

related literature | Search [www.corning.com/opcomm](http://www.corning.com/opcomm). Click on “Resources.”

0504_NAFTA_AEN	Product Specifications, OptiSheath® Sealed Terminal, UCA Series
206-339	Instruction, Wall-Pole-mounting Bracket for UCAO Closures
001-284	Instruction, Splice Trays Using Heat-shrink Splice Protectors
009-043	Instruction, OptiSheath® Extension Kit for SST-Drop™ Cable
206-371	Instruction, Pressure Test Valve Kit

## Table of Contents

1.	Carton Contents . . . . .	3
2.	Use and Application . . . . .	4
2.1	Network Planning . . . . .	4
2.2	Tools and Equipment Required . . . . .	4
3.	Removing the Terminal Cover (Optional). . . . .	5
4.	Preparing The Cable . . . . .	6
4.1	Remove Cable Sheath and Pigtail Jacket . . . . .	6
4.2	Install Bonding Hardware (Armored Cable Only) . . . . .	8
4.3	Install Strain-relief Hardware. . . . .	9
4.3.1	Install Strain-relief Bracket(s) . . . . .	9
4.3.2	Trim Nonmetallic Central Strength Member . . . . .	9
4.3.3	Trim and Secure Metallic Central Strength Members (if applicable). . . . .	9
4.3.4	Install Restraint Cap . . . . .	9
4.4	Mark Cable . . . . .	10
5.	Installing Cable . . . . .	10
5.1	Apply Sealing Tape to Terminal. . . . .	10
5.2	Apply Sealing Paste and Tape to Cable . . . . .	11
5.3	Insert Cable into Terminal . . . . .	12
5.4	Use a Dummy Plug, if Necessary . . . . .	12
5.5	Secure the Cable . . . . .	14
6.	Grounding Armored Cable, If Applicable . . . . .	15
7.	Installing Buffer Tube Holders And Tray Stacker . . . . .	15
8.	Installing The Sealing Gasket . . . . .	16
9.	Preparing Fiber For Mid-span Applications . . . . .	16
9.1	Splice Loose-tube Input Fibers to Pigtails . . . . .	17
9.1.1	Prepare Buffer Tube for Splicing . . . . .	17
9.1.2	Prepare Pigtail for Splicing . . . . .	18
9.1.3	Secure Buffer Tube and Pigtails to Tray . . . . .	19
9.1.4	Splice Fiber to Pigtail . . . . .	19
9.1.5	Secure Splice Tray . . . . .	20
9.2	Splice Ribbon Fibers to Pigtails . . . . .	21

9.2.1	Prepare Ribbon Fiber for Splicing . . . . .	21
9.2.2	Prepare Pigtail for Splicing . . . . .	22
9.2.3	Secure Ribbon Fibers and Pigtails to Tray . . . . .	23
9.2.4	Splice Fiber to Pigtail . . . . .	23
9.2.5	Secure Splice Tray . . . . .	24
9.3	Splice Ribbon Fan-out Fibers to Ribbon Fibers . . . . .	25
9.3.1	Prepare Ribbon from Fan-out Body for Splicing . . . . .	25
9.3.2	Prepare Ribbon Fiber for Splicing . . . . .	26
9.3.3	Secure Ribbon Fibers to Tray . . . . .	27
9.3.4	Splice Fibers . . . . .	27
9.3.5	Secure Splice Tray . . . . .	27
10.	Managing Pigtail Fibers . . . . .	28
10.1	Remove Dust Caps From OptiFit® Adapters Inside the Cover . . . . .	28
10.2	Clean Connectors and OptiFit® Adapters . . . . .	29
10.2.1	Clean OptiFit Adapters inside the Cover . . . . .	29
10.2.2	Clean Connectorized Pigtails . . . . .	29
10.2.3	Install Connectors into OptiFit Adapters . . . . .	29
11.	Installing Flat Drop Cable Into Add-a-cable Port Adapters . . . . .	29
11.1	Install Cable . . . . .	30
11.2	Prepare Buffer Tubes for Splicing . . . . .	31
11.3	Secure Buffer Tubes/Cables to Splice Tray . . . . .	31
11.4	Splice Drop Cable Fiber to Distribution Fiber . . . . .	31
11.5	Secure Splice Tray . . . . .	32
12.	Sealing the Terminal . . . . .	32
12.1	Verify Sealing Gasket Orientation is Correct. . . . .	32
12.2	Reattach the Cover, if Removed. . . . .	32
12.3	Pressure Test the Terminal . . . . .	33
13.	Grounding the Terminal . . . . .	33
14.	Mounting the Terminal . . . . .	33
14.1	On a Wall . . . . .	33
14.2	In a Handhole . . . . .	34
15.	Mating Connectorized Drop Cable To The Terminal . . . . .	35
15.1	During Initial Installation . . . . .	35
15.1.1	Clean the OptiFit®™ Connectors on the Drop Cable(s) . . . . .	35
15.1.2	Clean OptiFit® Adapters . . . . .	36
15.1.3	Mate Connectorized Drop Cable. . . . .	36
15.2	After Initial Installation. . . . .	37
16.	Routing Connectorized Drop Cable to the Subscriber's Premises . . . . .	38
17.	Mating Connectorized Drop Cable at the Premises. . . . .	38
18.	Maintenance and Repair Procedures . . . . .	38
18.1	Maintain the Terminal . . . . .	38
18.2	Repair Procedures . . . . .	38
18.3	Reenter the Terminal. . . . .	38
18.4	Replacing Or Adding Cables. . . . .	39
18.5	Replace Components . . . . .	39

# 1. Carton Contents

- |    |                                                                                   |    |                                                                                                |
|----|-----------------------------------------------------------------------------------|----|------------------------------------------------------------------------------------------------|
| 1  | (1) Terminal with splice tray stacker                                             | 12 | (1) Wall- or handhole-mounting bracket                                                         |
| 2  | (2) Sealing wedges                                                                |    | (2) screws and instructions                                                                    |
|    | (2) Collars                                                                       | 13 | (1) Sealing gasket                                                                             |
|    | (4) Screws                                                                        | 14 | (1) Box of pigtails (4, 6, 8, or 12 as ordered for Advantage application of the terminal only) |
| 3  | (2) Precut sealing tape                                                           | 15 | (1) Splice tray and instruction                                                                |
| 4  | (1) Roll of sealing tape                                                          | 16 | (1) Accessory kit containing:                                                                  |
| 5  | (3) Dummy plugs (1 with air valve)                                                |    | • (2) Strain-relief brackets                                                                   |
| 6  | (6) Buffer tube holders                                                           |    | • (2) Hose clamps                                                                              |
| 7  | (2) Cleaning cloths                                                               |    | • (1) Sealing paste - labeled as "Dichtpaste"                                                  |
| 8  | (1) Gauge for sealing tape                                                        | 17 | (1) Wrench (Classic application only)                                                          |
| 9  | (1) 5-ft or (1) 10-ft length of 1/4-inch spiral wrap (Advantage application only) |    |                                                                                                |
| 10 | (1) 12-inch hook-and-loop strap                                                   |    |                                                                                                |
| 11 | (3) Split grommets and cable ties                                                 |    |                                                                                                |

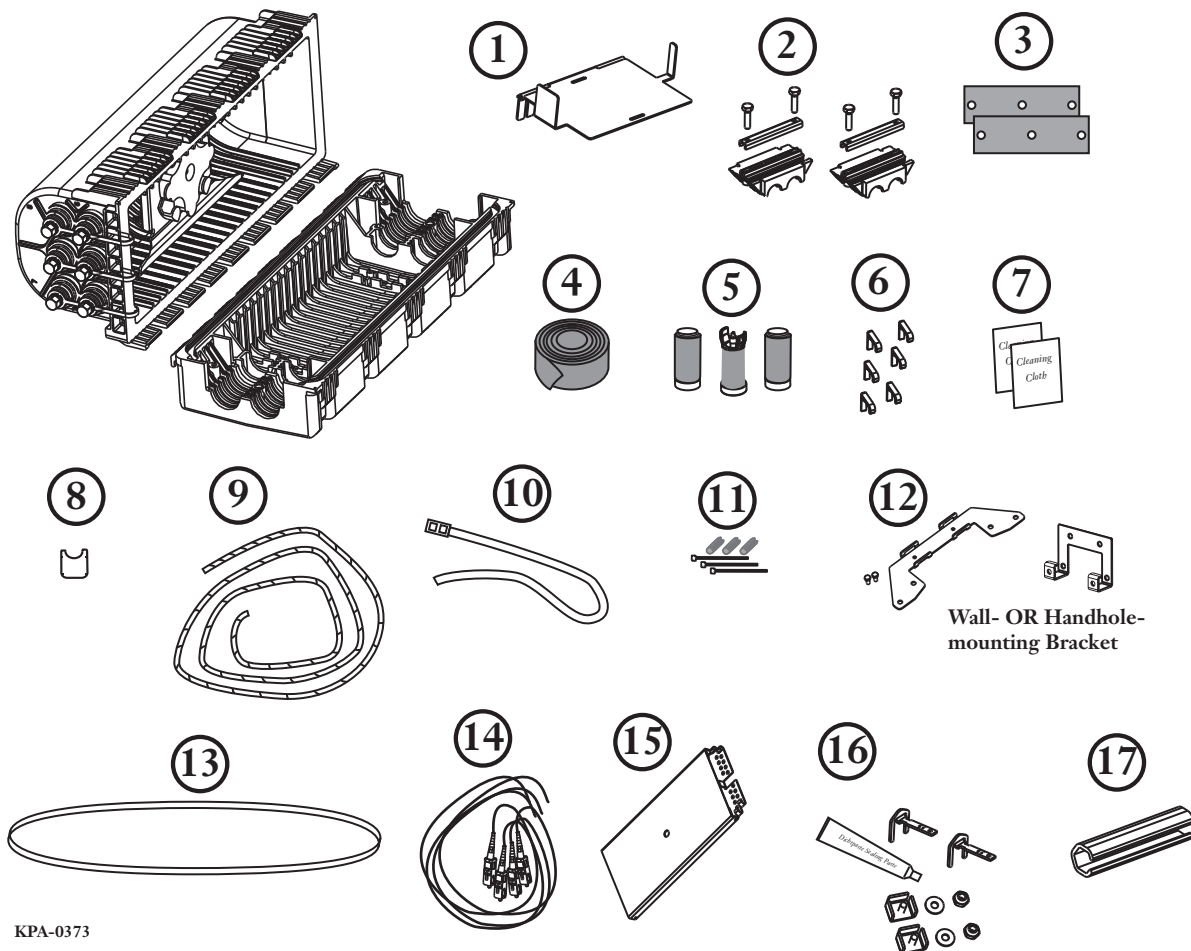


Figure 1

## 2. Use and Application

### 2.1 Network Planning

The OptiSheath® Advantage and Classic Sealed UCA Terminal allows a provider to bring service from a central office, headend, or remote terminal serving a substantial number of subscribers to an individual subscriber's site, such as a home, apartment, individual business, or business suite.

Installation of the terminal requires engineering the network prior to deployment of the terminals. Engineers should determine the required number and dimension of sheath openings, the distance between the openings, and the number of OptiFit® connectors to be installed.

Contact Corning Optical Communications Engineering Services at 1-800-743-2671 for assistance in network planning and placing the order for network deployment products.

### 2.2 Tools and Equipment Required

The following tools and materials are required to complete this procedure:

- Tape measure
- Scissors
- Side cutters/diagonal cutters
- Cable or utility knife
- Flat-blade screwdriver
- 5/16-inch nut driver
- Hand pump or regulated tank supply
- 3/8 -inch socket and ratchet
- Marker
- Cable crimping tool (p/n M67-020) to anchor buffer tubes under splice tray tabs
- Single-fiber heat-shrink splice protectors (p/n 2806032-01 for a pack of 50 single-fiber, 40 mm protectors or p/n 2806031-01 for a pack of 50 single-fiber, 60 mm protectors), purchased separately
- Vinyl tape
- Ground kit (p/n SCA-KT-GND) to ground armored cable

Corning recommends use of the following:

- Optical Fiber Access Tool (p/n OFT-000) to split the buffer tube in mid-span applications and access individual fibers in ALTOS® cable
- Universal Access Tool (p/n UAT2-000) to split mid-span buffer tubes in SST-Ribbon™ cables
- Ribbon Splitting Tool (p/n RST-000) to access individual fibers in SST-Ribbon cables
- Ideal™ Buffer Ring Cutter (p/n 100107-01) to split end-span buffer tubes
- Buffer Stripping Tool (p/n 3206001-01) to remove jacket from pigtail fibers
- Optical Access Connector Cleaning Kit (p/n TKT-OTAP-CLN-001) to clean the OptiFit® adapters and connectors
- BAND-IT®- type tool for mounting terminal to a pole
- Torque wrench

### 3. Removing the Terminal Cover (Optional)

**IMPORTANT:** Although the cover can be removed, it is not recommended. Pigtail fiber routing is easier with the cover installed on the terminal. If the cover is removed, it must be reinstalled before routing fiber.

**Step 1:** Open the latches on the cover using a flat-blade screwdriver Figure 2A.

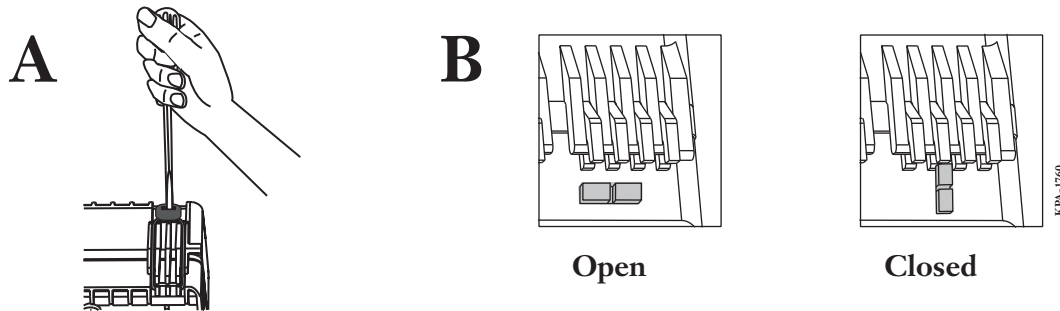


Figure 2

**Step 2:** Turn the terminal around with the hinges facing you. Rotate the retention locks at the rear of the terminal one-quarter turn to the open position Figure 2B.

**Step 3:** Position the cover at a 90-degree angle from the base. Push down on the hinge pins until they are free of the hinges in the base. Pull the cover toward you and lift it away from the terminal (Figure 3).

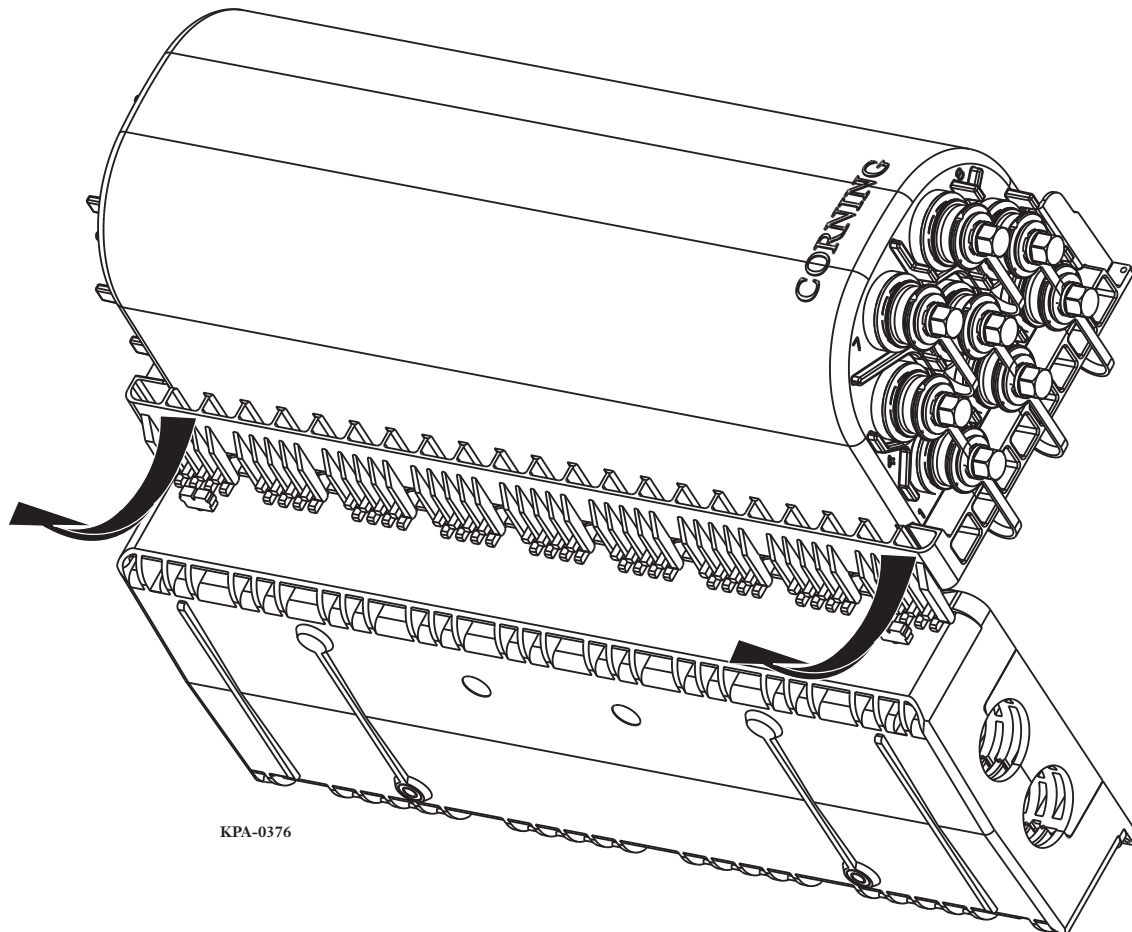






Figure 3

## 4. Preparing The Cable

Cable preparation is the same for the Classic and the Advantage versions of the terminal.

### 4.1 Remove Cable Sheath and Pigtail Jacket

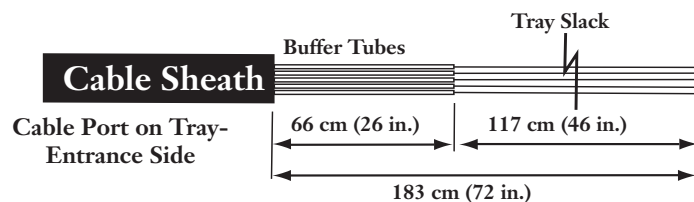
	<b>WARNING:</b> Do not install telecommunications equipment or work with telephone wiring during a lightning storm. Telephone lines can carry high voltages from lightning causing electrical shock resulting in severe injury or death.
	<b>CAUTION:</b> Corning recommends the use of safety glasses (spectacles) conforming to ANSI Z87 for eye protection from accidental injury when handling chemicals, cables, or working with fiber. Pieces of glass fiber are very sharp and have the potential to damage the eye.
	<b>CAUTION:</b> The wearing of cut-resistant safety gloves to protect your hands from accidental injury when using sharp-bladed tools and armored cable is strongly recommended. Use extreme care when working with severed armor. There will be a sharp edge where armor is cut. To minimize the chance of injury from the cut armor, cover the exposed edge with a wrap of electrical tape. To minimize the chance of injury from sharp-bladed tools, always cut away from yourself and others. Dispose of used blades and armor scrap properly.
	<b>CAUTION:</b> Fiber optic cable is sensitive to excessive pulling, bending, and crushing forces. Consult the cable specification sheet for the cable you are installing. Do not bend the cable more sharply than the minimum recommended bend radius. Do not apply more pulling force to the cable than specified. Do not crush the cable or allow it to kink. Doing so may cause damage that can alter the transmission characteristics of the cable; the cable may have to be replaced.

**IMPORTANT:** Typical lengths when using Corning Optical Communications' splice trays are illustrated. Refer to instructions provided with your Corning splice tray. Since the actual application may vary, it is recommended to route the buffer tubes as they will lie in the terminal to determine actual strip lengths before cutting fiber. Refer to routing illustrations.

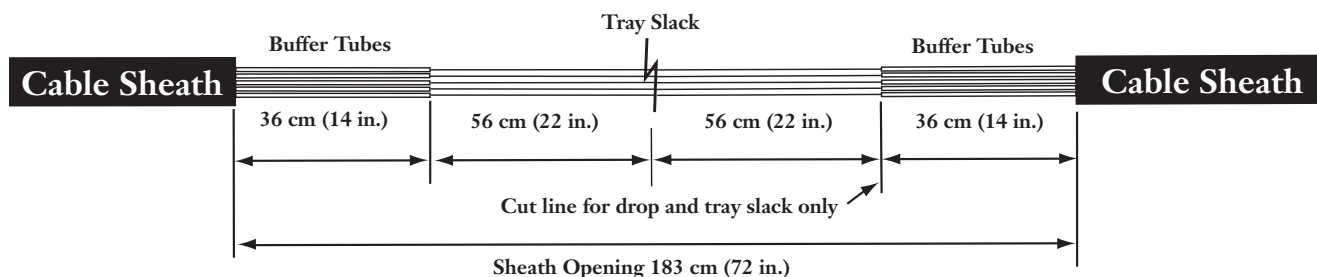
- Step 1:** Remove the length of cable sheath and armor (where applicable) as indicated in (Figure 4) for the appropriate installation application (butt, express, mid-span, or end-span) according to the manufacturer's directions for the cable type being installed.
- Step 2:** Cut the central strength member of each cable to 15 cm (approximately 6 inches) from the sheath using side cutters. Leave 15 cm (approximately 6 inches) of yarn, if present, for strain-relieving the cable.

**NOTE:** Do not expose the bare fiber until the cable has been secured in the end cap and the fiber is ready for splicing.

## Butt Configuration in End-span Applications

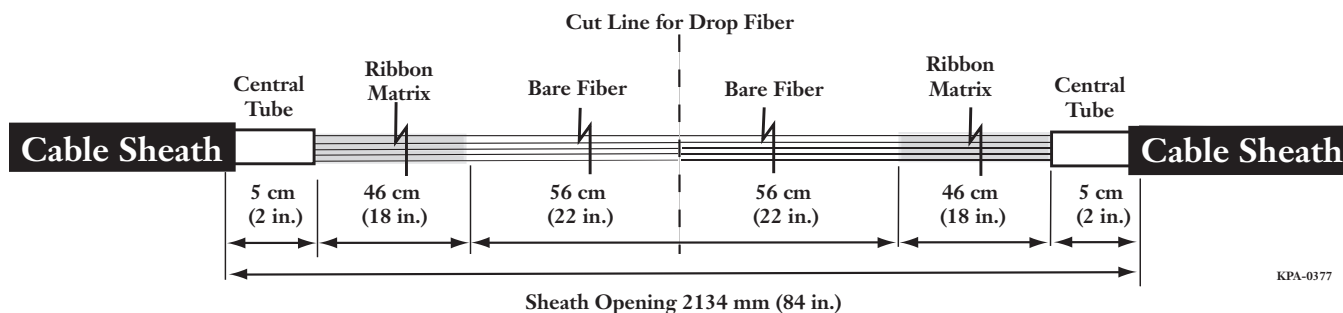


## Butt Configuration in Mid-span Application with Loose Tube Cable



## Butt Configuration in Mid-span Application with Ribbon Cable

(For Ribbon Fiber Cables in End-span Applications, strip 42 inches of sheath and follow the left side of the ribbon cable diagram below.)



KPA-0377

Figure 4



## 4.2 Install Bonding Hardware (Armored Cable Only)

If installing armored cable, it should be grounded to a primary ground. Ground armored cables using bonding hardware (p/n 02-002149-001, purchased separately by contacting your customer service representative).

- Step 1:** Cut a slit into opposite sides of the outer sheath and armor about 2.5 cm (1 inch) from the end of the sheath (Figure 5). To do this, score the armor with a cable knife (being careful not to damage the inner sheath) and split the sheath by flexing it.
- Step 2:** Position the bonding clamp base plate under the armor. The stops of the clamp should just touch the outside of the armor and sheath. Tap the sheath above the ground clamp base to set the teeth.
- Step 3:** Position the top plate and locknut on the outer sheath over the base plate. Tighten with a 3/8-inch wrench so that the teeth on the upper plate are driven into the sheath.

**IMPORTANT:** When the cable has metal strength members, attach the extension bracket to the base plate as shown in the inset before installing the top plate.

- Step 4:** Wrap the bonding connector and split portion of the sheath with a few wraps of vinyl tape.
- Step 5:** Attach terminal of a ground wire equal to or greater than #6 AWG (not provided) over top plate. Add a locknut and tighten to torque value of 23 in-lb.
- Step 6:** Secure the other end of the ground wire as described in Section 6 - "Grounding Armored Cable, if Applicable."

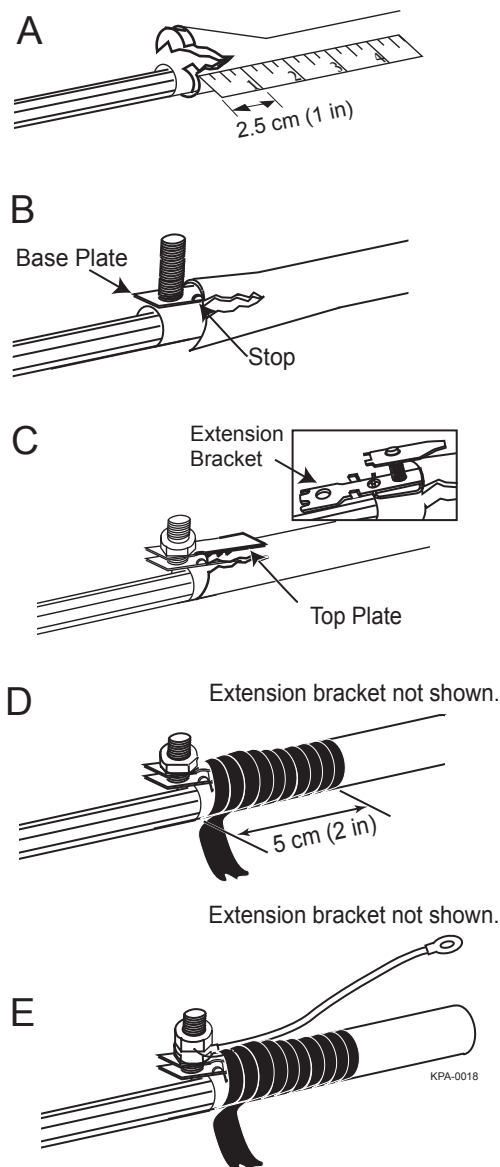


Figure 5

**NOTE:** Ground kit is required to attach bond clamp to grounding locations on terminal.



## 4.3 Install Strain-relief Hardware

Installation of strain-relief brackets prevents pistoning or bowing of central strength members, as well as cable sheath slipping or pullout. You will be required to strain-relieve the cables later in this procedure. When instructed to strain-relieve a cable, refer to this section for the directions on doing so.

### 4.3.1 Install Strain-relief Bracket(s)

**Step 1:** Place a hose clamp over the cable in the notch of the bracket (Figure 6). Position the end of the sheath at the appropriate mark on the bracket.

- 25 mm (1.0 inch) for armored cables (marked as “A” on bracket)
- 19 mm (0.75 inch) for dielectric cables (marked as “N” on bracket)

**IMPORTANT:** If bonding hardware is used, make sure the hose clamp does not overlap the bond clamp.

**Step 2:** Tighten the hose clamp in the notch on the bracket with the tensioning body on the hose clamp as shown (Figure 6). Tighten hose clamp securely to a torque value of 30 in-lb. Wrap hose clamp and bonding hardware, if installed, with vinyl tape as shown in (Figure 6).

**Step 3:** Repeat for the second cable, when applicable.

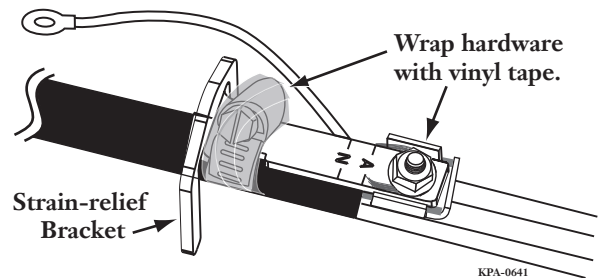


Figure 6

### 4.3.2 Trim Nonmetallic Central Strength Member

If strength member is nonmetallic, trim the strength member flush with the top of the strain-relief bracket or bond clamp (Figure 7 — vinyl tape not shown for clarity).

### 4.3.3 Trim and Secure Metallic Central Strength Members (if applicable)

If strength members are metallic, order p/n UCN-GND-SC20 separately to secure the strength members. Bend them over the slots in the extension bracket of the bond clamp as shown in the inset in Figure 8 and then trim excess.

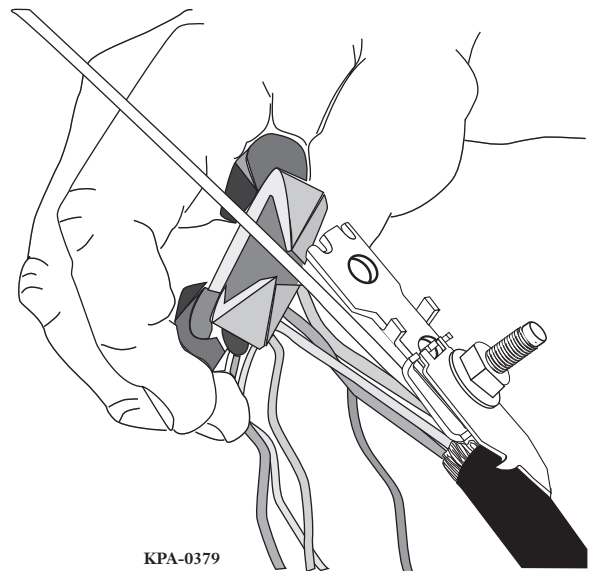


Figure 7

### 4.3.4 Install Restraint Cap

- Step 1:** If aramid yarn is present, wrap yarn twice in a clockwise direction around the restraint cap stud (Figure 8 — vinyl tape not shown for clarity).
- Step 2:** Position the cap behind the bracket.
- Step 3:** Install a washer and nut and tighten securely.
- Step 4:** Repeat for other cables, when applicable.

**IMPORTANT:** Confirm all buffer tubes are clear of the strength elements prior to securing the restraint cap.

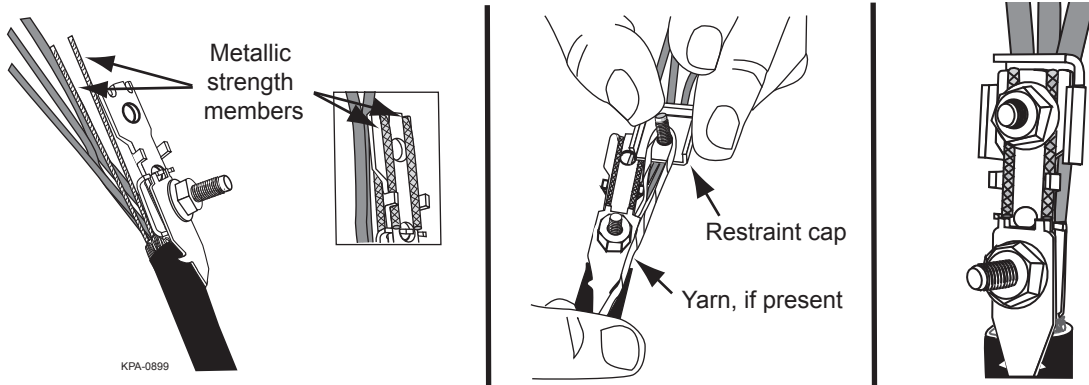


Figure 8

### 4.4 Mark Cable

- Step 1:** Temporarily install the central office side cable into the terminal by sliding the strain-relief bracket into position.
- Step 2:** Mark the cable where the sealing tape will be wrapped around the cable (Figure 9).
- Step 3:** Remove cable from the terminal.

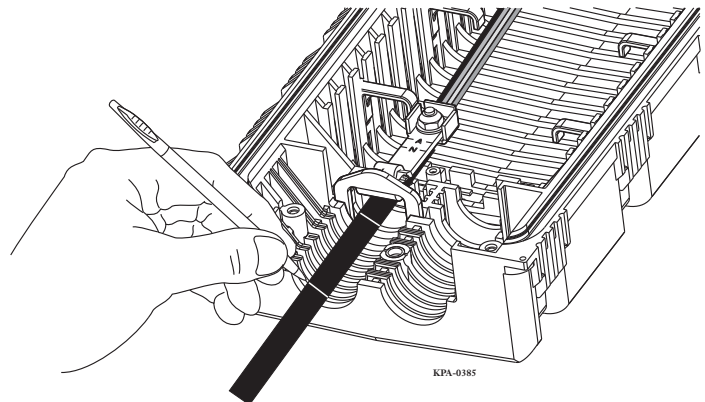


Figure 9

## 5. Installing Cable

### 5.1 Apply Sealing Tape to Terminal

- Step 1:** Remove the wax paper backing from the precut sealing tape.
- Step 2:** Align the center hole in the tape with the center hole in the terminal base and apply sealing tape (Figure 10). Make sure not to obstruct the holes for the sealing wedge screws.

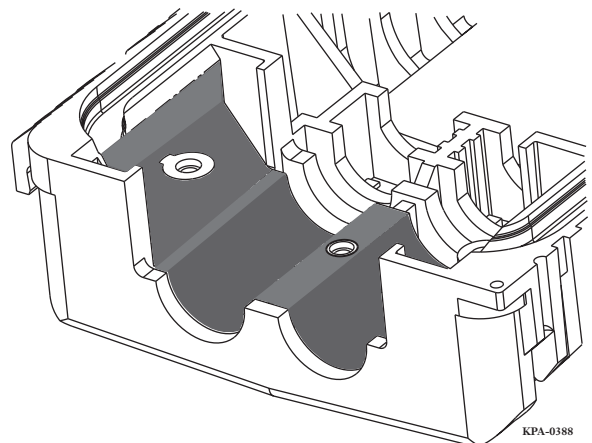


Figure 10

## 5.2 Apply Sealing Paste and Tape to Cable



**CAUTION:** If you are installing outside plant cable or temperature fluctuates widely along any part of the cable, the central member must be strain-relieved. Failure to do so may result in damage to the cable as temperature varies. If the entire length of cable is located in a controlled environment where temperature fluctuation is minimal, it is not necessary to secure the central members. The cable can be strain-relieved by sheath retention alone..



**CAUTION:** Isopropyl alcohol is flammable with a flashpoint at 54°F. It can cause irritation to eyes on contact. In case of eye contact, flush eyes with water for at least 15 minutes. Inhaling fumes may cause mild dizziness. In case of ingestion, consult a physician..

- Step 1:** Clean the cable sheath and remove scratches and cuts by lightly scraping the sheath with the back of a knife. Do not use emery paper.
- Step 2:** Clean the cable where the tape will be applied using the provided alcohol cleaning pad.
- Step 3:** Apply sealing paste “dichtpaste” to the cable. Use wax-paper backing from the sealing tape to spread the paste evenly around the cable in the area where the sealing tape will be applied (Figure 11). Wait for the sealing paste to dry.
- Step 4:** Cut and pull the strip of sealing tape as shown in Figure 11. The tape will stretch and thin before it breaks.

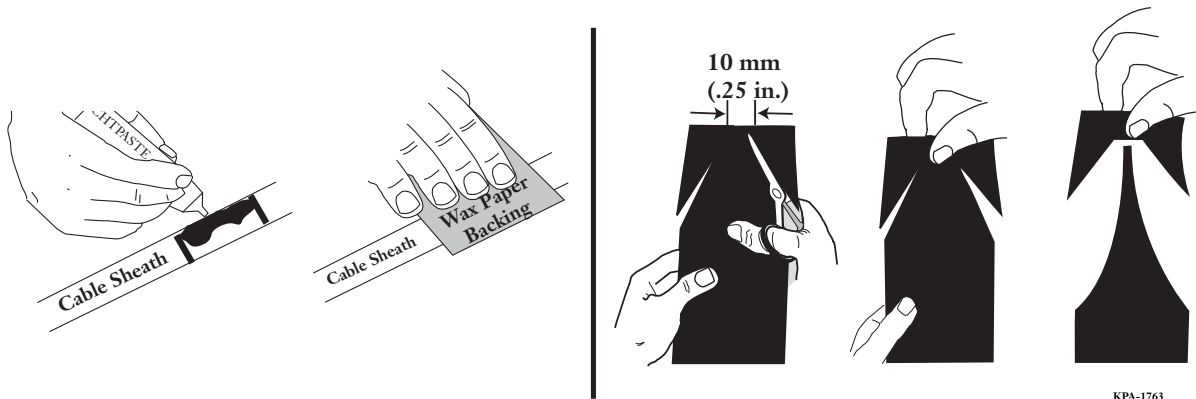


Figure 11

- Step 5:** Apply sealing tape to the cable sheath in the marked area. Wrap the tape until it conforms to the diameter on the supplied gauge (Figure 12). Always finish with a complete wrap that overlaps the starting point by 1/2 inch.

**IMPORTANT:** Failure to wrap the tape to the gauge diameter or to overlap the tape as shown may cause the terminal to leak.

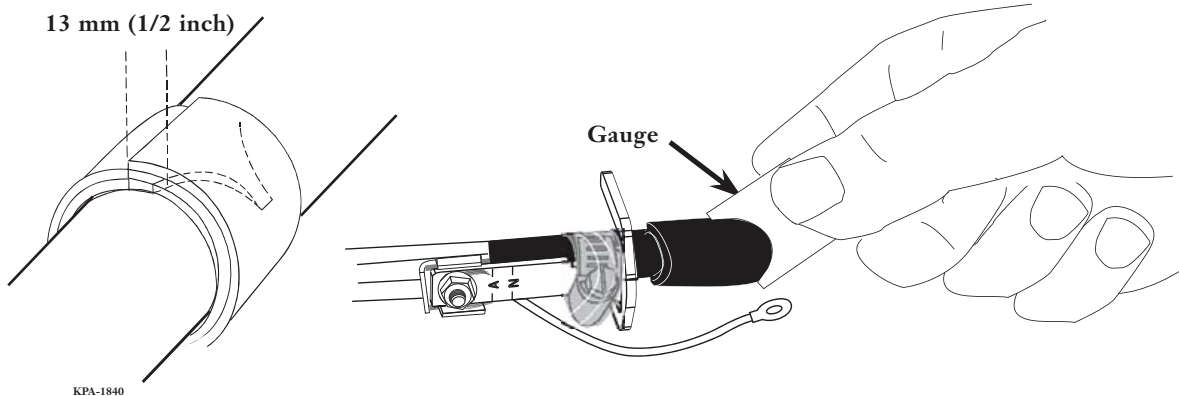


Figure 12

### 5.3 Insert Cable into Terminal

Insert the taped cable(s) into the lower half-shell (Figure 13).

**IMPORTANT:** Do NOT use unapproved flat-profile cables. Install only ONE round or NO flat-profile cable per port. Installing more than one cable (round or flat) per port will create pathways for water to enter the terminal, causing leaks.

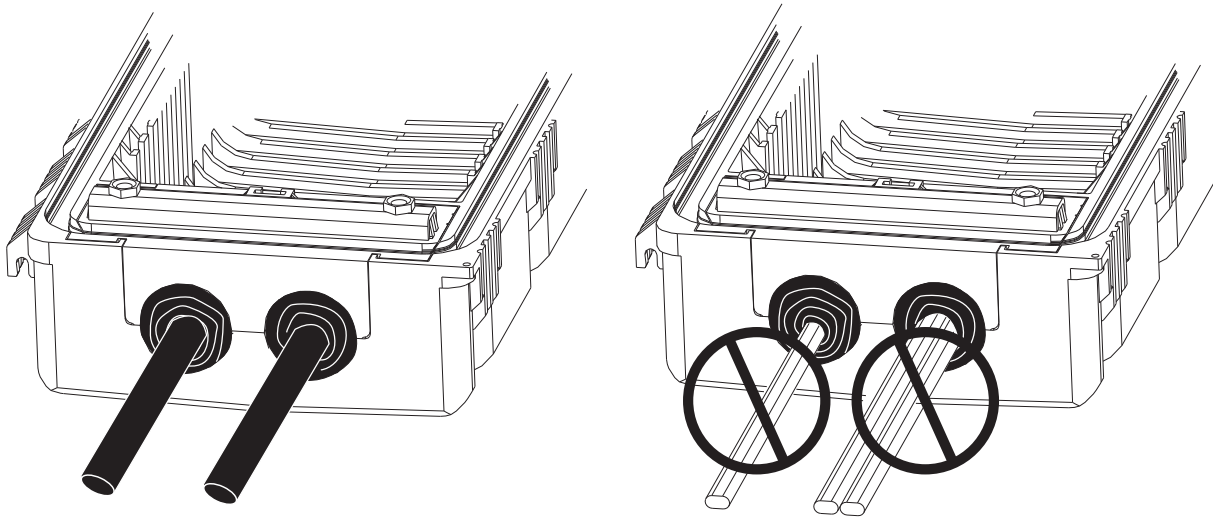


Figure 13

### 5.4 Use a Dummy Plug, if Necessary

Use a dummy plug to fill the unused ports. (A kit [p/n UCA-KT-PLUG] may be ordered containing five additional plugs.)

**Step 1:** Install a prewrapped dummy plug into one of the open ports with the closed end of the plug flush against the outside of the end cap (Figure 14).

**NOTE:** A through-type configuration is shown here. In a butt-type configuration, both cables would exit from the same end and the dummy plug(s) and/or dummy plug with flash valve would be installed in the other end of the terminal.

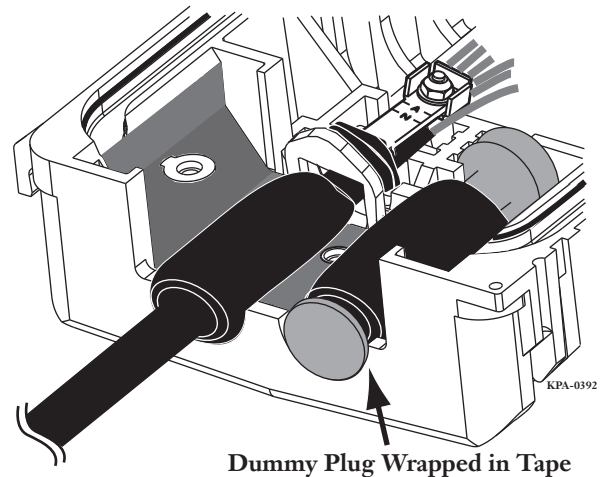


Figure 14

**Step 2:** Install the prewrapped dummy plug with flash valve into the other open port (Figure 15).

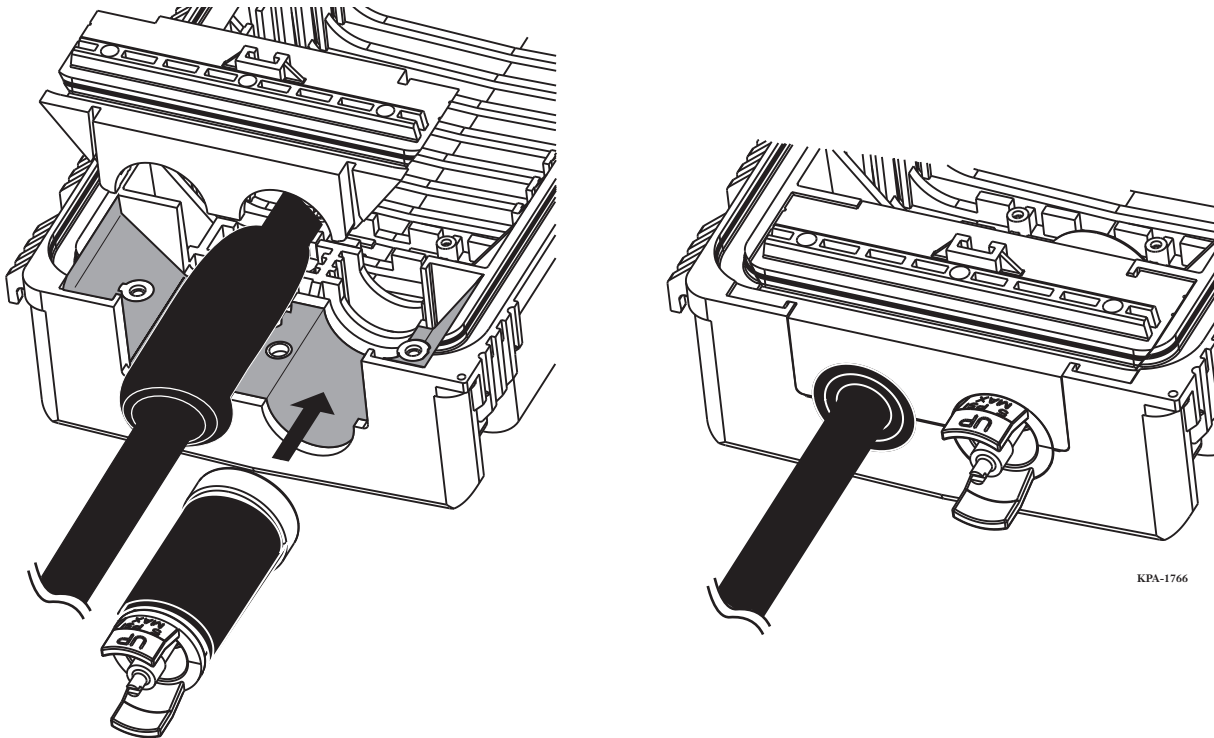


Figure 15

**Step 3:** If using an unwrapped dummy plug, follow the instructions in Section 5.1 and Section 5.2 to install sealing paste and tape on the plug. Use the gauge (Figure 16) to ensure there is enough tape applied to correctly seal the port.

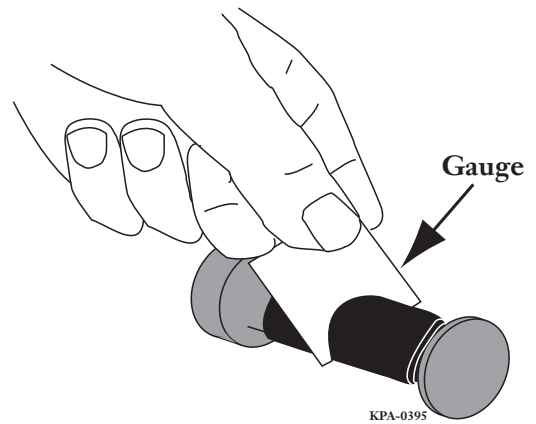
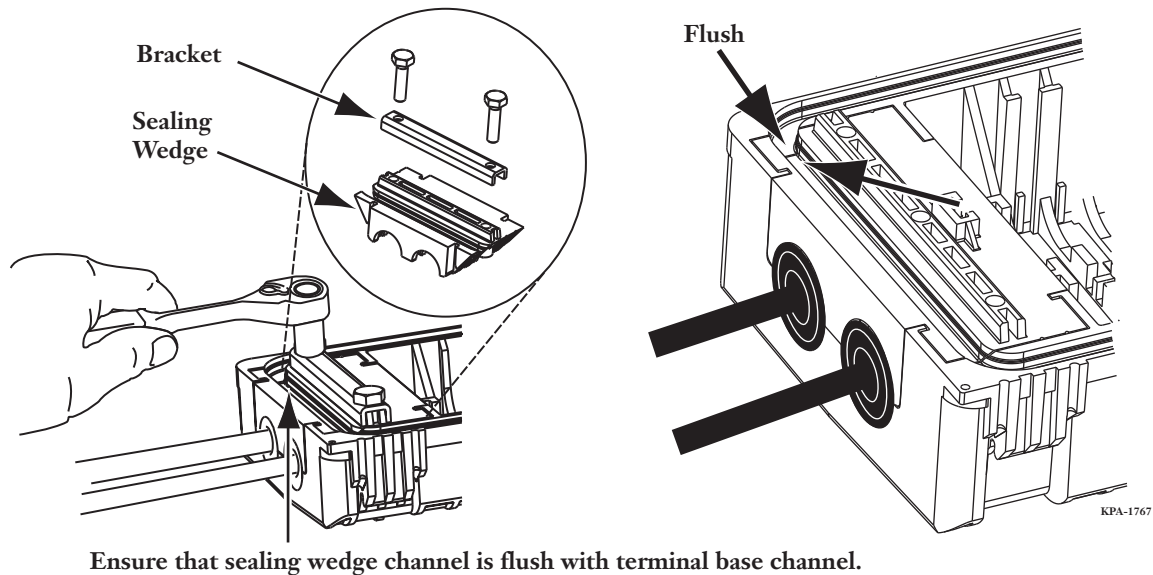


Figure 16

## 5.5 Secure the Cable

**Step 1:** Install the sealing wedge and bracket over the taped cable by alternately tightening the bolts until the wedge is closed (Figure 17). The two surfaces inside the gasket channel must be flush to avoid leaks.



Ensure that sealing wedge channel is flush with terminal base channel.

Figure 17

**Step 2:** Use a small screwdriver to press down the sealing tape in the gasket groove as shown in Figure 18A.

**IMPORTANT:** Do not pull the tape to remove excess from the gasket groove. This will remove the tape below the gasket joint and cause leaks.

**Step 3:** Spread this portion of the sealing tape over the joint of the base and the wedge as shown in Figure 18B. Remove any excess sealing tape from the rest of the joint area. Repeat for each of the four corners where the wedge and the base meet.

**Step 4:** Repeat Section 5 for the cable(s) to be installed in the opposite end of the lower half-shell.

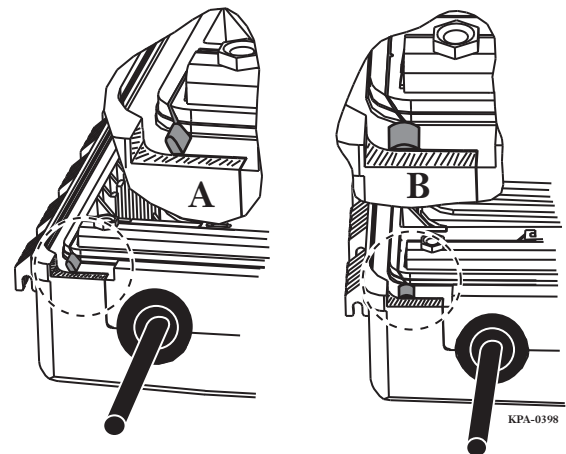


Figure 18



## 6. Grounding Armored Cable, If Applicable

If using armored cable, attach the loose end of the ground wire from the cable grounding hardware to either of the screws shown in (Figure 19).

Ground wires are not provided. Additional grounding hardware may be purchased separately.

- p/n UCN-GNDCBL-20 contains twenty 8-inch #6AWG ground leads
- p/n UCN-GND-SC20 contains twenty ground clamp assemblies

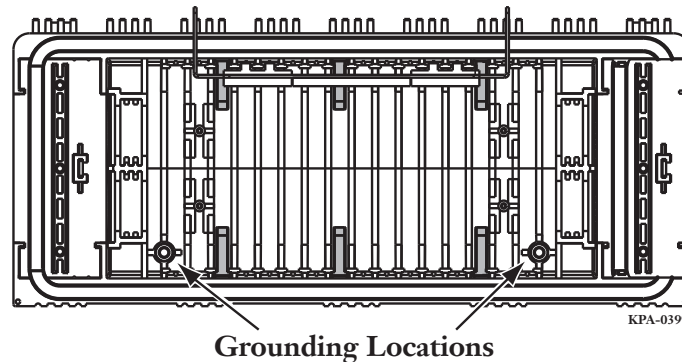


Figure 19

## 7. Installing Buffer Tube Holders And Tray Stacker

- Step 1:** Slide the buffer tube holders into the terminal as shown in Figure 20. The holders can be installed into the slots inside the terminal or into either of the sealing wedges as needed.
- Step 2:** Position the tray stacker on the hinge side of the terminal as far to the left in the base as possible.
- Step 3:** Slide the tray stacker feet into the ridges inside the terminal base as shown.
- Step 4:** Loop the excess buffer tubes/ribbons beneath the holders (strain-relief hardware not shown for clarity). Route loose-tube fibers in a loop. To store excess ribbon fibers, route the ribbons in a figure-eight pattern beneath the holders as described in Section 9.2 - "Splice Ribbon Fibers to Pigtails."

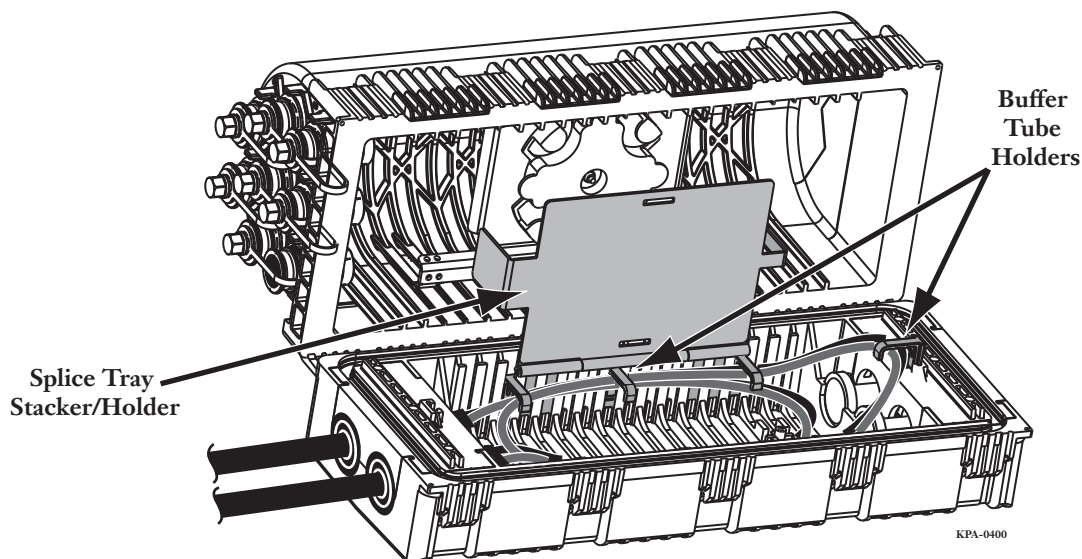


Figure 20



## 8. Installing The Sealing Gasket

**IMPORTANT:** The gasket must be installed before splicing can be performed in the terminal.

Clean channel around the perimeter of the terminal base. Insert the sealing gasket into the lower half-shell with the channel on the gasket facing upward (Figure 21).

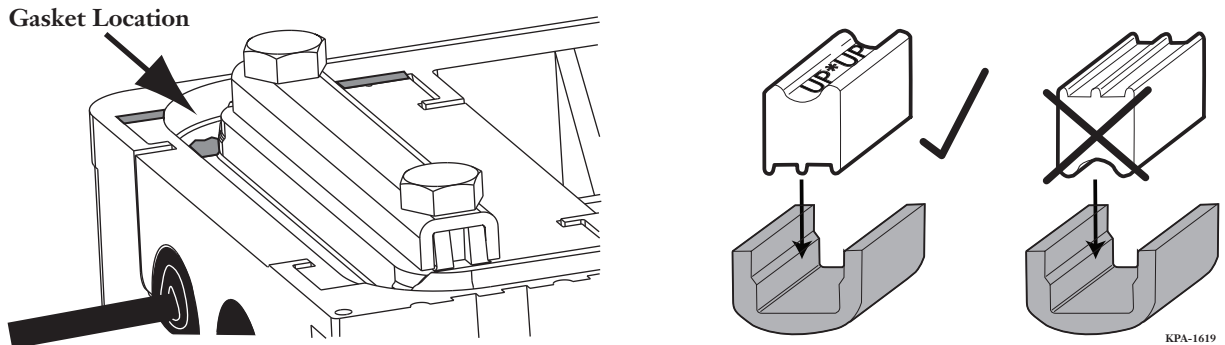


Figure 21

## 9. Preparing Fiber For Mid-span Applications

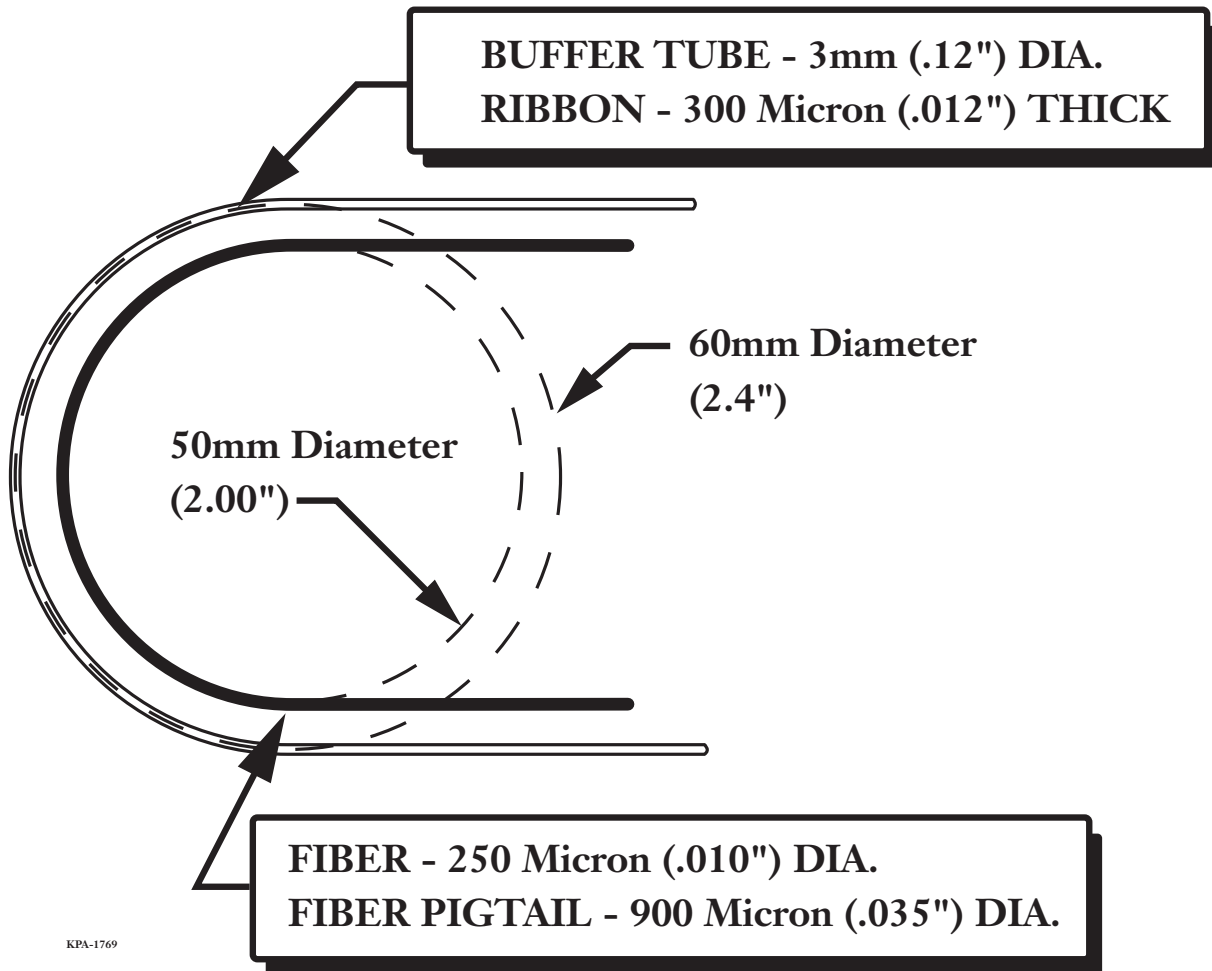


Figure 22



**CAUTION:** Fiber optic cable is sensitive to excessive pulling, bending, and crushing forces. Consult the cable specification sheet for the cable you are installing. Do not bend the cable more sharply than the minimum recommended bend radius. Do not apply more pulling force to the cable than specified. Do not crush the cable or allow it to kink. Doing so may cause damage that can alter the transmission characteristics of the cable; the cable may have to be replaced.

The most important step in handling and installing any type of optical fiber is not to bend the fiber too tightly. Bending the fiber too tightly can cause attenuation (loss of light) or breakage. Use the full-size diagram below for the minimum bend diameter. Figure 22 is a full-size template of the minimum bend radii for various fiber types.

**IMPORTANT:** Never bend any fiber, ribbon, pigtail, or buffer tube tighter than shown in Figure 22. Tighter bends will cause attenuation (loss of signal) and may break fibers.

### OptiSheath® Advantage Versions:

- To splice pigtails to loose-tube fibers, proceed to Section 9.1.
- To splice pigtails to ribbon fibers, proceed to Section 9.2.
- To splice ribbon fan-out body fibers to ribbon fibers, proceed to Section 9.3.

### OptiSheath® Classic Version:

- To install flat drop cable (loose-tube fibers in buffer tubes), proceed to Section 11.

## 9.1 Splice Loose-tube Input Fibers to Pigtails

Before splicing fibers, determine the fiber routing configuration you will use in your splicing application. Buffer tubes may enter the splice tray and have all fibers in the buffer tube spliced at that time or stored in the tray for splicing later. It is also possible to splice one fiber from a buffer tube and express the remaining fibers out of the splice tray. Figure 24 illustrates the recommended routing inside the tray for the fibers being spliced and the express routing of the unused fibers.

**IMPORTANT:** Refer to the instruction manual for your splice equipment for detailed splicing instructions.

### 9.1.1 Prepare Buffer Tube for Splicing

- Step 1:** Separate the distribution buffer tube from the other buffer tubes.
- Step 2:** Remove the cover from the provided splice tray and position the tray in the splice tray stacker so cable tie holes in the tray are toward the right side of the terminal.
- Step 3:** Route distribution buffer tube into the lower right corner of the splice tray. Mark the buffer tube where it enters the splice tray (Figure 23).

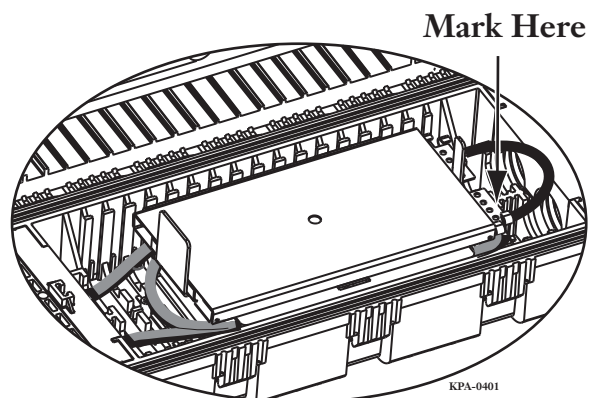


Figure 23

**IMPORTANT:** If input cable entered from the left front port of the terminal, route buffer tubes into the tray at the upper right and exit on lower right. Route pigtails in a counterclockwise direction in the tray.

- Step 4:** Route two loops of buffer tube around the inside perimeter of the splice tray as shown in Figure 24 and exit the tray. Mark the buffer tube where it exits the tray.
- Step 5:** Remove the splice tray from the stacker.
- Step 6:** Use the Optical Fiber Access Tool (p/n OFT-000) to split the buffer tube inside the tray according to the instructions provided with the tool. Remove the buffer tube to access the fibers.
- Step 7:** Determine the distribution fibers to be spliced to 900 micron pigtails and cut the distribution fibers to be spliced at the center of the loop. Do not cut all the fibers; cut ONLY the fibers to be spliced.

**NOTE:** If distribution fibers were cut in the center of the loop, there should be approximately 22 inches of fiber exiting each side of the buffer tube. Strip lengths apply to Corning UCAO splice trays only.

- Step 8:** Express the unused distribution fibers through the tray. Label and store the downstream (dark) fibers in the splice tray.
- Step 9:** For the first six splices, route one loop of distribution fiber around the inside perimeter of the splice tray and enter the first splice organizer ((Figure 24). Route any additional fibers one and a half times around the tray to enter the opposite side of the second splice organizer (Figure 24).

**NOTE:** If input cable entered from the left front port of the terminal, route buffer tubes into the tray at the upper right and exit on lower right. Route pigtails in a counterclockwise direction in the tray.

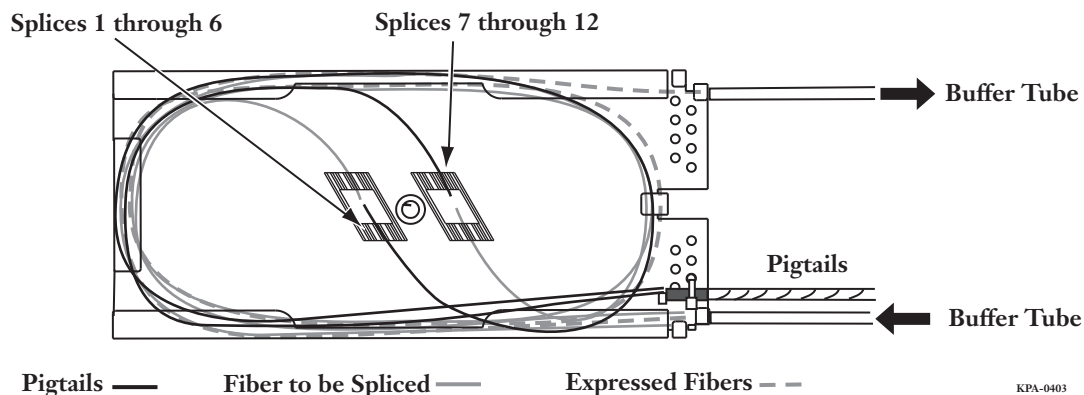


Figure 24

### 9.1.2 Prepare Pigtail for Splicing

- Step 1:** Route two loops of pigtail around the inside perimeter of the splice tray (Figure 24).

**IMPORTANT:** Typical lengths when using Corning UCAO splice trays are illustrated. Since the actual application may vary, it is recommended to route the pigtails as they will lie in the terminal to determine actual strip lengths before cutting fibers. Refer to “Managing Pigtail Fibers,” if necessary.

- Step 2:** Use the Buffer Stripping Tool (p/n 3206001-01) to remove the jacket from the pigtail according to the instructions provided with the tool (Figure 25).
- Step 3:** Remove the cut jacket to access the fiber.

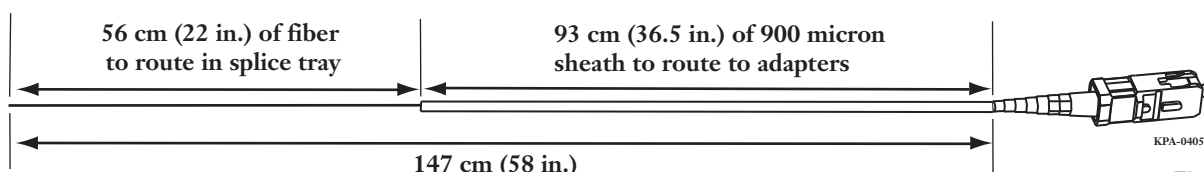


Figure 25

### 9.1.3 Secure Buffer Tube and Pigtails to Tray

**Step 1:** To secure the buffer tube to the tray, adjust the stop screw on the crimping tool (p/n M67-020) so the jaws of the tool are equal to the outer diameter of the buffer tube (Figure 26).

**Step 2:** Tighten the locknut on the tool.

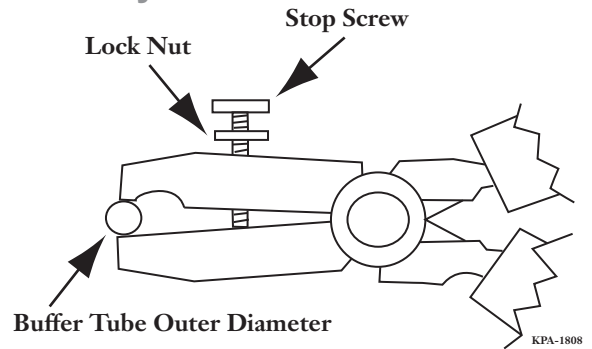


Figure 26

**Step 3:** Using the inner tab on the splice tray first, position the buffer tube approximately 1 cm (3/8 inch) beyond the tab (Figure 27).

**Step 4:** Crimp the buffer tube under the tab using the crimping tool.

**IMPORTANT:** Do not crush the buffer tubes.

**Step 5:** Determine the number of pigtails that will be secured together. Cut spiral wrap in 11-inch sections for each pigtail bundle. Feed the pigtails through spiral wrap for protection.

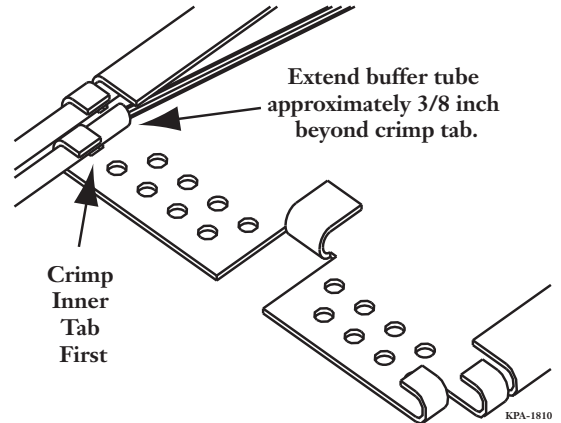


Figure 27

**Step 6:** Place vinyl tape at the end of the spiral wrap (Figure 28).

**Step 7:** Secure the pigtails to the splice tray around the vinyl tape using a cable tie threaded through the holes in the tray. Position cable tie buckle inside the tray and to one side of the pigtail bundle to avoid interference with the splice tray cover.

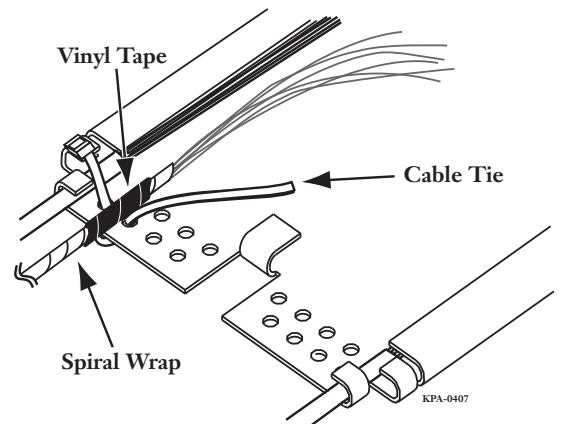


Figure 28

### 9.1.4 Splice Fiber to Pigtail



**WARNING: Never look directly into the end of a fiber that may be carrying laser light.**

Laser light can be invisible and can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.



**WARNING: DO NOT** use magnifiers in the presence of laser radiation. Diffused laser light can cause eye damage if focused with optical instruments. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

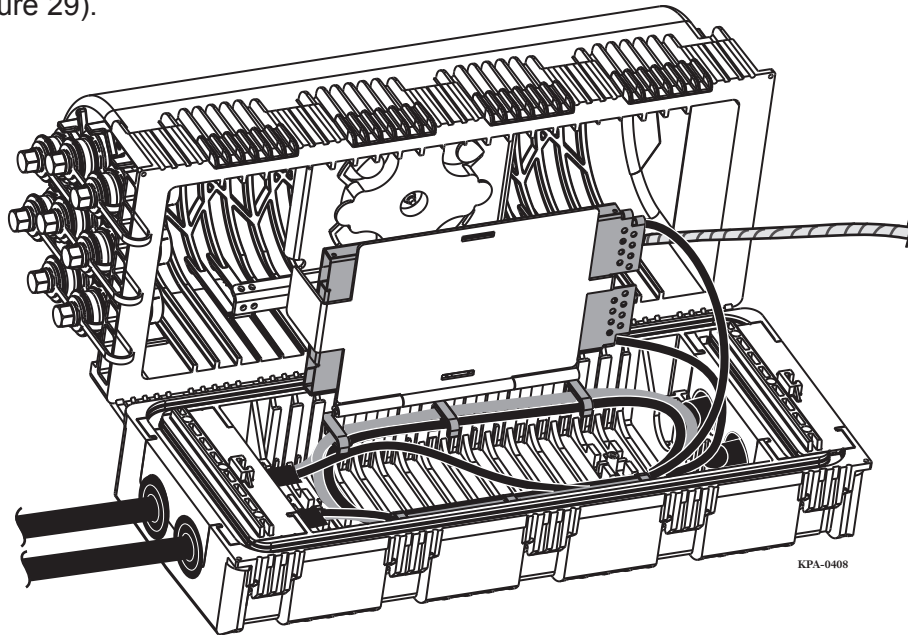
**Step 1:** Bring prepared pigtail ends and cut buffer tube fibers to the splicing equipment.

- Step 2:** Slide a heat-shrink protection device onto each pigtail end to be spliced and move the heat-shrink device out of the way.
- Step 3:** Clean, cleave, and splice pigtail fibers to distribution fibers per instructions provided with the splicing equipment.
- Step 4:** Slide the protection device up over the splice point. Use the splicing equipment to shrink the protection device over the splice point.

### 9.1.5 Secure Splice Tray

- Step 1:** Snap the cover onto the tray.
- Step 2:** Rotate the tray stacker up and place the splice tray in the stacker so cable tie holes in the tray are toward the right side of the terminal.
- Step 3:** Route distribution fibers around the inside perimeter of the storage area beneath the tray stacker and secure fibers beneath the buffer tube holders as needed (Figure 29).

Routing in a  
Butt-type  
Configuration



Routing in an  
Inline (Through)  
Configuration

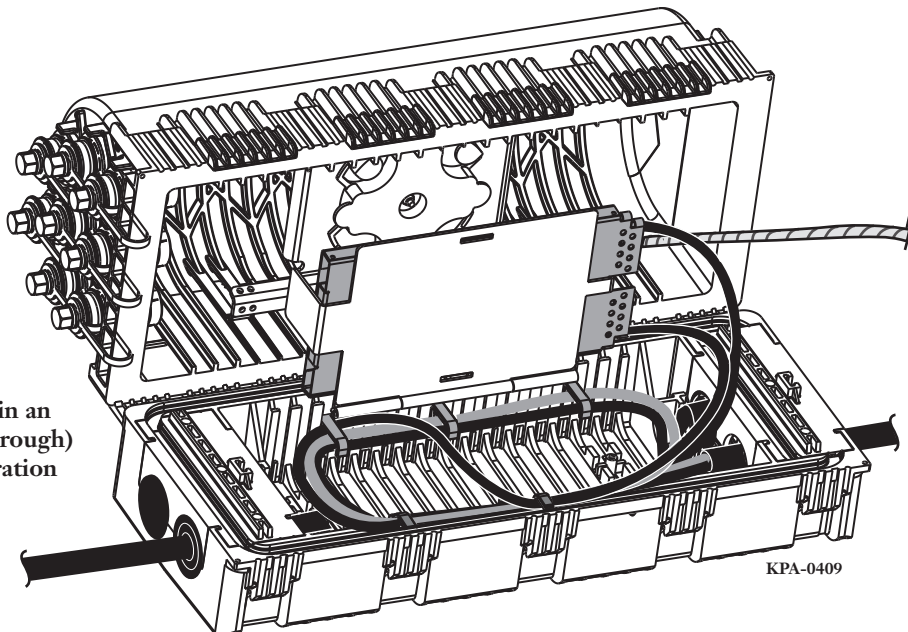


Figure 29



- Step 4:** Rotate the tray stacker down. Secure the tray(s) in the stacker with the hook-and-loop strap provided (Figure 30).
- Step 5:** Proceed to Section 10 - "Managing Pigtail Fibers."

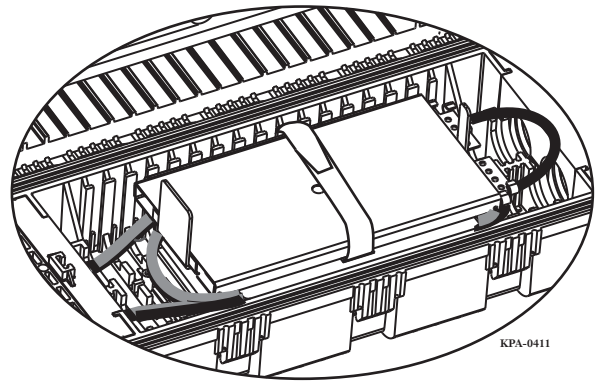


Figure 30

## 9.2 Splice Ribbon Fibers to Pigtails

Before splicing fibers, determine the fiber routing configuration you will use in your splicing application. Ribbon fibers may enter the splice tray and have all fibers in the ribbon spliced at that time or stored in the tray for splicing later. It is possible to splice one fiber of a ribbon and express the remaining fibers out of the splice tray. Figure 32 illustrates the recommended routing inside the tray for fibers being spliced and the express routing of the unused fibers.

**IMPORTANT:** Refer to the instruction manual for your splice equipment for detailed splicing instructions.

### 9.2.1 Prepare Ribbon Fiber for Splicing

- Step 1:** Remove the cover from a splice tray and position the tray in the splice tray stacker so cable tie holes in the tray are toward the right side of the terminal.
- Step 2:** Route the ribbon to the lower right corner of the splice tray (Figure 31). Mark the ribbon where it enters the tray.

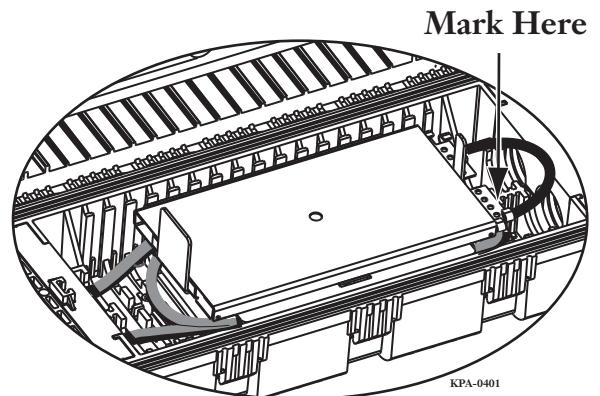


Figure 31

**IMPORTANT:** If input cable entered from the left front port of the terminal, route ribbon into the tray at the upper right and exit on lower right. Route pigtails in a counterclockwise direction in the tray.

- Step 3:** Route two loops of ribbon fiber around the inside perimeter of the splice tray as shown in Figure 32 and exit the tray. Mark the ribbon where it exits the tray.
- Step 4:** Remove the tray from the stacker.
- Step 5:** Use the Ribbon Splitting Tool (p/n RST-000) to split the ribbon inside the tray into individual fibers according to the instructions provided with the tool.
- Step 6:** Determine the distribution fibers to be spliced to 900 micron pigtails and cut the distribution fibers at the center of the loop. Do not cut all the fibers; cut ONLY the fibers to be spliced.

**IMPORTANT:** If distribution fibers were cut in the center of the loop, there should be approximately 22 inches of fiber exiting each side of the buffer tube. Strip lengths apply to Corning UCAO splice trays only.

**Step 7:** Express the unused distribution fibers through the tray. Label and store the downstream (dark) fibers in the splice tray.

**Step 8:** For the first six splices, route one loop of distribution fiber around the inside perimeter of the splice tray and enter the first splice organizer (Figure 32). Route any additional fibers one and a half times around the tray to enter the opposite side of the second splice organizer (Figure 32).

**IMPORTANT:** If input cable entered from the left front port of the terminal, route ribbon into the tray at the upper right and exit on lower right. Route pigtails in a counterclockwise direction in the tray.

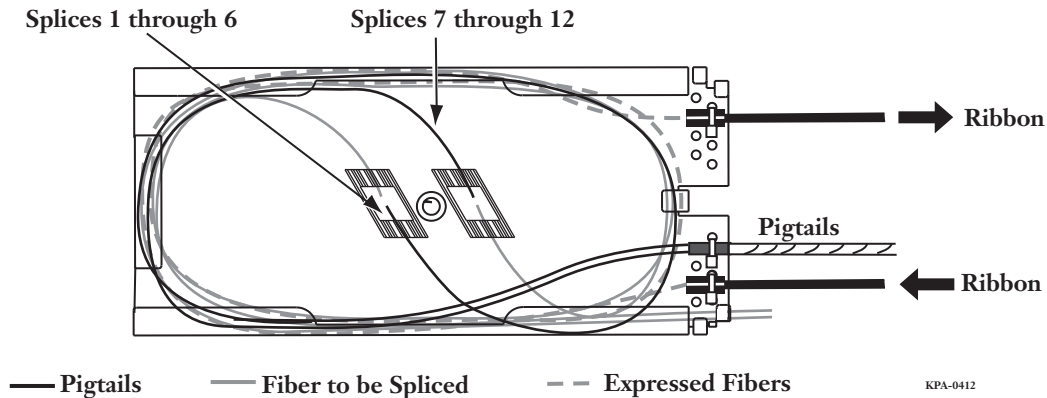


Figure 32

## 9.2.2 Prepare Pigtail for Splicing

**Step 1:** Route two loops of pigtail around the inside perimeter of the splice tray ((Figure 32).

**Step 2:** Use the Buffer Splitting Tool (p/n 3206001-01) to remove the jacket from the pigtail according to the instructions provided with the tool (Figure 33).

**IMPORTANT:** Typical lengths when using Corning UCAO splice trays are illustrated. Since the actual application may vary, it is recommended to route the pigtails as they will lie in the terminal to determine actual strip lengths before cutting fibers.

**Step 3:** Remove the cut jacket to access the fiber.

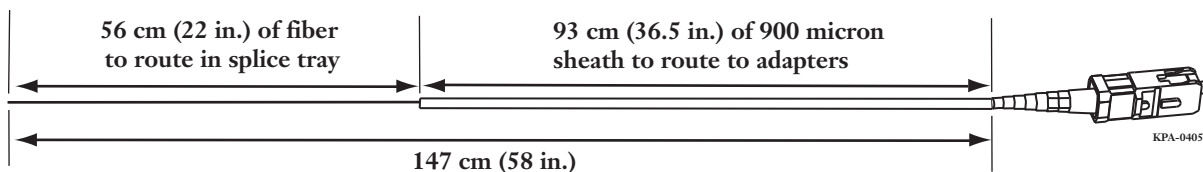


Figure 33



### 9.2.3 Secure Ribbon Fibers and Pigtails to Tray

- Step 1:** Orient the ribbon fiber on its edge with the aqua (#12) fiber facing upward. Insert up to four ribbon fibers in a split grommet (Figure 34).
- Step 2:** Secure the split grommet to the tray using a cable tie. Position the cable tie buckle to one side to avoid interference with the cover.

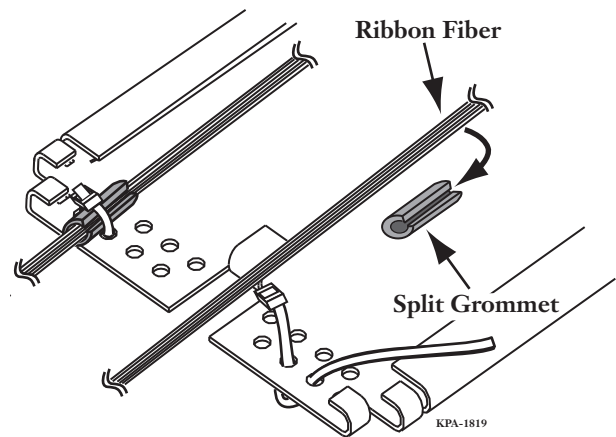


Figure 34

- Step 3:** Determine the number of pigtail fibers that will be secured together. Cut spiral wrap in 11-inch sections for each pigtail bundle. Feed the pigtails through spiral wrap for protection.
- Step 4:** Place vinyl tape at the end of the spiral wrap (Figure 35).
- Step 5:** Secure the pigtails to the splice tray around the vinyl tape using a cable tie threaded through the holes in the tray. Position cable tie buckle to one side of the pigtail bundle to avoid interference with the cover.

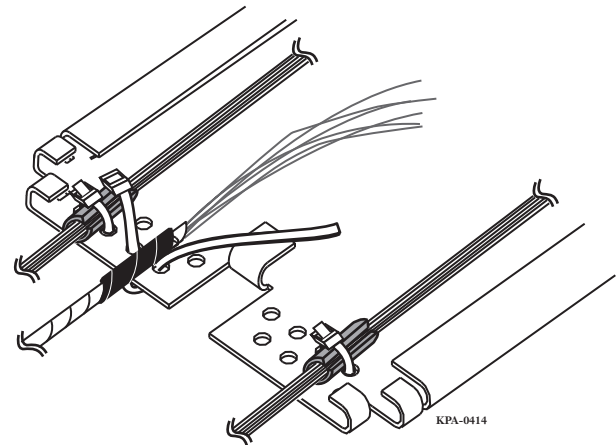




Figure 35

### 9.2.4 Splice Fiber to Pigtail

	<b>WARNING: Never look directly into the end of a fiber that may be carrying laser light.</b> Laser light can be invisible and can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.
	<b>WARNING: DO NOT use magnifiers in the presence of laser radiation.</b> Diffused laser light can cause eye damage if focused with optical instruments. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

- Step 1:** Bring prepared pigtail ends and cut ribbon fibers to the splicing equipment.
- Step 2:** Slide a heat-shrink protection device onto each pigtail end to be spliced and move the heat-shrink device out of the way.
- Step 3:** Clean, cleave, and splice pigtail fibers to distribution fibers per instructions provided with the splicing equipment.
- Step 4:** Slide the protection device up over the splice point. Use the splicing equipment to shrink the protection device over the splice point.
- Step 5:** Proceed to Section 10 - "Managing Pigtail Fibers."

## 9.2.5 Secure Splice Tray

- Step 1:** Snap the cover onto the tray.
- Step 2:** Rotate the tray stacker up and place the splice tray in the stacker in the lowest available position.
- Step 3:** Route distribution fibers around the inside perimeter of the splice tray area in a figure-eight pattern and secure beneath the buffer tube holders (Figure 36).

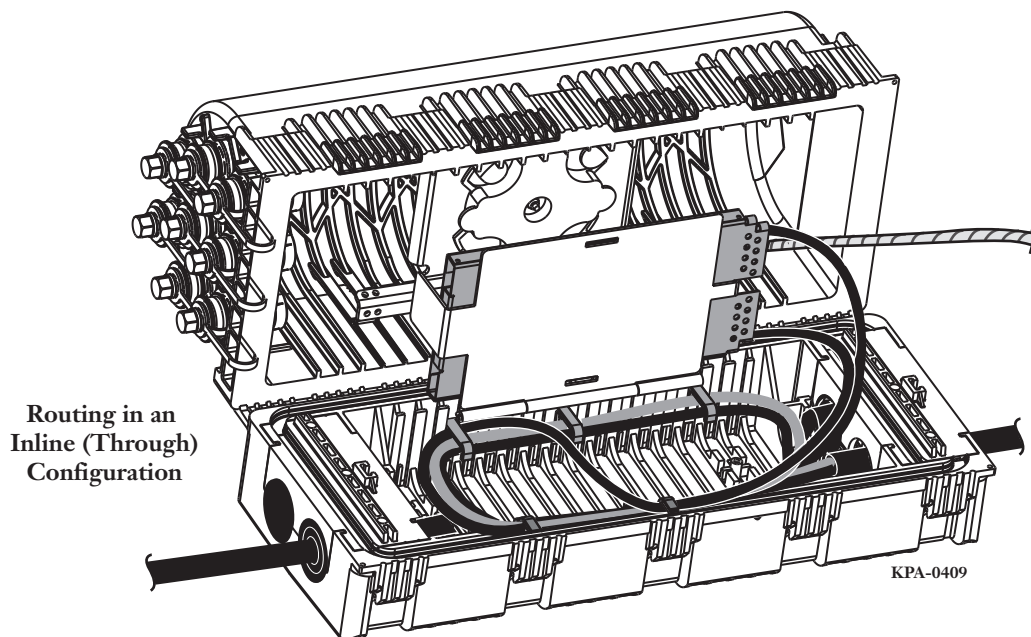
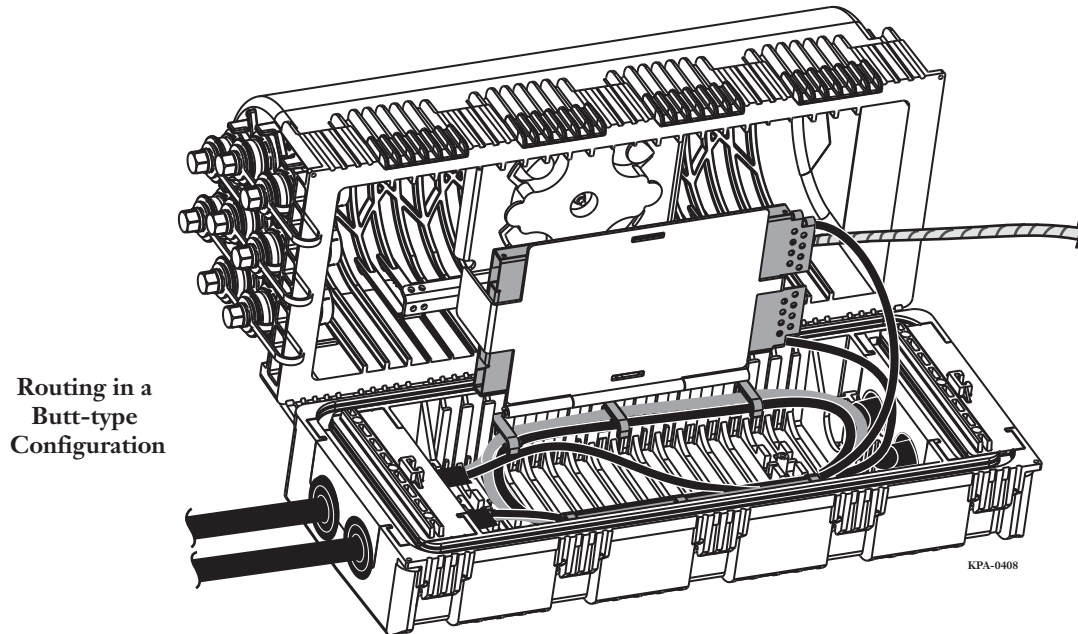


Figure 36

- Step 4:** Rotate the tray stacker down. Secure the tray(s) in the stacker with the hook-and-loop strap provided (Figure 37).
- Step 5:** Proceed to Section 10 - “Managing Pigtail Fibers.”

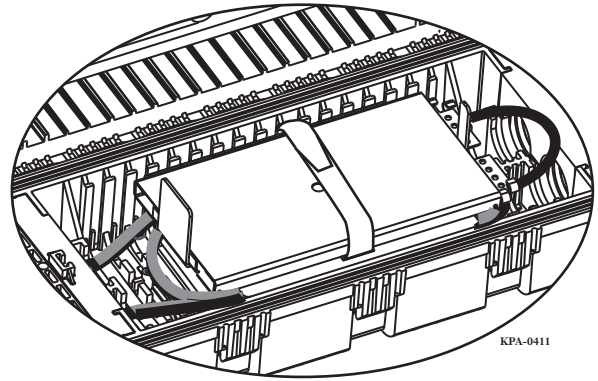


Figure 37

## 9.3 Splice Ribbon Fan-out Fibers to Ribbon Fibers

Before splicing fibers, determine the fiber routing configuration you will use in your splicing application. Ribbon fibers may enter the splice tray and have all fibers in the ribbon spliced at that time or stored in the tray for splicing later. It is possible to splice one fiber of a ribbon and express the remaining fibers out of the splice tray. Figure 40 illustrates the recommended routing inside the tray for fibers being spliced and the express routing of the unused fibers.

**IMPORTANT:** Refer to the instruction manual for your splice equipment for detailed splicing instructions.

### 9.3.1 Prepare Ribbon from Fan-out Body for Splicing

- Step 1:** Remove the cover from a splice tray and position the tray in the tray stacker in the lowest available position in the splice tray stacker so cable tie holes in the tray are toward the right side of the terminal.
- Step 2:** Cut a length of spiral wrap long enough to cover the pigtails from the fan-out body to the cable tie location (approximately 12 inches) on the slack storage spool bracket in the terminal cover (Figure 45). Carefully wrap the pigtails with the spiral wrap, beginning at the fan-out body.

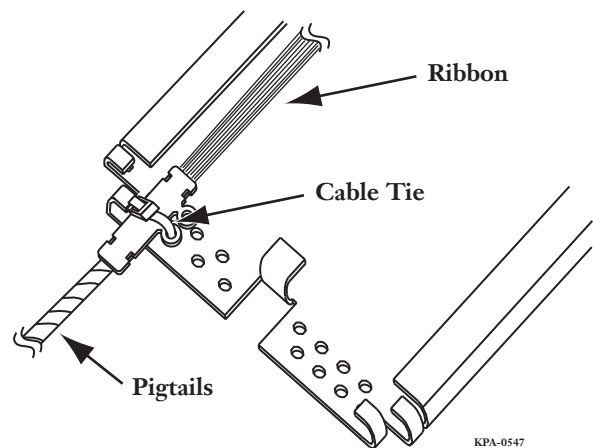


Figure 38

- Step 3:** Secure the ribbon fan-out body to the splice tray with a cable tie (Figure 38).
- Step 4:** Route two loops of ribbon from the fan-out body around the inside perimeter of the splice tray to the organizer in the center of the tray.

### 9.3.2 Prepare Ribbon Fiber for Splicing

**Step 1:** Route the distribution ribbon to the lower right side of the splice tray near the center tab (Figure 39). Mark the ribbon where it enters the tray.

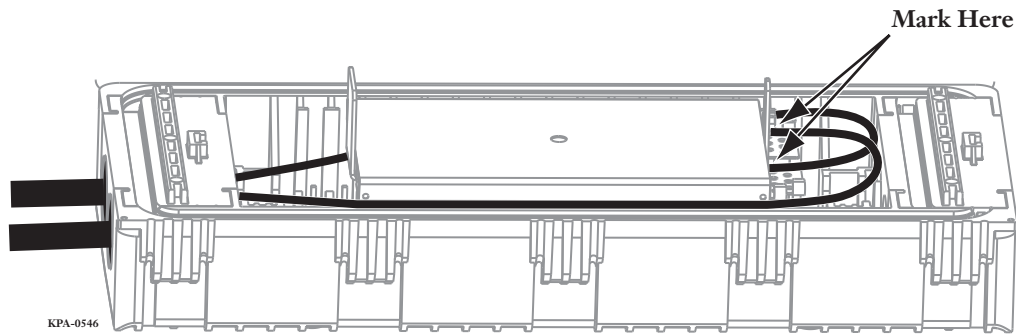


Figure 39

**IMPORTANT:** If input cable entered from the left front port of the terminal, route ribbon into the tray at the upper right and exit on lower right. Route ribbon from the fan-out body in a counterclockwise direction in the tray.

**Step 2:** Route two loops of ribbon fiber around the inside perimeter of the splice tray as shown in Figure 40 and exit the tray. Mark the ribbon where it exits the tray.

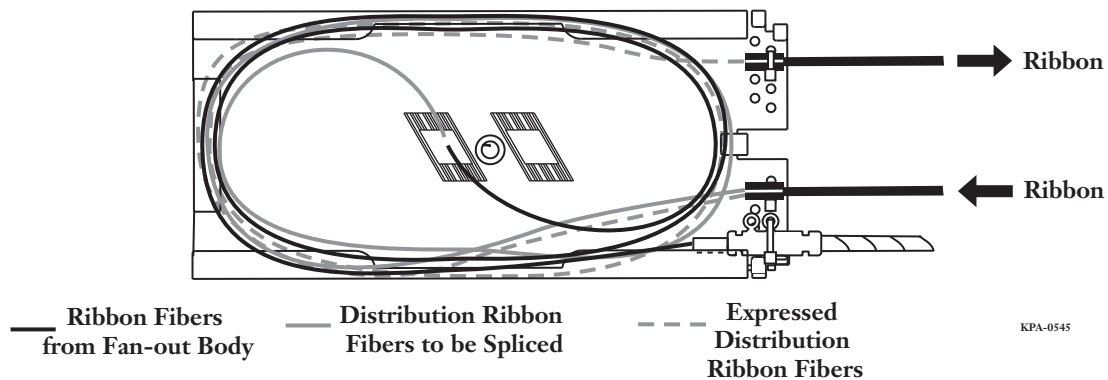


Figure 40

**Step 3:** Remove the splice tray from the stacker.

**Step 4:** If splicing less than the maximum number of fibers in the ribbon, use the Ribbon Splitting Tool (p/n RST-000) to separate the desired number of fibers for splicing according to the instructions provided with the tool.

**Step 5:** Express the unused distribution fibers through the tray. Label and store the downstream (dark) fibers in the splice tray.

### 9.3.3 Secure Ribbon Fibers to Tray

- Step 1:** Orient the ribbon fiber on its edge with the aqua (#12) fiber facing upward. Insert up to four ribbon fibers in a split grommet.
- Step 2:** Secure the split grommet to the tray using a cable tie (Figure 41). Position the cable tie buckle to one side to avoid interference with the cover.

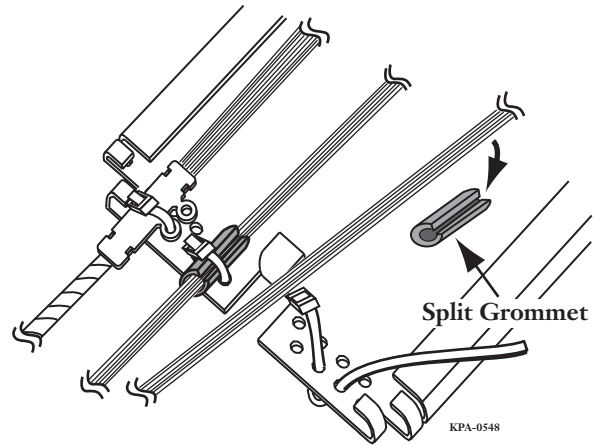


Figure 41

### 9.3.4 Splice Fibers

- Step 1:** Bring prepared ribbon fibers to the splicing equipment.
- Step 2:** Slide a heat-shrink protection device onto one of the ribbons and move the heat-shrink device out of the way.
- Step 3:** Clean, cleave, and splice ribbons per instructions provided with the splicing equipment.
- Step 4:** Slide the protection device up over the splice point. Use the splicing equipment to shrink the protection device over the splice point.

### 9.3.5 Secure Splice Tray

- Step 1:** Snap the cover onto the tray.
- Step 2:** Place the splice tray in the stacker and rotate the stacker upwards out of the way (Figure 42).
- Step 3:** Route distribution fibers around the inside perimeter of the splice tray area in a figure-eight pattern (only one loop shown for clarity) and secure beneath the buffer tube holders.
- Step 4:** Rotate the tray stacker down. Secure the tray(s) in the stacker with the hook-and-loop strap provided (Figure 43).
- Step 5:** To connect the pigtail fibers, proceed to Section 10 - "Managing Pigtail Fibers."

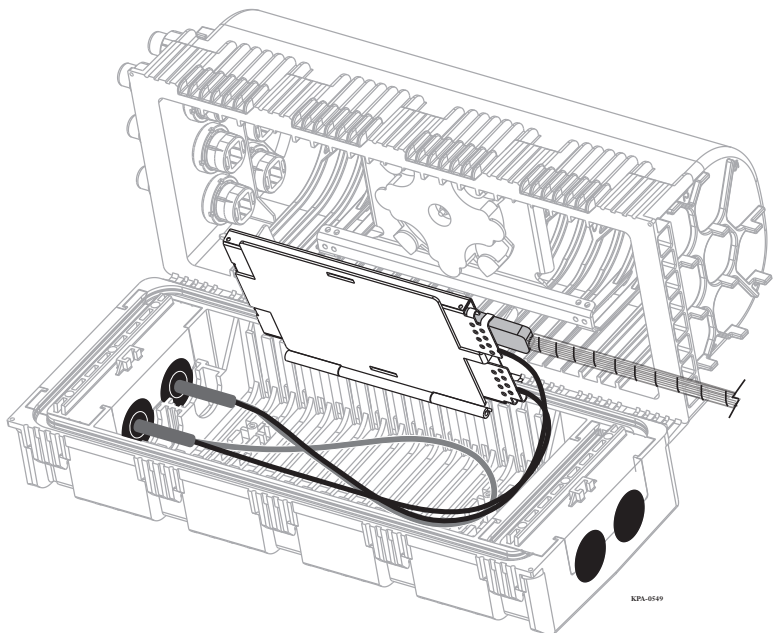


Figure 42



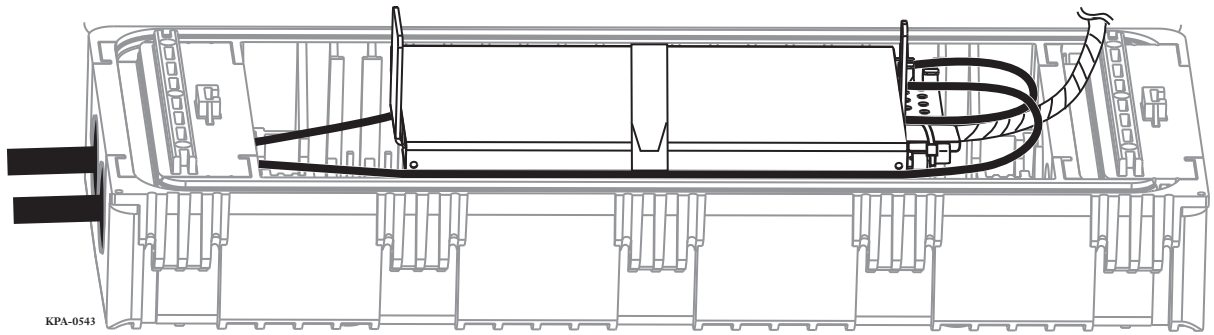


Figure 43

## 10. Managing Pigtail Fibers

### 10.1 Remove Dust Caps From OptiFit® Adapters Inside the Cover

**Step 1:** Inside the cover, remove the dust caps from the OptiFit adapters as they are prepared for mating with the connectorized pigtails (Figure 44).

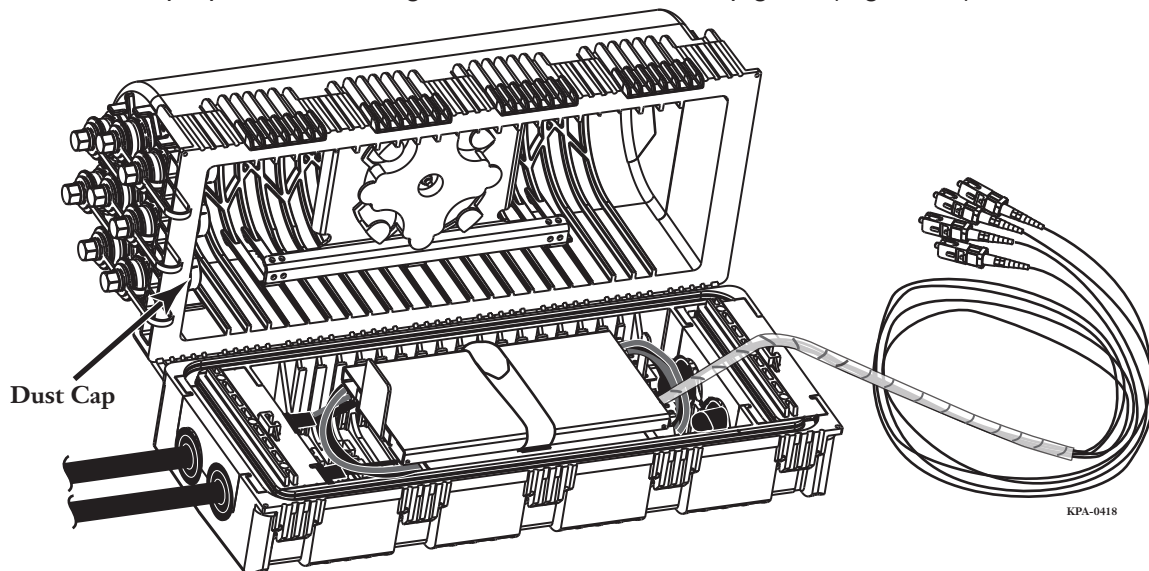


Figure 44

**Step 2:** Route pigtail fibers around the slack storage spool in the terminal's cover with enough slack to reach the appropriate adapter, in either end of the terminal.

**Step 3:** Secure the fibers by attaching them with a cable tie around the spiral wrap to the slack storage spool bracket (Figure 45).

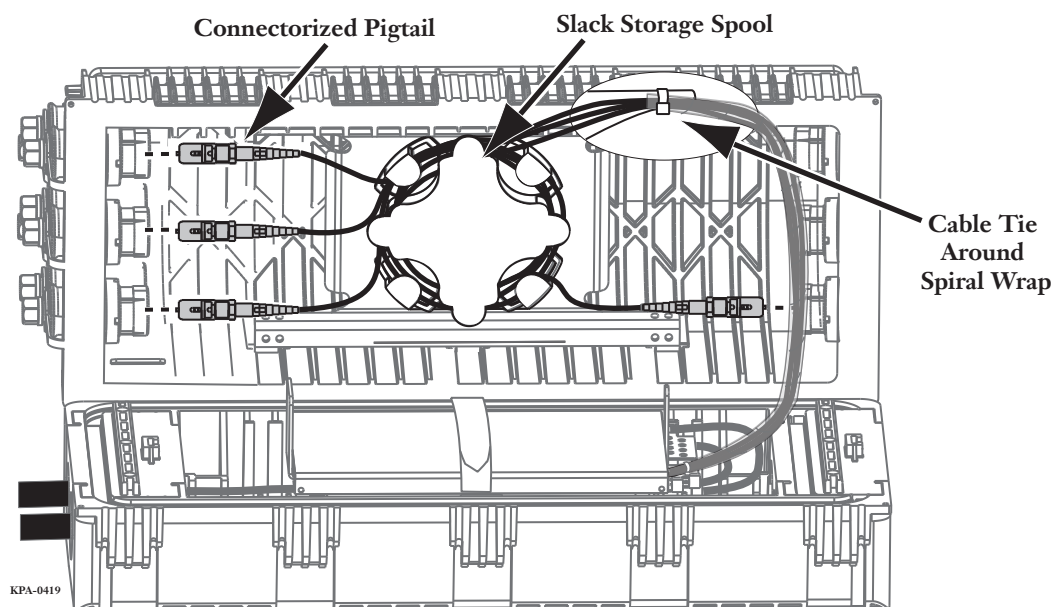


Figure 45

## 10.2 Clean Connectors and OptiFit® Adapters

Use the Corning Optical Access Connector Cleaning Kit (p/n TKT-OTAP-CLN-001, purchased separately) to clean inside each adapter in the cover.

### 10.2.1 Clean OptiFit Adapters inside the Cover

Insert a dry swab into the adapter sleeve and then make three 360-degree twists (Figure 46). Dispose of the swab after one use. Repeat for all adapters.

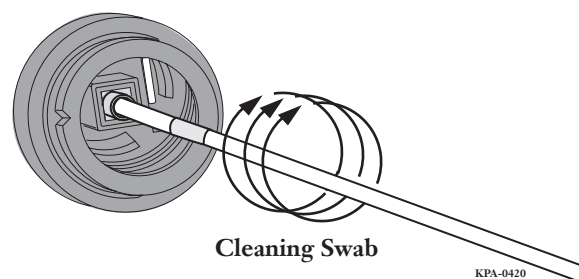


Figure 46

### 10.2.2 Clean Connectorized Pigtails

Remove the protective dust cap and clean the end face and ferrule of each connectorized pigtail before inserting into the cleaned OptiFit adapters. Use cleaning methods and materials as standardized by your company. Also observe the following rules:

- Always keep dust caps on connectors when not in use.
- Ensure dust caps are clean before reuse.
- Clean the connector before every remate, especially for test equipment patch cords.

### 10.2.3 Install Connectors into OptiFit Adapters

Insert each connectorized pigtail into an OptiFit adapter on the inside of the terminal (Figure 45). Refer to OptiFit adapter numbering on the outside of the housing for correct pigtail location.

## 11. Installing Flat Drop Cable Into Add-a-cable Port Adapters

OptiSheath® terminals fitted with add-a-cable port adapters in the end caps allow installation of a flat drop cable for splicing inside the terminal. This classic application of the terminal is ideal for individual drops and multiport consolidation, and can be combined with OptiFit connectors. Refer to the product specification sheet listed in the “Related Literature” section for



a complete list of product part numbers and options available. Contact your Customer Service Representative to order the appropriate port configuration for installation of flat drop cables.

## 11.1 Install Cable

- Step 1:** If installing drop cables after the initial installation of the terminal, open the terminal cover as described in Section 18.3 - "Reenter the Terminal."
- Step 2:** Using the plastic wrench, loosen the bolt head on the outside of the desired port adapter (approximately two turns of the wrench) enough to allow you to remove the plastic plug from the center of the bolt head. Do NOT completely remove the bolt head. Discard the plug.
- Step 3:** Strip approximately 182 cm (72 inches) of cable sheath to expose the buffer tube (Figure 4). Cut the strength members as close to the end of the jacket as possible, taking care not to nick the buffer tube.
- Step 4:** Insert the buffer tube and cable sheath into the port adapter until the edge of the jacket sheath is prevented from going any farther. Look through the viewing window on the adapter inside the terminal to ensure the jacket is seated against the adapter opening.
- Step 5:** Using the plastic wrench, tighten the bolt head on the outside of the port adapter until the spacer touches the add-a-cable adapter body.
- Step 6:** Route slack for adapters 4 through 8 before routing slack from adapters 1 through 3. Route buffer tubes in a clockwise direction into the area behind the fiber slack storage spool bracket in the top of the terminal cover. Secure the buffer tube slack to the bracket using a cable tie (Figure 47).

**IMPORTANT:** Route buffer tube slack for adapters 1, 2, and 3 in front of the fiber slack storage bracket to avoid bending the buffer tubes behind the bracket.

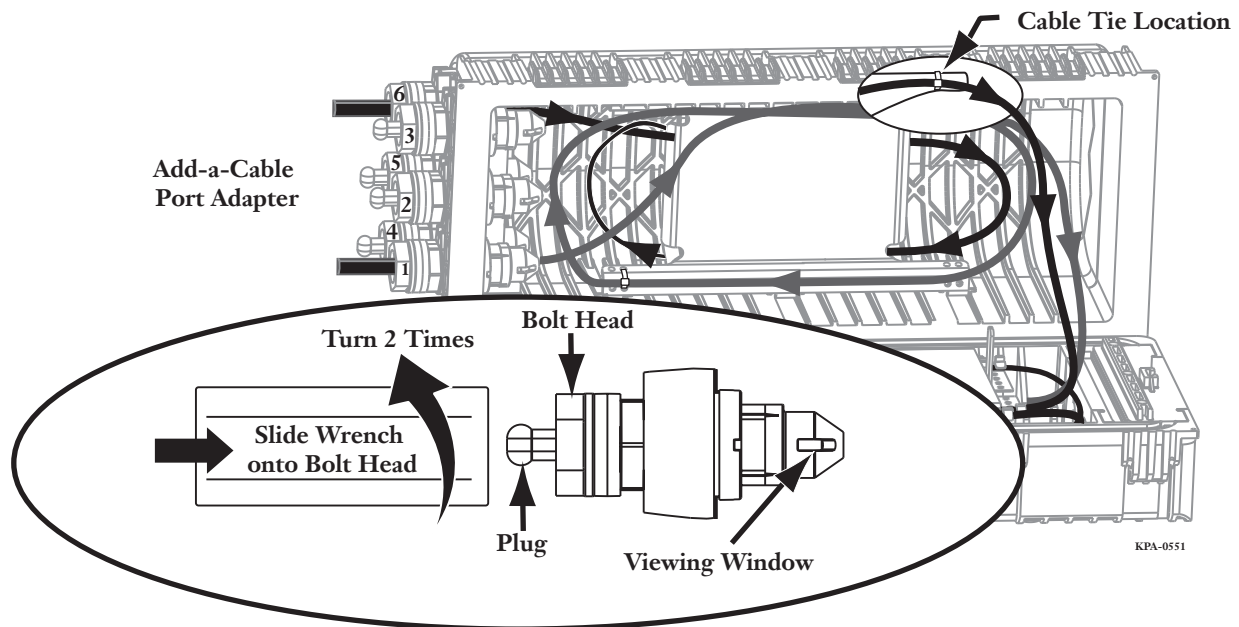


Figure 47

## 11.2 Prepare Buffer Tubes for Splicing

- Step 1:** Route the buffer tube to the lower right corner of the splice tray. Mark the buffer tube where it enters the tray. Remove the tray from the stacker.
- Step 2:** Use the Ideal Buffer Tube Splitter (p/n 100107-01) to split the buffer tube inside the tray according to the instruction provided with the tool. Remove the cut buffer tube to access the fibers.
- Step 3:** Determine the distribution buffer tube to be spliced to the flat drop cable.
- Step 4:** Remove the buffer tube in the lengths indicated in Figure 4 for the butt configuration in an end-span application using the Optical Fiber Access Tool (p/n OFT-000).
- Step 5:** Label and store the downstream (dark) fibers in the splice tray.

## 11.3 Secure Buffer Tubes/Cables to Splice Tray

- Step 1:** To secure the buffer tube to the tray, adjust the stop screw on the crimping tool (p/n M67-020) so the jaws of the tool are equal to the outer diameter of the buffer tube as shown in Figure 47.
- Step 2:** Tighten the locknut on the tool (Figure 48).

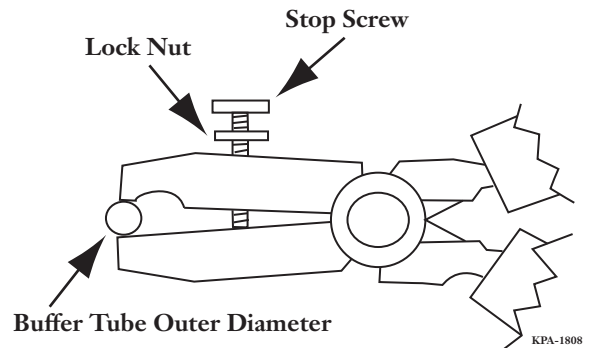


Figure 48

- Step 3:** Using the inner tab on the splice tray, position the buffer tube approximately 1 cm (3/8 inch) beyond the tab (Figure 49).
- Step 4:** Crimp the tab over the buffer tube using the crimping tool.
- Step 5:** Secure the flat drop cable to the tray with a cable tie.

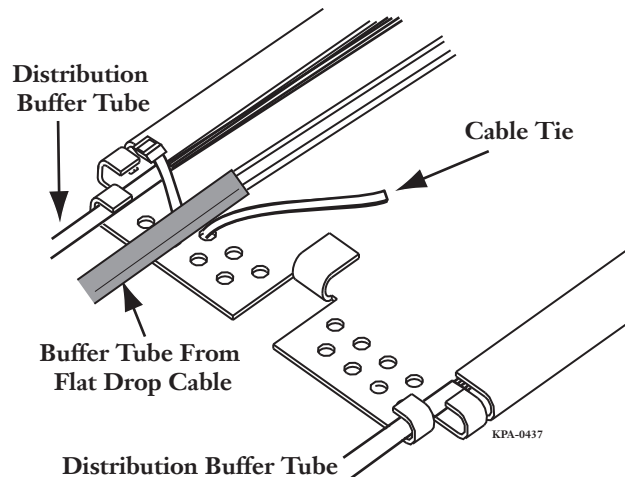


Figure 49

## 11.4 Splice Drop Cable Fiber to Distribution Fiber

- Step 1:** Bring cut buffer tube fibers to the splicing equipment. Slide a heat-shrink protection device onto one of the fibers to be spliced and move the heat-shrink device out of the way.
- Step 2:** Clean, cleave, and splice per instructions provided with the splicing equipment.
- Step 3:** Slide the protection device up over the splice point. Use the splicing equipment to shrink the protection device over the splice point.

## 11.5 Secure Splice Tray

- Step 1:** Snap the cover onto the tray.
- Step 2:** Rotate the tray stacker up and place the splice tray in the stacker so the cable tie holes in the splice tray are toward the right.
- Step 3:** Route distribution buffer tubes around the inside perimeter of the splice tray area and secure beneath the buffer tube holders.
- Step 4:** Rotate the tray stacker down. Secure the tray(s) in the stacker with the hook-and-loop strap provided (Figure 50).

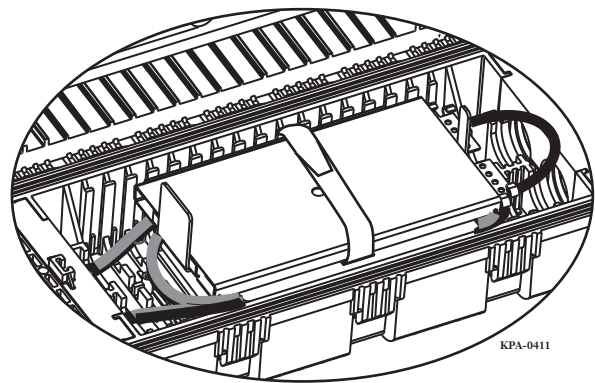


Figure 50

## 12. Sealing the Terminal

### 12.1 Verify Sealing Gasket Orientation is Correct

Make sure the gasket is installed into the lower half-shell with the channel on the gasket facing upward and the three ridges facing downward (Figure 51).

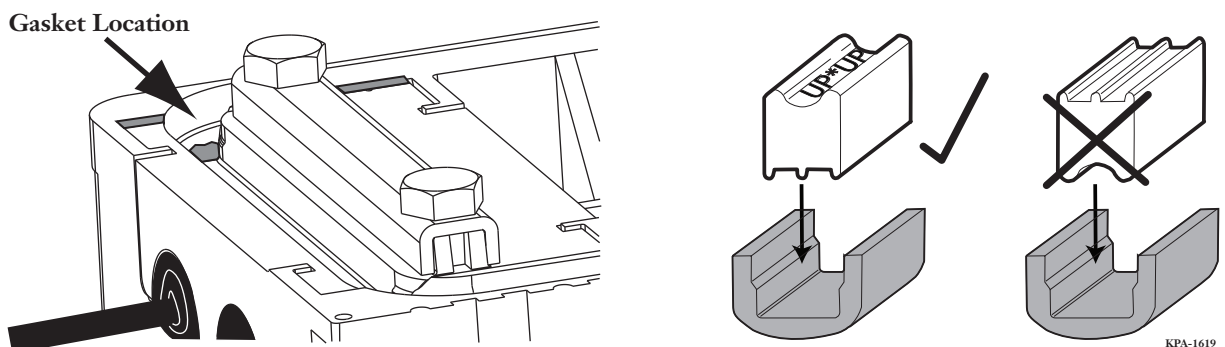


Figure 51

### 12.2 Reattach the Cover, if Removed

- Step 1:** Attach the top half-shell by sliding the hinge pins back into the hinge position. Rotate the retention locks on the hinge side of the closure one-quarter turn to the closed position shown in Figure 52B.
- Step 2:** Close the latches as shown in Figure 52A to secure the cover in place.

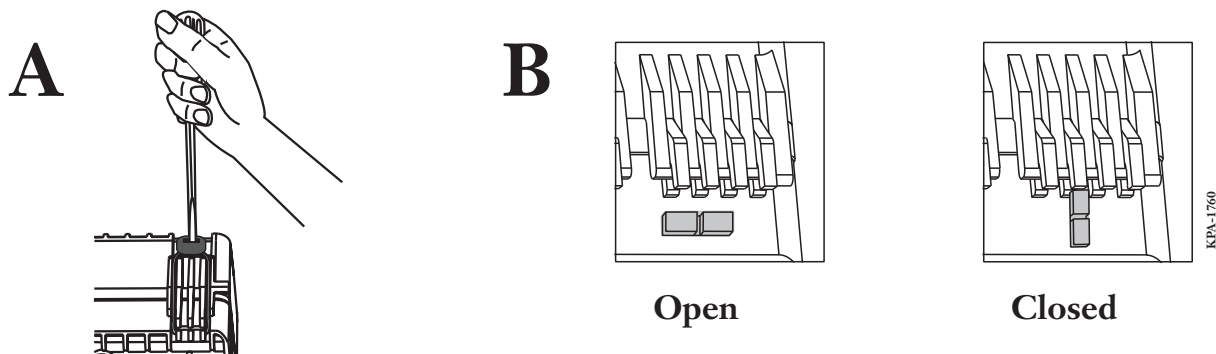


Figure 52

## 12.3 Pressure Test the Terminal

**IMPORTANT:** Use p/n UCA-KT-FV-OP pressure test valve kit to pressure test the terminal after EACH cable installation.

**Step 1:** Attach the hand pump or a regulated tank supply to the valve inside the dummy plug.

**Step 2:** Inject 5 psi of air into the terminal using a hand pump or a regulated tank supply (Figure 53). Check pressure regularly.



**WARNING:** To avoid a potentially hazardous situation that could result in death or serious injury, do not exceed 5 psi (35 kpa) gauge pressure. The terminal could burst.

**Step 3:** Use a spray bottle to apply a soapy water solution to the key sealing areas, such as the sealing gasket, cable entries and dummy plugs. Watch the terminal for signs of leakage (soap bubbles).

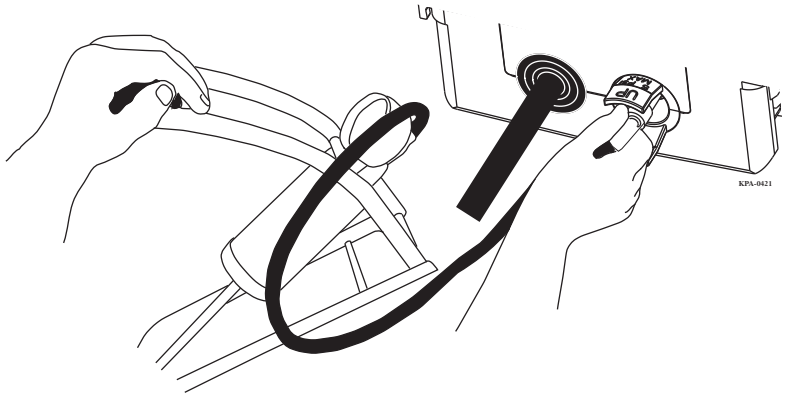


Figure 53

**IMPORTANT:** A correctly sealed terminal maintains pressure with no leaks. If obvious signs of leakage, such as a rapid pressure drop or an audible hissing sound are present, STOP and make any necessary corrections such as cleaning and repositioning the gasket, checking tightness on the wedge seals or resealing the cable/dummy plug sealing tape.

**Step 4:** After the flash test has been performed and the terminal sealed correctly, carefully release pressure and allow air to escape.

## 13. Grounding the Terminal

If grounding is required, and was not performed previously, use a #M6-12 mm 3/8-inch hex-head screw to attach a #6 AWG ground wire to the terminal at the ground location shown in Figure 54. Terminate the other end of the ground wire per standard codes and local methods and practices.

## 14. Mounting the Terminal

Determine mounting location. The terminal can be secured to a wall or a pole. Follow instructions appropriately.

### 14.1 On a Wall

**Step 1:** To install the terminal on a wall, attach the mounting bracket to the terminal using a 3/8-inch wrench, nut driver, or socket and the screws provided.

**Step 2:** If grounding is required, attach a #6 AWG ground wire with one of the mounting screws for the bracket before securing the terminal to the wall (Figure 54). Terminate the other end of the ground wire per standard codes and local methods and practices.

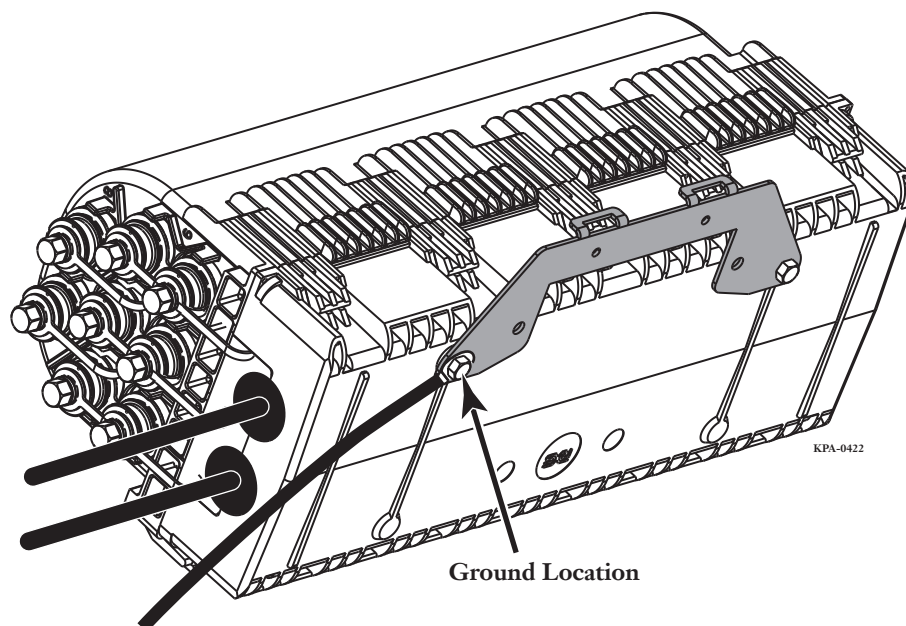


Figure 54

- Step 3:** Position the terminal on the wall in the mounting location selected. Drill a pilot hole or insert wall anchors, as needed. Insert appropriate fasteners through the holes in the mounting bracket and secure the terminal to the wall.

## 14.2 In a Handhole

- Step 1:** Attach the handhole bracket as shown using the provided screws.
- Step 2:** Using the provided screws, attach the wall bracket to the terminal with the flanges on the bracket facing away from the terminal.
- Step 3:** Hang the terminal on the handhole bracket.

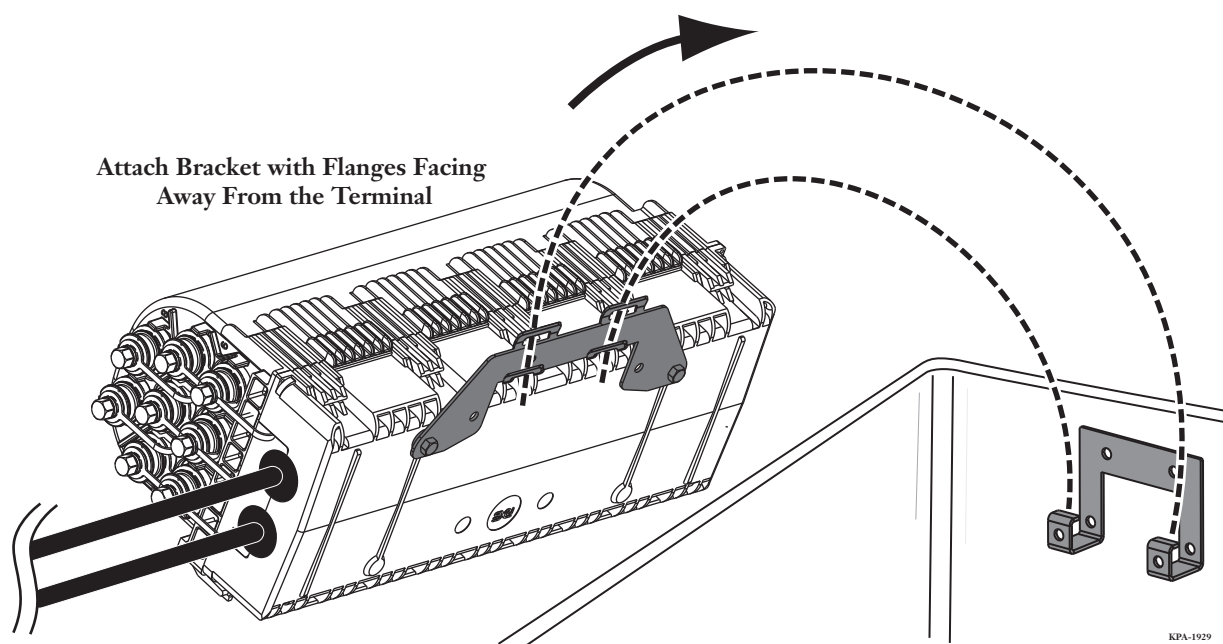


Figure 55

## 15. Mating Connectorized Drop Cable To The Terminal

### 15.1 During Initial Installation

#### 15.1.1 Clean the OptiFit® Connectors on the Drop Cable(s)

**Step 1:** Clean the connectors with the Optical Access Connector Cleaning Kit before mating. Pull one length of fresh QbE™ wipe out of the box and fold it over the fiber-safe foam platen - tear off the old wipe at its perforations (Figure 56).

	<p><b>WARNING: Never look directly into the end of a fiber that may be carrying laser light.</b> Laser light can be invisible and can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.</p>
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

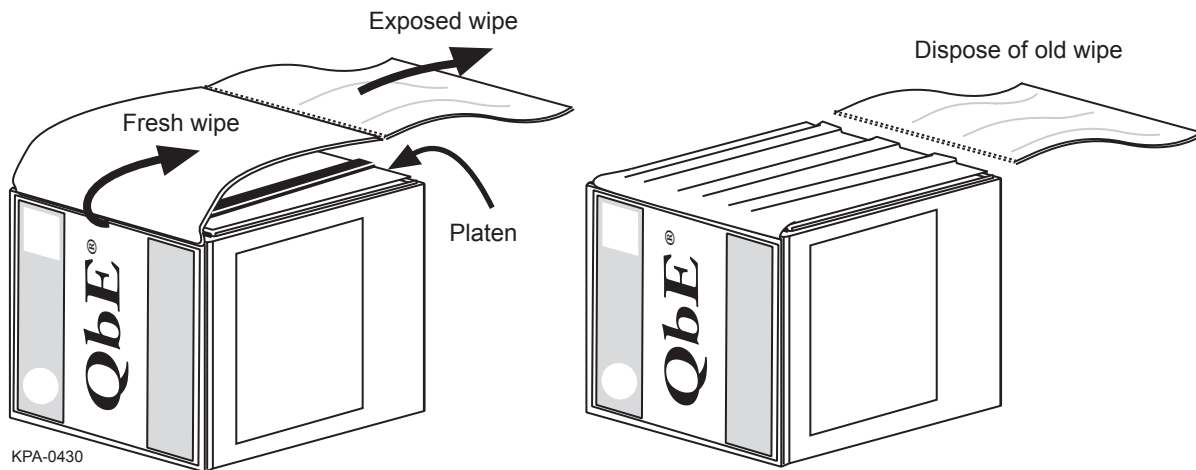


Figure 56

- Step 2:** Remove the protective cap from the connector by rotating the connector nut.
- Step 3:** Align the connector keys so that the connector ferrule end face is centered on one of the three raised strips on the platen. On Premiere connectors, make sure that the angled end face is facing the direction of the cleaning (Figure 57).
- Step 4:** Hold the end face of the connector at 90 degrees to the platen.
- Step 5:** Pull the connector end face lightly over the platen away from the wipe's fold in a smooth linear motion (Figure 57).



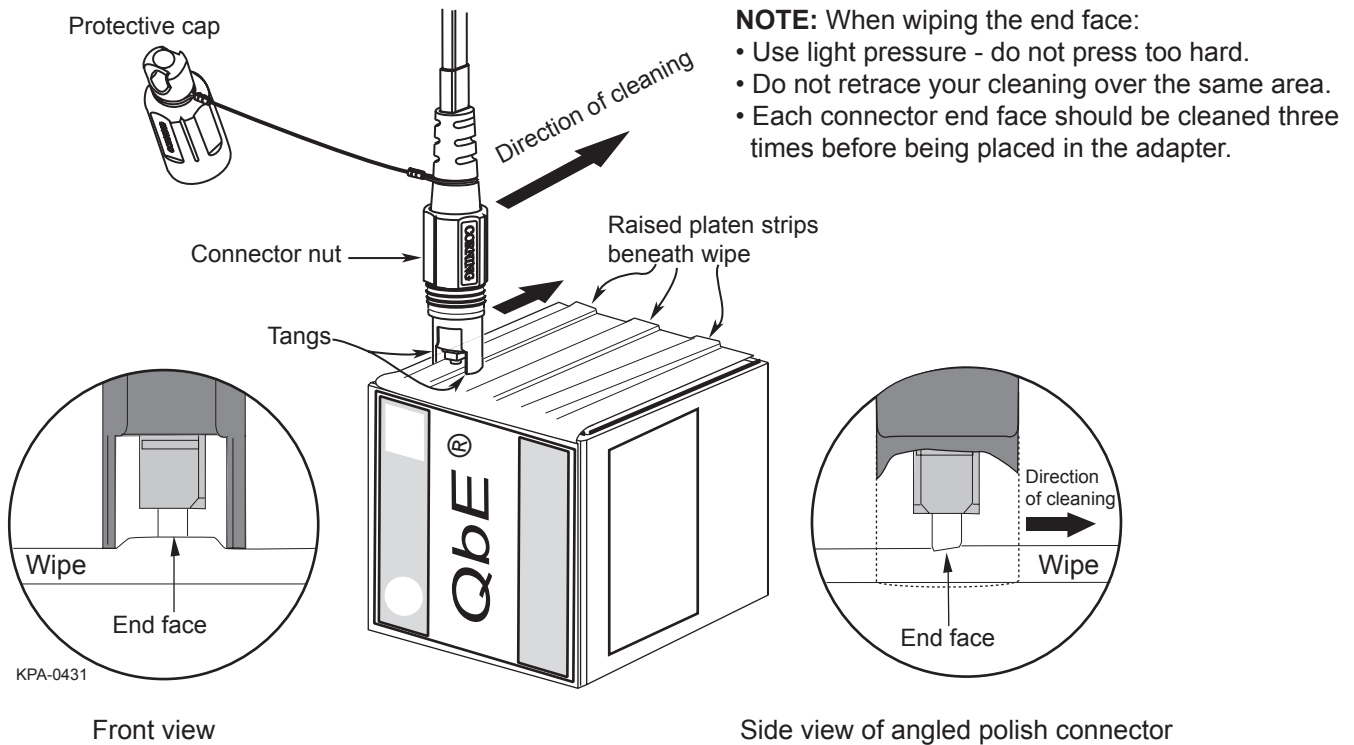


Figure 57

### 15.1.2 Clean OptiFit® Adapters

- Step 1:** Remove the protective plug from the OptiFit adapter where the connector will be mated (Figure 58).
- Step 2:** Insert a dry swab into the adapter and make three 360-degree twists with light pressure against the connector end face. Dispose of the swab after one use.

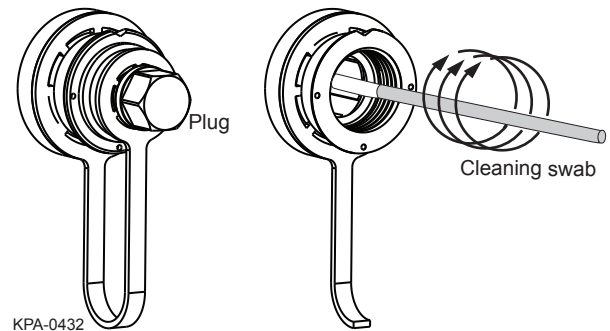


Figure 58

### 15.1.3 Mate Connectorized Drop Cable

- Step 1:** Insert the connectorized drop cable into the OptiFit adapter. Orient the arrow on the connector tang with the notch in the adapter (Figure 59).
- Step 2:** Screw the connectorized drop cable connecting hardware into the OptiFit adapter.
- Step 3:** Screw the OptiFit adapter plug into the connectorized drop cable protective cap.
- Step 4:** Repeat Section 15.1 for all connectorized drop cables.



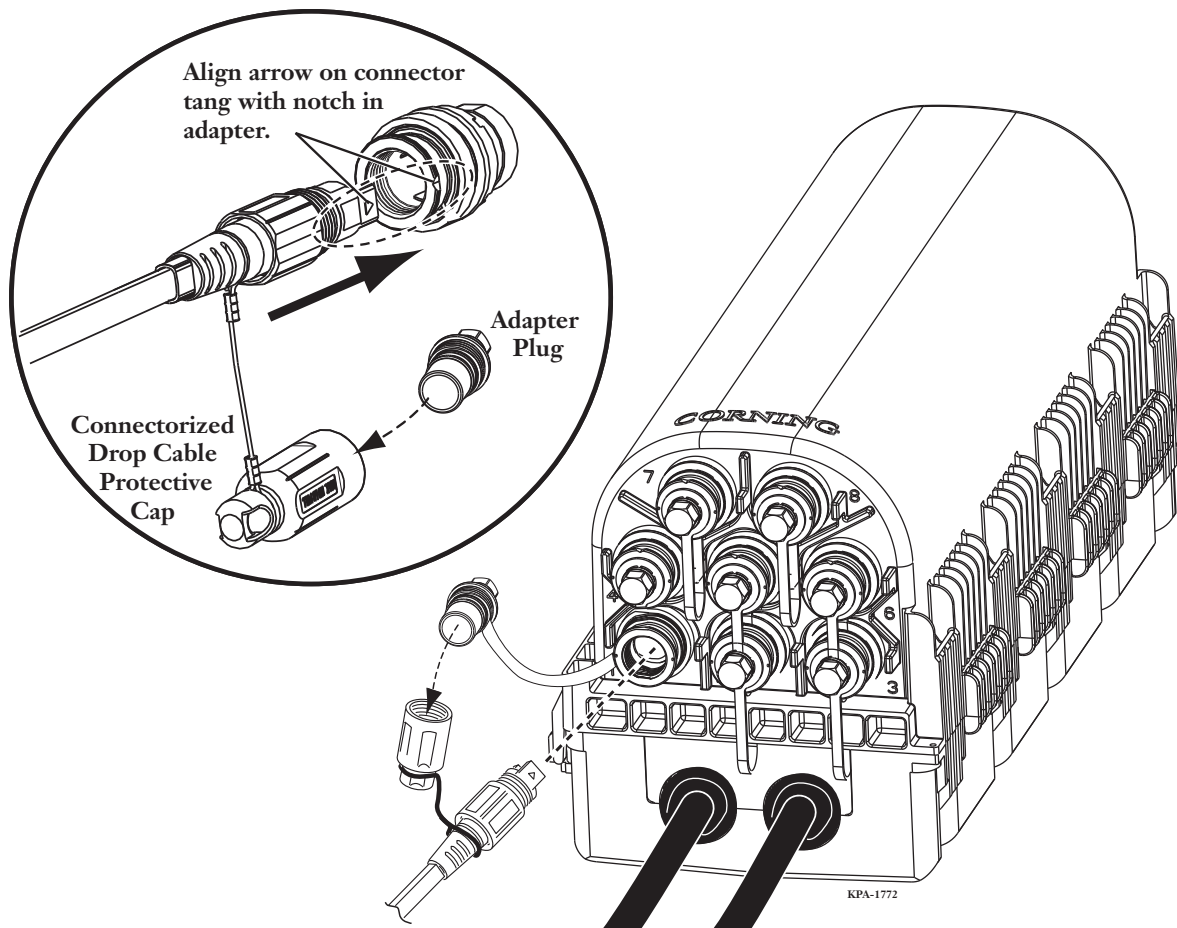


Figure 59

## 15.2 After Initial Installation

After the initial installation, the sealed terminal may become covered with mud and dirt due to normal ground water or flooding. Although these contaminants on the outside of the housing will not affect the performance of the unit, care must be taken when removing the OptiFit® adapter plugs for drop cable installation to prevent loose dirt particles from entering the adapter sleeve and contaminating a connector end face.

**NOTE:** Only use clean water to wash the outer housing. Do not use any type of solvent.

**Step 1:** Remove any cable ties or hardware securing the terminal and stubbed cable.

**IMPORTANT:** Use care when handling the terminal to prevent kinking the cable stub.

**Step 2:** When handling the terminal, support the terminal and its cable stub to prevent kinking the cable stub at the entrance of the terminal.

**Step 3:** **For light dirt and dust,** soak a rag or towel with clean water and gently clean the housing. Wipe dry with a clean, dry rag or towel.

**For heavy, caked-on mud and dirt,** spray the terminal with low-pressure water such as from a garden sprayer. A soft-bristled brush may also be used to lightly scrub the housing to loosen the mud and dirt. Remove any remaining dirt with a water-soaked rag or towel and wipe dry with a clean, dry rag or towel.

- Step 4:** Although the unit should now be generally clean, there may still be dirt particles around the OptiFit® adapter plugs. Therefore, before removing a plug, first turn the terminal so that the adapters face downward and then unscrew the selected plug. In this way, any stray dirt particles will fall to the ground instead of into the adapter.
- Step 5:** Use the Corning Optical Access Connector Cleaning Kit as described in Section 15.1.1 and Section 15.1.2 to clean the OptiFit drop cable assembly and the OptiFit adapter plugs.
- Step 6:** Keep the adapters facing down while inserting and tightening the drop cable assembly as described in Section 15.1.3.

## 16. Routing Connectorized Drop Cable to the Subscriber's Premises

- Step 1:** **In buried cable applications using conduit**, use the eye on the protective cap of the connectorized drop cable to pull the cable through the duct to the destination point where the connectorized drop cable will be mated. Ensure that you do not exceed 100 lbf (pounds force) on the cable.
- In aerial-, pole-, or wall-mount applications**, route to the subscriber's premises per standard local practices.
- Step 2:** Manage the connectorized drop cable slack at the subscriber's premises using a slack storage device or standard local practices.

## 17. Mating Connectorized Drop Cable at the Premises

- Step 1:** Access the network interface device (NID) at the subscriber's premises.
- Step 2:** Use the Corning Optical Cleaning Kit to clean each adapter and connector before mating as described in Section 15.1.
- Step 3:** Mate the connectorized drop cable to an OptiFit adapter inside the NID per the directions provided by the NID manufacturer.
- Step 4:** Close and secure the NID at the subscriber's location per instructions provided by the NID manufacturer or standard local practices.

## 18. Maintenance and Repair Procedures

### 18.1 Maintain the Terminal

No routine maintenance of this product is required to keep it in operational order. In the event of loss of service or low performance, reenter the terminal, if necessary, to determine which components are defective.

### 18.2 Repair Procedures

In the event of loss of service or low performance, confirm that the distribution and drop cables are mated correctly. If necessary, reenter the terminal to determine which components are defective.

### 18.3 Reenter the Terminal

- Step 1:** Place a flat-blade screwdriver in the latches.
- Step 2:** Pry open as shown in Figure 60.

## 18.4 Replacing Or Adding Cables

- Step 1:** Remove sealing gasket.
- Step 2:** Remove bolts holding the sealing wedge bracket and remove the bracket.
- Step 3:** Insert one of the bolts just removed into the center hole on the sealing wedge. Tighten screw slowly to force wedge out (Figure 60).
- Step 4:** Remove any pieces of sealing tape from the sealing wedge and lower half-shell.
- Step 5:** Install cable(s) as described in Sections 4, 5, and 6 of this procedure.

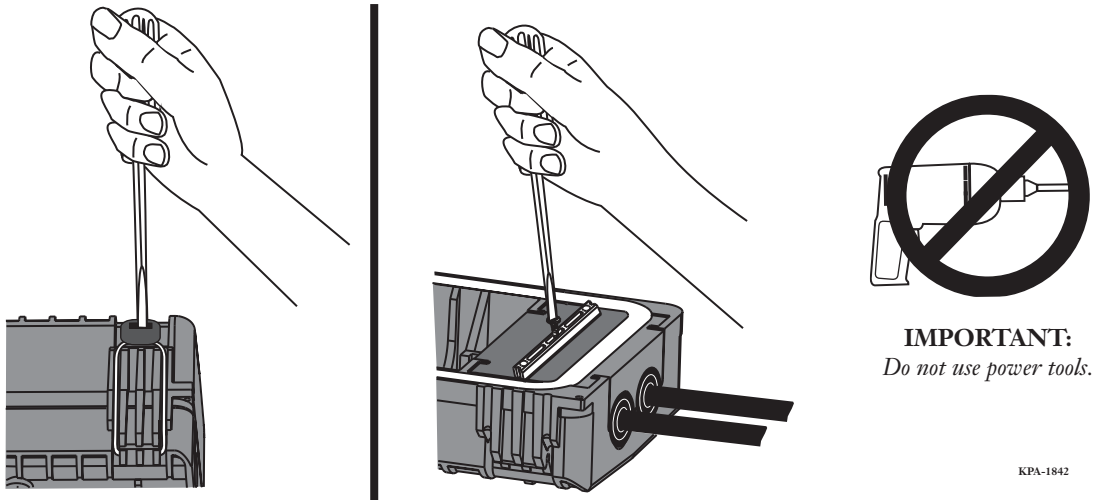


Figure 60

## 18.5 Replace Components

Contact Corning Engineering Services at 1-800-743-2671 for instructions to repair or replace broken or defective components.

---

Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA  
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • [www.corning.com/opcomm](http://www.corning.com/opcomm)

Corning Optical Communications reserves the right to improve, enhance, and modify the features and specifications of Corning Optical Communications products without prior notification. A complete listing of the trademarks of Corning Optical Communications is available at [www.corning.com/opcomm/trademarks](http://www.corning.com/opcomm/trademarks). All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2004--2006, 2009, 2015 Corning Optical Communications. All rights reserved.

---