

# USER MANUAL

**Manufacturer:**

Jonard Tools®

**Product Name:**

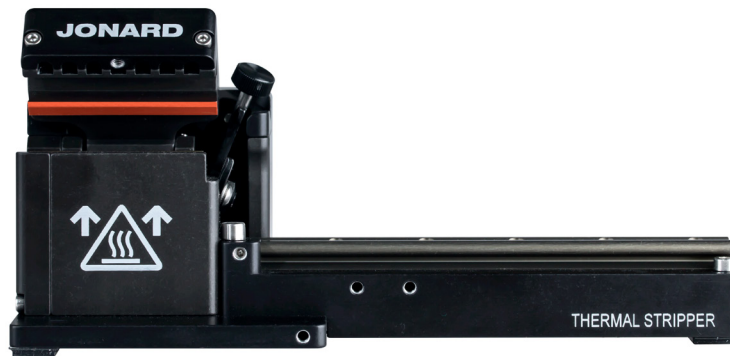
Jonard Tools® TSAB-40 Thermal Single Fiber Stripper - Adjustable Blade

**Manufacturer Part Number:**

TSAB-40

▶ Click here for more details on the Jonard Tools® TSAB-40 Thermal Single Fiber Stripper - Adjustable Blade

## Thermal Stripper, TSAB-40 User Manual



User Manual Version 1.4

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## **Introduction**

The Jonard TSAB-40 Thermal Stripper is a fiber preparation unit designed to thermo-mechanically remove coatings from optical fibers.

It is designed to support from 40µm to 1000µm glass optical fibers.

This manual is intended to instruct the user in the routine use, adjustment, and maintenance of the Thermal Stripper.

**NOTICE:** It is the responsibility of the user to use this product for its intended purpose and according to this manual. Jonard Industries cannot be responsible for damages or injury resulting from failure to follow these instructions.

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## **Safety Considerations**

- The use of safety glasses is recommended. Fragments of fiber can cause injury if they come into contact with eyes.
- Observe all safety precautions common to the handling of optical fibers and dispose of fiber scraps safely.
- Do not operate the Thermal Stripper in the vicinity of flammable vapors or liquids. Operation of the unit in such an environment may increase the risk of fire or explosion.
- Before storing, the Thermal Stripper should be turned off and the heating element cooled to room temperature. This should also be done before cleaning with compressed gas or canned air. These products can contain flammable materials or contaminants that may ignite.
- Use only the A/C adapter that is supplied with the Thermal Stripper. Using an improper power supply may permanently damage the Thermal Stripper.
- Do not modify or disassemble the Thermal Stripper or any of its accessories, including the power supply.
- The heating element operates at temperatures up to 200° C. Never place your fingers inside the lid or touch the heating element surface, as burns may result.
- The sides and bottom of the unit may become warm to the touch after prolonged use.
- Turn the Thermal Stripper off when not in use.
- Do not expose any portion of the Thermal Stripper to water or other liquids.

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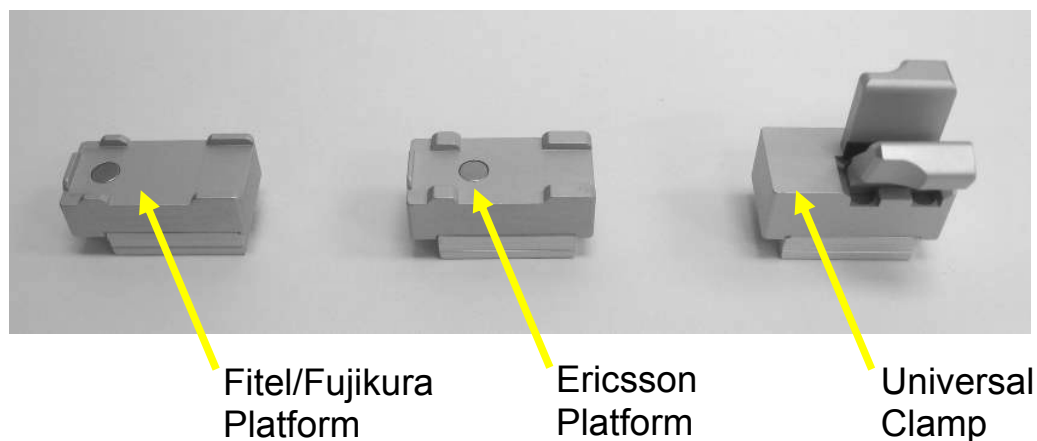
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## **Components**

The standard Thermal Stripper kit contains the following items:

- Thermal Stripper unit
- A/C Power Supply and Cord
- Cleaning Brush
- User Manual
- Fiber Holder Platform (purchase separately)



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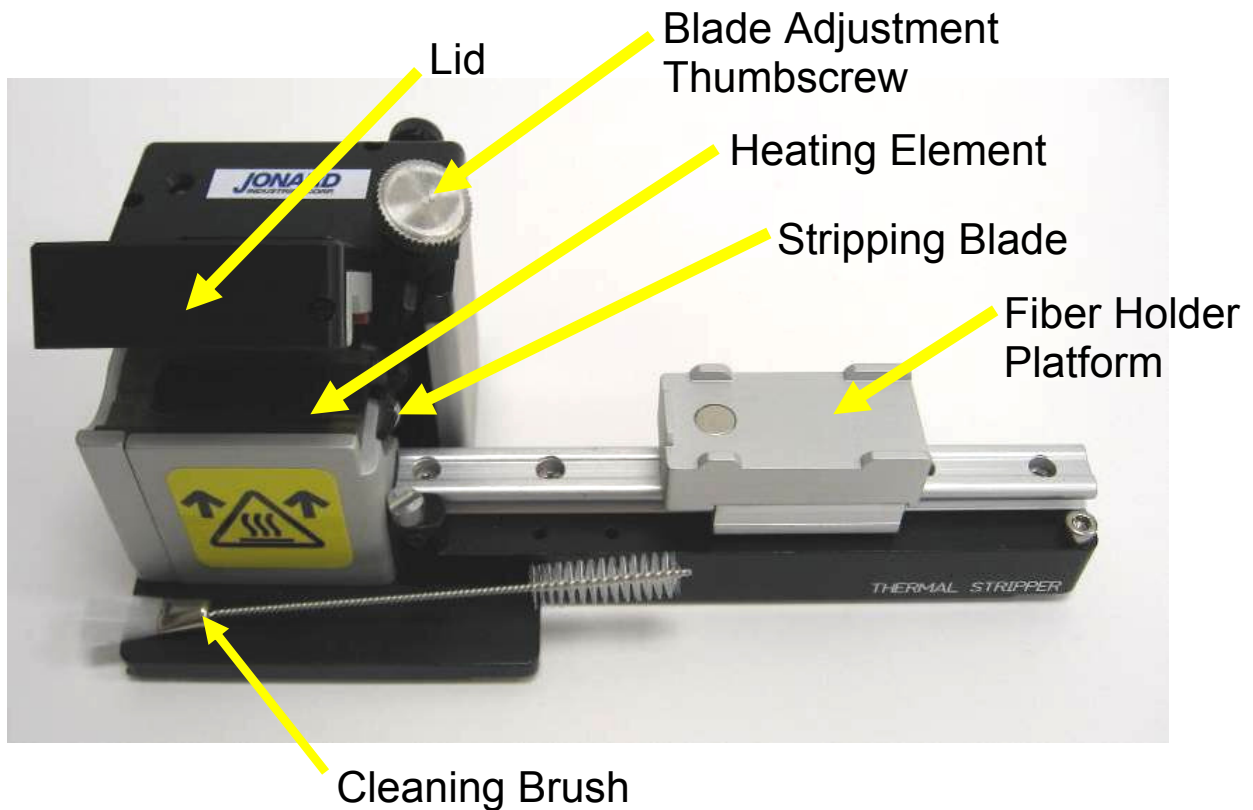
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## **External Overview**

The following picture is an external overview of the Thermal Stripper with Fiber Holder Platform installed.



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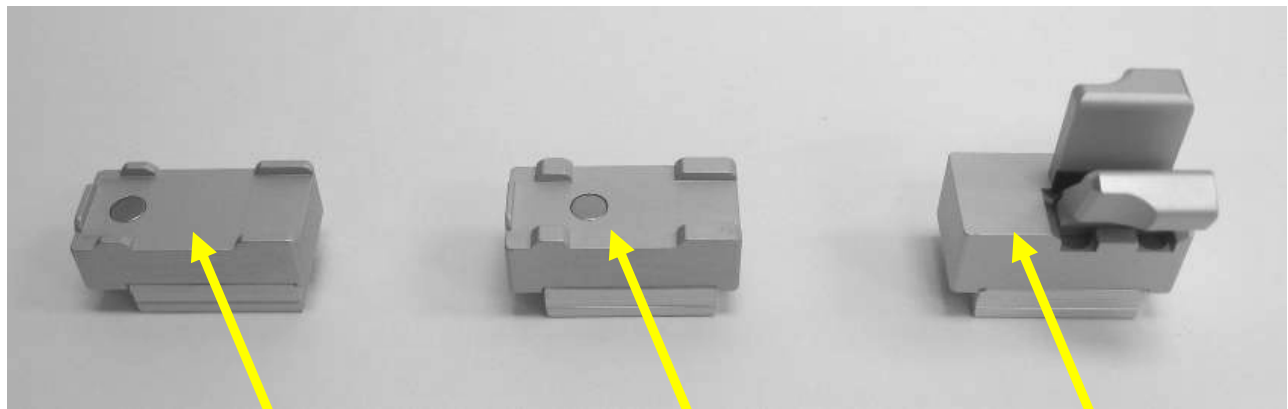
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## **Fiber Holder Platform Installation**

A fiber holder platform or clamp is required for stripping and is supplied separately. The platforms that are available support Fitel/Fujikura or Ericsson fiber holders. For operation without fiber holders a Universal Clamp is also available.

For all three carriages the front of the carriage is to the left in the following picture.



Fitel/Fujikura  
Platform

Ericsson  
Platform

Universal  
Clamp

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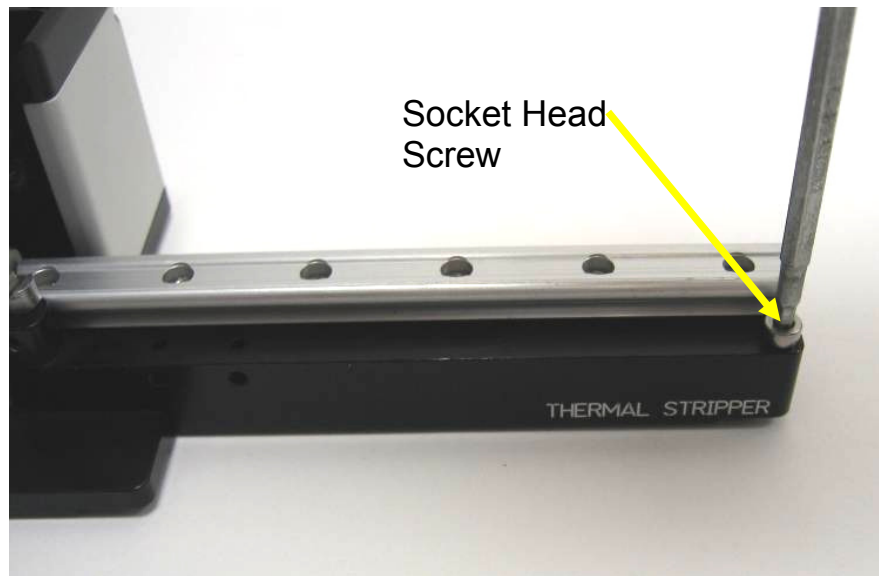
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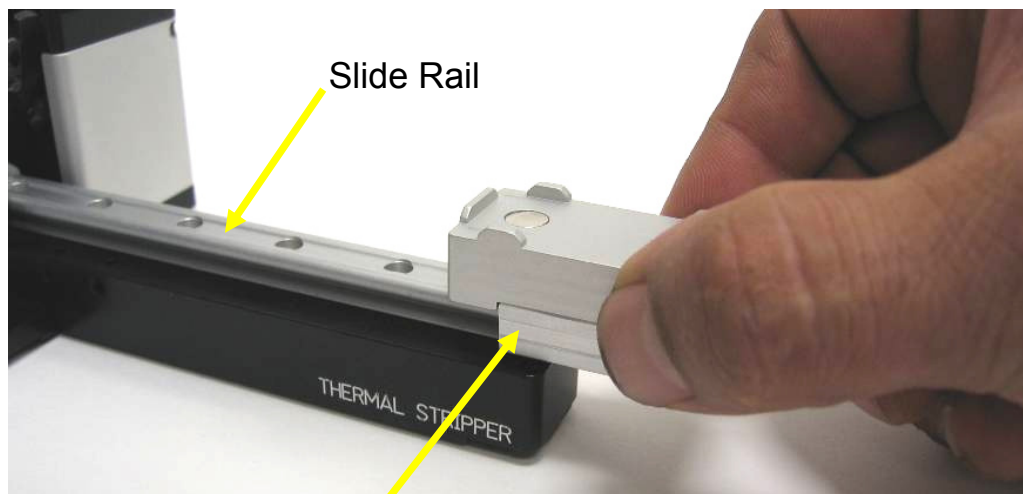
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1. Remove the socket head screw with an M2.5 hex head wrench.



2. At the end of the Thermal Stripper where you removed the screw slide your fiber holder platform or Universal Clamp onto the rail until it is completely on.



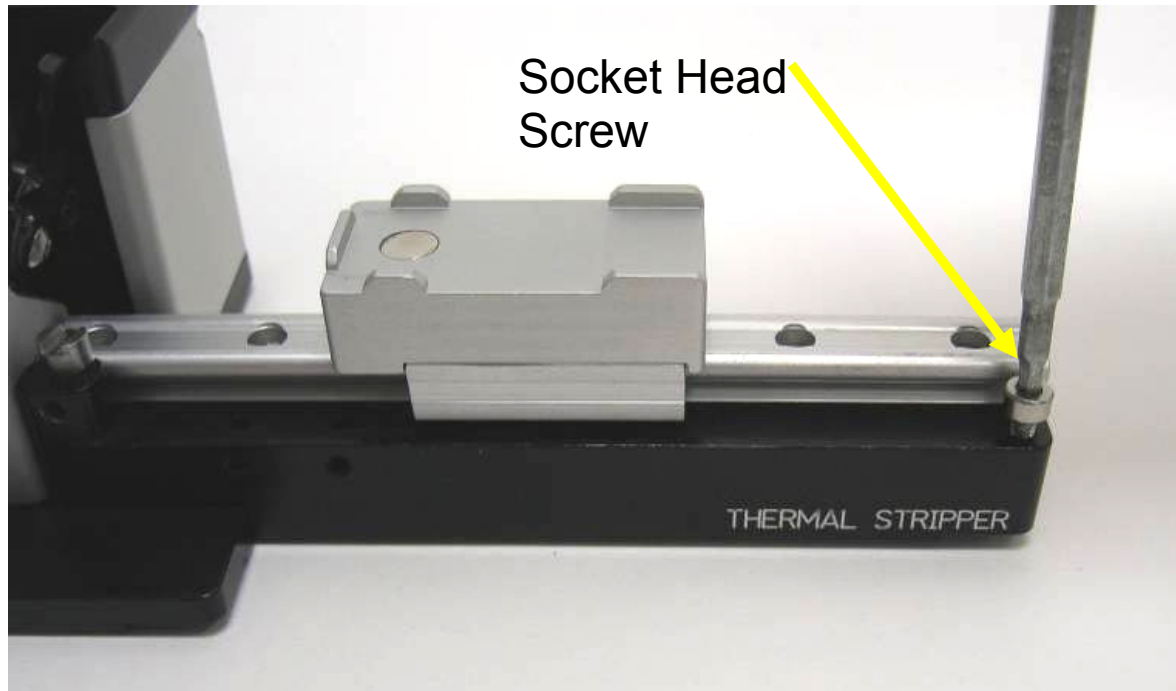
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3. Reinstall the socket head screw with an M2.5 hex head wrench until tight.



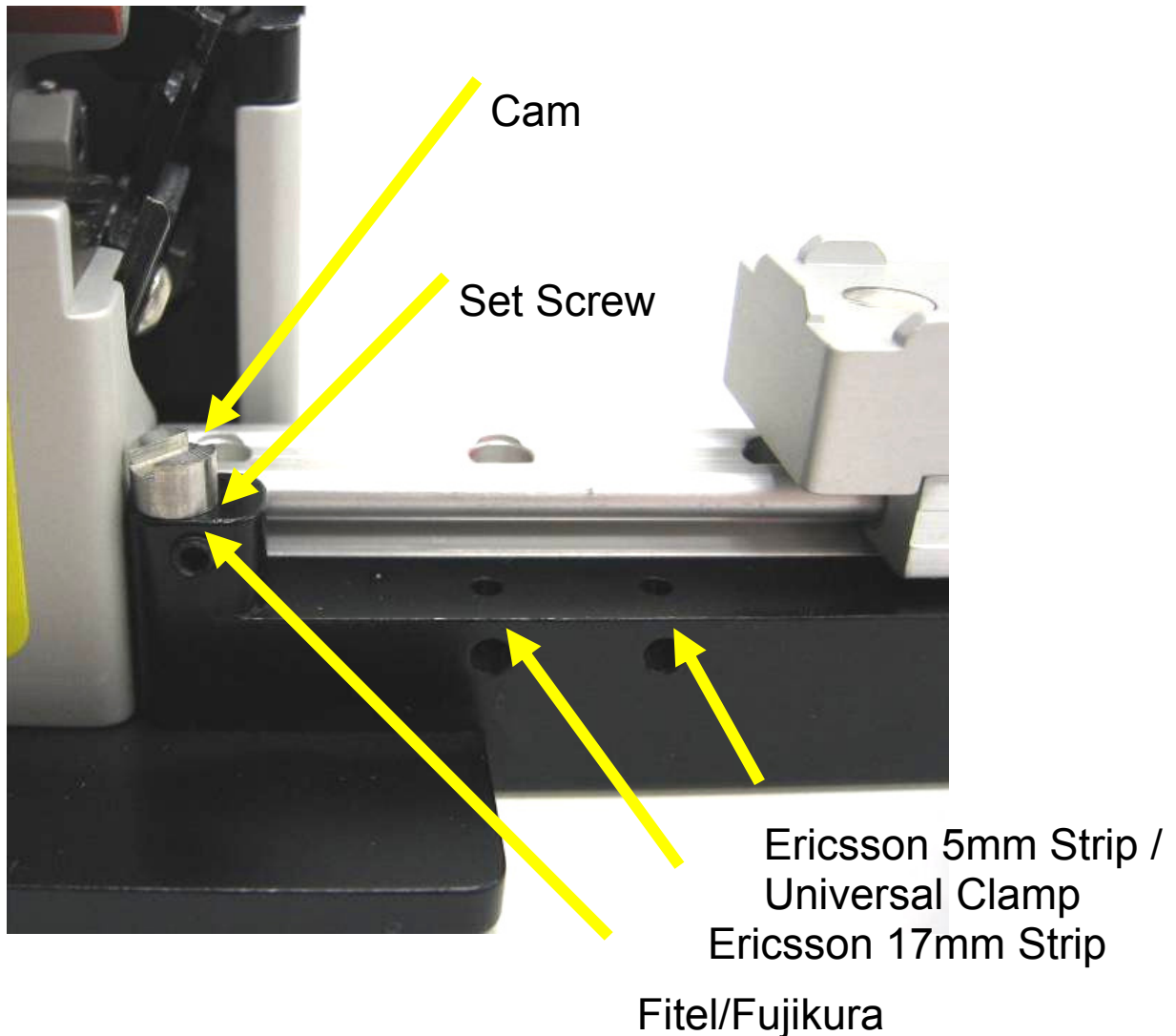
4. Depending upon the platform you have just installed and required strip length the cam needs to be moved to adjust for the correct strip length (The cam is installed in the position for the Fitel/Fujikura platform from the factory).

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5. Remove the set screw with an M1.5 hex head wrench and then remove the cam.
6. Insert the cam into the correct position and secure in place by installing and tightening the set screw with an M1.5 hex head wrench.

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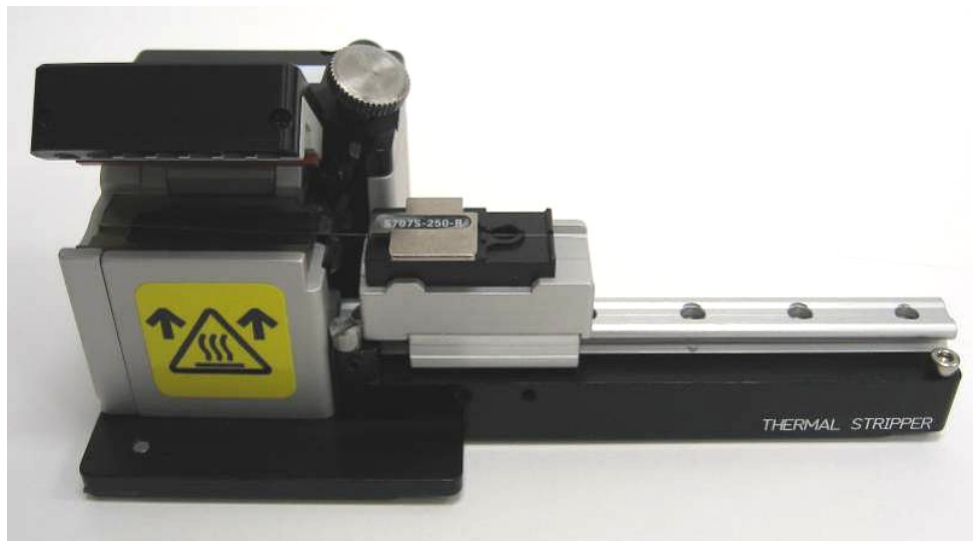
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## **Operation**

To turn the unit on simply plug the power cord into the outlet. Unplug the unit to turn it off. To operate the unit

1. Attach the power cord to the power supply.
2. Connect the power supply to the Thermal Stripper.
3. Plug the AC power cord into a 100-240 VAC (50/60 Hz) outlet.
4. The indicator L.E.D. displays a steady red while the unit is heating to the set temperature. After the operating temperature is reached the LED blinks red. The unit is now ready for use.
5. Slide the fiber holder platform all the way to the left (toward the stripping blades and heat element).
6. Place the fiber to be stripped in the fiber holder or universal clamp such that the fiber extends to the far edge of the heater.



7. Place the fiber holder on the platform and align the fiber so that it is on the heating element and between the “v” of the blades.

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8. Close the blades by pressing down on the lid. The LED will turn yellow for the duration of the “Wait Time.” Continue to hold the lid closed until the LED turns green. The green light indicates the fiber is ready to be stripped.

Indicator LED



LED Color	Meaning
Red	Heating to “Set Point” temperature
‘Blinking’ Red	Maintaining “Set Point” temperature
Off	Heater at “Set Point” temperature
Yellow	“Wait Time” to soften fiber coating
Green	Ready to strip fiber

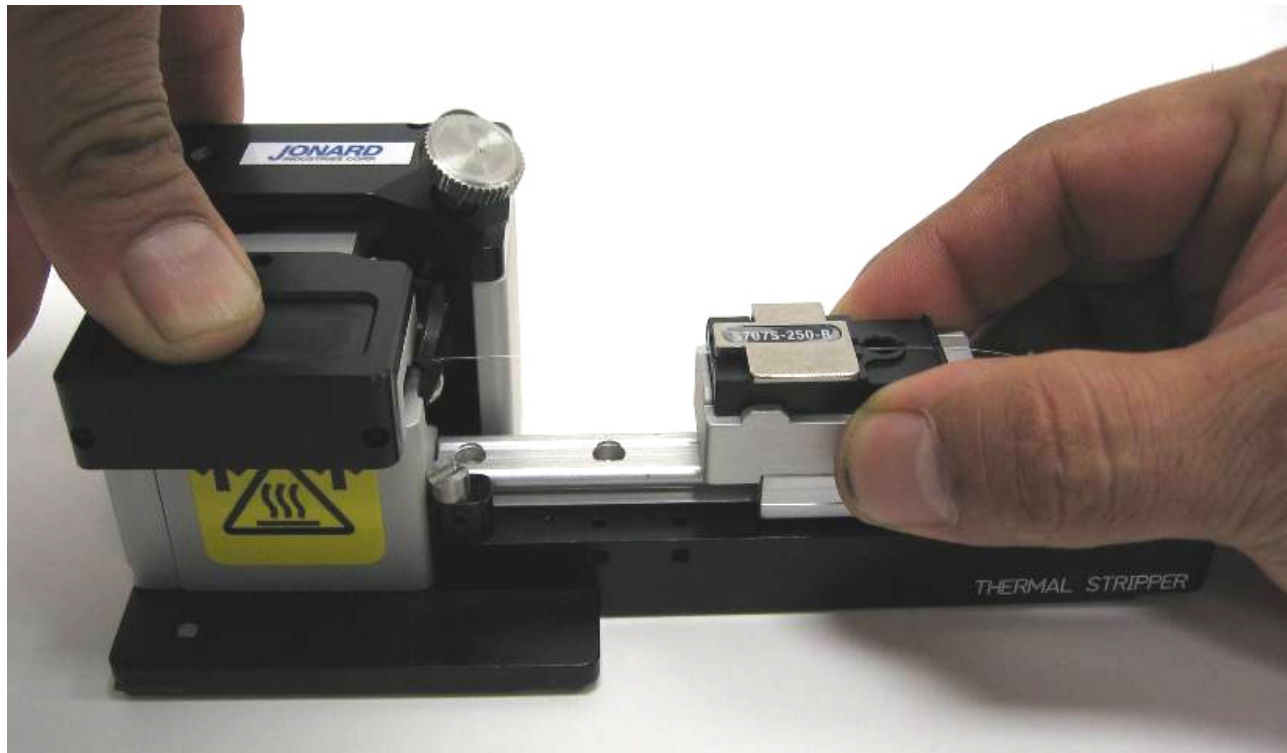
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9. Continue to hold the blades closed and slide the fiber holder and platform away from the heating element.



10. Release the lid and remove the fiber holder. The fiber is now ready to be cleaned, cleaved and spliced.

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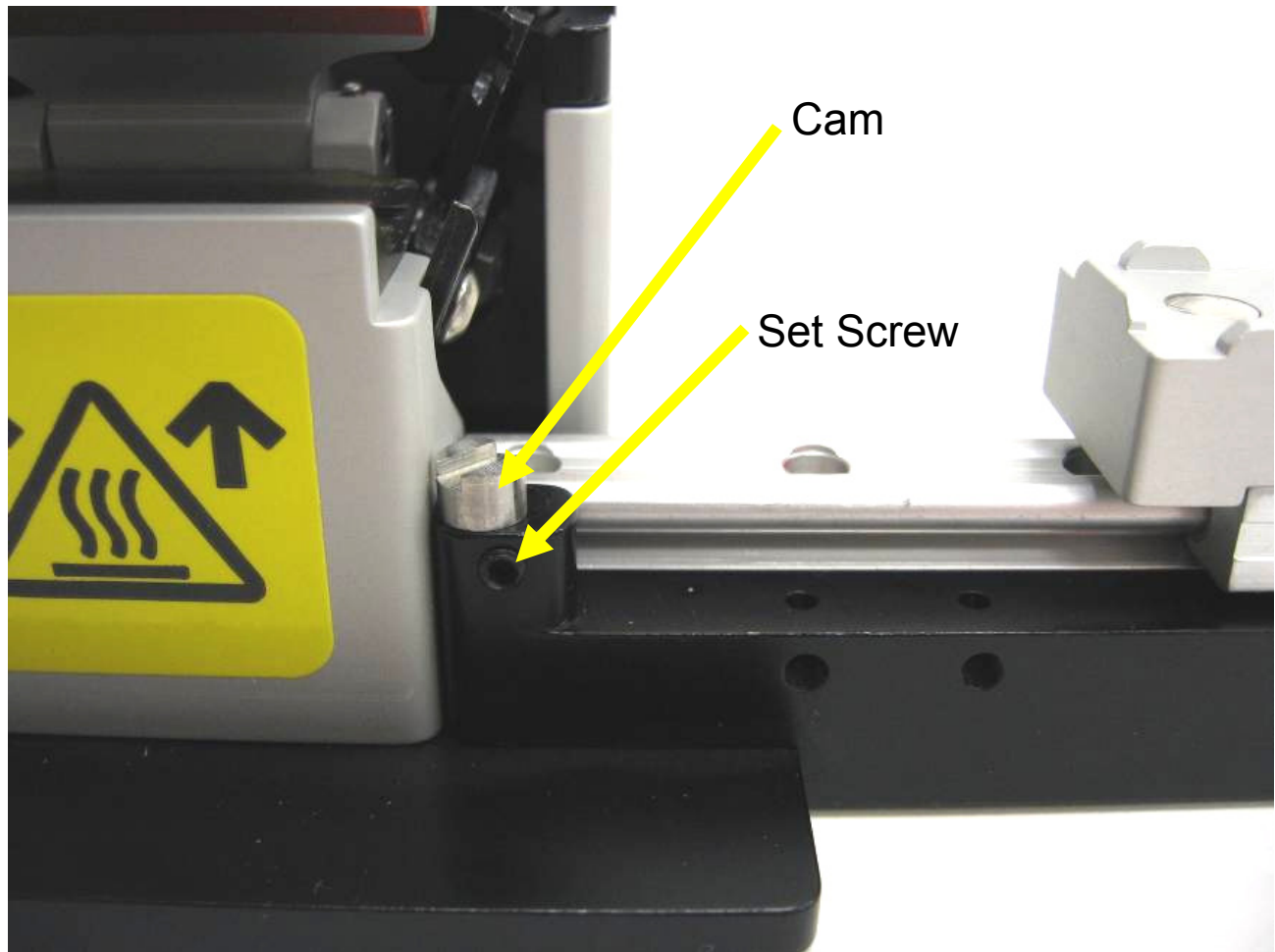
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## **Strip Length Adjustment**

1. For fine adjustment of the strip length, loosen the set screw, shown below, with an M1.5 hex head wrench. Rotate the cam to change the strip length. Secure the cam by tightening the set screw with an M1.5 hex head wrench.



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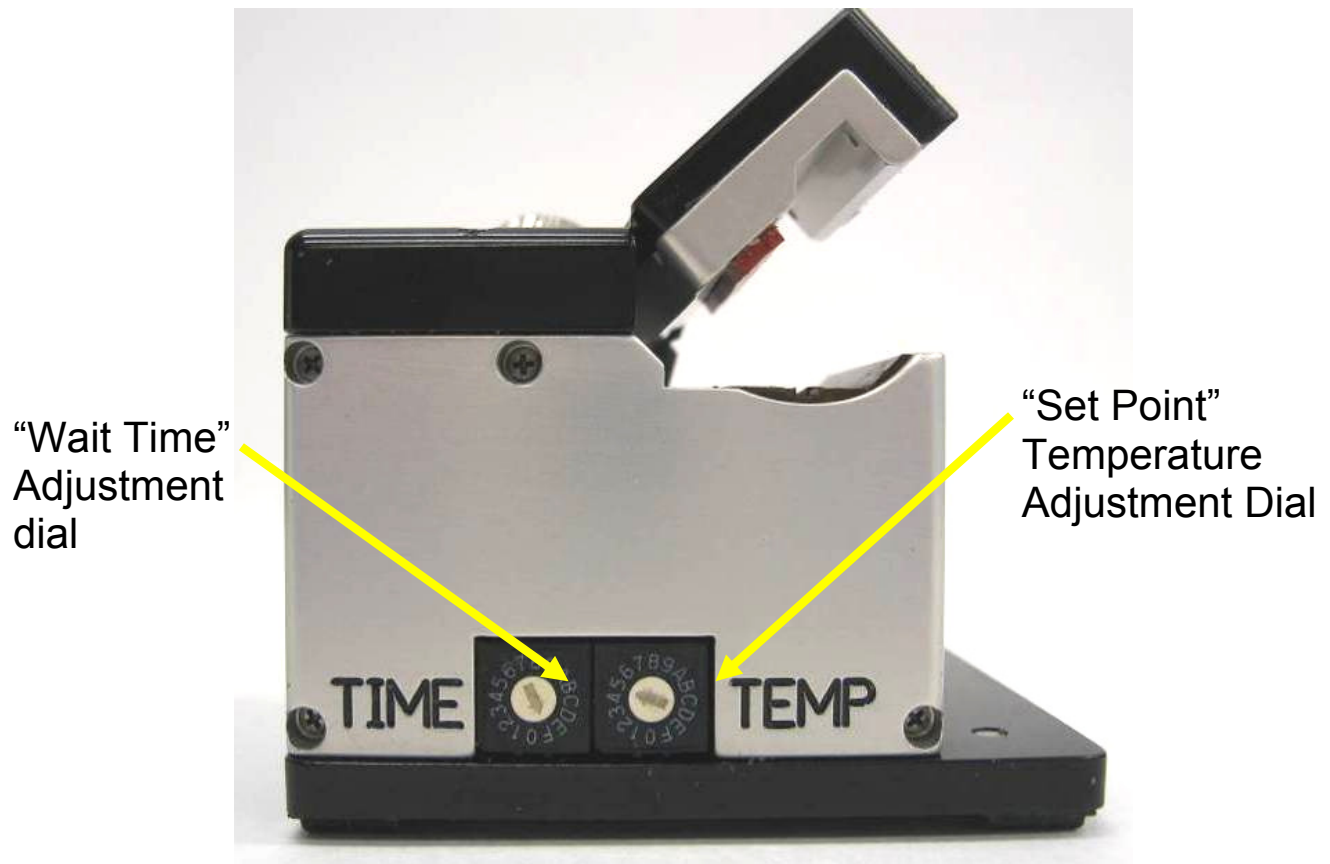
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## Time & Temperature Adjustment

For some coating types you may need to adjust the Temperature and Time settings to insure the proper stripping of fiber.



1. To adjust the “Set Point” temperature, use a small flat screwdriver to rotate the temperature adjustment dial to the appropriate setting (See table on next page or the table on the back of the Thermal Stripper for setting values).

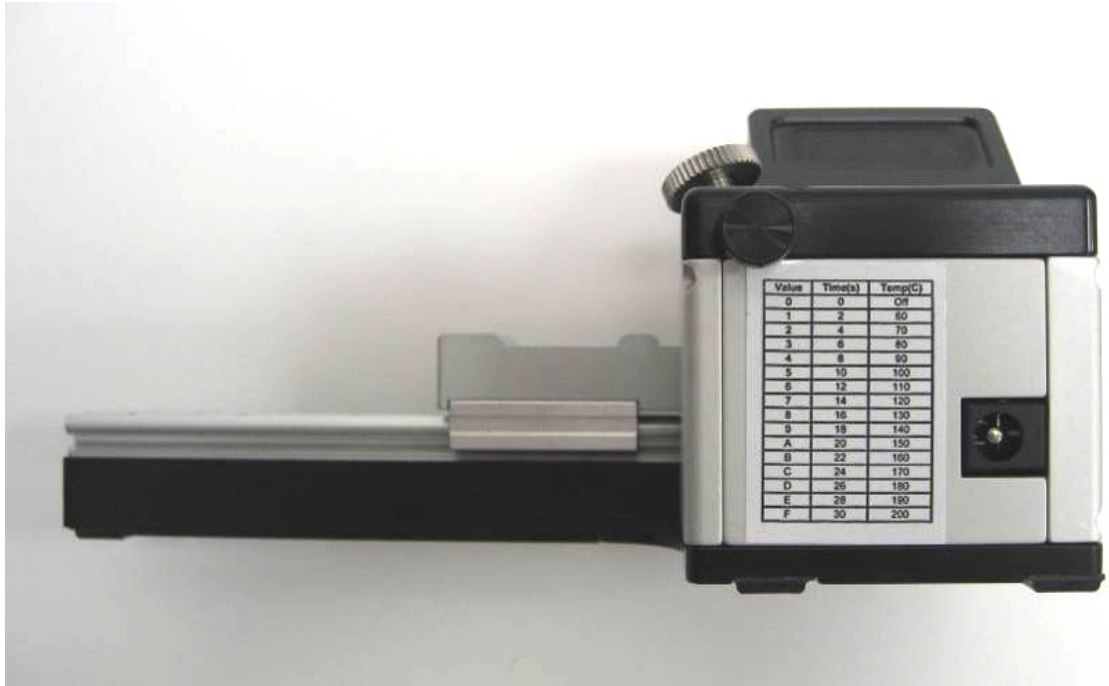
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Value	Wait Time (s)	Set Point Temp (°C)
0	0	Off
1	2	60
2	4	70
3	6	80
4	8	90
5	10	100
6	12	110
7	14	120
8	16	130
9	18	140
A	20	150
B	22	160
C	24	170
D	26	180
E	28	190
F	30	200

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2. Factory default is 140°C for 250µm coatings. Increase the time if stripping process is not smooth and the fiber does not strip cleanly. Reduce the temperature if melting of the coating is observed.
3. To adjust the “Wait Time”, use a small flat screwdriver to rotate the time adjustment dial to the appropriate setting (See table above or the table on the back of the Thermal Stripper for setting values).
4. Increase the time if stripping process is not smooth and the fiber does not strip cleanly. The following table is a good starting point for different fiber coatings.

Fiber Diameter (µm)	Time Setting	Temperature Setting
125 (250 coating)	3	9
125 (900 coating)	5	9
200	6	9
400	8	9
500	8	B
600	A	B
800	A	C
1000	B	D

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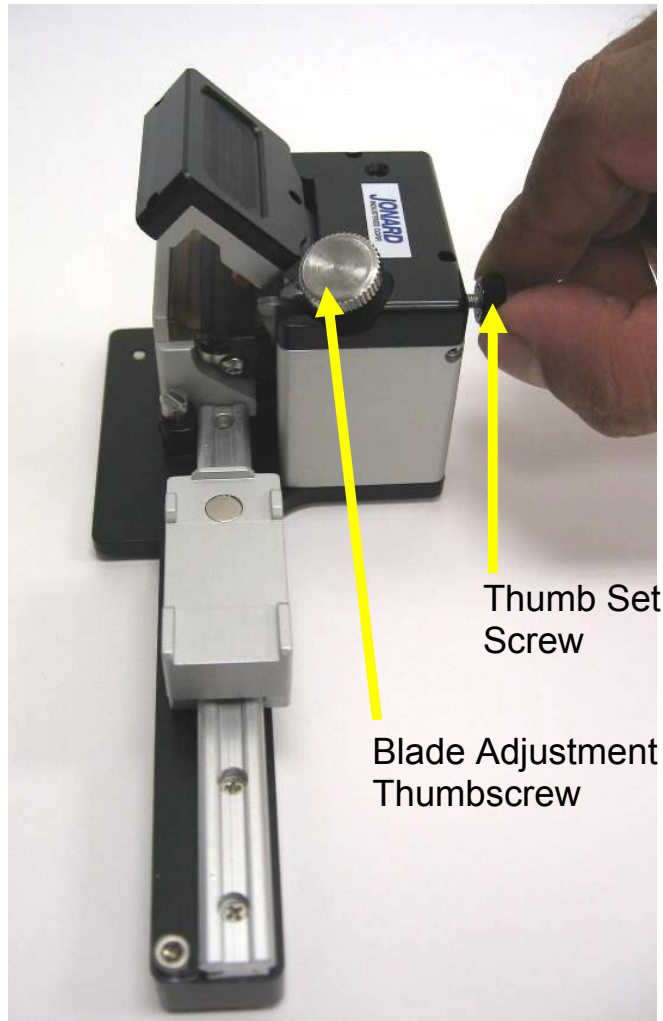
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## **Fiber Size/Blade Adjustment**

For different cladding diameters it is necessary to adjust the blade setting to optimize stripping performance. To adjust the blade:

1. Loosen the thumb set screw (counterclockwise) to release the blade adjustment screw as seen below.



2. Turn the blade adjustment screw (clockwise) all the way.
3. Follow the steps from the Operation section to load the fiber.

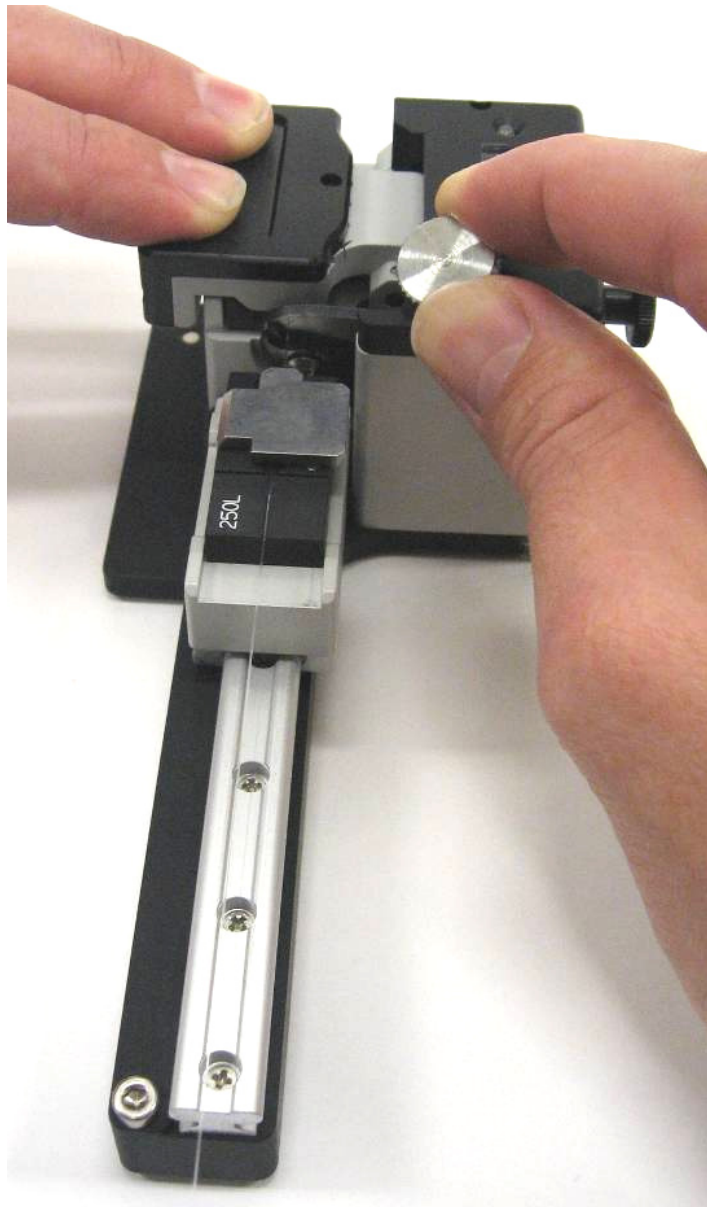
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4. Close the blades by pressing down on the lid.



7. Turn the blade adjustment screw (counterclockwise) until the blades contact the fiber enough for an initial strip.
8. Attempt to strip the fiber. If the fiber is stripped proceed to the next step. If not repeat the previous step

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9. Place the stripped portion of the fiber in the stripping blade and tighten the blade adjustment screw until the blade grabs the fiber cladding. Test this by sliding the fiber back and forth.
10. This setting should allow the fiber to move through the blade with slight friction caused by contact with the blades.
11. Turn the adjustment screw (clockwise) slightly, approximately 15 degrees.
12. Tighten the thumb set screw (clockwise) to lock the blade setting. The Thermal Stripper is now ready for use.

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## **Cleaning**

With use debris will build up behind the blade as well as on the heating element of the Thermal Stripper, affecting the strength of the stripped fiber. While the Thermal Stripper can be used many dozens of strips between cleaning, for optimal performance we recommend cleaning after every strip.

1. With the included cleaning brush, sweep excess coating out from behind the stripping blade.



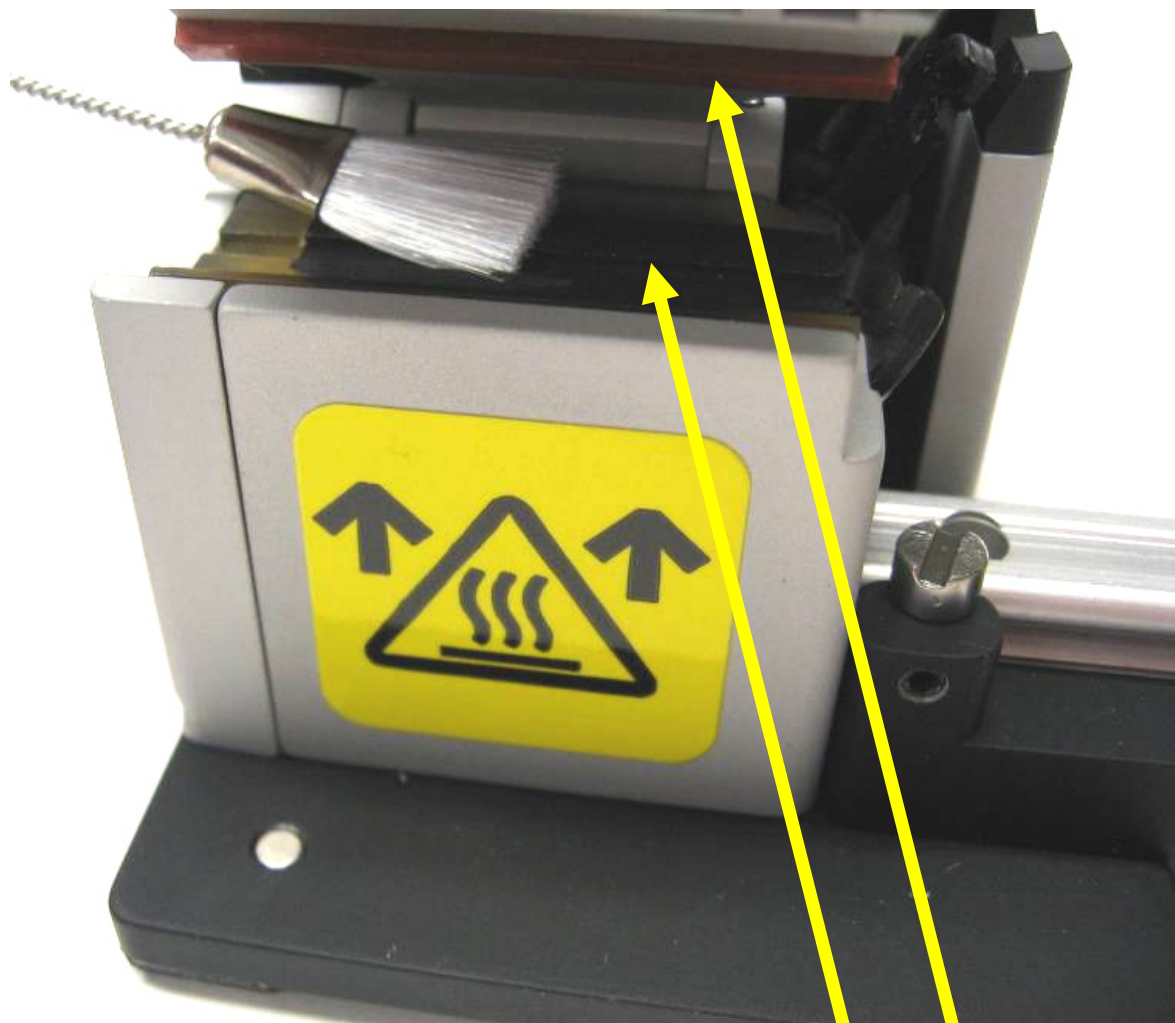
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2. After excess coating is removed from behind the blade thoroughly clean the heating element and upper pad by brushing debris away from the stripping blade toward the back of the Thermal Stripper.



Upper Pad  
Heating Element

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