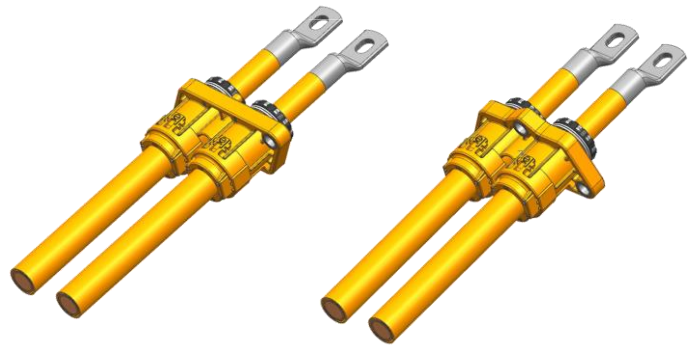


• APTIV •

Assembly Manuals

AK pass through 70mm² 2way
(Hardness use only)



D

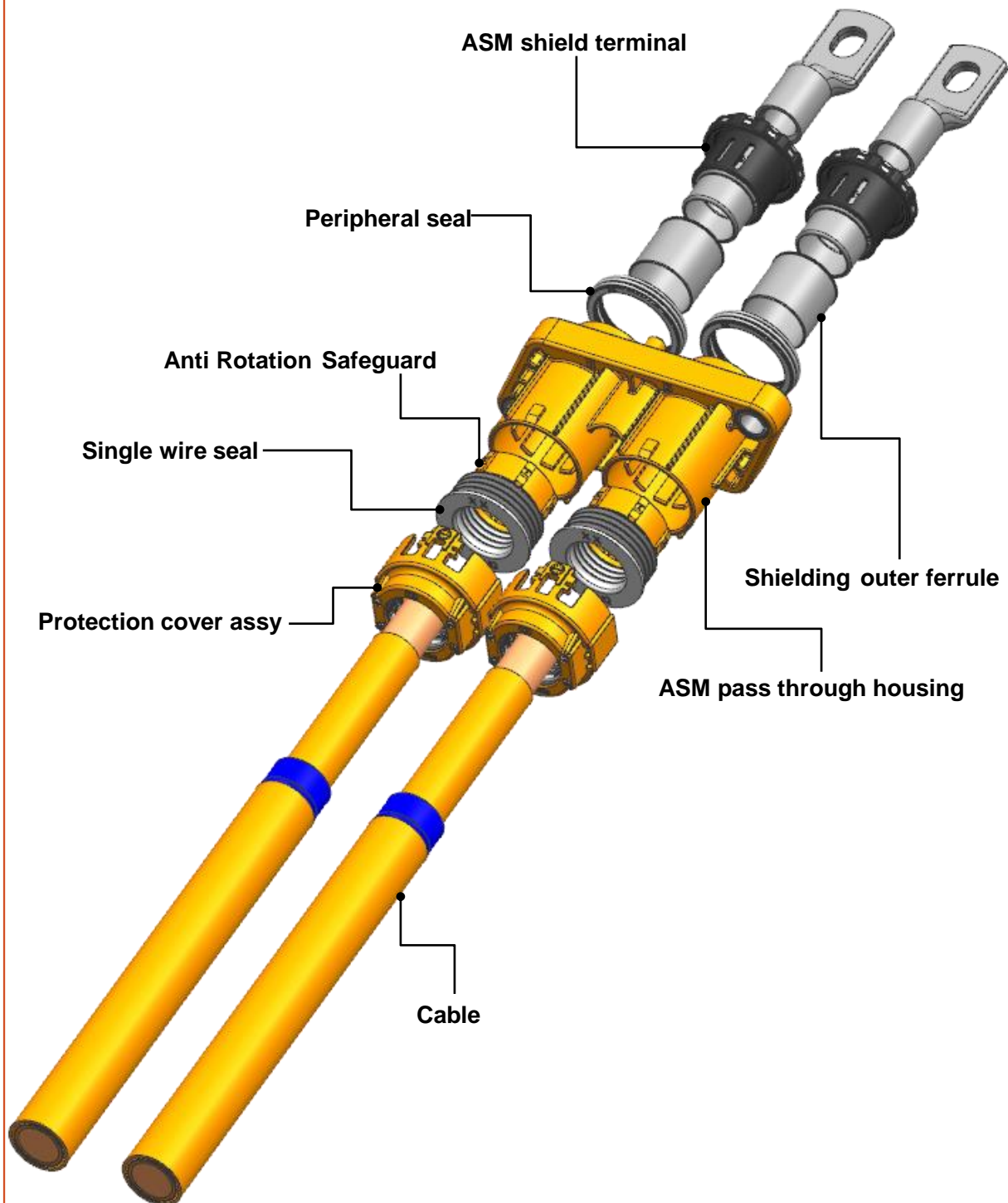
01 – Nov 08, 2019

TABLE OF CONTENTS

<u>Components (exploded view)</u>	3
<u>List of components</u>	6
ASSEMBLY SEQUENCE	
<u>Cable specification</u>	7
<u>Step 1: inserting anti rotation safeguard</u>	8
<u>Step 2: stripping cables</u>	9
<u>Step 3: stripping ASM pass through Components</u>	10
<u>Step 4: inserting ASM shield terminals and ring terminals</u>	11
<u>Step 5: crimping terminal</u>	12
<u>Step 6: inserting shielding inner ferrules and ASM shield terminals</u>	13
<u>Step 7: crimping shielding inner ferrule and ASM shield terminal</u>	14
<u>Step 8: inserting peripheral seals and ASM pass through housing</u>	15
<u>Step 9: putting components to install tools</u>	16
<u>Step 10: inserting cable seals</u>	17
<u>Step 11: inserting protection cover assys</u>	18
<u>Table of crimping machine</u>	19
<u>Revisions</u>	20

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 information is correct at the time of releasing. Reprinting or translation is not permitted without written permission from Aptiv. Copyright 2019 Aptiv. All rights reserved.

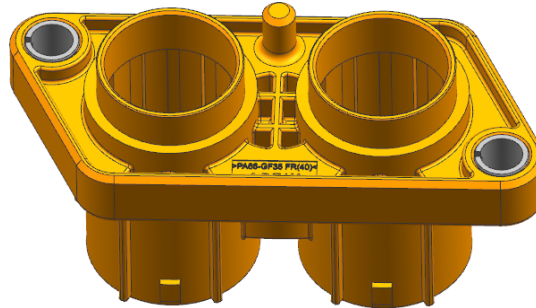
EXPLODED VIEW



**!!! Pictures used in this Assembly Manual and original parts may differ in some details,
This difference has no influence on the assembly process !!!**

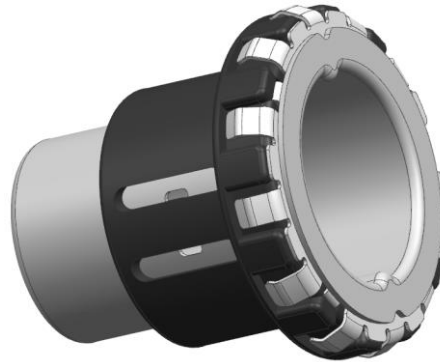
EXPLODED VIEW

Drawing 35197330

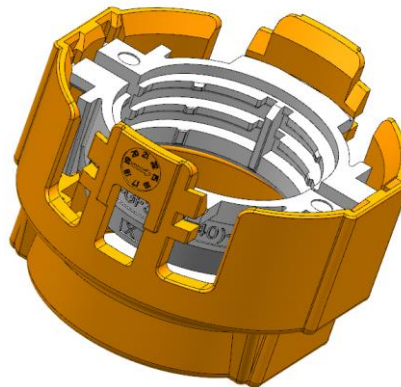


Drawing 35197712

Note: the left ASM shield terminals must be kept from the atmosphere in the package after taking some pieces out for assembly.



Drawing 35197332



!!! Pictures used in this Assembly Manual and original parts may differ in some details,
This difference has no influence on the assembly process !!!

EXPLODED VIEW

Drawing 35197331

Note: the left single wire seals must be kept from the atmosphere in the package after taking some pieces out for assembly.

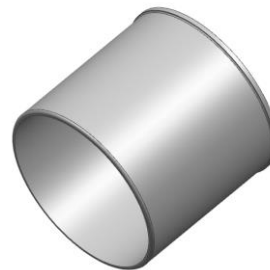


Drawing 35236725

Note: the left peripheral seals must be kept from the atmosphere in the package after taking some pieces out for assembly.



Drawing 35197334



Drawing 35212035



!!! Pictures used in this Assembly Manual and original parts may differ in some details, This difference has no influence on the assembly process !!!

LIST OF COMPONENTS

Component	DELPHI PART- NO.	AMOUNT
<i>ASM pass through housing</i>	<i>2 screw</i> 35197716	1 pc
	<i>3 screw</i> 35197715	1 pc
<i>ASM shield terminal</i>	35197711	2 pc
<i>Shielding outer ferrule</i>	35197311	2 pc
<i>Peripheral seal</i>	35197273	2 pc
<i>Single wire seal</i>	35197279	2 pc
<i>Protection cover assy</i>	35197706	2 pc
<i>Anti rotation safeguard</i>	35207823	2 pc

Component (kit assembled)	DELPHI PART-NO.	AMOUNT
<i>AK pass through</i>	<i>2 screw</i> 35219979	1
	<i>3 screw</i> 35305465	1

STORAGE CONDITIONS BEFORE ASSEMBLY	
TEMPERATURE:	+18°C to +55°C
RELATIVE HUMIDITY:	45% to 85%
ATMOSPHERIC PRESSURE:	860 hPa to 1060 hPa
STORAGE TIME:	min. 24 hours

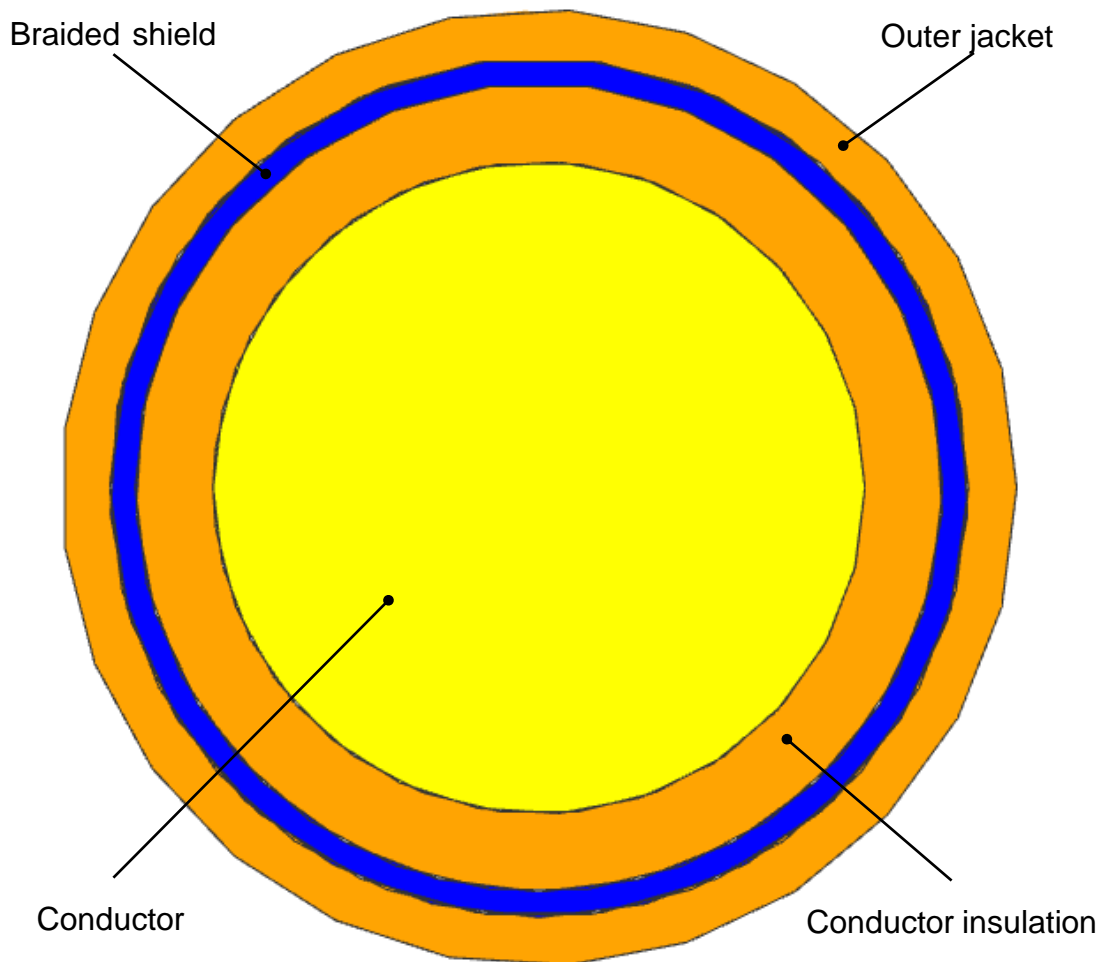
CABLE SPECIFICATION

Cable supplier: COROPLAST FHLR2GCB2G

Cable cross section: 70mm²

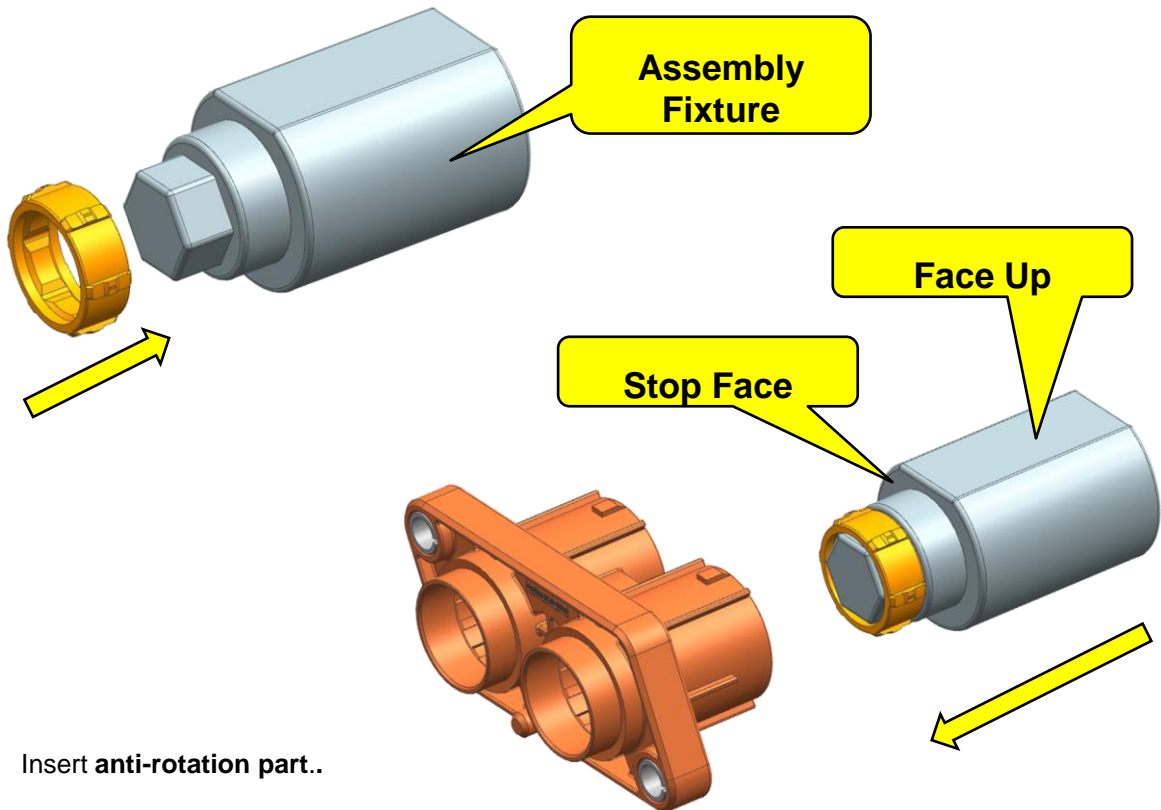
Supplier cable PN: 9-2621

Cable supplier: Coroplast

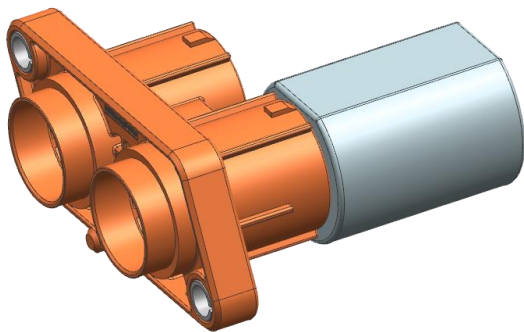


STEP 1 – INSERTING ANTI-ROTATION SAFEGURD

A
S
S
E
M
B
L
Y



1



Hand tool refer to:

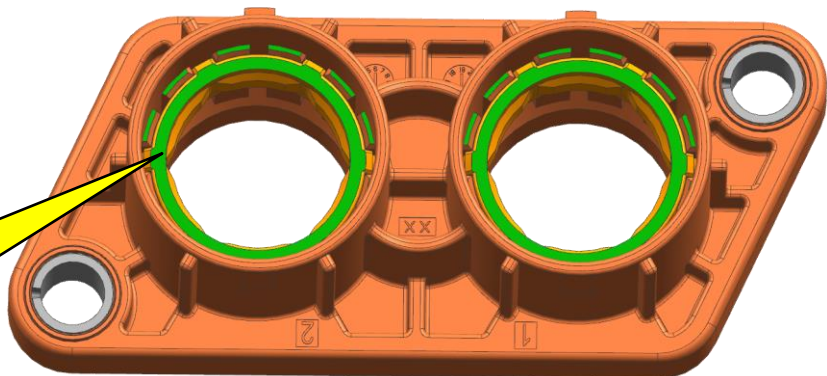
P/N 35415063

D/N 35415063 -CUS01-S01

Note:

If you want to get the crimping tool, please contact APTIV Manufacturing Engineer.

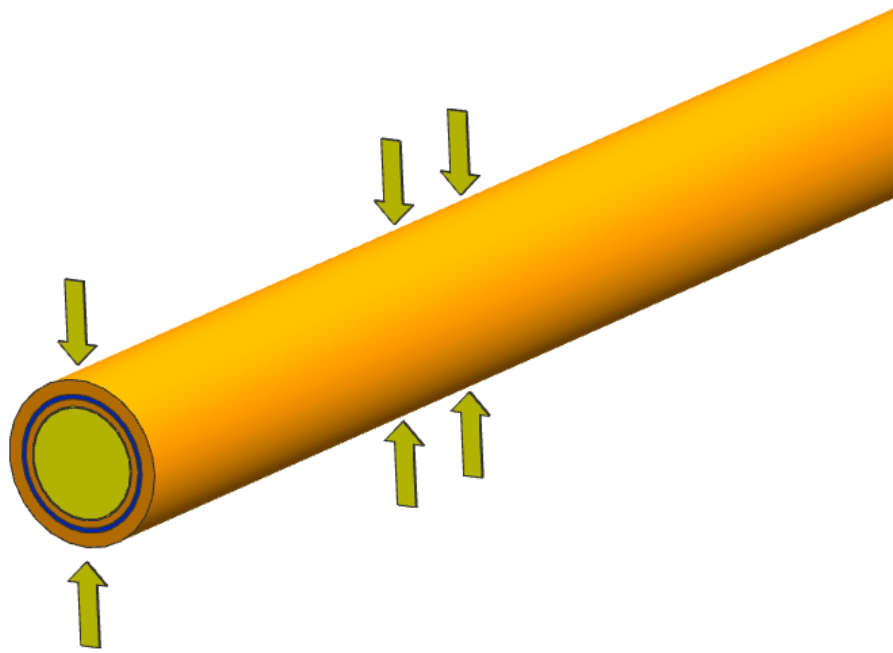
The faces marked with green are coplanar.



Step completed.

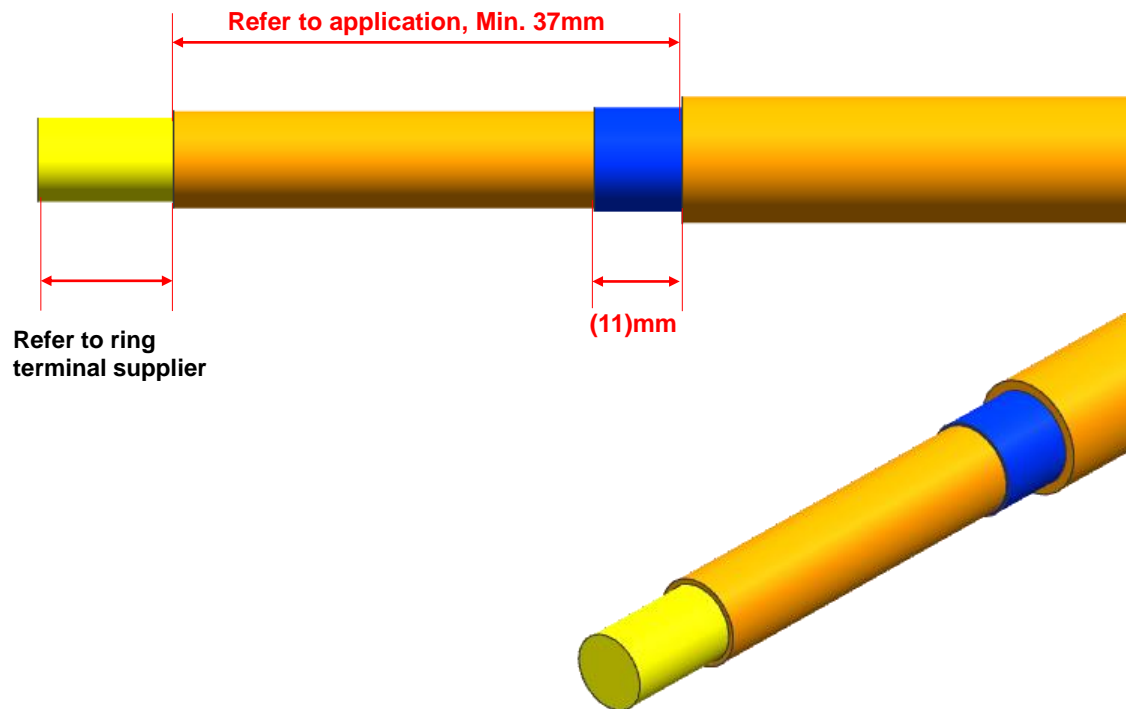
STEP 2 – STRIPPING CABLES

A
S
S
E
M
B
L
Y



Strip the **outer jacket** from the end of the cable, cut **braided shield** and remove **conductor insulation** to the right length.

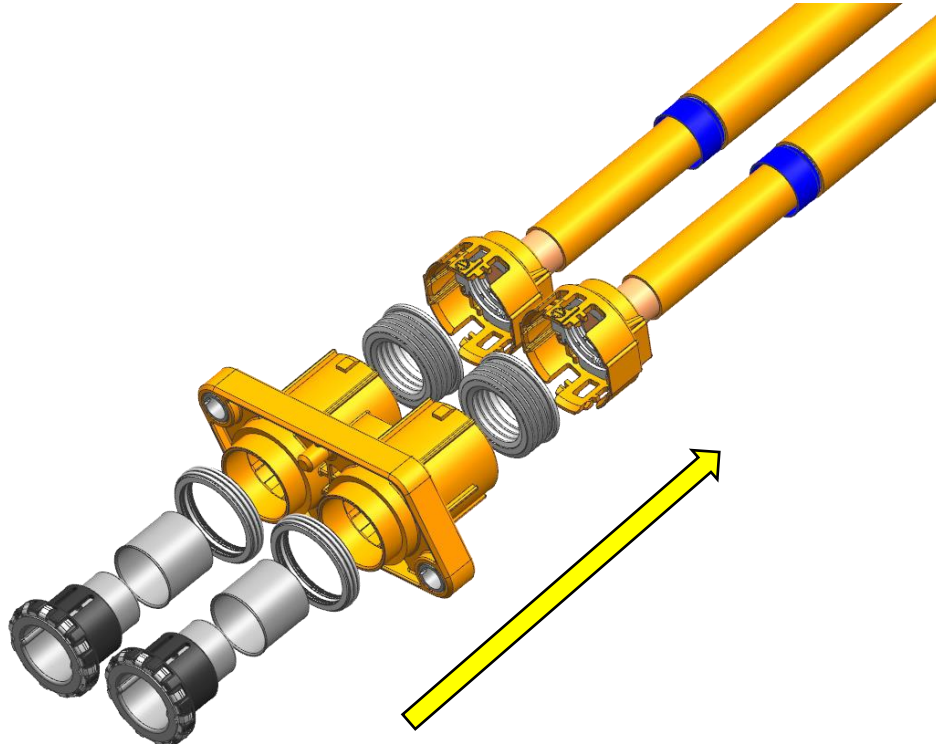
2



Step completed.

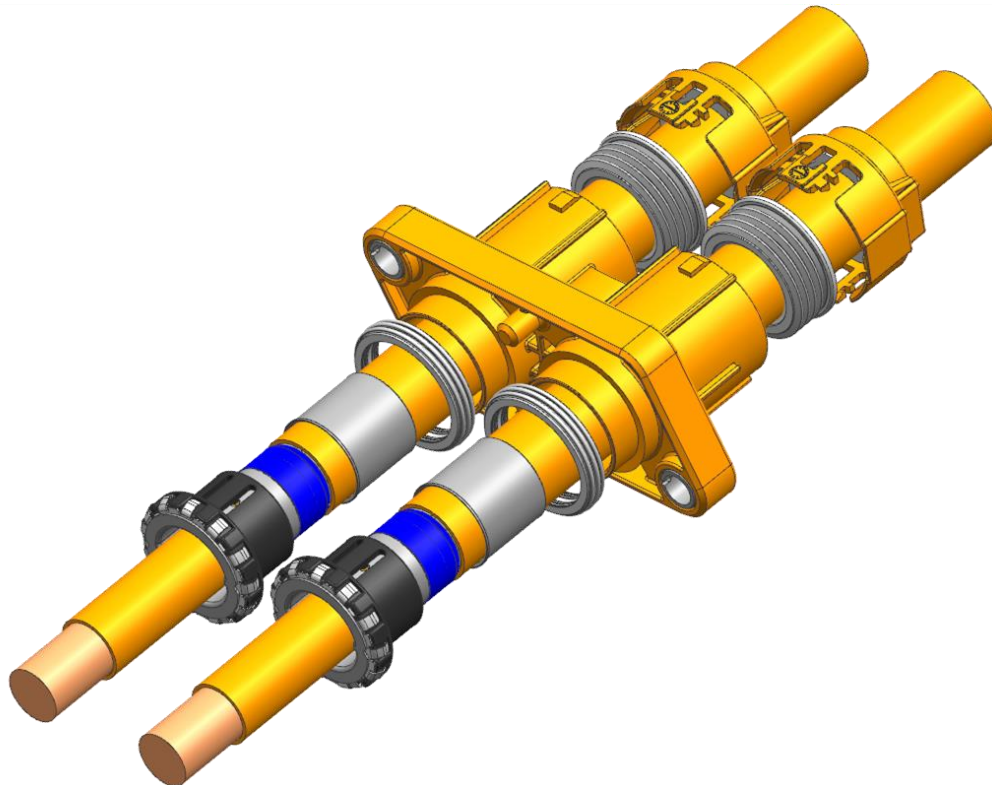
STEP 3 – INSERTING PASS THROUGH COMPONENTS TO CABLE

A
S
S
E
M
B
L
Y



Insert **pass through components** to cable. First **protection cover assy**, then **cable seal**, **ASM pass through housing**, **peripheral seal**, **shielding outer ferrule** and at last **ASM shield terminal**.

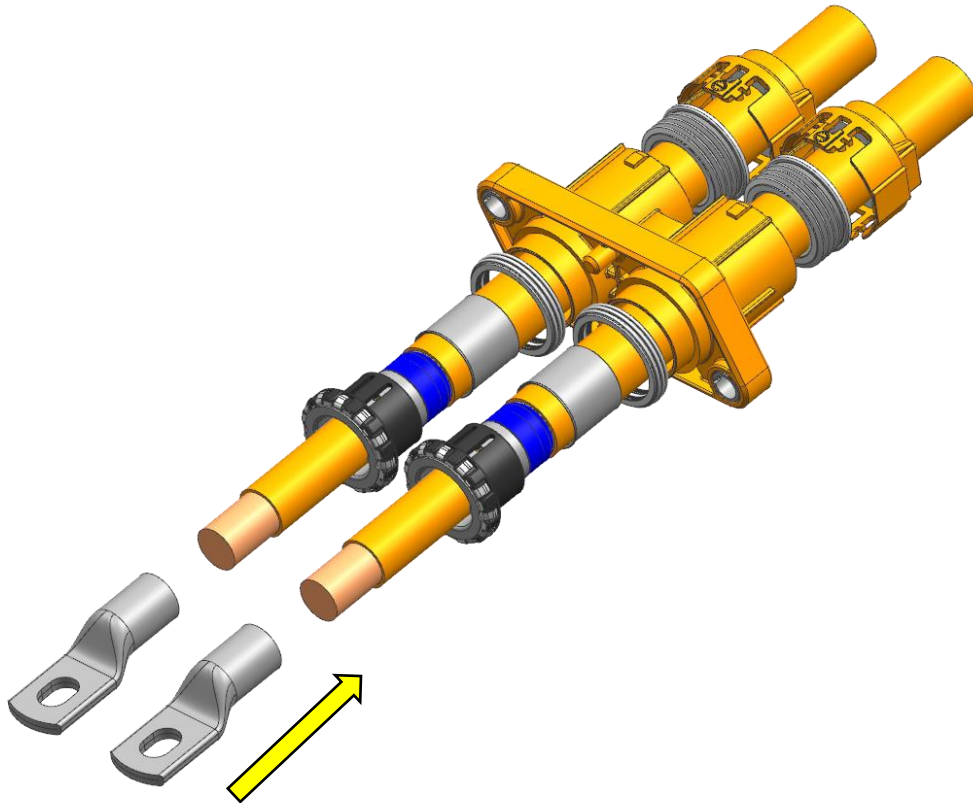
3



Step completed.

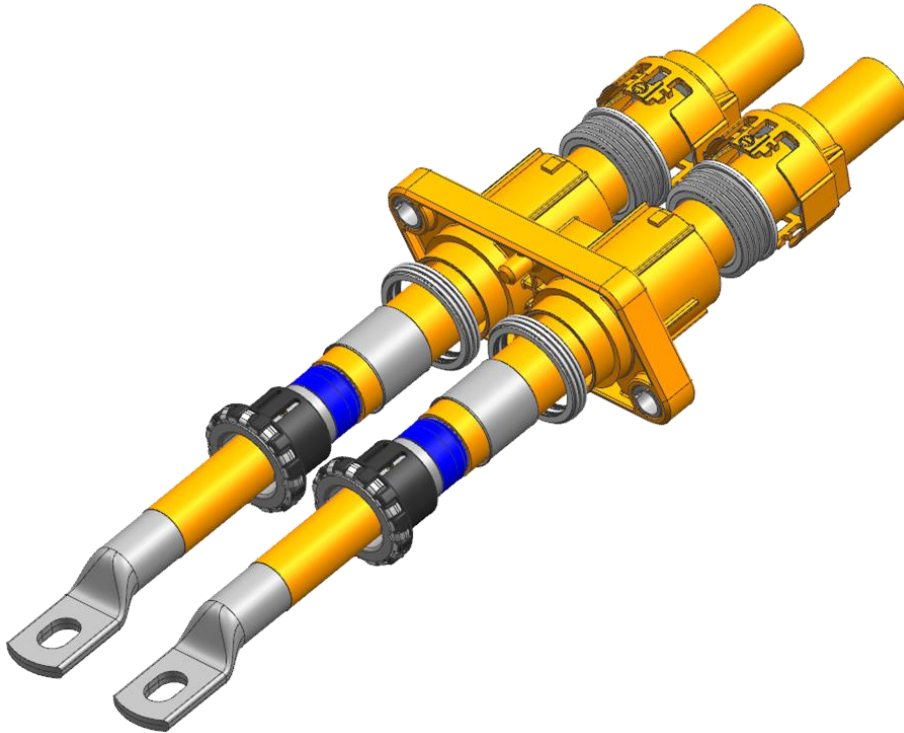
STEP 4 – INSERTING TERMINALS TO CABLE

A
S
S
E
M
B
L
Y



4

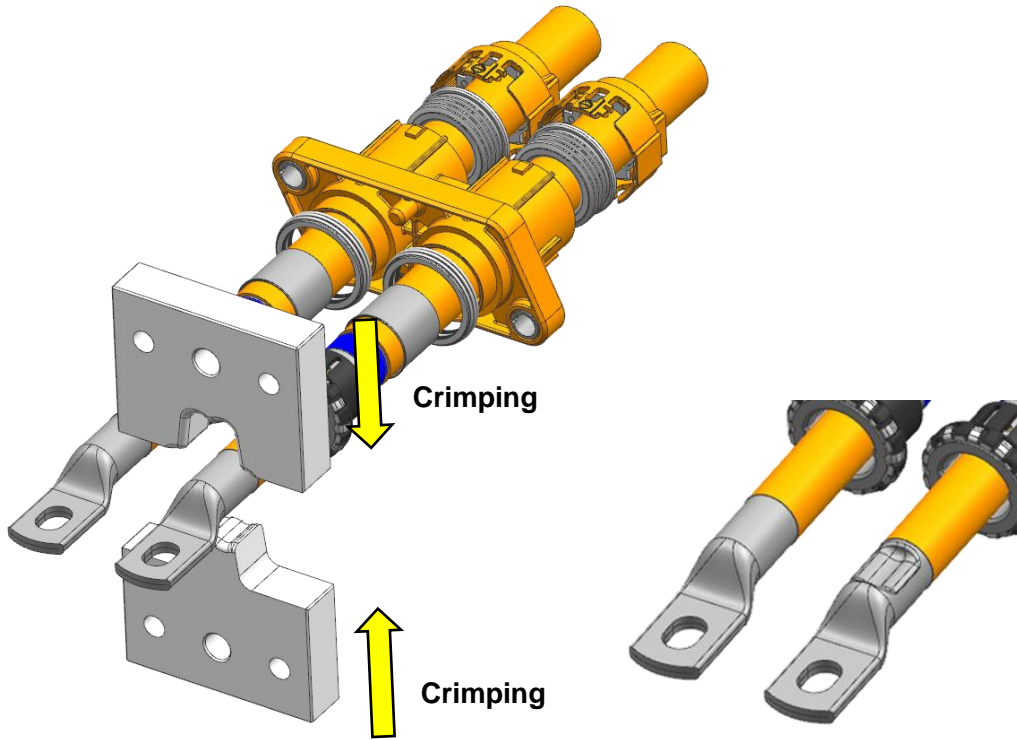
Insert **terminals** to cable.



Step completed.

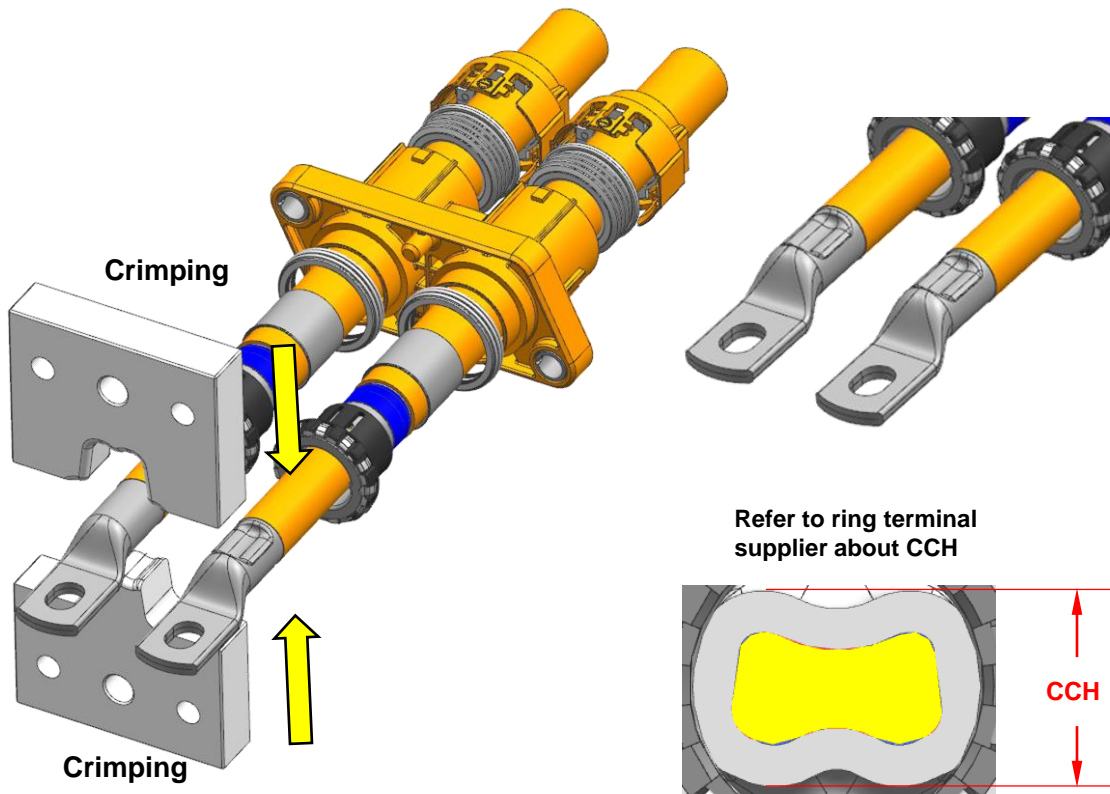
STEP 5 – CRIMPING TERMINALS

A
S
S
E
M
B
L
Y



5

Crimp terminal.

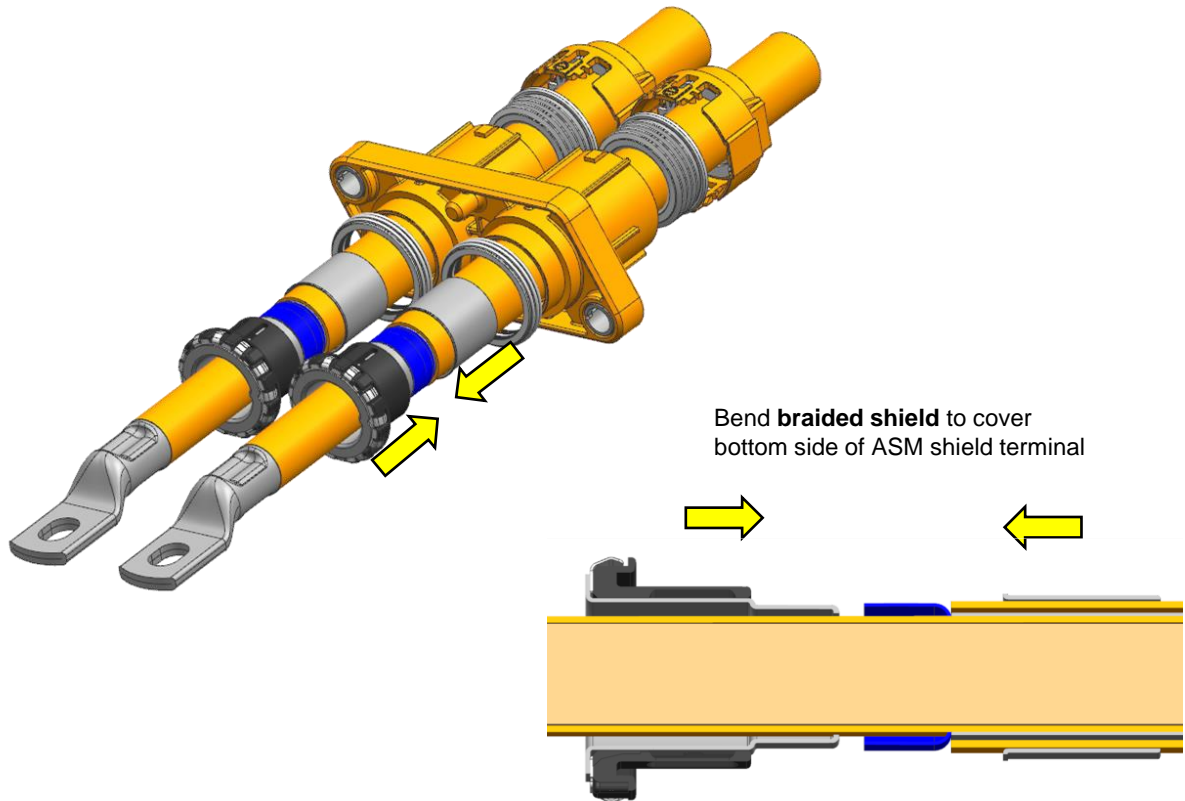


Refer to ring terminal
supplier about CCH

Step completed.

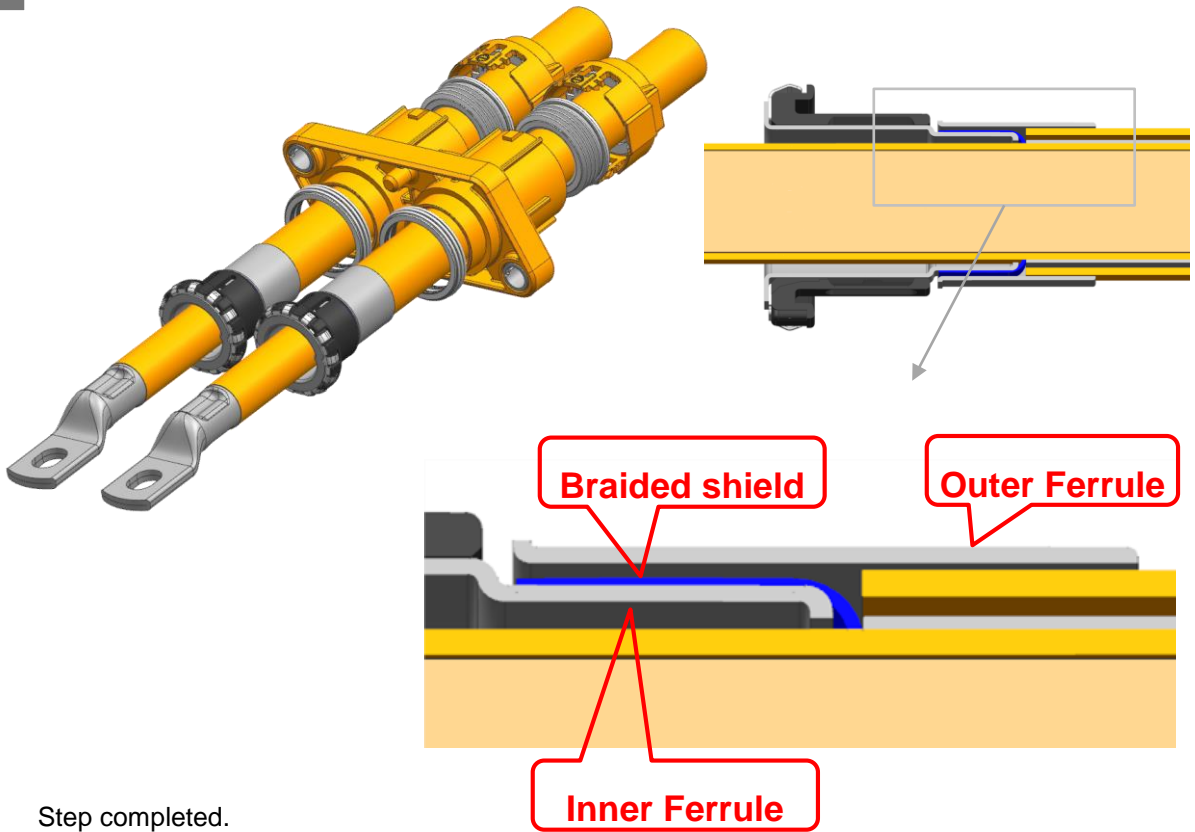
STEP 6 – INSERTING SHIELDING INNER FERRULES AND ASM SHIELD TERMINALS

A
S
S
E
M
B
L
Y



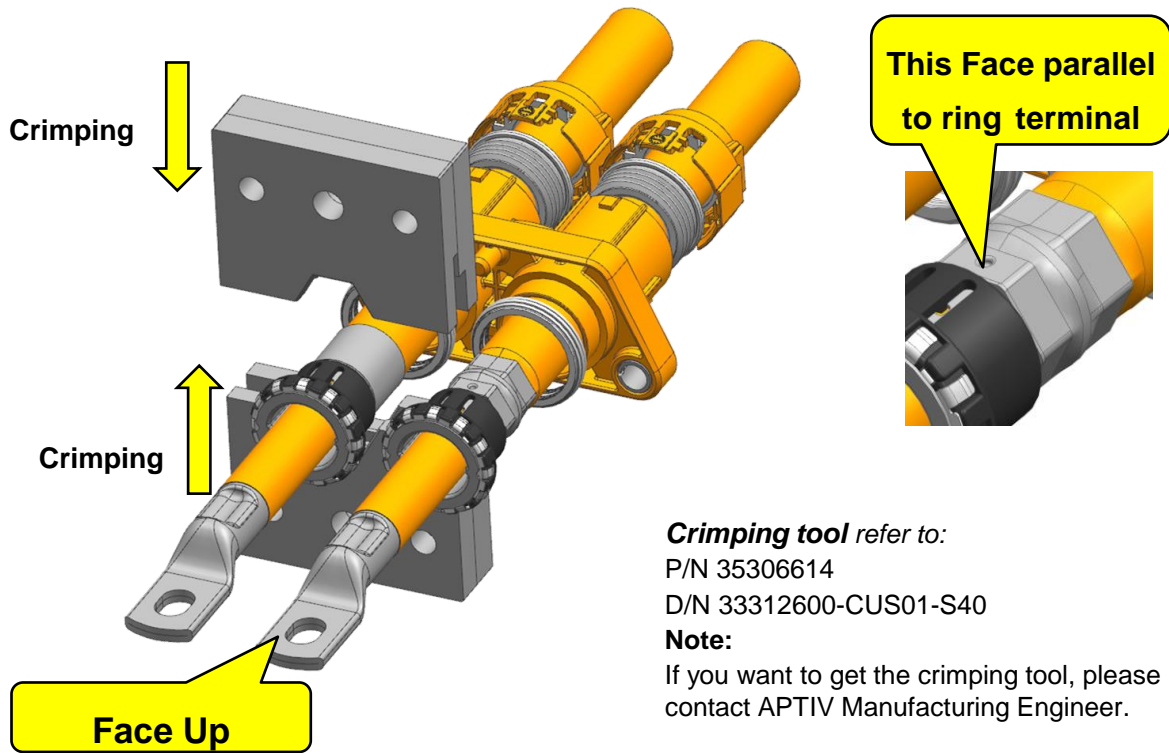
6

Insert the **shielding inner ferrules** and **ASM shield terminals**.



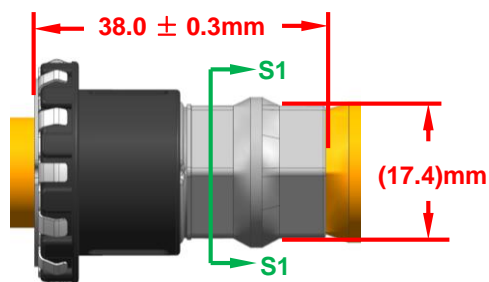
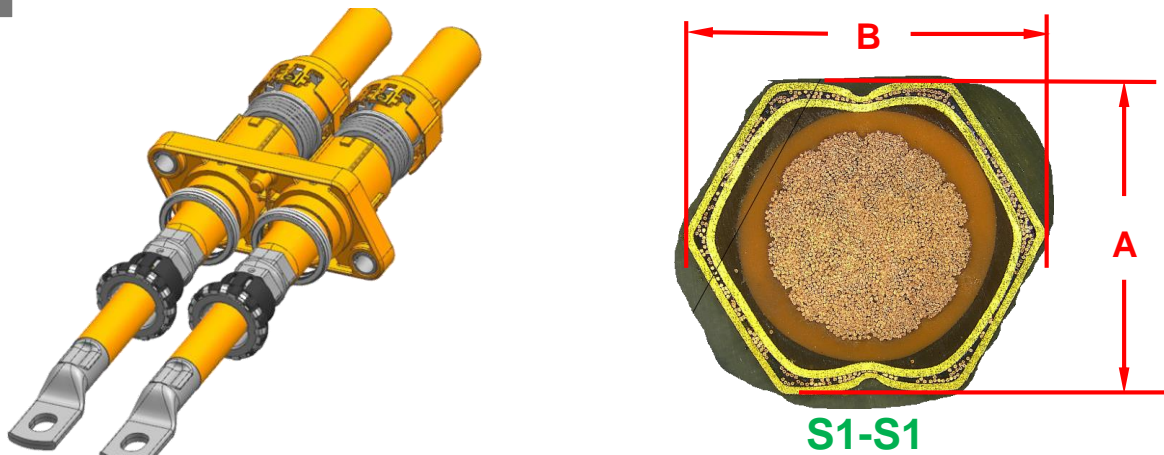
STEP 7 – CRIMPING SHIELDING INNER FERRULE AND ASM SHIELD TERMINAL

A
S
S
E
M
B
L
Y



7

Crimp another **shielding inner ferrule** and **ASM shield terminal**.

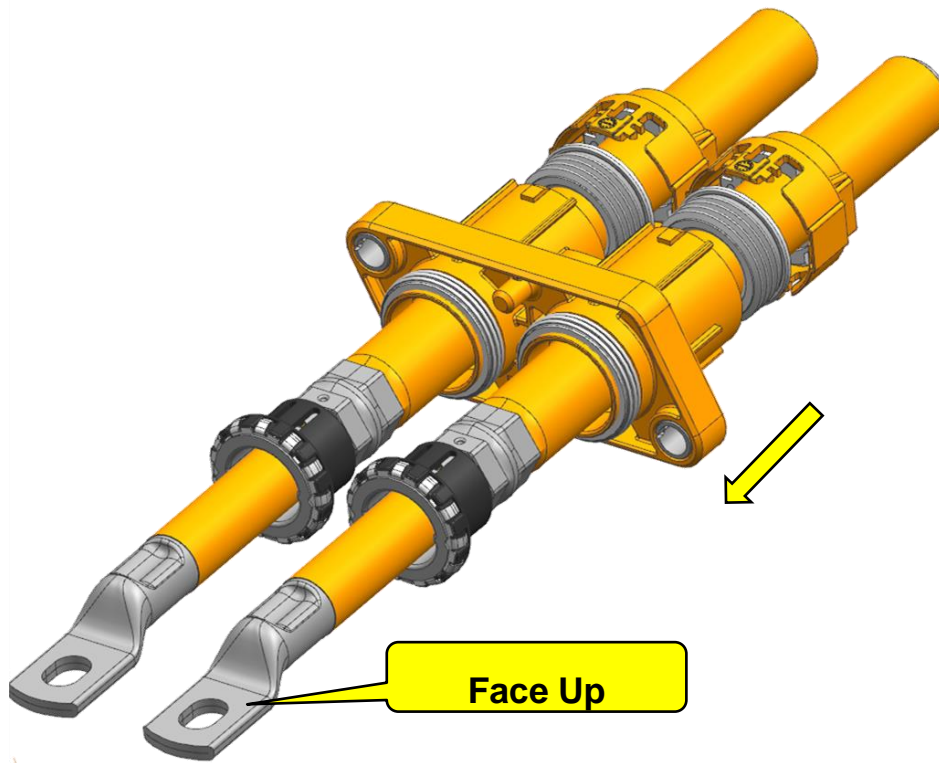


Step completed.

Cable size(mm ²)	70
A	17.4 ± 0.1
B	20.05 ± 0.3
Crimp resistance	$< 0.055\text{m}\Omega$
pull-out strength	$> 450\text{N}$

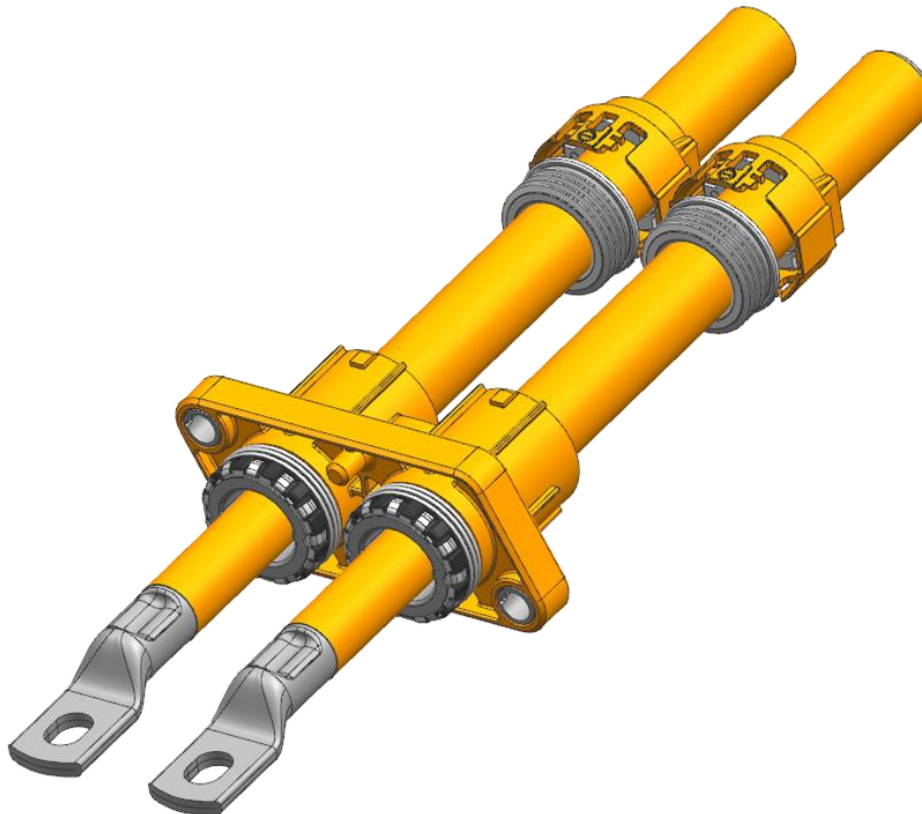
STEP 8 – INSERTING PERIPHERAL SEALS AND ASM PASS THROUGH HOUSING

A
S
S
E
M
B
L
Y



8

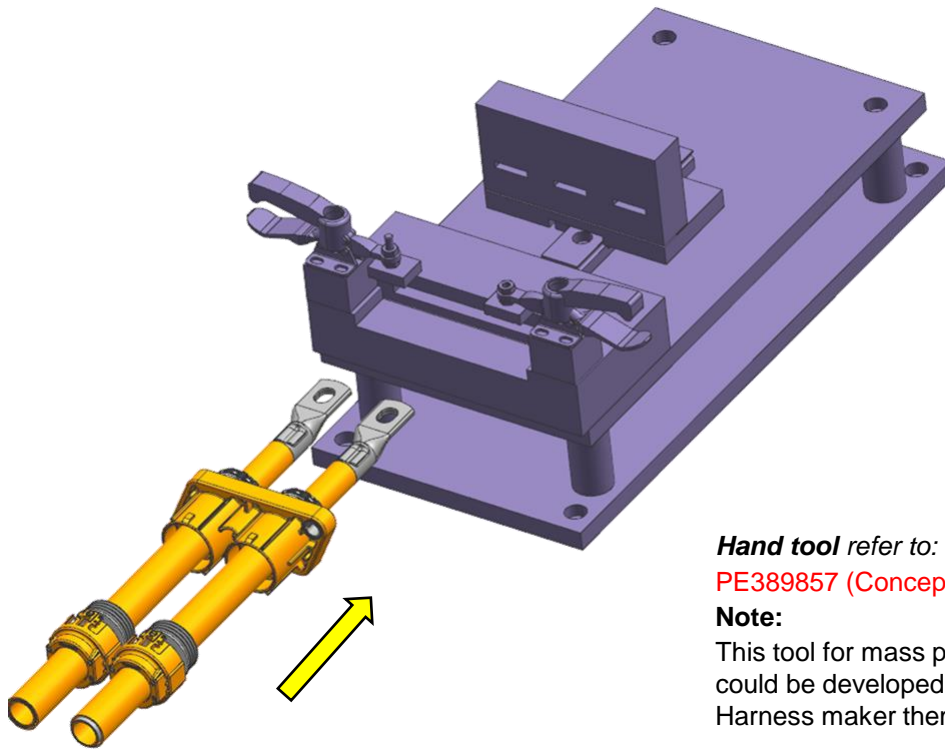
Insert **peripheral seals** and **ASM pass through housing**.



Step completed.

STEP 9 – PUTTING COMPONENTS TO INSTALL TOOLS

A
S
S
E
M
B
L
Y

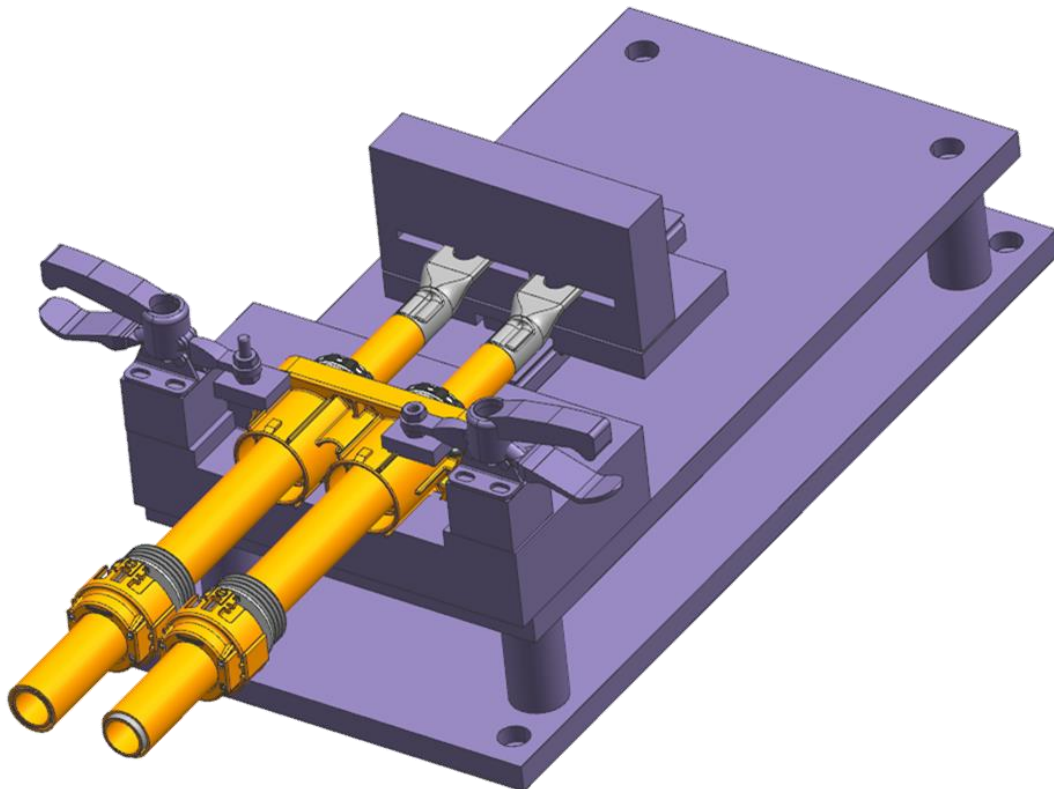


Hand tool refer to:
PE389857 (Concept Proposal)

Note:
This tool for mass production
could be developed by the
Harness maker themselves.

9

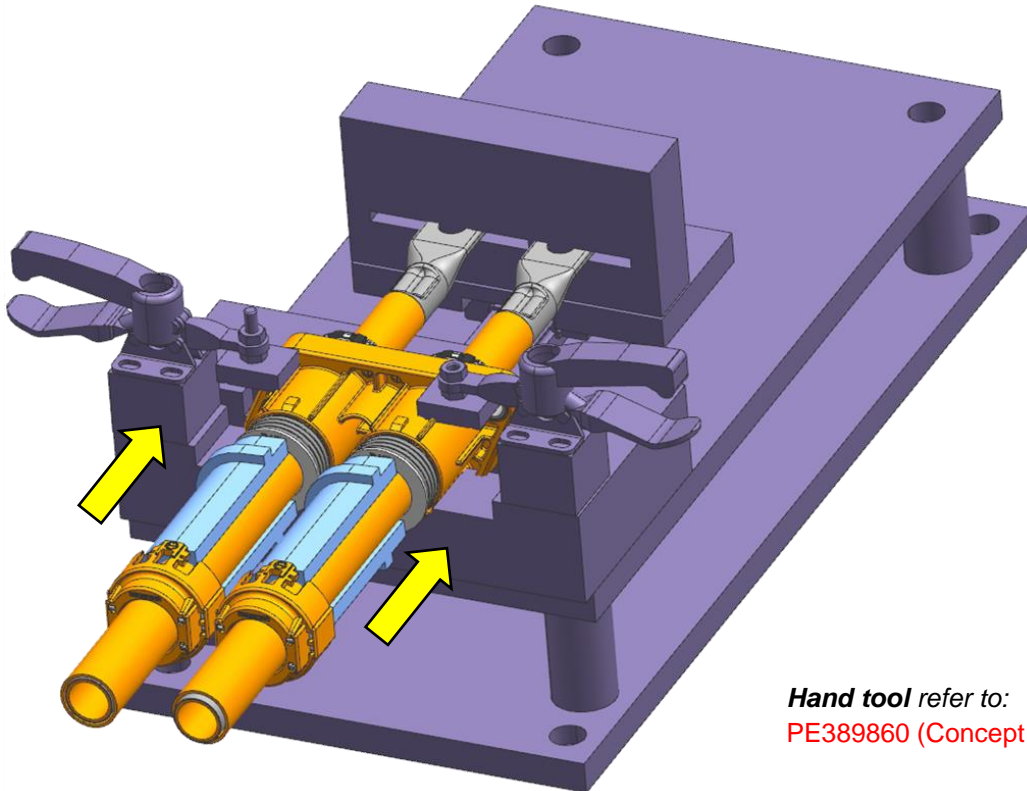
Put **components** to install tools.



Step completed.

STEP 10 – INSERTING CABLE SEALS

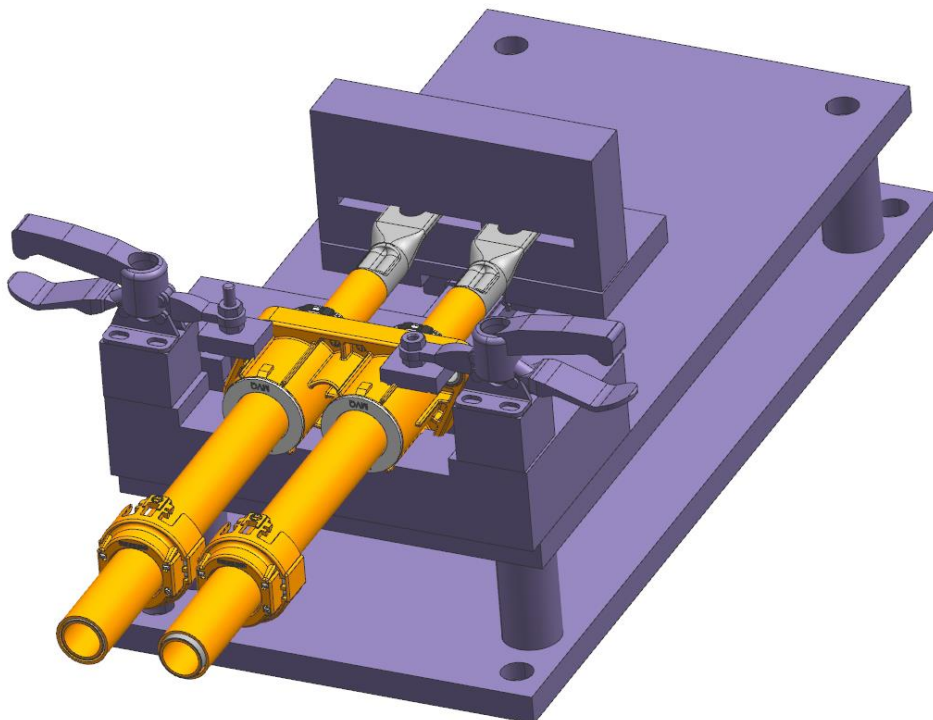
A
S
S
E
M
B
L
Y



Hand tool refer to:
PE389860 (Concept Proposal)

10

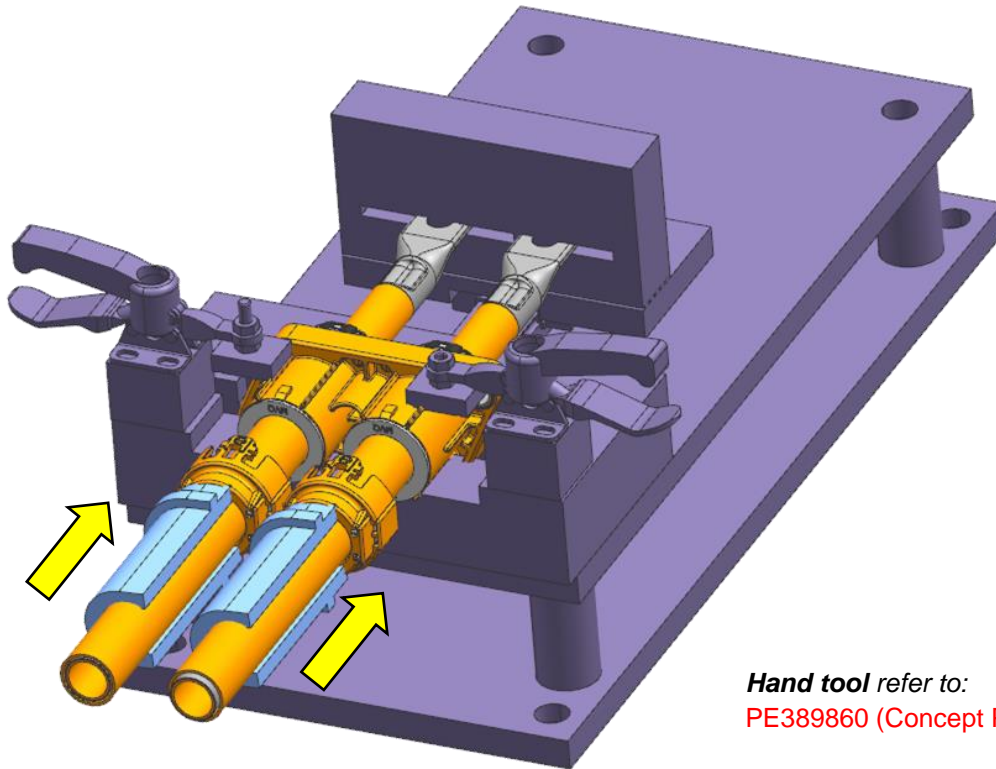
Insert **cable seals**.



Step completed.

STEP 11 – INSERTING PROTECTION COVER ASSYS

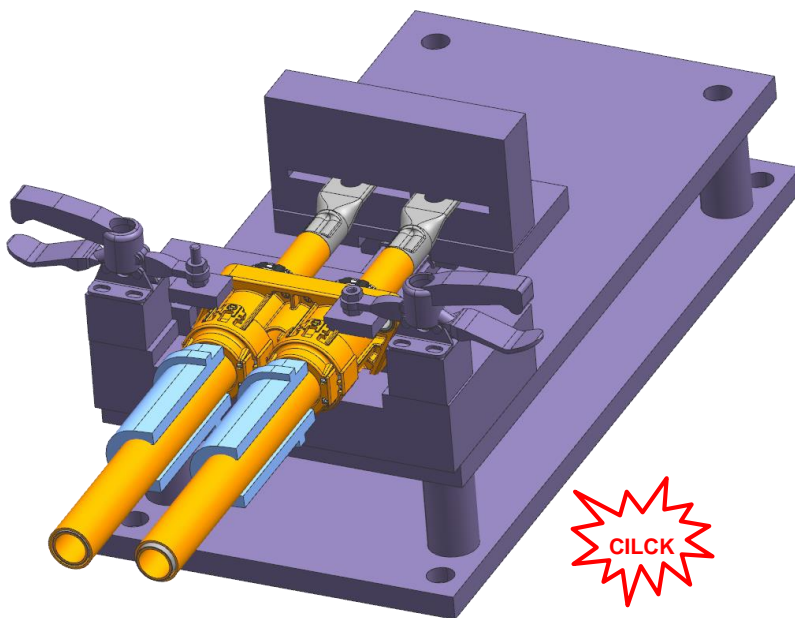
A
S
S
E
M
B
L
Y



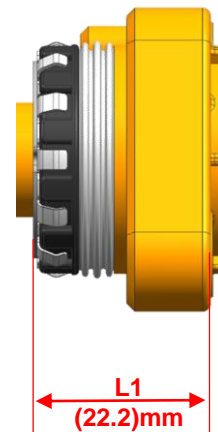
Hand tool refer to:
PE389860 (Concept Proposal)

11

Insert protection cover assys.



1. The tool must be able to keep the terminals in the right position. No rotate allowed during inserting process;
2. The tool must be able to keep the dimension L1 steady.
3. At last the tool can help to insert protection cover assy.



Step completed.

TABLE OF CRIMPING MACHINE

1



2



Item	Function	Tool PN.
1	Crimping tool for <i>AK Pass Through 2way 70mm²</i>	
2	Crimping machine for <i>AK Pass Through 2way 70mm²</i>	

REVISIONS

Rev.	Change description	Drafter	Check	Date
01	Initial creation	Link Gao	Link Gao	Nov.08.2019