CJB20-630 & CJBK20-630
630(400)A Screened Separable Connector (Screwed type) up to 24kV

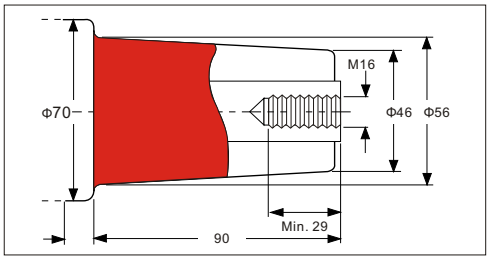
Installation Instruction

Attention: Do not nick the silicone rubber deflector (Red part integrated with stress control cone) and the Tee connector house during all the procedure of operation.

Before installation, please check the outer diameter of core insulation to make the suitability according to dimensions shown in below table:

Size	Suit for core insulation outer dia.range (mm)	Suit for conductor size (mm^2)	
		17.5kV	24kV
1	16.5-23	35-95	25-70
2	23-28	120-185	95-150
3	28-36	240-400	185-300
4	36-40	500	400-500

Bushing profile:
The TEE connector should only be used on bushing with dimensions as shown in right drawing.
(If the bushing with M12 screw can be also available, please indicate when make order.)



1. Check and ensure the cable against any damage, water or moisture corrosion. Cut the damage part if any.

2. The cable must be fixed right under the bushing without any distortion. Otherwise, the distorted cable will imposed a distortion force on the bushing, this will destroy the sealing performance of the bushing and the switchgear, and resulting in the leakage of SF6 gas and the cracking of bushing, and consequent short circuit and explosion.

Refer to Figure 1:
3. Cut the cable to required length, strip the oversheath for 800mm-1000mm according to installing request.
Remove any filler materials from the cores.
Cut the cable armour to 20mm and inner sleeve to 5mm.
Bend and shape the cores to the suitable position.
Wrap the end of copper shield with PVC tape.
Abrasive, degrease and clean the cable oversheath for 150mm from the cut edge.

4. Fix the copper braid onto the tape shield of each core and armour with wire binder, then solder it. Or use roll spring.
Remove any sharp edge from soldering, wrap all the sharp edges with PVC tape.
Place the breakout over the cores and pull it as far down the crutch as possible, shrink the breakout evenly.
Place the heat shrinkable sleeve down over the cores, put them as down as possible and shrink the sleeve from down ends, then upwards.
According to the length required for installation, fix the trifurcate part temporarily, and formally after installation finished.

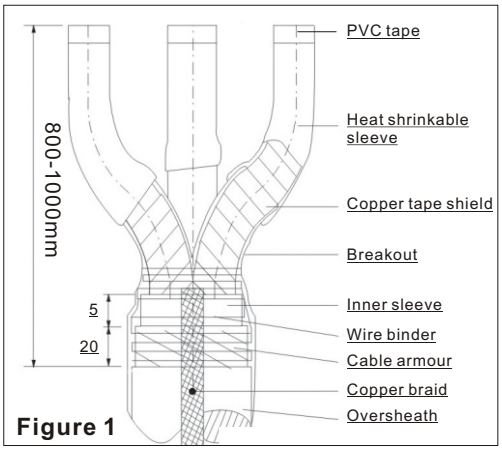


Figure 1

United Electric
E-mail: export@ueaccessory.com
Tel: 0086-755-26419390 / 26419370 Fax: 0086-755-26414580
www.ueaccessory.com

Refer to Figure 2:

5.1 Contrast the center point of bushing with each phase, cut the cable at 50-55mm below the bushing center, or hang the lug onto the bushing first, then cut the cable accordingly.

5.2 The suited length on each phase for installation will be required accordingly, longer or shorter length will lead to bad contact between the plane of cable lug palm and bushing. It may result in heating and temperature growing, and damage the cable and equipment.

5.3 Strip off the heat shrinkable sleeve to 175mm, tape shield to 20mm, and core screen to 20mm respectively, make sure the insulation length for 90mm.

Do not nick the insulation, the insulation surface should be smooth and free from any conductive material.
The screen cut should be smooth transition, without any turnup and sharp-angle.

Cut back the insulation to 45mm, chamfer the insulation cut to 1*45°, protect the sharp end of conductor with PVC tape.

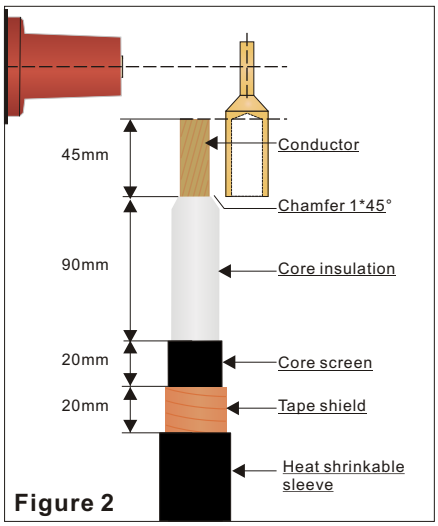


Figure 2

Refer to Figure 3:

6. Wrap semi-conductive tape at the position of 2mm above the tape shield cut to make a step with width of 20mm and thickness of 5mm, continue to cover the heat shrinkable sleeve.

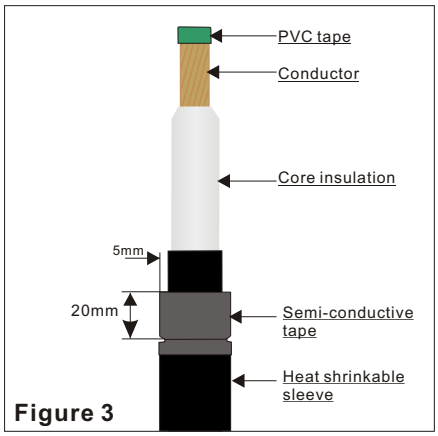


Figure 3

Refer to Figure 4:

7. Clean on the insulation from the cut end downwards with cleaning tissue, do not reuse the tissue just applied.
After the liquid dry. Coat the silicone grease onto the insulation, and the inner surface of the deflector as shown on part A.

Do not coat the silicone grease onto core screen.

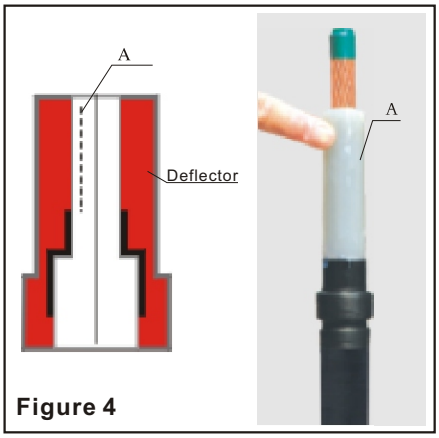


Figure 4

Refer to figure 5:

8.1 Push the deflector onto the cable core with rotation until the flange of deflector contact firmly with the semi-conductive tape step.

8.2 Wrap several layers of PVC close to the underside of the deflector as a marker for checking the position of the deflector. The deflector must stay in place after finish the installing of Tee connector house.

8.3 Remove the PVC tape previous applied from the conductor.

Put on the cable lug over conductor and compress it. Remove any burrs and excess grease from the cable lug.
Please notice the direction of the lug palm when compress the cable lug, the plane of lug palm should be parallel with the copper plane in the bushing, which can guarantee good contact.

The load current may occur due to the bad contact between the lug and the copper plane in bushing, it will result in heating and temperature growing, and damage the cable and equipment.

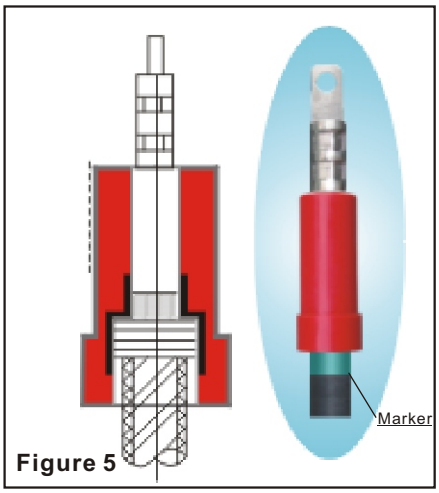


Figure 5

Refer to Figure 6:

9.1 Fasten firmly M16/12*75(or M12/12*60) double-end-thread screw onto the bushing with M16 ahead.

9.2 Coat evenly silicone grease onto the upper part of the deflector and the inner surface of down part of front connector house **CJB** suit.

9.3 Aim at the direction of the cable lug, push the cable installed with the deflector into the CJB suit in an uninterrupted movement.
Be noticed that the deflector and PVC marker should not have any moving. The down part of the deflector will expose for about 30-40mm.

10. Push the longer end of the CJB suit installed with cable onto the bushing of switchgear, and the cable lug hole will pass over the screw at meantime. After that, if need to install rear connector CJBK, go to **step13**, if not, go to **step 11**.

11.

11.1 Install the flat washer, spring washer and nut in sequence, screw down the nut with hexangular sleeve and spanner with the moment of 30NM.

11.2 Coat silicone grease onto the inner surface of back part of CJB, screw the jam into the end of the CJB suit with hand firstly, and then screw it down with spanner.

11.3 Cover the black protective hat onto the end of jam and connector body.

11.4 Install the earthing wire onto connector. There should be at least 5mm space distance between connectors.

12. Fix the trifurcate part of the cable, ground all the earthing wires, mark the phases.

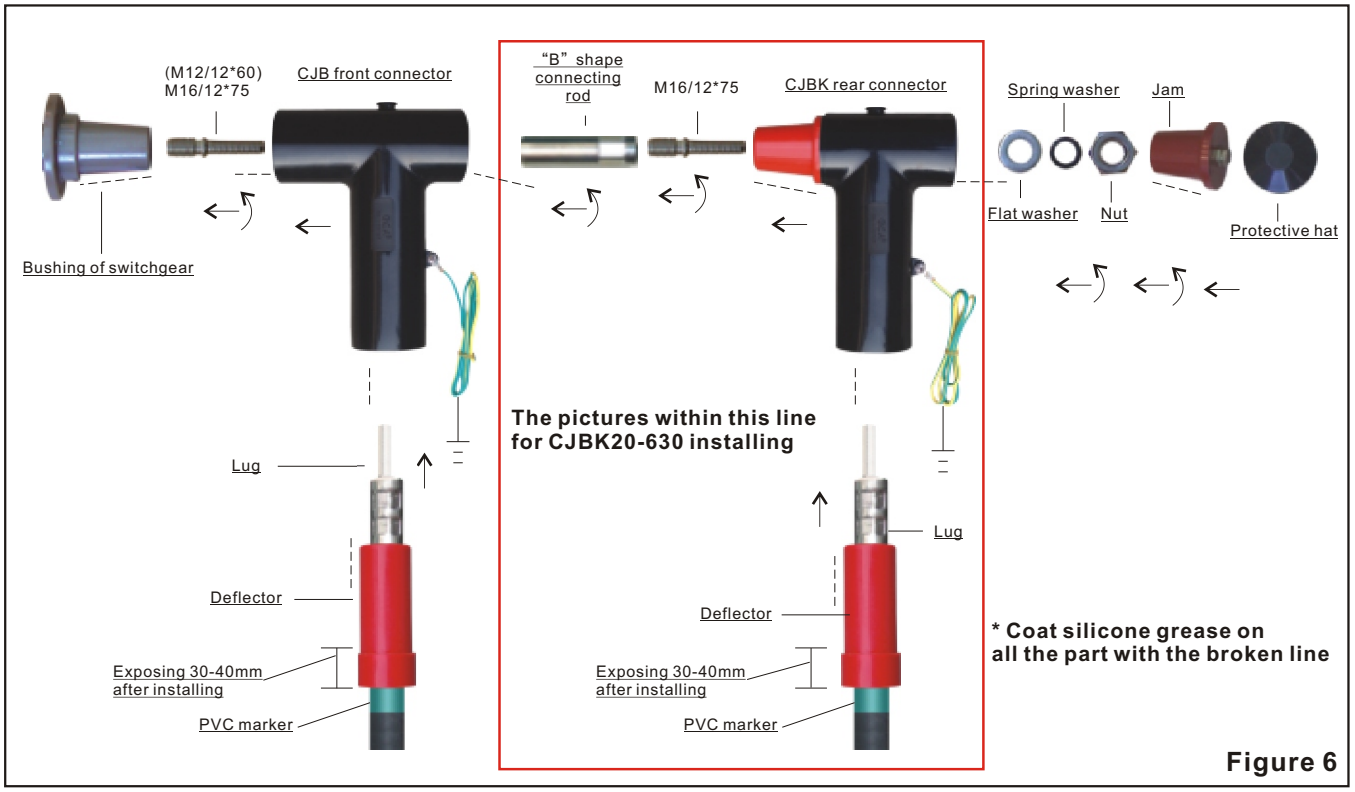


Figure 6

13. Continue from step**10**

13.1 Push 'B' shape connecting rod into the back part of front connector CJB. Screw it with the moment of 30NM. Then screw M16/12 double-end-thread into the connecting rod.

13.2 According to **step 1-8**, strip the cable, push on the deflector.

13.3 Coat evenly silicone grease onto the upper part of the deflector and the inner surface of down part of rear connector CJBK suit.

13.4 Aim at the lug direction, push the cable installed with deflector into CJBK suit in an uninterrupted movement.
Be noticed that the deflector and PVC marker should not have any moving. The down part of the deflector will expose for about 30-40mm.

14. Push the longer end of the CJBK suit installed with cable onto the end of CJB suit, and the cable lug hole will pass over the screw at meantime.

14.1 Install the flat washer, spring washer and nut in sequence, screw down the nut with spanner with the moment of 30NM.

14.2 Coat silicone grease onto the inner surface of back part of CJBK, screw the jam into the end of the CJBK suit with hand firstly, and then screw it down with spanner.

14.3 Cover the end of jam and connector body with black protective hat.

15. Install the earthing wire onto connector. There should be at least 5mm space distance between the connectors.

16. Fix the trifurcate part, ground the earthing wire of CJB and CJBK, mark the phases.