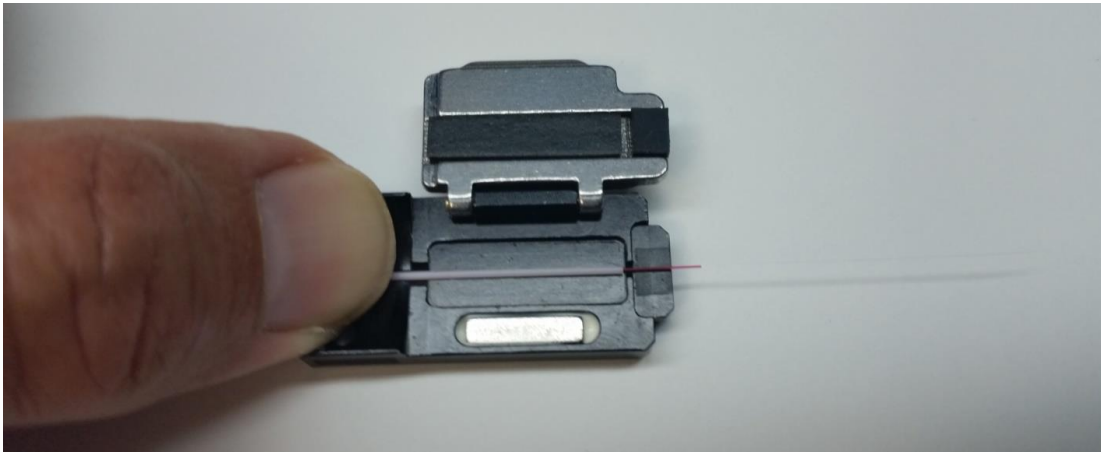


## Application Note

### Fusion Splicing with Loose Tube Buffer Fiber (LT-900)

The following procedure describes the preparation of loose tube 900 micron fibers for splicing loose tube fibers to splice on connectors in the FSP200, 915FS and 910FS fusion splicers using the LT-900 fiber adapters. The cleaving procedure (steps 1-4), is also necessary for cleaving and splicing loose tube fibers to loose tube fibers.

1. Remove 5cm of the acrylic coating from the 250 micron fiber. Clean the fiber with 99.9% pure isopropyl alcohol.
2. Place the loose tube buffered fiber into the LT-900 fiber adapter as shown below.



The 900 micron loose tube must not be held by the small fiber clamp on the far right hand side but only with the larger main clamp.

3. Make sure that the 900 micron buffer is on the edge of the main cavity as shown. If it is not at this edge the shrink tube for the splice on connector will not capture the 900 micron buffer. Make sure that the acrylic coating makes contact with the fiber pad clamp. The fiber pad clamp will prevent the fiber from moving (pistoning) during cleaving and subsequent splicing.
4. Cleave the fiber. Do not remove the cleaved fiber from the LT-900 adapter.
5. Place the LT-900 with the cleaved fiber into the left hand side of the fusion splicer.
6. Place the SOC into the SOC adapter into the right hand side of the fusion splicer.
7. Perform splice.
8. Place the splice protector snugly against the metal tube on the SOC.
9. Place the splice and splice protector into the oven.
10. Position the loose tube buffer of the field fiber so that 2-3mm of the loose tube buffer is within the splice protector.
11. Activate the oven to shrink the splice protector. Make sure that the field fiber is inside the splice protector by at least 2mm so that there is adequate strain relief.
12. Complete assembly of the SOC as per SOC instructions.

Make sure that the fiber pad clamps of the LT-900 are clean and free from contamination and oil. Only use 99.9% pure isopropyl alcohol.

The 900 micron loose tube adapter is proprietary to Tempo Communications and is patent pending. United States Patent No. 9,835,799.