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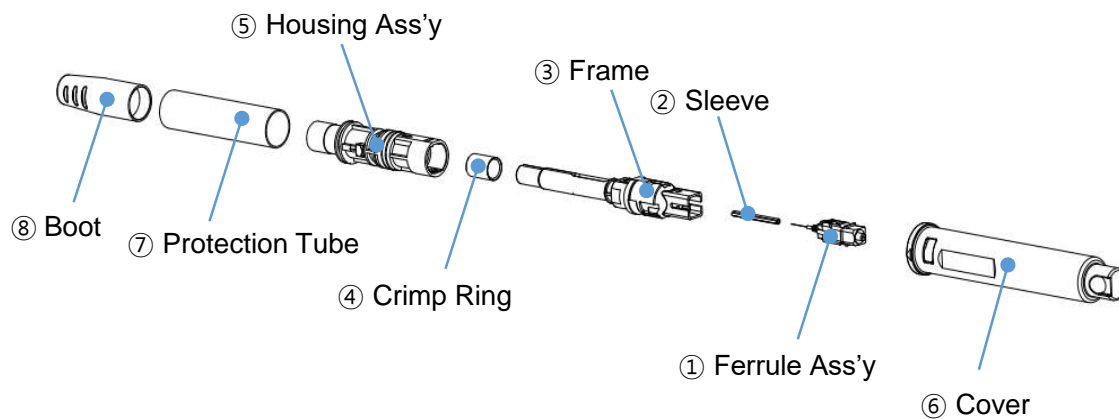1. General
2. HFSOC-A2-SC/APC-PSPL-8145 Configuration
3. Assembly Tools
4. KF4A-HDC(Fusion Splicer) Setting
5. Installation

1. General

This installation guide provides procedures for assembling for HFSOC-A2-SC/APC-PSPL-8145 to 8.1x4.5mm outdoor cable with KF4A-HDC All-In-One Fusion Splicer. A basic understanding of fiber handling, stripping, cleaning and splicing will be helpful.

2. HFSOC- A2-SC/APC-PSPL-8145 Configuration

3. Installation Tools
3.1 Tools for Cable Preparation

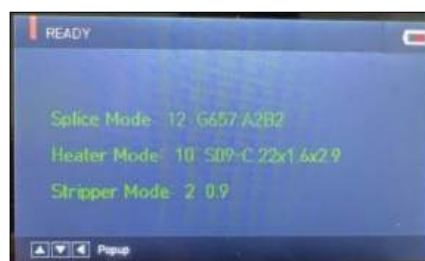| Jacket Slitter (SL-8145/5020)	Fiber Stripper (CFS-3)	Crimper (CRTL-CR-PSPL)	Snipper Cutter	Marker
Kevlar Shears (IDEAL 45-344)	Cutter Knife	Ruler	Canned Air	Cleaning Wipes

3.2 Tools for Fusion Splicing (Stripping & Cleaving & Heating)

KF4A-HDC	Holder Left (SST-900L)	Holder Right (HF4-SC/FC)	HDC Heater (HT-2030)

4. KF4A-HDC Setting
Depending on your cable, choose the appropriate settings for splice mode, stripper mode, and heater mode. When working with the HFSOC-SM-SC/APC-PSPL-8145, you may need to adjust settings depending on the machine's environmental conditions.

4.1 Splice Mode
• G.657.A2 to G.657.A2 : Setting – 12. G657 A2B2
• G.652.D to G.652.D : Setting – 1. SM ITU-T G652
• G.652.D to G.657.A2 : Setting – 18. G652-G657 A2B2

4.2 Heater Mode for HFSOC with 21mm Sleeve
• Setting – 10. S09-C 22x1.6x2.9
• Detail - Heating Time : 40~60 seconds / Heat Temp. : 180~190 Degree

4.3 Stripper Mode
• Setting – 2. 0.9
• Detail - Stripping Time : 2 seconds / Stripping Temp. : 135 Degree

4.4 HDC Heater Mode for 8.1x4.5mm Cable with Protection Tube
• Detail - Heat Time : 120 seconds / Heat Temp. : 190 Degree

5. Installation Procedure
5.1 Cable(8.1x4.5mm) Preparation.
5.1.1 Insert components in order. First slide boot, cable protection tube, housing ass'y Prepare crimp ring and frame outside of the cable.
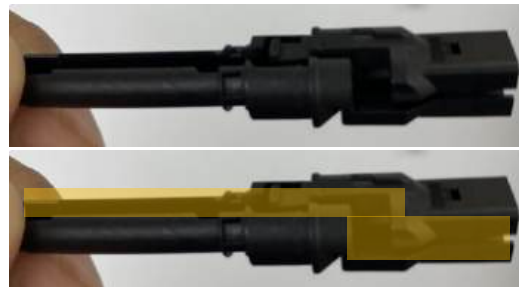

① Boot
③Housing Ass'y
② Protection Tube
④Crimp Ring
⑤ Frame

[Tip]
Crimp Ring will be inserted in 5.1.7

[Tip]
Frame will be inserted in 5.3.1 by using the slit.
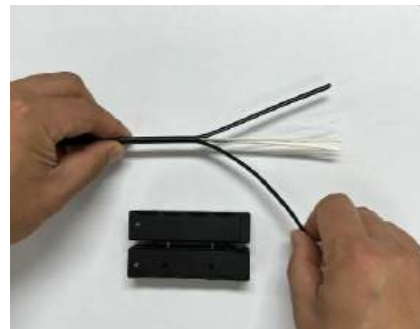
5.1.2 Measure and mark 110 mm from end of cable using a ruler. Then mark 80mm.

5.1.3 Split the jacket at 110mm using the slitter.

5.1.3a

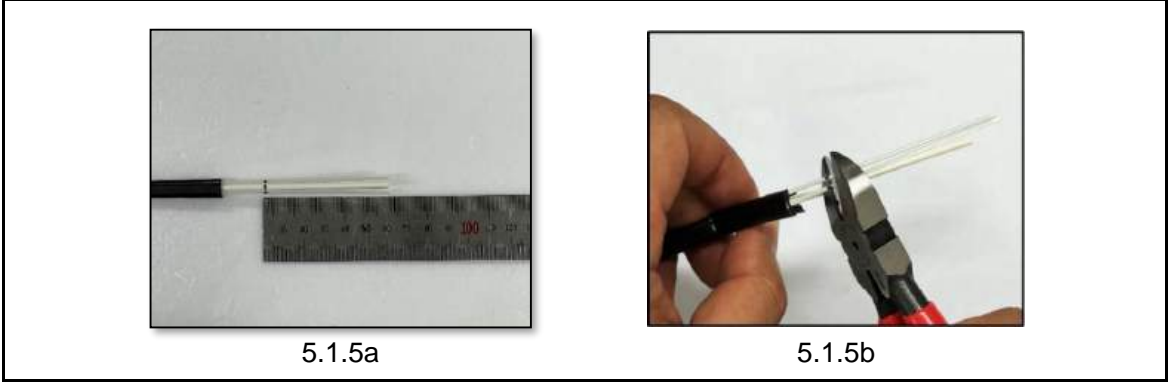5.1.3b
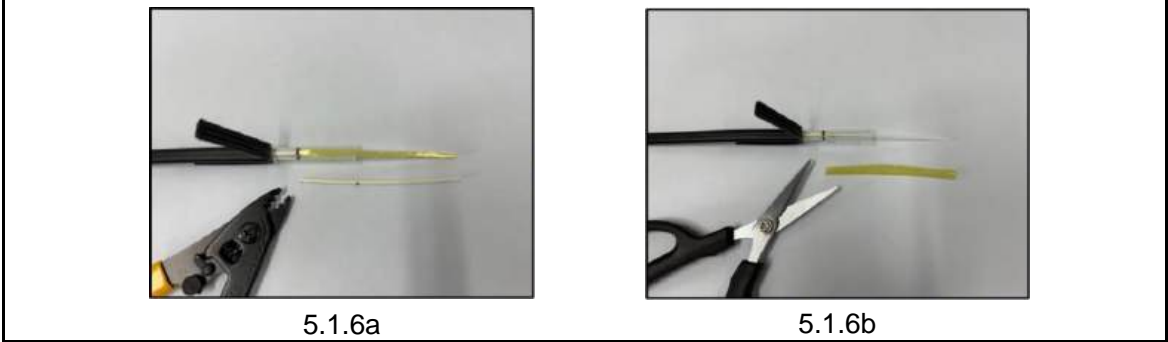
5.1.4 Using the scissors, Remove 80mm of the split jacket.
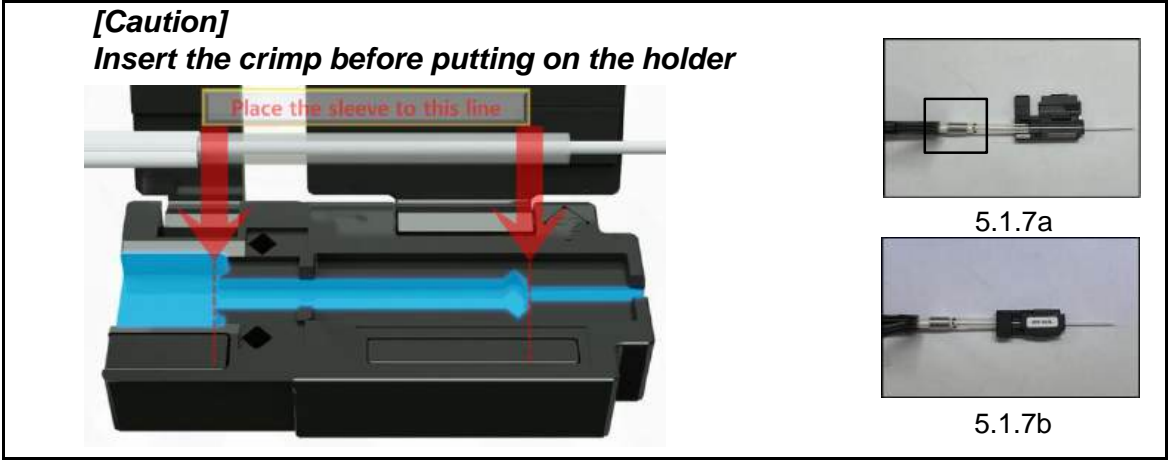

5.1.4a

5.1.5 Remove the FRP strength member using a Snipper at the 60mm mark.
(Based on removed jacket end)

5.1.5a

5.1.5b

5.1.6 Using the fiber stripper tool, remove the loose tube at the 60 mm mark,
exposing of the aramid yarn. And Remove the aramid yarn using Kevlar scissors.

5.1.6a

5.1.6b

5.1.7 Insert the Crimp Ring and Splice Sleeve order and place the 0.9mm fiber
on the holder (SST-900L).

[Caution]
Insert the crimp before putting on the holder

Place the sleeve to this line

5.1.7a

5.1.7b

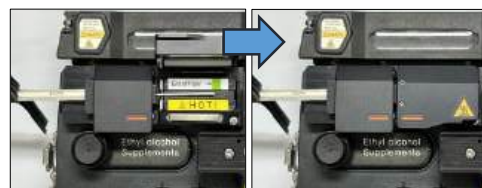### 5.2 Fusion Splicing (Include Stripping and Cleaving)
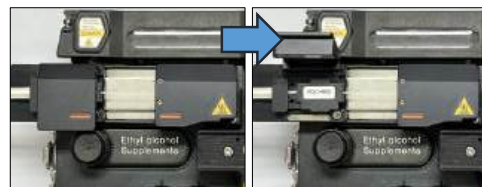
5.2.1 Stripping

a. Turn on the power of stripper.

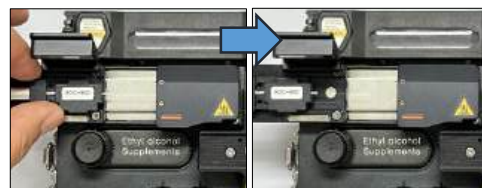b. Mount the fiber holder to the auto-stripper. Make sure 0.9mm fiber should be placed on the center of heater.

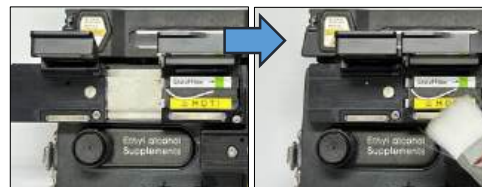c. Close left cover first then right cover. On closing right cover, stripping process is activated automatically.

d. After Stripping is completed, open the left cover.

e. Remove the holder sliding back not lift it up to avoid damage on the fiber.

f. When the right cover is opened, the left part returns to its original position. Use a brush to clean the blade and hot plate area.

5.2.2 Cleaving

a. Clean the optical fiber using an alcohol-soaked fiber wipe. Open the cover of the cleaver and trash bin. Mount the holder on the cleaver slot.

b. Close the covers and press the actuation button, and carefully remove the holder with sliding it back.

   [Caution]
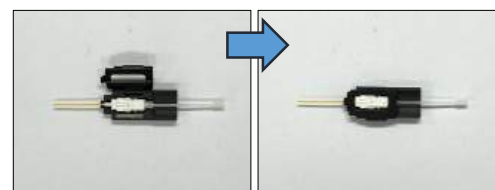   *Lifting the holder after cleaving may damage the fiber.*

c. Place the prepared fiber holder into the splicer. The fiber must be in the V-groove and the left cover must be closed on the cable guide to secure the cable.
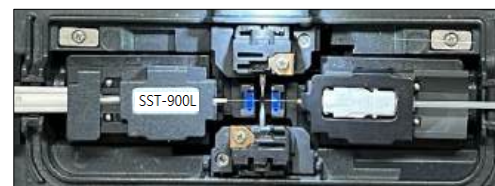   (Close the left cover)

   [Caution]
   Insert one side of the split jacket into the cable guide hole

d. Please go through the same process for the subassembly.
   (Stripping to Cleaving)

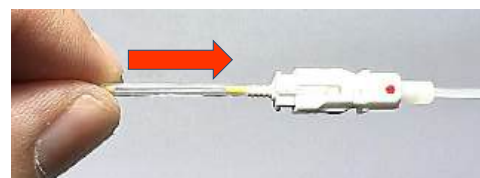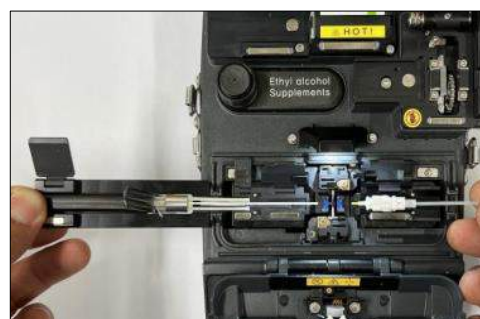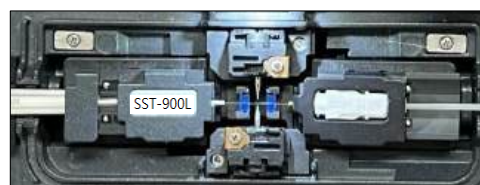
e. Mount the subassembly holder into the splicer.

5.2.3 Splicing

a. Close the wind cover after ensuring
   that both holders are in place.
   When wind cover is closed,
   the splice will be executed automatically.

b. Splicer will pause for viewing of
   the splice parameters.

c. After successfully splicing, the splicer
   automatically performs a tensile test
   when the door of the splicer is opened.
   Please DO NOT interrupt this test.

d. Carefully open the holder cover,
   hold both sides and lift it up carefully.

   [Tip]
   *To prevent damage to the spliced
   fiber, open the left side covers while
   pressing(holding) the cable, and hold
   the ferrule cap while opening the
   right side holder cover.*

e. Slide sleeve over the splice carefully to
   the end of the subassembly.

f. Open the heater cover. Locate the
   connector and sleeve area and place the
   sleeve within appropriate heating area.
   Close the right heater cover first, then
   the main heater cover.
   If the auto heater function is on,
   it will run automatically. If not, press the
   heater button to run it.

g. Open the heater cover, hold both
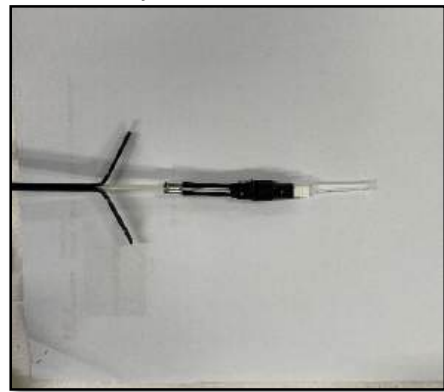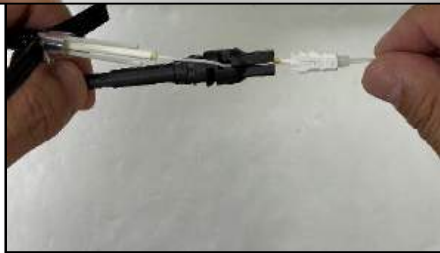   ends and lift straight off the heater.

5.3 Assembly with housing kit

5.3.1 0.9mm fiber Insertion & Frame Assembly

: Carefully insert the 0.9mm fiber into the frame through the slit
and insert the frame into the back of the ferrule assembly.
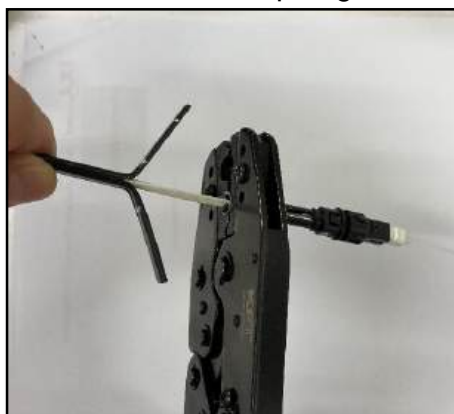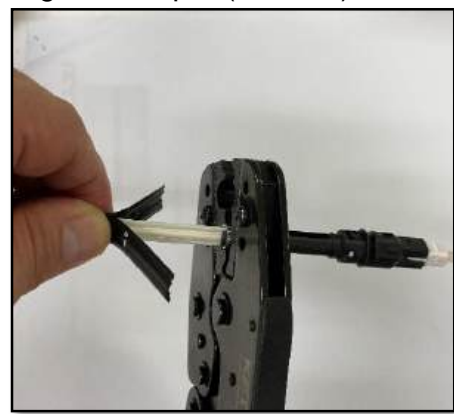

5.3.1a

5.3.1b

[Tip]
You may hear "Tick" sound

5.3.2 Crimp Ring Assembly

: Insert the clamp ring and secure the frame using the crimper (**2 times**)

5.3.2a

5.3.2b

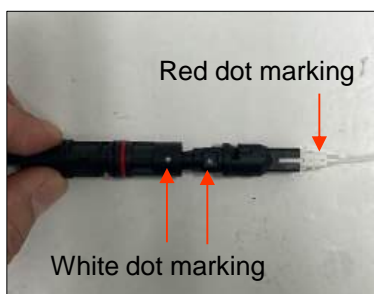*[Tip] Press the clamp ring once, turn it 90 degrees and press it again*

[Caution] When using the crimper, make sure the crimp ring does not slip out of place.
Squeeze the crimper hand until you hear it click.

5.3.3 Housing Assembly
  : Insert the housing ass'y into the in rear of the frame. Push the screw cap all
   the way to secure it onto the cap assembly. It is important that the cap
   assembly is securely fastened to the screw cap for the housing.

Red dot marking

White dot marking

5.3.3a

5.3.3b

[Caution]
Pay attention to the direction of the assembly.

5.3.4 Protection Tube Assembly
  : Insert the protection tube.

5.3.4a

5.3.4b

  : Use the HDC heater to secure the cable and housing kit as shown blow.

5.3.4c

5.3.4d

: After the heater is done, remove it from the heater and use the canned air to cool it down quickly.

5.3.4e	5.3.4f

: Finally, place the boot in full contact with the rear of the housing body and install the cover on the connector.

5.3.4g	5.3.4h	5.3.4i

-End of Document-