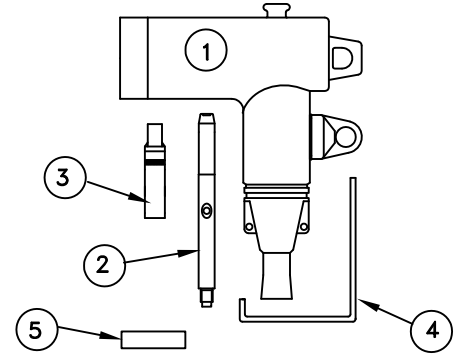


Kit contents may include:

1. 200 A Loadbreak Elbow
2. Male Contact Probe.
3. Compression Lug.
4. Installation Wrench.
5. Silicone Lubricant
6. Installation Instruction
7. Mastick
8. Copper braid
9. Shrink tube



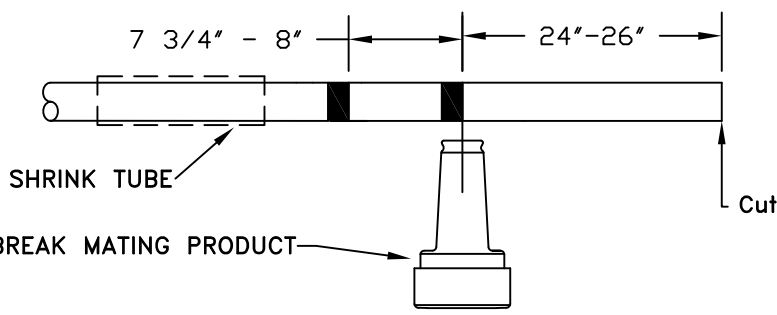
Check contents to be sure they are:

- \* correct
- \* complete
- \* undamaged
- \* properly fitted with cable and mating components
- \* Check threads by threading probe into compression lug. If resistance is encountered prior to full assembly, check for damage and replace damaged component.

**STEP 1A**

**SHIELD WIRES ONLY**

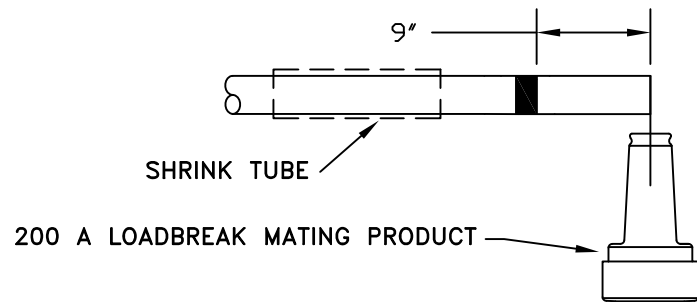
1. Straighten ends.
2. Train cable into final position.
3. Pull extra cable 24-26" beyond the centerline of the bushing. Place a tape mark at the centerline of the bushing.
4. Remove outer jacket 7 3/4" to 8" beyond the tape.
5. Slide shrink tube onto cable.



**STEP 1B**

**FLAT METALLIC TAPE SHIELD ONLY**

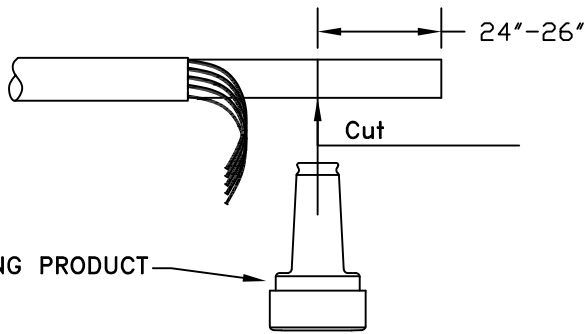
1. Straighten ends.
2. Train cable into final position.
3. Cut excess cable squarely at the centerline of the bushing.
4. Remove outer jacket beyond the tape as shown.
5. Slide shrink tube onto cable.



**STEP 2A**

**SHIELD WIRES ONLY**

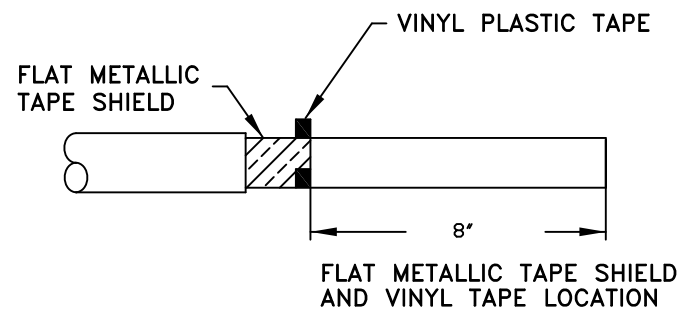
1. Unwrap neutral wires back to cable jacket.
2. Cut excess cable squarely at the centerline of the bushing.



**2B**

**FLAT METALLIC TAPE SHIELD ONLY**

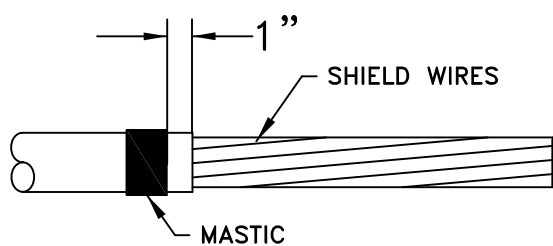
1. Remove flat metallic tape shield and secure with vinyl plastic tape to dimension shown.



**3A**

**SHIELD WIRES ONLY**

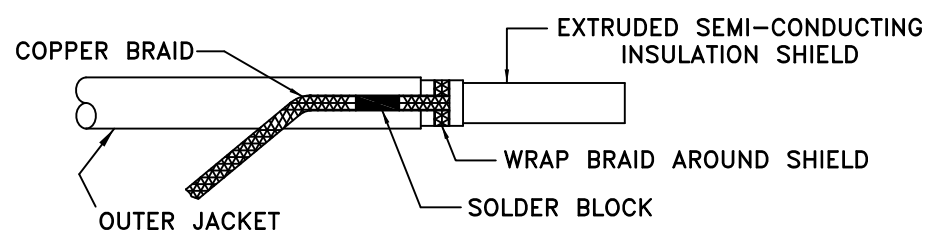
1. Use abrasive cloth to abrade area where mastic is to be applied.
2. Apply 1 layer of mastic 1 inch from the edge of the jacket.



**3B**

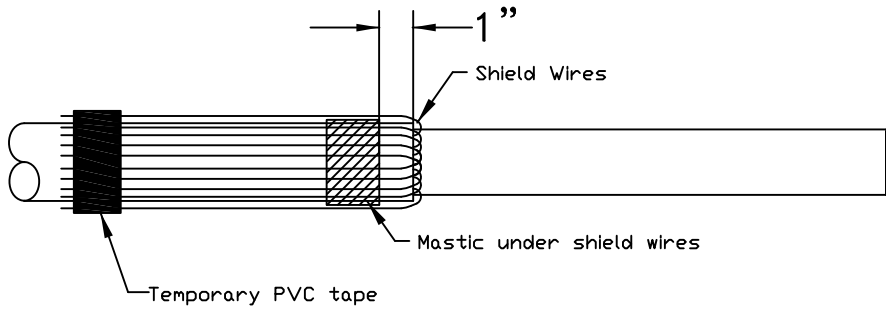
**FLAT METALLIC TAPE SHIELD ONLY**

1. Position the braid such that solder block is located 1 inch from the edge of the outer jacket.
2. Wrap braid around shield.



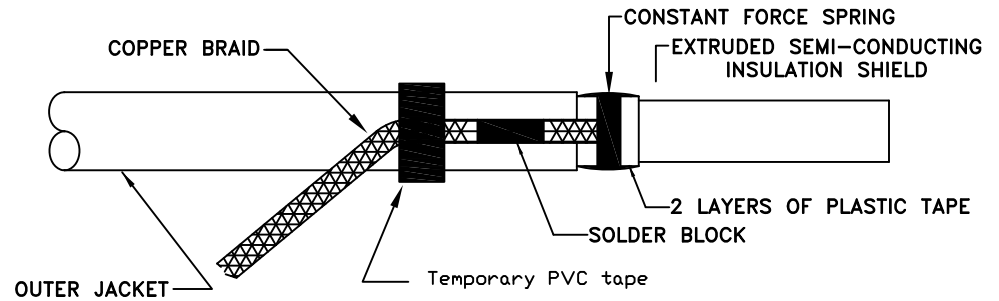
4A.  
SHIELD WIRES ONLY

1. Fold back shield wires and press into mastic.
2. Secure shield wires to cable with temporary PVC tape.



4B  
FLAT METALLIC TAPE SHIELD ONLY

1. Put constant force spring over copper braid.
2. Wrap 2 layers of plastic tape over constant force spring.
3. Secure braid to cable with temporary PVC tape.



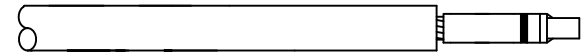
STEP 5

1. Remove shield and insulation from cable end as shown. Cut squarely taking care not to nick conductor.



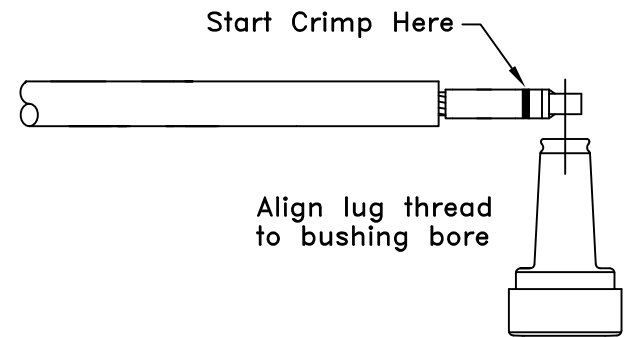
STEP 6

1. Wire brush bare aluminum conductors and immediately install compression lug. Rotate to spread inhibitor.



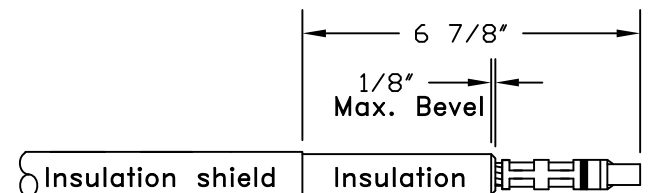
STEP 7

1. Position compression lug so the contact threaded hole aligns with bushing bore.
2. Start crimp at the crimp mark. Rotate 180° each successive crimp.
3. Carefully wipe excessive inhibitor from the outside of the lug and cable.



STEP 8

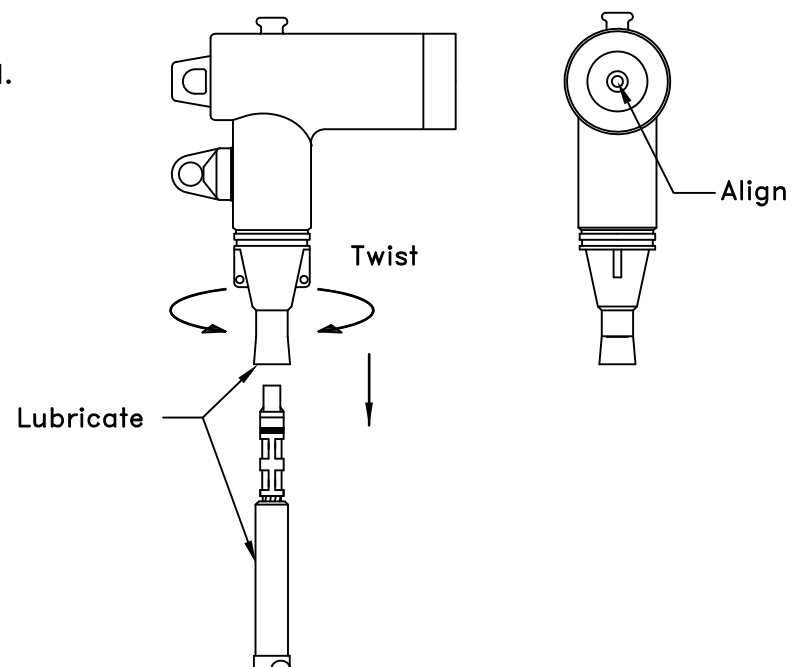
1. Remove insulation shield as shown. Bevel insulation end 1/8" max.
2. Thoroughly clean insulation to remove all traces of conductive residue.



Straight, Smooth & Squared.  
Do not cut or nick insulation.

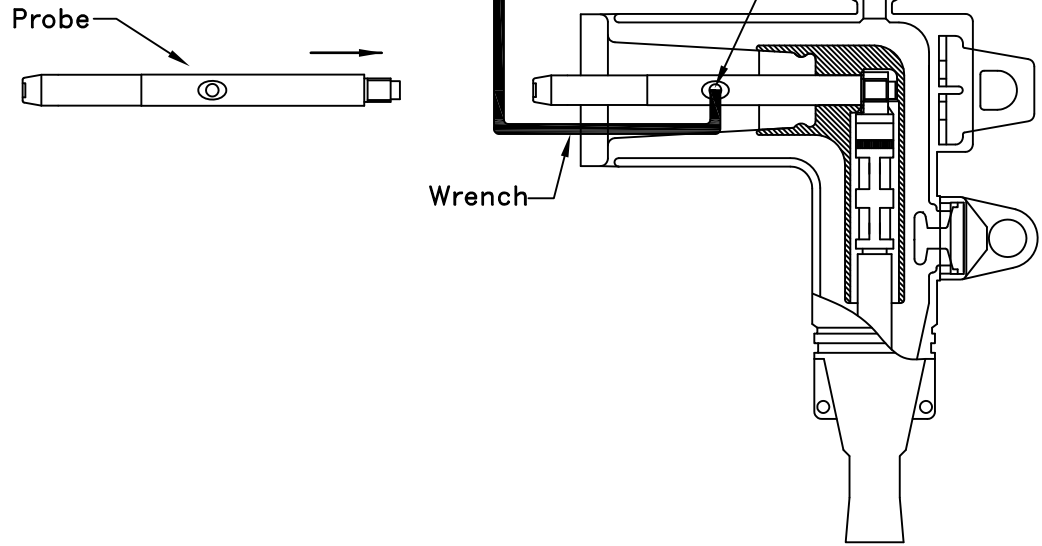
STEP 9

1. Lubricate cable insulation and inside elbow housing with lubricant supplied. Keep insulation clean of dirt and grime.
2. Slide elbow connector onto cable with a back and forth twisting motion. Wipe off all excess grease.
3. Align elbow with compression lug's threaded hole.



**STEP 9**

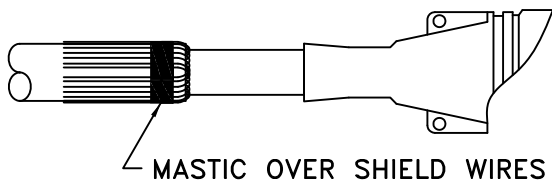
1. Thread probe into lug by hand, taking care not to crossthread.  
The probe must turn freely for approximately four turns before becoming snug.
2. Tighten probe with the wrench until wrench bends.



**STEP 10A**

**FOR SHIELD WIRES ONLY**

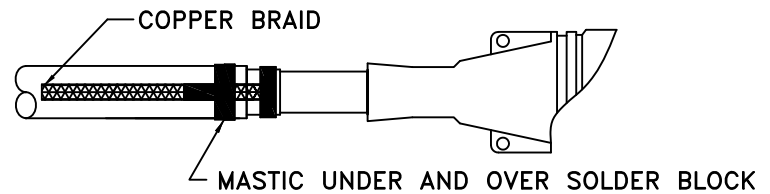
1. Apply 1 layer of mastic over wires.



**STEP 10B**

**FLAT METALLIC TAPE SHIELD ONLY**

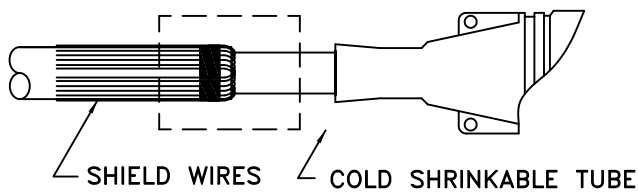
1. Lift braid off jacket and apply 1 layer of mastic on jacket in area of solder block.
2. Lay the braid along the cable and apply 1 layer of mastic over solder block.



**STEP 11A**

**FOR SHIELD WIRES ONLY**

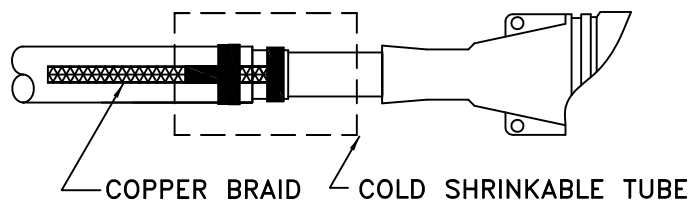
1. Slide seal tube over the elbow connector and position it as shown.



**STEP 11B**

**FLAT METALLIC TAPE SHIELD ONLY**

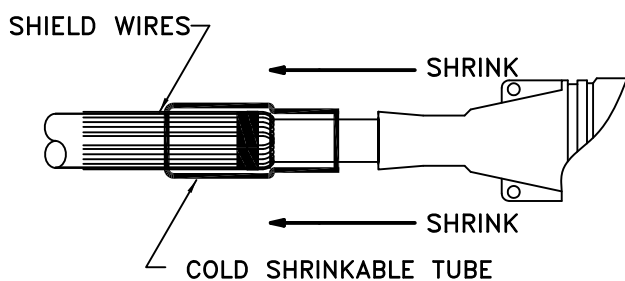
1. Slide seal tube over the elbow connector and position it as shown.



**STEP 12A**

**FOR SHIELD WIRES ONLY**

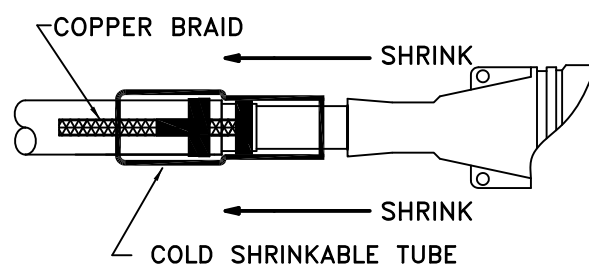
1. Shrink the seal tube onto cable starting from the elbow connector toward the cable.



**STEP 12B**

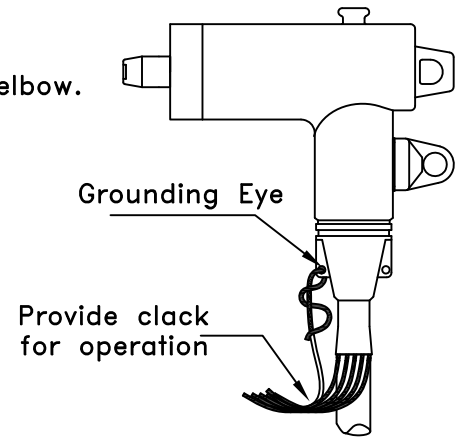
**FLAT METALLIC TAPE SHIELD ONLY**

1. Shrink the seal tube onto cable starting from the elbow connector toward the cable.



STEP 13

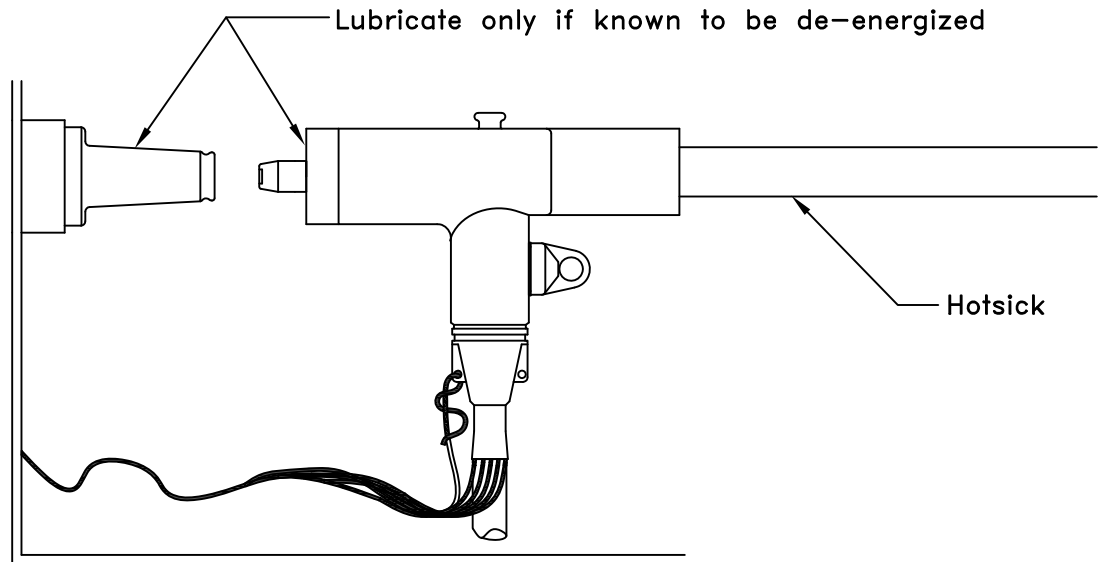
1. Insert one end of a No 14 AWG copper wire or equivalent through the grounding eye on the elbow.  
Twist tight taking care not to damage eye.
2. Twist neutral wire and connect to ground using appropriate connector.  
Provide adequate slack in wires to elbow connectors.



STEP 14

1. Lubricate the receptacle portion of the elbow connector and the mating bushing with the lubricant supplied.

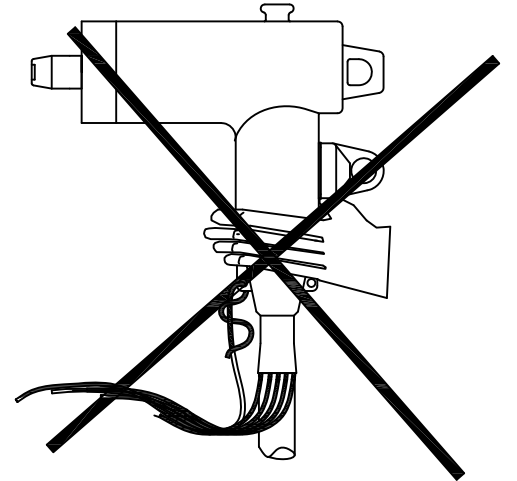
LUBRICATE ONLY IF THE TRANSFORMER AND ELBOW  
ARE KNOWN TO BE DE-ENERGIZED.



**CAUTION:**

1. DO NOT OPERATE THE ELBOW BY HAND
2. ELBOW IS NOT DESIGNED TO LOCATE FAULTS.
3. AFTER CLOSING IN ON A FAULT, THE BUSHINGS AND ELBOWS MUST BE REPLACED.

DO NOT OPERATE BY HAND



## Before Loadmake or loadbreak Operations

Area must be clear of obstructions that would interfere with the operation of the connector. This position should allow the operator to establish firm footing. Grasp the hotstick tool securely, maintaining positive control over the movement of the loadbreak connector before, during and directly after the operating sequence. Because of the control, speed and force required to engage or disengage the elbow, certain operating position are more advantageous than others. If there some questions as to proper operating positions, it is recommended that the connectors be operated deenergized. Do not connect two different phases of a multiple phase system. Before closing a single phase loop, make certain both ends of the loop are the same phase.

LOADBREAK CONNECTORS MUST BE OPERATED WITH AN EIGHT FOOT LONG, FULLY INSULATED "HOTSTICK" TYPE OF TOOL.

### Loadmake Operation

1. Area must be clear of obstructions that would interfere with the operation of the connector.
2. Grasp elbow firmly with hotstick.
3. Position tip of probe into end of loadbreak bushing.
4. Slowly insert elbow onto bushing until a slight resistance is felt.
5. Maintaining a firm grasp on the hotstick, thrust the elbow the rest of the way onto the bushing.
6. Push again on the elbow using the hotstick, and then pull gently to make sure that it is secure.
7. Place an insulated protective cap with ground wire attached to system ground on any exposed energized bushing using a hotstick.

### Loadbreak Operation

1. Area must be clear of obstructions that would interfere with the operation of the connector.
2. Use hotstick to secure standoff insulator or portable feedthru in bracket. Attach ground devices to system ground per appropriate installation instructions. All associated apparatus must also be grounded.
3. Secure elbow pulling eye firmly onto hotstick and lock.
4. Without exerting any pulling force, slightly rotate the connector in order to break the surface friction prior to disconnection.
5. Withdraw elbow from bushing with quick motion.
6. Use hotstick to place elbow on lubricated standoff insulator or portable feedthru.
7. Using a hotstick, place an insulated protective cap with ground wire attached to system ground on any energized bushing.

## TEST POINT TEST ON 21 LBT

This elbow is equipped with a capacitive test point that may be used to establish whether or not the circuit is energized if the proper voltage detection instrument is used.

1. Remove test point cap with a hotstick.
2. **WARNING: THE VOLTAGE TEST POINT IS A CAPACITIVE DEVICE. IT IS NOT DIRECTLY CONNECTED TO THE CONDUCTOR.**  
Do not use conventional voltage measuring devices. Follow the manufacturer's directions for the meter that is used.  
Test with a suitable sensing device, made for use with separable connectors manufactured with capacitive test points, to determine if cable is energized. Contamination, moisture, dirt, etc. around the test point or use of the wrong measuring equipment can provide a false "no voltage" indication of an energized elbow. To prevent serious or fatal injury treat the elbow as energized until the "no voltage" test point indication is confirmed by other means.
3. After voltage detection has been made, clean and lubricate the inside surface of the cap with silicone grease and replace it on the test point.

CABLE CUT BACK TEMPLATE

