

# Z-LASER

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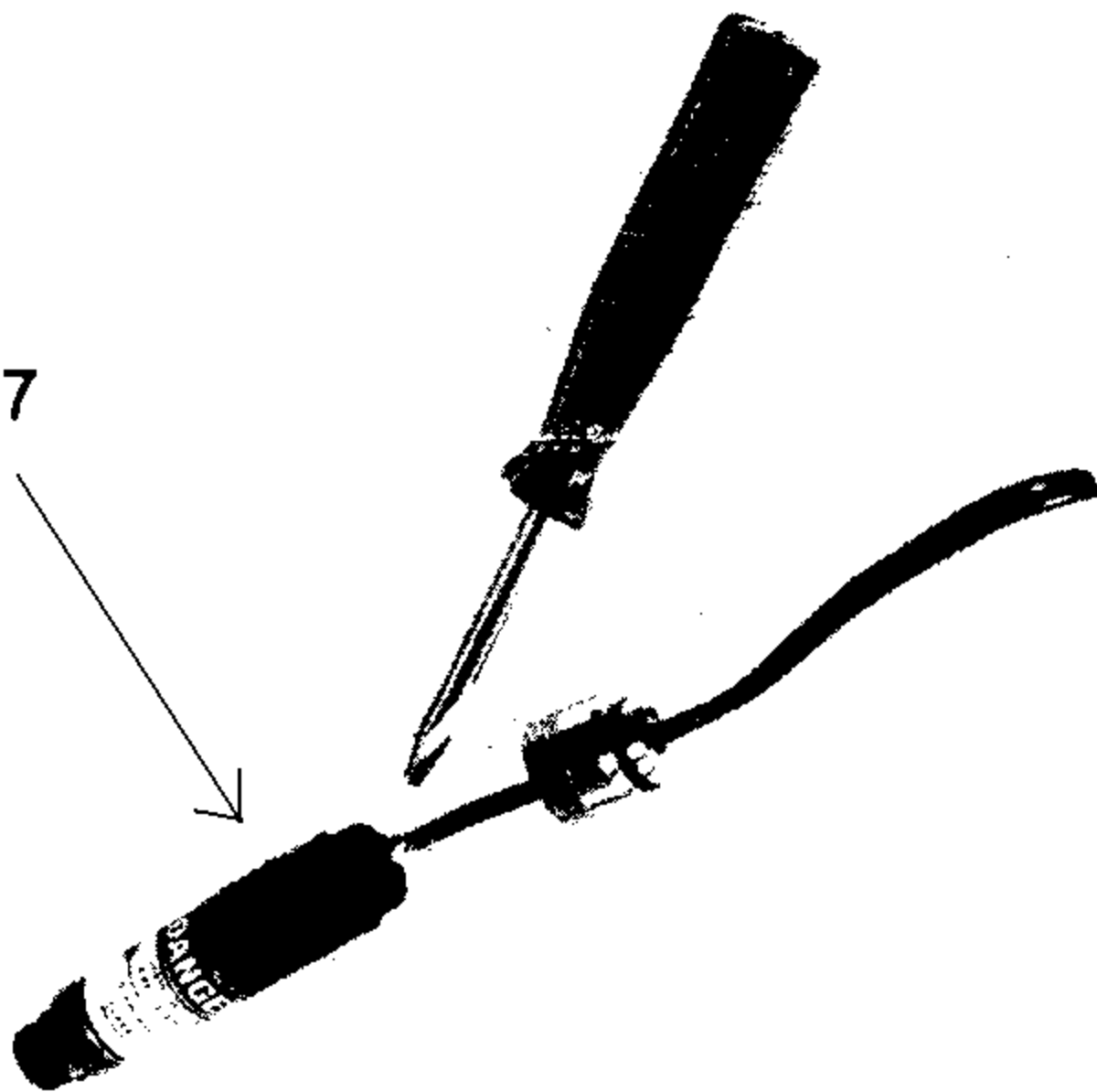
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## OPERATING INSTRUCTIONS

### Z5T~TEXTILE PRO LASER

ZL-Z5TLP  
1002148467

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**SUPERIOR SEWING**

*The simple way  
for professional use  
of your Textile Pro Laser*

**Dear customer,**

Thank you for your recent purchase of our Textile Pro Laser. It has been developed and constructed in accordance with the latest technological standards, and will enable you to quickly and accurately position your fabric. The Textile Pro Laser is very versatile. It can project a point, a cross, a line, or a line with a point. It is also possible to adjust the brightness of the Textile Pro Laser to suit the material in use. This enables you to achieve an optimum projection for all your applications.

Please only use the Textile Pro Laser for alignment or positioning purposes. It should not be used for any other purpose. Any other use is at your own risk.

**Class 3A laser**

These lasers are not dangerous if exposure is not longer than 0.25s. Eye protection is afforded by blinking and other defense reflexes. The beam is spread out. Do not look into the beam. Do not use any optical aids, as they could focus the beam so that it represents a danger to the eyes.  
Output power < 5mW with a maximum intensity of 25 W/m<sup>2</sup>

**Z-LASER** products are produced in accordance with the following norms:  
ISO 9001 / DIN EN 60825-1 / VDE 0837 / IEC 825-1 / FDA

**Components:**

- 1.) Standard light ZL- Z5T-LP.
- 2.) Standard mounting kit ZL-H3DT (including adapter, screw driver, allen key).

**Accessories:**

- 1.) ZL- CA35 adapter for 1 laser.
- 2.) ZL-JB4 junction box for up to 4 lasers.
- 3.) ZL -H6TS assembly bar: hole bar, angles with screws.
- 4.) Heavy duty mounting kit ZL-H2DT including adapter,
- 5.) Power supply ZL-WNGA.

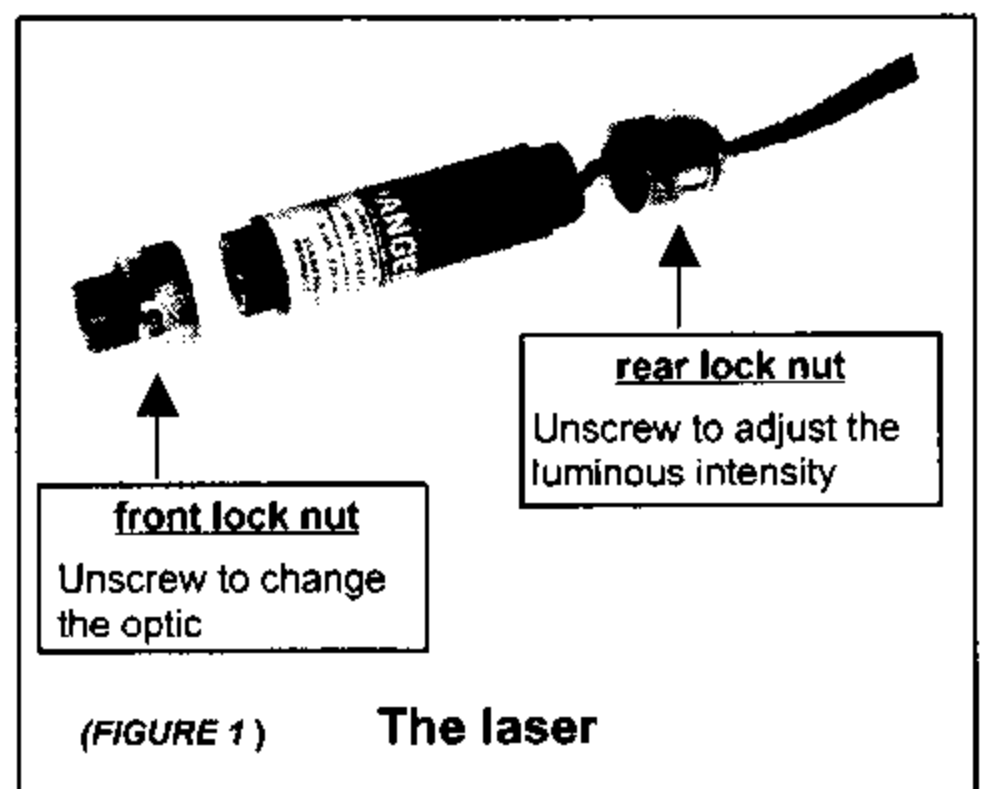
**1.) The Laser**

The laser diode has a metal body, with a 14mm diameter and only a 70mm overall length.

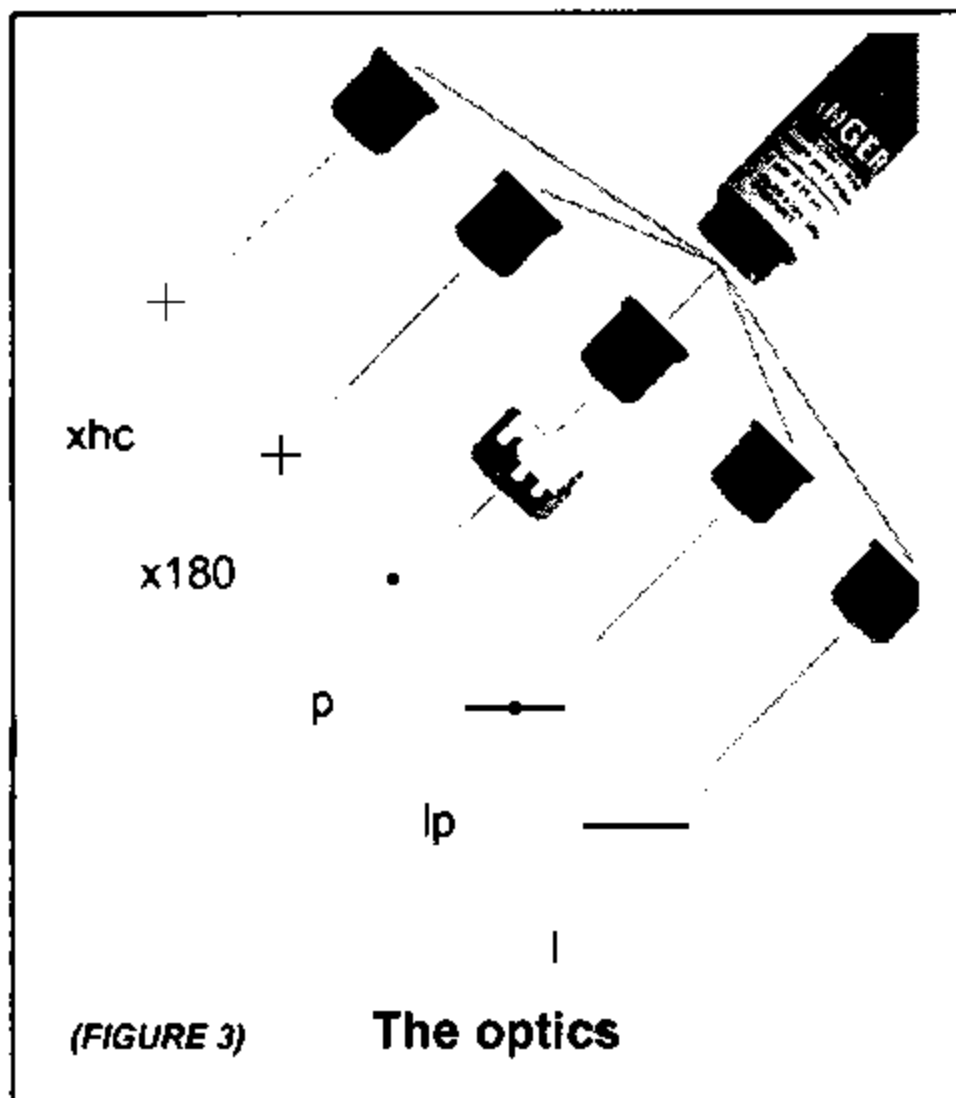
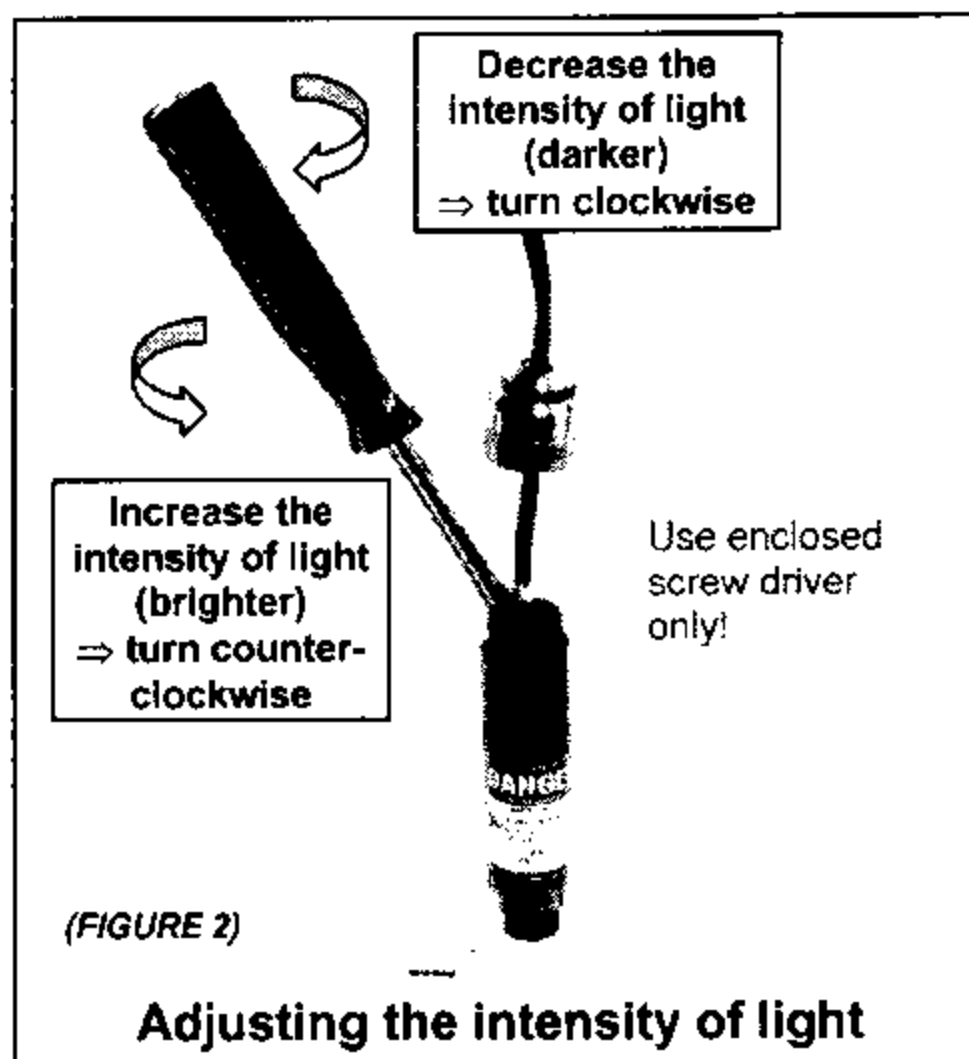
To replace the optic, simply unscrew the front silver lock nut, remove the existing optic and replace it with the desired optic, and screw the assembly back onto the laser.

While doing this, adjust the optic so that the projection is optimally focused.

**(FIGURE 1)**



To adjust the intensity of the projected light (**dim**), unscrew the rear silver lock nut, being careful not to twist the power supply cable. Use the supplied screwdriver to adjust the potentiometer screw, which is located next to the power supply lead attachment. Turn the screw clockwise to decrease the light intensity (less bright); it will project around 1mW when turned to the minimum setting. Turn the screw counter-clockwise to increase the light intensity (brighter); it will project almost 5mW at the maximum setting. **(FIGURE 2)**



## 2.) The Optics

There are 5 different interchangeable optics for the ZL-Z5T, Textile Pro Laser with the following designs: large cross (xhc), small cross (x180), point (p), line with a point (lp) and a line (l). You can change the optics in a few simple steps, as detailed. **The line point comes standard. All other optics must be purchased separately.**

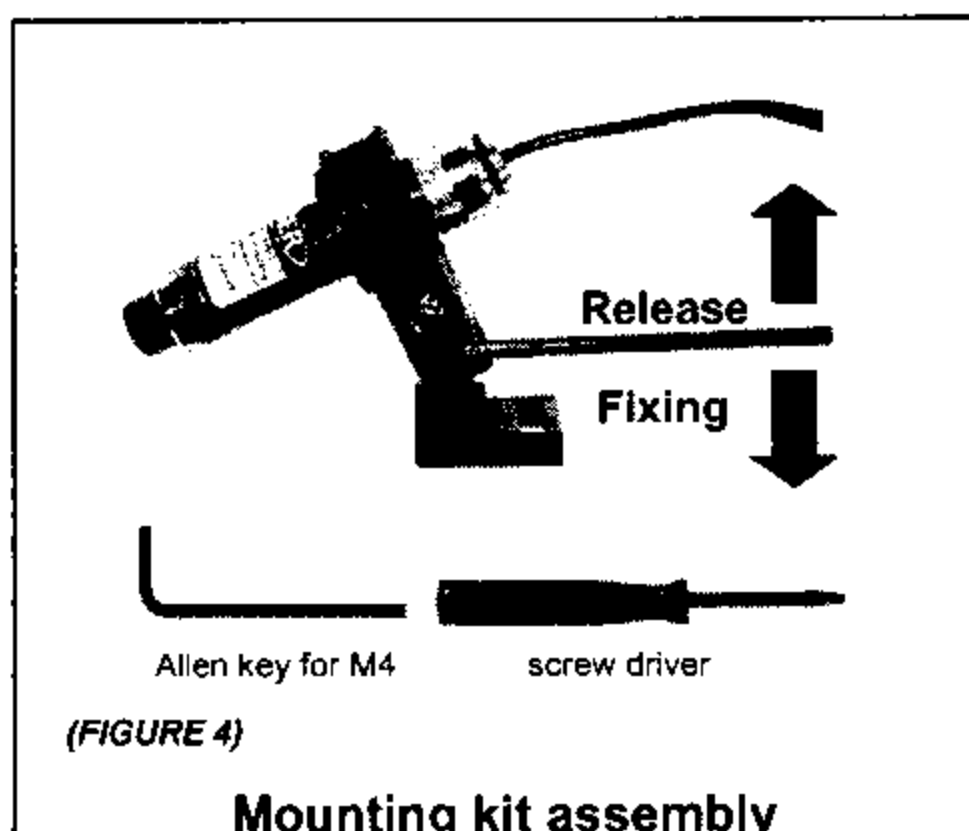
**(FIGURE 3)**

**Important Notice!** Please don't use, store or transport the laser without the fitted optic, as the diode can easily get dirty.

## 3.) The ZL- H3DT Mounting

The laser can be placed in the adapter and mounting, and fixed in the required position with the hexagon head fixing screw located in the side of the mounting. A suitable 3mm-hexagon key is in the tool set. The laser and mounting assembly can be fixed to your machine through the elongated fixing slot at the base of the mounting assembly. The universal ball joint enables final accurate laser positioning.

**(FIGURE 4)**



#### 4.) The WNG Plug-in Wall Transformer

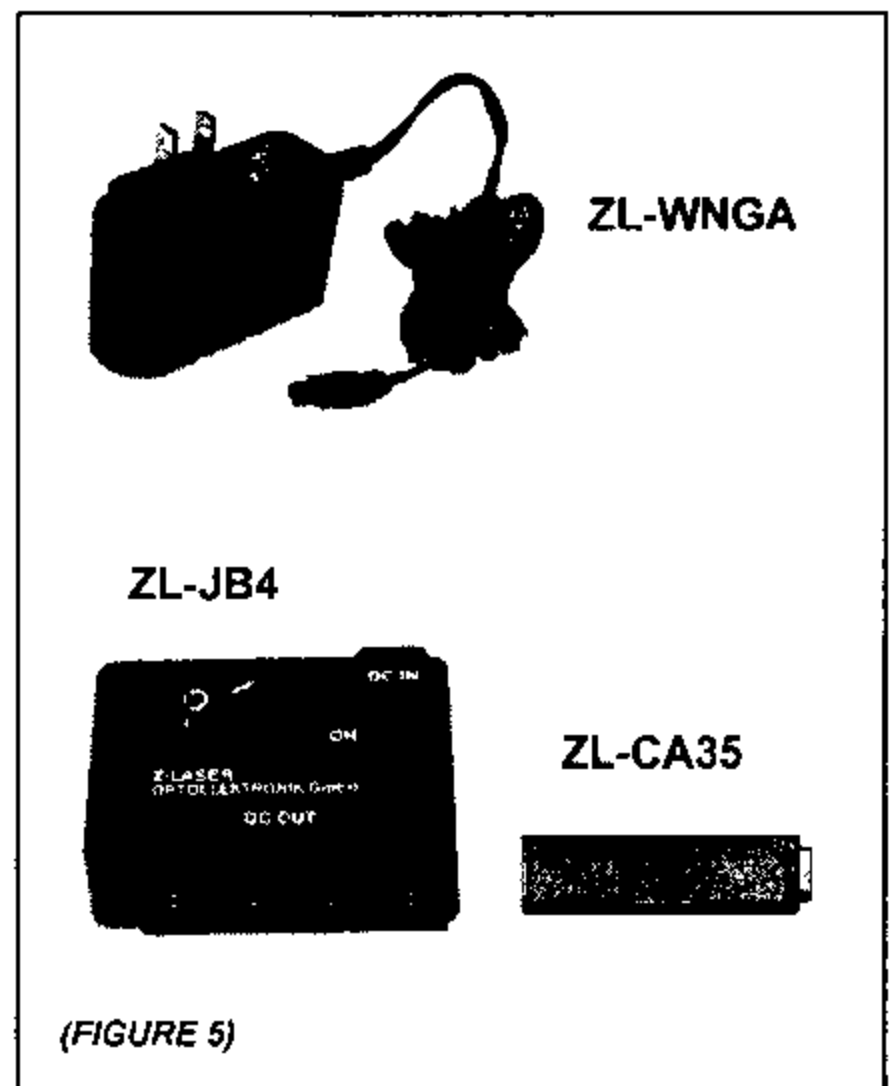
Plug in the ZL-WNGA power supply into an outlet. To connect one Textile Pro Laser to the cable of ZL-WNGA please use the ZL-CA35 adapter (either side is okay). For up to 4 lasers, please use the ZL-JB4 junction box. The ZL-JB4, has 4 sockets in a row that are used for connecting 4 lasers. The side with the single socket is for the connection of the ZL-WNGA power supply. The ZL-JB4, also has an on/off switch and an LED indicator light. When the indicator light is on, the lasers receive power and should project a light.

Two versions of the WNG exist:

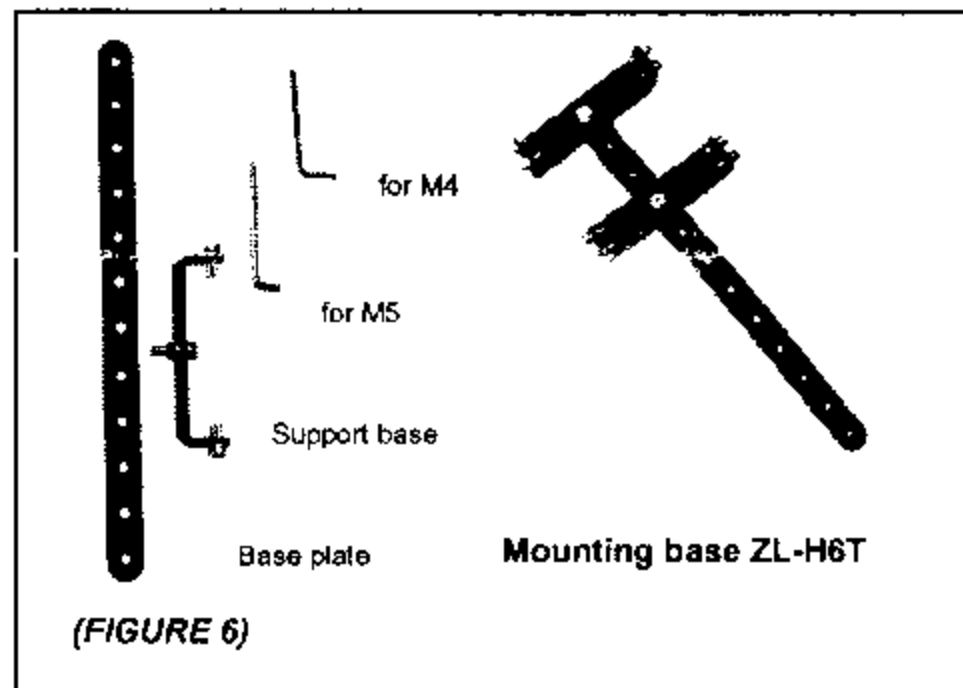
- The ZL-WNGA with American plug (110V)
- the ZL-WNGE with European plug (220V)

Power range : both devices have a power input from 85 to 265 VAC and 47-63Hz

(FIGURE 5)



(FIGURE 5)



(FIGURE 6)

#### 5.) The ZL-H6TS Assembly Bar

If you need to install several Textile Pro lasers onto your machine, we recommend that you use the ZL-H6TS assembly bar.

Utilizing the great flexibility of the assembly bar and the ZL-H3DT mountings, you can mount, and optimally position, up to 4 different Textile Pro lasers to suit your particular application.

(FIGURE 6)

#### 6.) The Tools

The ZL-Z5T, Textile Pro Laser set includes a 1.8mm screwdriver and a 3mm-hexagon key. The screwdriver is used to adjust the brightness of the projected light, and the hexagon key is used to position and adjust the laser in the mounting.

#### 7.) Other Lasers Available

Heavy duty cutting table / Spreading table light: ZL-Z20-12 (long line)

Made in Germany  
by  
Z-LASER Optoelektronik GmbH  
Freiburg (Germany)