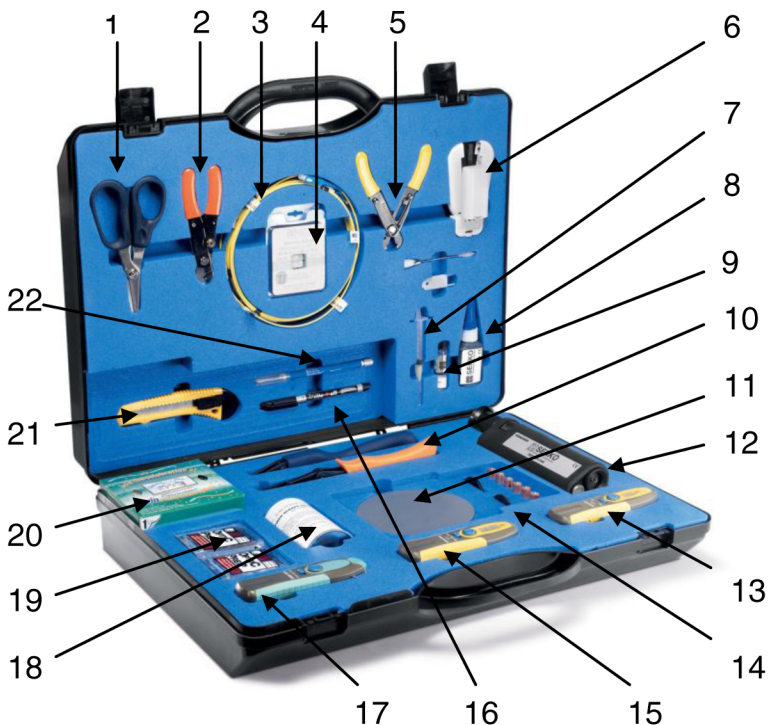


## 1. GENERAL

**1.01** This document provides assembly instructions SC style One Piece fiber optic connectors.



## 2. PROCEDURE

### 3. EPOXY PREPARATION

**3.01** Prepare Adhesive for injection into connector. Fill the syringe (Item 7) with required amount of Fast Cure Adhesive (Item 8), screw the needle into place, and turn the syringe up so the needle is pointing upwards. Press the syringe plunger up to expel the air from the tube until a small amount of the adhesive is ejected from the needle tip. Using a tissue remove any excess adhesive from the needle tip. **Note:** Adhesive curing time is 2 ~ 3 minutes when used with Primer. **Caution:** Do not exceed the pot life of the adhesive as recommended by the manufacturer.



### CABLE PREPARATION

**3.02** Slide relevant components onto the cable as shown.



**3.03** Strip the cable to the dimensions shown in Figure 1 using (Item 5) for jacket removal and (Item 2) for Buffer removal), Cut Kevlar to length using (Item 1)

**Note:** When using 900µm for pigtails only refer to the optical fiber strip length shown in template below.

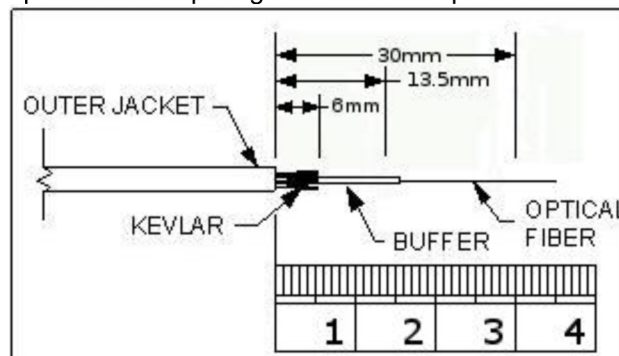


Fig. 1, Cable Preparation

**3.04** Slightly bend the exposed fiber to assure that no nicks occurred while removing the secondary coating. If the fiber was nicked, it will break easily.

**3.05** Clean the exposed fiber by drawing it through an alcohol pad. (Item 19)

### FILLING CONNECTOR WITH EPOXY

**3.06** Wipe clean the needle tip of the adhesive-filled syringe. Insert the needle into the connector until it bottoms out. Keeping the contact bottomed out, fill the ferrule with adhesive until a small amount has formed on the tip of the connector, then withdraw the needle from the back of the connector.



### FITTING CONNECTOR TO CABLE

**3.07** Dip the complete length of stripped fiber into the Primer / Activator bottle (Item 9)

**Note:** Take care not to stub the fiber on the top of the bottle. The fiber needs to be inserted into the connector within a few seconds; otherwise you will need to re apply the Primer.

**3.08** Insert the fiber into the connector while Slowly rotating the connector.



**3.09** Spread Kevlar™ around the connector backpost. Slide the Crimp Sleeve over the Kevlar™ and connector backpost. Crimp the sleeve using a CRT-401 crimp tool.(Item 10) Use the .178" hex die to crimp over the backpost. Use the .151" hex die to crimp over the cable.

**3.10** Slide the Strain Relief Boot over the Crimp Sleeve and connector.

**3.11** Insert the connector / ferrule tip into the Primer bottle once more (Item 9) this will help to cure the exposed adhesive on the tip of the ferrule. The connector will require around 2 minutes to cure enough to be able to cleave and polish.

**3.12** Using a scribing tool (Item 22), lightly score the fiber at the point where the fiber and bead of adhesive meet. Gently pull on the fiber until it separates.

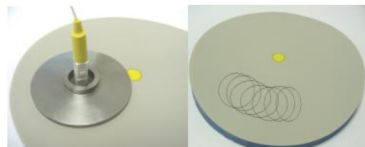


## 4. POLISHING

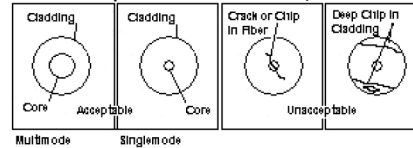
**4.01** Using a piece of 15µm Silicon Carbide polishing film, gently rub across the surface of the sharp piece of fiber that is left until it is ground down to the surface of the ferrule.

**4.02** Take the 60 Durometer rubber polishing pad from the termination kit (Item11), clean the pad using filtered water or IPA (Isopropyl Alcohol). Place a clean piece of 3µm diamond polishing film on to the pad. Insert the ferrule into the universal hand polishing puck, and then hold flat onto the polishing film. Making very gentle circular motions on the film (approximately the size of 30mm diameter circle) do this for around 30 circles, see examples below. Then clean the end of the ferrule using and alcohol wipe. Proceed to next 1µm polishing film as perform the same sequence as stated above.

**Note:** This can also be performed using a field polishing machine

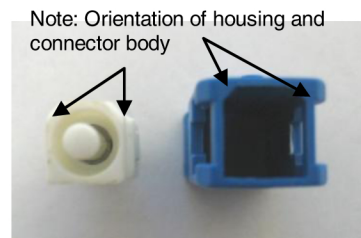


**4.03** After polishing view the visual quality of the ferrule endface using a x200 handheld microscope (Not included with Part No. FC-AFT)

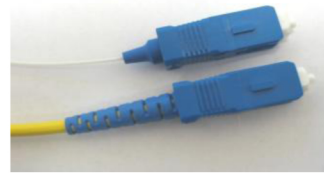


## 5. FINAL ASSEMBLY

**5.01** Align Holder and the Frame to a proper orientation, and push the Holder over the Frame until it locks into place.



## 6. COMPLETED TERMINATION



## 7. ORDERING INFORMATION

**7.01** For further information on connectors, consumables, tools and microscope inspection equipment or any other fiber optic products, contact your sales representative at: