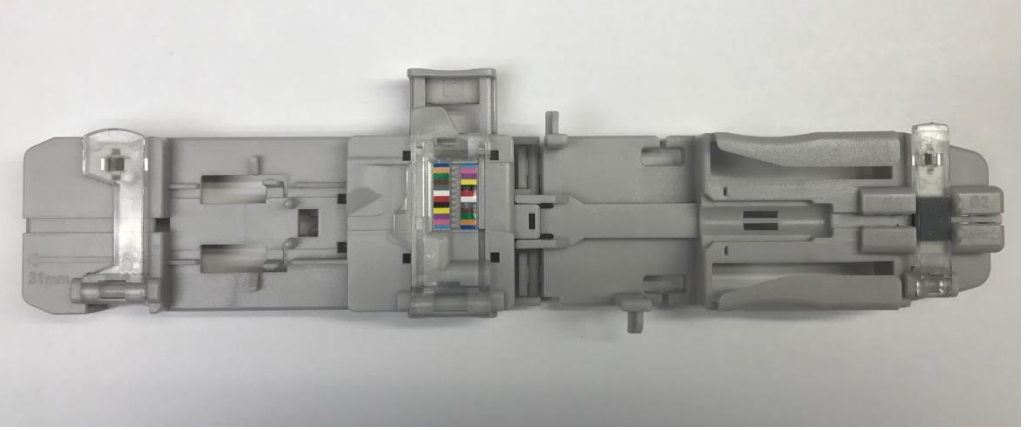
# Ribbonizing Loose 200 µm Coated Fibers

AFL

# Items Needed

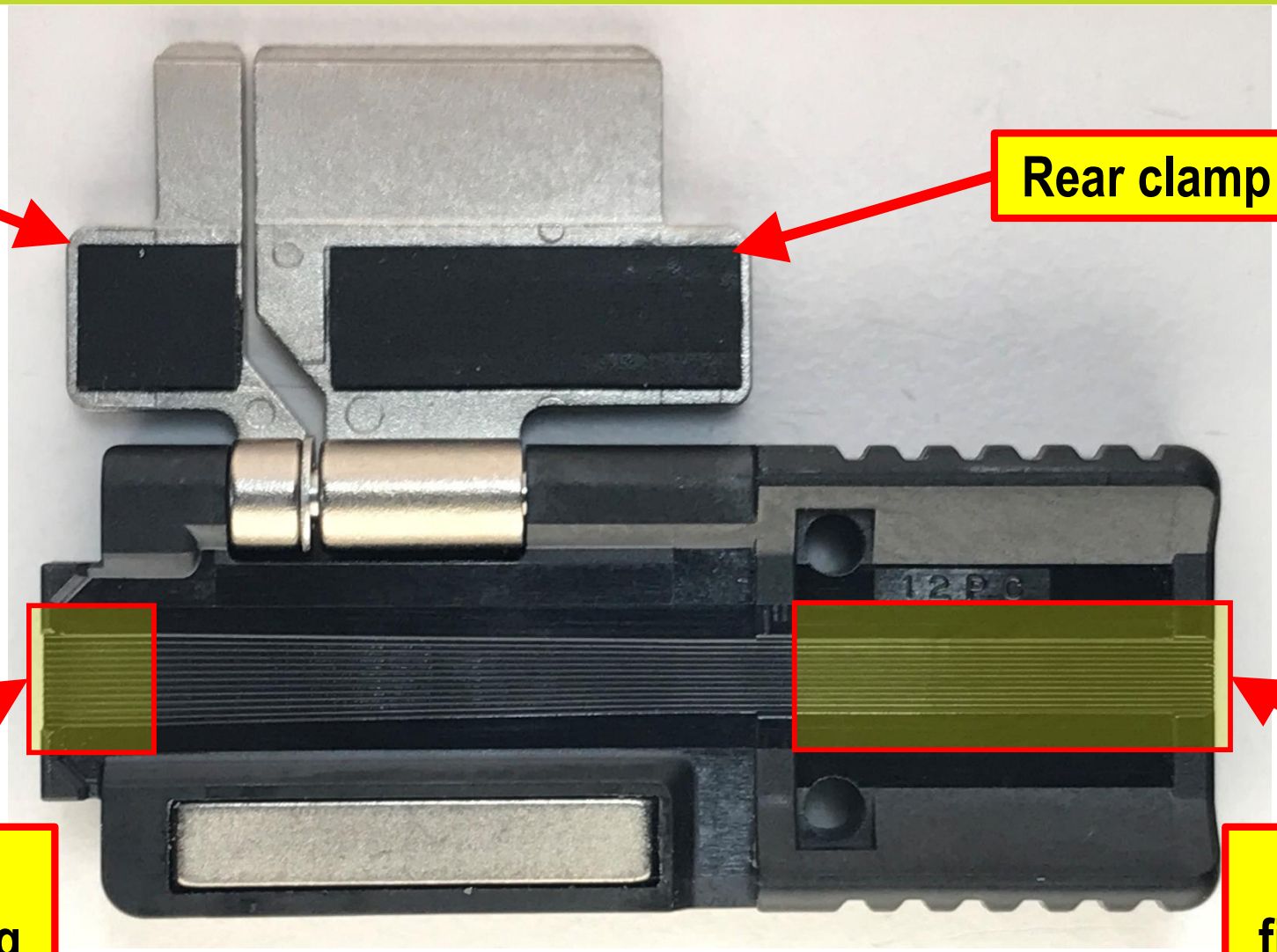
- FH-70-12PC
  - Pitch conversion fiber holder
- RT-02 Ribbonizing Tool
  - Also applicable to 250 µm coated fibers


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



**RT-02 Ribbonizing Tool**
(AFL part number S017465)

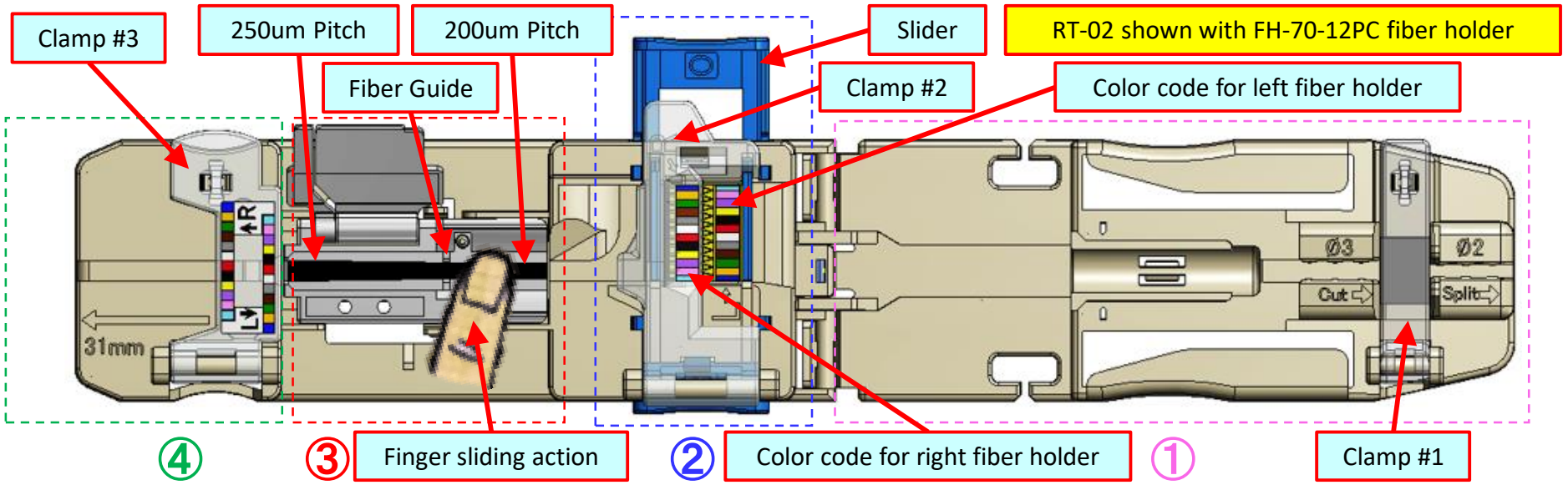
# FH-70-12PC Pitch Conversion Fiber Holder Features




**FH-70-12PC Pitch Conversion Fiber Holder**

AFL part number S017464

# RT-02 Structure and Features



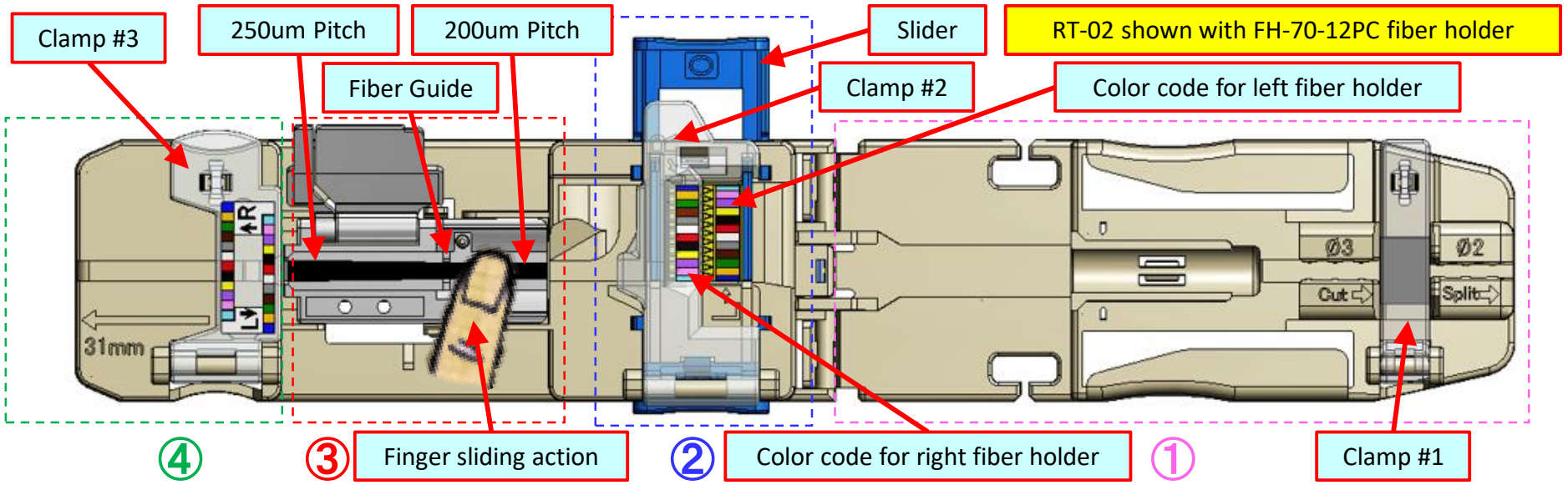

**Section ④**: Clamp #3 prevents fibers from crossing over each other while you use your finger to smooth the fibers down into the groves of the fiber holder.
(Gap = 0.3mm between Clamp #3 and body).

**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.

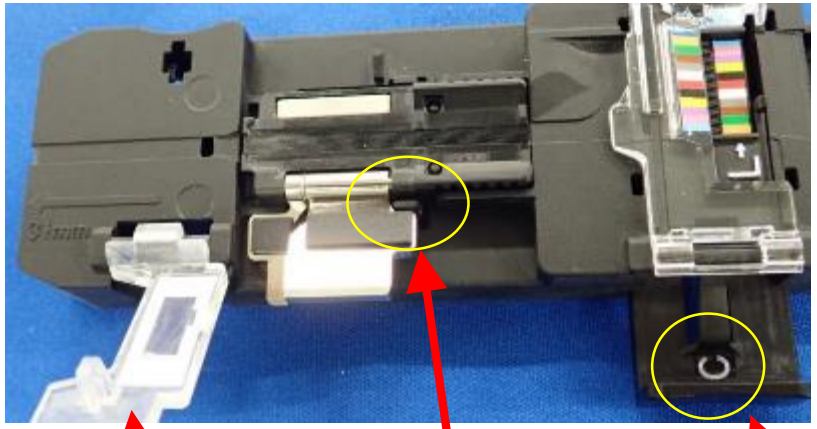
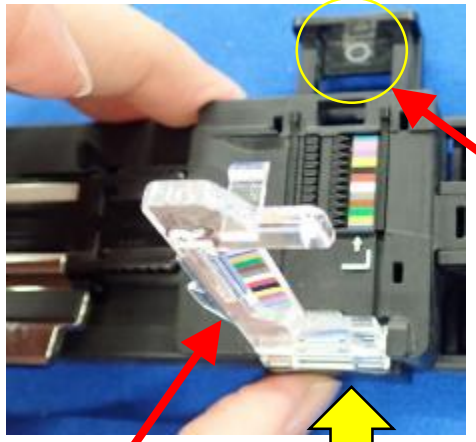
# Operation Summary



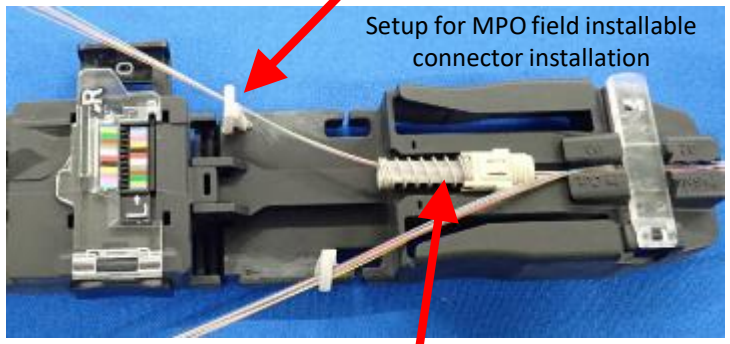
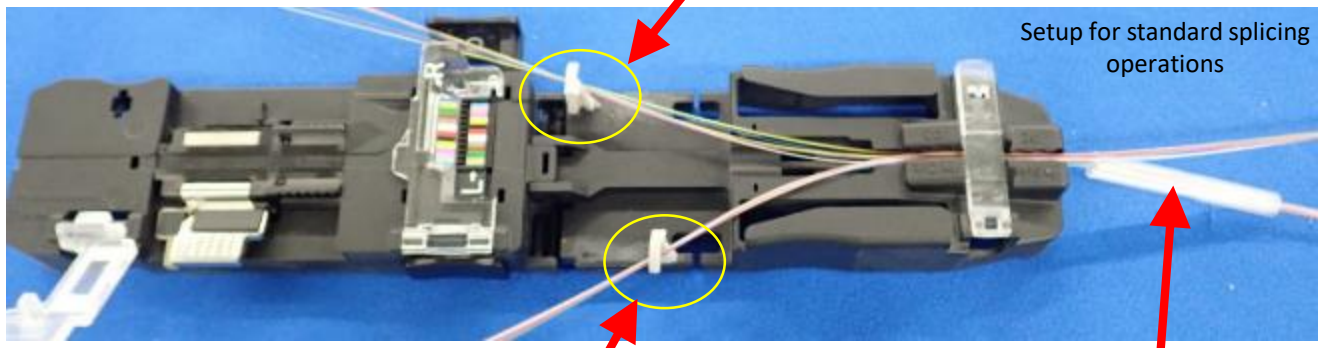

**Operation flow (main steps):**

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.

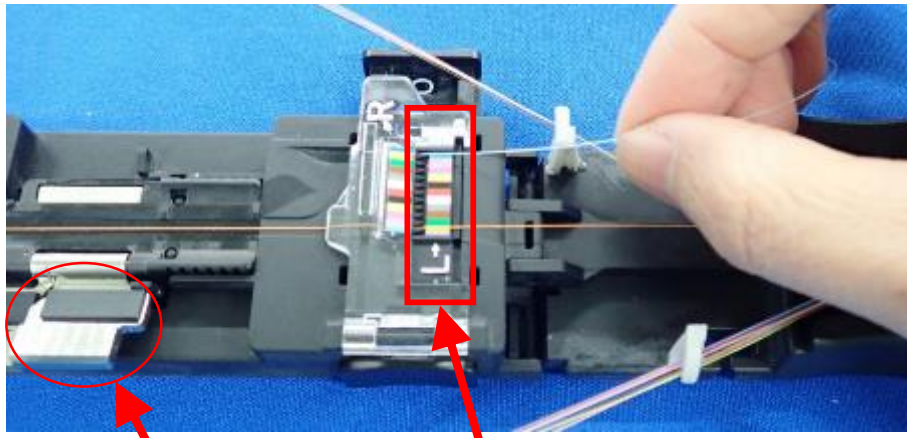
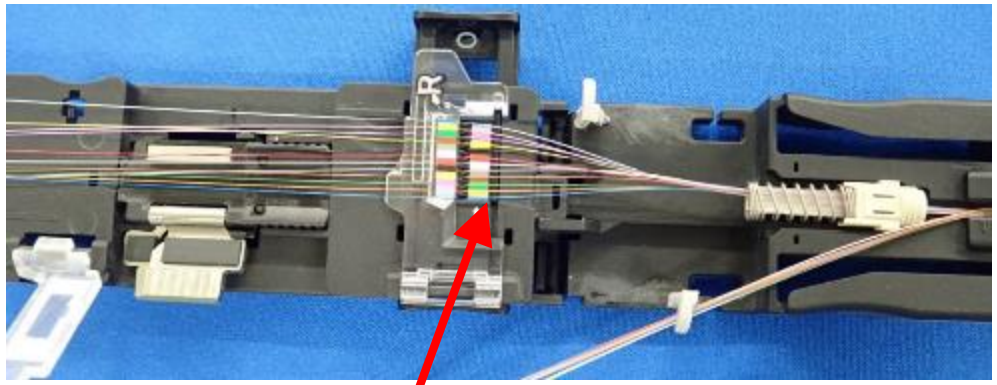
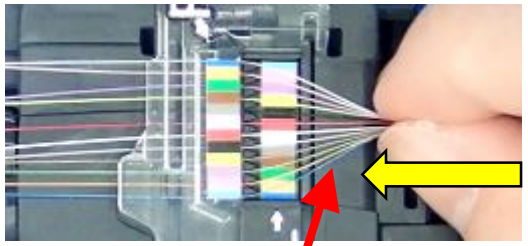
# Step 1: *Setup RT-02 to Prepare for Ribbonizing*

| Step No. | Job content | Process specification |
|---|---|---|
| 1 | **Initial Tool & Fiber Holder setting** |   ⑤ You will see the "O" (open) mark. "C" Closed ② Set the FH-70-12PC fiber holder in place and lock the fiber holder clamp open. ④ Push the Slider completely to the ***REAR*** to the "O" (open) position, as shown. This is the Slider starting position. ① Open Clamp #3 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. |

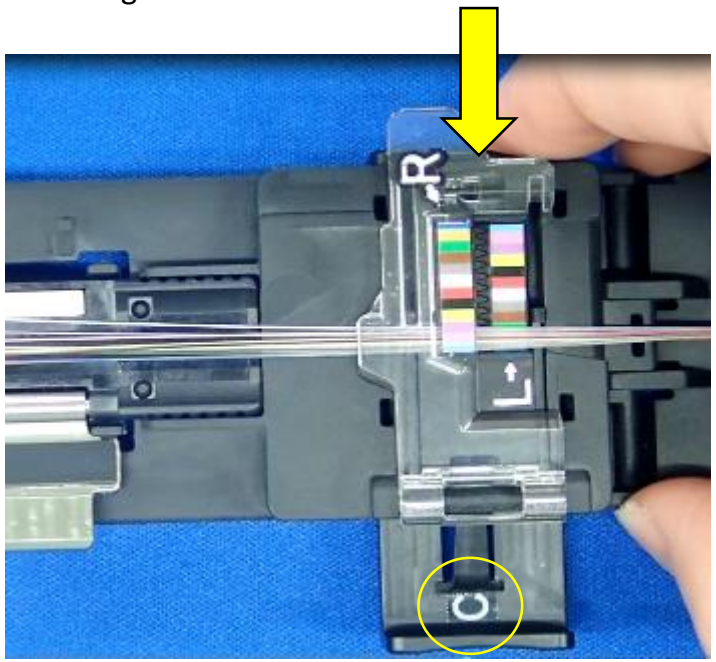
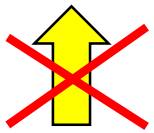
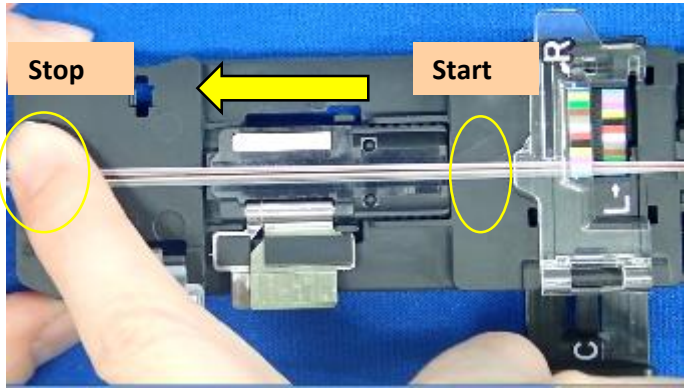
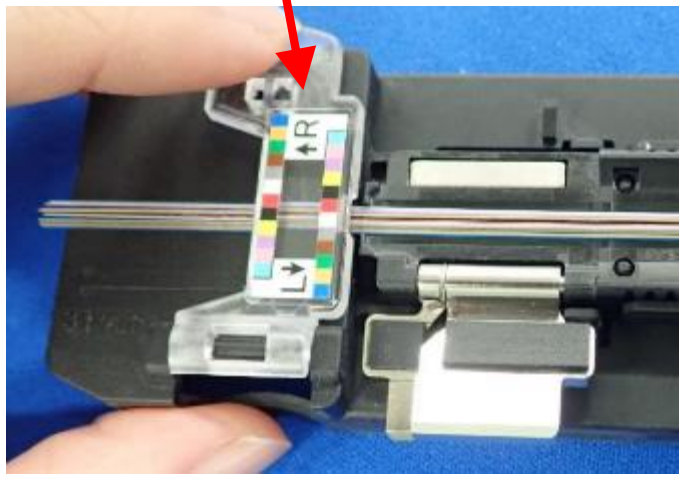
# Step 2: *Initial Fiber Loading*

| Step No. | Job content | Process specification |
|---|---|---|
| 2 | **Initial fiber setting into the RT-02**<br><br>**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.** |  <br>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<br><br>Group of 12 fibers being ribbonized<br>  <br>Setup for MPO field installable connector installation<br>Connector housing part & Sseeve (in the case of Fuse MPO connector with cable)<br><br>Group of 12 fibers being ribbonized<br>  <br>Setup for standard splicing operations<br>Next 12 fibers to be ribbonized<br>(Fibers 13 through 24)<br>Sleeve (in the case of general splicing) |

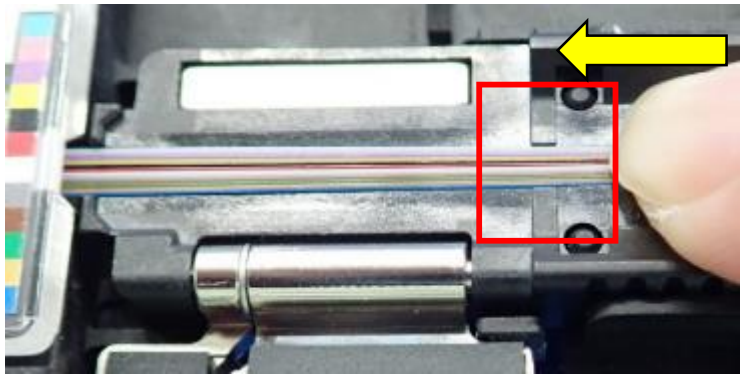
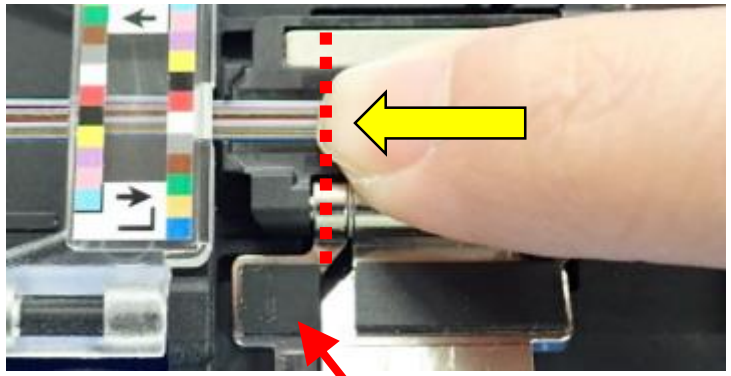
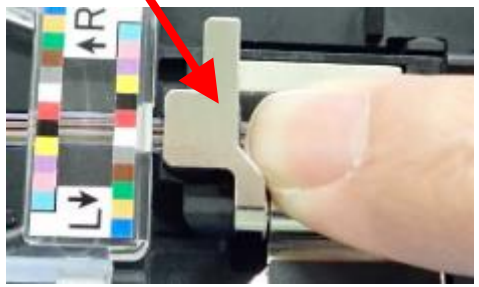
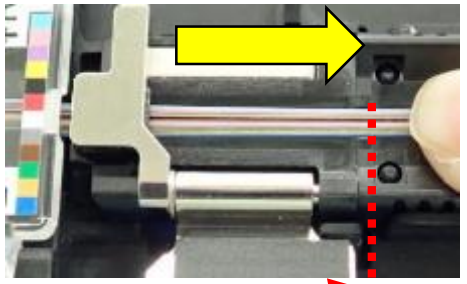
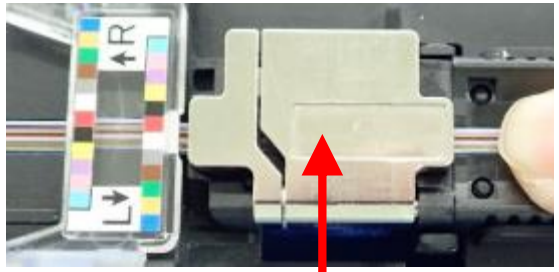
# Step 3: *Inserting Fibers Through Organizer*

| Step No. | Job content | Process specification |
|---|---|---|
| 3 | **Fiber insertion** |  Fiber holder clamp ("locked" open)<br>Use "**L**" ⇒ color template because fibers are being loaded into the ***LEFT*** fiber holder<br>① Randomly pick up fibers one by one & insert into the proper color slot.<br>***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.<br>  ② Insert all 12 fibers in proper color code position<br>  ③ Gather the 12 fiber & push as shown to remove any excess slack so the fibers will all be the same length |

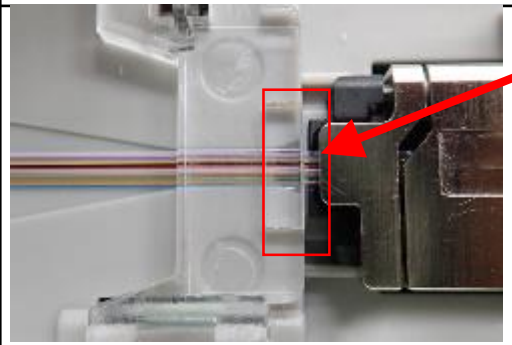
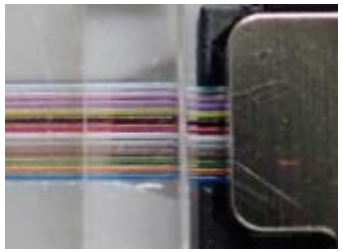
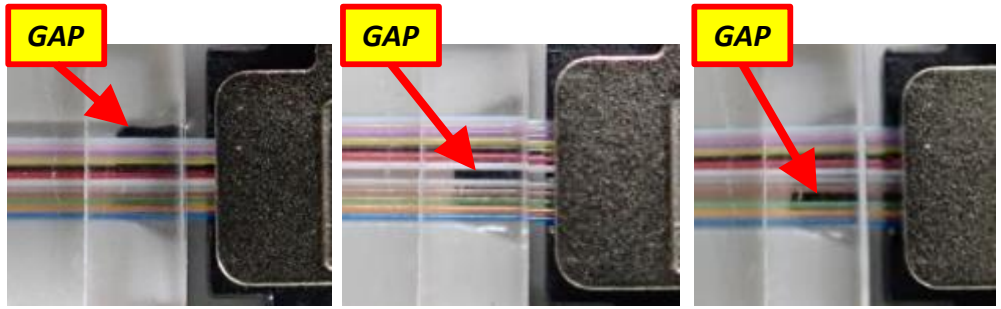
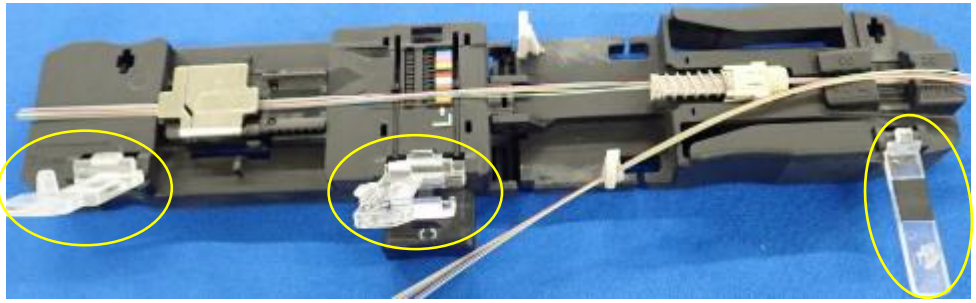
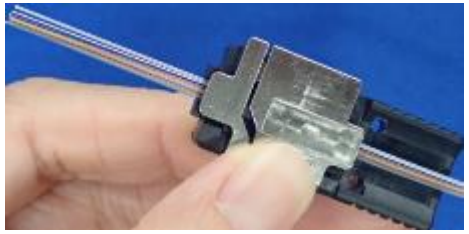
# Step 4: *Gathering Fibers Together*

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

# Step 5: *Converting Fiber Pitch Spacing to 250 µm*

| Step No. | Job content | Process specification |
|---|---|---|
| 5 | **Fiber pitch arrangement** | 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.<br>  <br>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.<br>  <br>Small fiber holder clamp<br>③ Close the small fiber holder clamp<br>  <br>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<br>  <br>Fiber Guide<br>  <br>Large fiber holder clamp |

# Steps 6 & 7: *Confirming Pitch Spacing & Removing Fibers*

| Step No. | Job content | Process specification |
|---|---|---|
| 6 | **Fiber Pitch Confirmation** |  <br>  <br>***OK***: No black gap<br>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.<br>*Note3: If a pitch spacing error occurs, open both fiber holder clamps and repeat the operations from steps 4 and 5.<br>  <br>***NO GOOD***: Black gap can be seen due to pitch error |
| 7 | **Release Fiber Holder** | Open all three clamps of the RT-02 and remove the fiber holder with the now ribbonized fibers<br>  <br>***Completed Ribbonizing***<br>  |

# Thank You!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