



## ASSEMBLY MANUALS

PRE - ASSEMBLY

HARNESS ASSEMBLY

CAR ASSEMBLY

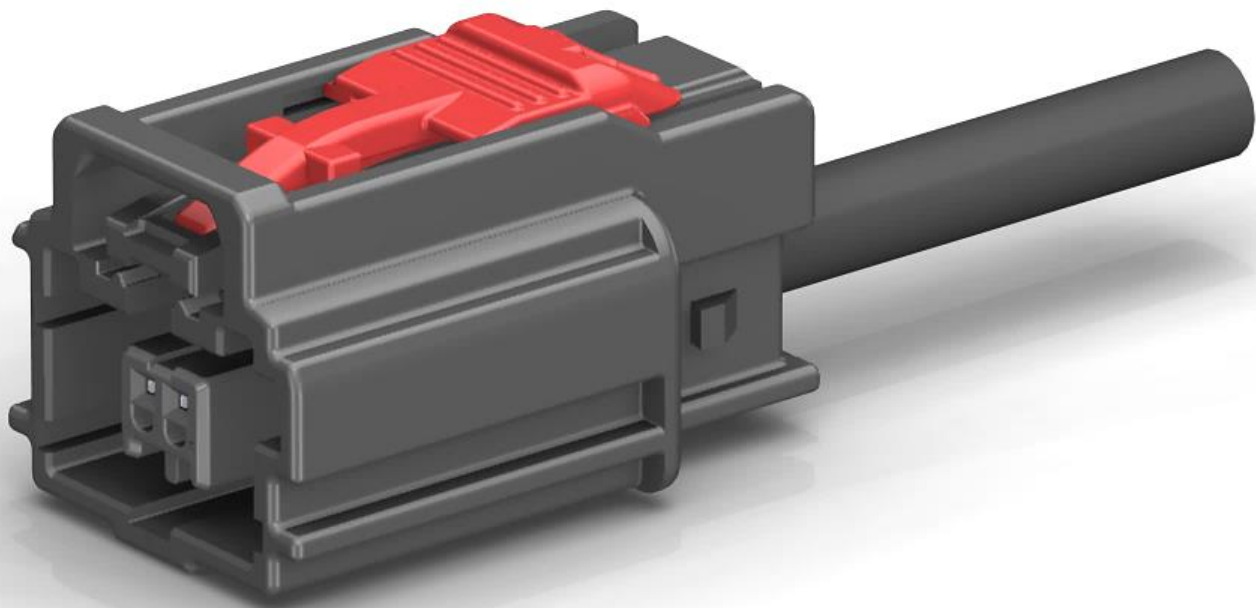
ASSEMBLY MANUAL - 35125525

# 1 Port AMEC Unsealed Connection System

Female CTS 0.50 Terminal System (Unsealed)

October 2018

D



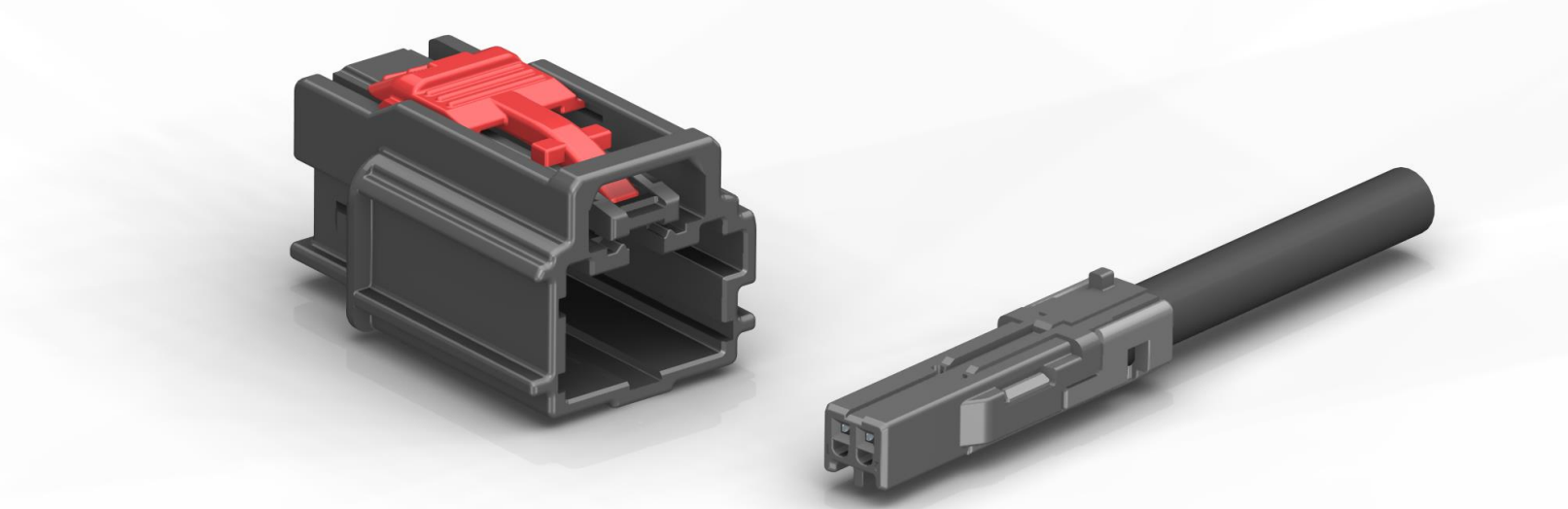
## Salttillo Technical Center

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**ASSEMBLY OF THE  
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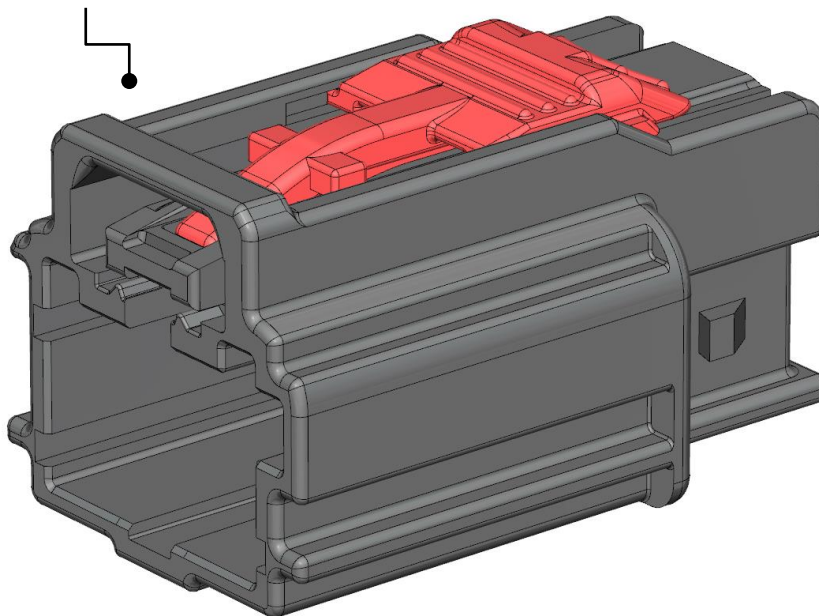
PRE - ASSEMBLY

HARNESS ASSEMBLY

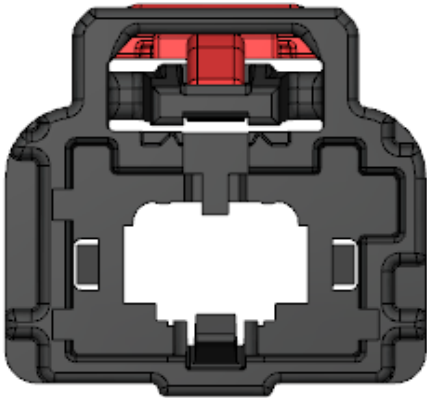
CAR ASSEMBLY

# 1 Port AMEC Unsealed Connection System

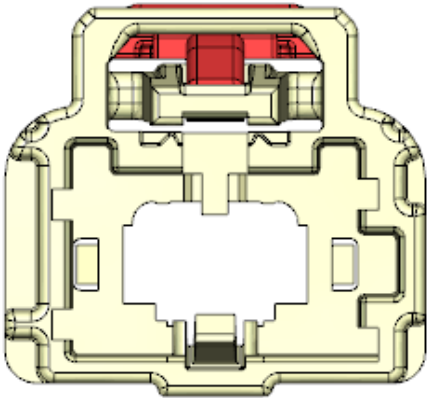
**FEMALE CONNECTOR  
ASSEMBLY**



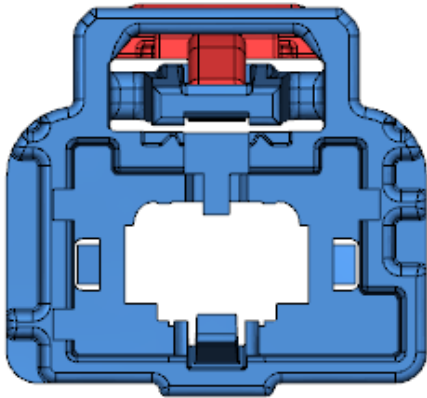
**VIEW OF VERSIONS**



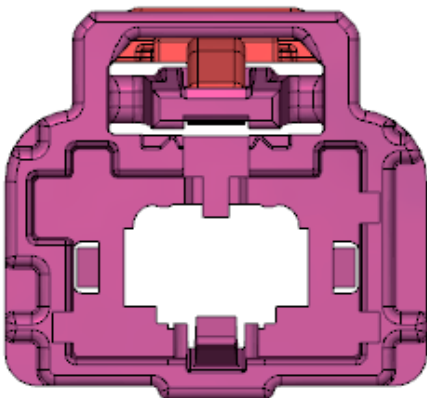
**TYPE 101 – KEY OPTION A**



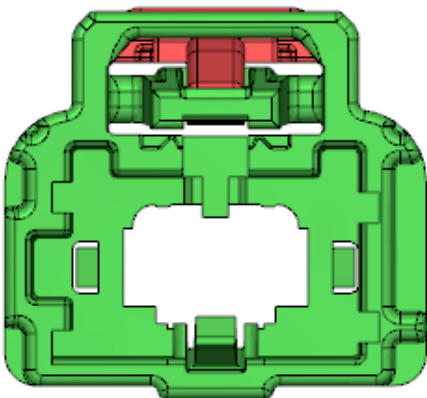
**TYPE 102 – KEY OPTION B**



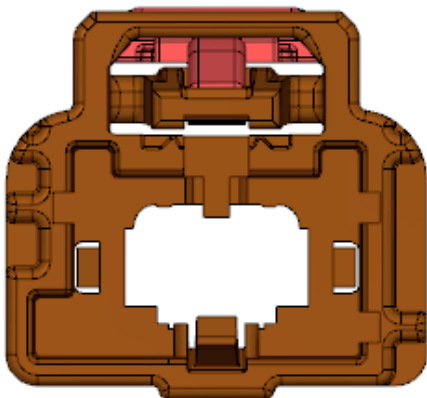
**TYPE 103 – KEY OPTION C**



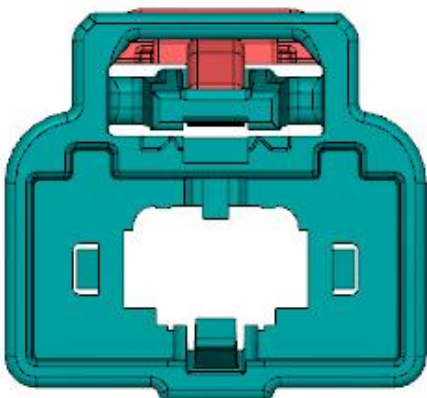
**TYPE 104 – KEY OPTION D**



**TYPE 105 – KEY OPTION E**



**TYPE 106 – KEY OPTION F**

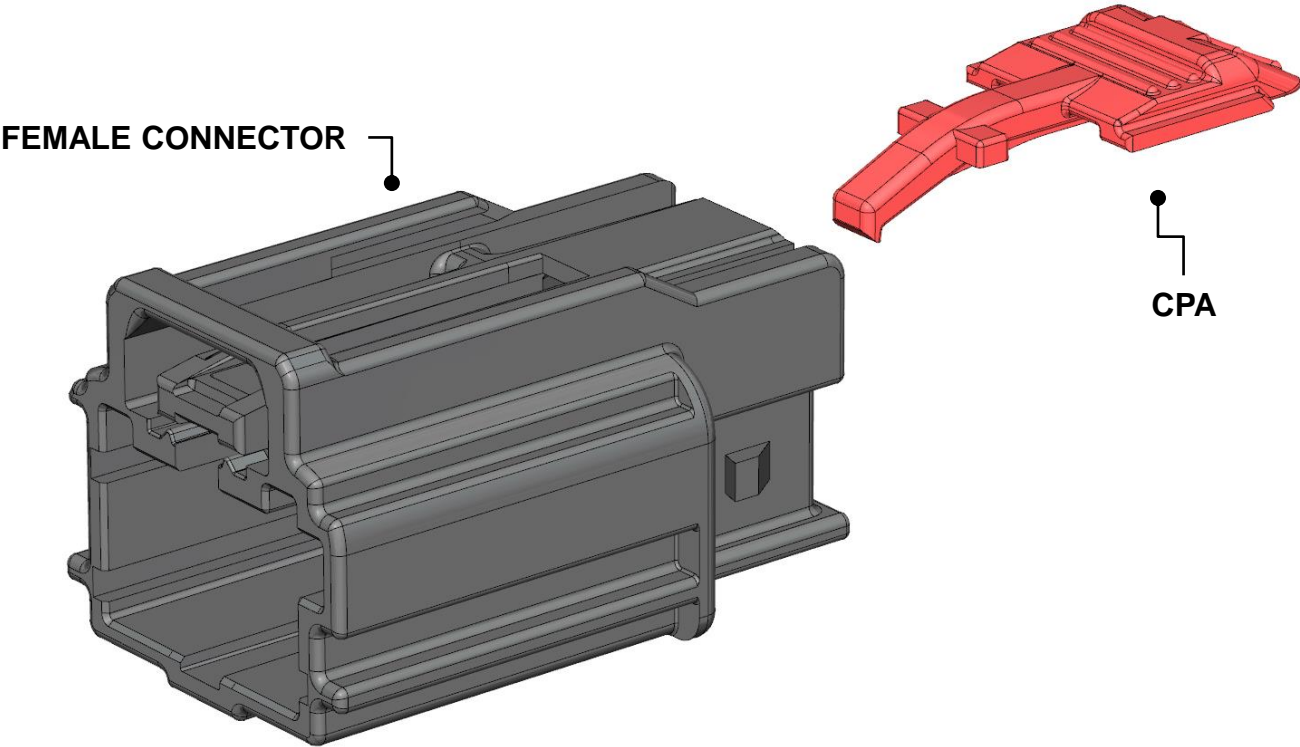


**TYPE 109 – KEY OPTION Z**

THESE CONNECTION SYSTEMS HAVE MULTIPLE CONFIGURATIONS, WHICH DIFFER IN THE INDEXING AND COLOR. 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 KEYING OPTIONS.

LIST OF COMPONENTS & EXPLODED VIEW

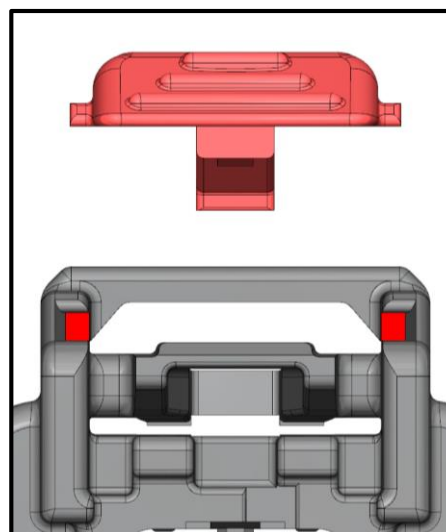
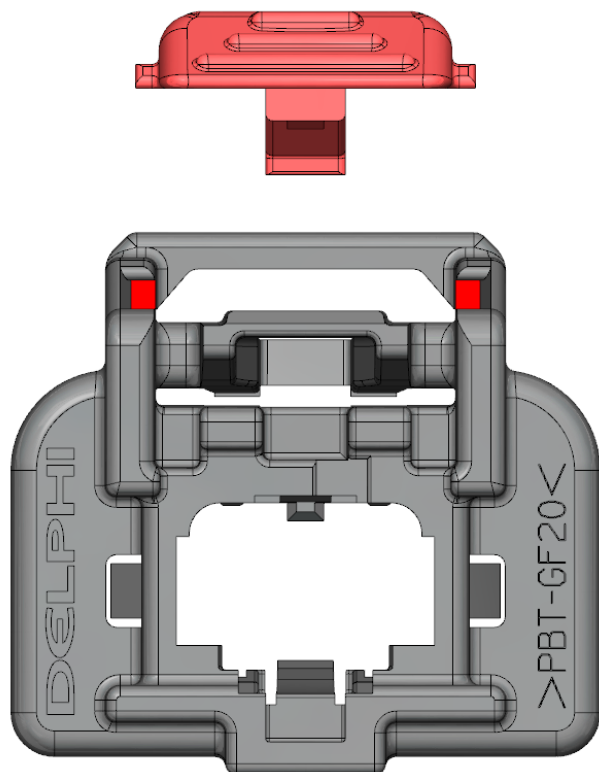
QUANTITY	COMPONENTS
1	FEMALE CONNECTOR
1	CPA



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 – Insert CPA to Pre-Stage Position

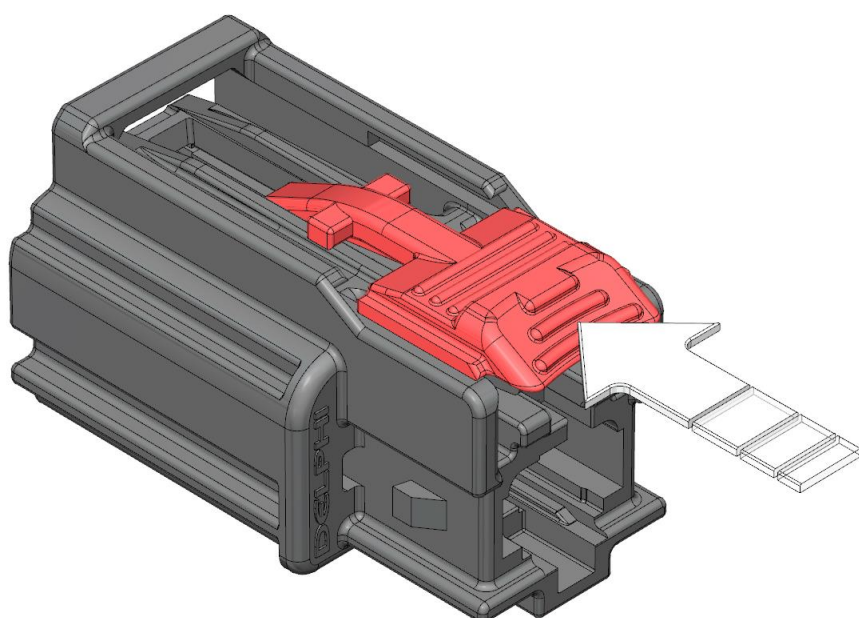
IDENTIFY SLOTS IN CONNECTOR AND THE ORIENTATION OF THE CPA



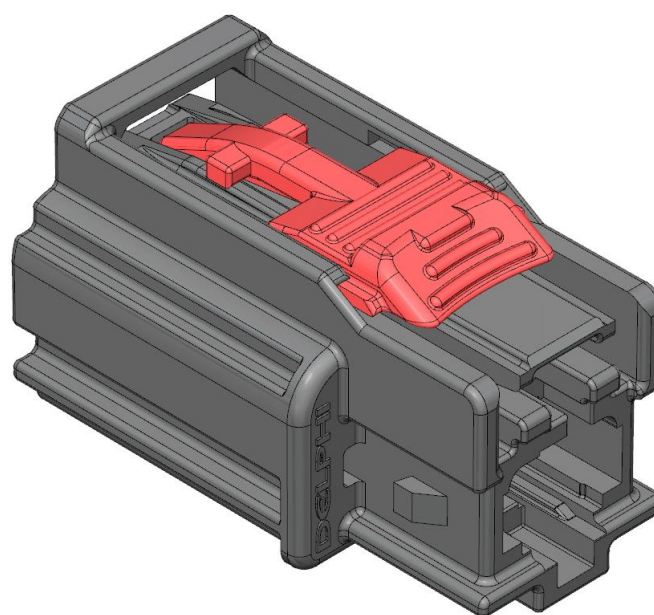
DETAIL

### STEP 1b – Insert CPA to Pre-Stage Position

INSERT CPA ONTO CONNECTOR BY SLIDING THE CPA RIBS INTO THE CONNECTOR SLOTS

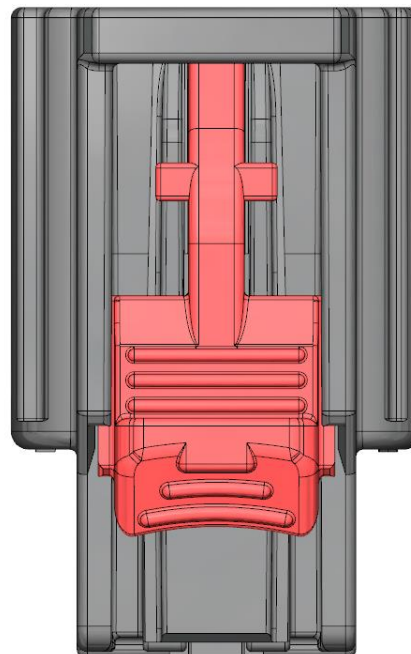
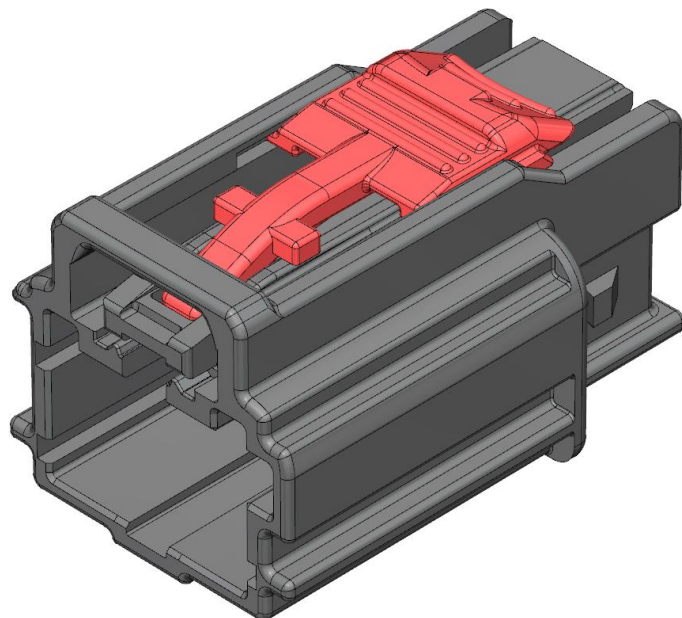


VERIFY AUDIBLE CLICK



CPA IS NOW IN  
PRE-STAGE POSITION

### FEMALE CONNECTOR ASSEMBLY – COMPLETED



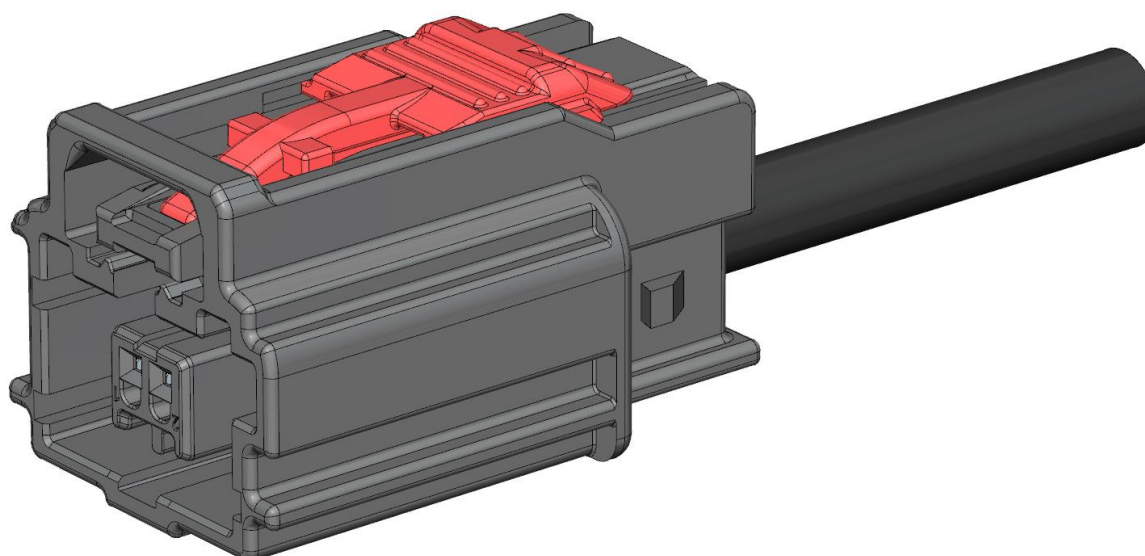
**ASSEMBLY OF THE  
FEMALE HARNESS ASSEMBLY**

PRE - ASSEMBLY

HARNESS ASSEMBLY

CAR ASSEMBLY

# 1 Port AMEC Unsealed Connection System

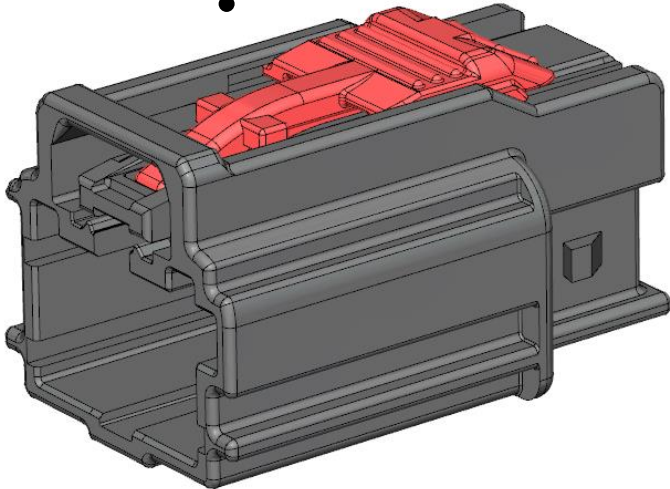


LIST OF COMPONENTS & EXPLODED VIEW

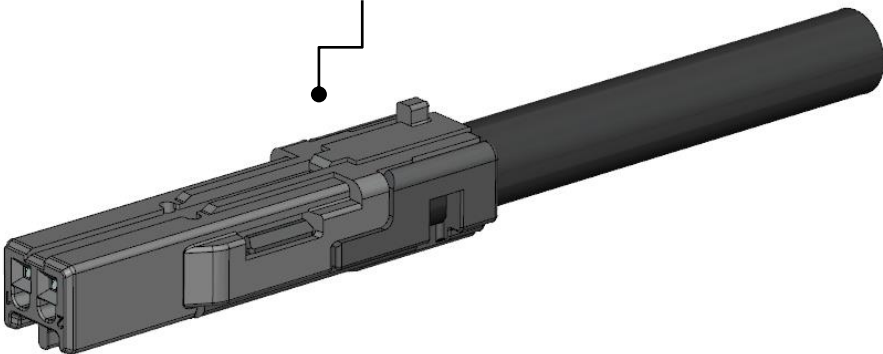
QUANTITY	COMPONENTS
1	FEMALE CONNECTOR ASSEMBLY
1	INNER CONNECTOR ASSEMBLY

REFER TO LATEST DRAWINGS FOR PART NUMBERS AND DETAILS

FEMALE CONNECTOR ASSEMBLY

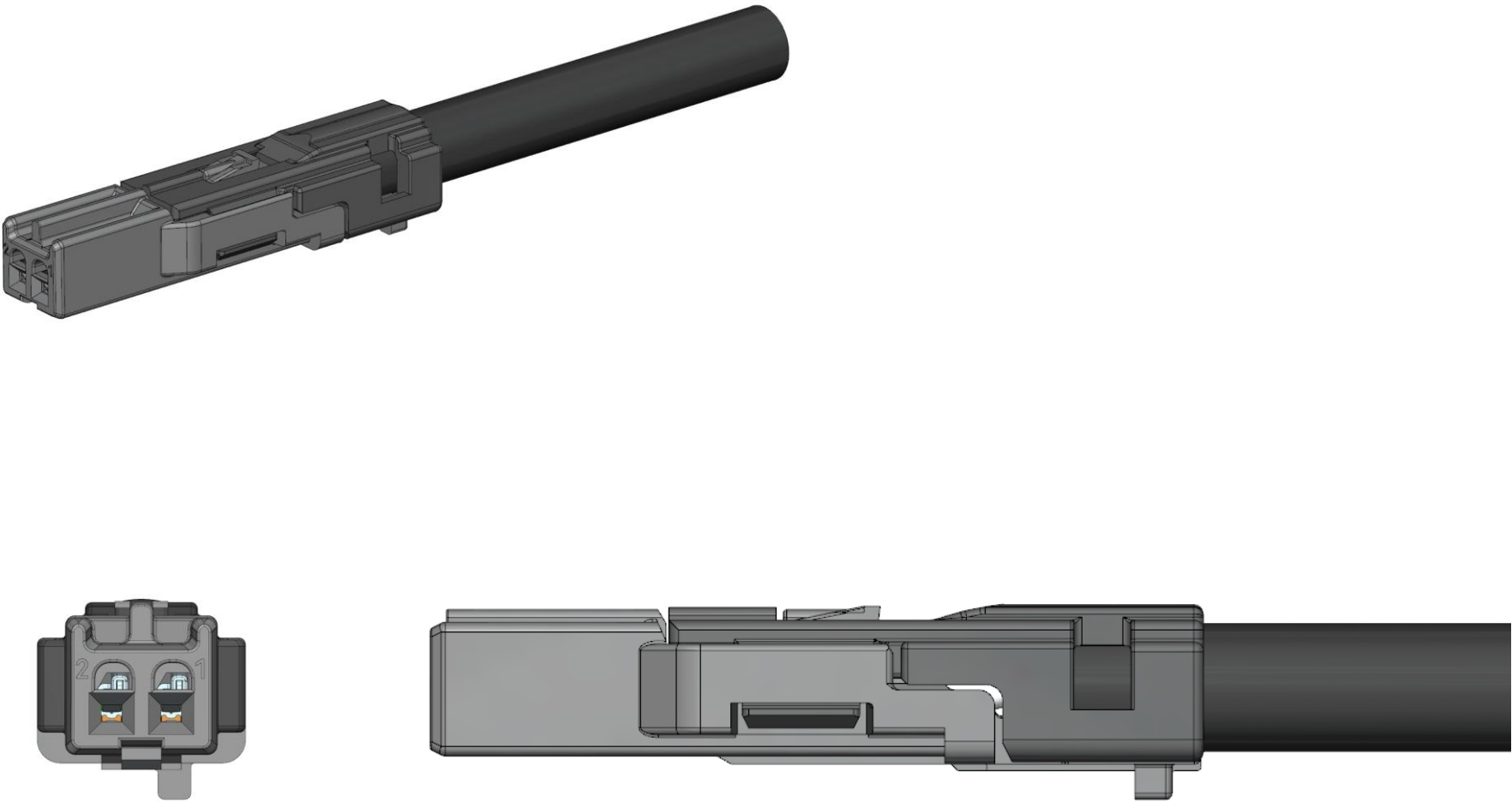


INNER CONNECTOR ASSEMBLY

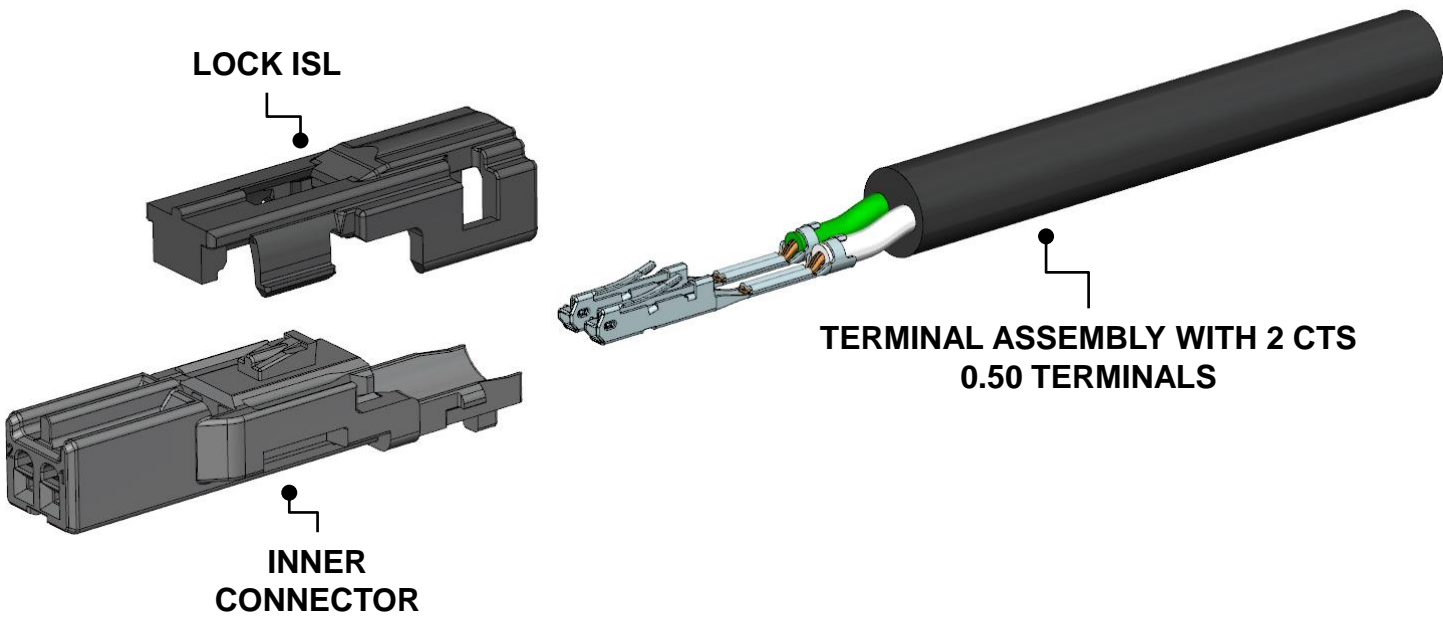


Pictures used in this Assembly Manual and original parts may differ in some details, these differences have no influence on the assembly process.

**STATUS BEFORE ASSEMBLY – INNER CONNECTOR ASSEMBLY**

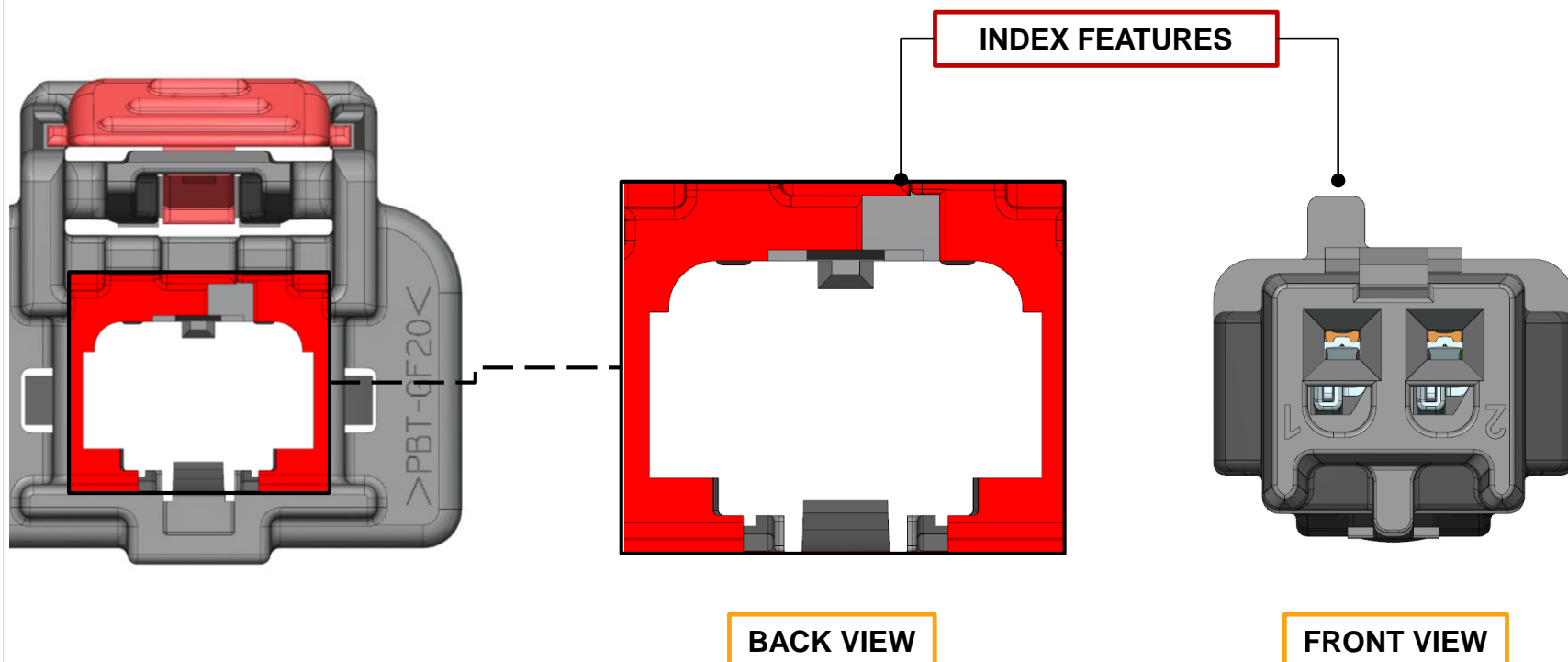


**INNER CONNECTOR ASSEMBLY CONSIST OF:**



### STEP 1 – Align Inner Connector Assembly with the Female Connector Assembly

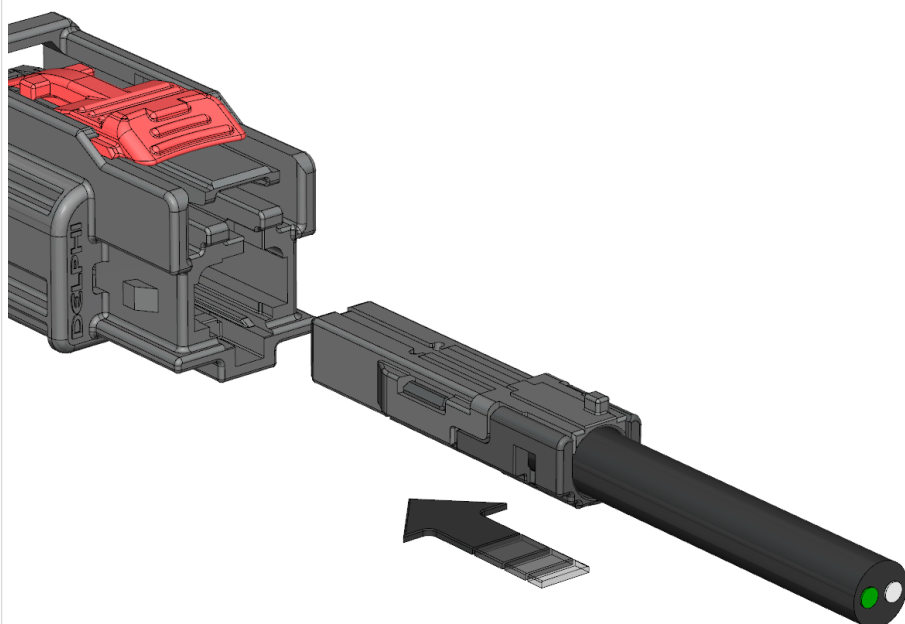
IDENTIFY INDEX FEATURES AND THE PROPER ORIENTATION OF THE INNER CONNECTOR



### STEP 2a – Install the Inner Connector Assembly

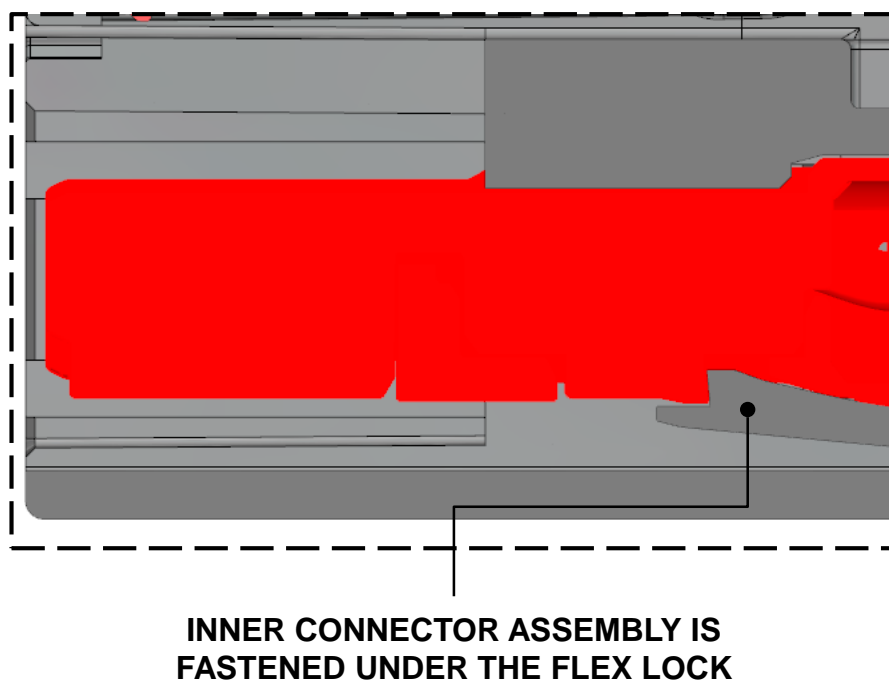
1

**PUSH THE INNER CONNECTOR ASSEMBLY STRAIGHT INTO THE BACK OF THE HOUSING**



2

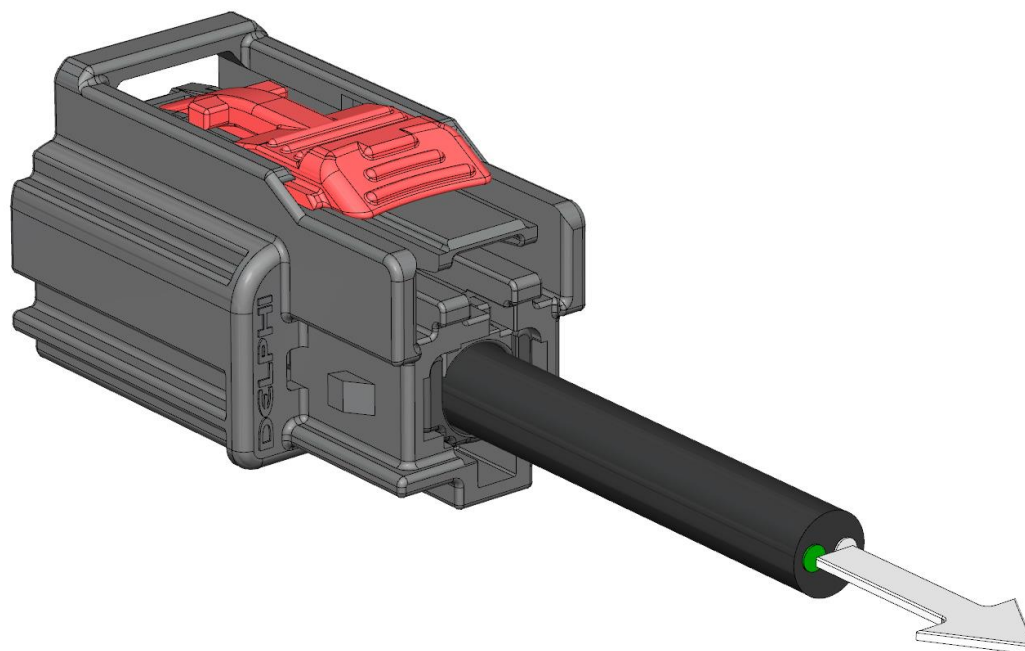
**VERIFY AUDIBLE CLICK**



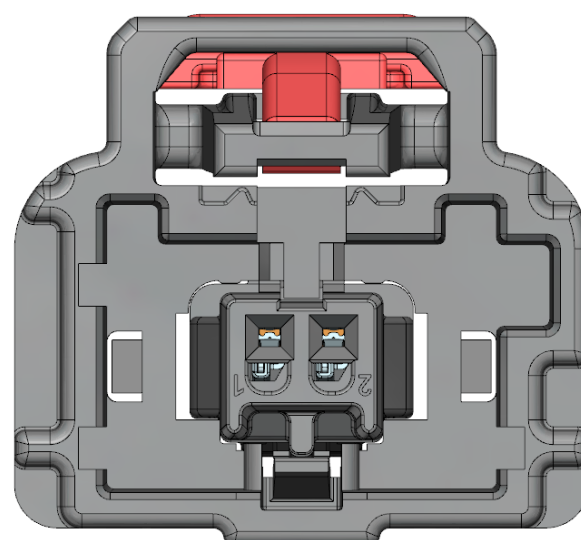
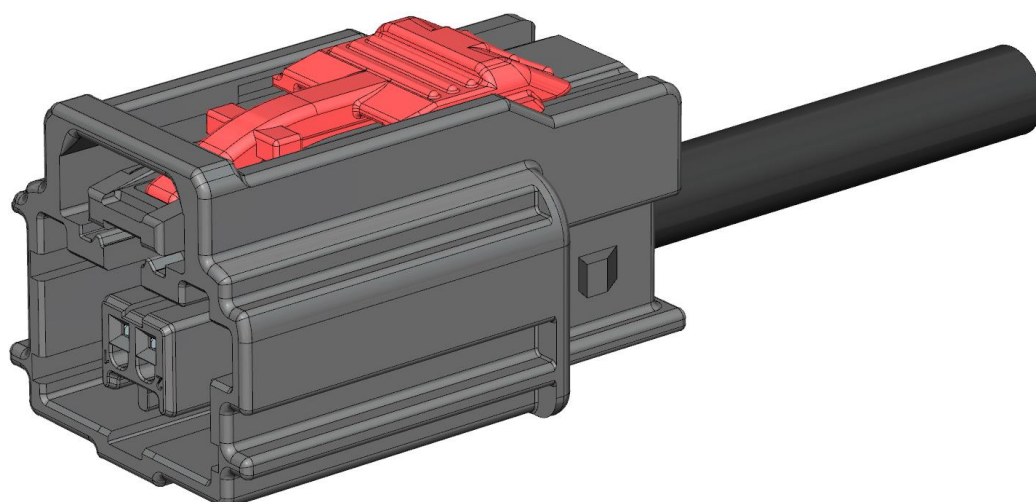
### STEP 2b – Install the Inner Connector Assembly

3

GENTLY PULL ON THE CABLE TO VERIFY  
THE LOCKING SYSTEM



### FEMALE HARNESS ASSEMBLY – COMPLETED



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

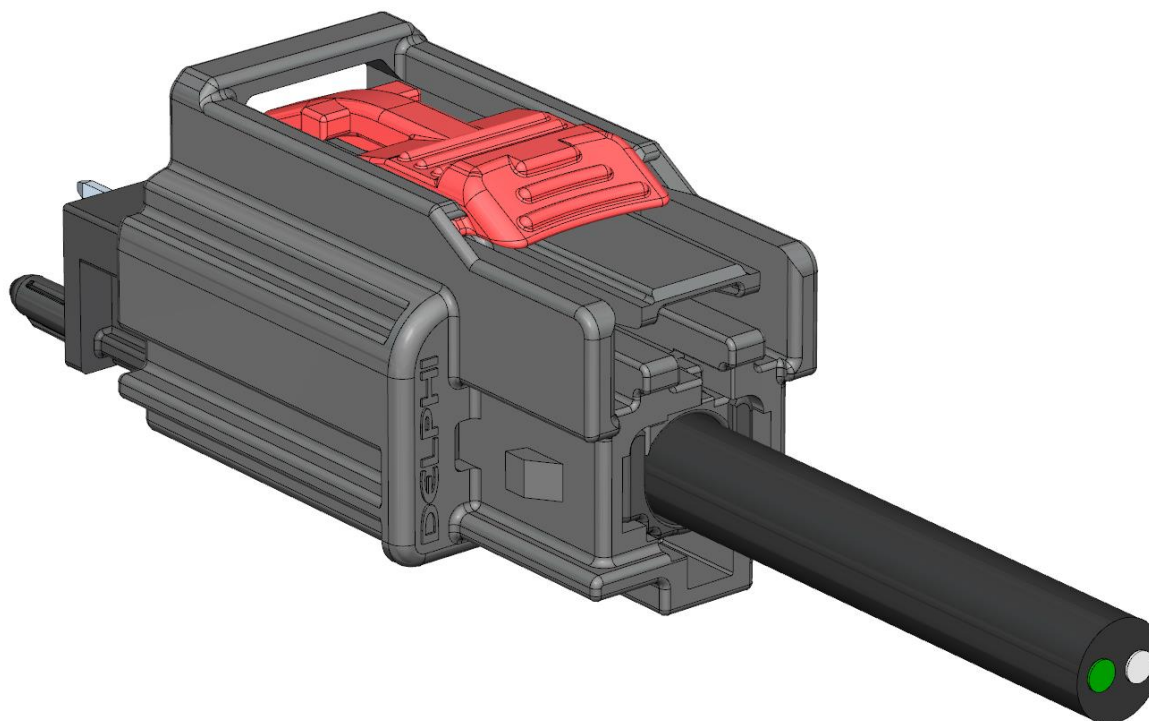
**ASSEMBLY OF THE  
CONNECTION SYSTEM**

PRE - ASSEMBLY

HARNESS ASSEMBLY

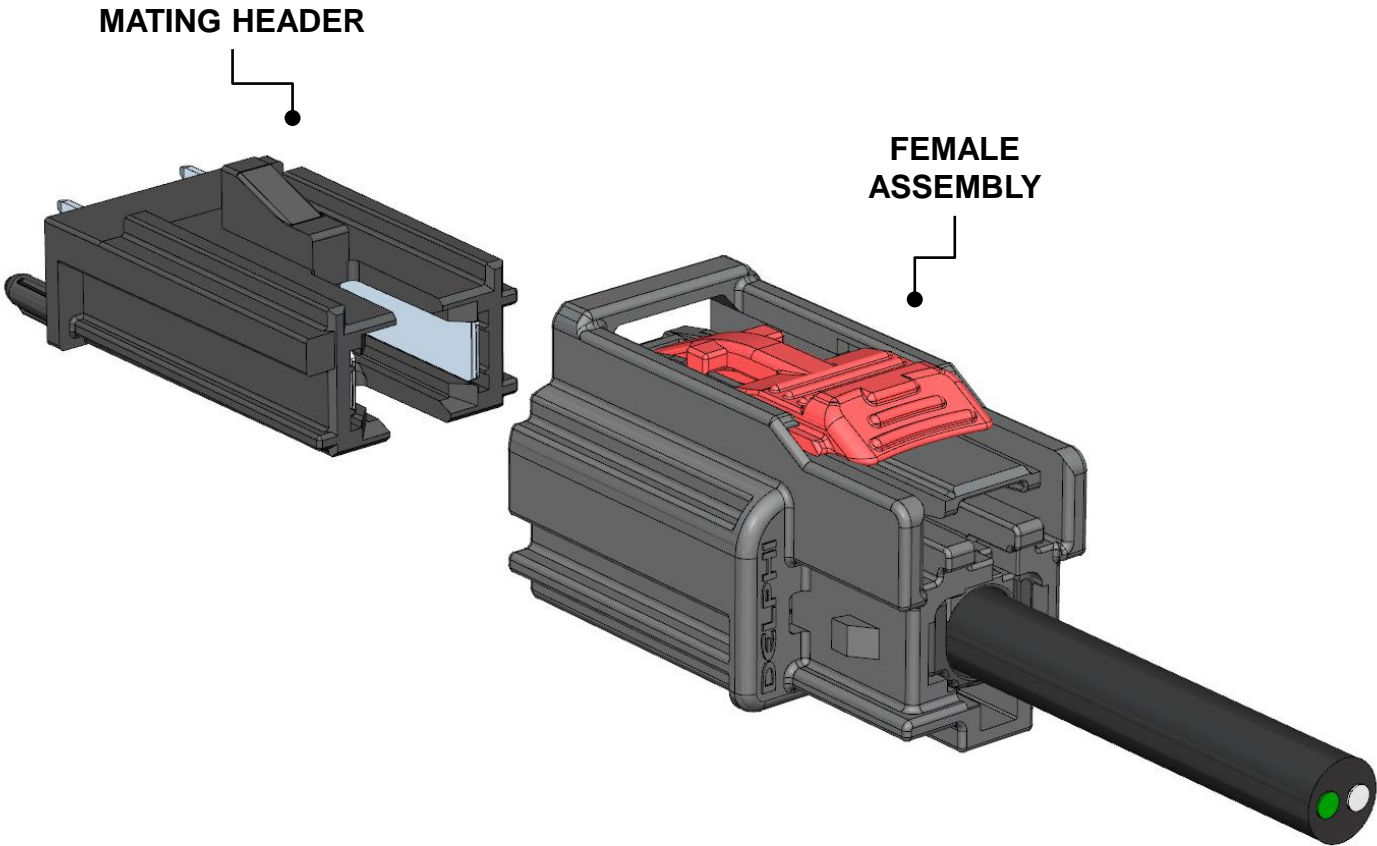
CAR ASSEMBLY

# 1 Port AMEC Unsealed Connection System



LIST OF COMPONENTS & EXPLODED VIEW

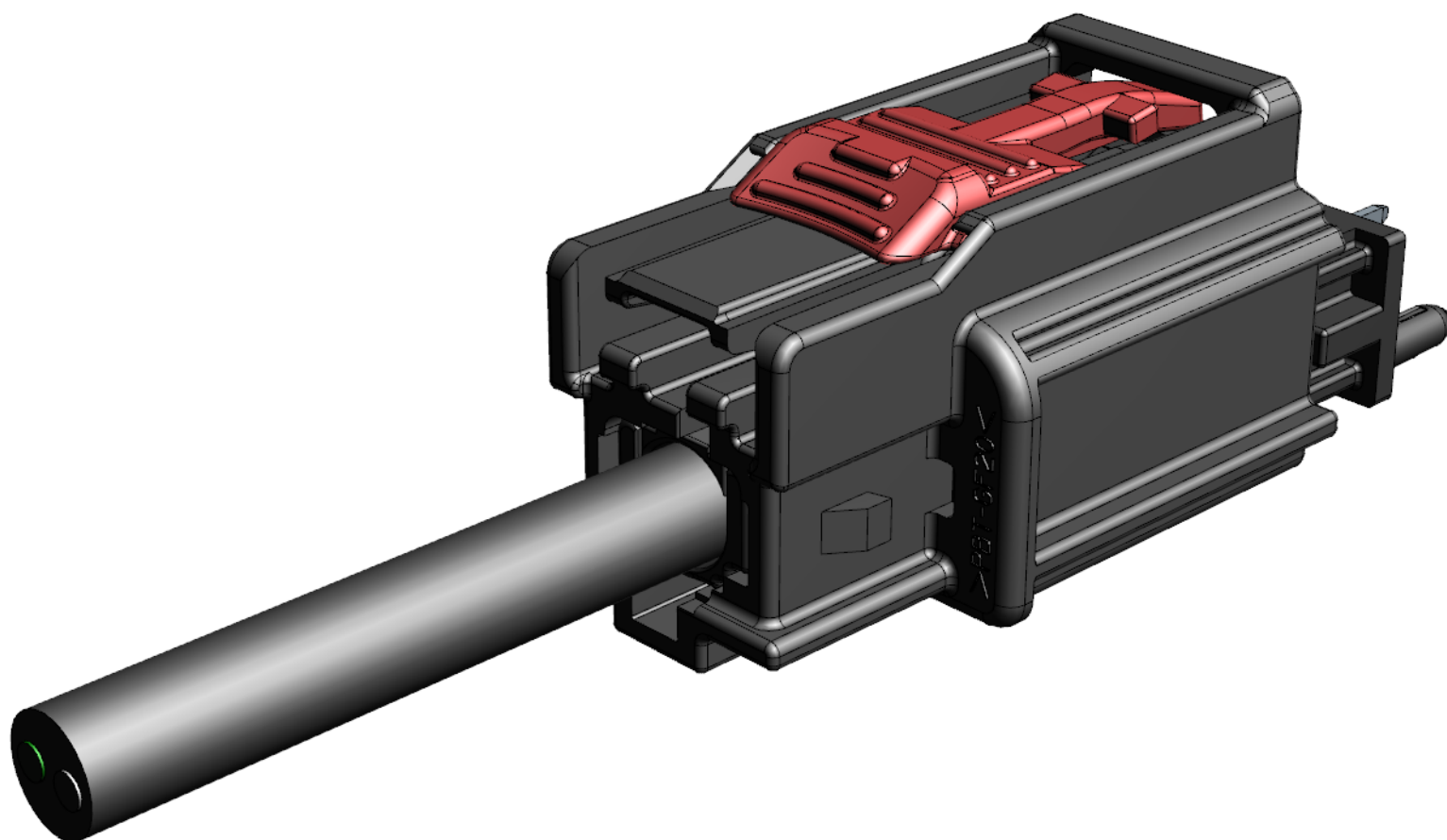
QUANTITY	COMPONENTS
1	FEMALE ASSEMBLY
1	MATING HEADER



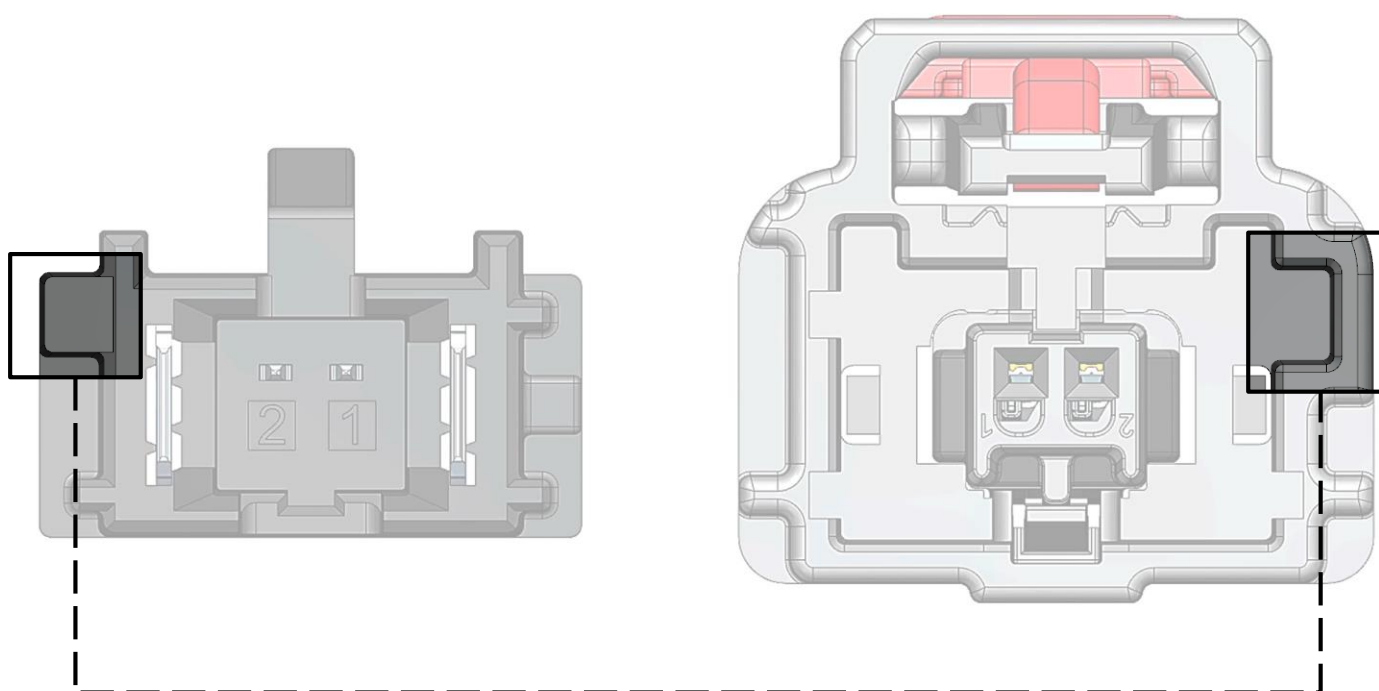
Pictures used in this Assembly Manual and original parts may differ in some details. These differences have no influence on the assembly process.

### 3D MODEL VIEW

**CLICK IMAGE TO START  
3D VISUALIZATION**



### STEP 1 – Identify Index Features

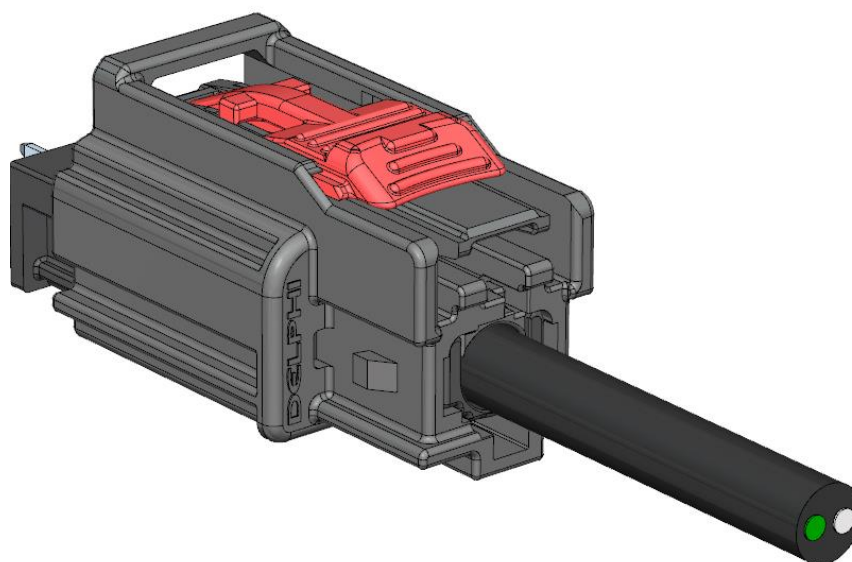
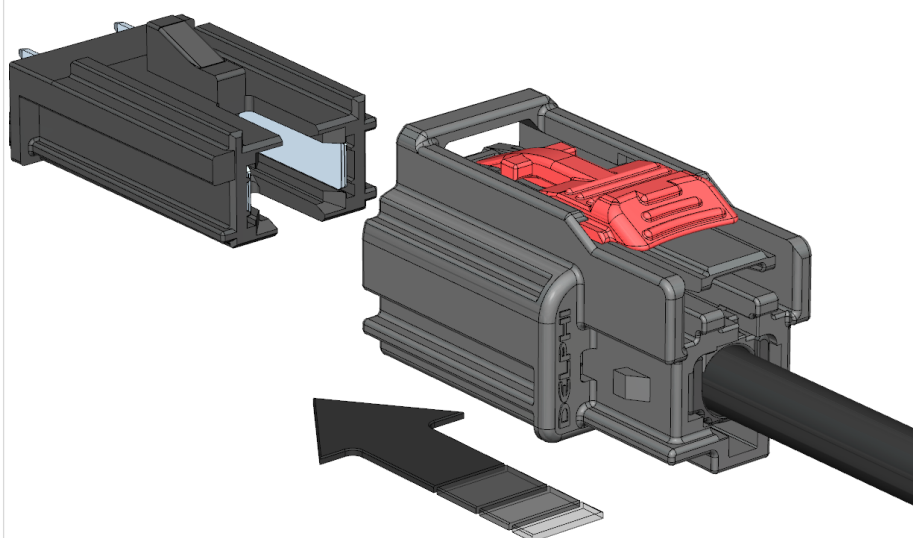


FRONT VIEWS

### STEP 2 – Align Index Features and Mate Female Assembly and Mating Header Together

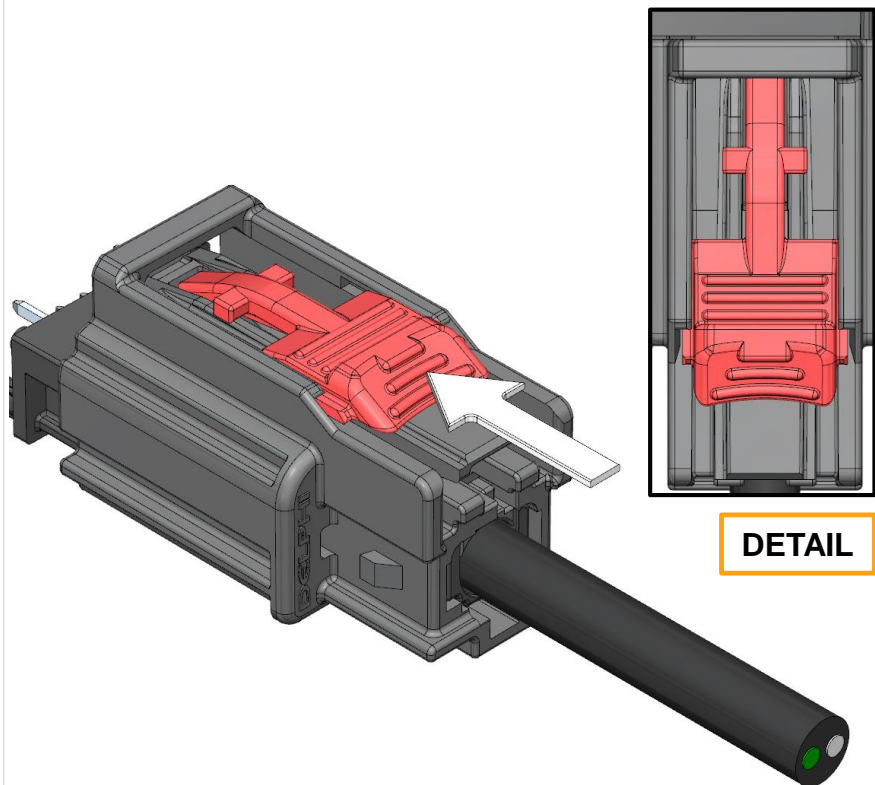
**IMPORTANT!** IF THE INDEXES DON'T LINE UP,  
DO NOT CONTINUE

VERIFY AUDIBLE CLICK



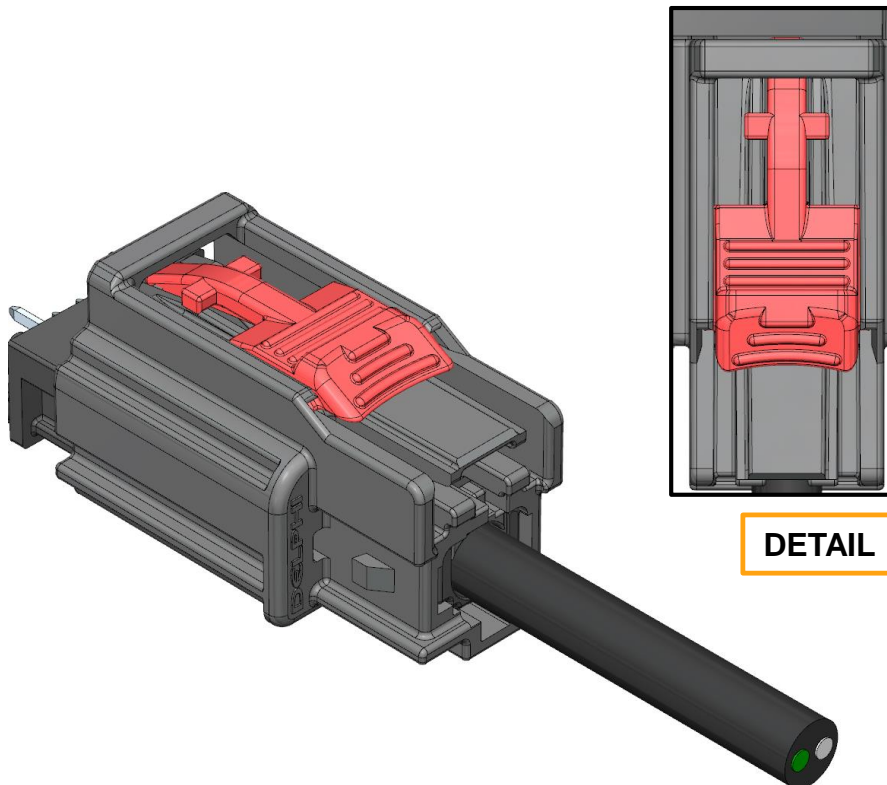
### STEP 3 – Lock CPA to Full-Stage Position

SLIDE THE CPA FORWARD



DETAIL

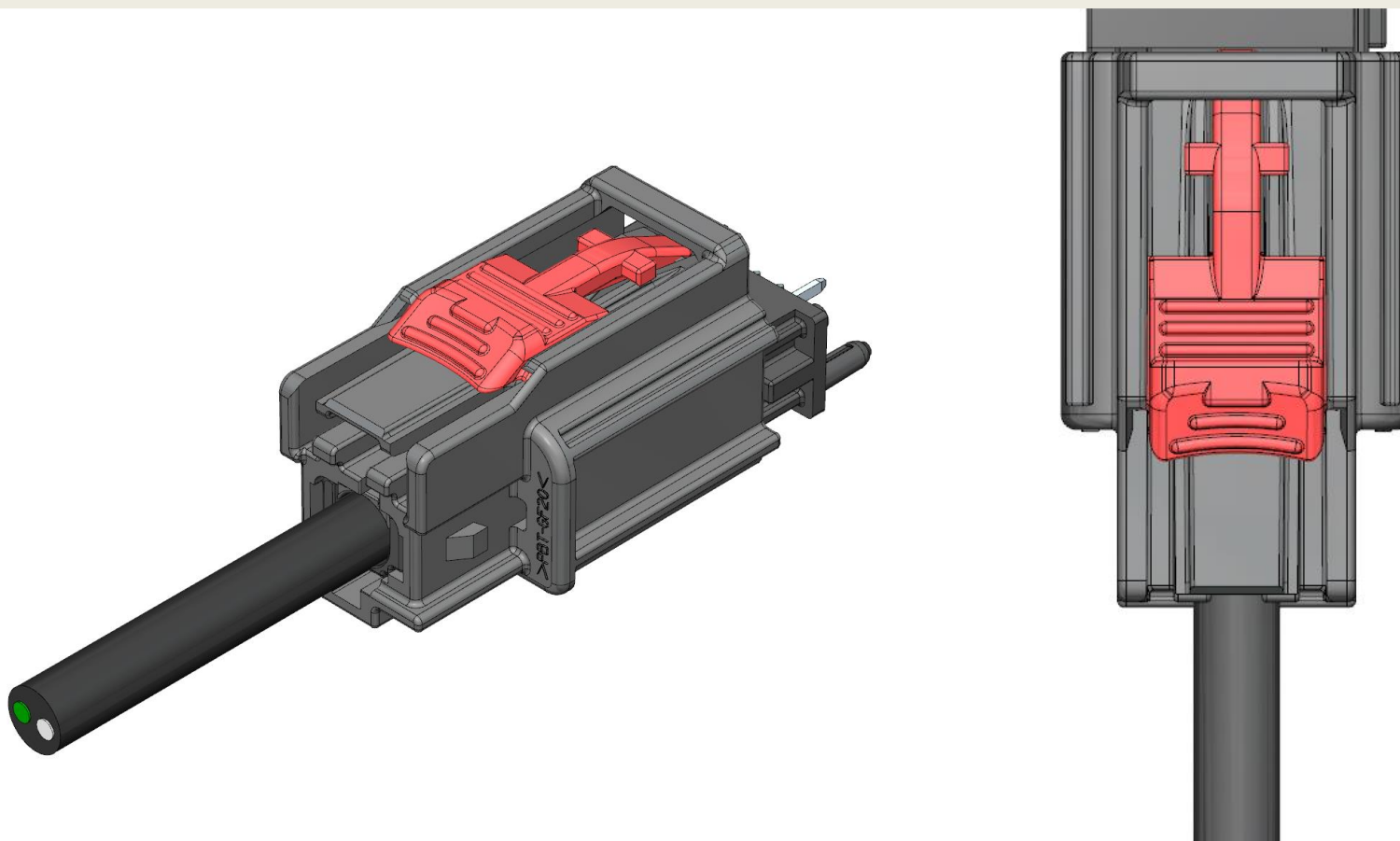
VERIFY AUDIBLE CLICK



DETAIL

CPA IS NOW IN FULL-STAGE POSITION

### CONNECTION SYSTEM ASSEMBLY – COMPLETED



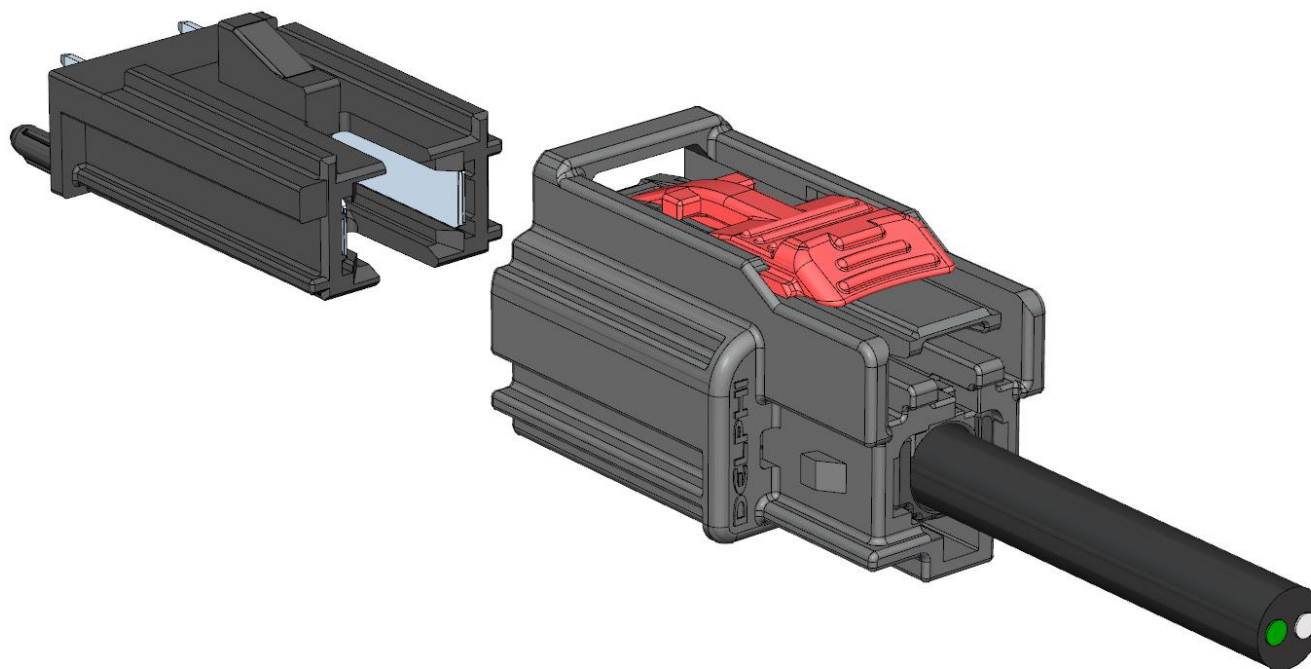
**DISASSEMBLY OF THE  
CONNECTION SYSTEM**

PRE - ASSEMBLY

HARNESS ASSEMBLY

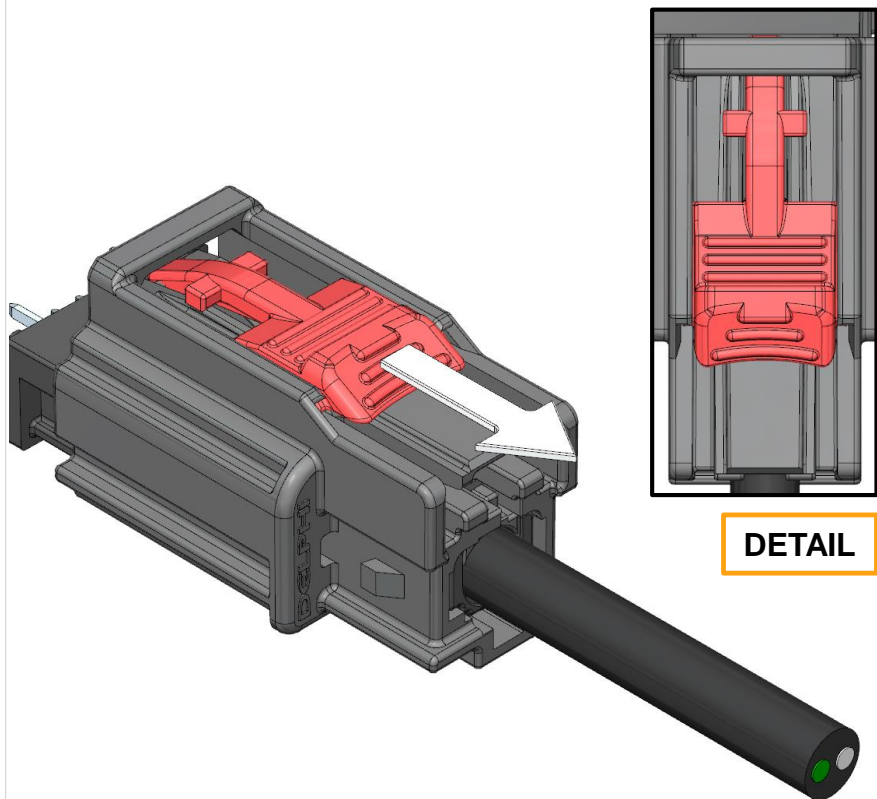
CAR ASSEMBLY

# 1 Port AMEC Unsealed Connection System

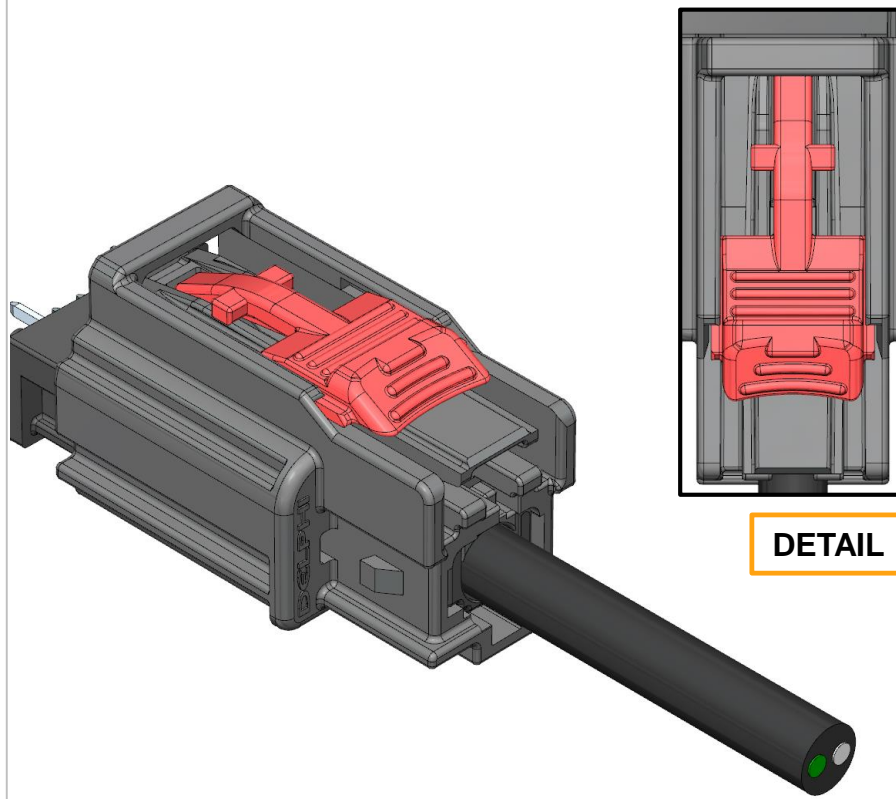


### STEP 1 – Move CPA to Pre-Stage Position

PUSH DOWN ON THE CPA AND SLIDE IT BACK



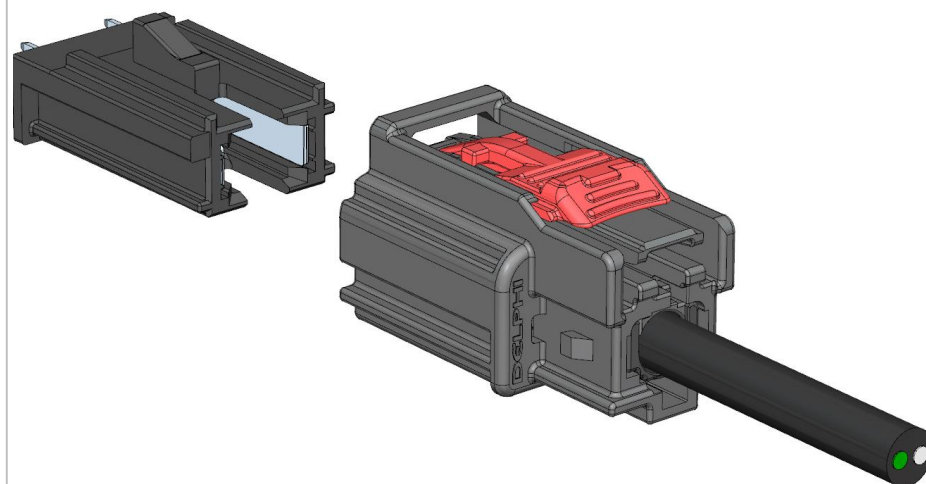
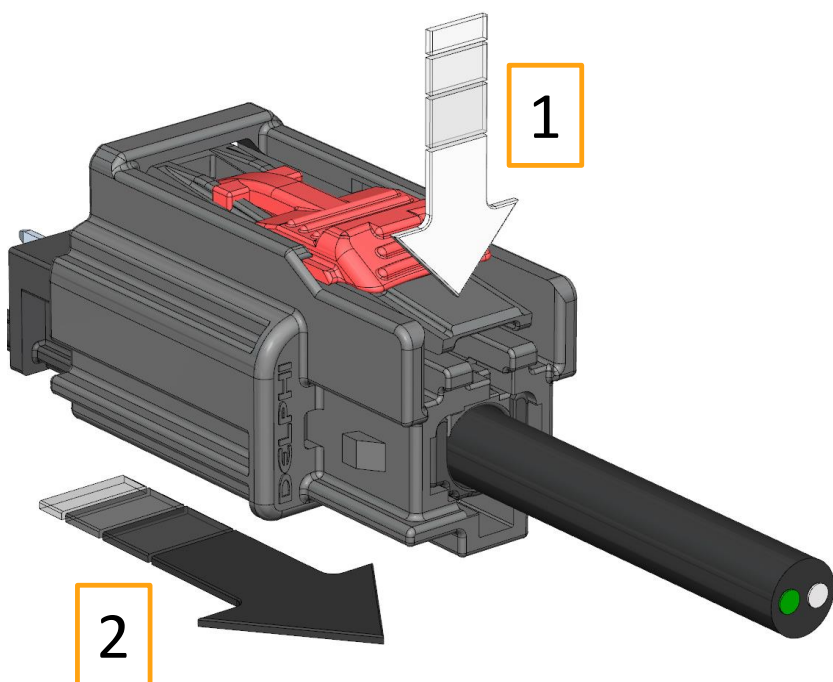
VERIFY AUDIBLE CLICK



CPA IS NOW IN PRE-STAGE POSITION

### STEP 2 – Disconnect

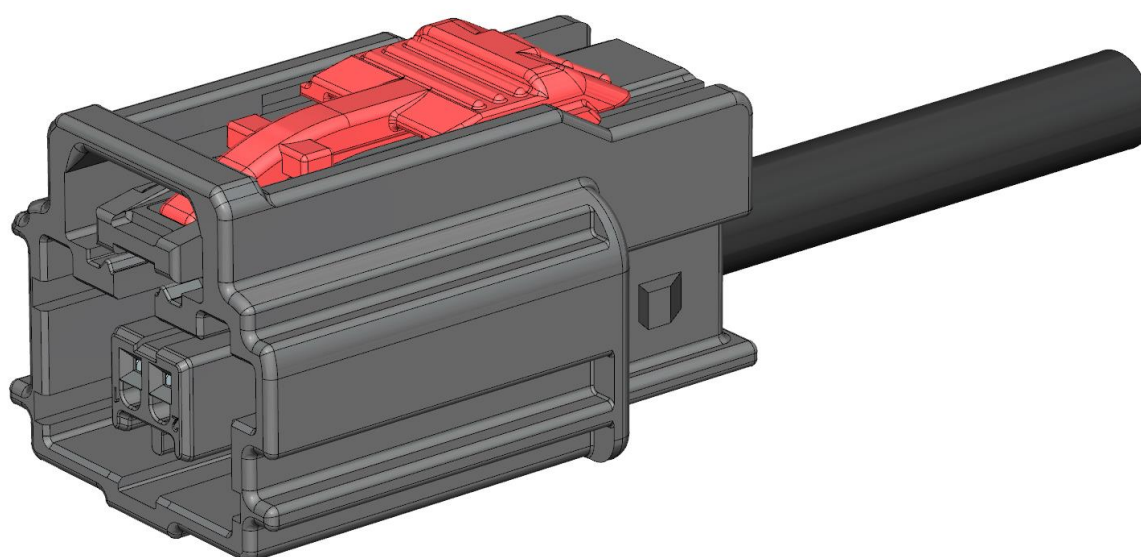
LOCATE AND PRESS DOWN THE CONNECTOR LOCK (1); WITH THE LOCK DEFLECTED, DISENGAGE THE FEMALE ASSEMBLY FROM THE HEADER (2)



CONNECTION SYSTEM DISASSEMBLY – COMPLETED

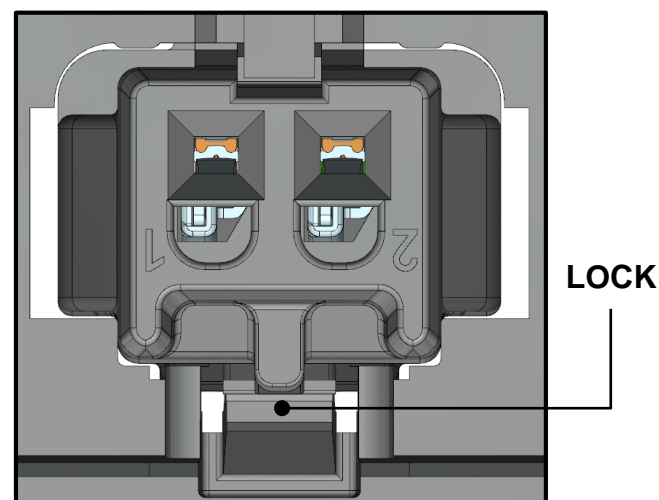
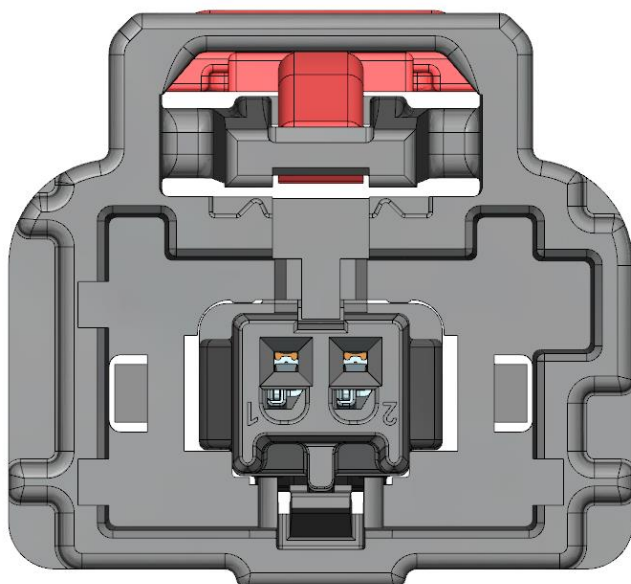
**REPAIR / REPLACEMENT OF  
THE FEMALE ASSEMBLY**

# 1 Port AMEC Unsealed Connection System



### INNER CONNECTOR ASSEMBLY REPLACEMENT (Remove) – STEP 1a

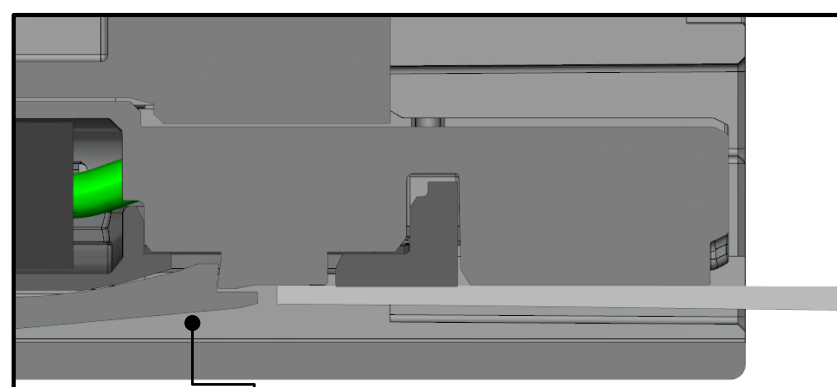
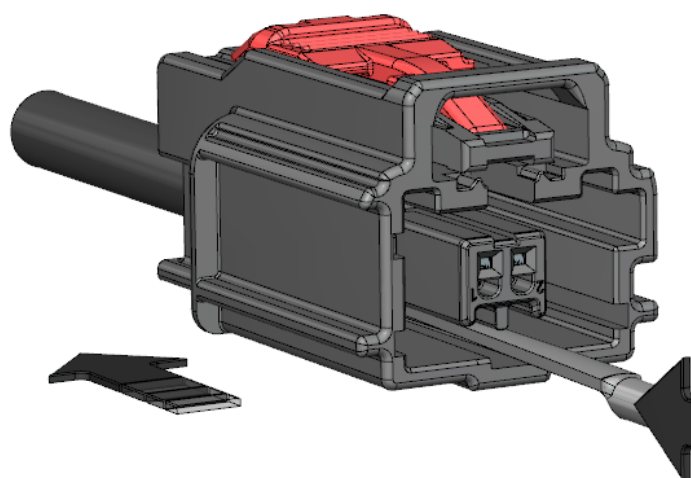
IDENTIFY THE LOCK FASTENING THE INNER CONNECTOR ASSEMBLY  
AT THE FRONT OF THE HOUSING



DETAIL

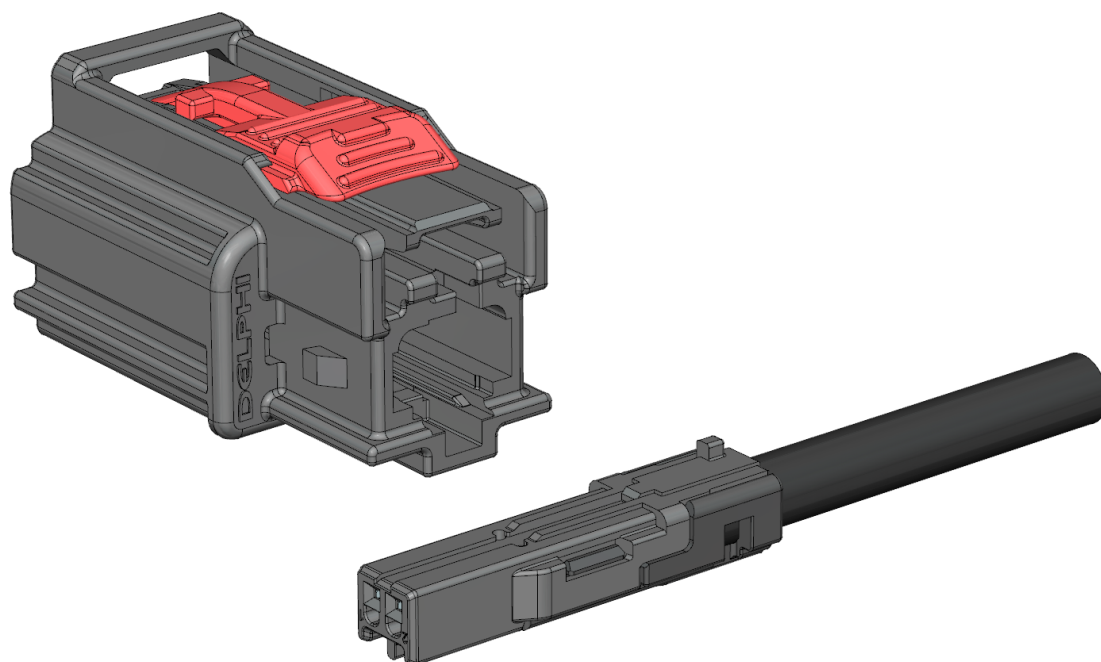
### INNER CONNECTOR ASSEMBLY REPLACEMENT (Remove) – STEP 1b

INSERT TIP OF TOOL 12094429 BETWEEN THE LOCK AND THE INNER CONNECTOR ASSEMBLY,  
DEFLECT THE LOCK AND PULL ON THE CABLE CAREFULLY TO RELEASE THE INNER  
CONNECTOR ASSEMBLY FROM THE HOUSING



DETAIL

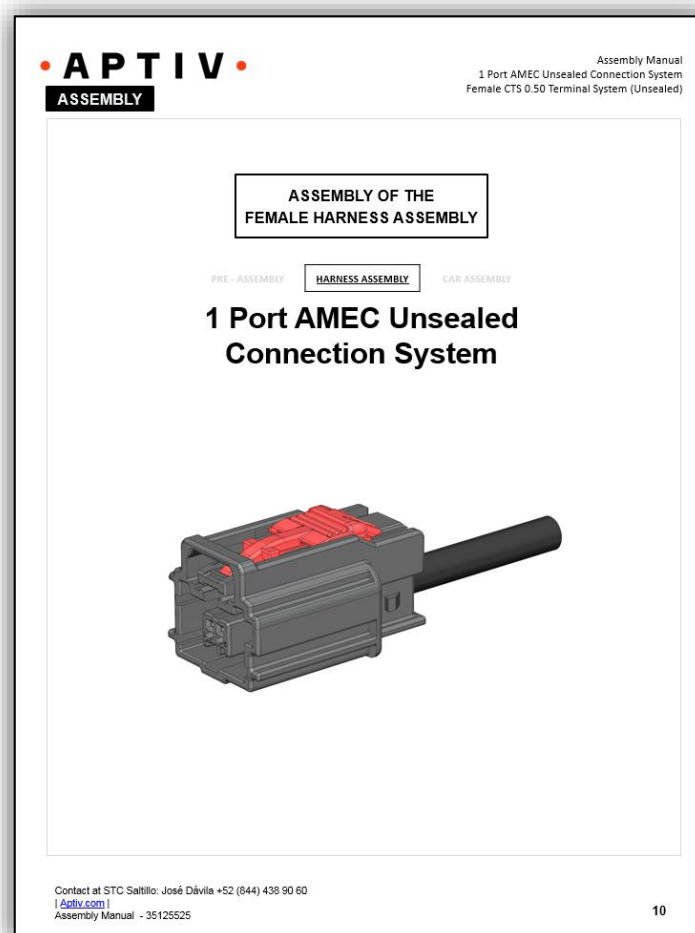
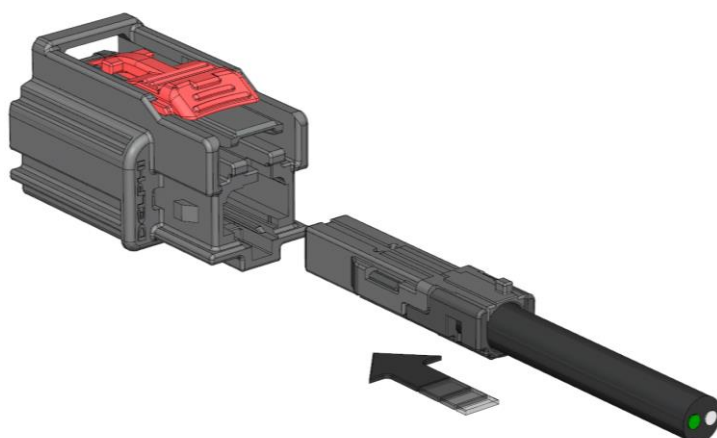
### INNER CONNECTOR ASSEMBLY REPLACEMENT (Remove) – STEP 1c



**INNER CONNECTOR  
ASSEMBLY REMOVED**

### INNER CONNECTOR ASSEMBLY REPLACEMENT (Install) – STEP 2

**REFER TO HARNESS  
ASSEMBLY SECTION**



RECOMMENDED REPAIR TOOLS



ITEM	APTIV PART NUMBER
1	12094429

REVISIONS

DATE	REV	REVISION HISTORY	AUTH
19SE17	01	RELEASED	437599
12OC18	02	REPAIR TOOL 12094429 WAS 12152110, UPDATED MANUAL TO APTIV FORMAT AND CONTACT NAME	441220