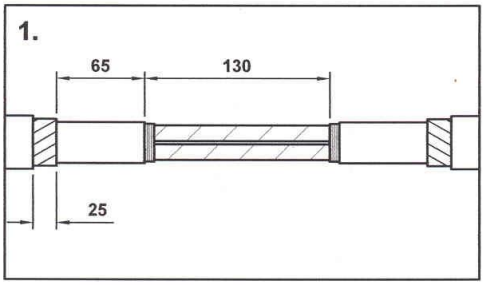
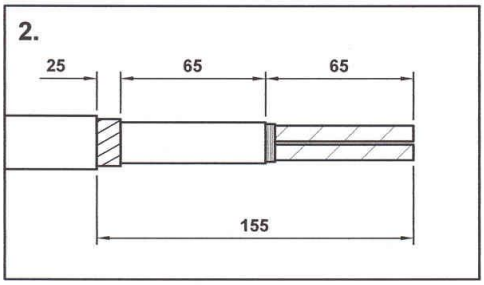
Work Instruction for a Single Phase Paper Lead Service Cable Pot End (LIVE)

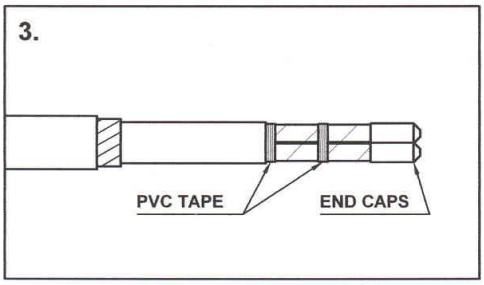
JOINT KIT REF : SE2/NY

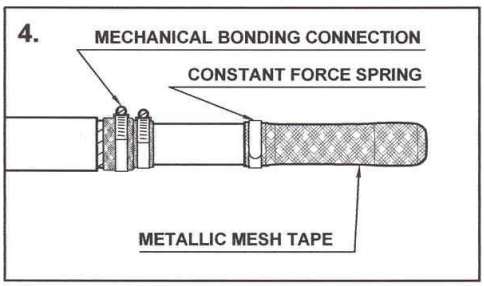
Authorisation Code W2.1 (NEDL), CJ1 (YEDL).

Scope To joint Paper Lead Service cables 0.007ins² up to 0.06ins².









Before starting work, carry out a personal on site risk assessment.

Always use the correct level of P.P.E.

All work must be carried out in accordance with existing company procedures and manuals.

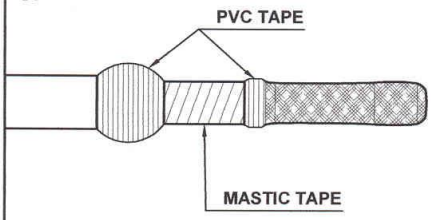
Start Position

Prepare the joint hole and check the cables are suitable to proceed.
Prepare the cable to the dimension opposite.
Clean the cable jacket, armour and lead sheath.
Fit temporary continuity earth bond.
Remove the lead sheath to the dimension opposite.
Using test lamps positively identify and mark the phase and neutral cores.
Shroud the lead sheath and all exposed metalwork adjacent to the point of work

Cut the phase core to 65mm and insulate with heatshrink end cap.
Cut the neutral core to 65mm and insulate with heatshrink end cap.
Apply 3 turns of PVC tape at the crutch position to provide additional mechanical strength.
Form the phase and neutral core back together and secure with PVC tape.

Attach the mechanical connection between the armour and lead sheath.
Wrap the joint in tinned copper mesh in 1 50/50 lap layer starting at the joint end by forming into a star and working towards the lead sheath.
Secure the tinned copper mesh to the lead sheath by using the constant force spring.

5.



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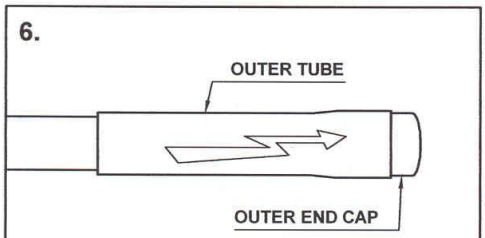


Apply PVC tape over the constant force spring in the same
Direction as the spring and over the mechanical bonding connection to remove any sharp edges.

Apply a 50/50 lap layer of mastic onto the lead sheath between the mechanical bonding connection and the constant force spring.

Position the outer heatshrink end cap over the end of the joint and shrink down working towards the cable.

Position the outer heatshrink tube centrally over the joint and shrink down commencing at the centre working outwards.

Allow the pot end to cool before applying any mechanical strain.

Allowing the finished joint to cool, place the opened end of the coloured bag over the joint and fasten to the cable using insulating tape.

After making live, carry out any required checks in accordance with the existing company procedures.

On completion, record the joint and reinstatement details.

Finish Position

LV JOINT KIT LIST

JOINT KIT REF: SE2/NY
NEDL/YEDL CAT N°: 174384

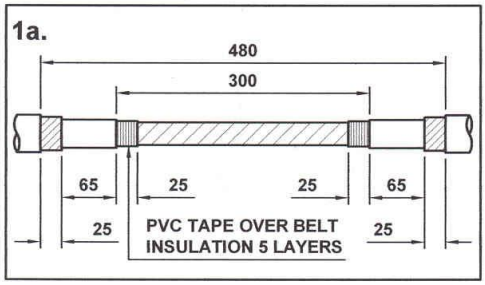
DESCRIPTION	REF	QTY
HEATSHRINK END CAP (OUTER)	SKE 15/40	1
HEATSHRINK END CAP (PHASE)	SKE 4/10	2
WORM DRIVE CLIP	-	1
METALLIC MESH TAPE	200mmLONG	1
METALLIC MESH TAPE	800mm LONG	1
CONSTANT FORCE SPRING	-	1
HEATSHRINK TUBE	PRINTED 'DANGER LIVE'	1
MASTIC TAPE	-	1
COLOURED POLYTHENE BAG	PRINTED 'DANGER LIVE'	1
JOINTING INSRUCTION	NEDJI/09	3 SHEETS

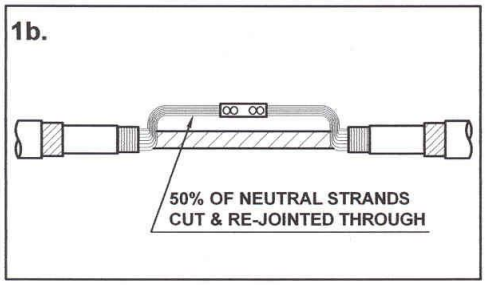
Work Instruction for a Single Phase Paper Lead "Concentric" Service Cable Pot End (Live).

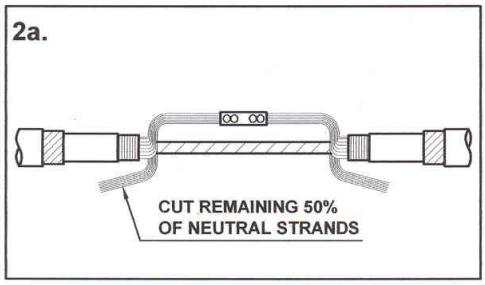
JOINT KIT
REF : SE2/NY

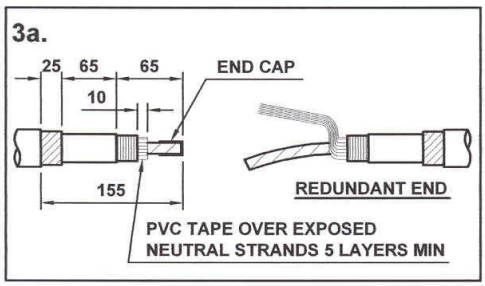
Authorisation Code

Scope To joint/stop end Single Phase Paper Lead Concentric Service cables 0.007ins² up to 0.06ins².





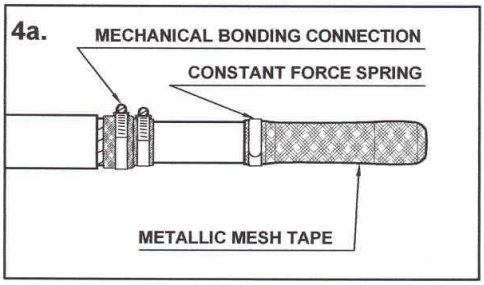




Before starting work, carry out a personal on site risk assessment.
Always use the correct level of PPE.
All work must be carried out in accordance with existing company procedures and manuals.

Start Position

Prepare the joint hole and check that the cable is suitable to proceed.
Remove serving and armour to dimensions on assembly drawing.
Clean exposed armour and lead sheath.
Fit Hepworth earth continuity bond and remove lead sheath to dimensions on assembly drawing.
Apply PVC tape to belt insulation and remove required amount of belt insulation.
Identify and test exposed neutral strands/segments. If satisfactory cut 50% of the neutrals in the central position of the joint (using approved method and tools) and arrange these strands into a bunch to form a conductor to one side of the insulated phase conductor (the segmented type of conductor strands will require twisting to prevent them digging into the underlying insulation).
Joint the cut neutral strands/segments together using an extended length mechanical connector.
Cut the remaining neutrals (using approved method and tools) and bend them away from the phase core.
Temporary insulate/shroud all neutrals and exposed earthed parts of the cable.
Identify and test phase core (ensure that the cable is NOT of the triple concentric design). If in any doubt contact your supervisor.
If satisfactory apply PVC tape tp phase core insulation, cut phase core in centre of joint, re-test and temporary insulate the exposed ends.
Cut phase core to dimensions on assembly drawing and shrink down end cap.
Test that the dead end of the cable is suitable to be made redundant.
If satisfactory, remove the temporary insulation/shroud from the neutral and earths, disconnect the neutral connection and cut back the neutrals to dimensions on assembly drawing.
Apply 5 layers of PVC tape over exposed neutrals

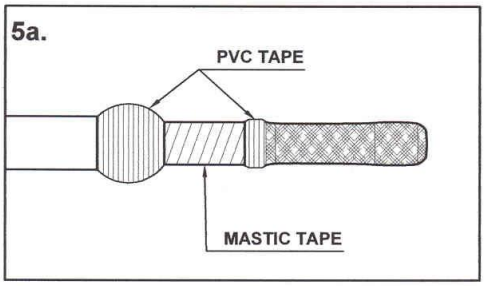


Attach the mechanical connection between the armour and lead sheath.

Remove the Hepworth temporary continuity earth bond.

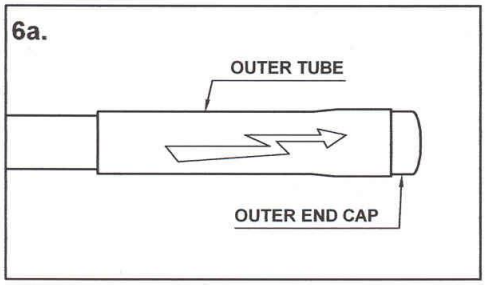
Wrap the joint in tinned copper mesh in a 50/50 lap layer starting at the joint end by forming into a star and working towards the lead sheath.

Secure the tinned copper mesh to the lead sheath by using the constant force spring.



Apply PVC tape over the constant force spring in the same direction as the spring and over the mechanical bonding connection to remove any sharp edges.

Apply a 50/50 lap layer of layer of mastic tape onto the lead sheath between the mechanical bonding connection and the constant force spring.



Position the outer heatshrink end cap over the end of the joint and shrink down working towards the cable.

Position the outer heatshrink tube centrally over the joint and shrink down commencing at the centre working outwards.

Allow the stop end to cool before applying any mechanical strain.

Allowing the finished joint to cool, place the opened end of the coloured bag over the joint and fasten to the cable using insulating tape.

On completion, record the joint and reinstatement details.

Finish Position

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