

Terminating Power Cables Using Compression Connectors and Lugs

1. Updating Practice 256-050-207

1.1 Purpose This addendum updates the information in GTE Telephone Operations Practice 256-050-207, Issue 5, March 1994.

1.2 Filing Instructions The following chart provides instructions for updating this practice.

Step	Updating Practice 256-050-207
1	Remove pages 21 and 22.
2	Replace them with the new pages attached to this addendum.

1.3 Revision Bars Revision bars mark all parts of the practice changed by this addendum.

10. Covers—Description and Installation

10.1 Using Heat Shrink Covers

Type HS Thomas & Betts covers are heat-shrink treated, thick-wall insulators designed to provide a mechanically rugged insulation over-straight-through connectors and C-taps. They have an ordering range of #12 through 1000 kcmil. Ordering information follows:

- HS12-6 – length 3 inches; serves #12 through 6 gauge (Item ID 767665).
- HS4-30 – length 5 inches; serves #4 through 3/0 gauge (Item ID 767576).
- HS40-400 – length 8 inches; serves 4/0 through 400 kcmil (Item ID 769819).
- HS500-1000 – length 9 inches; serves 500 through 1000 kcmil (Item ID 767667).

Type HS covers are tubular and must be placed over the cables before splicing or crimping a lug.

10.2 Shrinking the Covers

After the HS covers are in place, begin shrinking by heating at the center of the sleeve and proceed toward both ends. Keep the heat gun about one inch from the surface, and keep the heat gun moving to avoid local overheating. Continue until no more shrinking is observed.

NOTE: See heat gun precautions in Section 12.

Use a drop cloth under shrinking cover to:

- Avoid burns as the glue gets hot.
- Prevent glue from dripping into equipment.

10.3 Snap-On Covers

Hard shell covers are made of:

- A high-impact black thermoplastic with a neoprene interseal sponge.
- Fire-retardant materials.

Hard shell covers may be placed over either H- or C-taps (refer to Exhibits 2 and 3).

10.4 Installing the Covers

When cable size is between 400 and 1000 kcmil, tear out appropriate filler tabs to reduce installation force. This also provides a positive seal around the cables.

Align cover halves centrally over the connector so that the:

- Inner and outer teeth interlock.
- Body of the connector lies between the pads (Exhibit 16).

With the palm of your hands, squeeze the cover until the teeth fully engage. Verify that the ends are sealed.

NOTE: It may be necessary to remove a small section of sponge to install the cover. The ends must be sealed upon completion.

11. End Caps—Description and Installation

11.1 Description

This part covers the method of installing the Raychem Corporation type heat-shrinkable cable end caps.

End caps provide a mechanically rugged insulation cover for stub-ended power cables, sizes #8 through 1000 kcmil, up to 600 volts in indoor, dry locations.

Ordering information is shown in the following chart.

Part #	Item ID	Range
HSC8-4	768815	#8-#4
HSC2-20	769823	#2-#2/0
HSC30-250	769824	#3-250 kcmil
HSC300-600	769825	300-600 kcmil
HSC700-1000	769826	700-1000 kcmil

NOTE: End caps provided have filler material within the end cap.

11.2 Installing the End Cap

Cut the cable end squarely and remove any sharp protrusions, such as wire strands that might damage the shrinkable cap during installation.

Dead ended wire, sizes #10-#14, used in DC and Ground applications must be finished as follows:

- Cut the lead squarely and fold one inch of the lead back upon itself.
- Slide a three inch piece of heat-shrink material over the end and heat shrink. The end of the heat shrink material must not overhang the folded end.

Remove the end cap from the package and place it over the end of the cable conductor strands. Using a heat gun, begin heating the cap from the closed end toward the open end. Keep the heat gun about one inch from the surface. Heat uniformly around the entire circumference of the cap. Do not direct the head of the gun on any other object other than the heat-shrink end cap. Heat until the cap conforms (tightly) to the cable and no more shrinking is observed.

See Section 12 for the proper use of a heat gun.

12. Proper Use of a Heat Gun

12.1 Proper Use

The Model PA1871 heat gun or equivalent should be used with an optional reflector. Do not direct the gun toward any object other than the head-shrink tubing or end cap materials. If this is unavoidable because of closeness of the working area, insulate the affected area with a fireproof canvas.

CAUTION: While working in close proximity to a fire-detection head such as Pyr-a-larm® or Fenwal Detect-A-Fire®, drape fireproof canvas around the head to prevent the movement of air produced by the heat gun from contacting the unit. Do not point the heat gun toward any detection head.

Pyr-a-larm is a registered trademark of Pyrotronics, a division of Baker Industries.
Detect-A-Fire is a registered trademark of Fenwal Incorporated.