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## 10 POS. HYBRID CONNECTOR

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**1 GENERAL**

**1.1 PURPOSE**

**THIS SPECIFICATION DESCRIBES HOW TO HANDLE THE 10 POS. CONNECTOR COMPONENTS.**

**1.2 CUSTOMER DRAWINGS**

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

C\_2141999 **ASSY FEMALE 10 POS. CONNECTOR**

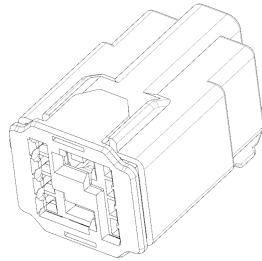
C\_2141994 **ASSY MALE 10 POS. CONNECTOR**

**INTERFACE SPECIFICATION :**

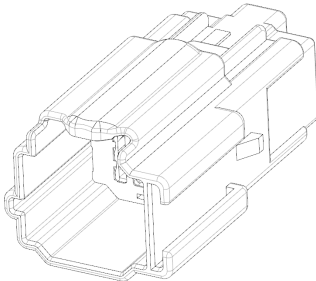
114-94188 **10 POS. CONNECTOR**

**1.3 DELIVERY CONDITION**

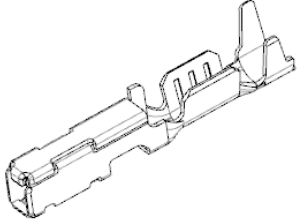
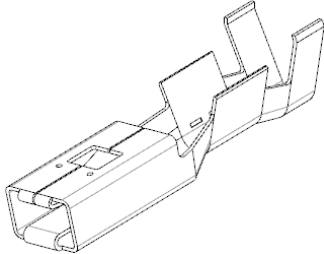
**1.3.1 10 POS. FEMALE CONNECTOR AND SPACER**

<p>ASSY 10 POS. FEMALE CONNECTOR</p>	<p>2141999 – KEYING A COLOUR: BLACK</p> <p>2177000 – KEYING B COLOUR: GREY</p> <p>2177612 – KEYING C COLOUR: BLUE</p> <p>2177613 – KEYING D COLOUR: GREEN</p>	
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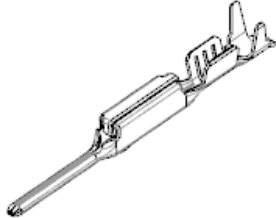
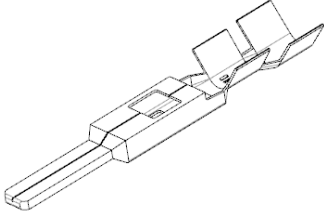
**1.3.2 10 POS. MALE CONNECTOR AND SPACER**

<p>ASSY 10 POS. MALE CONNECTOR</p>	<p>2141994 – KEYING A COLOUR: BLACK</p> <p>2141995 – KEYING B COLOUR: GREY</p> <p>2177614 – KEYING C COLOUR: BLUE</p> <p>2177615 – KEYING D COLOUR: GREEN</p>	
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1.3.3 TERMINALS FOR 10 POS. FEMALE CONNECTOR

<p>GENERATION Y 0.64mm TERMINAL</p>	<p>TE-PN: 0-1456574-5 0-1456574-1 0-1456574-2</p>	
<p>APEX 2.8mm TERMINAL</p>	<p>FORD-PN: XF-2T-14474-CA F8VB-14474-AA F8VB-14474-AA XF-2T-14474-BA</p>	

1.3.4 TERMINALS FOR 10 POS. MALE CONNECTOR

<p>GENERATION Y 0.64mm TERMINAL</p>	<p>TE-PN: 0-1924275-5 0-1924275-1 0-1924275-2</p>	
<p>APEX 2.8mm TERMINAL</p>	<p>FORD-PN: 8U5T-14421-CA 8U5T-14421-DA 8U5T-14421-EA 8U5T-14421-BA</p>	

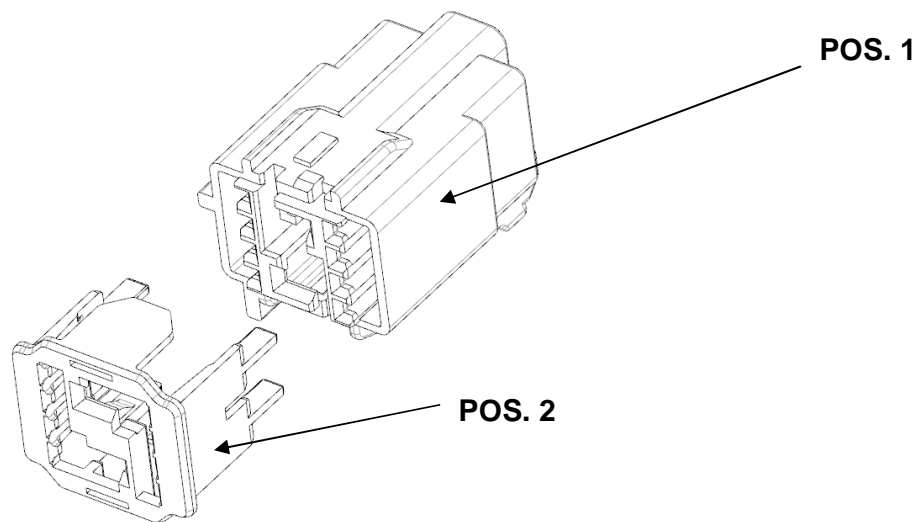
## 2 CONNECTOR OVERVIEW

### 2.1 OVERVIEW

#### ASSY FEMALE 10 POS. CONNECTOR

POS 1: FEMALE HOUSING

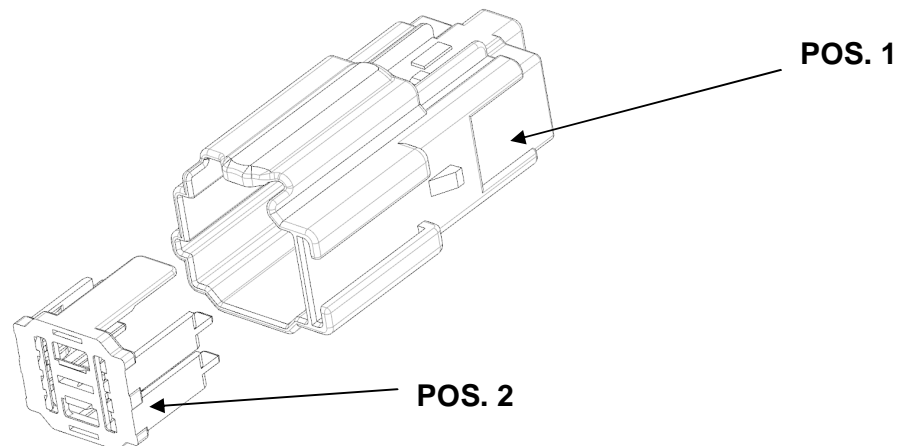
POS 2: FEMALE SPACER



#### ASSY MALE 10 POS. CONNECTOR

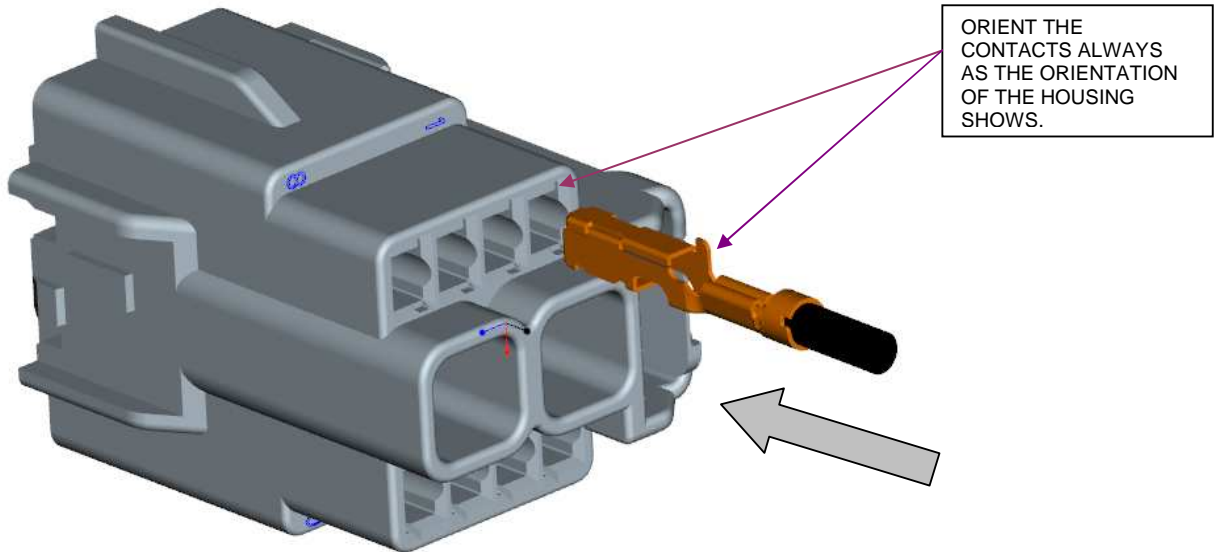
POS 1: MALE HOUSING

POS 2: MALE SPACER

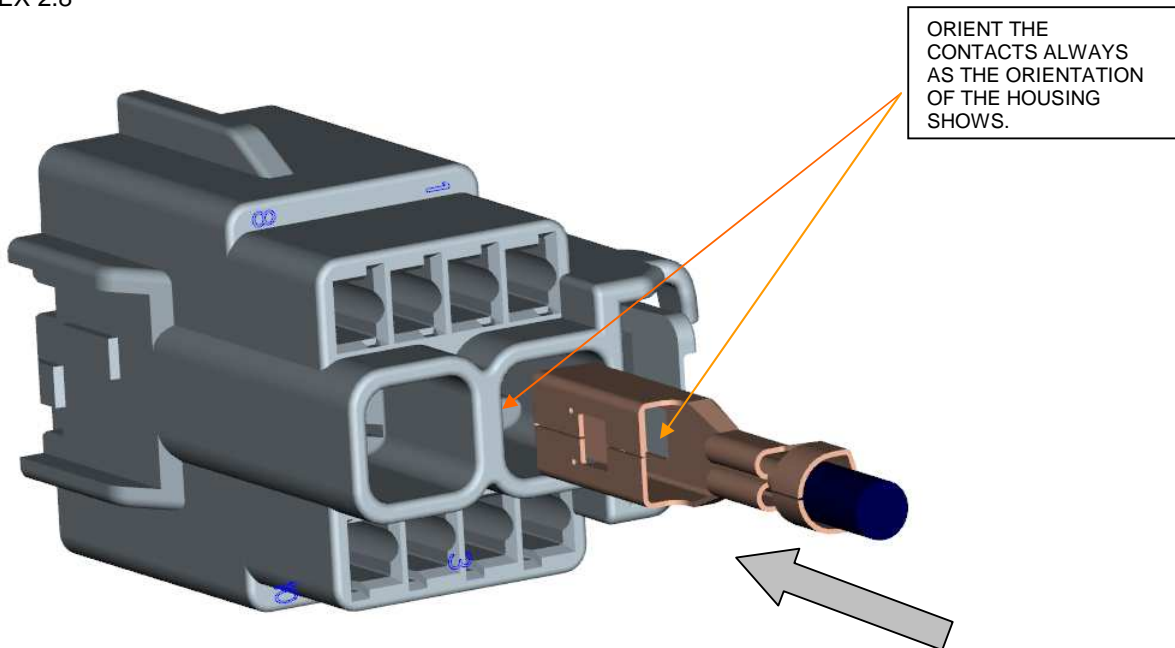


## 2.2 TERMINAL INSERTION INSTRUCTIONS FOR FEMALE TERMINALS

### GENERATION Y 0.64

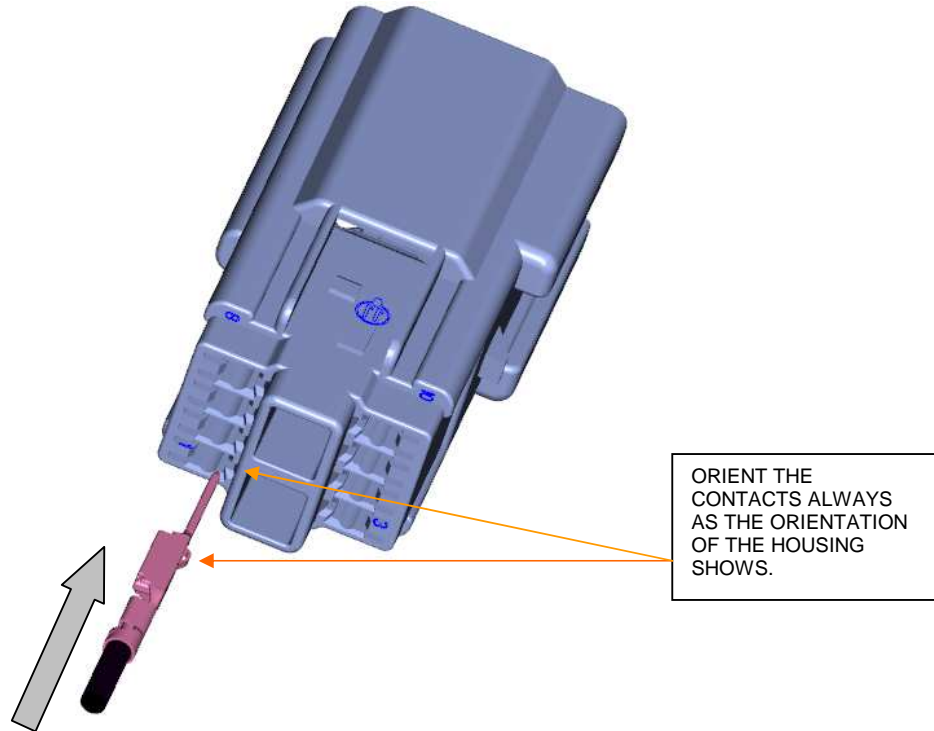


### APEX 2.8

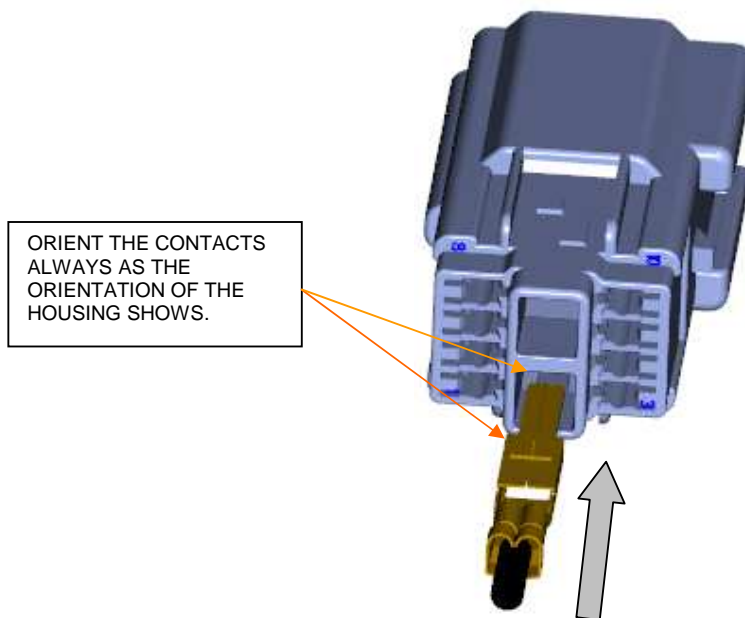


**TERMINAL INSERTION / REMOVAL INSTRUCTIONS FOR MALE TERMINALS**

GENERATION Y 0.64



APEX 2.8



**PUSH ALL TERMINALS INTO THE CONNECTOR UNTIL THE LOCKING IS FELT OR HEARD BY AN AUDIBLE CLICK**

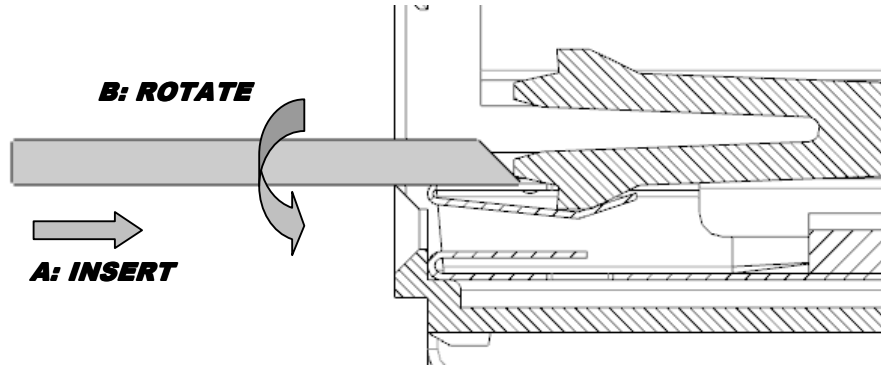
### ALL FEMALE TERMINALS REMOVAL INSTRUCTIONS

TPA ( SPACER ) MUST BE REMOVED BEFORE CONTACT UNMOUNTING

**A**

**POSITION**

THE EXTRACTION TOOL TO LOCKING FINGER



**C**

**PULL OUT**

THE TERMINALS WHILE THE LOCKING FINGER IS RELEASED (STEP "B")

**B**

**ROTATE**

EXTRACTION TOOL TO RELEASE THE LOCKING FINGER

EXTRACTION TOOLS FOR MALE TERMINALS:  
 GENERATION Y 0.64 - TE-NO. 1452426-1  
 APEX 2.8 - TE-NO. 1452426-1

### ALL MALE TERMINALS REMOVAL INSTRUCTIONS

TPA ( SPACER ) MUST BE REMOVED BEFORE CONTACT UNMOUNTING

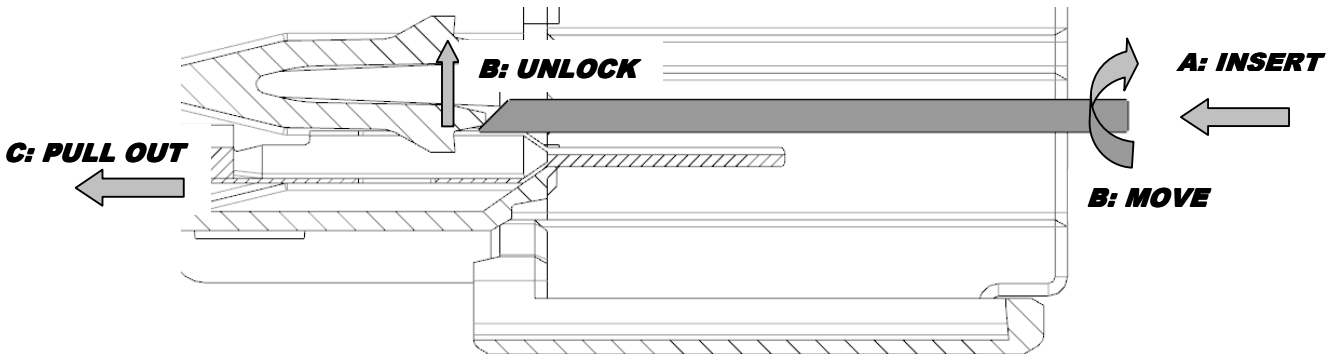
**C**

**PULL OUT**

THE TERMINALS WHILE THE LOCKING FINGER IS RELEASED (STEP "B")

**A**

**POSITION-** THE EXTRACTION TOOL TO LOCKING FINGER AS SHOWN .



EXTRACTION TOOLS FOR MALE TERMINALS:  
 GENERATION Y 0.64 - TE-NO. 1452426-1  
 APEX 2.8 - TE-NO. 1452426-1

**B**

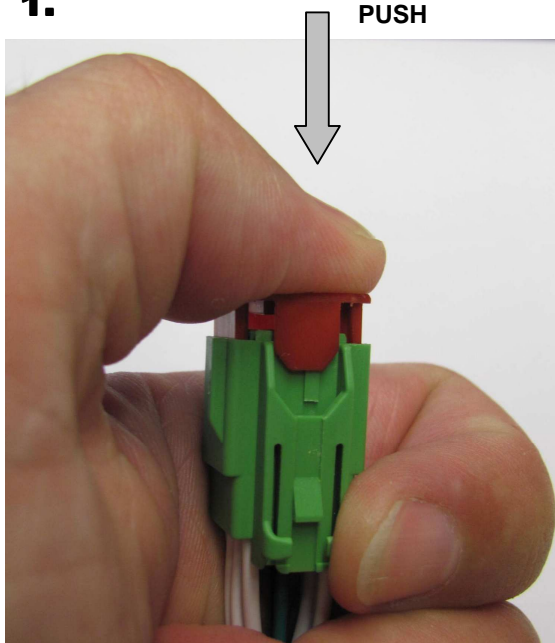
**MOVE -** THE EXTRACTION TOOL SIDWARDS TO RELEASE THE LOCKING FINGER .

2.3 **APPLICABLE WIRES**

PLEASE ALSO SEE THE CUSTOMER DRAWINGS

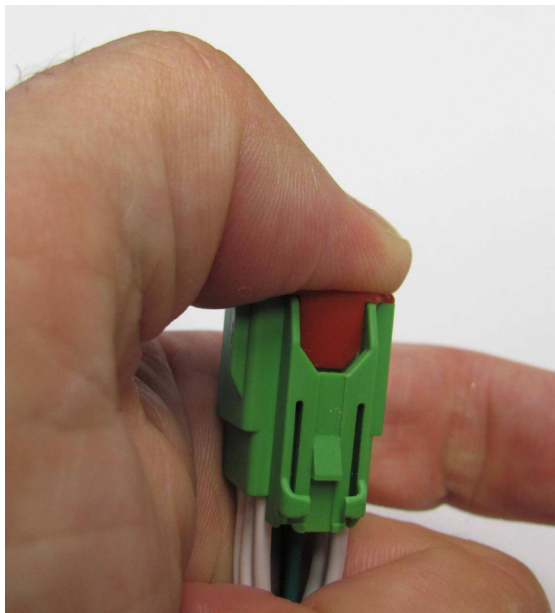
## 2.4 TPA - (SPACER) INSERTION / REMOVAL INSTRUCTION FEMALE HOUSING

**1.**



**DELIVERY CONDITION OF THE FEMALE  
CONNECTOR WITH THE  
FRONT LOADED TPA ( SPACER ) IN  
PRESET POSITION.  
THE FRONT LOADED TPA ( SPACER ) IS  
ELEVATED.**

**DO NOT PUSH THE SPACER FURTHER THAN THIS POSITION BEFORE CONTACT MOUNTING**



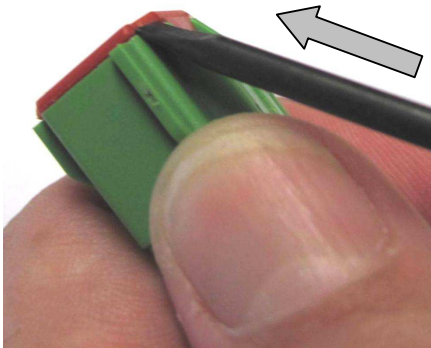
**AFTER CONTACT MOUNTING,  
THE SPACER SHOULD BE PUSHED IN END  
POSITION. THE FRONT LOADED TPA ( SPACER )  
IS FULLY INSERTED.**



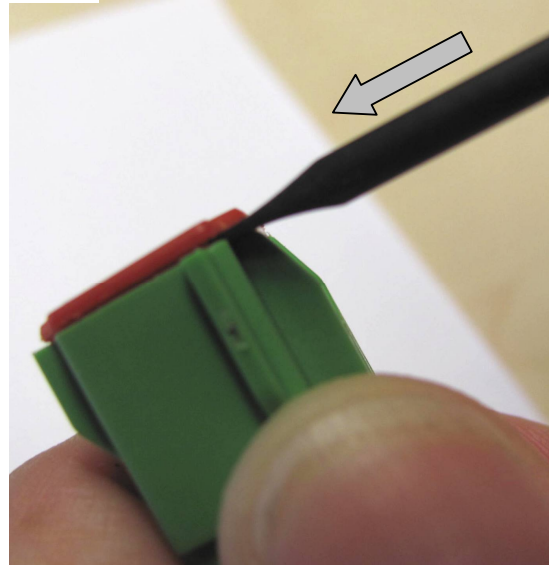
## REMOVAL OF THE SPACER FROM FEMALE HOUSING

INSERT THE SCREW DRIVER OR THE EXTRACTION TOOL 1452426-1 AS SHOWN  
TO UNLOCK / LIFT THE SPACER

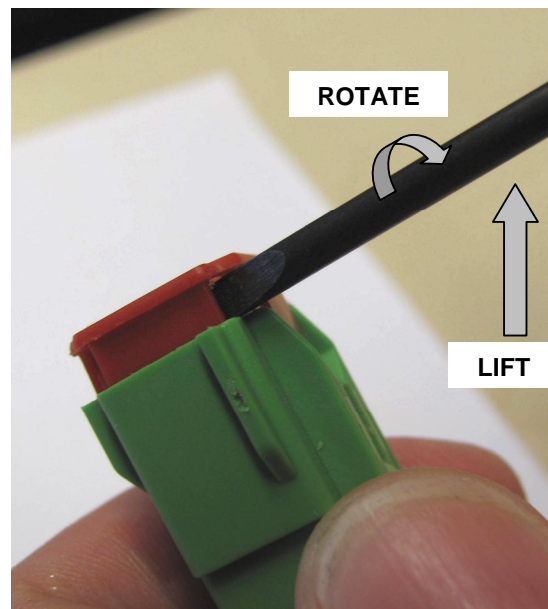
**1.**



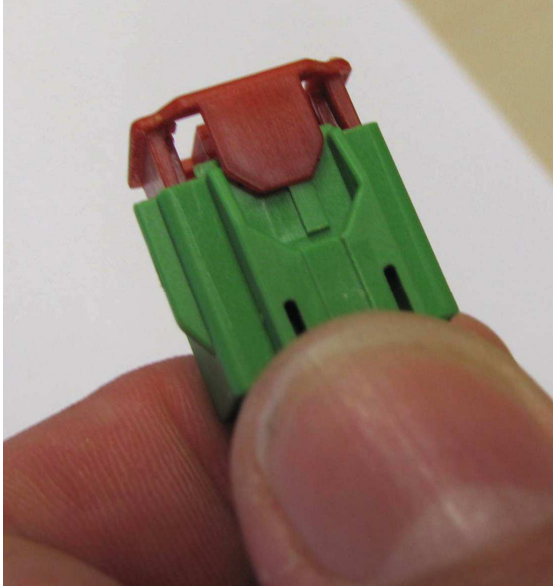
**2.**



**3.**



ROTATE THE TOOL BY  
90 DEGREE AND THAN LIFT  
THE TPA ( SPACER ) IN  
PRESET POSITION



**PICTURE SHOWS THE TPA ( SPACER )  
IN PRE-LOCK POSITION**

**REMOVE THE SECONDARY LOCK BY USING THE EXTRACTION TOOL 1452426-1  
OR A SMALL SCREWDRIVER.**

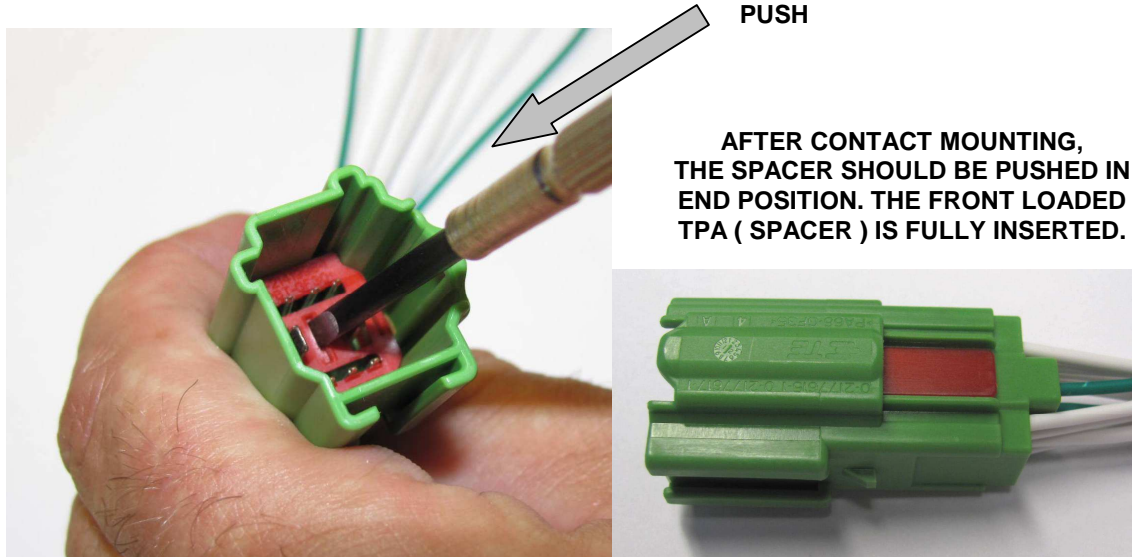
## **MALE HOUSING**



**DELIVERY CONDITION OF THE FEMALE  
CONNECTOR WITH THE  
FRONT LOADED TPA ( SPACER ) IN PRESET  
POSITION.  
THE FRONT LOADED TPA ( SPACER ) IS  
ELEVATED.**

**DO NOT PUSH THE SPACER FURTHER THAN THIS POSITION BEFORE CONTACT MOUNTING**

**1.**

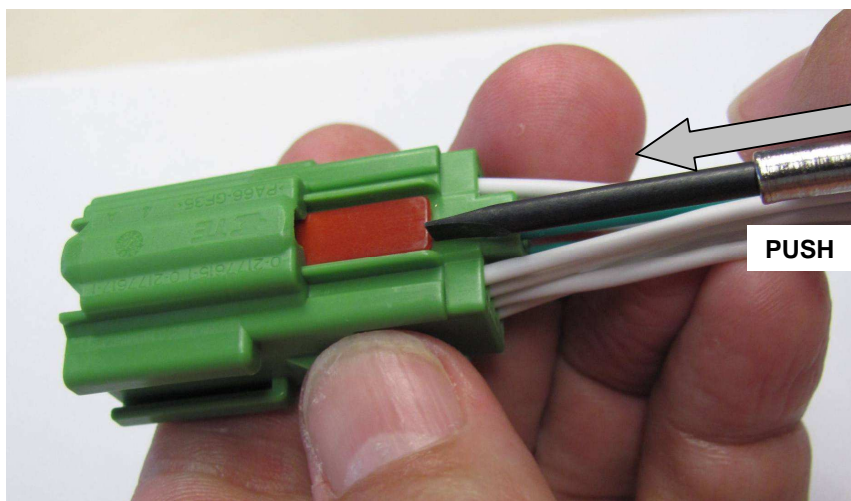


**PLEASE DO NOT DAMAGE THE TABS DURING SPACER INSERTION TO END-LOCK POSITION. RECOMANDATION: TOOL WITH NO SHARP EDGES !**

**FOR REMOVING THE TERMINALS THE SECONDARY LOCKS HAVE TO BE REMOVED COMPLETELY.**

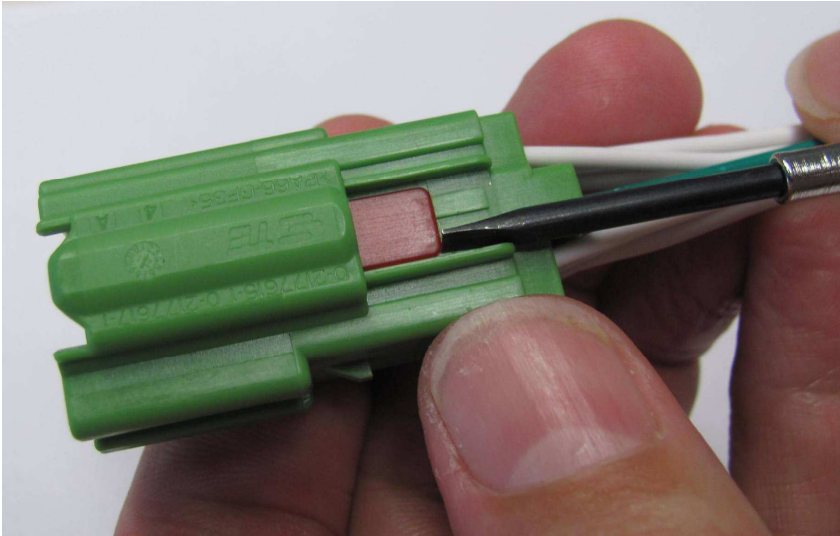
## **REMOVAL OF THE SPACER FROM MALE HOUSING**

**1.**



**INSERT THE SCREW DRIVER OR THE EXTRACTION TOOL AS SHOWN TO UNLOCK / LIFT THE TPA ( SPACER )**

**2.**

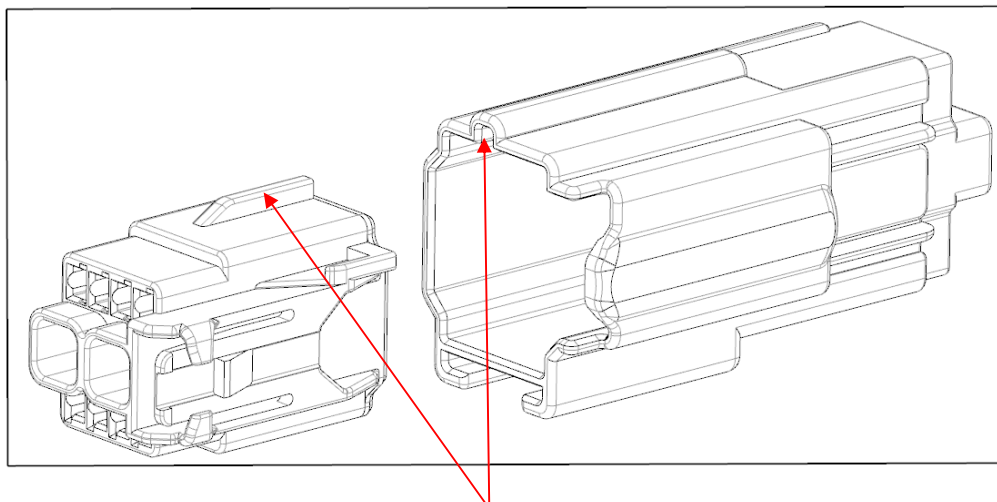


**PICTURE SHOWS THE  
TPA ( SPACER )  
IN PRE-LOCK POSITION**

**REMOVE THE SECONDARY LOCK BY USING THE EXTRACTION TOOL 1452426-1  
OR A SMALL SCREWDRIVER.**

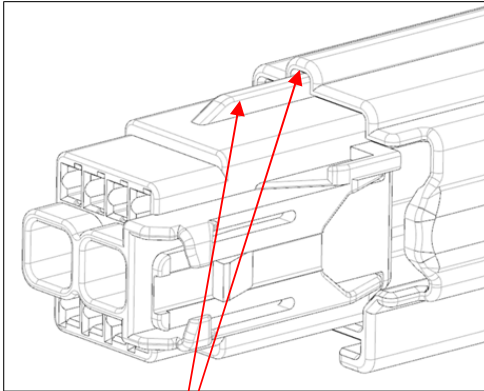
**FOR REMOVING THE TERMINALS THE SECONDARY LOCKS HAVE TO BE REMOVED COMPLETELY.**

**3. MATING AND UNMATING OF THE 10 POS. CONNECTORS**

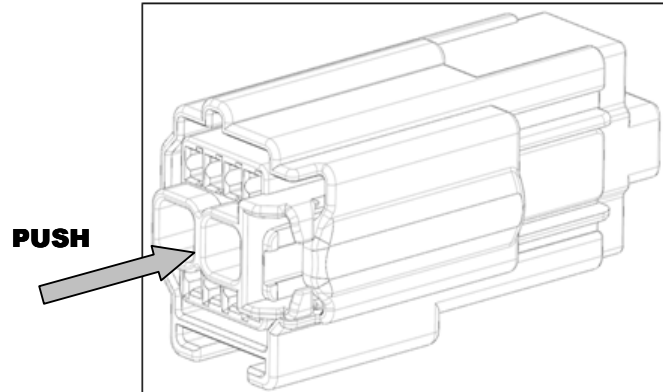


**POLARISATION FEATURES  
( MECHANICAL AND COLOUR KEYING )**

### 3.1 MATING OF THE CONNECTORS

**1.**

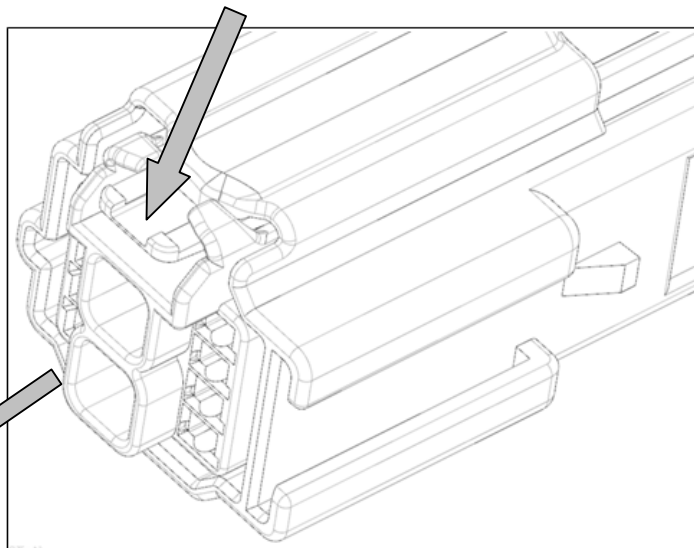
POLARISATION FEATURES

**2.**

MATE THE CONNECTORS SUCH AS THE  
POLARISATION FEATURES FIT TOGETHER  
UNTIL IT STOPS  
(PRE-LOCKED POSITION)

**DO NOT BEND THE WIRES DURING ASSEMBLY! DO NOT MATE PARTS BY PUSHING ON WIRES! MATING FORCE SHOULD BE APPLIED ON HOUSINGS.**

### 3.2 UNMATING OF THE CONNECTOR WITH THE HEADER

**1. PUSH****2. PULL**

