Southwire®
Services & Solutions

Rejuvenation Instructions

#710 – Cutting a Treated Cable

This document covers the following:

- How to cut an injected cable.

WARNING: It is dangerous working around energized high-voltage systems, pressurized systems, and chemicals. Always work in accordance to the Field Operations Safety Handbook (FOSH) or other local governing safety standards.

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Cutting a Treated Cable

The injection process has been shown to improve the reliability of underground power cables. However, there may still be occasional dielectric failures of the cable or component failures that require the attention of utility line personnel.

The purpose of this NRI is to:

- Provide instructions for the safe handling of cables injected with fluid.
- Guide personnel in procedures to avoid contact of fluid with the environment.
- Supplement the information provided in the safety data sheets (SDS) for the fluids. The most current SDS for injection fluids may be found on Knomentous.

1. General information

- Always wear nitrile gloves when there's a possibility of handling fluids
- Although current fluids are not flammable, when working with potentially energized cables combined with the possibility of misting it is best practice to have a Class C fire extinguisher within easy reach.
- The following cable-cutting instructions are specific to Southwire Services. **Follow your company's policy for cable cutting procedures** and adapt any information provided below.

Figure 1: Class C fire extinguisher

2. Will fluid come out of the cable?

Many factors determine whether fluid will leak from the cable after being cut. Placing an approximate volume is difficult and almost impossible. Always prepare for fluid to flow out of a cut cable.

3. Catch leaked fluid in a bucket.

1. Use a catch basin or bucket preferably made of polypropylene, nylon, or HDPE.
2. Place a catch basin underneath the cable where the cut is to be made to catch the leaked fluid.

Figure 2: Place a basin under the cable to catch leaking fluids.

4. Position the cutting tools on the cable.

a. Use only spiking tool and remote-operated cutters where it is not possible to ground the cable.

b. After the cable is properly identified (follow NRI 210 for cable identification) position the spiking tool.

c. Drape a blast blanket over the spike tool if no other substantial barrier is available. This will also direct any fluid into the basin.

d. You can also use rags to catch fluid if a blast blanket is not needed.

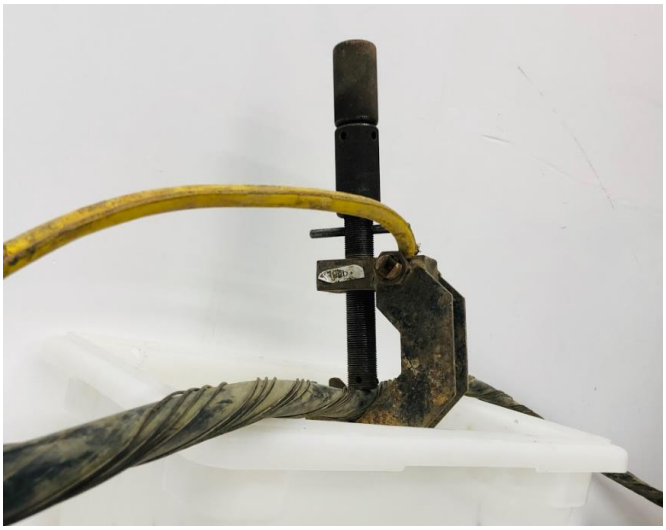

Figure 3: Position the grounded spiking tool.

Figure 4: A spiked cable

5. Drape a rag over the cutting tool to absorb fluids.

a. After identification and spiking, the cable may be cut.

b. Drape a rag over the remote cutting tool to intercept and absorb any small streams of fluid.

Figure 5: Absorb fluids with a paper towels or rags.

6. Discard the fluids.

Note: Do not pour the fluid into storm or sanitary drains.

- Small quantities of fluid can be absorbed with rags and disposed of in dumpsters.
- If there is too much liquid to practically absorb with rags, follow the directions of the supplied spill kit (PIG® KIT630).
- Cleaning of fluid covered tools or other items may be done using water or an approved cleaner, as specified in the FOSH.
- Soaked items should be placed in the spill kit bucket and returned to HQ for proper disposal.

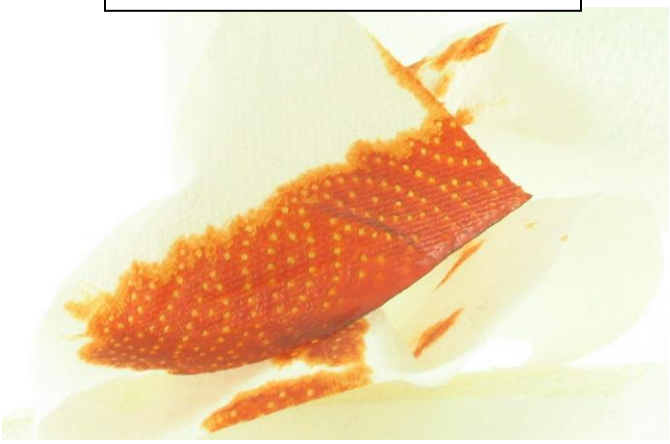

Figure 6: Discard absorbed fluids.

7. Send a failure sample to Southwire Services.

- If the cable will be sent back to Southwire Services for failure investigation, follow NRI 700 for failure sample handling.

8. Post-repair performance.

- For best post-repair performance, the cable should be spliced or terminated with injection adapters (IAs).
- If the cable was treated more than 1 year ago molded splices may be installed.
    - If cold-shrink splices are to be installed, injection adapters must be installed.

- If injection adapters cannot be installed, the ends of the splice connector may be sealed with a combination of tapes. Contact cablerejuvenationengineering@southwire.com for more information.

9. Leaving Cable Ends Exposed

- If part of the cable is abandoned and the end left exposed, it is recommended to use mastic tape and a coldshrink end cap to seal the cable end.

Figure 7: Coldshrink end cap