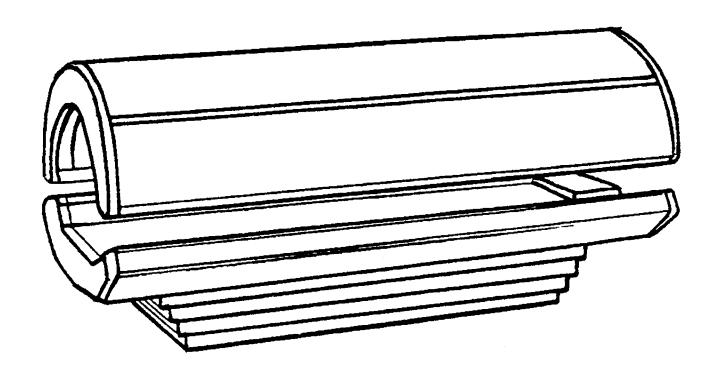


# INSTRUCTIONS FOR ASSEMBLY AND USE FOR SUNBED TYPES 32/9; 34/9; 32/33; 32/33 VHO; 34/27 USA AND CANADA



#### **WARNING:**

■ Read the instructions booklet before using this product.
■ When using a folding combination machine with bench and canopy, lie down on the bench and pull the canopy down until it will move no further. When using a canopy only, lie down and pull the canopy down as for as the stand will allow.
■ Operation of this device closer to the body than the recommended minimum distance for use may result in overexposure.
■ Recommended eyewear: Provided eyeshields (Intexco Nr. 5635/1s) or equivalent eyewear as defined under 21 CFR 1040.20 2(b) (6).

One pair of protective eyewear is furnished with this equipment and should be worn by all persons in the room when lamps are on. Disconnect power cord before attempting to clean, replace lamps or engage in the maintenance of this product. THE FOLLOWING LAMPS HAVE BEEN CERTIFIED FOR USE IN THIS EQUIPMENT: **COSMOLUX RCS, COSMOLUX VHR, COSMOLUX UVA PLUS** or compatible types.

THIS PRODUCT CONFORMS WITH PERFORMANCE STANDARDS FOR SUN LAMP PRODUCTS UNDER 21 CFR PART 1040.20

#### **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 SERVERE BURNS OR LONG-THERM INJURY TO THE EYES.

Medication 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. Minimum use distance is 1 inch or 2.54 centimeter. Tanning may appear after one application provided that your skin is capable of developing a suntan. Allow 48 hours between sessions to obtain a base tan, once or twice per week to maintain appearance.

#### **IMPORTANT**

- The sunbed is intended for permanent connection.
   The connection lead be Type SJT or equivalent 3 x AWG
   8 cable with a 25 foot maximum length.
- Before any job is carried out on the sunbed (such as replacement of a lamp or starter, or cleaning), the unit must, as a matter of principle, must be disconnected from the fusebox.
- Repairs to the sunbed should only be carried out by a locally approved electrician, or by the manufacturer's service engineer.
- The sunbed may only be installed in a dry area shielded from splashing or dripping water.
   A relative humidity of 70% and a room temperature of 28°C (82° F) must not be exceeded. A higher room temperature will also mean a higher temperature on
- Air intake slots and hot air outlets on the cooling fans must not be covered, otherwise overheating of the unit will occur.

the bed and/or under the canopy.

- In case of failure of the cooling fan (causing abnormal warming of the unit), switch the unit off immediately.
- Certain materials (e.g. paintings) which fade when exposed to sunlight should not be exposed to UV light from the sunbed unit for extended periods.
- In new sunbeds, it is possible that tubes may flicker or moving shadow effects may appear. The tanning function of the sunbed will not be affected. Slight blackening may also appear at the ends of the tubes, but this will have no effect on the function of the unit, or the life of the tubes.
- Children do not realize the dangers which can occur in the use of electrical appliances. Therefore, children must never be allowed to operate electrical appliances without supervision.
- This unit is not designed for use for medical purposes.
- The sunbed is allowed to use only by one person at the same time.

# Some facts about tanning

The light radiated from the units has an optimum composition. The special lamps yield a particularly high proportion of mild UV."A" tanning radiation. This prevents sunburn while at the same time inducing tanning in an extremely short time.

The sunbed can only develop its full tanning potential if normal conditions for tanning in the sun are met. Persons who do not tan in natural sunlight will not be affected by the radiation from the sunbed either.

# **Special instructions**

for units with built-in facial tan

With the built-in facial tan facility, the higher radiated power gives a much better tan than can be obtained from

the standard UVA tubes. Because of this increased power, there is intensive tanning of the facial skin, which, even in natural sunshine, browns more slowly than other parts of the body.

The facial tan can be switched on and off by the rocker switch in the control panel (ON: \*/ OFF:0).

#### **Exposure tips**

Uv appliances are not to be used by those persons who, when exposed to sunlight, get sunburn without their skin turning brown (skin type I), or who are prone to sunburn, or by children under 16, or by persons who have suffered from skin cancer or are susceptible to it.

The distance from the radiation source is a built-in feature of the construction of the unit. For a unit with intensive facial tan, a minimum distance of 4-6 inch must be maintained. Follow the recommendations regarding exposure times and intervals.

Don't use the sunbed if the time switch is faulty, or if the filter glass of the intensive facial tanning unit is broken.

Ultraviolet radiation whether from the sun or from UV appliances can cause skin or eye injury. Such biological effects depend on the nature and amount of the radiation and also on the sensitivity of the skin of the individual user.

After excessive exposure, the skin may show signs of sunburn. Excessively frequent ultraviolet radiation by sunlight or UV appliances may cause premature ageing of the skin, and also increased risk of skin tumours.

If the eyes are unprotected their surface may become inflamed, and excessive exposure may damage the retina in certain cases. After many repeated exposures, grey cataract may develop.

In cases where individuals have particular sensitivity to ultraviolet radiation, and where certain medications or cosmetics are used, special care is necessary.

Most lamps will display up to 120 % of rated output during the first 50 hours of illumination. As such exposure schedules should be reduced by 20 % or sunburn may occur. After the initial 50 hours, the lamps will run at between 95 % and 100 % of their rated output.

The following precautions must therefore be taken:

- always use the goggles supplied;
- remove cosmetics in good time before exposure, and do not use sun protection products of any kind;
- don't use the sunbed if you are taking medications which increase the sensitivity of the skin to ultraviolet radiation; in case of doubt, ask your doctor;
- always skip a day between two exposures; don't have an extra sunbathe on the same day;
- observe the recommendations regarding exposure times, intervals and distances;
- if persistent swellings, sores, or pigmented liver spots form on the skin, consult your doctor.

#### **Exposure Times**

#### RECOMMENDED EXPOSURE SCHEDULE

MAXIMUM	EXPOS	JRE	TIMES		
(IN MINUTES)					

CLASS:	SKIN TYPES:	week 1	/week 2	week 3	3/MAX
ı	Sensitive Skin (Burns easily and severely, and does not tan.)	TANNING NOT ADVISED			
11	<b>Light Skin</b> (Burns easily and severely, and tans minimally.)	3	6	8	11
111	Normal Skin (Burns moderately, and tans moderately.)		8	10	11
IV	<b>Dark Skin</b> (Burns minimally, and tans well or above.)	5	8	10	11

An exposure programme for your sunbed has been established to match the various skin types and the radiation sources fitted to your sunbed, in accordance with the guidelines of 21 CFR 1040.20. This exposure programme is appended to these instructions as a supplementary sheet, and is also displayed on a sticker on your sunbed unit.

The recommended initial exposure time and maximum exposure time must not be exceeded.

#### **Exposure distance**

The exposure distance is a built-in feature of the construction of the unit, and should not be reduced under any circumtances.

# After exposure

It is advisable to apply a skin lotion after exposure.

# **Spares**

The operating life of the UVA low-pressure tubes and facial lamp is approx. 500-800 hours. Original spares must be used when replacing these.

The type designations of the UVA low-pressure tubes, facial lamp and filter plates are given on a sticker (located at the rear right of the unit near the power cable).

These spares can be ordered from your after-sales centre or dealer, quoting the appliance Art.-No. (shown on the type rating plate).

THE FOLLOWING LAMPS HAVE BEEN CERTIFIED FOR USE IN THIS EQUIPMENT.

32/9; 34/9; 32/33: 34/27

Canopy CS (XA 1-12-100 W) Cosmolux
Canopy UVA plus (A1-12-25 W) Cosmolux
Bed RCS (XA 1-15-100 W) Cosmolux

32/33 VHO
Canopy VHR (NA 1-15-160 W) Cosmolux
Canopy UVA plus (A1-12-25 W) Cosmolux

Canopy UVA plus (A1-12-25 W) Cosmolux Bed RCS (XA 1-15-100 W) Cosmolux

THIS PRODUCT CONFORMS WITH PERFORMANCE STANDARDS FOR SUN LAMP PRODUCTS UNDER 21 CFR PART 1040.20

#### IMPORTANT NOTICE

#### Please read carefully the following important information

The electrical requirements for all 220 Volt combinations are:

220 Volt dedicated circuit 40 Amp receptacle 40 Amp rated breaker

Operating any 220 Volt combination at voltage levels below 220 or above 240 constitutes an automatic nullification of the warranty, as it could cause damage to the unit's system.

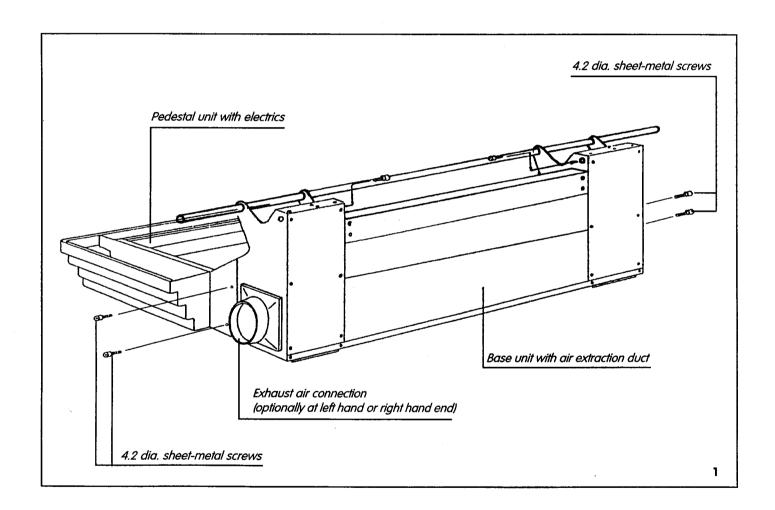
Please insure that your electrician and / or installer reads this information prior to delivery and setup. Using a digital volt meter, he or she must first determine the exact limvoltage being delivered to the receptacle. If the line voltage is not within the specified range, employment of a buckboost transformer will be requested to regulate it. Please contact your authorized DR. KERN dealer for pricing and availability on buck-boost transformers.

# **Assembly**

Assembly of your new sunbed is straightforward provided you observe the following sequence.

#### **Pedestal**

The pedestal is supplied as two separate components. These comprise the pedestal proper with complete electrical installation, and the rear base unit with column bases and air extraction duct. Start by placing the rear base unit centrally at the location assigned to the sunbed. Then position the pedestal in front of the rear base unit with the vertical side walls of the pedestal slightly overlapping the rear bases. In this position, screw the two parts together, using two of the 4.2 dia. x 9.5 sheet-metal screws supplied, at each end.



#### Top unit

Your sunbed is fitted with a spring balancing system. This spring system is located in the rear base parts. If you look down into these bases from above, you will see the springs, which have already been tensioned at the factory. Right at the top of the bases, and partly hidden from view by the rear wall of the bases, you will see a bar which is secured by a screw at each end. **These screws must not be removed until after the top unit has been fitted (hung).** 

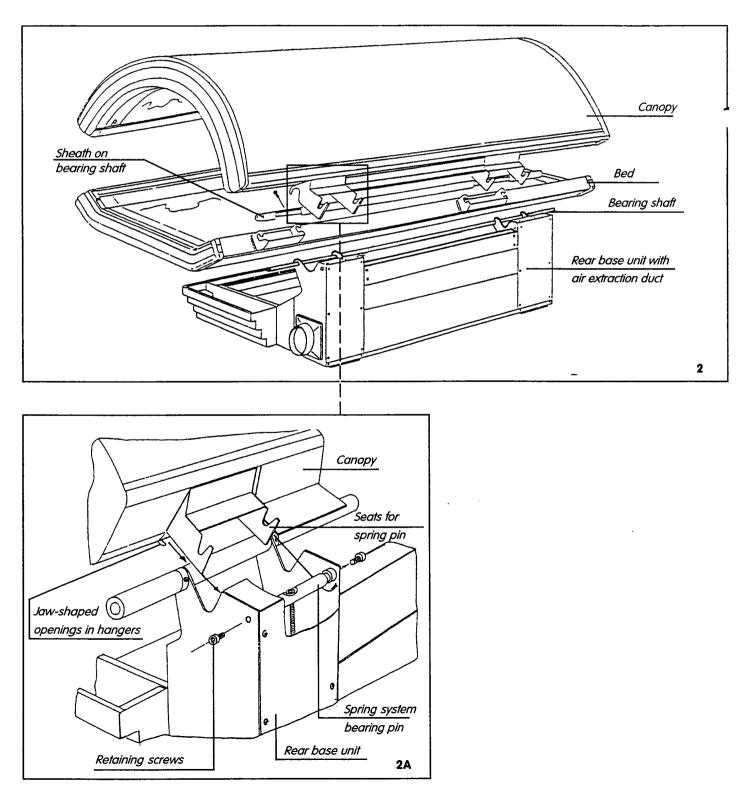
On the rear spar of the top unit you will see the "hangers". Jaw-shaped openings are provided in the front of these hangers. On assembly, the bearing shaft of the column base has to engage in these openings.

To assemble the top unit, the top unit must now be lifted and supported so that the front spar is quite a bit higher than the rear spar. With the unit in this tilted position, insert the rear hangers into the bases so that the jaw-shaped openings slide onto the bearing shaft, as illustrated in Fig. 2A.

While one person keeps the top unit raised by supporting it at the front, make sure that the hangers are properly supported on the bearing pins. The top unit can then be gently lowered into the operating position.

This will cause the rear arms of the hangers to pivot under the bars to which the springs are attached.

In this position, i.e. with top unit lowered, the lateral retaining screws can, and must, be unscrewed.



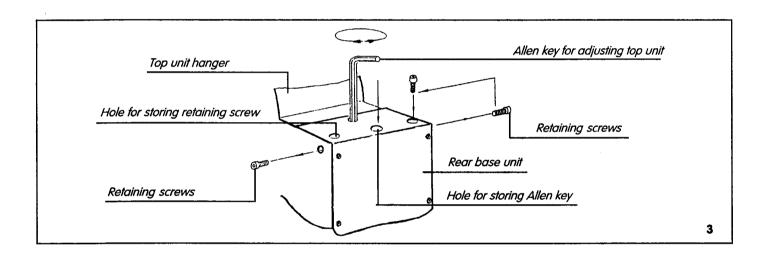
#### Tension spring adjustment

An easy pivoting motion of the top unit can now be set by "tensioning" the springs. However, as the springs have already been pretensioned at the factory, first try raising the top unit and lowering it again. If the top unit stays in any position the setting is correct. If the top unit tends to sink, the springs need more tensioning. To do this, lower the top unit and adjust the springs as shown in Fig. 6A, using the Allen key supplied.

Turning the key to the right will increase the tension of the springs. Turning to the left will reduce the tension of the springs.

Adjust the springs equally at both columns. Keep testing to check whether the spring adjustment is sufficient. Spring adjustment is sufficient when the top unit will stay in any intermediate position and can be very easily raised and lowerded.

The Allen key and retaining screws can be kept in the holes in the column cover (visible from above).



#### **Bed**

The bed unit is packed lamp side down. In the back wall (i.e. visible on top) you will see the fan and two screwed holes at 1160 mm centres for later attachment of the bed to the pedestal.

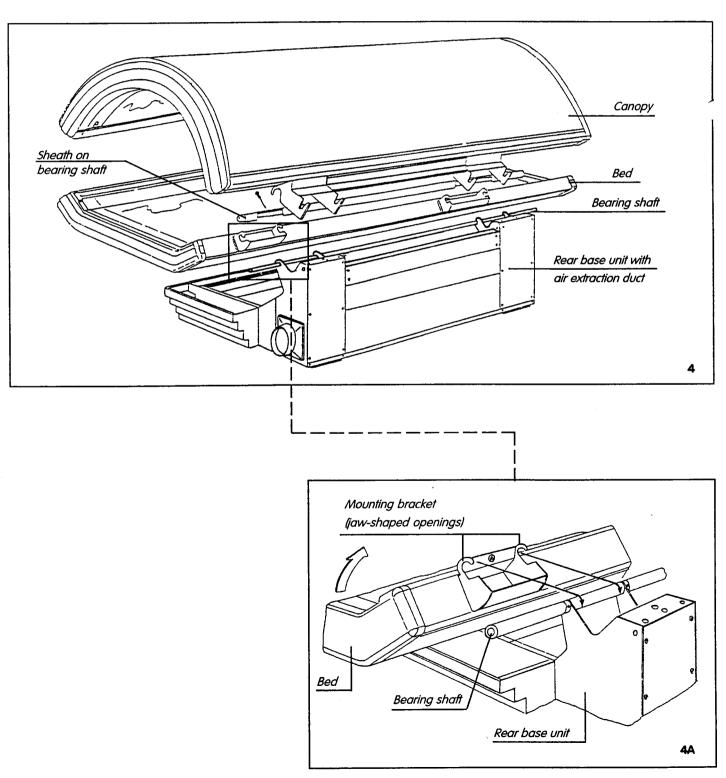
On the rear spar of the bed, as also on the top unit, two hangers with jaw-shaped openings are fitted.

The bed must now be lifted by two persons, lamp side upper most, so that the spar with the hangers points to the rear. With the bed tilted slightly - keeping the front higher than the rear - guide the hangers with the jaw-shaped openings onto the bearing shaft, making sure that the hangers on the bed are positioned between the hangers on the top unit.

While one person keeps the front of the bed raised and steady, make sure that the hangers are propely supported on the bearing shaft.

The bed can then be lowered onto the pedestal.

To complete the assembly, the sheath is pushed onto the bearing shaft and secured with two M4 screws.



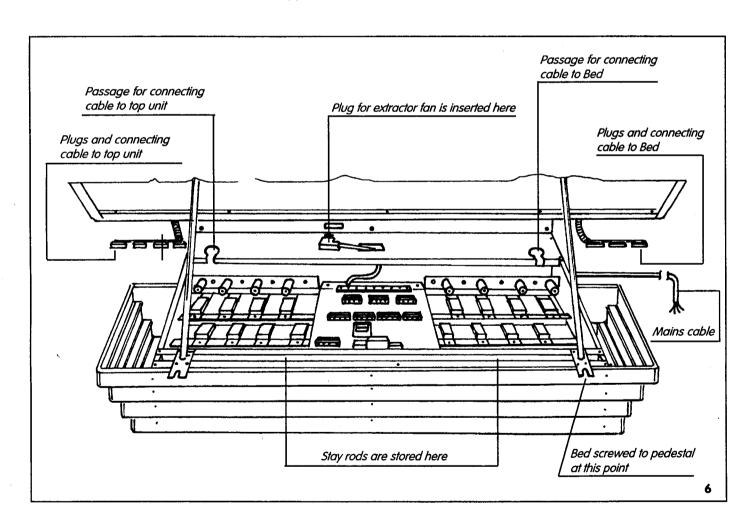
#### **Electrical connection**

Your sunbed is intended for connection to 220 V 60 Hz supply. Connection to the power supply may only be carried out by a locally approved electrician, as a permanent connection in compliance with the local regulations. In any case, a device must be provided whereby the unit can be isolated from the mains with a contact opening gap of at least 3 mm on all poles. Suitable isolating devices are LS switches and contactors.

For the connection to the mains, the bed unit can be lifted again at the front and propped with the stay rods.

Before the sunbed is connected to the mains, the connecting cables to the bed and to the top unit must be plugged in. These connecting cables are non-reversibly fitted with multiway connectors. Thus the left-hand connecting cable to the top unit can only be plugged into the left-hand plug row, and the right-hand connection cable to the bed can only be inserted in the right-hand plug row.

Finally, fasten the cable retainer plates to the pedestal side walls with the  $4.2 \times 9.5$  sheet-metal screws supplied.



Lastly, connect the mains cable to the power supply by mean of a CEE plug and socket, or by permanent connection. Lower the bed onto the pedestal again, after removing the stay rods, which can be stored in the front recess of the pedestal. Once the bed has been screwed to the pedestal with the M6 screws supplied, the sunbed is ready for operation.

# **Operation - starting**

Select the desired sunbathe time by means of the rotary timer knob. On expiration of this time, the tubes and the facial tan lamps are switched off automatically.

#### Selector switch

The selctor switch is used for selecting the following functions

🗯 Facial tan - Spaghetti lamps

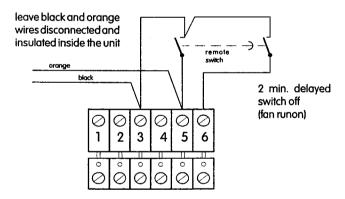
Se Body cooler

**UV** Tanning tubes

These functions can be stopped by switching to "0", although the time switch will then continue running until it reaches "0", or "OFF" as the case may be.

#### Remote control

Your solarium can be easily connected to a remote timing device by connecting the switched phase leads to the poles 3 and 5 to the 6 pole terminal, which is located under the bench of the unit on the left side of the mounting plate. Remove and isolate the wires, connected to pole 3 and 5, which are needed for normal buildin-timer operation. The connection of the remote switch is been shown in the following diagram. Use a cord type SP-1 or SPT-1, or heavier, with a maximum length of 25 feet.



A 2 or 3-minute "Lag Relay" after-cooling timer must be connected in all commercially employed solaria. This function is standard on most remote timing devices developed for use in the indoor tanning industry, or can be ordered from your authorized distributor as an easy-to-install module that fits onto the main contactor block, and is connected to pole no. 6 (red) there on.

#### Notice:

In accordance with the maximum exposure limit of 11 minutes, the maximum running time of the remote timer should not exceed 11 minutes

# **Changing lamps and starters**

As is the case for all maintenance operations, the sunbed must be disconnected from the power supply. For lamp and starter replacement, the acrylic panel must be removed from the top unit or bed. In the case of the bed it is removed by undoing the fixing screws in the front retaining strip and by withdrawing the retaining strip and acrylic panel forwards.

In the top unit, the acrylic panel is fitted under tension. After unscrewing the plastic head screws of the trimming extrusions, the panel is removed by pushing the middle of the panel inwards slightly with one hand and drawing it from the rest on the front spar with the other hand (if necessary with the aid of a small screwdriver).

The acrylic glass panels should be regularly cleaned inside and out. Only <u>solvent-free non-corrosive</u> household cleaning products should be used.

To insert the panel, the long rear edge of the panel is inserted into the rear retaining strip and gentle pressure is applied to the middle of the panel. This "flexing" of the panel will enable it to snap back into the front spar.

To prevent possible injury to health, original lamps (see stamp mark at the end of the tube) must be used when replacing lamps.

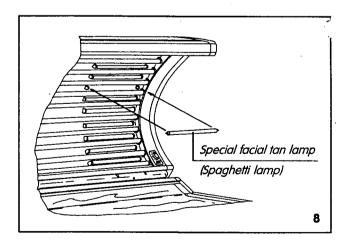
These can be obtained from your dealer.

Twist each lamp until the contact pins at the end of the lamp become visible in the slots in the holder. Then remove the lamp from the holder. Fit new lamp by inserting the contact pins at both ends into the holder slots simultaneously, and then rotating the lamp approx. 90 degrees.

Whenever a tube is replaced, the corresponding starter should be renewed as well. The starter

is removed by applying gentle pressure and turning it to the left.

Press the new starter gently into the holder and twist it to the right until fully "home".



# Cleaning the sunbed

Before cleaning the sunbed, always switch off and unplug the sunbed, or if it is permanently connected to the mains, disconnect at the fusebox.

To clean the sunbed, only a damp cloth should be used.

# Cleaning the acrylic panels

Owing to the powerful air circulation, it may happen that dust is deposited on the insides of the acrylic panels. This contamination may affect large areas of the panels, or may be confined to small areas. If such contamination occures, the acrylic panel must be taken out and cleaned as described under lamp changing.

# Use only solvent-free non-corrosive household cleaning products.

Such contamination may also occur on new equipment after a short time in operation, owing to the different static charge of the acrylic panel.

These cleaning operations are excluded from the guarantee.

# Sunbed cooling

The cooling system fitted to your new sunbed is the most effective system for appliances of this kind. Because of the powerful air circulation, entrainment of dust etc. cannot be ruled out. Such contamination, some of which may be deposited in the sunbed and on the fans, may impair the cooling of the unit. The unit should therefore be cleaned, as the need arises or at regular intervals. Also, remember that warm air will be less effective than cold air in cooling lamps which are at a given operating temperature. Therefore always make sure that your sunbathing room is well ventilated.

#### **Warnings**

This machine should under no circumstances be used when:

- Never operate this machine when the ambient room air temperature is greater than 82 degrees fahrenheit.
- Never operate this machine when the remote timer is not working properly.
- Never operate this machine when the blue filter glass in any facial tanner is not installed or is broken/defective:
- Never operate this machine when it is not ventillating itself properly (too hot inside).
- The salon owner or operator may never, under any circumstances, open the bench of the unit.

#### NOTE:

- Avoid from having the acrylic sheets come in contact with sharp edges and objects.
- Insure that the main exhaust hoses are never kinked and kept free of debris.
- The room or cabin in which the unit is operated must be well ventilated.
- Make sure that the unit never comes in contact with water while connected to power.
- Do not turn the machine on and off frequently within the space of 3 minutes.

#### **Trouble Shooting**

Problem	Probable cause	Solution
Unit is activated but nothing happens	No power	Check properly connection of power supply and check circuit breakers located in the base.
Unit is activated but nothing happens	Timer clears after priming	Reprime the timer ant try again.
Unit is activated but nothing happens	Hour meter or coin box / remote	Check the connections to both - replace if defective timers do not work
Lamps do not light	Lamp not in socket properly	Turn lamp in socket unil lamps illuminates
Lamps do not light	Lamp is defective	Replace lamp
Lamps do not light	Starter is defective	Replace starter
Facial tanner does not light	Face tanner switch turned to "OFF"	Turn face tanner switch to "ON" turned to "OFF"
Facial tanner does not light	Lamp is defective	Replace lamp

# Warranty

#### **OUR WARRANTY**

All materials used in the construction of our solariums are fully replacement warrantied, for a period of two years, beginning on the date of installation. Lamps, starters, plastic end caps, and acrylic sheets are not included in our policy, as they are separately covered by the manufacturers from wich we purchase them.

#### ELECTRICAL CODE APPROVAL

Solariums are ETL approved. Local electrical code inspection authorities should be referred to the respective labeling located on the back of each unit, next to the main power cable.

For warranty claims, replacement parts, replacement lamps and service, please contact your authorized distributor.

# Circuit diagramm

