



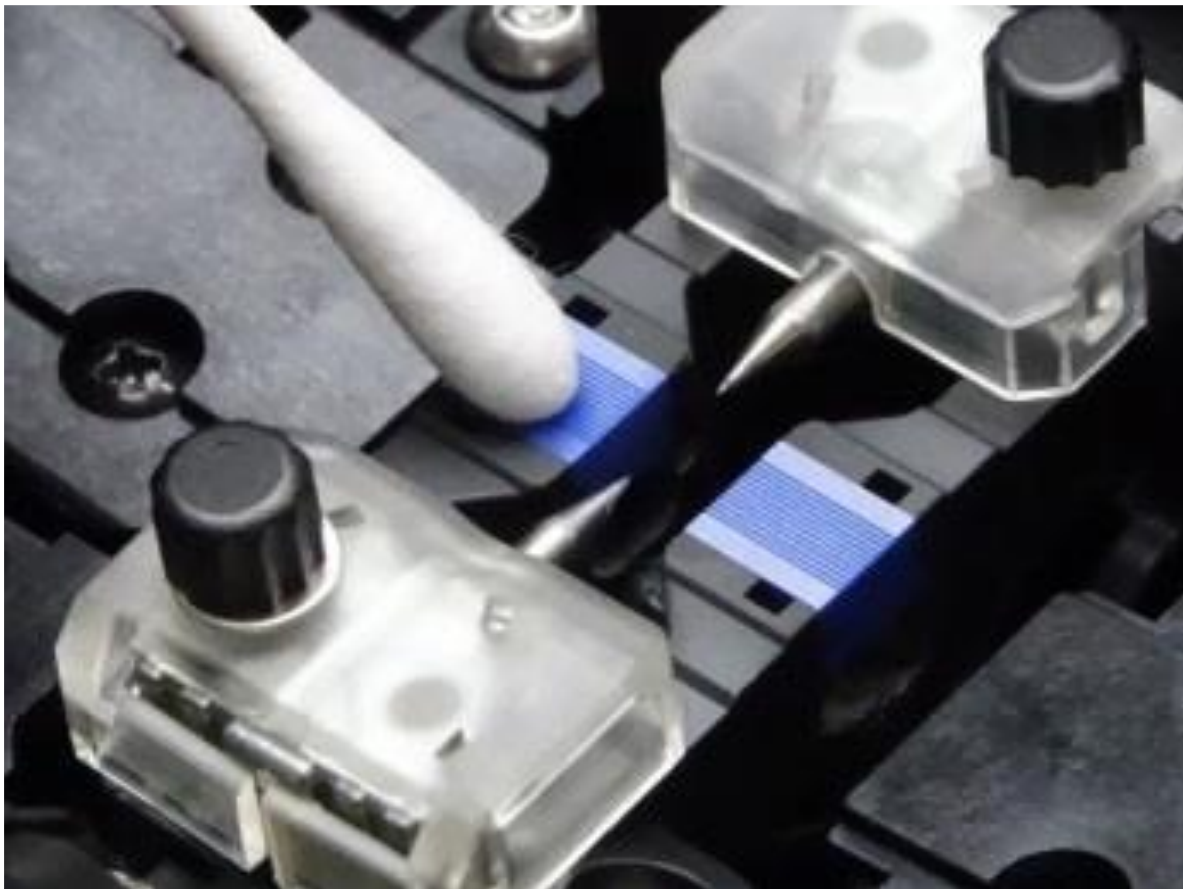
## **Cleaning Preparation for 90R, CT50 & RS03 before Splicing.**

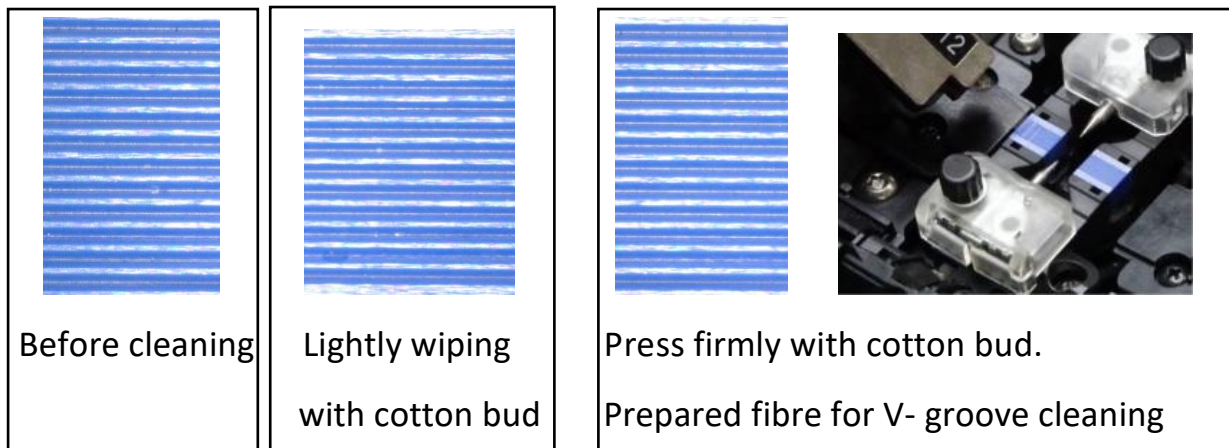
### **Please see the following steps...**

Cleaning the 90R and its accessories is essential for optimum results!

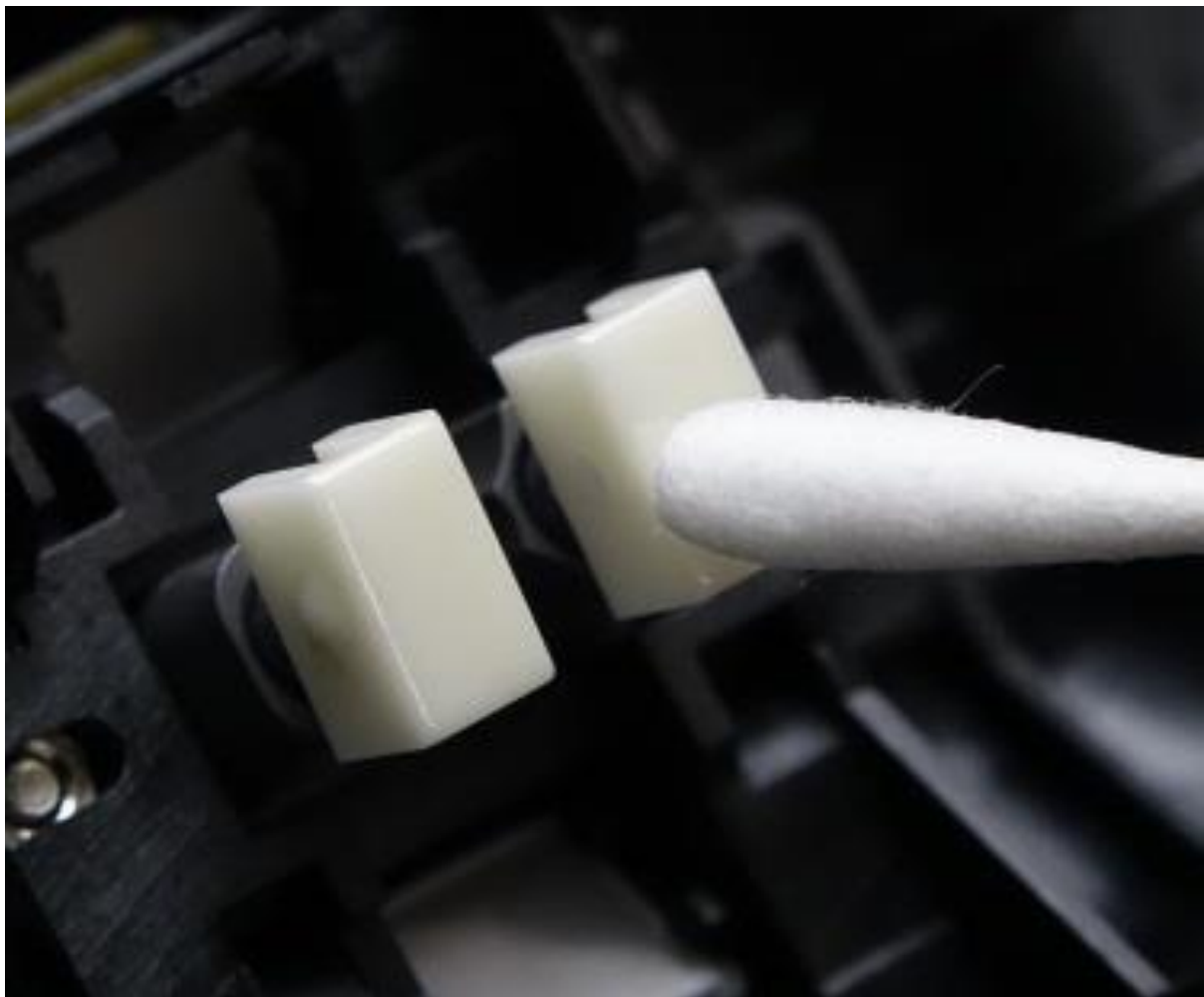
Make sure all your tools are spotlessly clean i.e. V-grooves, fibre clamps, objective lenses, CT50 cleaver clamp pads, anvil, cleave blade, RS03 stripping blades and clamp pads.

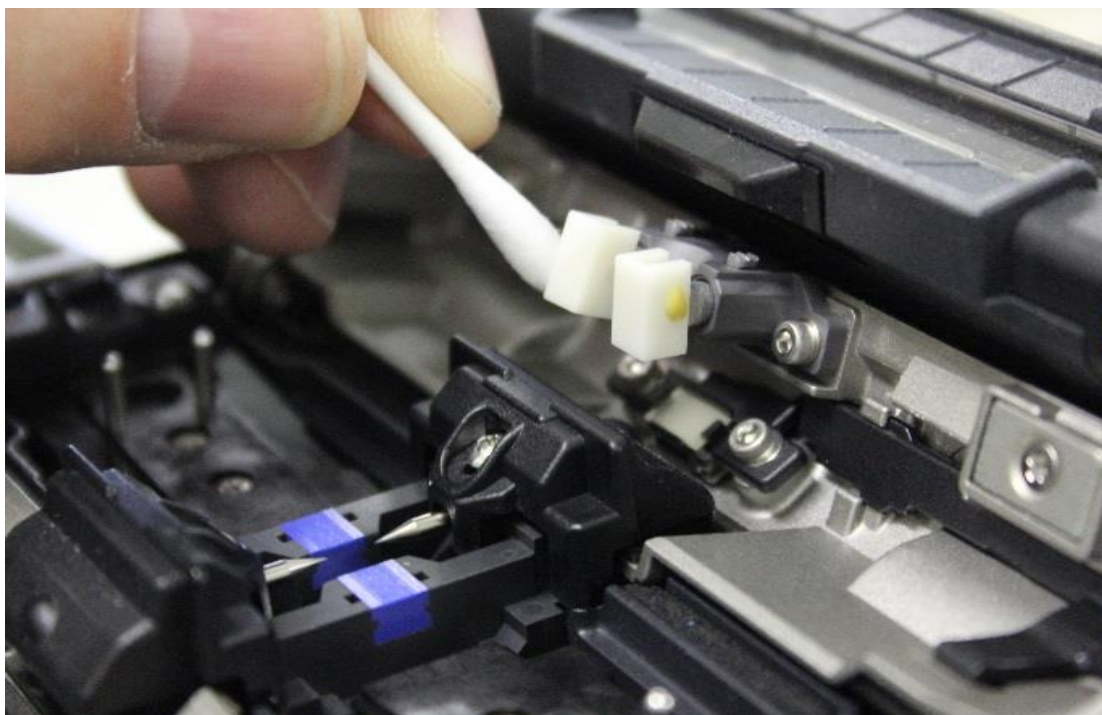
1. When cleaning the V-grooves you **must** press down firmly and use IPA while doing so.



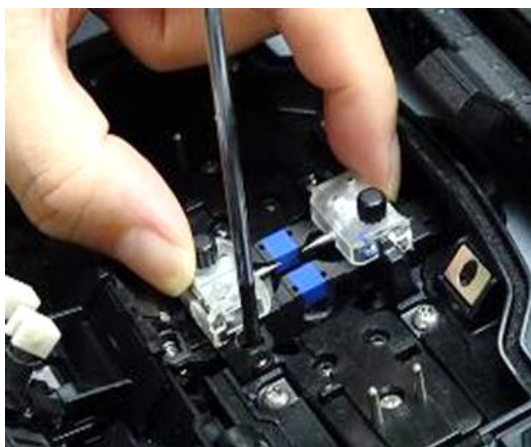


2. Clean the fibre clamps with lint free cotton buds moistened with IPA in an up and down motion including the side surfaces.





3. You can also replace the V-groove set for the spare in the case.



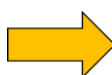
The spare V-groove set are already fitted with stabilized electrodes.

This is a quick way to overcome Offset Errors.

1:40mmR Large Fiber Offset

No.	Gap [μm]	Offset [μm]	Cleave L	Cleave R
1	68	0.9	1.4°	1.9°
2	63	0.3	0.5°	1.1°
3	55	1.3	0.7°	0.9°
4	54	5.2	1.7°	1.2°
5	54	0.4	1.3°	0.4°
6	62	1.1	0.4°	0.7°
7	48	1.2	1.9°	0.3°
8	48	2.7	1.0°	1.5°
9	48	0.8	1.9°	0.1°
10	43	6.7	0.9°	0.3°
11	42	0.7	0.4°	1.8°
12	40	2.8	2.0°	0.5°

1:SM AUTO

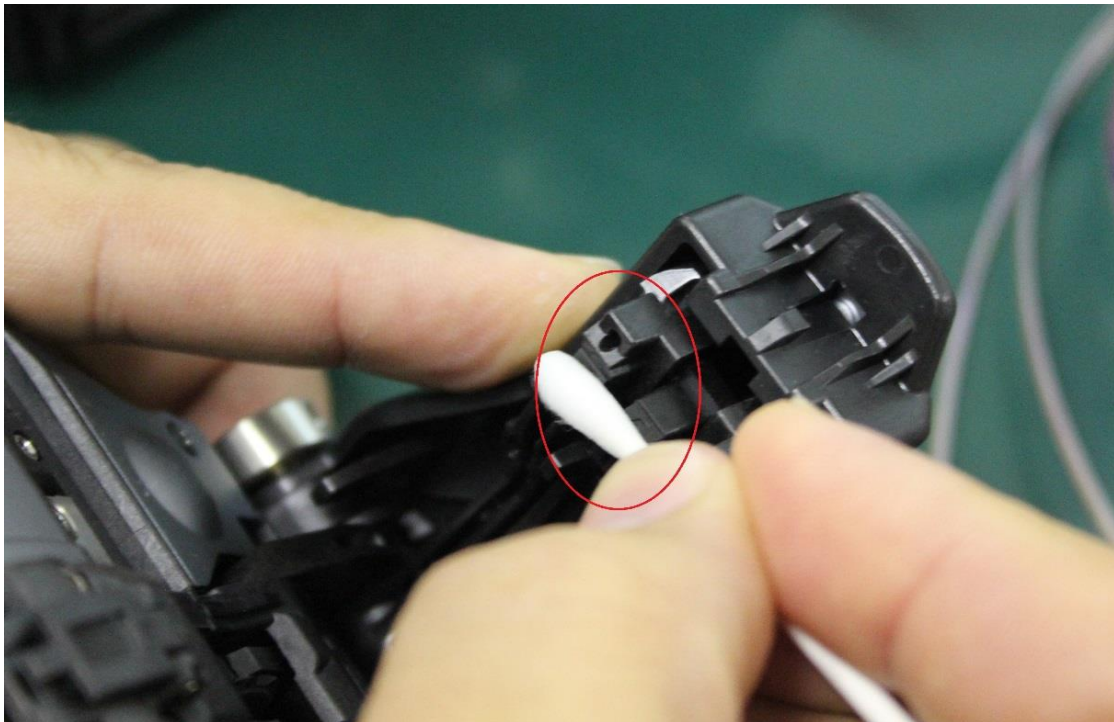


1:40mmR PAUSE

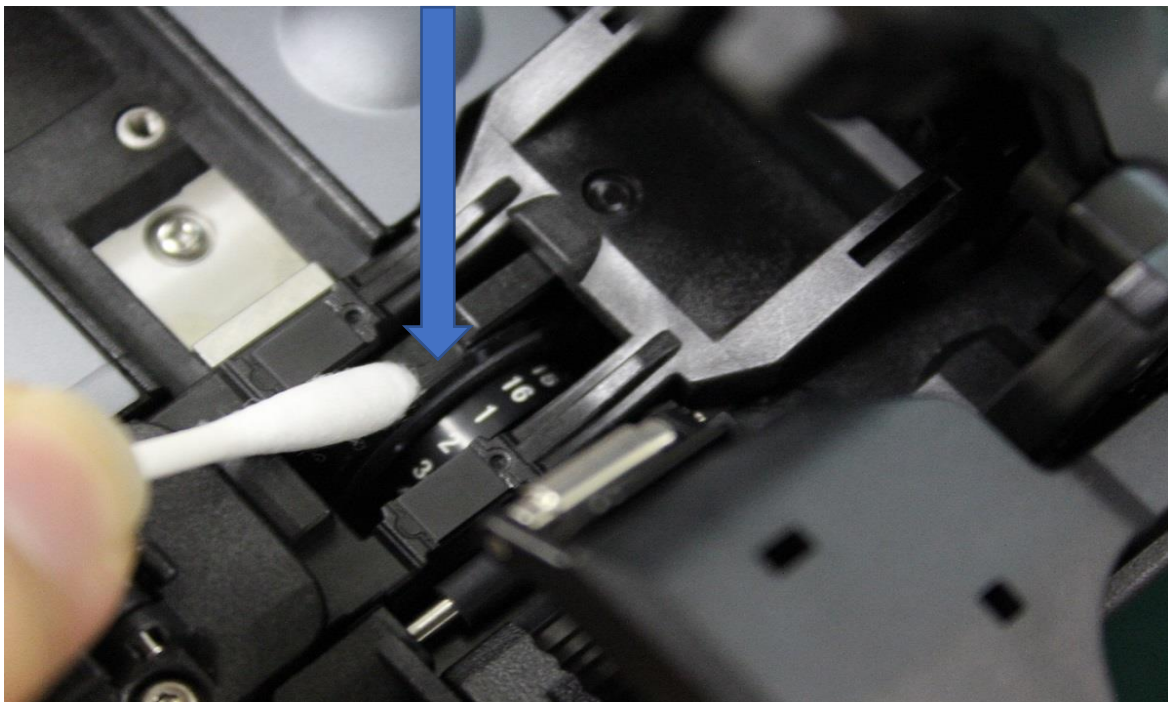
No.	Gap [μm]	Offset [μm]	Cleave L	Cleave R
1	42	1.4	0.2°	0.2°
2	50	0.9	0.7°	0.1°
3	51	0.9	0.5°	0.6°
4	53	1.1	0.1°	0.1°
5	51	0.3	0.1°	0.7°
6	48	0.3	0.6°	0.3°
7	50	1.1	0.7°	0.5°
8	50	0.0	0.7°	0.9°
9	58	1.2	0.1°	0.8°
10	66	0.6	0.7°	0.7°
11	71	1.0	0.8°	0.9°
12	66	0.5	0.7°	0.1°

1:SM AUTO

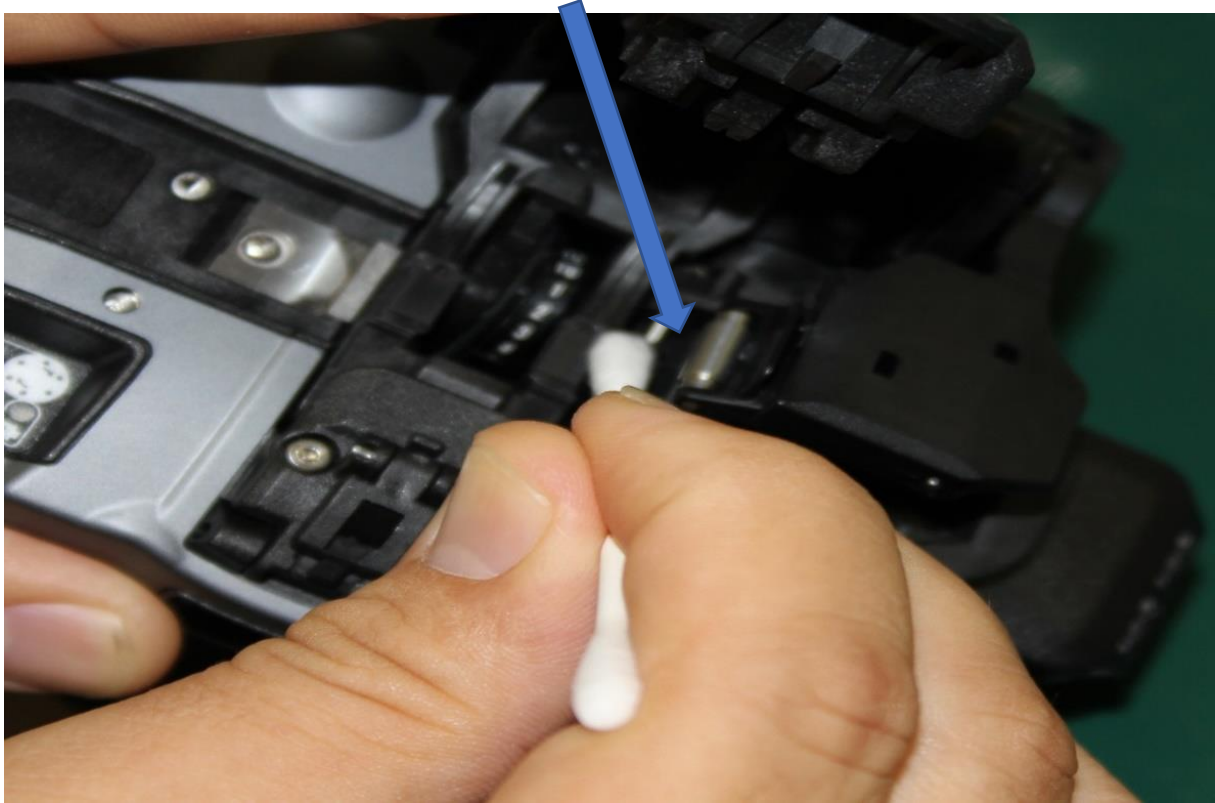
4. Clean the cleaver's clamp pads daily.



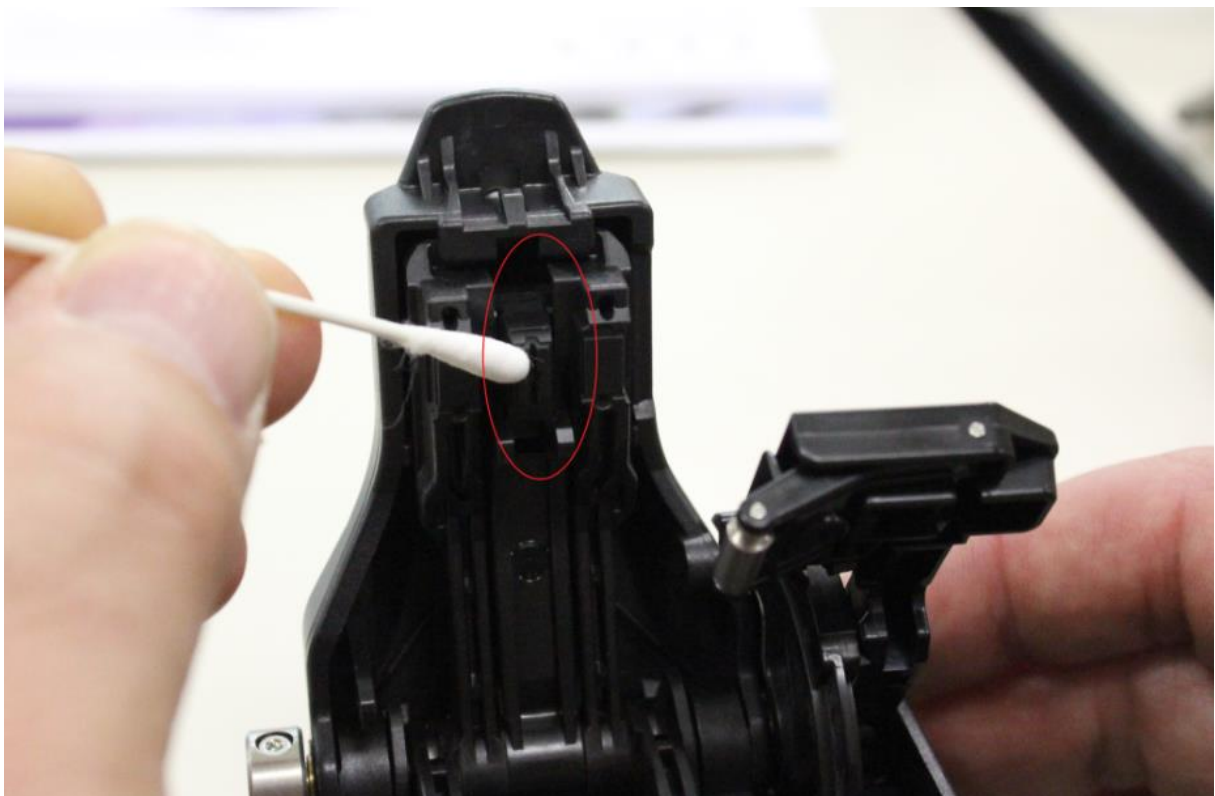
Carefully clean the blade with not much force.



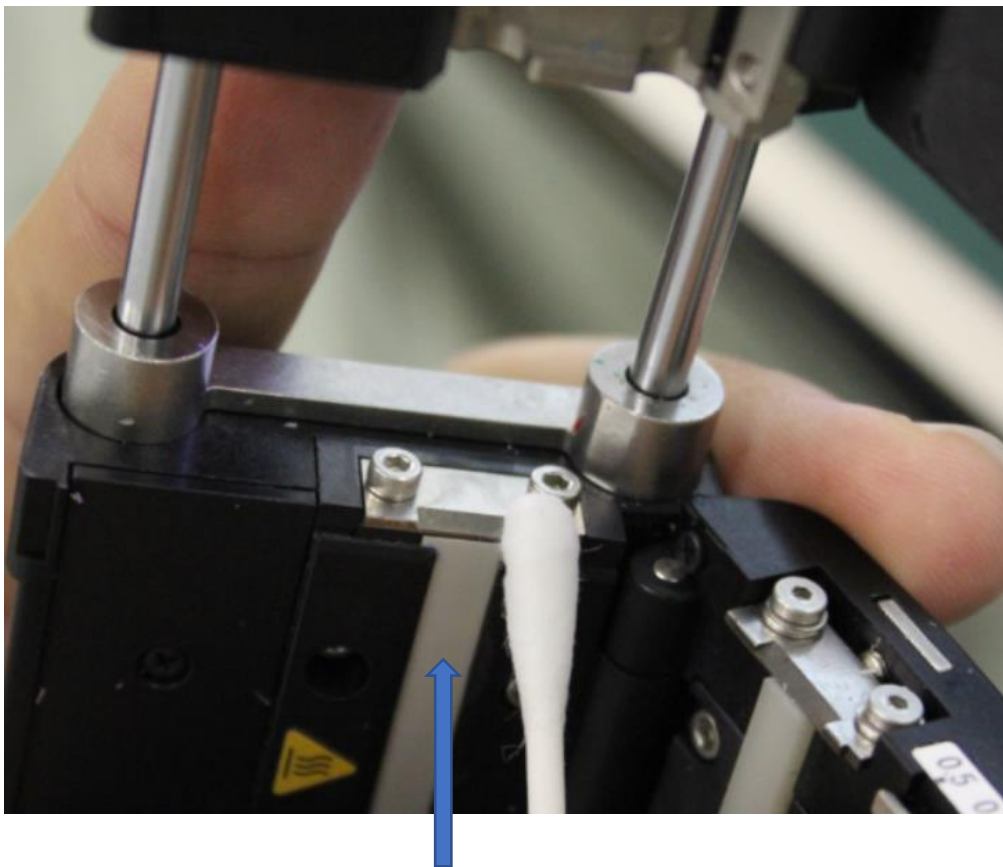
5. Clean fibre collector rollers.



6. Clean the CT50 anvil as shown below.



7. Cleaning the RS03; use a cotton bud moistened with IPA for all rubber surfaces and blades.



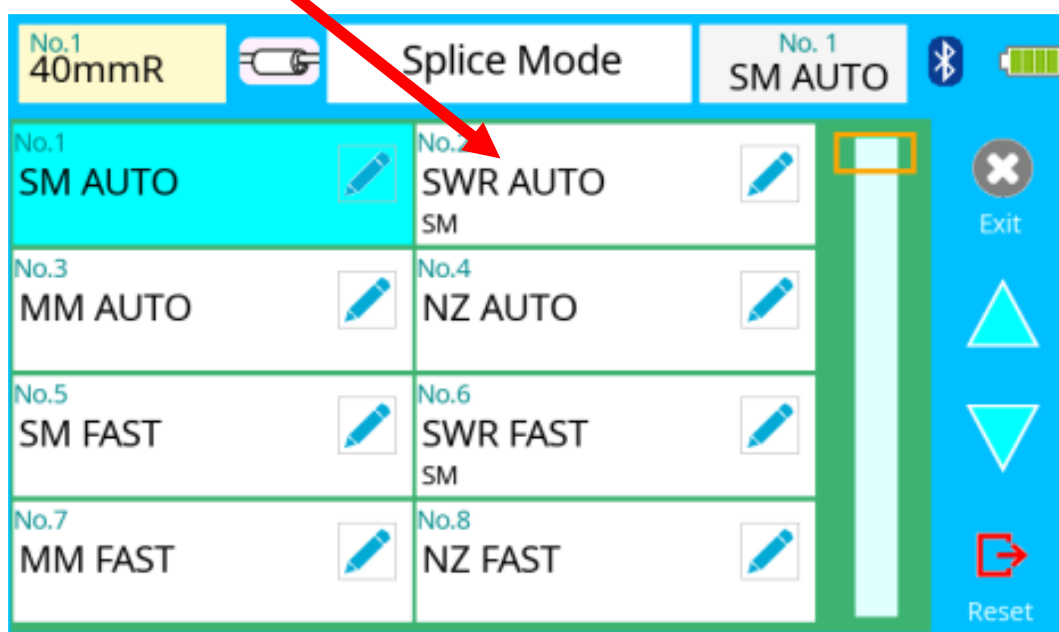
Clean heater plate

8. FH-70-12 or FH-50-12N: fibre clamp cleaning.



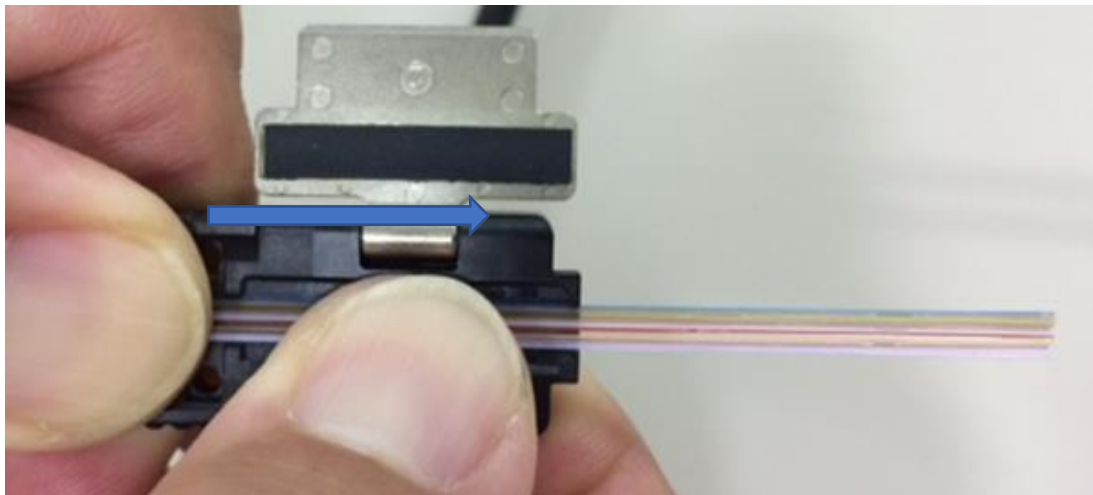
## SWR fibre Splicing. Please see the following steps...

1. Turn 90R on and select SWR Auto and 40mmR/FP-05  
SWR Auto automatically sets the RS03 temperature to ④ (maximum).



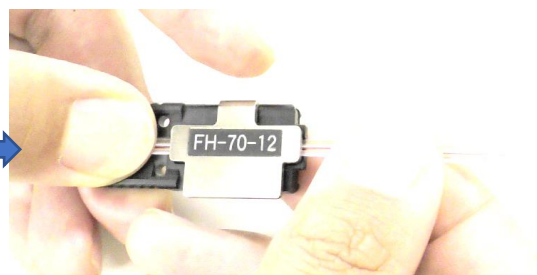
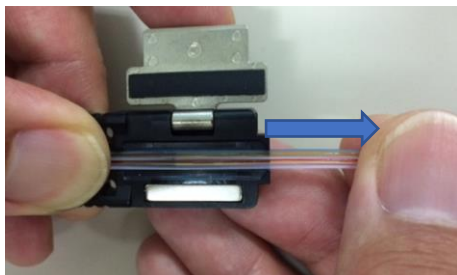
2. Turn on RS03 and make sure that the RS03 temperature is set to the highest temperature, level ④ (maximum).

3. Clean and set fibres in fibre holder making sure that they are correctly positioned, with no cross over of fibres.

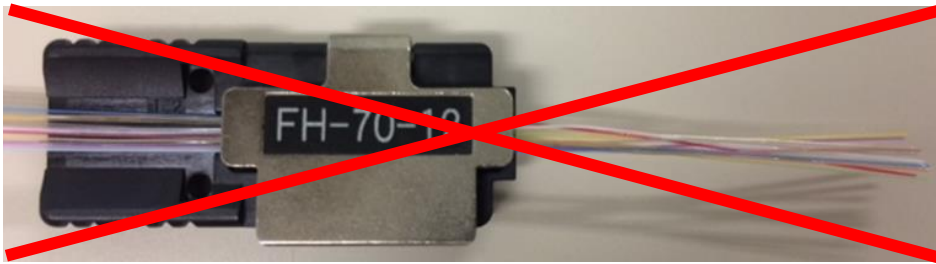


Press thumb along the fibre for correct positioning.

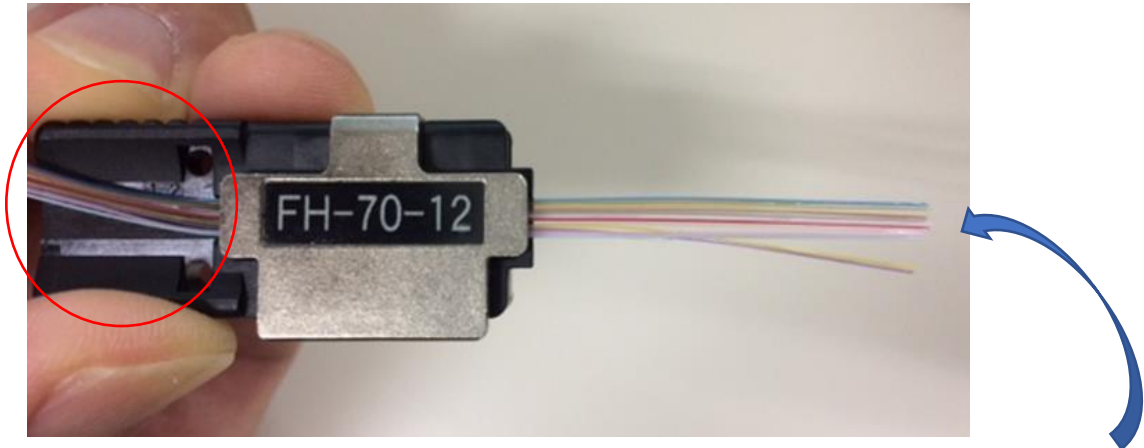
(Best practise is to put BLUE FIBRE to hinge)



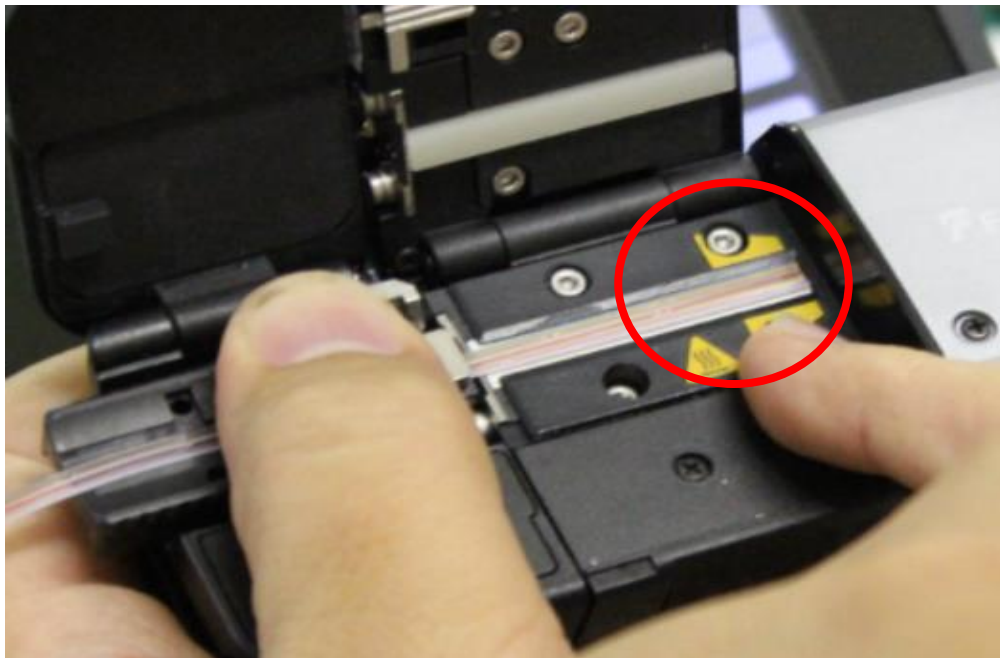
Pull fibre and close lid. (Best practise is to put BLUE to hinge)



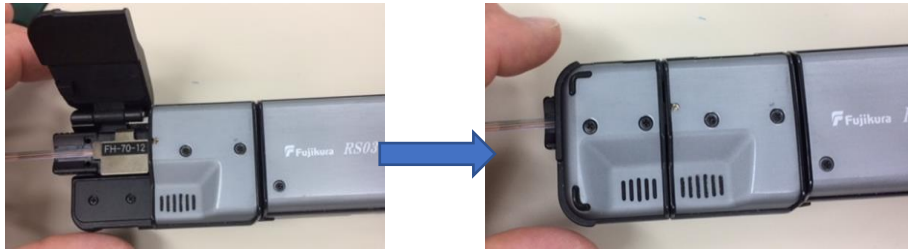
Fibre crossed – No good!



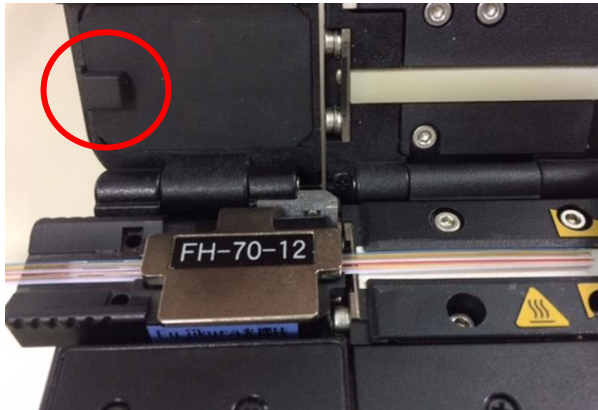
Make sure that you don't pull as circled above as this will cause fibre split.



Place fibre in RS03 making sure that the fibre is the correct length as shown, approx. 30-35mm as circled below.



4. Close the right clamp first and then the left clamp. The left clamp is necessary to prevent fibre slippage as circled in the image below.



5. Press down firmly and hold the right clamp until the green LED comes on, approx. ten seconds.



6. Hold the RS03 firmly and slowly pull the left clamp assembly to strip the SWR. If you hold lightly you may experience fibre slippage!

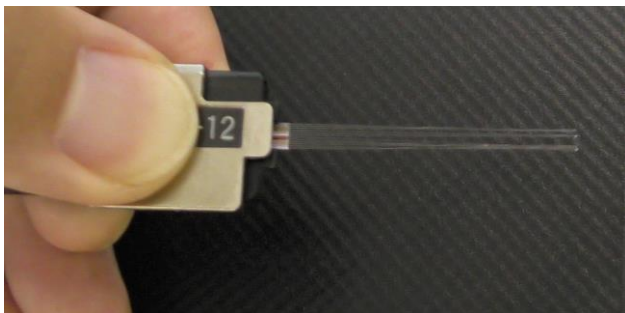


7. Carefully wipe the fibres with a lint free tissue moistened with IPA.

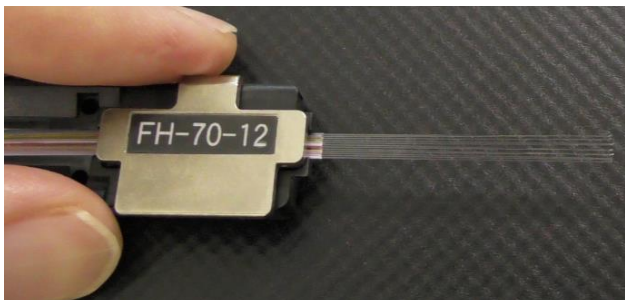
8. Hold fibre lid firmly while wiping, if not it could result in fibre slippage.



9. After wiping you will see that one or two of the fibres will be attached to each other, this is normal due to the excess IPA from wiping and crossover. To correct, **carefully** flick the ends of the fibres.



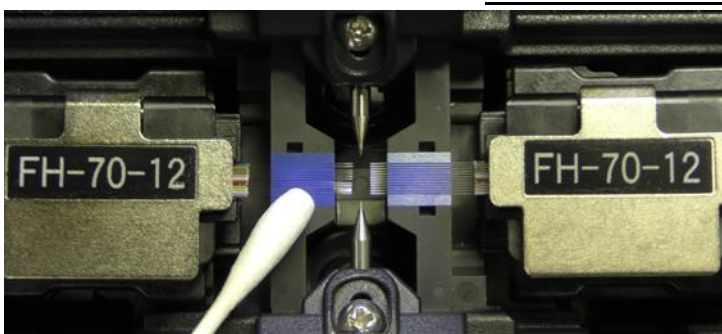
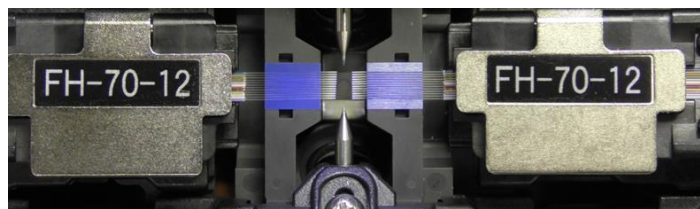
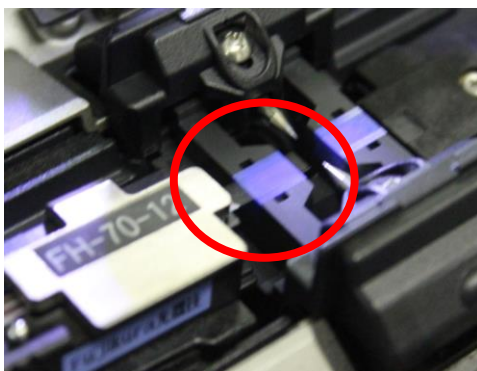
Flick the ends of the fibres to separate.





10. Place the fibre holder onto the cleaver and cleave. Do not touch the end of these fibres as they are now prepared for splicing.

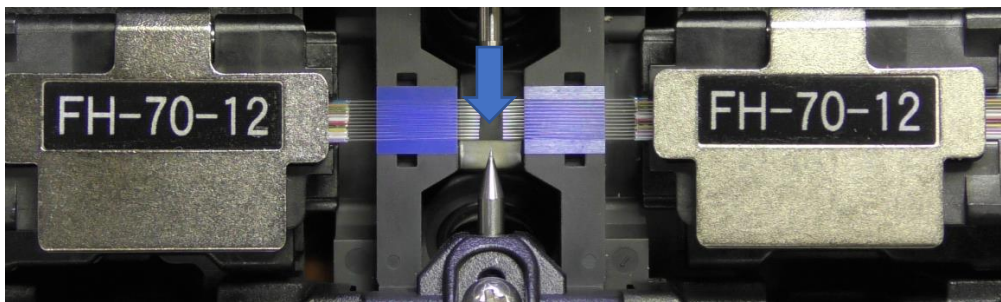
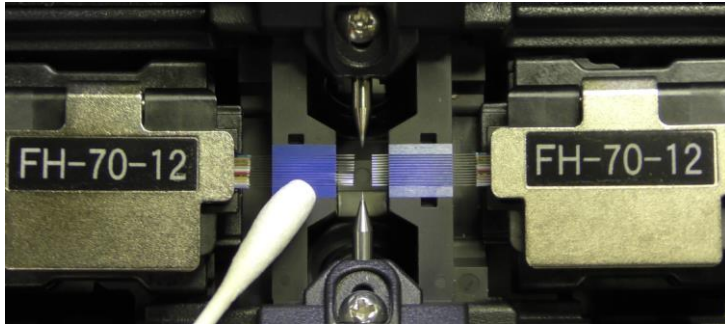
11. Place prepared fibre holder onto the splicer, making sure that all twelve fibres are sitting correctly in the V-grooves as circled below.



***If you experience any of the fibres not going into its V-groove, please carefully use a cotton bud to move the fibre into its place.***

***Cotton bud only used for fibre out of V-groove situation.***

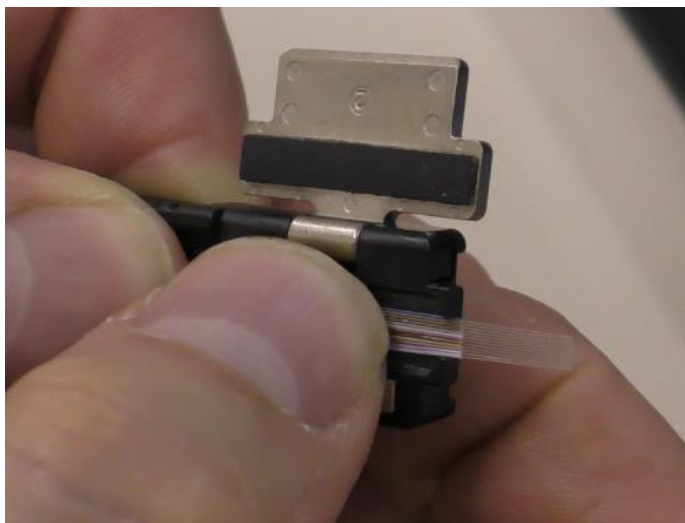
***The cotton bud remedy cannot solve Gap Error, Offset Error and Cleave angle Error.***



***Only use the cotton bud remedy for the fibre out of V-groove only for five seconds. If not solved, prepare new fibres.***

Open Clamp Lid Remedy.

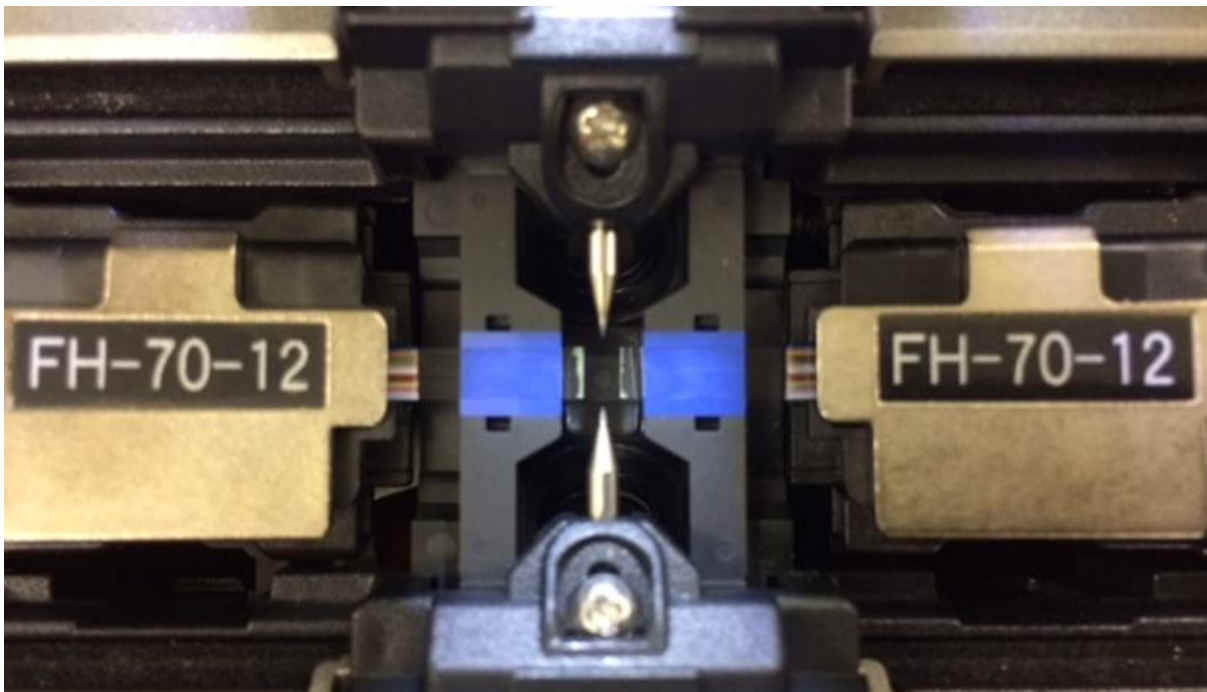
- Hold fibre, open clamp and press firmly along the SWR fibre, re-clamp and check in splicer for improvement.



- Hold fibre, release the clamp and re-clamp. Check in splicer for improvement. Do not take the fibre away from the holder, as this will cause poor gap difference.



12. Put a splice protector (40mmR, FP-05) onto the other SWR fibre to be spliced. There is no set order when fitting the splice protector to the SWR, left or right fibre is fine as long as you put one on.



Both left and right SWR fibres prepared and ready to be spliced.

12. Press to start splicing procedure Pause will show gap, offset and cleave angle.

No.	Gap [μm]	Offset [μm]	Cleave	
			L	R
1	56	4.0	1.0°	3.0°
2	55	4.0	1.5°	3.3°
3	55	7.7	1.3°	2.0°
4	58	4.0	0.9°	1.6°
5	43	4.1	1.3°	1.7°
6	46	2.8	0.9°	1.3°
7	47	2.4	1.4°	0.8°
8	49	2.2	2.1°	0.7°
9	55	4.2	2.0°	0.7°
10	54	2.4	2.8°	1.5°
11	50	7.5	3.4°	2.9°
12	51	1.2	2.7°	2.3°

- If ok press again – when the procedure has finished the estimation and other information will be displayed on the monitor.

No.	Loss [dB]	Error(s)
1	0.01	No Error
2	0.00	
3	0.01	
4	0.00	
5	0.01	
6	0.00	
7	0.00	
8	0.00	
9	0.03	
10	0.04	
11	0.04	
12	0.00	

13. After the splice the 90R will perform the proof test.



14. Place 40mmR/FP-05 splice protector over the completed splice as shown below.



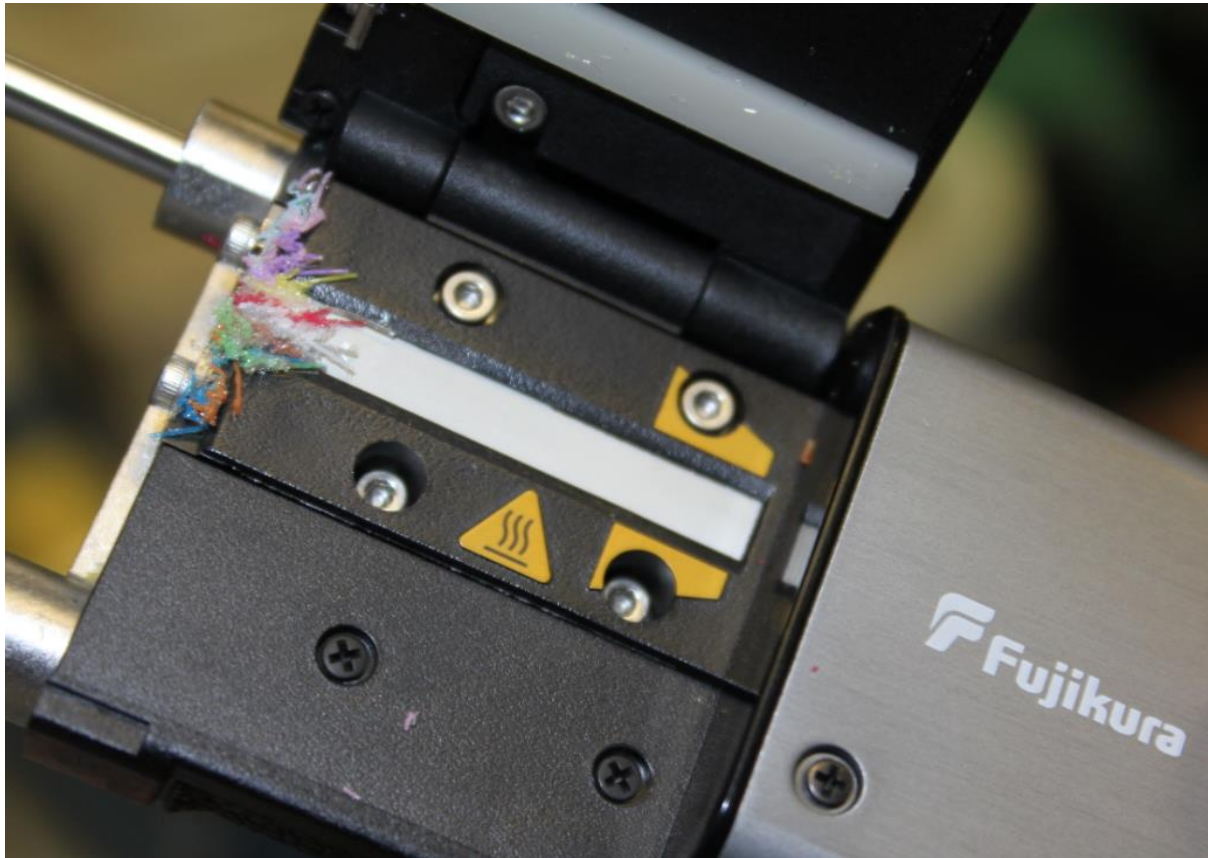
15. Place the prepared splice with fitted splice protector into the heater/oven as shown.



16. Repeat the above steps for the remaining SWR fibres.

### **90R/CT50/RS03 Important Tips**

1. Turn splicer on and make sure the RS03 and CT50 are Bluetooth connected.
2. Set the correct splice mode i.e. SWR AUTO
3. SWR fibre splicing pre-splice checks
  - Fibre count on splice mode.
  - Check cleave angles – all of them.
  - Crack or debris on all fibre ends.
  - Check stripped SWR fibre in RS03 – look out for possible broken fibres due to poor cleaning of stripping blades and rubber pads.
  - Large Gap difference between left and right fibres: Cause; fibre slippage when stripping and cleaning.
  - Fibre offset: Cause; the fibre is incorrectly placed into the fibre holder, debris in the V-grooves or on the surface of the fibre clamps.
4. CT50 checks and tips
  - Clean all clamps pads
  - Clean the anvil.
  - Carefully clean the cleave blade.
5. RS03 checks and tips.
  - Clean all rubber surfaces and heater plate.
  - Clean the upper and lower blades as these components will gather the most debris as shown below.



- Make sure to set the heat level to 4 (maximum).
- Turn Eco off.