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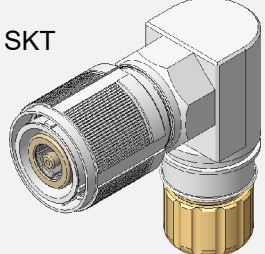
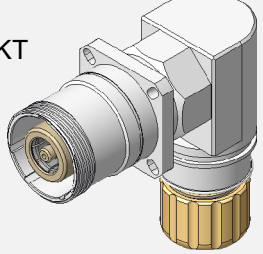
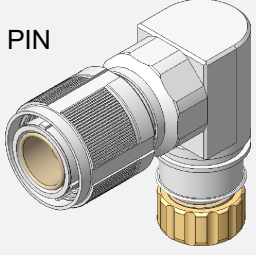
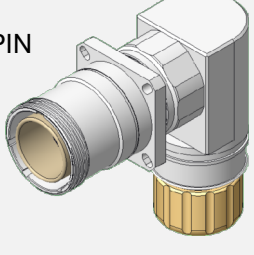
Document number	<b>123GB-1004</b>
Document name	<b>RAPTOR 90° ASSEMBLY INSTRUCTION</b>

**\*\* FOLLOW ALL LOCAL HEALTH AND SAFETY POLICIES \*\***


**Scope**

The scope of this document is to describe the customer assembly process for Raptor 90° plugs (00XXXX-1XXC) and Receptacles (06 XXXX-1XXC) Pin and Socket

Supporting documents	
Document number	Document name
123GB-1005	Torque settings & tools
123GB-0929	Crimp settings & tools

Build Overview	
 <p>SKT</p>	 <p>SKT</p>
 <p>PIN</p> <p>RAP-06XXXX-XXXC</p>	 <p>PIN</p> <p>RAP-00XXXX-XXXC</p>

Document Traceability			
Issue No	RN/ECN number	Date	Initials
1	RN31245	06/02/2026	BK

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**00**

**123GB-1004 refers to product part number family RAP-0XXXXX-1XXC**

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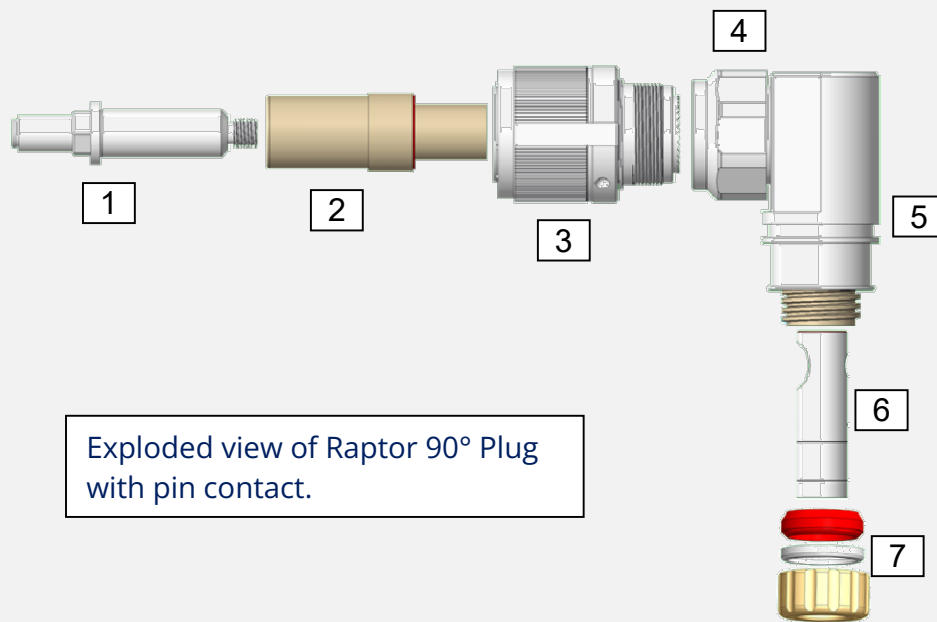
**Key Points with reference to this assembly.**

1. Refer to the catalogue for part number breakdown.
2. The connector backshells are supplied loose and must be terminated before assembly to the plug or receptacle shell.
3. See page 1 for variant types and reference views.

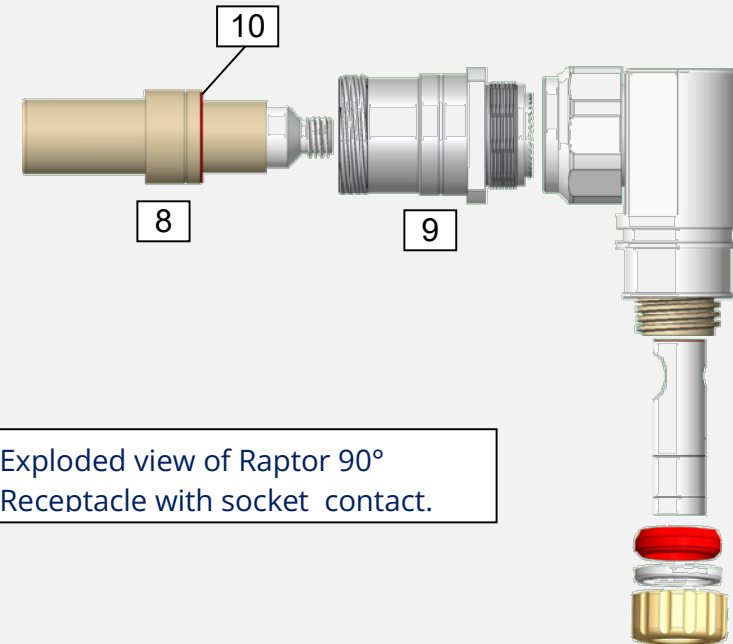
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## Exploded view of components



Exploded view of Raptor 90° Plug  
with pin contact.

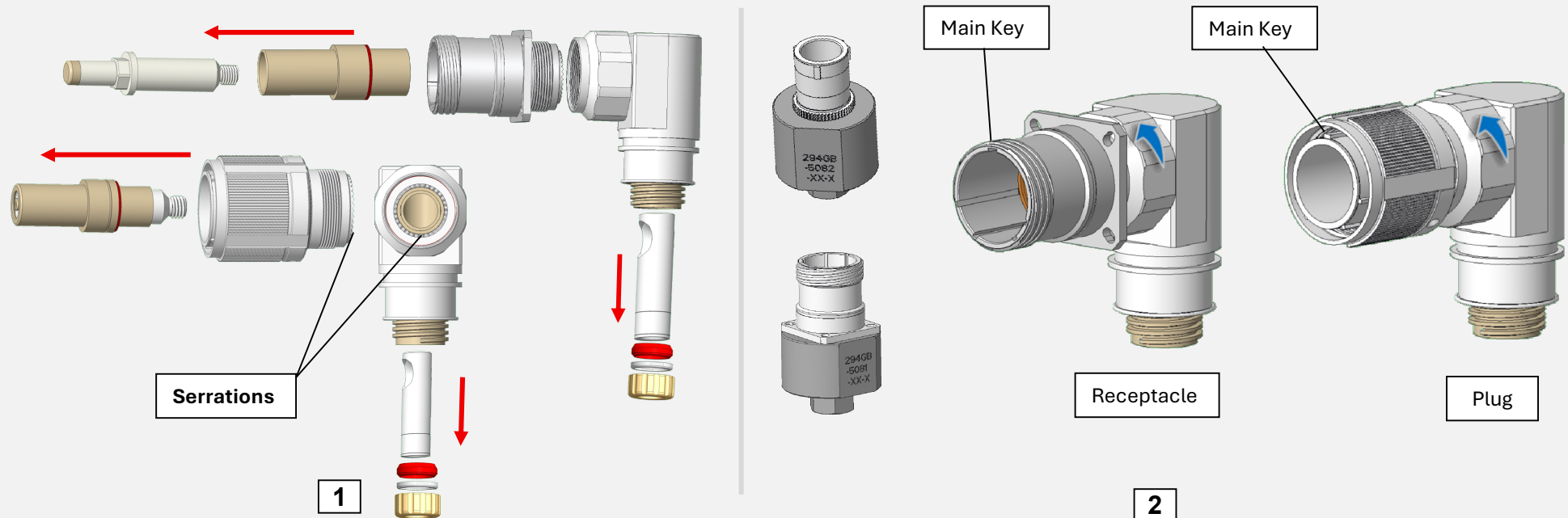


Exploded view of Raptor 90°  
Receptacle with socket contact.

1. Pin contact.
2. Pin contact insulator.
3. Plug shell assembly.
4. Coupling nut. (Part of backshell assembly).
5. Backshell assembly.
6. Crimp contact.
7. Cable nut, cable seal and slip ring.
8. Socket contact & insulator assembly.
9. Receptacle shell assembly.
10. Anti vibration seal. (Fitted to both male and female insulators).

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## 20 Fit Shell to Backshell



**1.** Unpack connector. Remove the cable nut, slip ring, seal and contact from the backshell. Remove the contact and insulator from the shell.  
**NOTE1:** the socket contact and insulator are supplied as a sub-assembly and will come out as one part

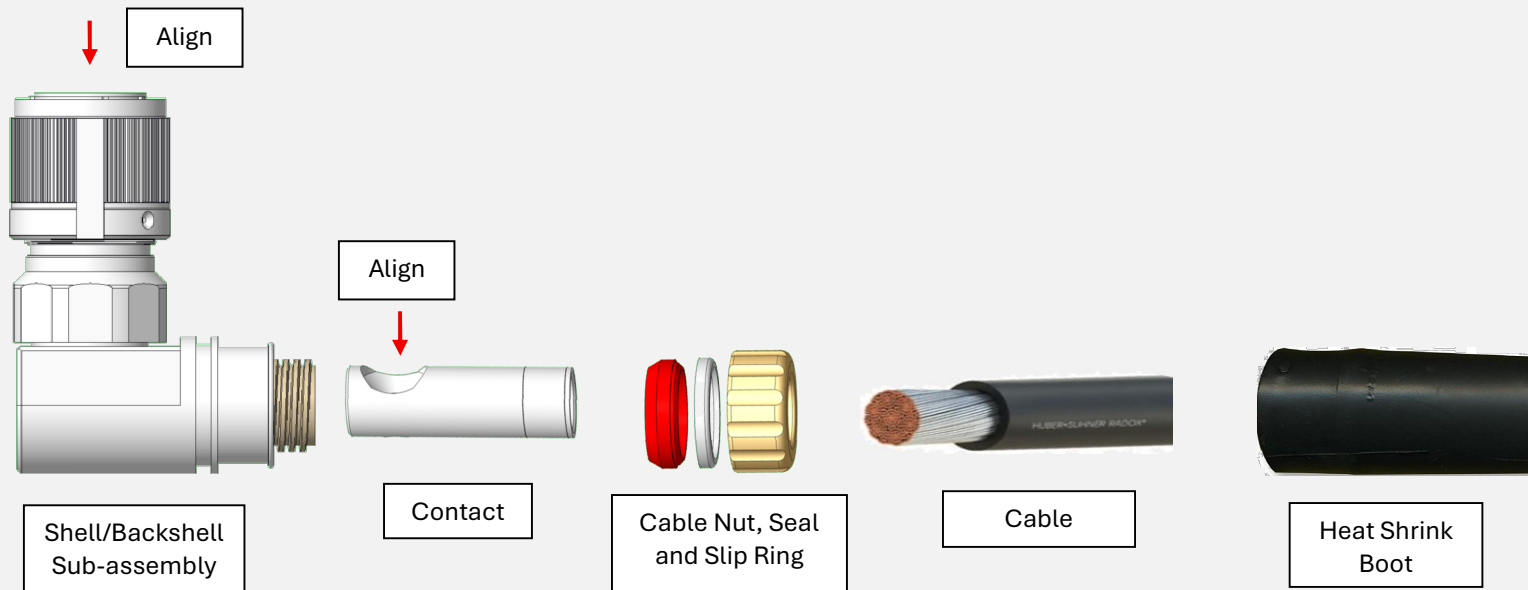
**2.** Screw the backshell coupling nut onto the shell, using the tools and torque values specified in **123GB-1005**.  
*\*Remember to set the desired connector main key position to backshell exit angle prior to performing this step\*.*

**NOTE 2:** As the shell and backshell come together, gently jiggle the two parts, in order to feel that serrations on the shell and backshell are correctly interlocked.

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## Terminate Backshell Contact (Unscreened cable)

**For un-screened cable.**

Fit the heat shrink boot, cable nut, slip ring and seal over the cable & terminate the crimp contact as per document **123GB-0929**.

Place the terminated contact into the 90° backshell sub assembly, align the contact thread/countersink with the shell.

Fit the cable nut, slip ring and seal.

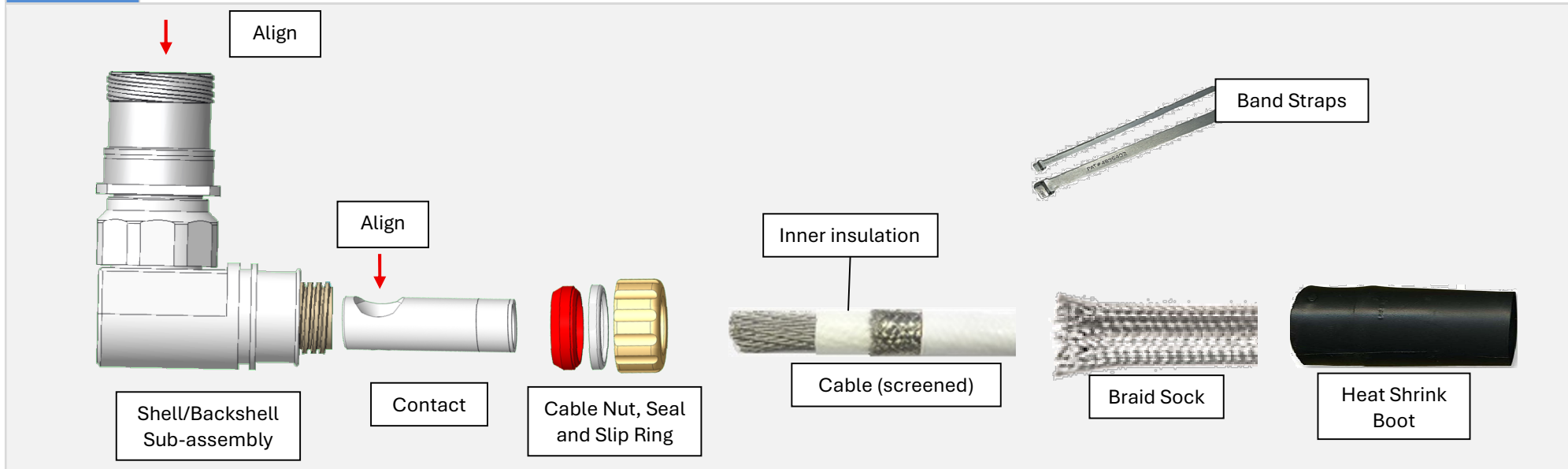
Tighten the cable nut to compress the seal onto the cable jacket.

Leave recovering the heat shrink boot until the pin or socket contact has been fitted.

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## 40 Terminate Backshell Contact (Screened cable)



### For screened cable.

Fit the heat shrink boot, braid sock, cable nut, slip ring and seal over the cable.

Strip the outer cable jacket, trim the braid and the inner insulation. Lengths must be determined to allow for crimping, and for the cable nut, slip ring and seal to fit on the inner insulation.

Terminate the crimp contact as per document **123GB-0929**.

Place the terminated contact into the 90° backshell sub assembly, align the contact thread/countersink with the shell.

Fit the cable nut, slip ring and seal. Tighten the cable nut to compress the seal onto the inner insulation.

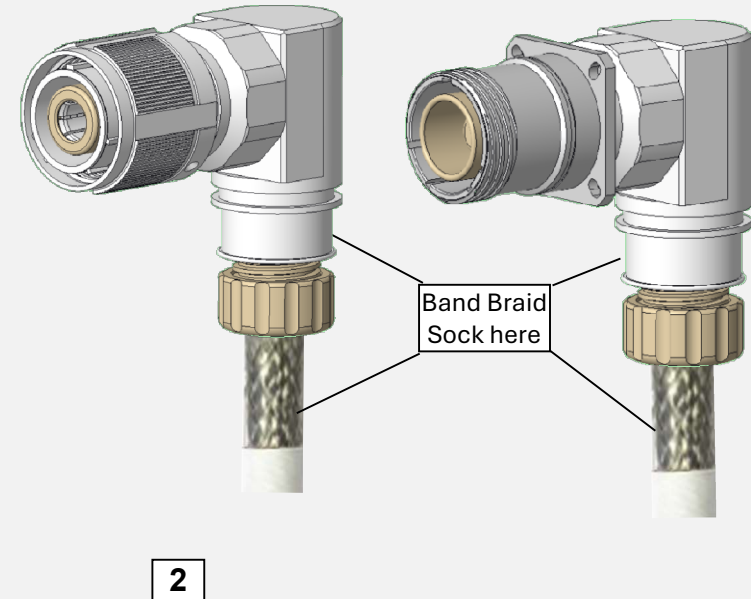
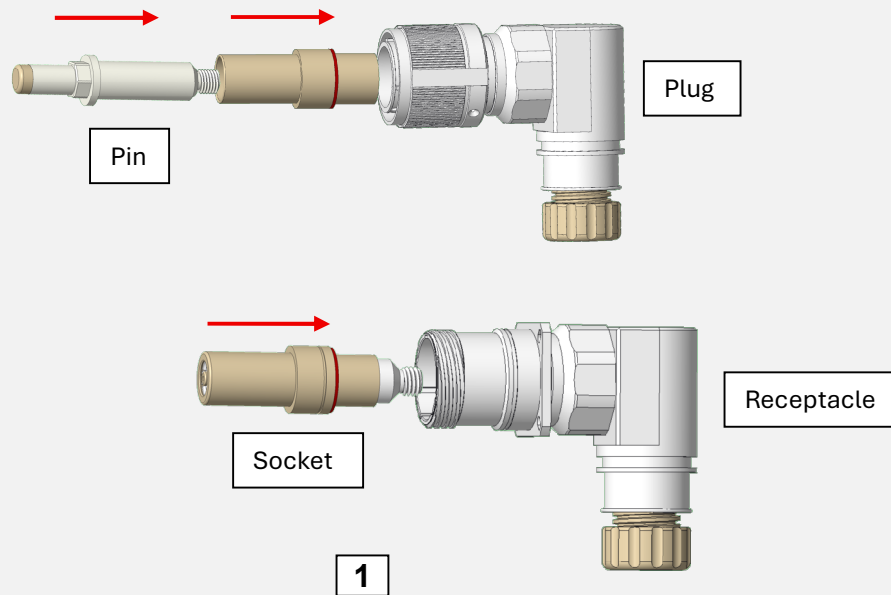
Leave fitting the braid sock and recovering the heat shrink boot until the pin or socket contact has been fitted.

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## 50 Fit Insulators and Contacts to Backshell



Fit the insulators and contacts into the shell. Screw the contact into the backshell crimp contact using the tooling specified in **123GB-1005'** Loosen the cable nut and gently twist the cable to align the two contacts if required.

Torque the contacts as per **123GB-1005** and re-tighten the cable nut.

**Screened cable:** Recommended method. Fit the braid sock over the backshell and cable braid and fix in position with Bandit straps.

**Screened & Unscreened cable,** Fit the heat shrink boot over the backshell and cable and recover.

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