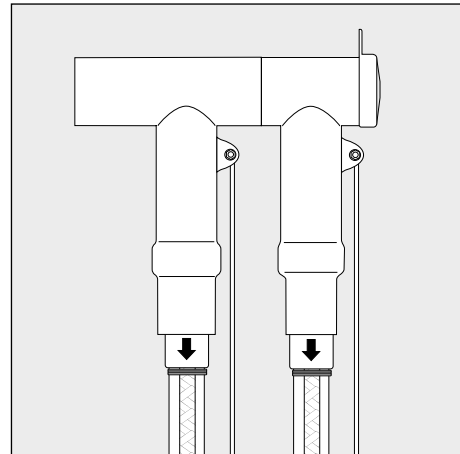




TE's Raychem Cable Accessories



Installation Instruction EPP-1799-10/16

**Raychem
Screened Separable
Coupling Connector 800 A for
Fit onto Base Connector Type
RSTI-68xx used with
bushings Type "C"
according to EN 50181
and screened Single Core
Polymeric Insulated Cable
with Cu-Tape Shield
36 to 42 kV**

Type: RSTI-CC-68xx-01

Safety Warning:

It is essential to observe the applicable safety regulations for working with high voltage equipment.

For precise safety information please contact the responsible authority.

To view the TE Energy website:

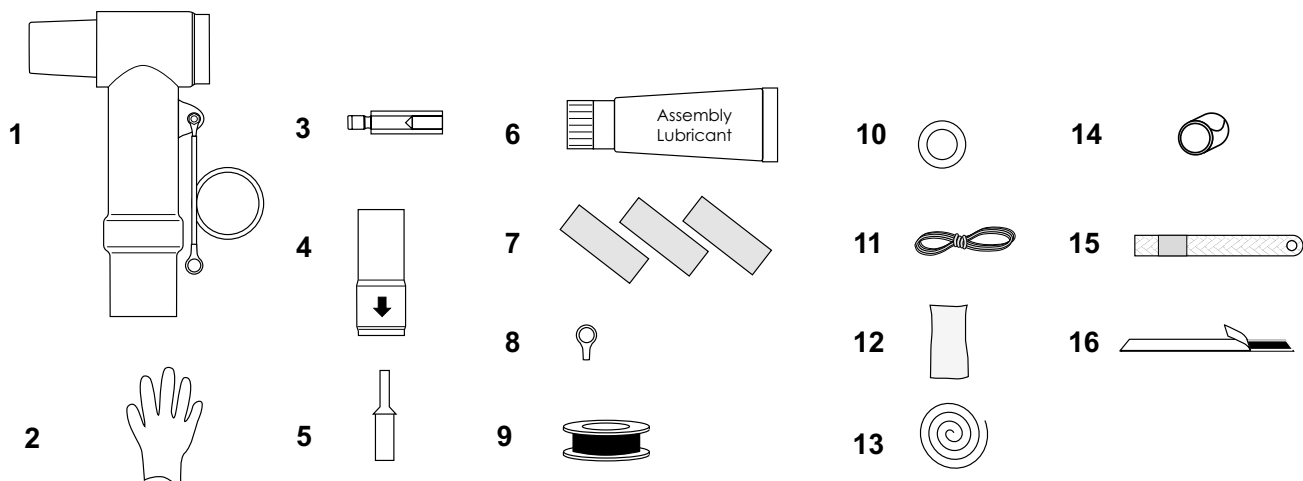


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Before Starting

Check to ensure that the kit you are going to use fits the cable.
Refer to the kit label and the title of the installation instruction.
Components or working steps may have been improved since you last installed this product.
Carefully read and follow the steps in the installation instruction.

Kit Content



1	3 x Connector body	3	3 x Coupling bolt	6	1 x Assembly Lubricant	10	3 x Cu-Washer, tinned	14	3 x Roll spring
2	3 x Gloves	4	3 x Stress cone	7	3 x Sealing tape	11	1 x String	15	3 x Earth lead
		5	3 x Main cable lug	8	3 x Screen cable lug	12	3 x Protective bag	16	3 x Copper adhesive tape
				9	1 x PVC tape	13	1 x Binding wire		

Table 1

Cross Section 36 & 42 kV	Ø Core Insulation		Reference No.		
	mm ²	min	max	Al	Cu
50	22.4 – 35.5 mm			RSTI-CC-6811-01	RSTI-CC-6821-01
70				RSTI-CC-6812-01	RSTI-CC-6822-01
95				RSTI-CC-6813-01	RSTI-CC-6823-01
120				RSTI-CC-6814-01	RSTI-CC-6824-01
150	28.9 – 42.0 mm			RSTI-CC-6815-01	RSTI-CC-6825-01
185				RSTI-CC-6816-01	RSTI-CC-6826-01
240				RSTI-CC-6817-01	RSTI-CC-6827-01
300				RSTI-CC-6818-01	RSTI-CC-6828-01
35-95	22.4 – 35.5 mm			RSTI-CC-6851-01	
95-120				RSTI-CC-6852-01	
120-240	28.9 – 42.0 mm			RSTI-CC-6853-01	
185-300				RSTI-CC-6855-01	

The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, TE Connectivity has no control over the field conditions which influence product installation.

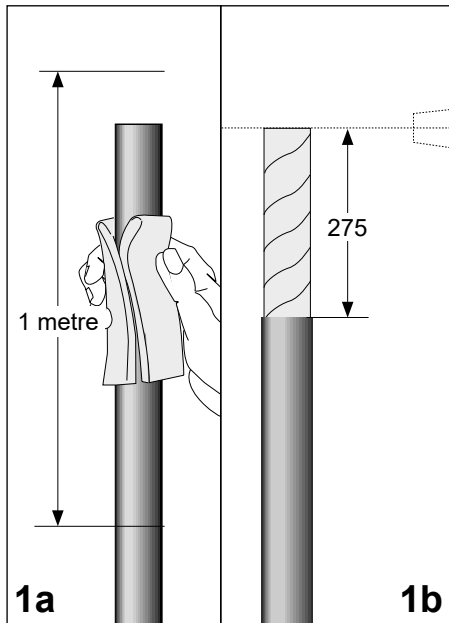
It is the user's responsibility to determine the suitability of the installation method in the user's field conditions.

TE Connectivity's only obligations are those in TE Connectivity's standard Conditions of Sale for this product and in no case will TE Connectivity be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products.

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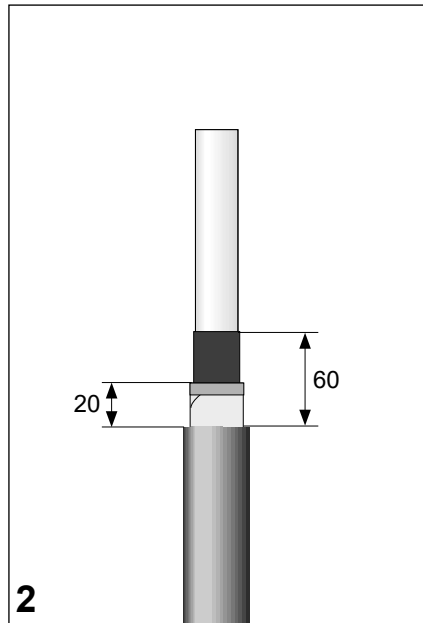
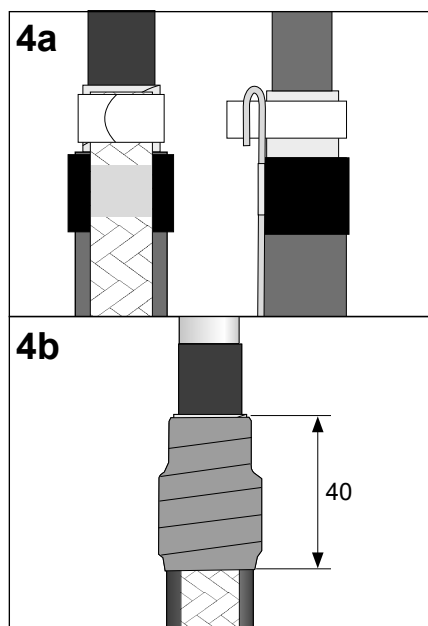
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Cable Preparation



Clean and degrease the end of the overshath for a length of 1 metre with solvent wipe.
Position the cable end in line with the bushing centre. Mark the overshath below the bushing centre at the dimension given in the drawing. Remove the overshath over this distance.

- Position the moisture barrier of the ground lead so that the top edge does not exceed the overshath cut. Fix the short end onto the copper tape shield with two layers of roll spring. Bend back the exceeding short length and fix it with the remainder of the roll spring. Fasten the roll spring with a twisting action. Cut away the excessive part of the short tail.
- Apply two layers of insulating tape on top of the roll spring and continue onto the overshath for a total length of 40 mm.



Place a wire binder temporarily over the metal tape shield 20 mm away from the overshath cut.
Remove the metal tape shield against the wire binder.
Replace the wire binder with two layers of copper adhesive tape onto the metal tape shield end.

Thoroughly remove the core screen to the dimensions given in the drawing, so that the insulation surface is free from all traces of conductive material.

Note: Do not nick the insulation!

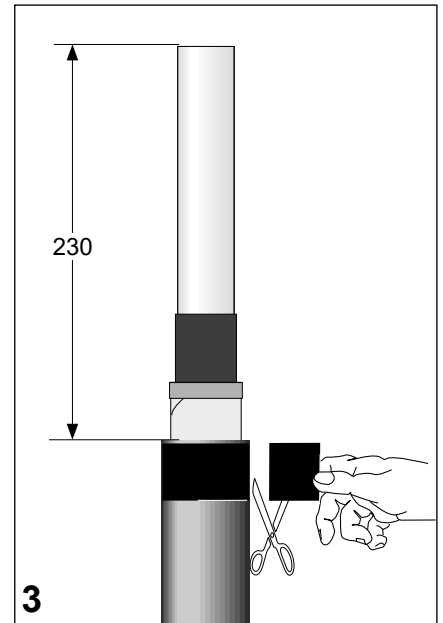
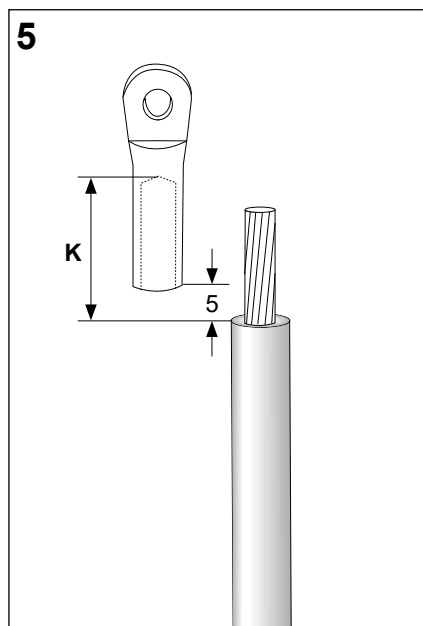
Cut back the insulation according to dimension **K** given in drawing details.

A. Compression technology (deep indentation and hexagonal)

Dimension **K** must not exceed 60 mm.

B. Mechanical lugs

Dimension **K** is identical to bore depth. Barrel of lug butts against insulation.



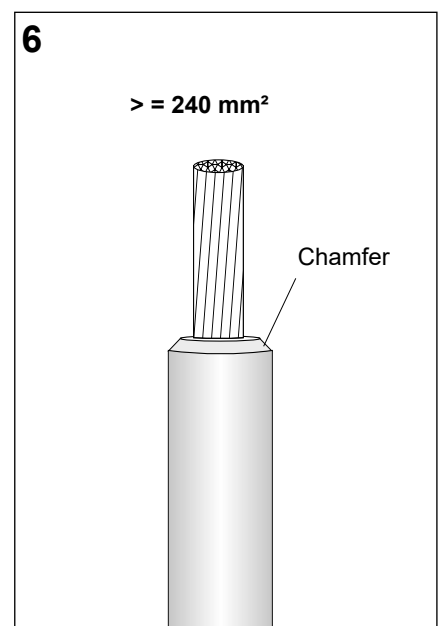
Cut with a hack saw the cable at 230 mm above the overshath cut.

Wrap one turn of sealant tape (green) with no overlap and slight tension around the end of the overshath.

Cut the tape and push ends together.

Recommendation for large cross sections

Convenient push on process of the stress cone requires chamfering of the insulation for cross section 240 mm^2 and above. See drawing!



Core Preparation

Table 2 - Use of Insert

Cross Section (Stranded mm ² (RM))	Lug Type		
	BLMC-25/95-16-800A	BLMC-95/240-16-800A	BLMC-185/300-16-800A
35	Y	N.A.	N.A.
50	Y	N.A.	N.A.
70	N	N.A.	N.A.
95	N	Y	N.A.
120	N.A.	Y	N.A.
150	N.A.	Y	N.A.
185	N.A.	N	N.A.
240	N.A.	N	N.A.
300	N.A.	N.A.	N

N.A. = not applicable

Y = Yes

N = No

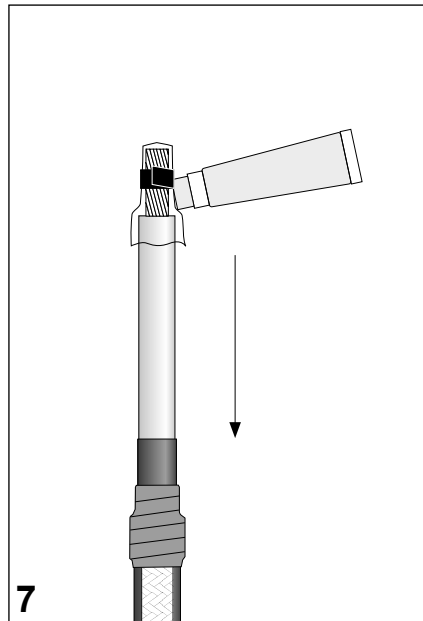
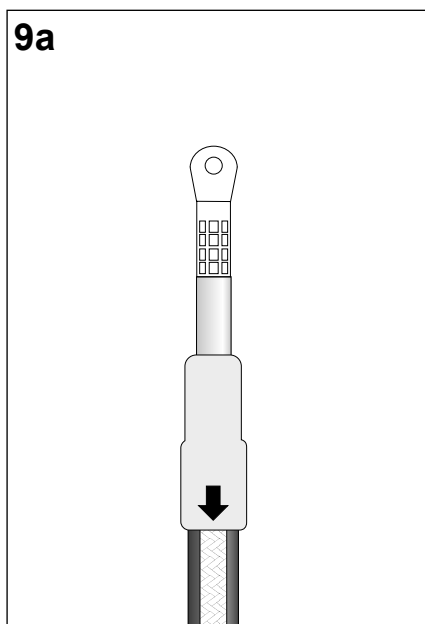
a. Compression Lugs

Install the cable lug with the appropriate die and compression tool.

Note:

Remove any sharp edges.

Clean and degrease the lug and insulation from any excessive compression grease.



Slide the small protective bag (assembly aid) over the exposed conductor and tie it down with a PVC tape as shown in the drawing.

Gently lubricate the outer surface of the protective bag and the core insulation with a thin layer of assembly lubricant. Apply the lubricant layer with the sponge top as shown.

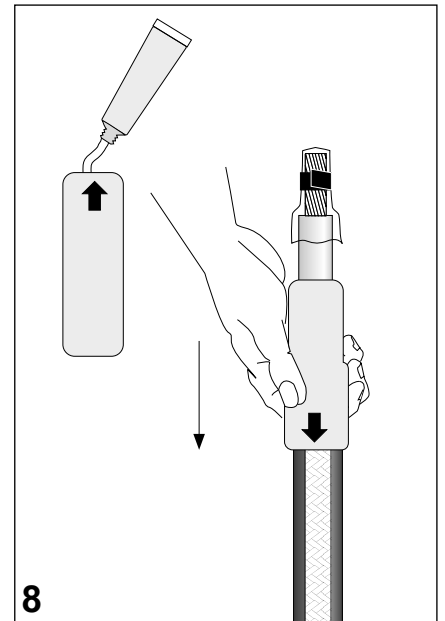
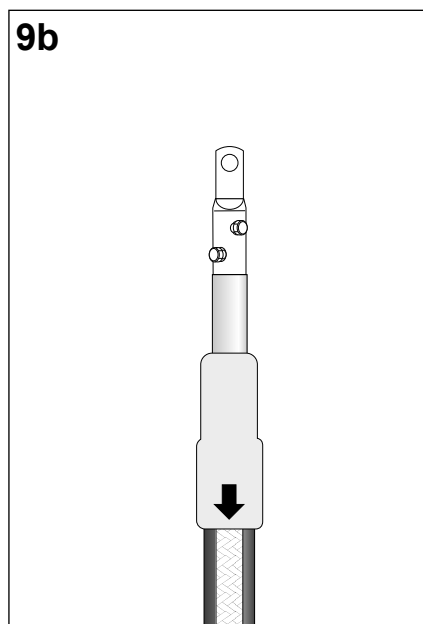
b. Mechanical Lugs with Inserts

The insert has to be used as noted in **Table 2**.

Ensure that the retention of the insert is locked into the appropriate slot in the barrel.

Install the cable lug using a lug fixture. Tighten the bolt set alternately in several equal steps until the heads shear off.

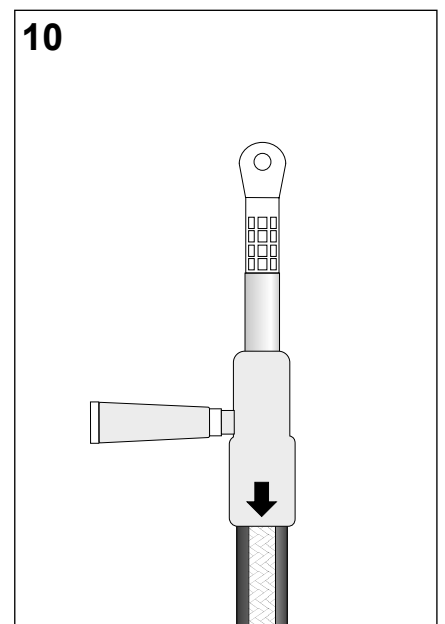
Remove any sharp edges.



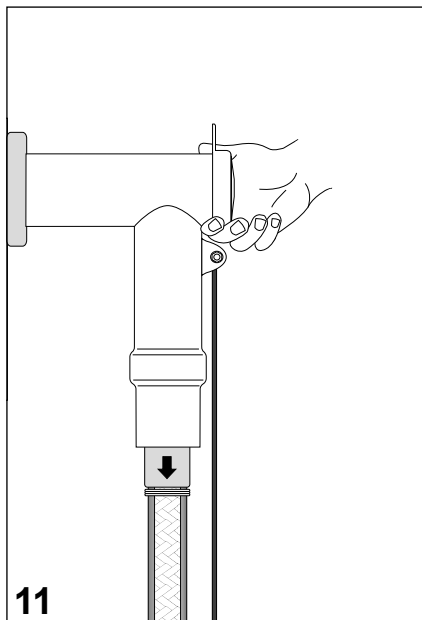
Apply onto the inner surface of the stress cone at the bottom end a 3 cm long sausage of assembly lubricant and spread it evenly over the inner surface. Use assembly lubricant without sponge top. Push the stress cone in one sequence with a twisting movement over the assembly aid completely onto the insulation until the inner collar of the stress cone stops at the roll spring.

Note: The arrow on the stress cone should point onto the cable sheath. Remove the assembly aid from the conductor.

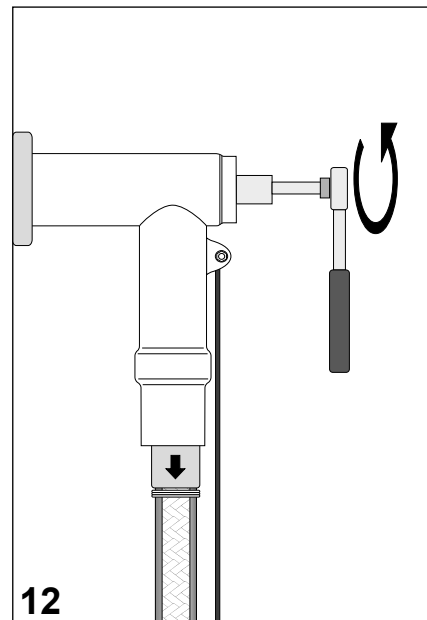
Apply a thin layer of lubricant onto the outer surface of the stress cone with the sponge top.



Preparation of Installed Screened Separable Connector



Remove from the installed connector the conductive endcap and save it in a clean container.



Remove from the installed connector the back plug and save it in a clean container.

Installation of Coupling Connector

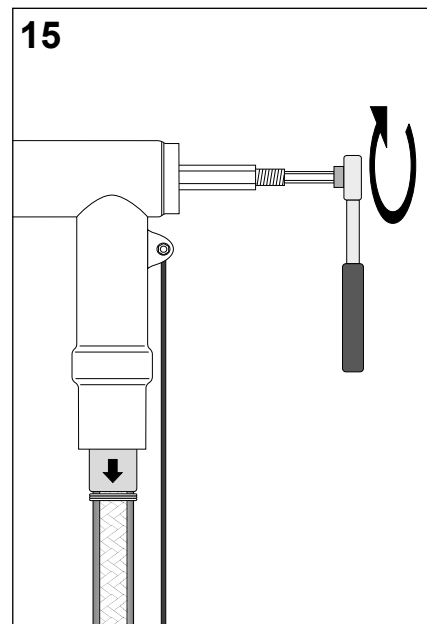
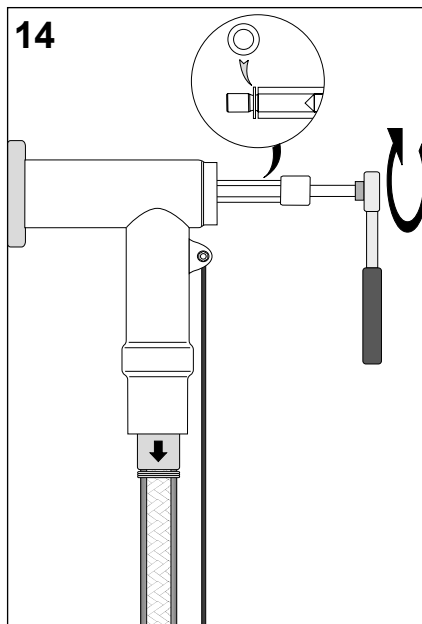
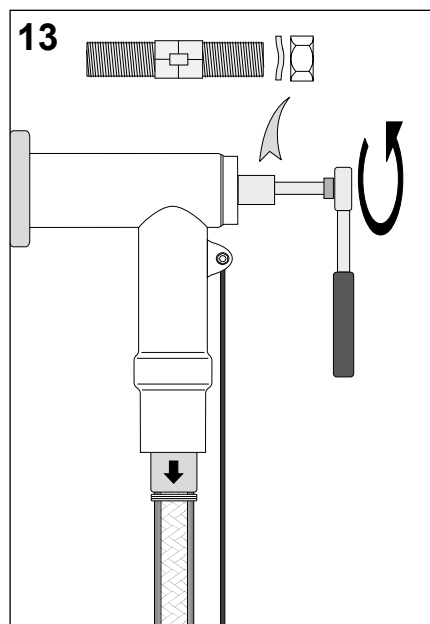
Remove from the installed connector **hexagon nut, washer, threaded pin** and save it in a clean container.

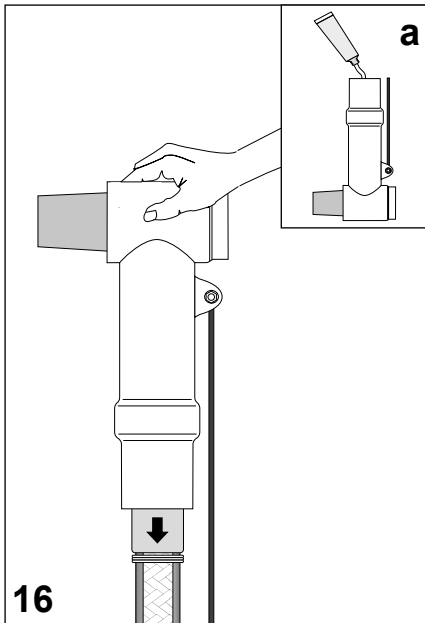
Ensure that the rear end of the already installed connector is lubricated with a thin layer of assembly lubricant.

Insert coupling stud with tinned Cu-washer (see detail) into the rear end of the connector and tighten it up with a torque wrench (27 mm).

Maximum torque: **35 Nm**.

Insert the **threaded stud M16** into the rear end of the coupling stud and tighten it up with an Allen key (8 mm). Maximum torque: **30 Nm**.

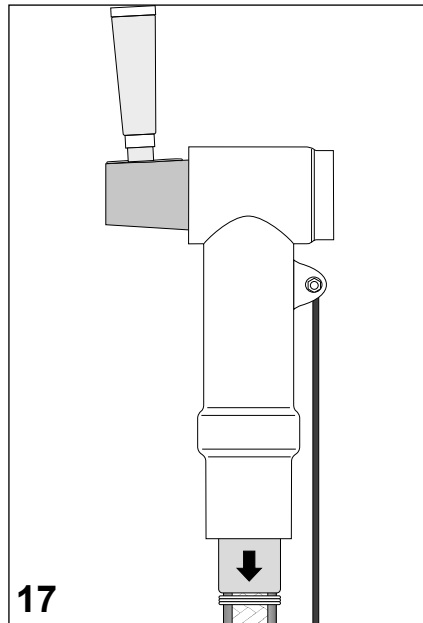




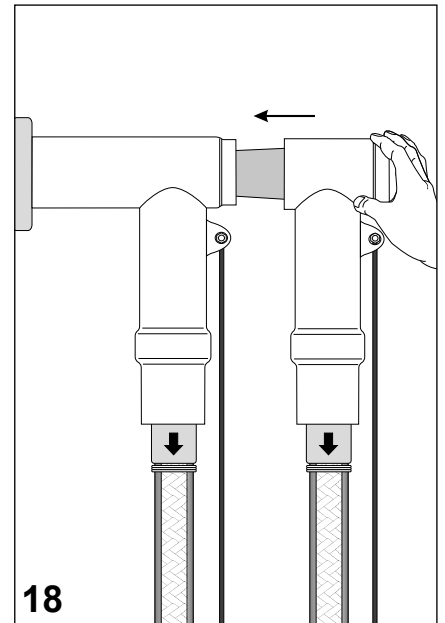
Clean the coupling connector body at the bottom end and apply a thin layer of lubricant onto the inner surface without the sponge top as shown in detail a.

Note: Use one way glove to evenly lubricate the inner surface at a length of approx. 50 mm.

Push the coupling connector body with no interruption onto the stress cone and hold it.

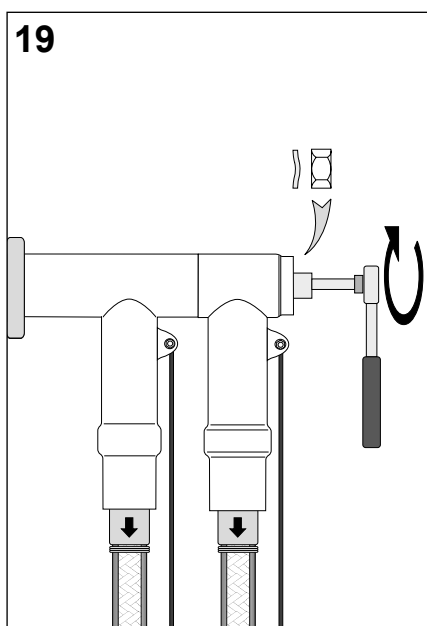


Clean the conical front end of the coupling connector and apply a thin layer of lubricant onto the outer surface of the cone with the sponge top. Continue **immediately** with the next step.

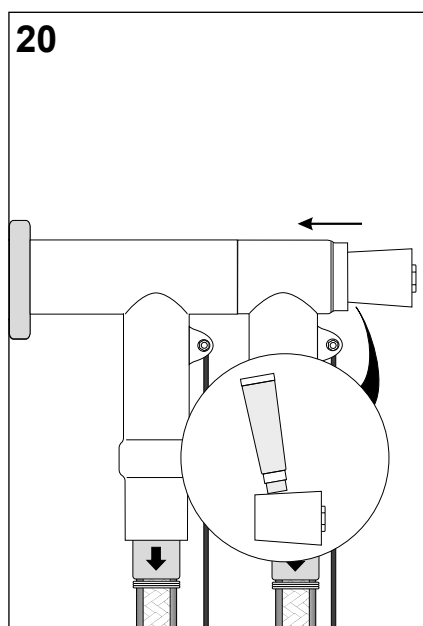


Align the conical front end of the coupling connector with the rear end of the already installed connector and push the coupling connector in position.

Insert the spring washer and hex nut. Tighten the hex nut onto the stud with a torque wrench (24 mm) at a torque of **30 Nm**.



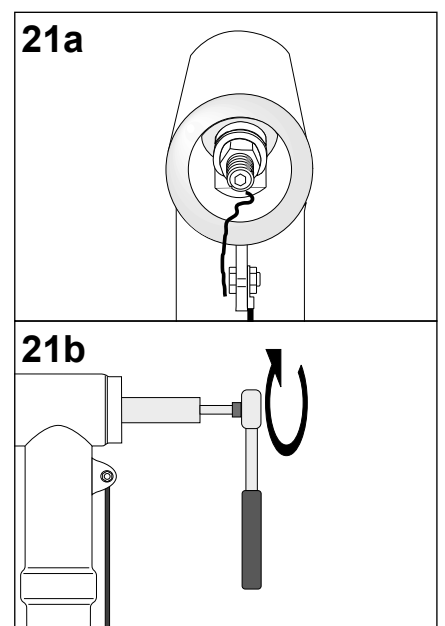
Clean the inner surface of connector back end and apply a thin layer of assembly lubricant. Do the same with the conical interface of the back plug as shown in detail.

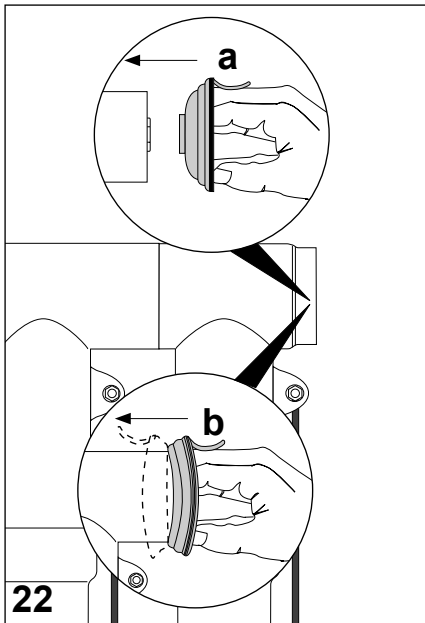


- Place a string into the rear entry of the connector as shown.
- Insert the back plug and screw it into place using a spanner (19 mm) at a torque of **30 Nm**.

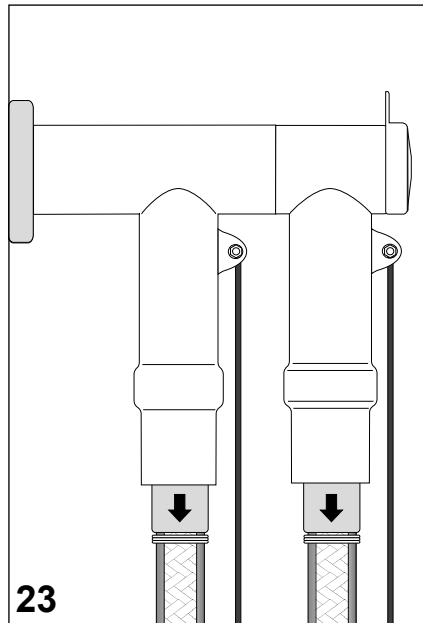
Remove the string prior to the last two turns.

Note: Back plug has to be flush with connector end. In case of protrusion of back plug check steps 13 - 15 for correct installation of components.





- a. Flip-back the endcap as shown in detail **a**. Position the protruding ring onto test point.
- b. Flip the endcap into final position with your finger as shown in detail **b**.

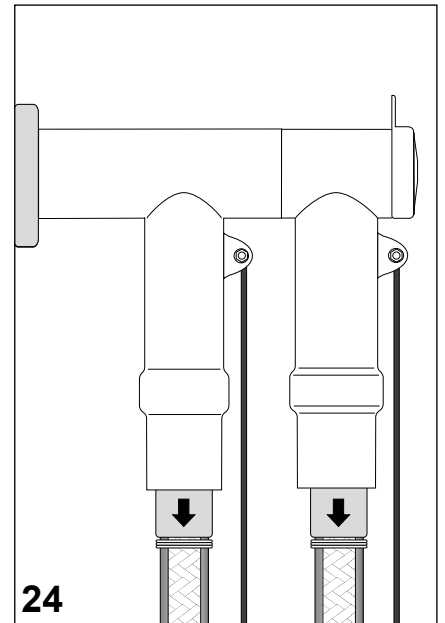


Ensure that the grounding lead is fastened tightly.

Fix the earth lead with a wire binder (four layers) at the end of the stress cone.

Connect the cable earth lead AND the RSTI earth lead to ground.

Note: Ensure that each cable is fixed with suitable cable cleats onto cable rack at a distance of 400 mm from the center of the bushing.



Screened separable coupling connector completed.

Please dispose of all waste according to environmental regulations.

