

# INSTRUCTION MANUAL FOR HIGH PRECISION FIBER CLEAVER

## CT-30 Series



### 1. Warnings and Cautions

	<b>WARNING:</b> 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.
	<b>CAUTION:</b> 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.
	Cleaver blade is extremely sharp. Do not touch as personal injury may result.
	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.

### 2. Components of Cleaver

	CT-30	CT-30A	CT-30B
Cleaver Main Body	1 pc.	1 pc.	1 pc.
Instruction Manual	1 pc.	1 pc.	1 pc.
Fiber Plate AD-30A	–	1 pc.	–
Fiber Plate AD-30B	–	–	1 pc.
Fiber Scrap Collector FC-02 (FDB-02 is attached)	1 pc.	1 pc.	1 pc.
Large Fiber Scrap Container Box FDB-03	1 pc.	1 pc.	1 pc.
Hexagonal Wrench HEX-01	1 pc.	1 pc.	1 pc.
Carrying Case CC-21	1 pc.	1 pc.	1 pc.
Side Cover SC-01	1 pc.	1 pc.	1 pc.
Screw N-005638	4 pc.	4 pc.	4 pc.

### 3. Applicable Fiber

Cleaver	Number of Fibers	Coated Diameter	Bare Fiber Diameter	Cleave Length
CT-30	Max. 12-fiber Ribbon	–	125 $\mu$ m	10 mm
CT-30A	1 (Single Fiber)	0.25 mm	125 $\mu$ m	6 to 20 mm
		0.9 mm	125 $\mu$ m	10 to 20 mm
CT-30B	1 (Single Fiber)	0.25 to 0.9 mm	125 $\mu$ m	16 mm

### 4. Cleaver Disposal

The CT-30 contains no toxic substance and no recyclable material. If to be disposed of, the cleaver should be discarded as noncombustible 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. +44-20-8240-2000 (Service: +44-20-8240-2020) Fax. +44-20-8240-2010 (Service: +44-20-8240-2029) URL <a href="http://www.fujikura.co.uk">http://www.fujikura.co.uk</a>
AFL Telecommunications	260 Parkway East Duncan, SOUTH CAROLINA 29334 U.S.A. Tel. +1-800-235-3423 (Service: +1-800-866-3602) Fax. +1-864-433-5560 (Service: +1-800-433-5452) P.O.Box 3127 Spartanburg, SC 29304-3127 URL <a href="http://www.AFLtele.com">http://www.AFLtele.com</a>
Fujikura Asia Ltd.	460 Alexandra Road #22-01 PSA Building Singapore 119963 Tel. +65-6-2711312 Fax. +65-6-2780965 URL <a href="http://www.fujikura.com.sg">http://www.fujikura.com.sg</a>
Fujikura Ltd.	Optical Fiber & Equipment Department International Sales & Marketing 1-5-1 Kiba, Koto-ku, Tokyo, 135-8512, Japan Tel. +81-3-5606-1636 Fax. +81-3-5606-1536 <a href="http://www.fujikura.co.jp/Light_com/1020/formmail3.html">http://www.fujikura.co.jp/Light_com/1020/formmail3.html</a>

### 6. Cleaving Procedure

To operate the cleaver, perform the following steps:

#### Unpacking the CT-30 Cleaver:

1. To unlock the cutting lever (1), press it gently (Fig.6-1). And, slide the stopper (2) (Fig.6-2).

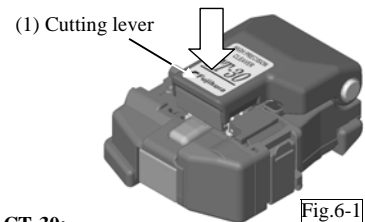


Fig.6-1

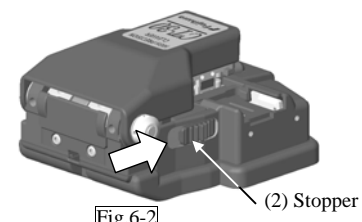


Fig.6-2

#### Cleaving with CT-30:

1. Strip 24 to 35mm of coating from the fiber end.
2. Clean the exposed fiber cladding.
3. Push the slide button (3) until it locks.
4. Set the stripped optical fiber on the cleaver.

**NOTE:** If using the CT-30A, align the end of the fiber coating to the position on the graduated scale for the desired cleave length. If using a fiber holder for ribbon fiber, make sure all fibers are parallel and not overlapping.

5. Press down the cutting lever (1).
6. Release the pressure on the cutting lever (1). A spring force will bring it to its open position.
7. The scrap collector rollers drive the fiber scrap into the fiber scrap container box (5) automatically.

**NOTE:** Do not put a finger in the driving area of the slide button (3) as personal injury may result.

After pressing it half way down, releasing the pressure on the cutting lever (1) may result in bad cleaving quality. Discard the fiber scrap container box (5) contents frequently.

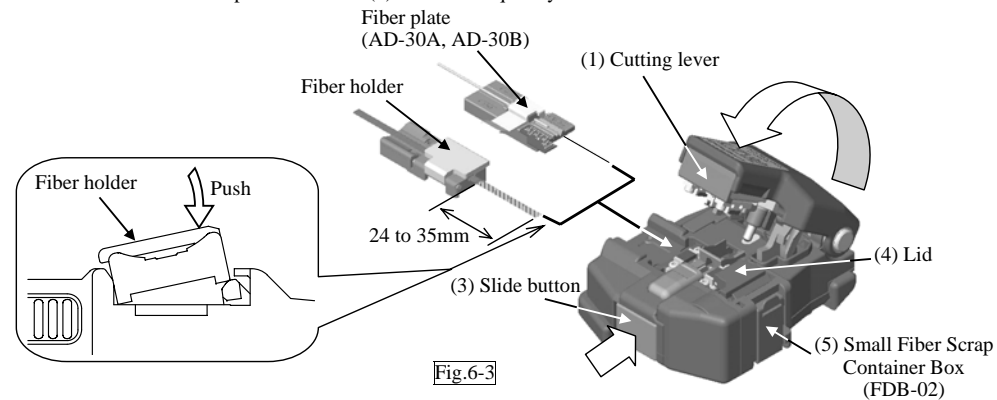


Fig.6-3

8. When using the large scrap container box (6), turn the knob (7) and withdraw the fiber scrap into the large fiber scrap container box (6)(Fig.6-4).

If the fiber scrap (8) is stuck, remove the large fiber scrap container box (6) and tap it gently (Fig.6-5).

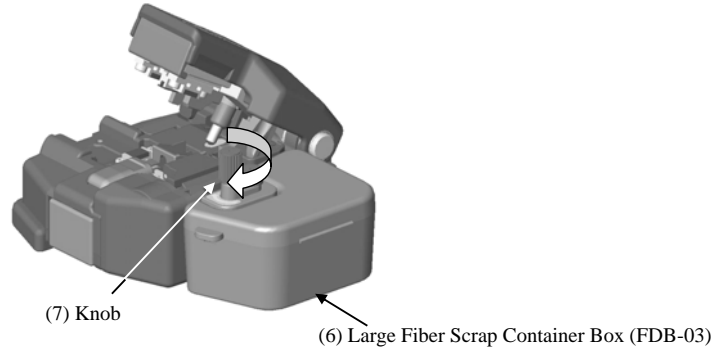


Fig.6-4

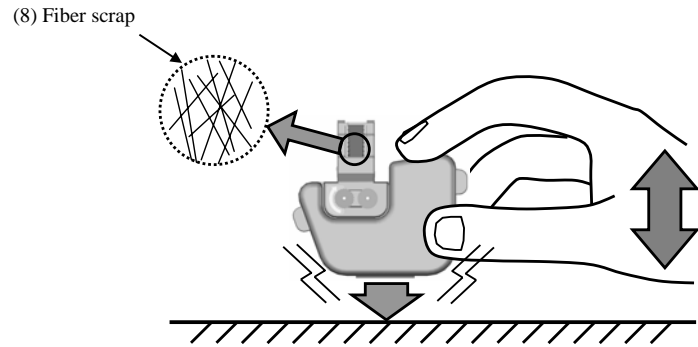


Fig.6-5

#### Storing the CT-30 Cleaver:

1. Press the cutting lever (1) down, until the stopper (2) can be slid in place to lock the cutting lever.
2. When storing the cleaver, empty contents of the small fiber scrap container box (5) and the large fiber scrap container box (6).

## 7. Blade Wear and Adjustments

**NOTE:** For proper operation of the CT-30 cleaver, after removing the blade cover (9) (Fig.7-1), clean the circular blade (10) and the elastomer clamp pads (11) frequently with cotton swabs soaked with alcohol (Fig.7-2).

The CT-30 cleaver uses a new circular blade that has 16 cleaving positions.

The following instructions describe how to rotate the blade position and adjust the blade height.

### 7.1. Blade Position Adjustment

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 (Fig.7-3).

1. Remove the blade cover (9) (Fig.7-1).

**NOTE:** Be careful not to touch the blade as this could cause damage to the blade.

2. Remove the small fiber scrap container box (5), the large fiber scrap container box (6) or the side cover (16).
3. Push the slide button (3) until it locks.
4. Using a 1.5mm hex wrench, loosen the blade lock screw (12).
5. Rotate the circular blade (10) 1/16th of a turn.
6. Tighten the blade lock screw (12).
7. Attach the blade cover (9).

### 7.2. Blade Height Adjustment

After the circular blade has been rotated a complete revolution (16 positions), its height needs to be adjusted to compensate for wear (Fig.7-4) (Fig.7-5).

1. Using a 1.5mm hex wrench, remove the fiber scrap collector (15) or the side cover (16).
2. Using a 1.5mm hex wrench, loosen the blade lock screw (12).
3. Using a 1.5mm hex wrench, loosen the adjuster lock screw (13).
4. Using a 1.5mm hex wrench, turn the adjuster (14) clockwise so that the reference dot aligns with the next position mark. Never attempt to rotate the adjuster more than 2 position marks.
5. Tighten the adjuster lock screw (13).
6. Tighten the blade lock screw (12).

Now the 16 blade positions may be used again. If the cleaver does not cleave properly, rotate the blade as described in paragraph 7.1.

### 7.3. Blade Replacement

After the circular blade has been raised 2 times (3 rotations) it needs to be replaced. Contact your Fujikura splicer distributor.

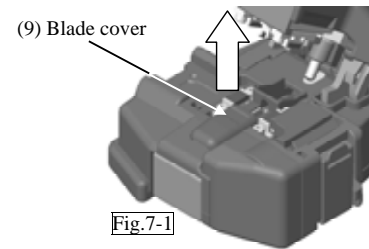


Fig.7-1

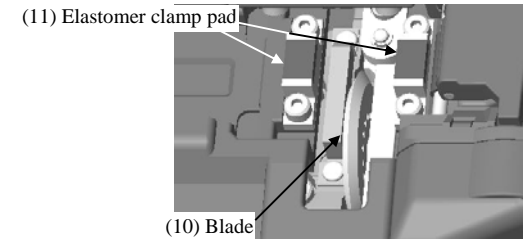


Fig.7-2

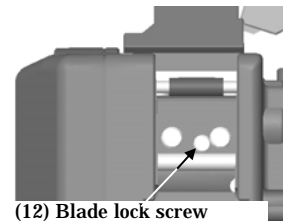


Fig.7-3

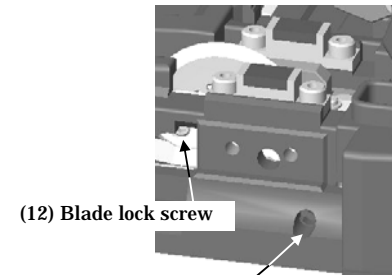


Fig.7-4

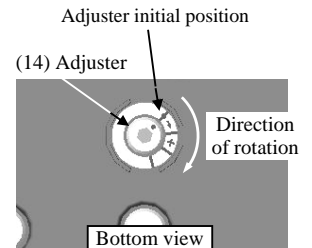


Fig.7-5

Fiber Scrap Collector Attachment

Parts	Use
Side Cover(16)	When collecting the fiber scrap manually
Fiber Scrap Collector(15)+Large Fiber Scrap Container Box(6)	When collecting the fiber scrap automatically
Fiber Scrap Collector(15)+Small Fiber Scrap Container Box(5)	When collecting the fiber scrap automatically with small space

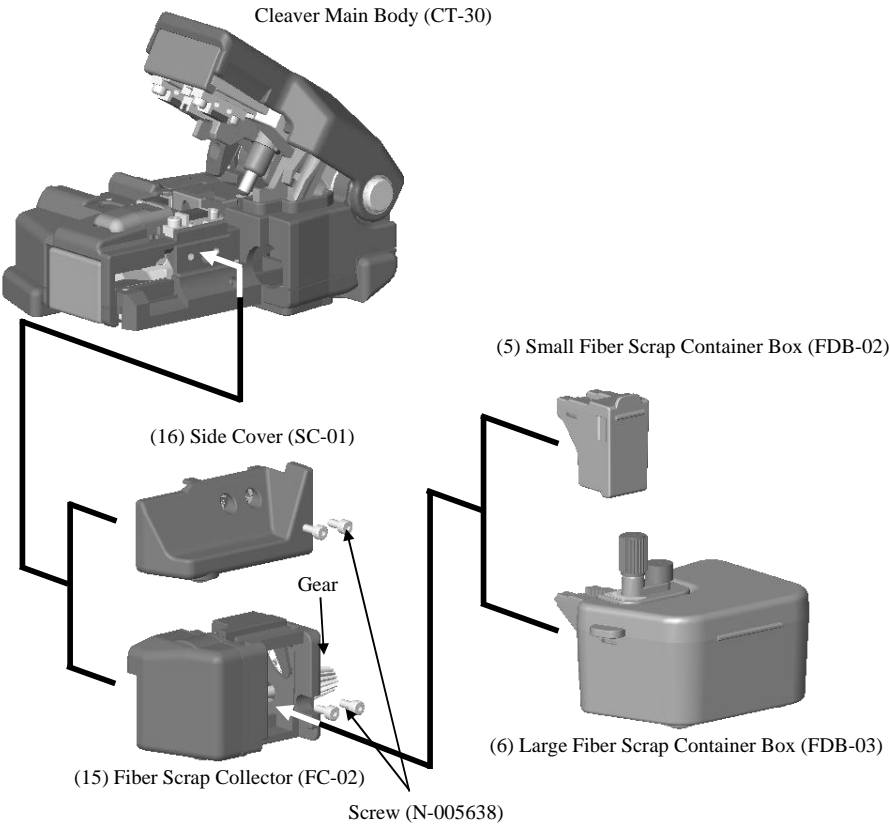
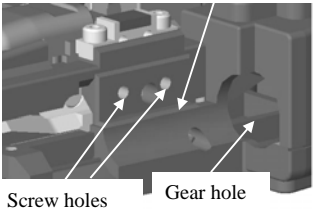


Fig.1

Fiber Scrap Collector or Side Cover Attachment

1. Place the fiber scrap collector (15) or the side cover (16) on the right side of the cleaver so that the screw holes of the collector align with the holes of the cleaver.  
In case of the fiber scrap collector, insert the gear of the fiber scrap collector (15) into the cleaver (Fig.1).
2. Push the fiber scrap collector (15) or the side cover (16) toward plane A (Fig.2), then tighten both screws (N-005638).
3. After cleave operation, confirm that the scrap collector rollers drive the fiber scrap into the small fiber scrap container box (5) or the large fiber scrap container box (6).

Fig.2



A. Top View when attaching Side Cover

See Fig.3 for top view in the carrying case of the main body with the side cover (16).

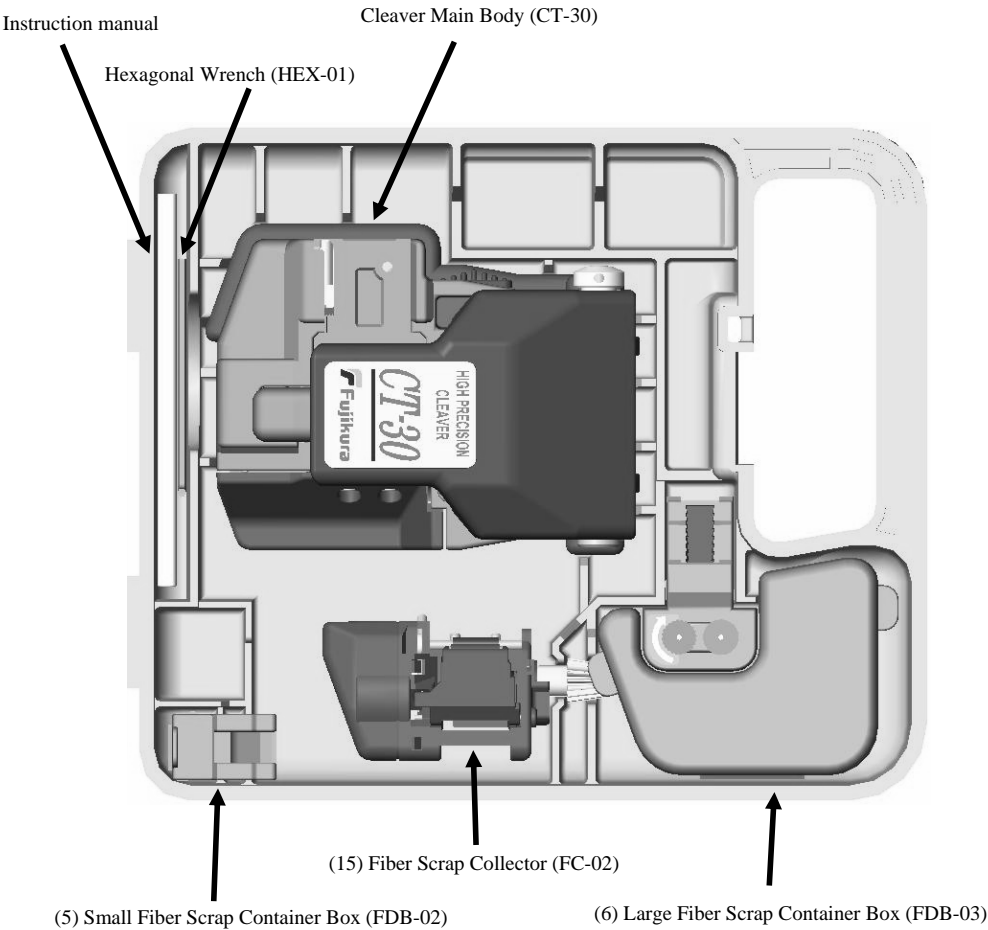


Fig.3

**B. Top View when attaching Small Fiber Scrap Container Box**

See Fig.4 for top view in the carrying case of the main body with the small fiber scrap container box (5).

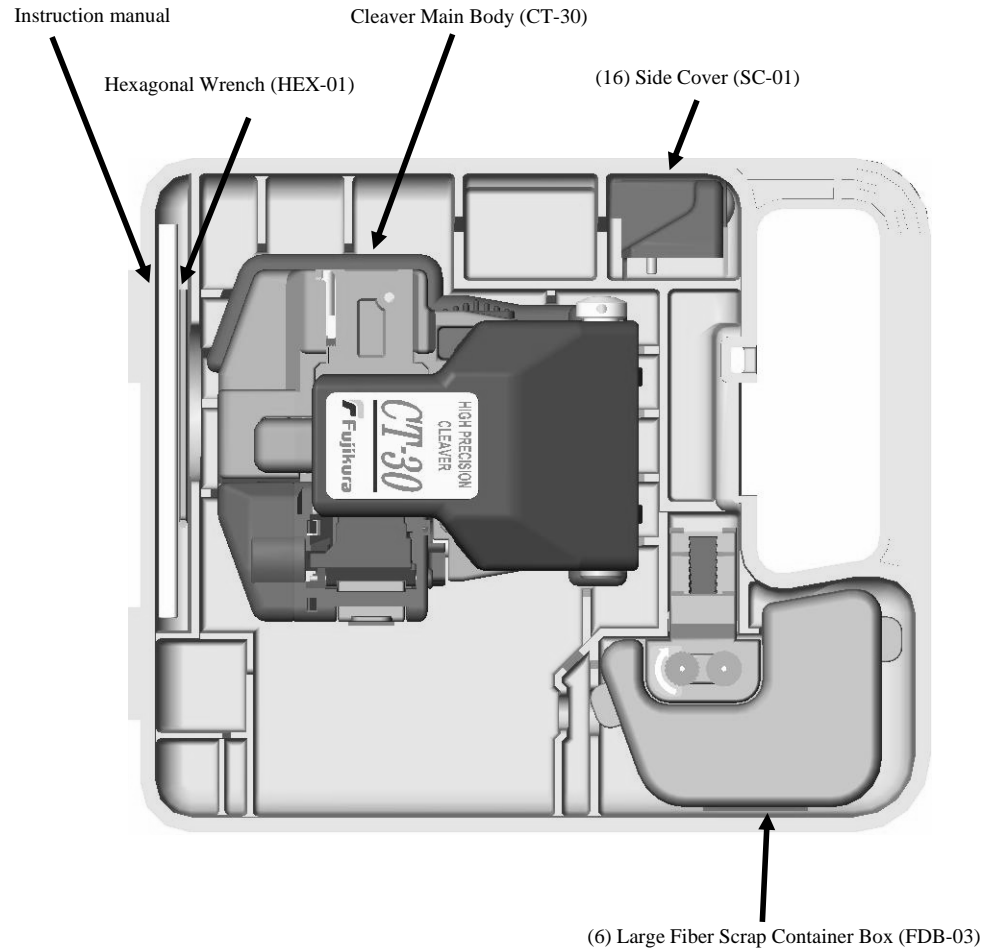


Fig.4

**C. Top View when attaching Large Fiber Scrap Container Box**

See Fig.5 for top view in the carrying case of the main body with the large fiber scrap container box (6).

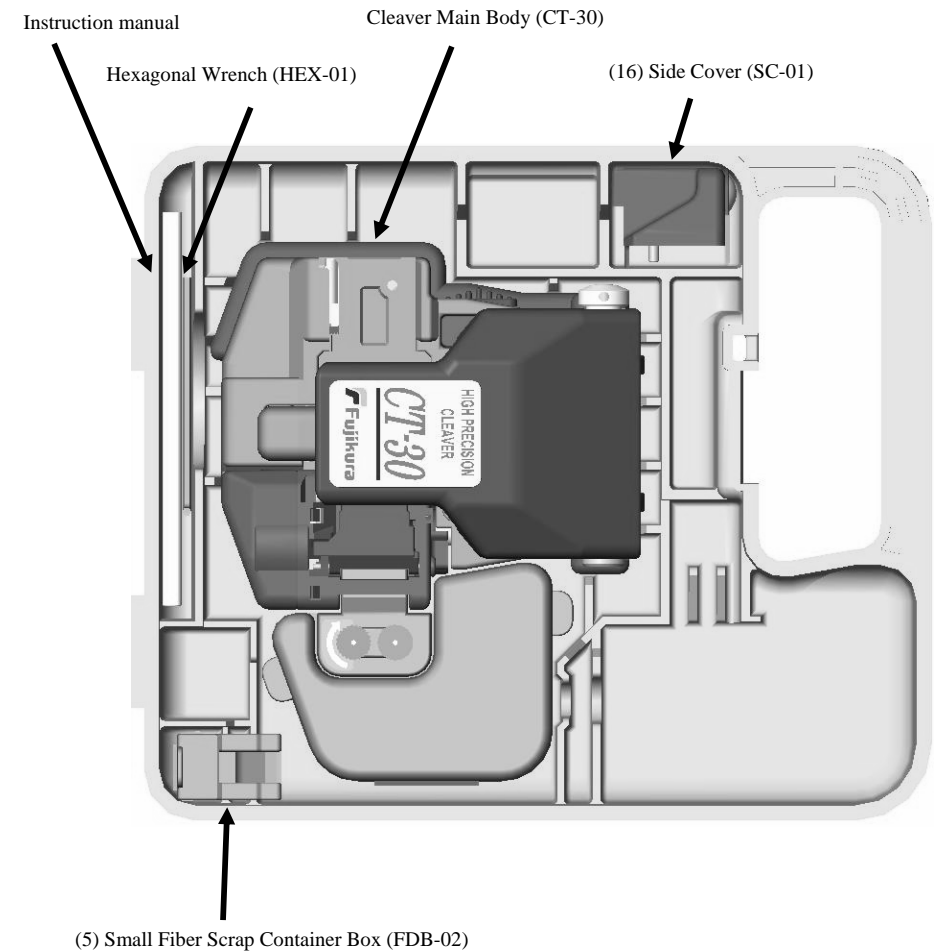


Fig.5