

**ORBIT 44-4 VHP/CV**



**DR MULLER/QDM**  
273 Ninth Street, 2nd floor  
San Francisco CA 94103

## LIMITED WARRANTY

Dr Muller/QDM warrants its products to be free from defects in materials and workmanship under intended normal use as described in the unit's Operation and Instruction Manual, for a period of one (1) year from date of sale.

This Limited Warranty applies only to the original purchaser of the equipment through Dr Muller/QDM or its authorized dealer or distributor, and is not transferable. Dr Muller/QDM's obligations under this warranty are limited to repair or replacement of any defective part without charge for that part to the original purchaser, with the following exceptions:

- Only parts obtained through Dr Muller/QDM, its authorized dealers or distributors may be used. Transportation costs for parts shipped to the consumer and the return of defective parts to Dr Muller/QDM are not included.
- Labor will be furnished without charge for ninety (90) days from the date of purchase only. All labor and related charges must be authorized by Dr Muller/QDM prior to start of repairs, and must coincide with Dr Muller/QDM's established rates and time allotment policy.
- Acrylics, lamps and facial bulbs are excluded from guarantee.

It is imperative that the original customer completes and returns the enclosed warranty information within 10 days after purchase to insure valid registration and coverage for potential claims.

If the warranty form is not registered, proof of purchase from Dr Muller/QDM or its authorized dealer or distributor will be required prior to any consideration on warranty claims. This could result in service delays.

This warranty is extended to the individual or legal entity, whose name appears on the warranty registration form filed with Dr Muller/QDM or whose name appears on the original sale document and may not be transferred to any other individual or legal entity.

This warranty does not apply to any failure of the product, or any parts of the product due to alterations, modifications, misuse, abuse, accident, improper maintenance, improper installation or if the serial number of the product has been removed, altered, or defaced. Adequate packaging must be used for returned goods to prevent freight damage.

This warranty is expressly in lieu of all other warranties, expressed or implied, including the warranties of merchantability and fitness. No person, firm or corporation is authorized to obligate Dr Muller/QDM for any connection with the sale or use of these goods.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

PLEASE,  
PROVIDE THE REQUESTED WARRANTY INFORMATION  
BELOW AND MAIL OR FAX THIS FORM TO:

**DR MULLER/QDM**  
273 Ninth Street, 2nd floor  
San Francisco CA 94 103  
Phone: 415 575 3200  
FAX: 415 575 3605

(PLEASE, WRITE OR TYPE CLEARLY IN BLACK INK)

OWNER's NAME: .....

SALON NAME: .....

STREET: .....

CITY: .....

STATE & ZIP: .....

TELEPHONE/FAX: .....

PURCHASED FROM: .....

DATE OF PURCHASE: .....

MODEL NUMBER: .....

SERIAL NUMBER: .....

"I certify that I have been briefed on the use of this Dr Müller  
Tanning Systems in regards to its operation, maintenance and  
consumer use."

.....  
(Company Name)

.....  
(Authorized signature owner/operator)

.....  
(Date)

This product conforms to the amended performance standard for sunlamp products under 21 CFR 1040.20 effective September 8, 1986.

CAUTION: High Voltage!  
Unplug from power supply  
before attempting to service.

TUBES AND LAMPS MAY NOT BE SUBSTITUTED  
EXCEPT AS RECOMMENDED BY THE MANUFACTURER.  
DO NOT REMOVE THIS LABEL!

Quarzlampenfabrik Dr. Müller GmbH  
Ruhlastrasse 93 · D-45239 Essen

Made in Germany

Orbit 44 - 4

△ 3 x 230 Volt, 40 Amps, 60 Cs  
19 COSMOLUX CA1-12-VHO 160 W tubes  
25 COSMOLUX NA 1-15 VHR 140W tubes  
4 DR. M 1000 US HID-lamps

Manufactured ..... Serial Number .....  
TUBES AND LAMPS MAY NOT BE SUBSTITUTED  
EXCEPT AS RECOMMENDED BY THE MANUFACTURER.  
DO NOT REMOVE THIS LABEL!

CERTIFIED ONLY TO THE  
CANADIAN ELECTRICAL  
CODE

DR. MÜLLER · D-45239 ESSEN  
VOLTS 240 · Δ-3-Phases · AMPS 40 · Hz 50  
MODEL Orbit 44-4

CERTIFIÉ EN VERTU DU  
CODE CANADIEN DE  
L'ÉLECTRICITÉ  
SEULEMENT

SERIAL .....  
MANUFACTURED .....





**• DANGER - Ultraviolet radiation. Follow instructions. Avoid overexposure.**

As with natural sunlight, overexposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause premature aging of the skin and skin cancer. **WEAR PROTECTIVE EYEWEAR; FAILURE TO MAY RESULT IN SEVERE BURNS OR LONG-TERM INJURY TO THE EYES.**

Medications or cosmetics may increase your sensitivity to the ultraviolet radiation. Consult physician before using sunlamp if you are using medications or have a history of skin problems or believe yourself especially sensitive to sunlight. If you do not tan in the sun, you are unlikely to tan from the use of this product.

1. This ORIGINAL DR. MÜLLER SOLARIUM has been equipped with

COSMOLUX NA 1-15 VHR tubes, 140W  
 COSMOLUX CA 1-12 VHO tubes, 160W  
 DR M 1000 US HID facial lamps

Tubes and lamps may not be substituted except as recommended by the manufacturer. **DO NOT REMOVE THIS LABEL.**

2. User must wear protective eyewear at all times. For replacement eyewear call your local distributor. Recommended eyewear is Georg Schmeier Type 2255.

3. For safety and best results do not position yourself closer than 6" (approx. 15 cm) to the tanning surface. The length of your hand is a good rule. Any other position may result in overexposure.

**RECOMMENDED EXPOSURE SCHEDULE**

SKIN TYPE	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEKLY MAINTENANCE SESSIONS
I = Fair	1 - 3	4 - 6	7 - 10	11 - 15	10 min.
II = Medium	2 min.	4 min.	6 min.	10 min.	10 min.
III = Dark	2 min.	4 min.	6 min.	10 min.	10 min.
IV = Dark	3 min.	5 min.	8 min.	12 min.	10 min.

First six sessions to be at 48 hour intervals; tan maintenance: 1 - 2 times weekly at week 4 dosage.

SKIN TYPES

SKIN TYPE I: Light skin type with very little or no pigments, will not tan, like with natural sunlight  
 We do not recommend any exposure to UV-A irradiation.

SKIN TYPE II: Light skin type with some pigments. We recommend the exposure schedule cited below.

SKIN TYPE III: Medium coloured skin or skin normally pigmented.

SKIN TYPE IV: Dark skin type or highly pigmented skin type.

Although the erythema threshold for skin type III and IV is considerably higher than for skin type II we recommend to base exposure times for skin type III and IV on the recommended exposure schedule for skin type II.

RECOMMENDED EXPOSURE SCHEDULE FOR SKIN TYPE II = LIGHT SKIN TYPE WITH SOME PIGMENTS

Recommended exposure time at the beginning:	2 minutes	3 sessions a week
Recommended exposure time after 3 sessions:	4 minutes	3 sessions a week
Maximum recommended exposure time	10 minutes	
Recommended number of sessions to obtain a tan:		7 - 10 sessions
Recommended intervals to obtain a tan:		2 days
Recommended number of sessions to maintain a tan:	10 minutes	1 - 2 sessions a week



## TANNING RULES

- Each user should strictly observe the EXPOSURE SCHEDULE listed on the tanning unit.
- Make sure that the tanning unit is equipped with a TIMER . The maximum time interval on the timer may not exceed the maximum recommended exposure time indicated on your tanning unit.
- USE PROTECTIVE EYEWEAR! Wear eye goggles or other UV-blocking eye protection. As with natural sunlight overexposure can cause eye injury.
- Beware of any photosensitive medication or cosmetics applied to the skin before and while tanning. It may increase your sensitivity to UV-light. In case of doubt, consult your physician.
- Take a series of controlled tanning sessions! The cumulative effect of multiple sessions will produce increased stimulation of pigment forming cells and leads to a long lasting and rich tan which protects better against sunburn.
- For those people who decide to tan "au naturel" make sure to remember those areas of your body which are normally not exposed to sunlight and are more sensitive to ultraviolet light. Generally clothed areas such as chest or buttocks, for instance, react more sensitively than the face or arms.  
THEREFORE, TAN CAREFULLY!
- Keep in mind, that in spring, after the lack of sunlight in winter, your skin reacts much more sensitively to ultraviolet light than, say in autumn.
- Remember, a tan normally lasts up to almost 4 weeks. After an intensive series of tanning sessions or an extensive holiday in the sun, take a rest period of some weeks before working on the maintenance of your tan.

USER INSTRUCTIONS

This sunbed produces UV-A radiation similar to that produced by the sun, however, in a much stronger and more concentrated form. The amount of UV-B radiation has been reduced to a minimum.

For this reason it is recommended that the maximum exposure time listed on the User Label should not be exceeded for someone with a light skin type with some pigments (= skin type II).

PLEASE USE INDICATED EXPOSURE SCHEDULE TO DETERMINE INITIAL EXPOSURE TIMES ACCORDING TO YOUR SKIN TYPE!

This sunbed will produce much the same results as experienced while tanning in the natural sun. People who are not likely to tan in the sun will also not get a tan from the use of this product.

Using the sunbed sensibly should prevent sunburn and other types of skin damage. The dangerous UV-B component of the UV-spectrum has been greatly reduced. THERE IS NO UV-C COMPONENT PRESENT.

The individual limit is reached if a few hours after the use of this product the skin turns slightly red or feels a little tight (erythema threshold).

NOTE: THIS ERYTHEMA THRESHOLD SHOULD NOT BE EXCEEDED!

At all times use the indicated exposure schedule to determine maximum exposure time and be aware that non-tanned portions of the body should be considered when selecting the proper exposure schedule.

The best distance to the tanning surface is about 6" (15 cm). The length of your hand is a good rule of thumb for this distance.

The sunbed is equipped with one set of protective eyewear.

ONLY ONE PERSON MAY USE THE SUNBED AT ONE TIME!

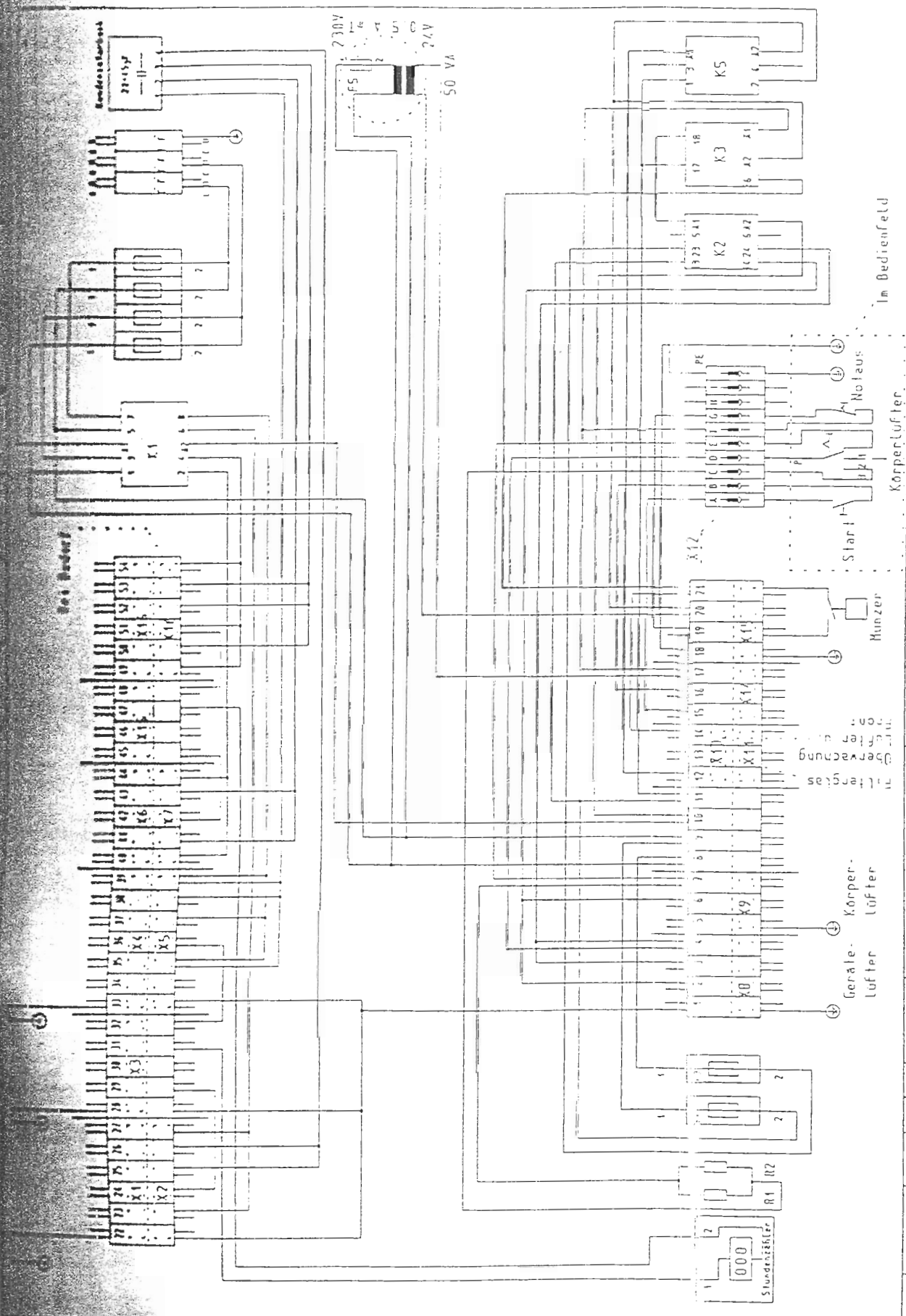




<b>Type:</b>	<i>Orbit 44-4 CV</i>
<b>Connection:</b>	<i>3-phase, <math>\Delta</math>3 x 230V/60Cs</i>
<b>Wattage:</b>	<i>approx. 11,000</i>
<b>Amperage:</b>	<i>40 amps</i>
<b>Height:</b>	<i><del>145</del> cm (approx. 57")</i>
<b>Breadth:</b>	<i>218 cm (approx. 87")</i>
<b>Depth:</b>	<i>133 cm (approx. 53")</i>
<b>Lamp specs:</b>	
<b>Top:</b>	<i>25 Cosmolux W/HR NA 1-15 lamps</i>
<b>Sunbed:</b>	<i>19 Cosmolux GA 1-12 VHO lamps</i>
<b>Facials:</b>	<i>4 x Dr M 1000 US</i>

**Note:** *An all-pole ground fault circuit breaker (FI protective switch) has to be provided at the site!*





**Steuerung**

Orbit (alle USA-Typen) Dr. Müller

Schutz K1	17.8.95	Str.	13.08.1995	Orbit	Blatt 7	8
Arbeitsweg	Delux	Norm	Norm	Essen Verdrn	Blatt 7	8
Arbeitsweg	Delux	Norm	Norm	Essen Verdrn	Blatt 7	8
Arbeitsweg	Delux	Norm	Norm	Essen Verdrn	Blatt 7	8
Arbeitsweg	Delux	Norm	Norm	Essen Verdrn	Blatt 7	8

Original  
 100%

(ISSUED 08/95 ; TECHNICAL CHANGES RESERVED)

QUARZLAMPENFABRIK DR MÜLLER GMBH & CO KG  
RUHRALSTRASSE 93  
D-45239 ESSEN

**O R B I T**

VHP™ Sun-tanning Equipment

ORIGINAL DR MÜLLER

Service and Assembly Instructions







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### Some General Remarks

UV-radiation produced by *Original Dr Müller VHP* sunbeds does not differ from the radiation produced by the natural sun since the effective spectral range is one and the same.

However, the intensity of artificial sunrays as produced by *Original Dr Müller* equipment is not diminished by air pollution, the sun's varying altitude (during winter, for instance), or a cloudy sky and similar accidental factors. On the other hand, the aggressiveness of UV-radiation is not increased by environmental risks such as ozone depletion or other coincidences which increase the intensity of UV-radiation (sea, mountains).

Though you should not expect *Original Dr Müller* sunbeds to outperform the natural sun there are three exceptions which give the preference to man-made sunlight. The artificial Dr Müller sun shines

- at your request (independent of weather and time of day)
- as long as necessary
- more intensive than the natural sun

Exposure to *Original Dr Müller* equipment can produce the same effects as tanning in the natural sun but - if used correctly - without the risk of a sunburn.

Please, read this manual carefully before operating the device and keep it in your files for further reference.



Please, observe the following instructions before first operating the unit:

This solarium may only be operated according to the currently effective VDE/EVU/TÜV standards - or equivalent national electrical standards at the place of destination.

Use this sunbed only in combination with a timer.

Do not tan in case of defective filter glasses (blue and/or clear filter glasses)

Do not expose this unit to humidity. Do not operate this unit near explosives.

Do not jam or cover air outlets or cooling and exhaust air system.

Do not operate this unit in case liquids or any solid materials should accidentally have got into the machine.

Do not expose materials/fabrics which may fade or get damaged by UV-light to radiation produced by this machine.

Please observe the following safety instructions prior to first exposure:

UV-light may cause severe damage to skin and eyes.

In case of skin diseases, symptoms of illness or indefinite complaints, in case of medication, especially those which may increase your sensitivity to light, consult your physician before first using a sunbed.

Avoid overexposure. Do not exceed recommended exposure times. In case of overexposure, or if skin feels irritated and blisters, consult a physician immediately.

Wear protective eye goggles. Remove contact lenses.

Apply no sun-shields.

Tan no more than once a day. Observe pauses between a series of tanning sessions.

Children should not use this unit at all. If they do, they should be supervised by an adult person and exposure times should be considerably reduced.



Skin Types

Exposure time according to skin type:

The world population is divided into six different skin types. Below, you'll find an exposure time for skin types I-IV which are the most prominent ones in the Western-European part of the world. For detailed exposure schedules according to specific national regulations (i.e. USA) please see separate enclosure.

Persons with skin type I (extremely sensitive to light) may eventually use this device. We strongly recommend, however, that the individual exposure schedule should be worked out by an experienced dermatologist.

HAUTTYPENTABELLE + BESONNUNGSPROGRAMM		für Original Dr. Müller		Wasser CC - 80W/100W Niederdruckstrahlen		
Hauttyp	Typenbeschreibung	Typenbezeichnung	Hautfarbe	Reaktionen auf die Sonne	Eigenschutzzeit in der Sonne	
					1. Woche	2. Woche
I	Haut auffallend hell Sommerprossen: stark Haare: rotlich Augen: blau	Keltischer Typ (2%)	hell	immer	keine	5 - 10 Minuten
II	Haut etwas dunkler als I Sommerprossen: selten Haare: blond bis braun Augen: blau, grün, grau	Europäer (12%)	hell	immer	kaum	10 - 20 Minuten
III	Haut hell bis hellbraun Sommerprossen: keine Haare: dunkelblond, braun Augen: grau, braun	Europäer (78%)	dunkel	häufiger	seltener	20 - 30 Minuten
IV	Haut: hellbraun, oliv Sommerprossen: keine Haare: dunkelbraun Augen: braun	mittelmeerescher Typ (8%)	mittel	kaum	schnell und viel	40 Minuten

Die Bestrahlungen in 40-Stunden-Abständen vornehmen

Wasser CC - 80W/100W Niederdruckstrahlen

Wasser CC - 140W/100W Niederdruckstrahlen

Wasser CC - 140W/100W Niederdruckstrahlen

→ All exposure times are based on original tubes and lamps as provided by the manufacturer. Use of different lamps may lead to different exposure times. Therefore, for replacement, use only lamps of the same type as originally provided. Using lamps of the same type ensures that safety standards are maintained and that the sunbed works at maximum performance. →



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## The right Dosage

Persons with very delicate skin should observe a minimum interval of 72 hours between first tanning sessions.

In order to build up a tan ( and in order to enable the skin to increase its own sun shield for an extended exposure to the natural sun) it is recommended to tan twice a week during the first two weeks, then three times per week according to the recommended exposure schedule.

You will receive the best results by tanning slowly, gradually increasing exposure times and by avoiding overexposure.

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→ The individual erythema threshold is reached, if several hours after tanning your skin gets red or feels tight and irritated. Exposures should always be kept just below your individual erythema threshold. In case of doubt, reduce exposure times. ←

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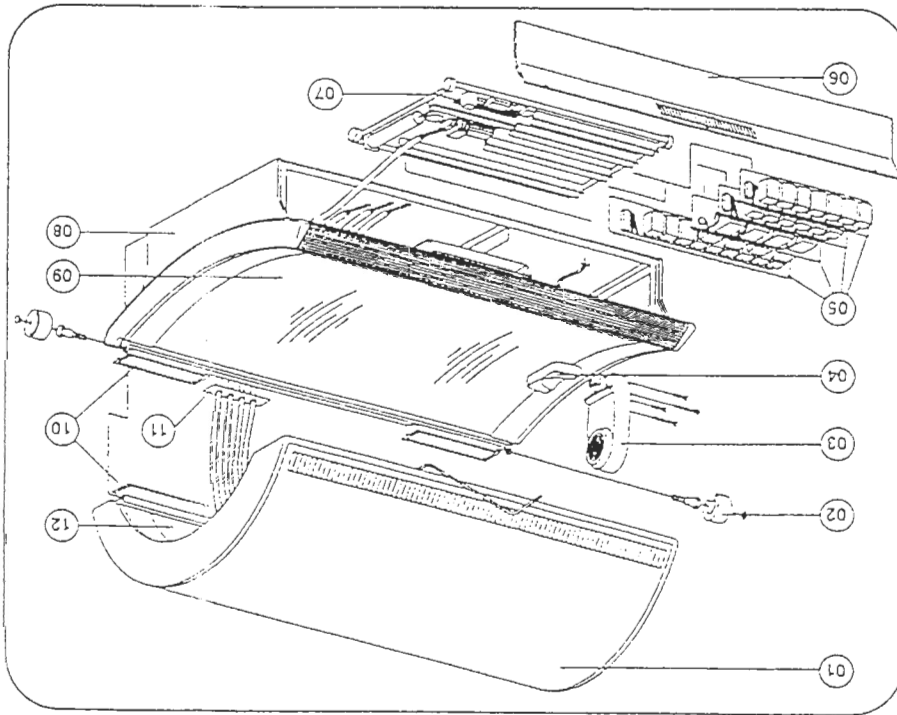
To obtain a gentle and healthy tan and in order to avoid eventual skin damages, observe the following general rule:

Do not take more than 50 tanning sessions per year - exposures in the natural sun included.

A tanning session an *Original Dr Müller VHP* sunbed equals a 3-hours stay in the natural sun in our latitudes - during summer - under a cloudless sky - at noon.

→ Assembly and repair work should only be performed by qualified electricians. Do not operate this unit in rooms exposed to humidity. Avoid contact with liquids or splash-water. During assembly and repair work always take care that all poles are disconnected from the electrical supply system. Ambient temperature should not exceed 30° Celsius. Higher ambient temperatures may increase the temperature of the acrylics and consequently diminish your clients' comfort. Note: Check whether e.l.c.b. (F.I. Circuit breaker) works properly prior to first operating the unit after repair work. Perform additional check in regular intervals. ←

- (01) Top structure
- (02) Endcaps for hinges
- (03) Body cooling Fan
- (04) Pillow
- (05) Ballasts
- (06) Front Cover Plate
- (07) Ballast Tray
- (08) Sunbed/bottom structure
- (09) Acrylic for sunbed
- (10) Air ducts (2 parts, right and left)
- (11) Cable fittings w/plate
- (12) Acrylic for top structure

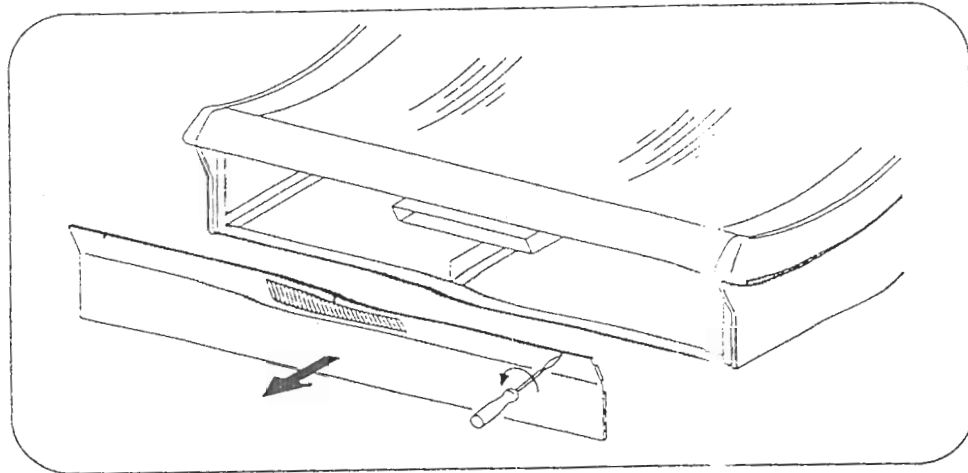


## The sunbed - bottom structure

... move the sunbed to the place of installation. To ensure that the unit works without fault, take care that it is placed in a perfect level position. If the ground is uneven, try to out-balance the bias by adjusting the screws at the base.

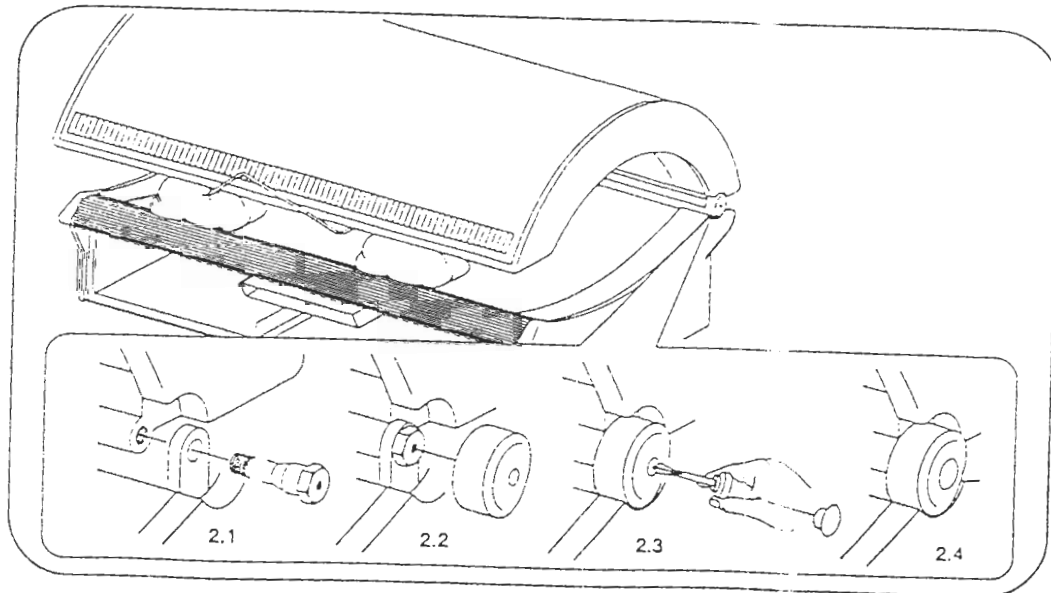
## The front cover plate

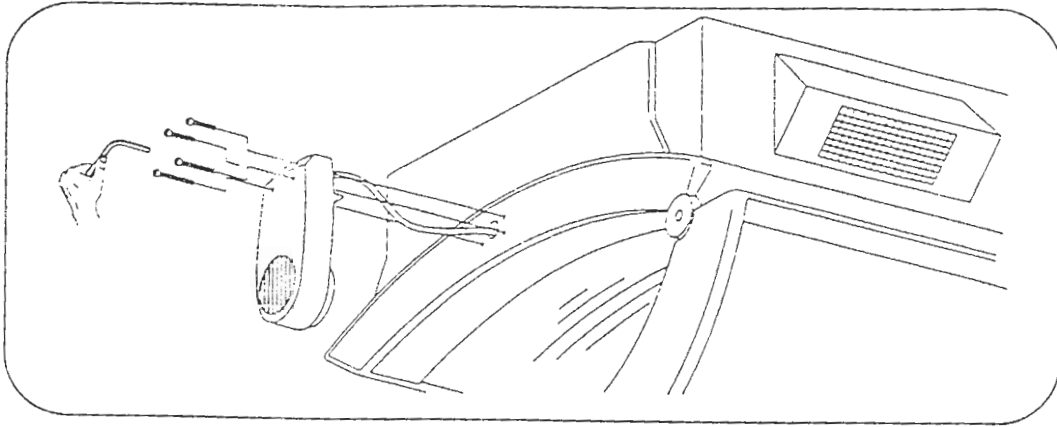
... loosen quick connections and remove front cover plate (fig. 1)



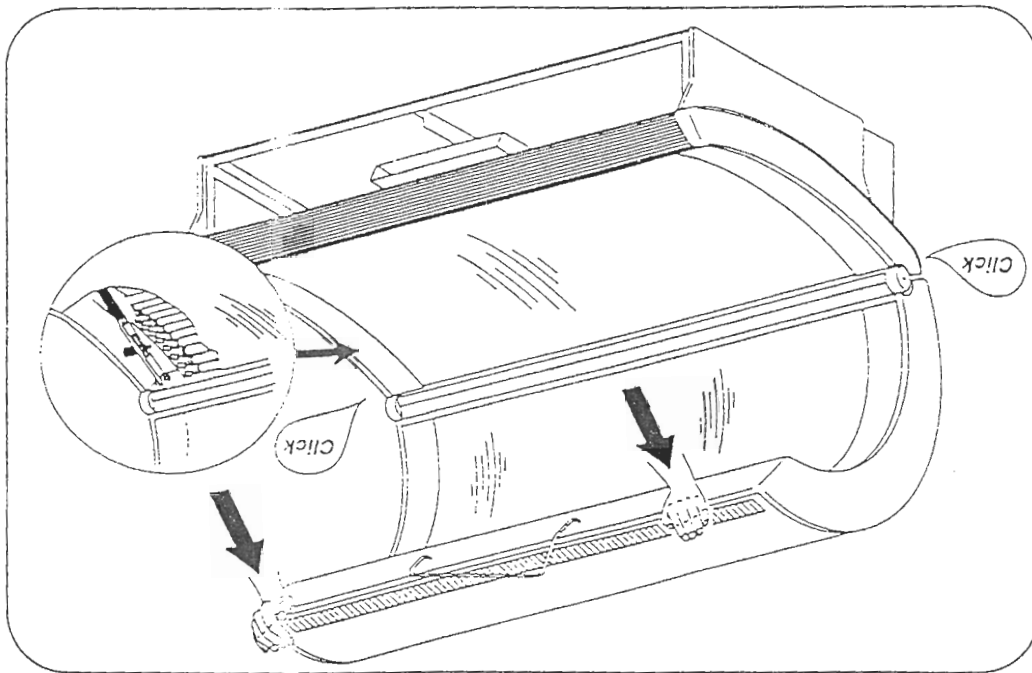
## The top structure

... Put some soft padding material on the sunbed to prevent eventual scratches or damages. Then put the top carefully onto the sunbed. Connect the top to the sunbed with the joint bolts (fig. 5.2.1). Put the caps on the hinges (fig. 2.2 and 2.3) and cover threadholes with plastic plugs.





The Body Cooling Fan  
 ... Assembly fittings for the body fan are provided at the right (head) side of the sunbed. Put the conductor cable through the cable inlet provided in the sunbed encap. Fasten screws and cover holes with white plastic plugs. Take care that the cable does not get entangled with the spring or runs over electrical components (heat). Use long and short screws as shown in the picture below.



→ Make sure that the brackets on both sides are well locked. ← To make sure, look through the air ducts.

The Top  
 ... Lift the top until you can hear that the brackets have snapped into place (fig. 3).

Assembly





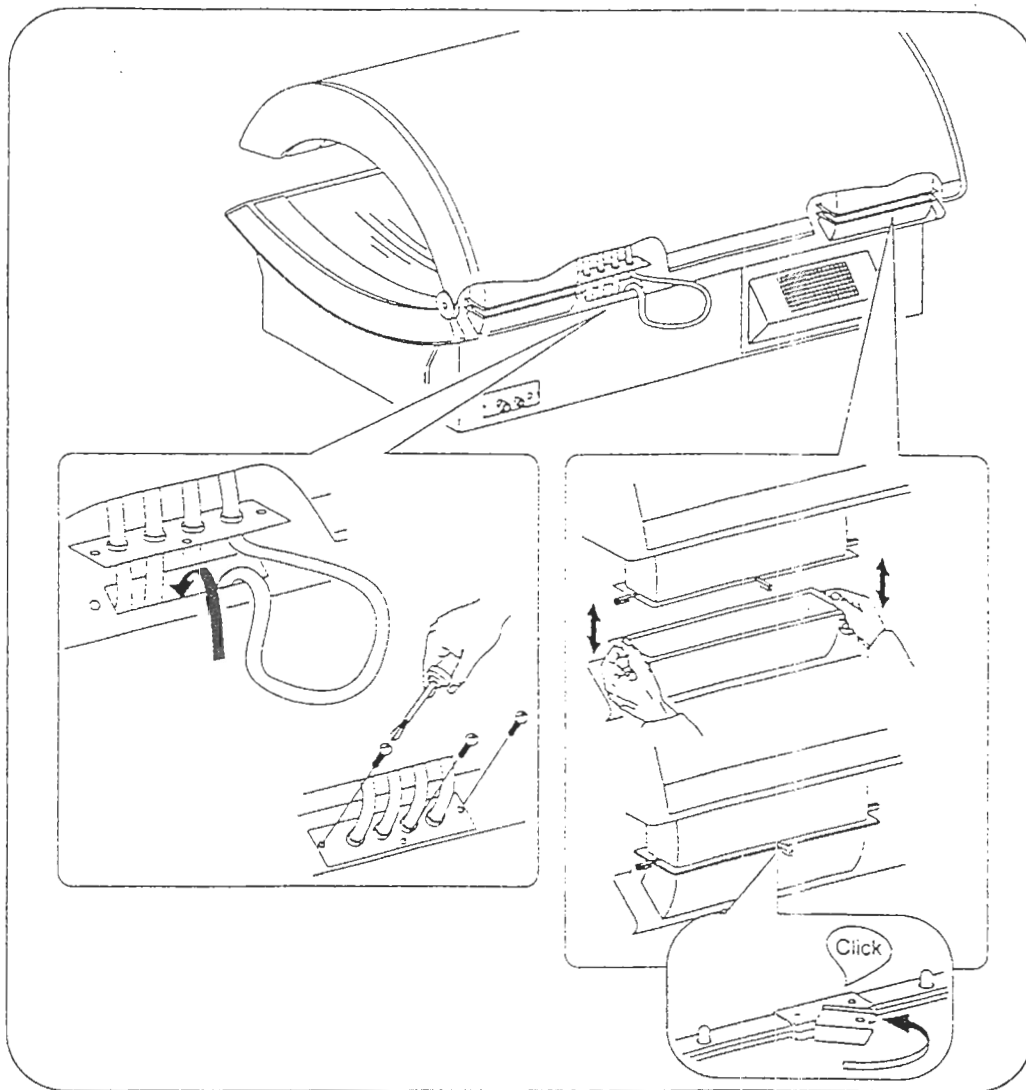
## The right connections

### The air ducts

... connect the air ducts ( of top and sunbed) and fasten with metal clips (fig. 5.2)

### The cables

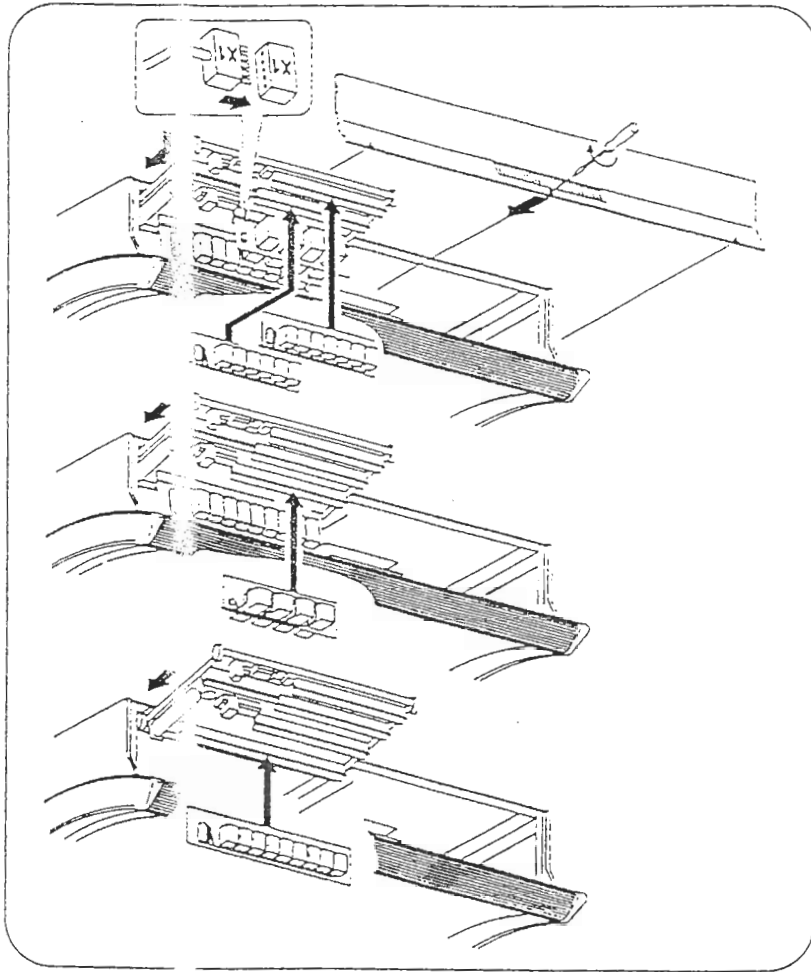
... put the cables from the top through the cable entry fitting provided at the sunbed. Fasten plate (fig. 5.1)





### The right Connections

The ballast tray ... is set with the two back wheels onto the rails provided at the base. Pull mains supply and control cable through the threaded joint at the rear and put them unto the ballast box close to the terminals. Push the ballast tray slowly forward, plug in the pre-assembled ballast modules and fasten. Connect ballast plugs to corresponding terminals, i. e. X 1 from ballast to X 1 on terminal (see fig. below).  
The Front cover Plate ... Set in the front cover plate and secure. Make sure that it fits exactly into place, else a built-in safety switch automatically prevents operation and the machine does not turn on.



The Solarium is now completely assembled and can be connected to the mains supply.

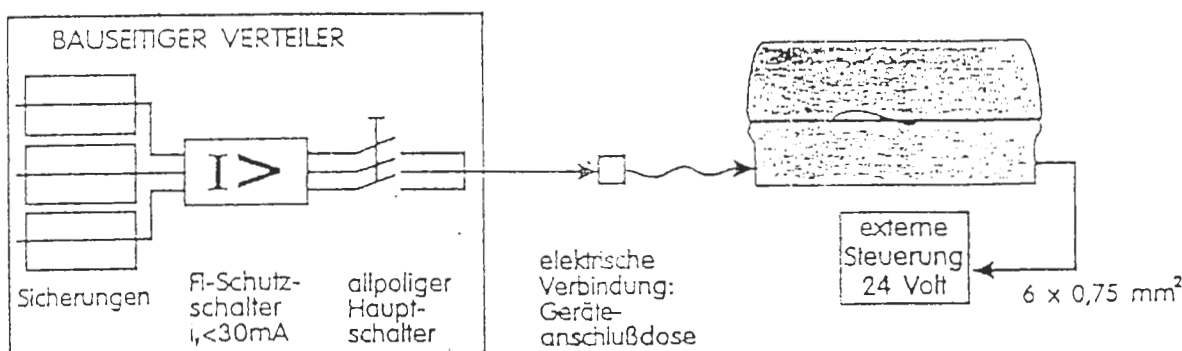


## Permanent Electrical Installation

### Before installing the machine

... you should verify that the electrical data on the type label correspond with the requirements of the local electrical supply system. The type label is located at the rear side of the sunbed, next to the cable inlets. An identical type label is located on the ballast tray.

For the specific electrical data of the version you are going to install, please refer to the corresponding data sheet provided with this manual.



→ Electrical installation to the mains supply may only be performed by a qualified electrician according to valid DIN/VDE standards or - for export units - similar national electrical standards

An all-pole circuit breaker has to be provided at the site of installation. For details see separate data sheet.

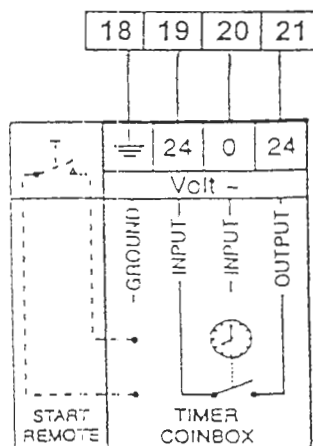
Use only one FI-circuit breaker per machine.

Take care the cables don't get jammed or buckled or run over electrical components. ←

### The Control Voltage

... as a standard this unit is equipped with 24V control; optional 230V.

The machine starts when terminal 19 and terminal 21 on the ballast box are connected (see fig. on the right)



→ Sun-tanning units should only be used in connection with a timer. The maximum timer interval should not exceed the maximum recommended exposure time. The maximum recommended exposure time is subject to lamp-type and quantity of lamps installed in the sunbed. ←



## Easy Operation

The control panel

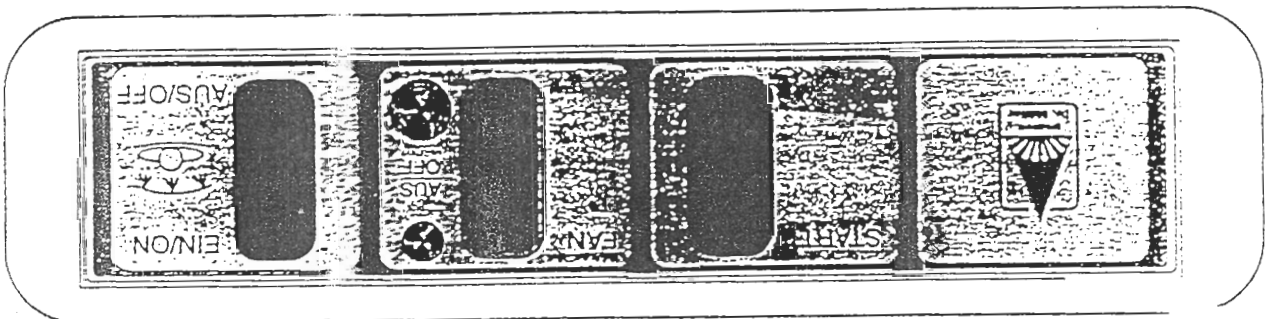
... is built into the top and easily accessible. It has the following functions:

The first button "Start" starts the machine immediately if the unit is connected to a control system with remote start function (see page 12, fig. 8). Depending on the type of control system you use, the start button may become redundant.

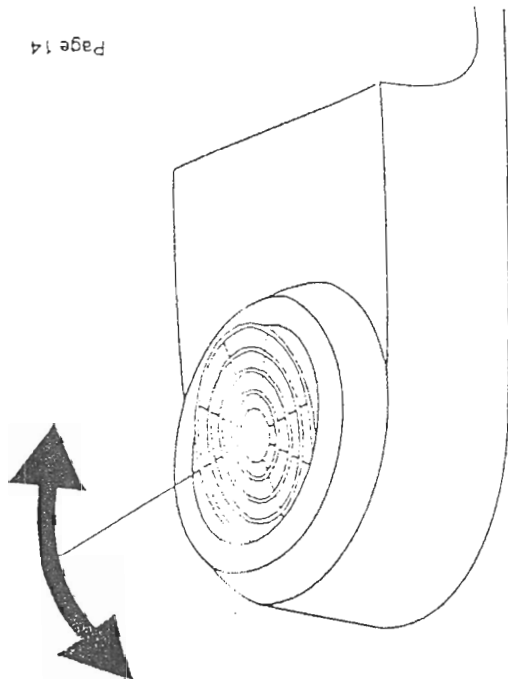
The second button "Fan" serves to adjust the body cooling fan. Choose between a more vigorous (big fan symbol) or more gentle (small fan symbol) cooling. Move the button into the medium position to switch off the fan completely.

The third button is without a function. As an optional version it serves to switch off the HID-facials during a tanning session. After approx. 3 minutes (after cooling time) the facials may be started again.

Another optional control button which is obligatory in some countries, is the EMERGENCY STOP BUTTON - a big red button at the right hand side of the control panel. Pushing this button allows the client to turn off the machine immediately at any time during a tanning session. The machine can only be started again if the emergency stop button is unlocked again.



The body fan is installed at the head-end of the sunbed and may be controlled with the fan button. In addition, the fan may be individually adjusted by changing the position of the air vents (up-or-downward).



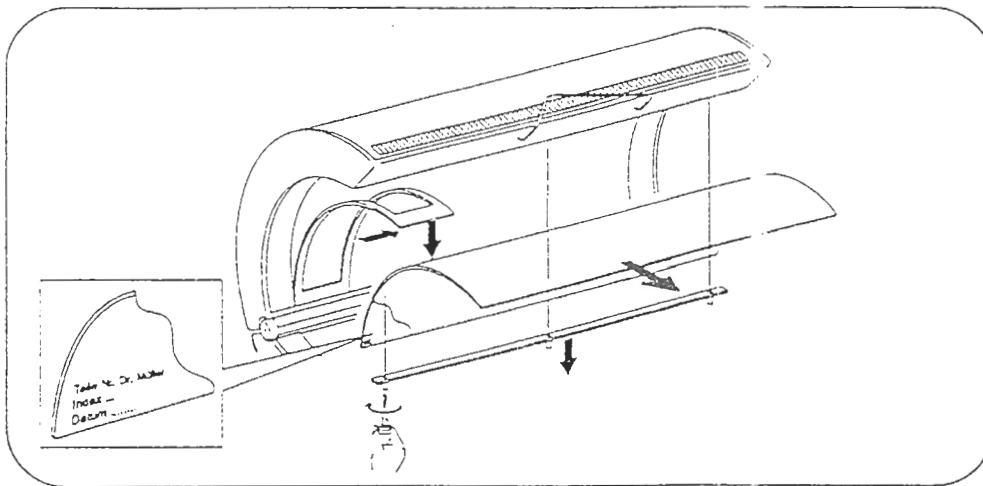
### The Acrylics

... should be kept clean and without scratches. Residues of cosmetics may burn in and have an adverse effect on the efficiency of the UV-radiation.

#### Top acrylic

... is disassembled by loosening the quick connections of the front plastic strip. Remove the strip and take plexi carefully out of the guide rail at the rear.

When installing the acrylic again, take care that the imprint with the article number is always at the lower left side (head-end) of the top.



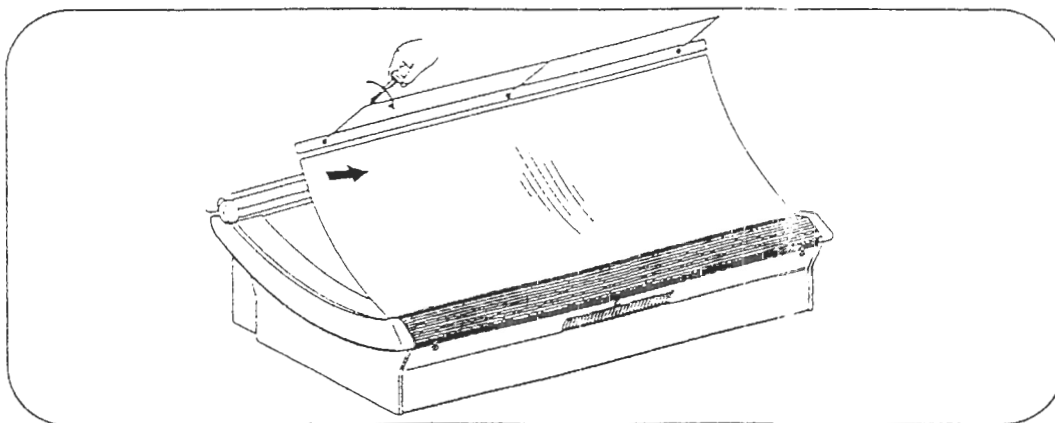
#### Sunbed Acrylic

... is disassembled by taking off the plastic strip at the rear (loose quick connections). Lift the acrylic carefully and pull it out off the front guide bar.

The acrylics should only be cleaned with a special liquid which may be ordered from the supplier. Never use abrasive cleaners or liquids which contain alcohol.

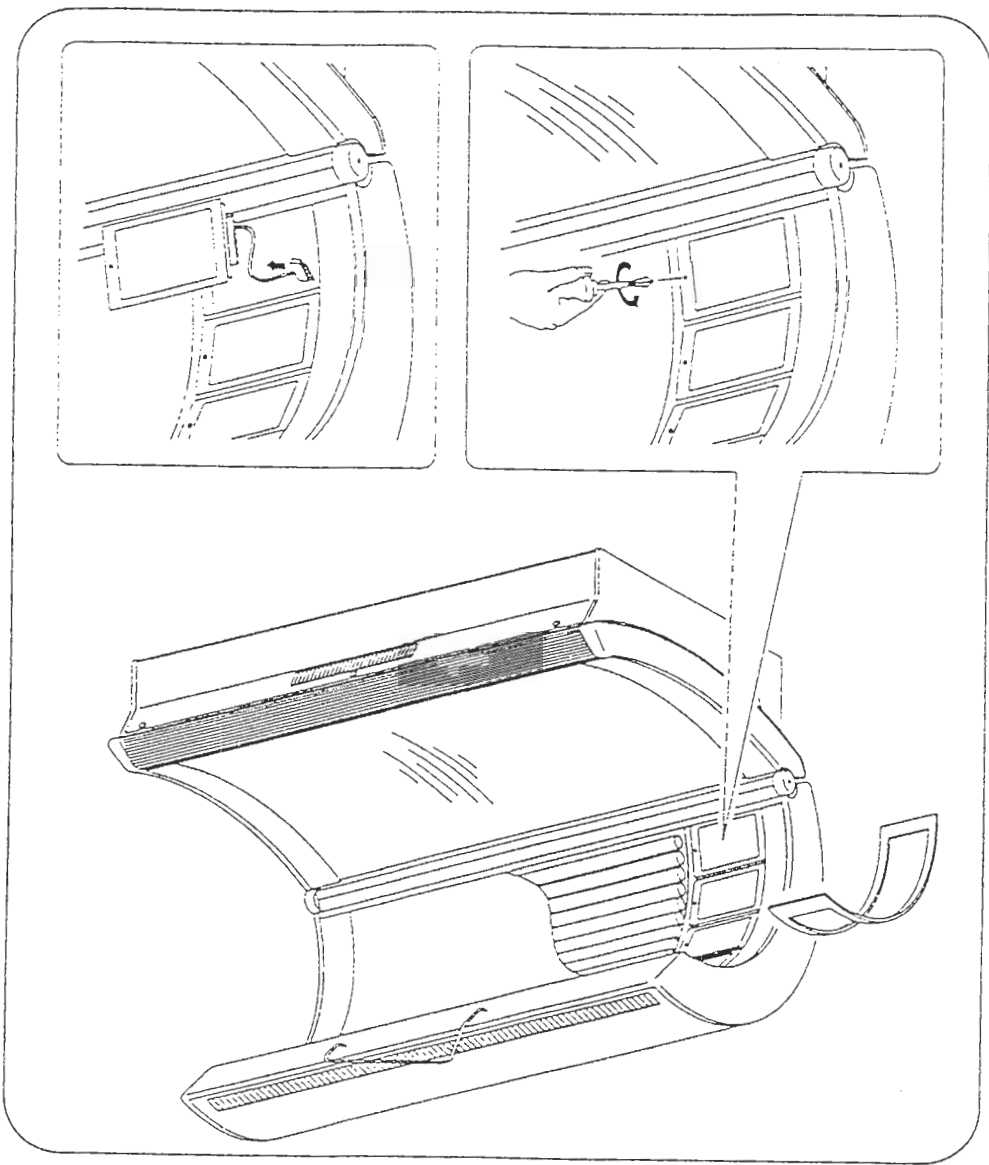
→ Take care that no liquids get into the machine. If this should happen, however, the machine has to be disconnected from the mains supply (all-poles). Don't start machine again before all liquids have been completely removed. Do not operate this machine without filters (blue and/or clear filters). ←

Replacement acrylics are available from your distributor.



The HID-quartz lights ... installed in the top ensure intensive tanning in the face and neck area. For maintenance/replacement of the quartz lights remove the top acrylic (see page 15) as well as the black mask behind the acrylic. Each cassette may now be removed separately. For this purpose loosen the quick connection and tilt the cassette downwards until you can see the terminal plug. After disconnecting the terminal plug, remove the cassettes completely. Don't let them hang down from the top!

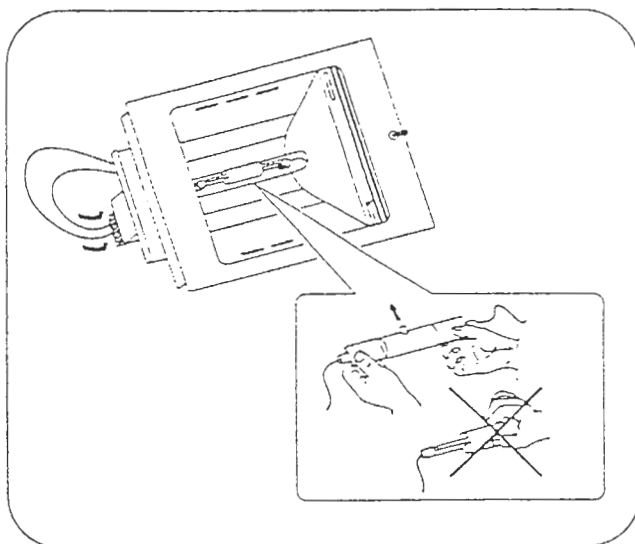
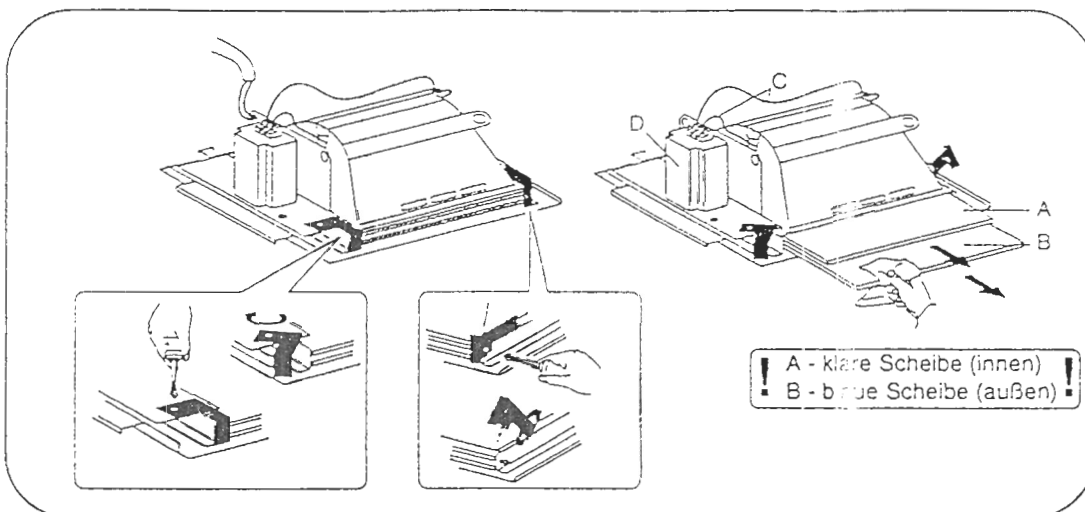
**Important Highlights**



## Important Highlights

### The Filters

... the filters are fixed by two metal angles. After loosening the screws, these angles may be turned sideways and the filters (A= clear filter; B= blue filter) may be removed. Use a soft cloth to prevent finger prints. Then loose connections (C) at the ignitors (D). The quartz light can now be removed by carefully pulling it out of the lampholder. When re-assembling, remember to put in the clear filter first (A = clear filter = inward side) and then the blue filter (B = blue filter = outward side)



### The Quartz light

...may only be replaced by a lamp of the same type. Only use Original Dr. Müller lamps. Don't touch the lamp with bare fingers (fig. 16.1). In case this has happened, clean lamp with pure alcohol. The HID lamp has to be installed in such a way that the glass nipple is turned inward. After cleaning the reflectors and the filters the cassette may be re-assembled in reverse order.

→ Test runs should only be performed after the top acrylic has been set in - if this is not the case the unit may get overheated.  
Do not look directly into the lights - if necessary (e.g. for testing purposes) only for a very short term and never without goggles. ←

The low-pressure lamps  
The special emission range of the low-pressure lamps used in Original Dr Müller  
sunbeds is specifically adjusted for tanning purposes.

Slight differences in colour or black ends are no material defects but result from  
physical processes which do not diminish the tanning efficiency of the lamp.

For replacement only use low-pressure lamps of the same type. Use of different  
lamp types may result in different exposure times. In case of non-compliant ( other  
than supplied or recommended by the manufacturer) lamps, there is no guarantee  
for eventual damages. Compliant replacement lamps may be ordered from the  
manufacturer or authorized distributors.

**Replacement**  
... for replacing the low-pressure tubes remove the acrylics (see page 15). The tubes  
can be removed - one by one - by slightly turning them in their bases until you can  
see the contact pins. In this position the tubes can be easily lifted out of their holds.  
Set in the new tubes and fix them by turning them 90°.

**The Starters**  
... The starters are located at the lamp base. Each lamp has a starter which may be  
removed by turning it 90° to the left.

**The Reflectors**  
... the reflectors should be cleaned regularly. Use mild detergent cleaner like glass  
cleaner. Never use abrasive cleaners.

For disposal of old low-pressure tubes please adhere to special national or regional  
regulations - as applicable.

→ During maintenance work - i. e. cleaning or replacement of filters, acrylics,  
tubes - the unit has to be completely disconnected from the electrical supply  
system!

Do not operate the machine again without cassettes and filters, acrylics and  
front plate properly in place!

All maintenance work should be performed by qualified personnel only. →

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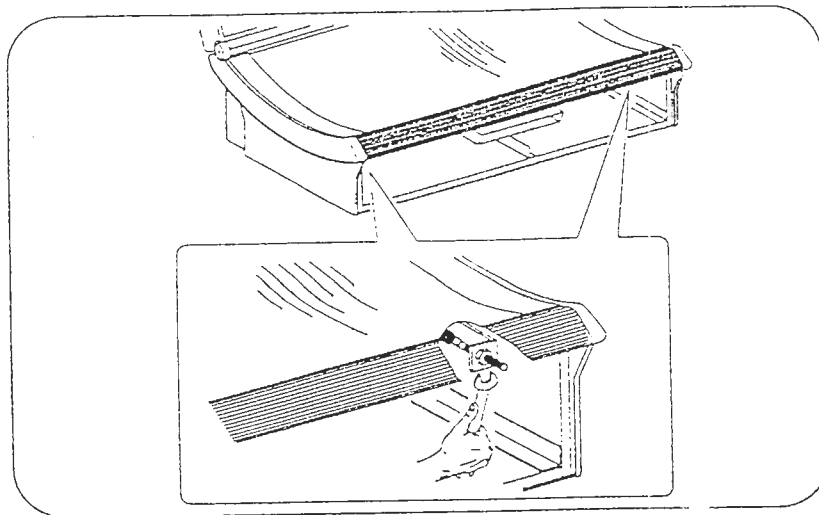
### Lamp Configuration





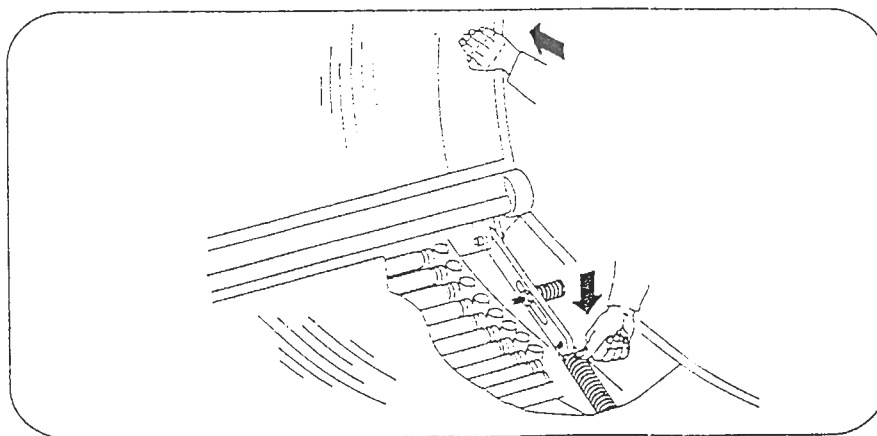
### The Springs

... for balancing the position of the top structure can be individually adjusted. Remove the front cover plate (page 8, fig. 1). By turning the adjustment screws the tension may be regulated. Turning the screws clockwise increases the tension, in contrary direction tension is relieved. **Screws have to be turned evenly on both sides to prevent different tensions.**



### Disassembly of top structure/Please see also separate page attached to top

First remove the front plate and disconnect all cable connections, the plate of the cable fittings as well as the air ducts. Then remove the sunbed -acrylic (see page 15, fig. 13) and lift top as much as possible. Then push springs until the bracket bar loosens. The top structure may now be put down again. Remove the bolts at the hinges and take the top off.



This subbed ... was designed, manufactured, and tested with care, using only high quality materials and components. Prior to shipment this unit was submitted to a final testing and quality control procedure. If inspite of these diligent and carefull procedures defects should occur which are due to defective materials or processing we guarantee to repair these defects free of charge within the terms of warranty.

**Warranty term** ... The warranty term is valid for 12 months or 1500 operating hours, except for filters, starters and lamps.

**Warranty Claim** The customer has to prove his warranty claim by supplying a copy of his purchase form and the serial number. If the claim is invalid all costs for repairs and material are invoiced on account of the customer.

**Natural wear and tear** ... as well as all damages resulting from incorrect operation or use, chemical, physical or thermal influences and slight mars which have no impact on the function of the equipment are not subject to guarantee. The guarantee does also not cover transport damages since these claims have to be made by the customer towards the forwarder.

**Export units** For subbeds installed outside Germany the specific terms of warranty is stated by our authorized distributors apply.

**Repairs** The guarantee terminates if repairs or any other services are performed by non-authorized personnel. Claims exceeding free of charge repair work are excluded.

**Complaints** In case of defects within the term of guarantee the factory's service department has to be notified immediately.

**Service Report** After servicing the machine the customer receives a report form, specifying the defect and the work done.

**Regular Checks** Checks of mechanical and electrical safety should be performed on a regular basis. It is recommended to perform these checks once a year or after 1500 operating hours - whichever comes first.

**General Terms of Trade** Our general terms of trade are printed on the reverse side of each invoice. These terms apply in addition to the special guarantee clauses for all transactions with our company.

**Guarantee Included**





The following check-list provides only basic information on some of the most common defects or problems.

It should help you to analyse the problem but it's intention is not to encourage you to deal with any electrical or mechanical defects yourself beyond regular maintenance work (cleaning filters, reflectors, acrylics, keeping fan/air vents free from dust) or replacements ( HID-lamps, tubes acrylics and starters).

Never modify or replace essential electrical components at your own discretion. All claims of warranty become immediately invalid and all eventual damages resulting from such unauthorized "repairs" or "amendments" are at your own risk. Therefore do not hesitate to call your local distributor for further help and information. In most countries, authorized distributors have established a service network with factory trained staff and compliant spare parts.

Remember that you have invested in a very high performance professional tanning bed and in order to keep it at maximum performance you should only allow professionals to service it.

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→ All service and repair work should only be performed by qualified persons - authorized by the manufacturer or his distributors.

While servicing the machine, take care that it is completely disconnected from electrical supply system.

For every test run the machine has the assembled completely (acrylics, air ducts, front cover plate). If not, this may result in serious damages. For the safety of all persons who either service or use the equipment an FI protective circuit breaker (e.l.c.b.) has to be installed. ←

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## Basic Troubleshooting - Checklist

**Defect** Complete unit does not turn on.

**Check** Correctly connected to electrical supply system?  
 Do you have the correct electrical supply system as stated on the type label?  
 3N ~ 400V/50 Hz (EU)  
 1N ~ 240V/50Hz (USA)  
 Different connections only optionally.

Front plate correctly in place?  
 Remove front plate and install again.

Correctly wired to control devices?  
 Connect to control devices as described in this manual.

Coin-box, computer or other control devices o.k.?  
 Check with supplier of control devices.

Main fan (machine) is working?  
 If not, call for service.

Is the flag relay in the main fan working?  
 The flag should be pushed forward by the air stream.

One of the safety features (micro-switches) activated?  
 Microswitches are provided:  
 At the front plate.  
 At the facials.

Check circuit breakers and fuses.  
 Turn on circuit breakers, or replace circuit breakers and fuses.

Are all electrical connections made on the ballast tray?  
 Check whether all plugs fit exactly to terminals.

For units with Facials ON/OFF option - K4 relay may be defective.  
 Call for service.

No defect but according to pre-set skin type.  
 Replace quartz light.  
 Quartz light defective.  
 Has the quartz light been recently replaced?  
 Check with connection on cassette and fitting of plugs.

Did you replace with different lamp than originally provided?  
 Only use Original Dr. Müller quartz lights for replacement.

Ignitor defective?  
 Replace by ignitor of the same type as originally provided or call service.  
 All circuit breakers turned on?  
 Turn on circuit breakers or replace if defective.  
 For units with Facials ON/OFF option - check K4 relay.  
 Call for service.

All facials not working.

One facial not working.

One component (top structure, sunbed) does not turn on.

Check plug / terminal connection of ballasts.  
 Make sure that plug fits correctly to terminal.



## Basic Troubleshooting - Checklist

<i>Defect</i>	<i>Check</i>	<i>Repair</i>
<i>Unit does not turn off.</i>	If cpl. unit does not turn off (lamps) after end of session the K1 relay is defective.	Call for service. <i>Do not run this machine with defective K1 relay, even if the defect seemed only temporary!</i>
<i>One lamp flickers</i>	Lamp is too old. Incorrect or defective starter.	Replace lamp. (Only use compliant lamp for replacement) Replace starter.
<i>One lamp not working at all.</i>	Has this lamp been recently replaced? Lamp and starter are o.k. but defect stays on.	Check lamp and starter for exact fitting, set in once again, if necessary. Check voltage of the ballast. Replace, if defective.
<i>Sunbed plexi gets too hot.</i>	Control if all air vents are free. Have the acrylics been replaced lately? Are air supply and exhaust air system performed according to our instructions? Check air supply and exhaust system.	Remove materials or labels which may obstruct free air flow at air vents. Replace old filtermats if necessary. Check whether acrylics are properly in place. Repeat assembly if necessary. Adapt fresh air supply and exhaust air system to our standards. See above.
<i>Machine vibrates.</i>	Main fan (machine) defective.	Call service for replacement.
<i>Top lowers on its own.</i>	Tension of springs is too weak	Re-adjust springs. <i>Take care that springs on both sides are adjusted evenly.</i>



**Technical Support**

For technical support and supply of spare parts contact your local distributor. For phone number see below.

Take care that the warranty form provided with this manual is filled out immediately after installation and send back. This makes it easier for us to keep track and make sure that you always get exactly the spare parts you need.

For warranty and compliance reasons defective parts or parts which are subject to natural wear and tear (lamps, acrylics) should only be replaced by parts as originally supplied by the manufacturer.

**Selective Spare Part List**

Article	Comments
Original Dr Müller HiD lamp 400W (US Dr M 400 ) or Original Dr Müller HiD lamp 1000W (US Dr M 1000)	look for lamp specs on type or user label
VHR NA 1-15 lamps or VHO CA 1-12 lamps or Cleo Performance R-UVA lamps	look for lamp specs on type or user label
Acrylic, sunbed	1997 x 858 x 4 mm (US: 5mm)
Acrylic, top	1995 x 1049 x 3 mm
lamp socket with starter	1458A
lamp socket w/o starter	1458B
body fan	standard or Power fan
Uvisol blue filter	200 x 165 x 2.5 mm (4-5 facials)
Uvisol blue filter	200 x 195 x 2.5 mm (3 facials)
Soladur clear filter	200 x 165 x 4 mm (4-5 facials)
Soladur clear filter	200 x 195 x 4 mm (3 facials)
Pillow, white, UV-resistant	200, 170 x 150: 140 x 5
VHP-starter	S 12
Goggles	green or red

For Technical Support or replacement parts, please call:

*(Phone and fax number of distributor)*



VENTILATION SYSTEM  
FOR  
ORIGINAL DR MÜLLER VHP TANNING EQUIPMENT

*ORBIT*  
AND  
*OMEGA*

# Ventilation System for Original Dr. Müller-Tanning Equipment

Since the installation of an efficient ventilation system in a tanning salon requires careful planning and some expertise, we suggest the following examples to achieve maximum air ventilation for our tanning equipment.

- 3 Equipment without exhaust air stack
- 3 Equipment with exhaust air stack
- 4 Connection of ventilation system to exit air duct
- 5 Connection of exhaust stack to tube D 300
- 6 Exhaust air system with additional fan
- 7 Accessories

Our equipment is designed as a closed ventilation system.  
For maximum efficiency and operation it is necessary to provide necessary air supply rates and sufficient dimensions for inlet air opening.  
We recommend an inlet air opening of 1100 cm<sup>2</sup>.



# Ventilation System for Tanning Equipment

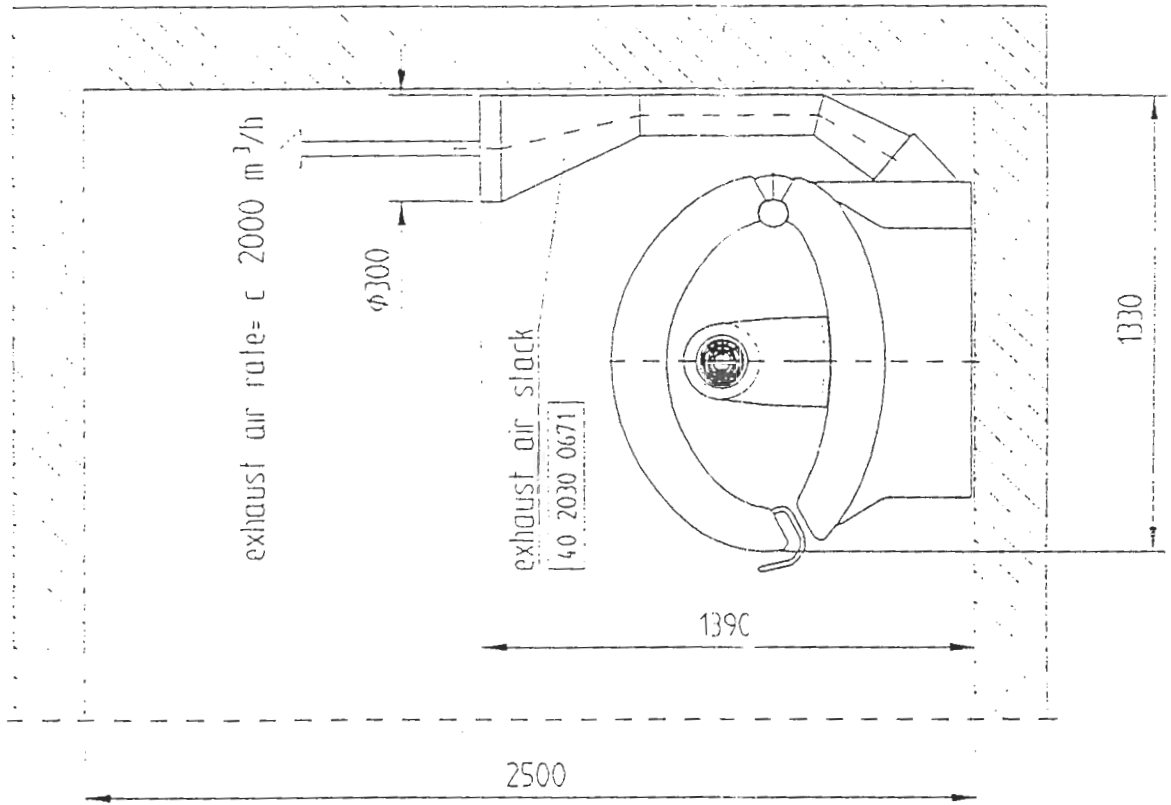
1) Version A = without exhaust air stack

2) Version B = with exhaust air stack

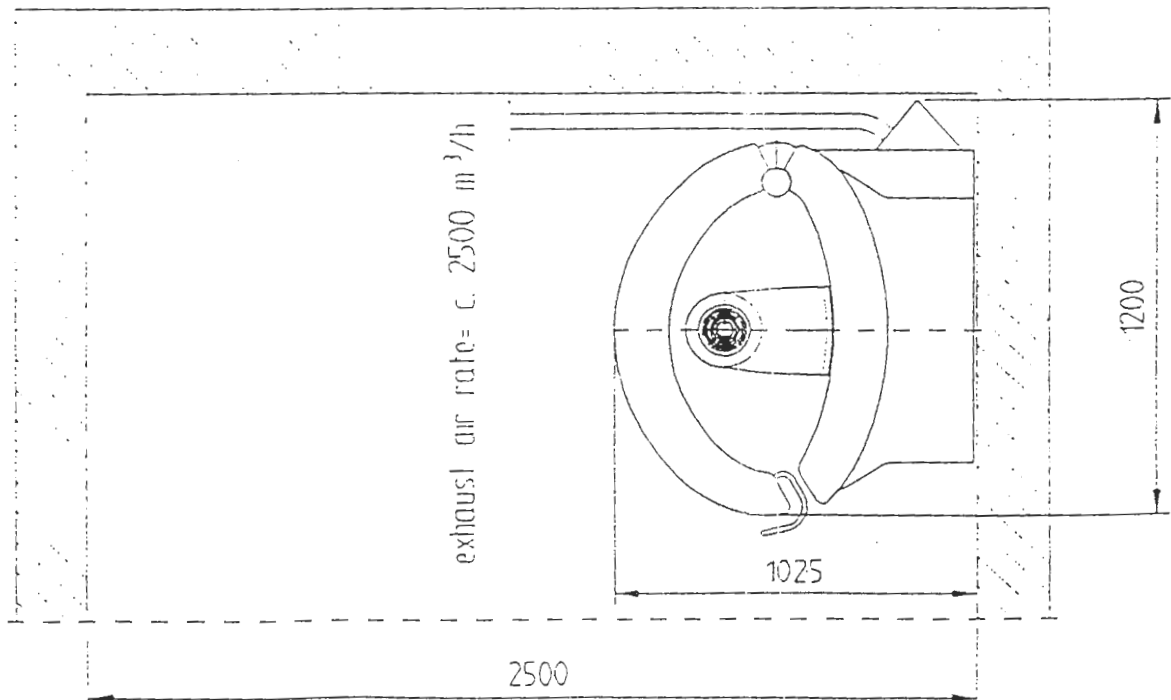
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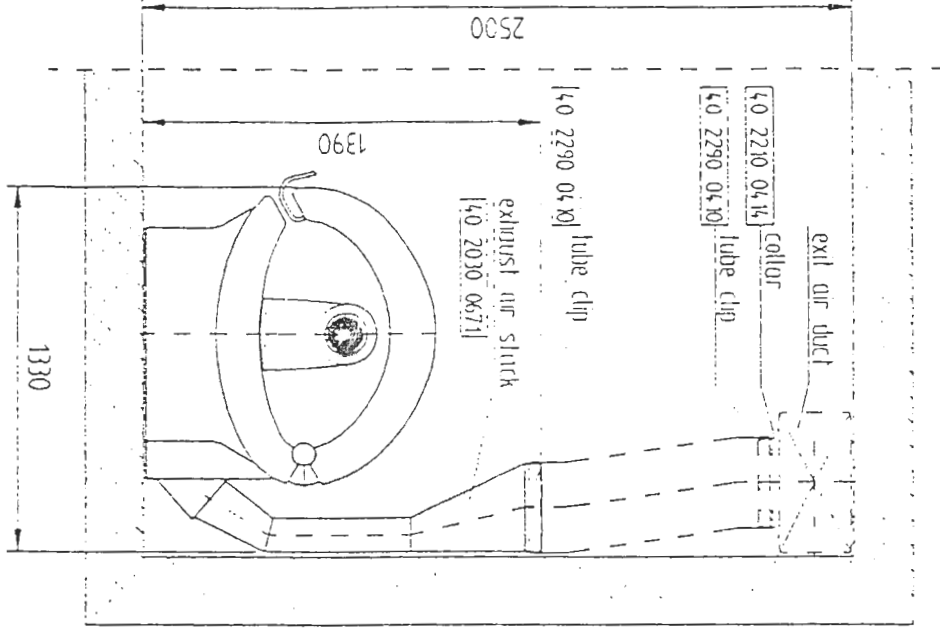
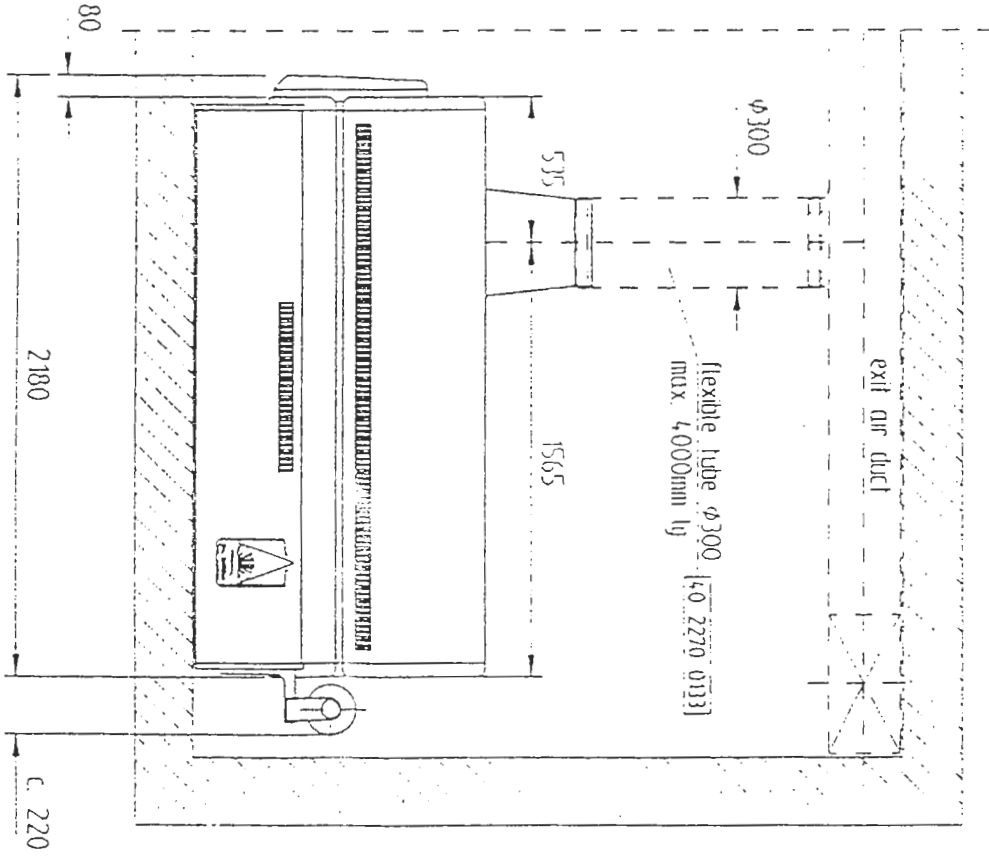
(B)

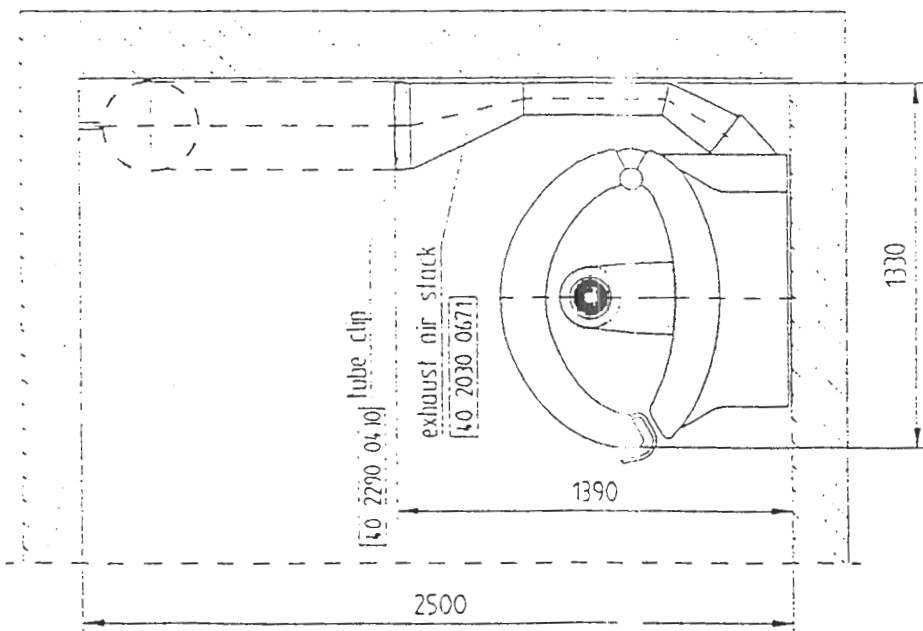
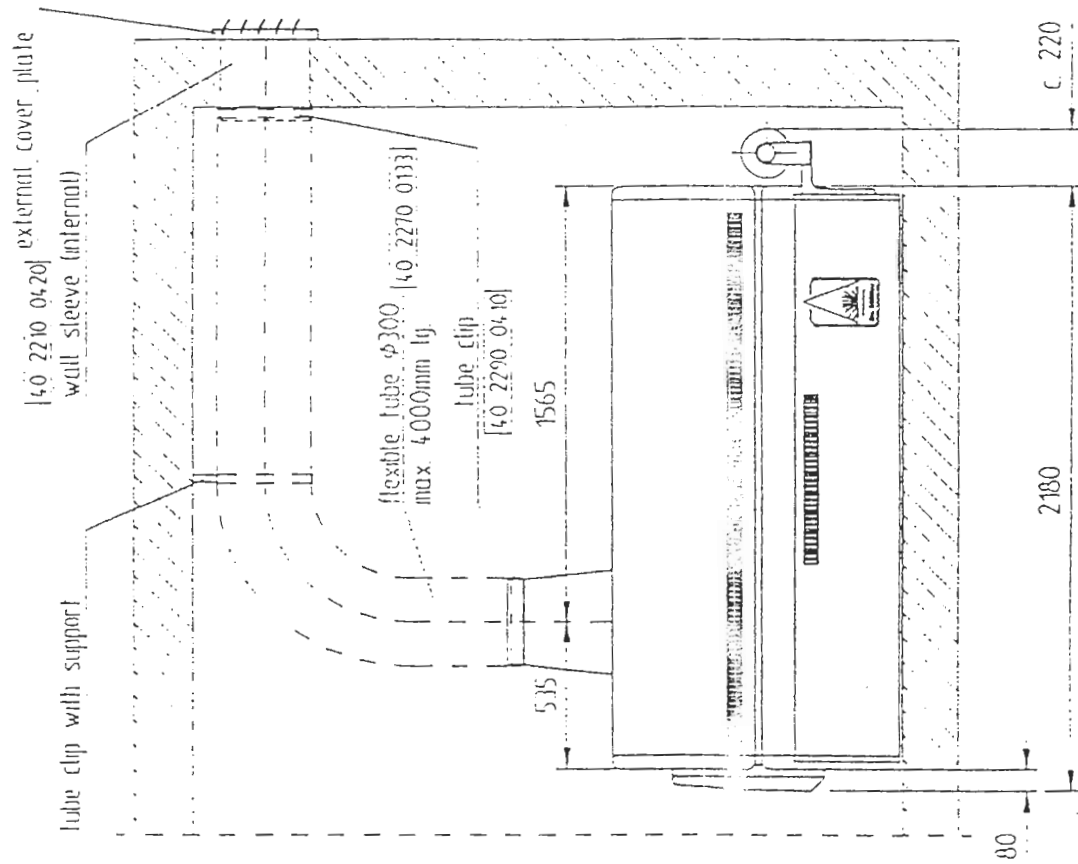


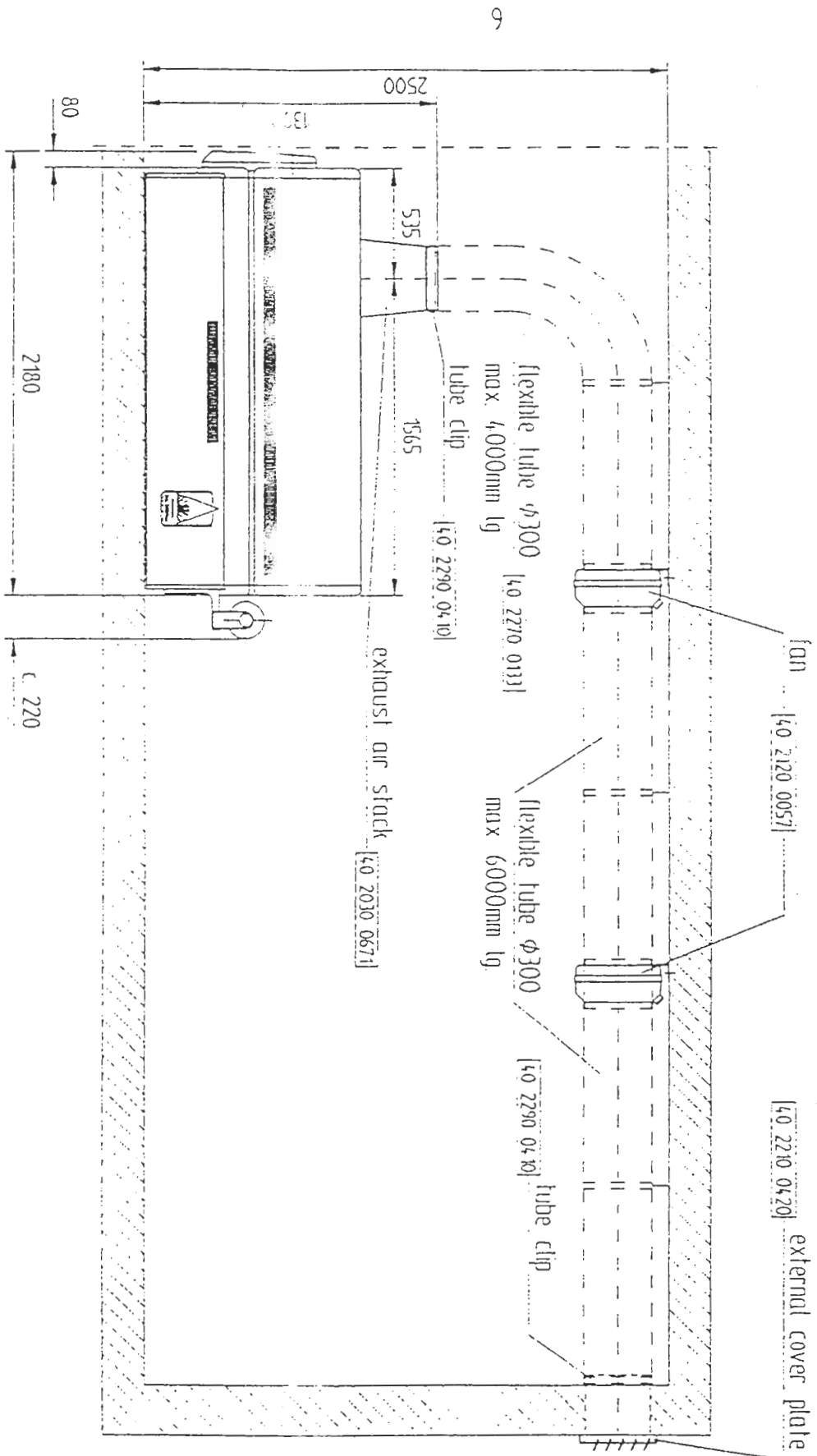
(A)



Connection of ventilation system to exit air duct







# ventilation systems for Original Dr. Müller-Tanning Equipment

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## Accessories

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Article No.	Article
40 2030 0671	exhaust air stack, ready for connection to D-300 tube
40 2270 0133	tube D=300, Flexadux P2V10 white
40 2290 0410	tube clip 280-300mm b=13
40 2210 0414	collar ILU 300 for exhaust air tube
40 2210 0420	cover plate AS 30
40 2120 0057	fan R315 for exhaust air tube

