

Assembly instructions for SRC

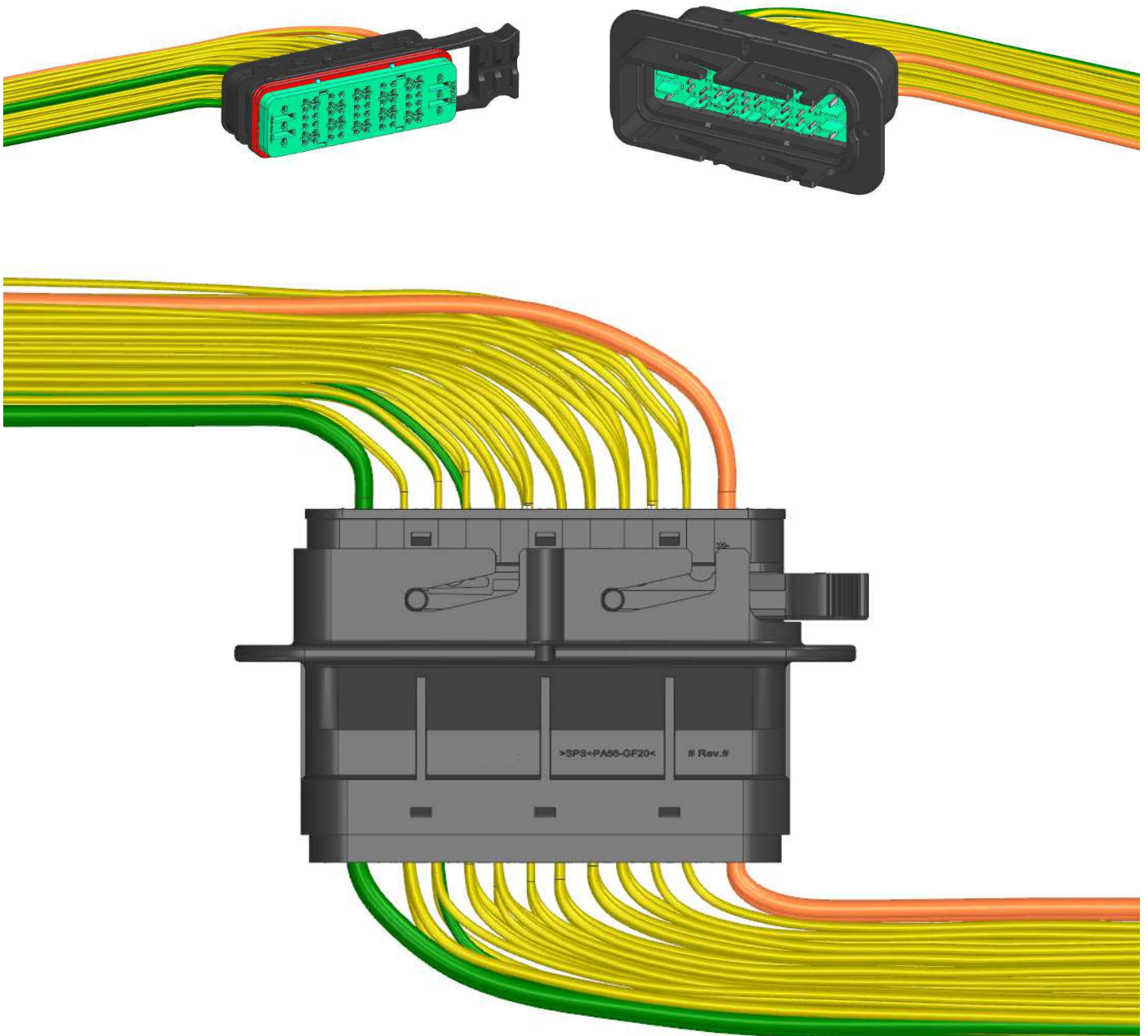


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**PLEASE READ DISCLAIMER AND RECOMMENDATION NOTES
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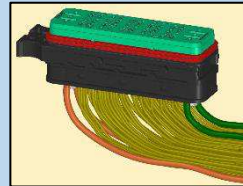

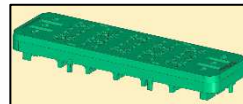
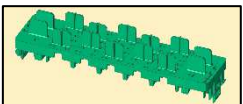
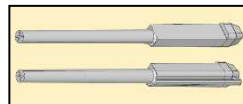
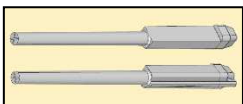
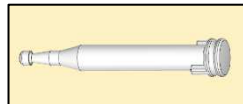
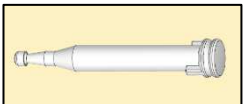
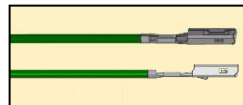
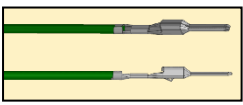
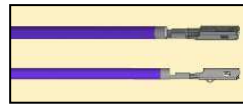
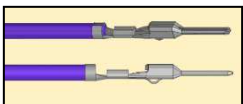
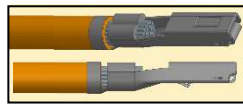
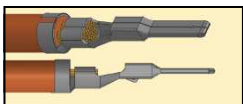

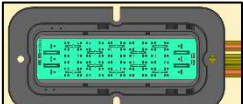


| | | | |
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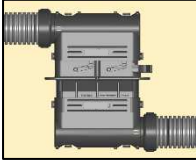
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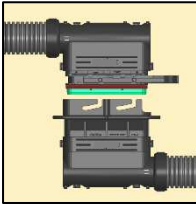
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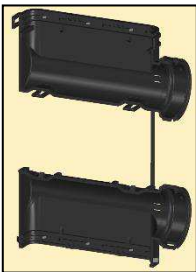
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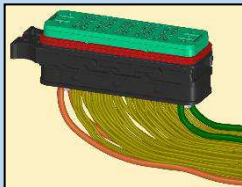
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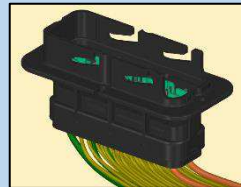
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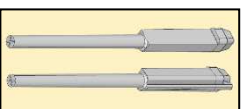
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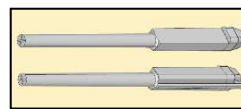
Female connector maintenance



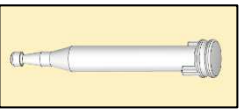
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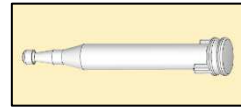
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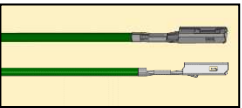
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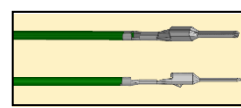
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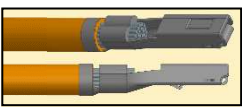
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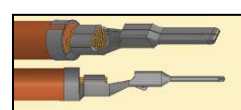
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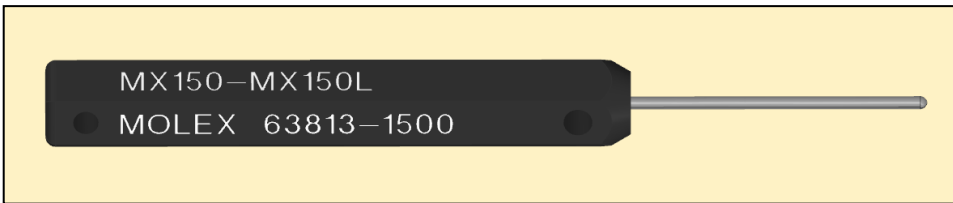
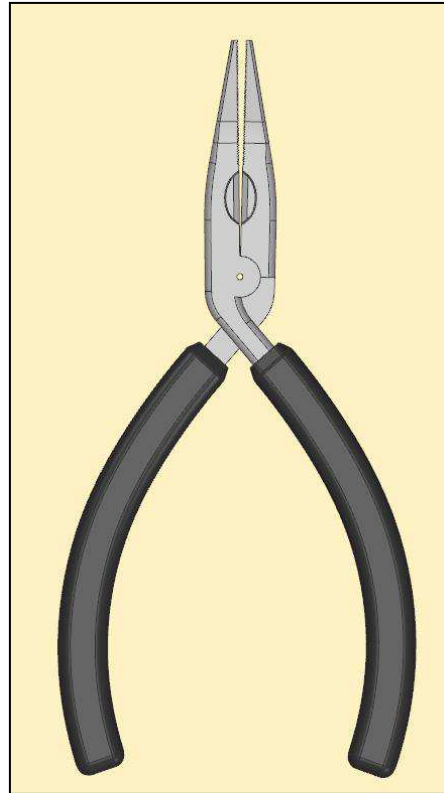
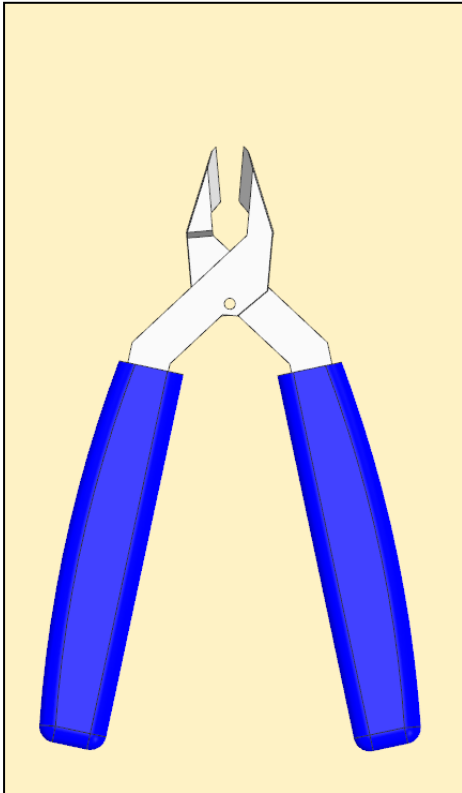
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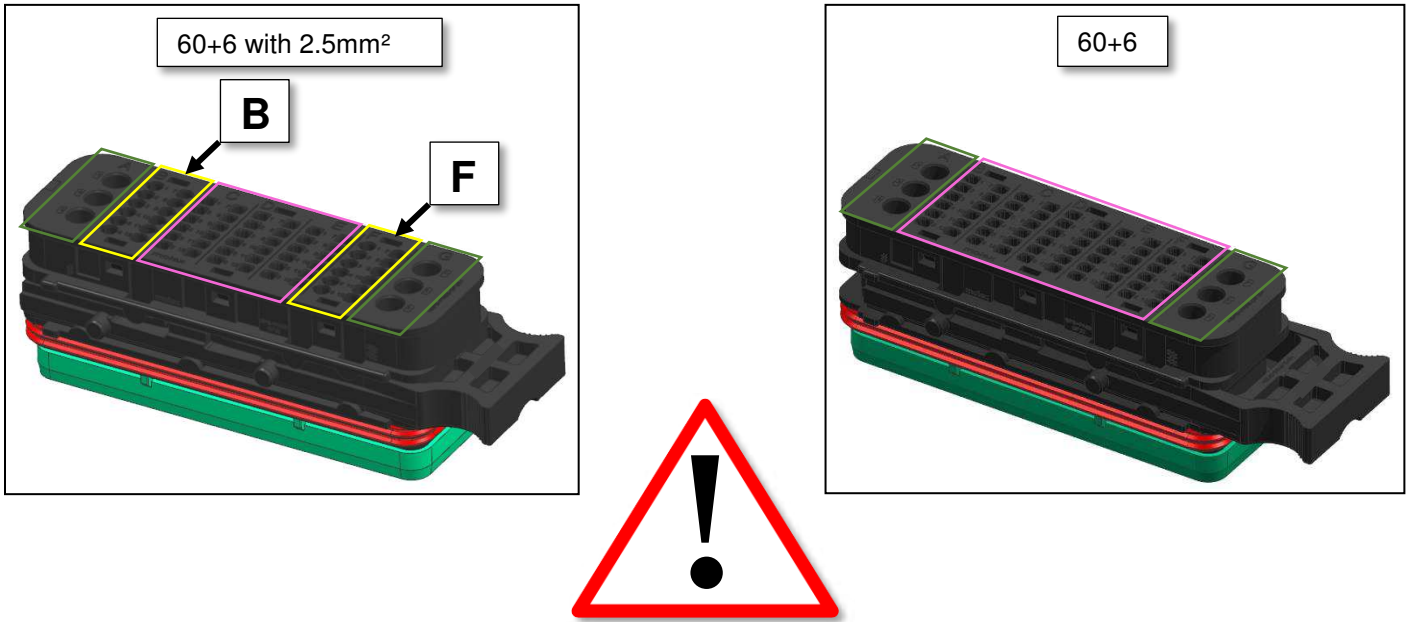
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TOOLS REQUIRED



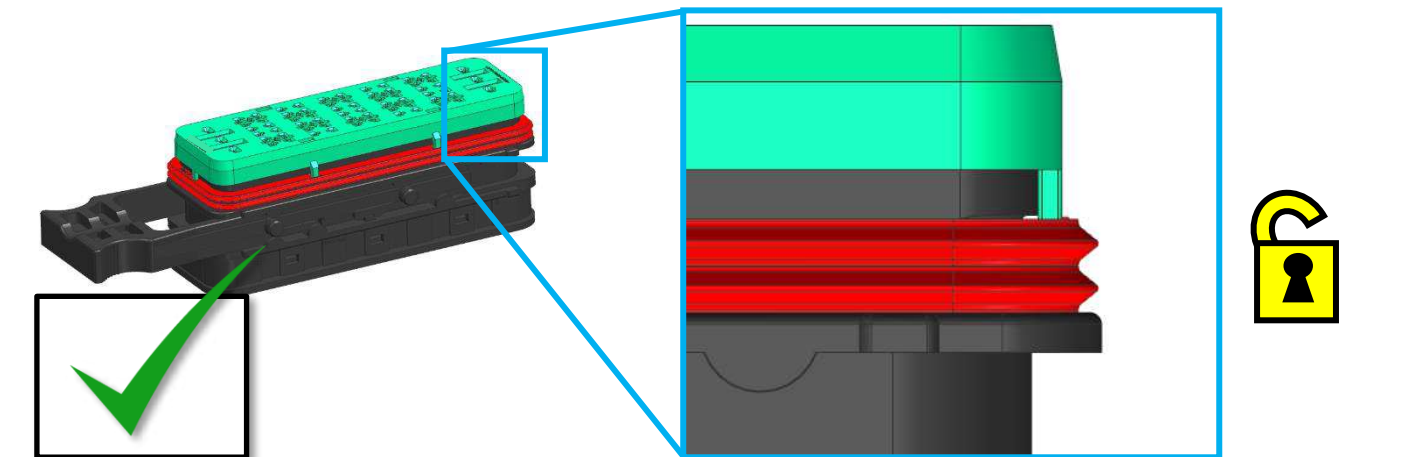
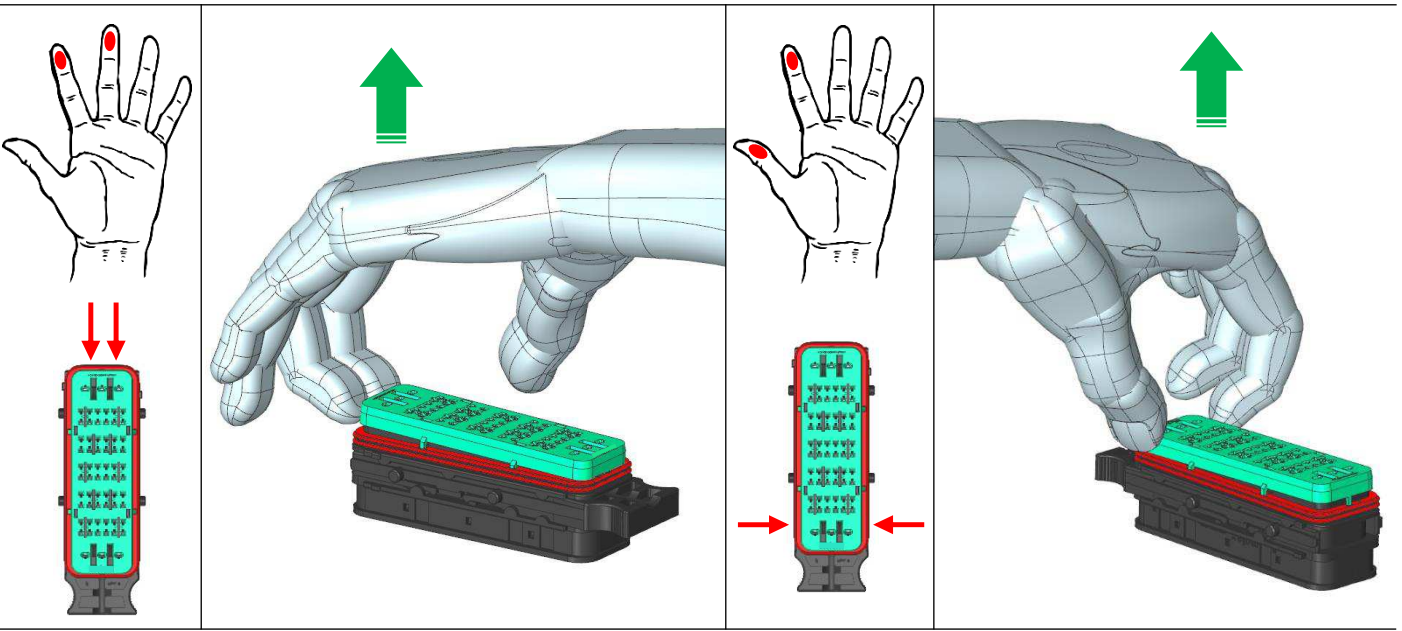
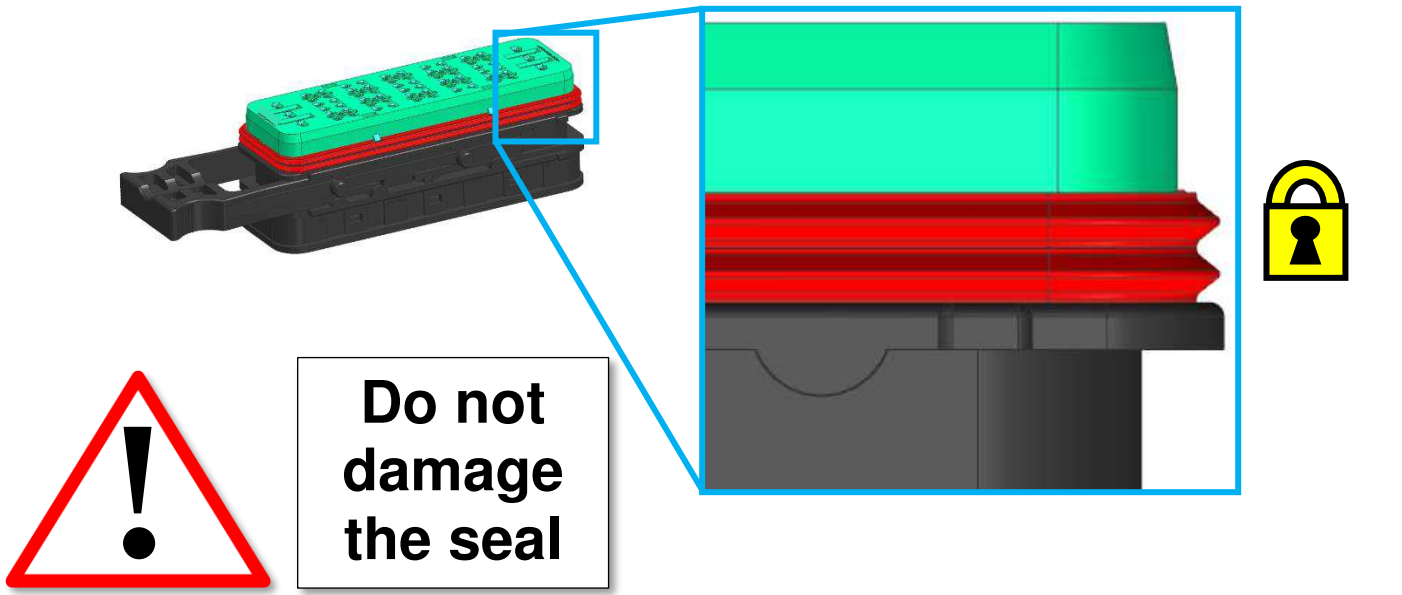
FEMALE ASSEMBLY OVERVIEW



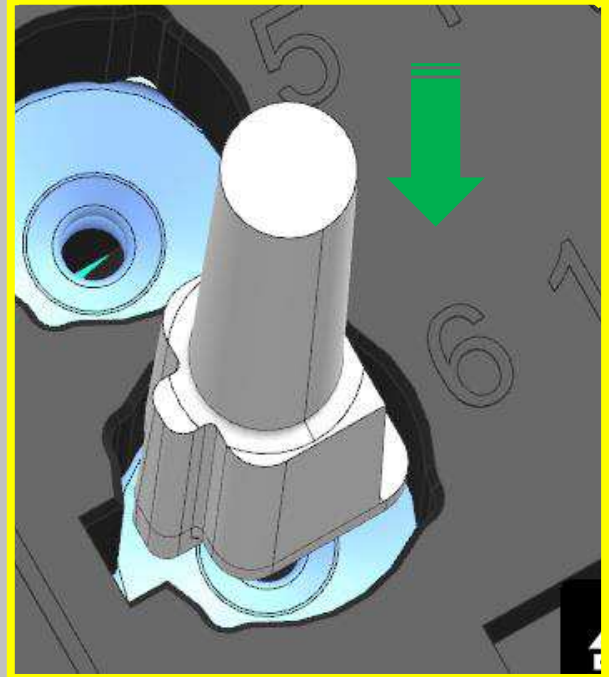
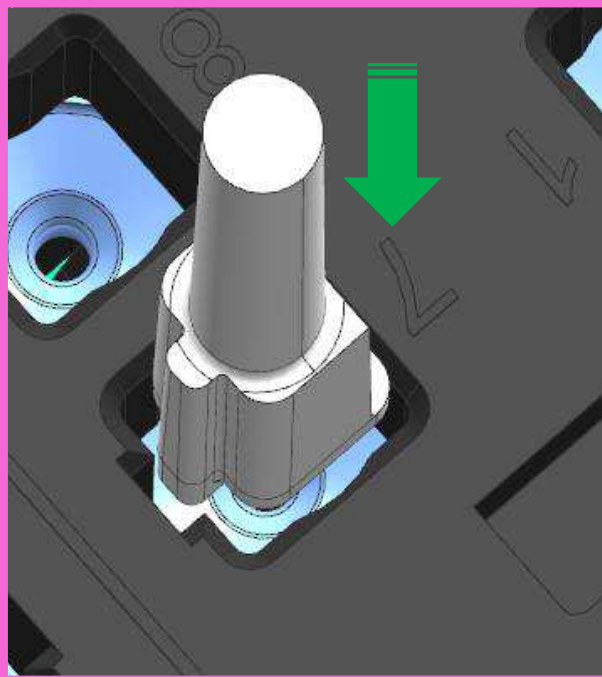
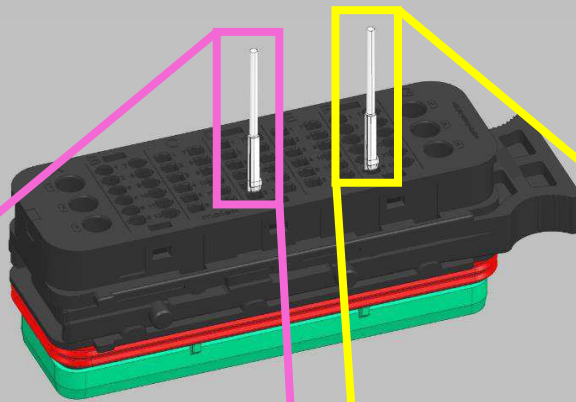
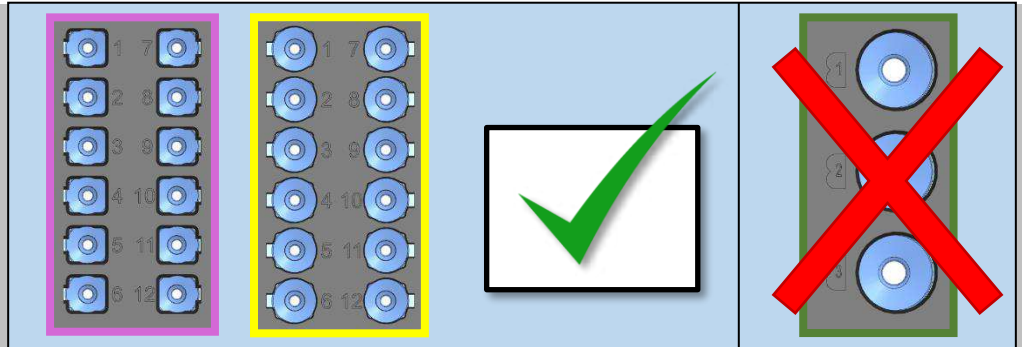
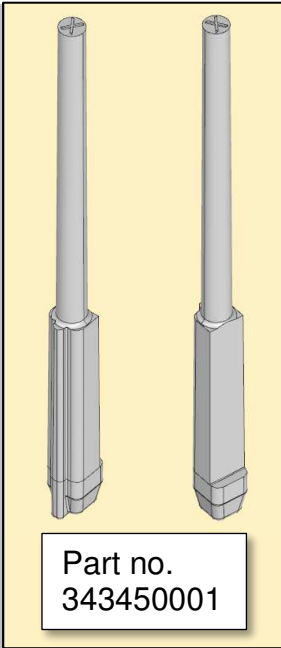
- 2.5mm² only available on some configurations and only in **B and F** locations as highlighted in yellow above
- For all configurations please see 2500000 thru 2500015

| Power | 2.5mm ² | Signal |
|---|---|--|
| | | |
| <p>Power Cable Insulation Diameter Range 3.0 – 5.0mm</p> | <p>2.5mm² Cable Insulation Diameter Range 1.5 – 3.0mm</p> | <p>Signal Cable Insulation Diameter Range 1.5 - 2.7mm</p> |

STEP 1 – OPEN TPA



STEP 2 – INSERT SIGNAL BLIND CAVITY PLUGS

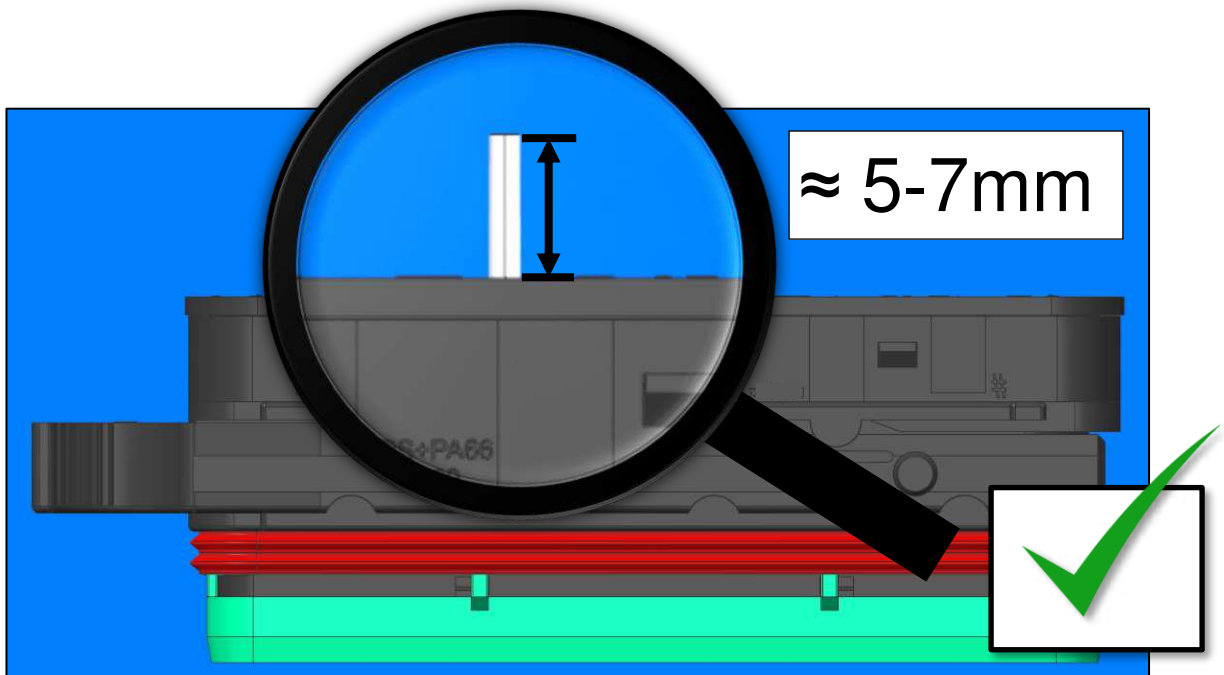
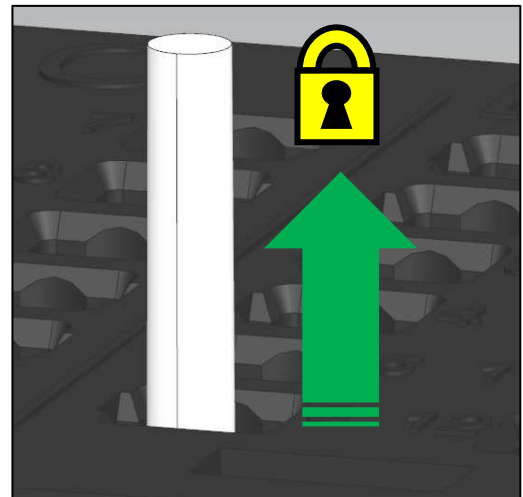
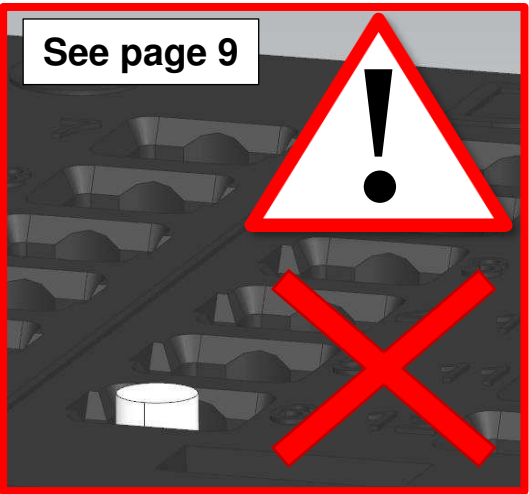
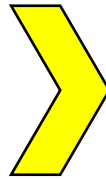
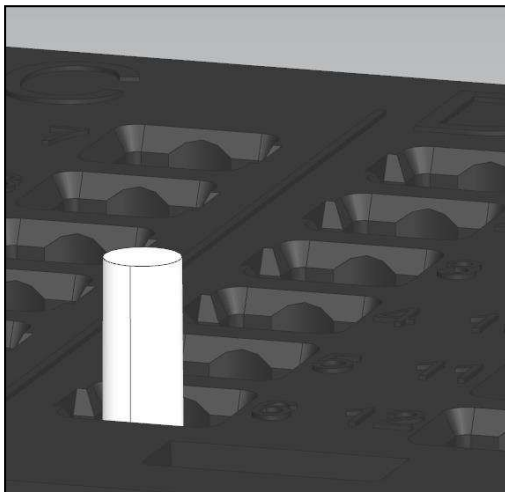
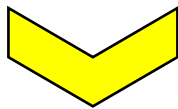
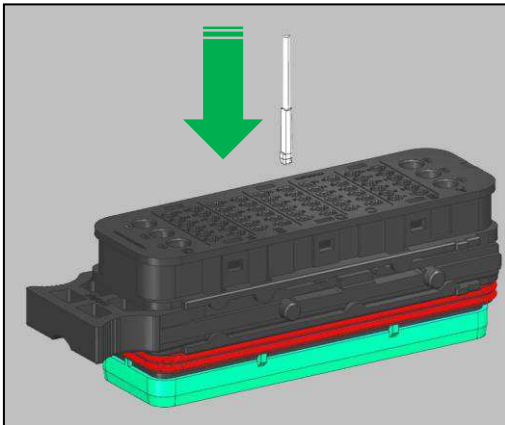


Demonstration example



See next page

STEP 2 – INSERT SIGNAL BLIND CAVITY PLUGS

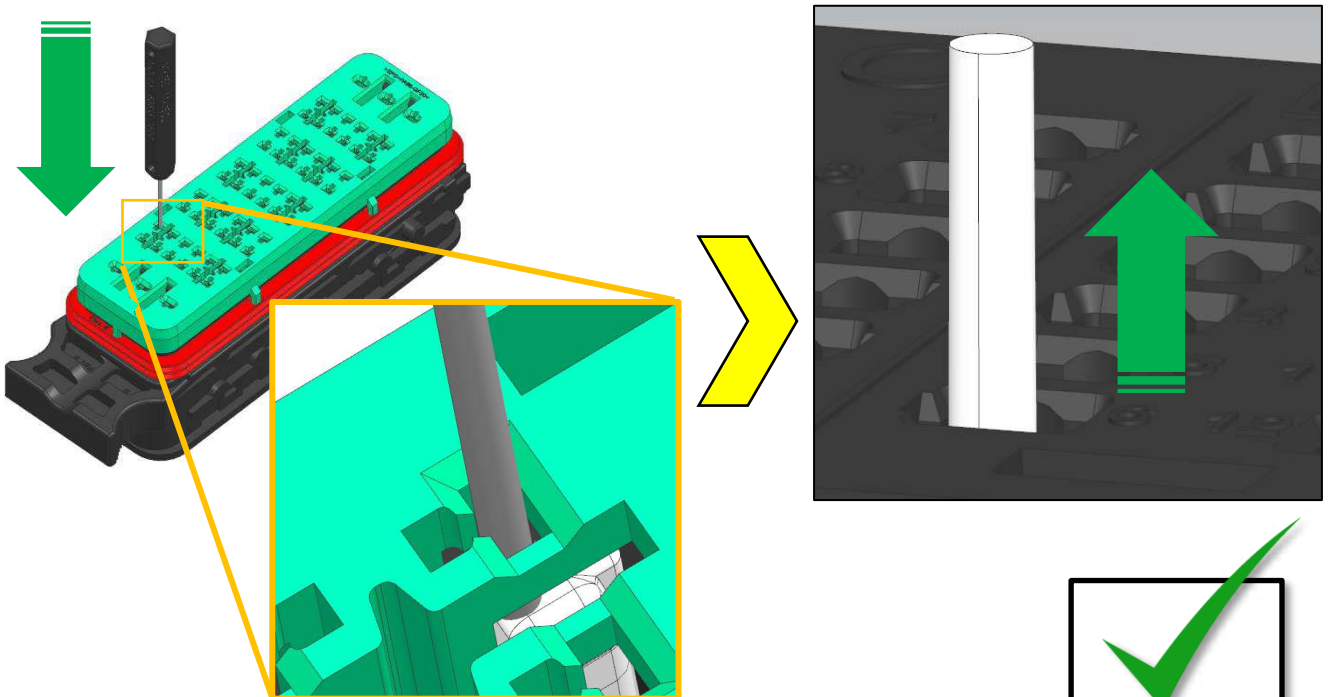
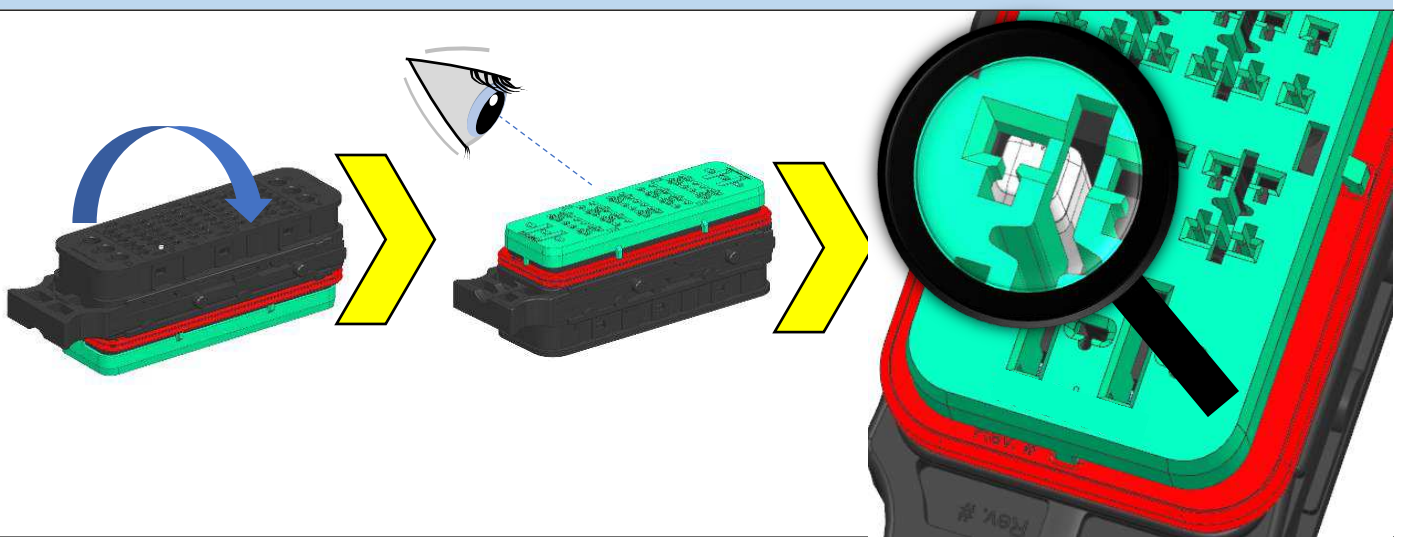


TOP TIP – ONLY FOR SIGNAL BLIND CAVITY PLUGS

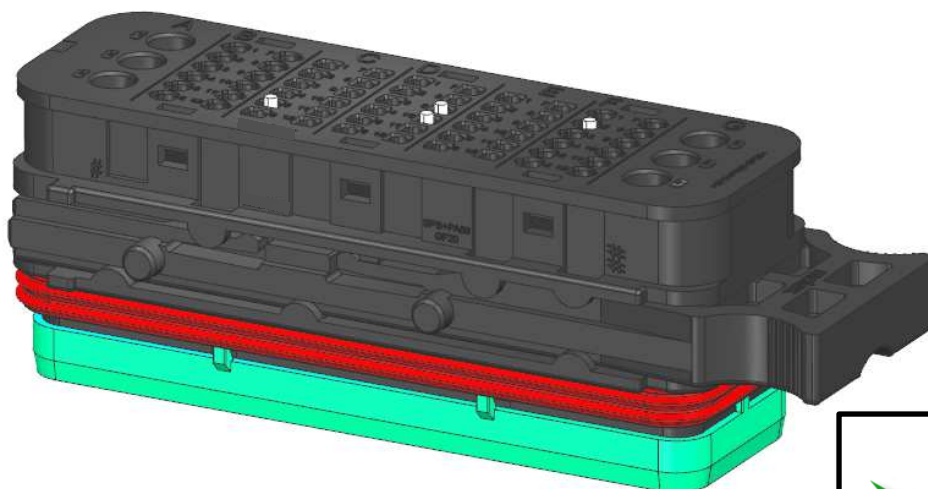
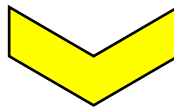
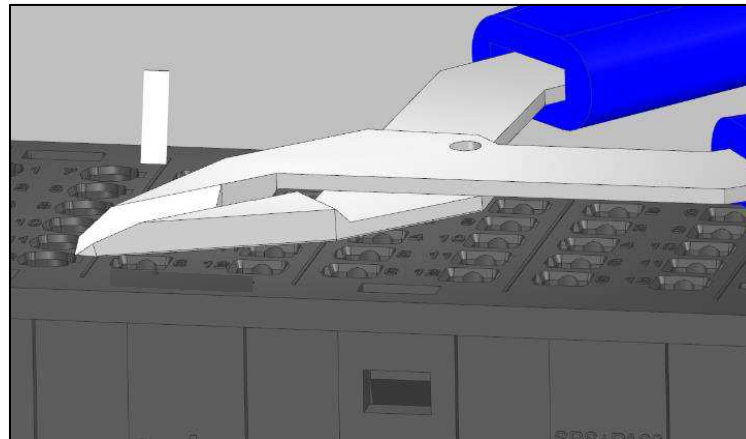
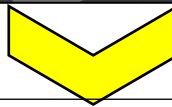
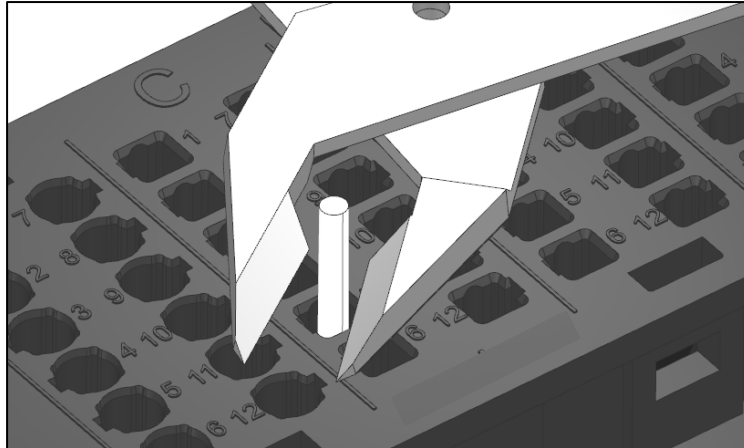
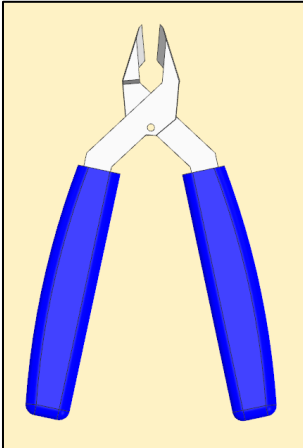
If this happens



Tool required



STEP 2.1 – TRIM SIGNAL BLIND CAVITY PLUGS (RECOMMENDED)



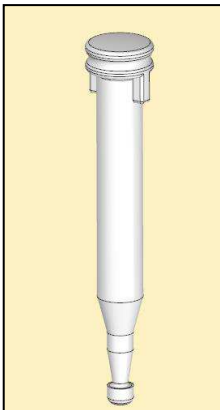
Demonstration example



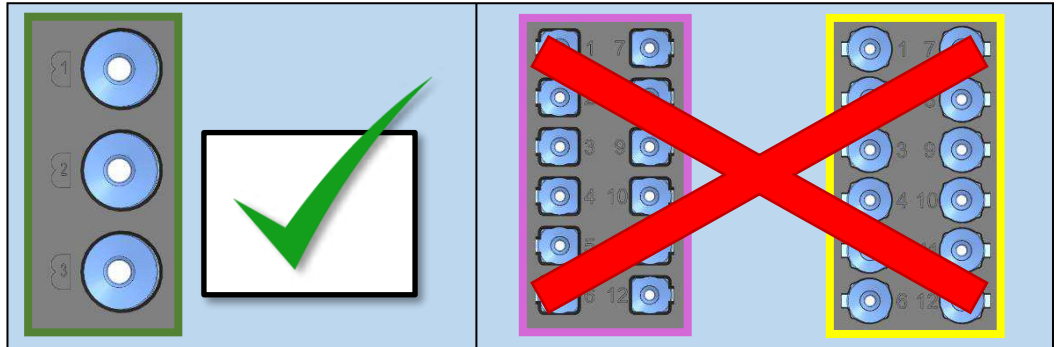
This specification is a controlled document.

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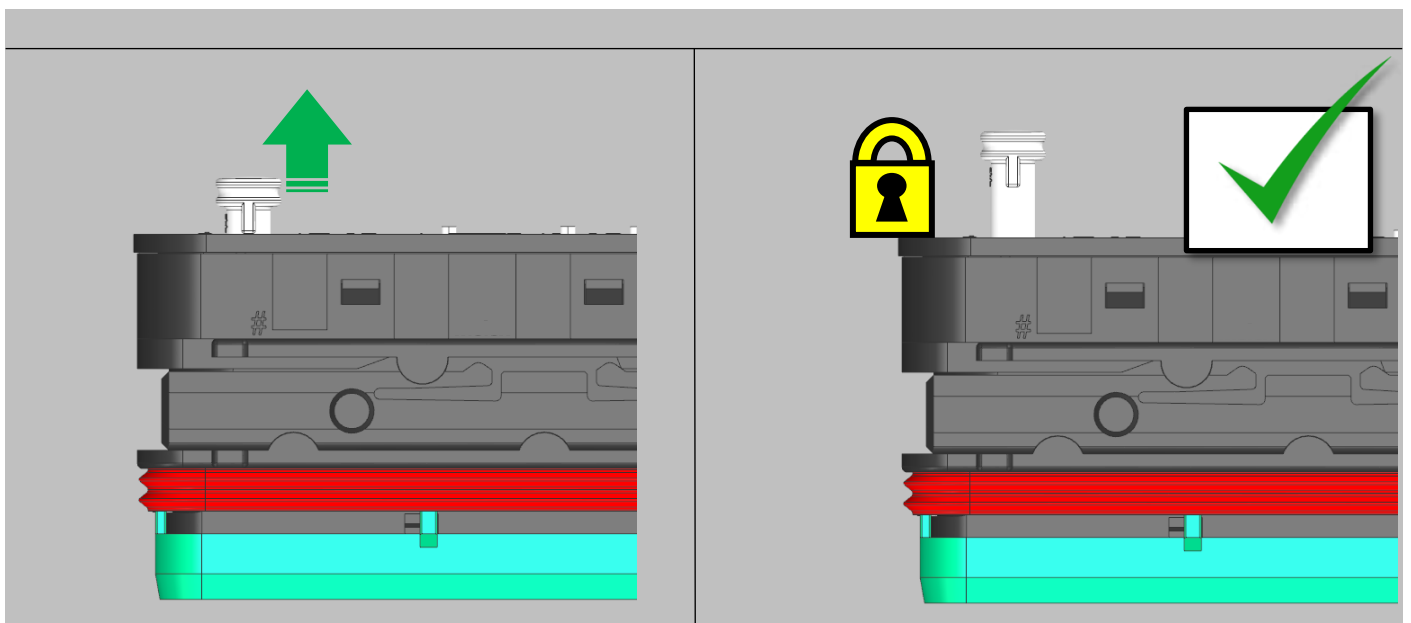
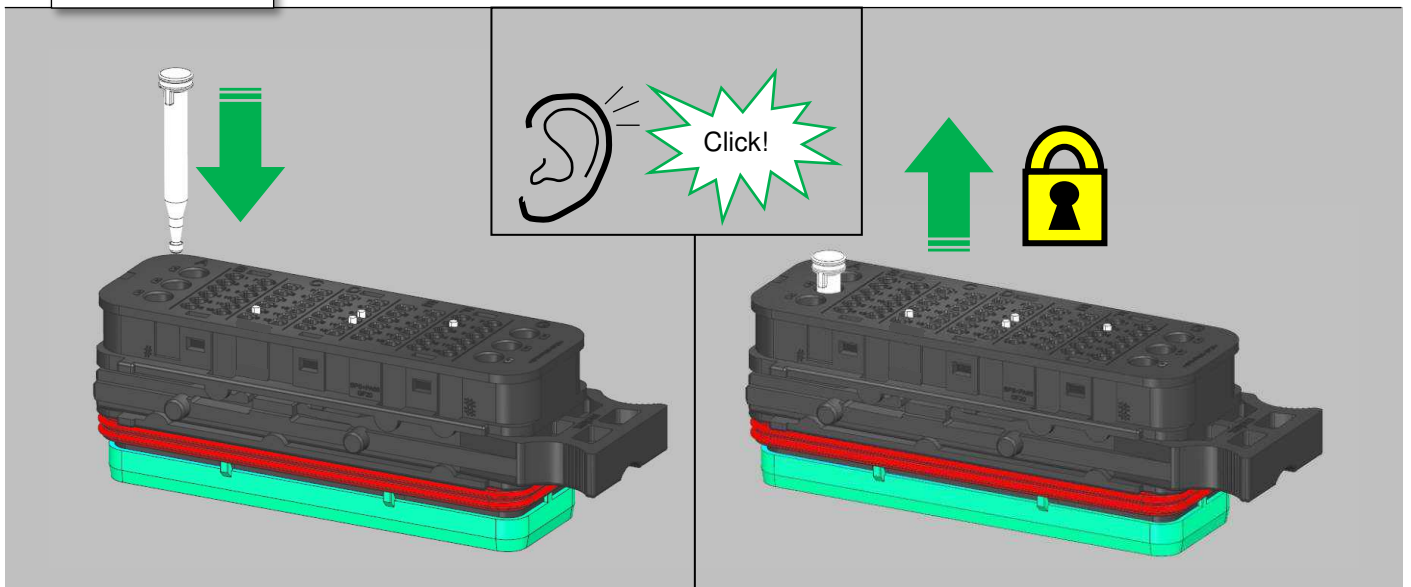
STEP 3 – INSERT POWER BLIND CAVITY PLUGS



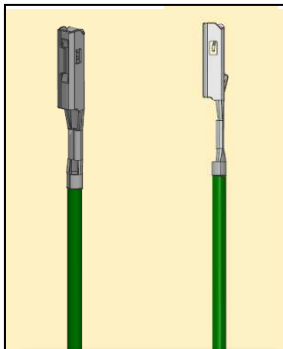
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(Old P/N:
937320001)



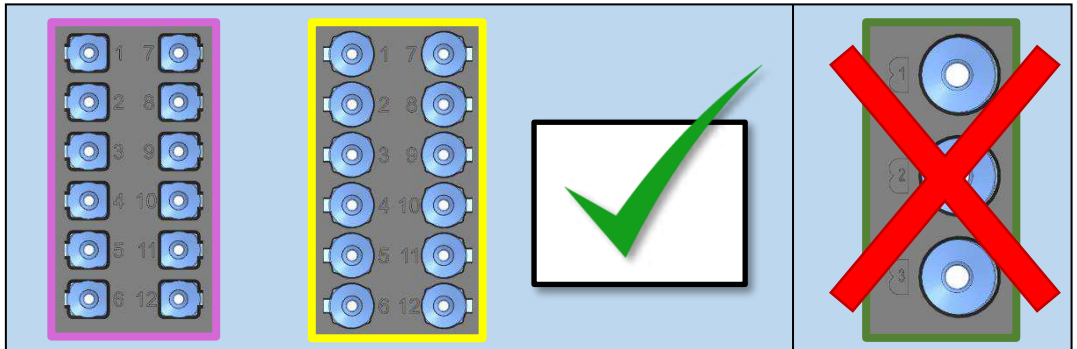
Demonstration example



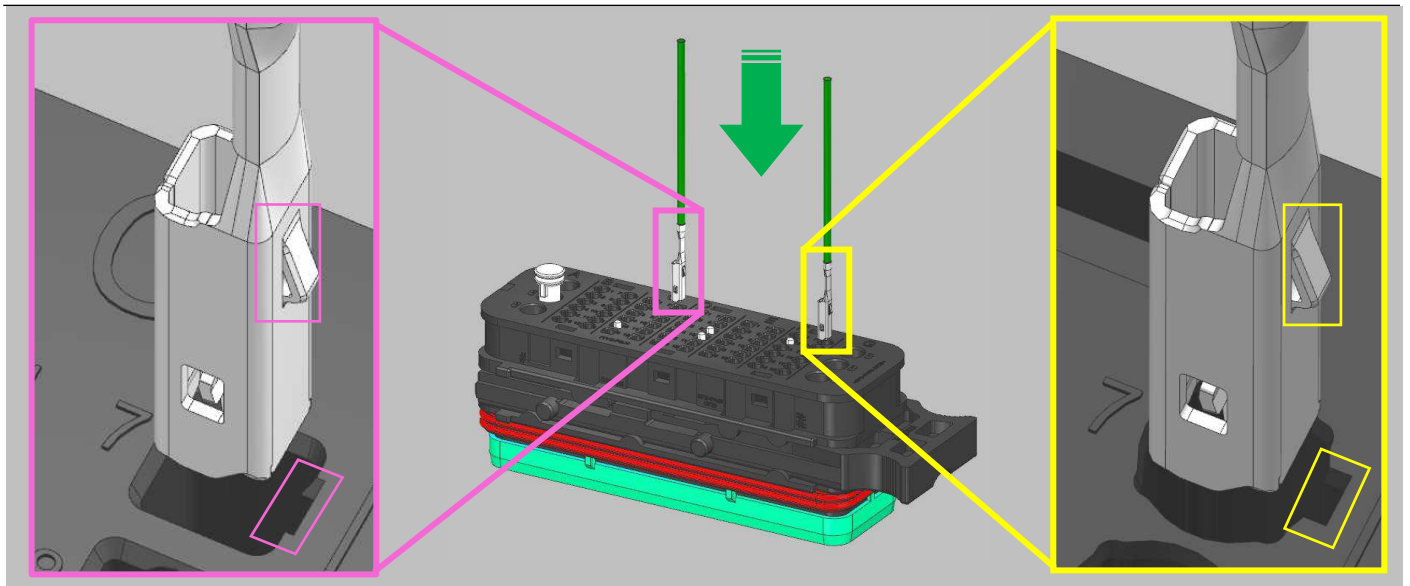
STEP 4 – INSERT SIGNAL TERMINALS



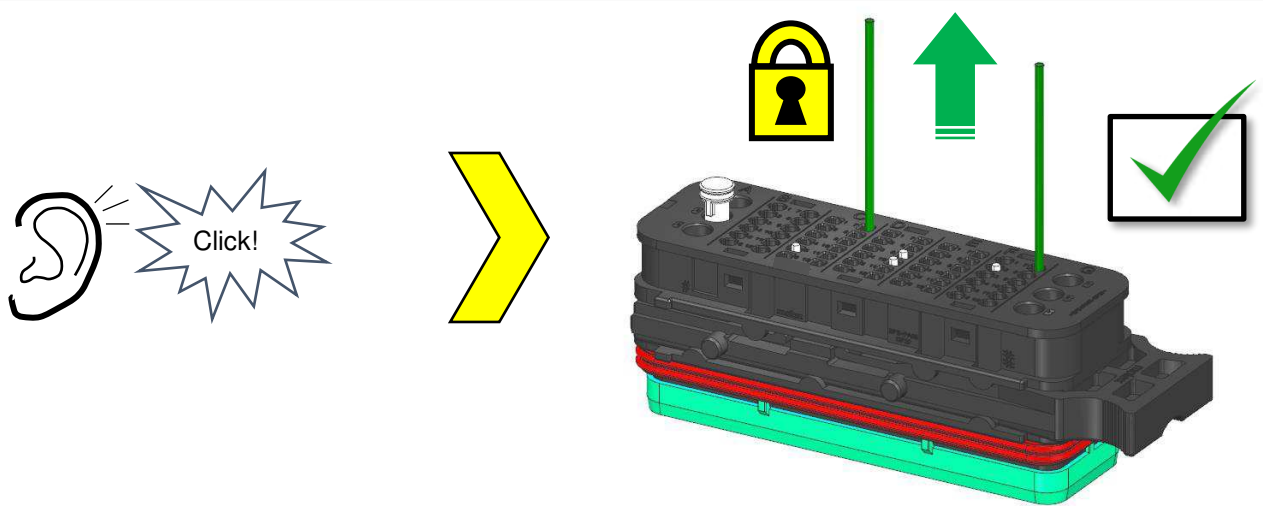
Part no. see sales drawing SD-33012-002



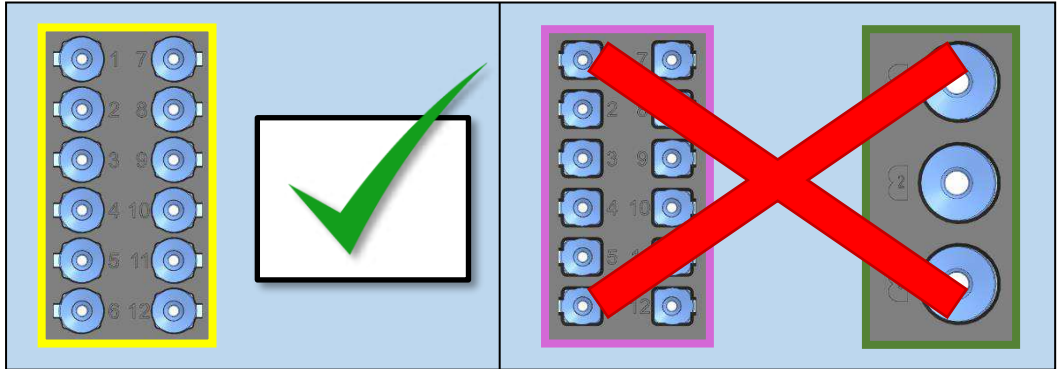
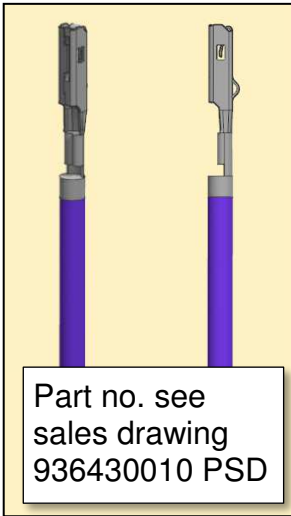
Signal
Cable Insulation Diameter Range 1.5 - 2.7mm



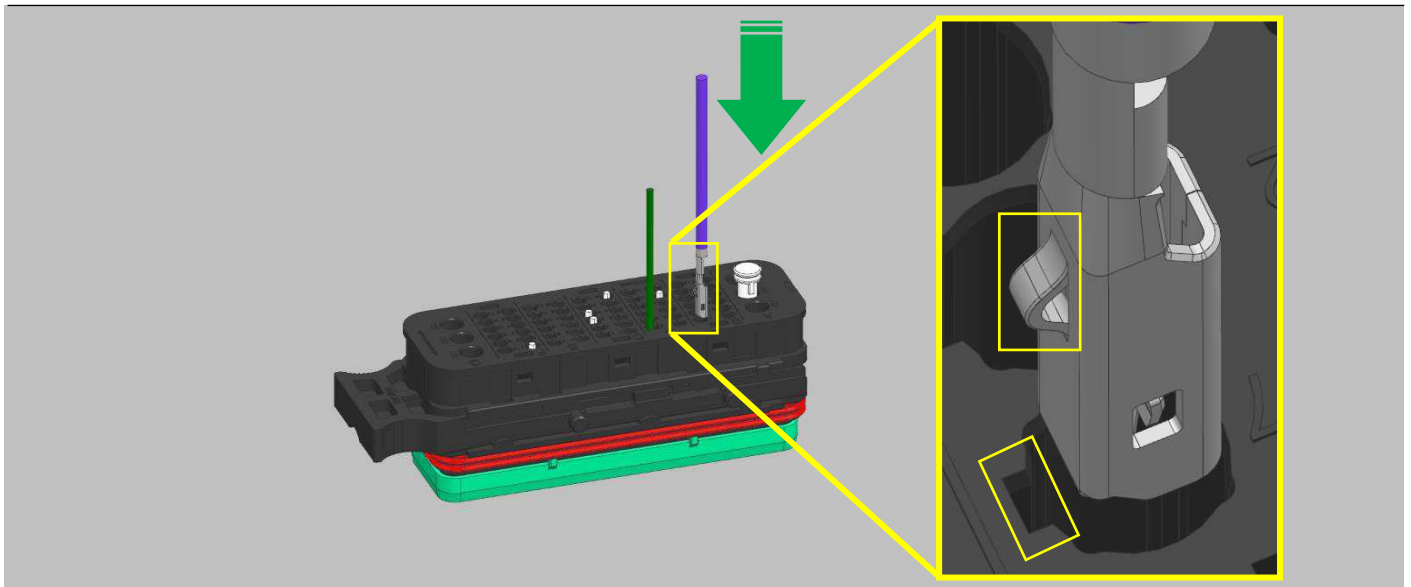
Demonstration example



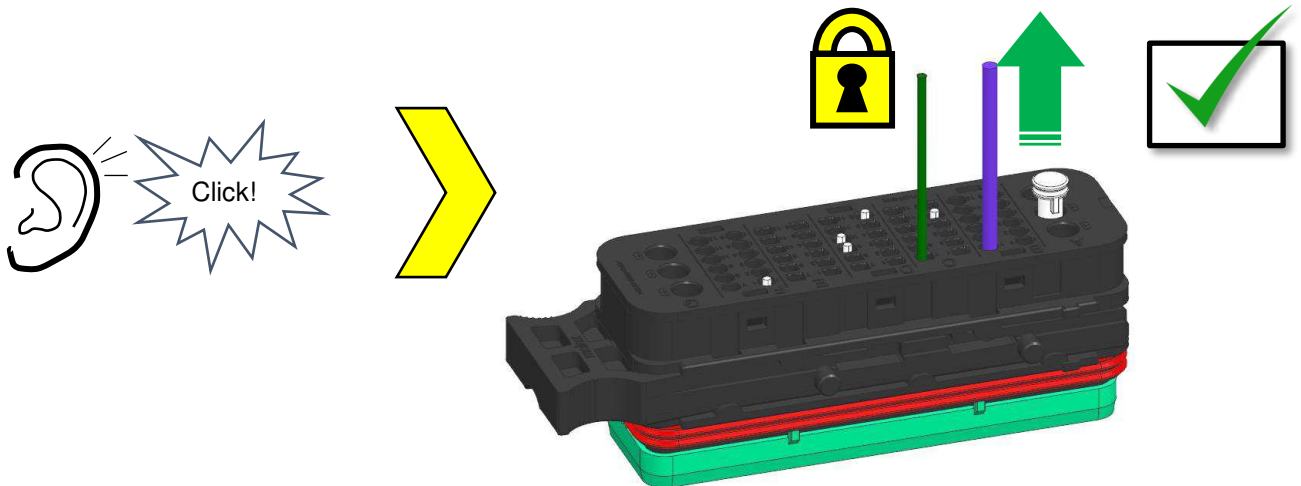
STEP 5 – INSERT 2.5MM² (13AWG) TERMINAL



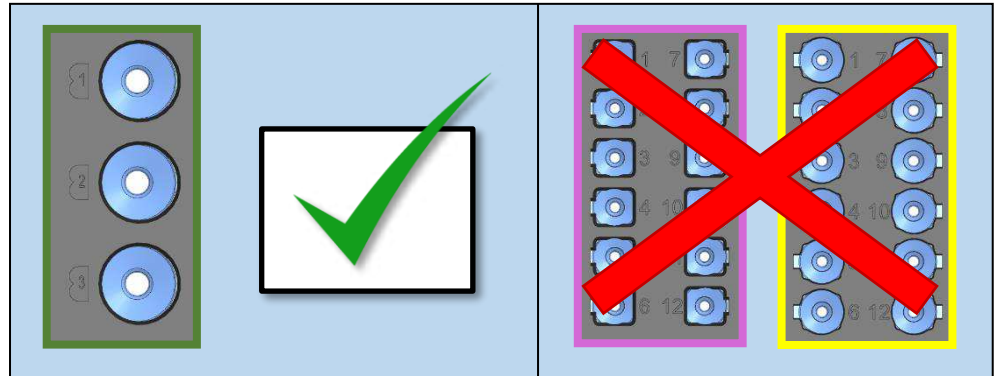
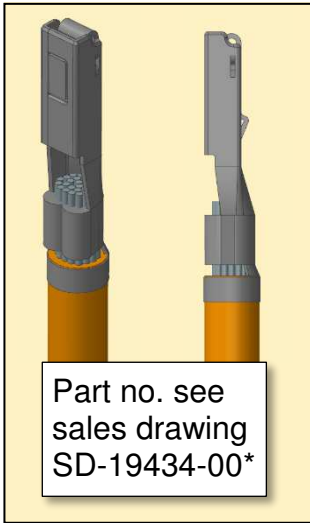
2.5mm²
Cable Insulation Diameter
Range 1.5 – 3.0mm



Demonstration example



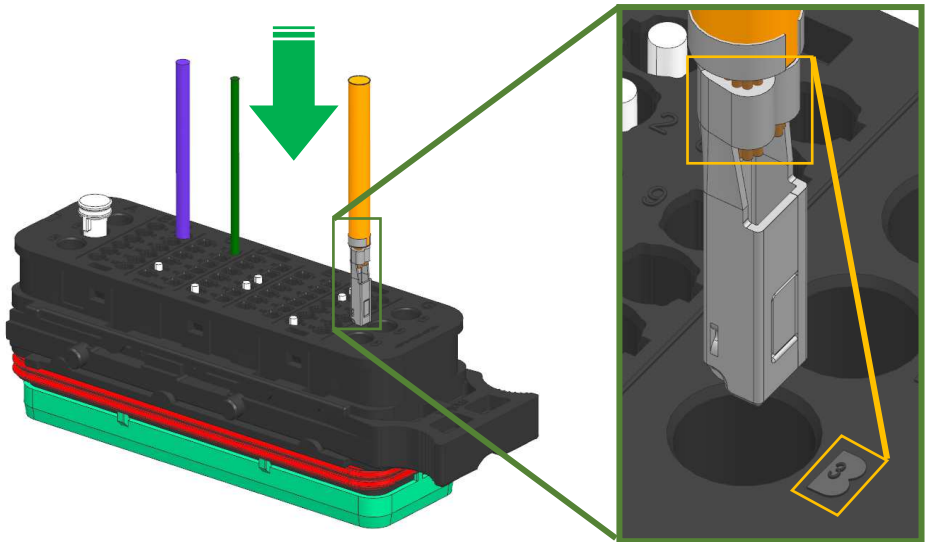
STEP 6 – INSERT POWER TERMINALS



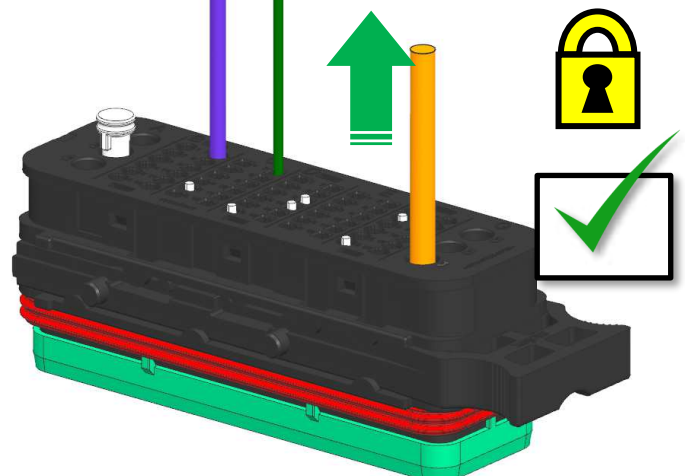
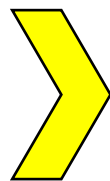
Power
Cable Insulation Diameter
Range 3.0 – 5.0mm



Insert terminal nose carefully through seal opening



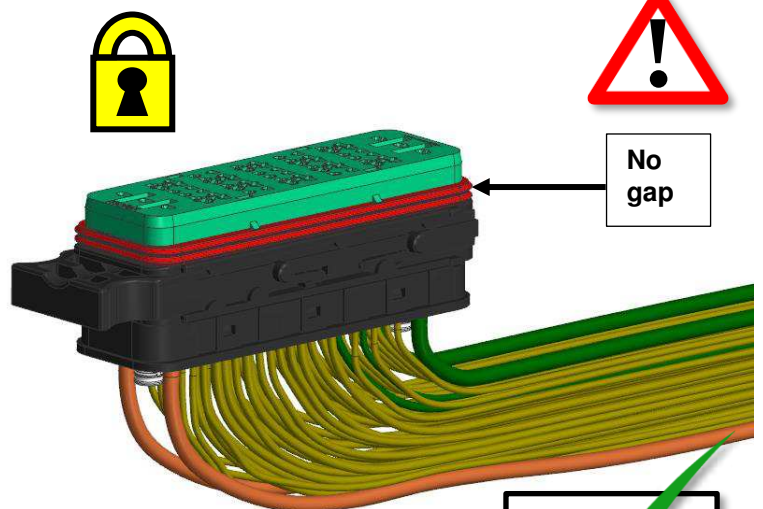
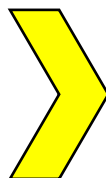
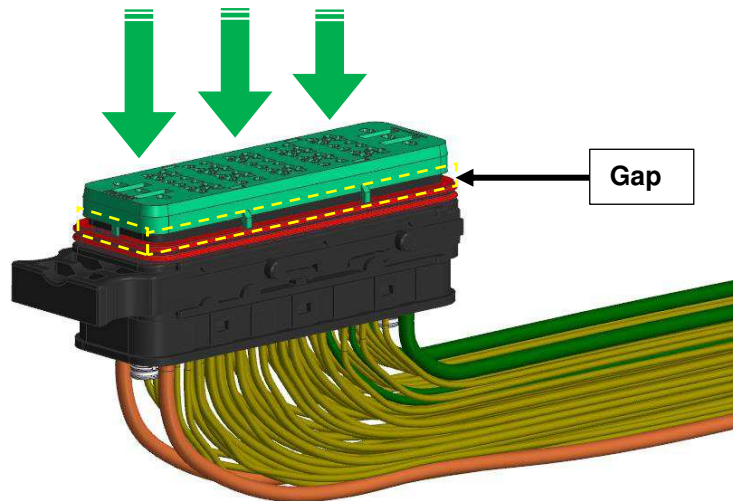
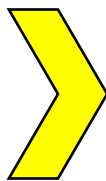
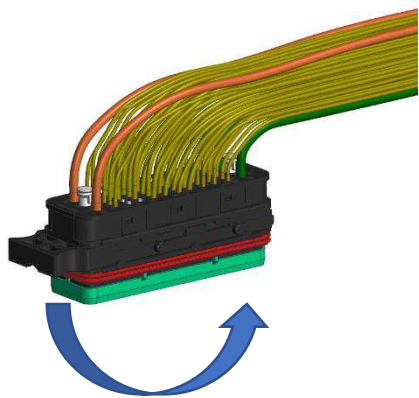
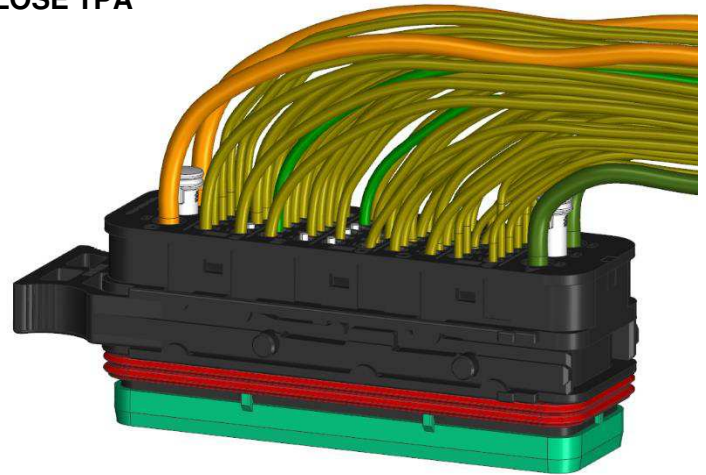
Demonstration example



STEP 7 – CLOSE TPA



**Populate connector fully
no holes left empty**

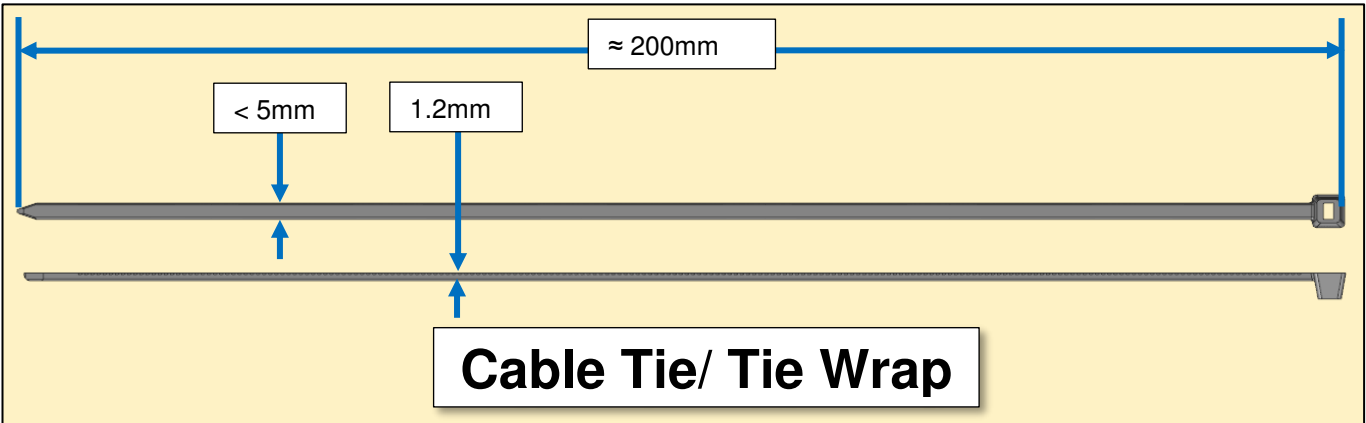
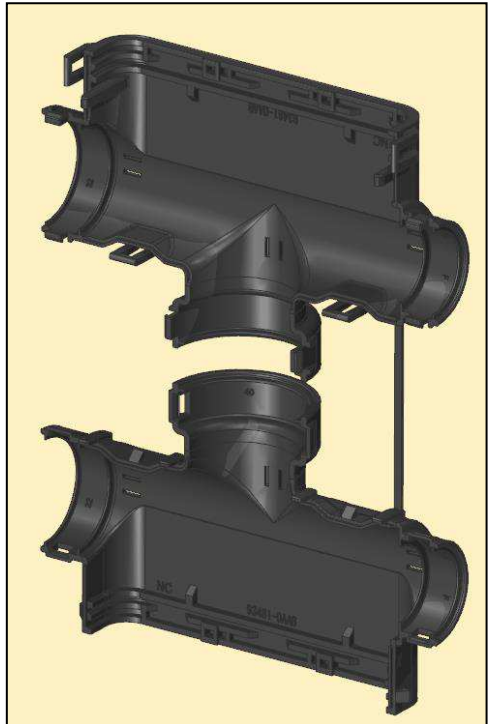
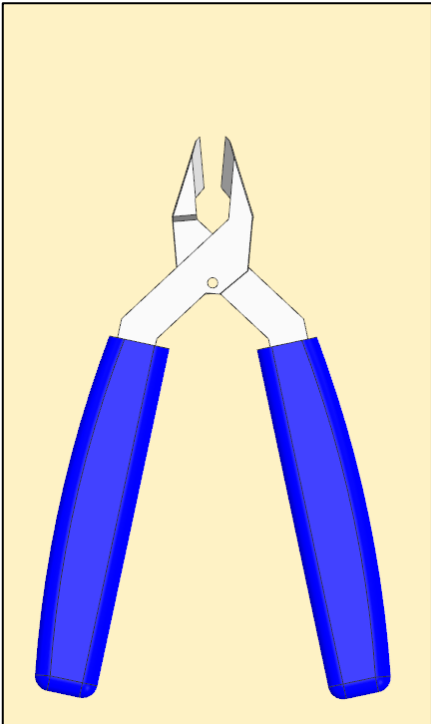


STEP 8 – APPLY WIRE DRESS/CONDUIT INTERFACE

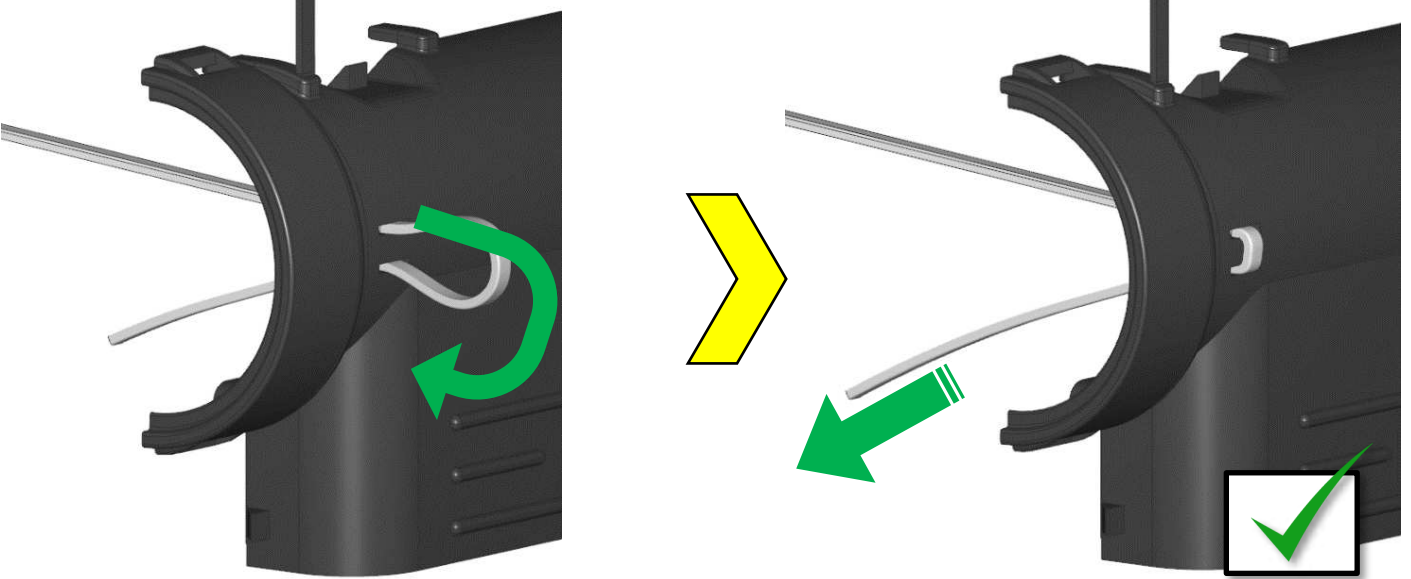
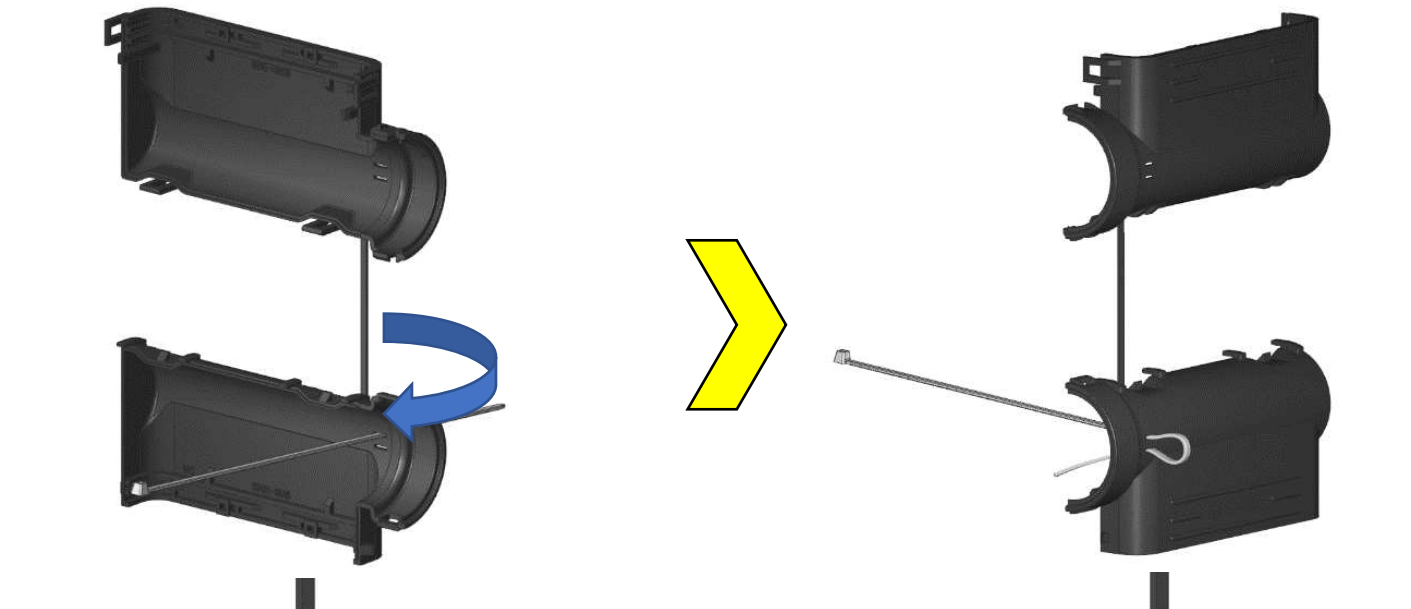
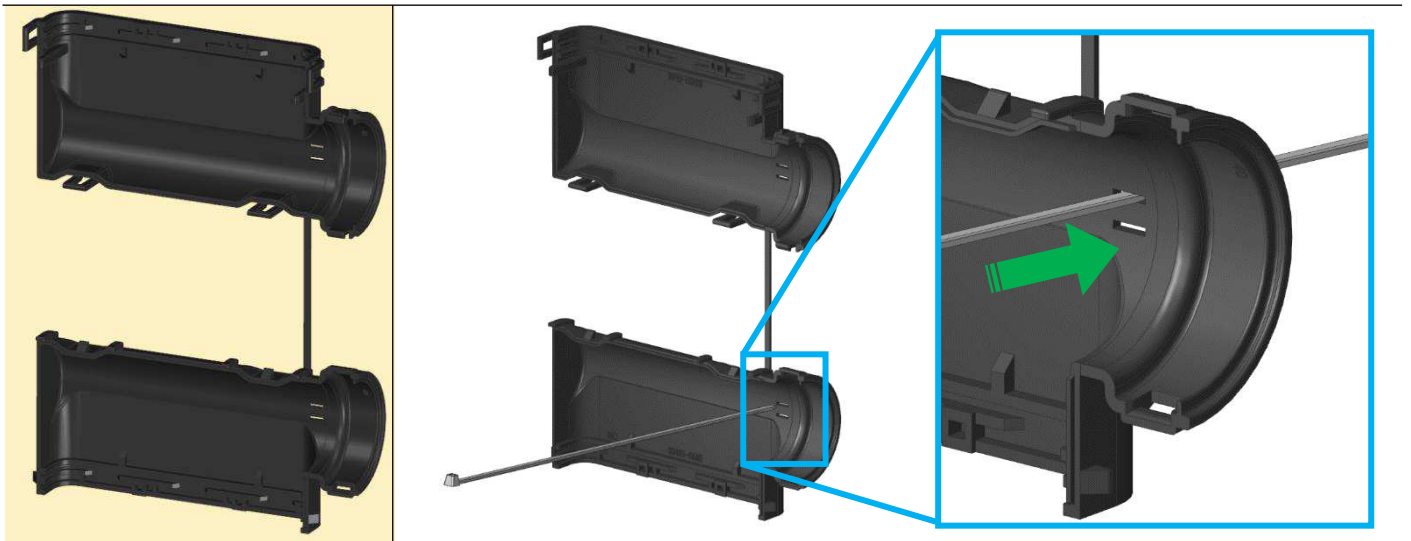


- Various configurations of wire dress available.
 - 1 – 3 open exits
 - 4 different exit sizes
- See sales drawing: 2500034
- Appropriate conduit must be used with wire dress
- Example shown for demonstration only
- Direction of exit(s) per wiring diagram

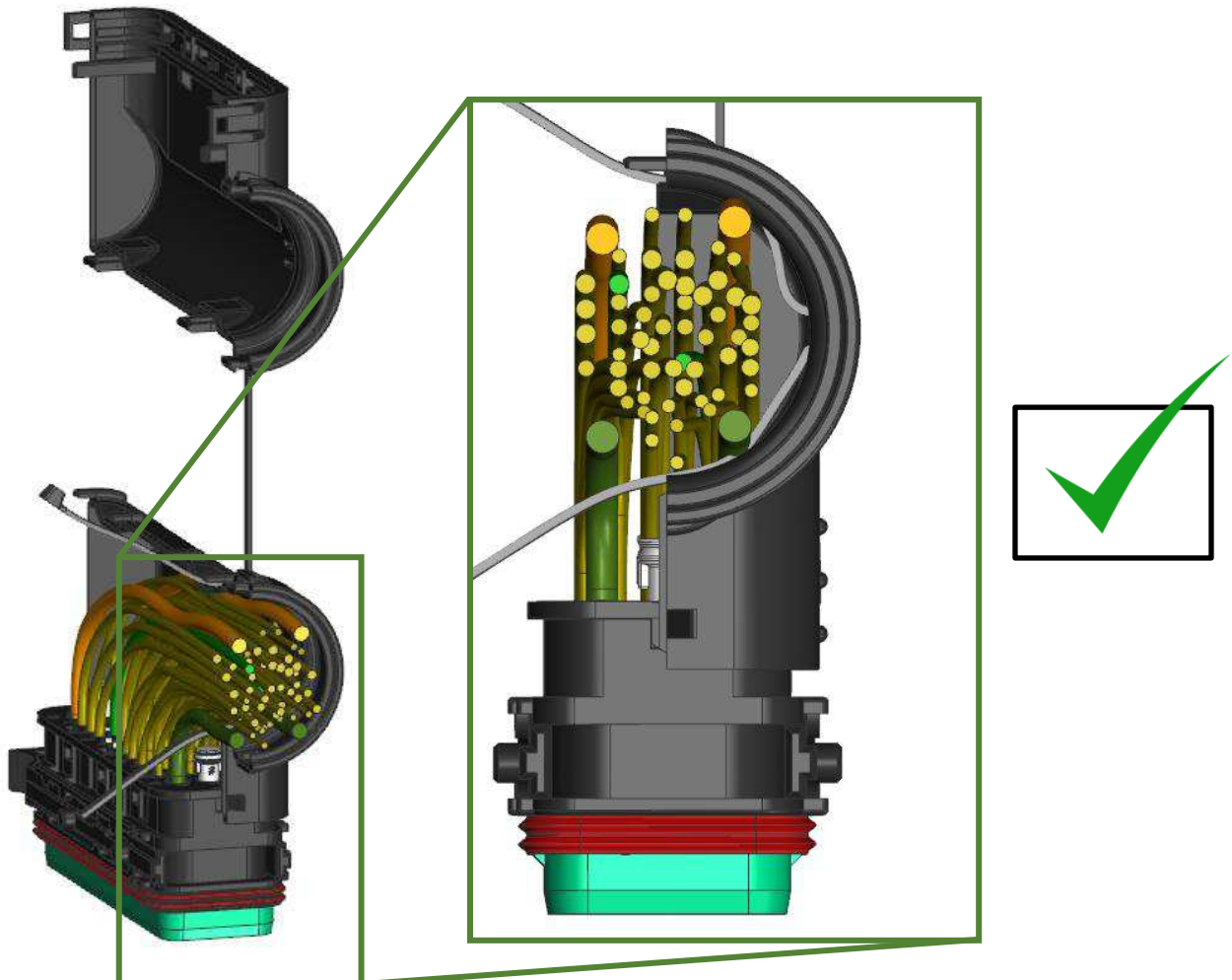
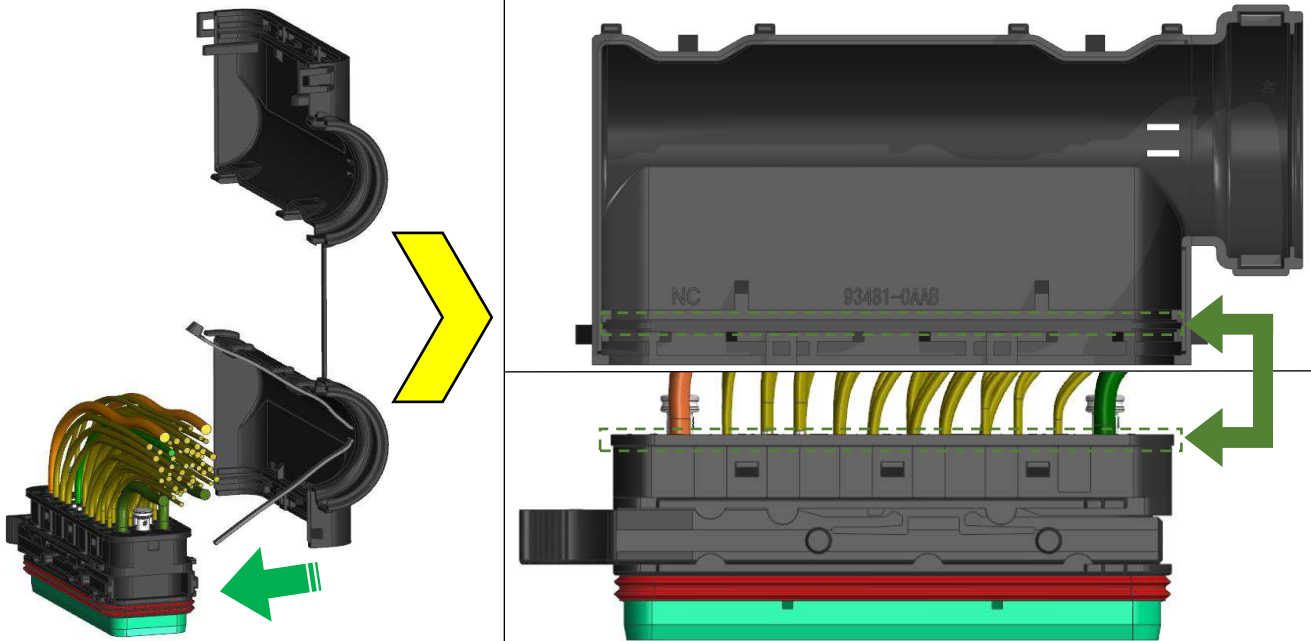
Tool & parts needed



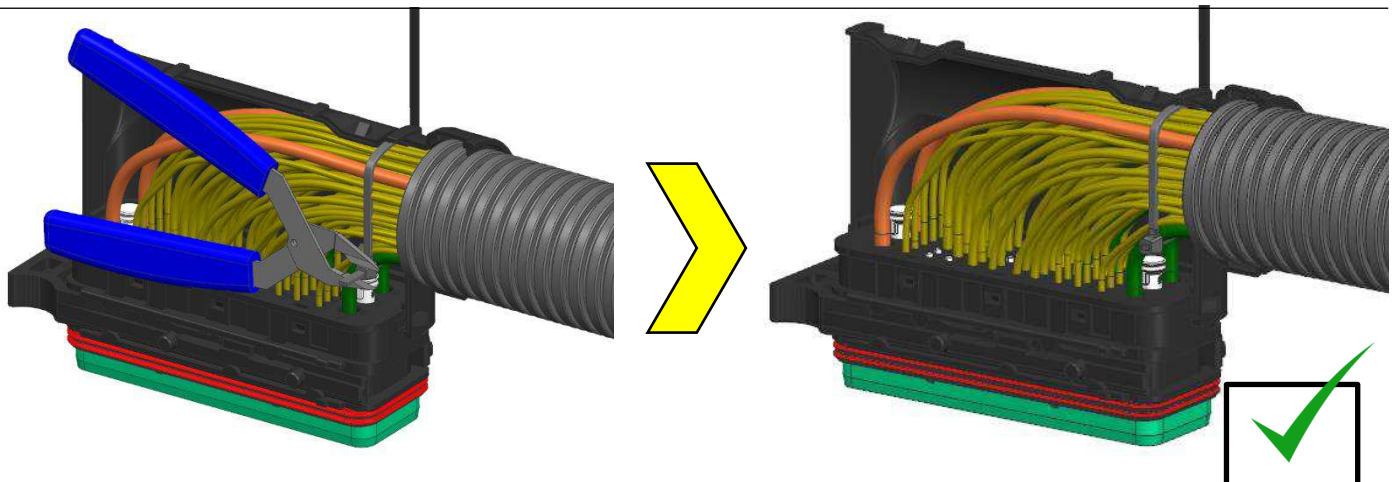
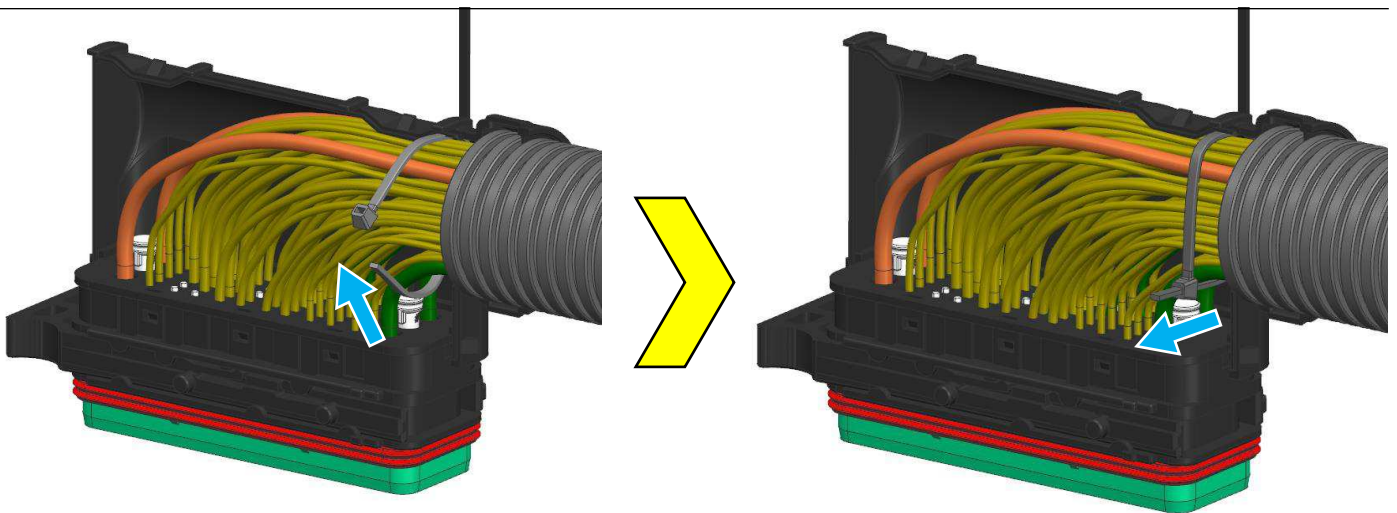
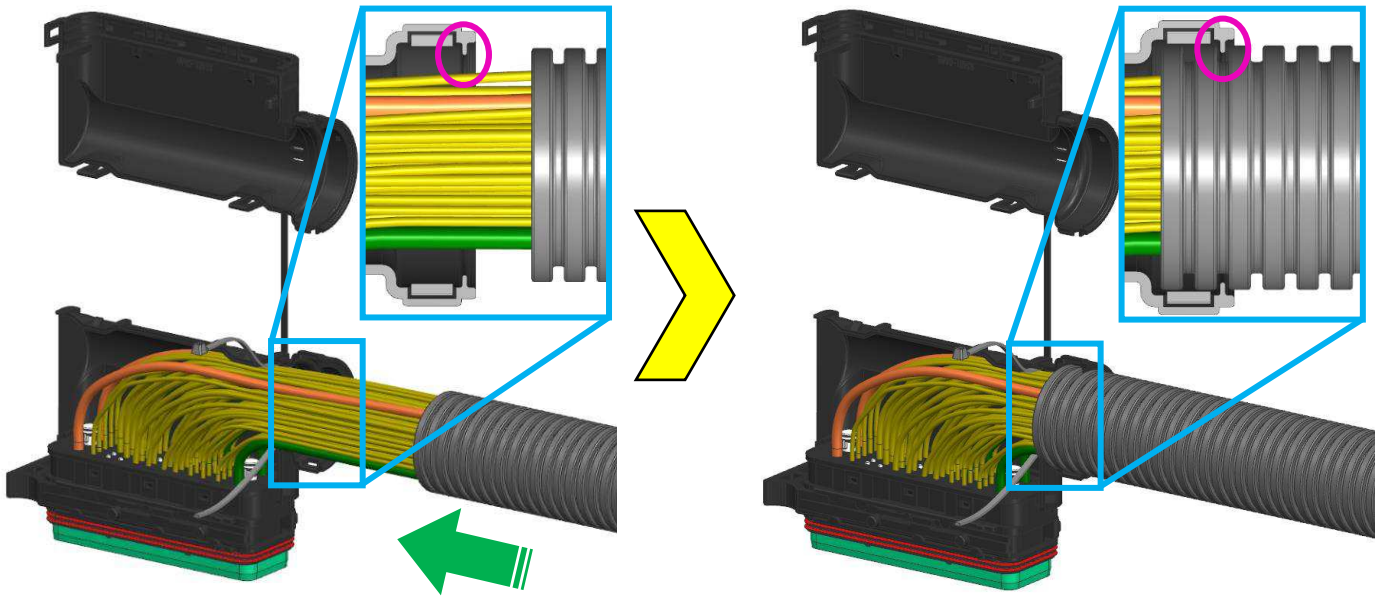
RECOMMENDED ASSEMBLY SEQUENCE



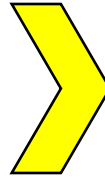
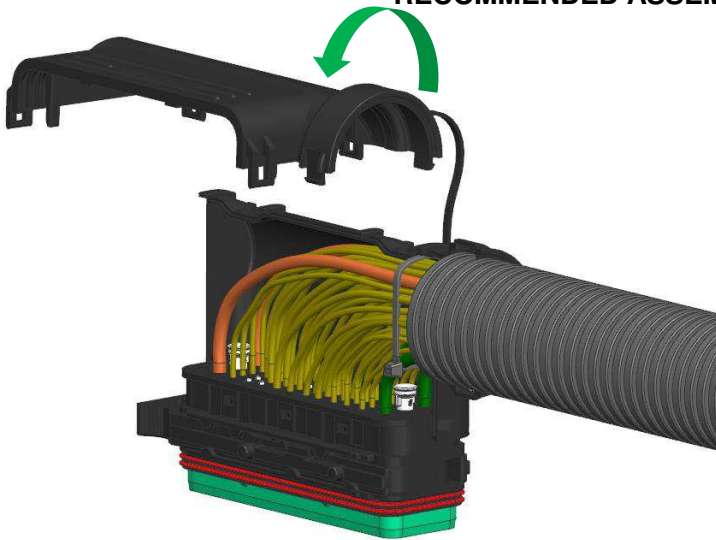
RECOMMENDED ASSEMBLY SEQUENCE



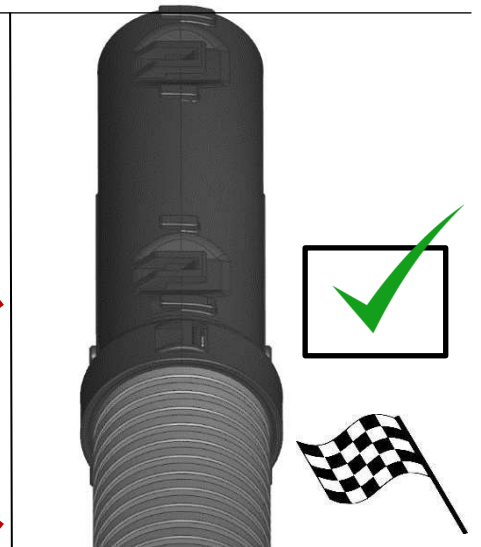
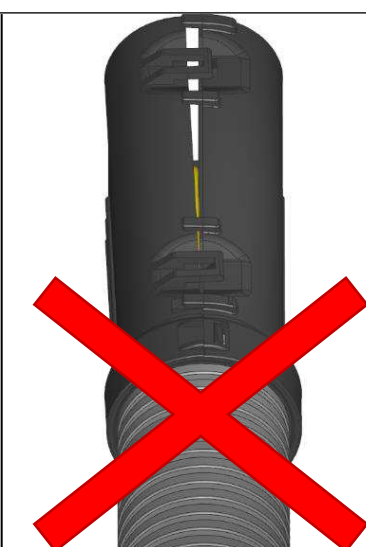
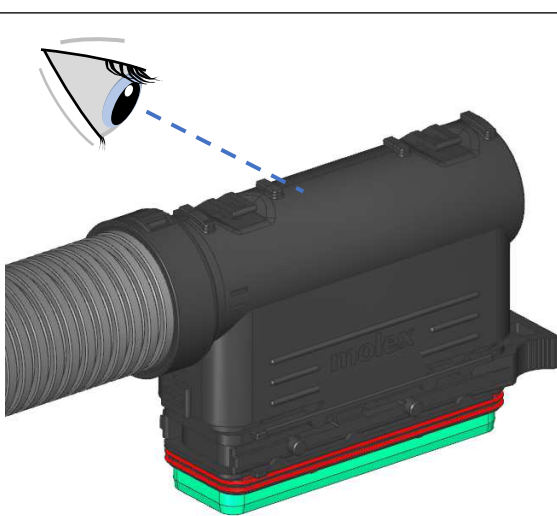
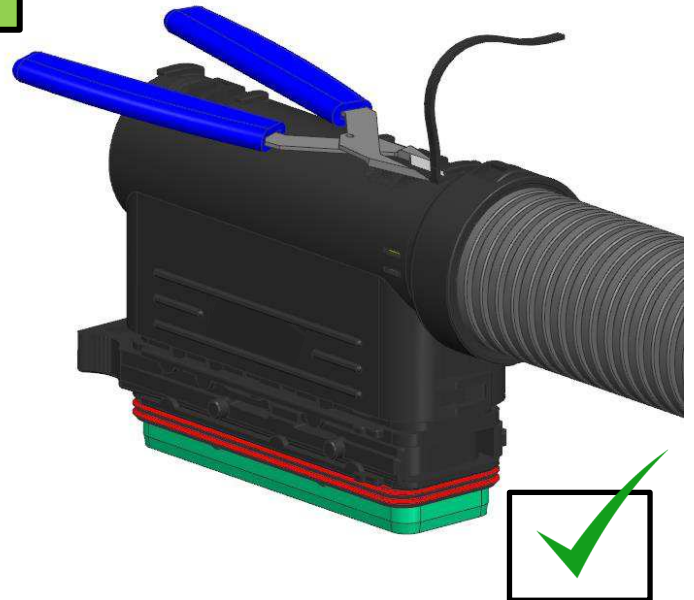
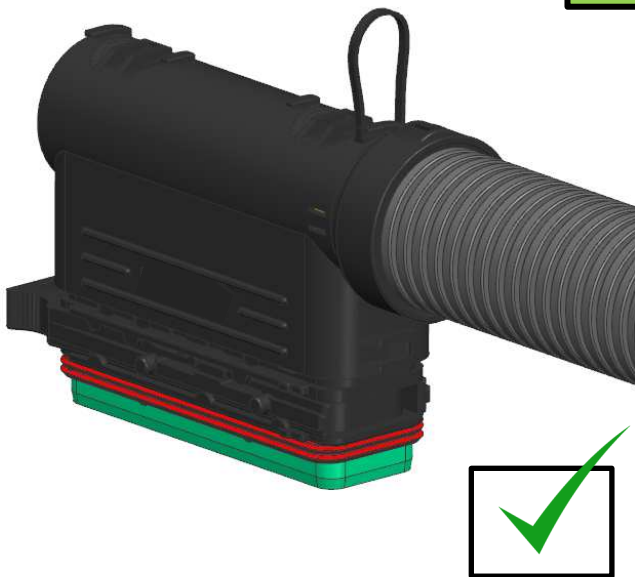
RECOMMENDED ASSEMBLY SEQUENCE



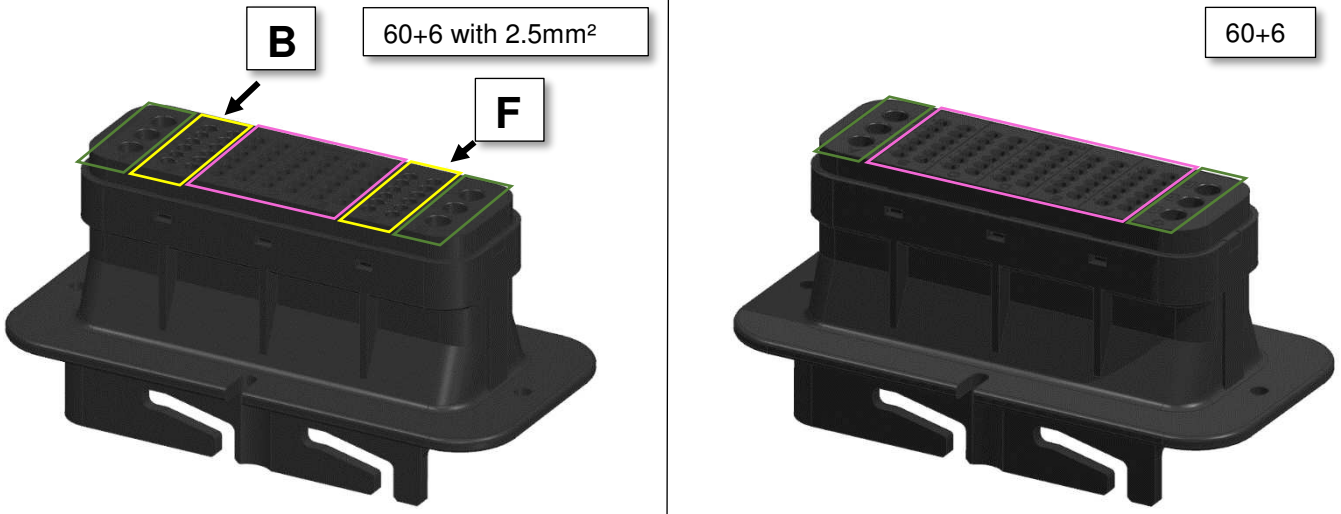
RECOMMENDED ASSEMBLY SEQUENCE



OR



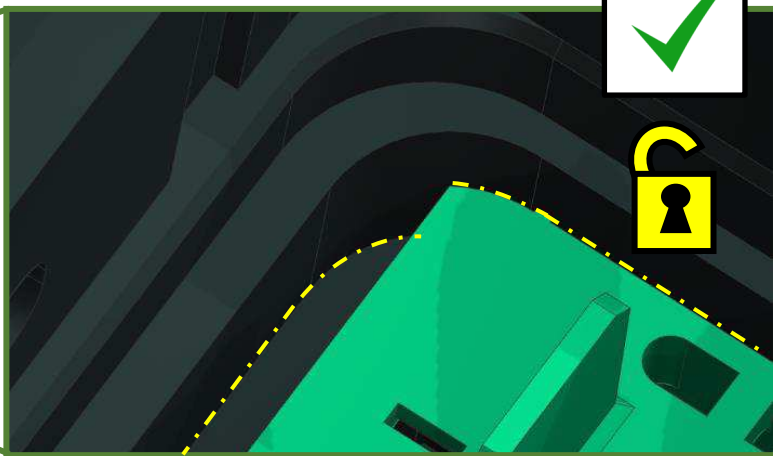
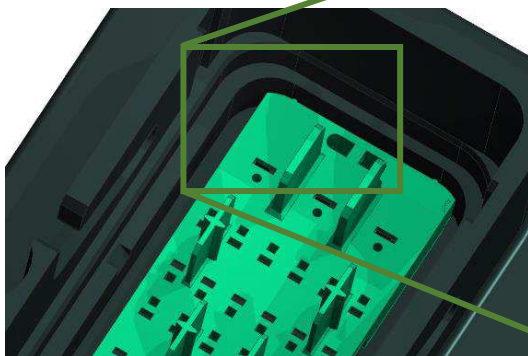
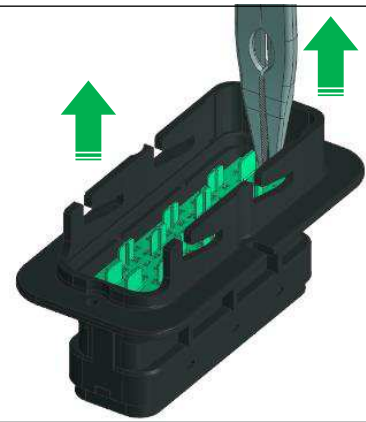
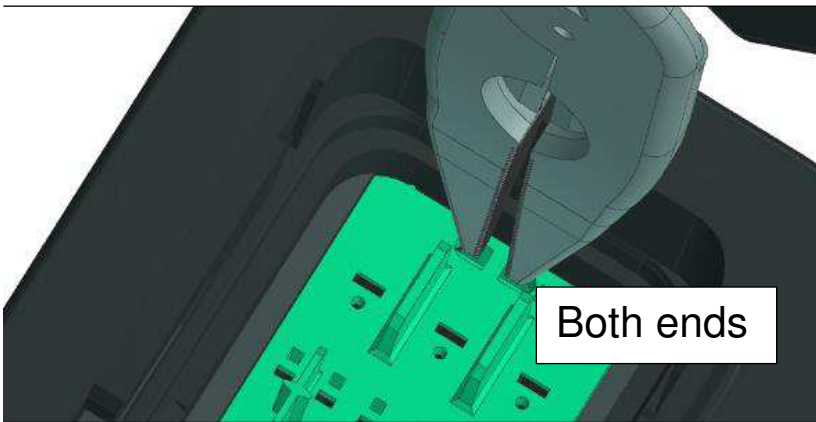
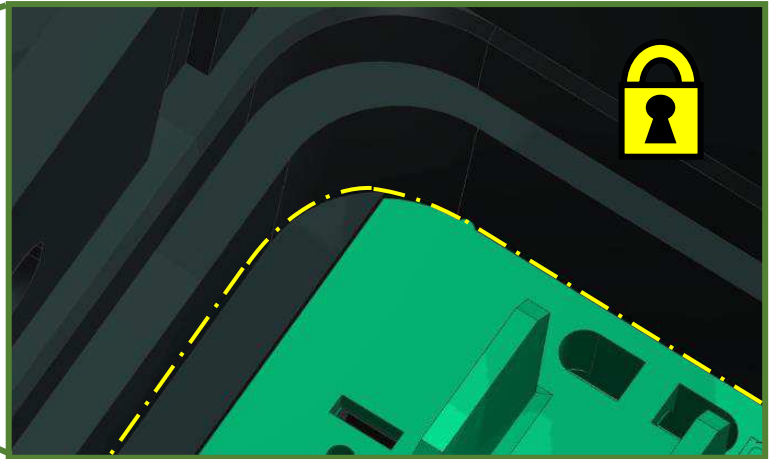
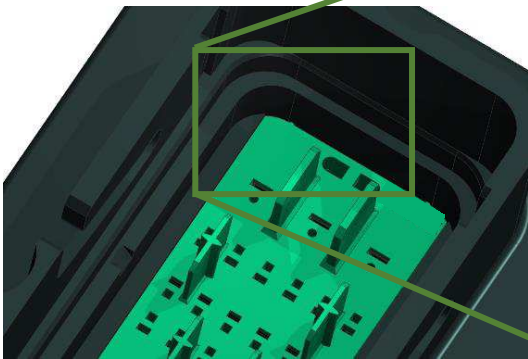
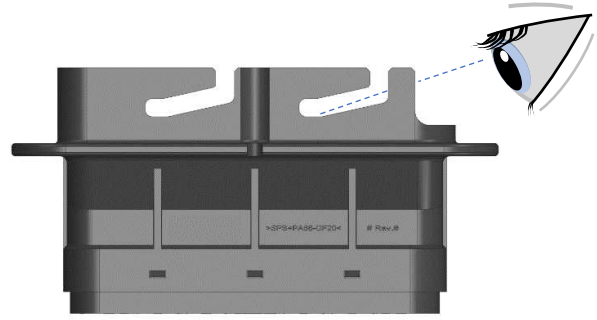
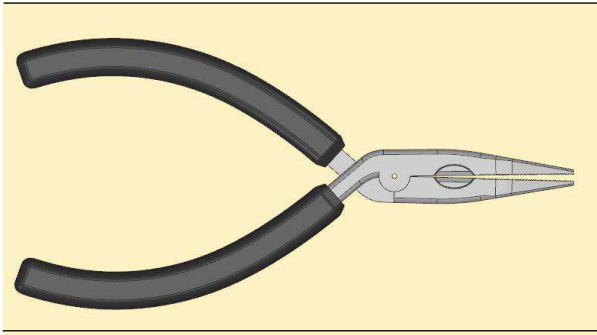
MALE ASSEMBLY OVERVIEW



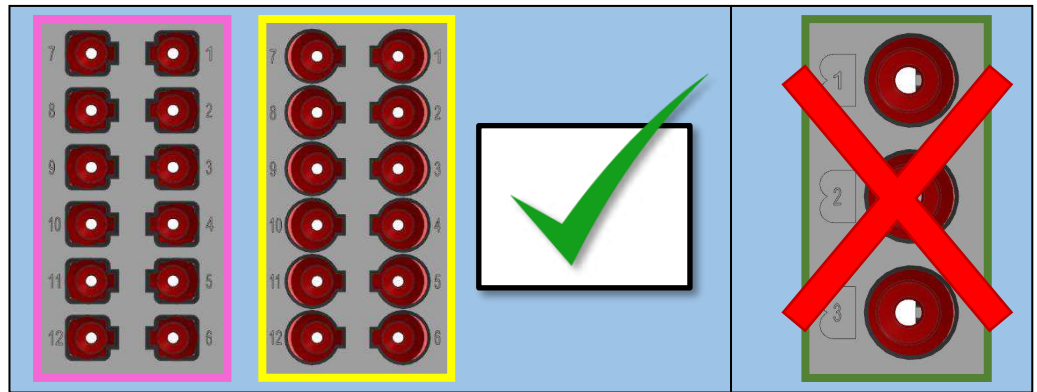
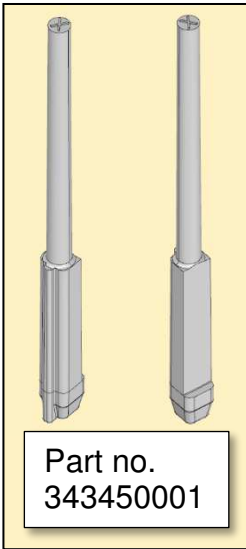
- 2.5mm² only available on some configurations and only in **B and F** locations as highlighted in yellow above
- For all configurations please see 2500016 thru 2500031

| Signal | 2.5mm ² | Power |
|--|---|---|
| | | |
| <p>Signal Cable Insulation Diameter Range 1.5 - 2.7mm</p> | <p>2.5mm² Cable Insulation Diameter Range 1.5 – 3.0mm</p> | <p>Power Cable Insulation Diameter Range 3.0 – 5.0mm</p> |

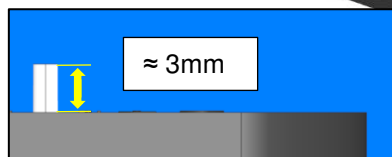
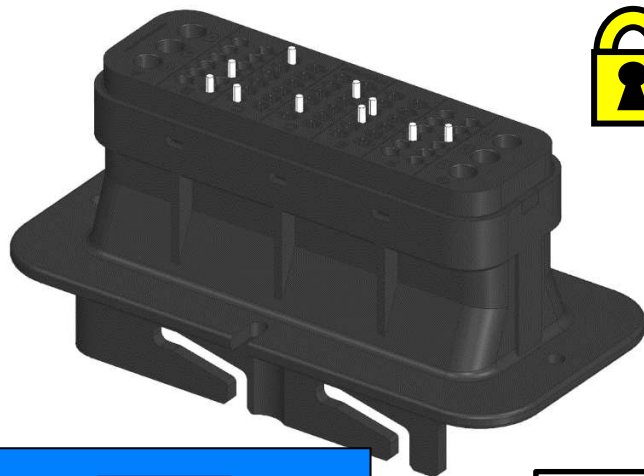
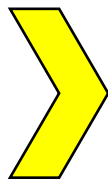
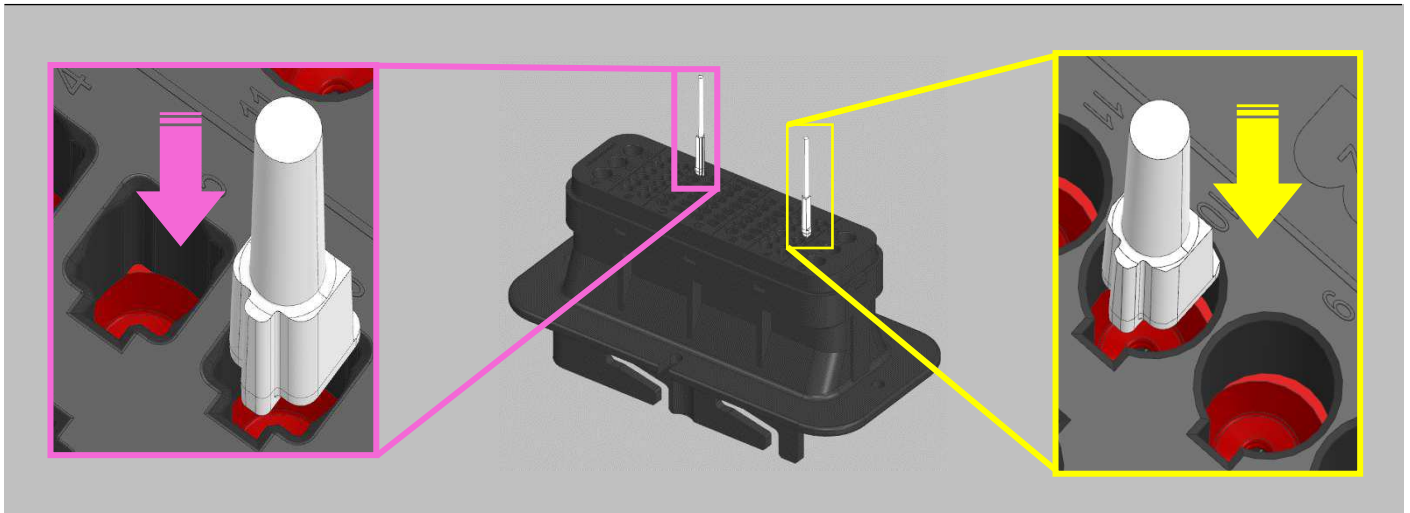
STEP 1 – OPEN TPA



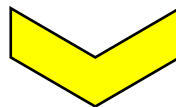
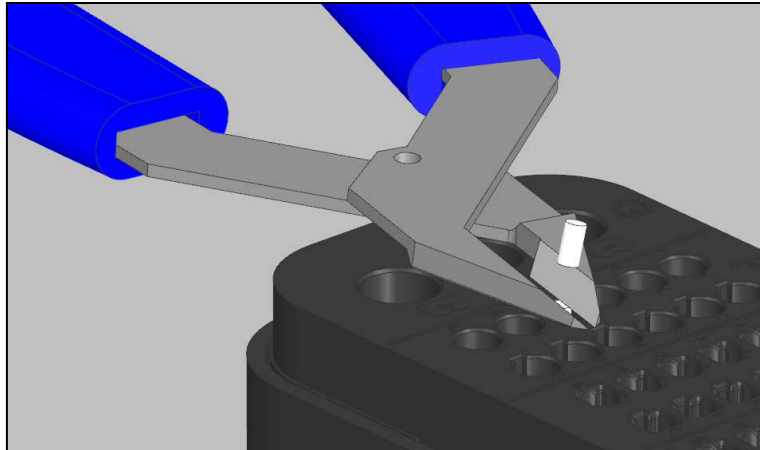
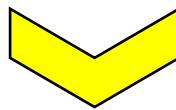
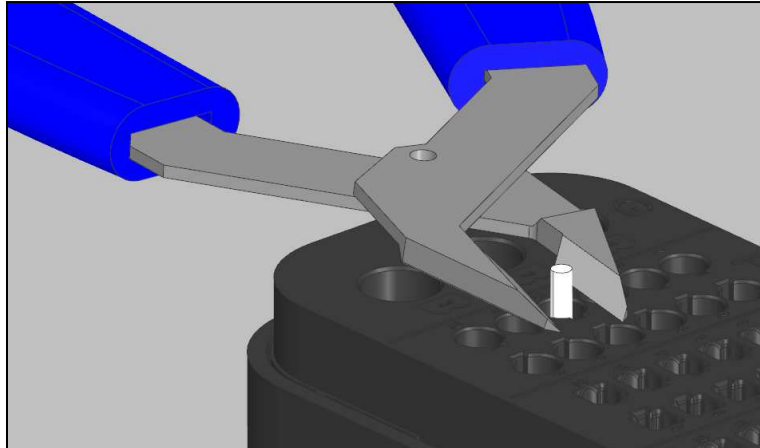
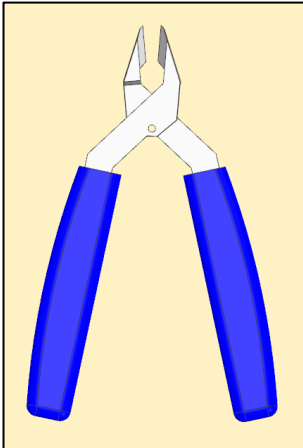
STEP 2 – INSERT SIGNAL BLIND CAVITY PLUGS



Demonstration example

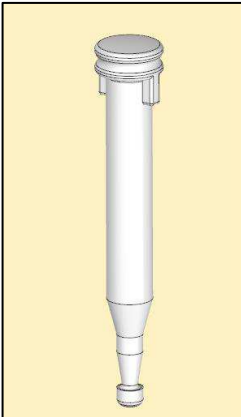


STEP 2.1 – TRIM SIGNAL BLIND CAVITY PLUGS (RECOMMENDED)

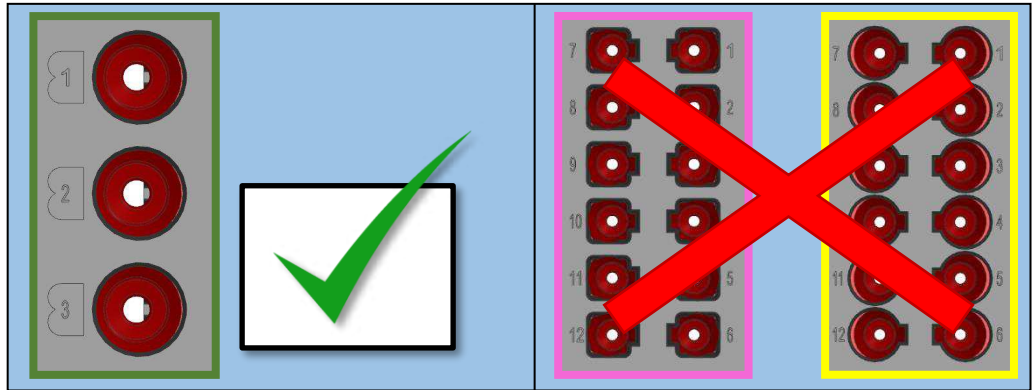


Demonstration example

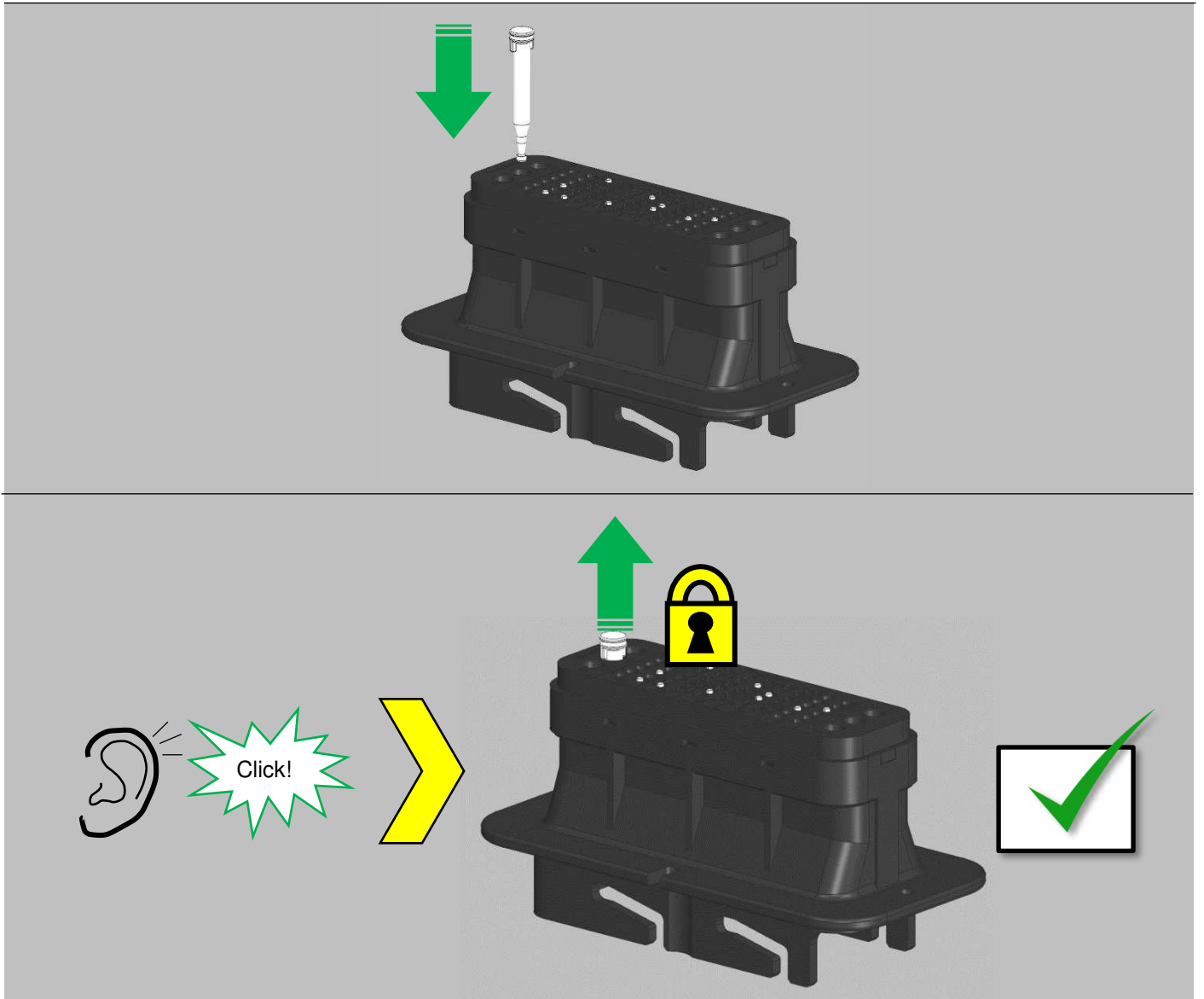
STEP 3 – INSERT POWER BLIND CAVITY PLUGS



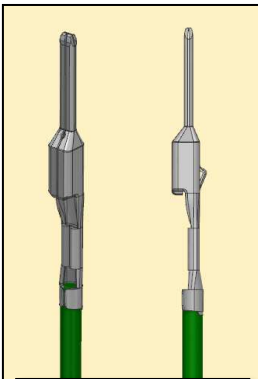
P/N:2500033-1
(Old P/N:
937320001)



Demonstration example



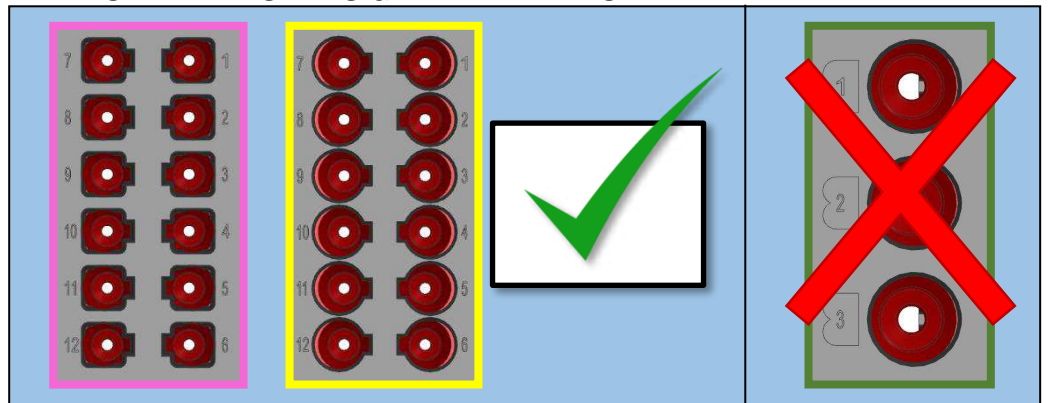
STEP 4 – INSERT SIGNAL TERMINALS



Part no. see sales drawing SD-33000-001

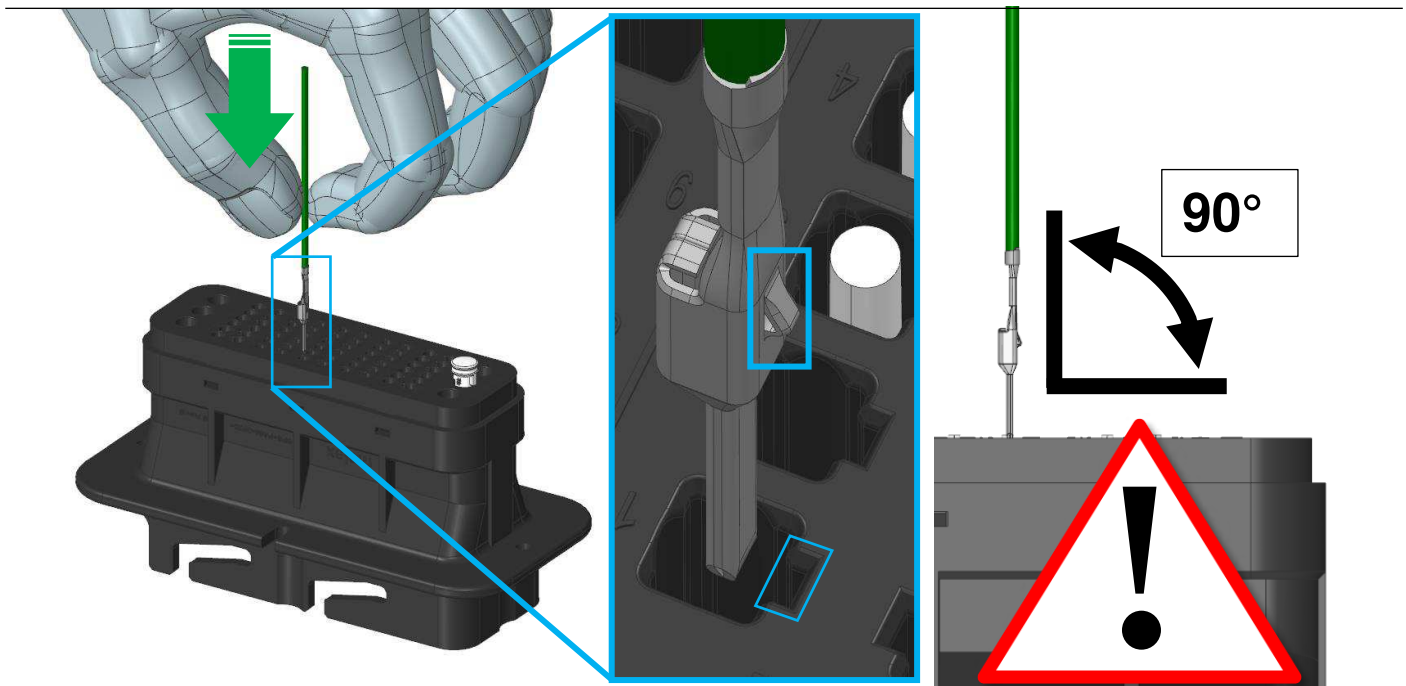
Signal

Cable Insulation Diameter Range 1.5 - 2.7mm

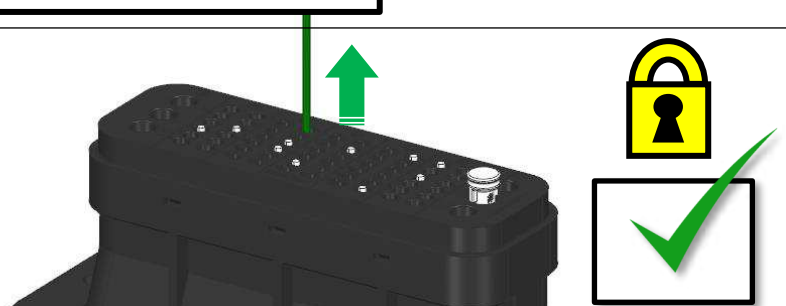
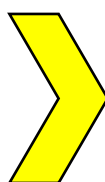


Important:

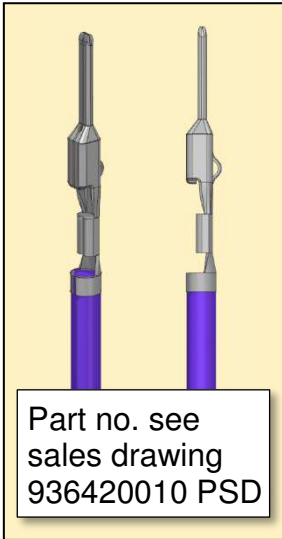
- Hold cable while putting in male terminals
- Insert terminals 90° to the rear cover
- Insert terminal nose carefully through seal opening



Demonstration example

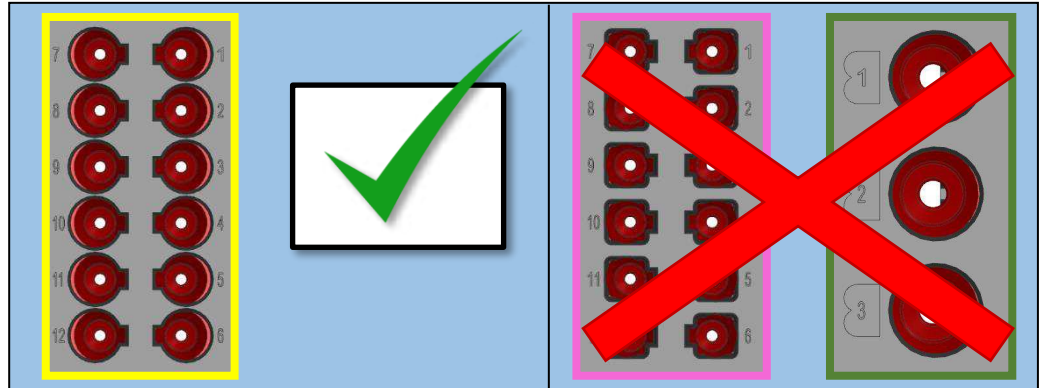


STEP 5 – INSERT 2.5MM² TERMINALS



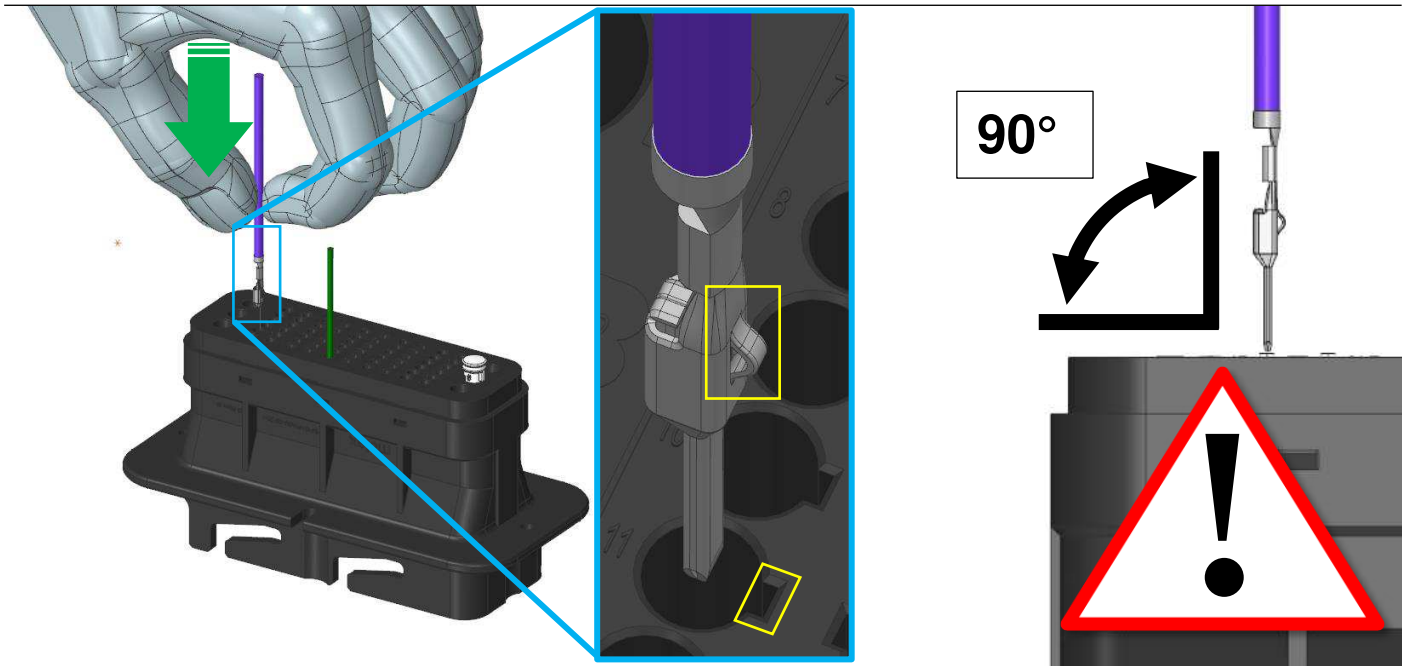
Part no. see sales drawing 936420010 PSD

2.5mm²
Cable Insulation Diameter
Range 1.5 – 3.0mm

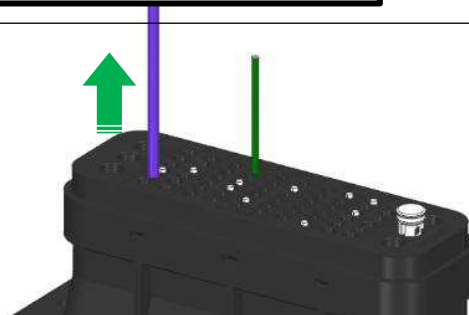
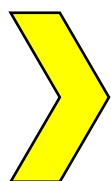


Important:

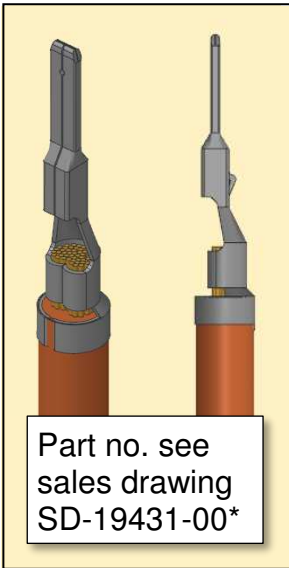
- Hold cable while putting in male terminals
- Insert terminals 90° to the rear cover
- Insert terminal nose carefully through seal opening



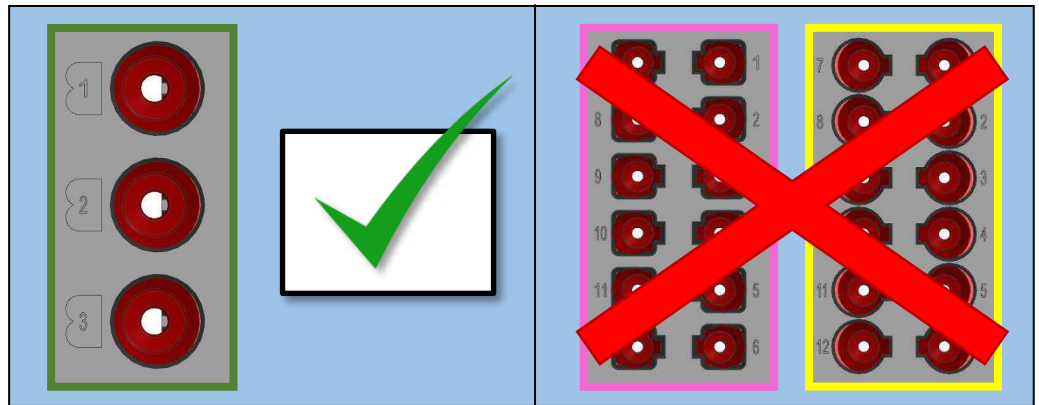
Demonstration example



STEP 6 – INSERT POWER TERMINALS



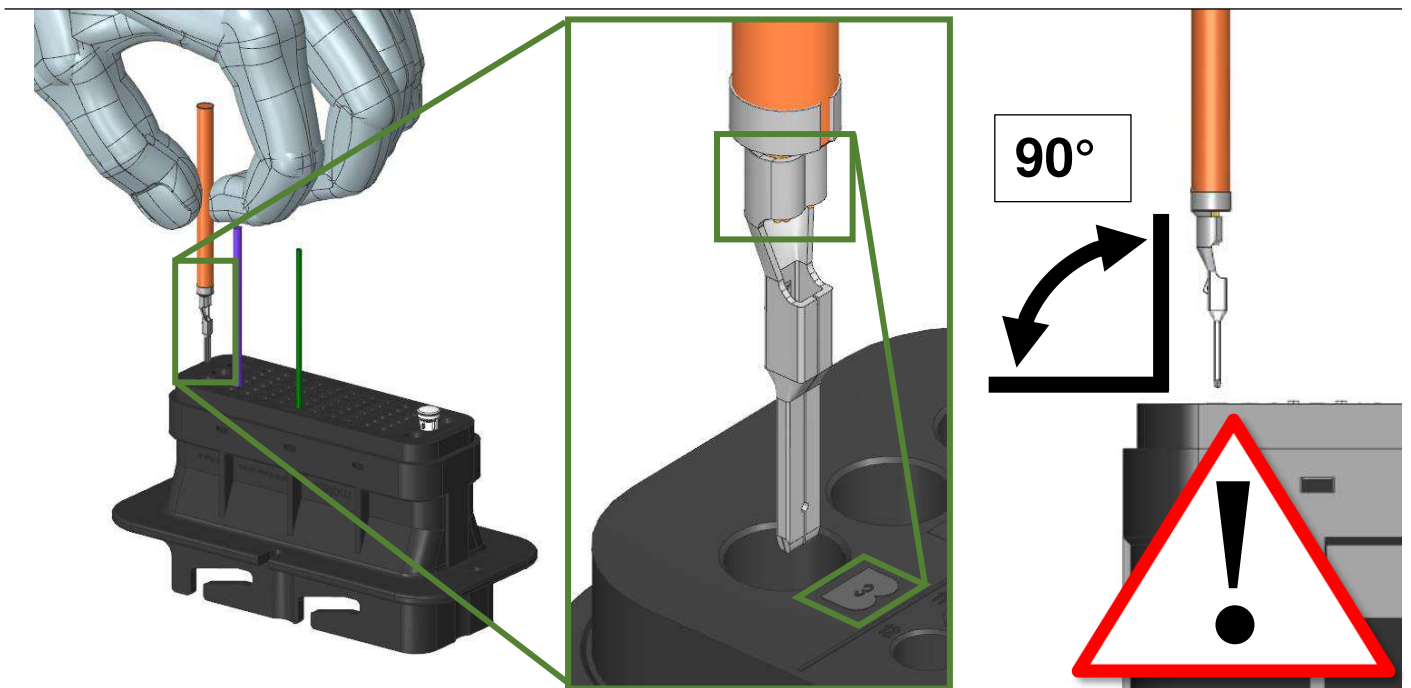
Part no. see sales drawing SD-19431-00*



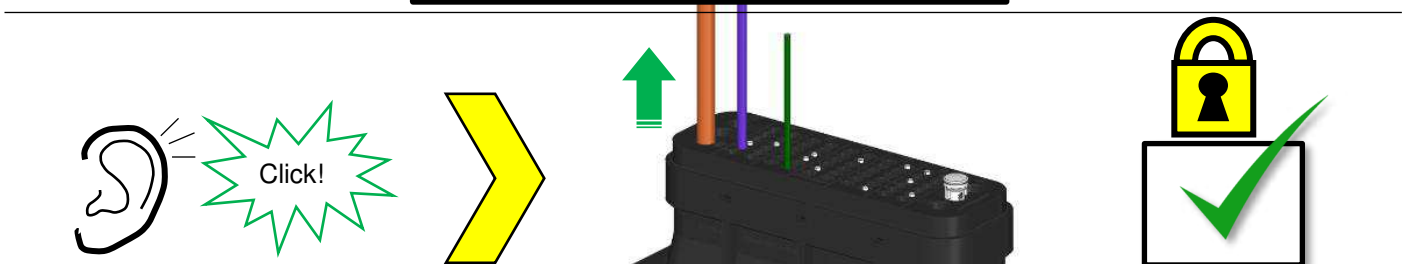
Power
Cable Insulation Diameter
Range 3.0 – 5.0mm

Important:

- Hold cable while putting in male terminals
- Insert terminals 90° to the rear cover
- Insert terminal nose carefully through seal opening



Demonstration example



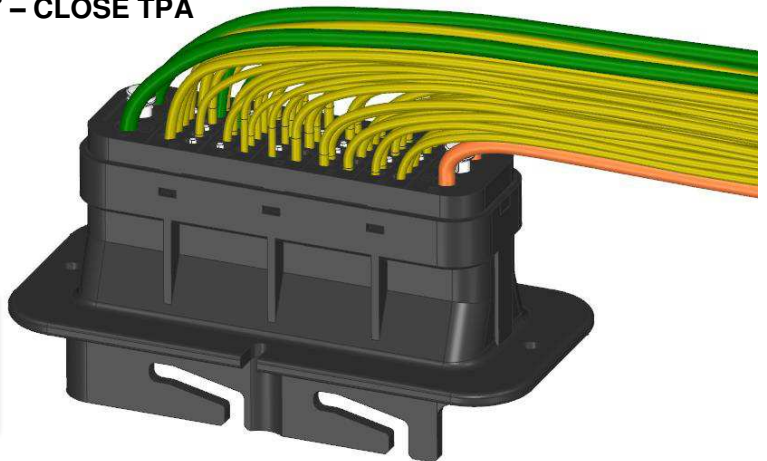
This specification is a controlled document.

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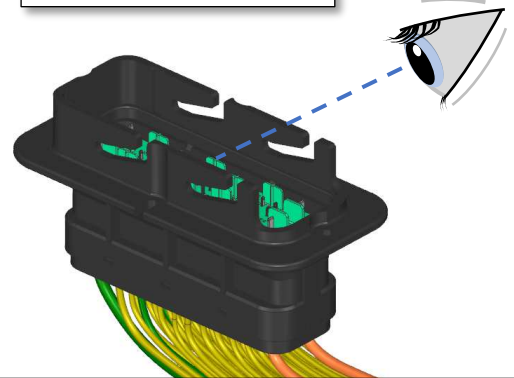
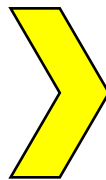
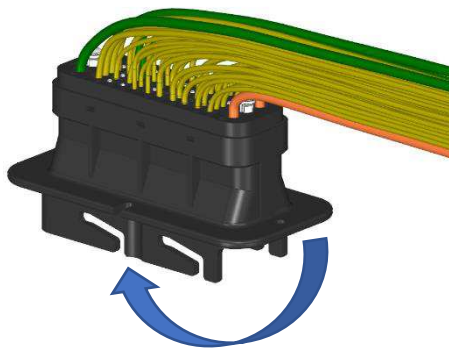
STEP 7 – CLOSE TPA



**Populate connector fully
No holes left empty**



Final Check

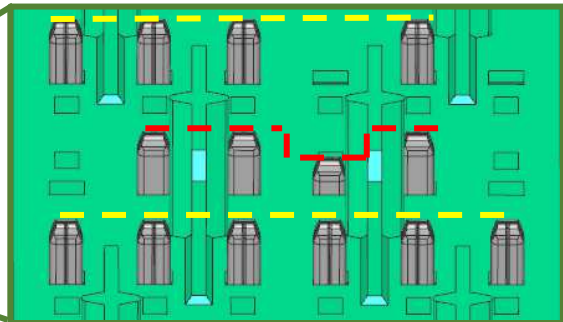
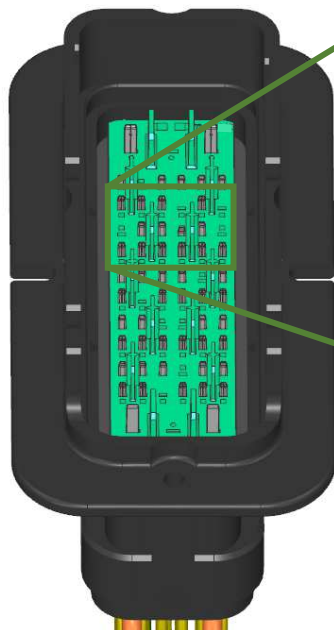


Note: Where terminals are not shown, blind cavity plugs have been used

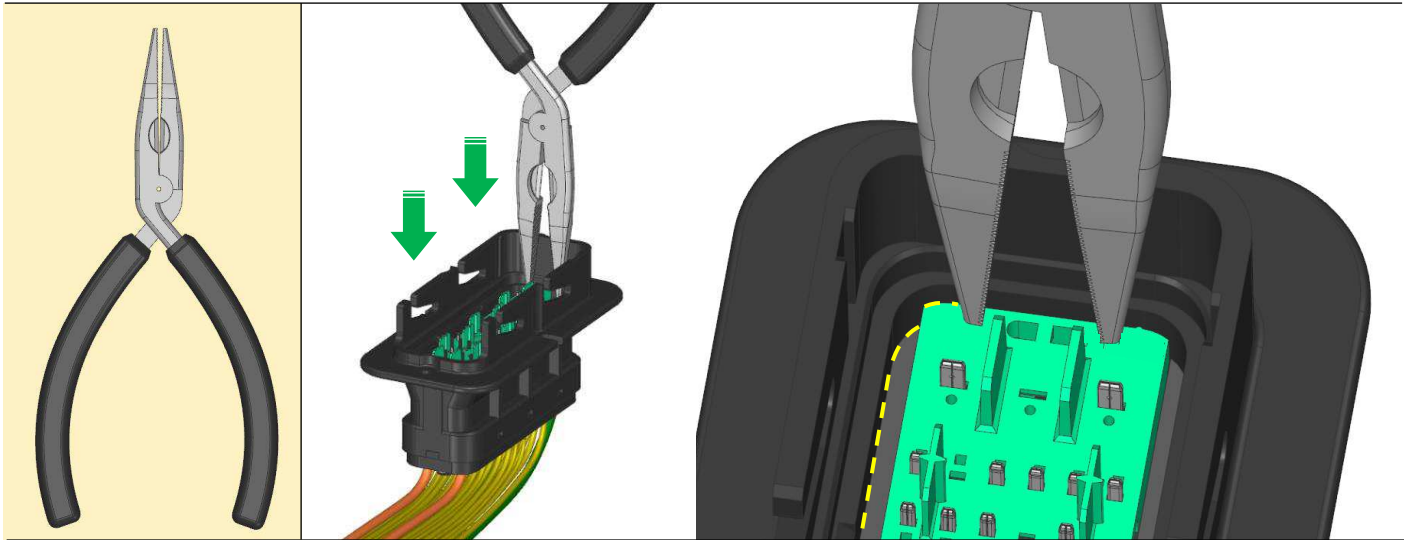
Demonstration example



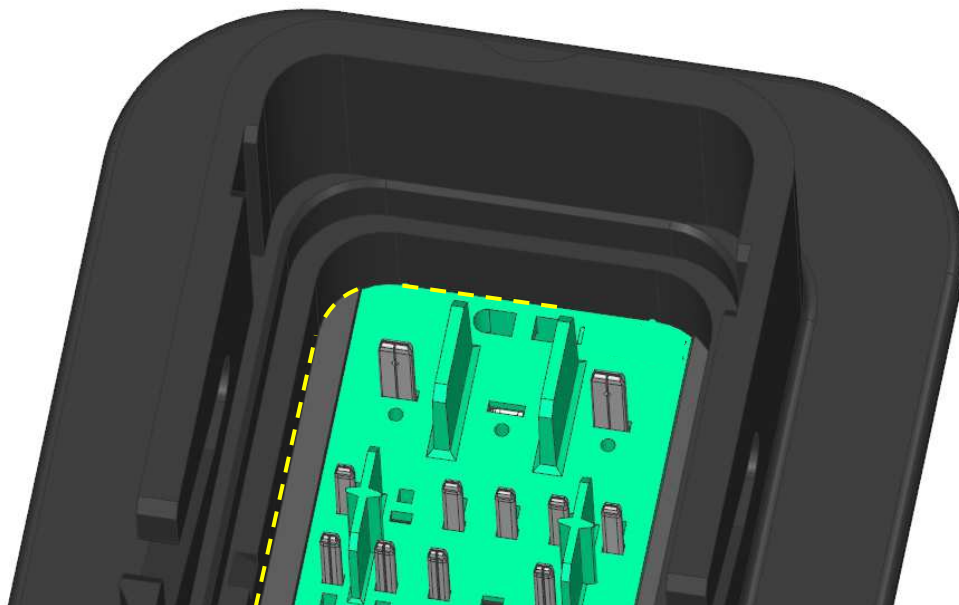
Ensure all cables are pushed forward fully



STEP 7 – CLOSE TPA



Note: Where terminals are not shown, blind cavity plugs have been used

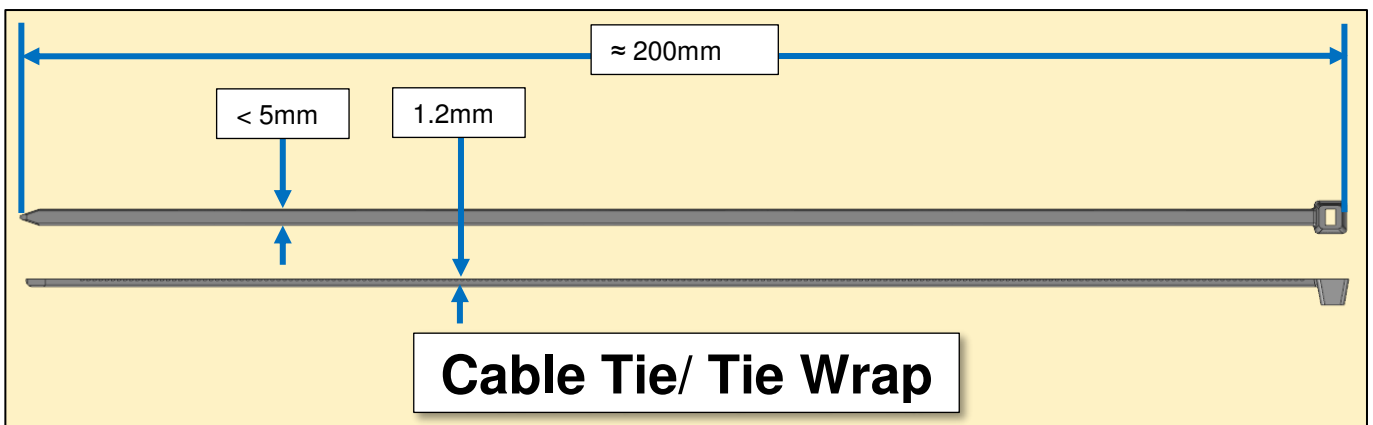
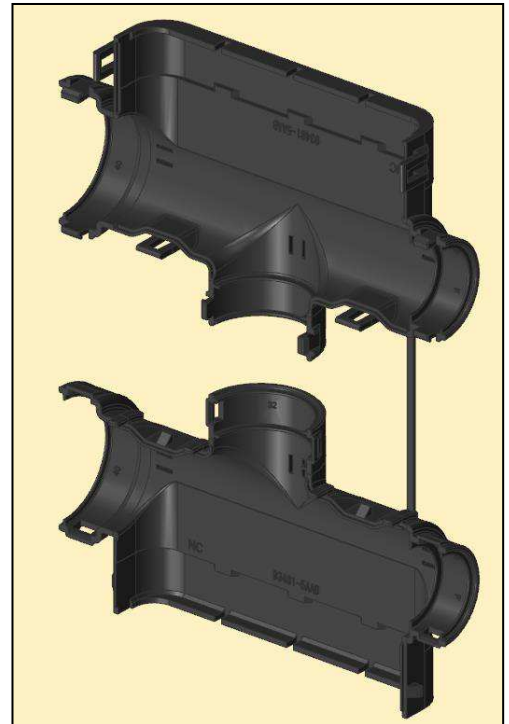
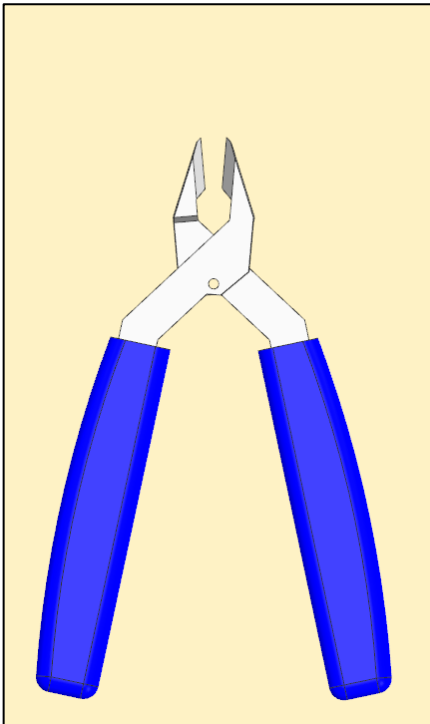


STEP 8 – APPLY WIRE DRESS/CONDUIT INTERFACE

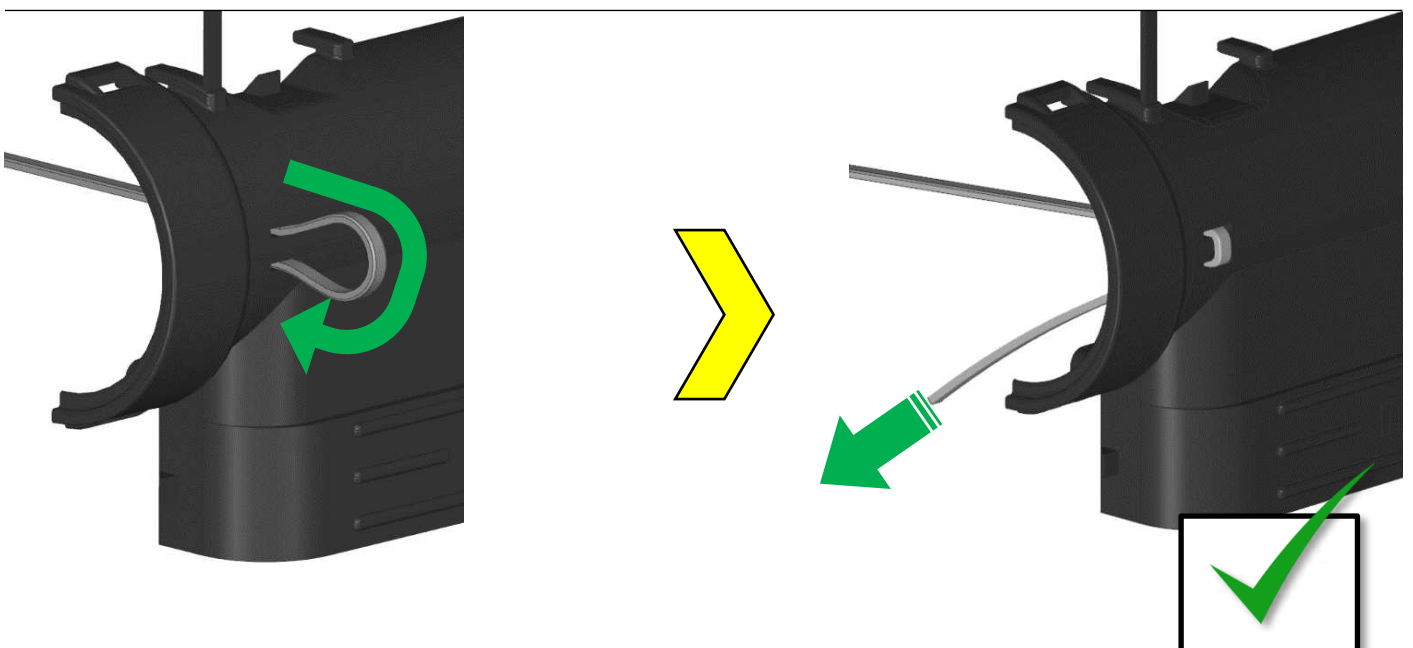
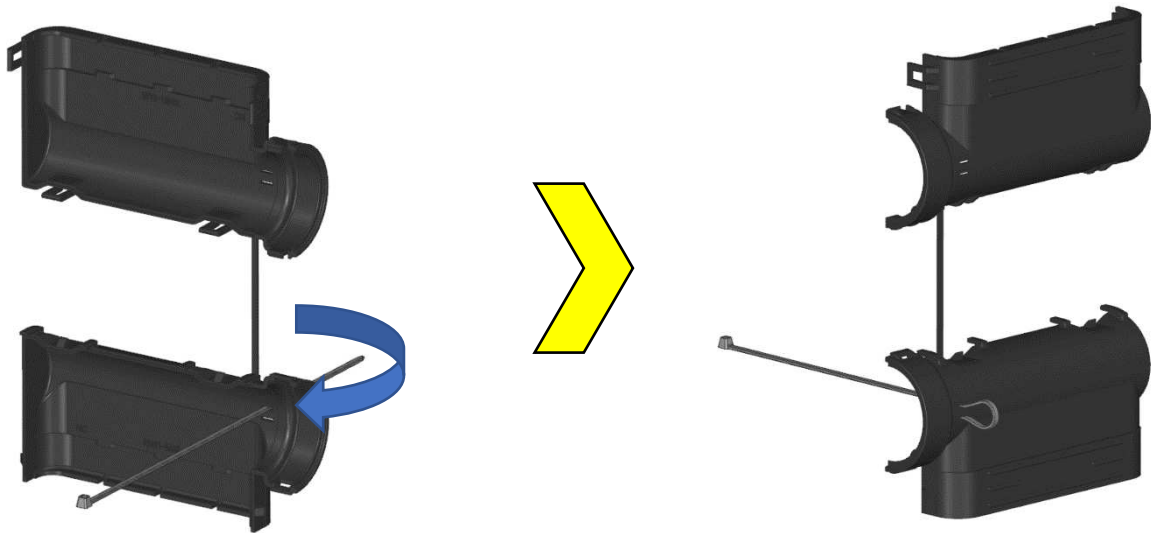
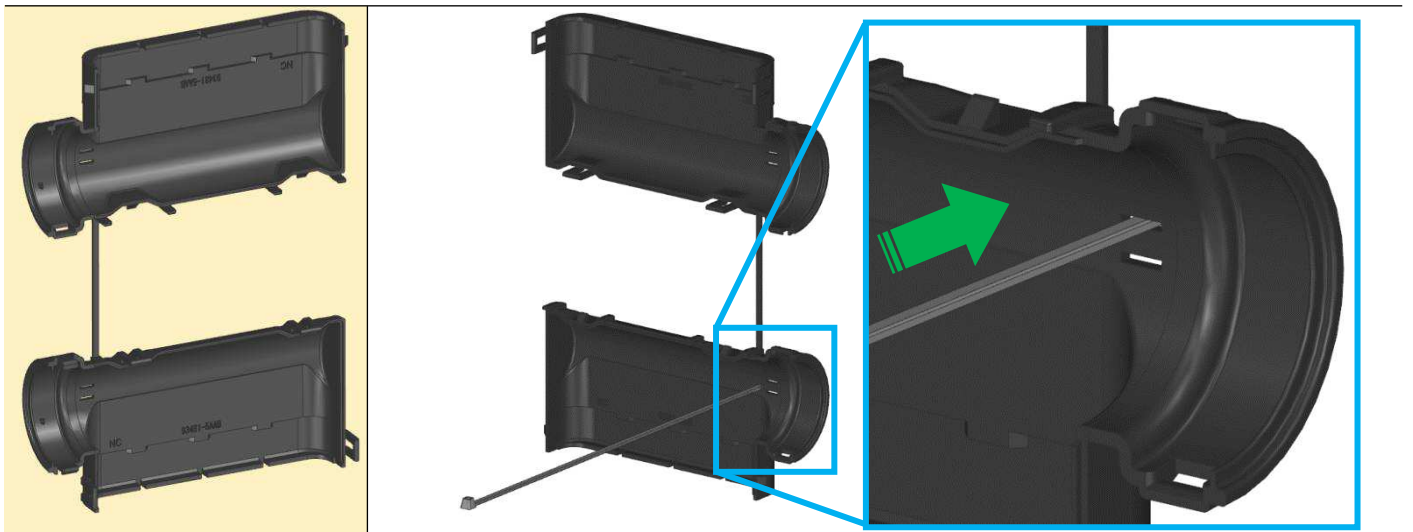


- Various configurations of wire dress available.
 - 1 – 3 open exits
 - 4 different exit sizes
- See sales drawing: 2500035
- Appropriate conduit must be used with wire dress
- Example shown for demonstration only
- Direction of exit(s) per wiring diagram

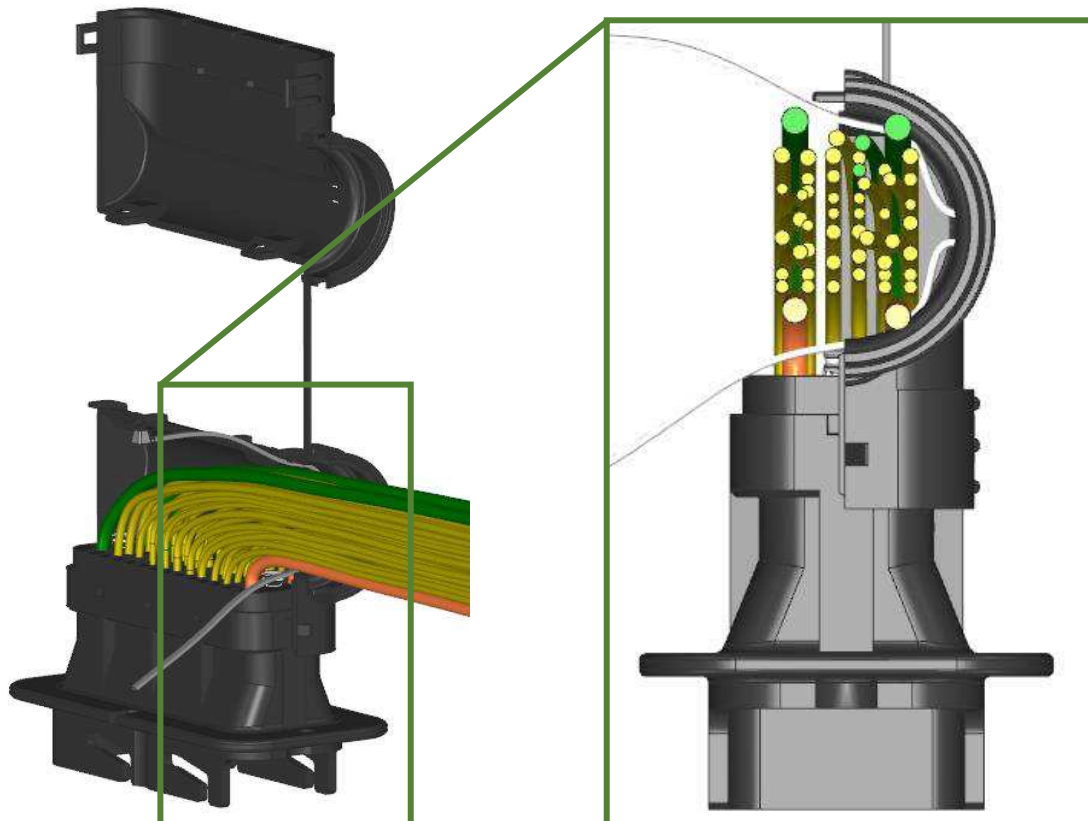
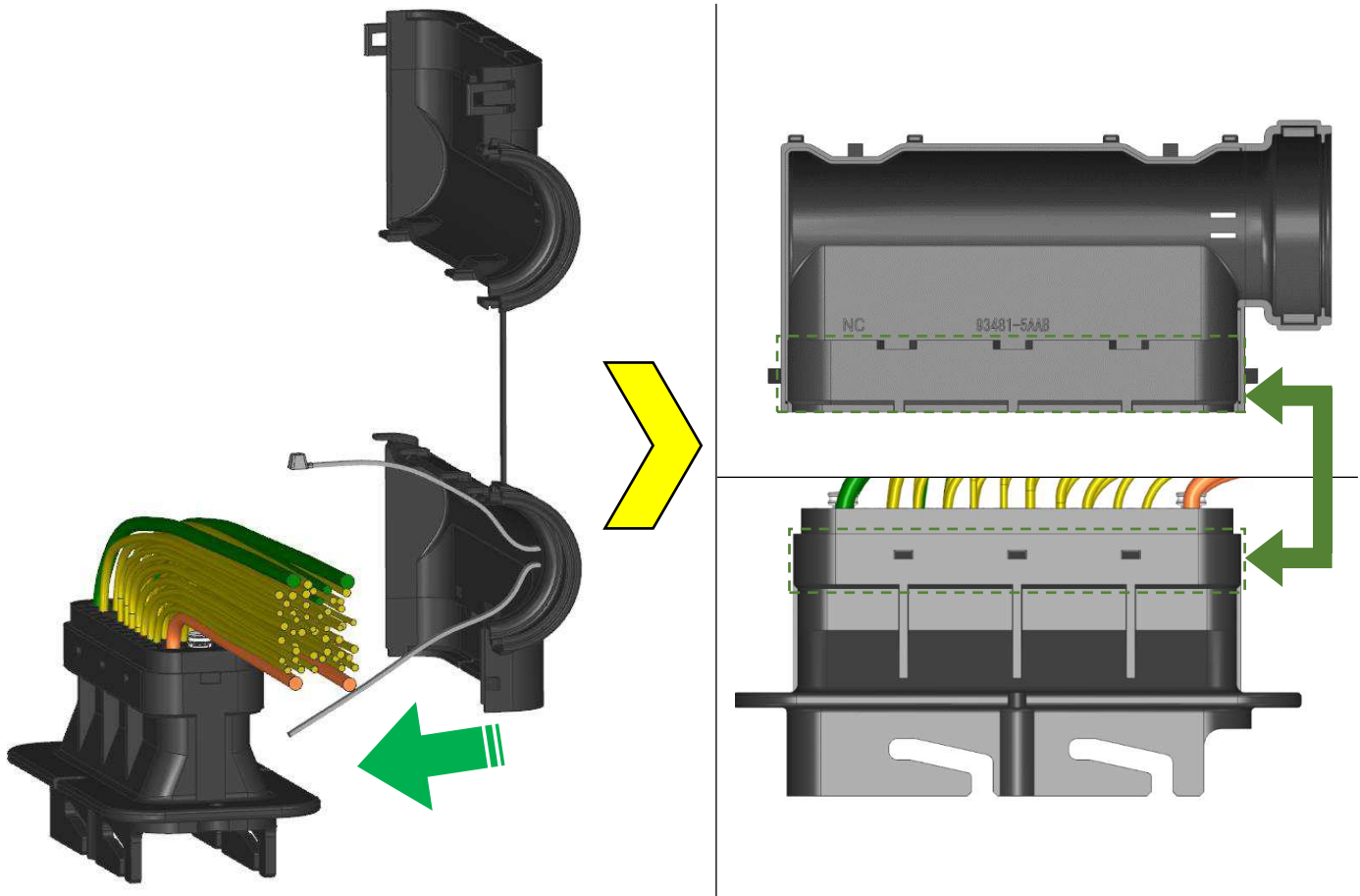
Tool & parts needed



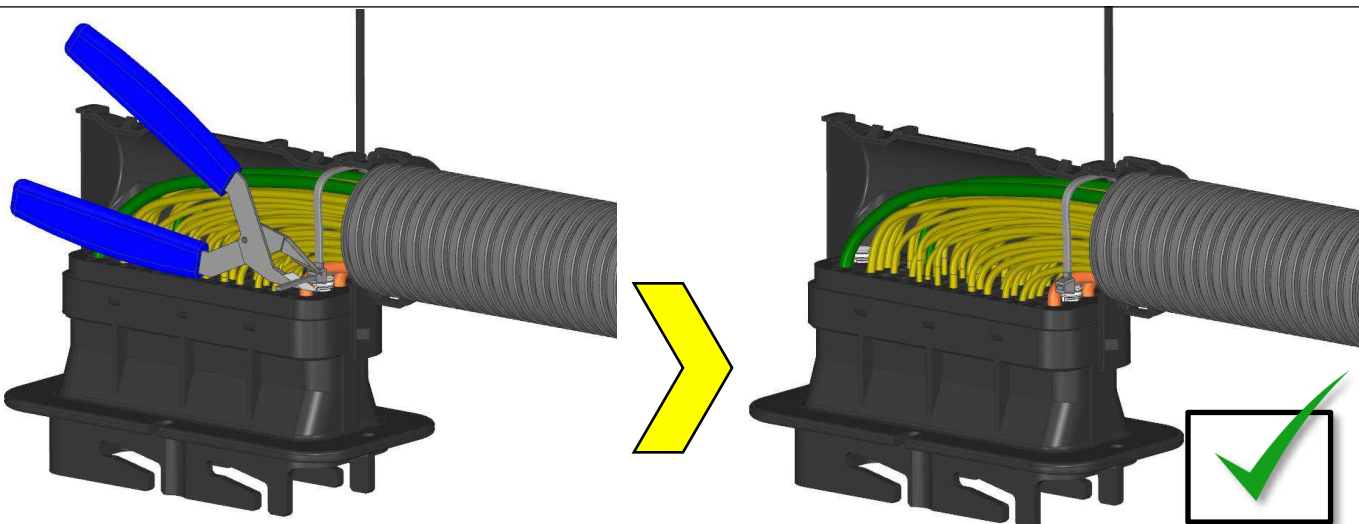
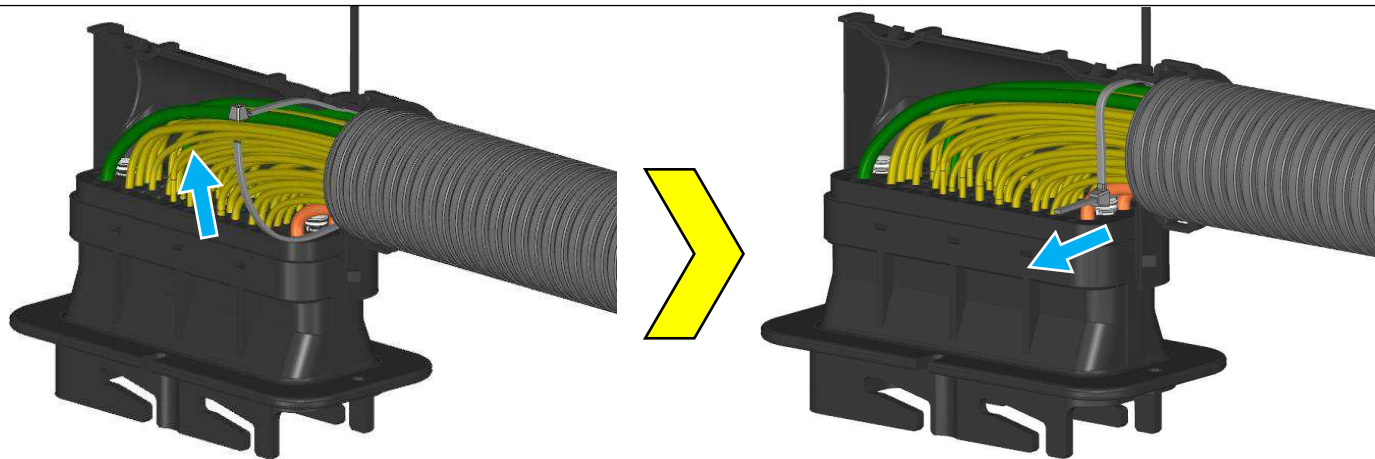
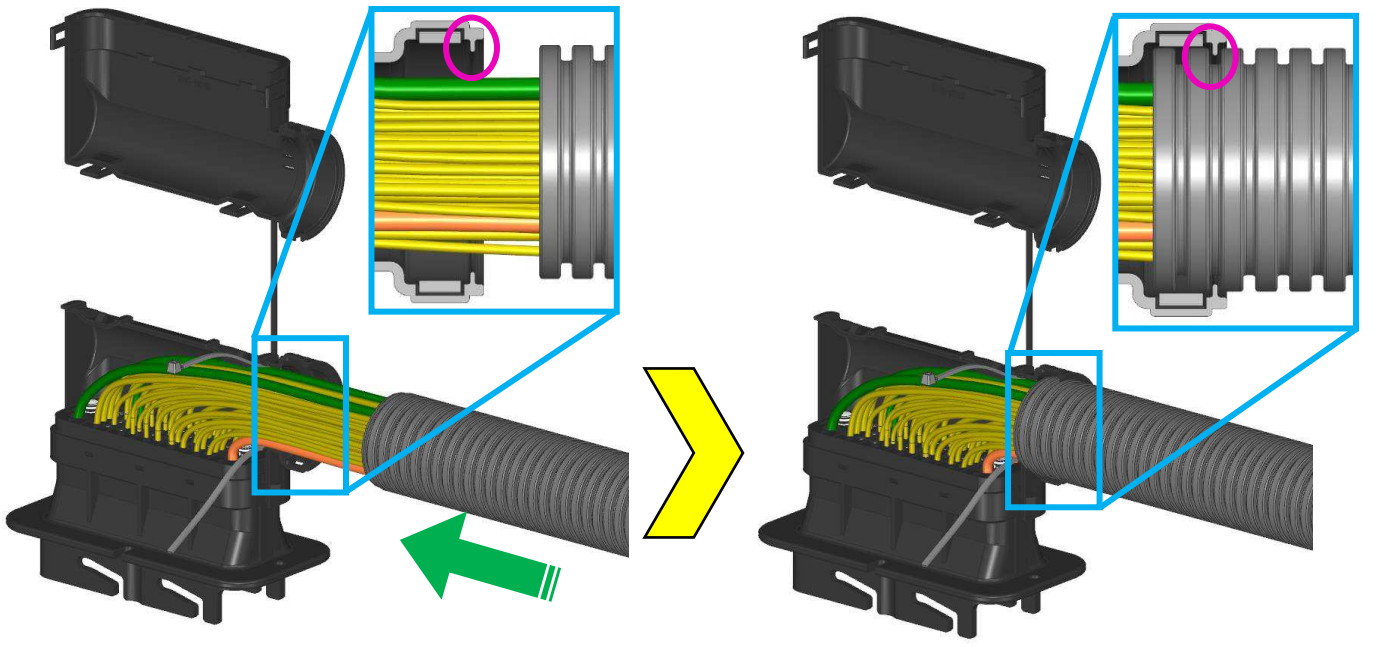
RECOMMENDED ASSEMBLY SEQUENCE



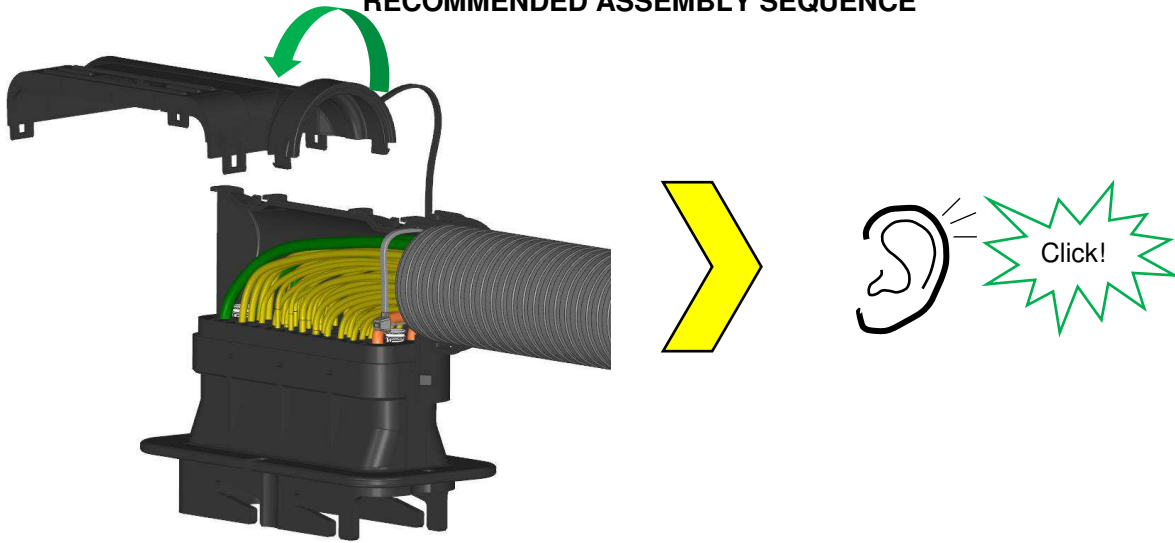
RECOMMENDED ASSEMBLY SEQUENCE



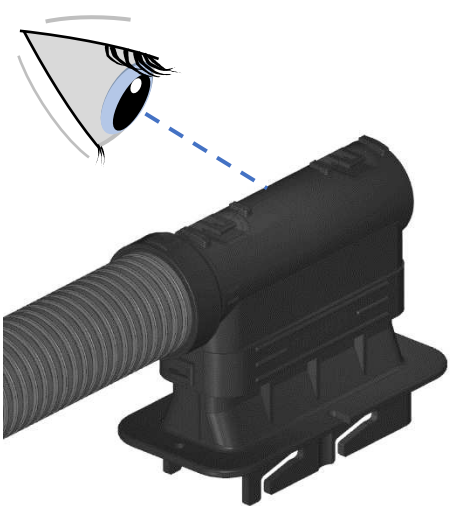
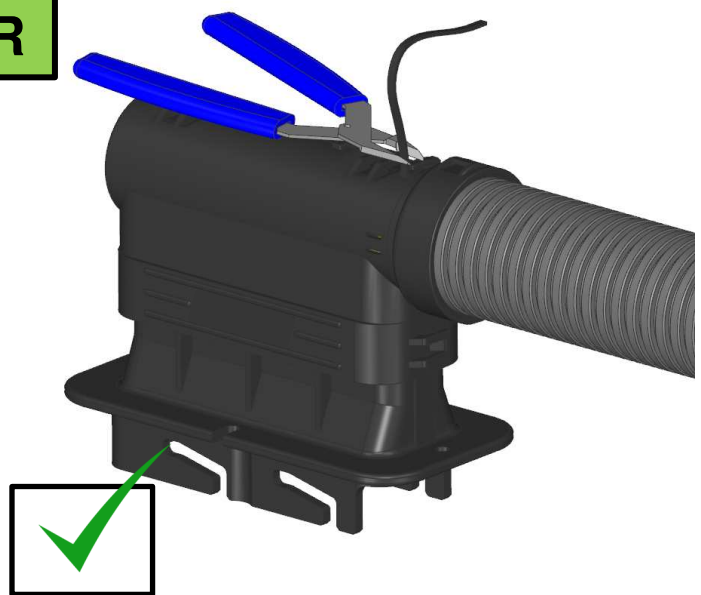
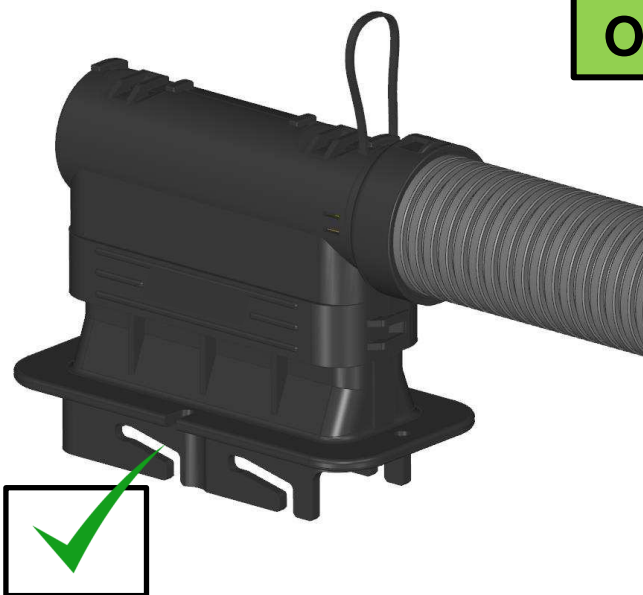
RECOMMENDED ASSEMBLY SEQUENCE

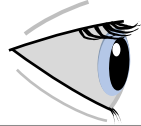


RECOMMENDED ASSEMBLY SEQUENCE



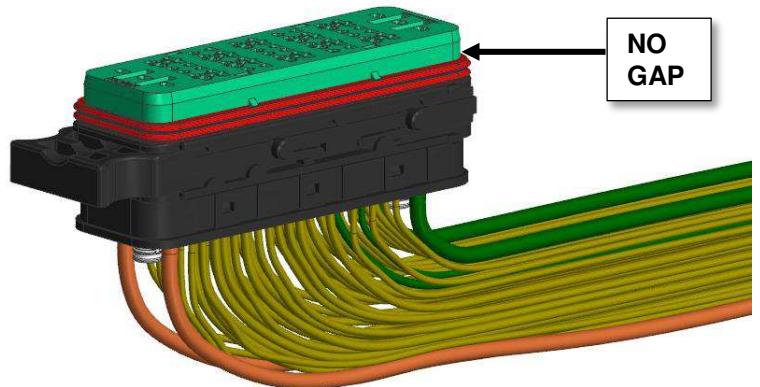
OR



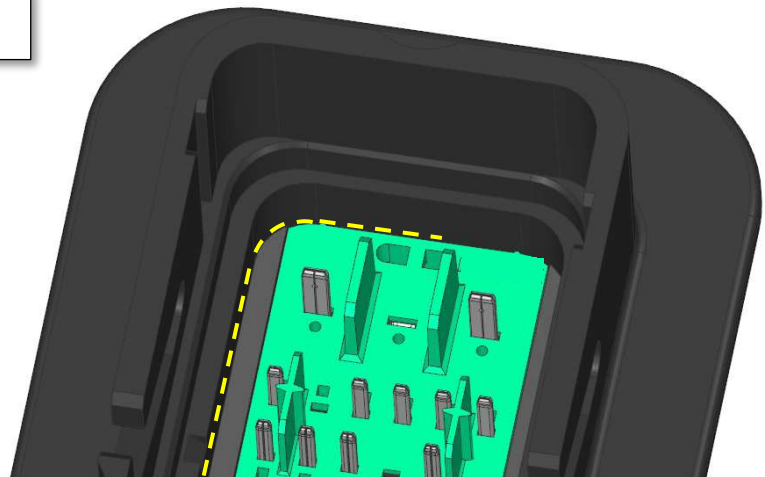


RECOMMENDED CHECKS

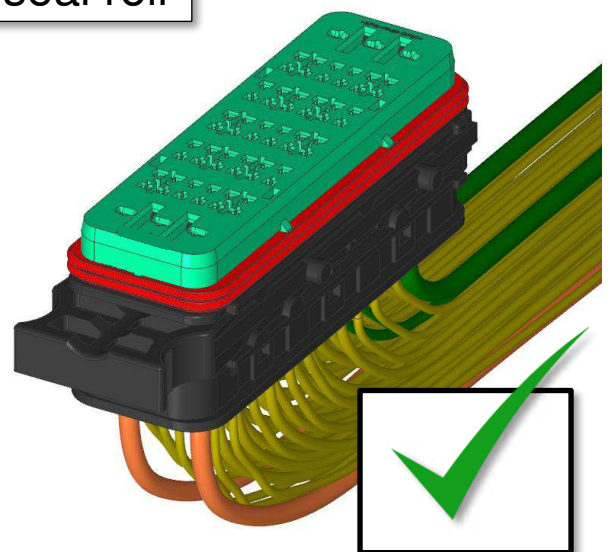
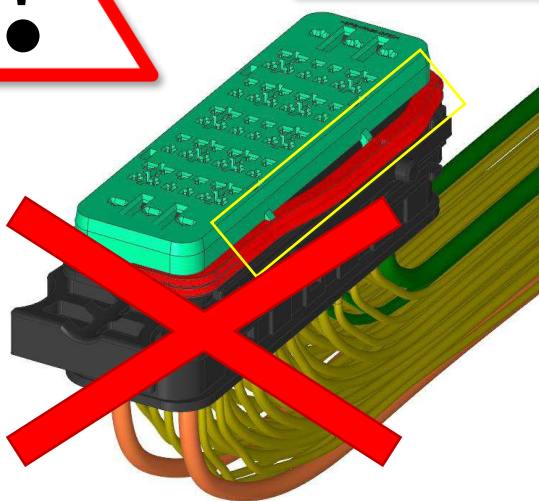
Female TPA is closed



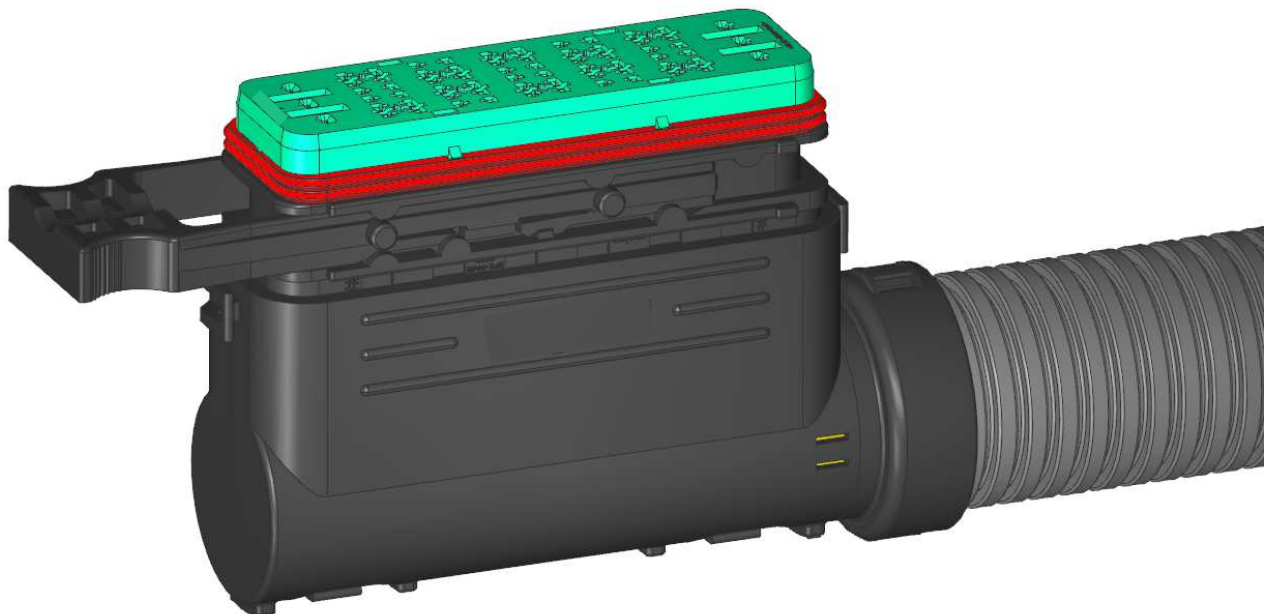
Male TPA is closed



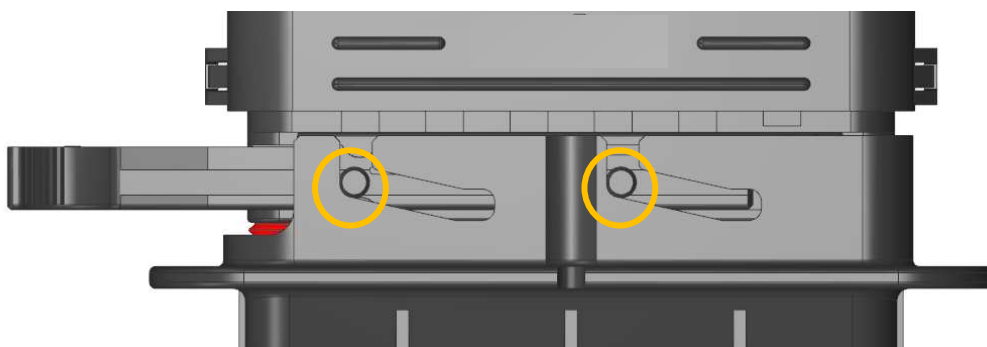
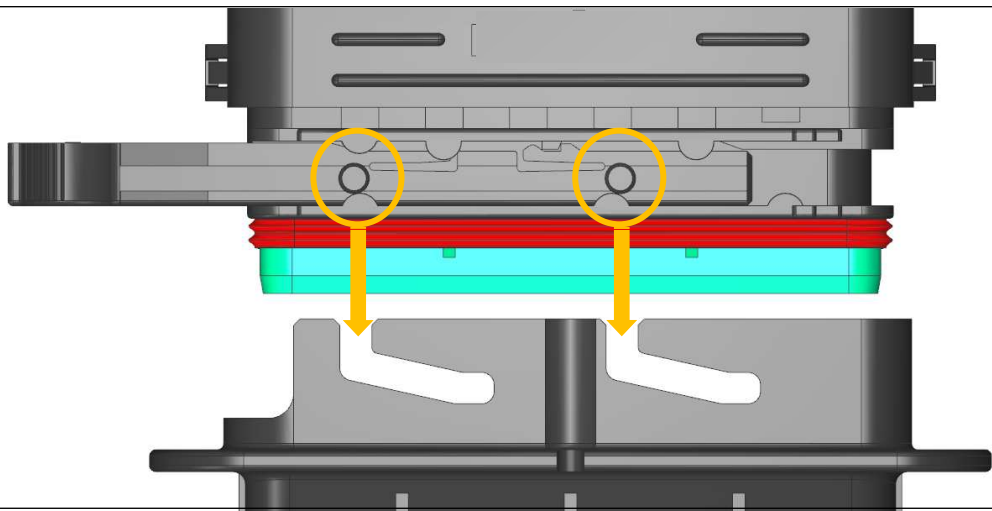
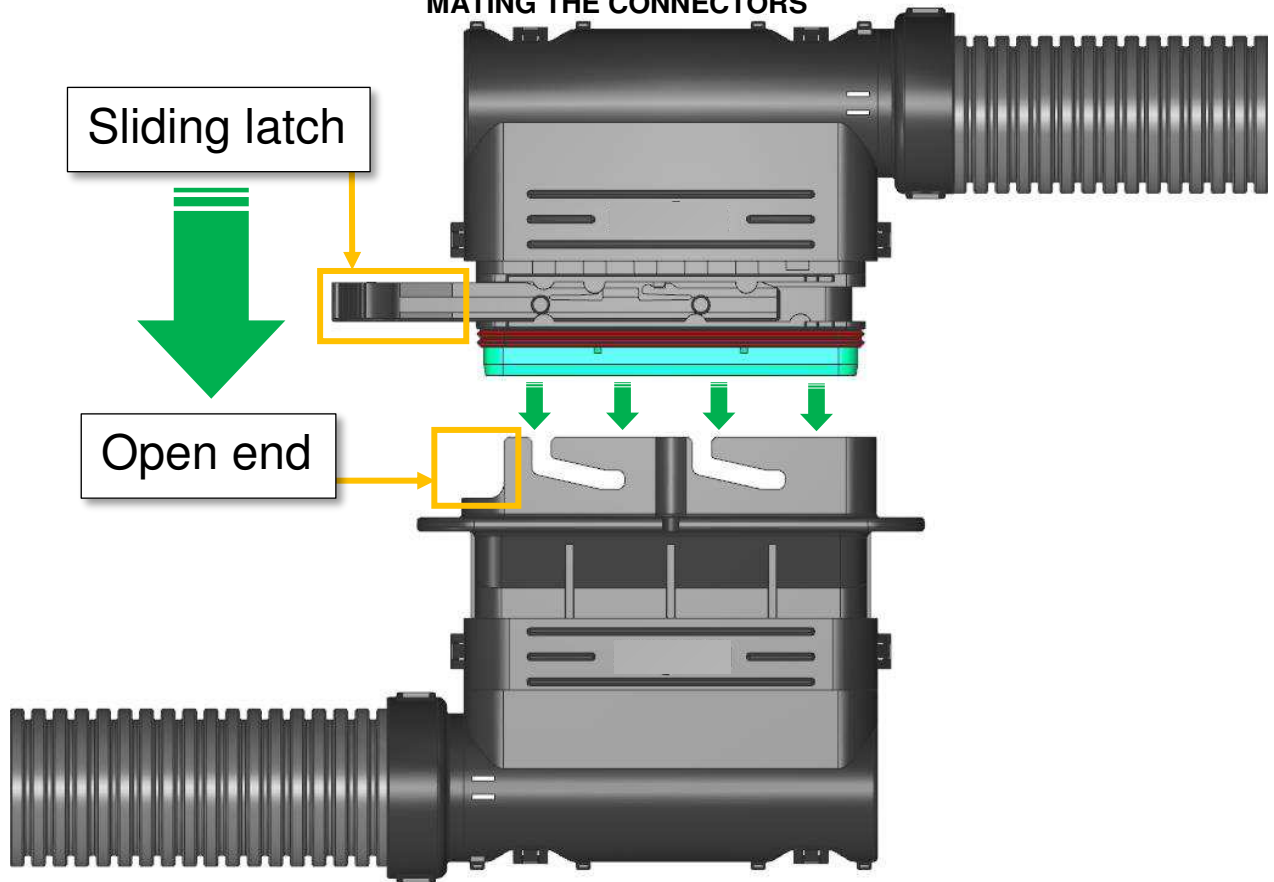
Check for front seal roll



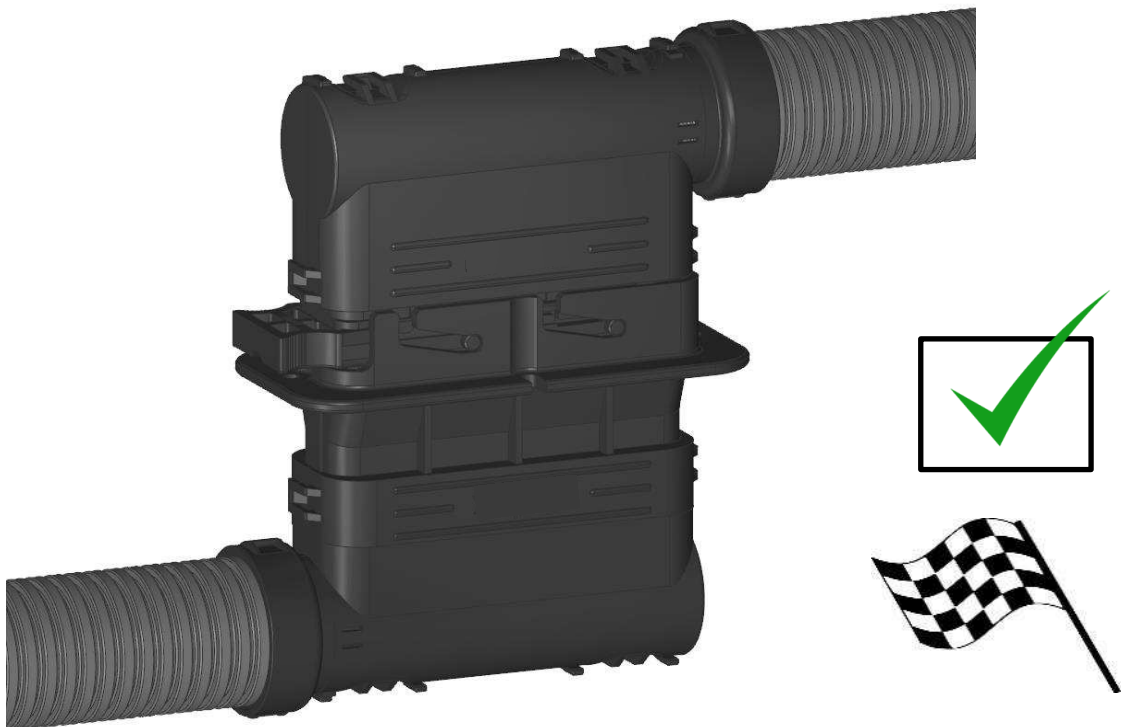
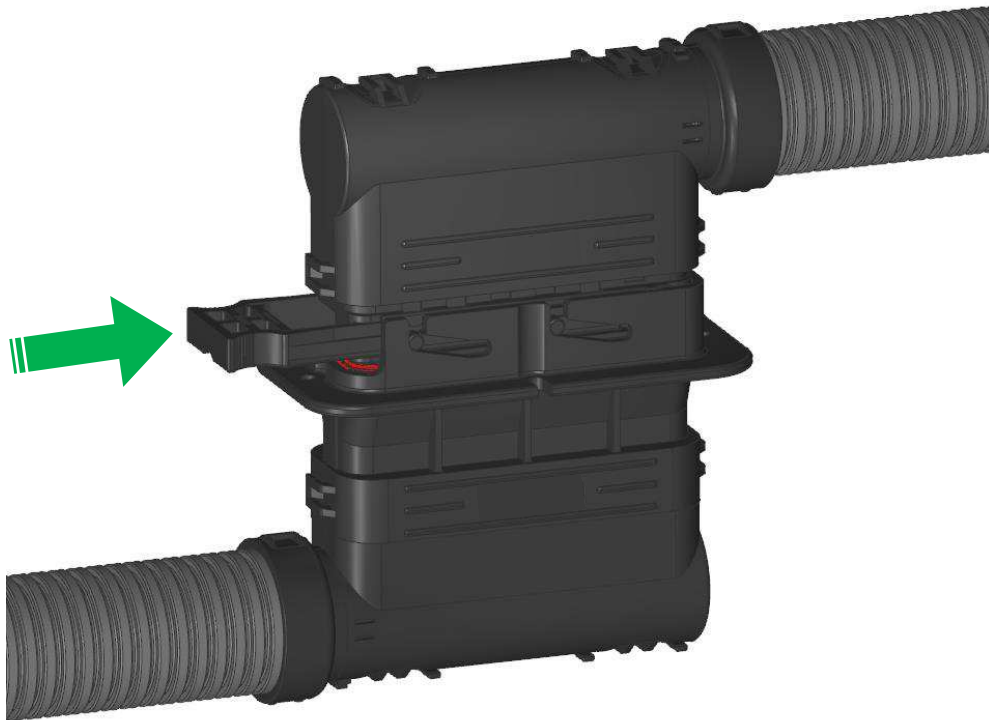
MATING THE CONNECTORS



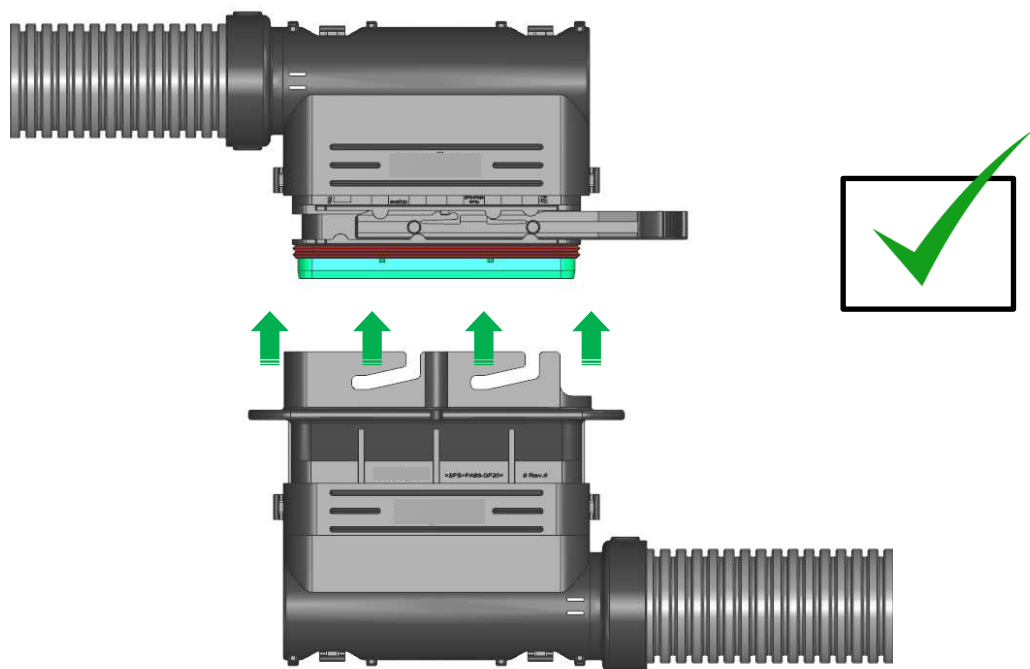
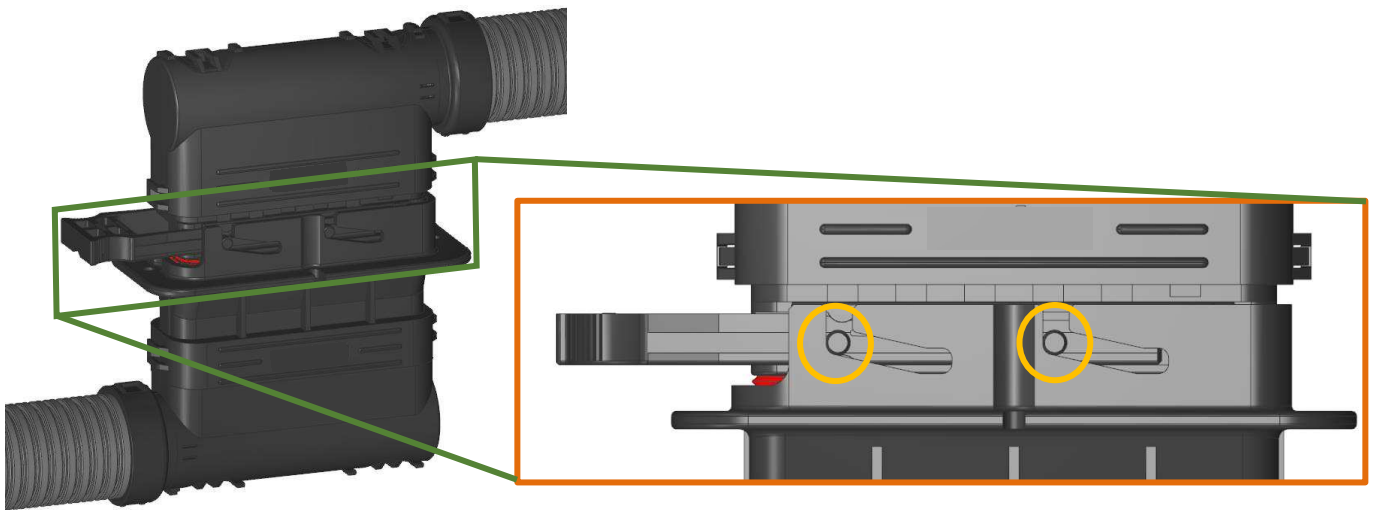
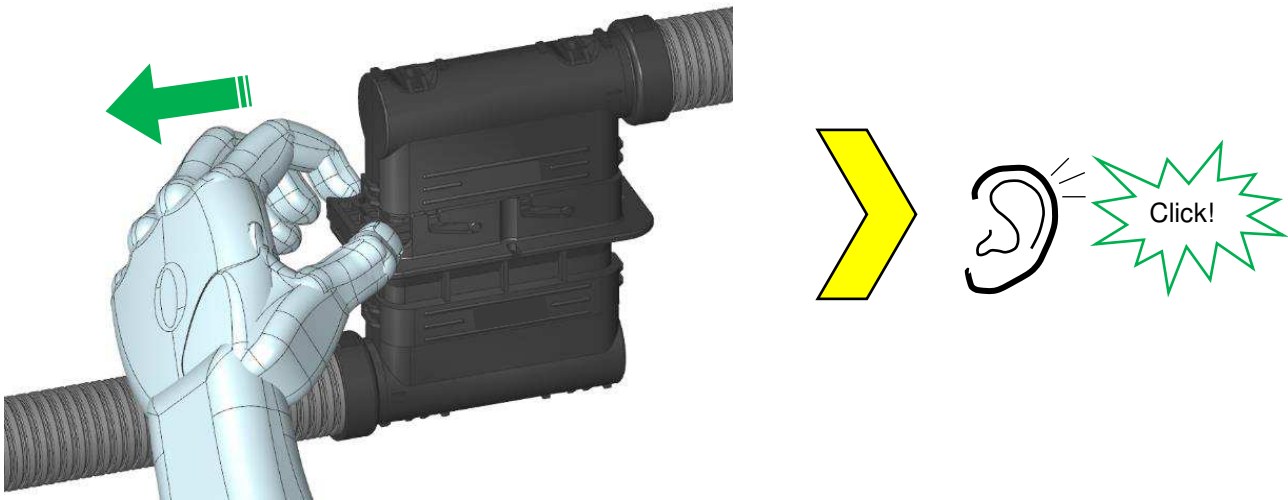
MATING THE CONNECTORS



MATING THE CONNECTORS

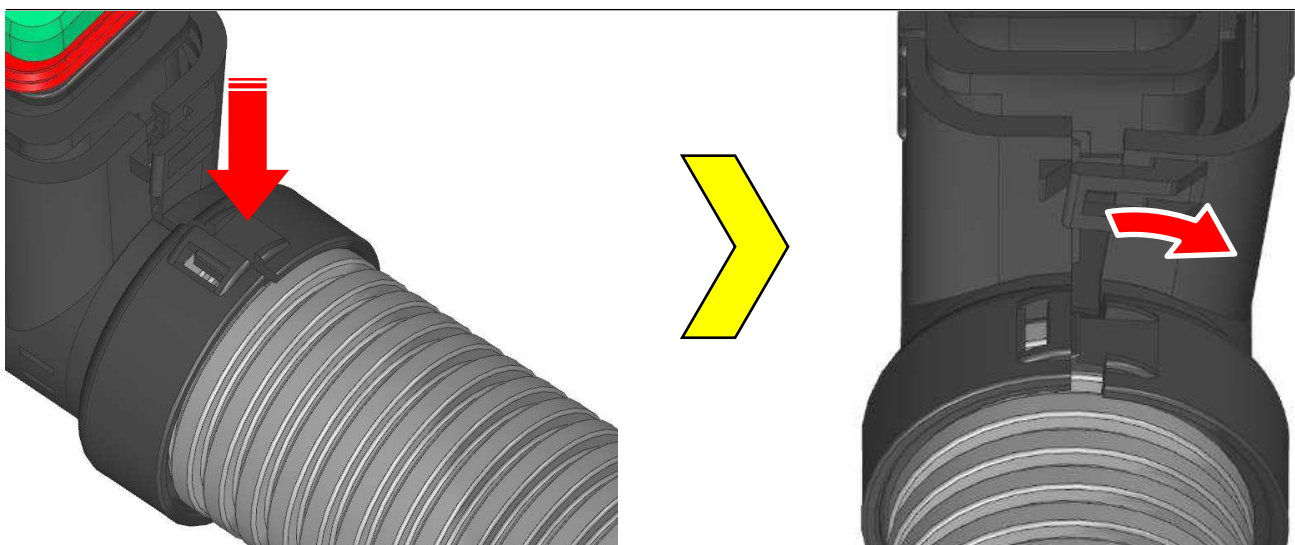
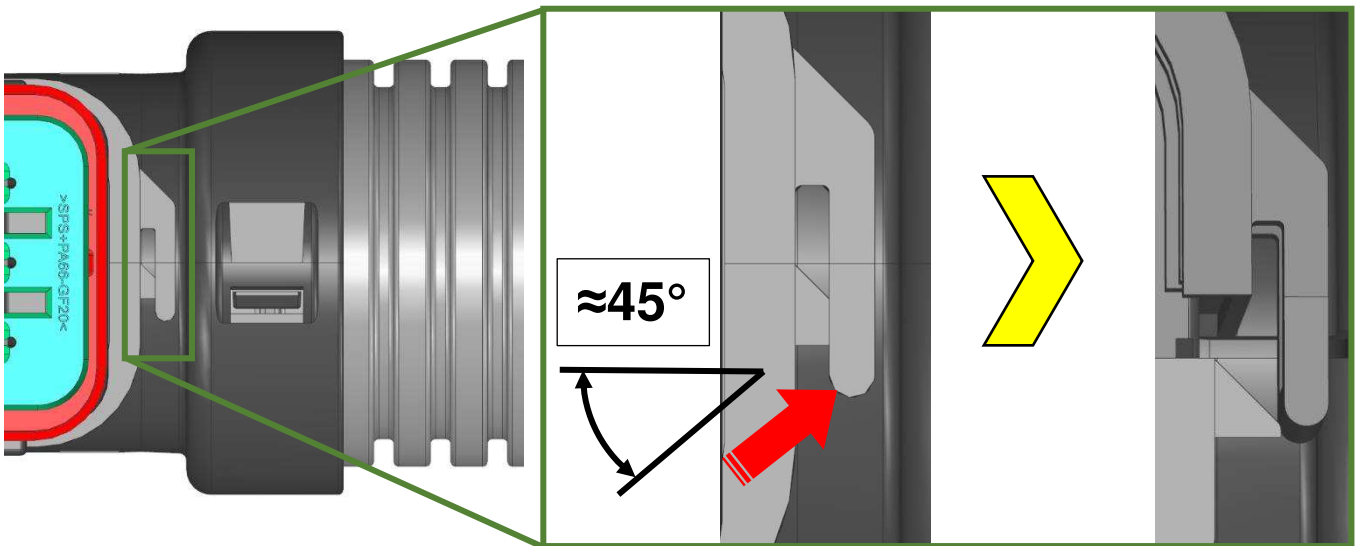
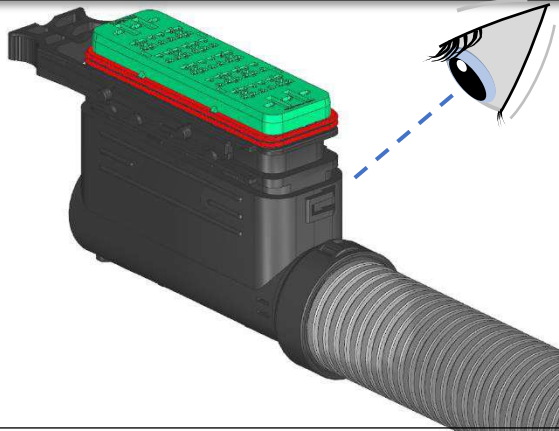


UNMATING THE CONNECTORS

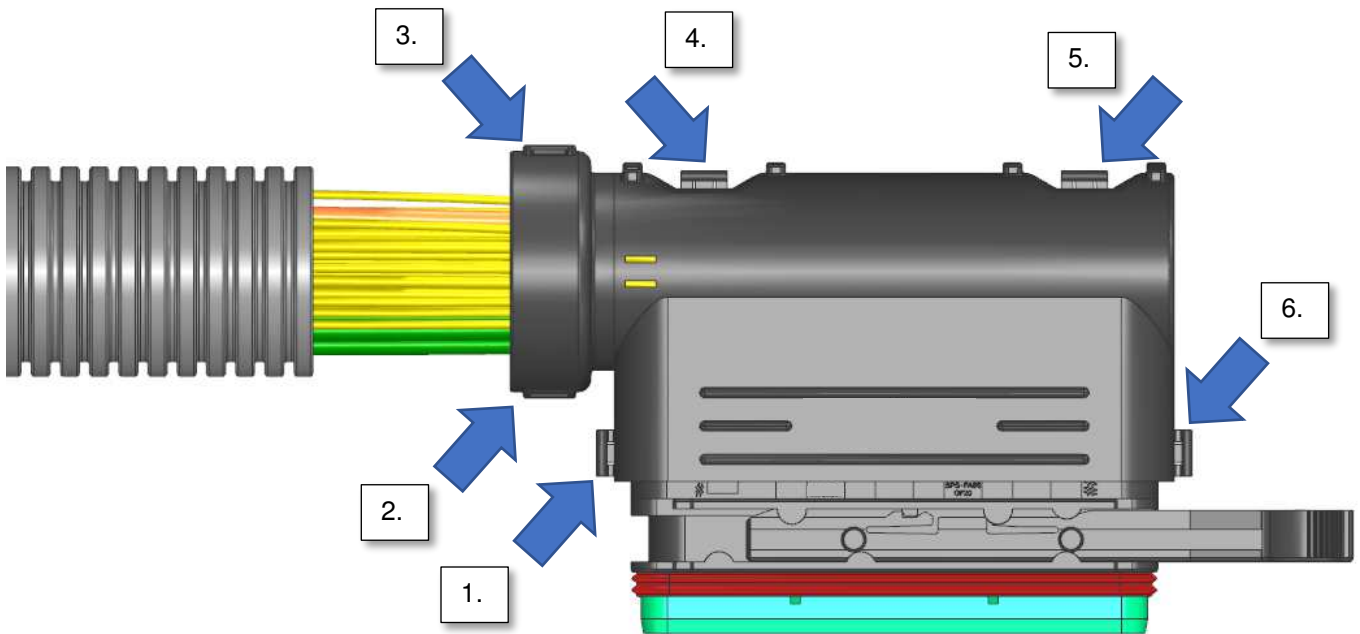
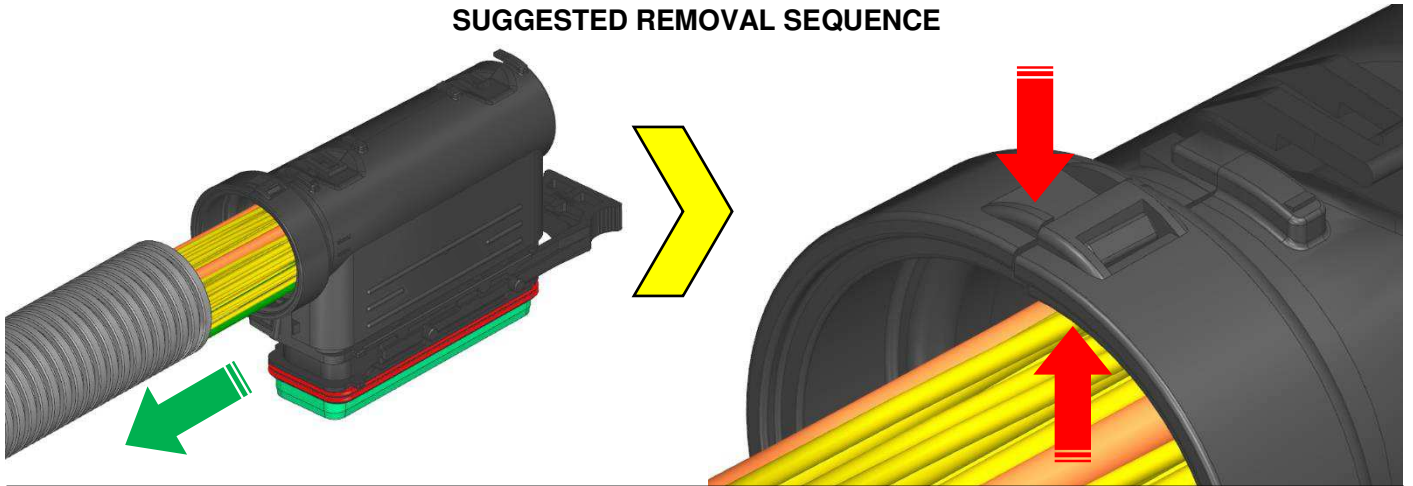


SUGGESTED REMOVAL SEQUENCE

Removal sequence same for both male and female connectors



SUGGESTED REMOVAL SEQUENCE



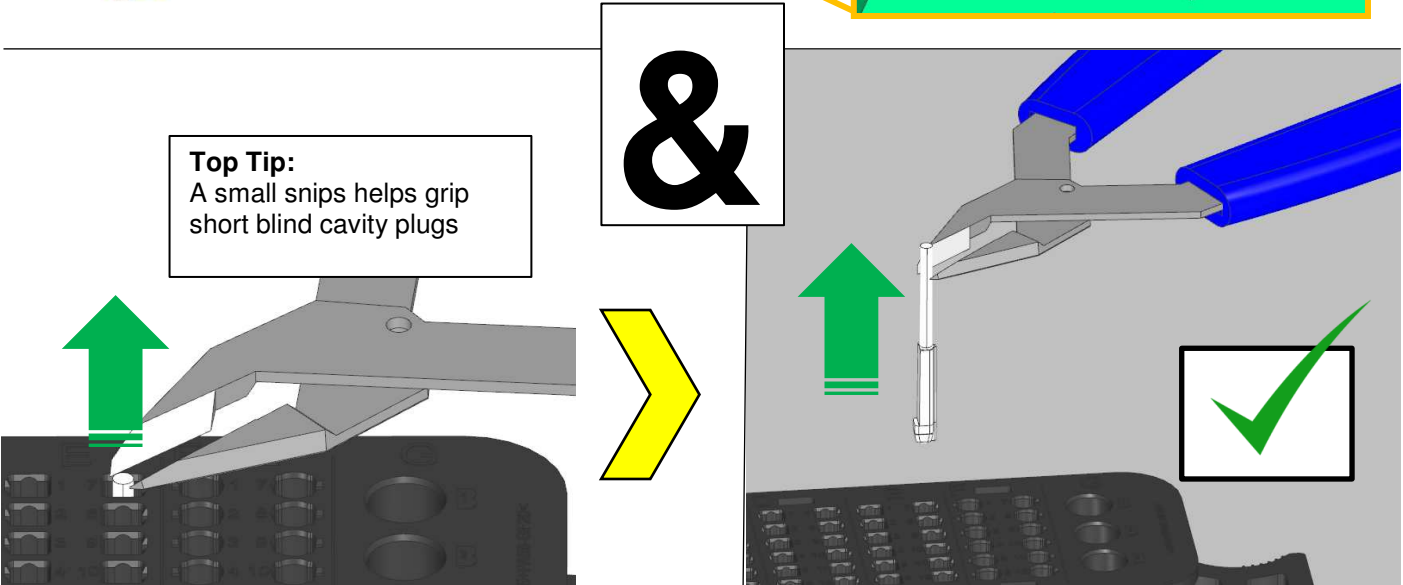
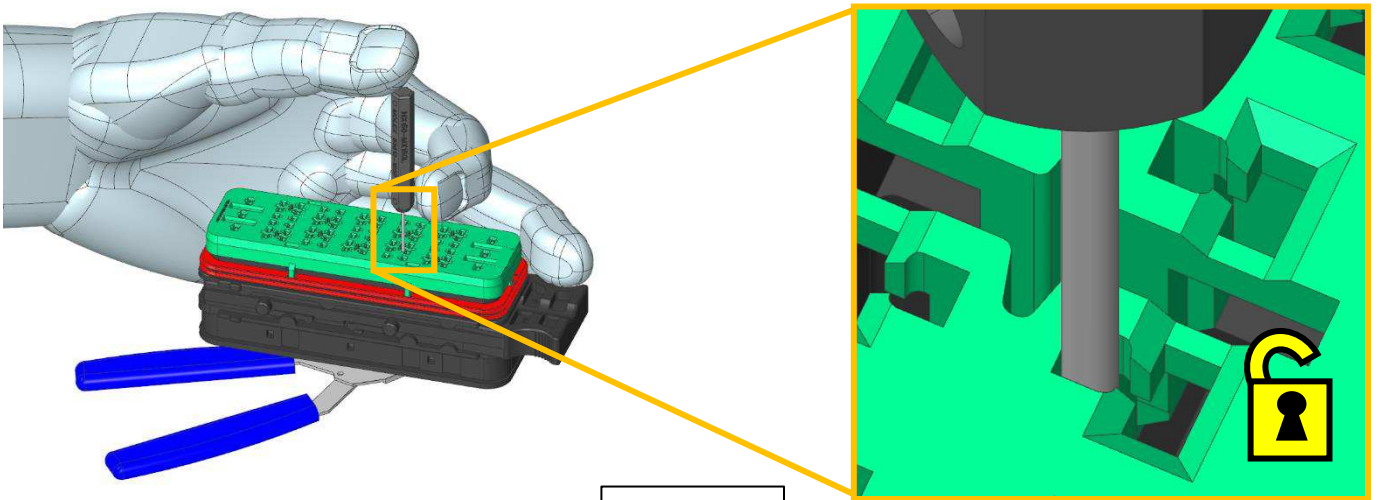
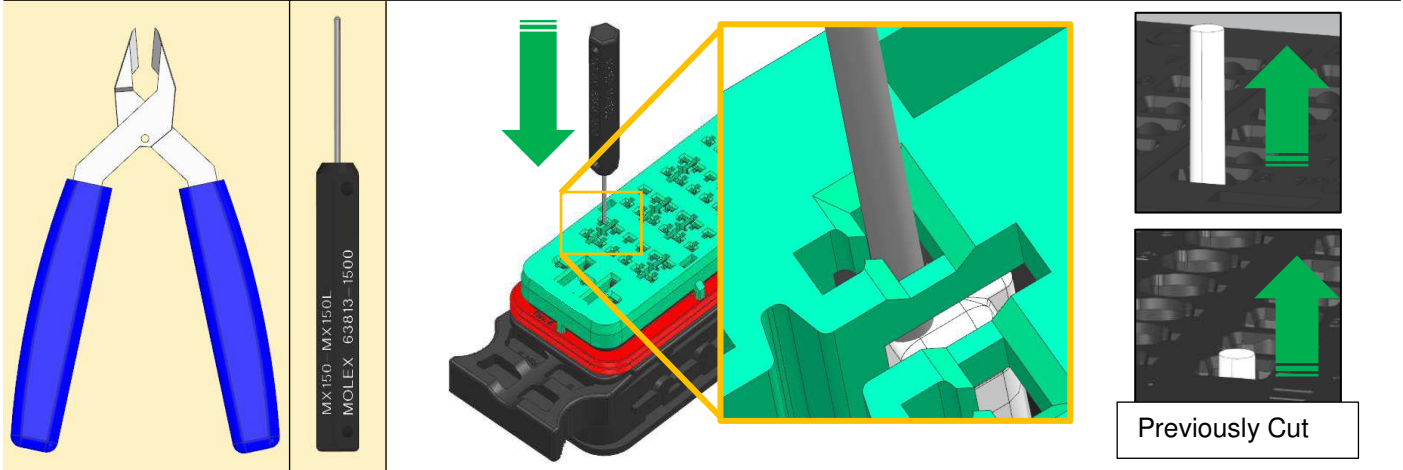
- Recommend sequence above
- Always start at latch nearest the connector
- Easier to start at an open exit side
- Continue de-latching in Clockwise / Anti-clockwise direction
- Same method for each latch & exit

REMOVING SIGNAL BLIND CAVITY PLUGS FROM FEMALE ASSEMBLY

Open TPA – see sheet 6

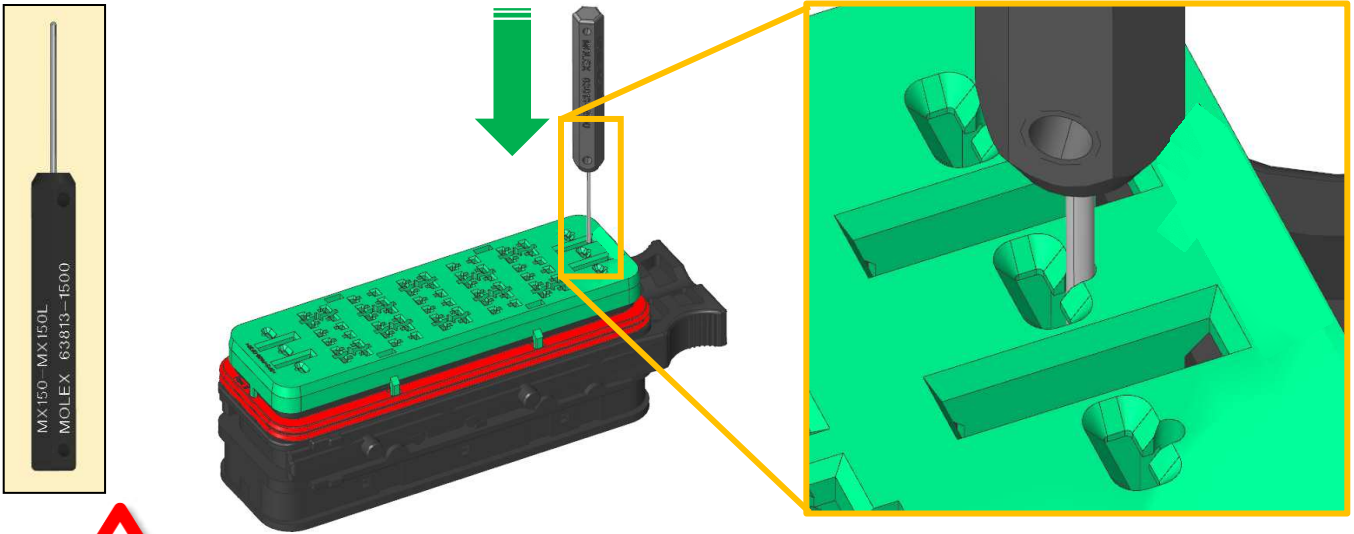


Do not damage cables when removing blind cavity plug

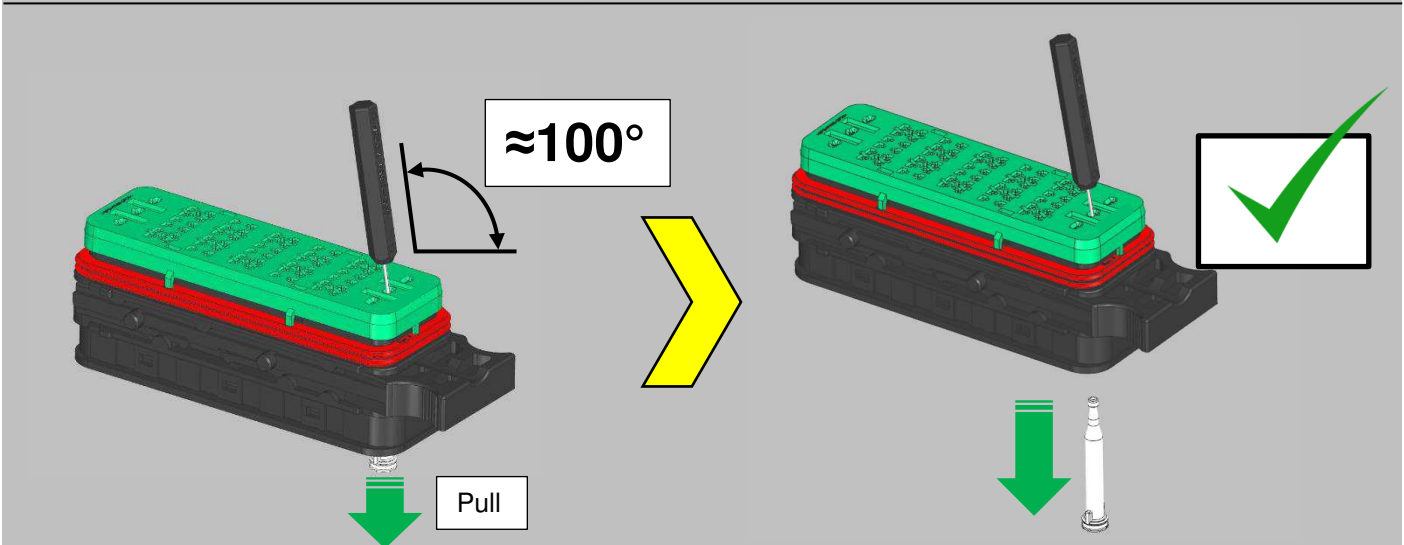
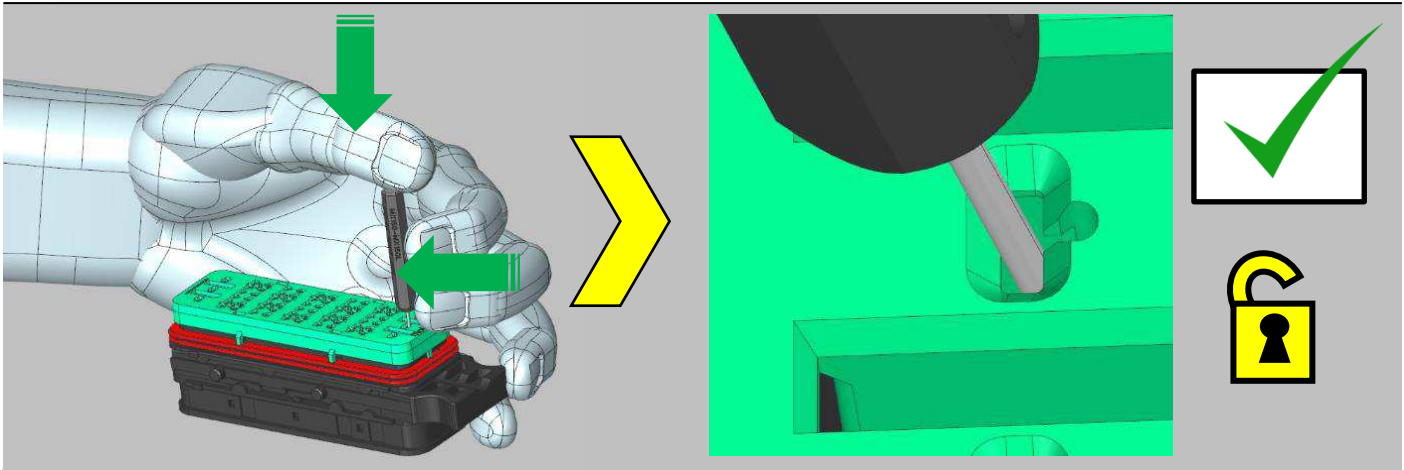


REMOVING POWER BLIND CAVITY PLUGS FROM FEMALE ASSEMBLY

OPEN TPA – SEE SHEET 6

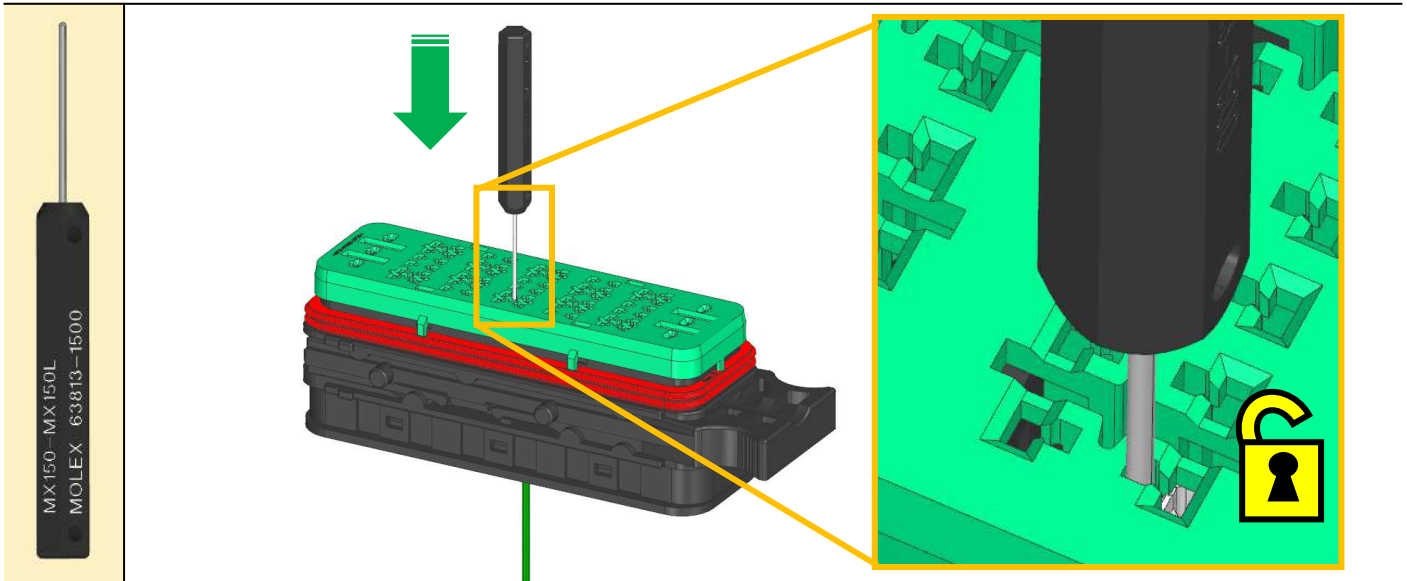


Special case for female power cavities

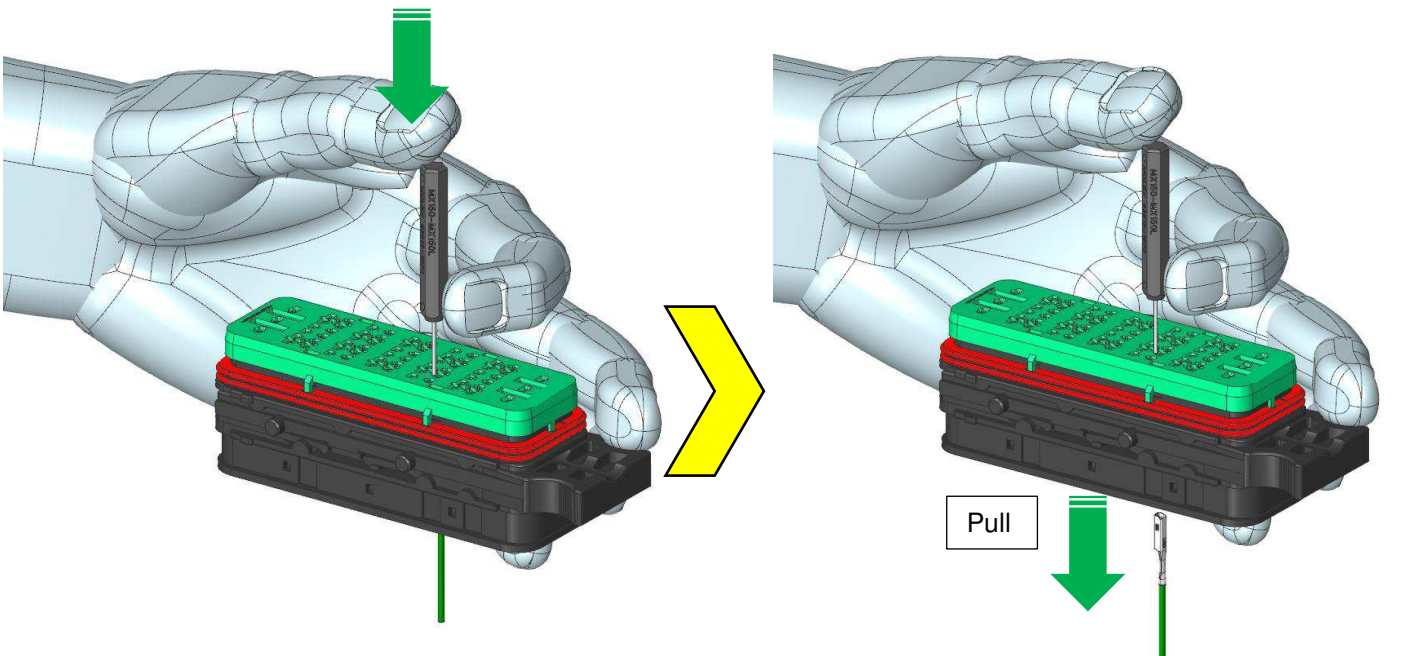


REMOVING SIGNAL & 2.5MM² TERMINALS FROM FEMALE ASSEMBLY

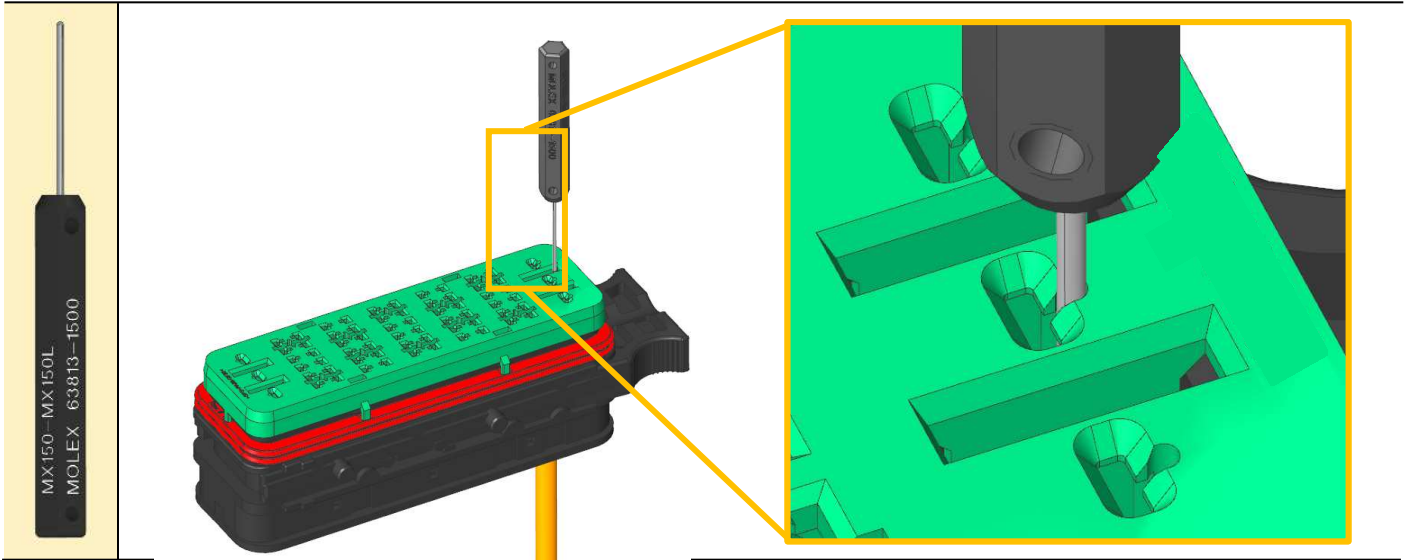
OPEN TPA – SEE SHEET 6



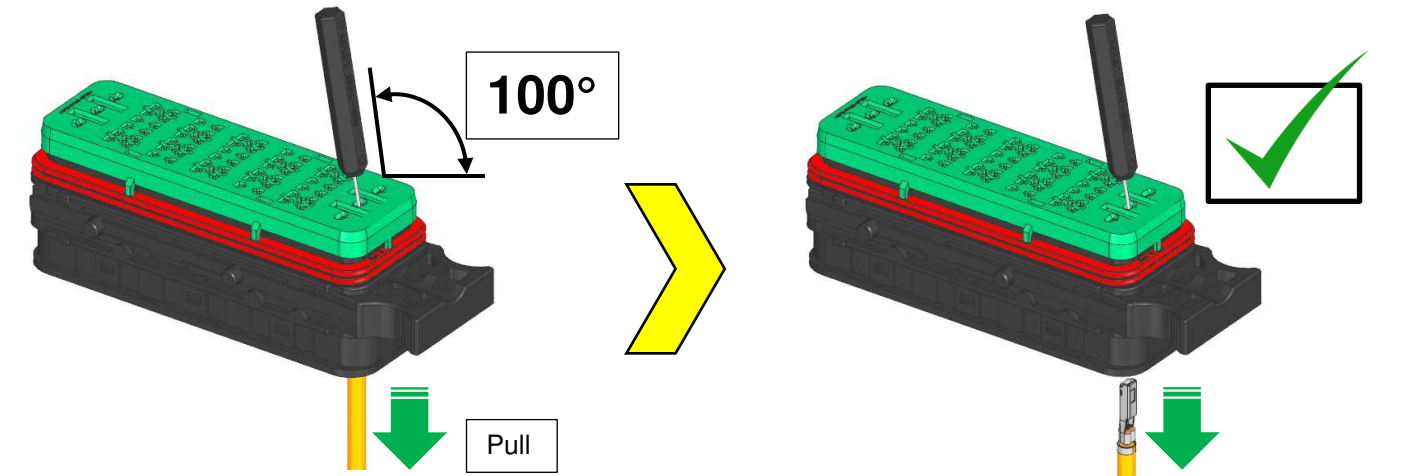
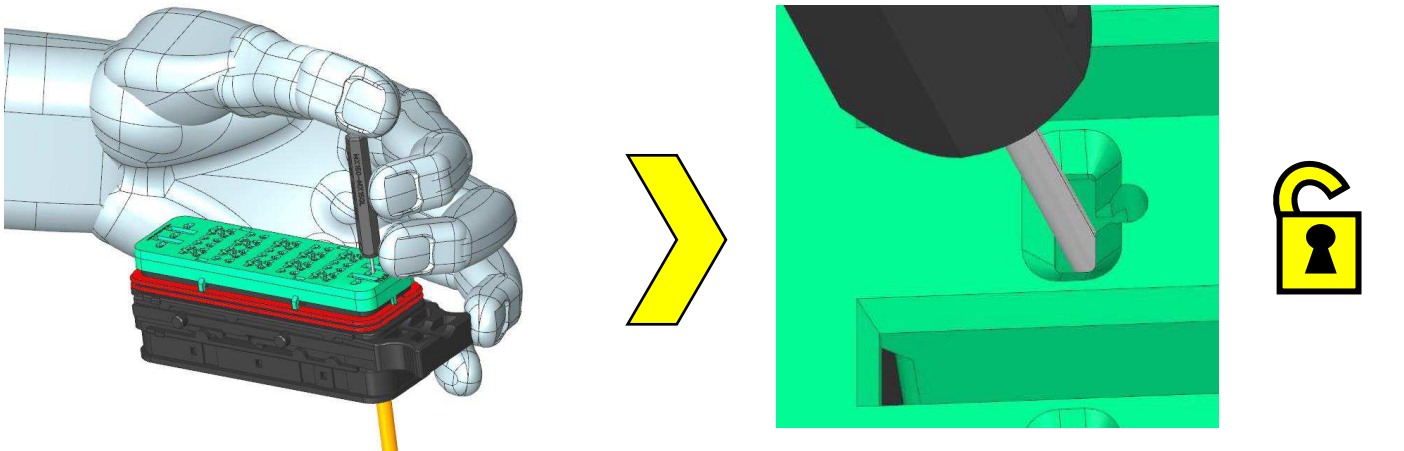
Pull cables carefully through the seal



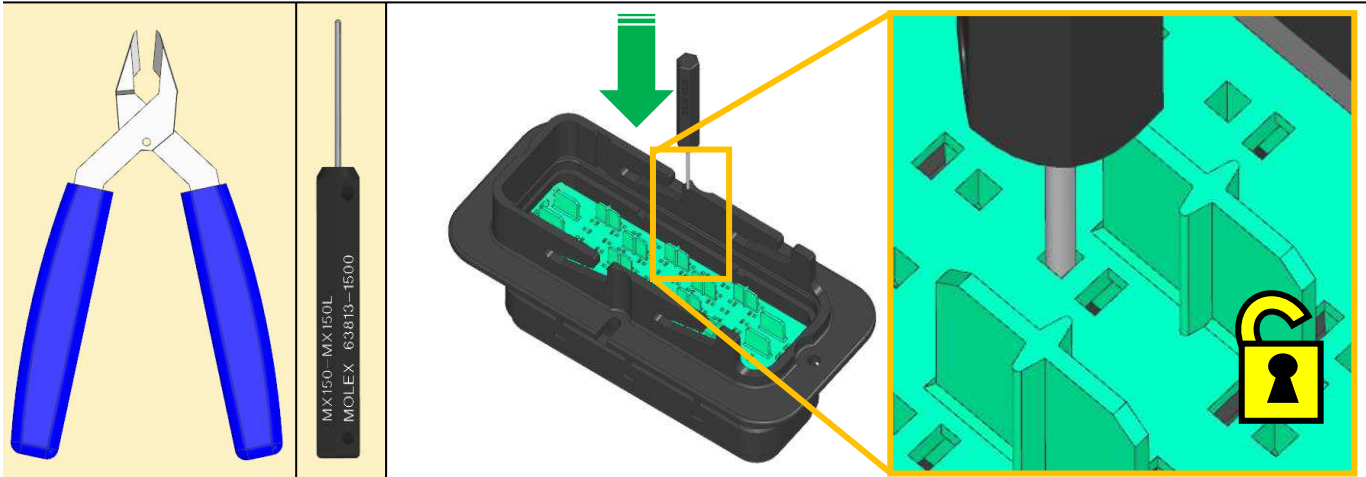
OPEN TPA – SEE SHEET 6



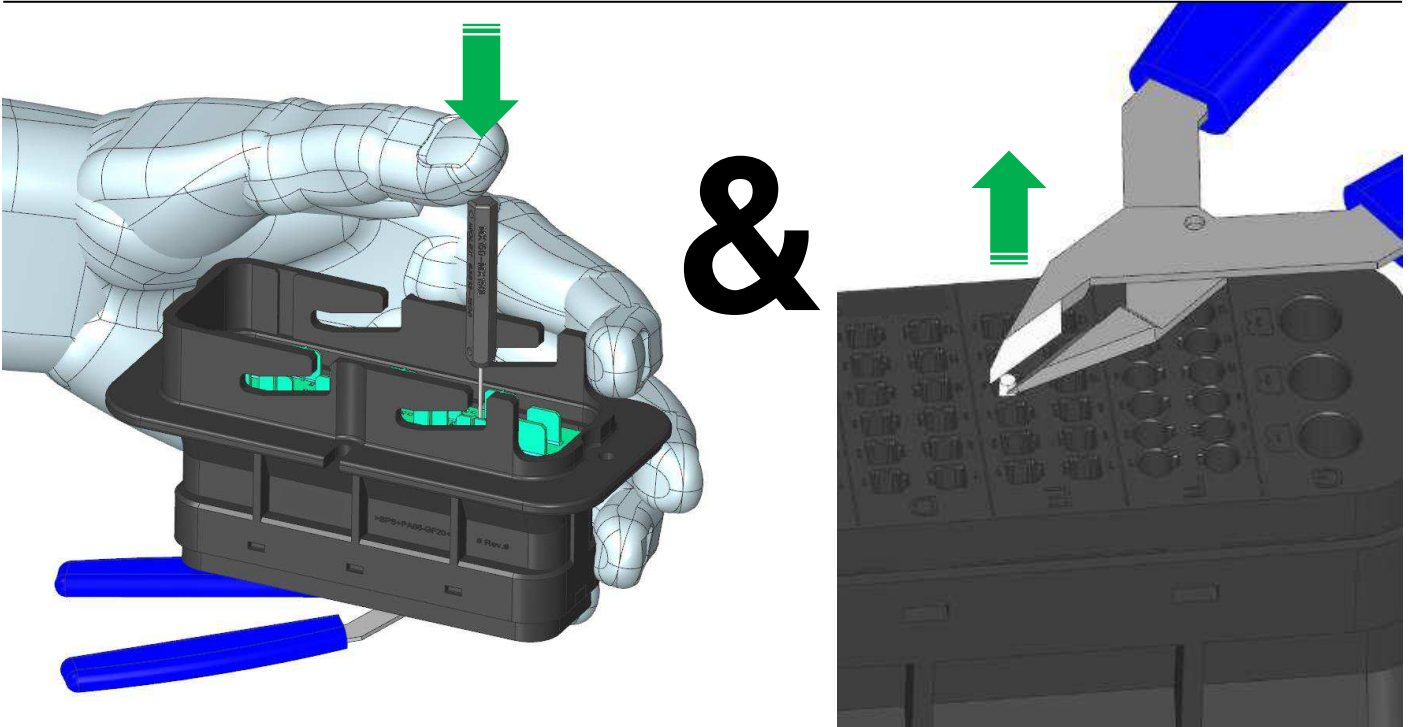
- Special case for female power cavities
- Pull cables carefully through the seal



OPEN TPA – SEE SHEET 22

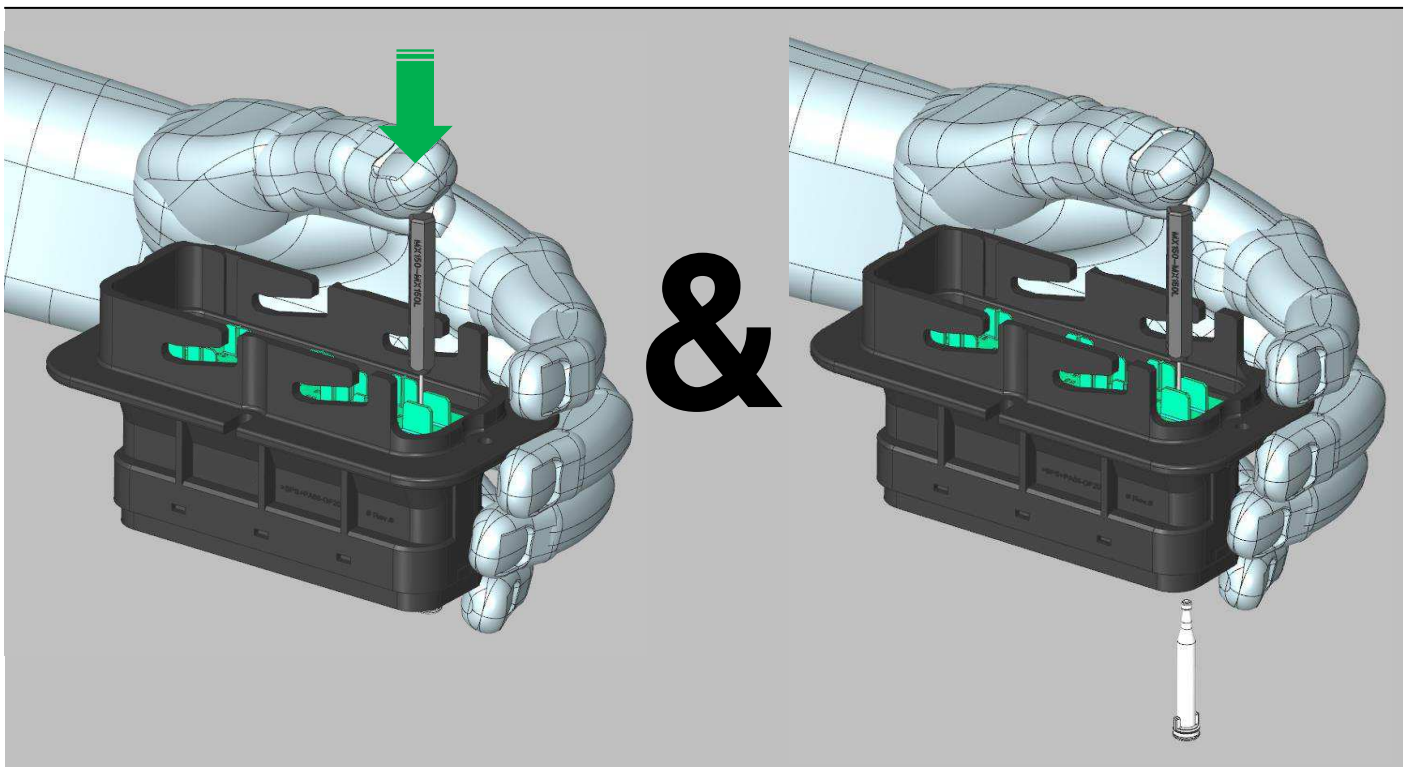
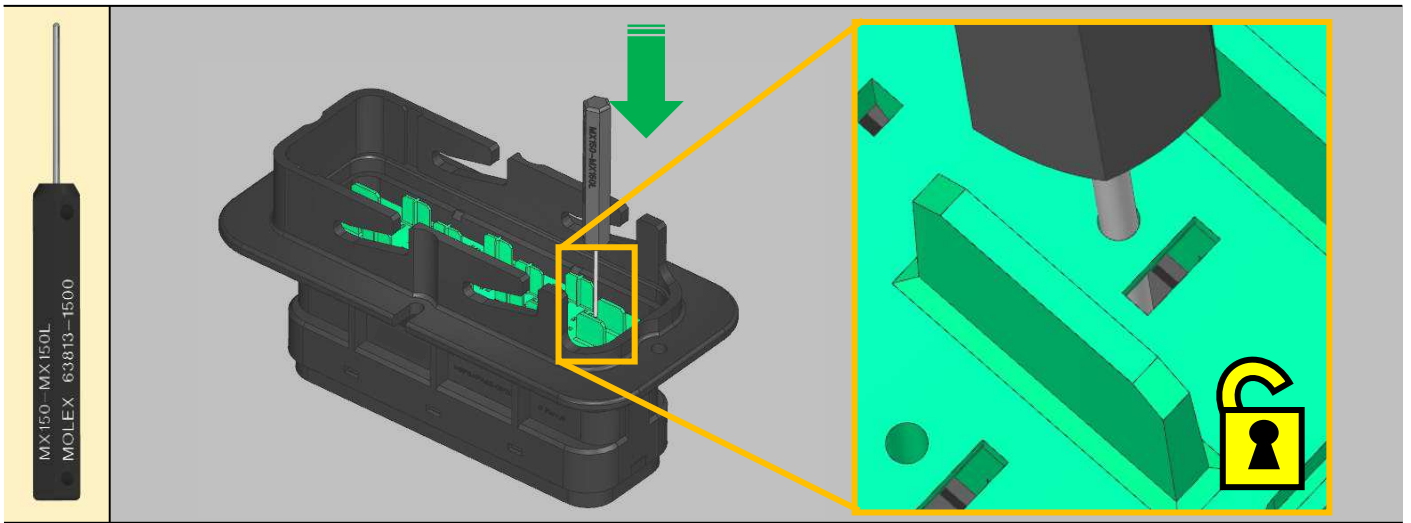


Top Tip:
A small snips helps grip short blind cavity plugs



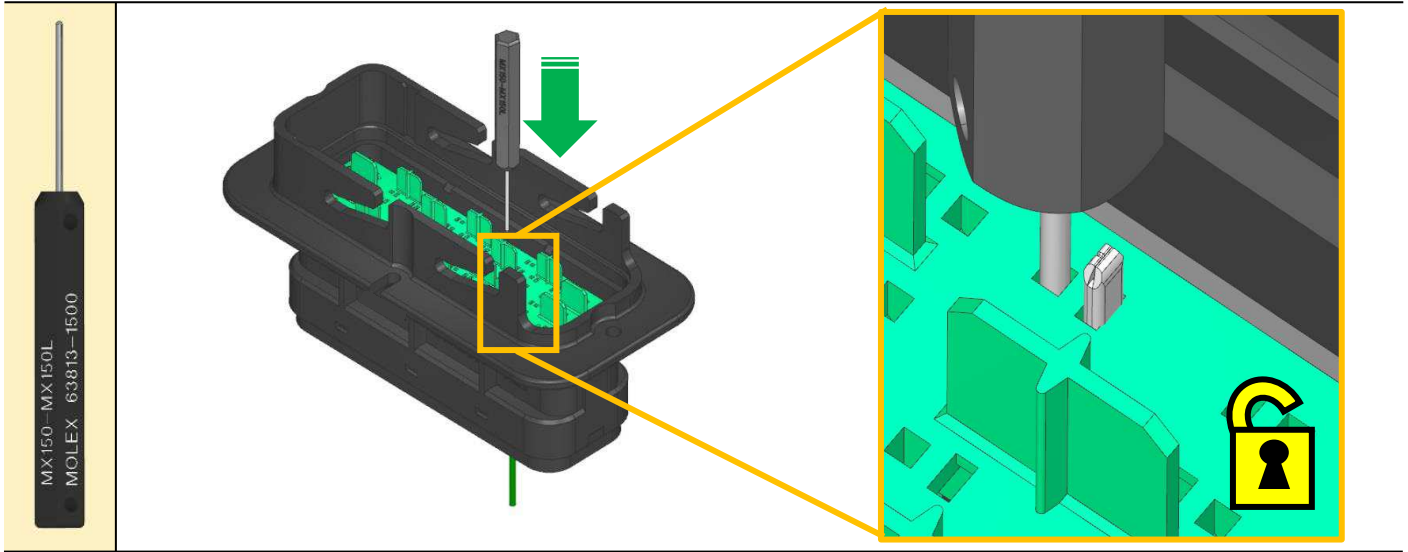
REMOVING POWER BLIND CAVITY PLUGS FROM MALE ASSEMBLY

OPEN TPA – SEE SHEET 22

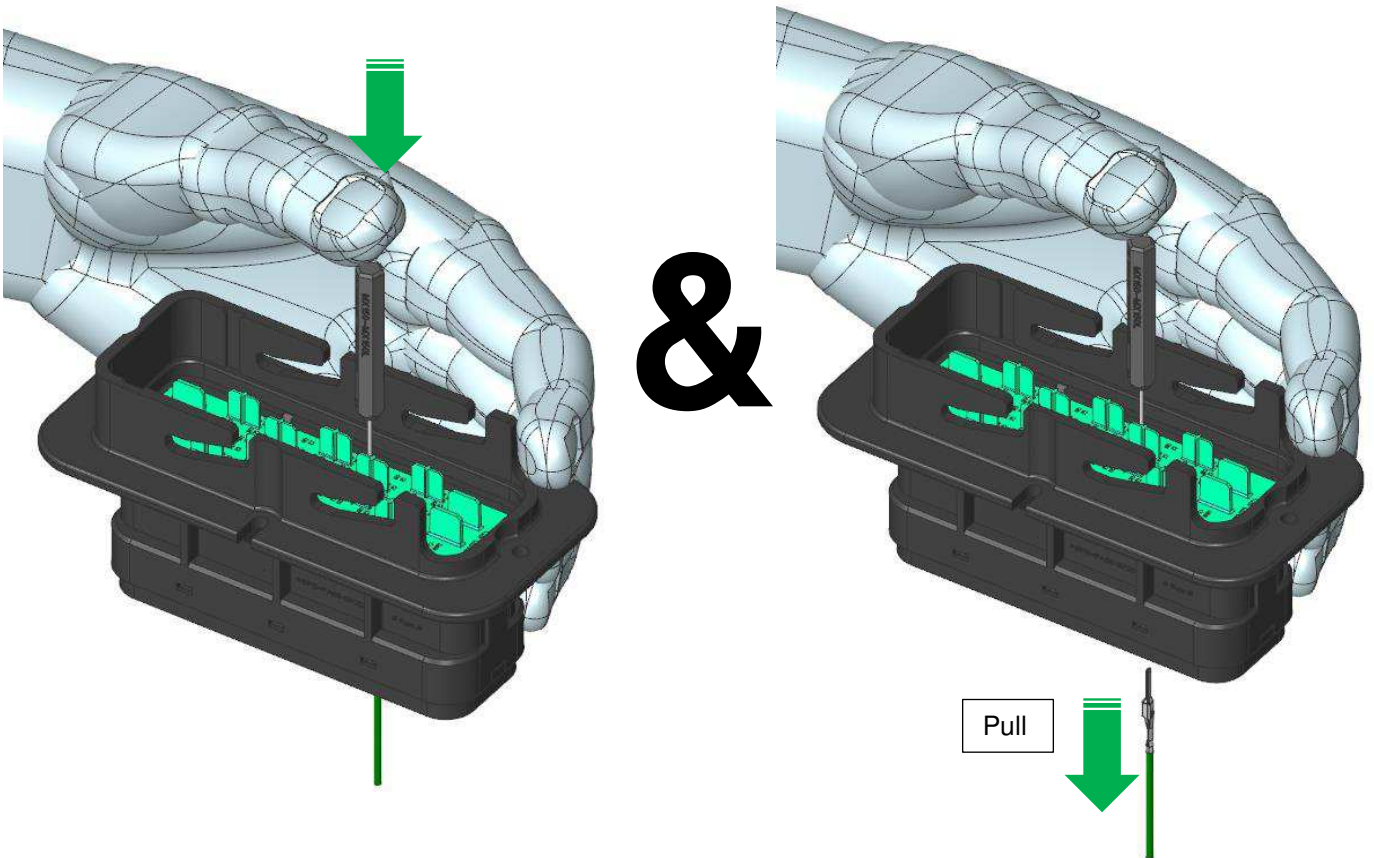


REMOVING SIGNAL & 2.5MM² TERMINALS FROM MALE ASSEMBLY

OPEN TPA – SEE SHEET 22

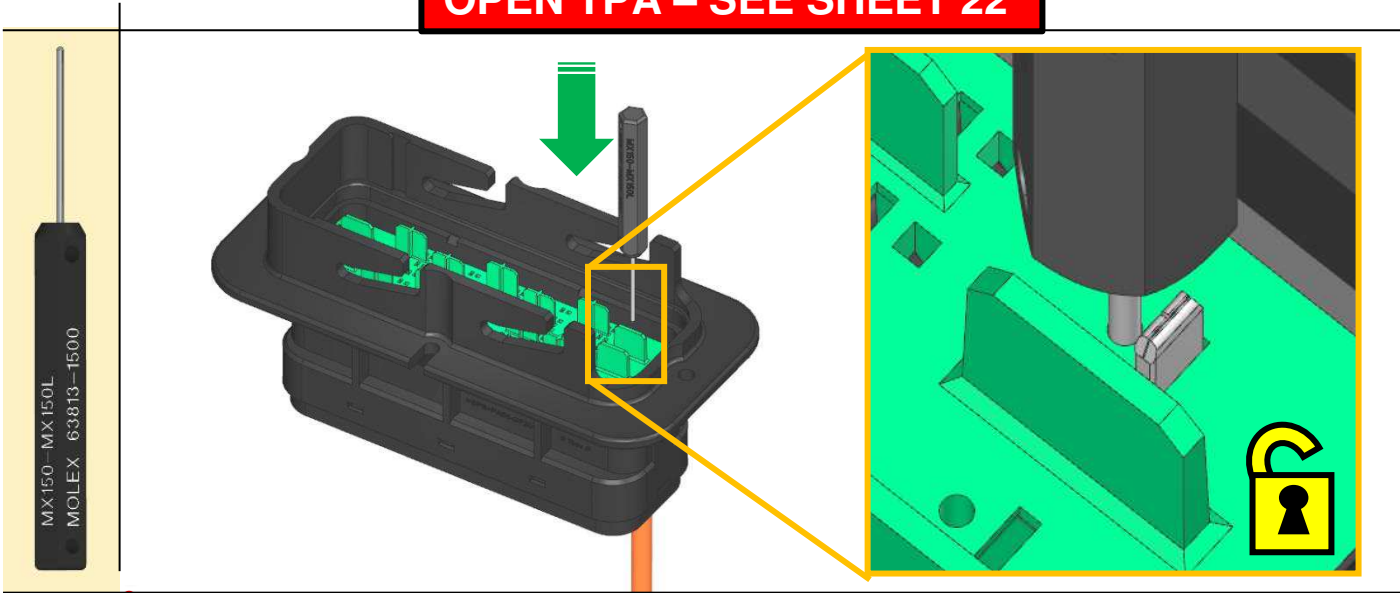


Pull cables carefully through the seal

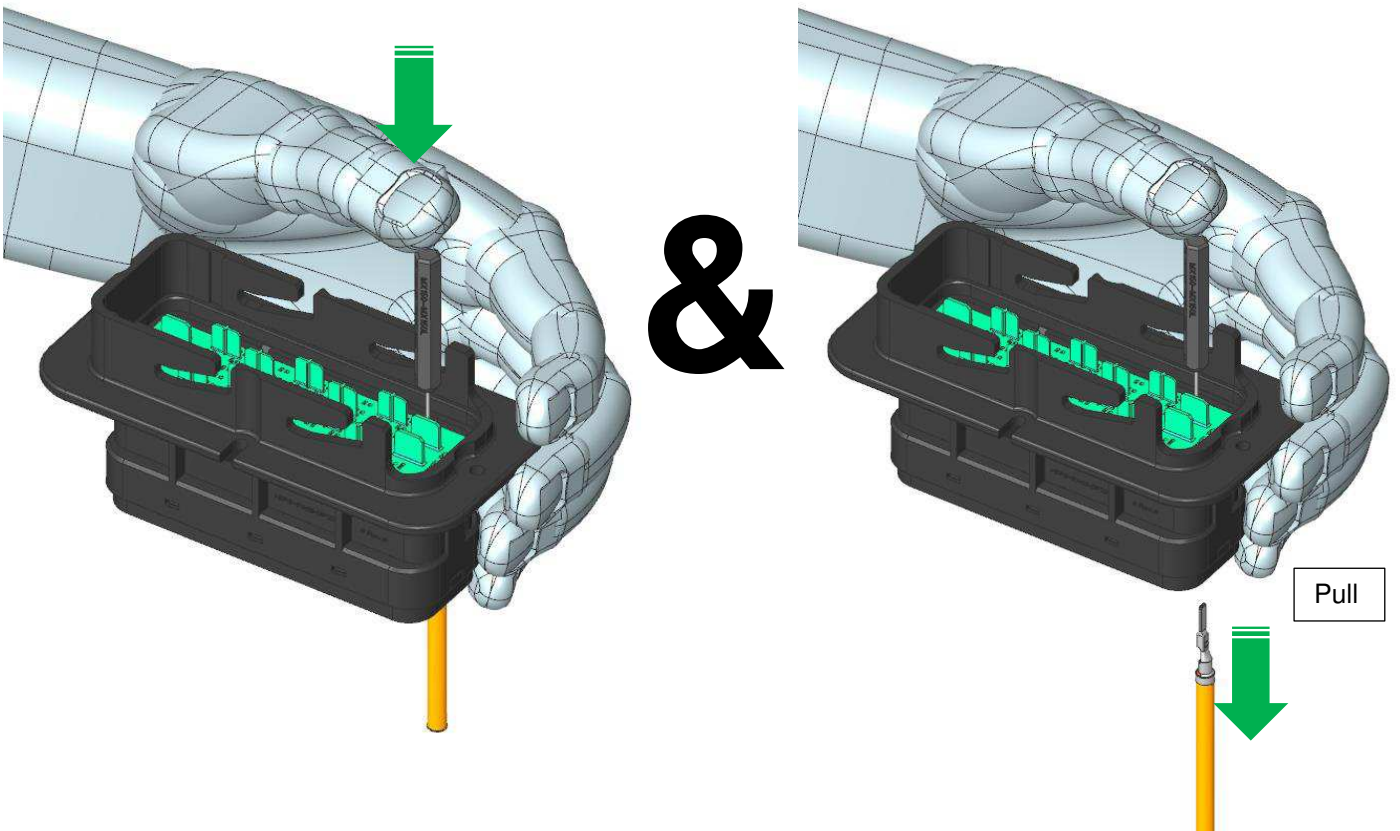


REMOVING POWER TERMINALS FROM MALE ASSEMBLY

OPEN TPA – SEE SHEET 22



Pull cables carefully through the seal



Disclaimer and Recommendations

1. Tools shown are recommendations only. TE connectivity will not be held responsible if an inappropriate tool is used for terminal removal.
2. Care must be taken when completing the 'Top Tip' sections. Terminal extraction tool must never be inserted into female terminals. Top Tip (page 9) is only ever to be used on signal blind cavity plugs to push them out in the event of over-insertion.
3. Take care when removing blind cavity plugs using a snips as they are easy to cut, the snips is only used to help grip the plugs.
4. TE connectivity recommends trimming the signal blind cavity plugs after insertion. This should always be completed before any wires are assembled into the connector housings.
5. Take care when removing blind cavity plugs from a fully assembled connector, do not damage the neighbouring cables with the snips.
6. Always insert the male terminal at 90° to the rear cover. Insert with care through the seal.
7. When inserting terminals hold the cable approx. 1cm back from the insulation crimp.
8. Conduit must be used in conjunction with the conduit interface/wire dress. Molex will not be held responsible if cables get damaged when conduit is not used with the conduit interface/wire dress. Each cable bundle should occupy a maximum of 70% of each conduit exit.
9. **This instruction manual shows a 60+6 configuration for demonstration purposes only. Always ensure the appropriate harness wiring diagram is followed.**
10. Power blind cavity plugs must be pulled fully back in the female housing before the TPA is closed.
11. Terminal and blind cavity plug removal – parts must be pulled out of assembly in the direction shown by the green arrow in the pictures.
12. Before mating connectors please ensure both connectors are fully populated and that the final checks have been completed.

Reference documents

| | |
|----------------------|---|
| 2500000 thru 2500015 | SRC Female Receptacle Housing Assembly Sales Drawing |
| 2500016 thru 2500031 | SRC Male Housing Assembly Sales Drawing (Extended Rear Cover) |
| 2500034 | SRC Female Conduit Interface Sales Drawing |
| 2500035 | SRC Male Conduit Interface Sales Drawing |
| TEC-108-160018 | SRC Male and Female Mixed Power Assembly Product Specification |
| 107-160003-02 | SRC Male Assembly Packaging Specification (Extended Rear Cover) |
| 107-160003-01 | SRC Female Receptacle Housing Packaging Specification |
| 107-160003-04 | SRC Conduit interface Packaging Specification |
| TEC-108-160019 | SRC Conduit interface Product Specification |
| 2500033 | SRC Power Blind Cavity Plug Sales Drawing |
| 107-160003-05 | SRC Power Blind Cavity Plug Packaging Specification |
| TEC-108-160020 | SRC Power Blind Cavity Plug Product Specification |

The following documents are Molex documents related to terminals used in the SRC Connectors

| | |
|---------------|--|
| SD-19431-*** | MX150L Various Male Blade Terminal Sales Drawings |
| SD-19434-*** | MX150L Various Female Receptacle Terminal Sales Drawings |
| SD-33000-001 | MX150 Male Blade Terminal Sales Drawing |
| SD-33012-002 | MX150 Female Receptacle Terminal Sales Drawing |
| 936420010 PSD | SRC 2.5mm ² Blade Terminal Sales Drawing |
| 936420010 PSK | SRC 2.5mm ² Blade Terminal Packaging Specification |
| 936430010 PSD | SRC 2.5mm ² Receptacle Terminal Sales Drawing |
| 936430010 PSK | SRC 2.5mm ² Receptacle Terminal Packaging Specification |
| 936420010 PSP | SRC 2.5mm ² Terminal Product Specification |

Thanks for choosing TE Connectivity

