



**POWER
SYSTEMS, INC.**

ELBOW CONNECTOR DEADBREAK ONLY!

25 KV CLASS FOR 35KV DEADBREAK OPERATION

DESCRIPTION

CAUTION: THE EQUIPMENT COVERED BY THESE INSTRUCTIONS SHOULD BE INSTALLED, OPERATED AND SERVICED ONLY BY COMPETENT PERSONNEL FAMILIAR WITH GOOD SAFETY PRACTICES. THIS INSTRUCTION IS WRITTEN FOR SUCH PERSONNEL AND IS NOT INTENDED AS A SUBSTITUTE FOR ADEQUATE TRAINING AND EXPERIENCE IN SAFE PROCEDURES FOR THIS TYPE OF EQUIPMENT.

Be sure that the connectors are rated for the intended application. **NOTE THAT THIS ELBOW IS INTENDED FOR DEADBREAK APPLICATIONS ONLY!**



INSTALLATION

All associated apparatus must be de-energized before performing any installation. Visually inspect parts for damage before using.

STEP 1. Train the cable into the final assembled position. Provide sufficient length of concentric neutral conductor for grounding after installation.

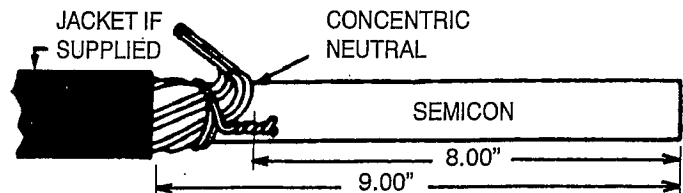
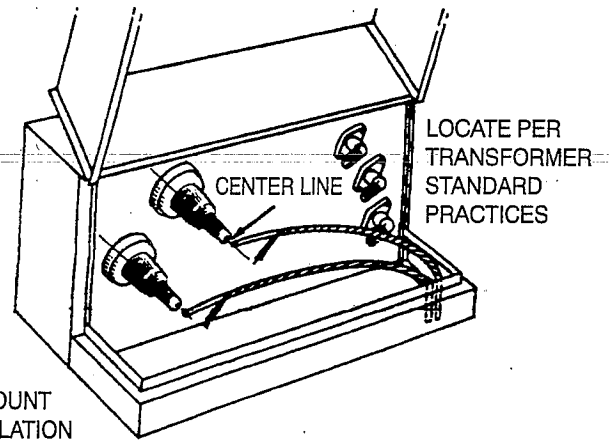
Allow sufficient slack in the cable to pull the elbow connector rod at least one foot away from, and in line with, the mating bushing insert. (See **STEP 9** for neutral lead slack.) Cut excess cable off square and even with the center line of the bushing.

Jacketed Cable

Remove jacket to dimension as shown. Seal jacket per standard operating instructions or by instructions provided with sealing kits.

URD Cable

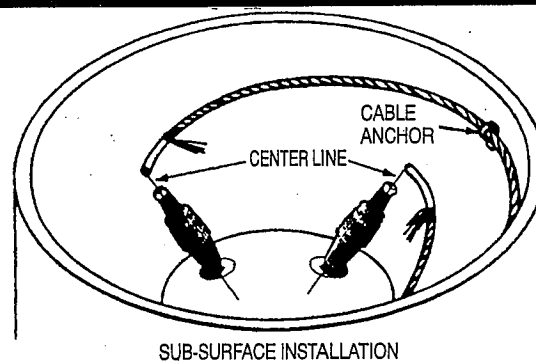
Secure concentric neutral to cable as shown.



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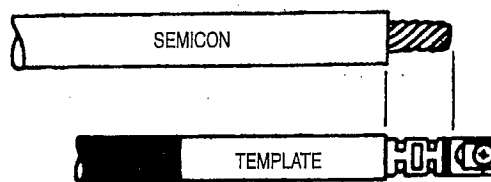
The cable must be straight along the length that extends into the elbow. The minimum bending radius of the remaining cable should be accordance with the cable manufacture's recommendations. Also train and support the cable to minimize the strain on the elbow and provide the required distances between parts during disassembly.



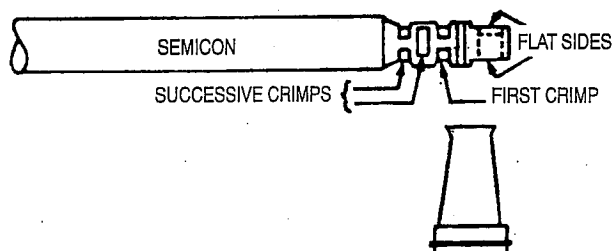
SUB-SURFACE INSTALLATION

STEP 2. Strip back insulation to expose the conductor, taking care not to nick the conductor and using the template as a guide.

TEMPLATE SELECTION: Printed adjacent to center fold of this instruction, you will find templates which apply to the various connectors that may be provided in the elbow kit. Using the connector catalog number and length, determine the correct template to use.



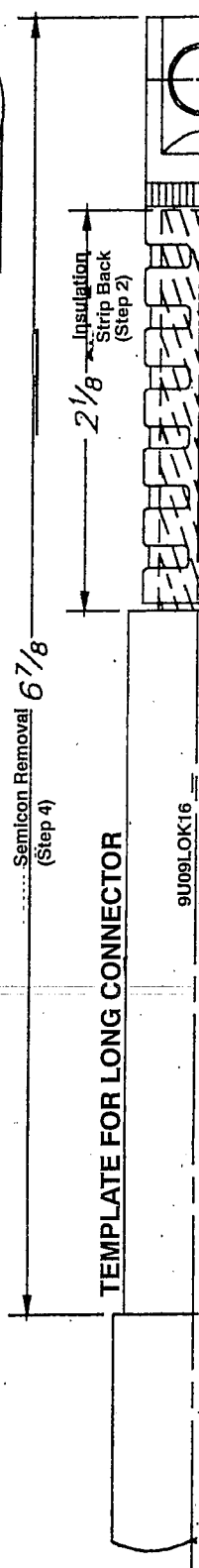
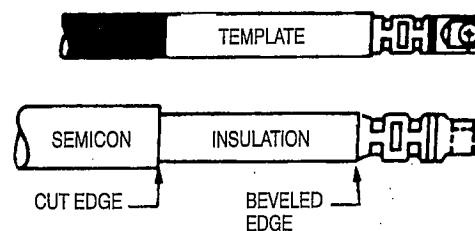
STEP 3. Wire brush the conductor and immediately install the ProbeLok™ crimp connector. Rotate until either flat side is properly aligned with the mating part. See Table 1 for recommended crimp tools and dies. Rotate the tool between each successive crimp to prevent connector distortion. Re-align the connector with the cable to eliminate any bends caused by crimping. Remove any excess connector joint compound forced out of connector during crimping.



STEP 4. Using the template as a guide, remove the semicon, taking care to avoid lifting the semicon from the insulation. Use extreme caution to avoid cutting into or otherwise damaging the insulation. Bevel the edge of the insulation adjacent to the connector to facilitate insertion into the elbow.

Remove any residual semicon from the insulation using a solvent-dampened cloth or non-conducting abrasive strip, if necessary. When using solvent, do not wipe from the semicon onto the insulation.

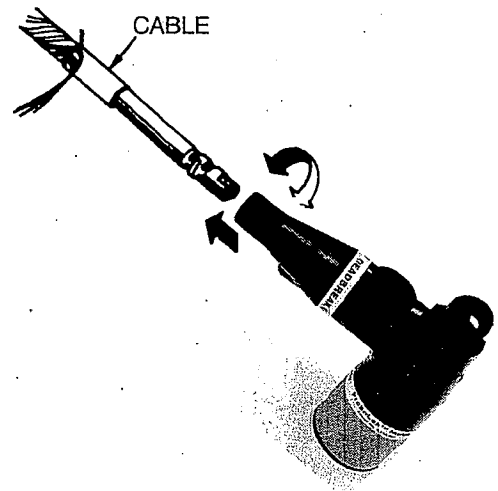
Bevel the edge of the insulation adjacent to the connector to facilitate insertion into the elbow.



STEP 5. Apply lubricant supplied to the surface of the insulation, ProbeLok™ connector, and bore of the elbow. Also, lubricate the elbow mating interface thoroughly.

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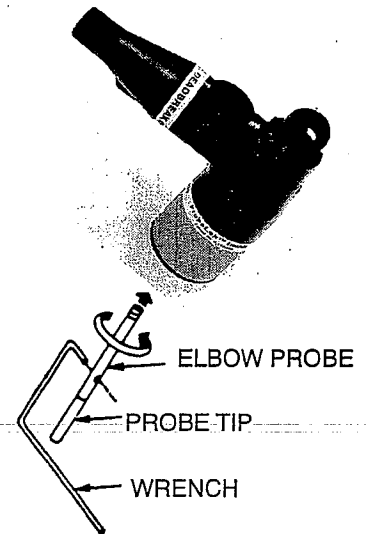
STEP 6. Slide the elbow onto the cable, using a back and forth twisting motion. Final seating of the elbow should align elbow and ProbeLok™ connector. Minimize twisting for final 1 inch of cable insertion to avoid interference with elbow conductive internal insert.



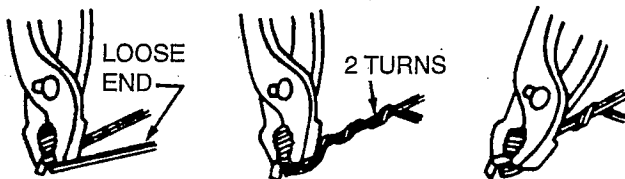
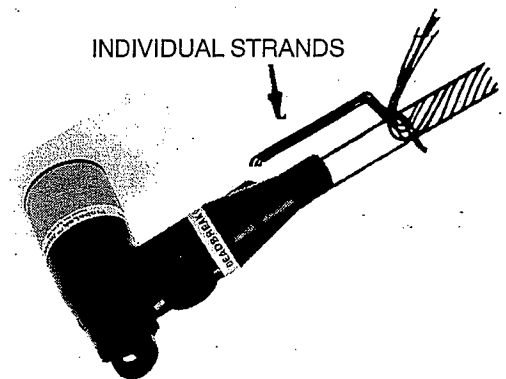
STEP 7. Turn the elbow until the elbow probe can be assembled into the ProbeLok™ connector. Insert the elbow probe into the ProbeLok™ connector and hand tighten to avoid cross threading; then tighten with the wrench provided until the wrench permanently deforms. (Then discard the wrench.)

If other tightening tools are used, they should produce a torque exceeding a minimum recommended 110 inch pounds for the contact rod to connector tightening.

Keep the elbow probe tip free of dirt at all times.



STEP 8. Using one or more strands of wire, connect the concentric neutral to the elbow grounding tab near the cable entrance. A tight connection will provide positive grounding for the elbow shield. Use individual single strands of #12 awg or #14 awg. **DO NOT** use a strand from the cable neutrals.



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STEP 9. See appropriate instructions for preparing the mating connector before installation of the elbow...

Using an insulated shotgun tool, carefully align the elbow with mating part and insert the elbow probe tip approximately one and one half inches. Then thrust the elbow into the mating part, avoiding any off-axis operation. The concentric neutral must then be connected to the ground and enough slack provided to allow the elbow probe to be pulled at least one foot away from the mating part. Train all grounds so they are a maximum distance away from the operating interfaces.

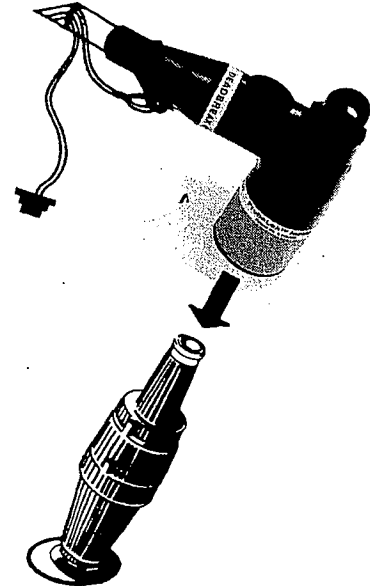


TABLE 1

RECOMMENDED CRIMP TOOLS AND DIES FOR HUBBELL SEPARATE CONNECTOR SYSTEMS

Connector Diameter	Manufacturer	Tool	Die	No. of Crimps For Connectors	
				Short	Long

EEl DESIGNATION: 8A

5/8"	Anderson	VD-5 & 6	---	3	5
	Burdly	MD6	BG (NOSE)	4	6
			W-BG	2	3
			W243	2	4
			Y35 & Y35L	U-BG	2
	Kearney	O	U243	1	2
			5/8 (Nose)	4	6
			5/8-1	3	6
	H	9/16		2	4
				2	4
Homac	UT5	TU	2	4	

EEl DESIGNATION: 10A

3/4"	Anderson	VC-5 & 6	---	3	5	
	Burdly	MD6	W247	2	4	
			Y35 & Y35L	U247	1	2
			U27ART	2	3	
			O	737	4	7
	Kearney	H	747	2	4	
			737	2	4	
			747	2**	3	

EEl DESIGNATION: 11A

7/8"	Anderson	VC-5 & 6	---	3	---
	Burdly	MD6	W249	2	---

** Crimps may overlap slightly.

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FOR FURTHER INFORMATION WRITE TO:

HUBBELL POWER SYSTEMS, INC.

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