

This instruction outlines two methods for establishing the semi con back edge on solid dielectric cables. The instruction is supplementary to our Termination Instructions for Indoor and Outdoor Single Core and Three Core Solid Dielectric Cables for Voltages 1.9/3.3KV – 19/33KV.

METHOD A

1. At a point where the semi con back edge is to be established form a band of PVC tape (approx. 1.00mm thick) around the insulation semi conductive screen.
2. Using a rat tail or round file, and the band of tape as a shoulder on which to rest the file, begin abrading away the insulation semi conductive screen. The process should be gradual and continuous around the cable circumference. As you near the insulation, the file should be used with greater care and smaller strokes as the last of the semi con is removed.
3. Continue to cautiously file away the semi con layer until a fine "ring" of insulation can be seen around the cable circumference. As distinct from a knife cut, slight abrasion of the insulation surface by the file will not adversely affect the termination; if excessive, it may be "polished" away.

NOTE: On 22KV and 33KV cables, use the abrasive cloth enclosed to smooth or "polish" any file abrasion on the XLPE.

METHOD B

1. At a point where the semi con cut back edge is to be established, form a tie wire around the insulation semi con screen. The purpose of this tie wire is to form a guide for the knife and to prevent delamination of the semi con screen below the knife cut.
2. Using a sharp knife and resting on the tie wire, score the semi con layer for the full circumference of the cable being extremely careful not to cut through the semi con layer into the XLPE insulation.
3. Having established the semi con cut back proceed to remove the semi con layer to this point by employing a series of longitudinal cuts in the semi con from lug to the semi con cut back edge. These cuts will facilitate removal of the semi con layer in strips.

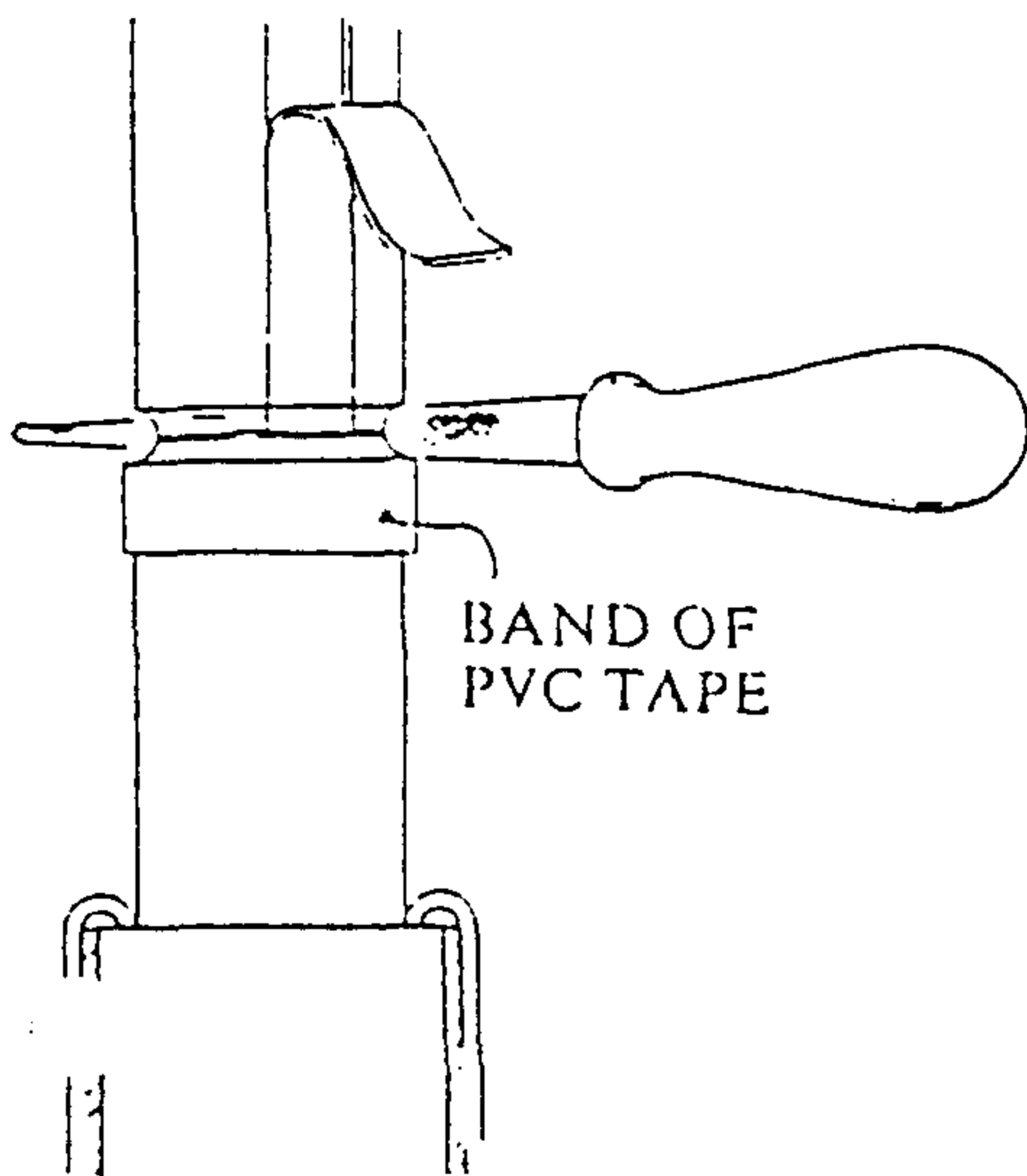
Extreme care must be taken at all times, so as not to cut into the insulation.

GENERAL

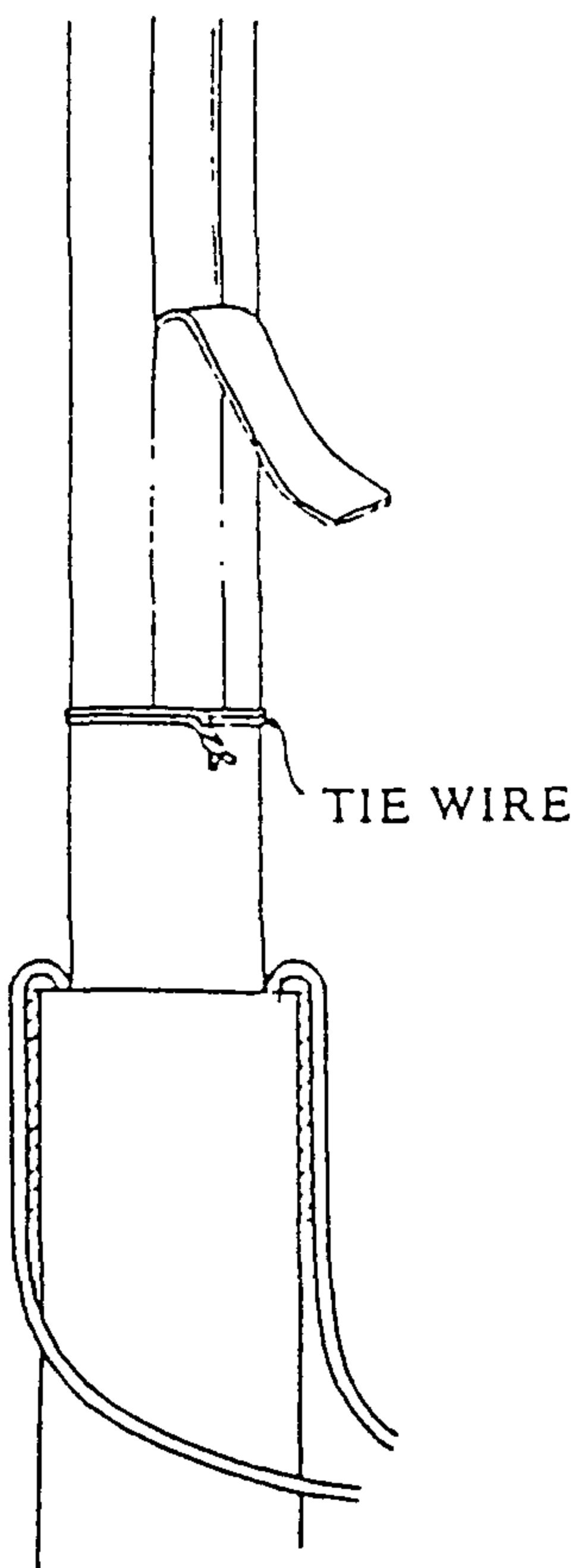
Separate the semi con layer from the insulation at the lug end and carefully peel off the semi con layer.

When the semi con cut back edge has been established using a knife, care must be taken when approaching the semi con cut back edge so as not to create separation (delamination) of the semi con layer from the insulation below the cut back edge. Do not pull the semi con strip over the tie wire, but rather carefully tear it along the tie wire, with an upward motion. This action will assist in preventing delamination particularly on cables offering an easy strippable semi con screen. Continue in this manner to remove the remaining semi con layer.

Remove tie wire or band of PVC tape as applicable and proceed in accordance with appropriate instructions.



METHOD A.



METHOD B.