

## Fiber Cleaver

### SKL-6C Instruction Manual

This product is designed and developed based on the full consideration of safety. To safely operate this product, please carefully read the precautions mentioned in this instruction manual and follow them strictly. After reading the instruction manual, please keep it in a place that will be convenient for the further referring.



Warning

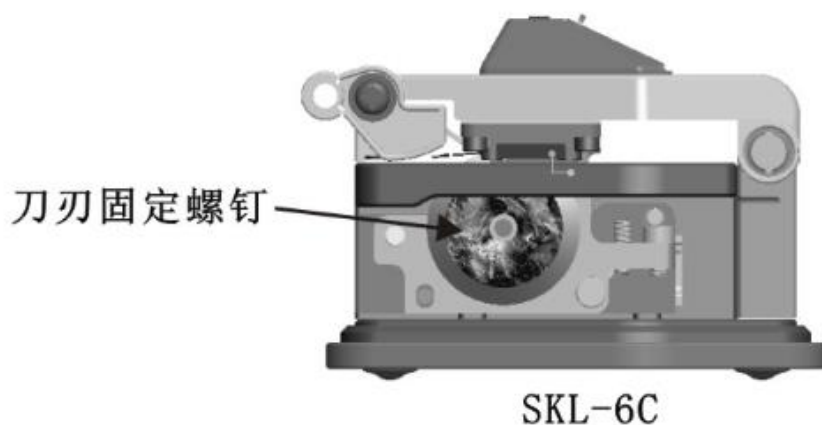


Attention

1. As the disassembly and oil injection may cause the failure, such operations are totally forbidden.
2. SKL-6C is some kind of the precision machinery. The knocking or falling to the ground (being strongly impacted) may damage the characteristics of fiber cleaver cutter or hurt the operators. It should be very careful during the operation.
3. The optical fiber and fiber chips are very tiny and sharp. If it is penetrated into the finger or eye, it will all cause the injury. It thus should be very careful during the operation. For the safe operation, the operator should wear the protective glasses.
- c
4. Please throw the fiber chips into the special container that is separated from the general garbage.
5. The cutter installed on the machine is very sharp. Do not touch it by hands, otherwise it may hurt your hands.
6. Please be noted that if the top lever of optical fiber cover is impacted, it will also cause the failure. The damaged top lever will reduce the performance of fiber cleaver.
7. In case of the failure or abnormal conditions, please stop the operation. Do not disassemble or modify the machine. Please contact the service department of our company as mentioned below.

Requirements on the replacement of fiber cleaver using the original cutter.  
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To guarantee the quality and performance of SKL-6C, the precondition for no need of adjusting the cutting force after the replacement of cutter is to use the original cutter of fiber cleaver.



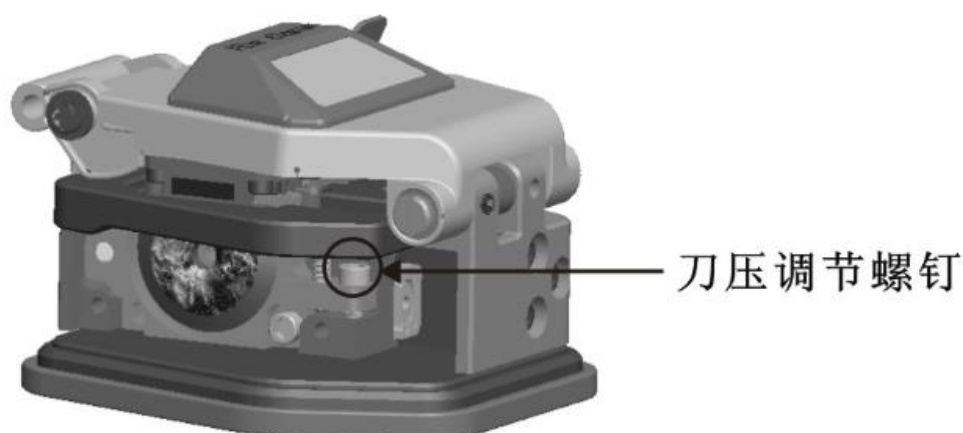
Warning 1: When using the non-optical adjusting cutter for the replacement, it may be unable to replace and install the cutter or adjust the cutting force.

SKL-6C adopts the special cutter fixing screw and it's no need to adjust the height of cutter even turning the cutting edge.

Therefore, if using the non-original cutter for the replacement of fiber cleaver, the installation may fail.

Besides, the cutting-force adjusting screw (the one in red below) is also matched with the precision of original cutter. If using the replacement cutter of other manufacturers, the height of cutter may not be adjusted.

Warning 2: If using the non-original cutter for the replacement of fiber cleaver, it will be unable to guarantee its quality and performance.



## 1. Introduction

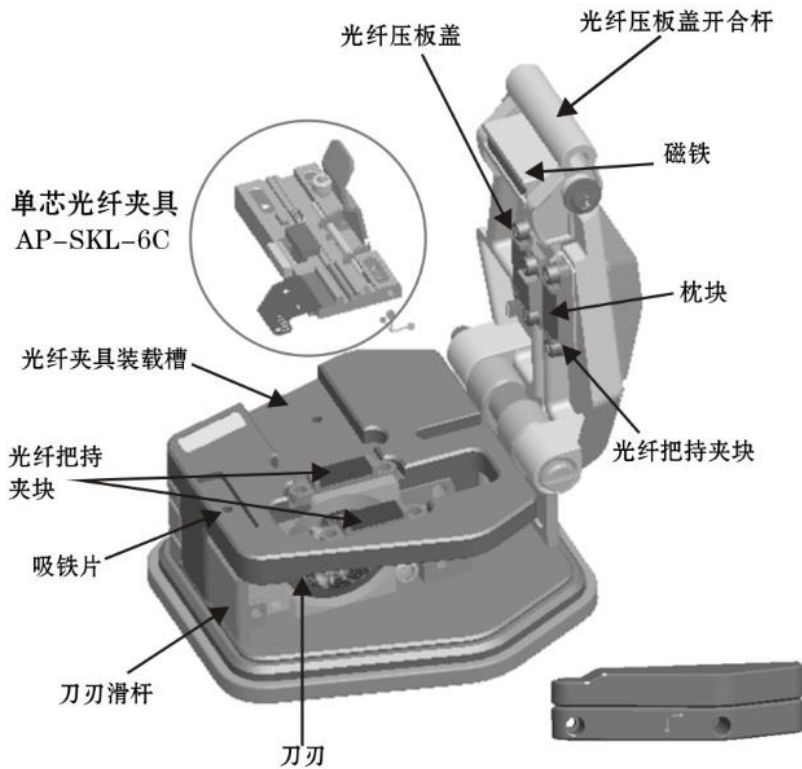
### Product Overview

	SKL-6C
Applicable Diameter of Bar Fiber	125 $\mu$ m
Applicable Quantity of Fiber Core	Single Core ( $\phi$ 0.25 & 0.9mm) – 12-core Ribbon Fiber – 2.5 Covered Wire
Cutting Length for Optical Fiber	18mm
Dimension	SKL-6C: 71.3(W) x 67.2(D) x 51(H) mm
Weight	SKL-6C: about 230g

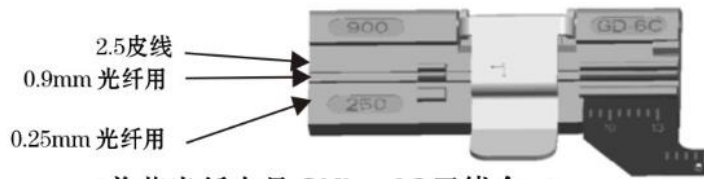
### Packing List

SKL-6C		
Fiber Cleaver SKL-6C	1 set	Single-core Fiber Chuck: AP-SKL-6C Replacement Cutter: SKL 22BL/16-FACE
Packing Box	1 piece	
Instruction Manual	1 copy	

## 2. Structure



〈光纤切割刀 SKL-6C〉

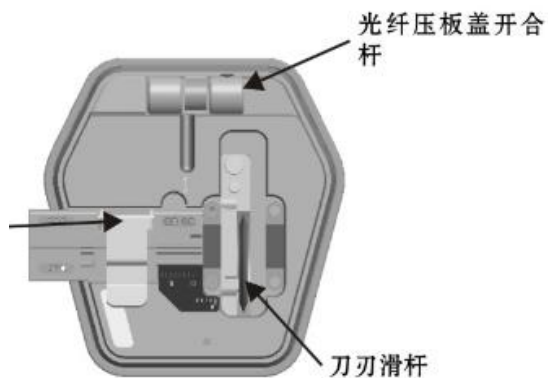


〈单芯光纤夹具 SKL-6C三线合一〉

### 3. Operations

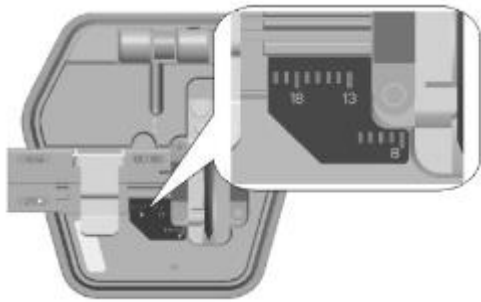
#### SKL-6C

1: Please lift up the top lever of optical fiber cover. Open the cover clip of single-core fiber clamp. Confirm that the sliding bar of cutter is at the front position.



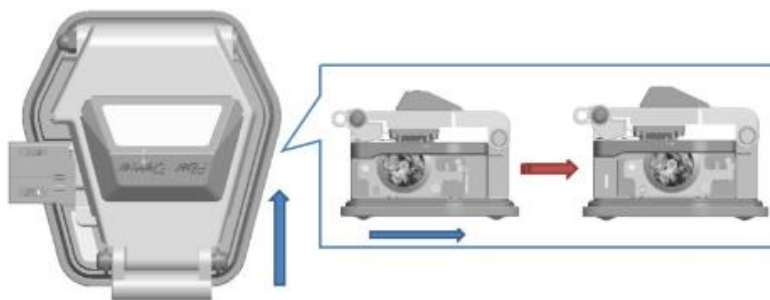
2: Put the optical fiber into the groove of single-core fiber clamp. Align the coating line with the scale of proper cutting length of optical fiber. (For instance, if the cutting length is 18m, align the coating line with the position of 18mm on the scale.) Then check the bare fiber whether it is

straight.



3: Cover the cover clip of single-core fiber clamp to clamp the fiber.

4: Please close the optical fiber cover and put down the top lever. Push the sliding block of cutter to cut off the optical fiber.



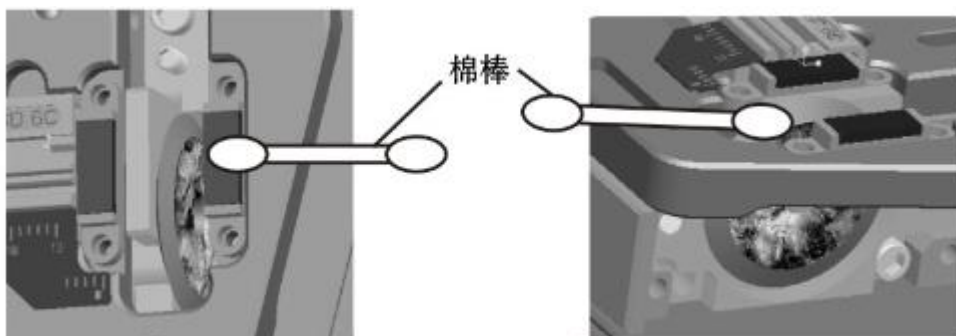
Lift up the top lever of optical fiber cover. Open the cover, press the fiber and open the single-core fiber clamp. Take out the fiber and clear the fiber chips.

#### 4. Maintenance

##### Daily Cleaning

To maintain the cutting performance of fiber cleaver, it is essential to perform the daily cleaning.

Please clean the cutting edge, the rubber block that clamps the fiber and pillow block using the cotton swab with the anhydrous alcohol.



The loading chute of fiber clamp and groove of single-core fiber clamp should also be cleaned.



注意

Attention

- In case of any dust on the cutter or fiber clamping block, the cutting performance may be reduced and it may also be impossible to achieve the smooth cutting end face of optical fiber.
- When cleaning the machine, do not use the fluid except the alcohol.
- If the fiber chips left on the rubber part of fiber clamping block, the cutting performance may be reduced and it may also be impossible to achieve the smooth cutting end face of optical fiber.

#### Adjusting Method of Cutting Edge

After many times of cutting, the cutter will be consumed, resulting in the situations of unable cutting off or defective cutting end face. If the situation continues, it will be necessary to adjust the position of cutting edge.

Please adjust the direction of cutting edge and adopt the new position of cutter according to the following steps.

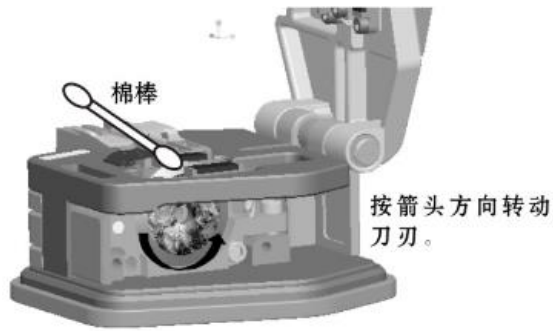
[Reference] Number of cutting for 1 point of cutting edge; 1,000 core wire

- 1: Open the right decorative cover using the cross point screwdriver.
- 2: Please use the slotted screwdriver to loosen the screw fixed on the cutter.



- 3: Turn the cutter to the next new cutting edge.

Use the cotton swab to press the side or front of cutter and push it outwards. It will then be easy to turn the cutter.



Attention

- When changing the position of cutting edge (turning the cutter), do not turn the cutter by hands directly.
- Do not use the metal tools (such as the tweezers) to turn the cutter.  
The use of metal tools may damage the cutter.

4:Fasten the fixing screw for the cutter

[Reference] The proper fastening torque is about 0.98Nm(10kgf • cm)



Attention

- Please be noted that do not over-fasten the fixing screw for the cutter, otherwise it may damage the screw.

5:Try to cut off the fiber 1 or 2 times. Use the screen of fusion splicer to confirm the cutting end face of fiber. If the cutting end face is not favorable, please adjust the height of cutter. (Please refer

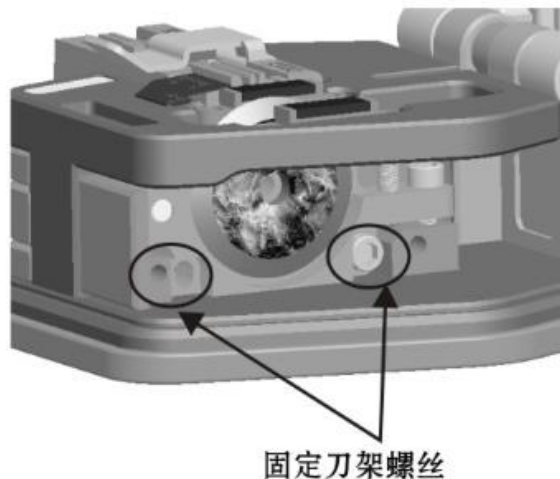
to *Adjusting Method for Height of Cutter.*)

6: Adjust the cutting angle. If the fusion effect is favorable, please lock the right decorative cover.

#### Adjusting Method for Height of Cutter

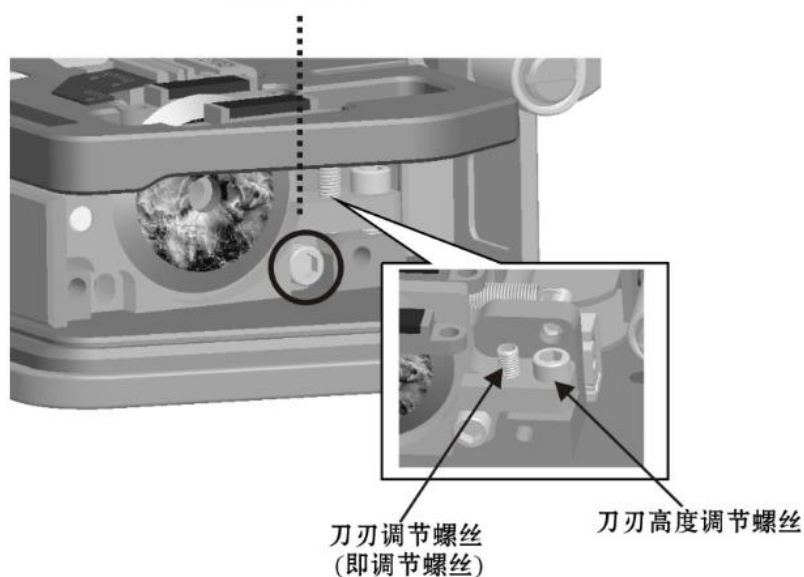
(0: SKL-6C, please take down the right decorative cover at first.)

1: Please loosen 2 fixing screws.



2: Please loosen the screw that is used to fix the height of cutter.

使用六角扳手



3: Put the automatic pencil core or wooden thin bar on the fiber clamping block. Move the sliding bar of cutter back and forth and rotate the adjusting screw for the height of cutter at the same time. The highest point of cutter edge that contacts the pencil core or wooden thin bar is treated as the reference point (0 $\mu$ m).

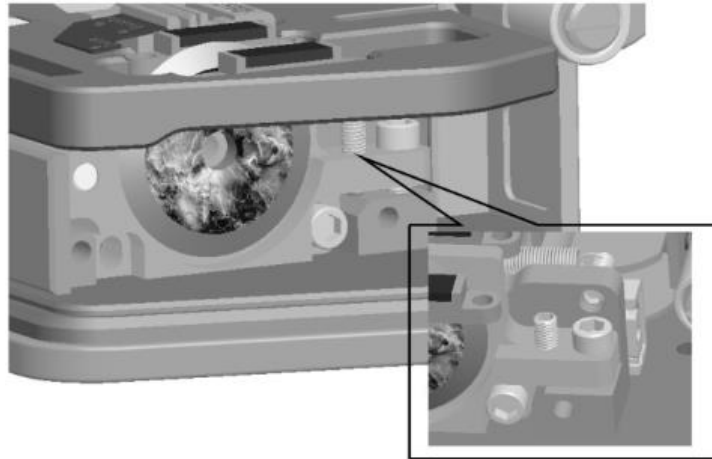
#### Key Points

- When adjusting the height of cutter upwards, it should loosen the height adjusting screw at first and then rotate it along the clockwise direction.



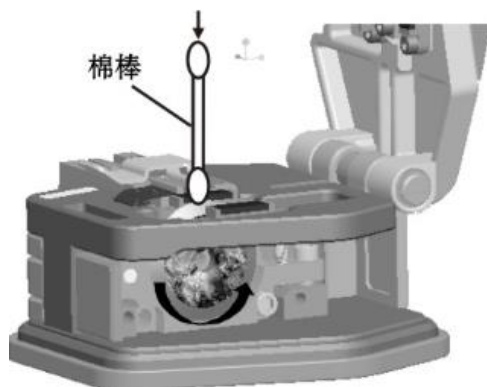
•When adjusting the height of cutter downwards, it should rotate height adjusting screw along the anticlockwise direction at first and then fasten the screw.

(Please use the cotton swab to press the cutter downwards and then rotate the height adjusting screw at the same time.)



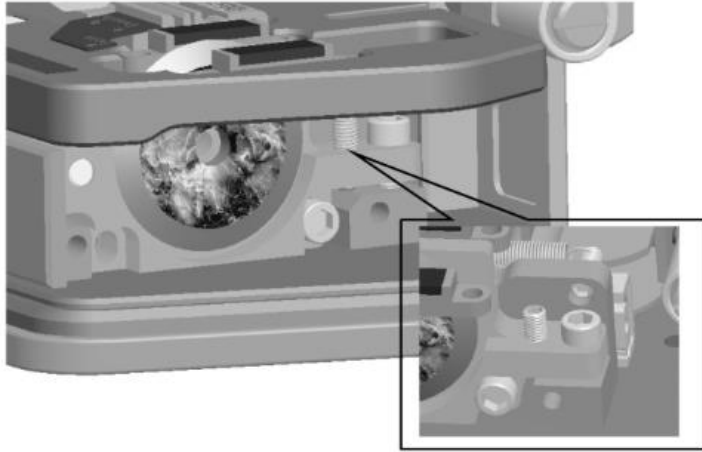
[Reference]

1 scale=about 1/4 circle



When adjusting the height of cutter downwards, it should use the cotton swab to press the cutter downwards and then rotate the height adjusting screw along the anticlockwise direction at the same time.

4: Please rotate the height adjusting screw 1/4-1/2 circle along the clockwise direction from the reference point.



#### Attention

- Please be noted that the height of cutter should not be adjusted too high, otherwise it may damage the pillow block and fiber end face.

5: Please fasten the fixing screw for the height of cutter.

[Reference] Proper Fastening Torque: about 0.59N.m (6kgf cm)

6: Please fasten 2 fixing screws that are loosened in Step 1.

[Reference] Proper Fastening Torque: about 0.98N.m (10kgf cm)

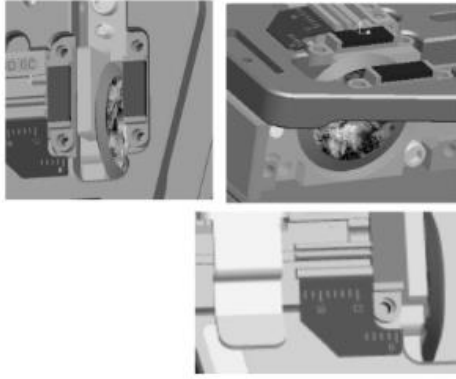
#### Replacement of Cutter

(0: SKL-6C, please take down the right decorative cover at first.)

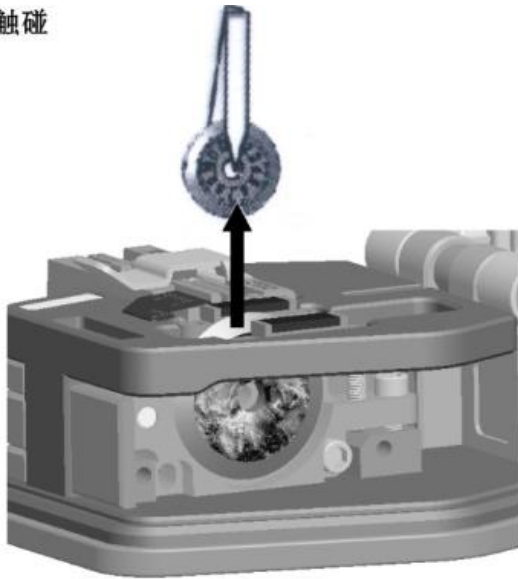
1. Take down the fixing screw of cutter.



2: Please use the tool such as tweezers to take out the cutter. Please be noted that the cutter should not touch other parts.



触碰



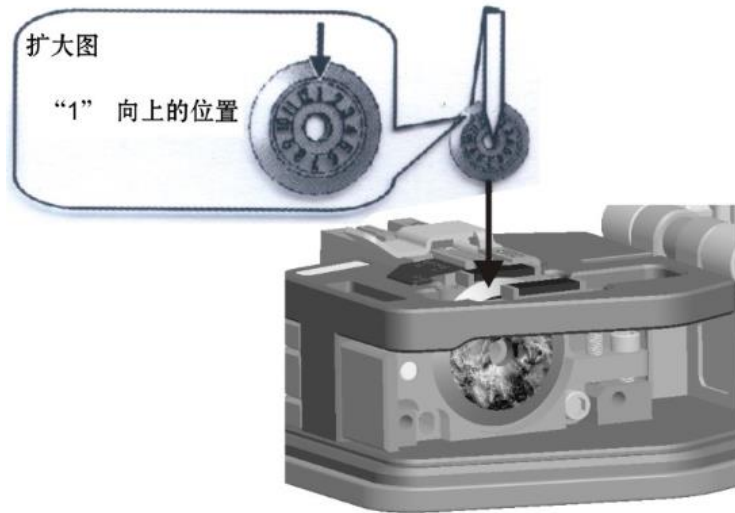
注意

Attention

- The cutter is precisely ground. If the cutter edge touches the metals, it may be damaged and thus be unable to achieve the normal cutting performance. Please be careful during the operation.
- When using the metal tweezers, do not damage the cutter edge.
- When taking the cutter, please use the gloves, but not the hands to touch it directly.
- Please separate the removed cutter from the normal garbage. It should be treated properly.

3: When installing the new cutter, please make the marker of “1” upwards. Put the cutter on the fixed plane of cutter fixed plate. Push it into the groove slightly.

At the same time, please align the central hole of cutter with the central position of screw hole at the installation side.



4: Please press the side surface of cutter using the finger. Fasten the fixing screw.  
 [Reference] Proper Fastening Torque: about 0.98N·m(10kgf·cm)



5: Please refer to *Adjusting Method for Height of Cutter* in Page 2 and adjust the height of cutter according to related steps.

6: Install the right decorative cover after being adjusted.

#### Troubleshooting



#### Favorable Cutting



#### Poor Cutting (large end face angle)



#### Poor Cutting (raised cutting surface)



Poor Cutting (damaged cutting surface)

Reasons to cause the poor cutting may include:

(A) The optical fiber is not put on the cutter straightly.

→ Please place the optical fiber straightly.

(B) The position of cutter is too high.

→ Please adjust the height of cutter.

(C) There are wastes on the fiber clamping block.

→ Please clean the fiber clamping block.

(D) There are foreign materials such as the dust on the cutter.

→ Please clean the cutter.

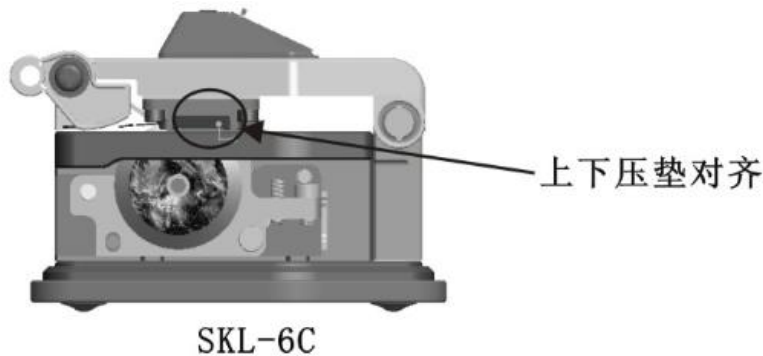
(E) There are foreign materials such as the dust on the optical fiber.

→ Please remove the fiber coating and clean the part of bare fiber.

→ The upper and lower pressure pad for the optical fiber may be loosened during the transportation.

If the poor cutting continues, please contact the department of maintenance surface of our company.

Leveling Method



There may be the clearance of upper and lower pressure pad during the transportation of SKL-6C.

A. Take down the fiber clamp at first and then loosen 3 hex screws on the fastenings;

B. Align the upper and lower pressure pad and clench it by the left hand (guarantee that there is no clearance of pressure pad and then fasten 3 hex screws);

C. Observe the whole machine whether there is any clearance of pressure pad in the sunlight. If no, please continue the cutting. If yes, please repeat steps of A and B.