

Cable Jointing Manual

Jointing Procedures

Module 14

Stripping PICAS Cable

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Revision Log

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Changes made	New Combined Module. Replaces Central Networks East COP15 MODULE 14. Replaces Cable Jointing Procedures in Central Networks West Underground Cable Jointing Manual:- CJP303; CJP356.	

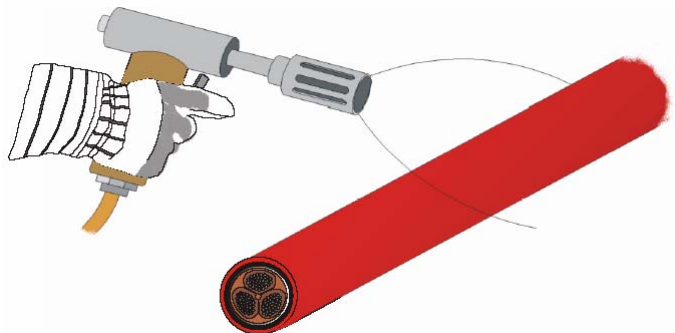
1. GENERAL

'PICAS' refers Paper Insulated Corrugated Aluminium Sheath cable, which was introduced into service in the 1970's and continued to be installed until the late 1990's. The Aluminium sheath is corrugated to improve the flexibility of the cable during laying. To protect the Aluminium from corrosion, the metal is overlaid with a red PVC sheath and to prevent moisture penetrating along the underside of the PVC, the corrugation valleys are filled with bitumen.

This Module specifies the approved method of removing the PVC and Aluminium sheaths.

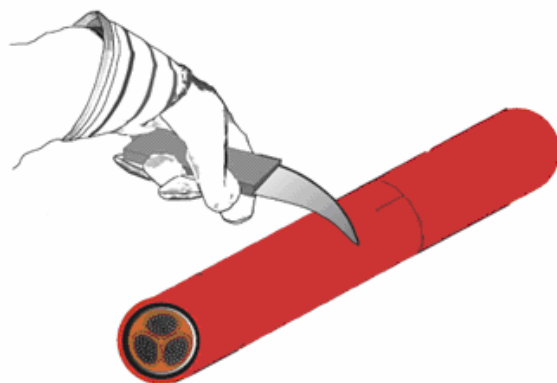
2. PROCEDURE FOR PVC SHEATH AND BITUMEN REMOVAL

2.1 To assist in removing the PVC oversheath it should first be gently heated using a gas torch. Take care not to overheat the material, because it will give off toxic fumes or even burn if it is overheated. Gentle heating also avoids the build up of pressure in the Bitumen compound.



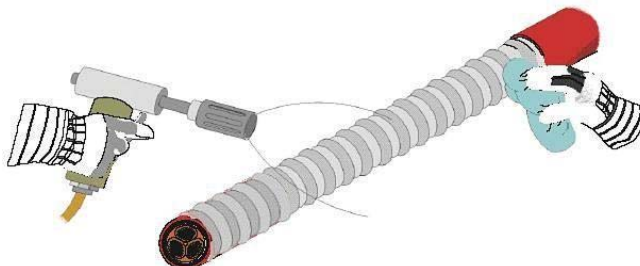
2.2 Once the sheath has reached a temperature that is warm but is not too hot to touch, it can be cut using a friction cord or a flat bladed cable knife.

2.3 Start with a circumferential cut then cut along the cable with the knife to avoid piercing the Aluminium. Remove the outer sheath.



2.4 With the PVC sheath removed and starting from the open end, the bitumen compound should be thoroughly cleaned from the surface of the Aluminium, using solvent wipes and heat applied by a gas torch.

Take care not to overheat the cable as this could lead to early joint or termination failure.



3. PROCEDURE FOR REMOVAL OF THE ALUMINIUM SHEATH

3.1 Wear protective gloves as the metal is sharp. The Aluminium sheath is removed using a special tool that resembles a pipe cutter, but has a special twin cutting wheel at one end of the jaw and two positioning rollers at the other.

3.2 Before using the tool examine the cutter wheel to ensure that it is in good condition; if not, it will need to be replaced.



3.3 Apply the tool to the PICAS cable with the double cutter wheel spanning a corrugation crest. Tighten the tool until the cutter just indents the crest, and then rotate to cut the metal, gently increasing the cutting pressure by closing the screw control.

3.4 Remove the Aluminium sheath in sections, each section not longer than 250 mm. **NB. Aluminium rings to be removed separately (if applicable).**

