

Splice Tray Kit for Pretium™ Rack-mountable 4U Housing

Revision History

Issue	Date	Reason for Change
3	03/2007	To clarify difference between initial and current versions of the 4U housing and add hex-head bolts if using current version of housing
2	08/2006	Changed redesigned kit to p/n PC4-SPLC-12SR
1	07/2003	Initial release

Related Literature

SRP 003-650 Instruction, Pretium Rack-mountable 4U Housing

Table of Contents

Admoni	shment	s	. 1
1.	Gener	al	. 1
2.	Tools	and Materials Required	. 2
		Tools	
	2.2	Materials	. 2
3. Install		ation	. 2
	3.1	Install Splice Shelf	. 2
	3.2	Install the Cable	. 3
	3.3	Route Pigtail Fibers	. 4
	3.4	Route Buffer Tubes	
	3.5	Splice Fibers	. 5
	3.6	Complete the Installation	

Admonishments

The precautionary terms used by Corning Cable Systems in its standard recommended procedures conform to the guidelines expressed in the American National Standards Institute document (ANSI Z535) for hazard alert messages. Alerts are included in this instruction based on the following:



DANGER: indicates an imminently hazardous situation which, if not avoided, <u>will</u> result in death or serious injury.



WARNING: indicates a potentially hazardous situation which, if not avoided, <u>could</u> result in death or serious injury.



CAUTION: indicates a hazardous situation which, if not avoided, <u>may</u> result in minor or moderate injury.

1. **GENERAL**

This document describes the recommended procedure for installing the splice tray bracket kit (p/n PC4-SPLC-12SR) shown in Figure 1 into a PretiumTM rack-mountable 4U housing. The splice tray bracket kit is a swing shelf installed into the rear of PCH-04U housings to provide splicing capability. The shelf accommodates up to twelve Type 2S splice trays. This kit can be used only when the cable enters the housing from the left (when housing is viewed from the front).

Initial versions of the housing were designed with internal studs in the sides. These studs have been eliminated in current versions of the housing.

Contact your customer service representative to purchase accessories that are sold separately.

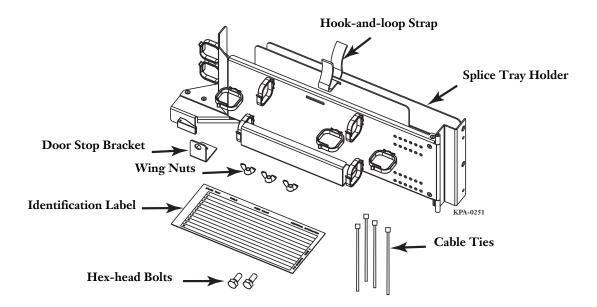


Figure 1 — Kit Components

2. TOOLS AND MATERIALS REQUIRED

2.1 Tools

No special tools are required to install this kit.

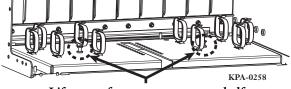
2.2 Materials

- Splice trays and splice protectors
- Factory-pigtailed panels
- Cable stripping tools

3. INSTALLATION

3.1 Install Splice Shelf

- **Step 1:** Open rear door of housing.
- **Step 2:** Remove existing fiber shelf from the rear of the housing by pulling up on the two plunger fasteners (Figure 2).



Lift up on fasteners to remove shelf.

Figure 2 — Remove Fiber Shelf

- **Step 3:** If using the current version of the housing, insert the two hex-head bolts into the cable entry plate from outside the housing (Figure 3).
- **Step 4:** Mount the splice shelf onto the bolts inside of the housing and secure with the two wing nuts provided (Figure 4). If using the initial version of the housing, attach the splice shelf to the internal studs on the cable entry plate inside the housing using two wing nuts.

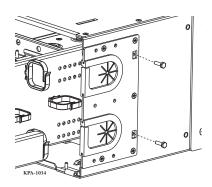
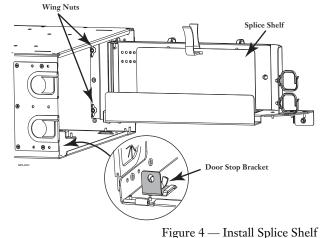


Figure 3 — Install Hex-head Bolts into Current Version of Housing

Step 5: Install door stop bracket into housing using a wing nut (Figure 4 inset).

3.2 Install the Cable

- **Step 1:** Open the shelf completely.
- **Step 2:** Secure the cable to the housing as detailed in the instruction provided with the housing.



and Door Stop Bracket

NOTE: 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 than can alter the transmission characteristics of the cable; the cable may have to be replaced.

- **Step 3:** Remove cable sheath as required for your application following the instructions for the cable you are installing. To provide adequate cable slack:
 - Remove between 60 and 65 inches of jacketed buffer tube.
 - Remove between 75 and 85 inches of jacketed pigtail.
 - Refer to the instruction provided with the splice tray for the length of fiber required in the splice tray.

3.3 Route Pigtail Fibers

- **Step 1:** Remove the blank panels from the housing and replace with factorypigtailed connector panels.
- **Step 2:** Use cable ties to loosely secure the pigtail fibers to the top interior of the housing (Figure 5). Do not tighten cable ties.
- Step 3: Route the pigtail through the front routing clips, around to the back of the splice shelf through the side routing clips, and back through the side routing clips to teh front again (Figure 6).

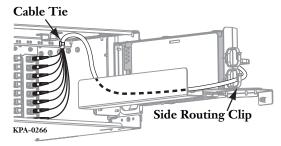


Figure 5 — Route Pigtail to Back of Shelf

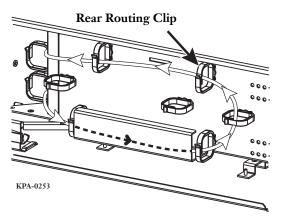


Figure 6 — Route Pigtail Through Rear Routing Clips

- **Step 4:** Position a splice tray (purchased separately) in the holder toward the back of the shelf.
- **Step 5:** Route the pigtail to the end of the tray near the hinge on the shelf (Figure 7).
- **Step 6:** Mark the jacket where the pigtail will enter the splice tray.

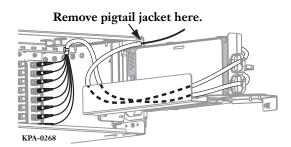


Figure 7 — Mark Pigtail Jacket

3.4 Route Buffer Tubes

- **Step 1:** Loosely secure the buffer tube to the rear of the shelf using a cable tie (Figure 8). Do not tighten the cable tie.
- **Step 2:** Route the buffer tube around to the front of the shelf and through the side routing clips to the splice tray previously installed.
- Step 3: Mark the buffer tube where it will enter the splice tray.

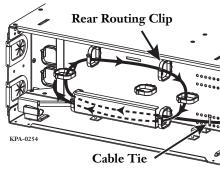


Figure 8 — Route Pigtail Through Rear Routing Clips

3.5 Splice Fibers

- **Step 1:** Strip pigtail jacket and buffer tube at the mark made previously in Figure 7 and Figure 9.
- Step 2: Uncoil enough pigtail fiber and buffer tube from the routing clips to reach the splicing location. Carefully move the fibers and splice tray to the splicing location.
- **Step 3:** Secure cable to splice tray. Splice fibers as explained in the instructions provided with the splice tray for the splicing method you are using.

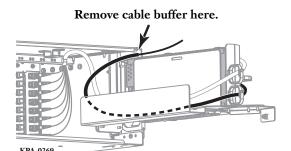


Figure 9 — Mark Buffer Tube



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



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 4: Once splicing is complete, return the splice tray to the tray holder. Store buffer tube and pigtail slack in the clips again as shown in Figure 10.
- **Step 5:** Secure the splice tray in the holder using the provided hook-and-loop strap.

3.6 Complete the Installation

Step 1: Attach the identification label to the inside floor of the housing. Identify each fiber as needed on the identification label (Figure 10). Accurate recordkeeping is imperative to an organized installation.

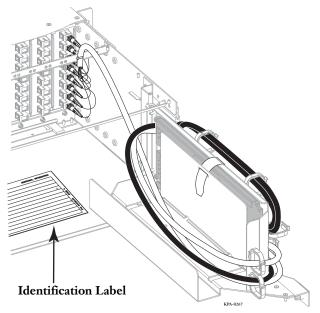


Figure 10 — Secure Splice Tray

- **Step 2:** Swing splice tray shelf to the closed position and secure the door using the nylon fastener.
- **Step 3:** Close rear door of the housing.