

# 8A Instruction Manual

## Important Safety Information

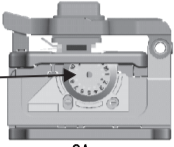
This product has been designed and manufactured to assure personal safety. Safety is essential in the use and maintenance of the equipment. Please read and observe all warnings instructions given in this operation manual. Keep this manual available to all personnel.



- Do not disassemble or lubricate any parts of the cleaver. Doing so could cause serious damage to the cleaver.
- This is a precision instrument. Do not impact the cleaver by hitting or dropping it. Doing so may cause personal injury and loss of cleaving performance. Handle with care.
- Glass fiber fragments are extremely sharp. It will result in injury if fragments come into fingers or eyes. Handle with care. Wear safety glasses at all times during cleaving operation for protection from glass fibers.
- Collect all fiber scraps in the dust bin and dispose of them in an approved fiber disposal unit.
- The blade of the cleaver is extremely sharp. Do not touch it with bare hands.
- Do not impact the top clamp lever. Doing so could cause damage to the cleaver and loss of cleaving performance.
- Stop using the equipment if the cleaver is damaged or a problem occurs. Do not disassemble or refit the unit. Contact our maintenance service center.

### Request of using authentic optical fiber cleaver blade

To ensure the quality and performance of 8A, only if users utilize appropriate replacement blade, can users rotate the blade without adjust the blade pressure.



blade locking screws

8A

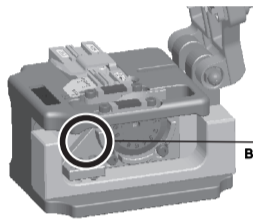
**Caution 1:** If users utilize replacement blade which is not designed for optical fiber cleaver, possibly users are unable to replace the blade or adjust the blade pressure.

8A utilize appropriate blade locking screws. Users do not need to adjust the height of blade after rotating the blade.

So it is possible that other kinds of replacement blades can not be installed.

Besides, crews of blade pressure adjustment screws (in the red circles below) are matched with the accuracy of the appropriate replacement blade. If users utilize replacement blade provided by other factories, possibly the height of blade cannot be adjusted.

**Caution 2:** If users utilize the replacement blade which is not designed for optical fiber cleaver, quality and performance are not guaranteed.



Blade pressure adjustment screws

## 1. General

### Specifications

8A	
Cladding Diameter	125µm
Fiber Size	Single fiber (Φ0.25&0.9mm) ~ 12-fiber ribbon-2.5 Leather cable
Cleaved Length	18mm
Dimensions	8A: 79(W) x 59(D) x 57(H)mm
Weight	8A: 223g

### 构成品

product 8A		
Optical Fiber Cleaver 8A	1 pc	Single fiber adapter: AP-SKL
Carrying case	1 pc	Replacement blade: 8AP-20BL/12 pieces
Instruction Manual	1 pc	8A-22BL/16pieces

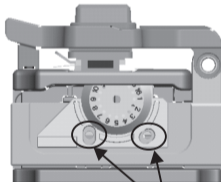
1

- Try and cleave the fiber. Make visual check of the fiber end face with the splicer. If the fiber end face is poor, adjust the blade height. (Refer to "Blade height adjustment.")
- After adjusting the cutting Angle to level off and having a good welding effect, lock the right trim cover.

## Blade height adjustment

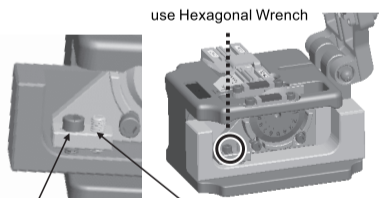
(0: For 8A)

- Loosen the 2 cross head screws.



Blade locking screw

- Loosen the blade height locking screw.

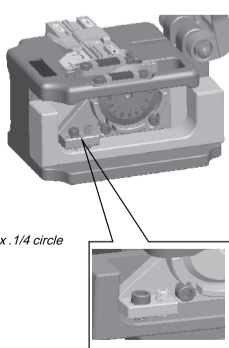


Blade height locking screw Blade height adjustment screw

- Place a mechanical pencil lead or a light stick on the clamps. Slide the blade carriage back and forth and turn the blade height adjustment screw. The point where the lead barely touches the edge of the blade is a reference point (0µm)

### Tips

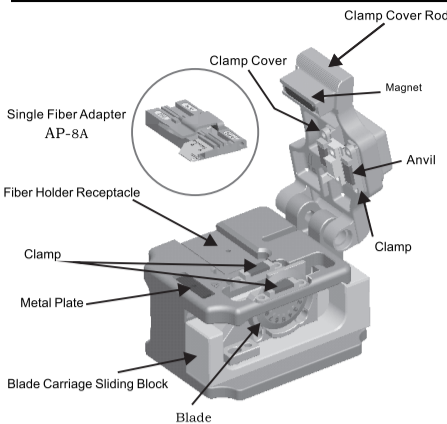
- To make the blade higher, loosen the blade height adjustment screw and then turn the blade height adjustment screw clockwise.
- To make the blade lower, turn the blade height adjustment screw anti-clockwise. Then tighten the blade height locking screw. (Turn the screw while pushing the blade down with a cotton swab.)



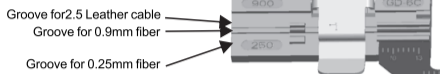
[Reference]  
1 mark on scale=Approx. 1/4 circle

4

## 2. Structure



< Optical Fiber Cleaver Of 8A Product >

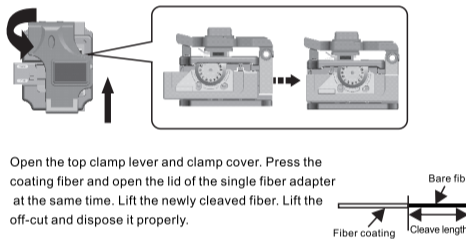


<Single Fiber Adapter 8A for three types of fibers>

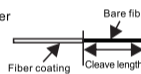
## 3. Operations

8A

- Open the clamp cover lever and fiber holder lid. The blade carriage should be in the forward position.
- Lower the fiber straight into the groove with the end of the fiber coating (e.g. if the cleave length is 18mm) at the 18mm mark on the ruler. Make sure the fiber lies straight across both rubber pads.
- Close the lid of the single fiber adapter and clamp the fibers.
- Close the clamp cover and lower the top clamp lever. Slide the blade carriage to the rear of the cleaver. The fiber will be cleaved.

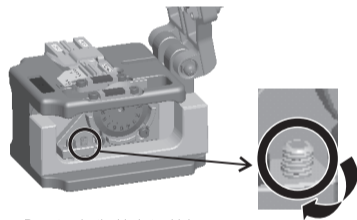


Open the top clamp lever and clamp cover. Press the coating fiber and open the lid of the single fiber adapter at the same time. Lift the newly cleaved fiber. Lift the off-cut and dispose it properly.



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- Turn the blade height adjustment screw clockwise by more 1/4 to 1/2 circles from the reference point.



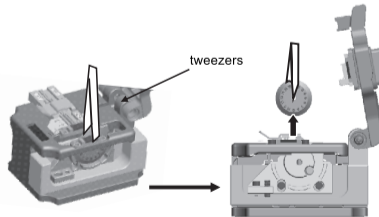
Do not make the blade too high. Doing so will damage the anvil and increases the chipped fiber ends.

- Tighten the blade height locking screw. [Reference] Optimum torque: Approx. 0.59N.m(8kgf.cm)
- Tighten the 2 cross screws which are loosened in step 1. [Reference] Optimum torque: Approx. 0.98N.m(10kgf.cm)

## Blade replacement

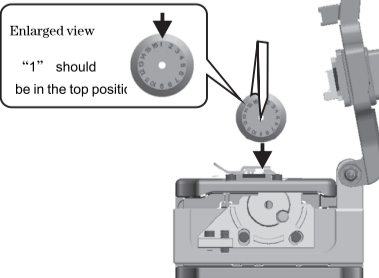
(0: For 8A)

- Unscrew the blade setscrew.
- Remove the blade with tweezers. Do not make the blade hit other parts of the unit.



- The edge of a blade is manufactured precisely. If the edge is hit against metallic objects, it will crack, resulting in poor cleaving performance. Handle with care.
- When using metallic tweezers, be careful not to damage the blade.
- Do not touch the blade with hands. Use gloves.
- Dispose of the old blade properly.

- Insert a new blade in the cleaver so that "1" of the number sticker is in the top position. Place the blade on the fixed surface of the blade fixing plate and gently push it into the groove. The hole of the blade should be aligned with the hole of the blade receptacle.



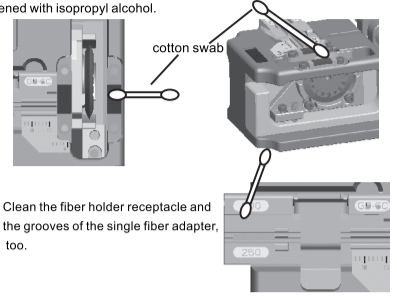
Enlarged view  
"1" should be in the top position

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## 4. Maintenance

### 日常清扫

To keep excellent cleaving quality, cleaning must be performed after use. Clean the blade edge, the rubber pad of the clamp and the anvil with a cotton swab moistened with isopropyl alcohol.



Clean the fiber holder receptacle and the grooves of the single fiber adapter, too.



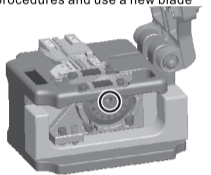
- Dust on the blade edge or the clamp might cause loss of cleaving performance or poor quality of fiber end face.
- Do not clean them with any other kind of chemicals.
- If the top clamp lever is closed leaving an off-cut fiber on the clamp, the rubber pad of the clamp will have a trace of the fiber, causing loss of cleaving performance or poor quality of fiber end face.

### Blade position change

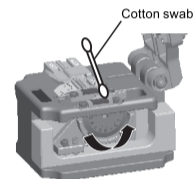
As the number of the cleaver's increases, a symptom that fiber cannot be cleaved or cracks will occur. If such symptom continues to appear, the blade position is worn out. Rotate the blade according to the following procedures and use a new blade position.

[Reference] 1,000 fibers per position

- Loosen the screws holding the blade with a flat screwdriver.



- Rotate the blade to the next position by pressing its side or edge with a cotton swab.



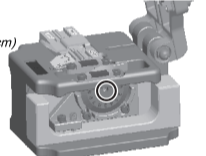
Rotate the blade in the direction indicated by the arrow



- Do not rotate the blade with bare hands.
- Do not rotate the blade with metallic tweezers. Doing so may damage the blade.

- Tighten the blade setscrew.

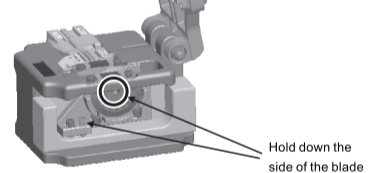
[Reference] Optimum torque: Approx. 0.98N.m(10kgf.cm)



- Do not over-tighten the blade setscrew. The screw will get down out.

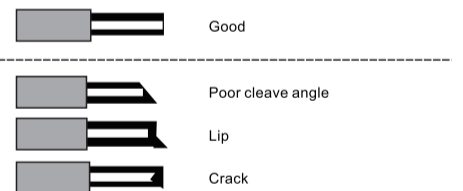
3

- Tighten the blade setscrew completely, while pressing the side of the blade. [Reference] Optimum torque: Approx. 0.98N.m(10kgf.cm)



- Adjust the blade height, referring to "Blade height adjustment" at page 6.

### Troubleshooting

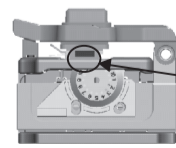


If the cleaving problem occurs, the followings are possible causes.

- The fiber is placed obliquely in the cleaver. → Make sure that the fiber is placed straight in the cleaver.
- The blade height is too high. → Adjust the blade height.
- Dust or dirt remains on the blade. → Clean the blade.
- Dust or dirt remains on the fiber. → Clean the blade.
- Dust or dirt remains on the fiber. → Remove the fiber coating and clean the bare fiber again. → The transportation process may cause up and down clamps do not compact optical fiber

If the problem still persists, please contact our maintenance service center.

### Leveling method



Align upper and lower clamps

8A

The transportation process may cause upper and lower clamps cannot compact optical fiber. There are gaps between upper and lower clamps. Or it is hard to Adjust the optical fiber end face.

- Firstly, remove the fiber clamp and then loosen the 2 internal hexagonal screws of connector.
- Align upper and lower clamps and clench them. ( If there are no gaps between upper and lower.
- Hold the entire machine facing the light at different angles to see if there is no gap between the clamps. If there is no gap, users can continue to cleave. Or users continue trying step A and B.

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# 8A系列 使用说明书

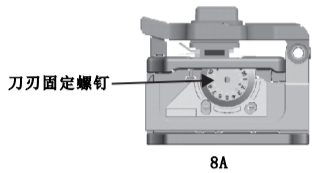
## 安全使用须知

本产品是在充分考虑了安全性的基础上设计研制的。为做到安全使用本产品，请务必熟读本说明书的注意事项，并严格遵守。阅读后请保存在便于查阅的地方。



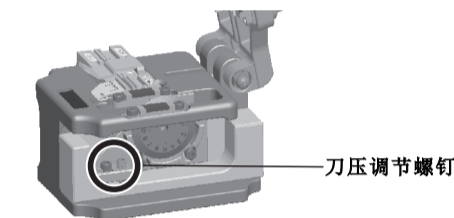
1. 由于对机体进行分解和注油会造成故障的发生，所以绝对不可实施。
2. 8A属于精密机械。如敲打和落地(受到强烈冲击)，可能会损伤切割刀的特性，也可能造成人员的受伤。使用时请多加小心。
3. 光纤及光纤碎屑非常纤细，且尖锐锐利。扎入手指，进入眼内都将造成伤害，所以操作时请多加小心。为了安全操作，请配戴防护眼镜。
4. 请将光纤碎屑丢入普通垃圾分开的专业废弃物场所。
5. 安装在机体上的刀刃非常尖锐，绝对不可用手触碰，以免受伤。
6. 请注意如果光纤压板盖开合杆受到冲击也会产生故障的原因。开合杆部受损的话，可能会降低切割刀的性能。
7. 如机械发生故障或异常情况，请停止使用。不要拆卸或改装，并请联系下面记载的本公司服务部门。

**关于使用光纤切割刀交换用正品刀刃的请求** (CM/CM012613-01A)  
 保证8A的品质和性能，刀口调整后无需调整刀压的压力是必须使用光纤切割刀的交换用正品刀刃。



**警告1:** 在使用非光纤切割刀的交换用刀刃的情况下，有可能无法进行刀刃的更换安装以及刀压调整。如使用了专用的刀刃固定螺钉，即使进行刀口调整也不需要调整刀压高度的设计。因此，如果使用光纤切割刀的交换用正品刀刃之外的刀刃，会有安装不了的可能性。此外，刀压调整螺钉(下面红色圈部分)也是与光纤切割刀的交换用正品刀刃精度相配合的，如果使用其它厂家的交换用刀刃，将会有刀刃高度调整不了的可能性。

**警告2:** 如使用非光纤切割刀的交换用刀刃，将无法保证其品质与性能。



## 1. 概要

### 产品概要

8A 系列	
适用裸纤径	125μm
适用光纤芯数	单芯 (Φ0.25 & 0.9mm) ~ 12 芯带状芯线-2.5皮线
光纤切割长度	18mm
尺寸	8A: 79(W) x 59(D) x 57(H)mm
重量	8A: 223g

### 构成品

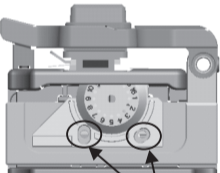
8A 系列	
光纤切割刀 8A	1 台
包装盒	1 个
使用说明书	1 份
单芯光纤夹具: AP-SKL	
更换刃: 8AP-20BL/12面 8A-22BL/16面	

- 5: 试着切断1、2次光纤，利用磁接机的画面来确认光纤的切割端面。如光纤切割端面不良，请调节刀刃的高度。(请参照『刀刃高度的调节方法』)
- 6: 调试切割角度平整，熔接效果良好后锁上右装置盖

## 刀刃高度的调节方法

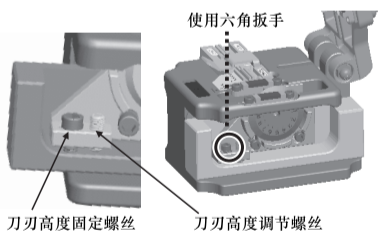
(0:8A机型时)

- 1: 请拧松2个固定螺丝。



- 2: 请拧松固定刀刃高度的螺丝。

固定刀架螺丝

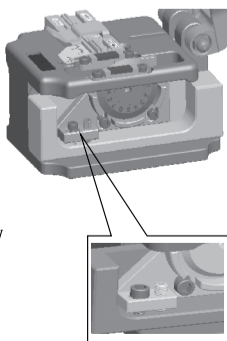


刀刃高度固定螺丝 刀刃高度调节螺丝

- 3: 将自动铅笔芯或木制细棒平放在光纤把持夹具上，边前后移动刀刃滑杆，边旋转刀刃高度调节螺钉。刀刃口的最高点和铅笔芯或木制细棒正好接触时的高度作为基准点(0um)。

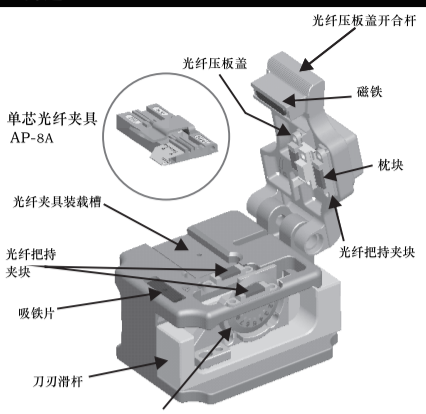
### 要点解释

- 刀刃高度要调高时，首先将高度调节螺丝松开，将调节螺钉按顺时针方向旋转。
- 刀刃高度要调低时，首先将调节螺钉按逆时针方向旋转，再将高度调节螺丝收紧。(请用棉棒边将刀刃向下按压，边旋转刀刃高度调节螺钉。)

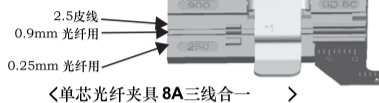


[参考]  
1 刻度 = 约 1/4 圈

## 2. 构造



〈光纤切割刀 8A 系列〉

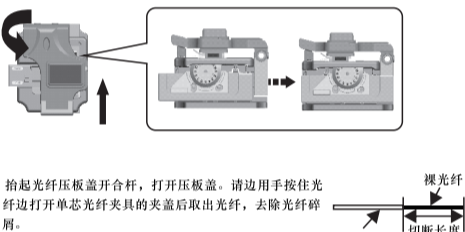


〈单芯光纤夹具 8A 三线合一〉

## 3. 操作方法

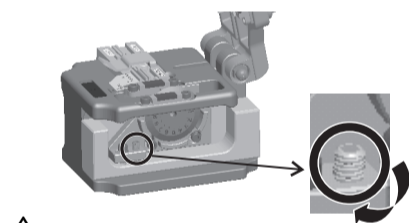
8A

- 1: 请将光纤压板盖开合杆抬起，打开单芯光纤夹具的夹盖。确认刀刃滑杆在面前侧的位置。
- 2: 将光纤放置在单芯光纤夹具的沟槽里。将涂覆边界线和光纤适当切断长度的测定刻度处对齐。(比如: 切断长度为18mm时，将涂覆边界线和刻度的18mm处对齐)这时，请确认裸光纤部是否呈笔直状。
- 3: 盖上单芯光纤夹具的夹盖，夹紧光纤。
- 4: 请关闭光纤压板盖。并且放下光纤压板盖开合杆。推进刀刃滑杆，切断光纤。



抬起光纤压板盖开合杆，打开压板盖。请边用手按住光纤边打开单芯光纤夹具的夹盖后取出光纤，去除光纤碎屑。

- 4: 请将刀刃高度调节螺钉从基准点开始按顺时针方向再旋转 1/4 圈 ~ 1/2 圈。



注意  
• 请注意刀刃高度不要调节过高。否则会出现枕块受损，光纤端面缺损现象。

- 5: 请拧紧刀刃高度固定螺钉。  
[参考] 适当的拧紧扭矩: 约0.59N·m(6kgf·cm)
- 6: 请在第1项时拧松的2个固定螺钉拧紧。  
[参考] 适当的拧紧扭矩: 约0.98N·m(10kgf·cm)

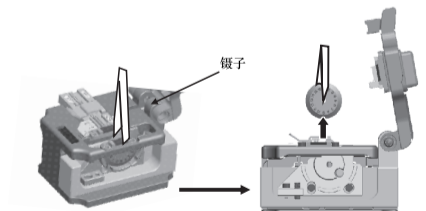
## 刀刃的更换

(0:8A 机型的时。)

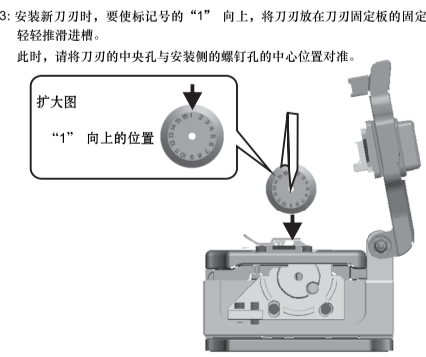
- 1: 拆下刀刃固定螺钉。



- 2: 请用镊子等取出刀刃。注意不要让刀刃碰到其他零件部位。



- 3: 安装新刀刃时，要使标记号的“1”向上，将刀刃放在刀刃固定板的固定面上，轻轻推滑进槽。此时，请将刀刃的中央孔与安装侧的螺钉孔的中心位置对准。

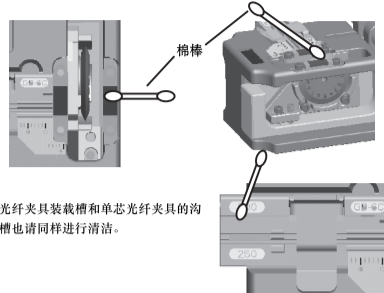


扩大图  
“1” 向上的位置

## 4. 维护

### 日常清扫

为了保持光纤切割刀的切割性能，使用后请务必进行清扫。请用沾有无水酒精的棉棒清洁刀口，光纤把持夹具的橡胶胶部，和枕块。



光纤夹具装载槽和单芯光纤夹具的沟槽也请同样进行清洁。

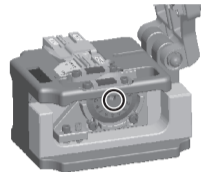
- 注意
- 刀刃和光纤把持夹具上如粘有灰尘的话，会造成切割性能的降低，也可能不能取得良好的光纤切割端面。
  - 清洁时，请不要使用酒精以外的液体。
  - 如光纤碎屑残留在光纤把持夹具的橡胶部时，会造成切割性能的降低，也可能不能取得良好的光纤切割端面。

### 刀刃口的调节方法

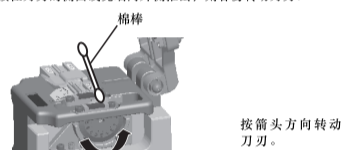
进行多次切割后，刀刃发生消耗，会出现切不净，切断面缺损现象。如持续发生此现象时，就有必要调整刀刃口的位置。请按以下步骤调整刀刃口方向，使用新的刀刃部位。

[参考]1处刀刃口可切割次数: 1,000芯线

- 1: 请用平口螺丝刀将固定刀刃的螺丝拧松。

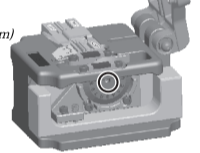


- 2: 将刀刃调转成下一个新的刃口。用棉棒按住刀刃的侧面或先端向外侧推出，则容易转动刀刃。



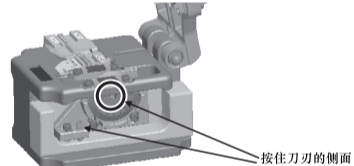
- 注意
- 更换刀刃口位置(旋转刀刃时)，请勿用手直接旋转刀刃。
  - 请勿使用金属工具(镊子等)转动刀刃。如使用金属工具，会损伤刀刃。

- 3: 拧紧刀刃固定用螺丝。  
[参考]适当的拧紧扭矩: 约0.98Nm(10kgf·cm)



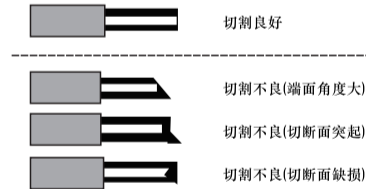
- 注意
- 注意勿过分拧紧刀刃的固定螺丝。可能会导致螺丝破损。

- 4: 用手指轻轻按着刀刃的侧面，拧紧刀刃固定螺钉。  
[参考] 适当的拧紧扭矩为: 约0.98N·m(10kgf·cm)



- 5: 请参考第6页的『刀刃高度的调节方法』，按其步骤调节刀刃的高度。

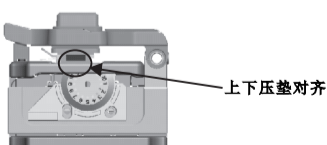
## 故障排除



- 造成切割不良，可能是由于以下原因。
- (A) 光纤未被笔直的放置在切割刀上。  
→ 请笔直安放光纤。
  - (B) 刀刃位置过高。  
→ 请调节刀刃高度。
  - (C) 光纤把持夹具上残留有垃圾。  
→ 请清洁光纤夹具。
  - (D) 刀刃上粘有灰尘等异物。  
→ 请清洁刀刃。
  - (E) 光纤上粘有灰尘等异物。  
→ 请重新去除光纤涂覆，清洁裸光纤部位。  
→ 运输过程中可能造成上下压垫不紧光纤

切割不良现象持续发生时，请联系本公司维修服务部门。

## 调平方法



8A

- 产品运输过程造成压不紧光纤上下压垫有间隙，或反复调节不好光纤端面时
- A. 首先将线夹取下，然后连接伴有2个内六角螺丝拧紧;
  - B. 把上下压垫对齐，用左手握紧(保证压垫没有间隙的情况下，开始收紧2个内六角螺丝);
  - C. 将整个机器对着光线不同角度去观察压垫是否没有间隙，如果没有间隙继续切割，有间隙重复A与B步骤。