

OWNER'S MANUAL

ORIGINAL DR. MÜLLER HIGH PERFORMANCE TANNING EQUIPMENT

S · U · N · G · A · T · E



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Attachments:

Wiring Diagrams, Technical Specifications, Exposure Schedules and User Instructions According to EU or US-Standards.

About this Manual

The information provided in this manual refers exclusively to the SUNGATE, the High Performance Commercial Tanning System designed by Advanced UV Light GmbH.

Addressees:

This manual provides information to:

- the operator/salon owner
- tanning salon personnel
- maintenance personnel

Scope:

In this manual you will find instructions for/information on

- proper use and application
- residual risks
- safety of use and operation
- transportation
- installation
- operation
- troubleshooting
- maintenance
- customer service

This manual provides important information necessary for the safe handling and servicing of the unit.

What you should do immediately:

Read this manual carefully prior to transportation, installation, operation and service of the unit.

What is not included in this manual:

This manual does not contain instructions for repair work. All service work should be performed by authorized service personnel only.

What is to be considered when reselling the unit?

When you re-sell the unit to another salon operator/user, please provide him with the original copy of this manual.

Important: Please inform manufacturer/or local distributor immediately about the name, address and phone/fax number (if available) of the new owner so that we can contact him in case of important or unforeseen new safety features.

Signs and Symbols used in this manual

Danger Warning



This sign indicates that there is a potential risk of fatal danger and personal injury.

Please observe this sign and proceed with caution.

Warning of Electrical Voltage



This sign indicates dangers in connection with the handling and servicing of electrical components and/or devices.

Warning of Hand Injury



This sign indicates the potential risk of hand injury and bruises.

Prohibitive Signs



Fire, Open Flame and Smoking Prohibited!



No Access to Unauthorized Personnel!



Persons with pacemakers are not allowed to use or Service this unit!

Mandatory Signs:



Wear personal protective outfit!

Captions:

ATTENTION

ATTENTION indicates that there are potential risks or dangers for the equipment or its components or potential environmental damage.

NOTICE

Here you will find information about the proper use of the sunbed or proper operational procedures.

> ACTIVITY SYMBOL

The text following this symbol refers to activities that must be performed in the precise order described in the text.

1 Model Data SUNGATE Model Version 50-4

Combination bed equipped with 50 low-pressure lamps and 4 x HID/adjustable facial lamps.
For specific lamp configuration and electrical data see type label and separate leaflet.

Address of Manufacturer and Customer Service:
Advanced UV Light GmbH
Ruhrtalstrasse 85-93, D-45239 Essen/Germany
Phone: + 49 201 84912-0; Fax: + 49 201 84912-55
e-mail: info@auvl.de;
www.auvl.de; www.drmueller.de

Country of Origin: Federal Republic of Germany

For Spare Part Orders, please provide the following information:

- Model Data – High Performance Commercial Tanning System "Sungate"
- Serial number
- Year of Manufacturing
- Item number as per current spare parts order list
- Required quantity

The permanently attached type label provides all basic information on specific lamp configuration, voltage, manufacturing date and serial number. You'll find the type label on the rear side of the sunbed and a copy of the type label inside the sunbed attached to the groundplate.

NOTICE

Spare parts must comply with the technical requirements as provided by manufacturer. Use only original spare parts from Advanced UV Light GmbH.

2 Proper Use and Application



This High Performance Tanning System was designed exclusively for the operation in commercial tanning salons attended by trained personnel.

Scope of Application:

The High Performance Tanning System Sungate was designed for cosmetic skin-tanning of adult persons, whose skin has the ability to tan and under strict observance of the recommended exposure times. For further details see the recommended exposure schedules which are enclosed as an addendum to this manual.

At no time is this sunbed to be used for any other application as described above.

Proper Use and Application includes:

The unit will only be operated in combination

- with a main disconnect switch installed at the site
- with an FI safety switch
- with a timer with a pre-set maximum timer interval not exceeding maximum exposure time (or in compliance with applicable local regulations and Health and Safety Standards at the site of installation)
- in observance of manufacturer's recommendations as to **Installation, Start-Up, Operation and Maintenance/Inspections** terms.
- With due safety provisions for foreseeable improper handling
- Any other use not strictly following these provisions will be considered improper use. For any damages resulting thereof, the manufacturer of the unit cannot be held responsible.

Staff qualification

This high performance sunbed must be installed, operated, and maintained by authorized and trained staff only who, based on their training, know-how and experience can guarantee proper handling and operation and who have been informed about potential risks and dangers.

Improper Use

Every application which is not covered by the terms of "use" as defined in this manual will be considered improper use.

Consequences of improper Use:

- Danger for the life and health of persons handling/servicing the sunbed as well as for those tanning on the unit.

2.1 Residual Risks



In spite of all safety provisions, there are still residual risks. Residual risks are potential, not obvious and apparent risks

such as:

- eye and skin damage caused by UV radiation
- an increased risk for persons being sensitive to sun or light
- an increased risk for persons with skin diseases, symptoms of skin disease or undefined complaints
- an increased risk for persons taking medication
- an increased risk for persons suffering from heart or blood circulation problems
- an increased risk for persons using cosmetics or fragrances
- an increased risk of allergies caused by UV-radiation
- risks caused by malfunctions in electric or control components
- risks while working on electrical components.

3 Safety

3.1 General Safety

The High Performance Tanning System Sungate (in the following referred to as the "unit") was designed and built with diligent consideration of all applicable harmonized standards, as well as additional technical specifications. The unit therefore provides state-of-the-art technology and guarantees the highest degree of safety.

Due to its inherent functional process, however, the unit has some spots and components which cannot be fully protected without interfering with its proper function and operability. A diligent personal safety routine protecting the user as well as the unit is therefore indispensable.


This unit can cause considerable risks when improperly handled by unauthorized and untrained personnel and if used for other purposes than its proper use and application.

Read this manual and the safety instructions carefully prior to installing, starting or doing maintenance work on the unit and always follow instructions.

Read and study the manual first!

Store the manual conveniently close to the unit where it is easily accessible:

- The unit must be installed and operated by authorized personnel only who based on their training, know how and experience can guarantee proper handling and operation and who have been informed of potential risks and dangers.
- In addition to this manual, other local/national safety standards for the prevention of accidents and other applicable safety rules and regulations must be observed as well as applicable standards for the protection of the environment.
- Observe Warning and Instruction Signs.

-  At the job-site – fire, open flame and smoking is prohibited
- In case of injury, accidents or skin irritations, please contact physician immediately.

Consequences if safety Instructions are disregarded:

Non-observance of safety instructions may cause serious personal injury as well as irreparable damage to the environment and the unit.

Non-observance of safety instructions voids all claims of warranty.

3.2 Safety of Operation

- Prior to any operation of the unit, check carefully if all safety features are provided and fully operable:



- sunbed acrylic sheet
- top canopy acrylic sheet
- facial filters
- ventilation
- open exhaust air outlet on the site

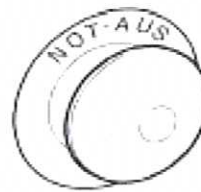
- Check the well-functioning of all safety features provided for safety and protection
- Do not circumvent, remove or in any other way interfere with provided safety and protection features
- Use only the unit only in connection with a timer and strictly observe applicable local standards and regulations about maximum exposure times.
- Do not instal the unit in rooms exposed to humidity or close to explosives.
- Do not stock container at the site of installation that might explode, e. g. spray bottles
- Do not cover or close air-and ventilation openings or air vents. Take care that sufficient air ventilation is provided.
- If liquids or solid materials have entered the unit, activate main disconnect switch (1) immediately and stop further operation.
- Do not expose materials that may fade or get damaged when exposed to sunlight or UV-light emitting from this unit.
- Prior to first operating the unit, check carefully if there are any traces of protective foil or other remains in the unit. – Remove if necessary.
- Prior to each use/tanning session, clean and disinfect the unit.
- Do not use any sharp-edged materials when working on the unit.
- If instruction, danger or safety signs are damaged or faded, replace these signs immediately.
- In case of malfunctions, never start the unit by activating the provided maintained contact switch.

- Warning of potential electrostatic load on the the sunbed. – when touching the sunbed or in a position very close to it, there is the risk of an electric stroke! Therefore persons with a pacemaker must not use the unit.



- During interruptions or at the end of daily service time, shut off the unit with the on-site mains switch(1) and secure against re-start with a padlock.

3.2.1 Emergency Stop Function (optional)



- In case of danger, all low-pressure lamps and the HID Quartz lamps can be shut off immediately by pushing the Emergency Stop Button (2). The ventilation of the unit will switch off with a delay time.

Improper Operating Conditions

The unit must not be operated if:

- the sunbed acrylic is damaged
- the top canopy acrylic is damaged
- one or all of the facial filters are broken or missing
- the timer is defective or missing
- the fans are not working properly
- the ambient temperature in the room exceeds 30°C
- the exhaust air disposal does not work
- the fresh air supply from outdoors is blocked or insufficient
- user does not wear protective eye-wear

3.3 Safety during Maintenance Work



- Maintenance work must be performed by authorized and trained personnel only.

- Here, for instance, you always need to observe the special risks connected with the handling and servicing of electrical components or devices.



- Observe the inspection and maintenance intervals recommended in this manual.
- Prior to maintenance work, block access to the job-site to unauthorized persons. Set up an appropriate sign that clearly indicates that maintenance work is performed on the unit.

Start repair and maintenance jobs only

- When unauthorized, erroneous and unexpected use of the unit has been prevented.
- The mains disconnect switch (1) on the site is in OFF-position and secured with a padlock.

In certain cases where you can't comply with all of these provisions, take care that adequate substitute measures are provided and inform your supervisor.

- The front cover plate(13) should only be removed when mains disconnect switch (1) is in OFF-position.
- When the maintenance/repair job has been completed, all disconnected safety provisions must be re-connected and their proper functioning must be checked.
- Unauthorized retrofits or modifications of the unit may affect the safety of users and professional staff and must be avoided at all times.
- Replacement parts must comply with the technical requirements of the manufacturer. It is recommended to use only original spare parts supplied by Advanced UV Light.
- When replacing low-pressure lamps and HID Quartz lamps and/or filters, use only identical or compatible lamps and filters. See "Lamp configuration" on the type label. The use of other lamps or filters may forfeit CE conformity and GS Certification of the unit (or other applicable Standards and Regulations at the site of installation).

3.3.1 Protection of the Environment

Used low-pressure lamps and HID Quartz lamps must be disposed of in accordance with applicable local/national standards for the removal of waste.

3.4 User Instructions



Remove contact lenses!
UV-radiation can cause eye and skin injury. Always wear protective eye wear and close your eyes when using this unit.

- When suffering from skin diseases, symptoms of disease, unspecified complaints or when taking medication, especially those that may increase the sensitivity to the sun and UV-light exposure – consult a physician prior to using this unit!
- Excessive tanning results in over-exposure. Consult physician immediately if skin shows irritation or blisters. Avoid the risk of over-exposure at all times!
- Children are not allowed to use this sunbed.
- Remove make-up or cosmetics several hours prior to a tanning session.
- Use only one tanning session per day!
- Observe at least a 24h interval between tanning sessions. Do not tan in the natural sun the same day you have used a sunbed.
- At the show of any adverse skin reaction, stop tanning session immediately. If the symptoms do not disappear after a short time, consult a physician.
- Self-tanning drugs or lotions must not be used in combination with tanning sessions. This combination increases the risk of over-exposure.
- The UV-type classification of this unit is shown on the type label.
- A Class 4 UV-device should only be used after a physician has been consulted.

Who may use a sunbed?

Adult persons who tan in the natural sun will also tan when using this unit.

NOTICE

With sensitive skin, there might be a heat-rash, caused by the infrared radiation (heat) that warms and reddens the skin. This reddening is no sunburn and constitutes no health risk.

Who should not use a sunbed?

People who do not tan or barely tan in the natural sun. This also applies to people who will only turn red.

What is the recommended exposure time?

Recommended Exposure Times depend on your individual skin type and the intensity of the tanning equipment you use. The Recommended Exposure Schedule and the Recommended Maximum Exposure Times are therefore calculated for different skin types and the different UV-sources used and should always be strictly observed. For Recommended Exposure Times see ADDENDUM 1 to this Manual.

How many tanning sessions are necessary/recommended?

The number of tanning sessions, too, depends on the individual skin type and the ability of the skin to tan. Usually a skin that tans normally shows a nice, even tan after 3 –5 sessions at 4-10 minutes. The first tanning session should be taken every other day (48h interval). To maintain an existing tan 1-2 sessions per week are recommended.

You shouldn't take more than 50 sessions per year – both in the natural and artificial sun. Always avoid over-exposure.

Should you use a sunscreen?

No!

Don't use any sun-screens or cosmetic products that are designed for tanning in the natural sun and that contain sun-filters. These products contain components that filter out aggressive radiation ranges, which in a sunbed have already been considerably reduced or eliminated. Do not use any self-tanners. These products contain substances that may affect the tanning process in a sunbed in very unexpected and unwelcome way. We recommend the use of skincare products specifically designed for indoor tanning. These products may accelerate your tan as well as moisturize your skin.

4 TECHNICAL DATA

Dimensions

Length.....mm	2300 (90.55")
Depthmm	1450 (57.08")
Height	
- with top closedmm	1350 (53.14")
- with top openmm	1680

Weight

- Cpl. unit, without AC device ca.....kg	450
- Sunbed w/o Ballast Tray ca.....kg	150
- Top ca.kg	150

Configuration

- Sunbedpcs.	21 Reflector Lamps (length= 176 mm)
- Top.....pcs.	29 Reflector Lamps (length= 176 cm)
- Lamp Wattage – see Type Label	4 High Pressure Lamps /single contact
Ventilation at Site of Installation	
- required air opening on the site.....mm	200 x 200
- Exhaust Air Volume to be disposed of.....m ³ /h	2500

Electrical Connection

Only for Installation according to EN 60204-1/VDE 0113

For all non EU-Standard Units please see separate leaflet

Operating Voltage.....V/HZ	400,50, 3ph NPE
Fusage on siteA	3 x 32 slow (K- or D- characteristics)
Total Power Input	
- without AC device.kW	11
- with AC device.....kW	12
Wire Gauge – on the site min.....mm ²	5 x 6 mm ² flex. Wire EUROPA HO5VV-F
Mains disconnect. Switch installed on site	
FI-Switch installed on the site	3 x 32 A/30mA

NOTICE:

Only operate this unit with a time control device with automatic switch-off after 30 minutes of operation. This is an additional safety feature to complement the standard switch-off function of the timer that controls the tanning time.

5 Description

The High Performance Commercial Tanning system SUNGATE represents a new generation of advanced tanning systems – powered by state-of-the-art technology, comfortable, and with a clear modern design.

The new filter and reflector technology features a special coating and processing procedure that allows for a more intense tanning performance on the face and neck area while simultaneously reducing the required power input.

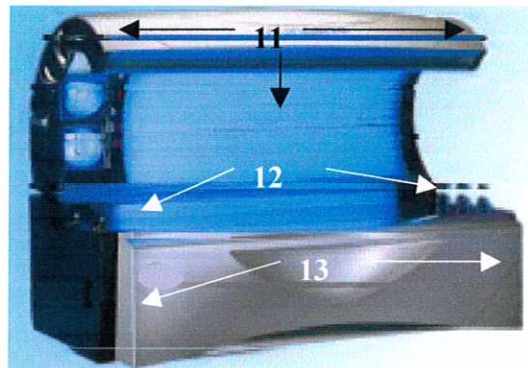
The spacious tanning tunnel increases the distance between the lamps and the human body for a more comfortable tanning experience while a superior lamp arrangement makes the most of overlapping irradiation allowing us to increase convenience without compromising on performance. Equipped with 50 low-pressure lamps and 4 intensive facials fields with HID Quartz lamps, the SUNGATE delivers maximum tanning performance.

The body cooling in head-and foot-end areas ensures a comfortable and cool tanning environment. The air vents in the top can be adjusted for best individual use. As an option, the SUNGATE is available with air-conditioning.

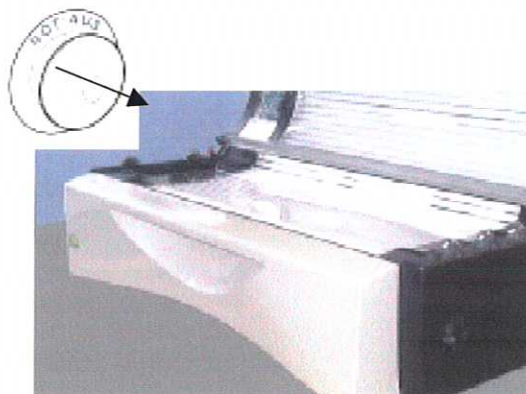
The controls, with time display, are easy to view and as easy to reach. Selections for cooling, facials, volume, etc. can be changed easily during a session. The control system also offers customized options and service functions that can be accessed with an authorized PIN-Code.

5.1. Accessories

- (1) Manual
- (1) set of protective eye-wear
- (1) box with div. spare parts
- (3) air vents for top canopy body cooling
- (1) head-rest
- (div) screws and bolts for assembly of exhaust air stack



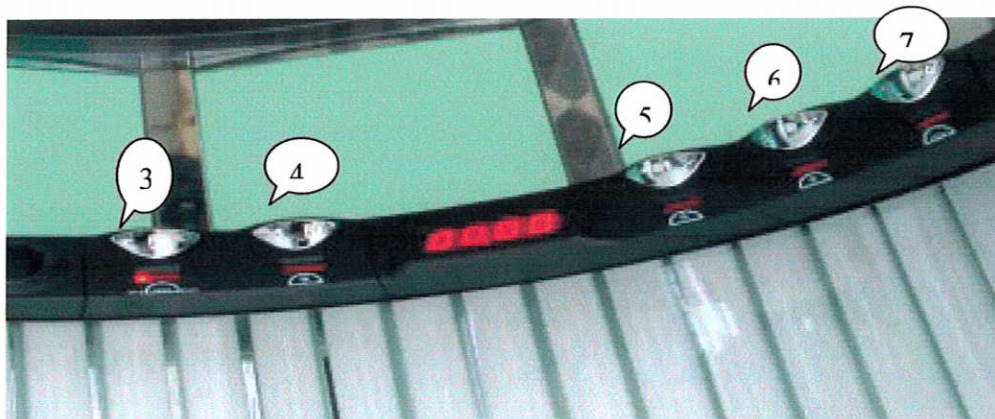
11 Top
12 Sunbed
13 Front Cover Plate



(2) Emergency Stop Button

In case of danger all lamps can be switched off immediately by pushing the Emergency Stop Button (2). The unit ventilation will switch off with a delay time.

5.2 Components and Controls



(3) Start/Stop



(4) AC-unit ON/OFF



(5) Facial Cooling



(6) Body Cooling



(7) Facials

5.3. Operation of the Unit

- Activate your control system by using a coin or token – or whatever applicable. The unit will start automatically.

You can turn off the unit by pressing the START/STOP button and re-start the unit by pressing this button again – provided that session time has not run out.



The HID lamps will only re-start after a cooling time of 2-3 minutes.

- push the canopy open
- Lie down on the sunbed
- Pull the top canopy down

Cooling for Face and Body

- By pushing the + or - option

Facial Cooling +/-



The ventilation for the facial cooling can be adjusted for best individual use. In addition, by manually adjusting the air nozzles, the direction of the cool airflow can be modified. The illuminated diodes show the selected intensity level.

By pressing the button options + or -

Body Cooling +/-



The body cooling of the sunbed can be steplessly adjusted for best individual use. The illuminated diodes show the selected intensity level.

Facial Lamps/HID



By pressing the button options + or -

Facial Lamps /HID + /-

The intensity of the facial lamps can be increased or diminished in certain steps. The illuminated diodes show the selected intensity level. If the button is pressed while on the lowest level (3 diodes illuminated) for more than 3 seconds, the facial lamps switch off. By pressing the + option, the facials will re-start again after a delay time. During this delay time the first diode is blinking.

Air Conditioning Unit (optional)

By pressing the button



AC unit ON/OFF

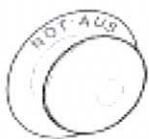
The AC unit turns off. By pressing this button again, it re-starts with a certain delay time. During the delay time, the first diode below the button is blinking.

After pre-set tanning time has expired, the unit shuts off automatically.

- Push the Top open and leave the sunbed

5.3.1 Emergency Stop Button

In case of danger pushing in the Emergency Stop Button can shut off the unit. The ventilation of the sunbed will stop after a certain delay time.

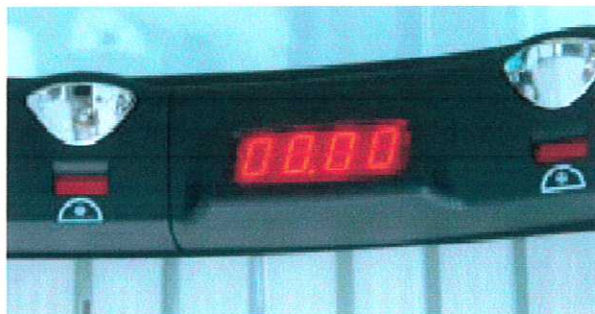


Open the top canopy and leave the room.

Inform the manager (or staff on duty) immediately.

5.4 The Display

In certain operational modes, the 4-digit display (8) shows the following messages:



- 0000= unit is idle
- During a tanning session: Shows tanning time (incremental)
- FAN= After cooling period
- In the Service Mode, various information and Set-Ups may be selected and modified, see chapter on "Set up of Electronic Controls"
- Error Message/Malfunction – helps to identify the defect, see chapter on "Troubleshooting".

6 Room Requirements at the Site of Installation

Room:

- dry, heating
- level floor with a load carrying capacity of min. 2000/kg/m².
- Ambient conditions: Temperature min. 10°C /max. 30°C;
Relative humidity: Max. 65%

Space Requirements for Operation and Maintenance:

- min. room size 2.50x2.50m


6.1 Main Supply System at the Site


6.1.1 Electrical Supply

For fuses and operating voltage at the site, please see wiring diagram attached.

- wire gauge for supply connection must comply with local standards at the site of installation. For Europ min. 5.6mm², flexible wire EUROPA HO5V-F.
- Power Input: 12kW
- Fuses to be provided at the site: EU: 3x32amp. For other countries please see separate technical data sheet.
- For all export units: Connection to the mains supply system must comply with applicable technical standards and regulations at the site of installation.

7 Transportation

-  Authorized staff should perform transportation to the site of installation only. We urgently recommend getting the support of authorized service personnel.

-  Block transportation ways and install warning signs to prevent unauthorized persons to enter the danger zone.

- Devices used for transportation and carriage must comply with applicable safety standards.
- When selecting devices for transportation and carriage, please consider the weight of the components.
- The unit is shipped completely assembled, packed onto a woo/cardboard box and to fixed to a wooden pallet.
- Check shipment immediately for completeness and eventual transport damage.
- In case of obvious transport damage, keep the packing for further evidence and advise your forwarding company immediately.
- Dispose of packing material in compliance with environmental standards.

7.1 Transportation with fork-lift

- Move forks cautiously into the pallet, lift the load carefully for a few centimeters and move – during transportation take heed that the box is in a stable position and may not drop and fall.

8 Assembly



Assembly work should be performed by authorized and trained personnel only. We recommend urgently to get support from authorized service personnel.

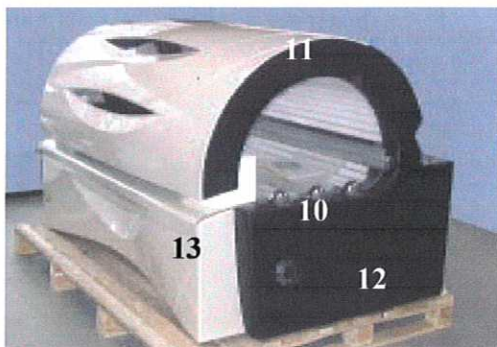
8.1. Disassembly

ATTENTION

It maybe necessary to disassemble the unit in order to remove it from the crate and bring it to the site of installation (HEAVY WEIGHT). For disassembly and transportation 4 persons are necessary to carry the disassembled parts to the site of installation. Take care not to damage and scratch parts!

- Remove wood/cardboard packing
- Remove upper lid
- Remove packing on the sides
- Remove exhaust air stack packed right on top of the unit
- Remove styrofoam (10) between sunbed (12) and top canopy (11)

For the time being the unit remains on the crate



(Fig. 7)

- Pull the Top Canopy (11) open

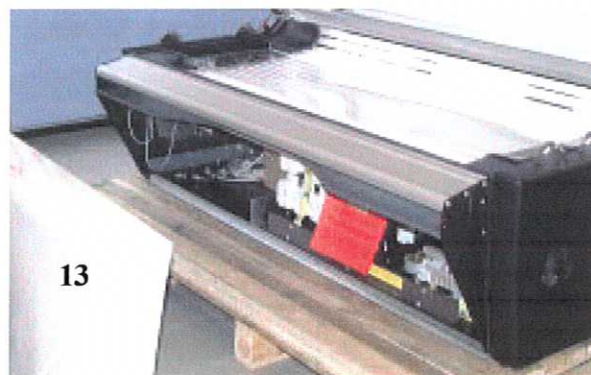


- Lift the sunbed acrylic (14) at the front for approx 10cm, lift it carefully at the rear and remove it carefully with 2 persons carrying the acrylic.



Fig. 9

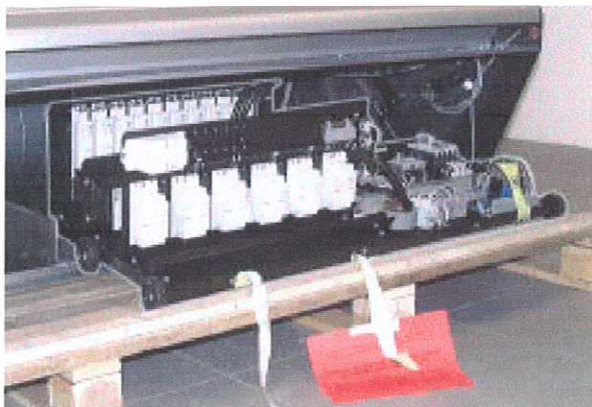
- Lift the cover plate (13) of the sunbed and remove



(Fig. 10)

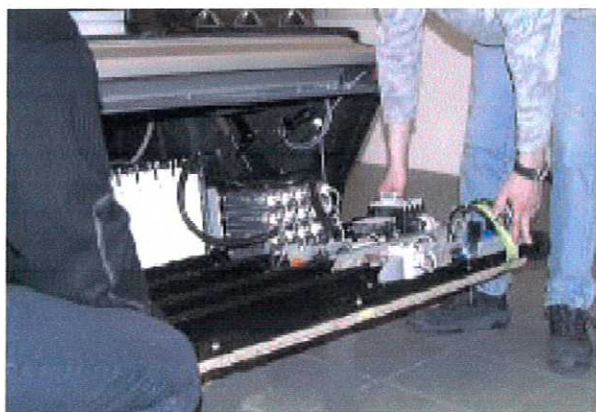
Unscrew the transport bracket (15)





(Fig. 11)

- Pull out the ballast tray (16) for approx. 30 cm (11-12"). If necessary, disconnect the terminals at the segments (17) from ballasts, unscrew the 3 segments (17) and remove and store carefully.



(Fig. 12)

- Take out the ballast tray (16)
- Take the box with the screws and bolts out of the sunbed (12)



(Fig. 13)

- Remove AC Acrylic (18) from sunbed



(Fig. 14)

- Remove lamp cover (19) at the foot-end.
- Remove lamp cover at head-end (20).

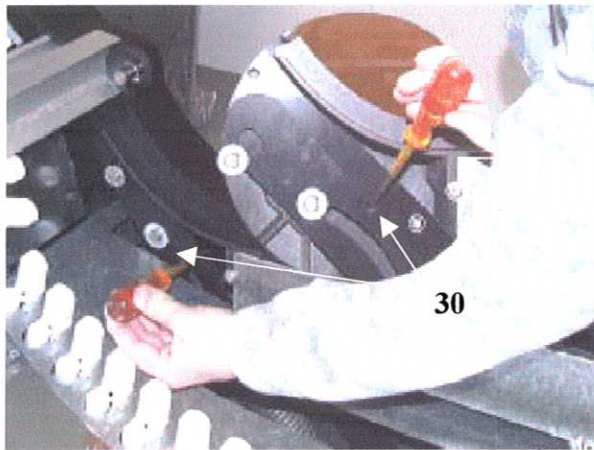
(Fig. 15)

- Assemble air vents (21) at foot-end and at head-end

(Fig. 16)



At the head and foot-end, set a screwdriver into the notch at the front lift arm and the rear hinge bracket and by levering downwards the ballbearing-point (30) must be pushed out of the guiding rails.



(Fig. 17)

- Put the top canopy down and protect by putting styrofoam (10) between sunbed (12) and top canopy (11)
- Lift the top with 4 persons, tilt it slightly forward, while the person at the rear foot end carefully pulls out the wiring harness out of the sunbed and carries it when removing the top.
- Turn the canopy by 90° in order to get through a door opening.



(Fig 18)

- Store the top canopy carefully on styrofoam

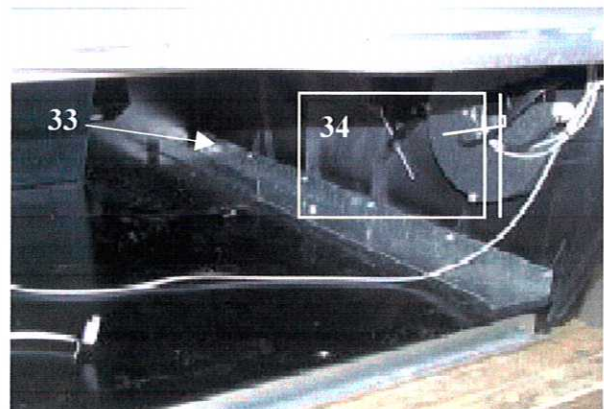


(Fig. 19)

Unscrew the sunbed from the wooden crate. On the ground plate of the sunbed at the right and lefthand side of the bracket (34) there is one hexagonal screw (33) each – the hexagonal nut is on the reverse side of the wooden crate.



(Fig. 20)



(Fig. 21)

- 4 persons need to lift the sunbed from the wooden crate, turn it by 90° and rest it on a wooden trolley or any other suitable transport vehicle to move it to the site of installation.
- Position the sunbed at the site of installation in such a way that the rear side of the sunbed is still accessible for the electrical connection to the mains supply system, the cable inlet and the assembly of the exhaust air stacks.

8.2 Reassembly

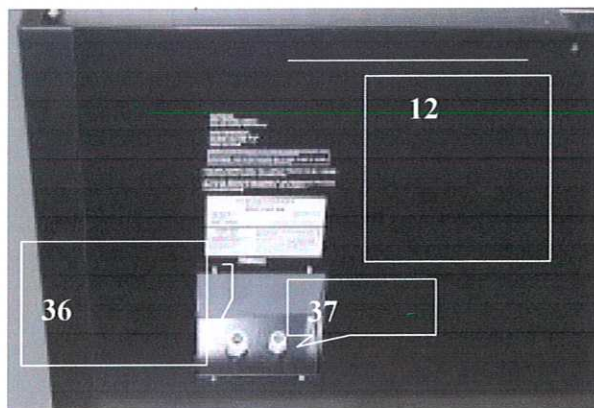
Prepare for Electrical Installation



The electrical installation must be performed by a certified electrician according to EN 60204-1/VDE 0113 and applicable EVU Standards – or comparable standards at the site of installation.

On-site installation must be secured in accordance with provided specifications (see Technical Data) with a built-in mains disconnect switch (1) and FI-Protection Switch.

- Check if local operational voltage complies with data provided on the type label placed at the rear side of the sunbed. If data do not correspond with the local supply system, the unit must not be connected.
- Feed in the supply connection (36) at the rear of the sunbed (12).
- Feed the supply connection (37) for the time control device (with potential-free contact) from the rear side of the sunbed (12).



(Fig. 22 – Rear view of the sunbed)

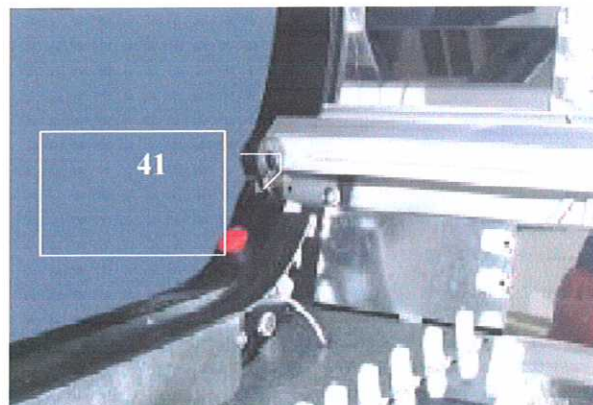
- All wire connections need to be laid out in such a way that there is no risk of stumbling (footholds).
- There is a risk of electrostatic load on the parts of the unit.- When touching the unit or when in close contact there is a risk of electric shock. Ground the unit carefully.

The first test-run of the unit must be performed by authorized personnel.



Secure against unauthorized start-up – lock the mains disconnect switch (Fig. 1)

- Move the ball-bearings (41) at head and foot-end to the outer ends.



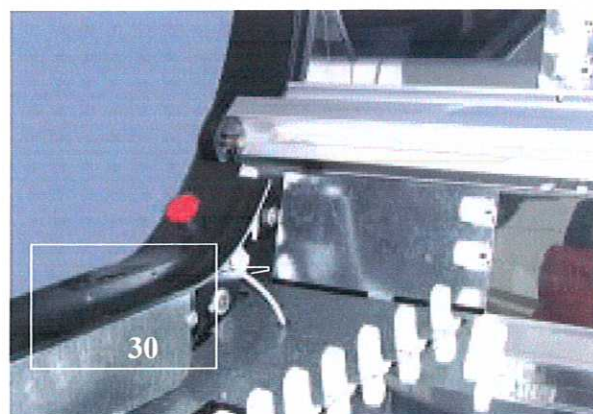
(Fig. 23)

- 4 persons lift the top canopy. The cables on the rear side of the top need to be carried with the top and must be cautiously let into the cable inlet of the sunbed.
- Rest the top canopy (11) in level position on the ball bearings (41). The two persons carrying at the rear side now have to let go else there is a risk of serious hand injury



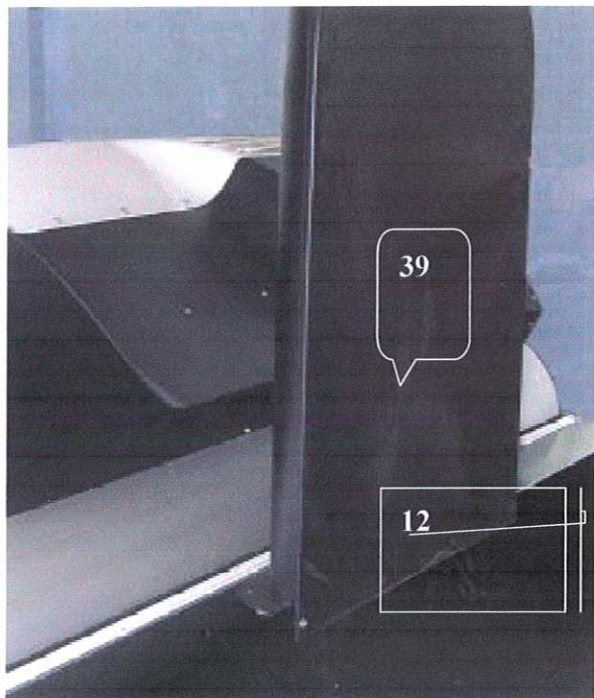
The two persons carrying the top at the front let the top slide backwards into the bearing.

The two persons hold the top carefully and open it slowly until the reels (30) at the foot and head-end snap in with an audible click.



(Fig.24)

Adjust unit in level position with the help of the adjusting screws in the groundplate. Put the exhaust air stack (39) from above onto the sunbed (12) and lock with screws.



(Fig. 25 – Rear View of the Unit)

Move the unit with the rear side into the final installation position. Required minimum distance to one of the side walls is 5 cm.

Connect exhaust air stack (39) with flexible hose (300mm) to onsite exhaust air system.



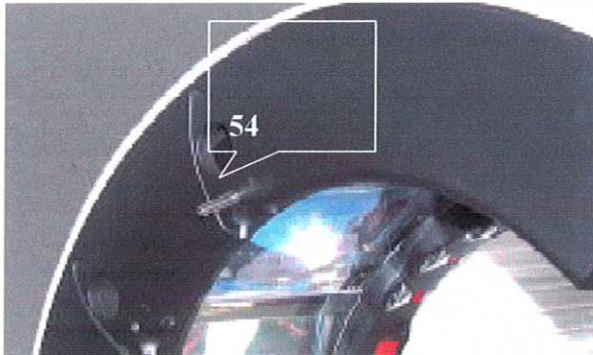
(Fig 26)

Assembly of Air Vents

Assemble the three air vents at the head-end of the top canopy.

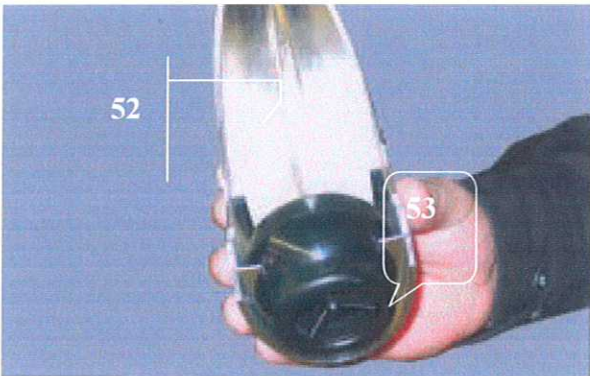
Take out of the box containing the accessories

- 3 air vents (52)
- 3 adjustable air nozzles (53)
- 3 bolts (54)
- 3 screws (56)

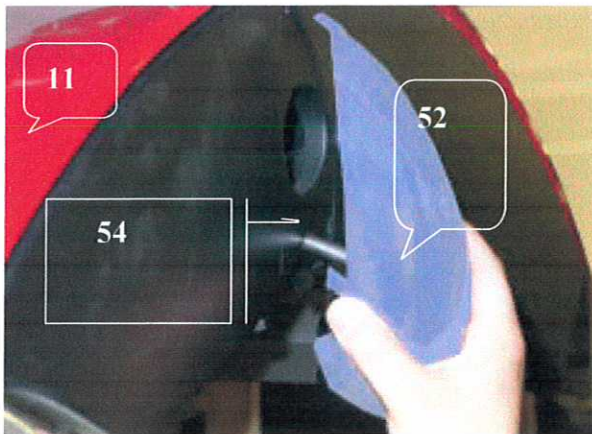


(Fig. 27)

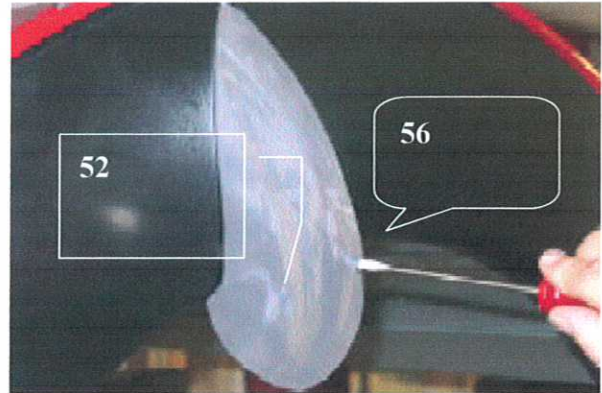
- Screw in the bolts (54)
- Put the air nozzle (53) into the air vent



- Put the air vent (52) onto the bolt (54) into the top canopy



- Fasten the air vents (52) with the screws (56) to the top canopy (11)



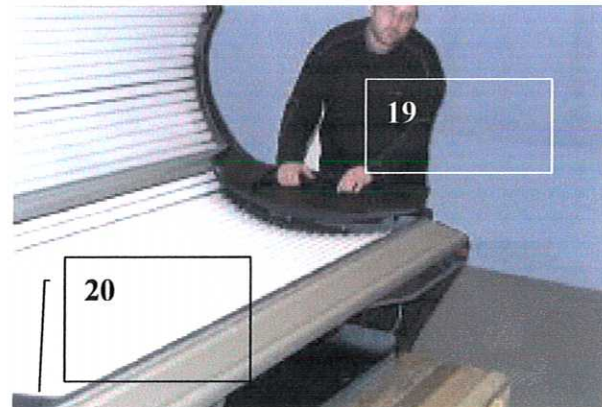
(Fig. 30)

- Fasten the air vents (21) at the footend (3x) and at the head-end (2x) of the sunbed



(Fig. 31)

- Put back lamp cover (19) at the footend
- Put in the connection at the head-end and fit in lamp cover (20)



- Put the AC-Acrylic (18) back into the sunbed (12)



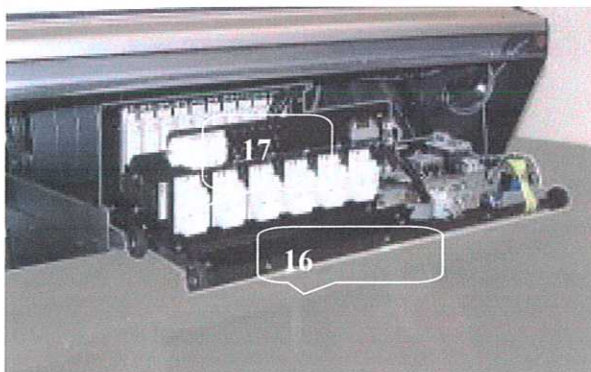
(Fig. 33)

- Push the ballast tray (16) into guide grooves (approx. 30cm).



(Fig 34)

- If previously disassembled, but back the 3 segments (17) and fasten.
- Re-connect the right-hand terminal at the segments (17) to the ballasts



(Fig 35)

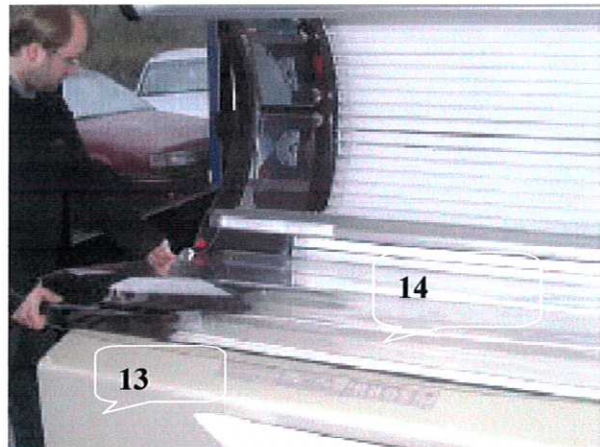
ORIGINAL DR. MÜLLER HIGH PERFORMANCE TANNING EQUIPMENT

Electrical Connection



The electrical connection must be performed by a certified electrician according to EN 60204-1VDE 0113 and applicable EVU Standards – or comparable standards at site of installation.

- Connect mains supply.
- Connect the mains supply from the time control device to terminal X20 according to "Assignment of Terminals" (attached).
- Connect terminals X1-X22 from top canopy and sunbed to ballast tray.
- Connect cable from control panel to the main PCB on the ballast tray (Display)
- Push in the ballast tray completely and take care that cables are not squeezed or crunched.
- Re-mount the front cover plate (13).
- Put in the acrylic (14) of the sunbed (12)
2 persons are needed for this job.



(Fig. 36)

8.3 Start-UP/Test Run

- Prior to first operating the unit, check if all safety features are installed and working properly:
- Sunbed Acrylic
- Top Canopy Acrylic
- Facial Filters
- Ventilation
- Exhaust Air Outlet
- Function of the Emergency Stop Button (2)



9 Set Up of Electronic Control



The followings jobs must be performed by a certified electrician.

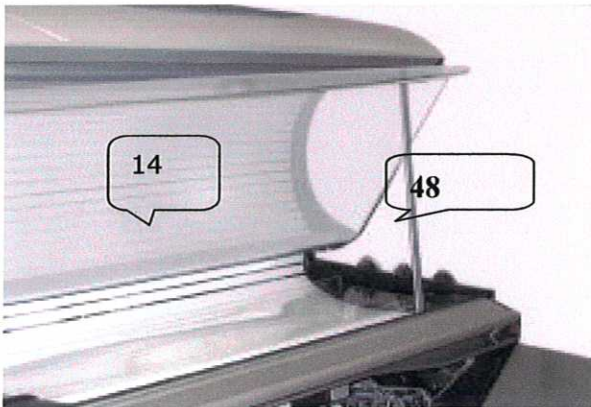
In the service mode, the total operating hours of the unit as well as the hours for low- and high-pressure lamps can be read and set back (for lamp operating hours only!).

Customized set-ups are also performed in this mode.

Turn the mains disconnect switch (1) into the ON position.

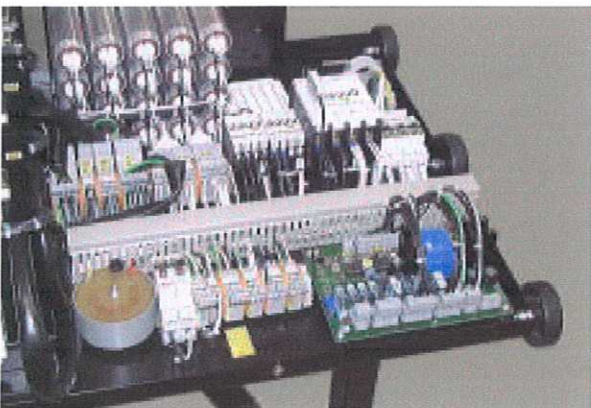
Push the Acrylic (14) of the sunbed upwards and secure with supplied bracket (48)

Remove front cover plate (13) of the sunbed (12).



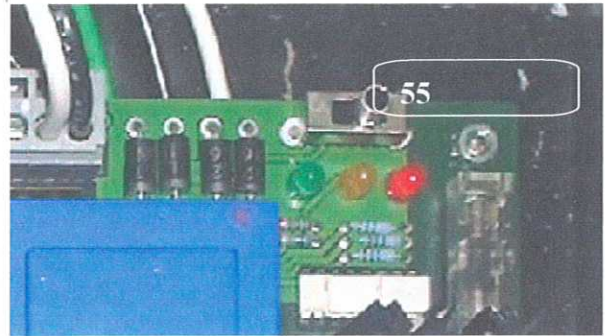
(Fig. 37)

The main PCB is on the front right hand side of the ballast tray (16)



(Fig. 38)

- In order to get into the program mode turn the lever switch (55) on the PCB – The BUS control LED (red) starts blinking very fast – program mode. The display reads: 0060.



(Fig. 39)

- The individual menu options are selected with the facial button (7) by using +/- values.



Facial Lamps +/-

With the body cooling button (6) the values are adjusted by using the + or – minus option in steps of 10.



Body Cooling +/-

With the facial cooling button (5) the values are adjusted by using the + or – minus option in single steps.



Facial Cooling +/-

- By activating the lever switch again, you leave the program mode – all changes are saved.
- Remount the front cover plate (13)
- Push back the support bracket (48) and reposition the acrylic (14) on the sunbed (12).

Electronic Controls: Set Up

Menu	Value	Description	Display	Pre-Set
00	60	Button (Start/Stop (3)) + R Test run 60 sec.	0060	-
00	60	Button (AC (4)) –R Operating Hours	xx xx	No Re-set
00	60	Button (Start/Stop (3)) – R Lamps Operating hours	xx	-
00	60	Button (Start/Stop 83)) - > 5 sec. re-set lamp hours	00 00	-
01	00	External Control	01 00	
01	01-30	Time Control in minutes via built-in time control	01 xx	00
02	-	Not assigned	02 02	02
03	-	Not assigned	03 01	01
04	00	AC unit always OFF (de-activated)	04 00	
04	01	AC unit always of at Start, then operable	04 01	02
04	02	AC unit always ON at Start, then operable	04 02	
05	00-90	Temperature for Heat-recycling option	05 25	25
06	00	Showlight always OFF	06 00	
06	99	Showlight always ON		
06	98	Showlight always ON when Unit OFF		98
06	1-97	Showlight ON, when Unit OFF and timer in steps of 10		
07	00-05	Start-Level Body Cooling Fan (0-5)	07 03	03
08	00-05	Start-Level Facial Cooling (0-5)	08 03	03
09	00-03	Start-Level Facial Lamps (0-3)	09 03	03
10	00	Button Start always activated	10 00	
10	01	Button Start only activated after cooling time has exp.	10 01	

The following set-ups can only be changed by authorized service personnel

11	-	Not assigned		
12	01-60	Max. operating time in minutes (safety switch-off)		30
13	00-03	Facial lamps reducible to level xx		00
14	00-06	Facial lamps time-out in minutes		3
15	01-03	Facial lamps ignition-level at start-up		01
16	00-99	Facial lamps switch-time in 10 ms steps		01
17	00-50	Motor time-out in ms for controlled fans		10
18	02-05	After cooling time in minutes		05
19	02-59	Pump-interval in ms for condensation water		10
20	00-99	Pump-time in ms for condensation water		20
2-26	00-99	RPM body cooling in single steps		
27-31	00-99	RPM facial cooling in single steps		
21	00-01	Button Stop activated/not activated	21 01	01

10 Trouble Shooting



Malfunctions and Errors must be serviced by authorized personnel only. Salon personnel is only allowed to correct malfunctions caused by incorrect operation.

Start trouble-shooting and corrections only after the built-in mains supply disconnect switch (1) is in OFF position and secured with a padlock!

If the unit is not ready for operation, the display (8) shows an error code listed in the table below:

10.1 Error Codes

Error Code	Description	Correction
E001	Wind-Flag does not switch on	Check terminal connections
E002	Facial Filter defective/missing	Replace
E003	Sunbed Acrylic open	Close acrylic
E004	Front Cover open	Close. Observe correct fit!
E005	Emergency Stop Button activated	Deactivate Emergency Stop
E006	Max. exposure expired	
E007	Not assigned	
E008	Communication Error	Check connection to Control Panel
E009	Not assigned	

Eliminate malfunction and then acknowledge correction by pressing the Start/Stop button.
The unit is again ready for Start-Up.

10.2 Malfunctions during Operation

Additional Malfunctions		
Malfunction	Cause	Correction
Unit does not turn on when timer is switched on	No voltage	Check circuit breakers and FI-Safety Switch
Low-pressure lamps are flickering	Starter defective	Replace Starter
Unit is getting too hot	Filter mats in top canopy and sunbed are blocked Insufficient Air circulation in the room	Replace filter mats (see chpts. 11.6 and 11.7) Check air outlets and remove blockage
One or more low-pressure lamps in the top canopy do not turn on.	Lamp not correctly installed. Lamp defective.	Check for correct installation (see chpts. 11.3 and 11.4) Replace lamp.
One or more HID-lamps do not light up.	HID lamp not correctly installed. HID Lamp defective/ignitor defective.	Check for correct installation (chpt. 11.5) Replace lamp or ignitor.

OWNER'S MANUAL

ORIGINAL DR. MÜLLER HIGH PERFORMANCE TANNING EQUIPMENT

S · U · N · G · A · T · E

ADDENDUM

ADVANCED UV LIGHT GMBH • RUHRTALSTRASSE 85-93 • D-45239 ESSEN

Phone: ++ 49 201 8 49 12 – 10

FAX: ++ 49 201 8 49 12 – 55

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Recommended Exposure Schedule	3
Tanning Rules	4
User Instructions	5
Technical Data	6
Additional Maintenance Instructions	7 – 9
Important Notice: Electrical Connection	10
Terminal Connection Electronic Control	10

Enclosures:

- Copy of Warning Label
- Copy of Type Label
- Wiring Diagrams

Skin Types and Recommended Exposure Schedule

Note: Sensitivity and reaction to UV-light exposure mainly depend on your individual skin type. The following chart shows the standard classification of Skin Types I - VI and their main characteristics. You should consider, however, that even within the same skin type, the individual condition of the skin and consequently the reaction to UV-light exposure may differ considerably and that certain factors (i.e. photosensitizing agents) also may influence your sensitivity to UV-light.

Skin Types* and Reaction to UV-Exposure

Skin Type	Description	Examples	Sunburn	Suntan
I.	Skin: very fair, w/freckles Eyes: blue, light gray, light green Hair: red, blonde	Celtic Type	Always	Tans little or not at all
II.	Skin: fair skin, some freckles Eyes: blue, green, gray Hair: blonde – dark blonde	Fair European type with white unexposed skin	Mostly	Light tan
III.	Skin: fair - to light beige, no freckles Eyes: grey, hazel Hair: dark blonde - brunette	Dark European type with white unexposed skin	Moderate sunburn	Average tan
IV.	Skin: light - beige, brown Eyes: dark Hair: brown – black	Mediterranean type Hispanics and Asians with light unexposed skin	Almost none	Tans easily, dark tan
V.	Skin: brown Eyes: dark Hair: black	Dark Mediterranean type, Hispanics with brown unexposed skin, Indians	Rarely	Always
VI.	Skin: black Eyes: dark Hair: black	Africans and African-Americans, Australian and South Indian Aboriginies	Never	Always

* Based on Philips Licht, Skin Type Classification

TANNING RULES

- Each user should strictly observe the **RECOMMENDED EXPOSURE SCHEDULE** listed on the tanning unit.
- Make sure that the tanning unit is equipped with a **TIMER. Never use a sunbed without a timer or with defective timer.** The maximum timer interval on the timer may not exceed the maximum recommended exposure time indicated on your tanning unit.
- **Never use a sunbed without filters** (i. e. clear and blue filters for the facials) **or with defective filters.** Missing or defective filters can cause severe sunburn.
- **Avoid any risk of over-exposure.** Possible symptoms of excessive exposure include red and itchy skin, which may blister and peel off, and a painful, itchy rash. Note: Sensitive skin can react with a heat rash immediately after a tanning session. This is due to the remaining infra-red heat rays and is not a sunburn if the symptom disappears shortly after the tanning session.
- **USE PROTECTIVE EYE WEAR!** Wear goggles or other UV-blocking eye protection at all times during a tanning session. Remove contact lenses. As with natural sunlight, overexposure can cause eye injury.
- **Medications may considerably increase your sensitivity to the ultraviolet radiation.** Some reported photosensitizing medications are, for instance, Antihistamines, Contraceptives, Psoralens, Sulfonamides, Tetracyclines, Antidepressants. There are also some medical conditions that can make tanning extremely hazardous. In case of doubt, consult your physician prior to using a sunbed.
- If you notice **any abnormal skin reaction** during or after a tanning session, **do not use tanning equipment again before consulting a physician.**
- **Remove all makeup** and other **cosmetics** before you take a session. Don't use **deodorants** or **perfume** immediately before a sunbath. These products, too, may contain ingredients that may increase your sensitivity to the ultraviolet light. **Skin should be dry and clean** when taking a tanning session.
- Also **remove all jewelry** before a tanning session in order to avoid possible allergic reactions and unattractive stripes.
- Use only skincare products designed specifically for indoor tanning immediately before and after a tanning session. **Don't use any screens** or sun lotions **for outdoor tanning.** These products have been created for a different purpose and a different UV-light spectrum than indoor tanning products and some may also cause photosensitizing or allergic reaction when used for indoor tanning.
- It is recommended to use **specifically designed indoor tanning products.** Pre-and after-tanning moisturizers will enhance your tan and keep the skin soft and supple.
- **Take a series of controlled tanning sessions!** The cumulative effect of multiple sessions will produce increased stimulation of pigment forming cells and result in a long lasting, rich tan which protects better against sunburn.
- **Only use indoor tanning equipment once a day.** Don't sunbathe outside on days you use indoor tanning equipment.
- Please remember that those parts of your body which are normally not exposed to sunlight, will react more sensitively to ultraviolet light. Generally **unexposed areas are likely to react more sensitively** to ultraviolet exposure than the face or arms. Keep also in mind that in spring, after the lack of sunlight in winter, your skin reacts much more sensitively to ultraviolet light than in fall.
- 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.

ALWAYS USE INDOOR TANNING EQUIPMENT IN A RESPONSIBLE AND CONTROLLED WAY.

AVOID ANY POSSIBLE HEALTH RISKS BY OBSERVING RECOMMENDED EXPOSURE TIMES AND TANNING RULES.

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. There is no UV-C component present.
- 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
- 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!

- The individual limit is reached if after a few hours after the use of this product the skin turns lightly 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 the 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. Any position closer to the tanning surface may result in over-exposure.

ONLY ONE PERSON MAY USE THE SUNBED AT ONE TIME.

ONLY ONE SET OF PROTECTIVE EYEWEAR HAS BEEN SUPPLIED.

Technical Data:

Model Version 50-4

Type:	Original Dr. Müller Tanning Equipment Model 50-4
Electrical Connection:	1 phase, 240V, 60Cs Optional 3-phase D
Total Wattage:	approx. 12.000 Watt
Height (Top open):	1680 mm, c. 66"
Height (Top closed):	1350 mm, c. 53"
Length:	2300 mm approx. 90"
Depth:	1450 mm approx. 57"
Weight:	Approx. 450 KG
Body Cooling:	At the head-end; adjustable; At the foot-end
Ventilation: Exhaust Air Volume m ³ /h	Central exhaust air fan 2.500
Circuit Breaker (1-phase)	80 amps.
Lamp specifications:	Facials: 4 x Dr M 1000 EG US HID Quartz Lamps Top 29 x AUVL VXR 180W Lamps, 1760 mm Sunbed 21 x AUVL VXR 160w Lamps, 1760 mm

NOTE: AN ALL- POLE CIRCUIT BREAKER (FI-SAFETY SWITCH) HAS TO BE PROVIDED AT THE SITE OF INSTALLATION!

(or, at least, in an easily accessible location on the same floor level)

Additional Maintenance Instructions

Replacement of guide bearings.

Though the teflon-coated guide bearings are made for wear and tear, it may become necessary to replace them if they show signs of damage. In order to replace the bearings, proceed as follows:

1. Remove the sunbed plexi
2. Remove the AC plexi
3. Remove the lamp coverings at head and foot-end
4. Remove the front cover plate



Fig. 1

5. Open the top
6. Push screwdrivers at both sides (head and foot-end) into the notch of the bracket. (See Fig. 2)

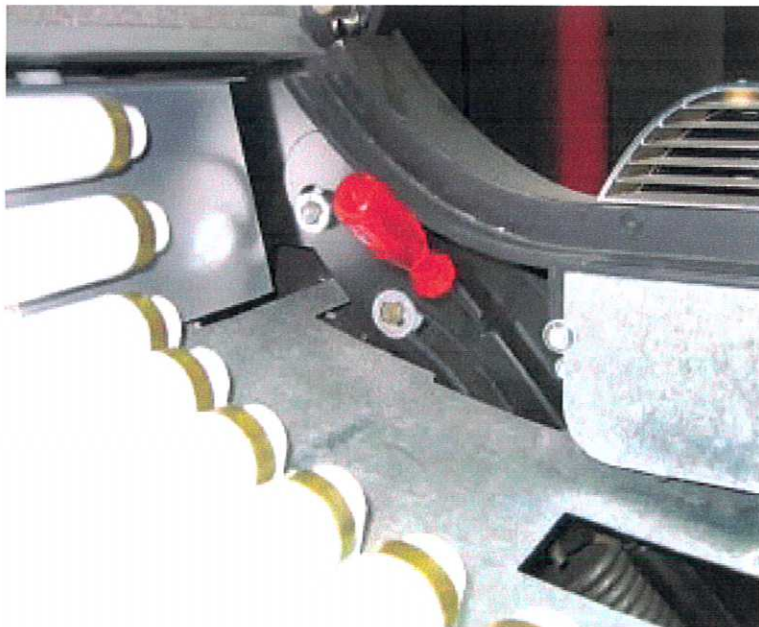
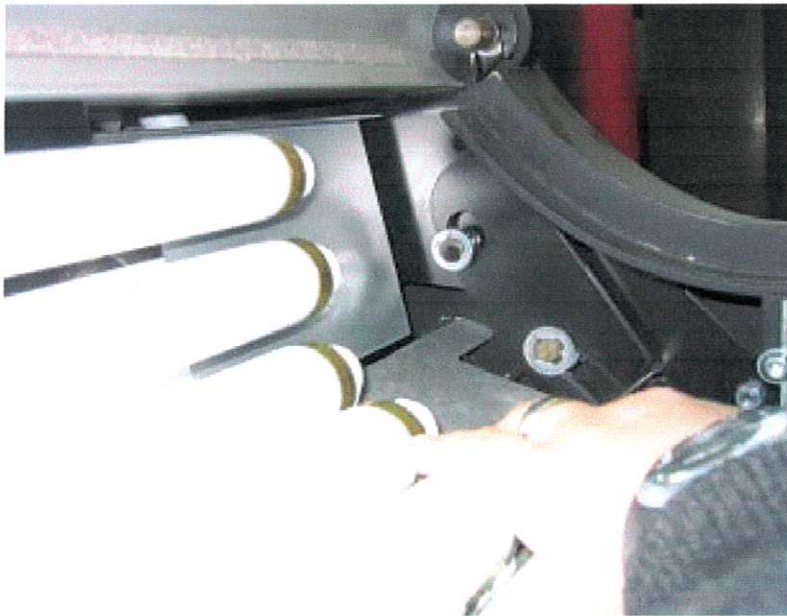


Fig. 2

7. Push in the screwdriver for leverage in order to lift the bracket out of the guide rail. (See Fig. 3). During this job a 3rd person has to hold the top wide open.

Fig. 3



8. When the bracket is positioned on both sides as shown in Fig. 3 the third person must slowly let the top down.
Caution: The Top is now disconnected and very heavy!!!
Put the top onto the sunbed. Take care to put soft padding material or styrofoam on the sunbed front profile to prevent scratches or damage.
9. One person lifts the top from the pivot.
First, pull a bit forward, then up.



Fig. 4



Fig. 5

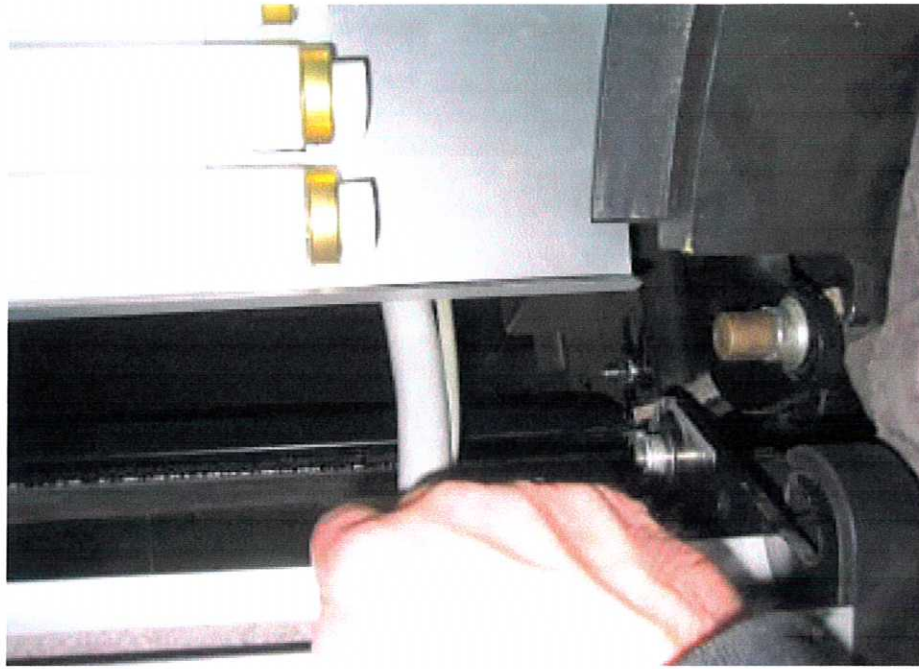


Fig. 6

10. As shown in fig. 6 the bearing is now accessible and can be replaced by a 2nd person.

11. The bearing must be installed in such a way that after reassembly of the top the slot in the bearing is positioned in the open fork (Fig. 7).

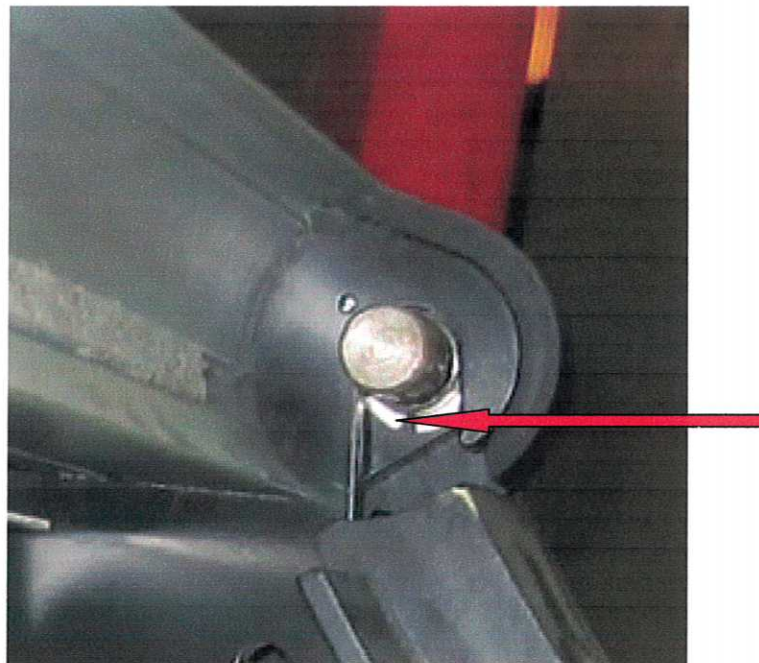


Fig. 7

12. Follow the same procedure for both sides of the top and re-assemble unit.



IMPORTANT NOTICE

READ CAREFULLY PRIOR TO PERFORMING CONNECTION TO ELECTRICAL MAINS SUPPLY!

The new ballast tray allows for 2 operational modes:

1. 230V 60Hz – “single phase”

This is the standard connection as delivered by manufacturer.
A bridge a connection terminal L2 and L3 has been provided.
Plug X30/31 is connected to female terminal X31.

2. 3 x 230V 60Hz “Delta”

In order to connect the unit to a 3-phase delta mains supply system, the bridge at connection terminals L2 and L3 has to be removed. (if the bridge is not removed this will cause a short at the entry terminals).
Plug X30/31 has to be connected to female terminal X30 (if plug X30/31 is not connected to female terminal X30 lamps in the sunbed will not light up).

Connection of Terminals Electronic Control Sungate

Terminal	Pin	Function
X11	PE	Protective Conductor Connection
X11	N	Zero
X11	L	Phase Secured via F1
X11	L	Phase secured via F1
X11	L	Phase secured via F1 & Emergency Stop
X12	GN	Zero f. body cooling top canopy
X12	GL	Phase f. body cooling top canopy
X13	KN	Zero f. body cooling sunbed
X13	KL	Phase f. body cooling sunbed
X14	NO/C	Remote Start Connection
X15	KP	Not assigned
X15	WR/WR	Control f. heat recycling system
X15	SL/SL	Control f. show light
X16	HL	Output (230V) for Main Fan
X16	KL	Output (230V) for AC unit
X16	RS	Output (230V) f. Main Contactor K1
X16	G1	Output (230V) for Facial Lamps Step 1
X16	G2	Output (230V) for Facial Lamps Step 2
X16	G3	Output f. Facial Lamps step 3
X17	MH	Input 230V from Timer
X17	ML	Zero 230V/24V pending control device
X17	MG	Input (24V) from Timer
X18	FS/FS	Safety Switch Control Front Cover Plate
X18	BS/BS	Safety Switch Control Snubbed Acrylic
X18	LS/LS	Safety Switch Control Wind flag (Main Fan)
X18	KF/KF	Not assigned
X18	TF/TF	Thermostat Heat Recycling
X19	GS/GS	Safety Switch Control Filter Glasses