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1.Scope

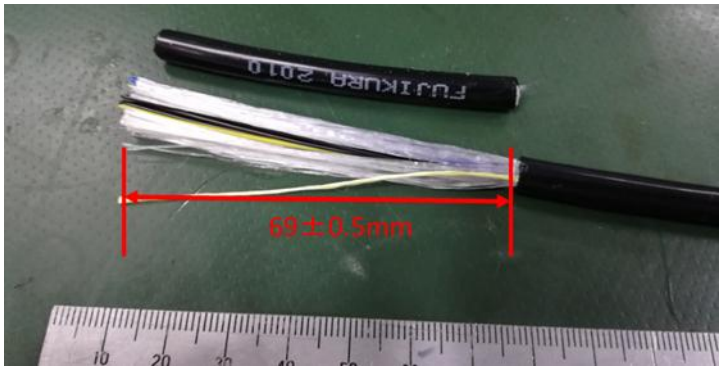
This technical document is for the assembly of the SW20-LCPT75.
(tension member type cable)
This document does not cover how to attach or polish the ferrule,
so please refer to the general purpose procedures when assembling.

2.Termination Process

2.0 Tools required for assembly

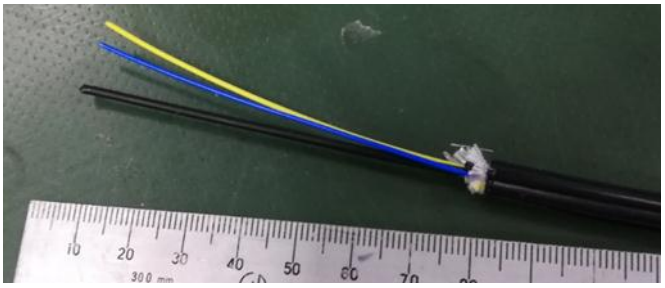
SW20-LCPT75-1/CVMD1 902-3225-3-00 : LC housing assembling tool
SW20-LCPT75-1/CVMD3 902-3227-9-00 : Fastener assembling tool
SW20-SCLC-T1/CV-MD 902-6065-5-00 : Hood assembling tool
SW20-LCPT75-1/CVMD4 902-6074-0-00 : Spring washer assembling tool
Cable stripper (Commercial products)
Torque wrench (Commercial products bit=14mm)
Wire stripper (Commercial products)

2.1 Cable Jacket Strip




*Avoid damaging the optical fiber when stripping off the jacket.

2.2 Remove All Buffers (Exposing Optical Fiber)



Cut all buffer material except for optical fiber and tension member.
If the optical fiber is a cord type, remove the jacket surrounding the fiber

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| ⚠0 | | | | | |

| | | | |
|---|---|---|---|
| TITLE<br>SW20-LCPT75-3 assembly procedure | HRS HIROSE ELECTRIC CO.,LTD. | | |
| | APPROVED | YY.HIYAMA | 20200318 |
| | CHECKED | SJ.SUZUKI | 20200318 |
| | DESIGNED | BENJAMIN RILEY | 20200318 |
| | WRITTEN | SU.KURODA | 20200318 |
| TECHICAL SPECIFICATION | ETAD-K0792-00 | ⚠0 | 1 / 13 |

FORM HC0011-9-1

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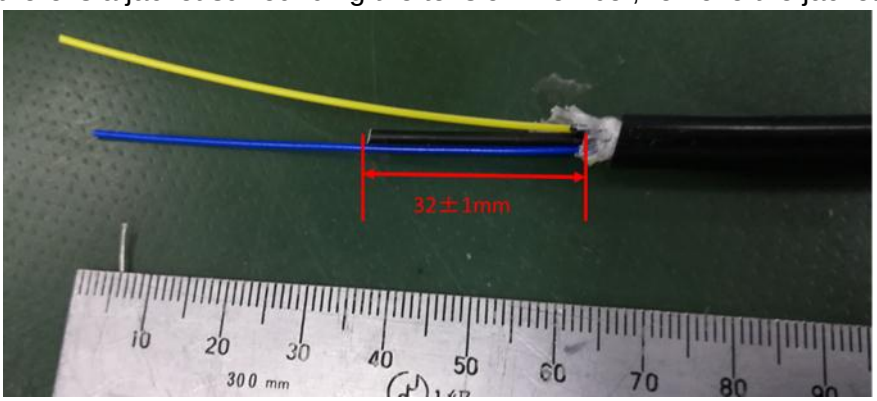
2.3 Cut Tension Member

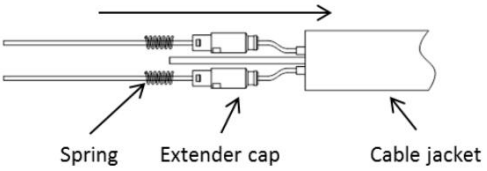
(If there is a jacket surrounding the tension member, remove the jacket)

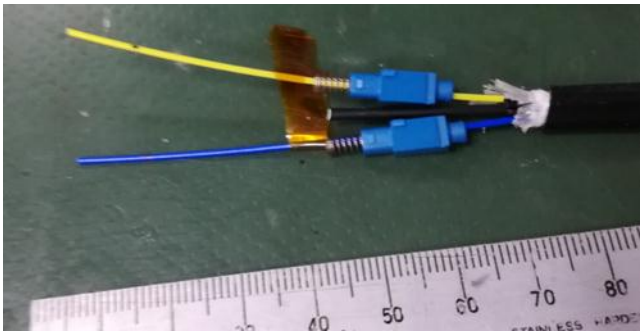



2.4 Insert Extender Caps and Spring

Insertion of preliminary LC components (Components required before adhering ferrules)

(Be careful not to lose the components)

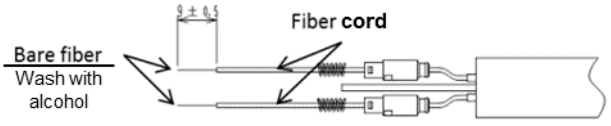


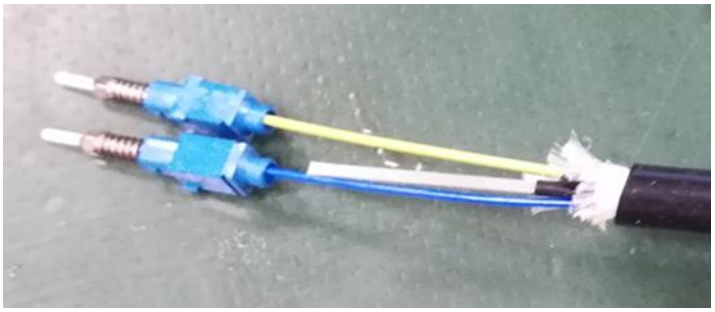




2.5 Attach Ferrules (Adhere + Polish)

From the end of the fiber, strip 9±0.5mm and adhere the LC ferrule

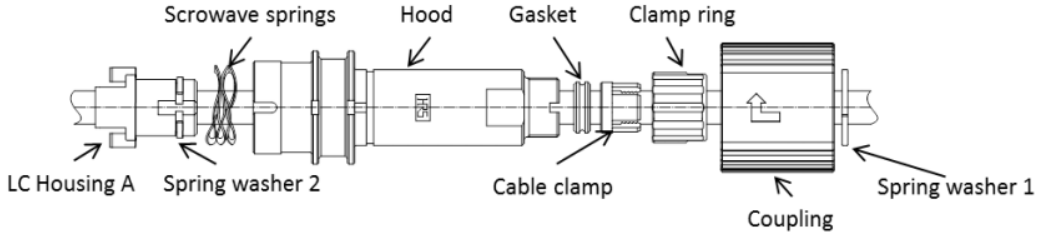
(If required, determine there ferrule's key)



(tension member's jacket has been stripped)

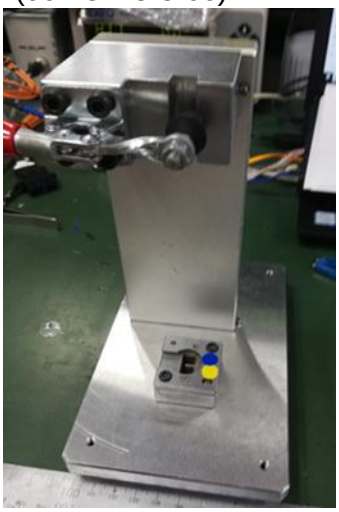
2.6 Insert Components 2 (Possible Insertion After Ferrule Adherence)
Insert in order displayed below



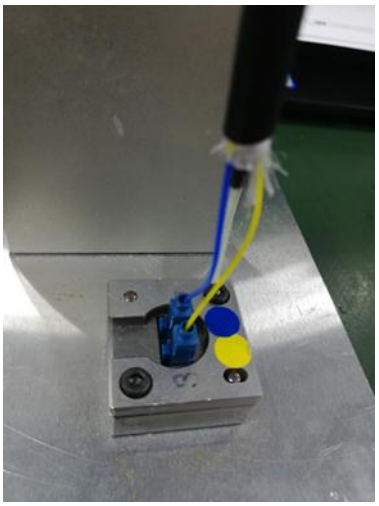

2.7 Assemble LC Connector
If there is a directional key for the LC, align the key with the lock lever when assembling



2.8 Assemble LC Housing
When assembling, use the LC housing assembling tool (specific to the SW20-LC)
SW20-LCPT75-1/CVMD1 (902-3225-3-00)



(1) Set LC housing to tool



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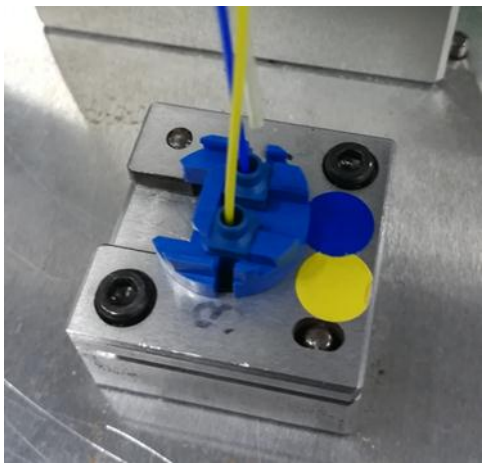
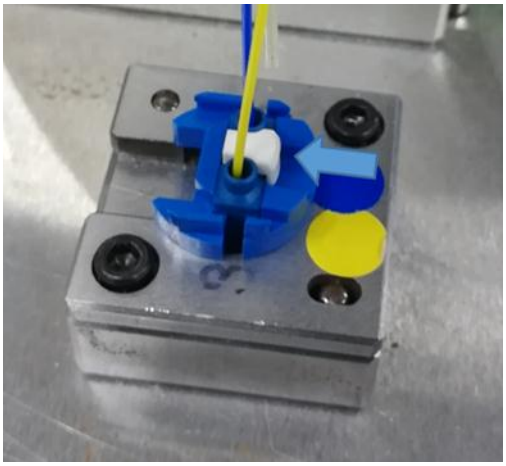
(2) Insert LC Slider B
Insert slider B into the tool as shown in the picture below



(3) Insert LC Spacer
Slide the LC spacer (white component) in the direction of the arrow shown in the picture below



(4) Assembling LC Housing A
Push down on housing A until joined with slider B



Remove the joined LC housing from tool

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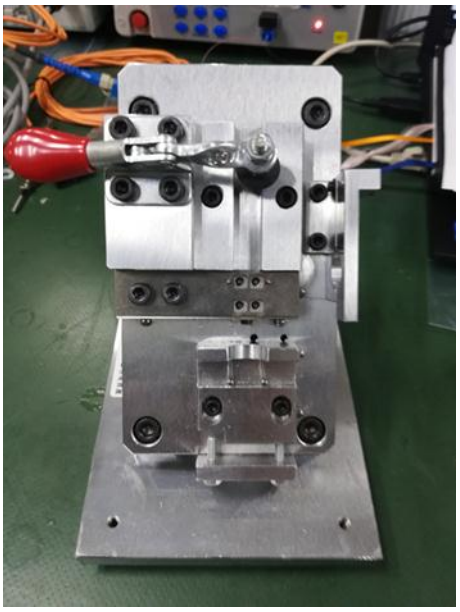
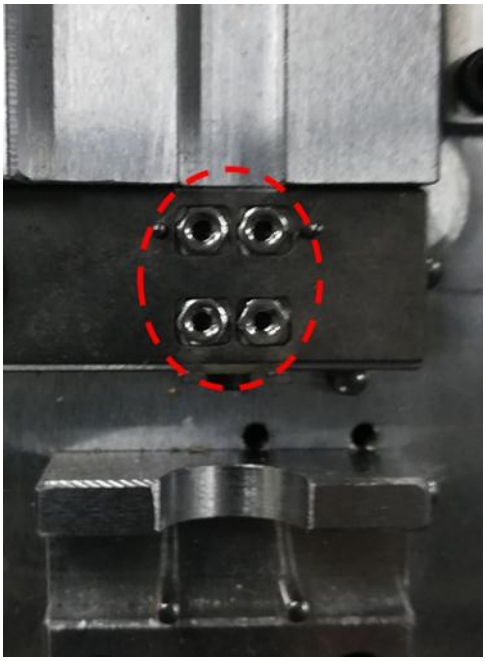
2.9 Assemble Fastener (Process to Fix Tension Member)
Use fastener assembling tool SW20-LCPT75-1/CVMD3 (902-3227-9-00)
(Place the designated LC attachment)



(1) Place Hexagon Nuts in Tool
Set hex nuts (4 pieces) in the tool



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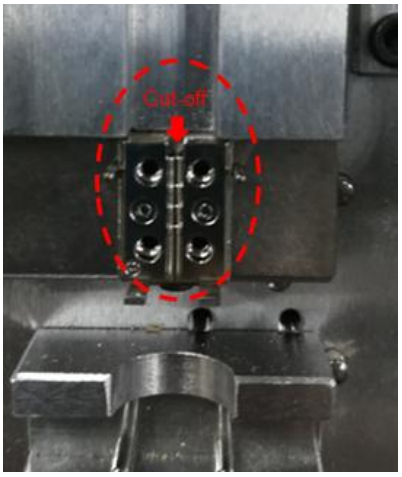
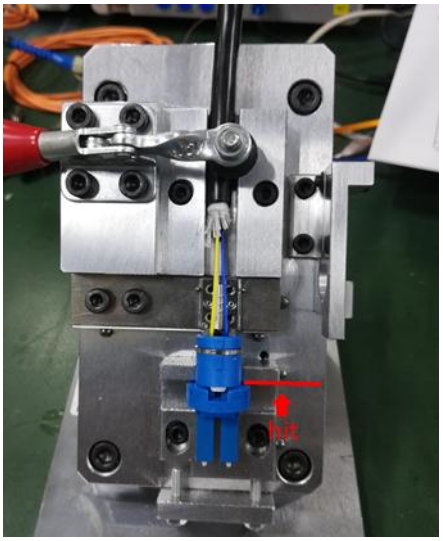
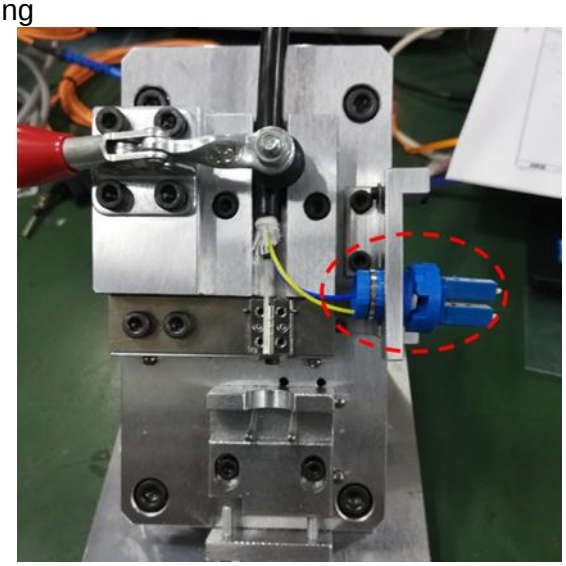
(2) Place Fastener
Set the fastener so the notched side is upward as displayed below




(3) Place LC Connector and Clamp the Cable
Place the LC connector and make fibers taut just as it is displayed below




(4) Cable Release
Release the LC connector and hold on the right side to avoid pinching cables when assembling



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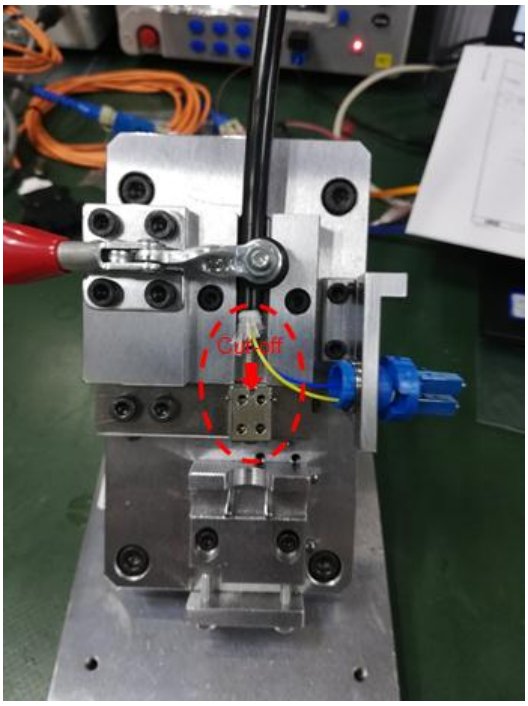
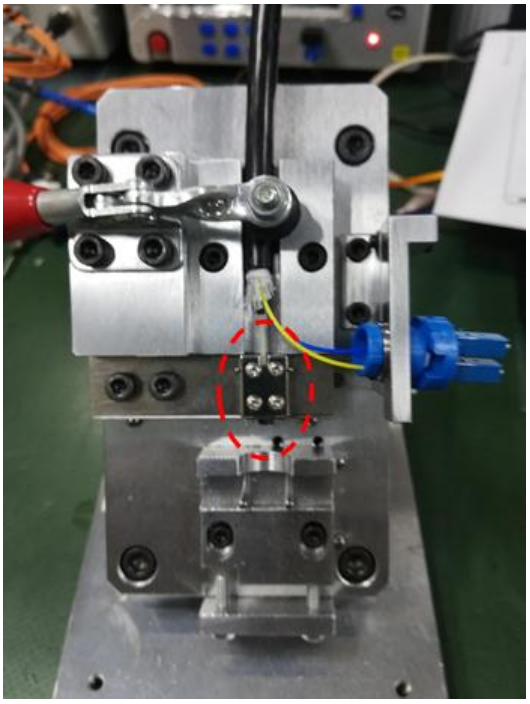
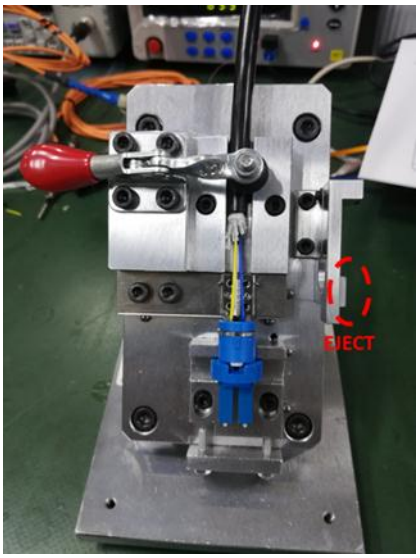
(5) Assemble Fastener
Make sure that the notch is set in the correct direction and tighten the screws
Tighten 4 screws with 40 cNm of torque.



(6) Release Cable Clamp and Eject Stopper Plates
Once the fastener's have been tightened, the product may be stuck to the tool, push eject on the tool and remove.

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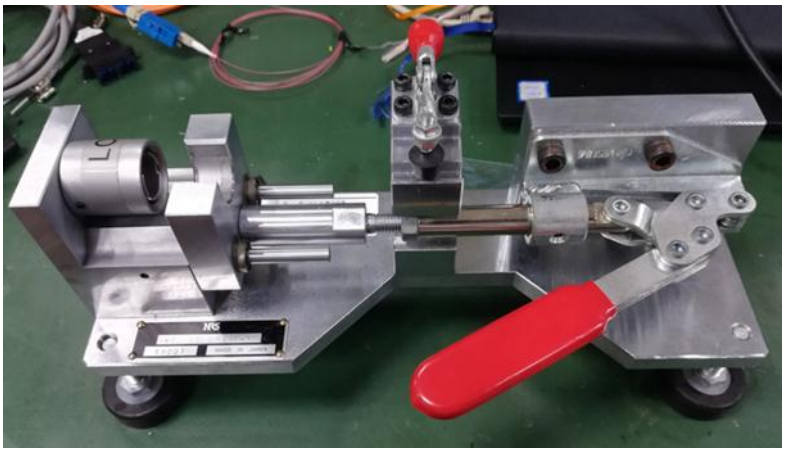
2.10 Assemble Hood

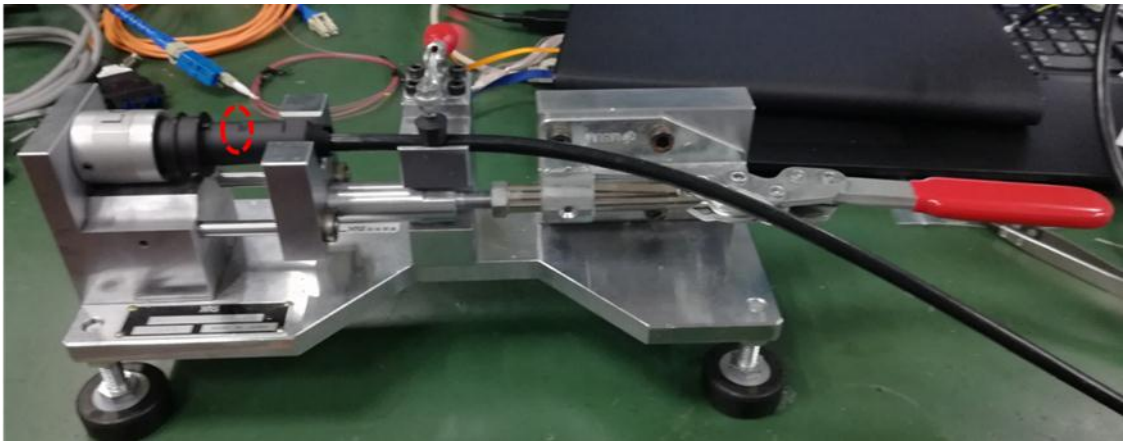
Use hood assembling tool SW20-SCLC-T1/CV-MD (902-6065-5-00)
(Place the designated LC attachment)



(1) Temporary Hood Assemble
Move the hood until the LC housing fits as shown the picture below)
(Align HRS mark with LC lock key.)



(2) Set hood in Assemble Tool
Make sure that the HRS mark is facing in the upward direction in the tool



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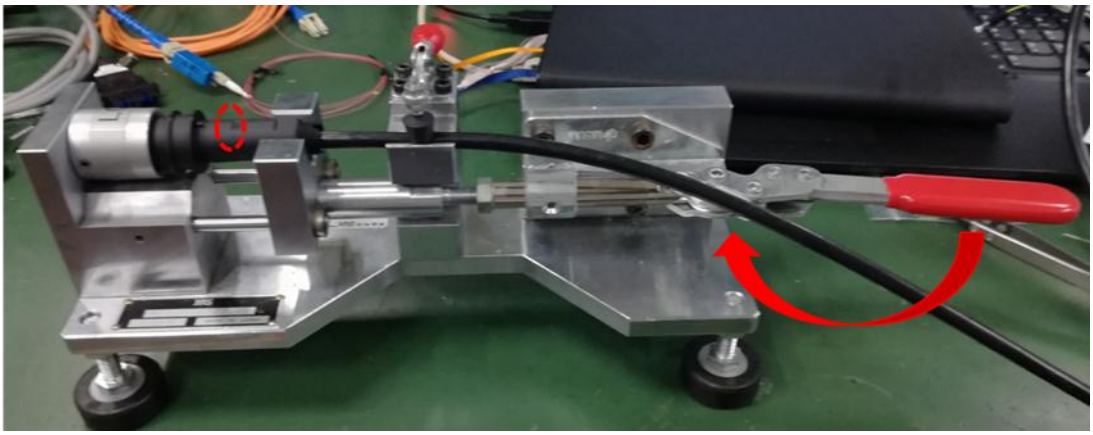
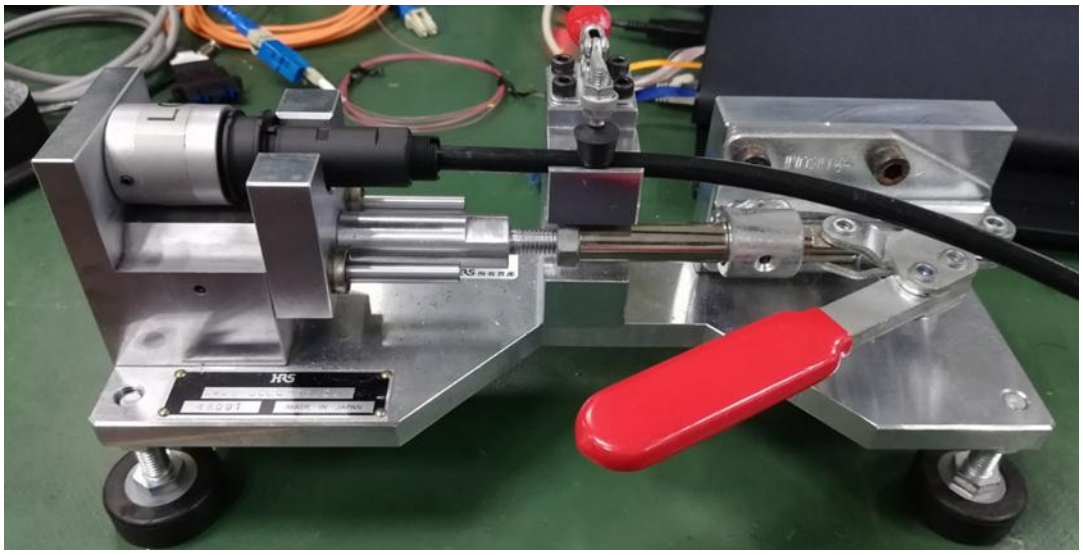
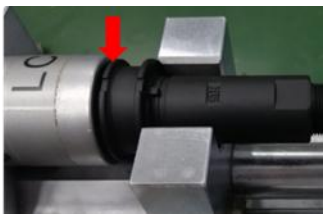
(3) Assemble Housing
Assemble the SW20's housing and hood by turning the lever in the direction indicated below

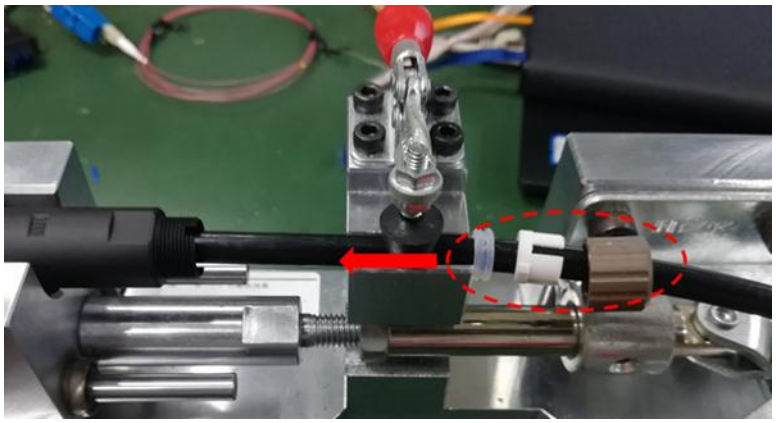








(4) Move the gasket so that it is inserted inside the hood but making sure it does not pass the edge of the cable.



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(5) Fasten Clamp Ring

Tighten Clamp Ring by wrench with 1.3Nm (bit = 14mm)

To ensure the cable does not retreat into the hood, apply tension to the cable as indicated by the arrow

(If too much torque is applied, the possibility of breaking a component is high)

(If cable retreats inside of the hood, the possibility of increasing the optical loss is high)



(6) Attach Rubber Packing

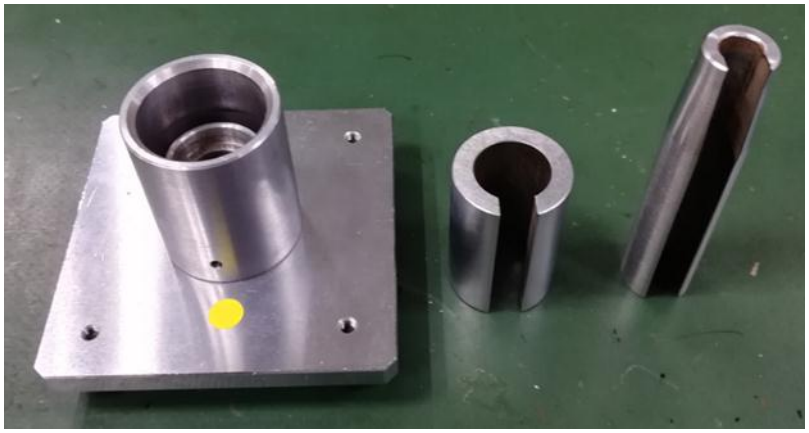
Remove from tool and insert rubber ring.





2.11 Assemble Metal Coupling

Use spring washer assembling tool SW20-LCPT75-1/CVMD4 (902-6074-0-00)



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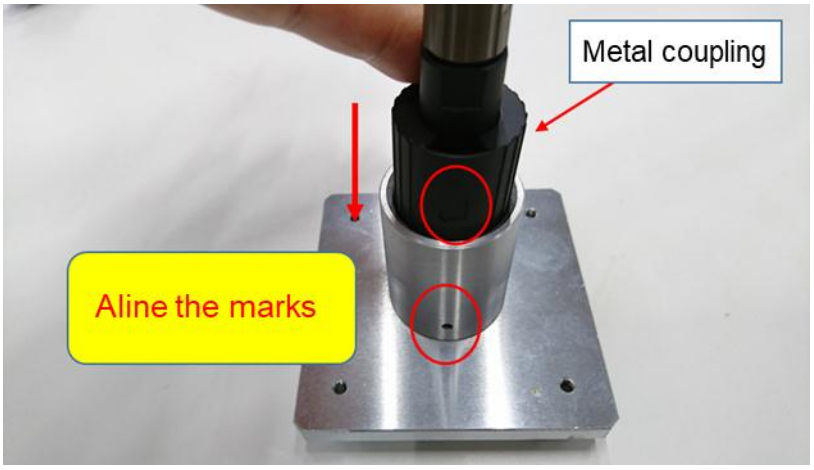
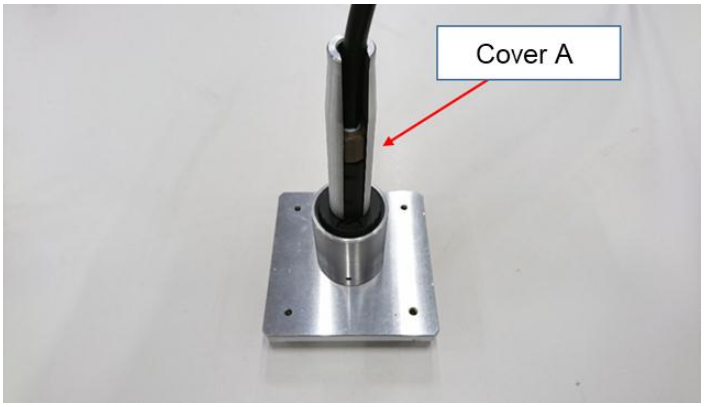
(1) Set Main body to Tool and drop metal coupling down






(2) Place protection cover A for the use protective cover a insertion of the spring washer to ensure that the spring washer does not scratch other components

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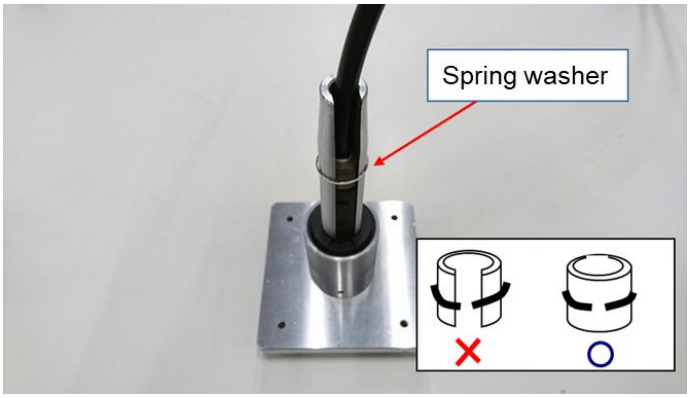
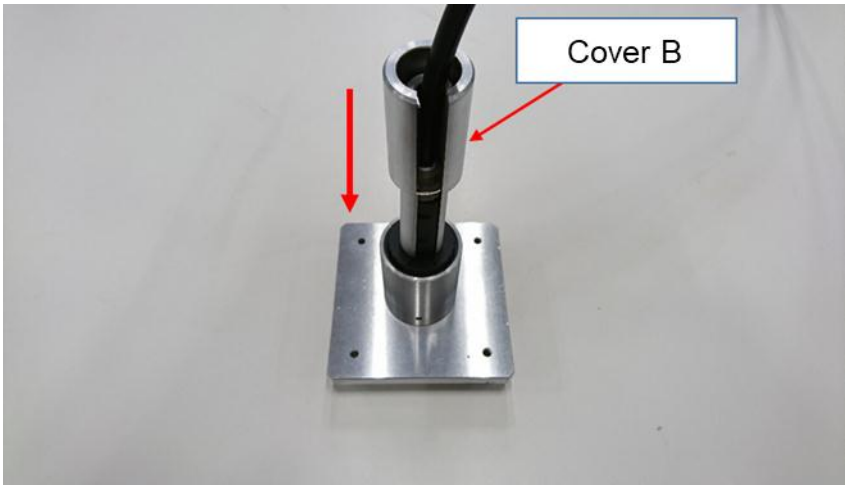
(3) Insert and Slide Spring Washer
To avoid damage, make sure the spring washer's opening does not align with the protective covers opening.




(4) Insert Cover B




(5) Push down until the Spring washer is fitted to the hood



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(6) Remove the Protective Covers
Pull protective Cover A up and Cover B



(7) Remove the SW20 from the tool



(8) When the cap is attached, assembly is completed.

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