APTIV

ASSEMBLY MANUAL

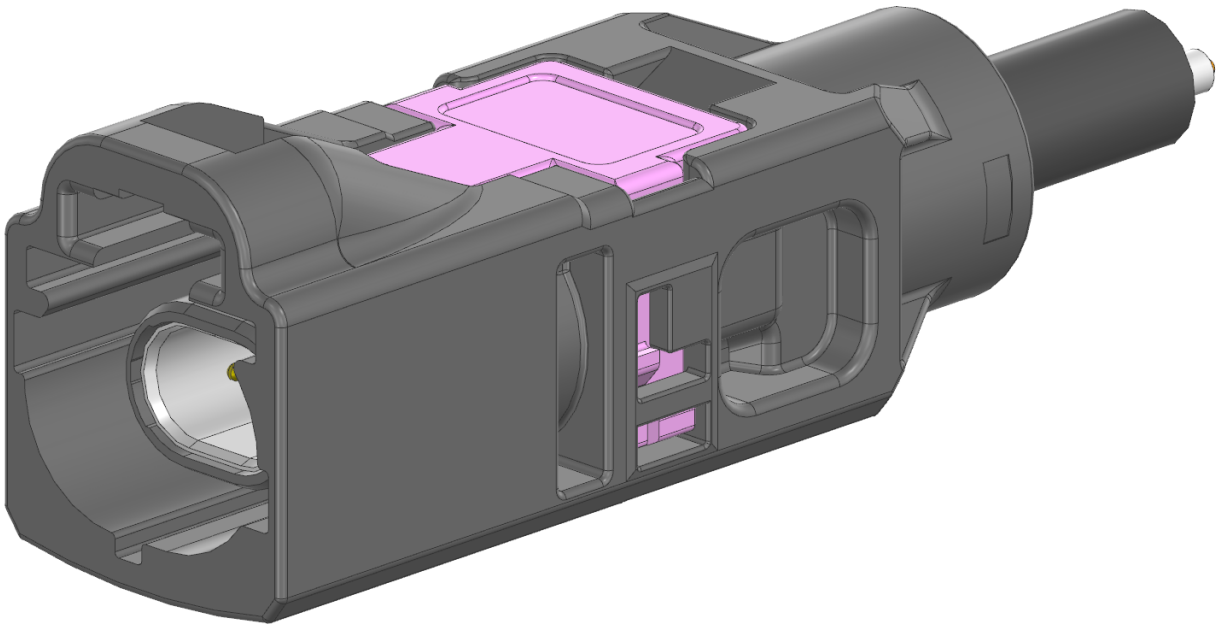
PRE - ASSEMBLY	HARNESS ASSEMBLY

35888695-CUS72-S01 Rev01

1 PORT H-MTD
Male Terminal System
Unsealed

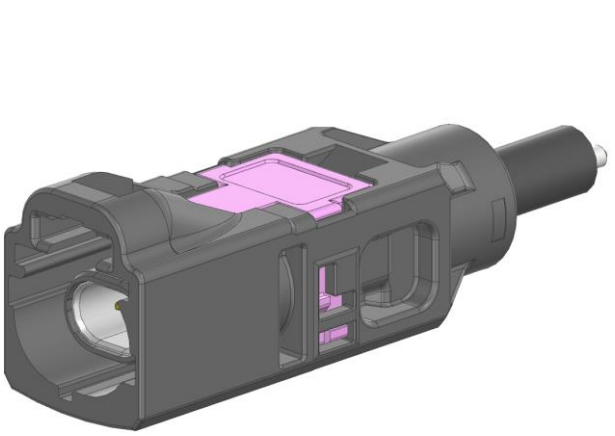
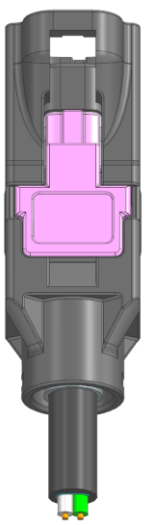
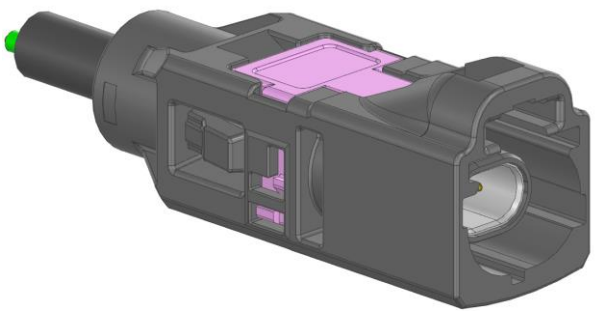
December 2024

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Issued by
STC Shanghai, China
CEC Chennai, India

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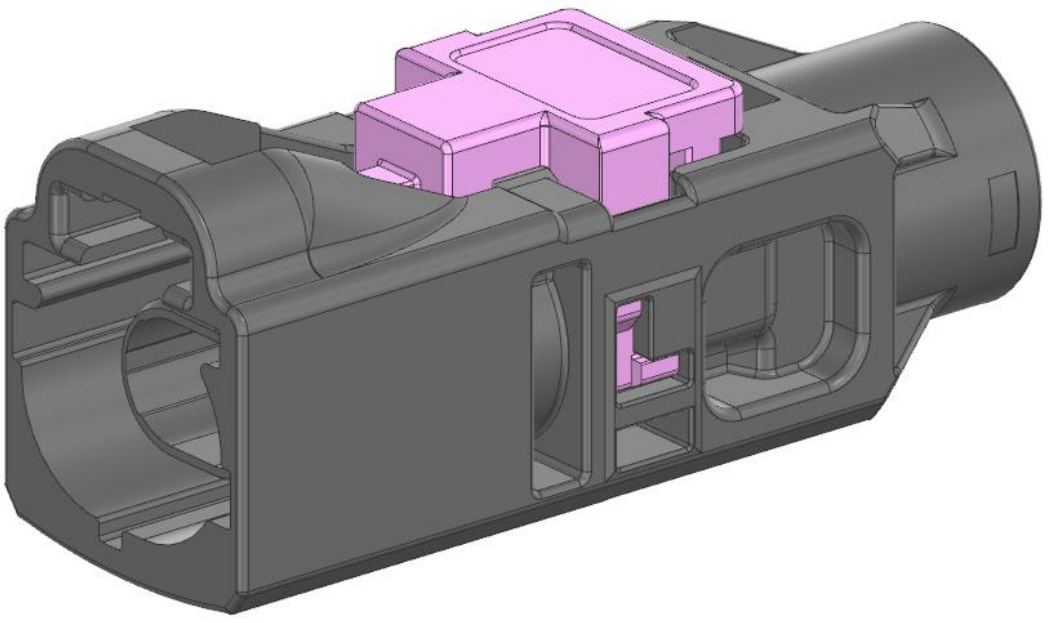
COMPONENT INFORMATION

ASSEMBLY	KEY OPTION	APTIV PN	AMOUNT
1-PORT HMTD MALE CONNECTOR WITHOUT CLIPSLOT	CODE A	35547127	**1**
	CODE B	35547128	1
	CODE C	35547129	1
	CODE D	35547130	1
	CODE E	35547131	1
	CODE F	35547132	1
	CODE Z	35547133	1
ASM TERM M H-MTD - UTP	-	35858026 / 35858027	-
ASM TERM M H-MTD - STP	-	35719839 / 35719761	-

ASSEMBLY OF THE MALE CONNECTOR

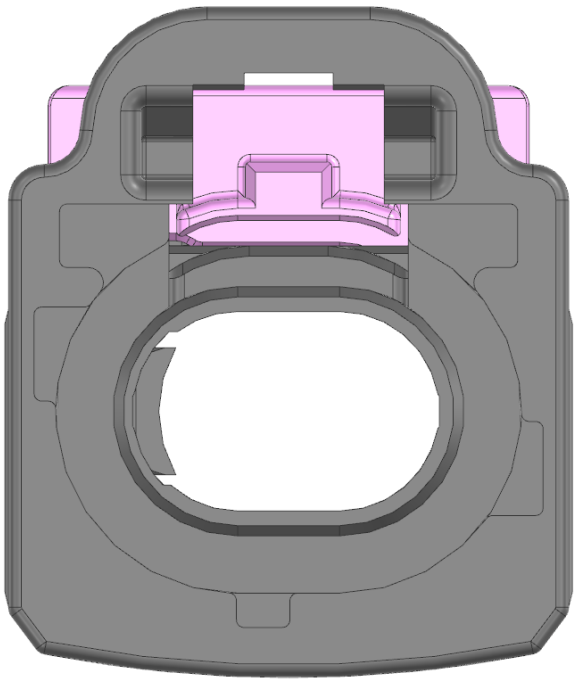
PRE - ASSEMBLY | HARNESS ASSEMBLY | CAR ASSEMBLY

1 PORT H-MTD Unsealed Connector



VIEW OF VERSIONS

1 WAY MALE CONNECTOR HOUSING



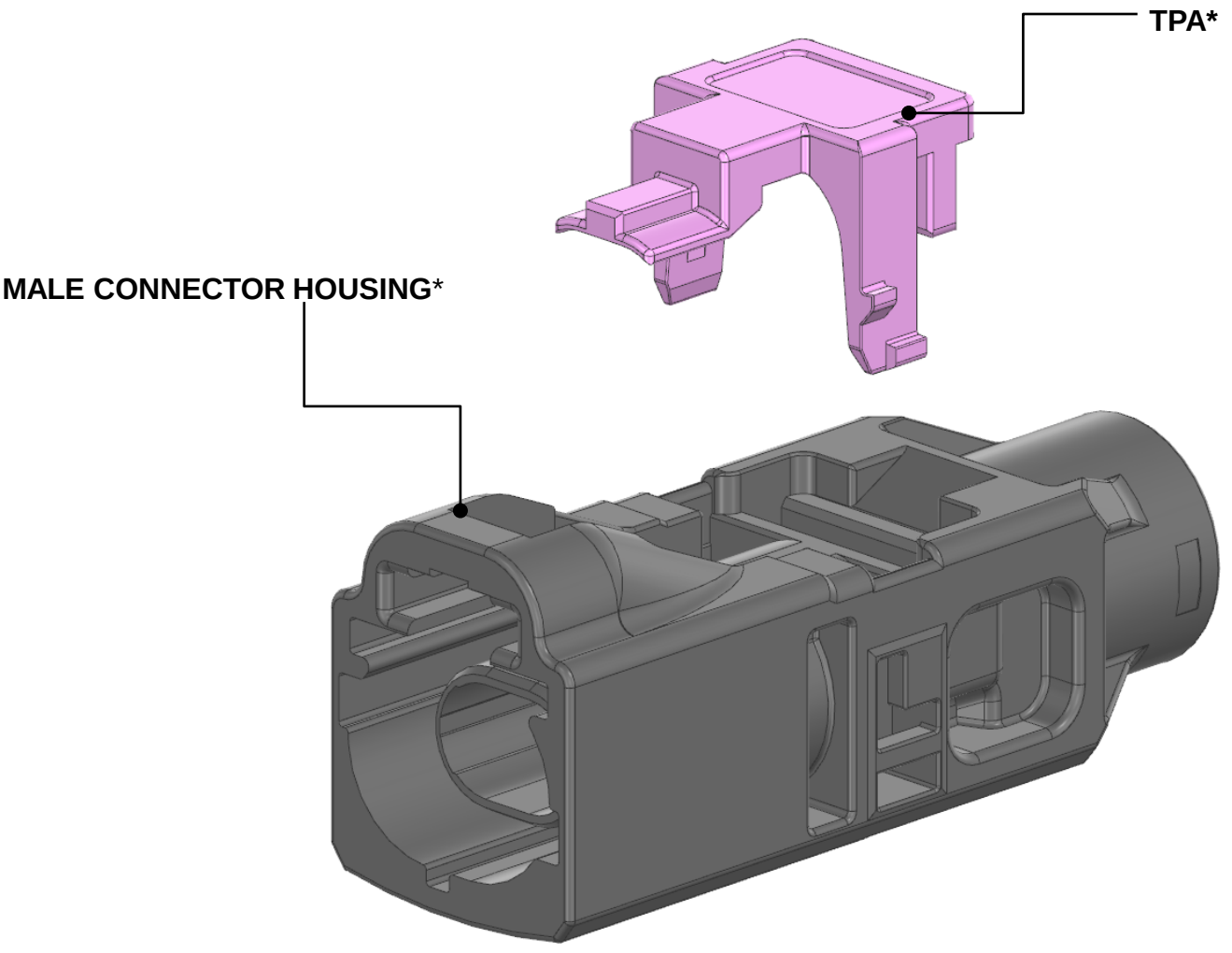
TYPE 101– CODE A WITHOUTCLIPSLOT

THESE CONNECTION SYSTEMS HAVE MULTIPLE CONFIGURATIONS, WHICH DIFFER IN THE INDEXING, CONNECTOR COLOR AND USE OF CPA. THE METHOD OF ASSEMBLY IS THE SAME FOR ALL CONNECTORS REGARDLESS OF SAID DIFFERENCES, UNLESS OTHERWISE SPECIFIED.
REFER TO LATEST ASSEMBLY TAXI DRAWINGS FOR DETAILS AND AVAILABLE OPTIONS.

LIST OF COMPONENTS & EXPLODED VIEW

QUANTITY	COMPONENTS
1	MALE CONNECTOR HOUSING*
1	TPA*

ADDITIONAL INFORMATION AND REFERENCE TO ANOTHER DRAWINGS, DOCUMENTS, ETC. FOR EXAMPLE: REFER TO LATEST DRAWINGS FOR PART NUMBERS AND DETAILS



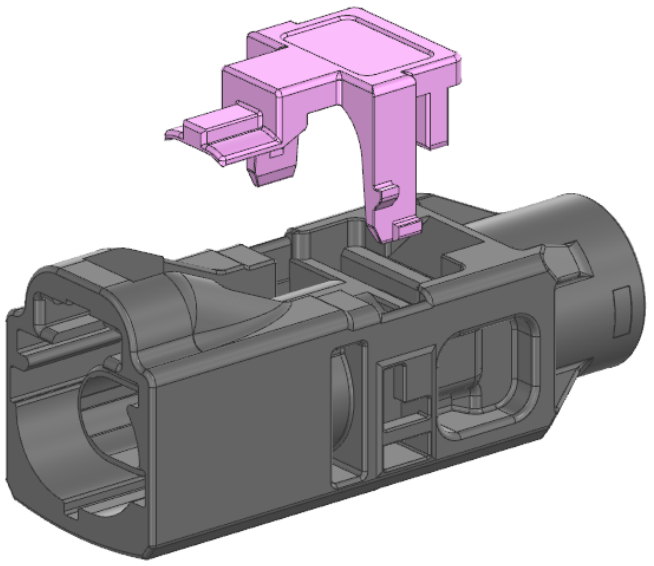
* THE PRODUCT AND ITS SINGLE COMPONENTS MUST NOT BE DAMAGED DURING THE ASSEMBLY PROCESS. CHEMICAL OR MECHANICAL DAMAGE IS NOT ALLOWED. THE PRODUCT SHALL NOT BE EXPOSED TO ENVIRONMENTAL POLLUTION DURING STORAGE OR ASSEMBLY. THE COMPONENTS SHOULD BE USED ON A FIFO (FIRST IN FIRST OUT) BASIS. STORAGE ALLOWED ONLY IN ORIGINAL UNOPENED SHIPPING CONTAINERS. SHELF LIFE OF 1 YEAR MAXIMUM FROM DATE OF ARRIVAL.
PERMISSIBLE STORAGE TEMPERATURE: MIN. 10°C, MAX. 45°C & <75% RH.

Pictures used in this Assembly Manual and original parts may differ in some details. These differences have no influence on the assembly process.

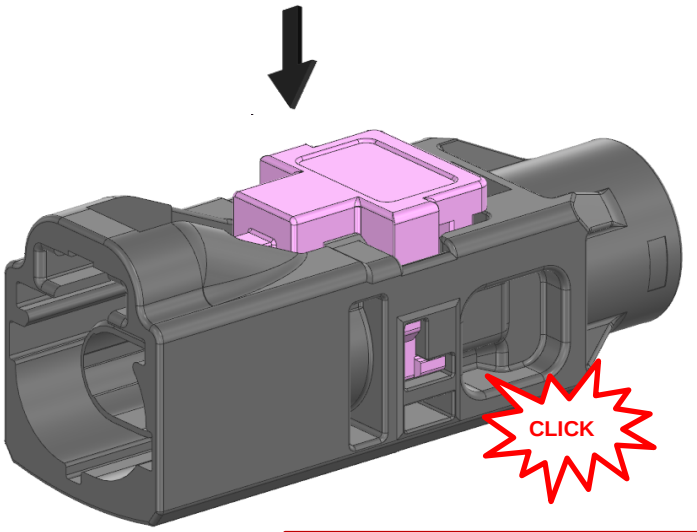
Step-1a Install TPA to Pre-Stage Position

PRE-ASSEMBLY

1 **IDENTIFY THE CORRECT ORIENTATION OF THE TPA AND ALIGN IT WITH THE CONNECTOR HOUSING**



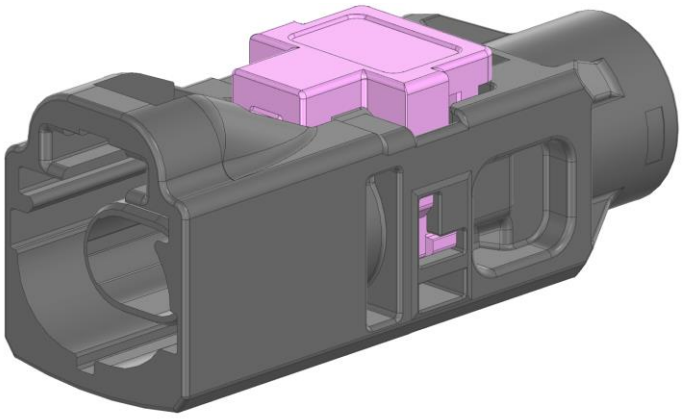
2 **PUSH THE TPA ON TO THE CONNECTOR HOUSING**

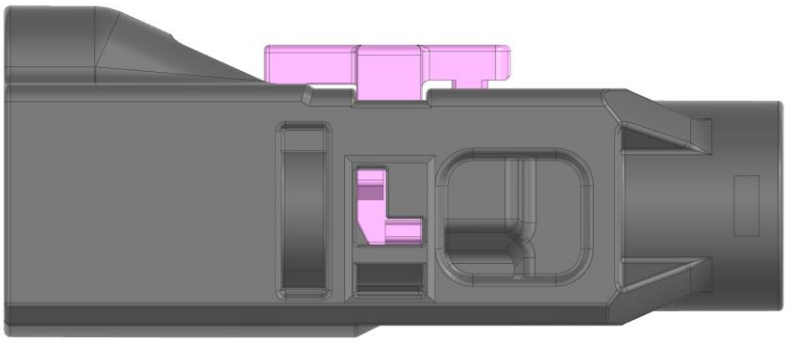


VERIFY AUDIBLE CLICK

STEP 1b – Install TPA to Pre-Stage Position

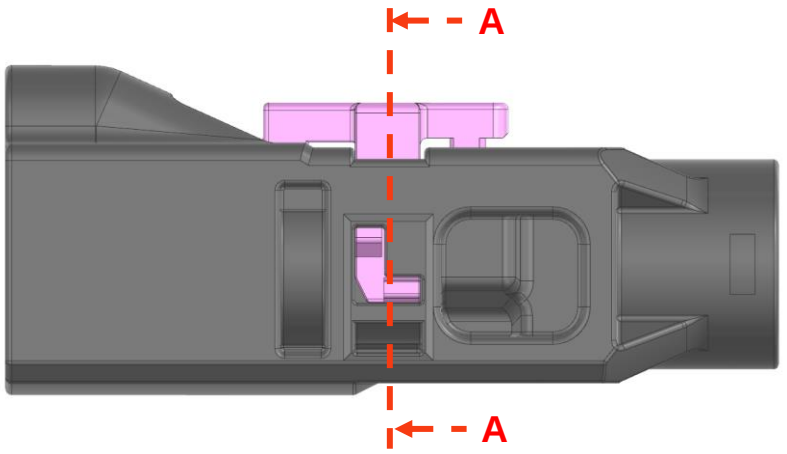
VERIFY THE TPA IS IN PRE-STAGE AND EVENLY LOCKED

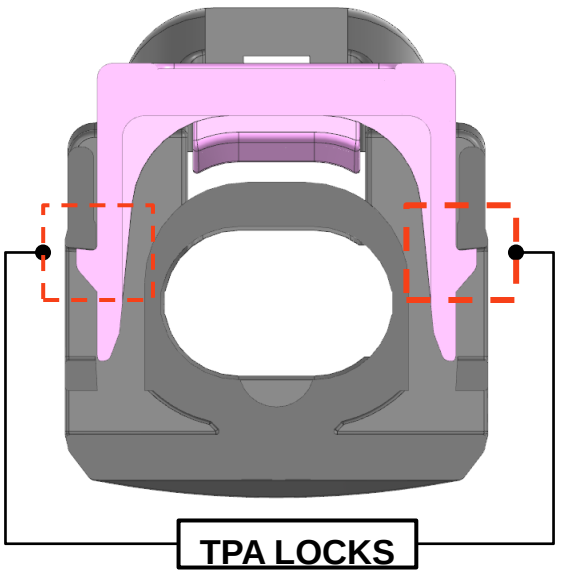




STEP 1c – Install TPA to Pre-Stage Position

THE TPA MUST BE PARALLEL WITH THE CONNECTOR AND LOCKED IN THE FIRST SET OF SLOTS

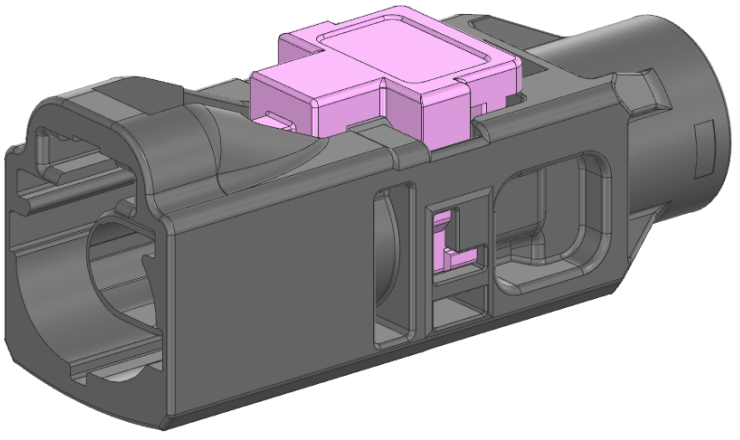


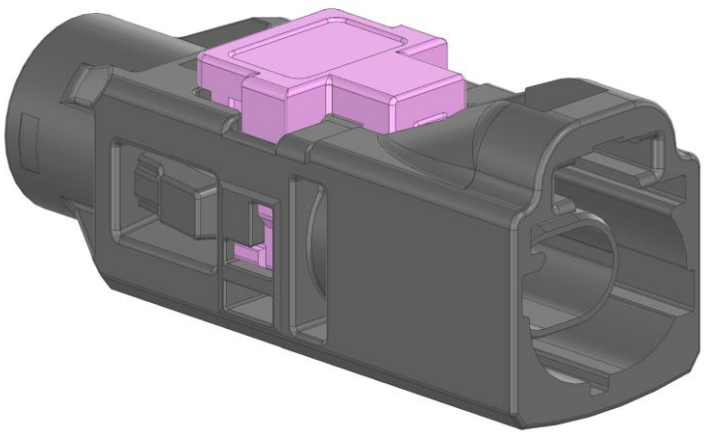


SECTION A-A

TPA IS NOW IN PRE-STAGE POSITION

MALE CONNECTOR PRE-ASSEMBLY – COMPLETED

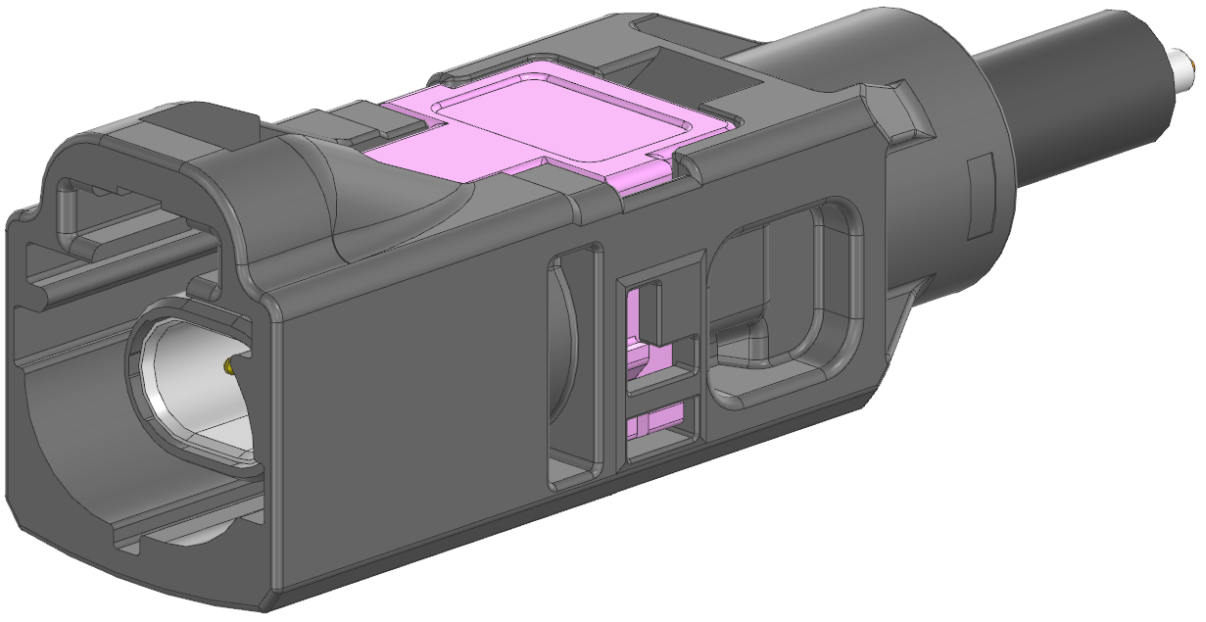




ASSEMBLY OF THE MALE HARNESS ASSEMBLY

PRE - ASSEMBLY | **HARNESS ASSEMBLY** | CAR ASSEMBLY

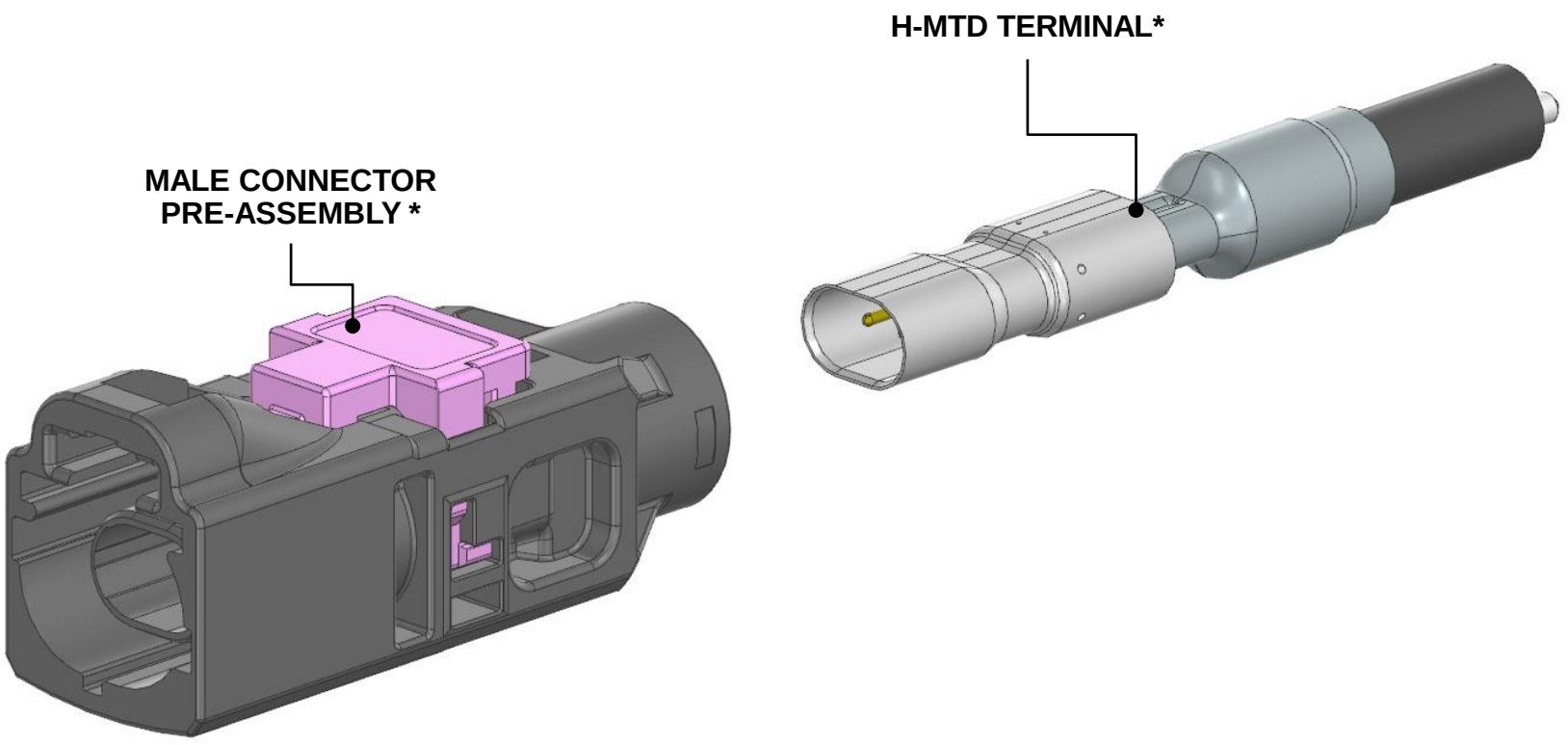
1 PORT H-MTD Unsealed Connector



LIST OF COMPONENTS & EXPLODED VIEW

QUANTITY	COMPONENTS
1	MALE CONNECTOR PRE-ASSEMBLY *
1	H-MTD TERMINAL*

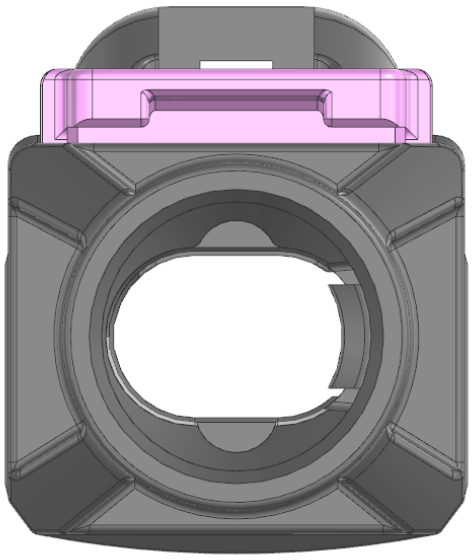
ADDITIONAL INFORMATION AND REFERENCE TO ANOTHER DRAWINGS, DOCUMENTS, ETC. FOR EXAMPLE: REFER TO LATEST DRAWINGS FOR PART NUMBERS AND DETAILS



* THE PRODUCT AND ITS SINGLE COMPONENTS MUST NOT BE DAMAGED DURING THE ASSEMBLY PROCESS. CHEMICAL OR MECHANICAL DAMAGE IS NOT ALLOWED. THE PRODUCT SHALL NOT BE EXPOSED TO ENVIRONMENTAL POLLUTION DURING STORAGE OR ASSEMBLY. THE COMPONENTS SHOULD BE USED ON A FIFO (FIRST IN FIRST OUT) BASIS. STORAGE ALLOWED ONLY IN ORIGINAL UNOPENED SHIPPING CONTAINERS. SHELF LIFE OF 1 YEAR MAXIMUM FROM DATE OF ARRIVAL.
PERMISSIBLE STORAGE TEMPERATURE: MIN. 10°C, MAX. 45°C & <75% RH.

Pictures used in this Assembly Manual and original parts may differ in some details. These differences have no influence on the assembly process.

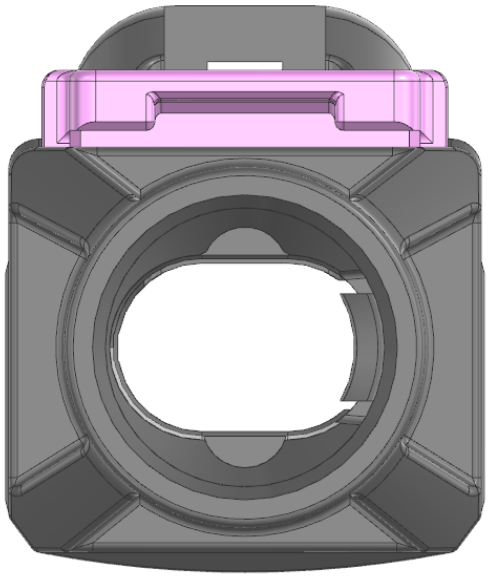
STEP 1a – Identify Cavities & Align Male H-MTD Terminal

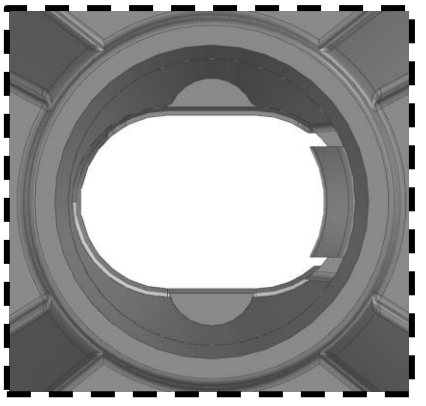


CAVITY ID NUMBERS LOCATED AT THE BACK OF THE CONNECTOR HOUSING

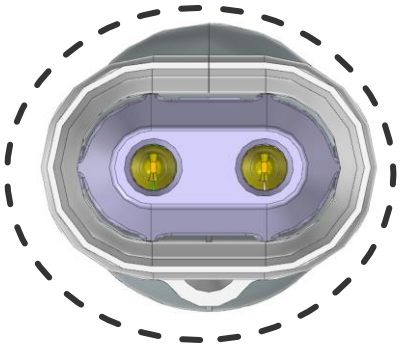
STEP 1b – Identify Cavities & Align Male H-MTD Terminal

INSERT MALE TERMINAL INTO HOUSING ACCORDING TO INSERTION PLAN





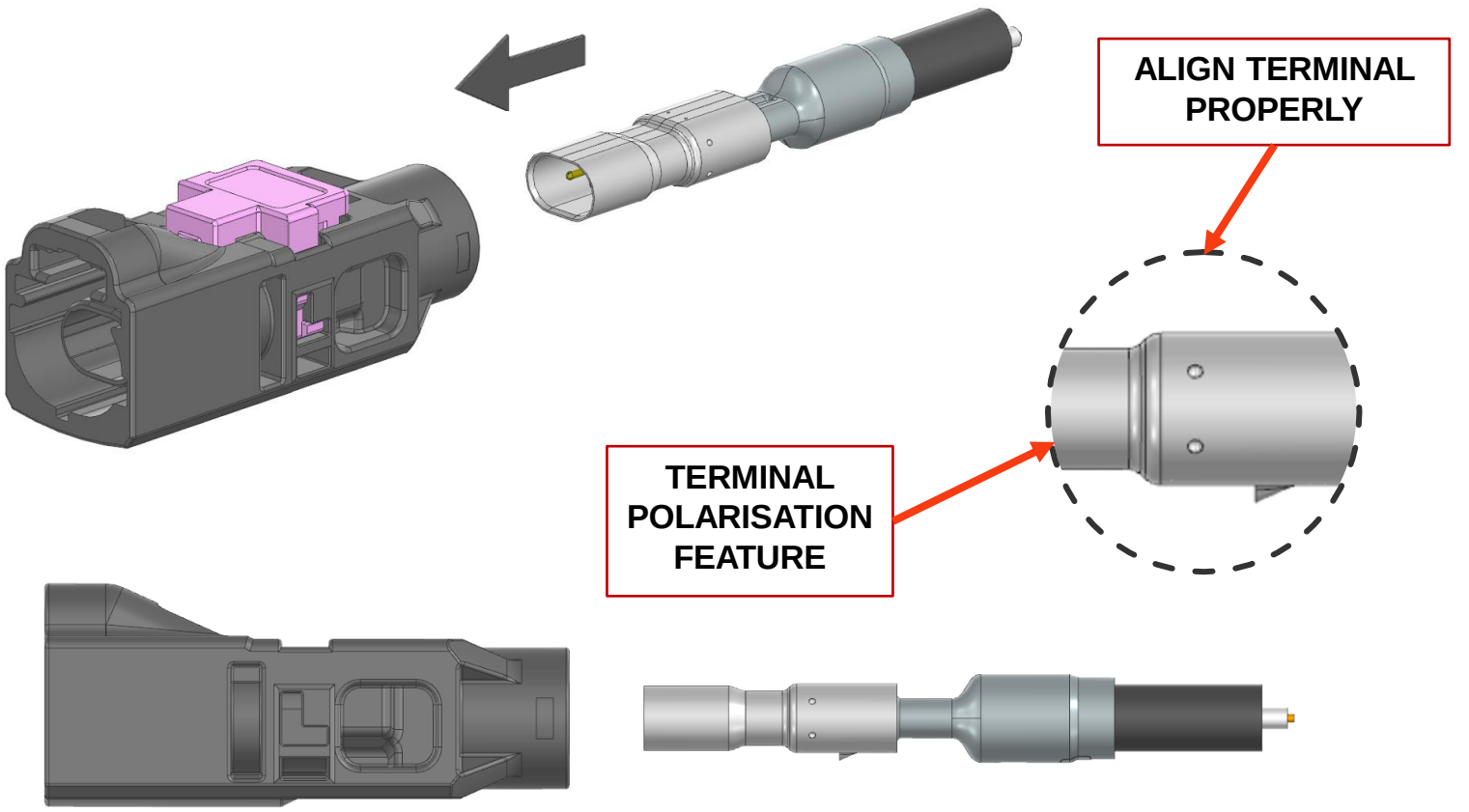
BACK VIEW



FRONT VIEW

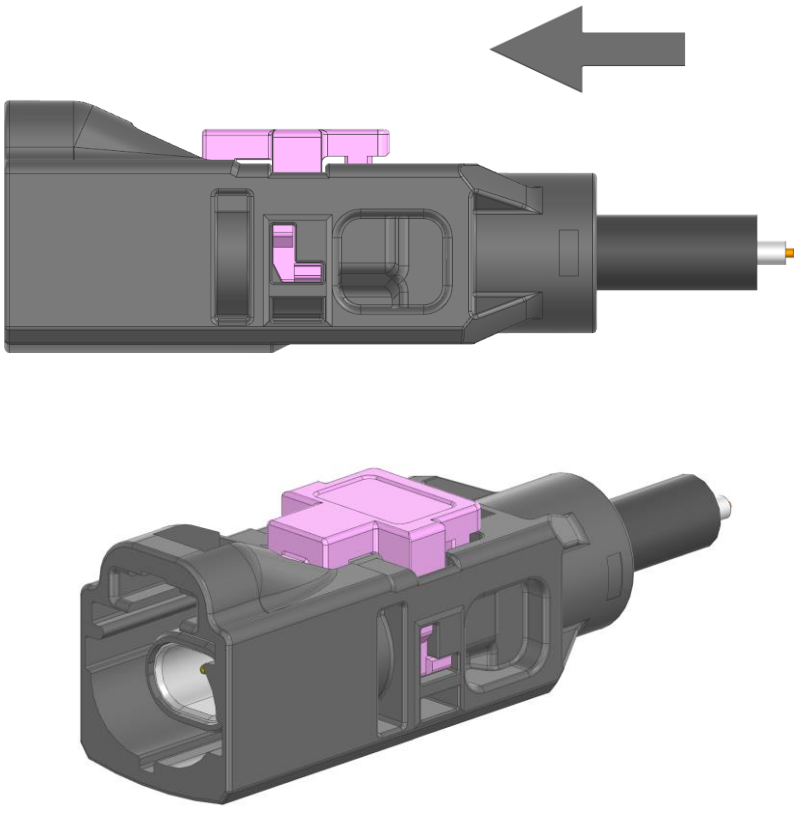
STEP 2a– Insert Male H-MTD Terminal

1 **IDENTIFY THE CORRECT ORIENTATION OF THE TERMINAL AND ALIGN IT WITH THE CONNECTOR PRE-ASSEMBLY**

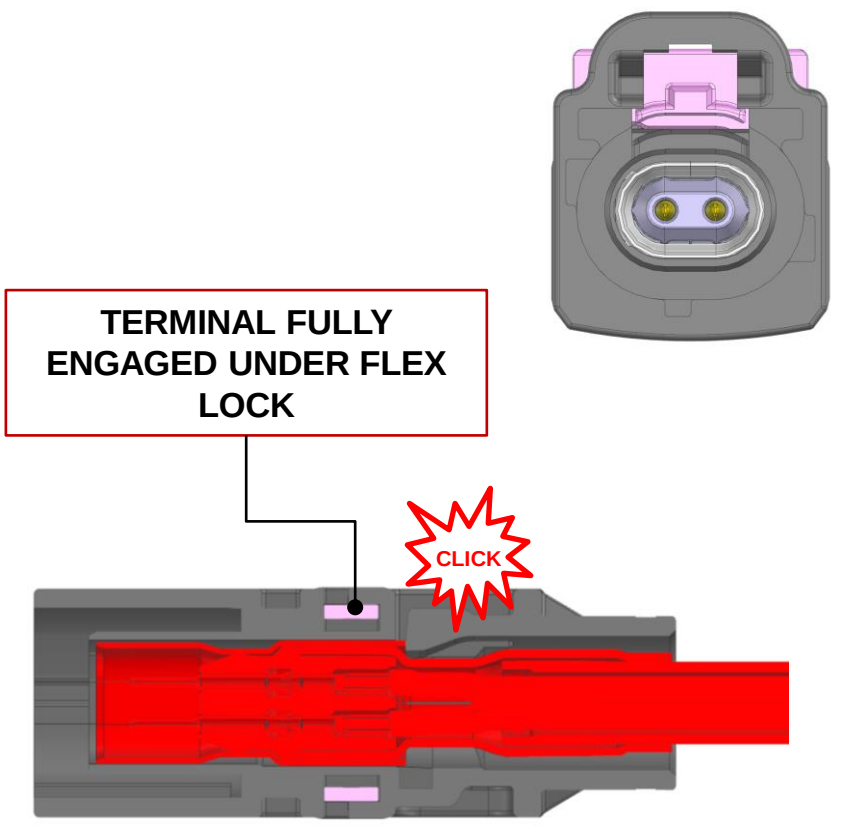


STEP 2b– Insert Male H-MTD Terminal

2 **PUSH THE TERMINAL STRAIGHT INTO THE CAVITY**

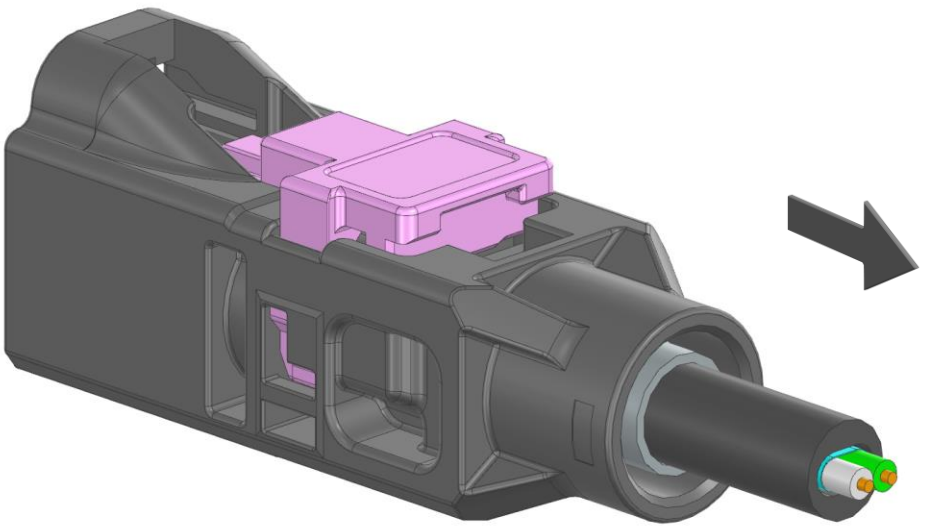


VERIFY AUDIBLE CLICK



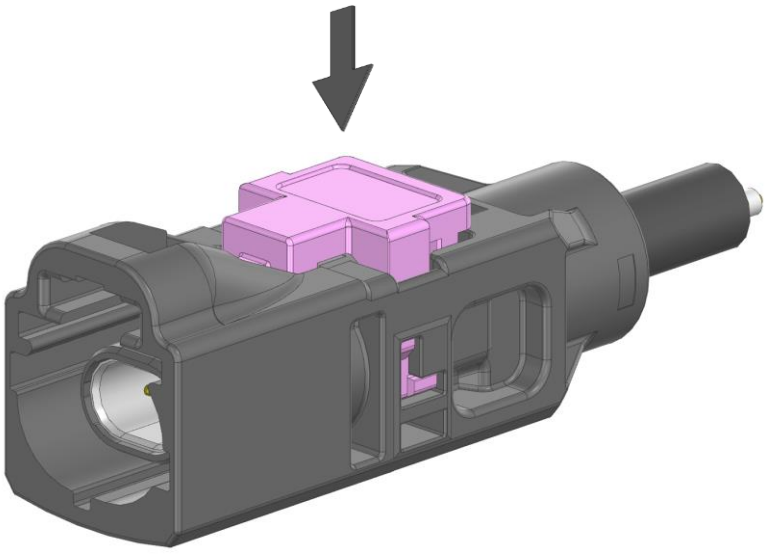
STEP 2c – Insert Male H-MTD Terminal

3 **GENTLY PULL THE CABLE TO VERIFY THE LOCK SYSTEM**

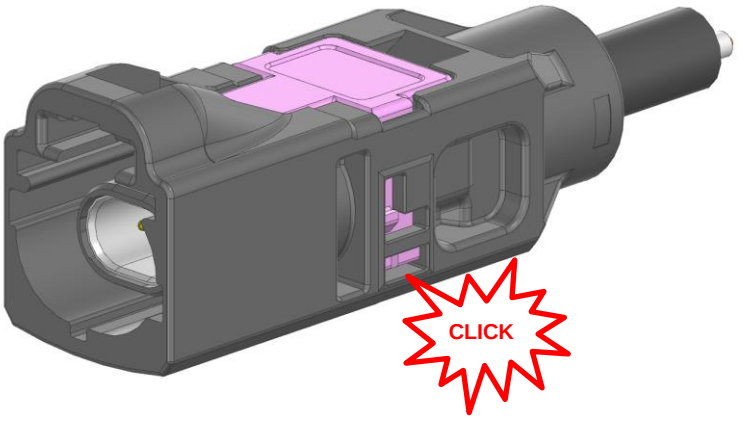


Step 3a – Lock TPA to Full Stage Position

1 **PUSH THE TPA FORWARD TO FULLY SEAT**



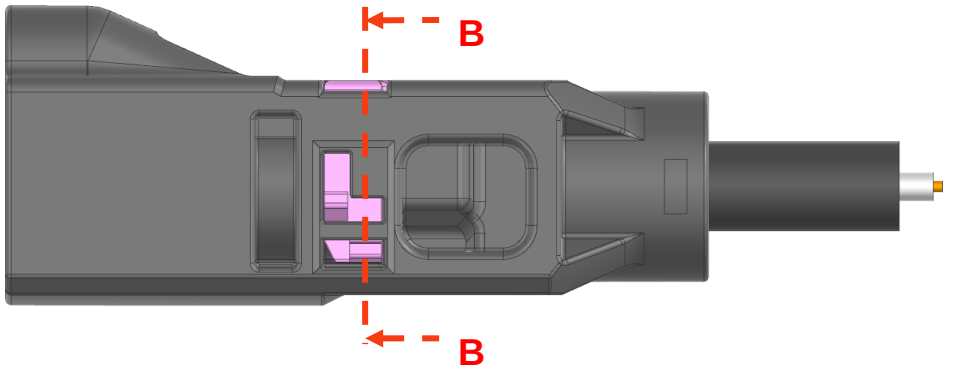
2 **THE TPA MUST BE PARALLEL WITH THE CONNECTOR AND LOCKED IN THE SECOND SET OF SLOTS**

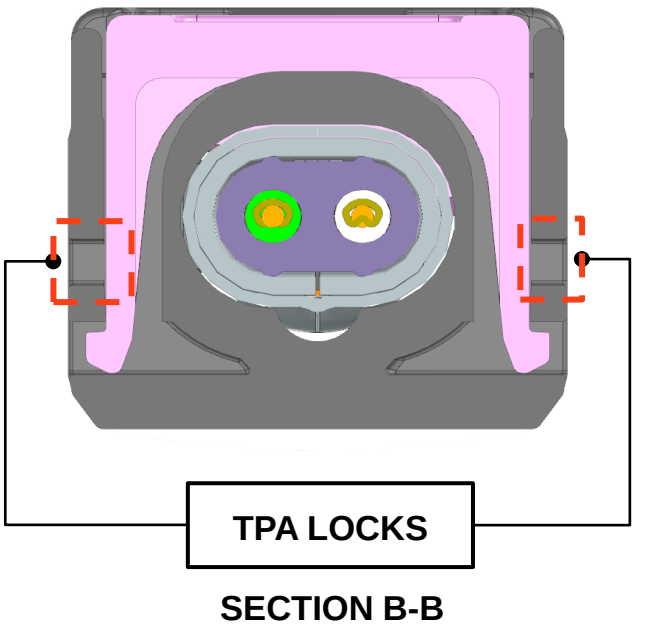


VERIFY AUDIBLE CLICK

***DO NOT FORCE THE TPA, IF IT CANNOT BE LOCKED, REVIEW IF TERMINALS ARE FULLY SEATED**

Step 3b – Lock TPA to Full Stage Position

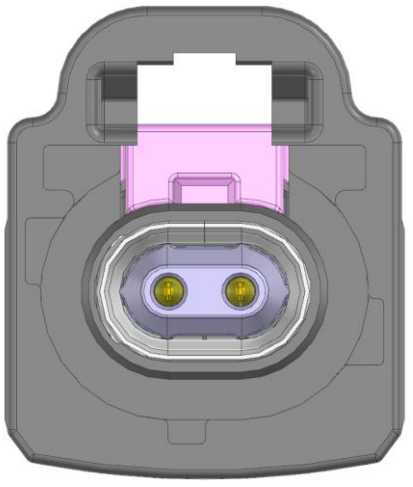


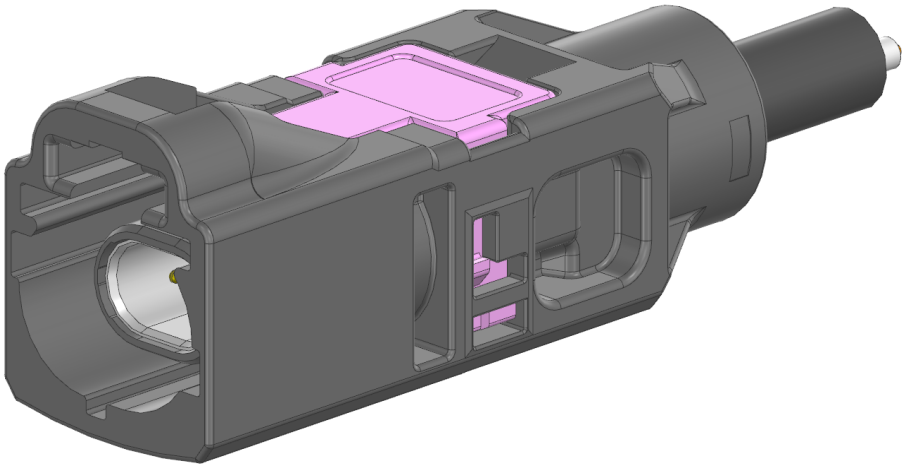


SECTION B-B

TPA IS NOW IN FINAL STAGE POSITION

MALE HARNESS ASSEMBLY – COMPLETED

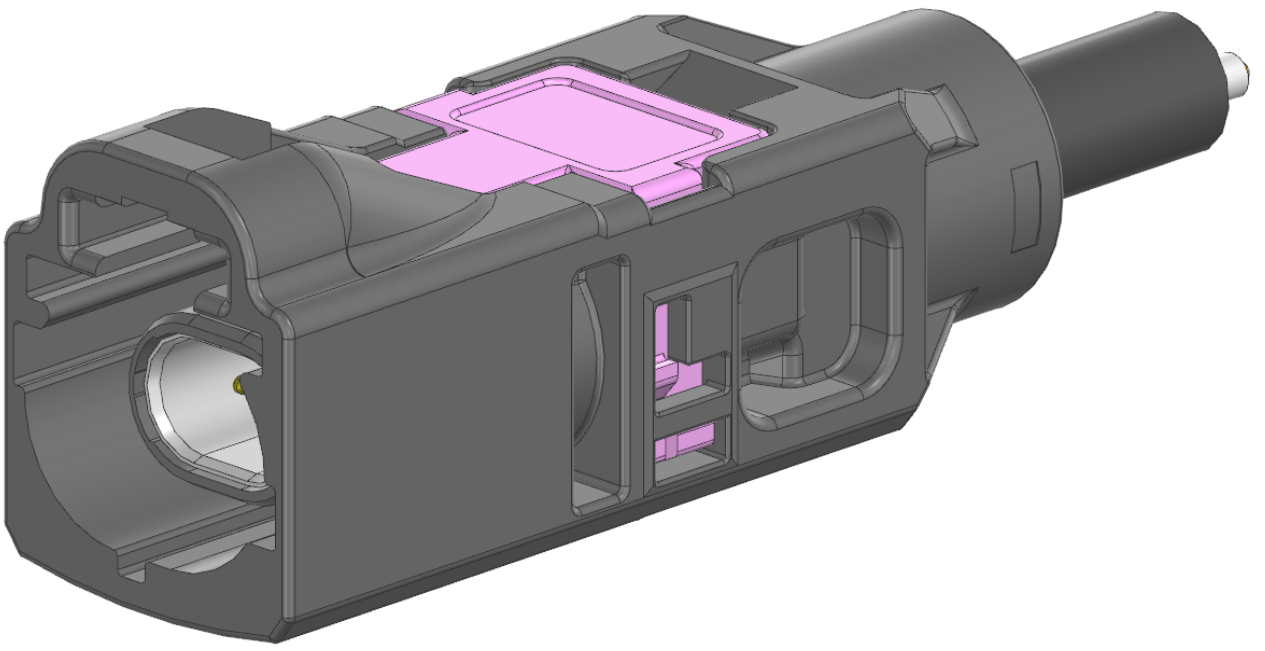




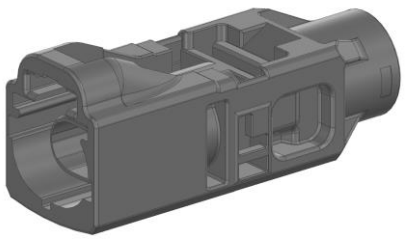
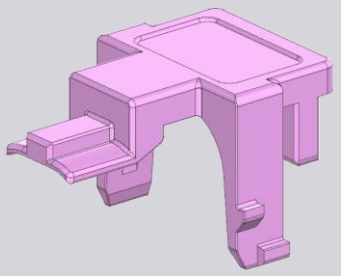
PERFORM TESTS, APPLY COVERINGS AS REQUIRED. INSPECT THE ASSEMBLY.

REPAIR/REPLACEMENT
OF THE MALE
ASSEMBLY

1 PORT H-MTD Sealed Connector

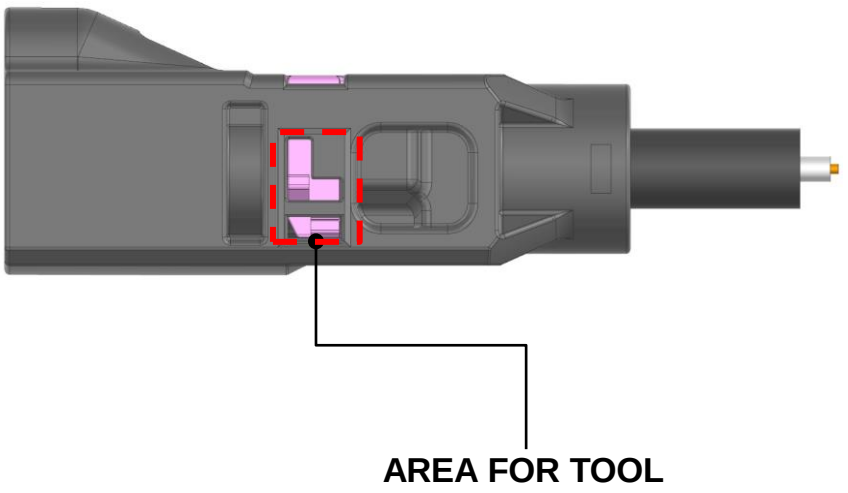


COMPONENT REPAIR/ REUSE CAPABILITIES

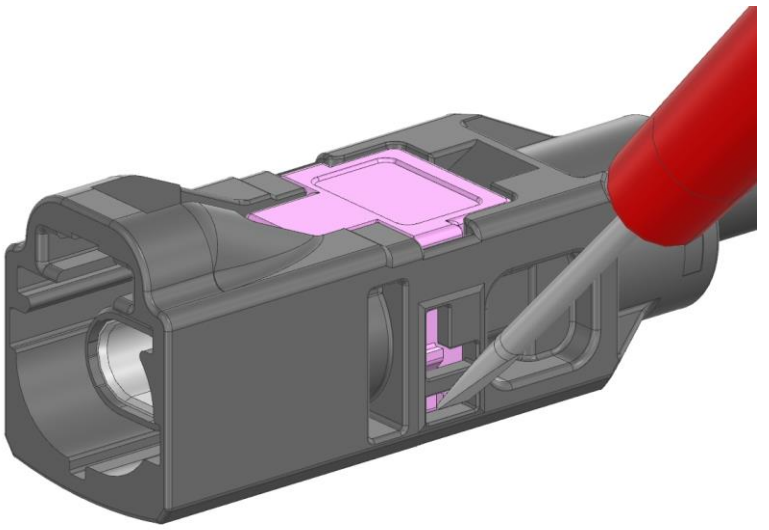
COMPONENT	IS IT REPAIRABLE?/ REUSABLE	COMMENTS
	NO	CONNECTOR HOUSING MUST BE REPLACED
	NO	TPA MUST BE REPLACED
	YES	CRIMPED TERMINAL IS RECOVERABLE; VERIFY ITS CONDITION BEFORE REUSE

STEP 1a – MALE HMTD TERMINAL REPLACEMENT (Remove TPA)

1 **LOCATE THE AREA TO INSERT THE TOOL**

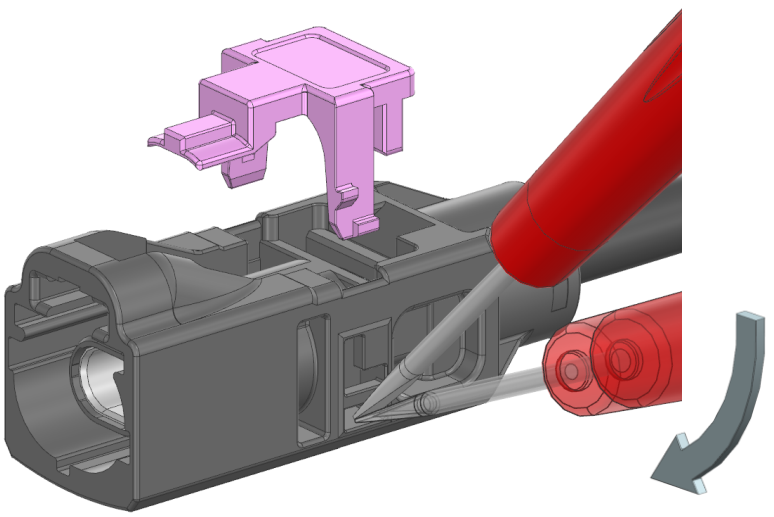


2 **INSERT TIP OF TOOL BETWEEN THE SLOT ON TPA**

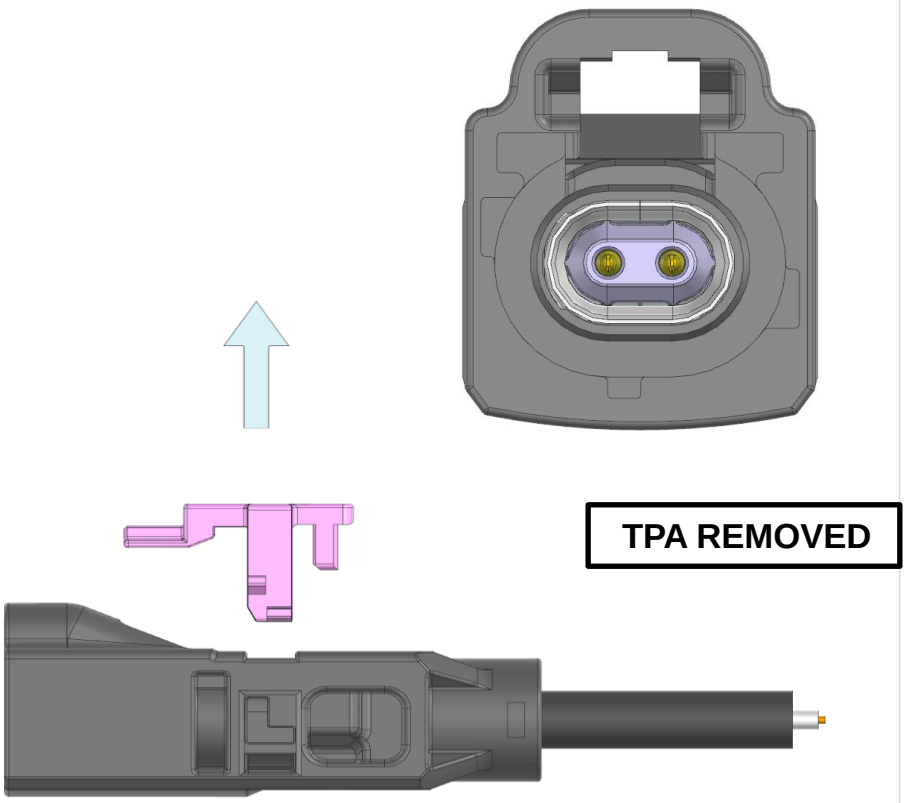


STEP 1b – MALE HMTD TERMINAL REPLACEMENT (Remove TPA)

3 **USE THE CONNECTOR AS LEVERAGE TO LIFT AND RELEASE THE TPA FROM ITS LOCK POSITION (SIMILAR FOR BOTH AREAS)**

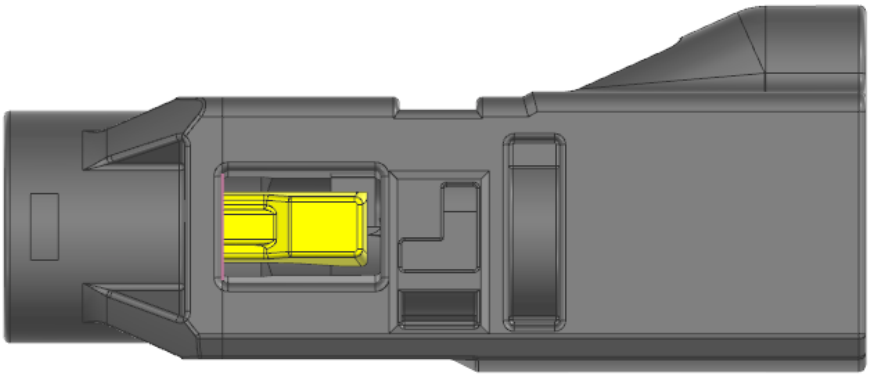


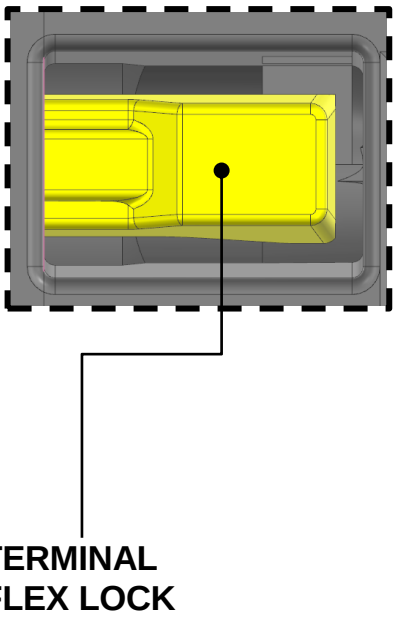
4 **REMOVE TPA FROM THE CONNECTOR**



STEP 2a – MALE HMTD TERMINAL REPLACEMENT (Remove Terminal)

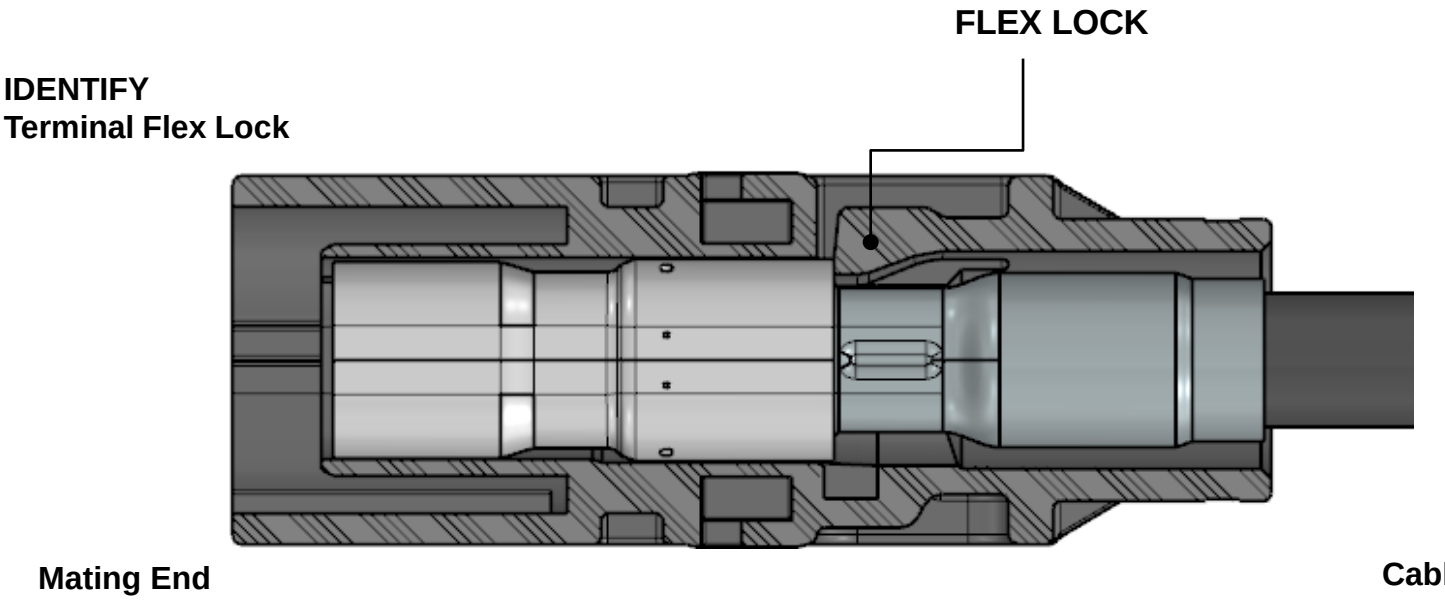
LOCATE THE TERMINAL FLEX LOCK (HIGHLIGHTED IN YELLOW)





STEP 2b – MALE HMTD TERMINAL REPLACEMENT (Remove Terminal)

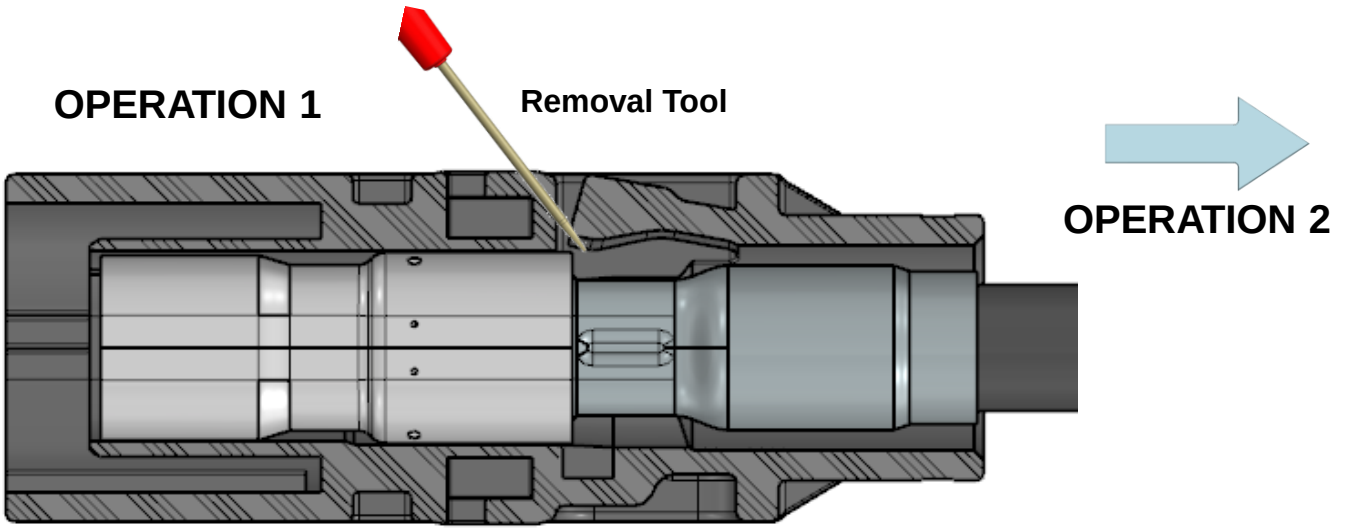
REMOVE TERMINALS



* This graph just represents how this kind of terminals are removed.

STEP 2c – MALE HMTD TERMINAL REPLACEMENT (Remove Terminal)

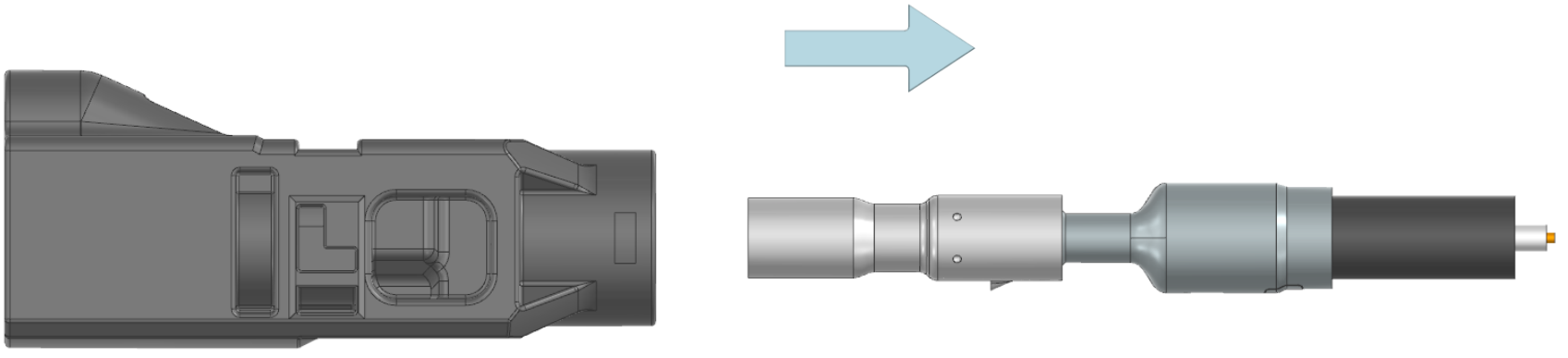
REMOVE TERMINALS



LOCATE FLEX LOCK & INSERT (OPERATION 1) TOOL BETWEEN THE FLEX LOCK AND TERMINAL, DEFLECT THE FLEX LOCK TO UNSEAT THE TERMINAL AND GENTLY PULL ON THE CABLE TO REMOVE (OPERATION 2) THE TERMINAL FROM THE CONNECTOR.

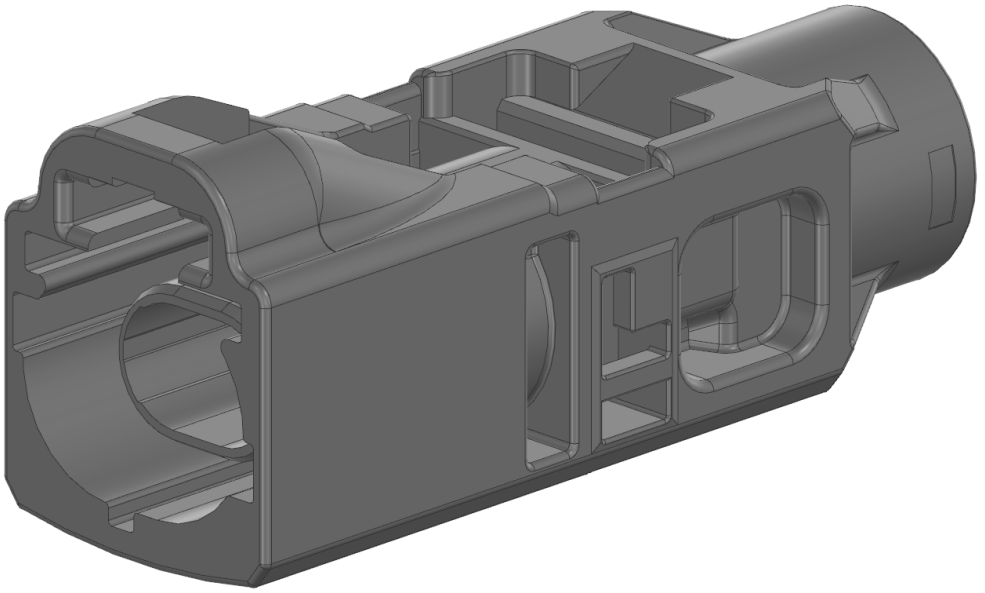
* This graph just represents how this kind of terminals are removed.

STEP 2d – MALE HMTD TERMINAL REPLACEMENT (Remove Terminal)



REMOVE THE TERMINAL FROM THE MALE CONNECTOR HOUSING

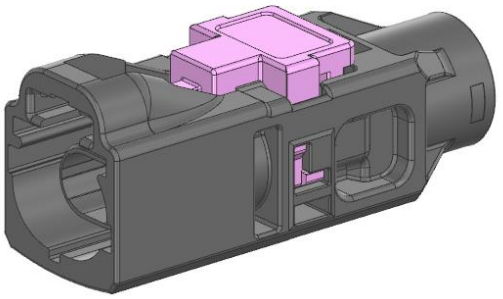
STEP 2e - MALE H-MTD TERMINAL REPLACEMENT (Remove Terminal)

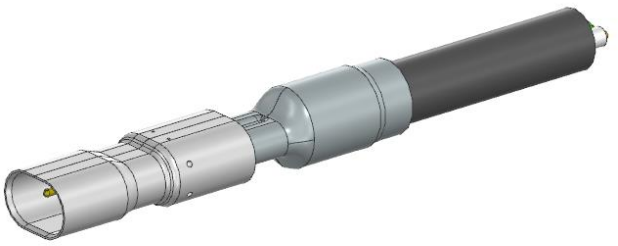


TERMINAL REMOVED

STEP 3 – MALE HMTD TERMINAL REPLACEMENT (Insert Terminal)

REFER TO HARNESS ASSEMBLY SECTION

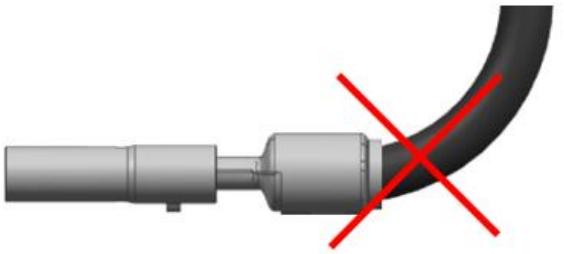






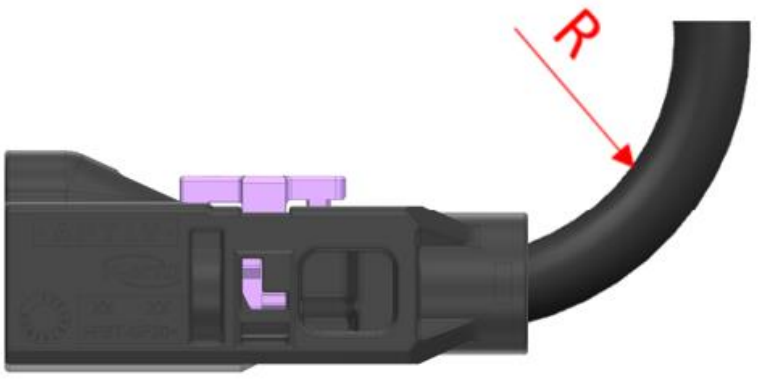
RADIUS BEND

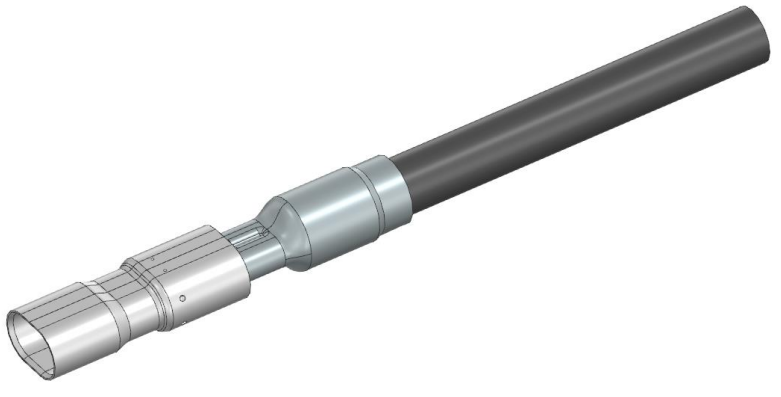
H-MTD MALE TERMINAL SHOULD FIRST BE ASSEMBLED INTO A CONNECTOR BEFORE THE CABLE WITH H-MTD MALE TERMINAL IS PROCESSED TO A CABLE HARNESS ON THE ASSEMBLY BOARD, TO AVOID THE DAMAGE OF H-MTD MALE TERMINAL





MINIMUM BENDING RADIUS MUST BE CONSIDERED, WHICH HAS TO BE TAKEN FROM CABLE SPECIFICATION.

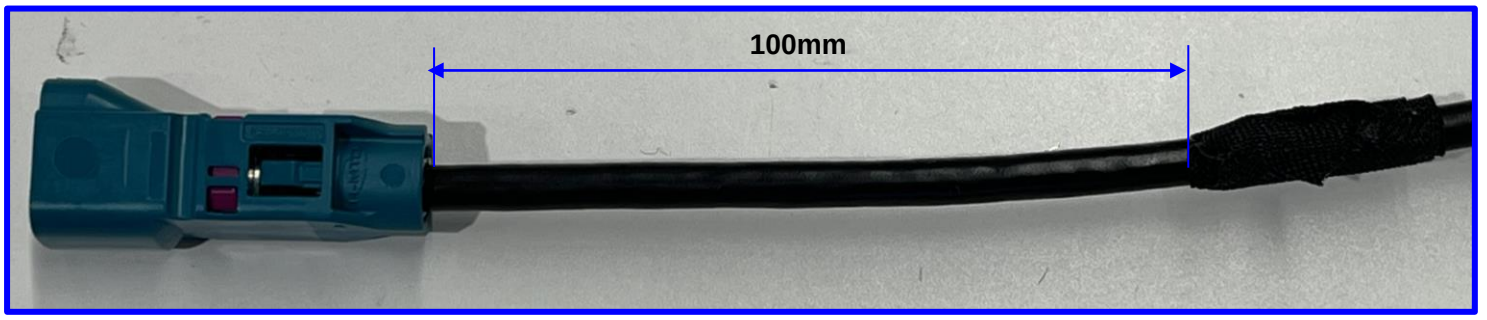




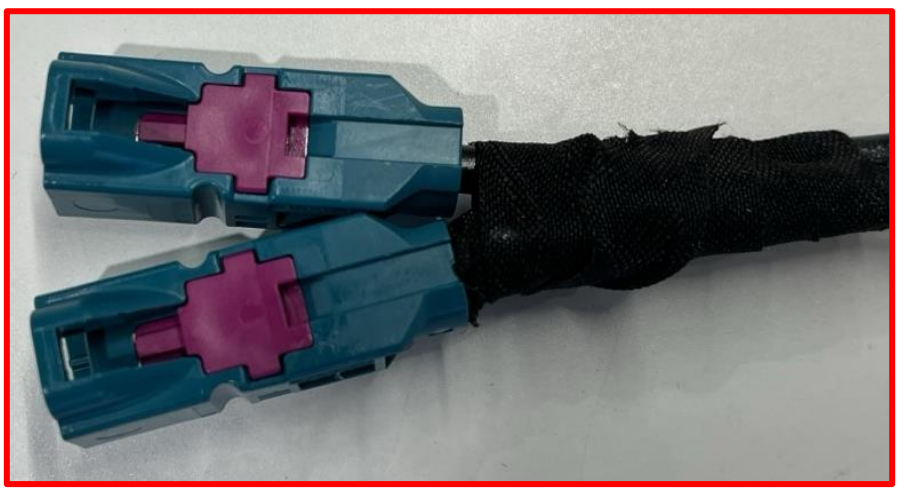
IF H-MTD MALE TERMINAL IS DAMAGED, IT IS NOT ALLOWED TO DISASSEMBLE AND REPAIR SINGLE H-MTD MALE TERMINAL. THE CABLE WITH H-MTD MALE TERMINAL MUST BE REPLACED.

RETENTION FORCE:
THE CABLE AND HMTD TERMINAL MUST NOT BE EXPOSED TO TENSILE FORCES WHICH EXCEED THE VALUE 110N.

BANDAGE



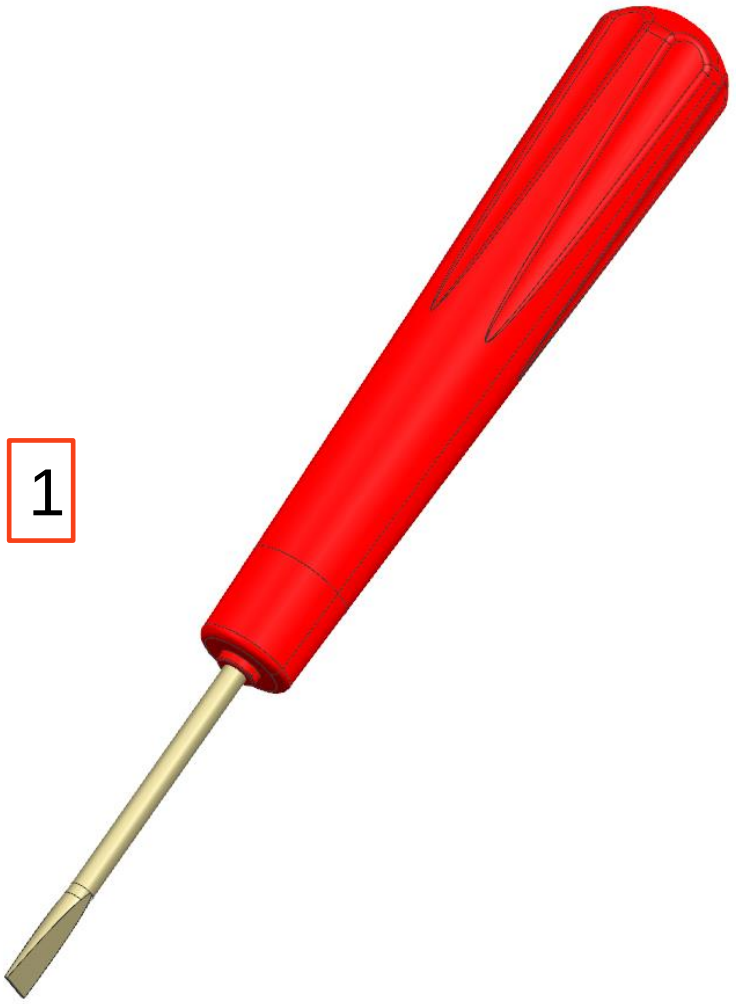




REMARK:

FOR THE MULTIPLE CONNECTION SYSTEM, BANDAGE DISTANCE FROM CONNECTOR IS 100MM AND CABLE CANNOT BE TWISTED.

RECOMMENDED REPAIR TOOLS



ITEM	DESCRIPTION
1	FOR TPA & TERMINAL REMOVAL

REVISIONS

DATE	REV	REVISION HISTORY	AUTH
10DE24	01	INITIAL RELEASE	450870