RSTI-6651

QTY 1 PC

3 SCREENED T-CONNECTORS FOR
630A CENELEC BUSHINGS EN50181
AND PLASTIC INSULATED SINGLE
CORE CABLE UP TO 36 KV
INCLUDING MECHANICAL LUG
DIA.OVER INSUL.:22.4-33.6 MM
CROSS SECTION: 35- 95 MM2

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1	X	EPPA-038-3-1000	STRING/WIRE

CONTROL
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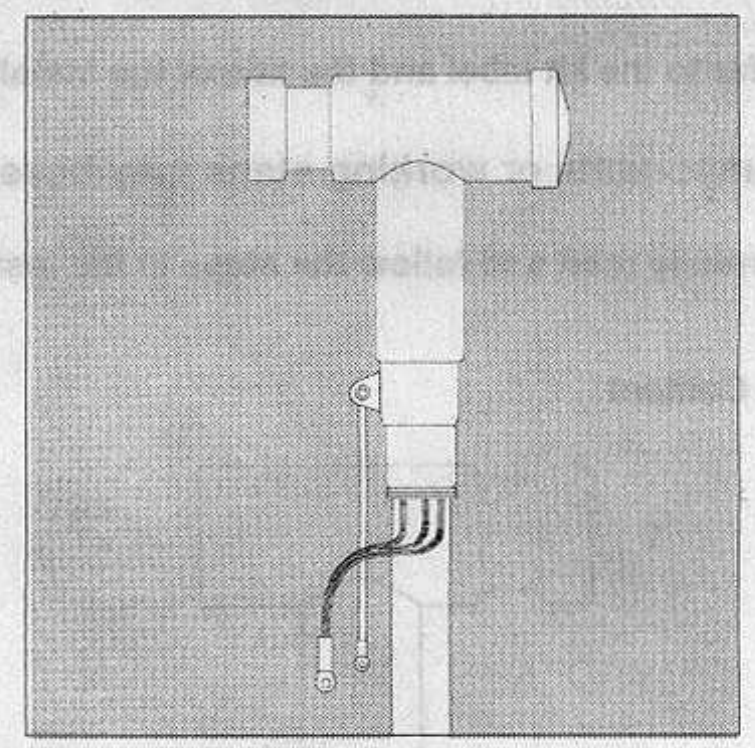
Raychem



Installation Instruction EPP-1117-11/03

Screened Separable Connector 630 A for Bushings according to EN 50181 and Single Core Polymeric Insulated Cable 36 kV

Type: RSTI 66xx

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.

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Before Starting

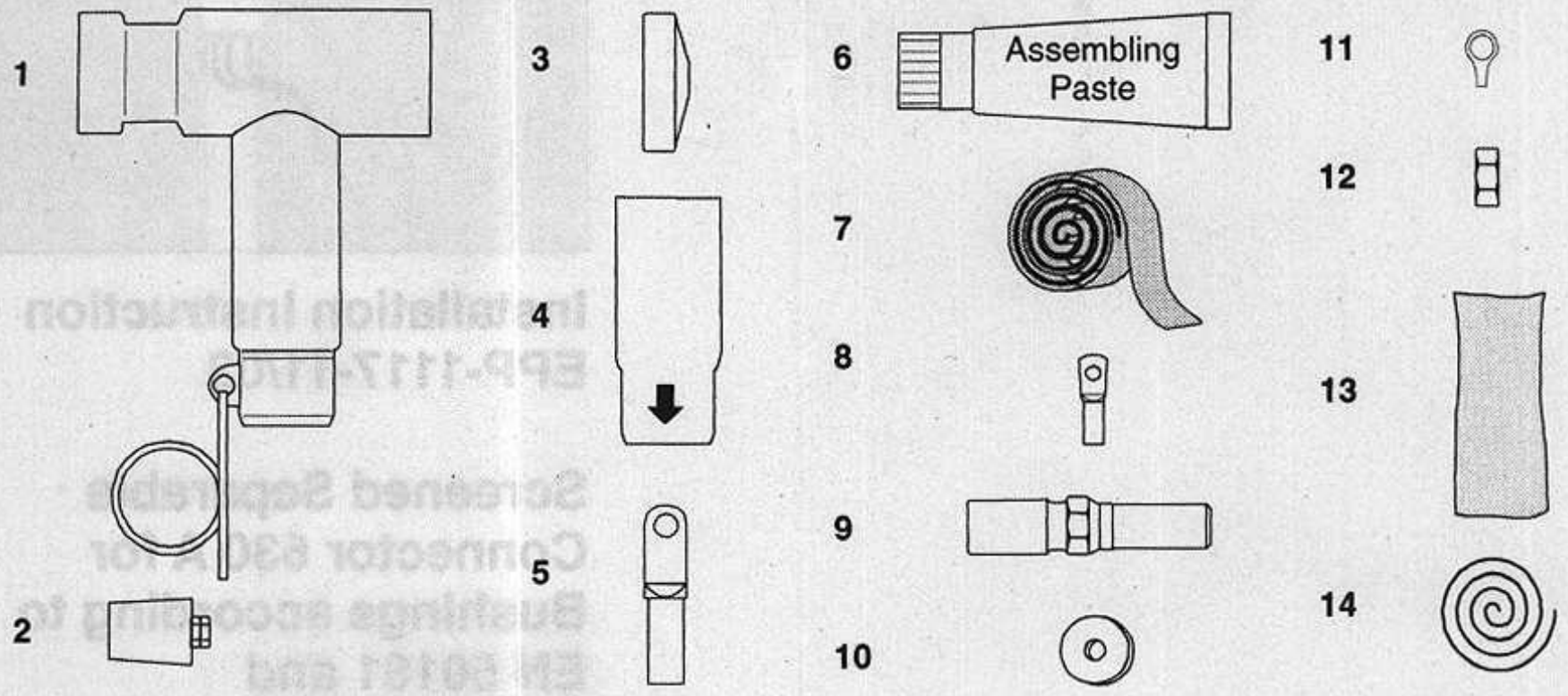
Check to ensure that the kit you are going to use fits the cable.

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

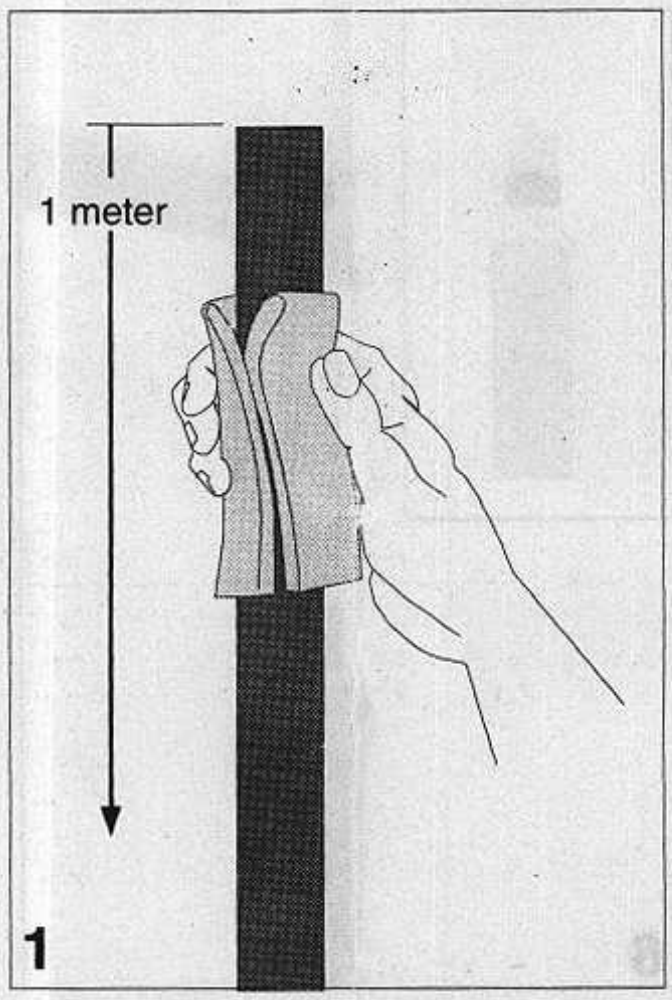


1 3x Connector body
2 3x Back plug
3 3x Covering cap
4 3x Stress cone
5 3x Main cable lug
6 2x Assembling paste
7 1x Sealing tape
8 3x Earth cable lug
9 3x Threaded pin
10 3x Spring washer (wave type)
11 3x Screen Cable lug
12 3x Nut
13 3x Protective bag
14 1x Binding Wire

Table 1

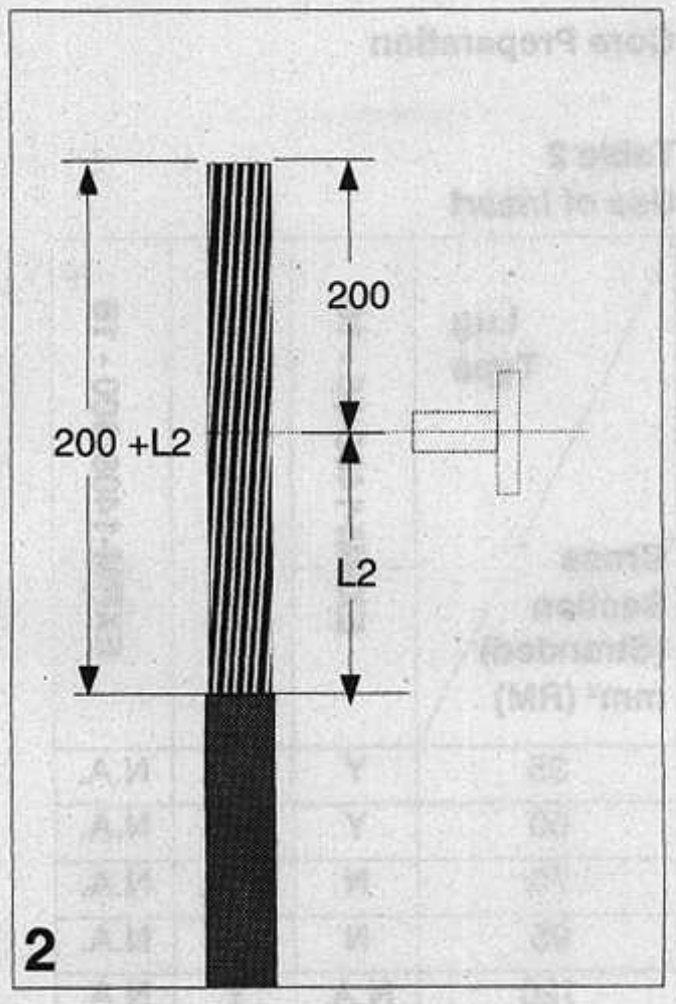
Cross Section	Ø Core Insulation 30 kV		Reference No.		Cut Back Dimension	
mm²	min	max	Al	Cu	L1 (mm)	L2 (mm)
50	22.4 - 33.6 mm		RSTI-6611	RSTI-6621	155	205
70			RSTI-6612	RSTI-6622		
95			RSTI-6613	RSTI-6623		
120			RSTI-6614	RSTI-6624		
150	28.9 - 40.0 mm		RSTI-6615	RSTI-6625	165	215
185			RSTI-6616	RSTI-6626		
240			RSTI-6617	RSTI-6627		
300			RSTI-6618	RSTI-6628		
35 - 95	22.4 - 33.6 mm		RSTI-6651		155	205
95 - 120			RSTI-6652			
150 - 240	28.9 - 40.00 mm		RSTI-6653		165	215
300			RSTI-6655			

Cable Preparation

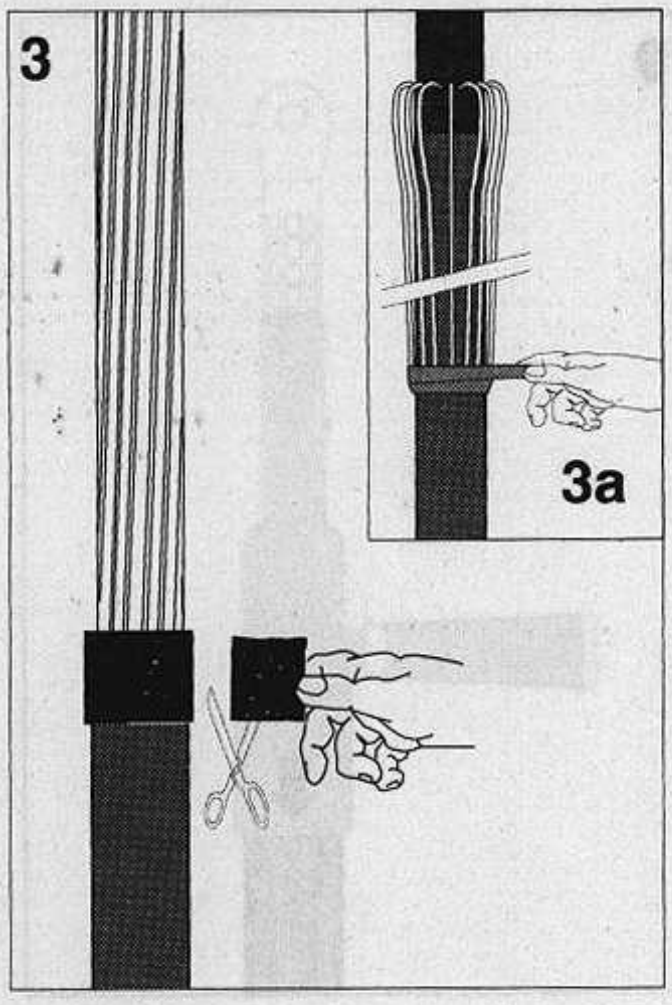


Clean and degrease the end of the oversheath for a length of 1 metre with solvent wipe.

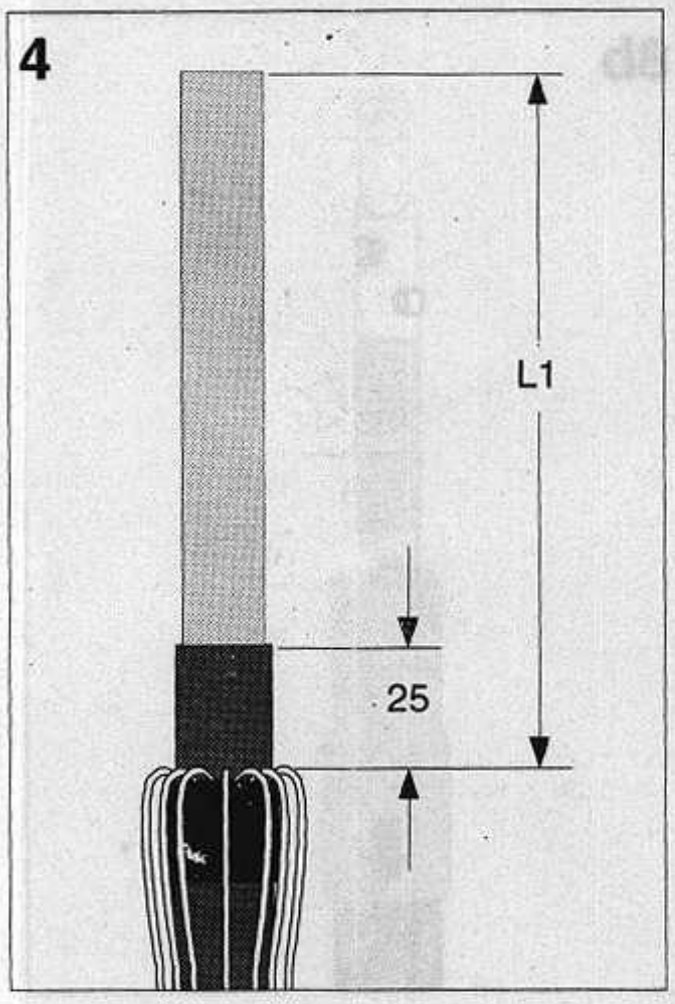
Wrap one turn of sealant tape (green) with no overlap and slight tension around the end of the oversheath.
Cut the tape and push ends together.
Bend the shielding wires back onto the oversheath.
Avoid crossing the individual wires.
Temporarily secure the wires with a tape or wire binder.



Cable with wire shield
Position the cable with 200 mm overlap to the bushing centre.
Mark the oversheath to dimension **L2** (see **table 1**) below the bushing centre.
Cut the cable 200 mm +L2 above the mark and remove the oversheath 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.



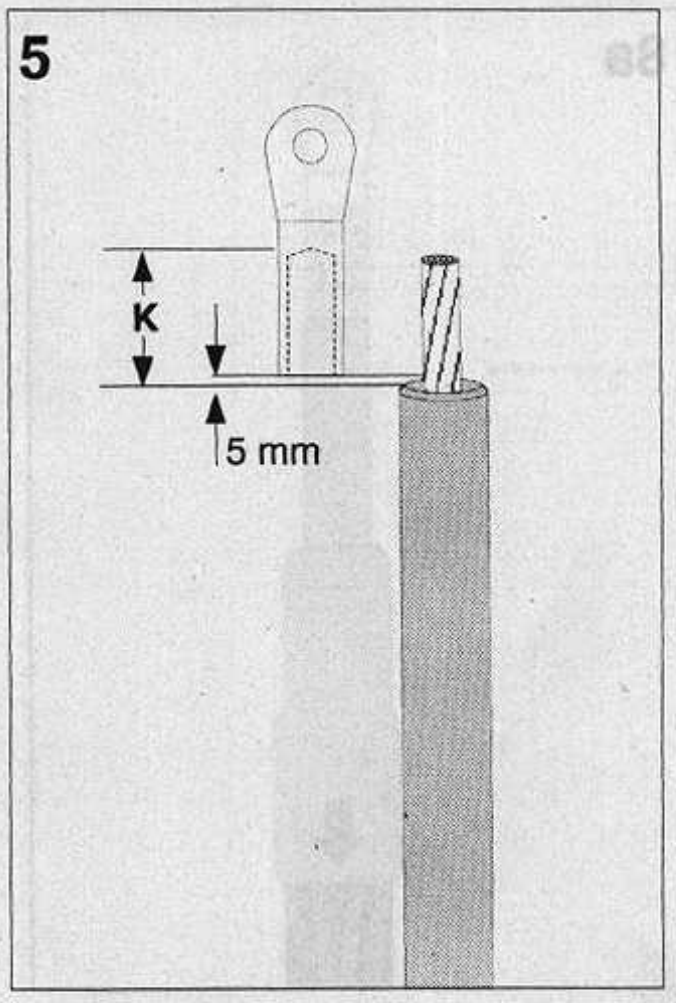
Cut the core according to the dimensions **L1** given in **table 1**.
Remove the core screen with appropriate screen cutting tool according to the drawing. The surface of the insulation should be free from all traces of conductive material. Compare the diameter over insulation with application range as shown in **table 1** as well as with marking of supplied stress cone.



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

A. Hexagonal compression and mechanical lugs
Dimension **K** must not exceed 55 mm.

B. Deep indent compression lugs
Dimension **K** must not exceed 60 mm.



Core Preparation

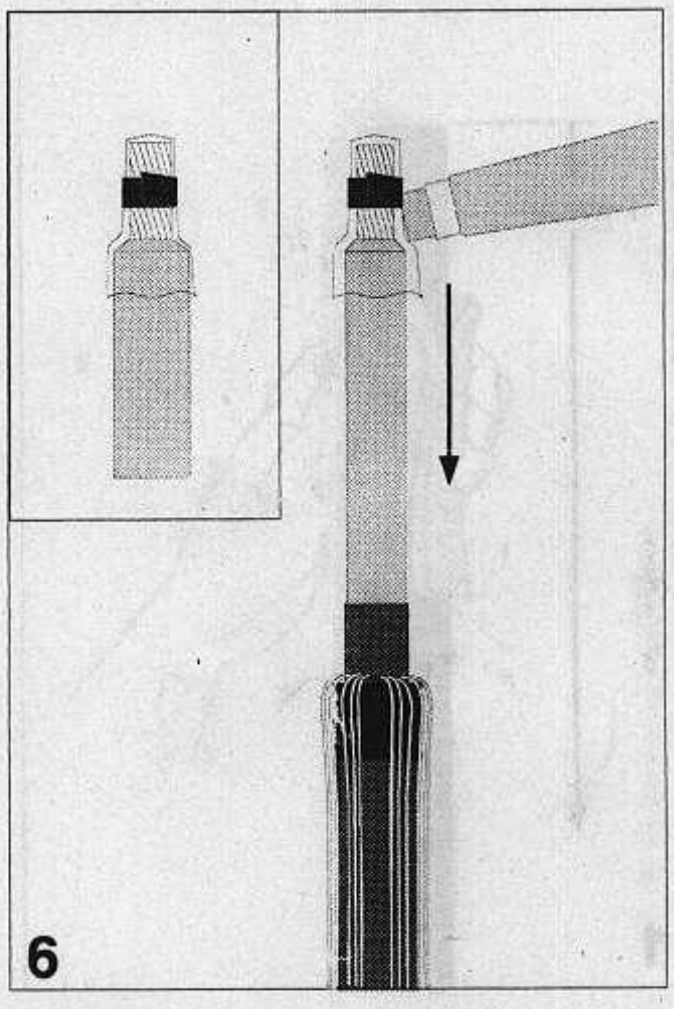
Table 2
Use of Insert

Lug Type / Cross Section (Stranded) mm² (RM)	EXRM-1408-95 - 16	EXRM-1408-240 - 16	EXRM-1408-300 - 16
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.	Y

N.A. = not applicable
Y = Yes
N = No

c. Compression lugs

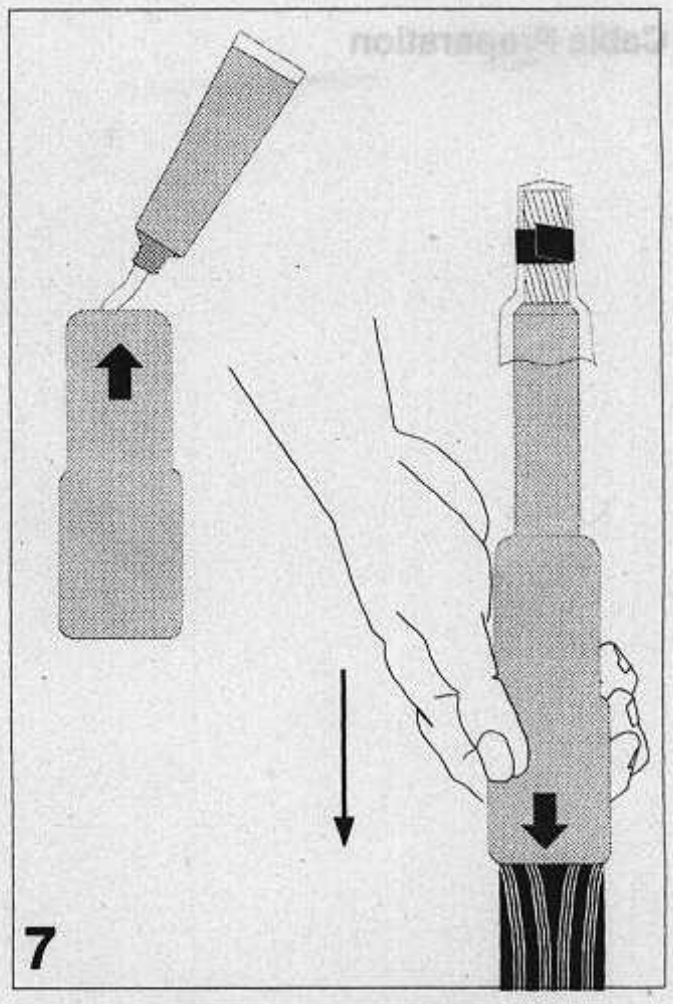
Install the cable lug with the appropriate die and compression tool.
Remove any sharp edges.
Clean and degrease the lug and insulation from any excessive compression grease.



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 grease. Apply the grease layer with the sponge top as shown.

b. Mechanical lugs

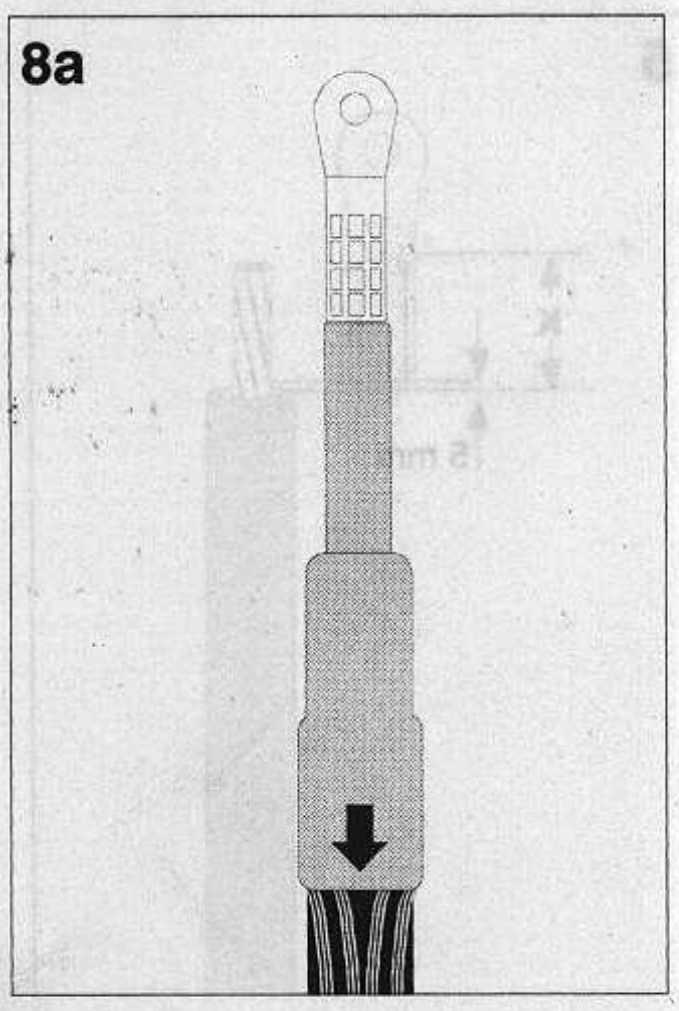
The insert has to be used as noted in **Table 2**.
Ensure that the retention of the insert is locked into the appropriate hole in the barrel.
Install the cable lug. Tighten the bolt set alternately in several equal steps until the heads shear off.
Remove any sharp edges.

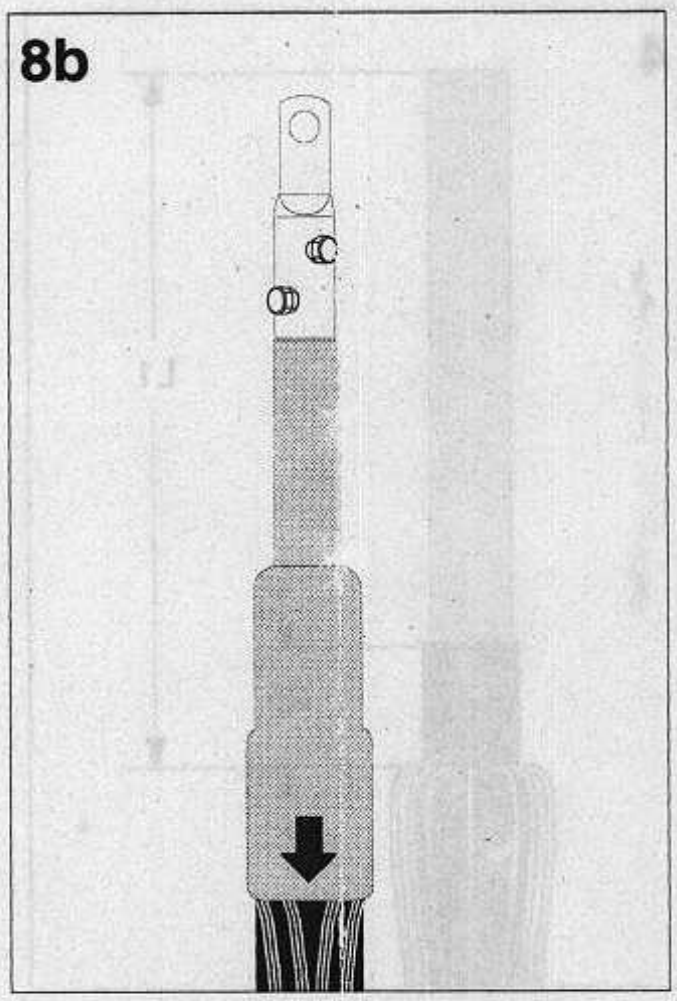


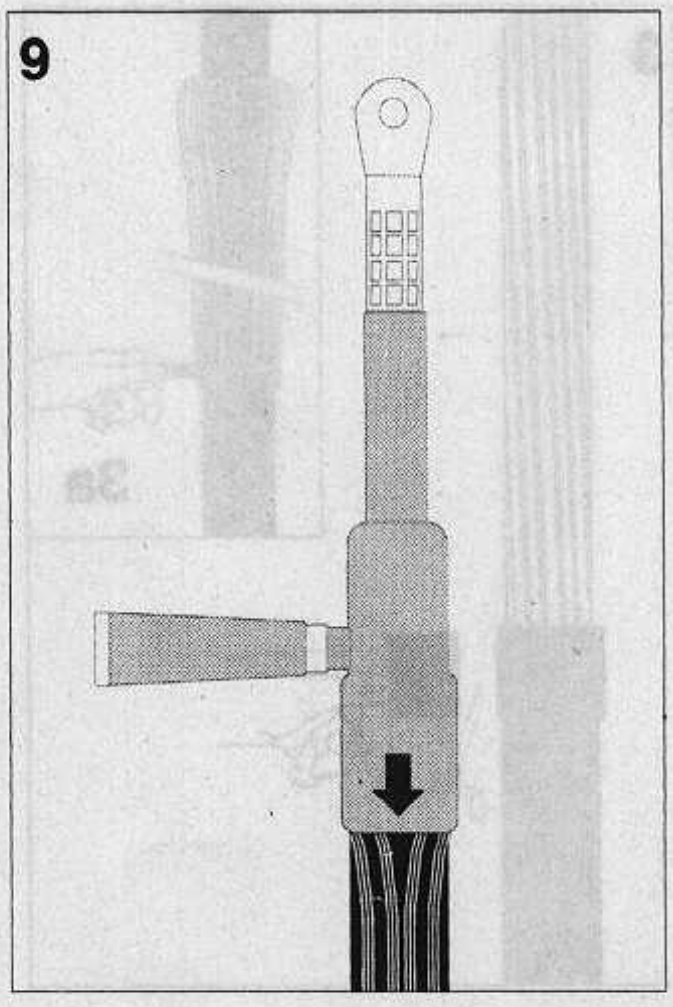
Apply onto the inner surface of the stress cone at the bottom end a 3 cm long sausage of assembly grease and spread it evenly over the inner surface. Use assembly grease without sponge top. Push the stress cone in one sequence with a twisting movement over the assembly aid completely onto the insulation until the inner collar of the stress cone stops at the over sheath cut back of the cable.
Note: The arrow on the stress cone should point onto the cable sheath.

Remove the assembly aid from the conductor.

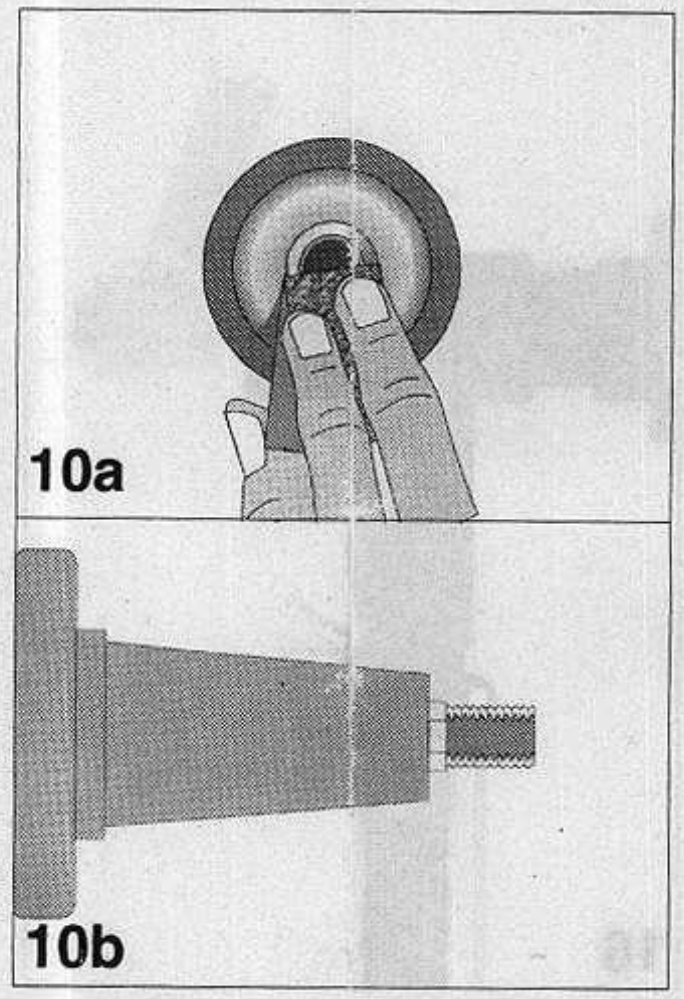
Apply a thin layer of grease onto the outer surface of the stress cone with the sponge top.

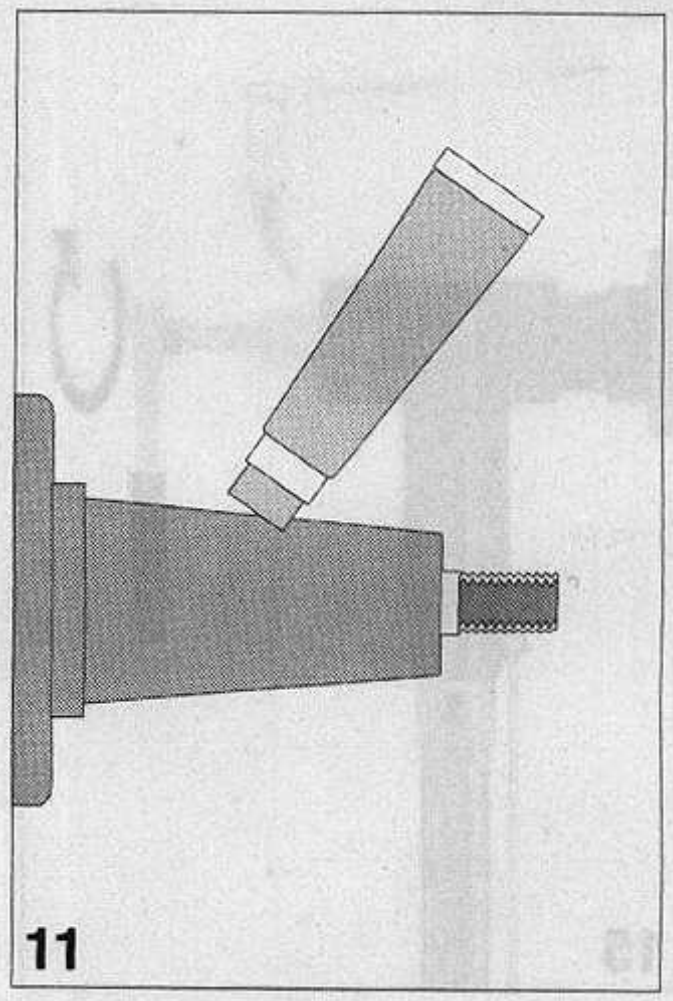






Mounting of Connector Body





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 a spanner (14 mm). Maximum torque: **35 Nm**.

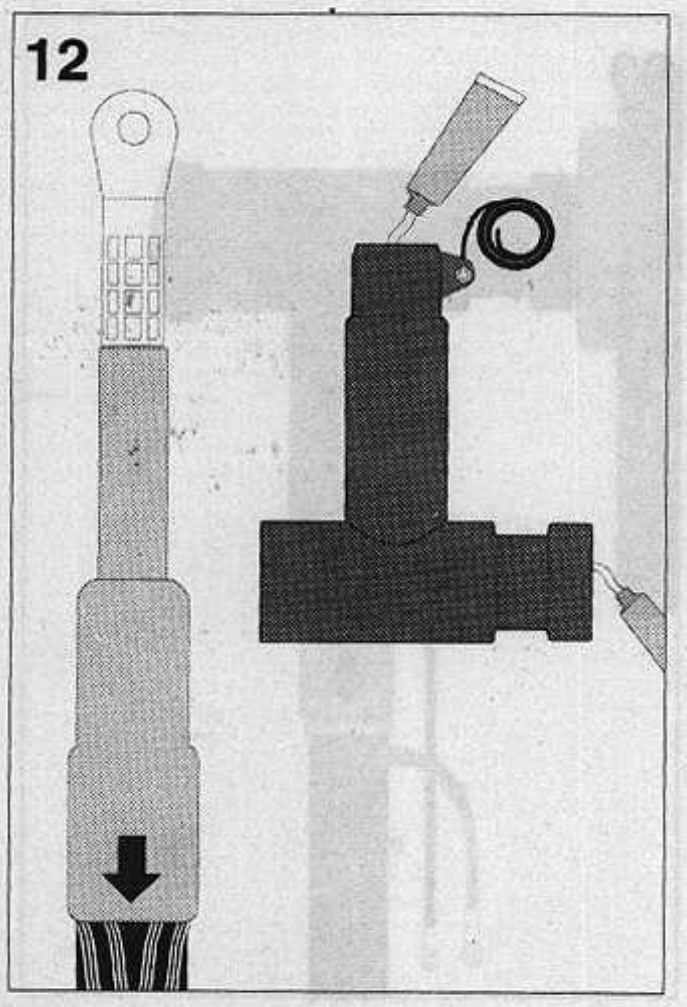
Clean the conical surface of the bushing and lubricate it with a thin layer of assembly grease as shown.

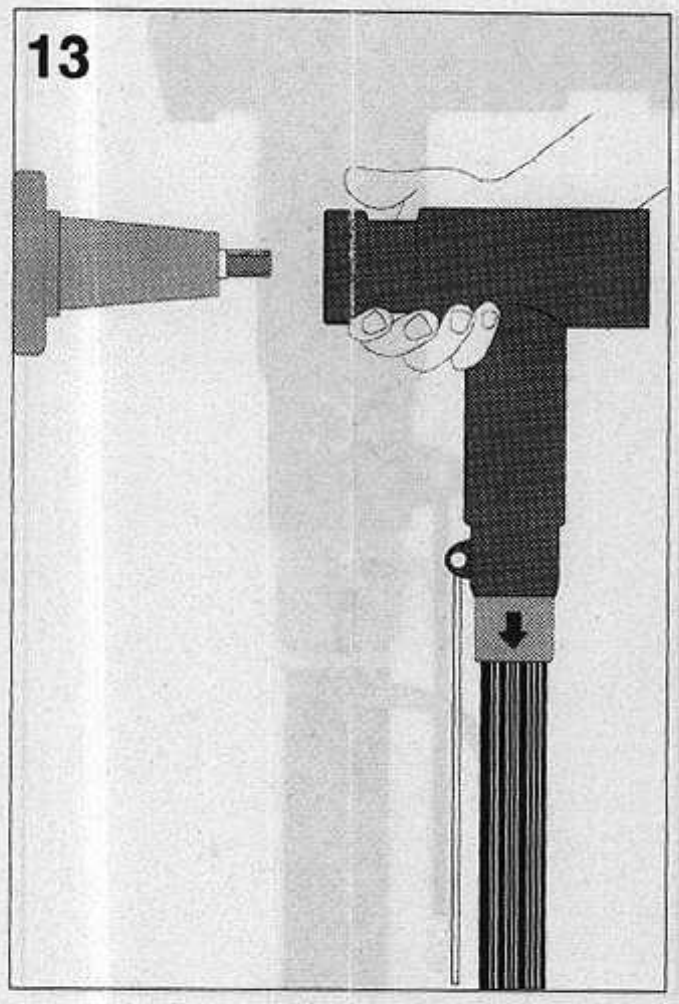
Clean and degrease the bottom and front end of the screened connector body and apply a thin layer of grease onto the inner surface without the sponge top as shown.

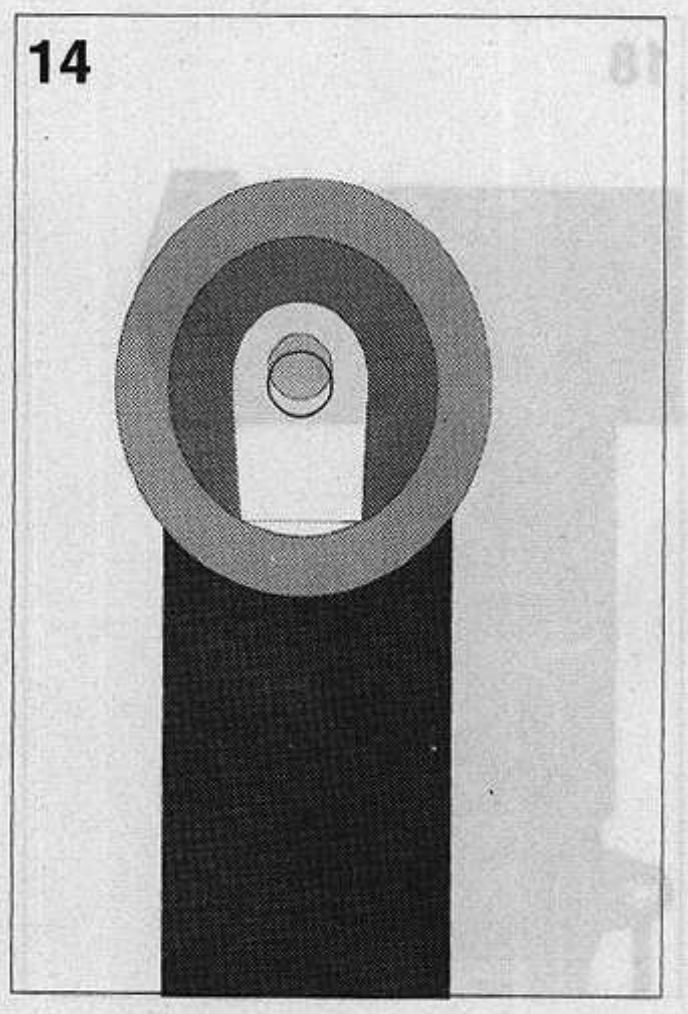
Note: Use one way glove to evenly lubricate the inner surface at a length of approximately 50 mm.

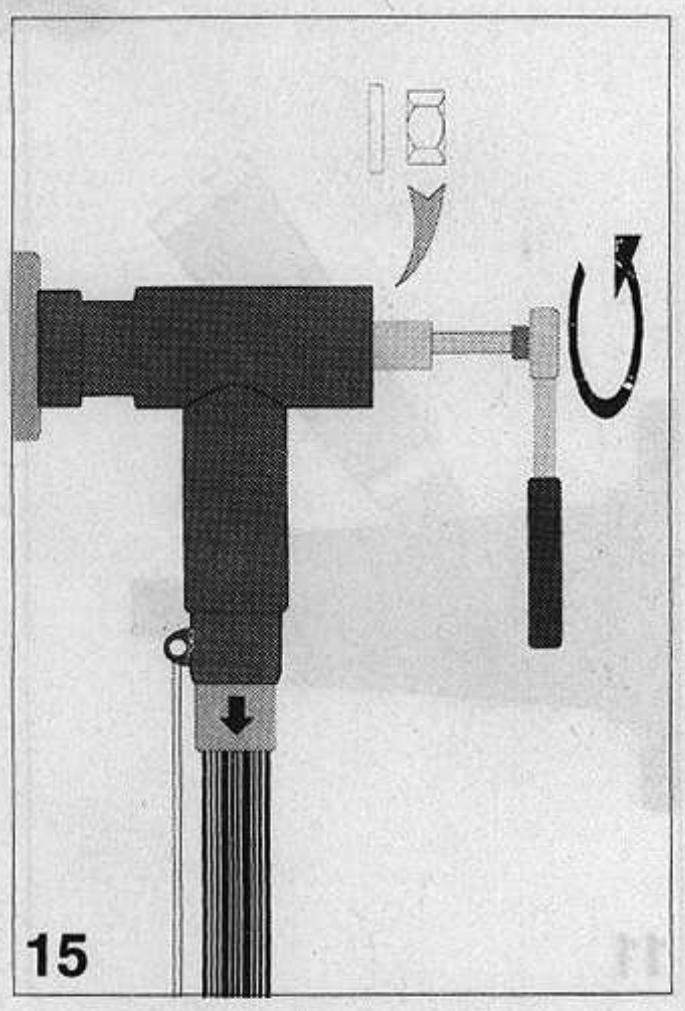
Push screened conr ector body with no interruption onto the stress cone and hold it. Continue imrnediately with the next step.

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

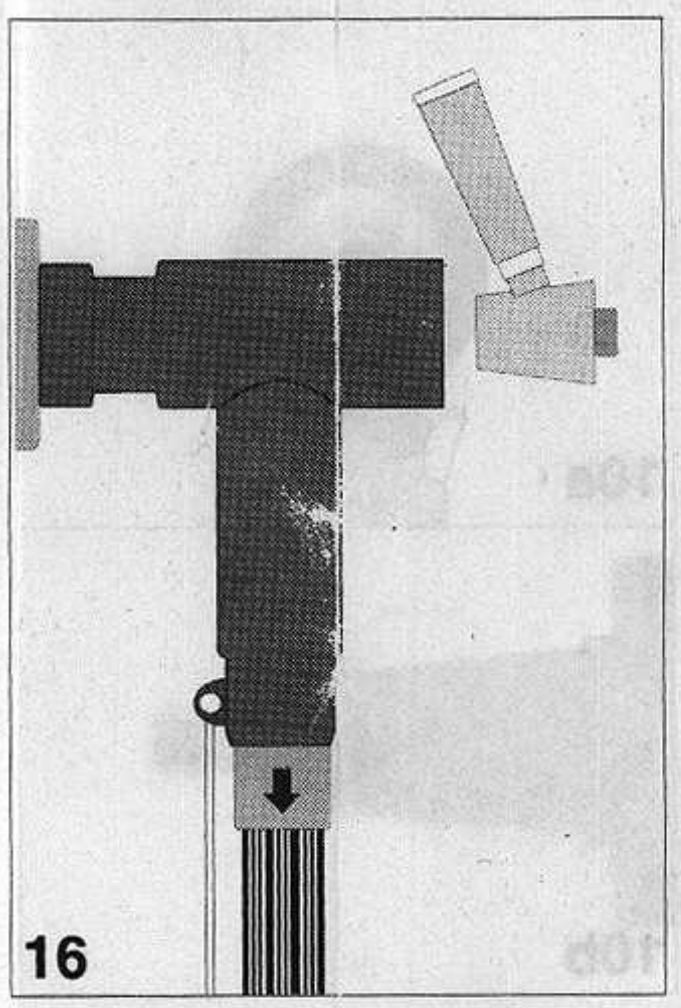




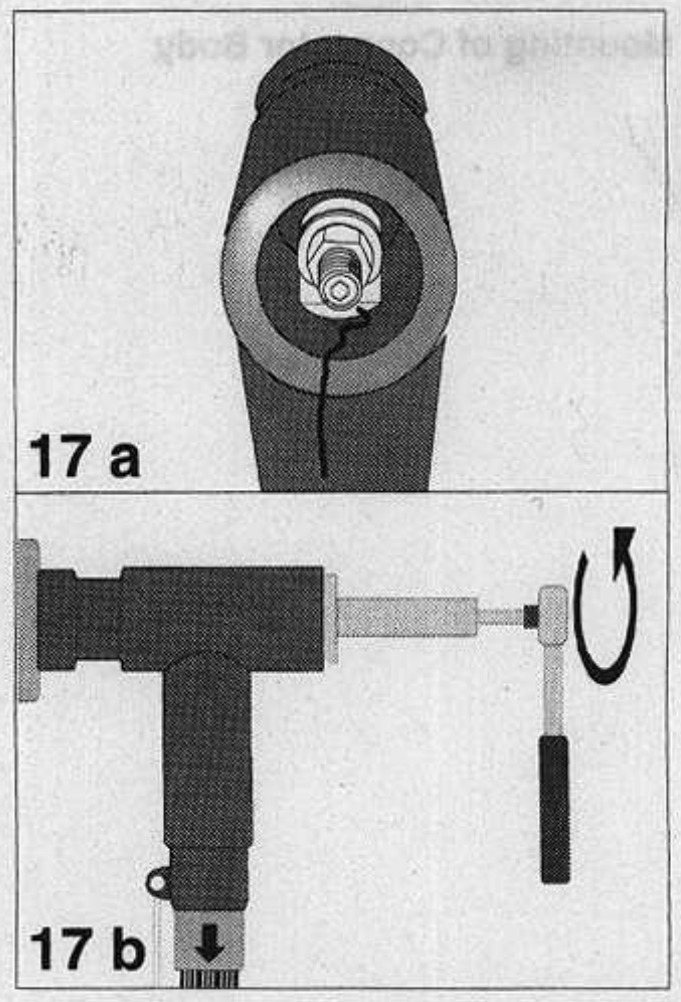




Insert spring washer (wave type) and hex nut. Tighten the hex nut onto the stud with a spanner (19 mm) at a torque of **30 Nm**.



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



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.

Cover the back plug with the conductive end cap using the groove of the test point as positioning aid.

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 appropriate connection lug as supplied in the kit.
Perform connection to ground.

Screened separable connector completed.

Please dispose of all waste according to environmental regulations.