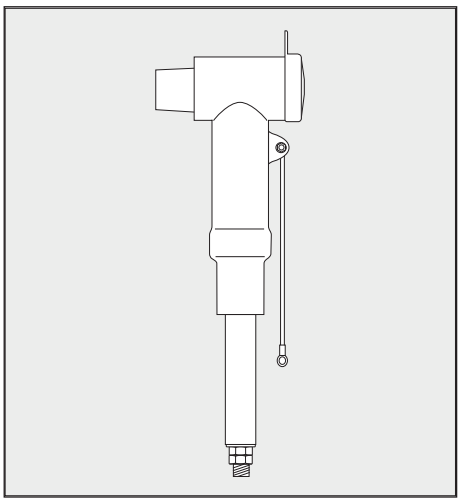
Raychem Cable Accessories



Installation Instruction
EPP-1884-6/18

Raychem
Coupling Assembly Kit
to be used for Connection of
Coupling Connectors
RSTI-CC-68xx
RSTI-CC-58xx
and
Surge Arrester
RSTI-CC-68SAxx10
RSTI-CC-58SAxx05
with
Base Connector Type
RSTI-x95x

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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Tel: +49-89-6089-0
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TE.com/energy

Before Starting

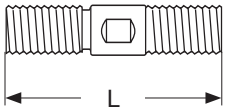
Check to ensure that the kit you are going to use fits the cable.

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.

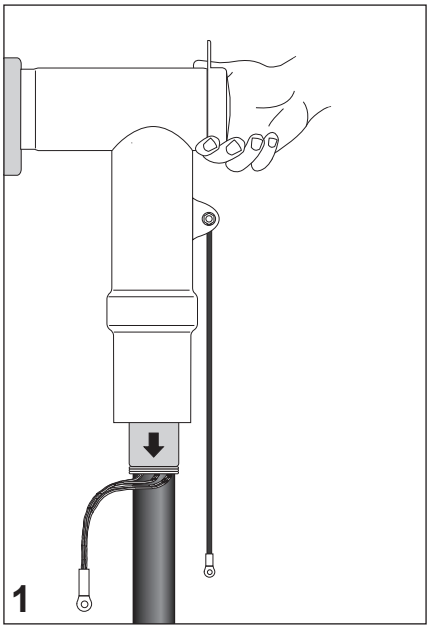
Kit Content



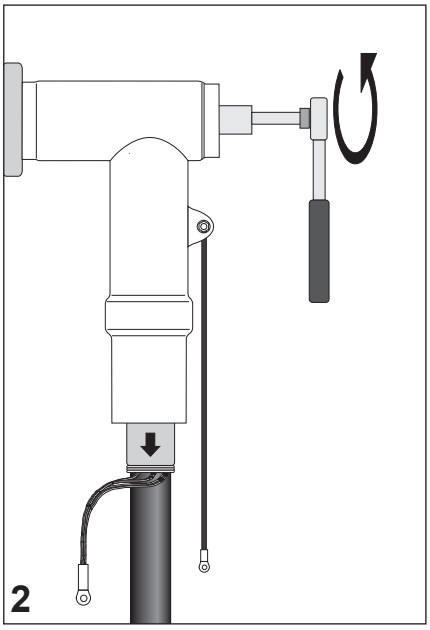
3 x Threaded pin M16 (EXRM-1885)
(L = 60 mm)

3 x Spring washer M16 (EXRM-1879)

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.

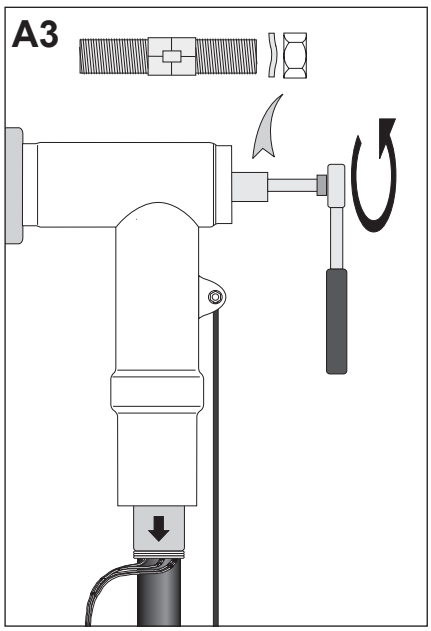
A. Installation of Coupling Connector with Surge Arrester

(B. Installation of Coupling Connector see Page 6)

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

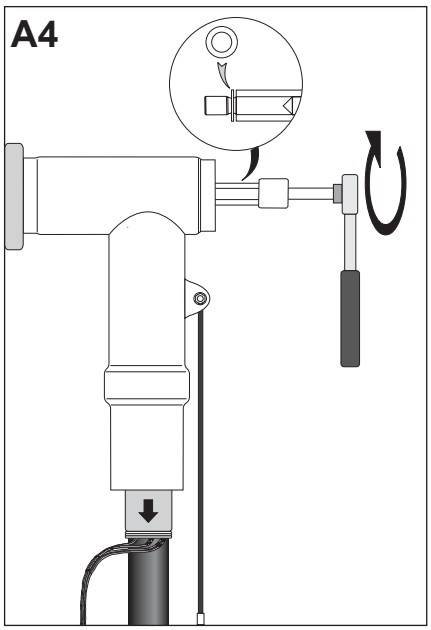
Throw away the washer.

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

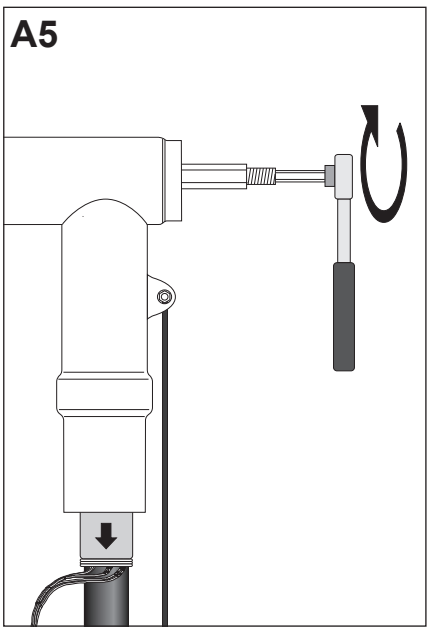


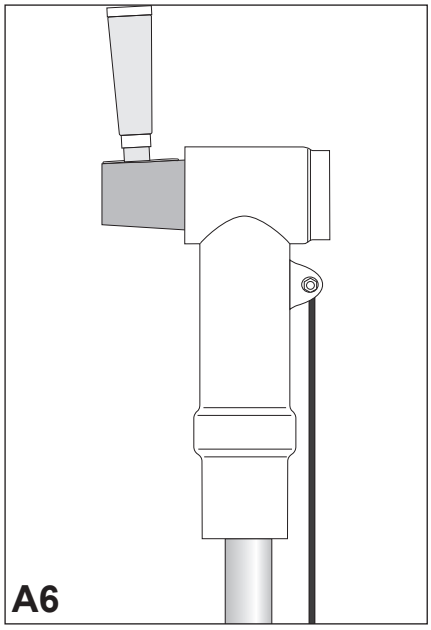
Insert coupling stud with tinned Cu-washer (see detail) into the rear end of the connector and tighten it up with a torque wrench (27 mm).

Maximum torque: **35 Nm**.

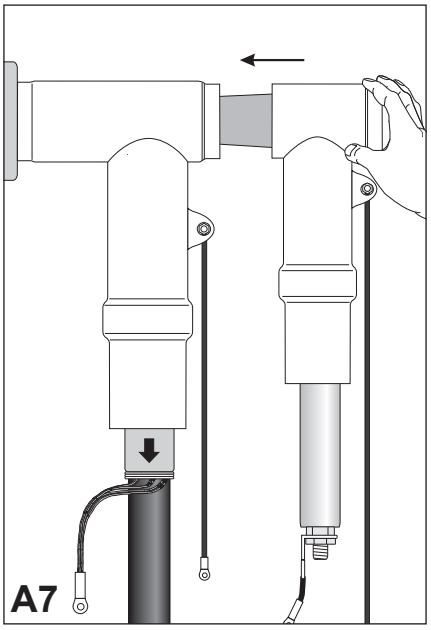


Insert a new threaded pin M16 marked EXRM-1885 into the rear end of the coupling stud and tighten it up with an Allen key (8 mm). Maximum torque: **30 Nm**.



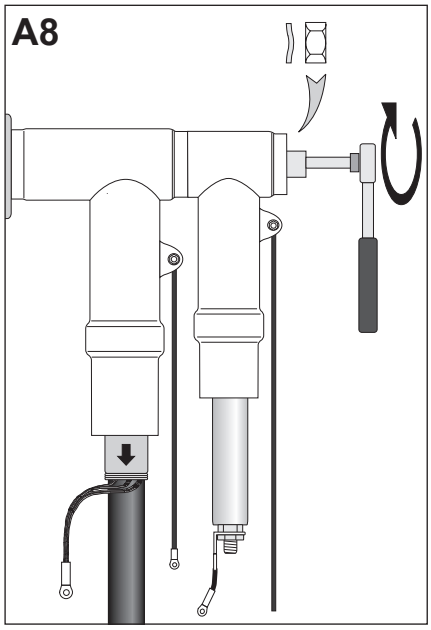


Clean the conical front end of the surge arrester and apply a thin layer of lubricant onto the outer surface of the cone with the sponge top. Continue **immediately** with the next step.

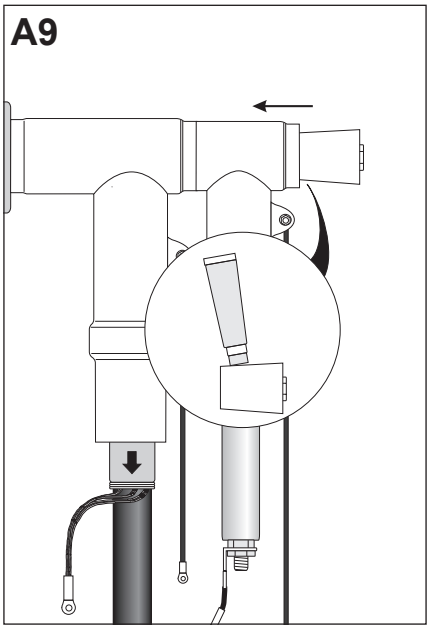


Align the conical front end of the surge arrester with the rear end of the already installed connector and push the coupling connector in position.

Insert the spring washer and hex nut. Use new washer. 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.

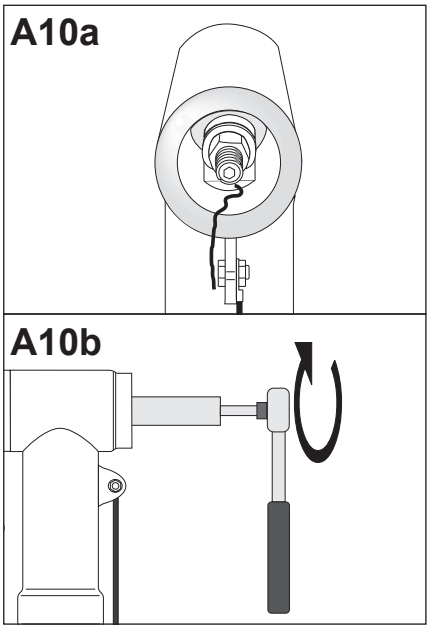


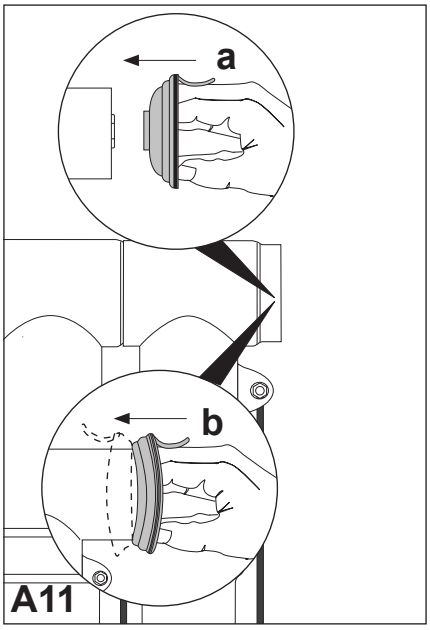
a. Place a string into the rear entry of the connector as shown.

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.

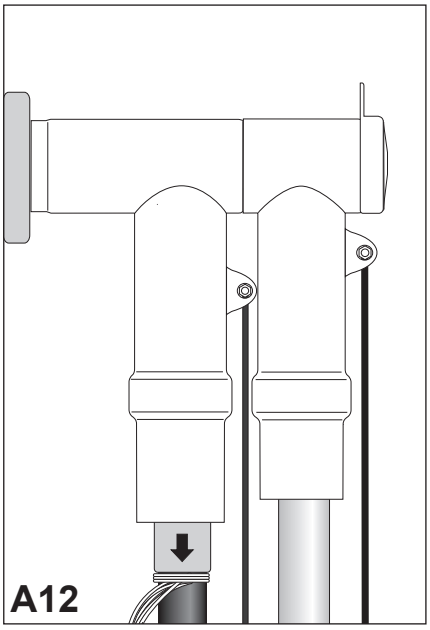
Note: Back plug has to be flush with connector end. In case of protrusion of back plug check steps A3 - A5 for correct installation of components.





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**.

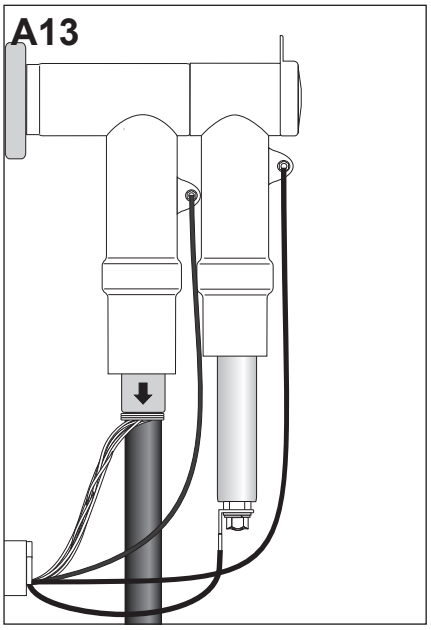


Ensure that the grounding lead of the housing is fastened tightly.

Perform proper connection to ground.

Select the shortest distance to ground and adjust the ground lead of the arrester to that length. Install the lug supplied at the free end of the ground lead.

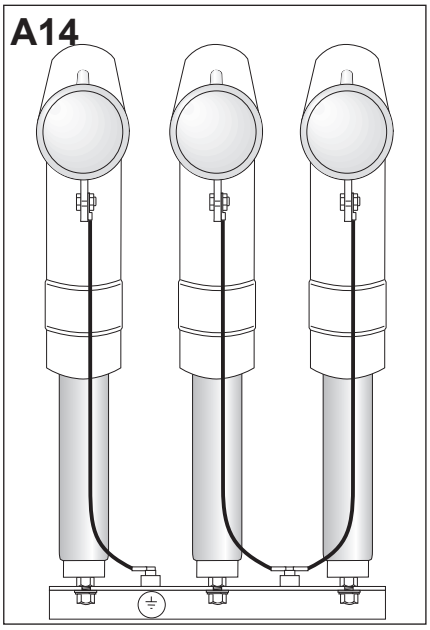
Perform the connection to ground and ensure that the grounding point has the lowest resistance to earth.



Mount the ground terminal of the arrester (M12 bolt) on a metal bar for mechanical support. This mechanical support is optional for voltage classes up to 24 kV. Switchgears for operating voltages above 24 kV require the mechanical support. Ensure that the mechanical support is grounded as well.

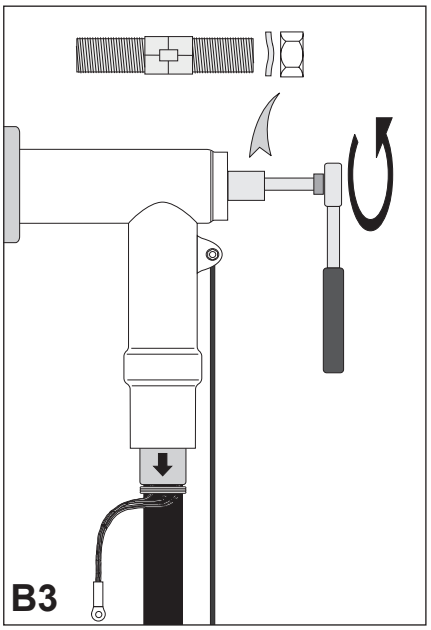
Installation completed.

Please dispose of all waste according to environmental regulations.



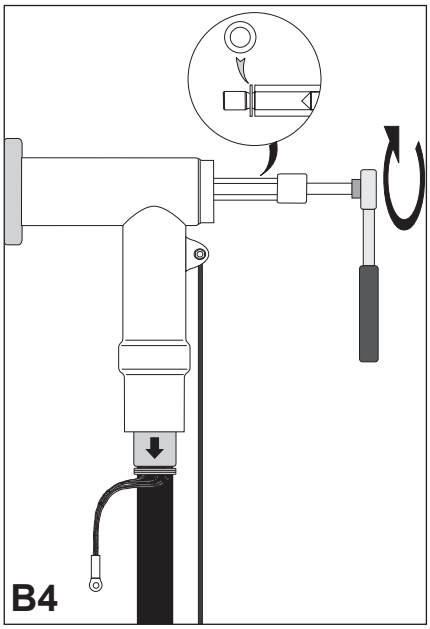
B. Installation of Coupling Connector

For cable preparation and core preparation please refer to installation instruction of coupling connector



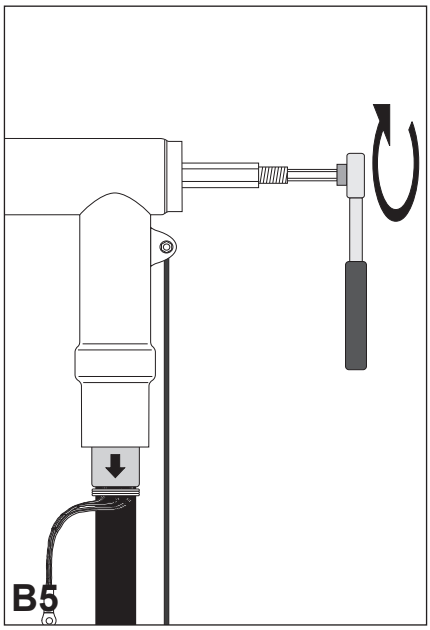
Remove from the installed connector **hexagon nut, washer, threaded pin** and save it in a clean container.

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**.

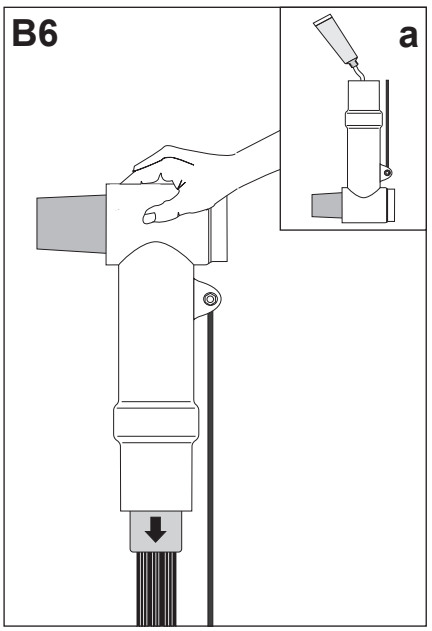


Insert a new threaded pin M16 marked EXRM-1885 into the rear end of the coupling stud and tighten it up with an Allen key (8 mm). Maximum torque: **30 Nm**.

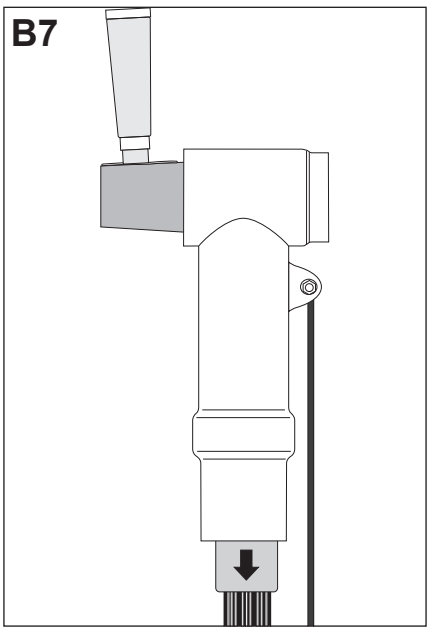
Clean the coupling connector body at the bottom end and apply a thin layer of lubricant onto the inner surface without the sponge top as shown in detail **a**.

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

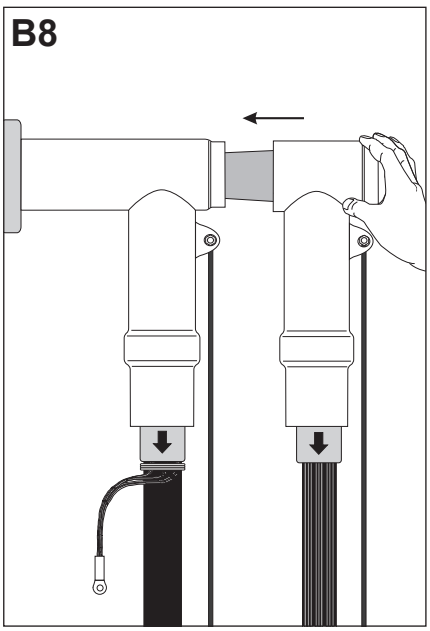
Push the coupling connector body with no interruption onto the stress cone and hold it.

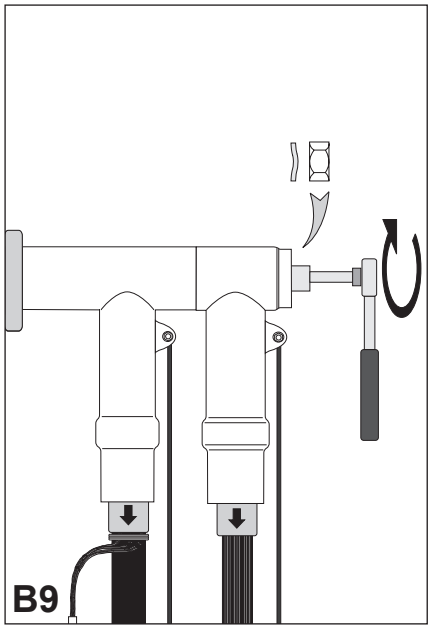


Clean the conical front end of the coupling connector and apply a thin layer of lubricant onto the outer surface of the cone with the sponge top. Continue **immediately** with the next step.

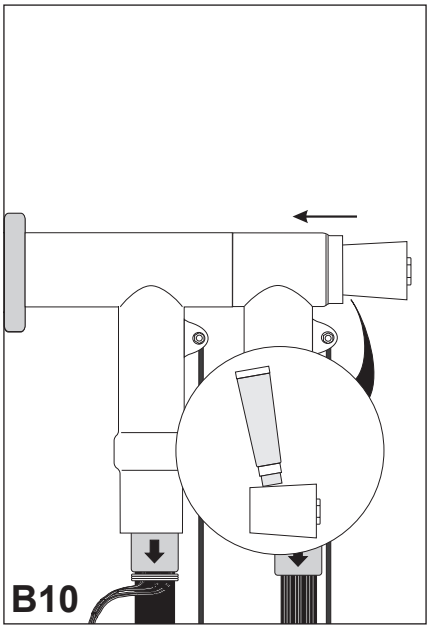


Align the conical front end of the coupling connector with the rear end of the already installed connector and push the coupling connector in position.





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.

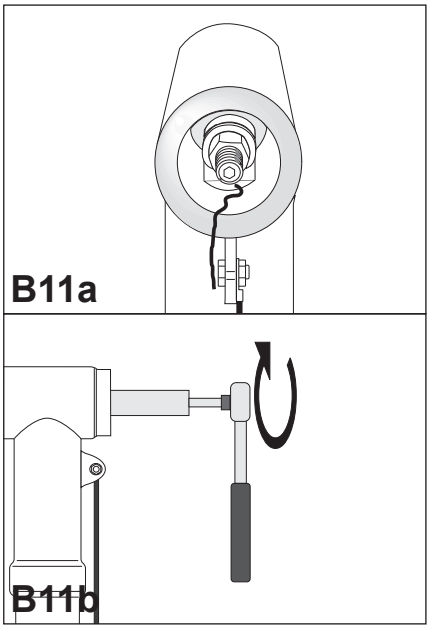
Ensure that the grounding lead is fastened tightly.

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.

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.



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.

Note: Back plug has to be flush with connector end. In case of protrusion of back plug check steps B3 - B5 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**.

Screened separable coupling connector completed.

Please dispose of all waste according to environmental regulations.