



# Deadbreak Apparatus Connectors

## Cable Training Tool Operating Instructions

### Contents

Product Information .....	1
Safety Information .....	2
Installation Procedure .....	3
Normal Heating Instructions .....	3
Accelerated Heating Instructions .....	4

 **CAUTION:** The Cooper Power Systems Cable Training Tool is designed to be operated in accordance with normal safe operating procedures. These instructions are not intended to supersede or replace existing safety and operating procedures. Read all instructions before operating the Cable Training Tool.

 **CAUTION: DO NOT** use damaged Cable Training Tool. **DO NOT** apply power if not wrapped around cable. **DO NOT** use in wet locations. **DO NOT** leave Cable Training Tool plugged in and unattended for extended periods of time. **DO NOT** allow Cable Training Tool to be cut or damaged.

### Acceptance and Initial Inspection

Each cable training tool is inspected and tested at the factory. It is in good condition when accepted by the carrier for shipment. Upon receipt of a cable training tool, inspect it thoroughly for damage and loss of parts incurred during shipment. If damage or loss is discovered, file a claim with the carrier immediately.

### Handling and Storage

If the cable training tool is to be stored for an appreciable time before installation, provide a clean, dry storage area.

### Quality Standards

ISO 9001:2000-Certified Quality Management System

## PRODUCT INFORMATION

### Introduction

The Cooper Power Systems Cable Training Tool warms the plastic insulation of underground power cables, making them pliable and easy to train. Using this tool during cable training permanently removes the cable's reel memory making subsequent cable terminating and cable movement less difficult.

### Read This Manual First

Read and understand the contents of this manual and follow all locally approved procedures and safety practices before installing or operating this equipment

### Additional Information

These instructions cannot cover all details or variations in the equipment, procedures, or process described nor provide directions for meeting every possible contingency during installation, operation, or maintenance. When additional information is desired to satisfy a problem not covered sufficiently for the user's purpose, please contact your Cooper Power Systems sales representative.



## SAFETY FOR LIFE



Cooper Power Systems products meet or exceed all applicable industry standards relating to product safety. We actively promote safe practices in the use and maintenance of our products through our service literature, instructional training programs, and the continuous efforts of all Cooper Power Systems employees involved in product design, manufacture, marketing and service.

We strongly urge that you always follow all locally approved safety procedures and safety instructions when working around high-voltage lines and equipment and support our “Safety For Life” mission.

## SAFETY INFORMATION

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians, who are familiar with this equipment should install, operate and service it.


A competent technician has these qualifications:


- *Is thoroughly familiar with these instructions.*
- *Is trained in industry-accepted high- and low-voltage safe operating practices and procedures.*
- *Is trained and authorized to energize, de-energize, clear, and ground power distribution equipment.*
- *Is trained in the care and use of protective equipment such as flash clothing, safety glasses, face shield, hard hat, rubber gloves, hotstick, etc.*


Following is important safety information. For safe installation and operation of this equipment, be sure to read and understand all cautions and warnings.

### Hazard Statement Definitions

This manual may contain four types of hazard statements:

 **DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in equipment damage only.

### Safety Instructions

Following are general caution and warning statements that apply to this equipment. Additional statements, related to specific tasks and procedures, are located throughout the manual.



**DANGER:** Hazardous voltage. Contact with high voltage will cause death or severe personal injury. Follow all locally approved safety procedures when working around high- and low-voltage lines and equipment.



**WARNING:** Before installing, operating, maintaining, or testing this equipment, carefully read and understand the contents of this manual. Improper operation, handling or maintenance can result in death, severe personal injury, and equipment damage.



**WARNING:** This equipment is not intended to protect human life. Follow all locally approved procedures and safety practices when installing or operating this equipment. Failure to comply may result in death, severe personal injury and equipment damage.



**WARNING:** Power distribution equipment must be selected for the intended application. It must be installed and serviced by competent personnel who have been trained and understand proper safety procedures. These instructions are written for such personnel and are not a substitute for adequate training and experience in safety procedures. Failure to properly select, install or maintain this equipment can result in death, severe personal injury, and equipment damage.

## INSTALLATION PROCEDURE

### NORMAL HEATING INSTRUCTIONS

#### Step 1.

- Identify the section of cable to be trained. If the cable section is wet, wipe it dry.

#### Step 2

- Visually inspect the Cable Training Tool for cuts or physical damage.

#### Step 3

- Attach the thermostat end of the Cable Training Tool securely to the cable using D-ring straps as shown in Figure 1.

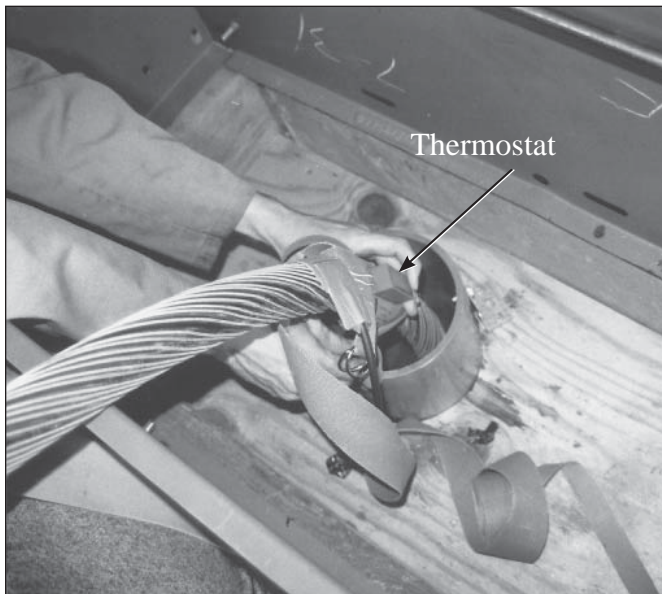


Figure 1.  
Attach thermostat end of Cable Training Tool to cable using D-ring straps.

#### Step 4

- Wrap the Cable Training Tool around the cable as shown in Figure 2. Do not overlap the tape onto itself. **This may cause overheating and damage the cable or Cable Training Tool.**

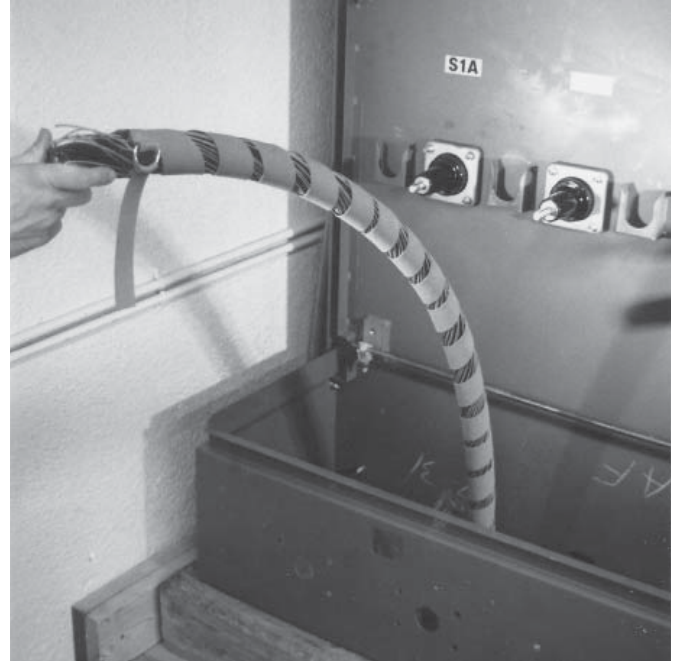


Figure 2.  
Wrap, but do not overlap tape.

#### Step 5

- Once the slack is taken out of the Cable Training Tool, secure the loose end of the Cable Training Tool using the D-ring strap. (If accelerated heating performance is required, see supplemental instructions under "Accelerated Heating Instructions".)

#### Step 6

- Plug in electrical cord to a 120V outlet for approximately 30 minutes. (The Cable Training Tool is thermostatically controlled and will not overheat the cable. Longer heat times improve the training ability of the cable.)

#### Step 7

- Unplug the power cord. Remove the Cable Training Tool and form the cable to desired shape.



**CAUTION:** Cable Training Tool and cable are hot! Wear gloves when removing.

## ACCELERATED HEATING INSTRUCTIONS

If the cable training tool is being performed in cold weather or shorter heat times are desired, insulation can be wrapped around the cable during heating. Any flexible elastomeric thermal pipe insulation can be used. A particular brand that works well is called AP Armaflex® Pipe Insulation by Armacell LLC.

### Step 5A

- Use a section of AP Armaflex® Pipe Insulation with a 4" ID, long enough to completely cover the Cable Training Tool when it is wrapped around cable.

### Step 5B

- Slide insulation over the cable and Cable Training Tool, making sure that the thermostat is completely covered as shown in Figure 3. It is important to ensure that the thermostat is completely protected from drafts and cold air. If the thermostat is not completely protected, overheating and damage to the cable may occur.



Figure 3.  
Completely cover thermostat with insulation.

### Step 5C

- Pinch both ends together and tape closed as shown in Figure 4.

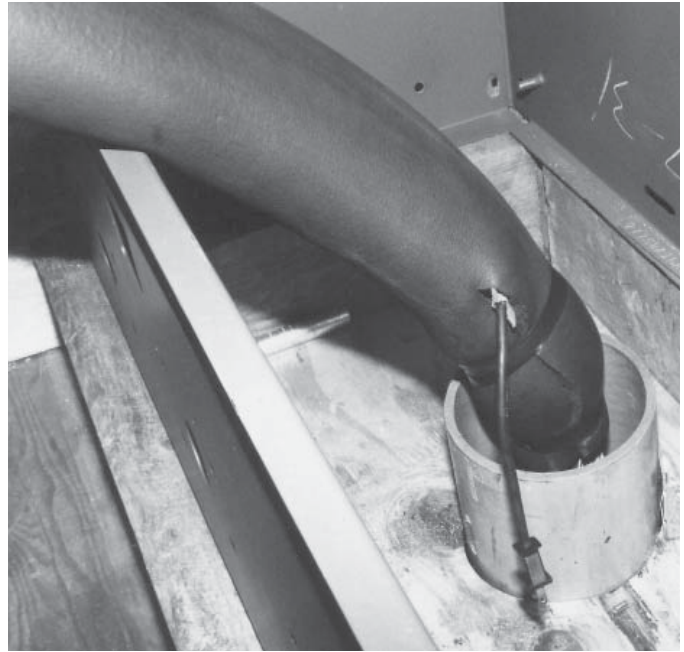


Figure 4.  
Pinch insulation closed and secure with tape.



**COOPER** Power Systems