

Cable Jointing Manual

Jointing Procedures

Module 19

Working with Consac Cable

Version:	1.0	Date of Issue:	June 2008
Author:	Terry Dutton	Job Title:	Senior Cable Specialist
Approver:	Keith Nutter	Job Title:	Network Standards Manager
		Review Date	June 2013

Revision Log

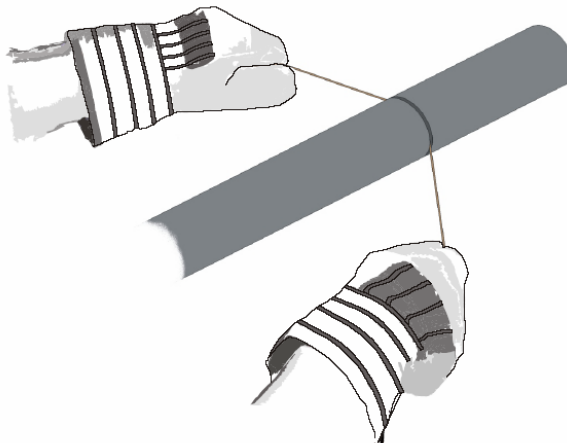
Version: 1.0	Prepared by: Terry Dutton	Date: June 2008
Changes made	<p>New combined Module.</p> <p>Replaces Cable Jointing Procedures in Central Networks West Underground Cable Jointing Manual:-</p> <p>CJP303; CJP304; CJP305; CJP306; CJP308; CJP309; CJP310; CJP312; CJP313; CJP317; CJP320.</p>	

Only attempt this procedure if you have been trained to do so and you have the appropriate tools. If in doubt refer to your line manager.

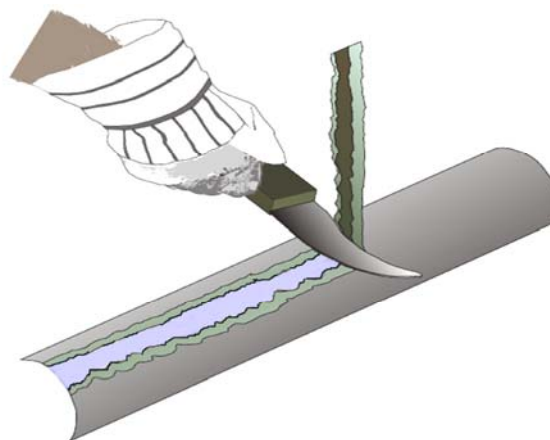
1. REMOVING THE OUTER PVC SHEATH

Always wear appropriate PPE when working on LIVE cables, including eye protection. *Do not attempt to work on **LIVE** Consac cables unless you have received the appropriate training.*

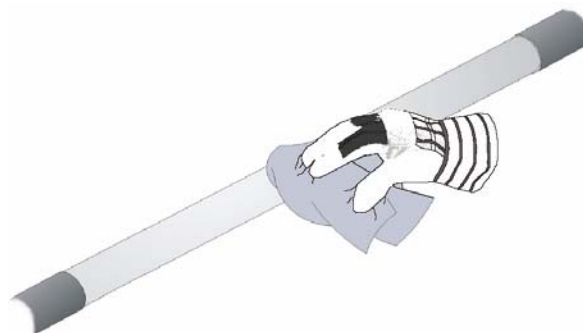
1.1 Mark the centre of the joint on the sheath and from this point measure and mark the sheath off positions, according to the cable jointing procedure. Using string, make two circumferential cuts at the marked sheath off positions.



1.2 After gently warming the sheath, join the two circumferential cuts with a lengthways cut, holding the knife at an angle so as to avoid scoring the Aluminium sheath.

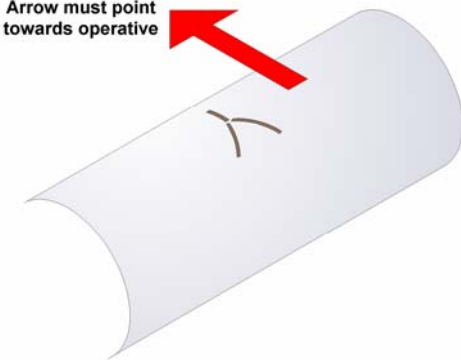
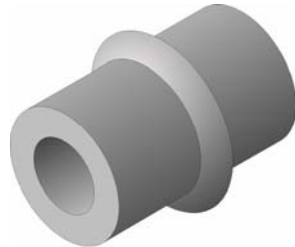
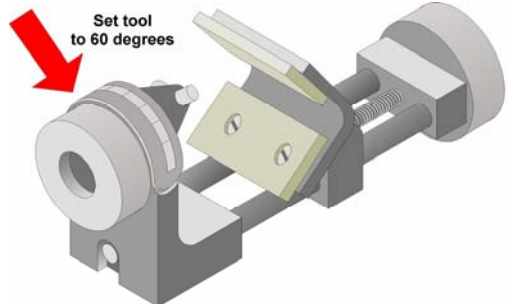
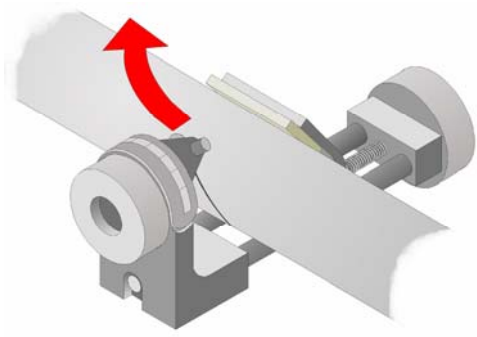


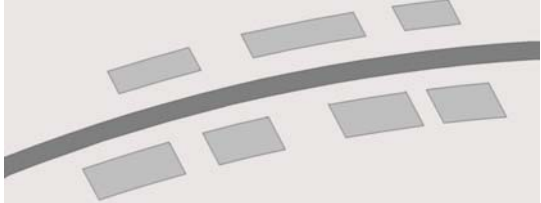
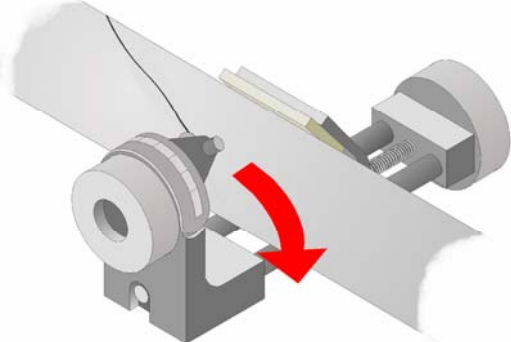
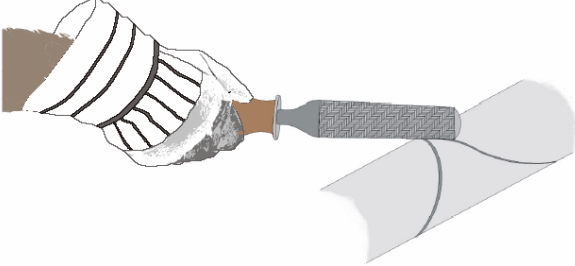
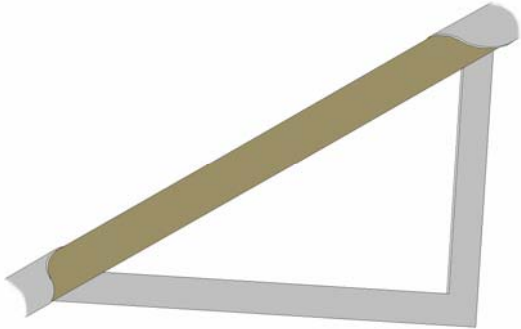
1.3 Remove the PVC sheath and clean off the underlying Bitumen using a gas torch and solvent wipers, leaving the surface in a clean, bright condition. Thoroughly inspect the condition of the Aluminium sheath.



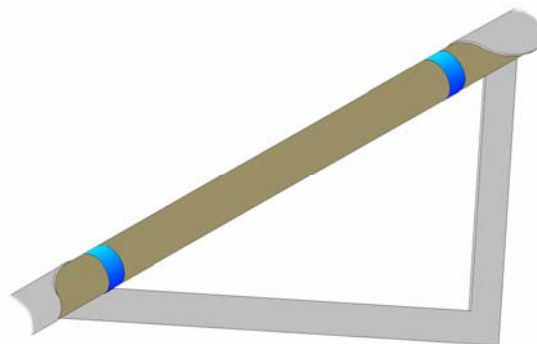
2. REMOVING THE ALUMINIUM SHEATH

From this point onward, wear both eye and hand PPE.

<p>2.1 Mark the Aluminium sheath at the cable joint centre and make two further marks at 60 degrees to form an arrow – this arrow must point towards the operative.</p>	 <p>Arrow must point towards operative</p>
<p>2.2 Select the correct cutting wheel for the sheath stripping tool according to the cable cross sectional area. The 45 thousands of an inch cutter is used for 70 to 120mm cable, the 70 thousands of an inch cutter is used for 150 to 240mm cable.</p>	
<p>2.3 Set the angle of the sheath cutting tool to 60 degrees, using the front control wheel and scale.</p>	 <p>Set tool to 60 degrees</p>
<p>2.4 Using the rear pressure control wheel, open then close the tool onto the first of the 60 degree marks. Apply light pressure then rotate the tool outward along the cable until it butts up to the PVC sheath edge, this should occur at tool bottom dead centre.</p>	

<p>2.5 Repeat this operation, moving the tool forward and backward along the cable, gradually increasing the pressure using the rear wheel. Continue this process until scuff marks from the shoulders of the cutting wheel appear along the edges of the cut, then stop.</p>	
<p>2.6 Remove the tool and re-set the cutter angle to 60 degrees on the opposite hand. Re-fit the tool and repeat operations 2.4 and 2.5. Remove the tool on completion.</p>	
<p>2.7 At the point where the two tool cuts join, use the edge of a six inch half round file to deepen the cut until the underlying papers just begin to appear. <i>The flat side of the file must point towards the inside of the arrow.</i></p>	
<p>2.8 Using a hammer and pliers lift the point of the arrow. Wearing gloves unpeel the Aluminium sheath from the cable, until the ends of the cut are reached. The sheath should now appear as shown in the illustration, pointing away from the operative.</p>	

2.9 Fit PVC tape binders at the points where the underlying papers are to be terminated.



2.10 Beat the cut part of the sheath flat with a pair of wooden beaters.



2.11 Holes can be punched in the Aluminium sheath, where required, using a special purpose tool.

