 **HSS-99 Directional lamp laser cpl.**  
(Item no. 164110 / Fig. 1)

**HSS-88 Directional lamp laser cpl.**  
(Item no. 168120 / Fig. 2)



*Fig. 1*



*Fig. 2*

**Dear customer,**

Thank you for choosing a product from the Wassermann range. Wassermann Dental-Maschinen incorporates the highest standards of quality and the latest technology. In order to enjoy maximum performance and years of trouble-free operation, please read this user manual carefully before you connect this lamp and start work, and operate the lamp according to the recommended guidelines. The operation safety and the functionality of this lamp can only be guaranteed if you follow both the general safety guidelines and the applying laws to prevent accidents as well as the precautions given in this user manual. We are not liable for any damages which occur due to inappropriate usage or faulty operation of this lamp.



Make sure that anyone using this lamp has read and understood this user manual.

Keep this user manual in a safe place where it can be referred to as required at any time.

 The lamp complies with the relevant EC guideline.



The lamp is subject to the EC guidelines 2002/96/EG (WEEE Directiv).

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## 1 Features

- Laser class 1
- Combination of daylight LED and laser, precise and discreet, without glare or reflections
- The user can adjust the guide light himself at any time.
- Due to the electrical connections, the installation of the guide light is performed by our Wassermann Service or one of our licensed specialist companies.

## 2 Safety guidelines

### 2.1 Safety symbols used in this manual



#### **Warning!**

This is a warning of risk situations and dangers.

Failure to observe this warning could be life-threatening. These warnings has to be observed.



#### **Information!**

This symbol draws your attention to specific features that has to be observed.

## 2.2 Safety guidelines

Configuring and operating this equipment requires **precise knowledge** and **observance** of the instructions in this **user manual**. The equipment is designed only for its intended application.



### **WARNING:**

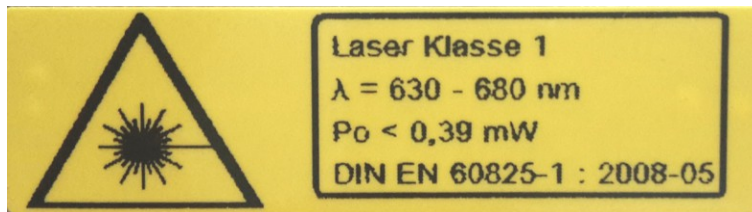
Servicing and repairs should be carried out only by authorised specialists.  
Disconnect the power plug before starting any maintenance work.



Make sure that the equipment is connected to the correct power source.



Laser class 1



- **Please do not point** the laser beam **at people!**  
Even class 1 lasers should not be pointed at people, since the glare may result in accidents.
- Do not look at the direct or reflected beam.
- Manipulations (modifications) to the laser equipment are not permitted.
- This operating manual should be kept carefully and handed over along with the laser equipment.

### 2.3 Responsibility for operation or damage

The responsibility for operating the lamp lies exclusively with the owner or user if said lamp is incorrectly serviced, maintained or altered by persons not employed by an authorised dealer or if the lamp is used in a manner contrary to its specified purpose.

The unit has to be maintained and operated in accordance with this user manual.

Wassermann Dental-Maschinen GmbH is not responsible for damage arising from the **nonobservance** of these instructions.

Warranty and responsibility provisions contained in the sales and supply conditions of Wassermann Dental-Maschinen GmbH are not extended by these instructions.

## 3 Application

An exact line is projected on the grinding platform by the lamp, discreetly without glare or reflections. Exactly coordinated combination of daylight-LED and laser ensure unparalleled sharp contours. The laser beam is precise and not too hard at the same time.

Consequently, it is possible to exactly grind the tuber level of the upper jaw by aligning the Raphe-Median-Line to the ghost line (Fig. 3).

Only use the lamp for this type of application.

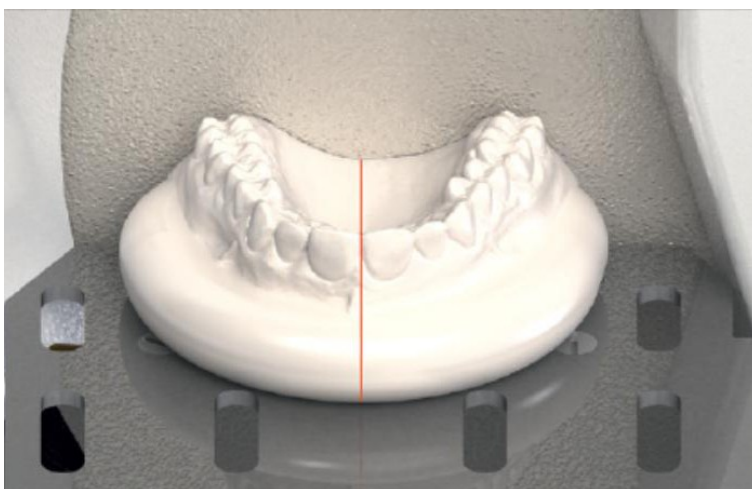



Fig. 3


## 4 Before starting

### 4.1 Transport

Before transporting the lamp, ensure that it has been unplugged from the power socket. Make sure that it is packed correctly in order to avoid accidental damage.

-  Be sure to check for any transport damage when unpacking the goods. Note down any damage if found.


### 4.2 Installation of a trimmer with lamp mounted

-  Never use tray or illumination fitting for lifting out!  
Open the box, remove the packing materials, and carefully lift out the device and accessories. Check the included accessories.

The device has to stand horizontally on a steady and even surface.



Install the device in a place where it will not block the working area and the functionality (take the dimensions into account). When you set up the unit, make sure that the grinding disc is accessible and that the unit is near a sink or close to the plaster separator.

-  Do not install the unit and the lamp outdoors or in places without proper ventilation. Before start-up, be sure the device reaches room temperature.

### 4.3 Storage

The location is very important when it comes to workplace safety, even if it is only to be set up there for a short period. The room should be dry, well ventilated and vibration-free. An even temperature and wooden supports also help.

The lamp should not be stored or set up outdoors.

If the lamp is to be stored for an extended period, protect it from moisture and dust.

## 5 Installation / Start-up



For further information please see the manual of your trimmer HSS-99 or HSS-88.

**Finally**, insert the power plug into the socket, making sure that the mains and the unit with lamp operate on the same voltage.

## 6 Operation

### 6.1 General operating instructions

All instructions for using the unit, whether in verbal or written form, are based on our own experience and experimentation and can only be regarded as guidelines.

### 6.2 Grinding process



The light shines immediately if the trimmer is switched on.



After you switch the trimmer on, wait a few seconds for the motor to come up to speed. Only then can you use its full power. Never push on the models so hard that the motor labours. This could overload it and cause possible damage.

- Mark the Raphe-Median-Line with a pencil and lay the model with the ground base onto the working surface.
- Move it towards the trimmer disc so that the ghost line and the Raphe-Median-Line mark correspond (p. 6, fig. 3).
- When required dorsal limit is reached the grinding process is completed.



### 6.3 Adjustment of the guide light

The user can adjust the guide light himself at any time.

- Remove the 2 recessed head screws (A).
- Remove the cover plate (B).
- Remove the key for the adjustment (C, Item no. 164101).
- This key fits the adjustment ring of the laser guide light exactly, so that the laser diode can now be adjusted by turning the key (Fig. 5).
- Then place the key (C) back in the guide light and fix the cover plate (B) with the 2 screws (A).

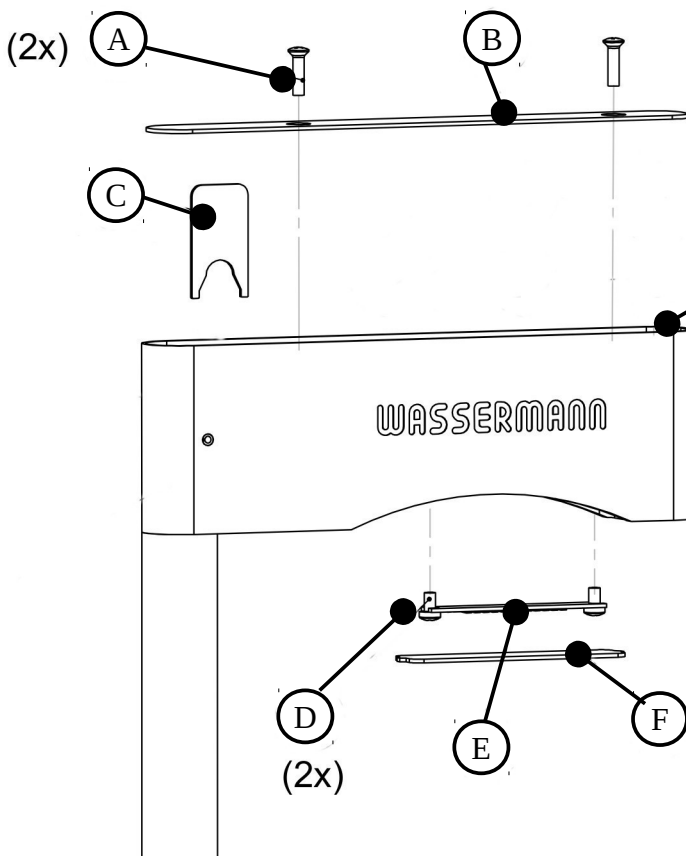


Fig. 4



Fig. 5

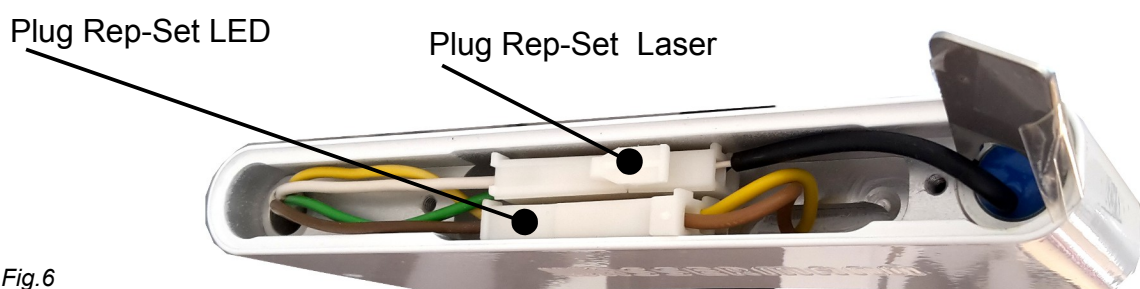


Fig.6

## 7 Troubleshooting

Fault	Cause	Remedy
No Laserlight		Note for service technicians: Please check the power supply voltage (approx. 11.8 V at idle speed).
	Power supply defective	If the power supply voltage at idle speed deviates clearly from 11.8 V, the power supply is probably defective. Please contact our Service hotline 0049 (0)40 / 730 92 6-0
	Laser defective	If the power supply voltage at idle speed is approx. 11.8 V, the laser is probably defective, please see 8.7 Installation of Rep-Set Laser (Item no. 164134)



If the above recommendations do not solve the problem, contact your dental depot or our service department.

## 8 Care and maintenance

### 8.1 Cleaning



Disconnect the power plug before starting any maintenance work.

The identification plate has always to be kept in easily legible condition and has not to be removed.



Remove external dirt from time to time with some form of cold cleaner.

Use only cold cleaners to avoid damaging the paintwork or removing the lettering.

The lamp should be cleaned at regular intervals to ensure trouble-free operation.

It requires only normal cleaning (sponge, damp cloth, mild detergent) and no further chemical additives.

## 8.2 Maintenance

The lamp does not require any servicing. Just make sure that the lamp is kept clean.

## 8.3 Repairs



Servicing or repairs to the lamp has only to be carried out by qualified technicians. Only original spare parts are to be used. Responsibility for the product is voided if unauthorised persons alter it or if inappropriate components are installed.

## 8.4 Spare parts

If necessary please contact our service hotline phone.

## 8.5 Service hotline 0049 (0)40 / 730 926 - 0

## 8.6 Installation of Rep-Set LED (Item no. 164132)

- Open the guide light as described under 2.6 (see P. 9 Fig. 4)
- Press and remove the lamp protection (F) carefully from above, e.g. with the help of a screw driver.
- Now remove both the recessed head screws (D).
- Change Rep-Set LED (Plug, see P. 9 Fig. 6).
- Fix with both recessed head screws (D).
- Press the lamp protection carefully from below till it snaps in again.
- Finally fix the cover plate (B) with the 2 screws (A).

## 8.7 Installation of Rep-Set Laser (Item no. 164134)

- Open the guide light as described under 2.6 (see P. 9 Fig. 4)
- Replace the Rep-Set Laser (Plug, see P. 9 Fig. 6).
- Finally fix the cover plate (B) with the 2 screws (A).

## 8.8 Scope of delivery / Accessories

<b>Included parts</b>	<b>Item no.</b>
Directional lamp laser cpl. HSS-99	164110
Directional lamp laser cpl. HSS-88	168120
<b>Accessories/Spare parts</b>	<b>Item no.</b>
Rep-Set Laser	164134
Rep-Set LED	164132
Key for the adjustment of the lamp	164101

## 8.9 Warranty



The warranty period for our directional lamp laser is 12 months. If faults occur within the warranty period, contact your dental depot or get in touch directly with our service department.

Your lamp should only be operated in perfect condition. If faults occur which could harm operators or third parties, the lamp should not be used until it has been fixed.

This warranty does not cover damage caused by improper use, external mechanical causes, transport damage or interference with the lamp by unauthorized persons.

## 9 Technical data

Directional lamp laser cpl. HSS-99 – Item no. 164110

Directional lamp laser cpl. HSS-88 – Item no. 168120\*

Dimensions (W x H x D) HSS-99 without power pack HSS-88 without power pack, without deposit table*	46 x 311 x 175 mm
Weight	1,33 kg / 2,38 kg*
Voltage	100 – 240 VAC
Output	18 W
Power consumption	~ 0,33 A
Safety class	1

The noise level of the lamp amounts to  $\leq 70$  dB (A).



Technical changes reserved.

## 10 Disposing of the unit

The unit has to be disposed by an authorized recycling operation. The selected company has to be informed of all possibly health-hazardous residues in the unit.

### 10.1 Information on disposal for countries within the EC



To conserve and protect the environment, prevent environmental pollution and improve the recycling of raw materials, the European Commission adopted a directive that requires the manufacturer to accept the return of electrical and electronic units for proper disposal or recycling.

Within the European Union units with this symbol should not therefore be disposed of in unsorted domestic waste.

For more information regarding proper disposal please apply at your local authority.

**11 EC Conformity Certificate**

in accordance with 2006/95/EG (low-voltage guidelines) and 2004/108/EG (EMV guidelines)

Manufacturer:	W A S S E R M A N N Dental-Maschinen GmbH Rudorffweg 15 - 17 D-21031 Hamburg	Product description:	Directional lamp for dental applications
Model:	Directional lamp laser cpl. HSS-99 Directional lamp laser cpl. HSS-88	Item no. 164110 Item no. 168120	
Applicable standards:	DIN EN 61010-1 DIN EN 61000-6-3 DIN EN 61000-6-1 DIN EN 60335-1 DIN EN 60825-1 : 2008-05		

Hiermit wird bestätigt, dass die oben bezeichnete Maschine den genannten EG-Richtlinien entspricht. Diese Erklärung wird ungültig, falls die Maschine ohne unsere Zustimmung verändert wird.

This is to confirm that the above mentioned machine complies with the described EC rules. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur de la Communauté Européenne. Cet avis est nul et non avenant si cette machine est modifiée sans notre accord.

Esta máquina, anteriormente mencionada, cumple con los límites requeridos por el reglamento EC. Ahora bien, esta declaración quedará invalidada en caso de realizar modificaciones al aparato sin nuestra aprobación.

Hiermee wordt bevestigd dat bovengenoemde machine voldoet aan de voorgeschreven EU normen. Deze verklaring verliest geldigheid als er zonder onze uitdrukkelijke toestemming wijzigen aan de machine worden aangebracht.

Place, date: Hamburg, 25.10.2016

Company stamp:



Signature : \_\_\_\_\_  
Wilfried Wassermann  
(Managing Director)

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