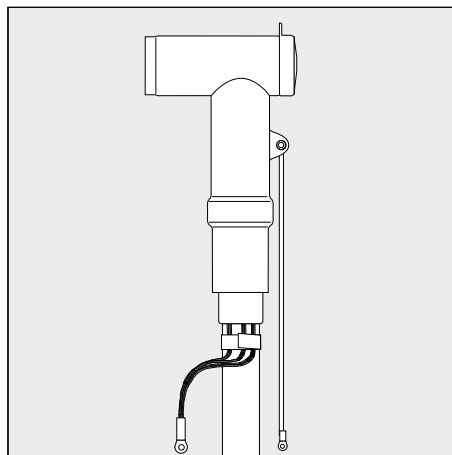




# Raychem

from TE Connectivity



## Installation Instruction EPP-2848-9/16

**Raychem  
Screened Separable  
Connector 1250 A for  
Bushing Profile "C"  
in Accordance to EN 50181,  
and Single Core Polymeric  
Insulated Cable up to  
42 kV**

**Type: RSTI-6954**

### **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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85521 Ottobrunn/Munich, Germany  
Tel: +49-89-6089-0  
Fax: +49-89-6096-345  
energy.te.com

# Before Starting

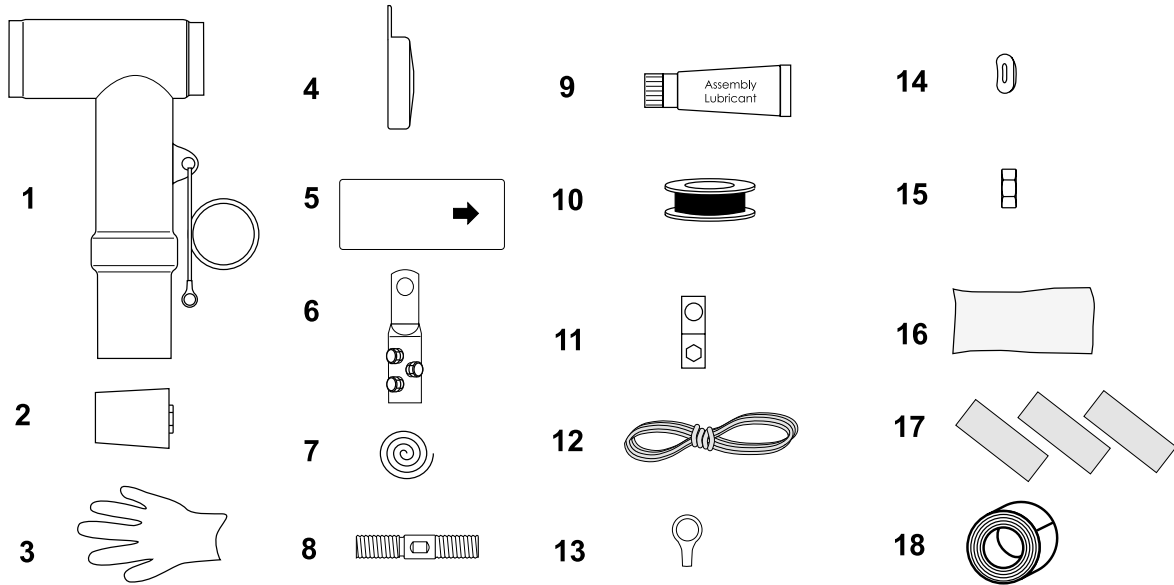
Check to ensure that the kit you are going to use fits the cable.

Refer to the kit label and the title of the installation instructions.

Components or working steps may have been modified since you last installed this product.

Carefully read and follow the steps in the installation instructions.

## Kit Content



1	3 x Connector body	4	3 x Covering cap	9	2 x Assembly lubricant	14	3 x Wave type washer
2	3 x Back plug	5	3 x Stress cone	10	1 x PVC tape	15	3 x Nut M16
3	3 x Gloves	6	3 x Main cable lug	11	3 x Cable lug (16 - 70)	16	3 x Protective bag
		7	1 x Binding wire	12	1 x String	17	6 x Sealing tape (grey)
		8	3 x Threaded pin M16	13	3 x Screen cable lug	18	3 x EPR tape (EXRM-1430-311653)

Table 1

Cross Section	Voltage Class	Ø Core Insulation		Reference No.
		min	max	
mm <sup>2</sup>	(U <sub>m</sub> )/kV			Al or Cu
1000	36 & 42	39.1	59.0	RSTI-6954

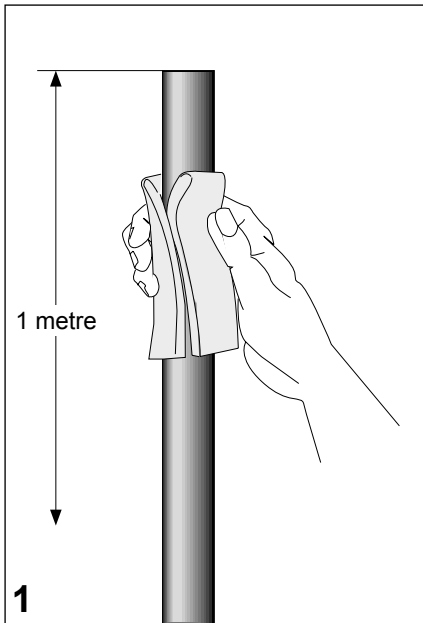
The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, TE Connectivity has no control over the field conditions which influence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

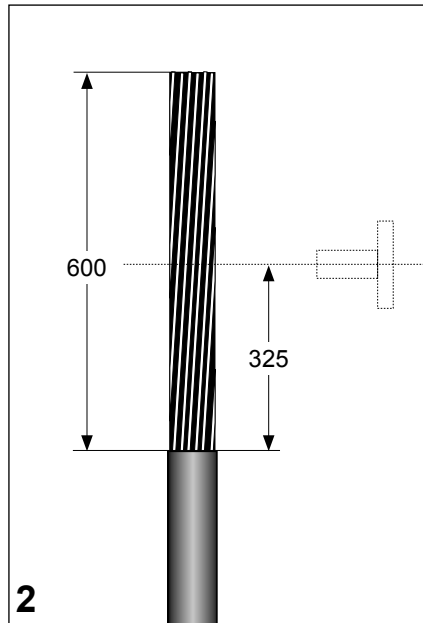
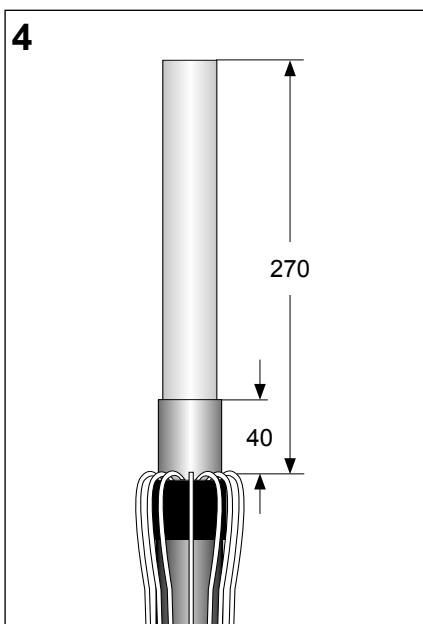


Preheat the cable and use appropriate devices to straighten the cable.

Clean and degrease the end of the overshath for a length of 1 metre with solvent wipe.

Cut the core with a hacksaw according to the dimension given in the drawing. Remove the core screen with appropriate screen cutting tool according to the drawing. The surface of the insulation should be free from all traces of conductive material. Compare the diameter over insulation with application range as shown in **Table 1** as well as with marking of supplied stress cone.

### Application Check!



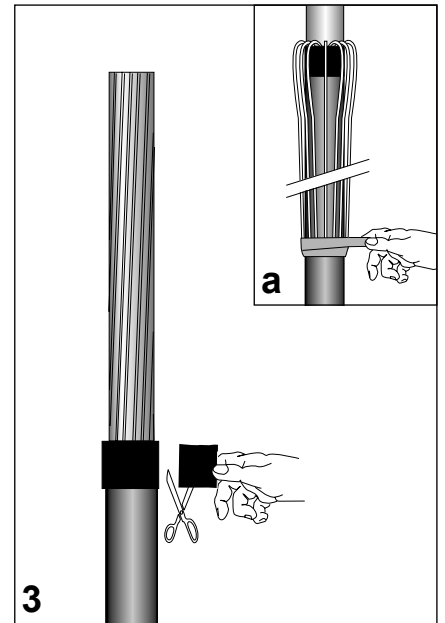
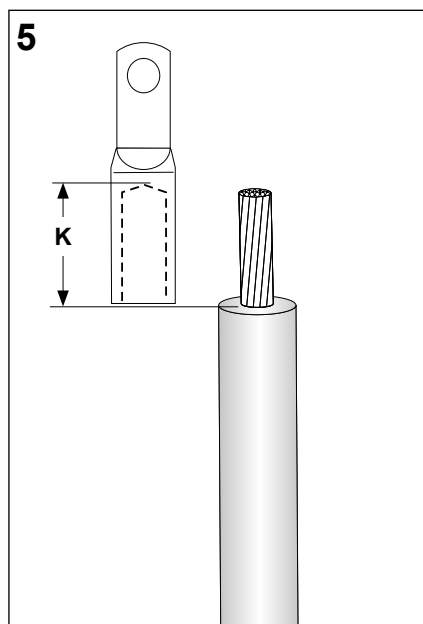
### Cable with wire shield

Position the cable with sufficient overlap to the bushing centre. Mark the overshath 325 mm below the bushing centre. Cut the cable 600 mm above the mark and remove the overshath over this distance. Cut off Cu-spiral screening tape flush with end of outer sheath.

**Edges** projecting beyond the outer sheath **must be avoided**, so that the stress cone can not be damaged during push on procedure.

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

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



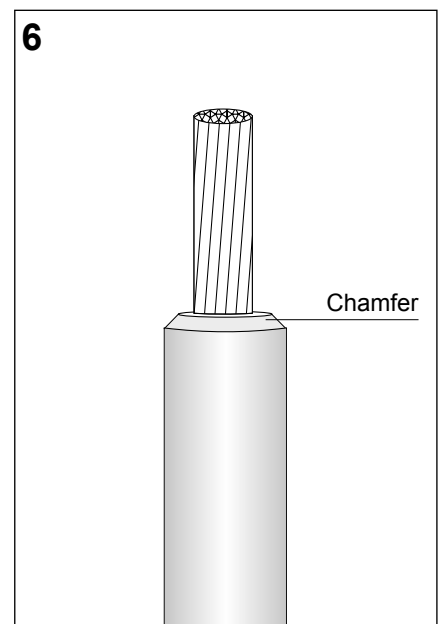
Wrap one turn of sealant tape (grey) with no overlap and slight tension around the end of the overshath.

Cut the tape and push ends together.

Bend the shielding wires back onto the overshath.

Avoid crossing the individual wires. Temporarily secure the wires with a tape or wire binder (see detail a).

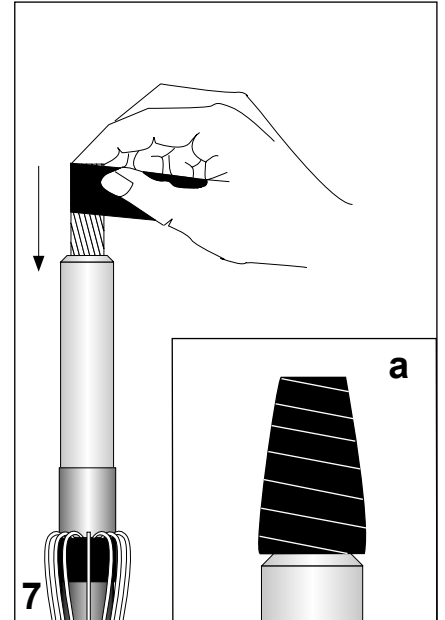
Convenient push on process of the stress cone requires chamfering of the insulation. See drawing!



## Core Preparation

Table 2 - Application Range of Mechanical Lugs

Part number	Cross section (mm <sup>2</sup> )	Ø over round stranded Al or Cu conductors (mm)	Ø over round solid Al conductors (mm)
BLMC-1000-16-1250A	1000	37 - 39.5	34.8 - 36

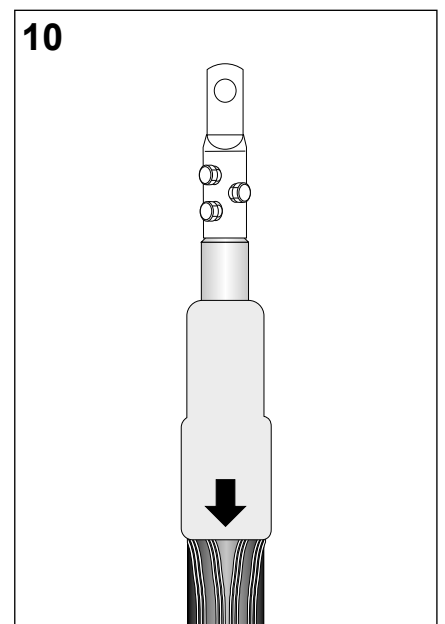
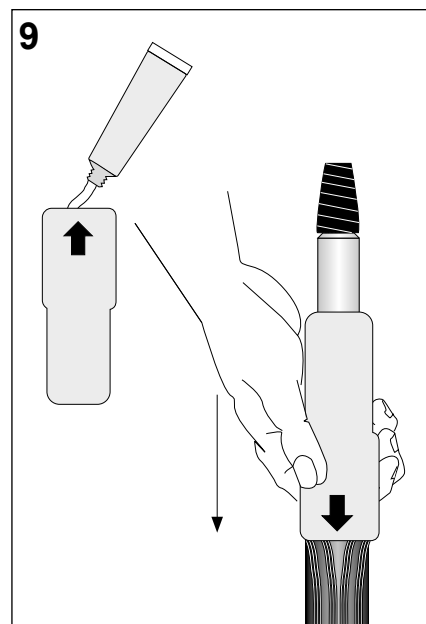
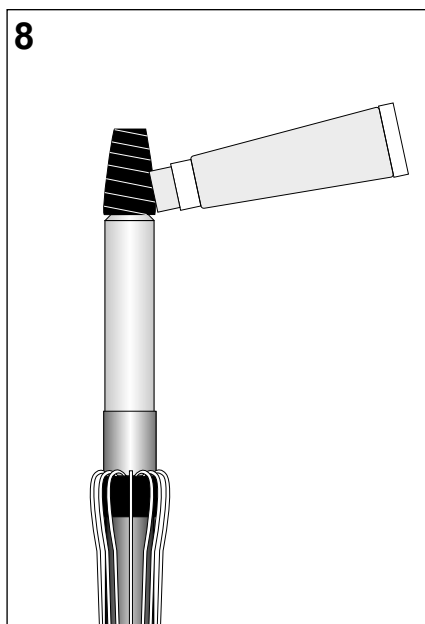


Wrap the EPR tape (EXRM-1430-311653) around the conductor to form a tapered shape towards the cut of the insulation as shown in the drawing and detail a.  
(This shape will aid during the push-on procedure of the stress cone.)

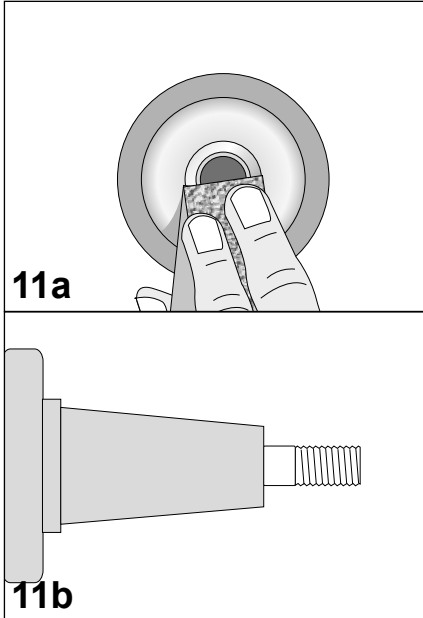
Apply onto the inner surface of the stress cone at the bottom end a 5 cm long sausage of assembly lubricant and spread it evenly over the inner surface. Use assembly lubricant without sponge top. Push the stress cone in one sequence with a twisting movement over the assembly aid completely onto the insulation until the inner collar of the stress cone stops at the oversheath cut of the cable.  
Remove the EPR tape from the conductor after the push-on procedure.  
**Note:** The arrow on the stress cone should point onto the cable sheath.

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

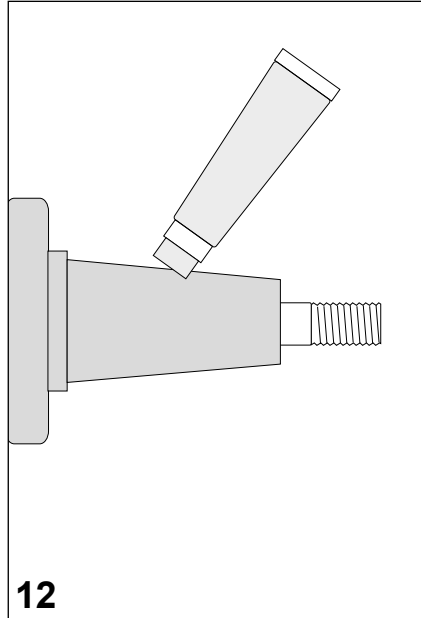
Install the cable lug using a lug fixture. Tighten the bolt set alternately in several equal steps until the heads shear off.  
**Remove any sharp edges.**



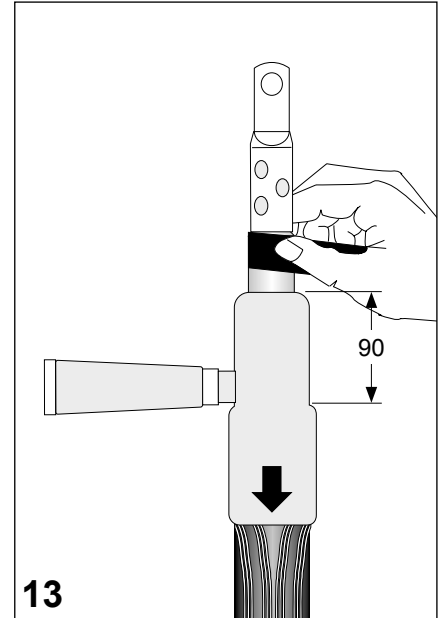
## Installation of Connector Body



- a. Abrade and clean the contact ring of the bushing thread from residuals such as resin or varnish if any.
- b. Insert the threaded stud into the bushing and tighten it up with an Allen key (8 mm). Maximum torque: **35 Nm**.



Clean the conical surface of the bushing and lubricate it with the assembly lubricant as shown.



Wrap EPR tape around the insulation of the cable to form a tapered shape (as in step 7) towards the stress cone.

Apply a layer of lubricant onto the outer surface of the wrapped EPR tape.

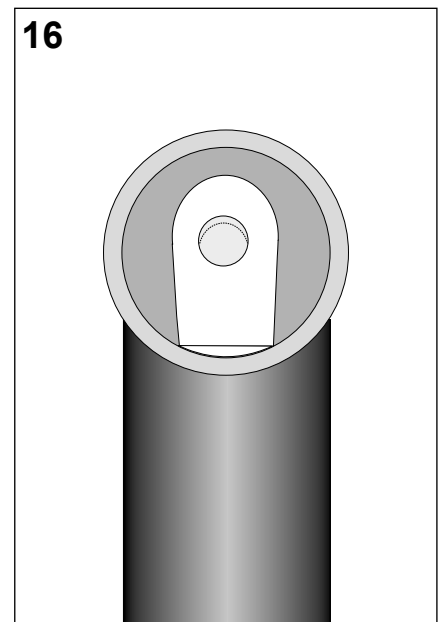
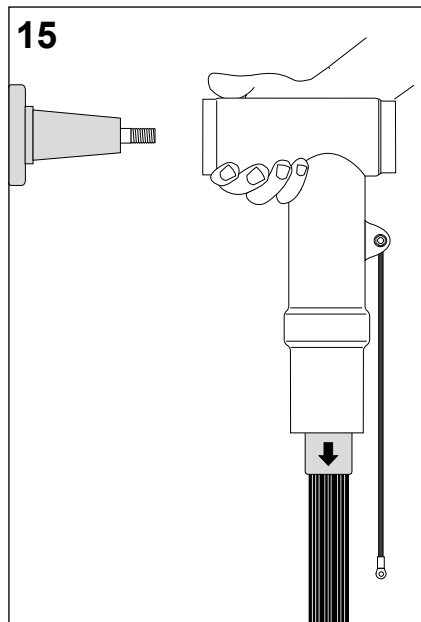
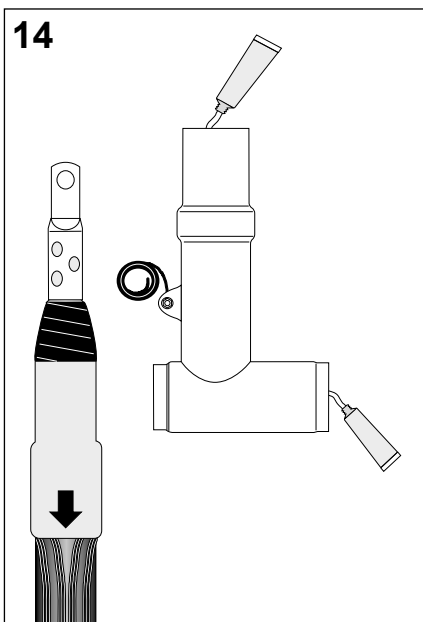
Then clean the surface of stress cone and apply a thin layer of lubricant onto the outer surface over a length of 90 mm with the sponge top.

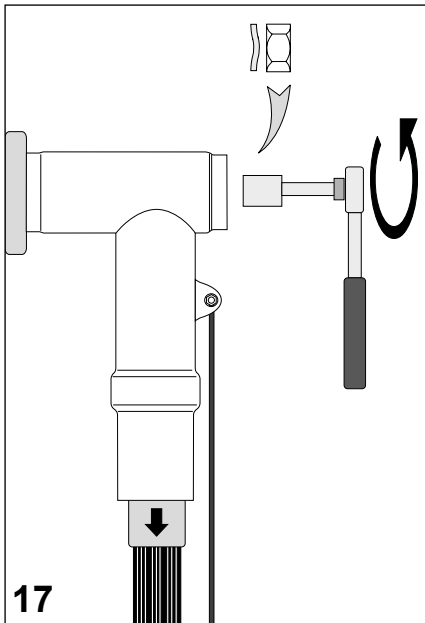
Clean and degrease the bottom and front end of the screened connector body and apply a thin layer of lubricant onto the inner surface without the sponge top as shown.

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

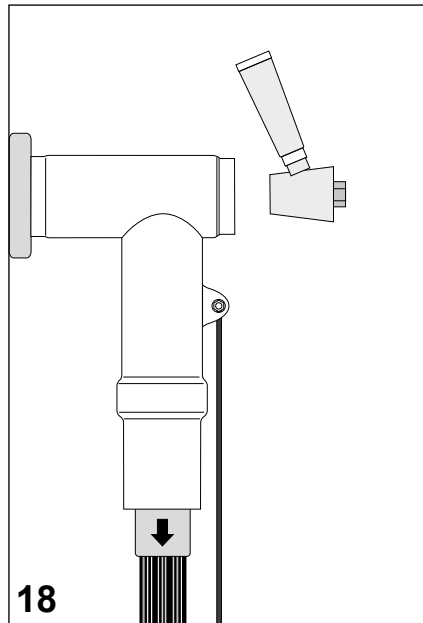
Push screened connector body with no interruption onto the stress cone and hold it. Continue **immediately** with the next step.

Align the eye of the cable lug with the threaded pin and push the screened connector onto the bushing.

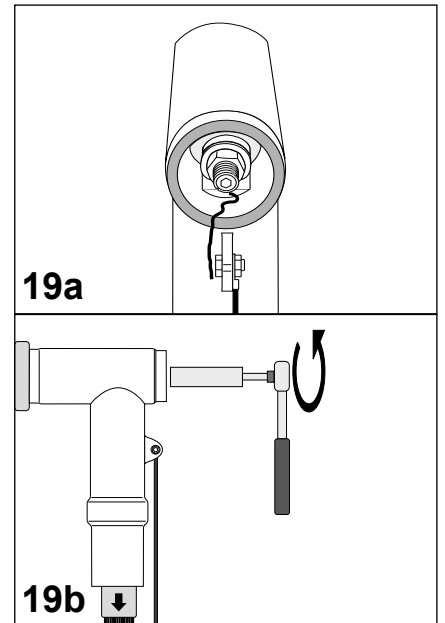




**17**  
 Insert the spring washer and hex nut. Tighten the hex nut onto the stud with a spanner (24 mm) at a torque of **30 Nm**.



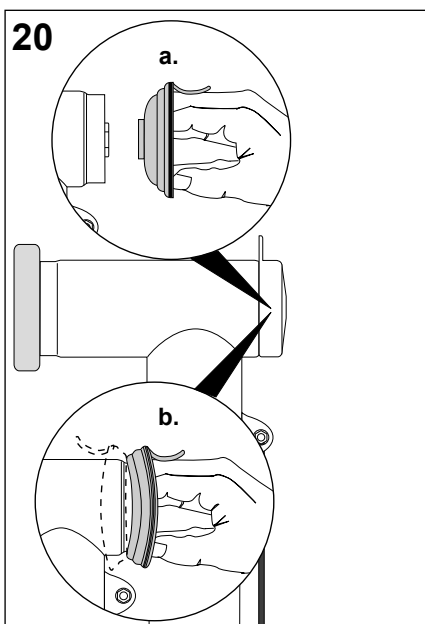
**18**  
 Clean the inner surface of connector back end and apply a thin layer of assembly lubricant. Do the same with the conical interface of the back plug as shown.



**19a**  
**19b**  
 a. Place a string into the rear entry of the connector as shown.  
 b. 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.

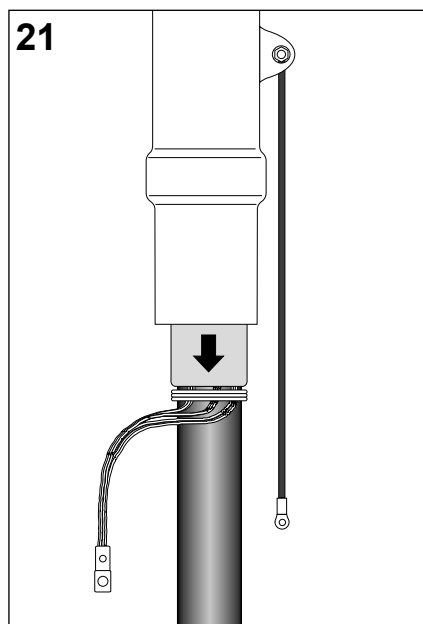
- a. Flip-back the endcap as shown in **detail a**. Position the protruding ring onto test point.
- b. Flip the endcap into final position with your finger as shown in **detail b**.



Ensure that the grounding lead is fastened tightly.

Fix the shielding wires with a wire binder (four layers) at the end of the stress cone. Gather the wires together to form an earth lead. Install at the end of the shielding wires the connection lugs supplied in the kit.

**Perform connection to ground.**



**Screened separable connector completed.**

**Please dispose of all waste according to environmental regulations.**

