

Ribbonizing Loose 200 μm Coated Fibers



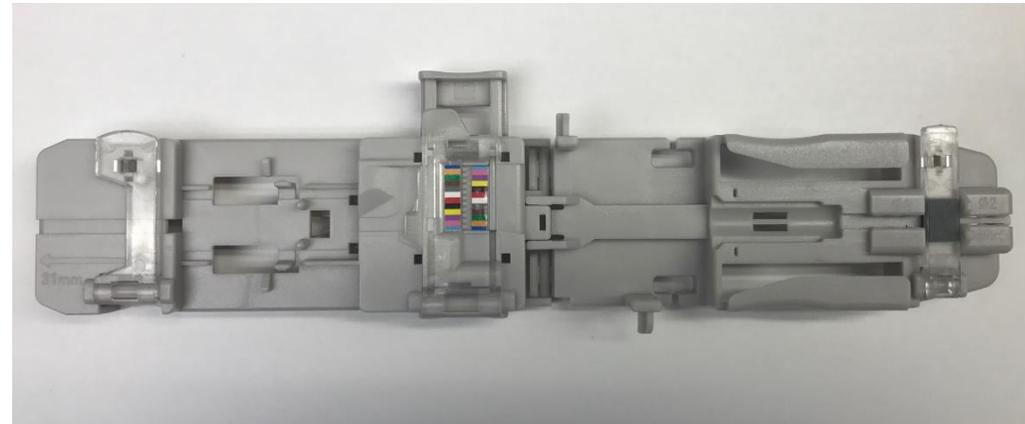
Items Needed

- FH-70-12PC
 - Pitch conversion fiber holder



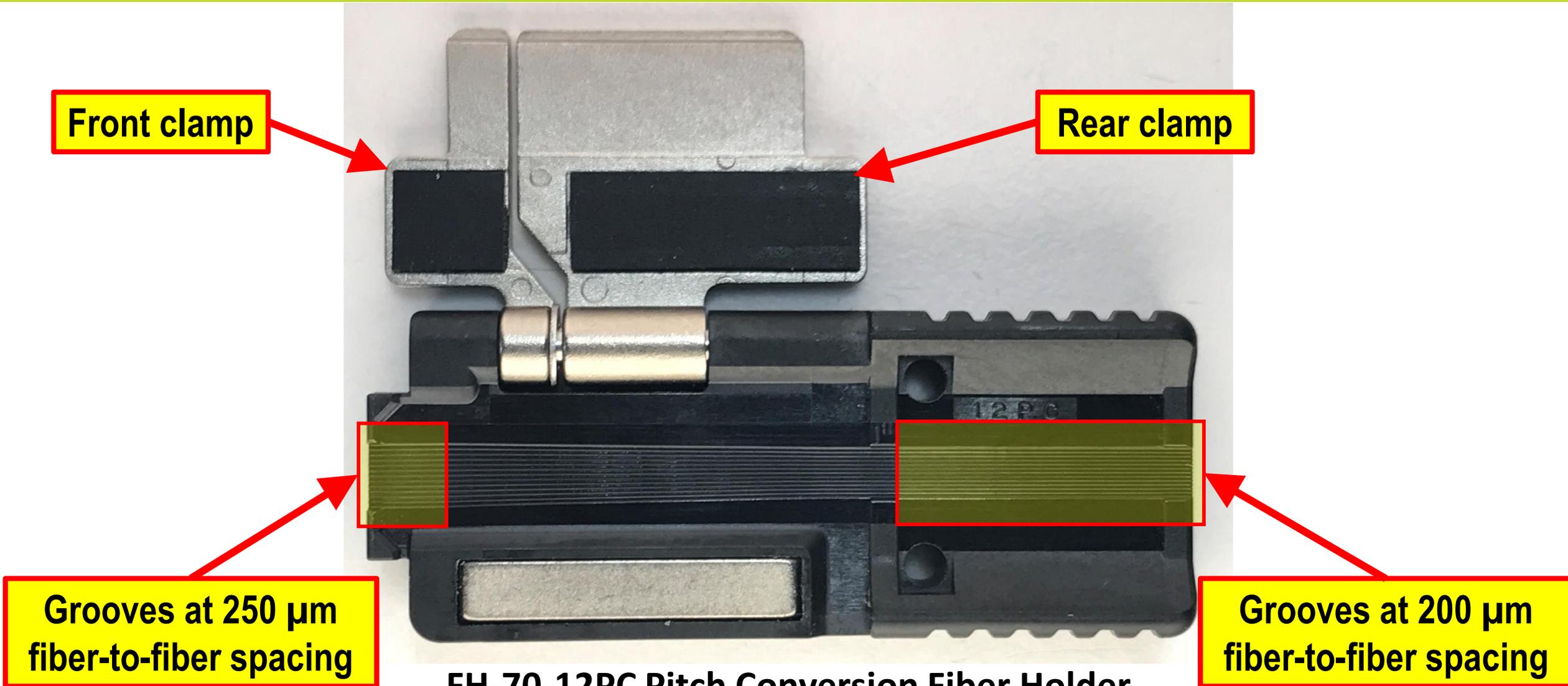
FH-70-12PC Pitch Conversion Fiber Holder
(AFL part number S017464)

- RT-02 Ribbonizing Tool
 - Also applicable to 250 μ m coated fibers



RT-02 Ribbonizing Tool
(AFL part number S017465)

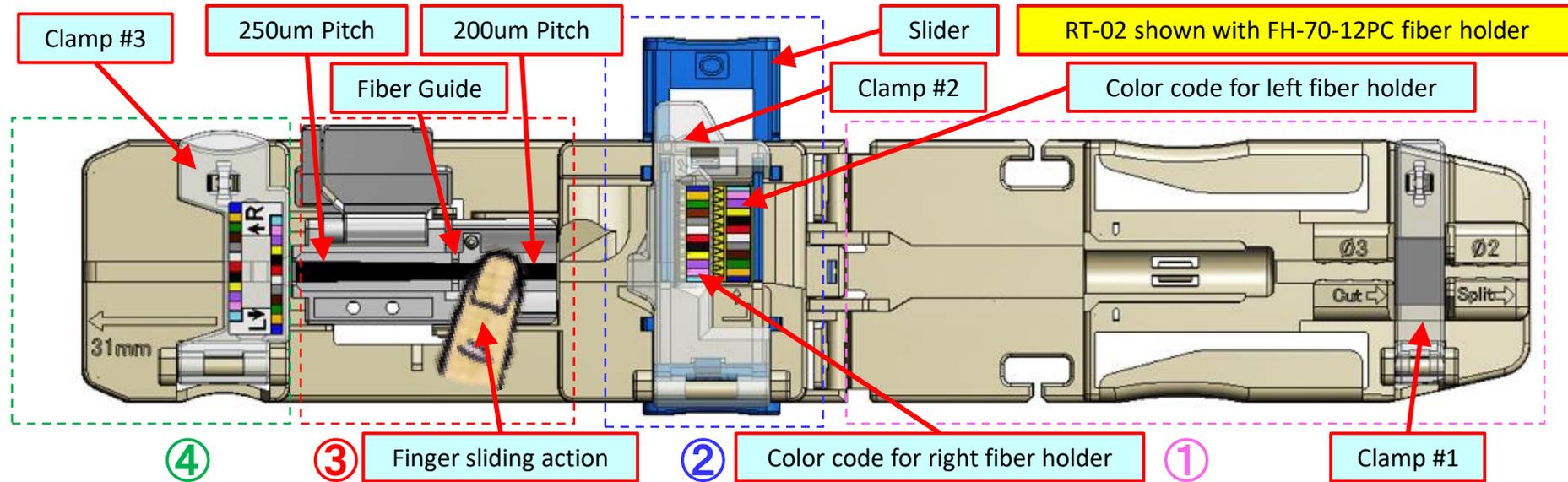
FH-70-12PC Pitch Conversion Fiber Holder Features



FH-70-12PC Pitch Conversion Fiber Holder

AFL part number S017464

RT-02 Structure and Features



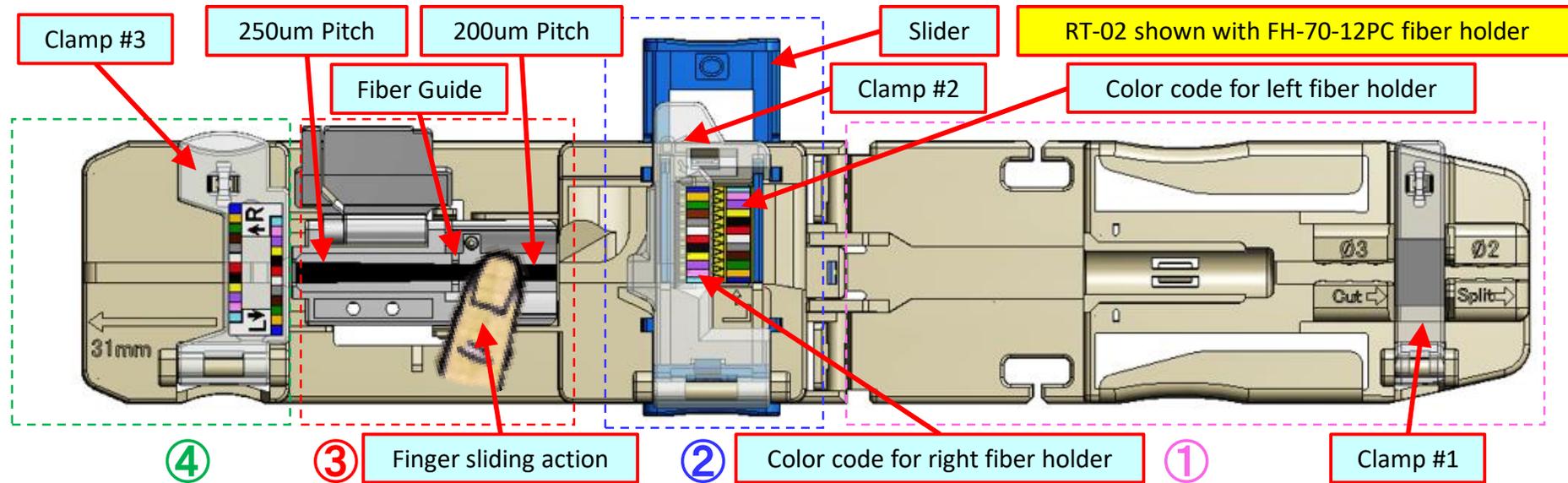
Section ④: Clamp #3 prevents fibers from crossing over each other while you use your finger to smooth the fibers down into the groves of the fiber holder. (Gap = 0.3mm between Clamp #3 and body).

Section ③: Arrange fibers in the fiber holder grooves by pressing down with your finger tip and sliding your finger. (100% pitch achievement if all fibers enter within the Fiber Guide)

Section ②: Insert each fiber under Clamp #2 in the proper color-coded position. (NOTE: There are 2 color codes, one for the right fiber holder, and the other for the left fiber holder.)

Section ①: Use Clamp #1 at the end of this section of the tool to firmly secure and hold the fibers to prevent the fibers from moving during the ribbonizing process. The fibers should be clamped so that the ends of the fibers are even with the far end of the tool (at the end of the “31mm” scale in Section ④). This will provide the proper length of fiber for stripping and cleaving after ribbonizing is complete.

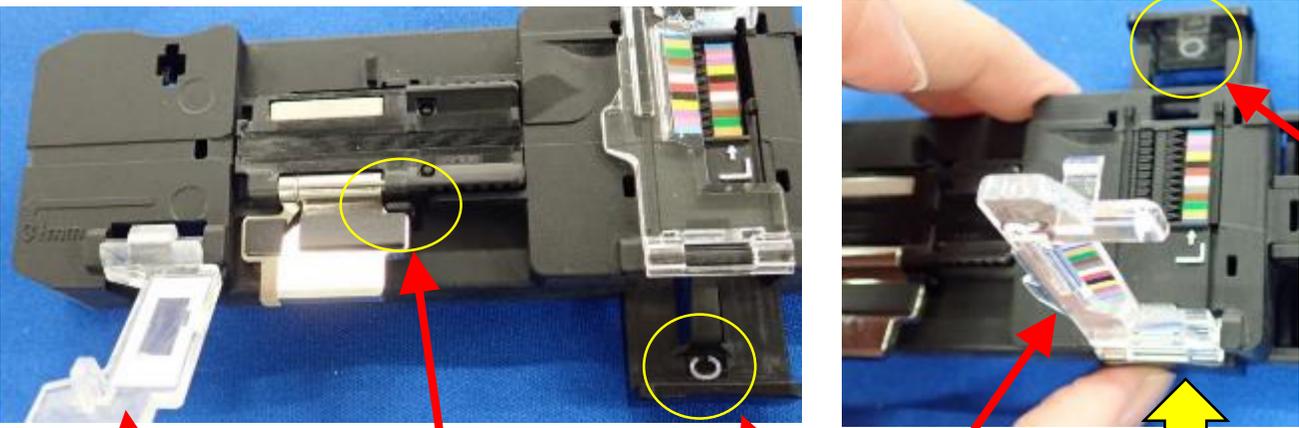
Operation Summary



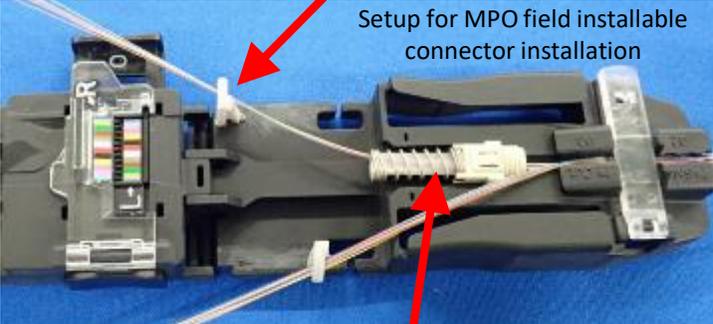
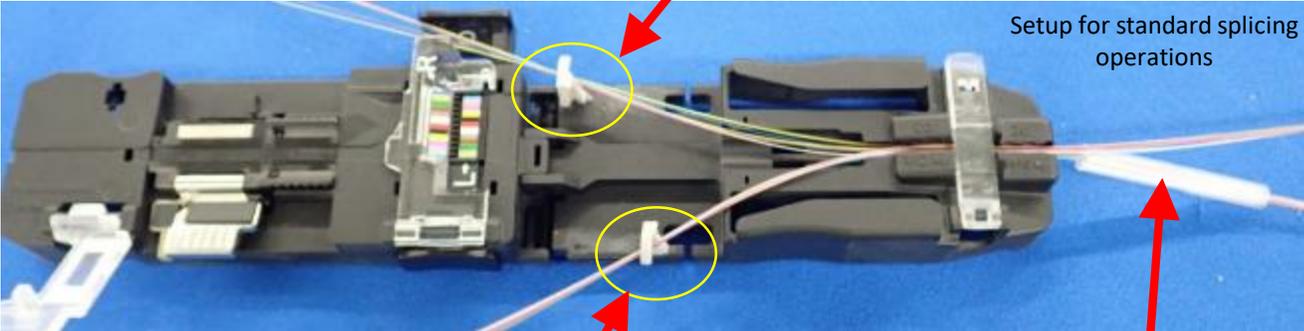
Operation flow (main steps):

1. Secure the fibers with Clamp #1 in **Section ①** with the fiber ends even with the far end of the RT-02.
2. Insert each fiber in the proper color-coded slot under Clamp #2 in **Section ②**.
3. With Clamp #3 in **Section ④** open, slide your finger from right to left to smooth the fibers down into the fiber holder grooves (in **Section ③**).
4. Next close Clamp #3 in **Section ④** (The 0.3mm gap will prevent fibers from crossing over each other during the next step.)
5. In **Section ③**, slide your finger tip from right to left almost to the end of the fiber holder, leaving just enough room to allow you to close the small fiber holder clamp. (**You will achieve 100% pitch conversion if all fibers enter through the Fiber Guide gate of the fiber holder.**)
6. Close the large clamp of the fiber holder to secure the fibers at the 250 μm fiber-to-fiber pitch spacing.
7. Open RT-02 clamps #1, #2 and #3, and remove the FH-70-12PC fiber holder with the now ribbonized fibers.

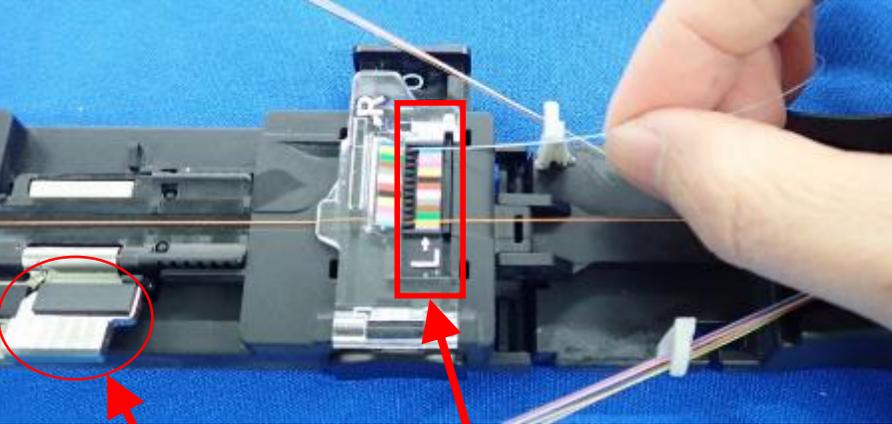
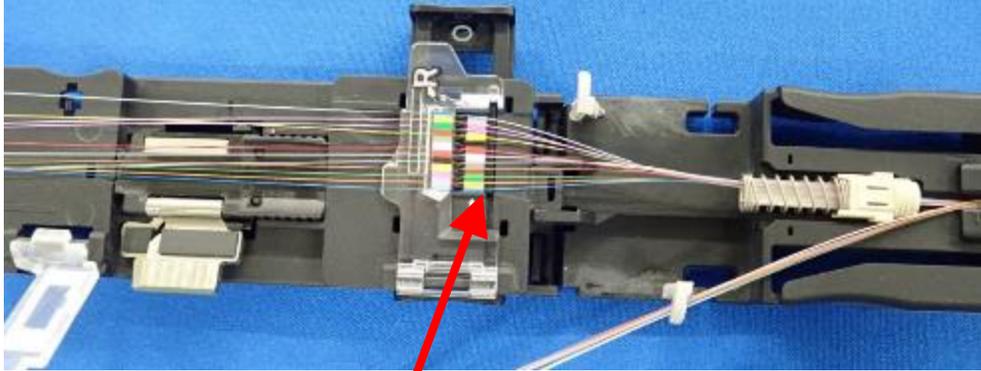
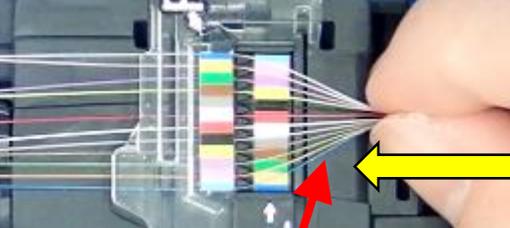
Step 1: Setup RT-02 to Prepare for Ribbonizing

Step No.	Job content	Process specification
1	Initial Tool & Fiber Holder setting	 <p>① Open Clamp #3</p> <p>② Set the FH-70-12PC fiber holder in place and lock the fiber holder clamp open.</p> <p>③ Open Clamp #2 BEFORE pushing the Slider to the rear. NOTE: If Clamp #2 is closed, the Slider cannot be pushed to the rear.</p> <p>④ Push the Slider completely to the REAR to the "O" (open) position, as shown. This is the Slider starting position.</p> <p>⑤ You will see the "O" (open) mark.</p> <p>"C" Closed</p>

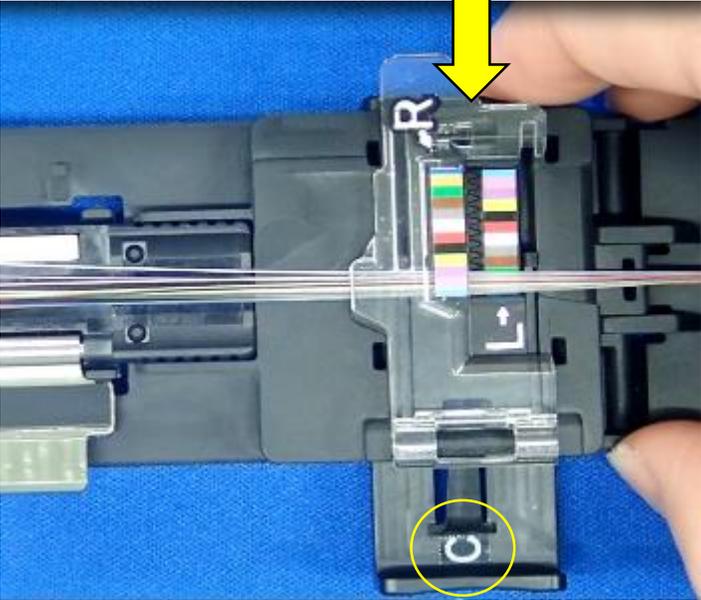
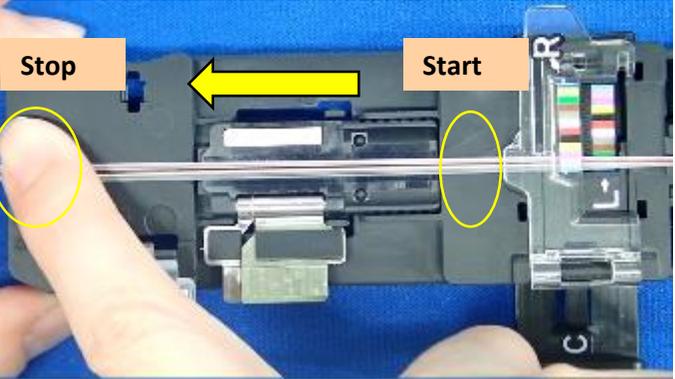
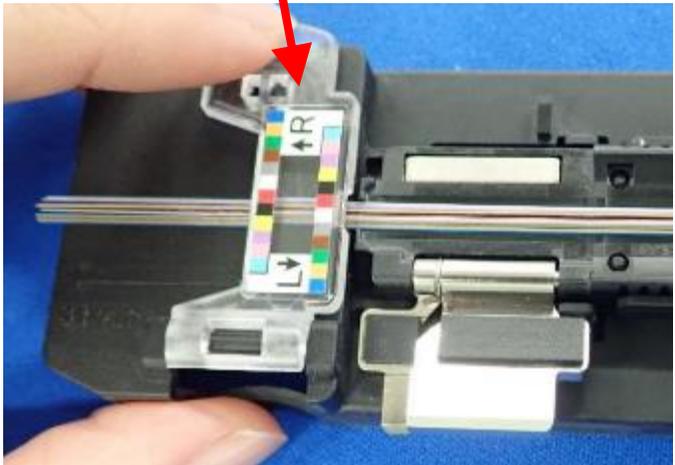
Step 2: Initial Fiber Loading

Step No.	Job content	Process specification
2	<p>Initial fiber setting into the RT-02</p> <p>NOTE: In this example, each cable unit tube contains 24 fibers. In such a case, the operator must first sort and separate the striped fibers #13 through #24 from the non-striped fibers #1 through #12.</p>	 <p>Fiber ends should be even with the end of the RT-02 as shown (~30mm from the end of FH-70-12PC fiber holder) to provide the proper fiber length for stripping</p>  <p>Group of 12 fibers being ribbonized</p> <p>Setup for MPO field installable connector installation</p> <p>Connector housing part & Sseeve (in the case of Fuse MPO connector with cable)</p>  <p>Group of 12 fibers being ribbonized</p> <p>Setup for standard splicing operations</p> <p>Next 12 fibers to be ribbonized (Fibers 13 through 24)</p> <p>Sleeve (in the case of general splicing)</p>

Step 3: Inserting Fibers Through Organizer

Step No.	Job content	Process specification
3	Fiber insertion	<p data-bbox="677 362 1569 786"></p> <p data-bbox="677 811 952 886">Fiber holder clamp ("locked" open)</p> <p data-bbox="1065 811 1684 886">Use "L" ⇒ color template because fibers are being loaded into the LEFT fiber holder</p> <p data-bbox="677 901 1658 1272"></p> <p data-bbox="901 1296 1276 1372">② Insert all 12 fibers in proper color code position</p> <p data-bbox="1676 901 2186 1129"></p> <p data-bbox="1717 1210 2196 1368">③ Gather the 12 fiber & push as shown to remove any excess slack so the fibers will all be the same length</p> <p data-bbox="1589 372 2168 448">① Randomly pick up fibers one by one & insert into the proper color slot.</p> <p data-bbox="1589 496 2160 776">*Note 1: Color template "L" or "R" is selected corresponding to the LEFT side or the RIGHT side fiber holder. This will ensure that the Blue #1 fiber will always be closest to the hinge side of the fiber holder clamp, which is industry standard for ribbon splicing.</p>

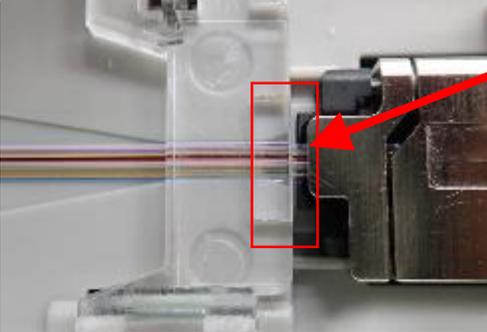
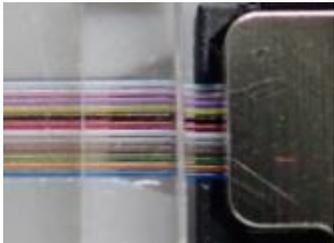
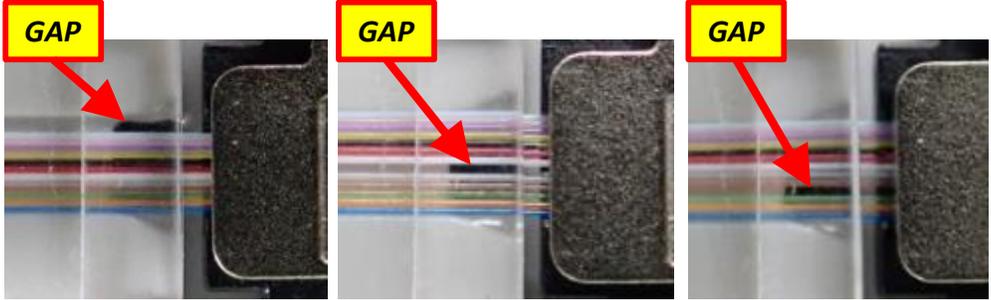
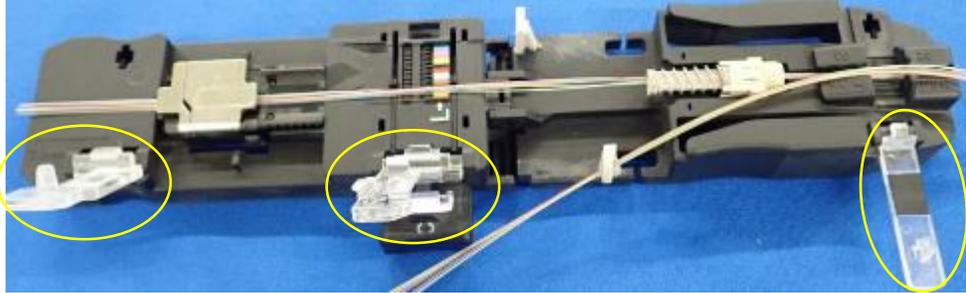
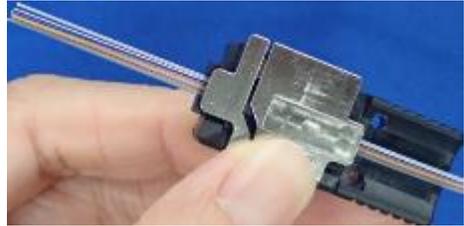
Step 4: Gathering Fibers Together

Step No.	Job content	Process specification
4	Fiber gathering and straightening	<p>① Push the Slider completely towards the FRONT (as shown) to gather the fibers together and align them with the fiber holder.</p>  <p>② You will see the "C" (Close) mark.</p>  <p><i>* Note 2: Don't push the Slider back to the rear after the fibers are gathered or fibers may be broken.</i></p> <p>③ Slide your finger to the left to straighten the fibers across the fiber holder.</p>  <p>④ Close Clamp #3 to prevent fibers from crossing over each other during the next step.</p> 

Step 5: Converting Fiber Pitch Spacing to 250 μ m

Step No.	Job content	Process specification
5	Fiber pitch arrangement	<p>① Slide your finger to the LEFT while pressing the fibers down to ensure all fibers pass within the Fiber Guide of the fiber holder. Continue to hold the fibers down with your finger tip.</p> <p>② Continue sliding your finger to the LEFT but stop in the position shown by the dotted line so the small fiber holder clamp can be closed.</p> <p>③ Close the small fiber holder clamp</p> <p>④ Slide your finger to the RIGHT past the Fiber Guide (make sure all fibers stay within the Fiber Guide) and close the large fiber holder clamp</p> <p>Small fiber holder clamp</p> <p>Fiber Guide</p> <p>Large fiber holder clamp</p>

Steps 6 & 7: Confirming Pitch Spacing & Removing Fibers

Step No.	Job content	Process specification
6	Fiber Pitch Confirmation	<p data-bbox="1245 349 2178 468">Check the fiber pitch where the fiber exits from the fiber holder. If any fiber is out of place, there will be a visible black gap between fibers.</p> <p data-bbox="1245 515 2117 591"><i>*Note3:</i> If a pitch spacing error occurs, open both fiber holder clamps and repeat the operations from steps 4 and 5.</p> <div data-bbox="708 344 1195 676">  </div> <div data-bbox="794 682 1128 925">  <p data-bbox="812 932 1057 968">OK: No black gap</p> </div> <div data-bbox="1207 625 2198 925">  <p data-bbox="1304 932 2033 968">NO GOOD: Black gap can be seen due to pitch error</p> </div>
7	Release Fiber Holder	<p data-bbox="777 992 1498 1061">Open all three clamps of the RT-02 and remove the fiber holder with the now ribbonized fibers</p> <div data-bbox="718 1072 1684 1365">  </div> <div data-bbox="1709 1093 2173 1365"> <p data-bbox="1740 1093 2071 1125">Completed Ribbonizing</p>  </div>

Thank You!



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