

• A P T I V •

ASSEMBLY MANUALS

PRE - ASSEMBLY

HARNESS ASSEMBLY

CAR ASSEMBLY

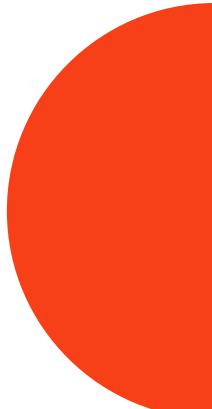
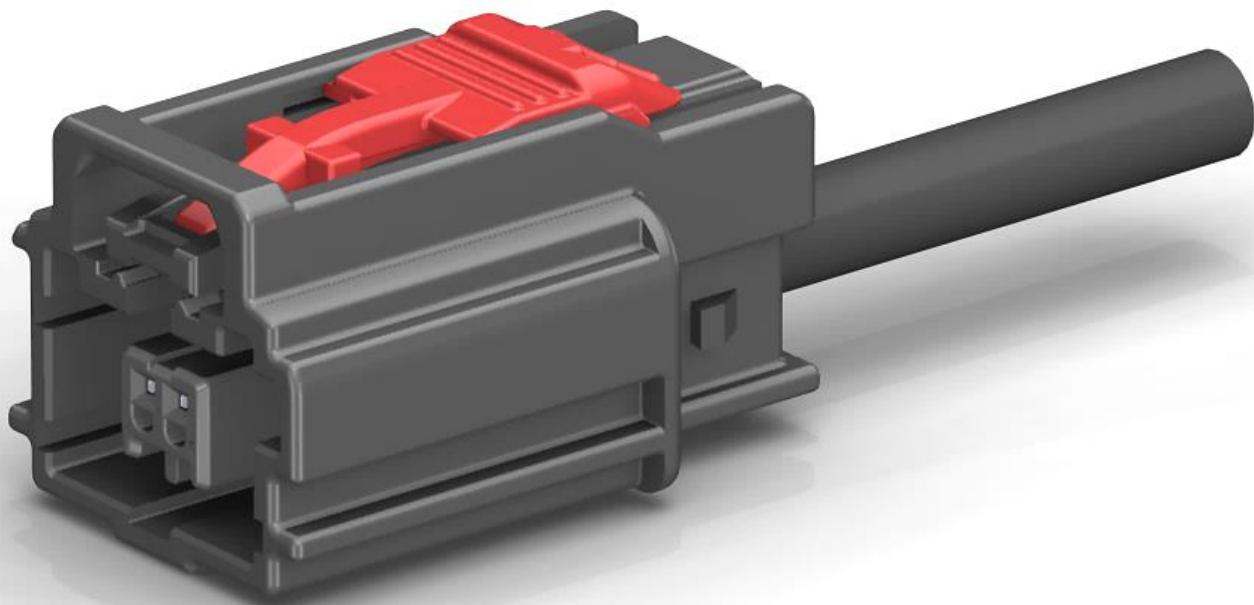
ASSEMBLY MANUAL - 35125525

**1 Port AMEC Unsealed
Connection System**

Female CTS 0.50 Terminal System (Unsealed)

October 2018

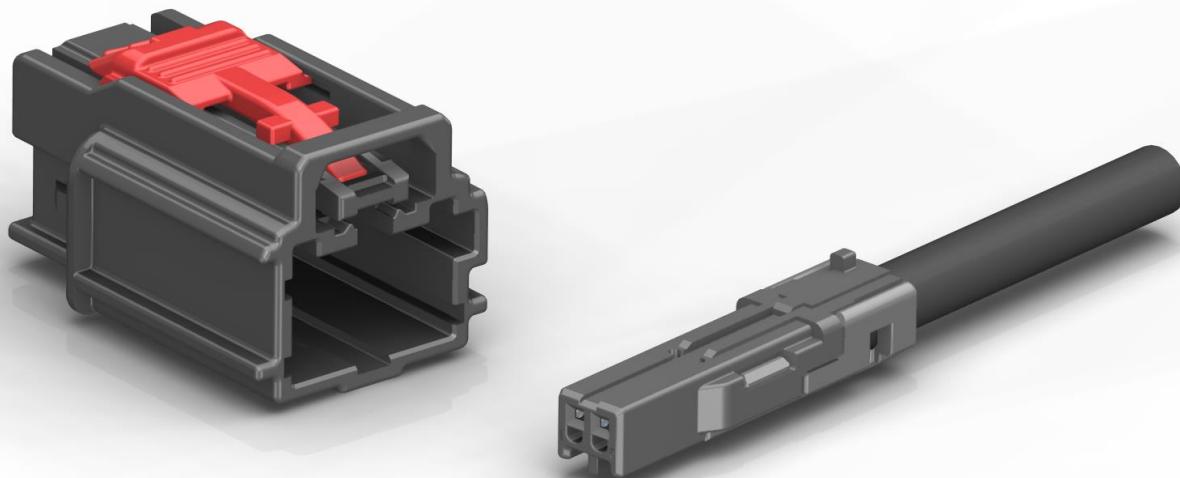
D



Saltillo Technical Center

The information contained in these assembly instructions is subject to alteration without prior notice and does not represent any obligation on the part of APTIV. All the information is correct at time of releasing. Reprinting or translation is not permitted without written permission from APTIV. © Copyright 2017 APTIV. All rights reserved.

TABLE OF CONTENTS



PRE-ASSEMBLY SECTION

ASSEMBLY OF THE FEMALE CONNECTOR	5
View of Versions	6
List of Components & Exploded View	7
Step 1 – Insert CPA to Pre-Stage Position	8
Connector Assembly – Completed	9

HARNESS ASSEMBLY SECTION

ASSEMBLY OF THE FEMALE HARNESS ASSEMBLY	10
List of Components & Exploded View	11
Status Before Assembly – Inner Connector Assembly	12
Step 1 – Align Inner Connector Assembly with the Female Connector Assembly	13
Step 2 – Install the Inner Connector Assembly	13
Harness Assembly – Completed	14

CAR ASSEMBLY SECTION

ASSEMBLY OF THE CONNECTION SYSTEM	15
List of Components & Exploded View	16
3D Model	17
Step 1 – Identify Index Features	18
Step 2 – Align Index Features and Mate Female Assembly and Mating Header Together	18

TABLE OF CONTENTS

Step 3 – Lock CPA to Full-Stage Position	19
Connection System – Completed Assembly	19

DISASSEMBLY SECTION

DISASSEMBLY OF THE CONNECTION SYSTEM	20
Step 1 – Move CPA to Pre-Stage Position	21
Step 2 – Disconnect	21
Connection System – Completed Disassembly	21

REPAIR / REPLACEMENT SECTION

FEMALE ASSEMBLY SUB COMPONENTS:	22
INNER CONNECTOR ASSEMBLY Replacement – Step 1 (Remove)	23
Step 2 (Install)	24
Recommended Repair Tools	25
REVISIONS	26

ASSEMBLY OF THE FEMALE CONNECTOR

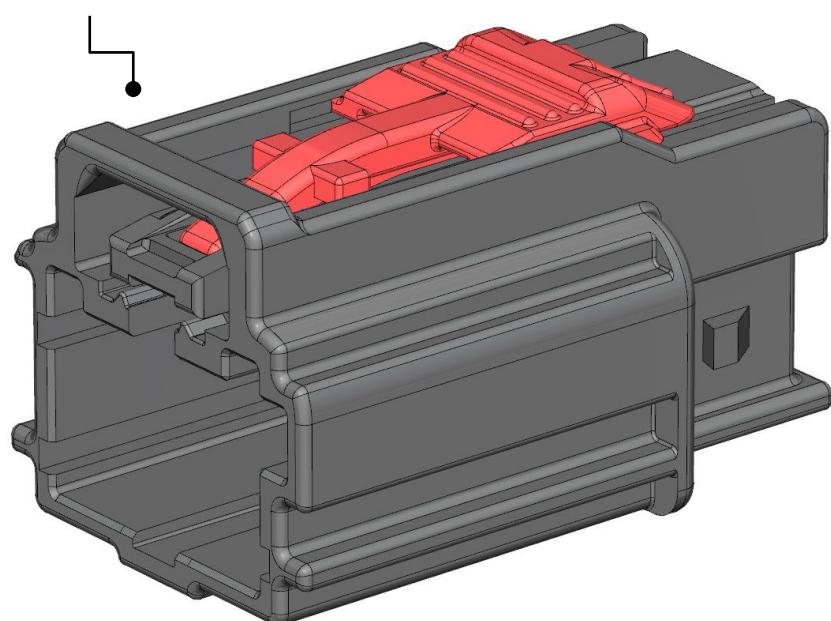
PRE - ASSEMBLY

HARNESS ASSEMBLY

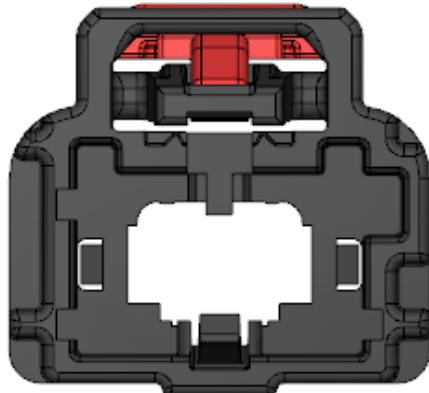
CAR ASSEMBLY

1 Port AMEC Unsealed Connection System

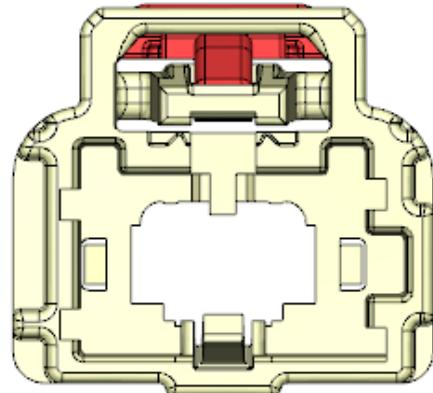
**FEMALE CONNECTOR
ASSEMBLY**



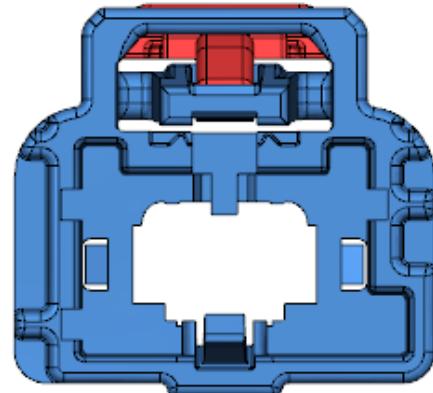
VIEW OF VERSIONS



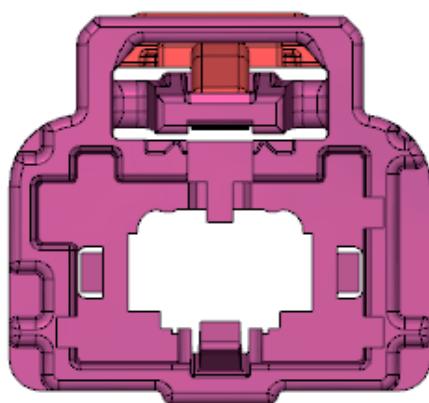
TYPE 101 – KEY OPTION A



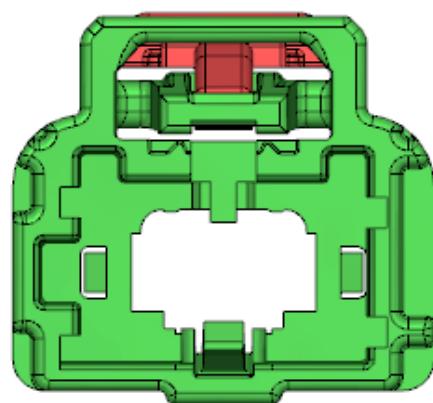
TYPE 102 – KEY OPTION B



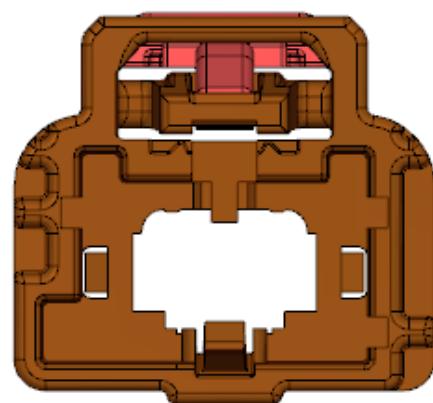
TYPE 103 – KEY OPTION C



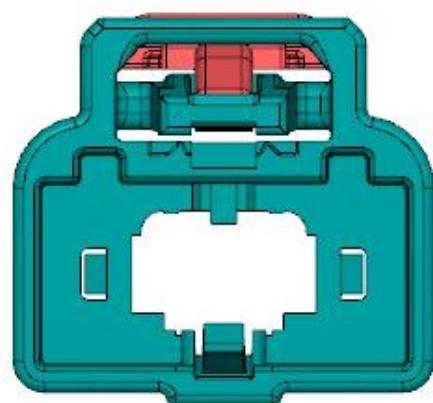
TYPE 104 – KEY OPTION D



TYPE 105 – KEY OPTION E



TYPE 106 – KEY OPTION F



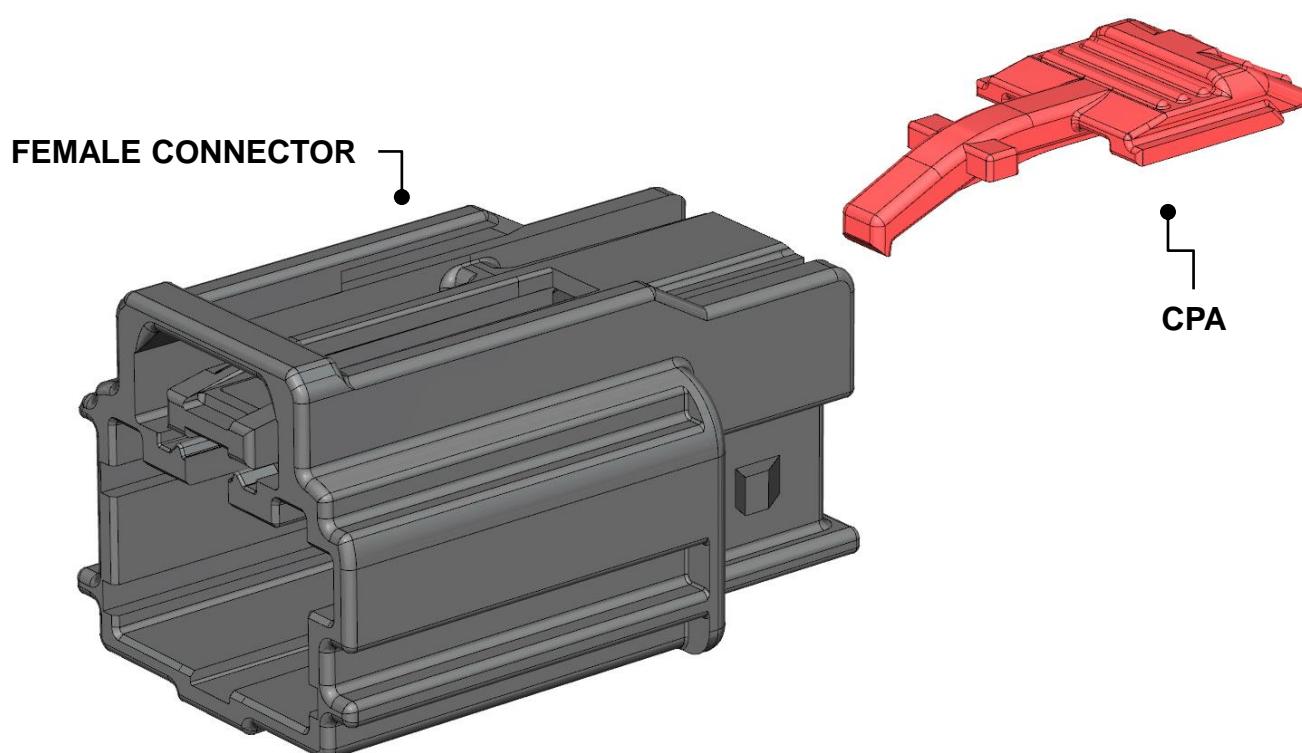
TYPE 109 – KEY OPTION Z

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

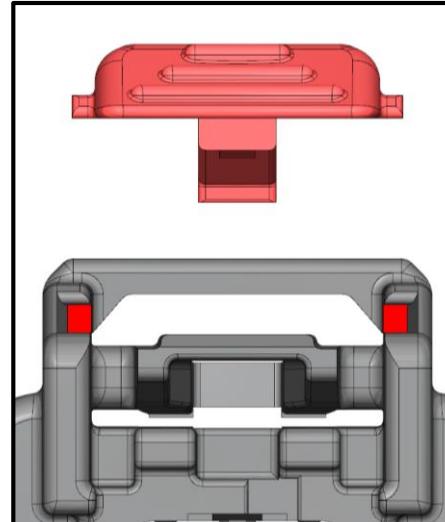
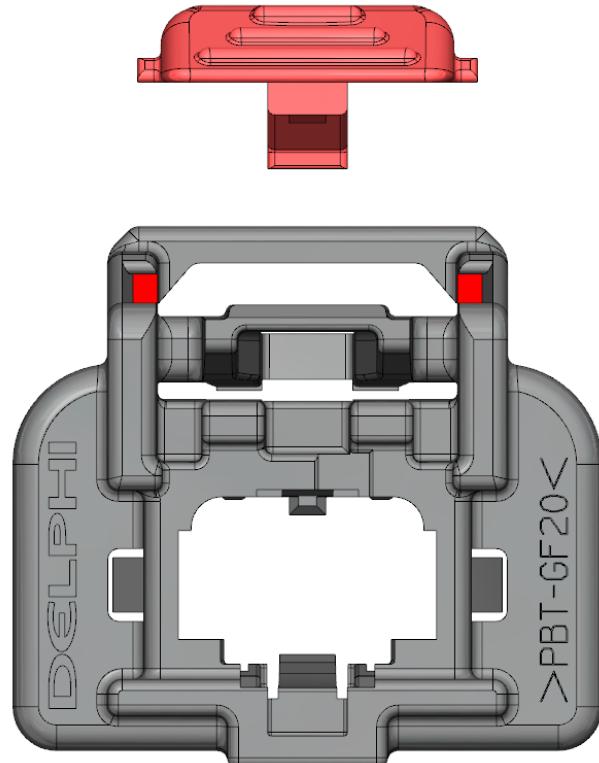
QUANTITY	COMPONENTS
1	FEMALE CONNECTOR
1	CPA



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

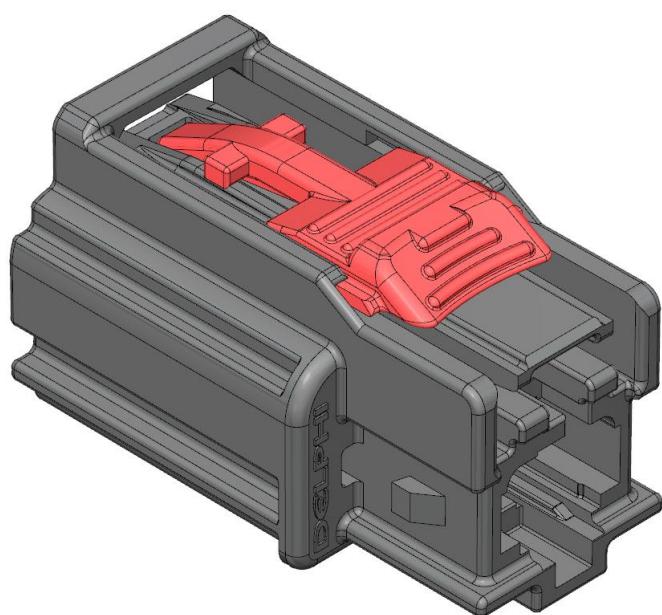
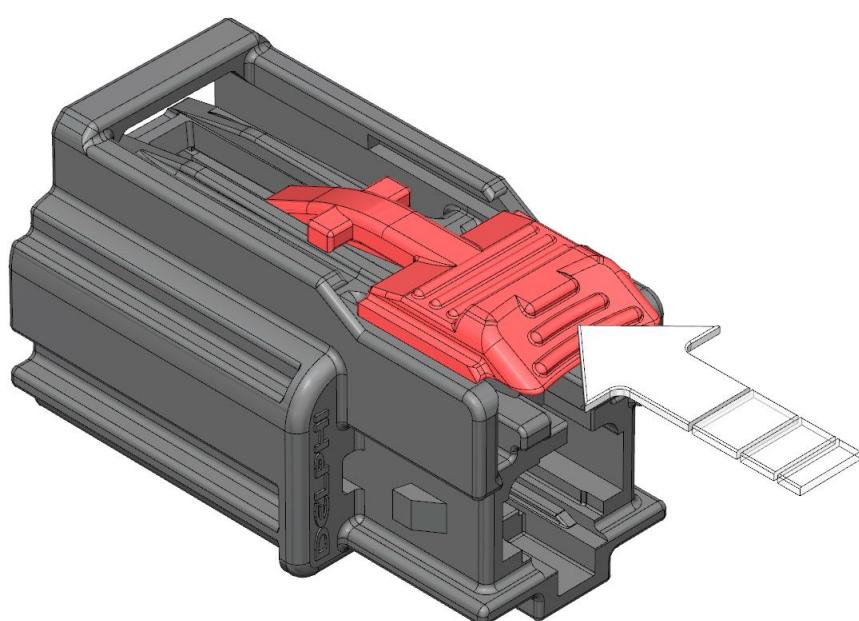


DETAIL

STEP 1b – Insert CPA to Pre-Stage Position

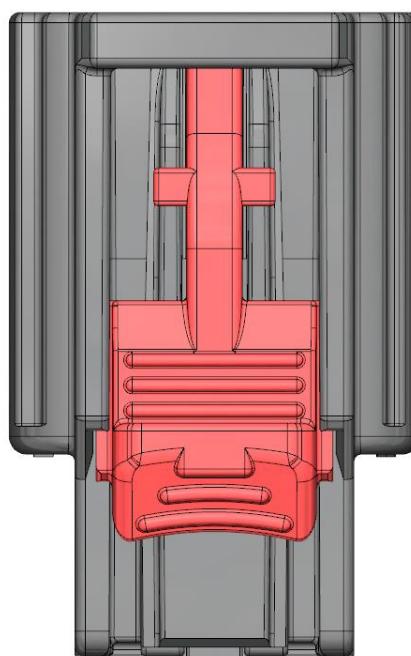
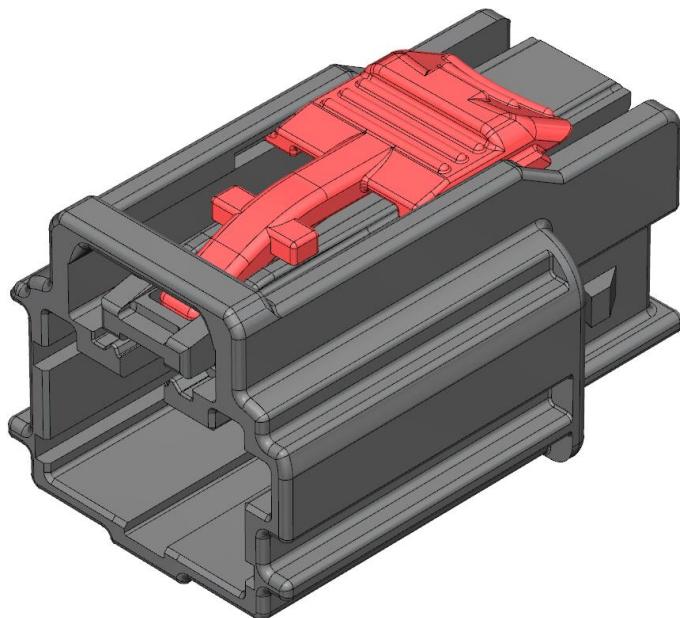
INSERT CPA ONTO CONNECTOR BY SLIDING THE CPA RIBS INTO THE CONNECTOR SLOTS

VERIFY AUDIBLE CLICK



CPA IS NOW IN
PRE-STAGE POSITION

FEMALE CONNECTOR ASSEMBLY – COMPLETED



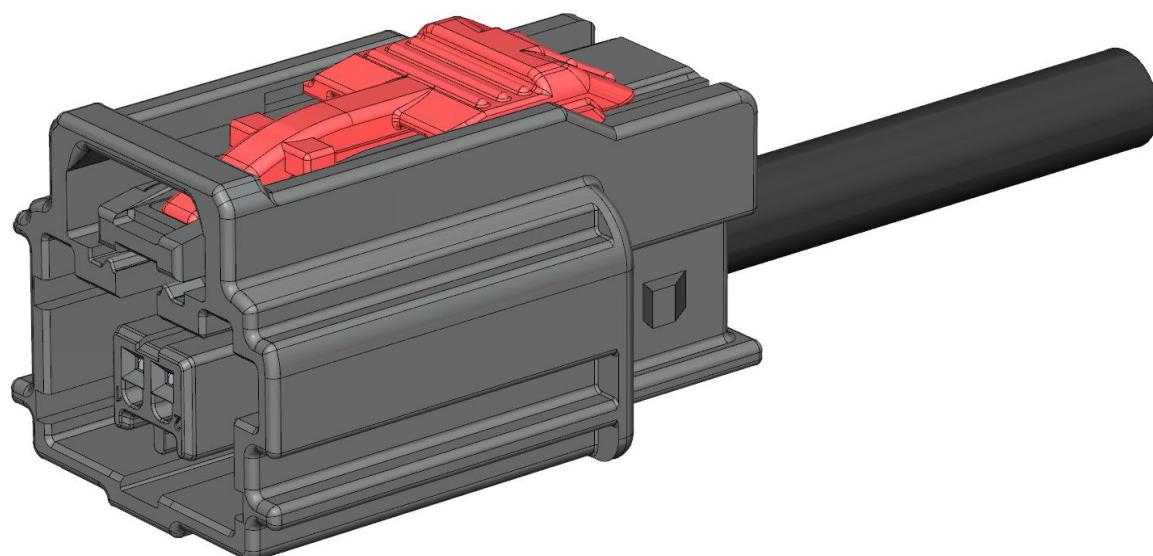
**ASSEMBLY OF THE
FEMALE HARNESS ASSEMBLY**

PRE - ASSEMBLY

HARNESS ASSEMBLY

CAR ASSEMBLY

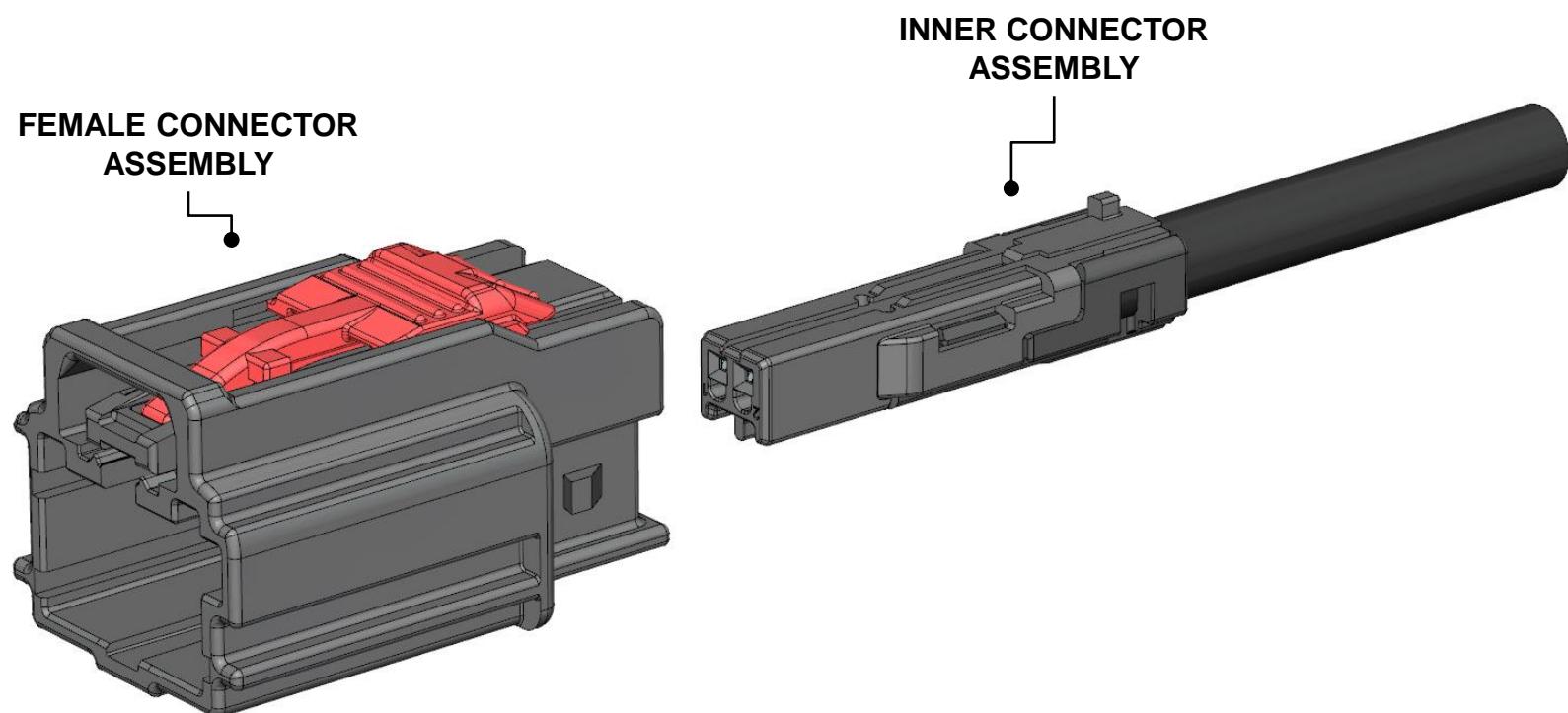
**1 Port AMEC Unsealed
Connection System**



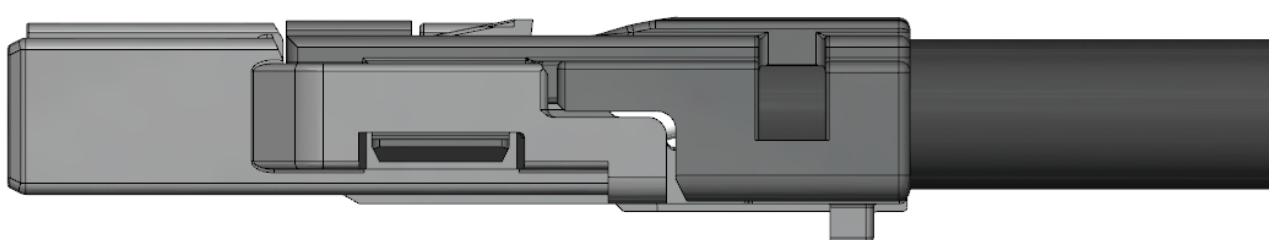
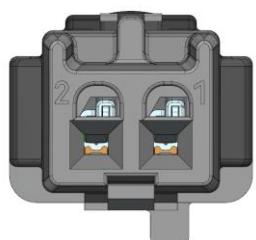
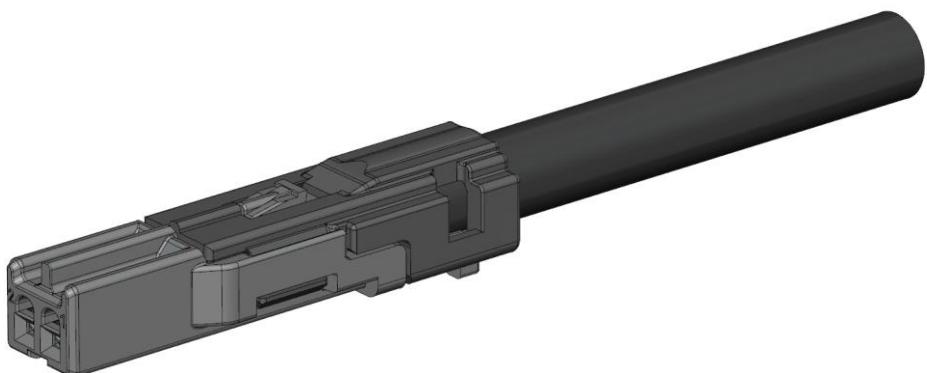
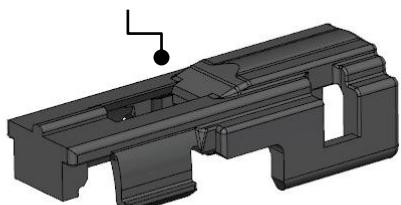
LIST OF COMPONENTS & EXPLODED VIEW

QUANTITY	COMPONENTS
1	FEMALE CONNECTOR ASSEMBLY
1	INNER CONNECTOR ASSEMBLY

REFER TO LATEST DRAWINGS FOR PART NUMBERS AND DETAILS

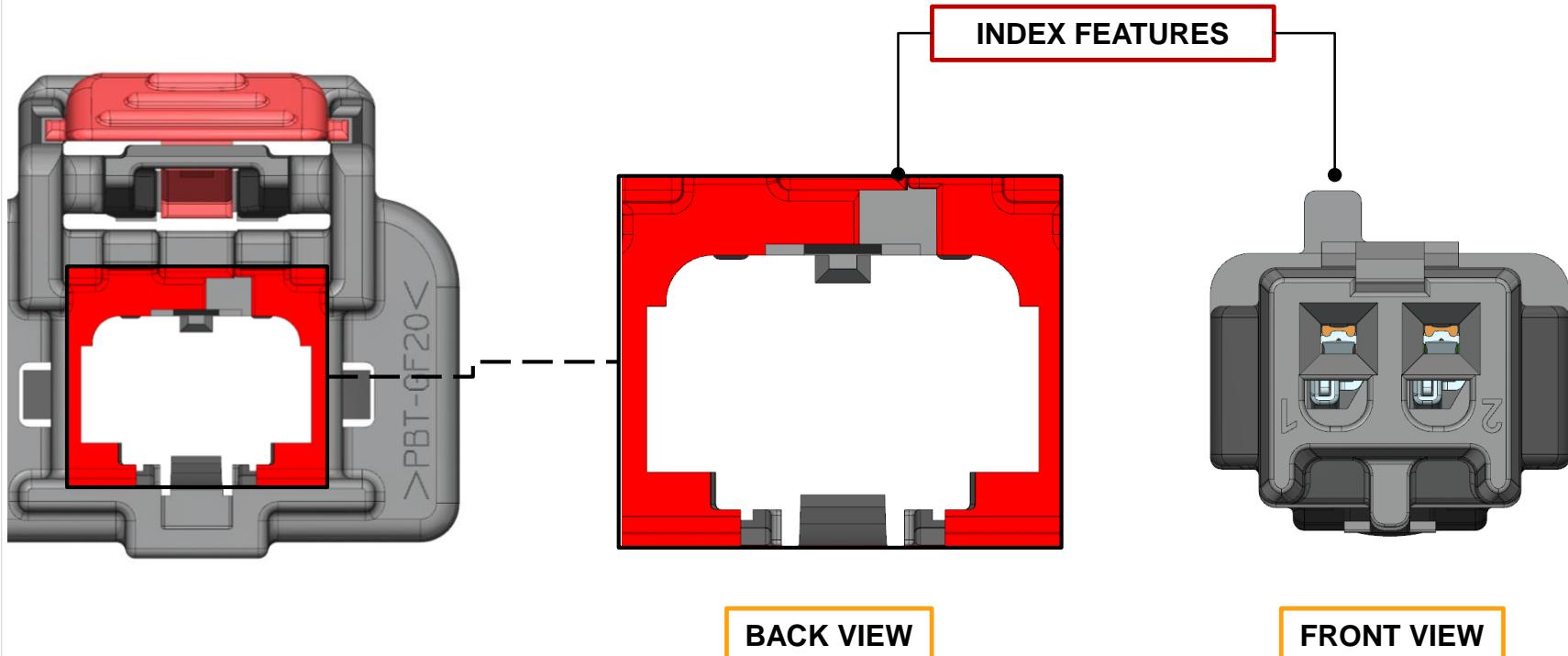


Pictures used in this Assembly Manual and original parts may differ in some details, these differences have no influence on the assembly process.

STATUS BEFORE ASSEMBLY – INNER CONNECTOR ASSEMBLY**INNER CONNECTOR ASSEMBLY CONSIST OF:****LOCK ISL****TERMINAL ASSEMBLY WITH 2 CTS
0.50 TERMINALS****INNER
CONNECTOR**

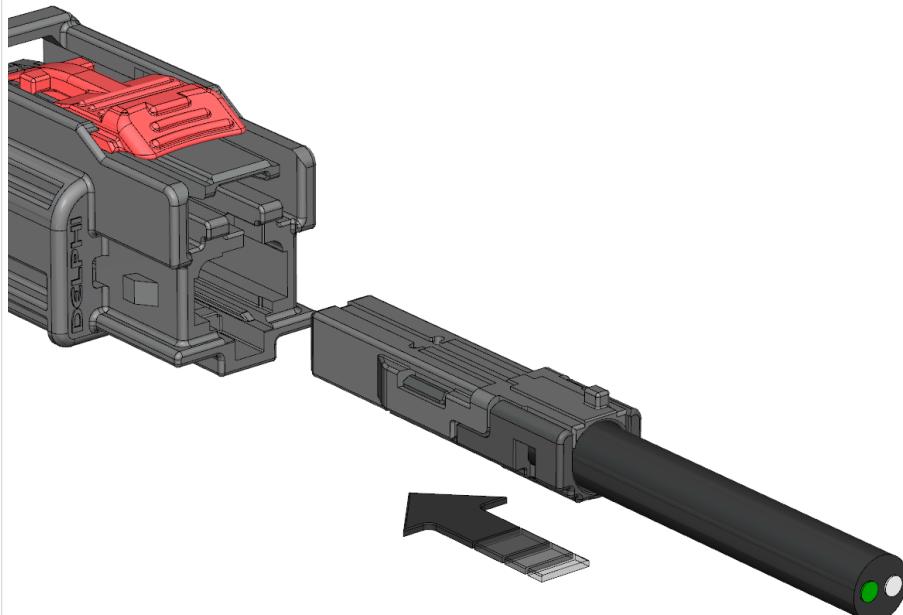
STEP 1 – Align Inner Connector Assembly with the Female Connector Assembly

IDENTIFY INDEX FEATURES AND THE PROPER ORIENTATION OF THE INNER CONNECTOR

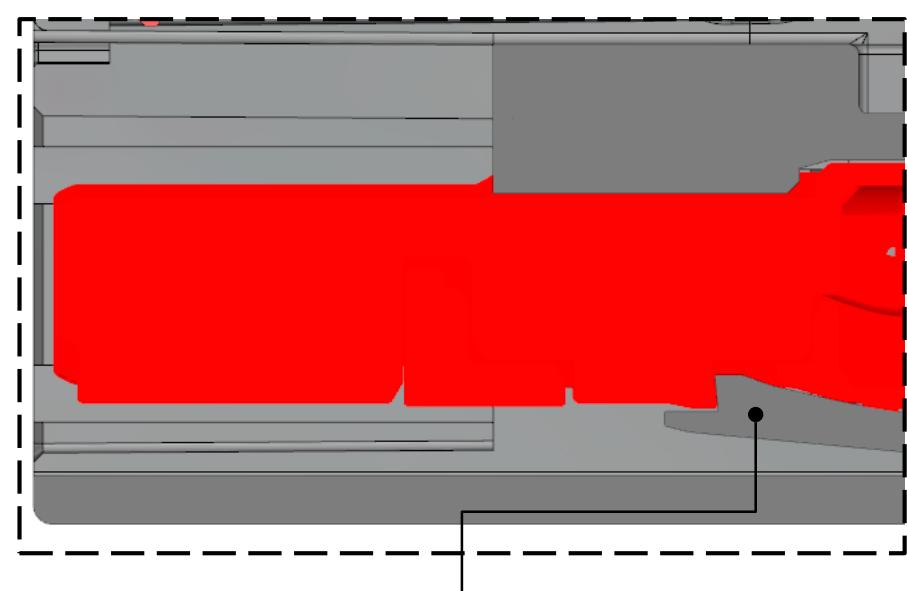


STEP 2a – Install the Inner Connector Assembly

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



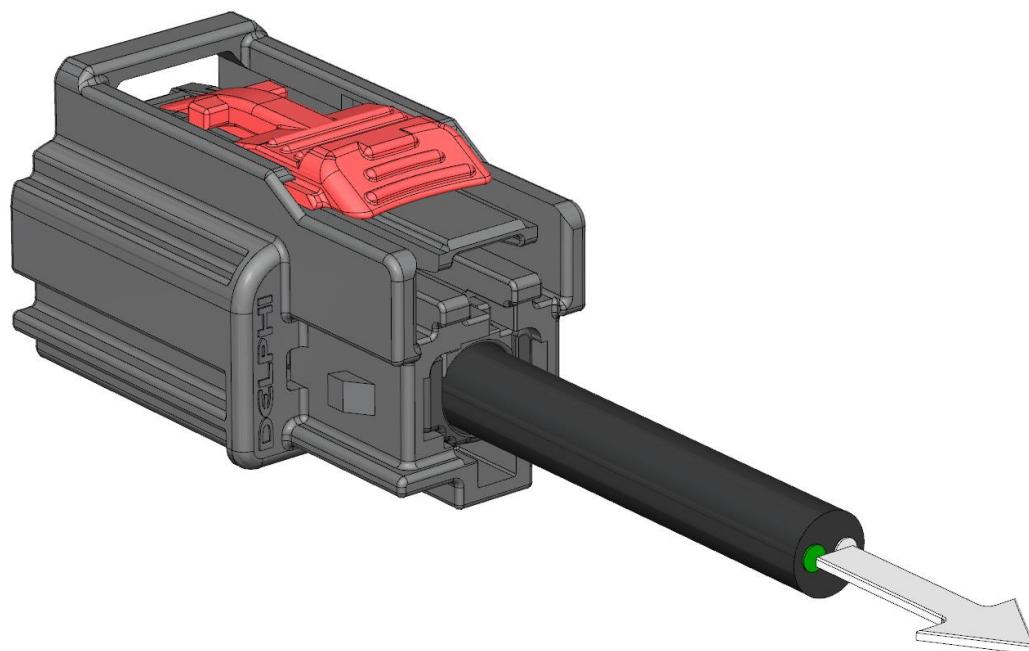
2 VERIFY AUDIBLE CLICK



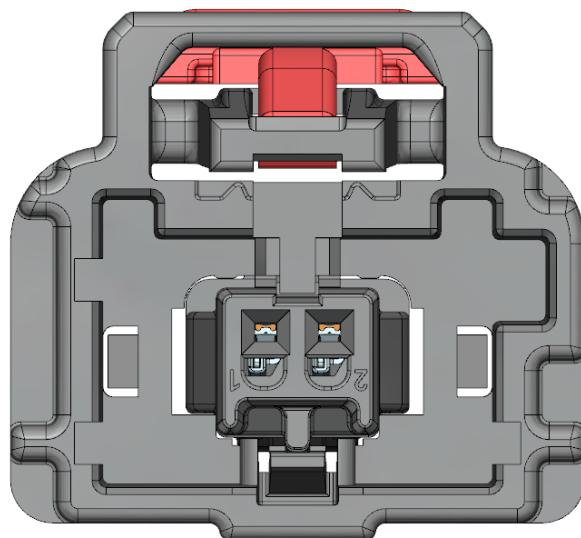
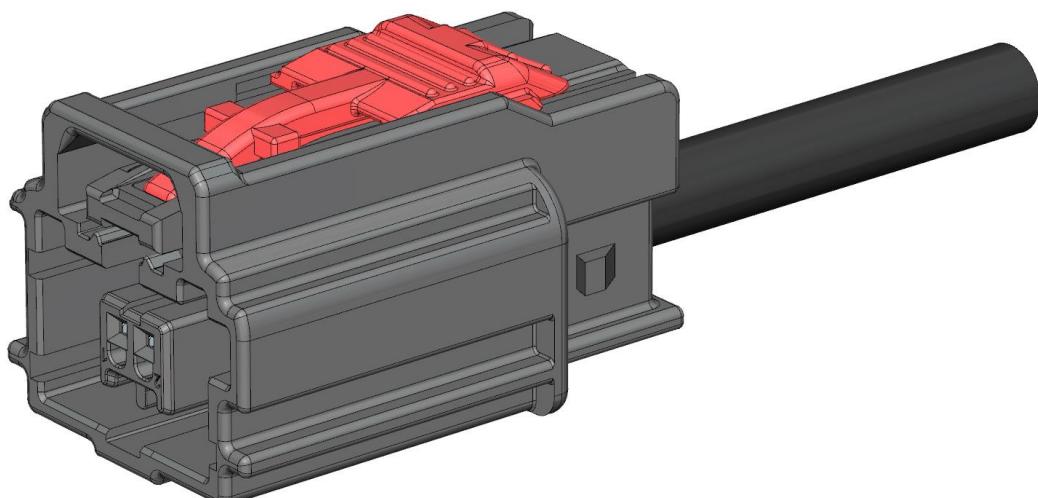
STEP 2b – Install the Inner Connector Assembly

3

**GENTLY PULL ON THE CABLE TO VERIFY
THE LOCKING SYSTEM**



FEMALE HARNESS ASSEMBLY – COMPLETED



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

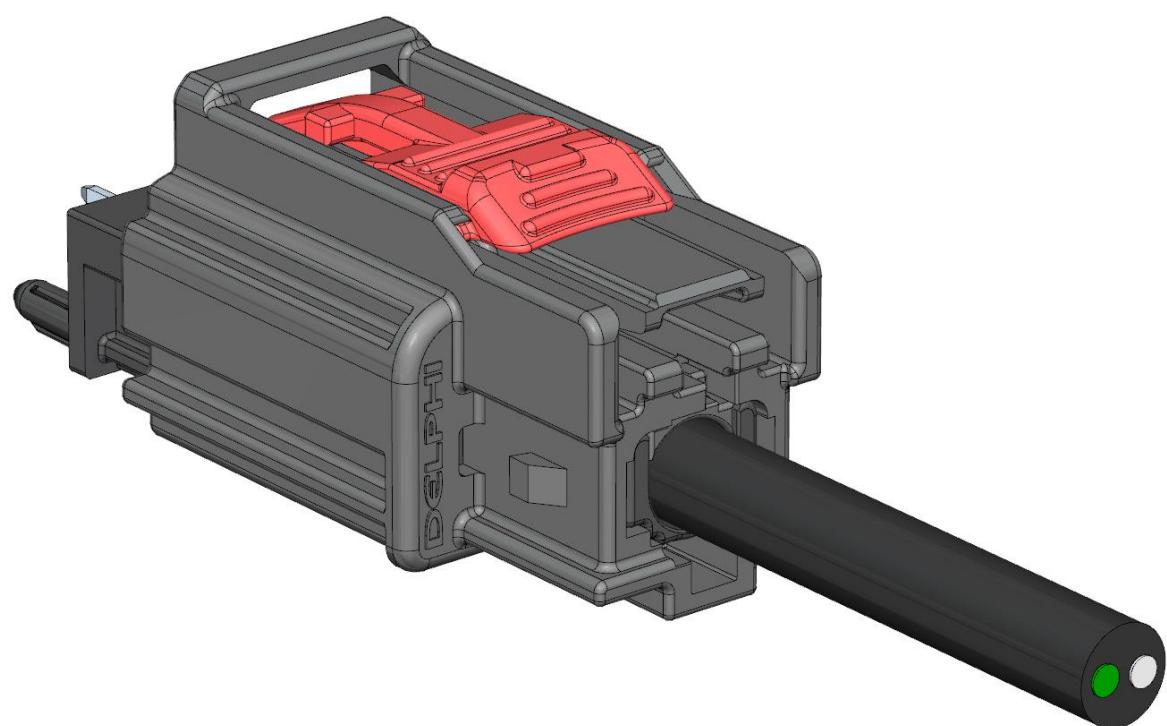
**ASSEMBLY OF THE
CONNECTION SYSTEM**

PRE - ASSEMBLY

HARNESS ASSEMBLY

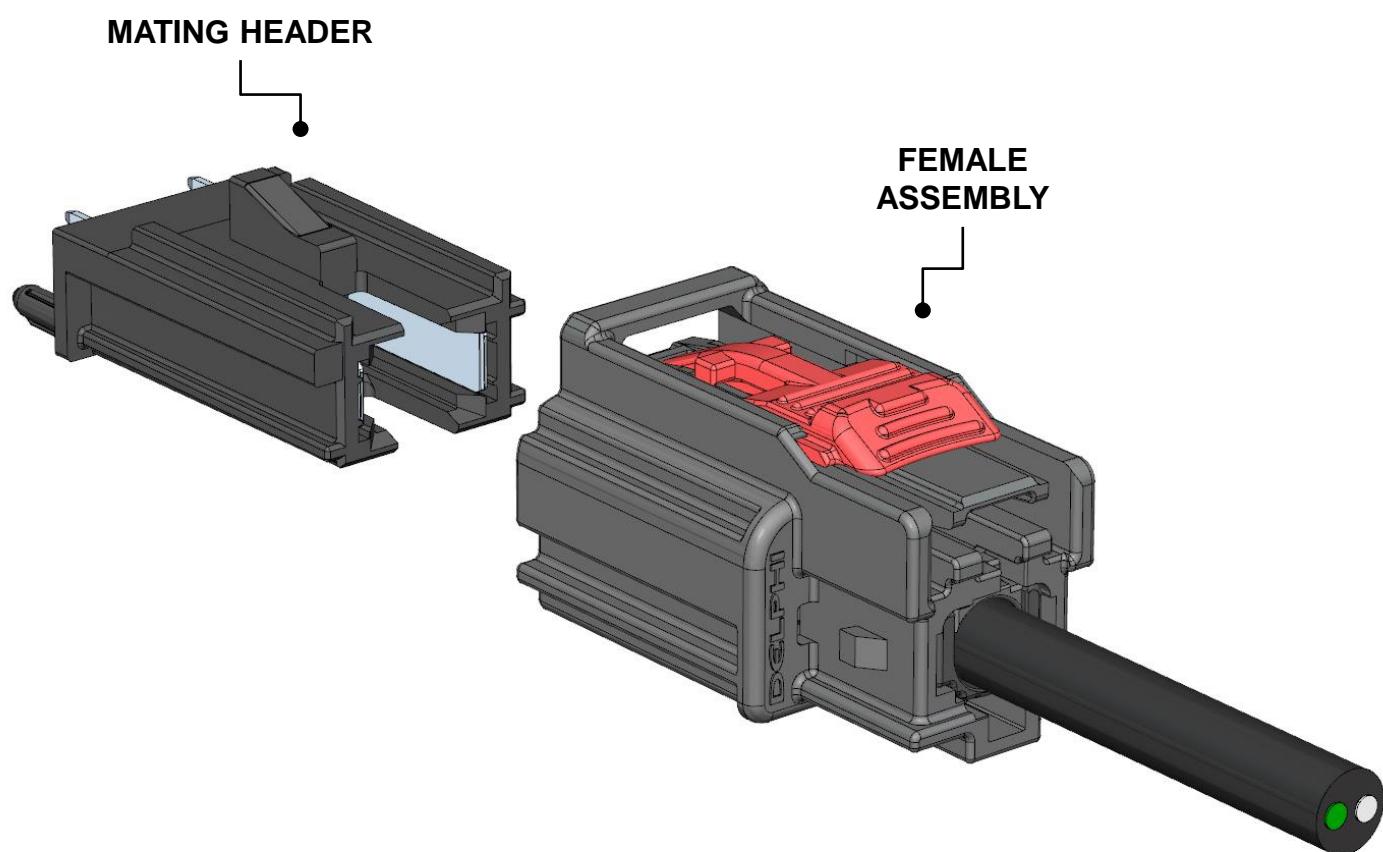
CAR ASSEMBLY

1 Port AMEC Unsealed Connection System



LIST OF COMPONENTS & EXPLODED VIEW

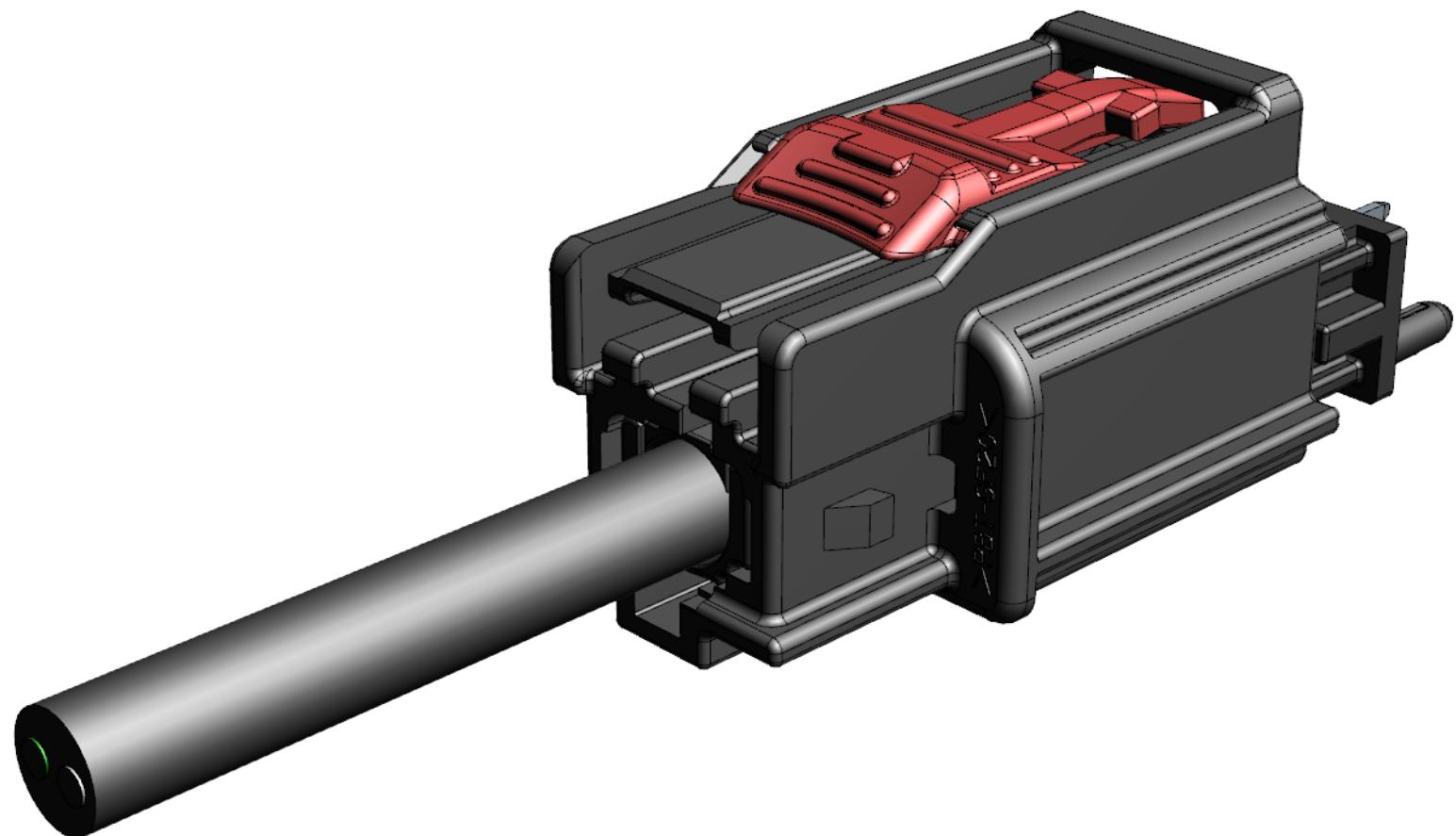
QUANTITY	COMPONENTS
1	FEMALE ASSEMBLY
1	MATING HEADER



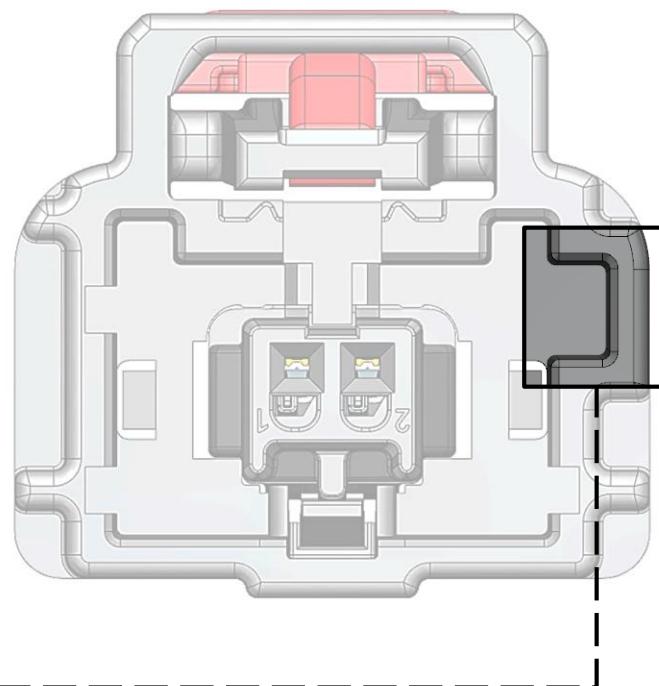
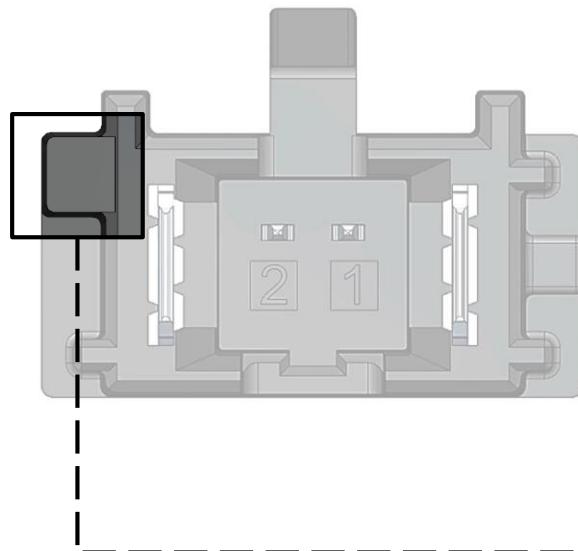
Pictures used in this Assembly Manual and original parts may differ in some details. These differences have no influence on the assembly process.

3D MODEL VIEW

CLICK IMAGE TO START
3D VISUALIZATION



STEP 1 – Identify Index Features

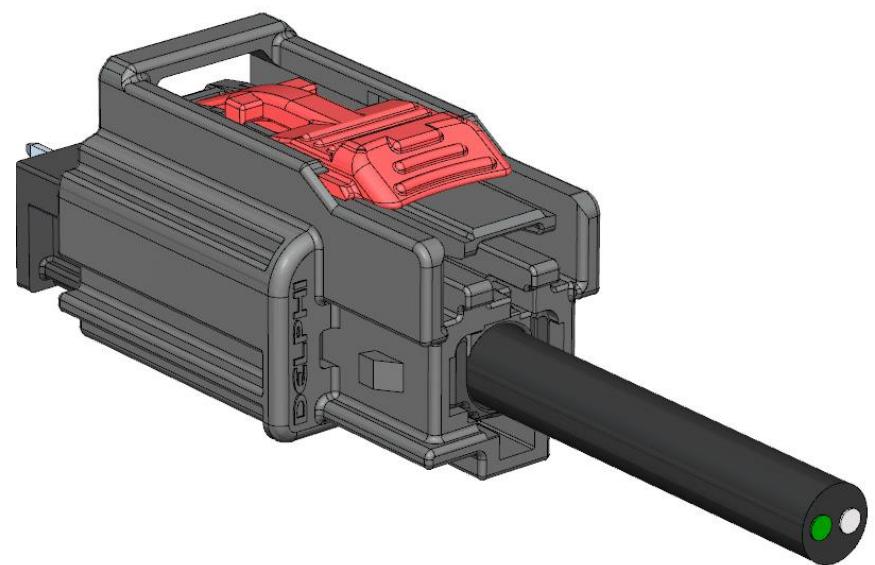
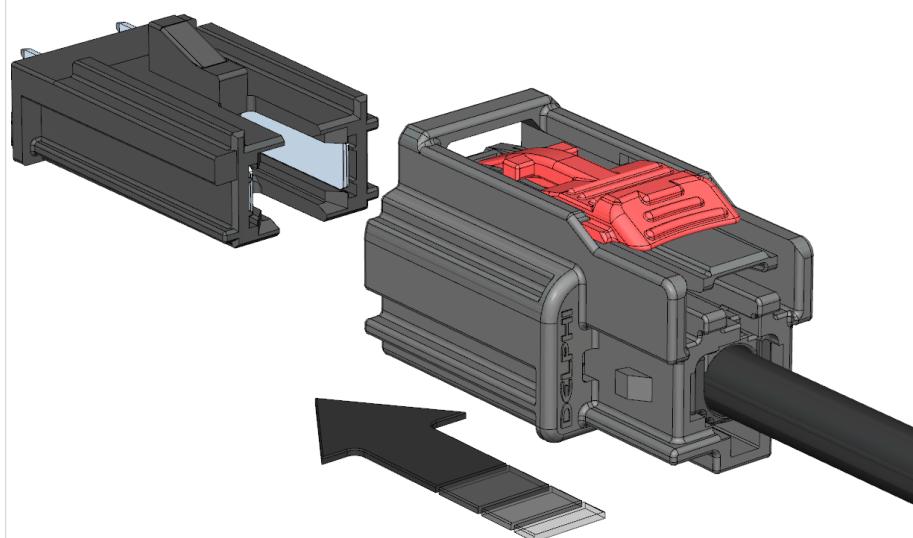


FRONT VIEWS

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

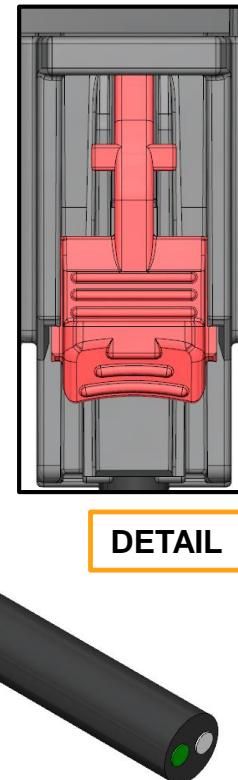
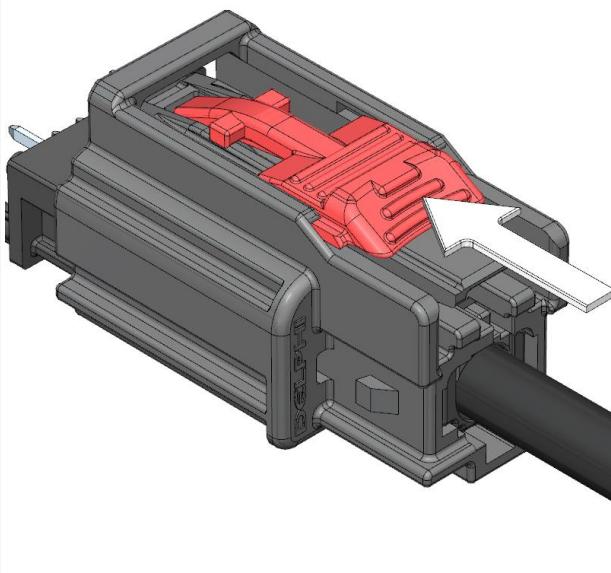
**IMPORTANT! IF THE INDEXES DON'T LINE UP,
DO NOT CONTINUE**

VERIFY AUDIBLE CLICK

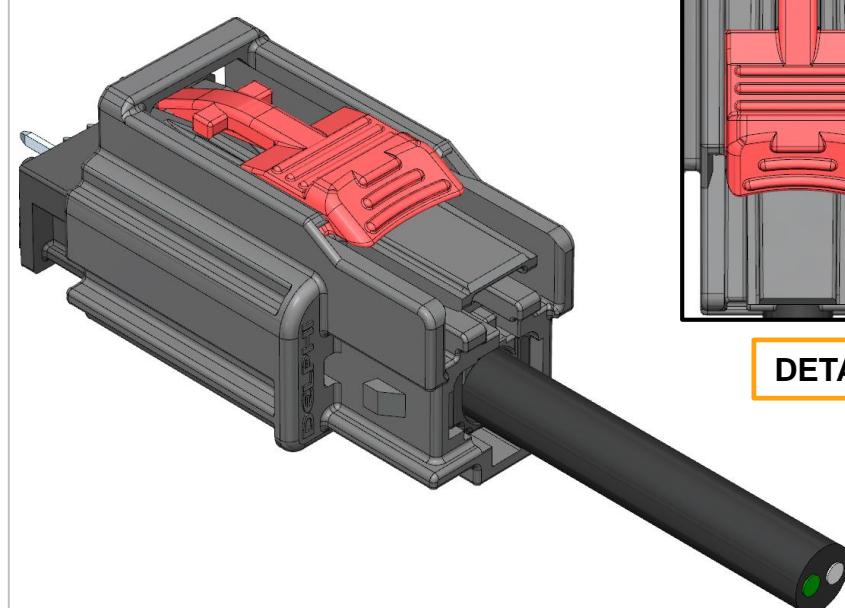


STEP 3 – Lock CPA to Full-Stage Position

SLIDE THE CPA FORWARD

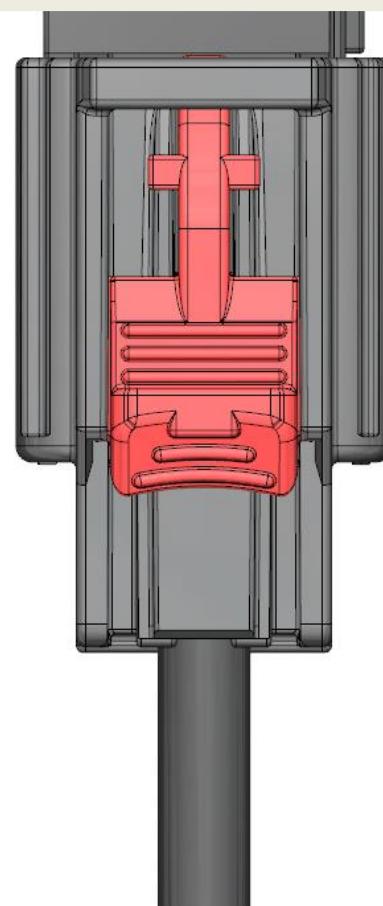
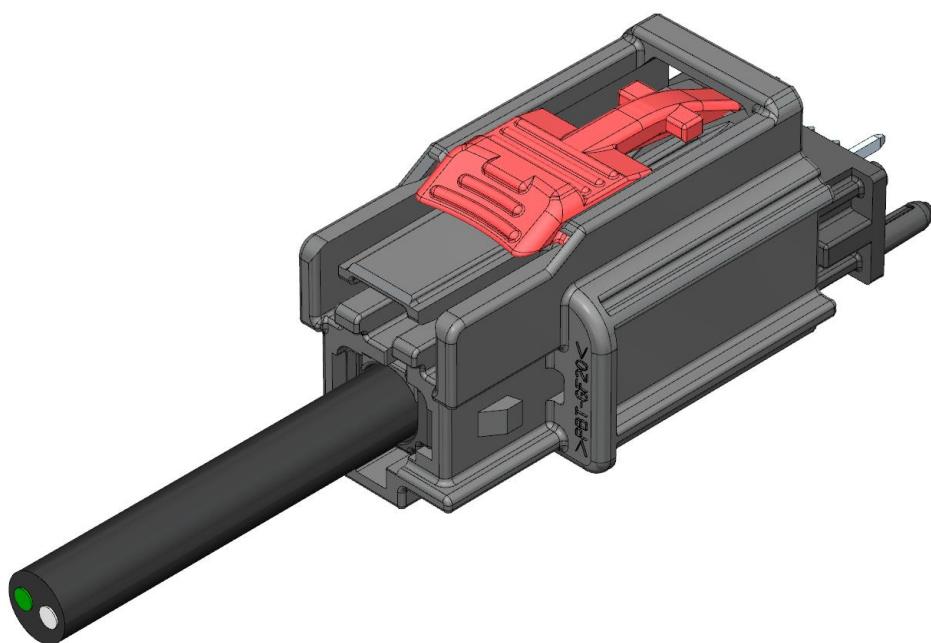


VERIFY AUDIBLE CLICK



CPA IS NOW IN FULL-STAGE POSITION

CONNECTION SYSTEM ASSEMBLY – COMPLETED



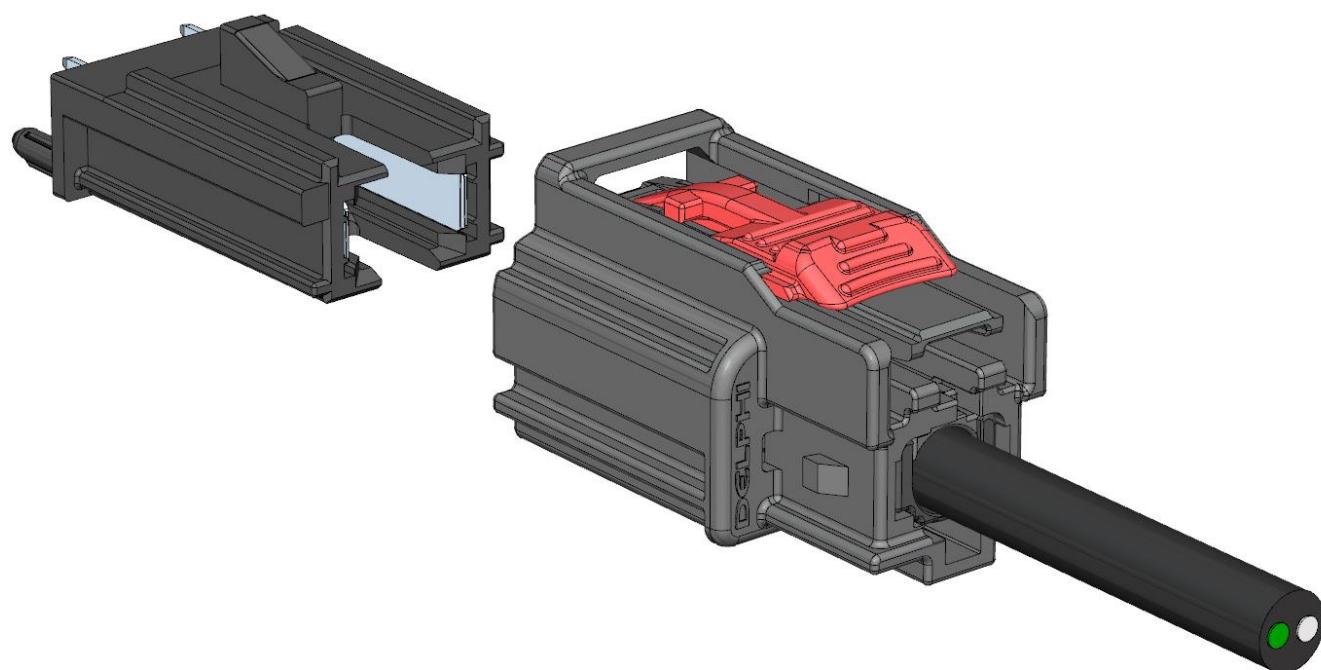
**DISASSEMBLY OF THE
CONNECTION SYSTEM**

PRE - ASSEMBLY

HARNESS ASSEMBLY

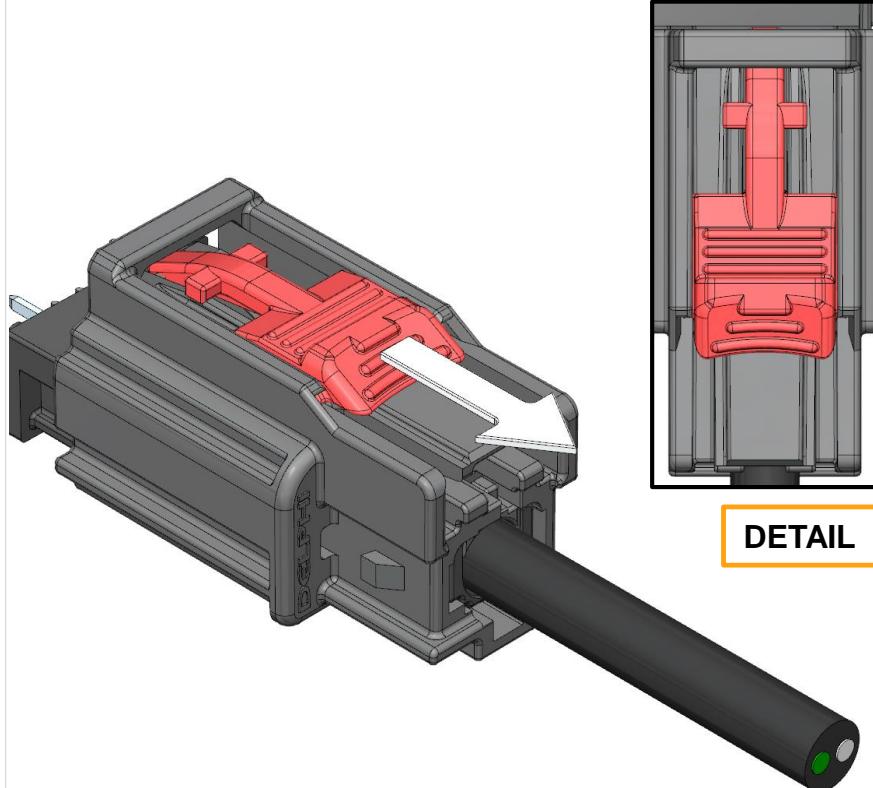
CAR ASSEMBLY

**1 Port AMEC Unsealed
Connection System**



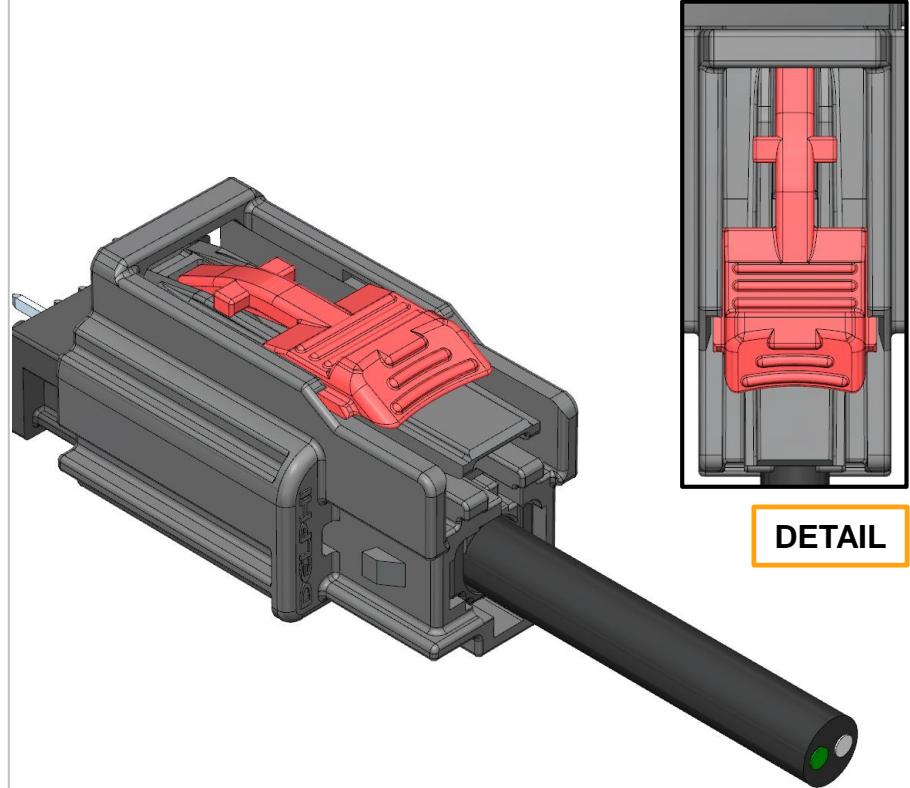
STEP 1 – Move CPA to Pre-Stage Position

PUSH DOWN ON THE CPA AND SLIDE IT BACK



DETAIL

VERIFY AUDIBLE CLICK

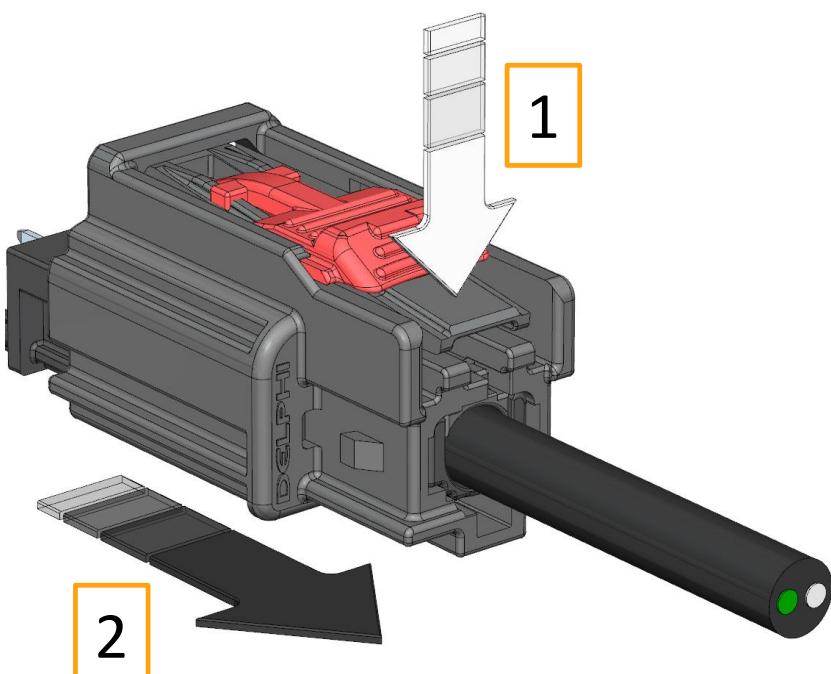


DETAIL

CPA IS NOW IN PRE-STAGE POSITION

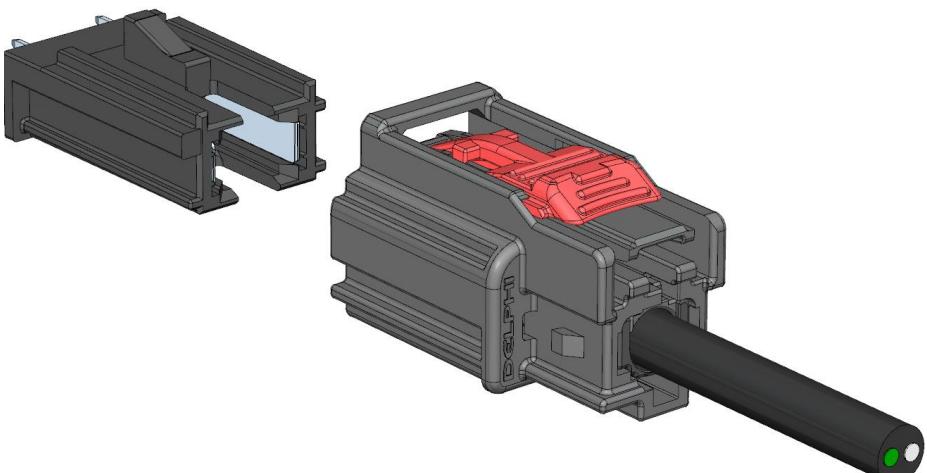
STEP 2 – Disconnect

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



1

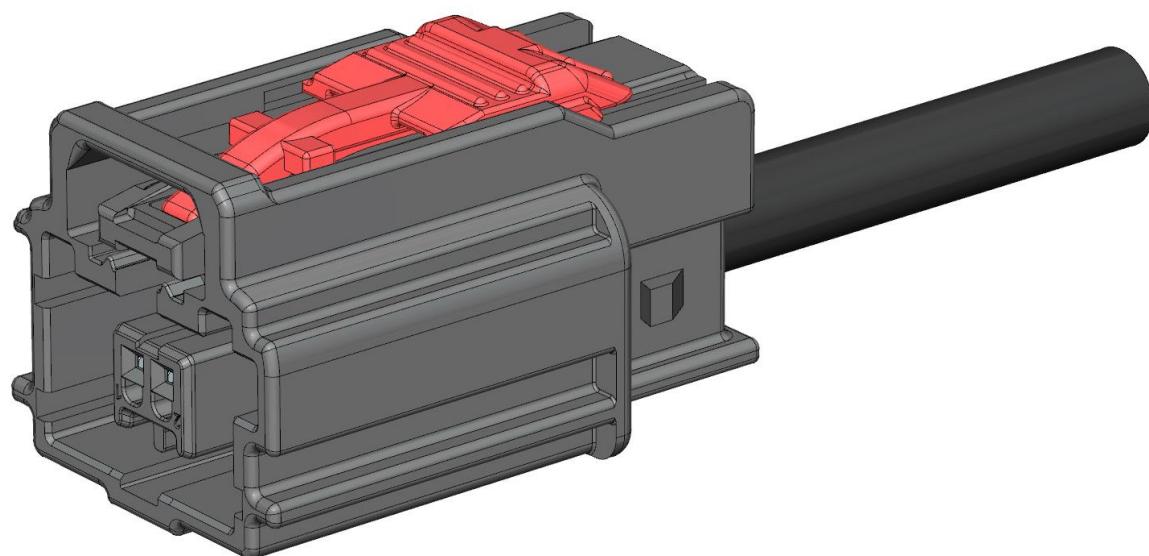
2



CONNECTION SYSTEM DISASSEMBLY – COMPLETED

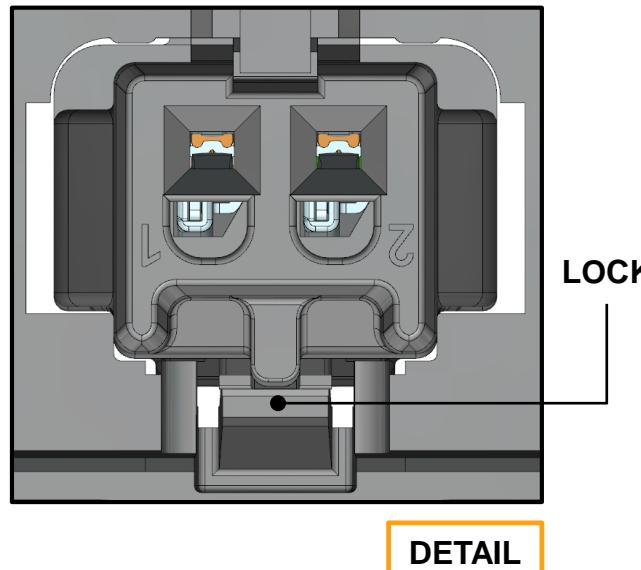
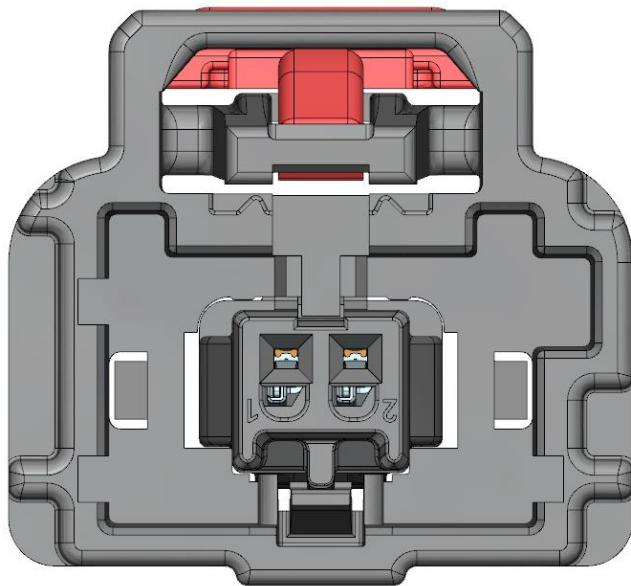
**REPAIR / REPLACEMENT OF
THE FEMALE ASSEMBLY**

1 Port AMEC Unsealed Connection System



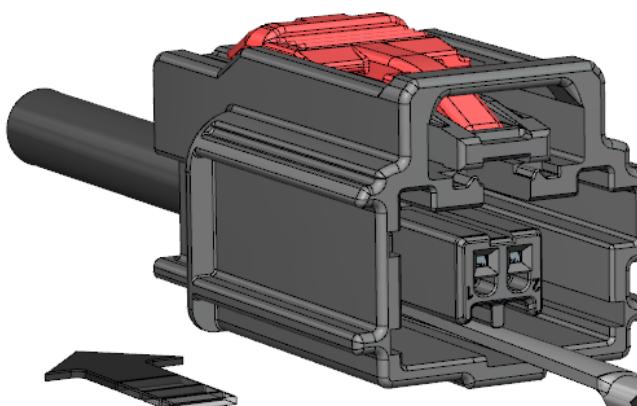
INNER CONNECTOR ASSEMBLY REPLACEMENT (Remove) – STEP 1a

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



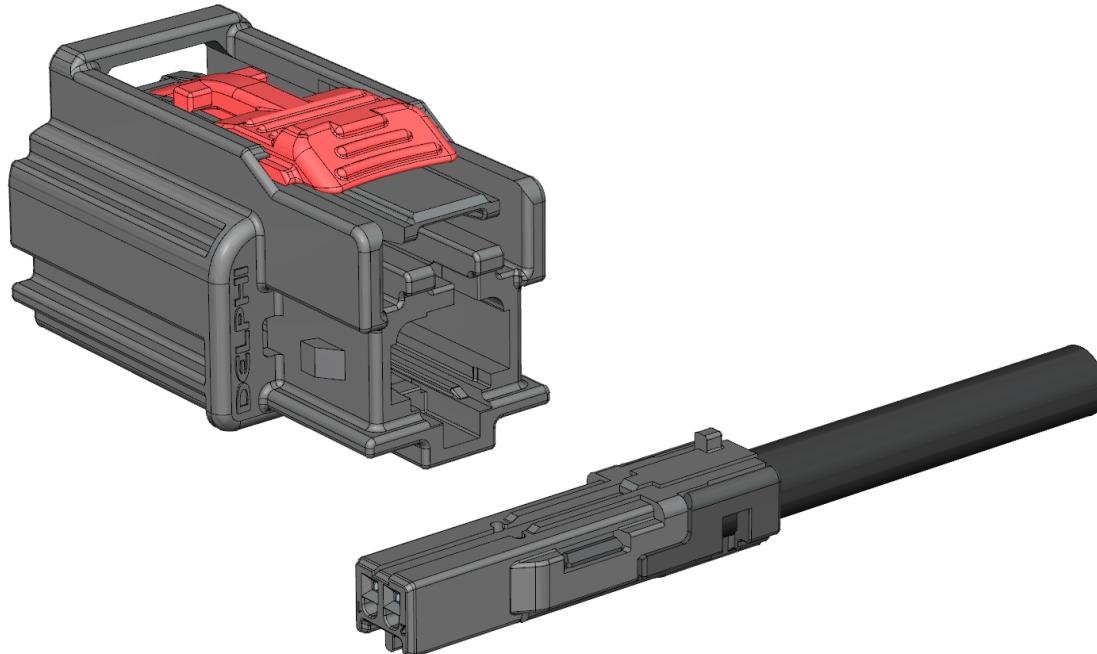
INNER CONNECTOR ASSEMBLY REPLACEMENT (Remove) – STEP 1b

**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

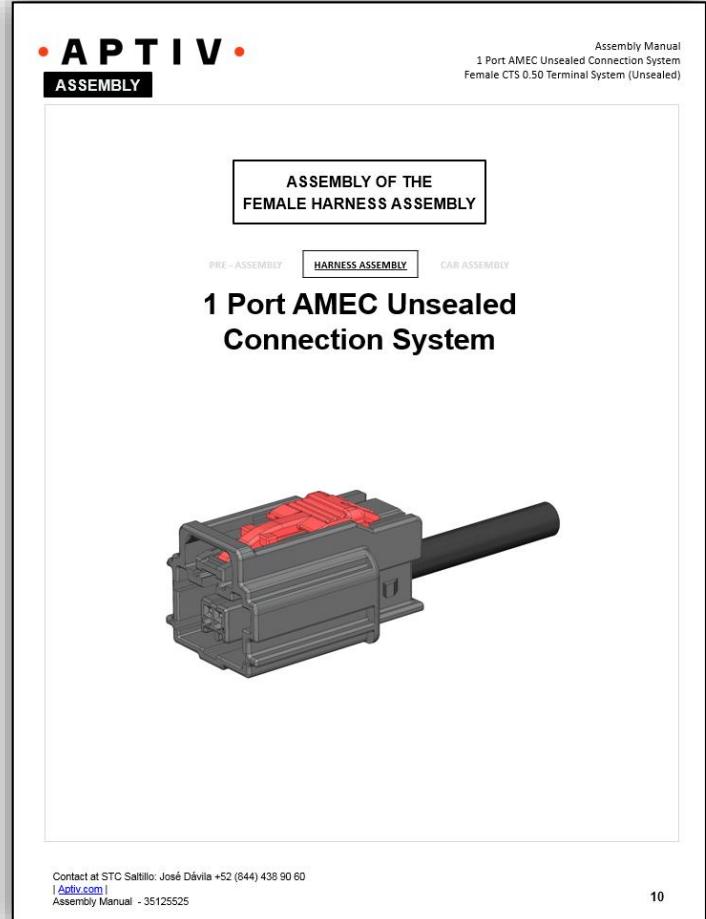
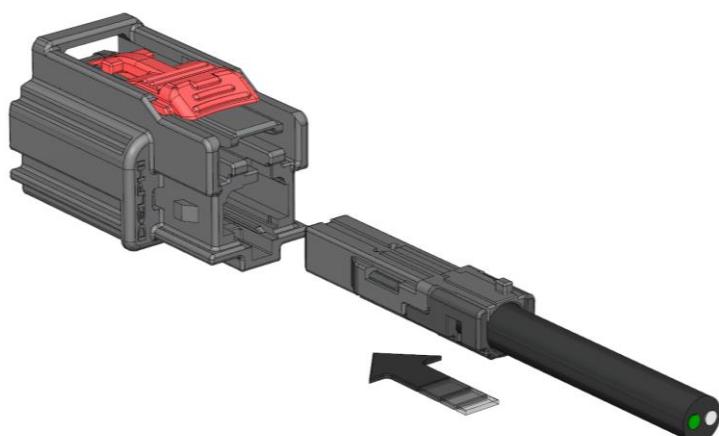
INNER CONNECTOR ASSEMBLY REPLACEMENT (Remove) – STEP 1c



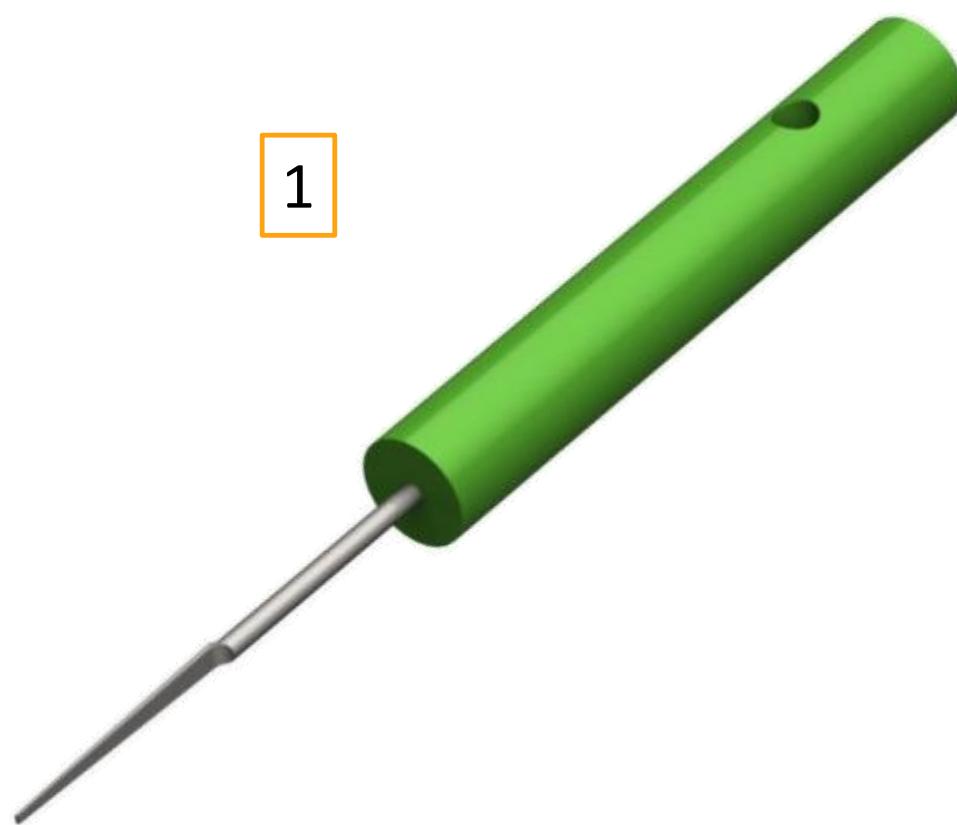
INNER CONNECTOR
ASSEMBLY REMOVED

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