INSTRUCTION MANUAL FOR HIGH PRECISION FIBER CLEAVER CT50

Please read this instruction manual carefully before operating the equipment. Adhere to all safety instructions and warnings contained in this manual.

1. Warnings and Cautions

CAUTION: There is a possibility of personal injury or equipment damage resulting from improper use by ignoring this documentation.
This cleaver is designed for cleaving the glass optical fibers used in telecommunications. Do not attempt to cleave any other material.
Cleaver blade is extremely sharp. Do not touch as personal injury may result.
Safety glasses should always be worn during fiber preparation and splicing operation. Fiber fragments can be extremely dangerous if they come into contact with your eyes or skin.
Do not disassemble or modify the cleaver.

Bluetooth® Wireless Technology

- The cleave uses Bluetooth technology for wireless data communication.
- The wireless data communication is done at a frequency of 2400MHz frequency band, and employs the DSSS modulation scheme. The estimated interference distance is 10m or less.
- The wireless data communication function shall be used in accordance with local electromagnetic emissions/susceptibility regulations.

CAUTION!

When using the fusion splicer, the optical fiber cleaver and the ribbon fiber stripper near medical devices, turn the wireless data communication function of these off.
Turn the power of the fusion splicer off in the aircraft. For the optical fiber cleaver and the ribbon fiber stripper, remove batteries to turn off the wireless data communication.

Typical wireless certifications are:

USA FCC Rules Part 15 FCC ID：QOQBGM111
CANADA Industry Canada Rules RSS-247 IC：5123A-BGM111
European Union (RE directive 2014/53/EU)
Safety：EN 61010-1, EMC：EN 301 489-1 v3.1.1,Spectrum：EN 300 328v2.1.1
JAPAN Radio-wave Law Article38-24 paragraph 1 R209-J00192

If you have any questions for other countries, contact an authorized Fujikura distributor listed in the following web site:

https://www.fusionsplicer.fujikura.com/service/index.html

Feature

The CT50 offers enhanced drop impact resistance compared to other existing cleavers and allows workers to replace the cleaving blade, providing customers with a drastic reduction in handling time and maintenance costs. The CT50 changes the position of the cleaving blade automatically and in accordance with the condition of the cleaving state of optical fibers on a fusion splicer through wireless data communication. In addition, the CT50 can complete cleaving works including scrap collection, with a single-step.

ADVANTAGE of using with splicer

The splicer can assess blade wear by analyzing the fiber image after cleaving, and then informs the operator with an on-screen alarm. Once the wireless data communication is succeeded with the splicer and cleaver, the operators can know it. This can be maximized the blade life and obtain stable and good cleave angle.

2. Components of Cleaver

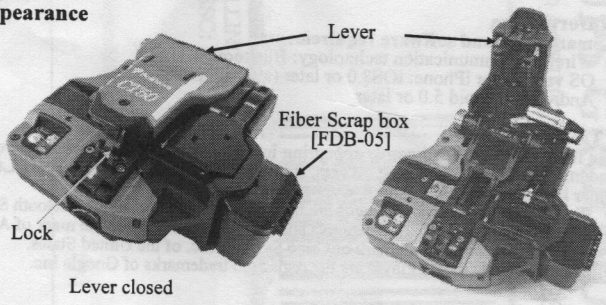
Name	Part Number	Qty	Remarks
Cleaver Main Body	CT50	1pc.	SPA-CT08-10 attached
Fiber Plate	AD-50	1pc.	For single fiber plate
Fiber Plate	AD-10-M24	1pc.	For single fiber plate with lid
Fiber Scrap Box	FDB-05	1pc.	-
Carrying Case	CC-37	1pc.	-
Hexagonal Wrench	HEX-01	1pc.	-
Instruction Manual	-	1pc.	This documentation
Accessories			
Spare blade	CB-08	1pc.	-
Arm kit	ARM-CT50-01	1pc.	-
Side Cover	SC-CT50-01	1pc.	-

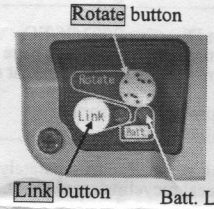
3. Applicable Fiber

Applicable fiber	Silica optical fiber,, Fiber count: Single to 12 ribbon fiber Cladding Dia. 125um

Item	Applicable fiber	Coating Dia.	Cleave length
Fiber Plate AD-50	Single	160 to 250um	5 to 20mm
		> 250um	10 to 20mm
		Drop Cable, ϕ2, ϕ3mm code	14mm
Fiber Plate AD-10-M24	Single	160 to 250um	5 to 20mm
		> 250um	10 to 20mm
Fiber Holder	1 to 12 ribbon	Depending on the fiber holder	10mm

4. Appearance





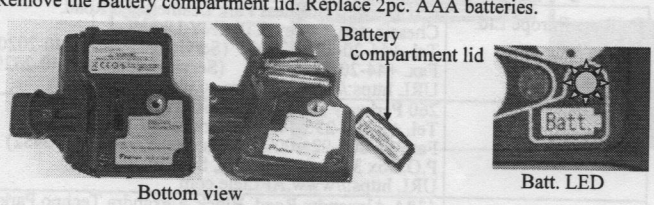
Name	Function
Rotate button	Rotates the cleave blade.
Link button	Connects to smartphone or splicer.
Batt. LED	Indicates the remaining battery capacity. Lights red to indicate a blade motor error.

5. Procedure

5-1. Battery Operation

Press Link button. "Batt. LED" indicates the remaining battery capacity.
Green: More than 10%, Red: Less than 10%

Battery replacement:
Remove the Battery compartment lid. Replace 2pc. AAA batteries.



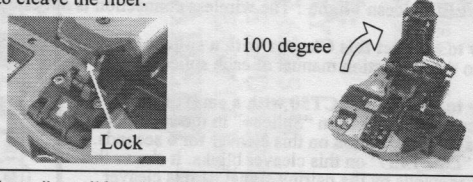
NOTE: If the battery capacity is less than 10%, "Batt. LED" lights red automatically after opening Lever. Please replace the battery immediately.

NOTE: Storage/operation at low temperatures reduces battery capacity in comparison to battery capacity at normal temperature. Low capacity is shown by the red "Batt. LED". If this occurs and the blade cannot be rotated automatically, rotate it manually as describes in section 6-2.

KSP75-FP-011288 (2)

5-2. Cleaving Operation

1. Release the "Lock" from the "Lever".
2. Lift the "Lever" until it stops. The blade is automatically set to the starting position and is ready to cleave the fiber.

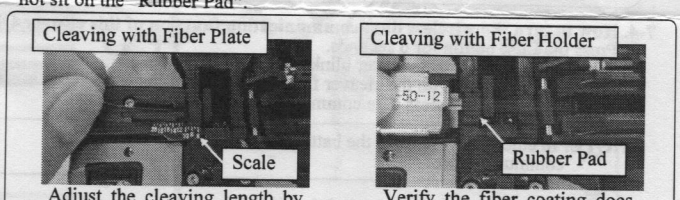


NOTE: The "Lever" can lift up to 100 degrees. Do not move it beyond 100 degrees.

3. Set the fiber to the cleaver.

Cleaving with Fiber Plate: Attach the Fiber Plate to the cleaver and tighten it with the screw. Strip 24 to 40mm of coating from the fiber to be cleaved, clean the fiber with an alcohol wipe. Set it in onto fiber plate. Check and adjust the fiber length using the scale on the fiber plate.

Cleaving with Fiber Holder: (1) Remove the fiber plate from the cleaver. (2)Open the lid of a fiber holder. Set the fiber onto the fiber holder. Check and adjust the fiber length about 30 to 40mm from the end of the fiber holder. (3)Strip the fiber coating and then clean it with an alcohol wipe. (4)Set the fiber holder to the cleaver. (5)Push the fiber holder forward. (6)Check the position of the fiber coating. If it sits on the rubber pad, go back to the step (2) until it does not sit on the "Rubber Pad".



4. Close and gently push down on the "Lever" until it stops. The blade automatically moves and the fiber is cleaved. The cleaved fiber scrap is automatically deposited into the "Fiber Scrap Box", [FDB-05].

5. Lift the "Lever" until it stops and remove the fiber from the cleaver. Be careful not to contaminate the end-face of the fiber by touching anything with it.
6. Properly dispose of the scrap by emptying the "Fiber Scrap Box" at an appropriate time.