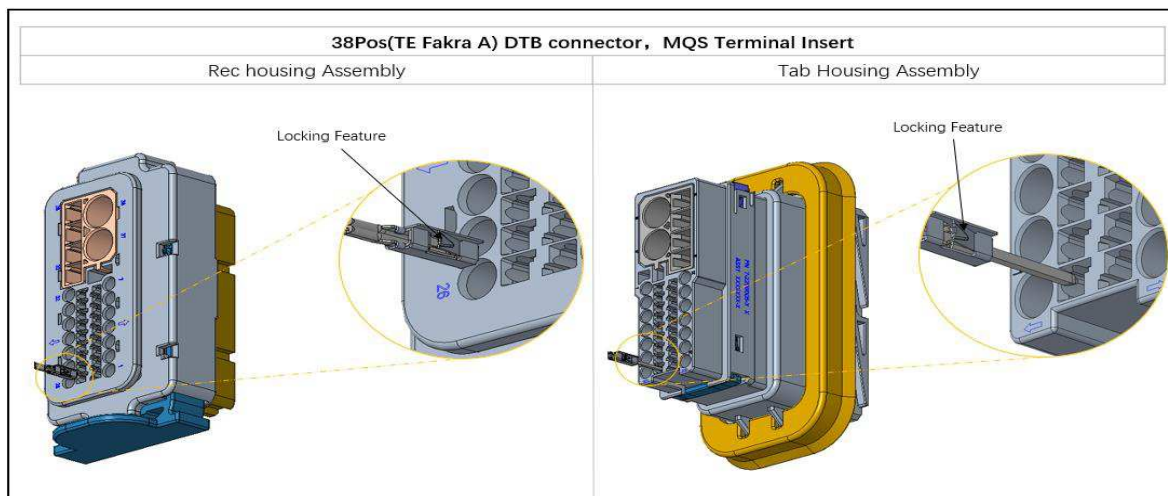


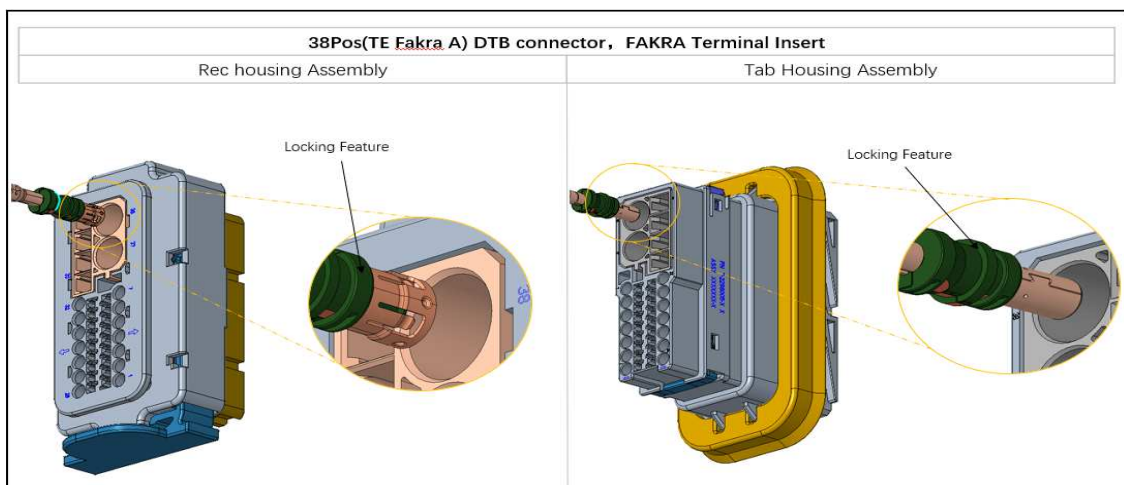
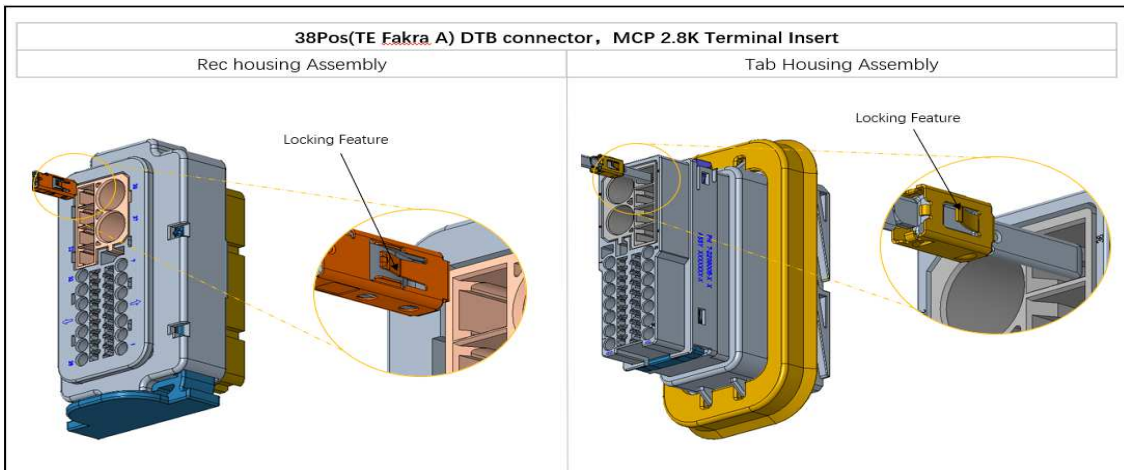
3.1.4 38Pos (TE Fakra A) DTB connector terminal insertion

3.1.4 38 位 (TE Fakra A) DTB 连接器端子插入

Insert terminals in right direction until an audible click and terminals completely engaged. Completely locking can be examined by gently pulling back the terminals.

按照正确的方向插入端子，直到有轻微咔嗒声插入到位。可轻微回拉线束检查确保插入到位。



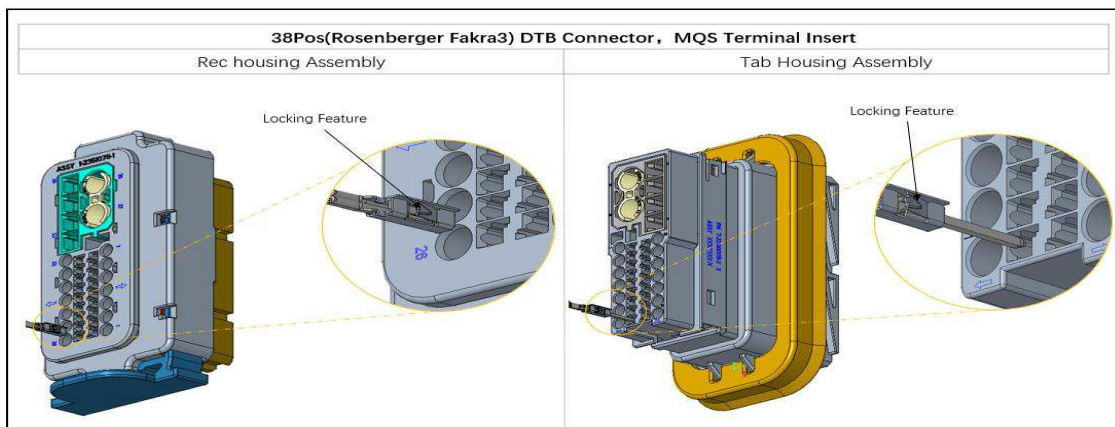


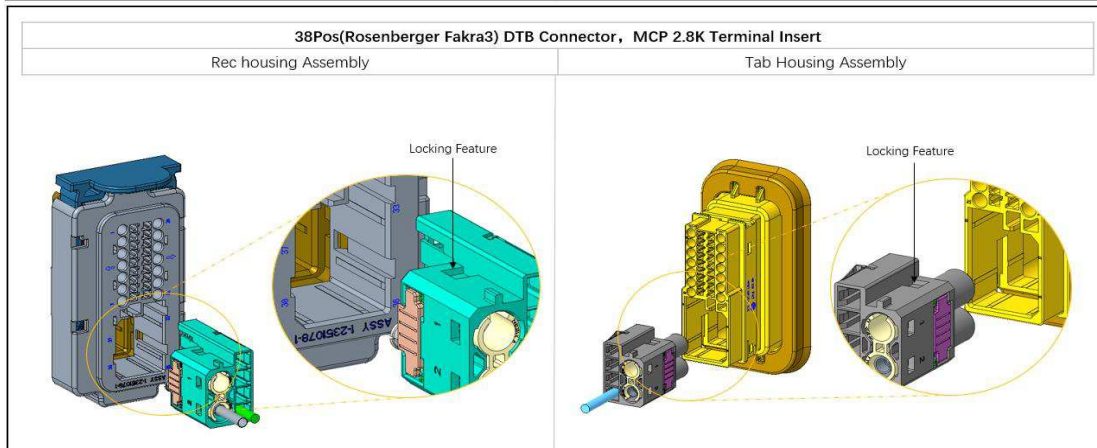
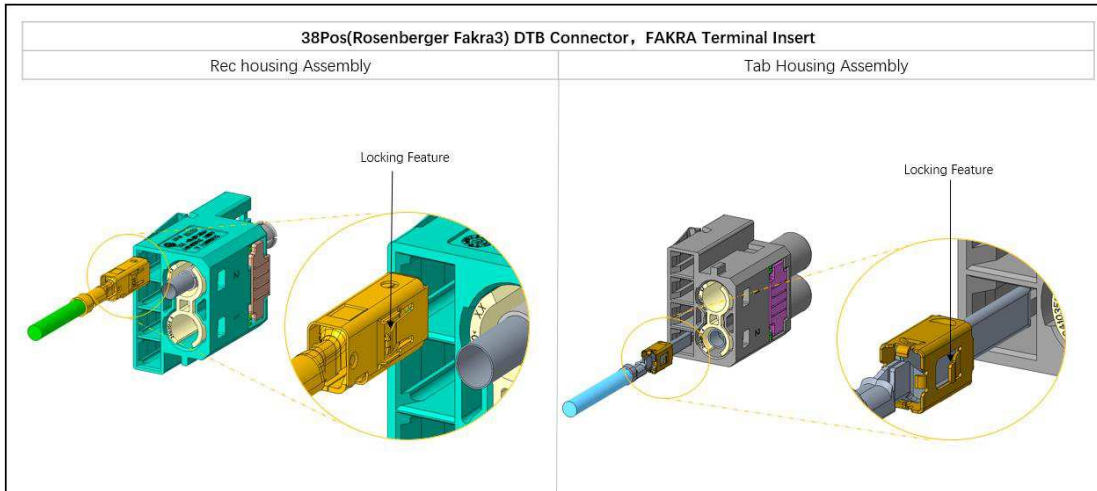
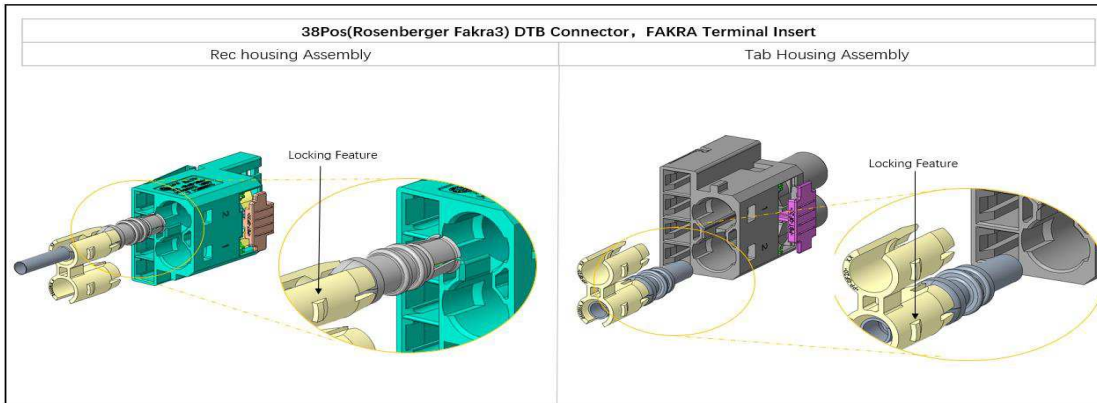
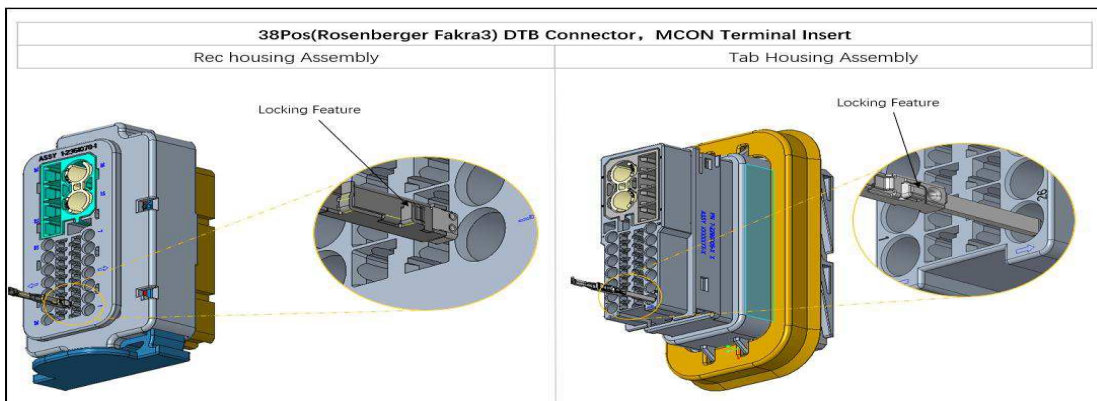
3.1.5 38Pos (Rosenberger Fakra3) DTB connector terminal insertion

3.1.5 38 位 (Rosenberger Fakra3) DTB 连接器端子插入

Insert terminals in right direction until an audible click and terminals completely engaged. Completely locking can be examined by gently pulling back the terminals.

按照正确的方向插入端子，直到有轻微咔嗒声插入到位。可轻微回拉线束检查确保插入到位。





3.1.4 Key points for terminal insert

3.1.4 端子插入关键点

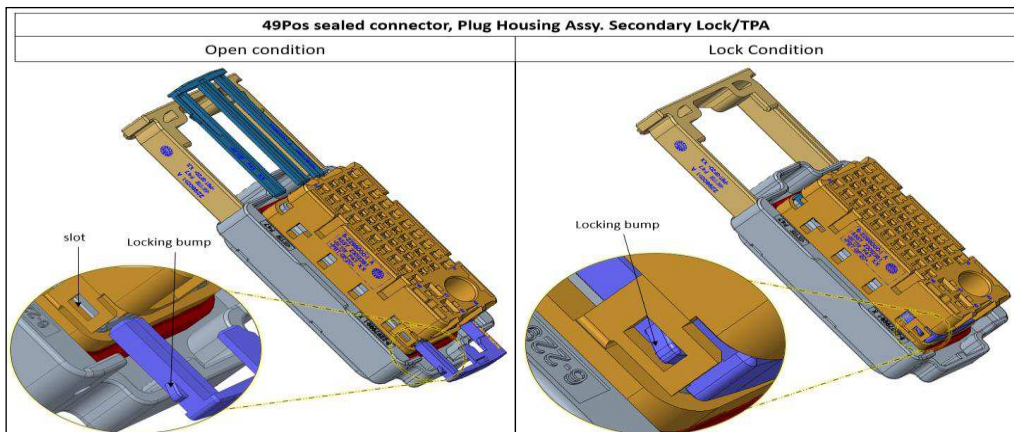
- a. Check and align the direction for terminal and cavity.
- a. 检查并确认端子和塑胶插孔方向一致
- b. Insert terminal until audio click and completely engaged.
- b. 插入端子直到听到轻微的“咯塔”声响并完全插入到位
- c. Pull back terminal gently to check the terminal locked completely.
- c. 轻微回拉线束检查确保端子完全锁止
- d. Terminal and Wire size for cavity requirement refer to TE customer drawing
- d. 对应孔位适用端子和线径要求参考 TE 客户图纸

3.2 Locking Secondary Lock

3.2 二次锁插入到位

There are 2 TPA's on each housing of 49, 50, 22 & 38P connectors. Locking secondary lock/TPA to lock position by orienting the TPA's into the guides in respective cavity blocks of 49, 50, 22 & 38P housings and by pushing the TPA's until the locking bump gets into the allocated slot as shown in figures 7.

Figure 7



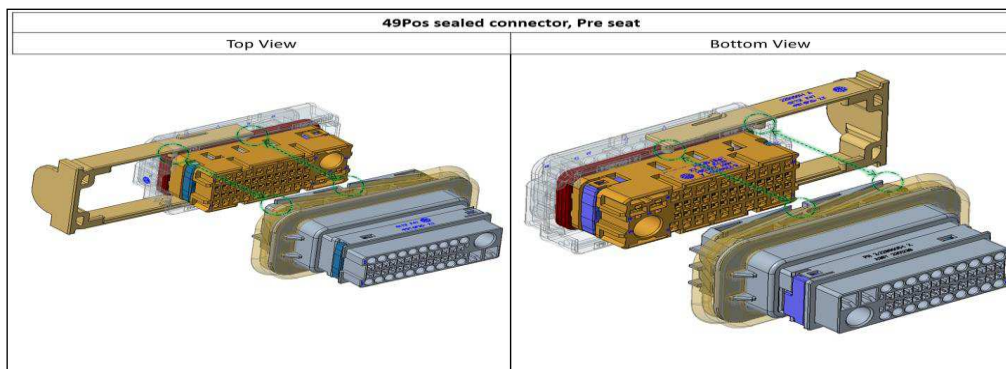
3.3 Mating plug with interface/header

3.3 连接对配端

3.3.1 Connector Pre-seat

3.3.1 连接器预装

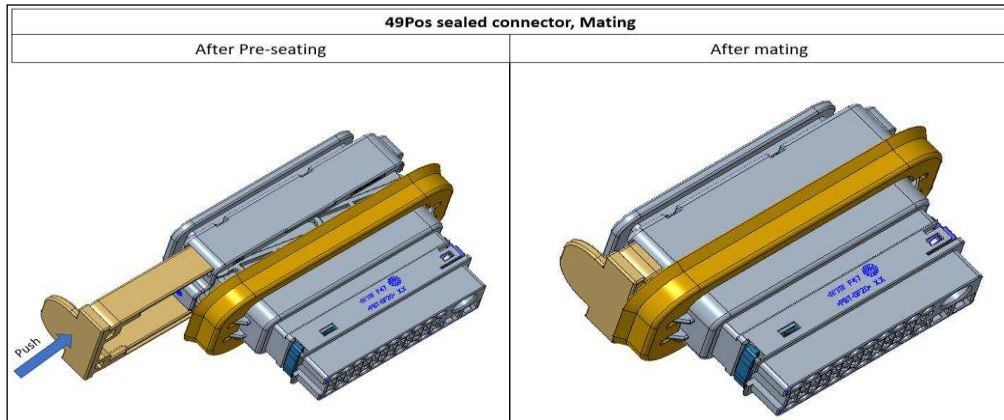
Pre-seat the plug housings on to the socket housings by aligning the lobes on the Slide to cam track on the Tab housing and then firmly push the slide together.



3.3.2 Mating the connector

3.3.2 连接器组配

Push the slider until the bump on the slider snaps into the end lock slot.

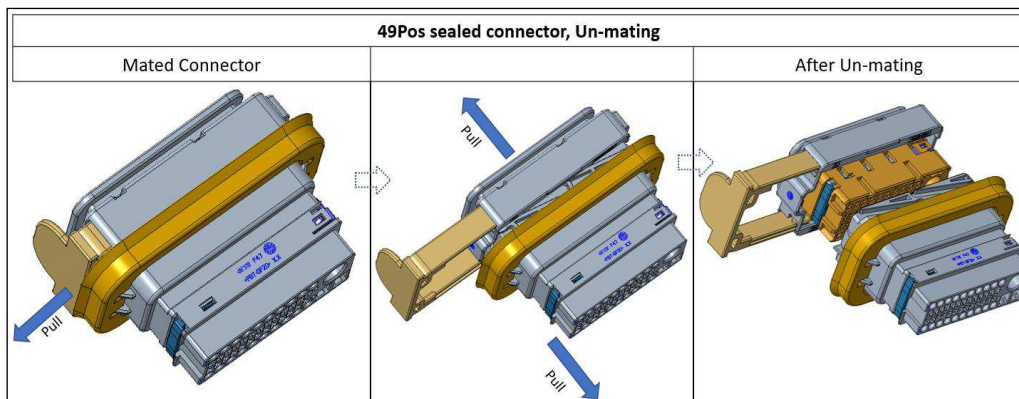


4 49, 50, 22 & 38 Pos sealed connector un-installation & disassembly

4 49, 50, 22 & 38 Pos 密封连接器拆卸

4.1 Un-mating the connector

4.1 从对配端拆离连接器



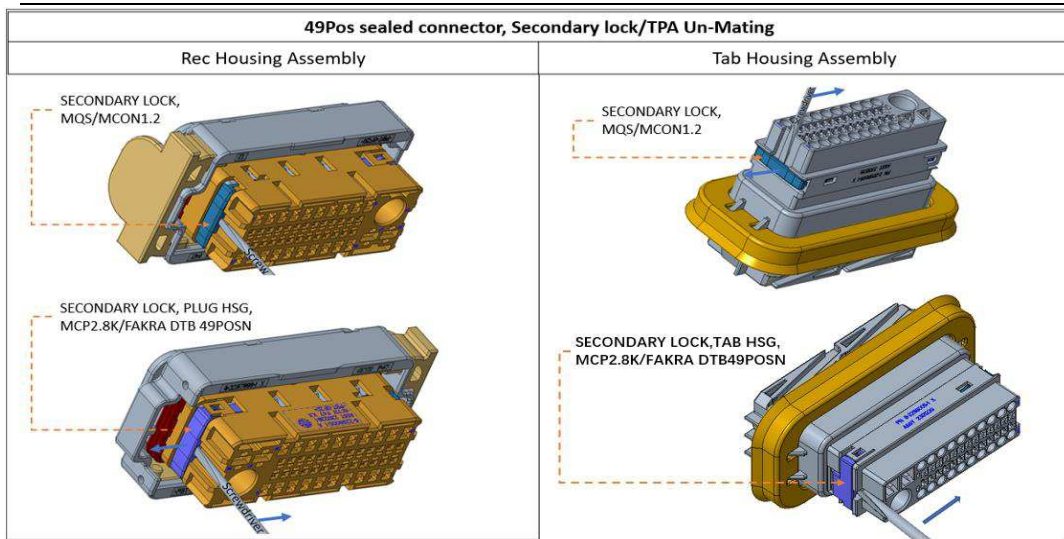
NOTE: Same instructions to be followed for 50P & 22P & 38P connectors

4.2 Release Secondary lock/TPA

4.2 退出二次所/TPA

Validated release tool can be used. Please pay attention to product protect and operator safety
 Place eligible tool (example as shown: Screwdriver) between cavity block and secondary lock to open Secondary lock/TPA.

经过验证的退出工具即可使用。请注意产品防护和操作人员安全



NOTE: Same instructions to be followed for 50P & 22P & 38P connectors

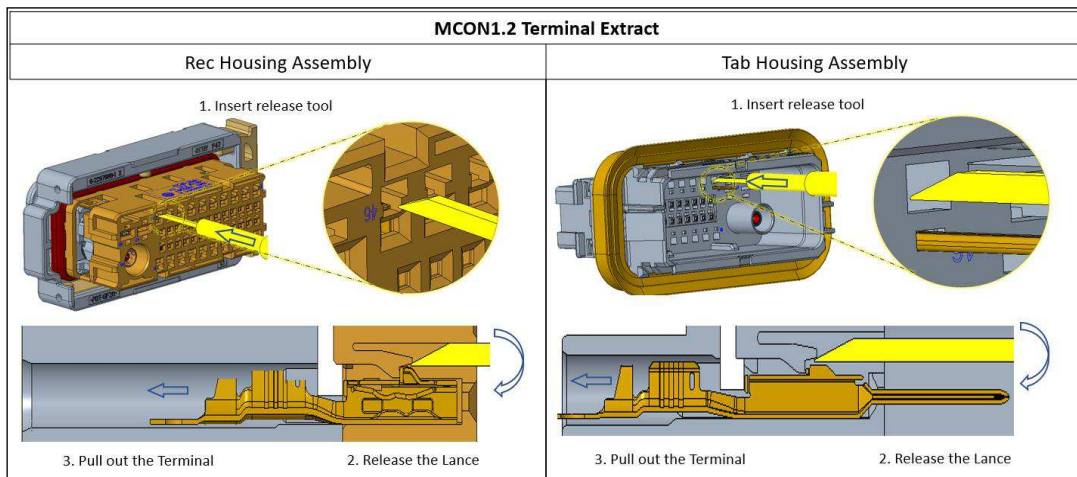
4.3 Terminal extract

4.3 端子退出

4.3.1 MCON1.2 terminal extract

4.3.1 退出 MCON1.2 端子

Validated release tool can be used. Please pay attention to product protected and operator safety
 经过验证的退出工具即可使用。请注意产品防护和操作人员安全。

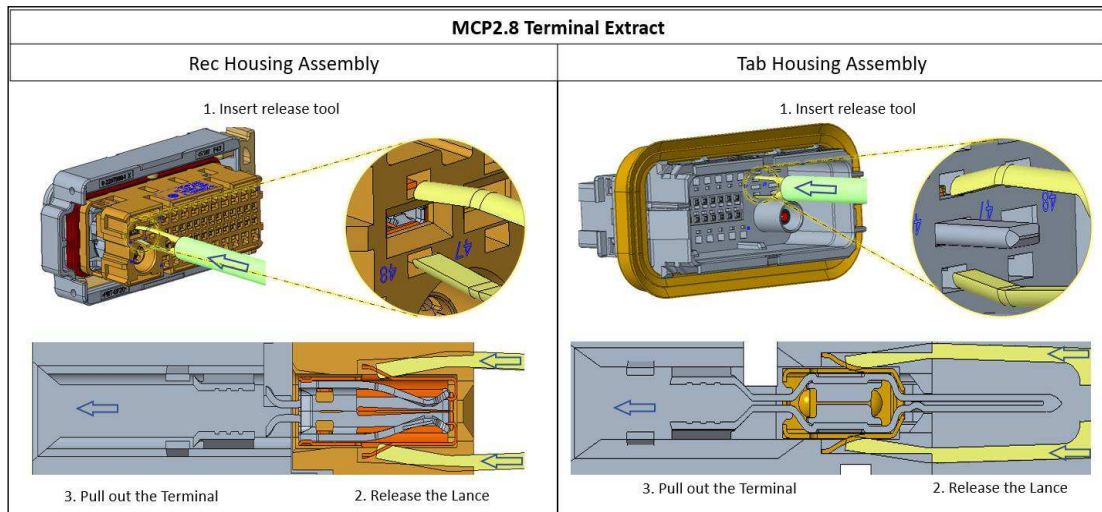


NOTE: Same instructions to be followed for 50P & 22P & 38P connectors

4.3.2 MCP2.8 terminal extract

4.3.2 退出 MCP2.8 端子

Validated release tool can be used. Please pay attention to product protected and operator safety
 经过验证的退出工具即可使用。请注意产品防护和操作人员安全。

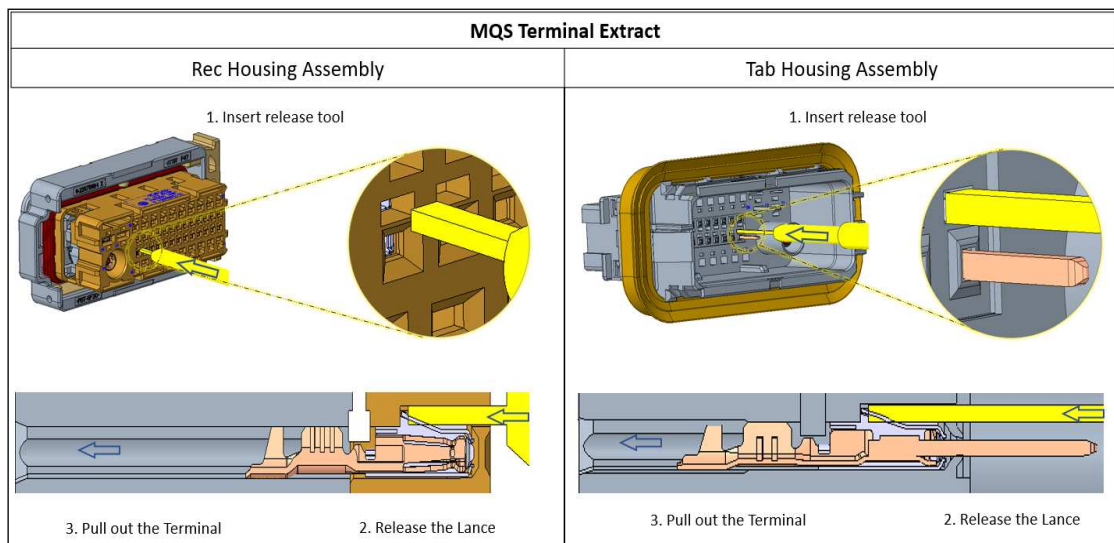


NOTE: Same instructions to be followed for 50P & 22P & 38P connectors

4.3.3 MQS terminal extract

4.3.3 退出 MQS 端子

Validated release tool can be used. Please pay attention to product protected and operator safety
 经过验证的退出工具即可使用。请注意产品防护和操作者安全。



NOTE: Same instructions to be followed for 50P & 22P & 38P connectors

5 Connector protection and operation rooms

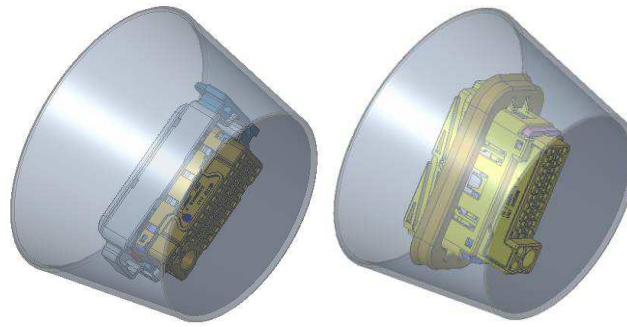
5 连接器防护及操作空间

5.1 Connector protection

5.1 连接器防护

Connector maybe physical damaged after harness assembly while inner transfer or to OEM before installed to panel of car body. So properly connector protection is recommend.

连接器在线束厂完成组装后，在线束工厂内部周转或是周转到 OEM 工厂过程中以及 OEM 内部安装到车身之前，可能会存在一定的损坏风险。因此建议对连接器进行合理的防护。



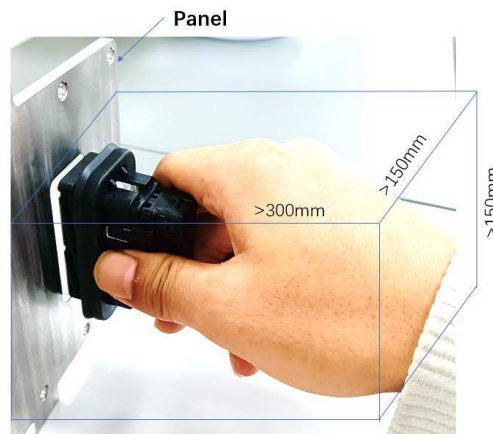
Recommend connector protection

5.2 Connector operation rooms

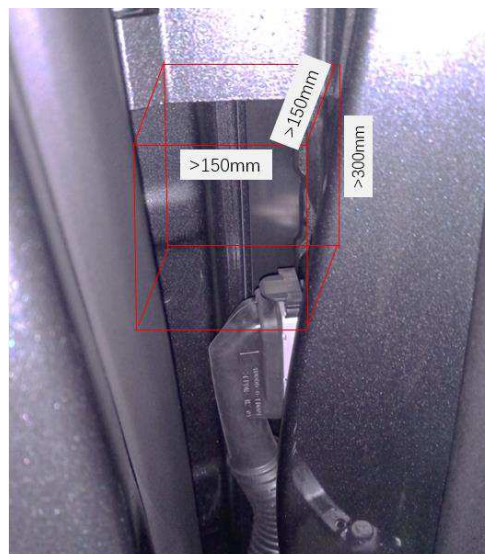
5.2 连接器操作空间

There must be enough rooms reserved for connector operation when mounting to panel or connectors engage/disengage.

必须预留足够的空间以保证连接器安装、互配、解锁等正常操作。



Recommend space for Male connector installation



Recommend space for connector engagement/disengagement