

# 123 Manual, LP-FLLCXX FusionLess® EasyFit LC Optical Mechanical Connector, Assembly Instructions

LPFLLCXX\_M123\_ENB01W



## 123 Manual, LP-FLLCXX FusionLess® EasyFit LC Optical Mechanical Connector, Assembly Instructions

This product has been designed and manufactured to assure personal safety. Improper operation can result in bodily injury and serious damage to this product. Please read and observe all warnings instructions given in this operation manual.

### For your safety operation

- **Wear safety glasses** before handling optical fiber to protect the eyes. Small pieces of glass fiber are very sharp and might get into the eyes or under the skin and cause injury.
- **Never look into** the end of a connector or an optical fiber which may have a laser coupled to it. Laser light may damage your eyes. Please note that laser light is not visible.
- If working in high places, please be careful not to drop any tools. (**Please use a wrist strap etc.**).



### Precautions

- |   |  |
|---|--|
| 1 | Improper assembly will result in a loss of performance. <b>Please read instructions</b> given in this operation manual.  |
| 2 | The product is sensitive to dirt or dust. Do not take connector out of the package. <b>until it is to be used.</b>   |
| 3 | The performance will be influenced by the cleaved fiber surface condition. Please use a cleaver that has a good blade.   |
| 4 | Plsaser <b>insert the fiber into the connector slowly.</b> If the fiber is roughly inserted, it might be damaged or broken, leading to product failure. Broken fiber could be scattered leading to product failure. Broken fiber could be scattered in all directions. |
| 5 | Do not remove the dust cap <b>until the connector has been completely assembled.</b>   |
| 6 | A proper amount of index matching gel is applied in the connector. Do not <b>insert fiber more than once.</b>  |



## 1 Composition:

- |                                       |
|---------------------------------------|
| • Connector (with wedge): 10pcs.      |
| • Boot: 10pcs.                        |
| • Fiber holder for 900 μm fiber: 1pc. |
| • Assembling Jig: 1pc.                |

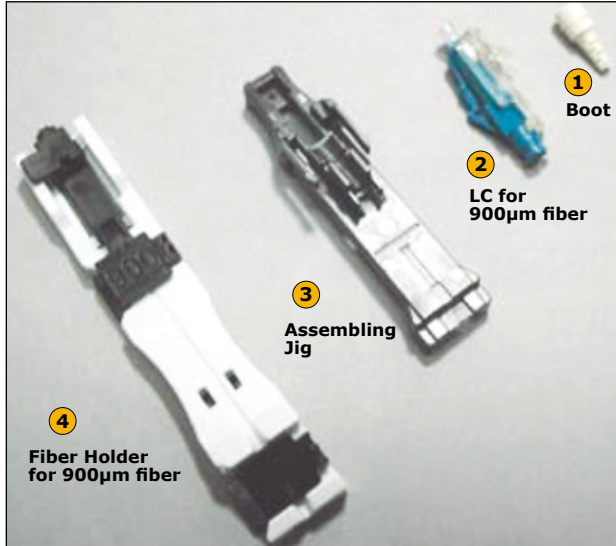


Figure 1

Following tools shall be required for assembling the above parts,

- |                  |
|------------------|
| • Fiber Cleaver  |
| • Jacket Remover |

## 2 Assembly tools example

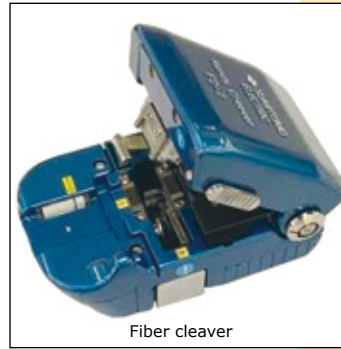


Figure 2

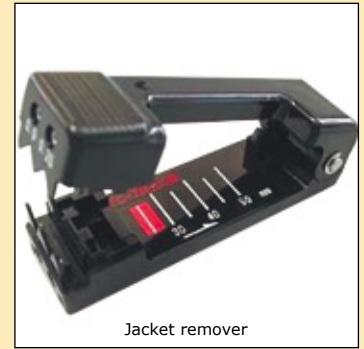


Figure 3

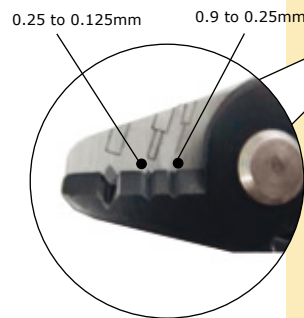


Figure 4

## 3 Preparing connector

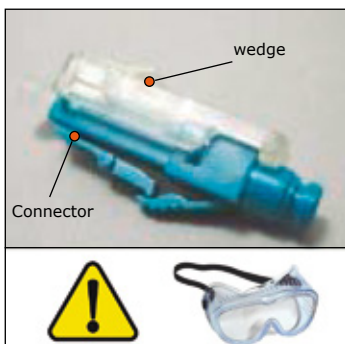


Figure 5

be sure to wear  
Safety Glasses

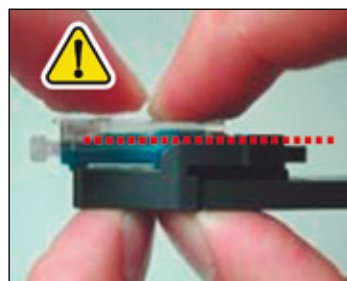


Figure 6

Be sure there is no space between the wedge and connector, if there is, push the wedge and connector together to realign.

## 4 Setting connector

Set circular groove of connector tightly onto semicircular ridge of "U" shaped shelf of Jig.

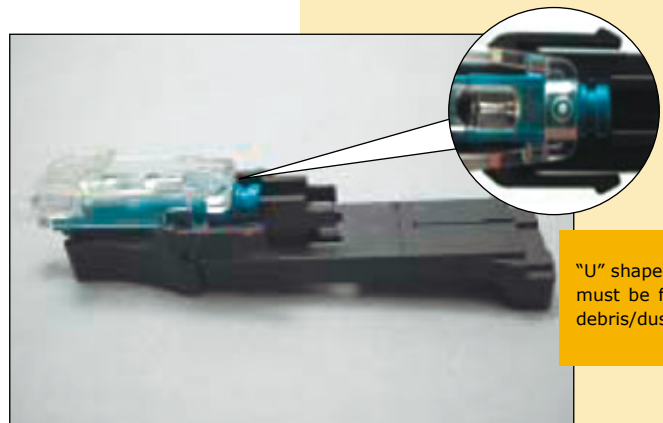


Figure 7

"U" shaped area must be free of debris/dust.

## 5 Preparing the fiber holder

Open covers 1,2 and 3 before using the holder. Make sure the guide is not visible from the rear of the fiber holder. If the guide is visible push the back-end into the fiber holder.

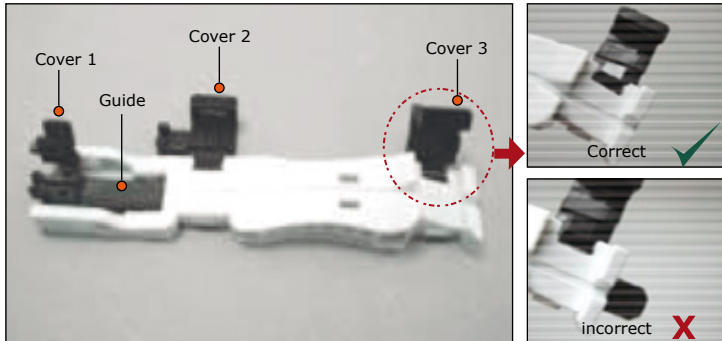


Figure 8

## 6 Install boot onto fiber



Figure 9

## 7 Removing fiber jacket

Remove fiber jacket, using the fiber jacket remover.

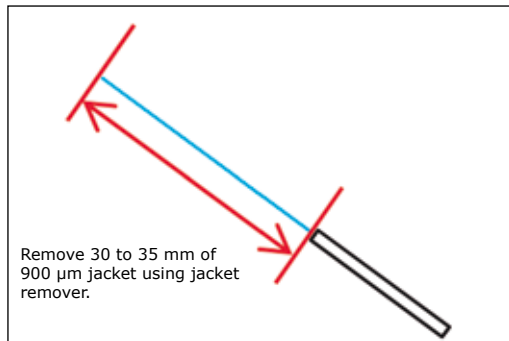


Figure 10

## 8 Clenning bare fiber

Clean bare fiber with a lint-free Gauze Pad moistened with pure Alcohol.

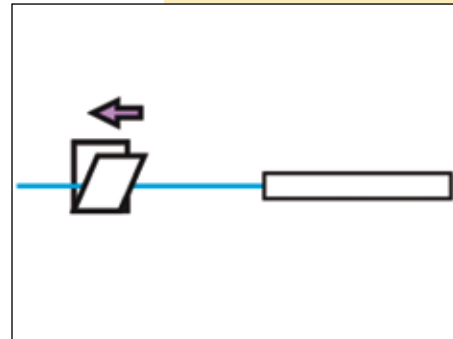


Figure 11

## 9 Screening Fiber

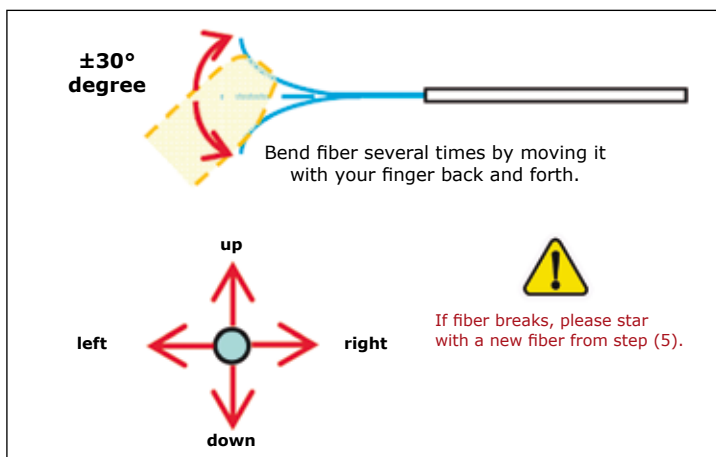


Figure 12

## 10 Setting fiber on the fiber holder

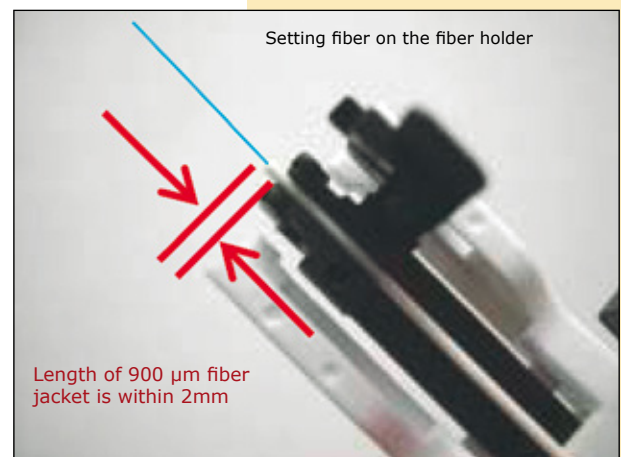


Figure 13

Set the fiber along the groove tightly before closing covers 1 and 2.

After closing covers 1 and 2 close cover 3.

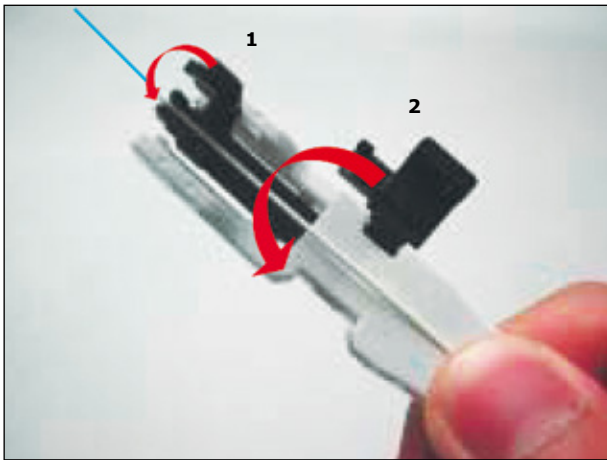


Figure 14

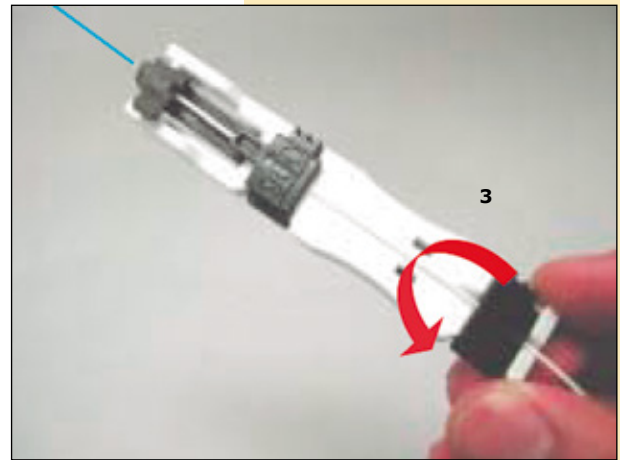


Figure 15

## 11 The fiber cleaver

- 1.- Set the cleaver for cutting.
- 2.- Set the fiber holder to the cleaver.
- 3.- Set the fiber holder tightly.
- 4.- Push the cover of the cleaver.

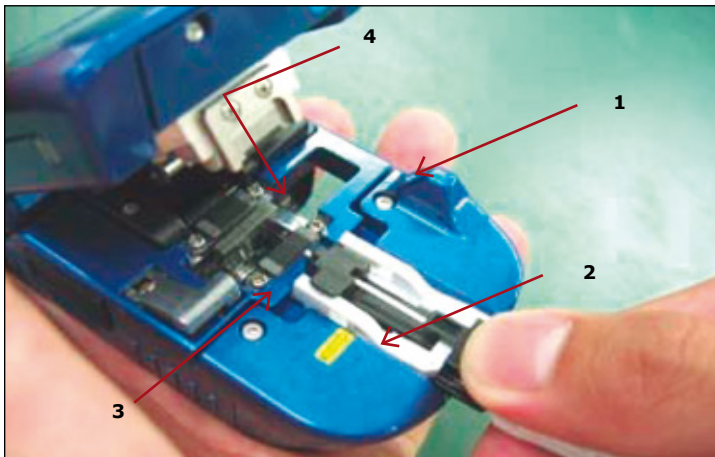


Figure 16

## 12 Fiber length check

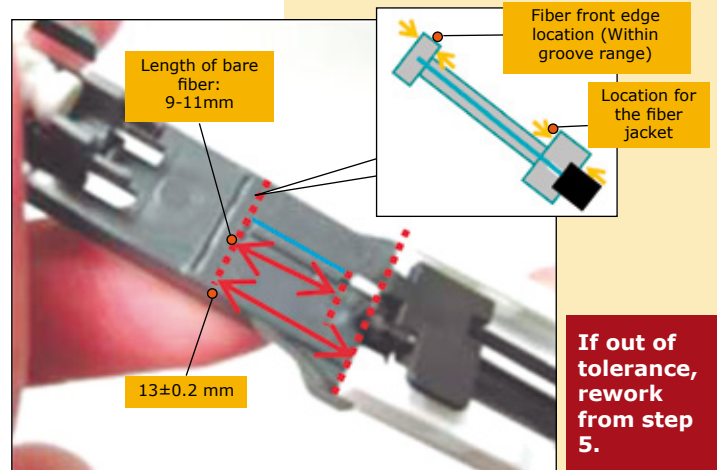


Figure 17



### 13 Inserting fiber

Set the fiber holder to the guide rail. be sure the fiber aligns with the U-groove.



Slide the fiber holder slowly until it stops.



Not following this step will cause an air gap between fibers creating high insertion loss.

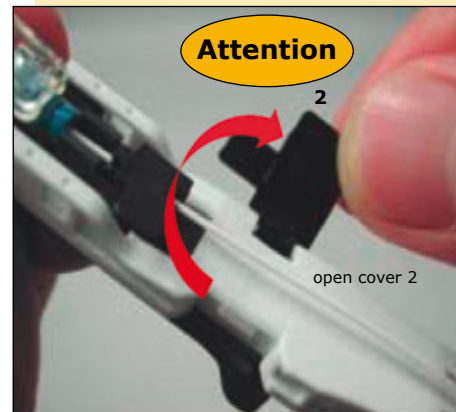


Figure 18

Figure 19

Figure 20

Insert until clicking sound is heard

Hold the sides of the fiber holder so that the fiber moves freely.

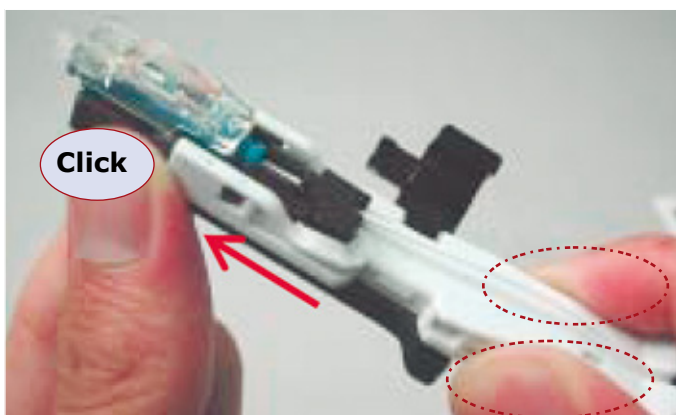


Figure 21

Small amount of bending is normal.

Not following this step correctly can cause damages to the fiber end.



Figure 22

### 14 Unlock the lever

Open lock lever

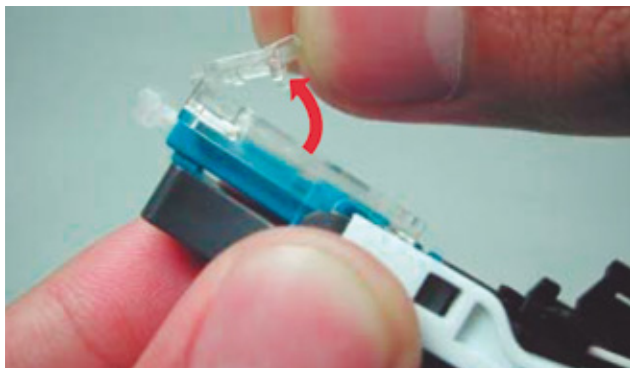


Figure 23

### 15 Remove the wedge

Push the arms to remove the wedge.

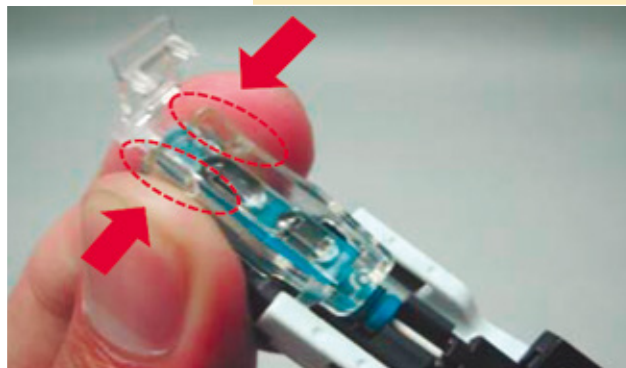


Figure 24

## 16 Open the cover

Open cover 1 and 3

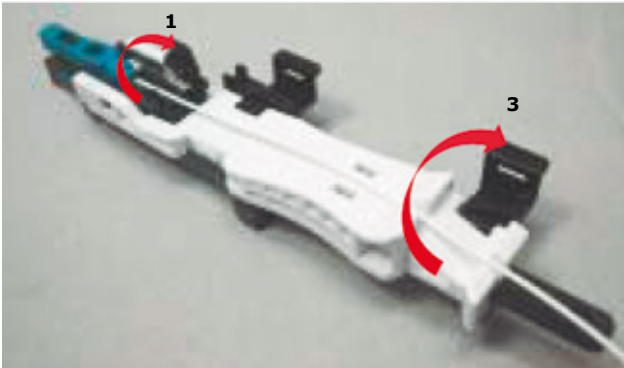


Figure 25

## 17 Remove connector



Figure 26

## 18 Fitting the boot



Figure 27

Finished product



Figure 28

Use a visible light source to test connection.

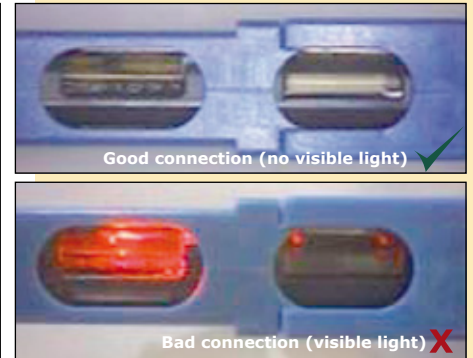


Figure 29

## Attention

*If the connector optical properties are insufficient to use, you can modify the connector properties by re-inserting the fiber and adjust the splice statement.*

1.- Remove the boot and attach the wedge on a connector again (make sure there is no space between the wedge and the connector).

2.- Push the inserted fiber and create the bend again.

**Do not pull fiber out from the conner.**

3.- Remove the wedge. Push the arm to remove the wedge.

4.- Re-install the boot.

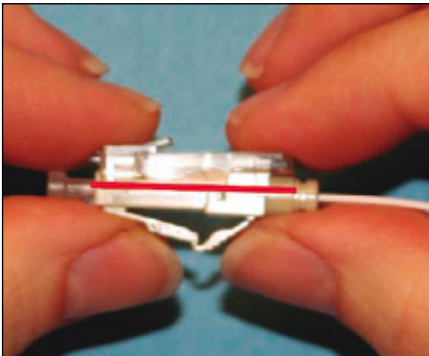


Figure 30

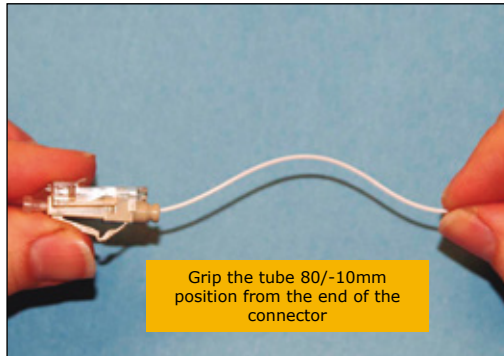


Figure 31

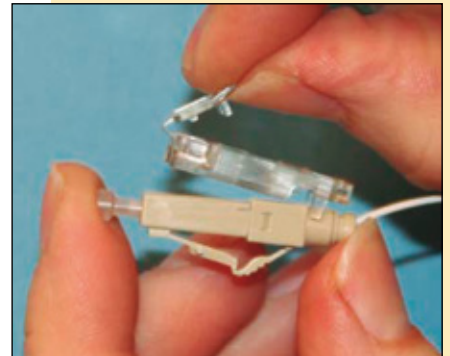


Figure 32