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# SUMITOMO RECOMMENDED PROCEDURE

### SRP SP-F01-026

## **Fiber Separator Jig**

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#### 1.0 General

This procedure describes techniques installation and preparing Sumitomo Slotted Core fiber optic ribbon cable. This product aids in the separation of the fiber groups and installation of furcation tubes and socks. Prior to using the Jig a separation scheme should be decided upon. Different installations will follow different schemes. For this procedure we will assume a 1728 cable will be installed in a network rack with 864 fiber patch panel assemblies. If additional cables will be installed in this rack it is highly recommended that a UHFC Ribbon Breakout Box be utilized as it will help route and better protect the ribbons. The 864 Patch Panel assemblies can be ganged together to accept the 1728 cable. The cover to connect the assemblies is included with the patch panels. Keep a few rubber bands handy as they can be used to retain the ribbons in the Jig.

### 2.0 Safety Precautions

- 2.1 The use of safety equipment is strongly recommended during the installation and handling of optical fiber cable.
- 2.2 To protect the hands, Kevlar gloves are recommended when handling the cable components.

#### 3.0 Reference Documents

SP-F02-029 - 1728 Fiber Cable Prep

SP-F05-002 - 6912 UHFC Ribbon Breakout Box

SP-F05-003 - Mechanical Joint Closure GI-TN

SP-F05-006 - Mechanical Joint Closure GI-TN

5184

## 4.0 Tools Required

The following is a list of tools and materials required to complete this procedure.

- a. Marking Pen
- b. Kevlar Gloves
- c. Safety Glasses
- d. Rubber Bands

### 5.0 Jig Assembly

### 5.1. Assembling the Jig

Remove the Jig from the protective pouch. See Figure 1.

Install the 9 posts into the 9 holes with the slotted end towards the base. See Fig. 2.



Figure 1

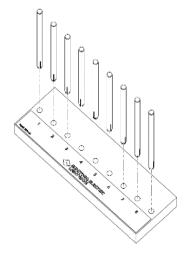
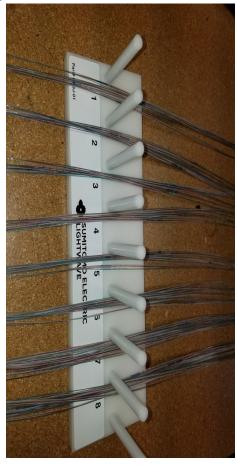


Figure 2

5.1.1 See doc: SP-F02-029 for cable prep procedures. At step 5.1.8 remove the ribbons from slot number 1. Place them in Jig slot 1 (see Figure 3). Remove the ribbons from slots 2 to 6 and placing them in the corresponding Jig slots. Following the cable color codes (see Figure 4) place the ribbons from Jig slot 1 into the Blue sock. Place the ribbons from Jig slot 2 into the Orange sock and so on. Placing blue painters tape around the end of the ribbon bundle from each slot will make it easier to insert/feed the ribbons through the sock.

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Ribbon

separation

from one

cable slot

Figure 3

Note: Use standard color code - Blue, Orange, Green, Brown, Slate and White for the six slots.

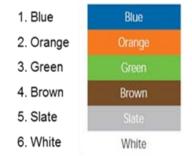


Figure 4

5.1.2 Divide ribbons based on the amount of ribbons per slot and splice tray capacity.

1152f – Is a 4 slot cable containing 192 fibers/16 ribbons per slot.

1728f - Is a 6 slot cable containing 288 fibers/24 ribbons per slot.

3456f - Is an 8 slot cable containing 432 fibers/36 ribbons per slot.

5184f - is an 8 slot cable containing 648 fibers/54 ribbons per slot.

6912f - is a 6 slot cable containing 1152 fibers/96 ribbons per slot.

Each particular termination solution may dictate a different separation scheme. For instance: If the installation is in a TN Enclosure (Splice case) with 4.5mm tubes and splice tray capacity of 144f per tray then a separation scheme is needed of 4 ribbons per tube. In this scenario it will be necessary to separate the ribbons from each cable slot into separate Jig slots. Assuming the same 1728 cable we would remove each fiber bundle from the cable slot and divide the ribbons into groups of 4. Ribbons 1-4 should be placed into Jig slot #1. Ribbons 5-8 should be placed into Jig slot #2 and so on. You will need 6 furcation tubes for each cable slot, all colored the same. Starting with the Blue group mark the tubes 1 to 6. Insert the ribbon bundle from Jig slot #1 into Blue tube #1. Insert the ribbon bundle from Jig slot #2 into Blue tube #2 and continue though Blue tube #6 and repeat for each slot and color code.

If the installation is in a TN Enclosure (Splice case) with 6.5mm tubes and a splice tray capacity of 216f per tray then a separation scheme is needed of 18 ribbons per tube. In this scenario it will be necessary to separate the ribbons from each cable slot into separate Jig slots. Assuming a 3456f cable we would remove each fiber bundle from the cable slot and divide the ribbons into groups of 18. Ribbons 1-18 should be placed into Jig slot #1. Ribbons 19-36 should be placed into Jig slot #2. You will need 2 furcation tubes for each cable slot, each colored the same. Starting with the Blue group mark the tubes 1 to 2. Insert the ribbon bundle from Jig slot #1 into Blue tube #1. Insert the ribbon bundle from Jig slot #2 into Blue tube #2 and repeat for each slot and color code.