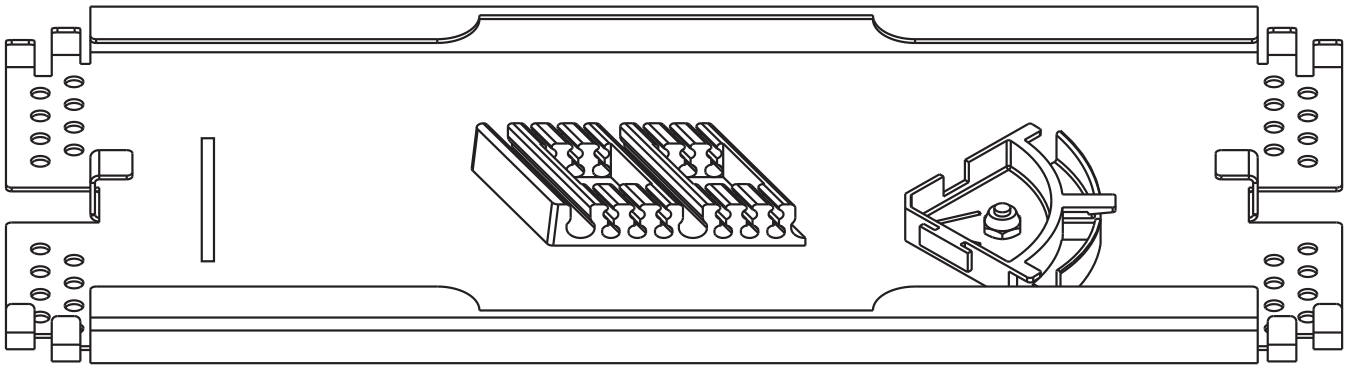
CORNING

Splice Tray (SCF-ST-126-V) Using Heatshrink Splice Protectors

001-290, Issue 2

1. PRODUCT INFORMATION

This document describes the installation of optical fiber with single-fiber heatshrink fusion splices into the SCF-ST-126-V splice tray manufactured by Corning Cable Systems.



KPA-0233

2. PRECAUTIONS

2.1. Laser Handling Precautions

	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.

2.2. Safety Precautions

	CAUTION: Recommend 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.

	CAUTION: 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.

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

2.3. Glass Fiber Precautions

CAUTION: Cleaved or broken glass fibers are very sharp and can pierce the skin easily. Do not let these pieces of fiber stick to your clothing or drop in the work area where they can cause injury later. Use tweezers to pick up cleaved or broken pieces of glass fibers and place them on a loop of tape kept for that purpose alone. **Good housekeeping is very important.**

2.4. Cable Handling Precautions

CAUTION: Fiber Optic Cleaning Fluid can cause irritation to eyes on contact. In case of eye contact, immediately flush eyes with water for at least 15 minutes. Inhaling fumes may be harmful. Use with adequate ventilation. In case of ingestion, consult a physician.

3. TOOLS AND MATERIALS

In addition to the standard tools and materials required for sheath removal and splicing, the following may be required:

- Single fiber heatshrink splice protectors (p/n 2806031-012 for a pack of 25 12-fiber ribbon, 40 mm protectors), purchased separately.
- Dual-hole Miller Tool Fiber Stripper (p/n 2104502-01) or equivalent.

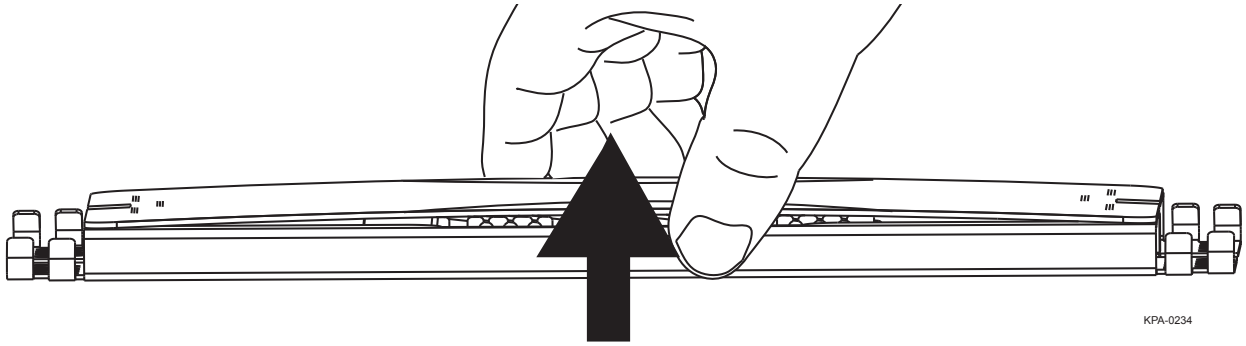
4. STRIPPING FIBER

Strip pigtail jackets to expose approximately 33 in (84 cm) of 900 micron cladded fiber.

NOTE: Detailed fiber stripping instructions are found in the documentation for the splicer. Do not expose the bare fiber until you are ready to splice it.

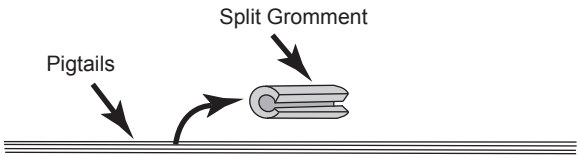
5. SECURING PIGTAILS TO SPLICE TRAY

Step 1: Remove cover from splice tray by lifting up on the tabs at the center edges of the cover. Flex the cover enough to allow the ends of the cover to slide out from under the retaining tabs at each end.

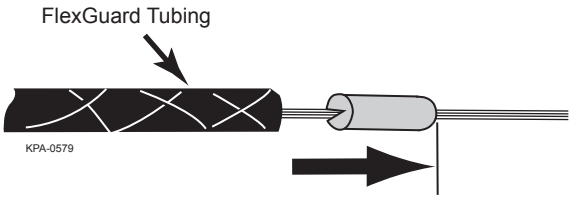


Step 2: Insert four pigtails into one protective nylon tubing.

Step 3: Place a split grommet around the pigtails.

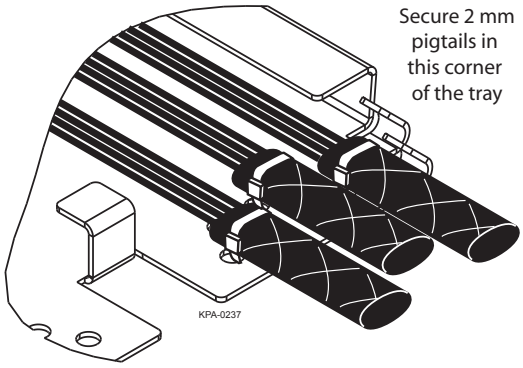


Step 4: Slide the tubing over the split grommet completely until the edge of the tubing is even with the edge of the grommet.



Step 5: Secure the split grommet and tubing to the splice tray using a cable tie. Position the cable tie buckles to one side to avoid potential interference with the splice tray cover.

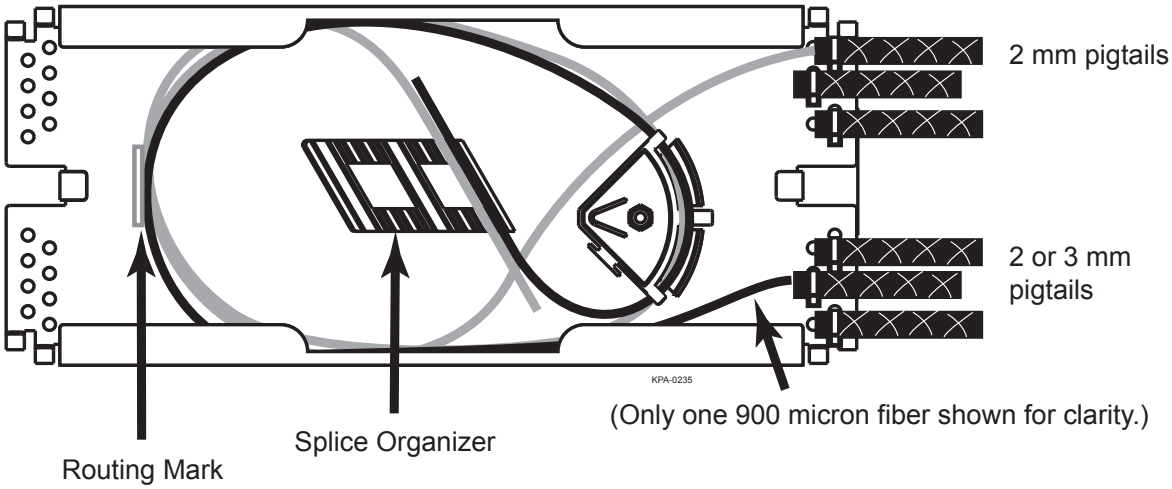
Step 6: Repeat Section 5 for the other pigtails. Secure the last groups of pigtails as shown.



6. DETERMINING FIBER ROUTING CONFIGURATION

Before splicing fibers, determine the fiber routing configuration you will use in your splicing application.

Typically fibers are routed into the splice tray for direct splicing to another fiber the recommended fiber routing inside the tray when direct splicing will be performed. Make at least one loop of fiber around the inside perimeter of the tray (at least 33 inches is recommended) to the splice organizer in the center of the tray. Do not allow the fiber loop to extend beyond the mark on the inside of the tray. Make sure the fiber is under the inside lip of the tray.



7. SPLICING SINGLE FIBERS

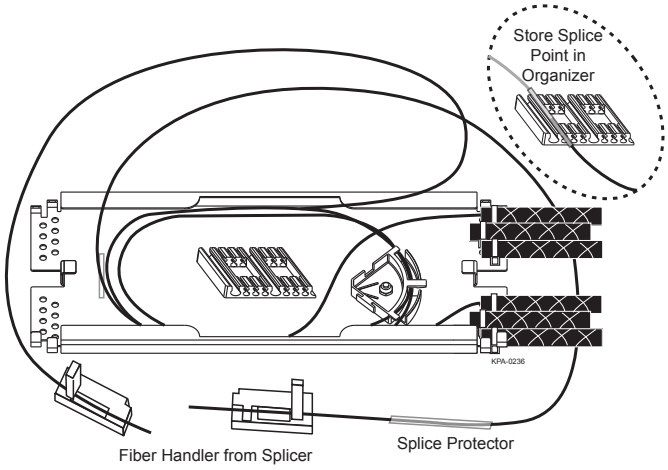
NOTE: Place the tray as close to the splicing equipment as possible. This reduces the possibility of broken fibers while transferring them from the tray to the splicer.

Step 1: Route all fibers into the tray as determined for your splicing application and method.

Step 2: Remove just enough fiber from the tray to reach the splicing equipment. Do not remove the entire length of fiber from the tray or twist fibers as they are removed. Slide the heatshrink splice protector over one of the fibers.

Step 3: Clean cable per cable manufacturer' s instructions. Splice per manufacturer' s instructions. Slide the splice protector over the splice and shrink the protector per the instructions provided with the splicing equipment.

IMPORTANT: The splice protector must be installed onto the fiber BEFORE the fiber is spliced.

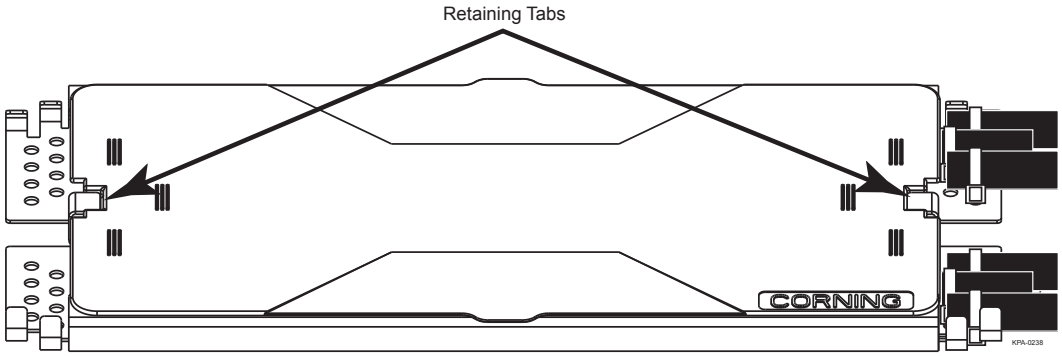


Step 4: Carefully route the fibers back into the tray and place the protected splice into the organizer.

Step 5: Repeat until all fibers are spliced and stored in the tray. You may stack up to two protected splices in each slot in the organizer.

8. SECURING THE COVER

Make sure all fibers are below the inside lip of the tray. Flex the cover as shown in Figure 3 and insert the ends under the retaining tabs at each end of the splice tray. Allow the middle of the cover to relax onto the tray.



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