

INSTRUCTION MANUAL FOR HIGH PRECISION FIBER CLEAVER CT-20



1. Warnings and Cautions

	WARNING : There is a possibility of death, serious injury, or physical loss, resulting from improper use by ignoring this indication.
	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 touch the cleaver blade. Failure to comply may result in personal injury.
	Be careful when using the cleaver, do not leave fingers in the cleaver. Fingers can be injured if left in the cleaver during its operation.
	CAUTION : There is a possibility of personal injury or physical loss resulting from improper use by ignoring this indication.
	Do not disassemble or modify the cleaver, it is a very high precision instrument.
	This cleaver is designed to cleave telecommunications optical glass fibers. Do not attempt to cleave any other material.

2. Components of Cleaver

Name	Model	Qty	Note
Cleaver Main Body	CT-20	1 pc	
Instruction Manual	-	1 pc	
Fiber Plate	AD-11	1 pc	Standard equipment in CT-20-11, CT-20FC-11
Fiber Plate	AD-12	1 pc	Standard equipment in CT-20-12, CT-20FC-12
Fiber Scrap Collector	FC-01	1 pc	Standard equipment in CT-20FC, CT-20FC-11, CT-20FC-12

3. Applicable fiber

Fiber Plate	Number of Fibers	Coated Diameter	Bare Glass Core Diameter	Cleave Length
-	MAX24ribbon	Depend on holders	0.125mm	10mm
AD-11	1(single)	0.25 to 0.9mm	0.125mm	16mm
AD-12	1(single)	0.25mm	0.125mm	6 to 20mm
		0.9mm	0.125mm	10 to 20mm

4. Cleaver disposal

The CT-20 contains no toxic substance, and no recyclable material. If to be disposed of, the cleaver should be discarded as incombustible material.

5. Contact Address

Inquiries concerning products should be made to the nearest sales agency or one of the following:

Fujikura Europe Ltd.	C51 Barwell Business Park Leatherhead Road, Chessington, Surrey KT9 2NY England Tel. +44-20-8240-2020 (Service: +1-800-866-3602) Fax. +44-20-8240-2029 (Service: +1-800-433-5452) URL http://www.fujikura.co.uk
Alcoa Fujikura Ltd.	260 Parkway East Duncan, SOUTH CAROLINA 29334 U.S.A. Tel. +1-800-AFL-FIBER (Service: +1-800-866-3602) Fax. +1-800-433-5560 (Service: +1-800-433-5452) P.O.Box 3127 Spartanburg, SC 29304-3127 URL http://www.afl-link.com
Fujikura Asia Ltd.	460 Alexandra Road #22-01 PSA Building Singapore 119963 Tel. +65-2711312 Fax. +65-2780965 URL http://www.fujikura.com.sg
Fujikura Ltd.	Export Department 1-5-1 Kiba, Koto-ku, Tokyo, 135-8512, Japan Tel. +81-3-5606-1164 Fax. +81-3-5606-1534 URL http://www.fujikura.co.jp/front_e.htm

6. Cleving procedure

The following pictures shows different parts of a CT-20 cleaver, as well as the attached fiber disposal unit FC-01.

To operates the cleaver, perform the following steps:

Unpacking a CT-20 cleaver:

Unlock stopper (6): press gently on the anvil lever (1), slide the stopper lever (6) to release the anvil lever, let the pressure of the anvil lever push the lever to its highest position. (Fig.6-5) Remove the fiber clamp cover (3). (Fig.6-1) Place this cover back on the fiber clamp pads when closing the CT-20 cleaver and locking it with the lever (6).

Cleving with CT-20:

1- Set the fiber on the cleaver:

Open lid (2) of the box. Set the stripped optical fiber on the cleaver pads.

The minimum length of the bare glass should be 30mm. Then close the lid (2).

Note:

If using AD-12 fiber plates, adjust the cleave length of the fiber with a ruler.

If using a fiber holder for ribbon fiber, make sure all fibers are parallel and not overlapping.

2- Cleave

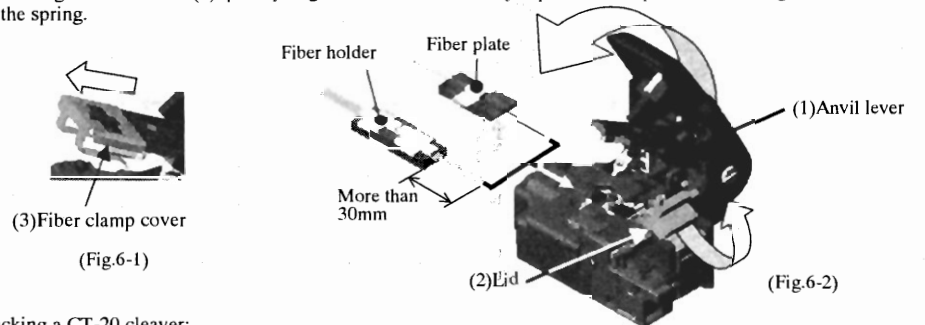
First, press on the anvil lever (1) slowly until the upper fiber clamps (8) come in contact with the bottom fiber clamps.

This first step clamps the fiber on both sides of the blade (7). Then continue by pressing rapidly on the same anvil lever (1), until it is completely folded on the cleaver body. This step ensures that the fiber is scored by the blade (7), and bent for complete separation of both ends of the fiber. Finally, release the pressure on the anvil lever (1) slowly. A spring force will bring it to its original position.

Note:

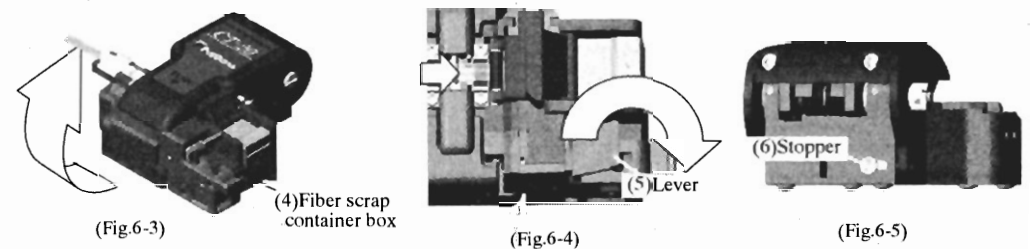
- releasing the pressure on the anvil lever (1) after pressing it half way down may damage the fiber.

- releasing the anvil lever (1) quickly might cause the cleaver to jump, and some parts to be damaged, due to the back force of the spring.



Packing a CT-20 cleaver:

Place fiber clamp cover (3) on the upper fiber clamps. Then press on the anvil lever (1) down, slowly until the fiber clamp pads come in contact, then continue pressing slowly until you can slide the stopper lever (6) in place to lock the anvil arm in place. (Fig.6-5)



7. Blade wear and adjustments

Note: for proper operation of the CT-20 cleaver. Clean the circular blade (7) and both elastomer clamp pads (8) frequently with cotton swabs soaked with ethyl alcohol. (Fig.7-1)

The CT-20 cleaver uses a new circular blade that has 16 cleaving positions.

1-Blade position adjustment: (Fig.7-2)

If the cleaver does not cleave properly, rotate the blade 1/16th of a turn to replace the worn out blade position with a sharp blade position:

- 1-1- remove fiber scrap container (4) from the fiber scrap collector FC-01.
- 1-2- loosen the blade lock screw (9).
- 1-3- rotate the circular blade 1/16th of a turn.
- 1-4- fasten the blade lock screw (9).
- 1-5- install fiber scrap container (4).

2- Blade height adjustment: (Fig.7-3)

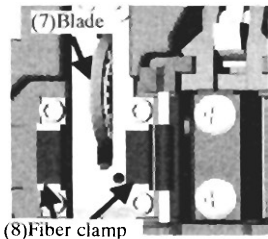
If the circular blade was rotated for a complete revolution (16 positions), its height needs to be adjusted to compensate for the wear:

- 2-1- remove fiber scrap container (4) from the fiber scrap collector FC-01.
- 2-2- loosen the blade lock screw (9).
- 2-3- loosen the adjuster lock screw (10).
- 2-4- turn the adjuster (11) clockwise, such as the reference dot aligns with the next position mark.
- 2-5- fasten the adjuster lock screw (10).
- 2-6- fasten the blade lock screw (9).

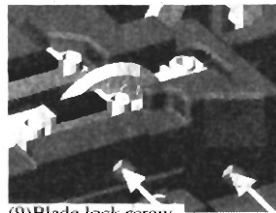
Now the blade can be used 16 times. If the cleaver does not cleave properly, rotate the blade as described in paragraph 1.

3- Blade replacement:

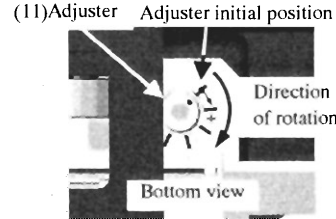
If the circular blade height has been adjusted 3 times, it needs to be replaced with a new one at Fujikura splicer distributor.



(8)Fiber clamp
(Fig.7-1)



(9)Blade lock screw
(Fig.7-2)



(11)Adjuster
(Fig.7-3)

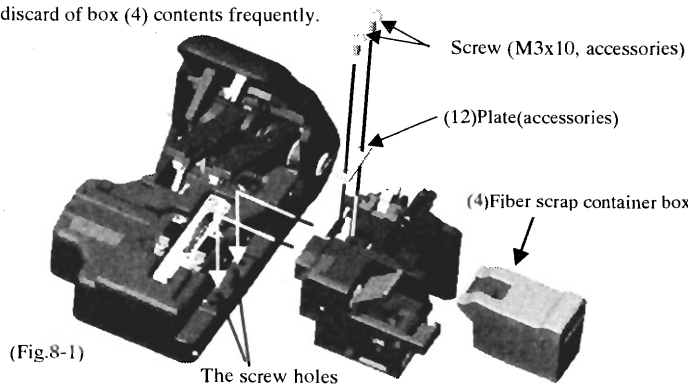
8.Fiber scrap collector attachment and operations

The fiber scrap collector attaches to the CT-20 cleaver with two screws:

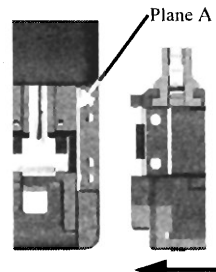
- 1- place the fiber scrap collector on the side of the cleaver so that the screw holes of the collector align with the ones of the CT-20 cleaver.(Fig.8-1)
- 2- push the fiber scrap collector toward plane A (Fig.8-2), then tighten both M3x10 screws.
- 3- To discard the fiber scrap after a cleave operation, press lever (5) down to cause the scrap box rollers to drive the fiber scrap in the disposal box.(Fig.6-4)
- 4- Then release slowly lever (5) and a spring back force will bring it back to its original position.

Note:

- discard of box (4) contents frequently.



(Fig.8-1)



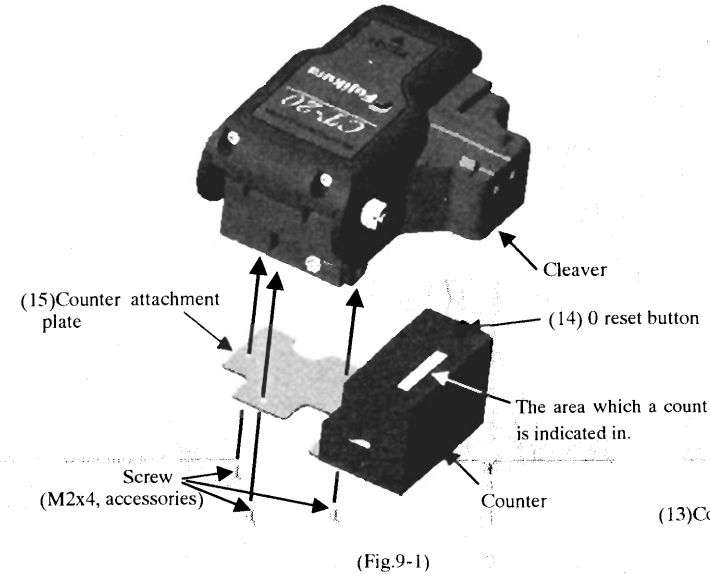
(Fig.8-2)

9.Counter attachment and operations

The counter attaches to the cleaver by screwing the counter attachment plate (15) to the base of the CT-20 cleaver:

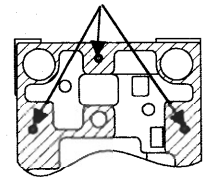
- 1- align the three screw holes of the counter attachment plate (15) with the screw holes in the bottom side of the CT-20.(Fig.9-2)
- 2- attach the counter by fastening three M2x4 screws.(Fig.9-1,9-3)
- 3- close anvil lever (1) and verify that it pushes the counter lever (13). Also, verify that the counter is incremented by one.

To reset the counter to "00000", press the "0 reset button" (14) located on top of the counter.

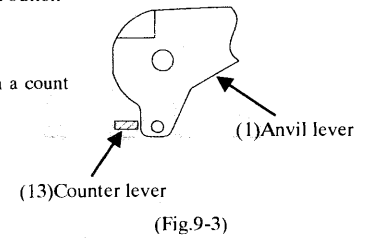


(Fig.9-1)

The screw holes for the counter attaches.



Cleaver bottom view
(Fig.9-2)



(Fig.9-3)