

# SPORTARREDO®

S.p.A.

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# Blue Moon



**INSTALLATION, USE AND MAINTENANCE MANUAL**

**USA**

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1 - GENERAL INFORMATION

1.1 LABELS

This device is intended to be used by only one person at a time. Lie on the bed and lower the canopy down to the stopping point.

**CAUTION: EXPOSURE POSITIONS OTHER THAN SPECIFIED MAY RESULT IN OVEREXPOSURE AND ARE NOT RECOMMENDED.**

Tanning normally begins after one to two exposures and maximizes after one to four (1-4) weeks of exposure following the recommended schedule for your skin type.

**Wear protective eyewear.**  
**Eyewear: SUN GLOBES**

Read the instruction booklet before using tanning system.

**RECOMMENDED EXPOSURE SCHEDULE**

First three sessions should be at 48 hour intervals. Followed by the gradual increasing of exposure times until maximum tanning has occurred (in approximately 4 weeks). MAXIMUM EXPOSURE is 12 minutes.

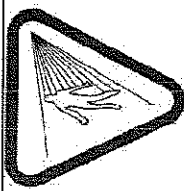
Skin Type	Week 1 1st - 3rd Session	Week 2 4th - 6th Session	Week 3 7th - 9th Session	Subsequent Weekly Session
II	2 min	5 min	7 min	10 min
III	2 min	5 min	8 min	10 min
IV	2 min	6 min	8 min	11 min
V	2 min	7 min	9 min	12 min

This product is in conformity with performance standards for sunlamp products under No. 21 CFR 1040.20. This appliance is intended to be used with the following lamps:  
**Kalfasun 630F 600W**  
**Kalfasun 1530F 1500W**  
**Kalfasun B23-S WHITE 160W**

For replacement lamps, eyewear or parts, contact:  
**SPORTARREDO USA INC.**  
**200 South Wacker Drive**  
**CHICAGO, IL 60606**  
**(1-866-899-4826)**

Cod. 10986.193.4.0

1 - GENERAL INFORMATION



**WARNING—ULTRAVIOLET RADIATION—FOLLOW INSTRUCTIONS—FAILURE TO USE PROTECTIVE EYEWEAR MAY RESULT IN SEVERE BURNS OR OTHER EYE INJURY—IF DISCOMFORT DEVELOPS, DISCONTINUE USE AND CONSULT A PHYSICIAN**

**ATTENTION—RAYONNEMENTS ULTRAVIOLETS—VEUILLEZ SUIVRE LES INSTRUCTIONS—SANS DISPOSITIF DE PROTECTION DES YEUX, CE PRODUIT PEUT CAUSER DES BRÛLURES OU LÉSIONS OCULAIRES GRAVES—SI VOUS SENTEZ UN MALAISE, EN DISCONTINUER L'USAGE ET CONSULTER UN MÉDECIN**

Avoid overexposure. As with natural sunlight, overexposure can cause eye and skin injury and allergic reaction. Repeated exposure may cause premature ageing of the skin and cancer. Medications or cosmetics may increase your sensitivity to the ultraviolet radiation. Consult physician before using sunbed if you are using medications or have a history of skin problems or believe yourself especially sensitive to sun light. If you do not tan in the sun, you are unlikely to tan from use of this product.

Éviter surexposition. Comme avec la lumière naturelle du soleil, la surexposition peut causer lésions aux yeux et à la peau et réactions allergiques. Une exposition répétée peut causer un vieillissement prématuré de la peau et cancer.

Médicaments et cosmétiques peuvent augmenter votre sensibilité aux rayons ultraviolets. Consulter un médecin avant d'utiliser la lampe à ultraviolets si vous utilisez médicaments, si vous avez problèmes de peau ou si vous croyez vous êtes particulièrement sensibles au rayons du soleil. Si vous ne bronzez pas avec le soleil, c'est improbable que vous pouvez vous bronzer en utilisant ce produit.

Cod. 169886.199.0.0

- AVVERTENZA: Non usare l'apparecchiatura se i filtri protettivi sono danneggiati o mancanti!
- ATTENTION: Do not use the sunbed if the filter glasses are missing or damaged!
- ACHTUNG: Bei defekter oder fehlender Filterscheibe keine Bestrahlung vornehmen!
- ATTENTION: Quand le filtres de protection manque ou sont abîmés, n'utilisez pas l'appareil.
- ATENCION: No utilizar el aparato si faltan los filtros protectores o si los mismos están dañados!

Cod. 169886.203.0.0

**CAUTION!**  
CONNECT ONLY TO A CIRCUIT PROTECTED BY A CLASS  
A GROUND FAULT CIRCUIT INTERRUPTER.

**ATTENTION!**  
BRANCHER SEULEMENT À UNE DÉRIVATION PROTÉGÉE  
PAR UN DISJONCTEUR DIFFÉRENTIEL DE CLASSE A.

VALID ONLY FOR CAN/CSA

Cod. 169886.200.0.0

**WARNING!**  
DISCONNECT POWER SUPPLY BEFORE OPENING UNIT.

**ACHTUNG!**  
VOR DER ÖFFNUNG DES GERÄTES SICH VERGEWISSEN, DASS  
DIE ELEKTRIZITÄT ABGESCHALTET IST

**ATTENTION!**  
AVANT D'OUVRIR D'APPAREIL, S'ASSURER QU'IL AIT ÉTÉ COUPÉ  
LA TENSION D'ALIMENTATION

**CUIDADO!**  
ANTES DE ABRIR EL APARATO HAY QUE ASEGURARSE DE QUE  
ESTE CORTADA LA TENSION DE ALIMENTACION

**ATTENZIONE!**  
PRIMA DI APRIRE L'APPARECCHIO ACCERTARSI CHE SIA STATA  
TOLTA LA TENSIONE DI ALIMENTAZIONE.

Cod. 169886.001.0.0

**WARNING!**  
GROUNDING CIRCUIT CONTINUITY IS VITAL FOR SAFE OPERATION OF  
EQUIPMENT. NEVER OPERATE EQUIPMENT WITH GROUNDING CONDUCTOR  
DISCONNECTED.

**AVERTISSEMENT!**  
POUR UN FONCTIONNEMENT SUR, NE JAMAIS UTILISER CET APPAREIL  
QUAND LE CONDUCTEUR DE MISE A LA MASSE EST DÉCONNECTÉ.

Cod. 169886.137.0.0

**WARNING!**  
HIGH LEAKAGE CURRENT - ENSURE PROPER GROUNDING.

**AVERTISSEMENT!**  
COURANT DE FUITE ÉLEVÉ - FOURNIR UNE MISE A LA  
TERRE EFFICACE

Cod. 169886.190.0.0

## 1.2 INTRODUCTION

### IMPORTANT

BEFORE OPERATING THE MACHINE, READ THE INSTRUCTIONS CONTAINED IN THIS OPERATING MANUAL CAREFULLY AND COMPLETELY.

KEEP THIS MANUAL AND ALL ENCLOSURES IN AN ACCESSIBLE PLACE WHERE IT CAN BE REFERRED TO BY ALL USERS (OPERATORS, MAINTENANCE PERSONNEL AND THOSE CLIENTS WHO ASK FOR DETAILED INFORMATION).

This Technical Manual is designed for use by installers and operators, and should be read carefully and completely before the machine is operated. The manual should always be available for reference and should be kept in a safe place so that it stays in good condition for future reference. For further copies or updates of the manual, contact the manufacturer at the address on the front page.

Sportarredo SpA reserves the right to make changes to the product and to the manual without being obliged to update the preceding manuals.

This manual contains all the instructions and information necessary to operate the machine:

- Correct installation of the machine.
- Description of the functions of the machine.
- Circuit diagrams.

The installers and the operators can use this manual to understand the characteristics of the machine and to learn the correct operating procedure.

## 1.3 GENERAL TANNING INSTRUCTIONS

**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 ageing 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 sunbed 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. This device is intended to be used by only one person at a time. Lie on the bed and lower the canopy down to the stopping point.

**CAUTION:** EXPOSURE POSITIONS OTHER THAN SPECIFIED MAY RESULT IN OVEREXPOSURE AND ARE NOT RECOMMENDED.

Tanning normally begins after one to two exposures and maximizes after one to four ( 1-4 ) weeks of exposure following the recommended schedule for your skin type.

### Skin type II.

This is the individual that usually burns easily and severely. Tans minimally or lightly and peels.

### Skin type III.

Often referred to as "average" complexion burns moderately and tans about average.

### Skin type IV.

This individual burns minimally, tans easily and above average.

### Skin type V.

This individual's system rarely burns, tans easily and substantially.

Session times are calculated for a supply voltage of 208V.

This product is in conformity with performance standards for sunlamp products under No.21 CFR 1040.20.

### RECOMMENDED EXPOSURE SCHEDULE

First three sessions should be at 48 hour intervals. Followed by the gradual increasing of exposure times until maximum tanning has occurred (in approximately 4 weeks). MAXIMUM EXPOSURE is 12 minutes.

Skin type	Week 1 1st-3rd Session	Week 2 4rd-6rd Session	Week 3 7rd-9rd Session	Subsequent Weekly Session
II	2 min.	5 min.	7 min.	10 min.
III	2 min.	5 min.	8 min.	10 min.
IV	2 min.	6 min.	8 min.	11 min.
V	2 min.	7 min.	9 min.	12 min.

This schedule is intended to be used with the following lamps: (standard configuration)

**Kalfasun B23-S WHITE 160W**

**Kalfasun 630F**

**Kalfasun 1530F**

**1.4 TRANSPORT AND HANDLING**

The machine is carefully protected and loaded onto pallets before shipping. The various parts of the machine must never be transported or stored in positions which differ from the positions in which they are shipped. In this case, the warranty shall be null and void.

The machine must be handled with care in order to prevent the risk of damage to the packaged sections. All handling operations should be carried out by authorized and trained personnel. When the machine is delivered, immediately check that the packaging material is whole and that no damage has occurred during transport.

Any damage to the machine must be notified to the carrier not later than **eight calendar days** from the date of delivery. If internal damage is suspected, it is advisable to accept the machine reserving the right to check accordingly.

**THE CARRIER IS RESPONSIBLE FOR ANY DAMAGE OCCURRING DURING TRANSPORT OF THE MACHINE. SPORTARREDO WILL MAKE EVERY EFFORT TO ASSIST THE CLIENT IN SUCH CASES**

**ALL MAINTENANCE OF THE MACHINE MUST BE PERFORMED BY SPECIALIZED TECHNICIANS FROM SPORTARREDO OR BY PERSONS AUTHORIZED BY SPORTARREDO USA INC.**

**IMPORTANT !  
ALWAYS DISCONNECT THE MACHINE FROM THE POWER SUPPLY BY PRESSING THE SWITCH BREAKER BEFORE CARRYING OUT MAINTENANCE**

**1.5 PREPARATION FOR INSTALLATION BY THE CLIENT**

Unless otherwise expressly specified in the contract, the following must be provided by the client:

- Connections to the electrical circuit, including the protective wire generally referred to as the "EARTH CONNECTION", unit feeding cable, power plug and circuit breaker.
- Canalization system for the emission of hot air.
- External air intake.
- All tools and equipment necessary for installation.

**THE UNIT IS SUPPLIED FOR INPUT VOLTAGE AT 230V 3phase 60 Hz**

**AND IT IS SUPPLIED WITH THE FEEDING CABLE**

*To make a power cable connection or voltage-change, make reference to the chapter "INSTALLATION" paragraph "VOLTAGE-CHANGE" and to the BLUE MOON n° 1/5 electrical diagram.*

**These operation must be done by technical personnel.**

THE BREAKER MUST BE INSTALLED IN THE POWER SUPPLY BOARD OF THE ESTHETICAL CENTRE AND IT MUST BE DONE BY THE CENTRE ITSELF.

Mod. BLUE MOON:

3x45A-30mA to feed 230V 3F ~ 60 Hz

**The installation must be done by technical personnel.**

THE POWER SUPPLY CONNECTION (UNIT-BOARD) MUST BE DONE BY THE CENTRE. THE SKILLED TECHNICIAN MUST USE A CERTIFIED CABLE WITH THE PROPER SECTION AND WITH ADEQUATE MECHANICAL PROTECTION, IN ACCORDANCE WITH THE RULES IN FORCE. *SEE CHAPTER 3.1 TABLES FOR TECHNICAL DATA "POWER SUPPLY CABLE SECTION"*

PLEASE CONTACT THE CUSTOMER SERVICE AT PHONE NUMBER

1-866-899-4826 FOR ANY FURTHER DOUBT

**Before the evening closing, or the closing for a prolonged period you should operate on the breaker in order to disconnect the power supply.**

TO HAVE A CORRECT USE OF THE EQUIPMENT, THE ROOM TEMPERATURE **MUST NOT EXCEED THE 86°F DEGREES**. IF ROOM TEMPERATURE EXCEEDS THIS VALUE, WE SUGGEST TO UTILIZE AN AIR-CONDITIONING UNIT.

## 2 - SAFETY INFORMATION

### 2.1 GENERAL

The employer must ensure that the persons assigned to the operation of the machine receive adequate training concerning possible accident risks, the devices fitted for the safety of the operator and the client, the risks associated with the emission of UV light and the general accident-prevention regulations specified by international norms and local legislation.

Those responsible for operation, maintenance, cleaning and control of the machine must adhere strictly to the accident-prevention regulations applicable in the country in which the machine is installed.

Before operating the machine, the operator must be completely familiar with the position and the function of all the controls and with the characteristics of the machine. The operator must read this manual carefully and completely.

The machine must be operated by fully-qualified operators only.

Removal of the **safety devices** and protective barriers is strictly forbidden.

No heavy weights must be placed on the moving parts of the machine. The ventilation ducts and intake grilles must not be obstructed by foreign bodies.

The machine must always be switched off and disconnected from the power supply before performing any routine or special maintenance operations.

Unauthorized replacement of or repairs to any part or section of the machine, or the use of accessories or material that are not original or recommended by the manufacturer, may represent a risk of injury, and exonerate the manufacturer from all civil or penal liability.

It is forbidden to stay near the appliance while it is operating without eye protection.

**"DANGEROUS ZONES"**: any zone internal to or in the vicinity of the machine in which the presence of an exposed person constitutes a risk for the safety and the health of that person.

**"EXPOSED PERSON"**: any person who is wholly or partly in a dangerous zone.

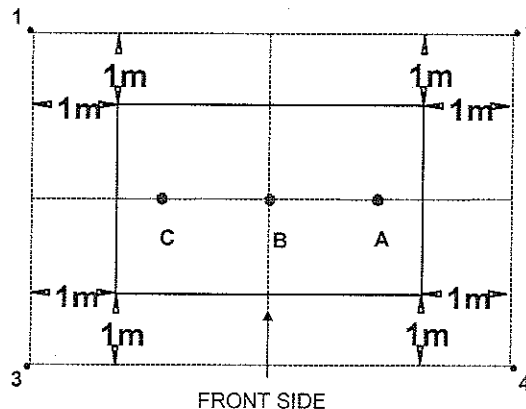
**"OPERATOR"**: person or persons assigned to the installation, operation, adjustment, maintenance, cleaning, repair and transport of the machine.

### 2.2 NOISE

The machine is designed and built in such a way as to reduce operational noise as follows:

- Effective normalized sound power during operation, see diagram below:  
1 = 62 dB (A) max 2 = 60 dB (A) max 3 = 62 dB (A) max 4 = 60 dB (A) max
- Effective sound pressure with simulation of the actual position of the person being treated:  
A = 69 dB (A) max,  
B = 70 dB (A) max,  
C = 70 dB (A) max.

The figures shown above have been determined according to ISO 3746.



### 2.3 REGULATIONS

Standards ANSI/UL 482 - Sun/Heat Lamps, CAN/CSA-C22.2 No. 224-M89.

In the planning of this unit the following rules and provisions of the European Community have been taken in consideration:

ECC Directive N. 91/368 dated 20.06.91, N.93/44 dated 14.06.1993, N.93/68 dated 22.07.93.

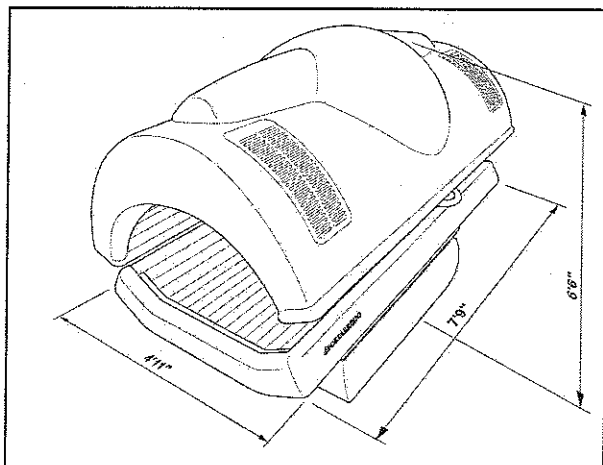
ECC Directive N.73/23 dated 19.02.73 known as "low voltage directive".

ECC Directive N.89/336 dated 03.05.1989 known as "Electronic compatibility directive".

En 60335-2-27 II part Special standard for units for the treatment of the skin with ultraviolet and infrared rays for home use and similar use.

## 3 - TECHNICAL DATA

## 3.1 DIMENSIONS AND TECHNICAL DATA BLUE MOON



LENGTH	79"
WIDTH	4'11"
HEIGHT	6'6"
WEIGHT	992lb

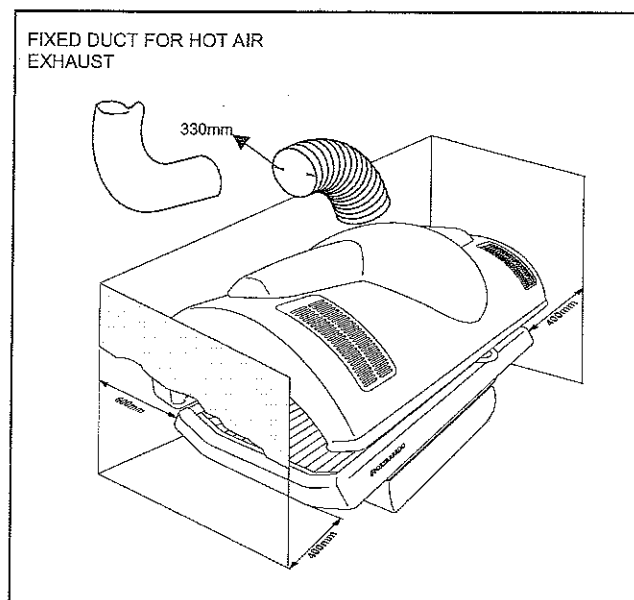
BLUE MOON	U.M	DATA
POWER SUPPLY	V	230V 3~
NOMINAL POWER	KW	12,6
NOMINAL CURRENT	A	34,9
FREQUENCY	Hz	60
WIRES SIZE	AWG	7
NUMBER OF WIRES REQUIRED		4
VOLUME OF AIR EXPELLED	m <sup>3</sup> /h	2700
PRODUCED CALORIES	Kcal/h	11600
EXPELLED CALORIES	Kcal/h	6960
FACIAL LAMPS TYPE	N.	2 KALFASUN 630F 2 KALFASUN 1530F
CANOPY LAMPS TYPE	N.	26 KALFASUN B23-S WHITE 160W
BASE LAMPS TYPE	N.	18 KALFASUN B23-S WHITE 160W

## UV EMISSION

SEE RAY EMISSION CERTIFICATE

## 4 - INSTALLATION

## 4.1 PRE-INSTALLATION



In order to ensure correct operation of the machine, it should be installed in an area which has been prepared as shown in the figure.

The connection of the exhaust air pipe must have on the first part (50-60 cm / 19"-23" inch from the edge of the fan) the minimum curving. This device has to be done to reduce the noise of the fan caused by the resistance of the hair, to improve the cooling of the lamps and to have a better air flow during the tanning session.

## 4.2 CONNECTION

The area in which the machine is installed **must be adequately ventilated, fit the area with an air intake from outside if necessary**. To improve the technical comfort we suggest to connect the tube to expel the hot air to a fixed duct to expel the air outward

- The metal structure of the machine is earthed by means of insulated wires connected to the earth terminal in the electrical junction box.
- The earth circuit must be in full compliance in accordance with the rules in force.
- The earth connection must also be fitted to low-voltage systems situated in wet or very damp areas (if the voltage to earth is in excess of 25V for alternating current or 50V for direct current).
- The earth wires connected to every part of the various sections of the machine and the earth wires from the various power circuits and user groups must be connected to a single earthing circuit.
- Ensure that the materials used for the earth system are suitably robust and provided with adequate protection.
- The connection to the main earth terminal should be as short as possible. The earth wires should not be subjected to mechanical stress of any kind, and must be protected against corrosion.



## 4.3 ASSEMBLY INSTRUCTIONS

## SEE ENCLOSED TABLE 1

- 1 Fix the lateral **B** to the bed **A** with 4 screws 12x30 with the Allen screws and the specific washer of 12x36. Fix the plastic panel **C1** into the bed **C**. Fix the plastic panel **C2** with 4 screws 4.8x13 into the bed **C**.
- 2 Set the ceiling **D**, slide it along the arms **B** to its maximum slide point. Take off the 4 **D2** brackets situated in the 4 corners of the sky. Fix the bracket and the plastic panel **D1** into the ceiling **D**.
- 3 Attach the body ventilation unit **E** to the lower section **C** and assemble the cover plastics. Connect the ventilator wiring.
- 4 Put the boxes **A1** and **A2** into the bed **A**.
- 5 Make the following connections:
  - 32 pins connector from ceiling to the box **A2**,
  - 10 pins connector from box **A2** to the box **A1**,
  - 10 pins connector from ceiling to the box **A1**,
  - 24 pins connector from bed to the box **A1**,
  - 3 pins black connector from body ventilation box to the box **A1**,
  - 3 pins black connector from actuator for lowering the ceiling to the box **A1**,
  - power cable connection.
- 6 Fix the frontal plastic panel **F** on bed **A**.

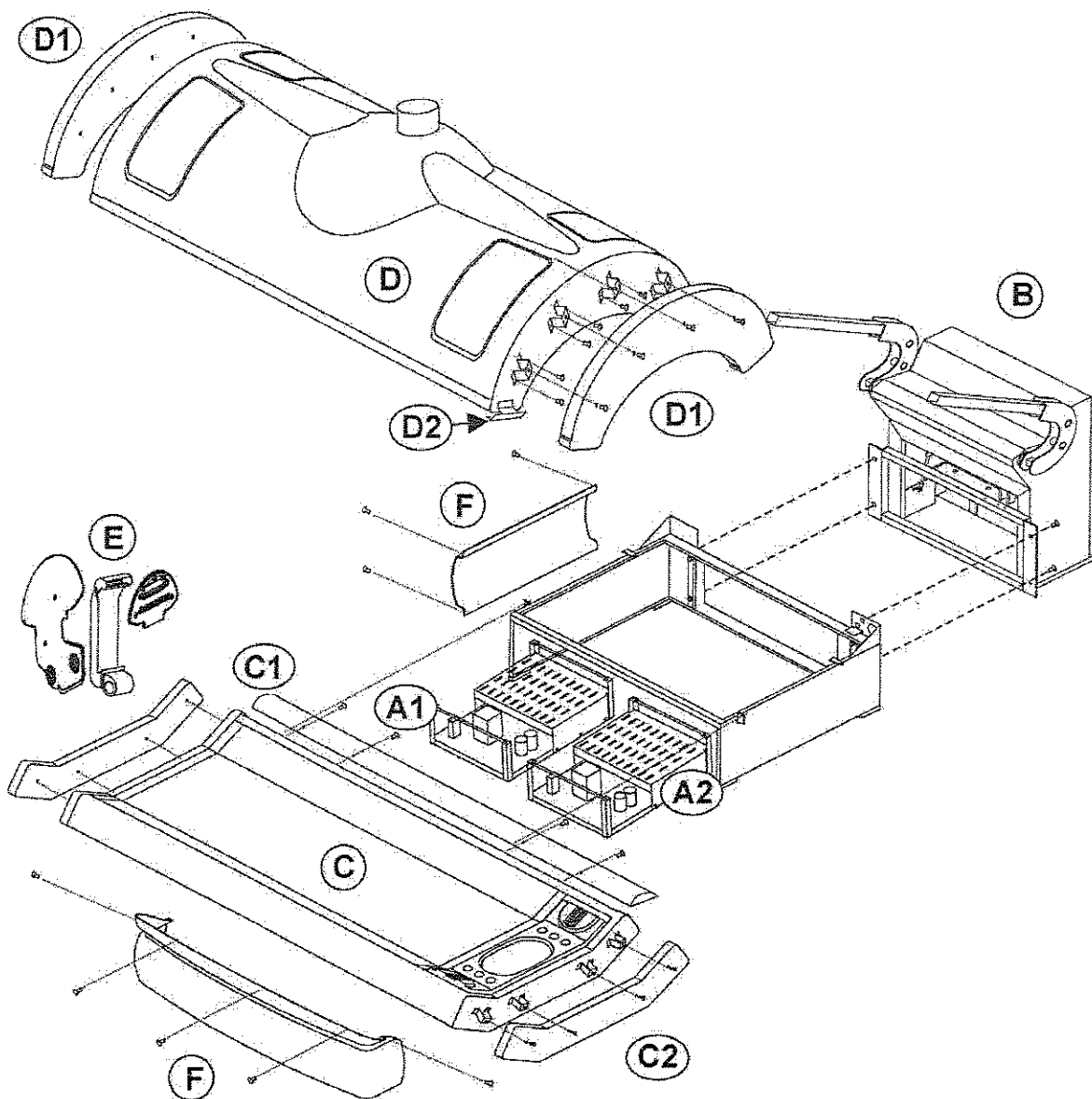


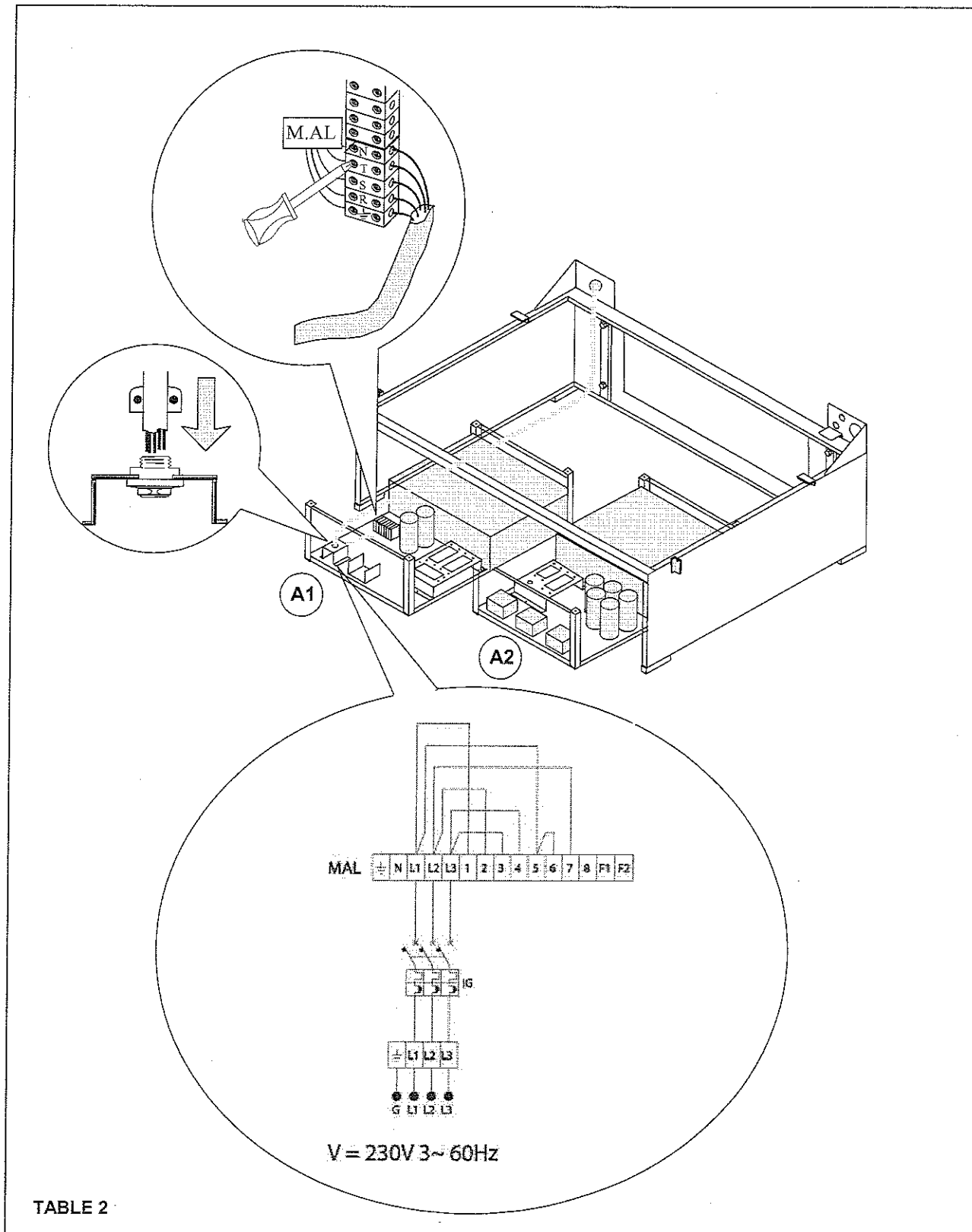
TABLE 1

## 4.4 VOLTAGE CHANGE

POWER CABLE CONNECTION TO FEED  
230V 3~ 60 Hz

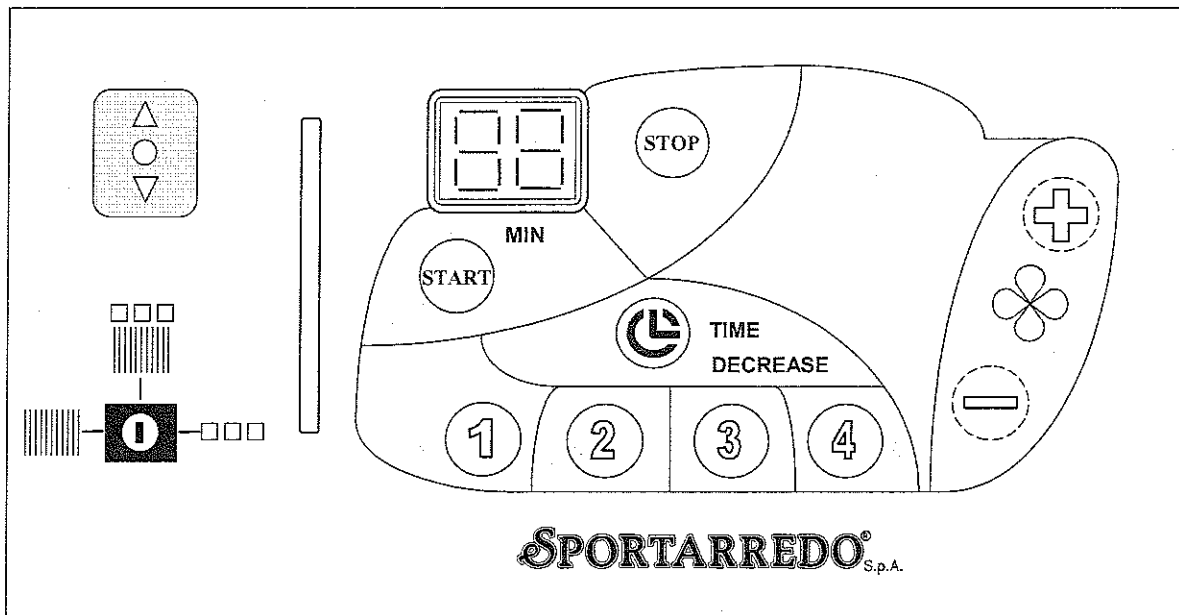
To enter the terminal board for power supply, placed inside the feeder box, make reference to table 2.

**IMPORTANT !**  
ALWAYS DISCONNECT THE MACHINE  
FROM THE POWER SUPPLY BY  
PRESSING THE CIRCUIT BREAKER  
BEFORE CARRYING OUT  
MAINTENANCE



## 5 - USE

## 5.1 CONTROL BOARD



Pushing this button you start the tanning treatment.

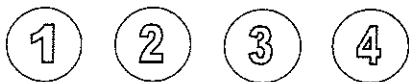


The time button is used to decrease the duration of the treatment after the unit has been turned on. At each pressure of the button there's a decrease of 1 minute.



The buttons marked "+" may be used to increase the power of the fan.

Through the buttons 1-2-3-4 the duration of the treatment is set out according to the customer skin type.



When the STOP button is pressed, the tanning lamps are switched off and the upper section (canopy) moves upwards. The tanning session is concluded.



When this button is pressed, the upper section descends to the normal operating position. Downward movement of the head is controlled by impulses; if the button is released, the downward movement is interrupted.



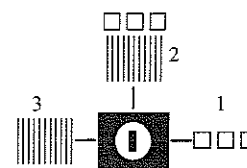
The buttons marked "-" may be used to decrease the power of the fan.

**PL** This display lights when the appliance has been operated for 100 hours to indicate that routine maintenance must be performed.

**SL** This display lights when the appliance has been operated for 400 hours to indicate that it is necessary to call a qualified technician for special maintenance.

Selections of the lamps must be made by the qualified personnel of the tanning centre and must be set before the session.

The machine is equipped with a radio/compact disc, so that the client can listen to music during the tanning session. The use of headphones is recommended.



**SELECTOR**

- 1 - Switches on the high-pressure facial lamps.
- 2 - Switches on all the lamps (high-pressure and low-pressure).
- 3 - Switches on the low-pressure canopy and bed lamps.

## 5.2 SAFETY OF THE PERSONS EXPOSED TO UV

**Don't use** the unit in case of filter damages and timer faults!

**ATTENTION!**  
**AN IMPROPER OR INCORRECT USE OF THE UNIT CAN CAUSE SERIOUS BODILY DAMAGES TO THE PERSON EXPOSED!**

From a careful analysis, as specified in **EN 60335-2-27**, the precautions that must be observed are listed below.

- 1) If the client is undergoing treatment using medication, such as antibiotics or anti-inflammatory pharmaceuticals, it is advisable to suspend tanning sessions.. In any case, it is advisable to consult a doctor.
- 2) Before a tanning session, the skin should be clean and free of cosmetics or perfumes.
- 3) Be sure not to exceed the exposure times selected by the staff of the tanning centre.
- 4) Always use the special protective eyewear. The eyes must under no circumstances remain open during the tanning session.
- 5) After each tanning session, it is advisable to apply a moisturising cream.

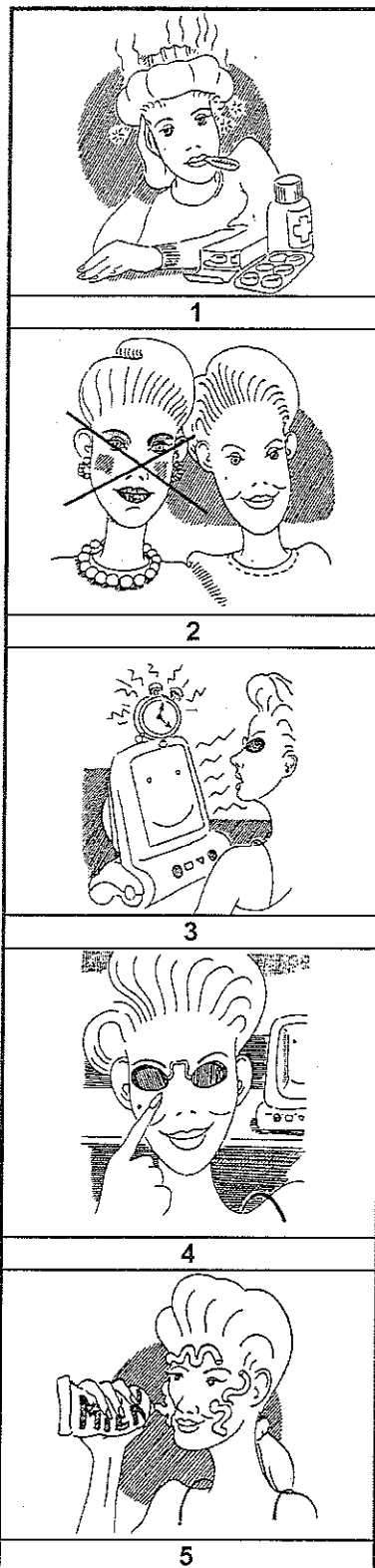
It's advisable to:

- Not exposure any part of the body more than one time per day.
- Not exposure to the unit and sun in the same day.
- Do not expose yourself to the appliance if you usually burn with normal sunlight or if you suffer from sun-rash.
- Do not make UV session in case of pregnancy. In any case please consult your own attending physician before making the session.
- Do not expose to UV immediately after depilation treatments.
- Do not expose children or adults that are prone to or are suffering (or have previously suffered) from skin neoplasia.
- Consult the physician if on the skin swellings, ulceration's or red spots appear.

**ATTENTION!**

- **Ultraviolet radiation may cause injury to the eyes and skin, such as skin ageing and eventually skin cancer.**
- **Read instructions carefully.**
- **Wear the protective goggles provided.**
- **Certain medicines and cosmetics may increase sensitivity.**

A copy of the following warnings is supplied with the manuals and must be shown to the public close to the unit.



### 5.3 PROGRAMMING THE PRE-DEFINED SESSION TIMES

The electronic control of solarium permits to programme 4 pre-defined sessions time. Their programming should be carried out as follows:

Switch on the solarium and press the **Time** key and then key **2** in sequence and keep them pressed for about four seconds until P4 is displayed.

With ventilation keys **+** or **-** choose the function to be modified or displayed.

Parameters	Display	Value
Session time in minutes for skin type 4	P4	1-40
Session time in seconds for skin type 4	S4	0-59
Session time in minutes for skin type 3	P3	1-P4
Session time in seconds for skin type 3	S3	0-59
Session time in minutes for skin type 2	P2	1-P3
Session time in seconds for skin type 2	S2	0-59
Session time in minutes for skin type 1	P1	1-P2
Session time in seconds for skin type 1	S1	0-59

#### P4-SESSION TIME IN MINUTES FOR SKIN TYPE 4.

IV (Mediterranean).

The **start** key displays the data relating to the function to be modified or read.

The ventilation keys **+** or **-** modifies the value according to the table.

The **stop** key confirms the value and exits the function.

The next function, i.e. S4, is displayed.

#### S4-SESSION TIME IN SECONDS FOR SKIN TYPE 4.

IV (Mediterranean).

The same procedure as per function P4 is repeated.

When exiting, P3 is displayed.

#### P3- SESSION TIME IN MINUTES FOR SKIN TYPE 3.

III (European dark skin).

The same procedure as per function P4 is repeated.

When exiting, S3 is displayed.

#### S3- SESSION TIME IN SECONDS FOR SKIN TYPE 3.

III (European dark skin).

The same procedure as per function P4 is repeated.

When exiting, P2 is displayed.

#### P2- SESSION TIME IN MINUTES FOR SKIN TYPE 2.

II (European fair skin).

The same procedure as per function P4 is repeated.

When exiting, S2 is displayed.

#### S2- SESSION TIME IN SECONDS FOR SKIN TYPE 2.

II (European fair skin).

The same procedure as per function P4 is repeated.

When exiting, P1 is displayed.

#### P1- SESSION TIME IN MINUTES FOR SKIN TYPE 1. I

(Celtic).

The same procedure as per function P4 is repeated.

When exiting, S1 is displayed.

#### S1- SESSION TIME IN SECONDS FOR SKIN TYPE 1.

I (Celtic).

The same procedure as per function P4 is repeated.

When exiting, rF is displayed.

**At this point, programming has been completed.  
To return to normal operation, switch off and reset.**

The pre-defined session times by the manufacturer are consistent with those indicated on the recommended exposure programs.

At each pressure of the "time decrease" button, the initial session time will be decreased of 1 minute; pushing again you can obtained in a decreasing way all the session times scheduled by the exposure programs.

## 6 - ORDINARY MAINTENANCE MADE BY THE CUSTOMER

### 6.1 ORDINARY MAINTENANCE

**IMPORTANT!**  
ALWAYS DISCONNECT THE MACHINE FROM THE POWER SUPPLY BY PRESSING THE BREAKER SWITCH BEFORE CARRYING OUT MAINTENANCE

**IMPORTANT!**  
USE ONLY THE DISINFECTANT CLEANSING THE BLUE COBALT FILTERS  
N.B. DO NOT USE ALCOHOL OR ALCOHOL-BASED PRODUCTS FOR CLEANING

#### REMOVING AND CLEANING THE TRANSPARENT AND BLUE COBALT FILTERS

To make the cleaning of the filters it's necessary to make as follows on Table 3-4.

#### CHECK OF THE BLUE COBALT FILTER

To prevent the exposition to bad rays it's important to check the good conditions of the blue cobalt filters and the fixing condition to the metallic frame. If breaks or cracks are present do not use the equipment and call for a skilled technician maintenance.

#### CLEANING THE TRANSPARENT AND BLUE COBALT FILTERS

Clean the filters internally and externally using a 50% solution of water and denatured alcohol.

**IMPORTANT!**  
USE ONLY THE DISINFECTANT CLEANSING MULTYSAN TO CLEAN THE ACRYLIC

ANY TAMPERING WITH THE APPLIANCE OR THE USE OF NON-ORIGINAL MATERIAL OR PARTS MAY LEAD TO INJURY. IN SUCH CASES, THE MANUFACTURER DECLINES ALL CIVIL AND PENAL LIABILITY, AND THE WARRANTY SHALL AUTOMATICALLY BE CONSIDERED NULL AND VOID.

#### FILTERS USED IN THIS APPLIANCE:

Cobalt filter 200x75mm  
Superlux filter TR-T 240x210mm

#### REFLECTORS USED IN THIS APPLIANCE:

C630 - C1530

#### PL PILOT LAMP FOR ROUTINE MAINTENANCE

This lamp lights when the appliance has been operated for 100 hours this means that routine maintenance, consisting of cleaning of internal and external filters of the appliance, should be carried out.

The luminous signal is turned off by the following procedure:

- press key **Time** and **1** at the same time, until the pilot lamp **PL** appears;
- press key **Start** (the point disappears);
- press again key **Start** (PL flashing);

Now the resetting procedure begins and is shown by the fast flashing of the pilot lamp.

When the flashing stops, **PL** appears again;

- to return the machine to normal operational status, turn the electrical power off and then back on.

The resetting procedure is finished.

This procedure should be carried out with the appliance in pause mode.

## REMOVING AND CLEANING THE ACRYLIC PANEL FITTED TO THE BASE

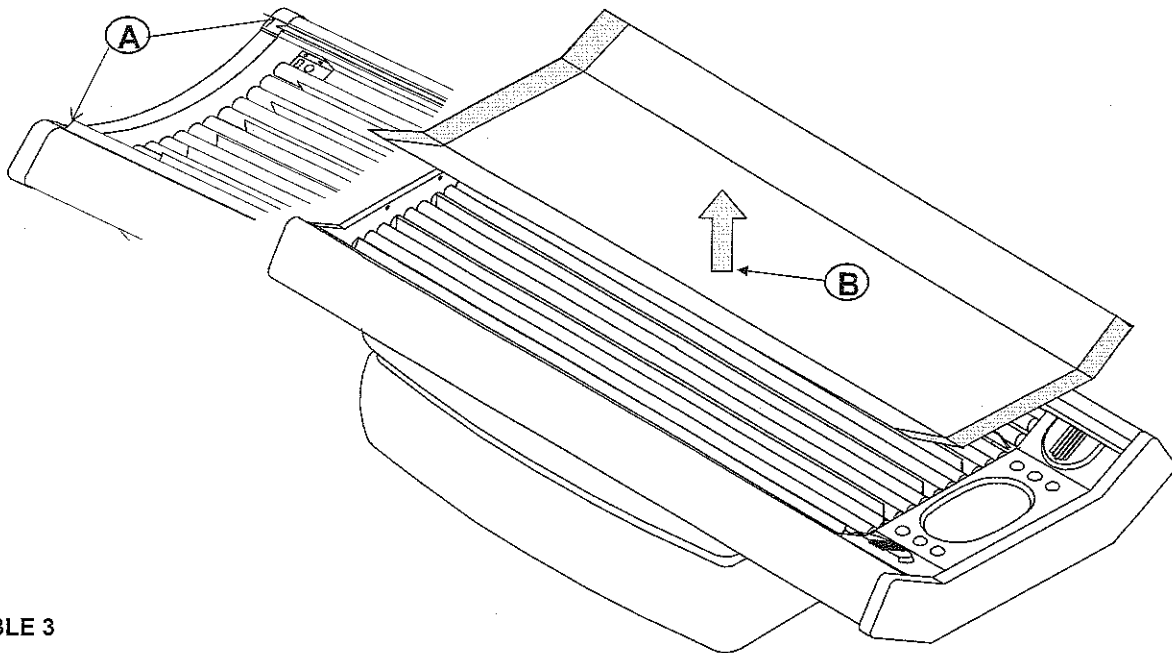


TABLE 3

## REMOVING AND CLEANING THE ACRYLIC PANEL AND FILTERS FITTED TO THE CANOPY

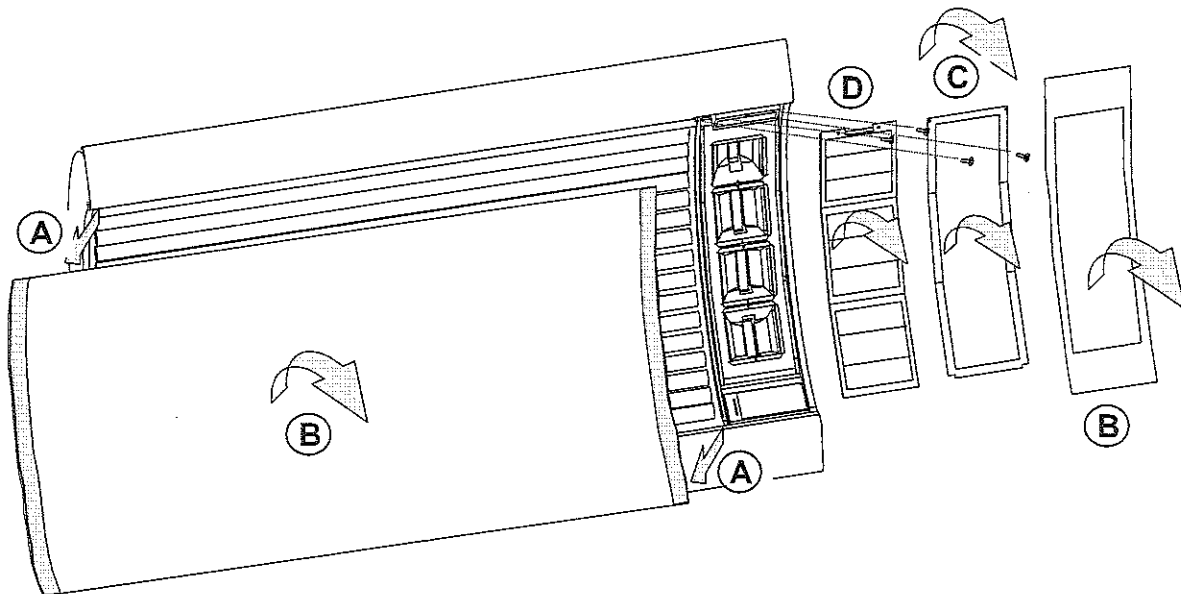


TABLE 4

PERFORM THIS PROCEDURE IN STRICT ALPHABETICAL SEQUENCE

## 7 - EXTRAORDINARY MAINTENANCE MADE BY A SKILLED TECHNICIAN

### 7.1 EXTRAORDINARY MAINTENANCE

#### SL PILOT LAMP FOR SPECIAL MAINTENANCE

This lamp lights when the appliance has been operated for 400 hours this means that the following extraordinary maintenance operations should be carried out:

- Cleaning of internal and external filters.
- Replacement of the lamps.
- Check the correct operation of the standby batteries.
- Check that the timer system is working correctly.
- Check that the SAFETY AND ACCIDENT PREVENTION instructions are legible and in satisfactory condition.
- Every 800 working hours replace the reflectors, the UV filters and the starters for the low-pressure lamps. Clean the fans and the inside of the machine.
- Every 1200 working hours replace the acrylics.

The luminous signal is turned off by following the procedure below:

- press key **Time** and **1** at the same time, until the pilot lamp **PL** appears;
- press key **+** appears **SL** ;
- press key **Start** (the point disappears);
- press again key **Start** (SL flashing);

Now the resetting procedure begins and is shown by the fast flashing of the pilot lamp.

When the flashing stops, **SL** appears again;

- to return the machine to normal operational status, turn the electrical power off and then back on.

The resetting procedure is finished.

This procedure should be carried out with the appliance in pause mode.

### 7.2 PERIODIC CONTROL PROCEDURES

**Electrical checks.** Check that the electrical safety devices, and the acoustic/illuminated signal devices and alarms are undamaged and that they function correctly. Check that the equipment and devices in the electrical control box are in satisfactory condition.

Standby batteries for raising the canopy.

**The standby batteries have a limited duration and should be replaced after 1000 hours (or three years) of installation.**

The useful life of the batteries depends to the use conditions and can decrease in special conditions of use.

Verify the correct operation of the batteries every change of lamps (400 hours) and fit the unit with new batteries in case of malfunction.

How to verify the operation: put the canopy of the unit down and DISCONNECT the machine from the power supply by pressing the switch breaker. With batteries in good conditions and with no power, the canopy must raise.

**IMPORTANT !**  
**ALWAYS DISCONNECT THE MACHINE**  
**FROM THE POWER SUPPLY BY**  
**PRESSING THE BREAKER BEFORE**  
**CARRYING OUT MAINTENANCE**

**IMPORTANT!**  
**USE ONLY THE DISINFECTANT CLEANSING THE**  
**BLUE COBALT FILTERS**  
**N.B. DO NOT USE ALCOHOL OR ALCOHOL-BASED**  
**PRODUCTS FOR CLEANING**

#### CHECK OF THE BLUE COBALT FILTER

To prevent the exposition to bad rays it's important to check the good conditions of the blue cobalt filters and the fixing condition to the metallic frame. If breaks or cracks are present do not use the equipment and call for a skilled technician maintenance.

#### CLEANING THE BLUE COBALT FILTERS

Clean the filters internally and externally using a 50% solution of water and denatured alcohol.

**IMPORTANT!**  
**USE ONLY THE DISINFECTANT CLEANSING**  
**MULTYSAN TO CLEAN THE ACRYLIC**

**ANY TAMPERING WITH THE APPLIANCE OR**  
**THE USE OF NON-ORIGINAL MATERIAL OR**  
**PARTS MAY LEAD TO INJURY. IN SUCH**  
**CASES, THE MANUFACTURER DECLINES ALL**  
**CIVIL AND PENAL LIABILITY, AND THE**  
**WARRANTY SHALL AUTOMATICALLY BE**  
**CONSIDERED NULL AND VOID.**



**REMOVING AND CLEANING THE ACRYLIC PANELS FITTED TO THE CEILING AND THE BED**

To make the cleaning of the acrylics of the base and sky it's necessary to make the disassembling as follows:

Disassembly the lateral plastic and then unscrew the acrylic-block bars with a cross head screwdriver. See picture enclosed: table 3 and 4.

**N.B. DO NOT USE ALCOHOL OR ALCOHOL-BASED PRODUCTS FOR CLEANING**

**CLEANING THE HIGH PRESSURE LAMPS FILTERS**

Clean the filters internally and externally using a 50% solution of water and denatured alcohol.

**CLEANING THE AIR FILTERS****IMPORTANT!**

**THE CLEANING OF THE AIR FILTERS SHOULD BE CARRIED OUT EVERY WORKING WEEK USING A JET OF COMPRESSED AIR OR USING A VACUUM CLEANER**

The positions of the filters are shown in the table 5 below.

Filters should be cleaned using a jet of compressed air or a vacuum cleaner as an alternative.

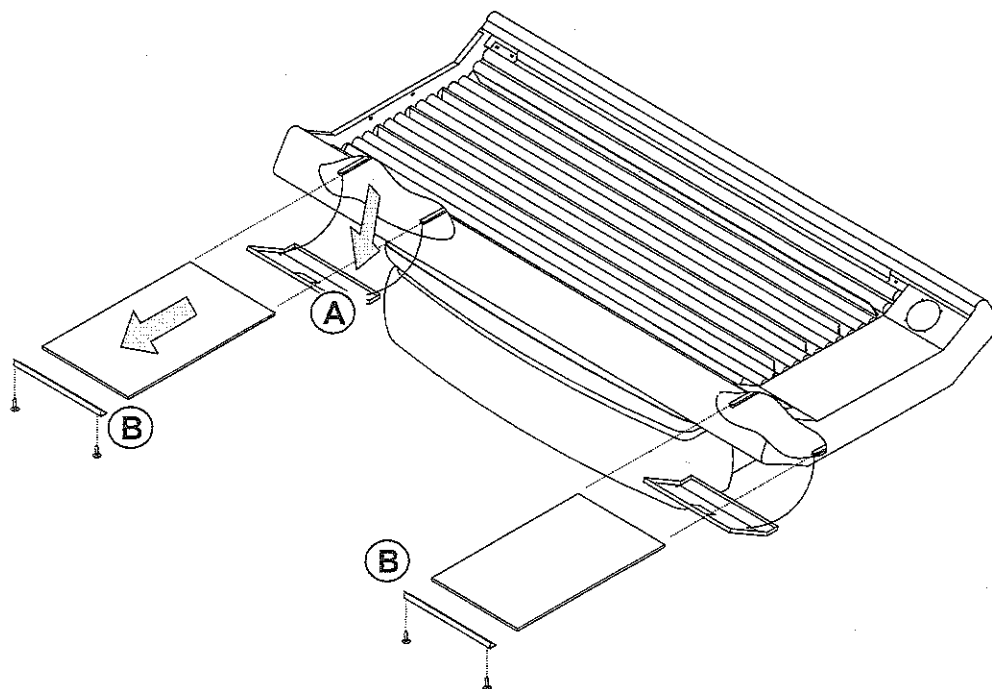
**REMOVING AND CLEANING THE AIR FILTERS**

TABLE 5

**PERFORM THIS PROCEDURE IN STRICT ALPHABETICAL SEQUENCE**

## MAINTENANCE OF THE COMPONENTS IN THE BOXES

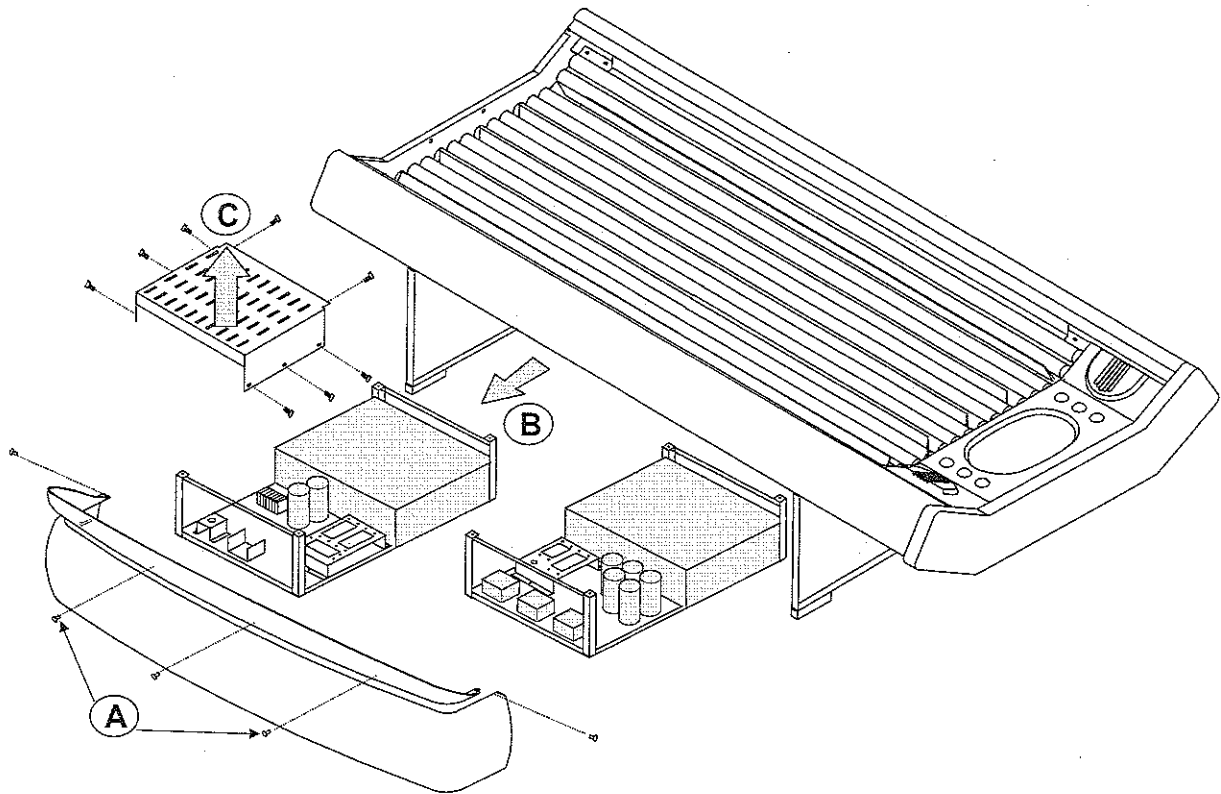


TABLE 6

## REPLACING THE FILTERS, REFLECTORS, HIGH AND LOW PRESSURE LAMPS

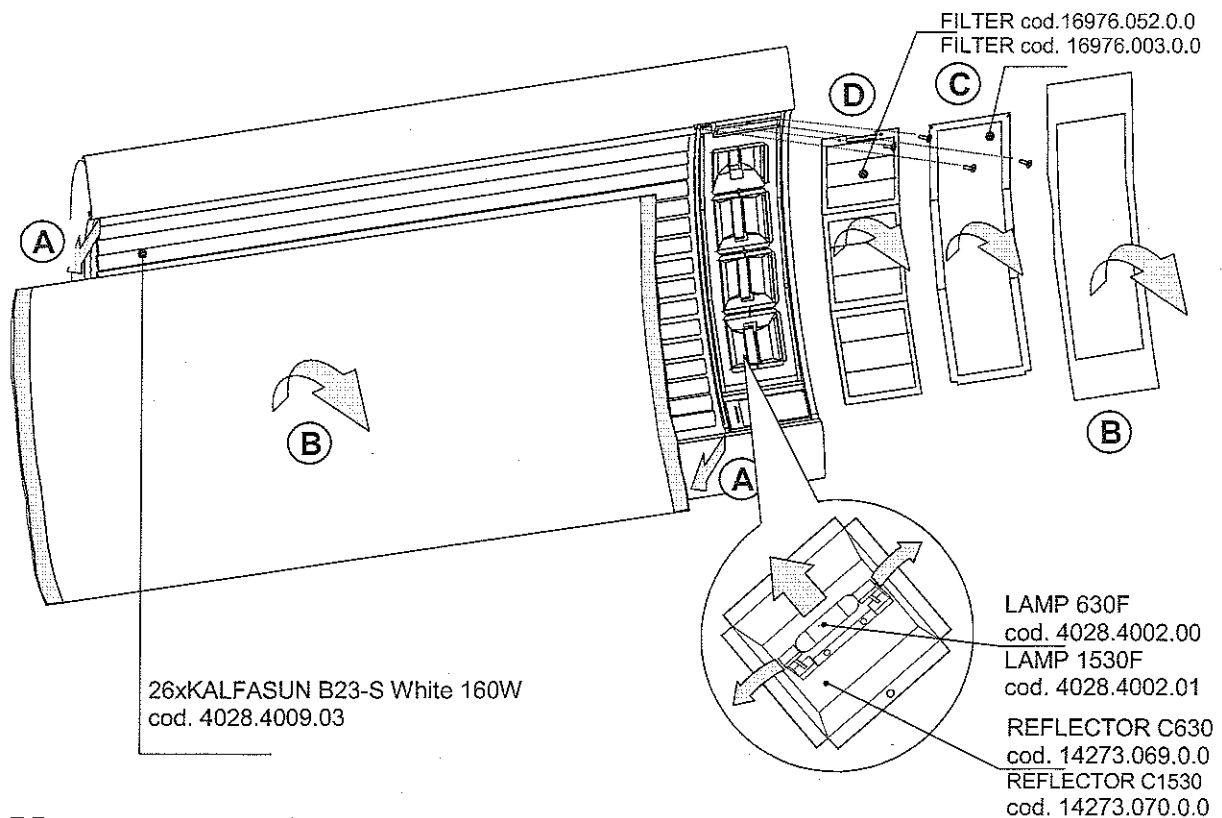


TABLE 7

PERFORM THIS PROCEDURE IN STRICT ALPHABETICAL SEQUENCE

REPLACING THE BASE LAMPS

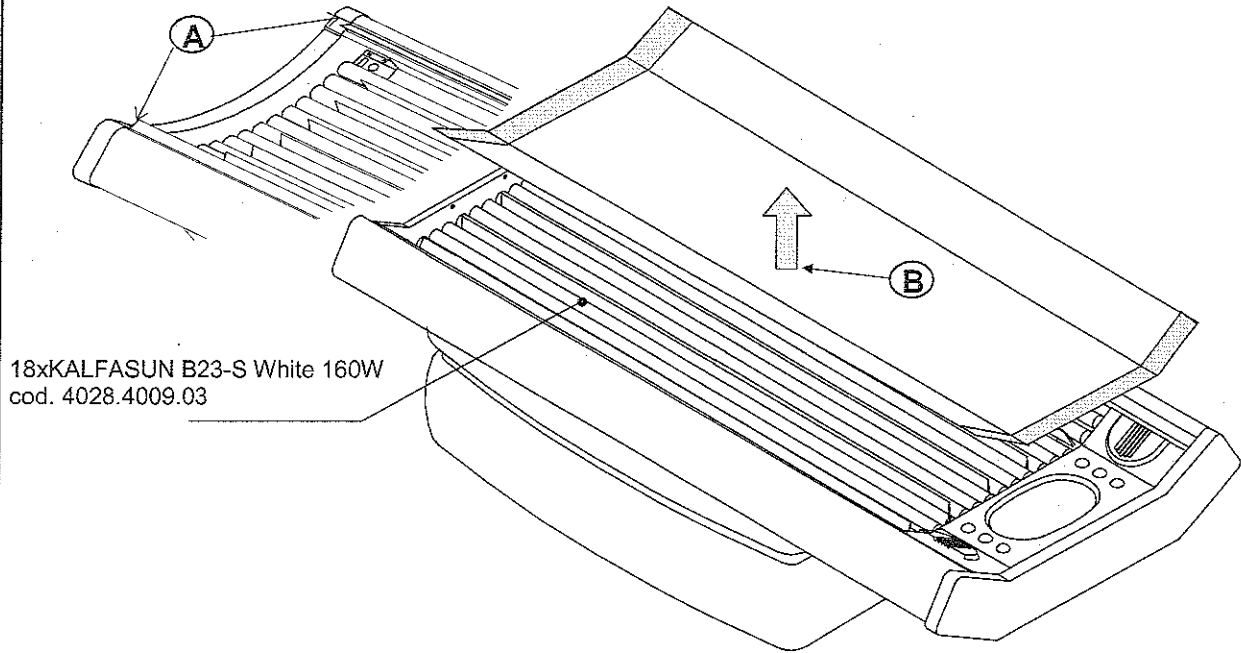


TABLE 8

T.MAX CONTROL BOARD

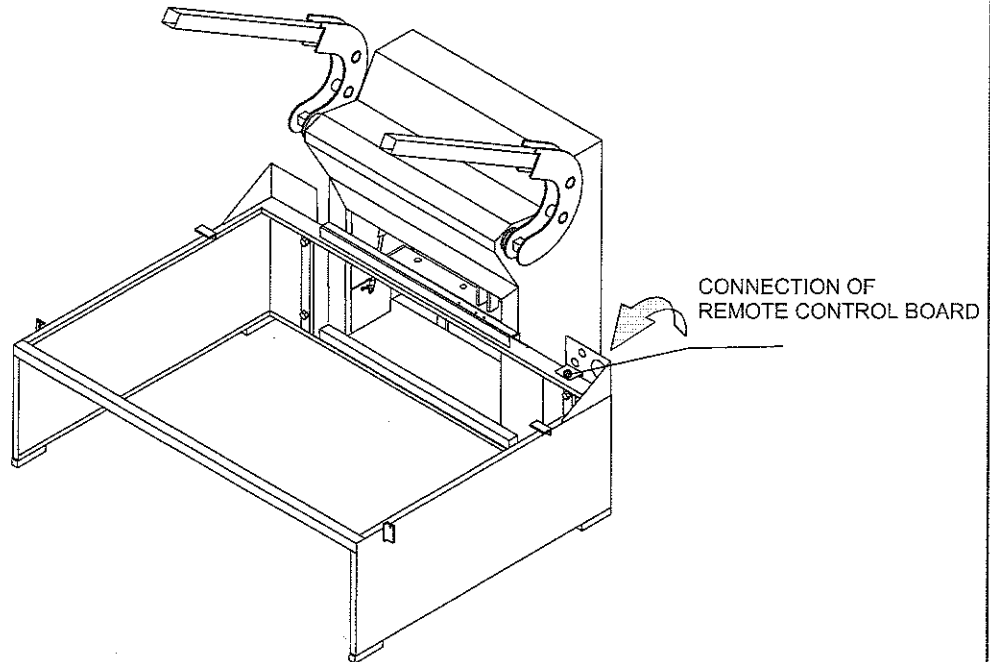
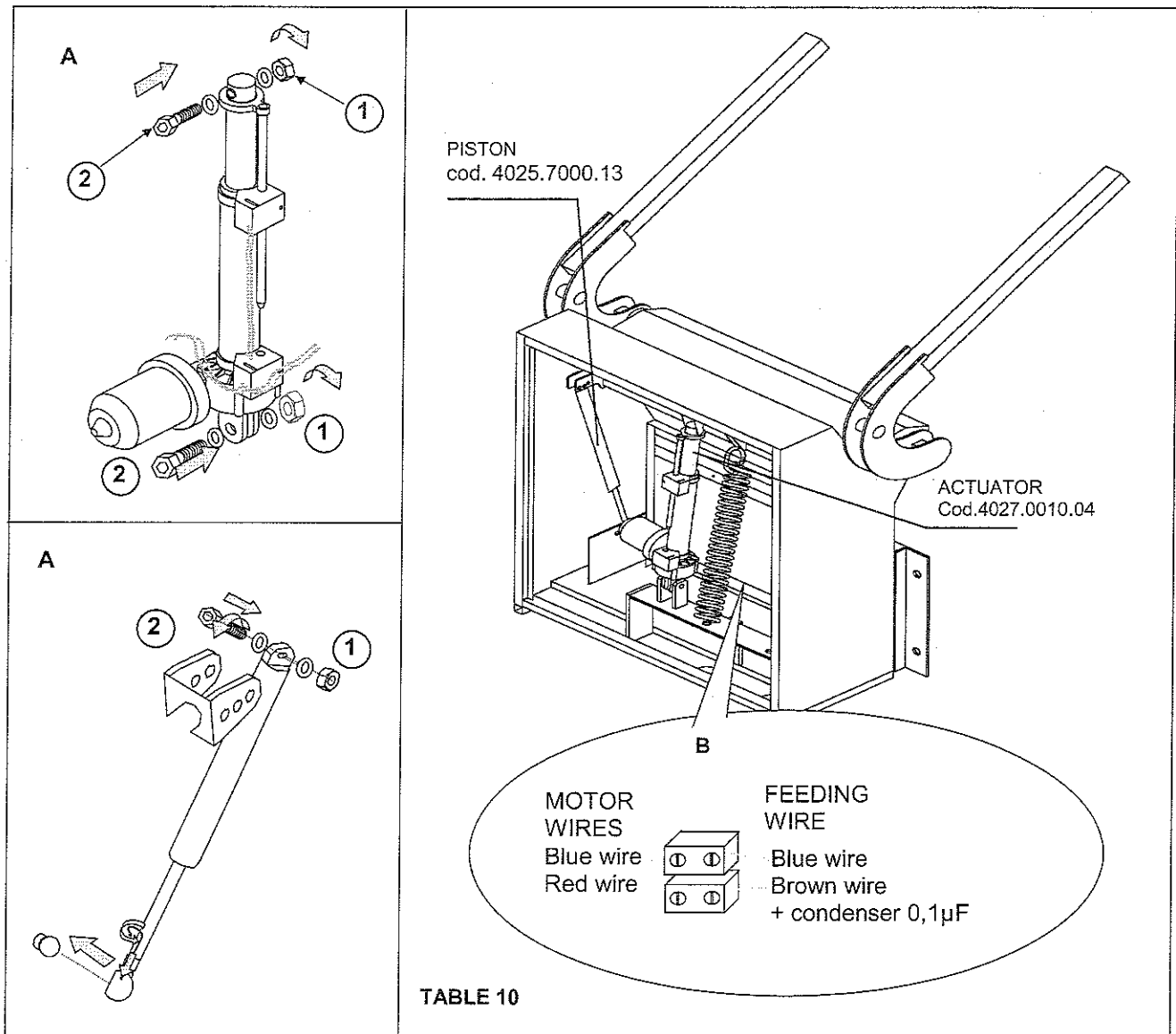


TABLE 9

PERFORM THIS PROCEDURE IN STRICT ALPHABETICAL SEQUENCE

## ACTUATOR AND HYDRAULIC PISTON SUBSTITUTION FOR LOWERING THE CANOPY



PERFORM THIS PROCEDURE IN STRICT ALPHABETICAL SEQUENCE

- Remove the n°4 screws and remove panel from the lateral.
- Disconnect from the terminal board the feeding wires of the actuator.
- Support the ceiling.
- Unscrew the block 1 and act on block 2 to release the screw nut. ( detail A).
- Replace the actuator or the hydraulic pistons with an approved original spare part.
- To assemble the part act the opposite procedure, by paying attention to connect the feeding wires of the motor to the terminal board, as shown in detail B ( red wire, blue wire ).

## REPLACING THE BASE COOLING FAN

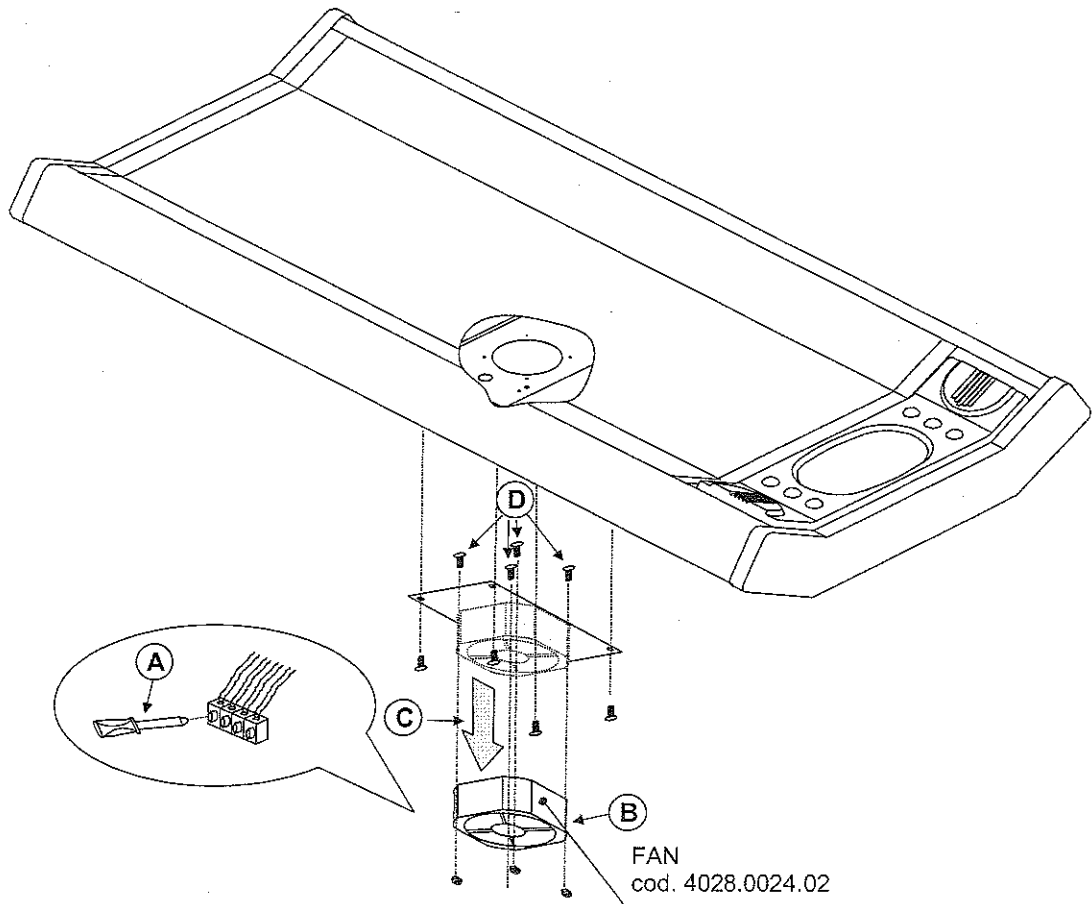


TABLE 11

PERFORM THIS PROCEDURE IN STRICT ALPHABETICAL SEQUENCE

REPLACING THE CANOPY COOLING FAN, COOLING FANS FOR HIGH PRESSURE LAMPS

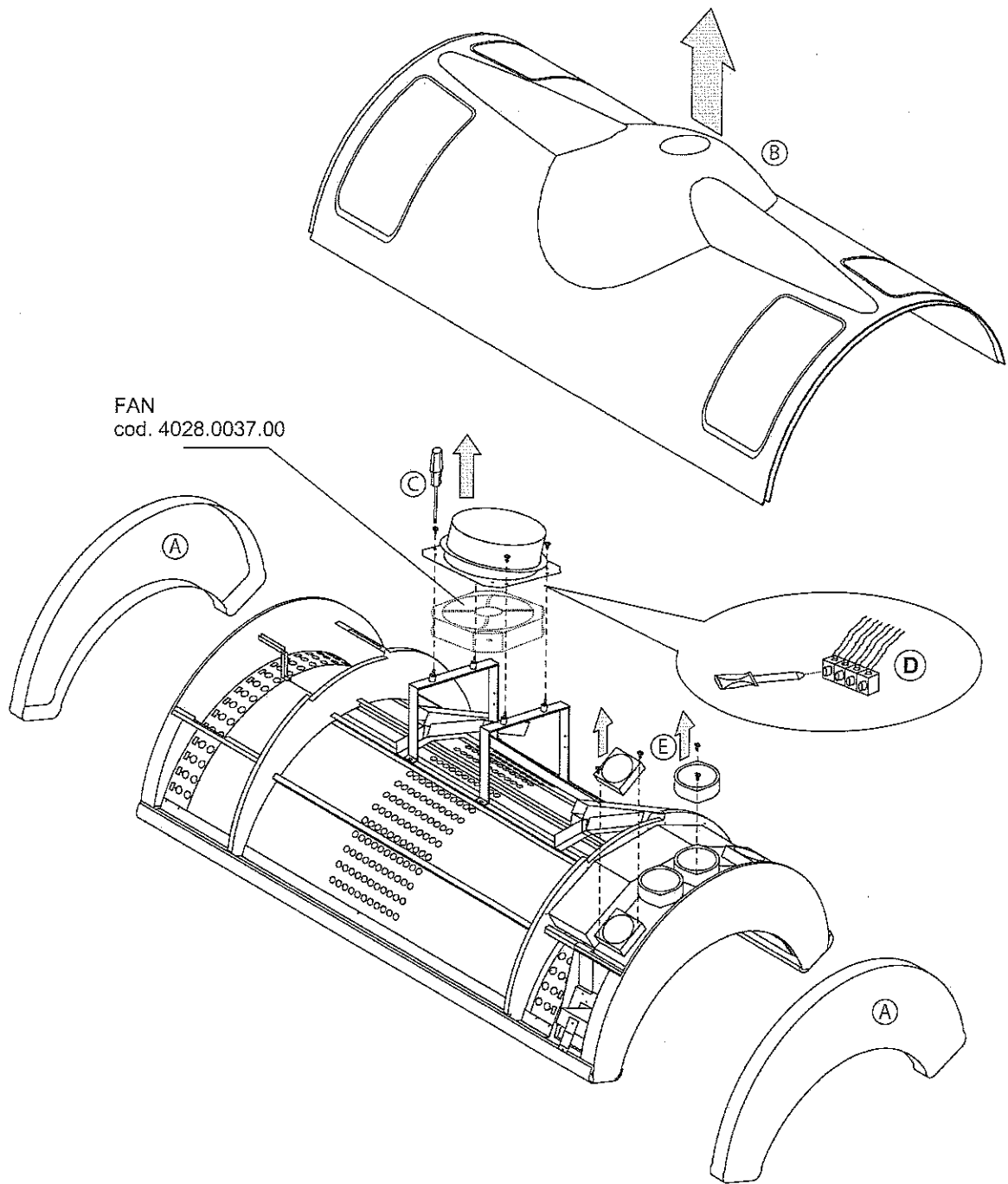


TABLE 12

PERFORM THIS PROCEDURE IN STRICT ALPHABETICAL SEQUENCE

## 8 - CONTROL BOARD PROGRAMMING

## 8.1 PROGRAMMING

Functions (firmware 1.3)	Display	Value	Standard
Session time in minutes for skin type 4	P4	1-40	*
Session time in seconds for skin type 4	S4	0-59	*
Session time in minutes for skin type 3	P3	1-P4	*
Session time in seconds for skin type 3	S3	0-59	*
Session time in minutes for skin type 2	P2	1-P3	*
Session time in seconds for skin type 2	S2	0-59	*
Session time in minutes for skin type 1	P1	1-P2	*
Session time in seconds for skin type 1	S1	0-59	*
Lamp cooling minutes	rF	3-8	*
Value of body ventilation at session start	bl	0-8	6
Value of body ventilation during cooling stage	bF	0-8	*
Minimum body ventilation	bd	0-8	0
Maximum body ventilation	bu	0-8	8
Type of body cooling ventilation: 0=fan 1=turbo	bt	0-1	0
Minutes for first coin	Pb	1-3	3
Time in seconds for first coin	Sb	0-59	0
Minutes for subsequent coin or accumulation of coins	Pu	1-3	3
Seconds for subsequent coin or accumulation of coins	Su	0-59	0
How to use	Ac	On-OFF	OF
Minutes for start delay and accumulation of coin	rS	0-99	0
Start key on keypad.	tS	On-OFF	On
Delay stop on keypad	SS	On-OFF	Of
Function face/body selector	St	On-OFF	Of
Priority external start	SE	On-OFF	On
External start function	CS	On-OFF	Of
Relay control on CBR/4	Cb	0-3	0
Delay CBR/4 relay disactivation when start button is loosed	Ct	mSx10	10
** Buzzer enable	b	On-OFF	On
** Mid session buzzer enable	b2	On-OFF	On
Session time display	uS	On-OFF	On
Ascending or descending session time display	AS	On-OFF	OF
Operating mode predefined	tF	0-6	0
Residual time to black-out	tr	On-OFF	On
1 <sup>st</sup> Vocal message	n1	On-OFF	On
2 <sup>nd</sup> Vocal message	n2	On-OFF	On
3 <sup>rd</sup> Vocal message	n3	On-OFF	On
4 <sup>th</sup> Vocal message	n4	On-OFF	OF
Choice language of the messages	Li	1-6	1

\* Value depends on the solarium.

\*\*Only for MPT/4 control board

To modify or read the basic parameters of the MPT/4 or TRS/4 card, programming should be carried out as follows:

Switch on the solarium and press the **Time** key and then key **2** in sequence and keep them pressed for about four seconds until P4 is displayed.  
With ventilation keys **+** or **-** choose the function to be modified or displayed.

**P4-SESSION TIME IN MINUTES FOR SKIN TYPE 4.**

IV (Mediterranean).

The **start** key displays the data relating to the function to be modified or read.

The ventilation keys **+** or **-** modifies the value (or logic status) according to the table.

The **stop** key confirms the value and exits the function.

The next function, i.e. S4, is displayed.

**S4-SESSION TIME IN SECONDS FOR SKIN TYPE 4.**

IV (Mediterranean).

The same procedure as per function P4 is repeated.

When exiting, P3 is displayed.

**P3- SESSION TIME IN MINUTES FOR SKIN TYPE 3.**

III (European dark skin).

The same procedure as per function P4 is repeated.

When exiting, S3 is displayed.

**S3- SESSION TIME IN SECONDS FOR SKIN TYPE 3.**

III (European dark skin).

The same procedure as per function P4 is repeated.

When exiting, P2 is displayed.

**P2- SESSION TIME IN MINUTES FOR SKIN TYPE 2.**

II (European fair skin).

The same procedure as per function P4 is repeated.

When exiting, S2 is displayed.

**S2- SESSION TIME IN SECONDS FOR SKIN TYPE 2.**

II (European fair skin).

The same procedure as per function P4 is repeated.

When exiting, P1 is displayed.

**P1- SESSION TIME IN MINUTES FOR SKIN TYPE 1. I**

(Celtic).

The same procedure as per function P4 is repeated.

When exiting, S1 is displayed.

**S1- SESSION TIME IN SECONDS FOR SKIN TYPE 1. I**

(Celtic).

The same procedure as per function P4 is repeated.

When exiting, rF is displayed.

**rF-LAMP COOLING MINUTES.**

When rF is displayed, the same procedure as per function P4 is repeated.

When exiting, bl is displayed.

**bl-VALUE OF BODY VENTILATION AT SESSION START.**

When bl is displayed, the same procedure as per function P4 is repeated.

When exiting, bF is displayed.

**bF- VALUE OF BODY VENTILATION DURING COOLING STAGE.**

When bF is displayed, the same procedure as per function P4 is repeated.

When exiting, bd is displayed.

**bd-MINIMUM BODY VENTILATION.**

When bd is displayed, the same procedure as per function P4 is repeated.

When exiting, bu is displayed.

**bu-MAXIMUM BODY VENTILATION.**

When bu is displayed, the same procedure as per function P4 is repeated.

When exiting, bt is displayed.

**bt-TYPE OF BODY COOLING VENTILATION.**

Enter function bt by pressing the start key. The display shows 0 (fan) or 1 (turbo). Change to 0 or 1, depending on the body cooling fan that is installed in the solarium, by following the same procedure as per function P4.

When exiting, Pb is displayed.

**Pb-MINUTES FOR FIRST COIN.**

When Pb is displayed, the minutes for start of session with coin can be modified by following the same procedure as per function P4.

When exiting, Sb is displayed.

**Sb-TIME IN SECONDS FOR FIRST COIN.**

When Sb is displayed, the seconds for start of session with coin can be modified by following the same procedure as per function P4.

When exiting, Pu is displayed.

**Pu-MINUTES FOR SUBSEQUENT COIN OR ACCUMULATION OF COINS.**

When Pu is displayed, the minutes for start of session with subsequent coins or accumulation of coins can be modified by following the same procedure as per function P4.

When exiting, Su is displayed.

**Su-SECONDS FOR SUBSEQUENT COIN OR ACCUMULATION OF COINS.**

When Su is displayed, the seconds for start of session with subsequent coins or accumulation of coins can be modified by following the same procedure as per function P4.

When exiting, Ac is displayed.

**Ac-COIN ACCUMULATION FUNCTION.**

When Ac is displayed, accumulation of coins is enabled (On) or disabled (OF) by following the same procedure as per function P4.

This function is operative if rS is other than 0.

When exiting, rS is displayed.

**rS- MINUTES FOR START DELAY AND ACCUMULATION OF COIN.**

When rS is displayed, the session start time delay can be modified by following the same procedure as per function P4.

If, for example, the value of this function is 2, the solarium starts after 2 minutes from pressing the start key. If the start key is pressed again, the solarium starts immediately.

If, however, the value is set to 99, the solarium remains in stand-by.

When exiting, tS is displayed.



**tS- START KEY ON KEYPAD.**

When tS is displayed, the start key on the keypad can be enabled (On) or disabled (OF) by following the same procedure as per function P4.

When exiting, SS is displayed.

**SS - DELAY STOP ON KEYPAD**

When SS is displayed, the stop key on the keypad can be delayed for 3 seconds (On) or normally operated (OF) by following the same procedure as per function P4.

When exiting, St is displayed.

**St - FUNCTION FACE/BODY SELECTOR**

When St is displayed, the face/body selector on the keypad can be disabled before Start (OF) or enabled during the session (On) by following the same procedure as per function P4.

When exiting, SE is displayed.

**SE- PRIORITY EXTERNAL START.**

When SE is displayed, the priority external start on the keypad can be enabled (On) or disabled (OF) by following the same procedure as per function P4.

When exiting, CS is displayed.

**CS - EXTERNAL START FUNCTION**

When CS is displayed, the external button to the Start can be disabled through a bridge (OF) or enabled without a bridge (On) by following the same procedure as per function P4.

When exiting, Cb is displayed.

**Cb- RELAY CONTROL ON CBR/4.**

Enter function Cb by pressing the start key. With ventilation keys + or - choose the function to be modified or displayed:

00 - CBR/4 relay disabled.

01 - The relay the contacts RUNN (7-8) on the CBR/4 board when the unit makes the session.

02 - The relay closes the contacts RUNN (7-8) on the CBR/4 board when the unit makes the session and final ventilation.

03 - The relay closes the contacts RUNN (7-8) on the CBR/4 board when the key start is pushing.

When exiting, Ct is displayed.

**Ct-DELAY CBR/4 RELAY DISACTIVATION WHEN START BUTTON IS LOOSED**

When Ct is displayed, the function to modify the delay (on milliseconds) of the relay CBR/4 disable activation can be obtained when the START button is loosed only with Cb at point 03 and with the same procedure as per function P4.

When exiting, b is displayed.

**b- BUZZER ENABLE.**

When b is displayed, the card loud speaker can be enabled (On) or disabled (OF) by following the same procedure as per function P4.

When exiting, b2 is displayed.

**b2- MID SESSION BUZZER ENABLE.**

When b2 is displayed, the card loud speaker is enabled (On) or disabled (OF) half-way through the session by following the same procedure as per function P4.

When exiting, uS is displayed.

**uS-SESSION TIME DISPLAY.**

When uS is displayed, the solarium session time can be enabled (On) or disabled (OF) by following the same procedure as per function P4.

When exiting, AS is displayed.

**AS-ASCENDING OR DESCENDING SESSION TIME DISPLAY.**

When AS is displayed, the time in ascending (On) or descending (OF) mode can be visualised by following the same procedure as per function P4.

When exiting, tF is displayed.

**tF - OPERATING MODE PREDEFINED**

Enter function tF by pressing the start key. With ventilation keys + or - choose the function to be modified or displayed:

00 - Operating mode standard or default.

01 - Operating mode with CARD without the choice of skin type and price for session.

02 - Operating mode with CARD and price for time to definition.

03 - Operating mode with CARD with the choice of skin type and price for session.

04 - Operating mode with external timer.

05 - Operating mode with computer (external control).

06 - Operating mode with CARD with the time price (dynamic charge).

When exiting, tr is displayed.

**tr - RESIDUAL TIME TO BLACK-OUT**

When tr is displayed, the function to memorize (On) or enable (OF) the residual time is on if a black-out occurs during the session with the same procedure as per function P4.

When exiting, n1 is displayed.

**n1-FIRST VOCAL MESSAGE.**

When n1 is displayed, the vocal message can be enabled (On) or disabled (OF) by following the same procedure as per function P4.

When exiting, n2 is displayed.

**n2-SECOND VOCAL MESSAGE.**

When n2 is displayed, the vocal message can be enabled (On) or disabled (OF) by following the same procedure as per function P4.

When exiting, n3 is displayed.

**n3-THIRD VOCAL MESSAGE.**

When n3 is displayed, the vocal message can be enabled (On) or disabled (OF) by following the same procedure as per function P4.

When exiting, n4 is displayed.

**n4-FOURTH VOCAL MESSAGE.**

When n4 is displayed, the vocal message can be enabled (On) or disabled (OF) by following the same procedure as per function P4.

When exiting, Li is displayed.

**LI-CHOICE LANGUAGE OF THE MESSAGES.**

When Li is displayed, choose one of the 6 languages by following the same procedure as per function P4.

01=Italiano  
02=English  
03=Español  
04=Greek  
05-06=free

When exiting, P4 is displayed.

**At this point, programming has been completed.  
To return to normal operation, switch off and reset.**

Maintenance functions	Display
To zero for filter cleaning	PL.
To zero for bulb replacement	SL.
Display of number of sessions	nS.
Display of lamp operating hours	oL.
Display of filter operating hours	oF.
Display of total solarium operating hours	oS.
Display of firmware card date	dC.

To modify or read the maintenance functions of the MPT/4 or TRS/4 card, programming should be carried out as follows:

Switch on the solarium and press the **Time** key and then key **1** in sequence and keep them pressed for about four seconds until PL is displayed.  
With ventilation keys + or - choose the function to be modified or displayed.

**PL- TO ZERO FOR FILTER CLEANING**

When PL. is displayed, press start to enter the function. PL without the point is displayed. Press the start key again and the display flashes for a few seconds. At this point the hours are zeroed and the associated lamp switches off.  
Press the stop key to confirm the data. By pressing ventilation key + the following SL function is displayed

**SL- TO ZERO FOR BULB REPLACEMENT**

When SL. is displayed, press start to enter the function. SL without the point is displayed. Press the start key again and the display flashes for a few seconds. At this point the hours are zeroed and the associated lamp switches off.  
Press the stop key to confirm the data. By pressing ventilation key + the following nS function is displayed

**nS- DISPLAY OF NUMBER OF SESSIONS.**

When nS is displayed, press start to enter the function. The format of the data displayed is as follows:

**position "." number**

**position:** indicates the value of the figure. E.g.: 1 for units, 2 for tens, 3 for hundreds ... and so on.  
**number:** indicates the value of the figure relating to the position.

E.g.: the card has carried out 008594 sessions.  
When pressing the start key, the display shows 1.4  
When pressing the start key again 2.9  
When pressing the start key again 3.5  
When pressing the start key again 4.8  
Therefore, the figure is 8594

If the start key is pressed again, the display again shows the data indicated in position 1.

Note: even if the card memorises a maximum of 6 figures, the zeros on the left-hand side are not displayed.  
Press the stop key to exit the function and oL is displayed.

**oL- DISPLAY OF LAMP OPERATING HOURS.**

When oL is displayed, press start to enter the function. The number of lamp operating hours is displayed. To read the number, repeat the same sequence as per function nS. Press the stop button to exit the function and oF is displayed.

**oF- DISPLAY OF FILTER OPERATING HOURS.**

When oF is displayed, press start to enter the function. The number of filter operating hours is displayed. To read the number, repeat the same sequence as per function nS. Press the stop button to exit the function and oS is displayed.

**oS- DISPLAY OF TOTAL SOLARIUM OPERATING HOURS.**

When oS is displayed, press start to enter the function. The total number of solarium operating hours is displayed. To read the number, repeat the same sequence as per function nS. Press the stop button to exit the function oS. When exiting, dC is displayed.

**dC- DISPLAY OF FIRMWARE (software microcontroller) CARD DATE.**

When dC is displayed, press start to enter the function. The year and then the week of the firmware is displayed.

E.g.:

When pressing the start key, the display shows	1.4
When pressing the start key again	2.0
When pressing the start key again	3.4
When pressing the start key again	4.3

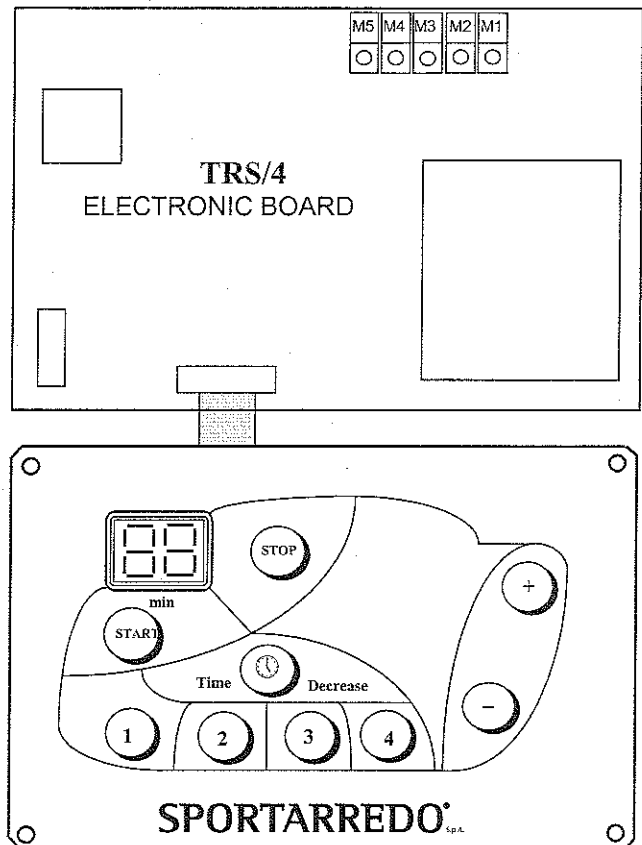
Therefore, the figure is 3404. In practice the firmware is of the 34th week of year 2004.

If the start key is pressed again, the display again shows the data indicated in position 1.

Press the stop key to exit the dC function. When exiting, PL is displayed.

**At this point, programming has been completed.**

**To return to normal operation, switch off and reset.**

**8.2 ELECTRONIC CONTROL BOARD CONNECTIONS****CIRCUIT BOARD TERMINALS: NUMBERING AND DESCRIPTION**

1	Power supply phase.
2	Power supply neutral
3	Control phase for lamps switch-on
4	Alimentation phase
5	Control phase for body-cooling ventilation

**IMPORTANT !**

**ALWAYS DISCONNECT THE MACHINE FROM THE POWER SUPPLY BY PRESSING THE CIRCUIT BREAKER BEFORE CARRYING OUT MAINTENANCE**

**ANY TAMPERING WITH THE APPLIANCE OR THE USE OF NON-ORIGINAL MATERIAL OR PARTS MAY LEAD TO INJURY. IN SUCH CASES, THE MANUFACTURER DECLINES ALL CIVIL AND PENAL LIABILITY, AND THE WARRANTY SHALL AUTOMATICALLY BE CONSIDERED NULL AND VOID.**

## 9 - TROUBLESHOOTING AND RAPID DIAGNOSTICS

- **The solarium does not switch on and the pushbutton display panel does not light.**

1 - Check that the power supply terminal board "MAL" is connected to the power supply.

See enclosed circuit diagram BLUE MOON n° 2/5.

2 - Check the fuses on the timer board "TRS/4".

3 - Check the voltage ( 230V ~ ) across terminals 1 and 2 on board "TRS/4".

See enclosed circuit diagram BLUE MOON n° 4/5.

- **The display panel lights up but the solarium does not switch on when START is pressed.**

1 - Switch the solarium off using the overload cut-out switch, wait 5 seconds and then switch on again.

2 - Check that the timer board "TRS/4" is programmed correctly.

See enclosed circuit diagram BLUE MOON n° 4/5.

- **The display panel lights up but when START is pressed the ventilation system only is switched on.**

1 - Check that remote control switches "HL1" "HL2" operate correctly. See enclosed circuit diagram BLUE MOON n° 2/5.

2 - Check the voltage 230V ~ across terminals 2 and 3 of the board "TRS/4".

See enclosed circuit diagram BLUE MOON n° 4/5.

- **The display panel lights up but when START is pressed only the lamps switch on (no ventilation).**

1 - Check that remote control switch "RV" operates correctly. See enclosed circuit diagram BLUE MOON n° 2/5.

2 - Check the voltage 230V ~ across terminals 2 and 4 of the timer board "TRS/4".

See enclosed circuit diagram BLUE MOON n° 4/5.

- **Body cooling system inoperative or cannot be regulated.**

1 - Check the voltage ( variable up to a maximum of 230V ~ ) across terminals of board "TRS/4".

See enclosed circuit diagram BLUE MOON n° 4/5.

- **One of the high-pressure or low-pressure does not switch on.**

1 - Check for voltage on the wiring to the lamp. Check the ignition reactor or the starter for the lamp.

- **The radio does not work.**

1 - Check the fuses on the Electronics board "AL12"

2 - Check that the output of the power supply module "AL12" carries 12Vcc.

3 - The plugging in of jack plug of the earphones, excludes the loudspeaker functioning.

See "BLUE MOON n°2/5" circuit diagram.

## 10 - DEMOLITION AND WASTE MATERIALS

### 10.1 WASTE MATERIALS

The lamps are considered as disposable waste materials and all the materials regarding the packing. Due to their characteristics, these lamps are classified as non-toxic and non-harmful **special waste materials**. Disposal of the lamps must therefore be effected as required by the appropriate legislation.

**Batteries** must be discharged as differentiated waste following the specific rules in force in each country.

### DEFINITION OF SPECIAL WASTE MATERIAL:

Residual material deriving from industrial processes or agricultural, artisan, commercial or service activities which, in view of their quantity of characteristics, are not classified as normal household refuse.

### 10.2 DEMOLITION OF THE MACHINE

Each country applies specific legislation concerning the disposal of machinery. Disposal of this machine must be carried out in compliance with the regulations laid down by local legislation and bye-laws. Dismantle the machine and group the various parts according to their chemical characteristics.

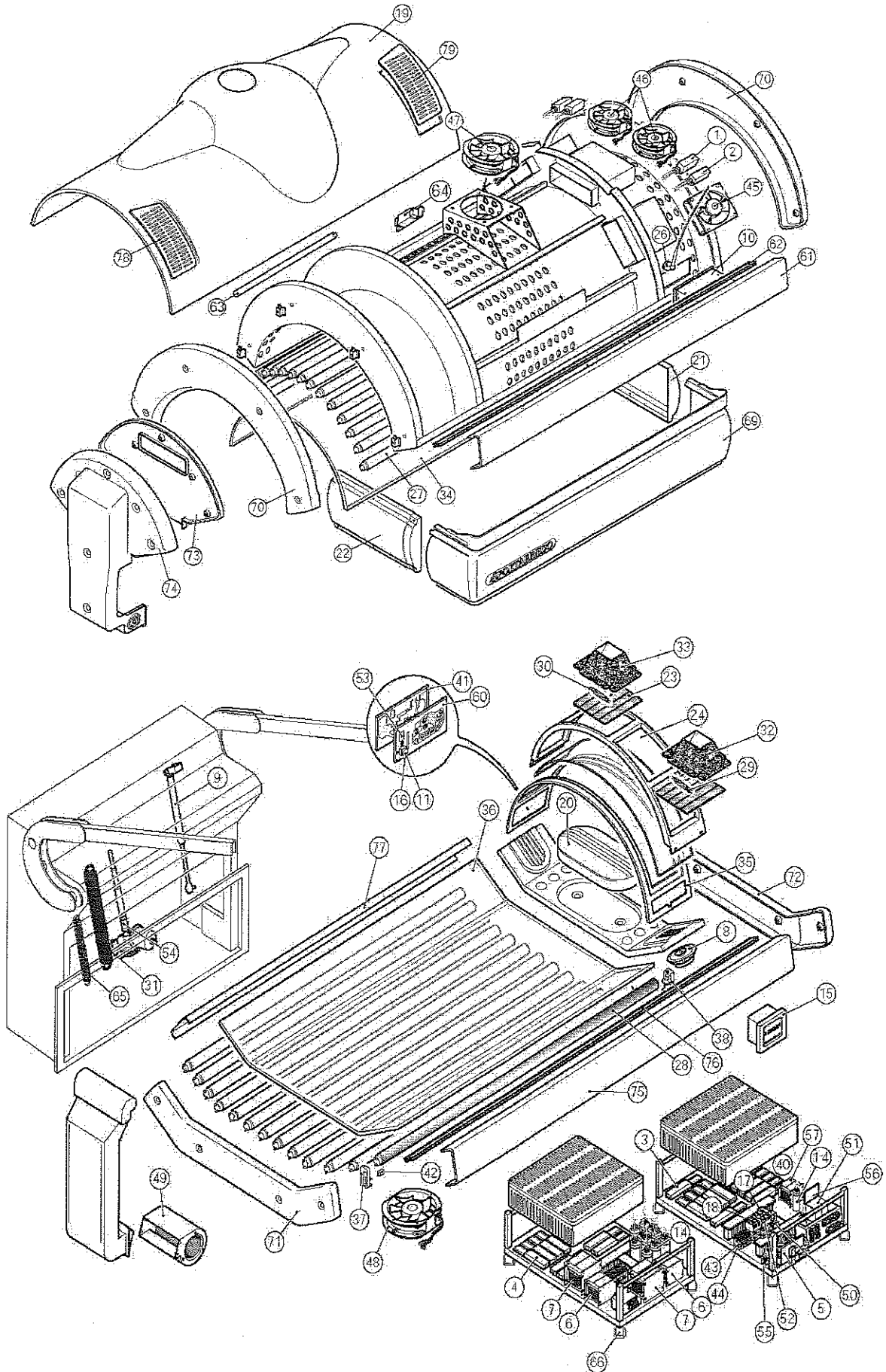
**Dismantling of the machine must be performed by qualified personnel**

**WARNING: The central terminals of the igniters for the high-pressure lamps carry extremely high voltage.**

11 - REPLACEMENTS AND CIRCUIT  
DIAGRAMS

## 11.1 SPARE PARTS LIST

REF	PC	CODE	DESCRIPTION
1	2	4028.4400.03	TRIDONIC ZRM 12 ES B IGNITOR
2	2	4028.4400.04	TRIDONIC ZRM 6 ES B IGNITOR
3	26	4028.1001.08	160W 230V 50HZ BALLAST
4	18	4028.1001.08	160W 230V 50HZ BALLAST
5	1	4028.1003.04	220/12V U TRANSFORMER
6	2	16973.000.0.0	MYSUN 630 220/230/240V BALLAST
7	2	16973.001.0.0	MYSUN 1530 220/230/240V BALLAST
8	2	4027.3030.04	LOUDSPEAKERS
9	1	4025.7000.13	HYDRAULIC PISTON A4B1Z-3-200-343 600N
10	1	4027.3025.04	COMPACT DISC
11	1	4028.2187.03	SELECTOR
12	1	4028.4306.01	CONDENSER 3,5 µF 450 V
13	1	4028.4307.00	CONDENSER 5 µF 450 V
14	5	4028.4300.00	CONDENSER 65 µF 450 V
15	1	4028.6000.01	HOUR COUNTER REVALCO
16	2	4028.2101.10	CONTACT FOR SELECTOR
17	1	4028.2100.04	LAMPS CONTACTOR FANTINI & COSMI HR2510
18	1	4028.2100.06	LAMPS CONTACTOR FANTINI & COSMI HR1710
19	1	15946.012.1.0	ABS COVER CANOPY
20	1	16946.017.00	CUSHION BLUE MOON
21	1	16946.240.0.0	VIOLET COVERING RIGHT BED
22	1	16946.241.0.0	VIOLET COVERING LEFT BED
23	9	16976.052.00	COBALT FILTER (DIMENSIONS 200 X 75)
24	3	16976.003.0.0	SUPERLUX TR-T 24 X 21 FILTER
25	2	16941.001.0.0	AIR ALUMINIUM FILTER
26	1	4027.3028.01	ANTENNA
27	26	4028.4009.03	LAMP KALFASUN B23-S White 160W
28	18	4028.4009.03	LAMP KALFASUN B23-S White 160W
29	2	4028.4002.00	KALFASUN 630F 230V UV-A LAMP
30	2	4028.4002.01	KALFASUN 1530F 230V UV-A LAMP
31	1	16960.006.0.0	TRACTION SPRING D59
32	2	14273.069.0.0	REFLECTOR C630
33	2	14273.070.0.0	REFLECTOR C1530
34	1	16946.014.0.0	CEILING ACRYLIC BLUE MOON M
35	1	15946.014.0.0	FACE ACRYLIC
36	1	16946.016.1.0	BED ACRYLIC BLUE MOON
37	44	4028.3310.01	NEON HOLDER WITH STARTER
38	44	4028.3310.00	NEON HOLDER WITHOUT STARTER
39	1	15906.026.0.0	CIRCUIT BOARD JACK
40	1	4028.4500.01	CONTROL RELAY FOR COOLING FAN UNIT FINDER 60.13
41	1	14703.043.0.0	CONTROL BOARD TRS/4 (COMPLETE)
42	44	4028.4020.03	STARTER PHILIPS S12
43	10	4028.3120.04	TERMINAL LEGRAND 37064
44	1	4028.3121.02	TERMINAL LEGRAND 37374
45	2	4028.0029.04	EBM 4650N HIGH PRESSURE LAMPS COOLING FAN
46	2	4028.0021.00	EBM W2S-130 AA0308 HIGH PRESSURE LAMPS COOLING FAN
47	1	4028.0037.00	EBM A2E 300-AA01 HOT AIR EXHAUST FAN
48	1	4028.0024.02	EBM W2E 250-HL06-01 LOW PRESSURE LAMPS COOLING FAN
49	1	4028.0048.00	ECOFIT 2GDS35.133/190 BODY FAN
50	1	4028.4550.01	RELAY UNDECAL FINDER 90.27
51	2	4027.3020.16	STORAGE BATTERIES 12V 1.2A
52	2	4028.2101.03	AUXILIARY CONTACT IR22
53	1	4028.2184.00	MARQUARDT SWITCH
54	1	4027.0010.04	ACTUATOR MOTOR ALI 3
55	1	4027.5010.00	DIODE BRIDGE
56	1	4026.0010.00	RCT ELECTRONIC BOARD
57	1	4028.1010.11	60VA TRANSFORMER
58	1	4028.4555.00	UNDECAL RELAY SOCKET FINDER 94.72
59	1	4028.4502.03	CONTROL RELAY FOR T.MAX 55.32
60	1	16906.029.0.0	KEYBOARD
61	2	19646.234.0.0	REAR AND FRONTAL PANEL CANOPY
62	2	16936.042.0.0	CANOPY ACRYLIC STOP PART PANEL
63	1	4028.4013.0.3	BLUE LAMP 36W
64	1	4028.1002.0.3	MEC 36/40W BALLAST
65	1	16960.007.0.0	TRACTION SPRING D35
66	8	4023.4000.06	WHEELS FOR FEEDERS CASSETTE
67	1	14703.032.0.0	CBR/4 ELECTRONIC BOARD (EUROPE UNIT)
68	3	4028.4304.00	CONDENSER 20 µF 450 V
69	1	4028.2120.21	BREAKER E84 D40
69	1	15946.013.0.0	FRONTAL BASEMENT ENSEMBLE
70	2	16936.026.0.0	CANOPY CAP
71	1	16936.031.0.0	BASEMENT CAP RIGHT
72	1	16936.030.0.0	BASEMENT CAP LEFT
73	1	16946.239.0.0	FAN COVER FRONTAL
74	1	16946.238.0.0	FAN COVER REAR
75	1	16946.237.0.0	FRONTAL PANEL BED
76	2	16936.043.0.0	BED ACRYLIC STOP PART PANEL
77	1	16946.236.0.0	REAR PANEL BED
78	1	16946.232.0.0	CANOPY GRID RIGHT
79	1	16946.233.0.0	CANOPY GRID LEFT



## 11.2 CIRCUIT DIAGRAMS LEGEND

SYMBOLS	DESCRIPTION
 G	Earth terminal
AC15 4028.4400.03	Igniter for Kalfasun 1530F lamps
AC6 4028.4400.04	Igniter for Kalfasun 630F lamps
AL 4027.3030.04	Loudspeakers
AT 4027.0010.04	Actuator motor
B 4027.3020.16	Storage batteries (12V 1.2A)
C1+11 4028.4300.00	Power factor correction capacitors 65 µF
C3-C5-C12 4028.4304.00	20 µF condenser
C5 4028.4306.01	3,5 µF condenser
C6 4028.4307.04	0,1 µF condenser
CN16T	Connector head feeders cassette ( 16 pins ).
CN24T	Connector head feeders cassette ( 24 pins ).
CN32L	Connector lateral feeders cassette ( 32 pins ).
CN32T	Connector head feeders cassette ( 32 pins ).
CNW1+3	Wieland connector( 3 pins ).
CO 4028.6000.01	Hour-counter.
CV 4028.4307.00	5 µF condenser
F1	1A fuse
F2	4A fuse
F3	6,3A fuse for accumulators
HL1 4028.2100.06	Remote control switch for lamps
HL2 4028.2100.04	Remote control switch for lamps
IG 4028.2120.21	Breaker
IR22 4028.2101.03	Auxiliary contact
LA15 4028.4002.01	Kalfasun Lamps 1530F
LA6 4028.4001.00	Kalfasun Lamps 630F
LB16 4028.4009.03	Kalfasun Lamps B23-S White 160W
LB36 4028.4013.03	Blue lamp 36W
M1	Head terminal board
MAL	Power supply for terminal board
MB	Bed terminal board
MV1+2	Terminal board for intensive fan
N	Neutral terminal of power supply
P 4028.2184.00	Up/down switch to rising of the canopy
P18-P36	Blue lamp 36W/18W
PD 4027.5010.00	Diode bridge
RA 4027.3025.04	Radio CD
RA15-2-3 16973.001.0.0	Ballast for Kalfasun 1530F lamps
RA6-1-4 16973.000.0.0	Ballast for Kalfasun 630F lamps
RB16-1+26 4028.1001.08	Ballast for Kalfasun B23-S White 160W
RB36-1 4028.1002.03	Ballast for blue lamp 36W
RCT 4026.0010.00	Circuit board for battery-charger and automatic control of ascent 30Vcc
RU 4028.4502.03	Control relay for N.O. contact of a coin box
RV 4028.4500.01	Control relay for cooling fan unit
S 4028.4020.03	Starter
SA 4028.2187.03	Selector
SCHEDA JACK 15906.026.0.0	Circuit board for Headphones
T12 4028.1003.04	Power supply circuit board for 12V dc radio
T30 4028.1010.11	Transformer 60VA
TRS/4 14703.043.0.0	Control board (complete)
VLE 4028.0048.00	Body fan
VT1 4028.0024.02	Cooling fan for bed low-pressure lamps
VT2-3 4028.0029.04	Cooling fan for high-pressure lamps
VT4-5 4028.0021.04	Cooling fan for high-pressure lamps
VT6 4028.0037.00	Hot air exhaust fan

## DESCRIPTION CIRCUIT DIAGRAMS

1/5 Voltage-change diagram.

2/5 Practical diagram of the bed feeders cassette (control unit).

3/5 Practical diagram of the head feeders cassette.

4/5 Practical diagram of head.

5/5 Practical diagram of base.

## 12 - MEDICATION

### 12.1 MEDICATION

Certain drugs can make your skin sensitive to ultraviolet light. The U.S. Department of Health and Human Services has published a booklet entitled Medications That Increase Sensitivity to Light; A 1990 Listing prepared by Jerome Levine, M.S., R.Ph. The booklet is HHS Publication FDA 91-8280 and is available from the U.S. Government Printing Office. Refer to this booklet or your health practitioner if you are taking any medications.

Dr. Richard Childers and Dr. Edward Emmett of Jhon Hopkins University compiled a list of drugs, foods, and other substances that could make your skin sensitive to ultraviolet light: This list is presented below:

- Diuretics ( which help prevent water retention ), prescribed for high blood pressure ( for example, Hydrodiuril ).
- Diabetes drugs-Orinase and Diabinase.
- Urinary tract infection treatments with phenothiazines.
- Tranquilizers, such as Thorazine.
- The acne treatment Retin-A.
- Antihistamines-Phenergan and Benadryl-particularity when they are used on the skin in ointment form.
- Antibiotics-Declomycin, Aureozicin, and Griseofulvin, which is use in ringworm treatment.
- Coal tar treatment for psoriasis or chronic eczema.
- Bacterial infection treatments using sulfanilamide.
- Compounds known as furocoumarins or psoralens, which sensitise skin to sunlight whether put on the skin or taken orally. They are prescribed for vitiligo ( loss of skin pigmentation ) and psoriasis.
- Birth control pills. The hormones they contain can react with sunlight and in some cases cause brown patches on the skin.
- Perfumes and colognes containing furocoumarins, compounds from natural products such as plants and fruits. Their natural oils cad sensitise the skin to sunlight.
- Food and fruits that contain photosensitising agents: celery, carrots, limes, coriander, parsley, fennel, dill, buttercup, mustard and figs.

## 13 - WARRANTY

### 13.1 LIMITED WARRANTY

For **USA** see next page.



## TERMS OF WARRANTY

Sportarredo USA, Inc. ("Sportarredo") warrants its tanning beds (the "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 two (2) years (the Warranty Period") from date of sale (proved by the invoice's date). This Limited Warranty does not cover the normal wear and tear of the Products.

This Limited Warranty applies only within the United States and Canada to the first end user (the "Buyer") of the Products and becomes void on the transfer or sale of the Products to any party other than the Buyer.

### I. Registration Requirement

a. This Limited Warranty becomes effective only if the Buyer fills out and returns the Warranty Certificate, dated and signed by the Buyer, to Sportarredo at the address shown below within thirty (30) days of the sale of the Products.

b. By returning the Warranty Certificate to Sportarredo, the Buyer acknowledges to have fully read and understood the user's manual, and to have complied with all the instructions stated in that document.

### II. Installation and Maintenance Requirements

a. This Limited Warranty does not apply when the installation has not been performed by Sportarredo's trained and certified technician. For the sake of clarity, the technicians have to be certified by Sportarredo, after attending Sportarredo's training courses.

b. This Limited Warranty does not apply if the Products are misused or abused, and there is evidence of mishandling, neglect, modification or repair without the approval of Sportarredo, or damage done to the Products by anyone other than Sportarredo.

c. This Limited Warranty does not apply to damages caused during transportation (including transport to and from the Buyer's location); or damage due to improper or lack of maintenance; voltage overloads or "under voltage"; insufficient or abnormal operation of electrical or hydraulic systems; improper or incorrect treatment of water supply; or corrosion caused by condensation or hard water; improper descaling treatments; or in general to any cause which does not specifically depend on defect in material or workmanship.

d. This Limited Warranty does not apply if the serial number on the product has been removed, altered or defaced.

### III. Warranty Claim Procedure

In order to submit a Warranty Claim, the Buyer must provide Sportarredo with a written notice of any alleged defects within the Warranty Period, but in any case after no more than ten (10) days from the date of the discovery of the defects. At Sportarredo's option, the Buyer must ship the defective Product(s) to Sportarredo, at the address shown below, with mailing or shipping charged prepaid. Sportarredo shall be liable for and shall pay for the all freight, shipping and delivery costs of forwarding parts sent to Sportarredo for repair or replacement under the Limited Warranty. The Buyer shall be liable and pay for all labor and transportation charges in the event of a house call by an unauthorized technician. Adequate packaging must be used for returned goods to prevent freight damages.

### IV. Warranty Services

a. Defective parts will be replaced upon receipt by Sportarredo. Only original parts obtained through Sportarredo USA Inc., its authorized dealers or distributors may be used. Shipping terms, methods, etc. must be pre-approved by Sportarredo prior to the return of the parts in question. Parts, etc. shipped to Sportarredo without prior approval will be refused and the owner/shipper will be responsible for all related shipping costs etc.

b. If the Products shall be proved to Sportarredo's satisfaction to be defective within the Warranty Period, Sportarredo's obligation under this Limited Warranty shall be limited to either repairing or replacing the Products, at Sportarredo's sole discretion, if such defect was caused solely by defective workmanship and materials. Such repair or replacement shall be Sportarredo's sole obligation and the Buyer's exclusive remedy hereunder and shall be conditioned upon the Buyer's fulfilling of its obligations under Warranty Claims Procedure. The 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:

1. Tanning lamps, filters, starters and igniters are warranted against defects for a period of sixty (60) days from date of sale.

2. Radios and speakers are warranted by the radio and speaker Sportarredo for the period of time indicated in their warranty certificates.

3. Labor will be furnished without charge for sixty (60) days from the date of purchase only. All labor and related charges must be authorized by Sportarredo USA Inc. prior to start of repairs, and must conform with Sportarredo USA Inc. established rates and time allotment policy.

4. All fans and batteries are warranted against defects for a period of two (2) years from date of sale.

5. Timer system, plastics reflectors and parts subjected to "normal" wear & tear (meaning parts intended to be used by the final customer during each session, as buttons, switches, profiles, etc) are warranted for one (1) year.

6. Acrylics are warranted for twelve (12) month prorated period (this warranty applies only if the "owner" of the units has used appropriate cleaners).

7. Mattresses and pillows are warranted for a period of six (6) months from the date of sale.

### V. Exclusion from Limited Warranty

The following are not covered by this Limited Warranty

Scratches, splinters, or marks to the Products, unless Sportarredo is notified as soon as the Products are received by the Buyer;

Normal wear and tear;

Defects not caused by the Products, but that are the result of improper installation;

Misuse or abuse by the Buyer;

Physical damage to the Product as a result of unreasonable use and/or negligence.

VI. Limitations on Warranty

This Limited Warranty is provided by Sportarredo, and it contains the only express warranty provided to the Buyer by Sportarredo. Sportarredo does not authorize any other person, including distributors, sub-distributors, agents, to give any other warranties on Sportarredo's behalf.

**SPORTARREDO DISCLAIMS ANY EXPRESS WARRANTY NOT PROVIDED HEREIN AND ANY IMPLIED WARRANTY, GUARANTY OR REPRESENTATION AS TO PERFORMANCE, QUALITY AND ABSENCE OF HIDDEN DEFECTS, AND ANY REMEDY FOR BREACH OF CONTRACT, WHICH BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION, OPERATION OF LAW, CUSTOM OF TRADE OR COURSE OF DEALING, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SPORTARREDO FURTHER DISCLAIMS ANY RESPONSIBILITY FOR LOSSES, EXPENSES INCONVENIENCES, SPECIAL, INDIRECT, SECONDARY OR CONSEQUENTIAL, INCIDENTAL, AND CONTINGENT DAMAGES WHATSOEVER, INCLUDING DAMAGES ARISING FROM OWNERSHIP OR USE OF PRODUCT.**

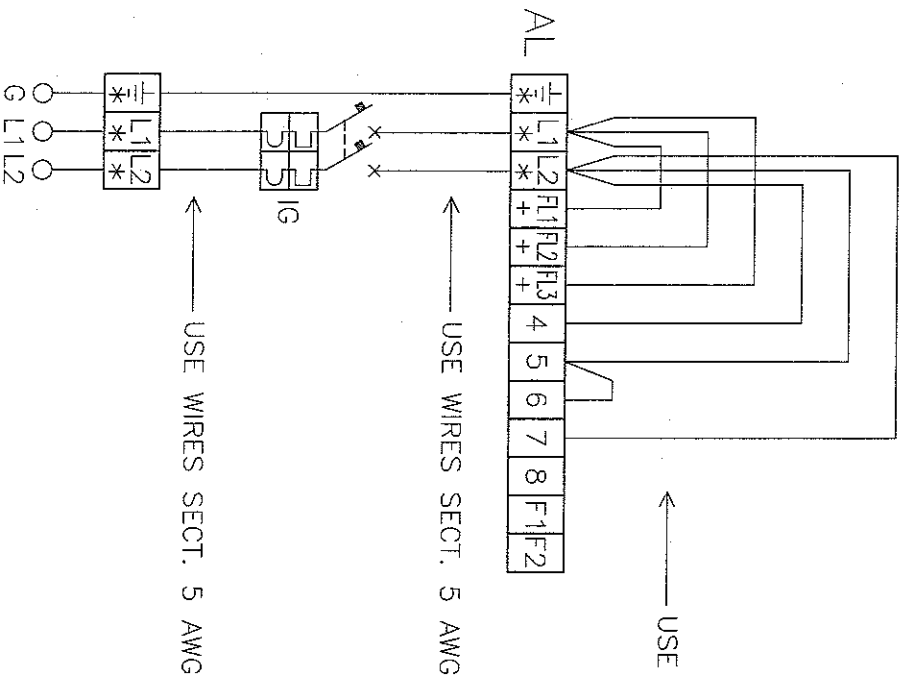
Implied warranties in jurisdictions where they may not be disclaimed shall be in effect only for the duration of the express warranty set forth herein.

If the Buyer has a claim under this Limited Warranty or under any implied warranties provided to the Buyer by state law, the Buyer may not file a court action based on that claim any later than one (1) year after the Buyer's right to file a court action accrues. In those states that do not allow this limitation on the time period for filing a court action, this provision is inapplicable.

VII. Sportarredo's Liability

a. Sportarredo's liability with respect to the Product sold to the Buyer shall be limited to the Limited Warranty provided herein. Sportarredo SHALL NOT BE SUBJECT TO ANY OTHER OBLIGATIONS OR LIABILITIES, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORIES OF LAW, WITH RESPECT TO THE PRODUCTS SOLD OR SERVICES RENDERED BY SPORTARREDO, OR ANY UNDERTAKING, ACTS OR OMISSIONS RELATING THERETO.

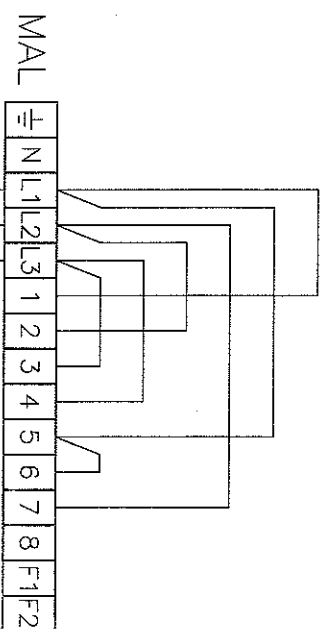
b. Without limiting the foregoing, Sportarredo specifically disclaims any liability for property or personal injury damages, penalties, special or punitive damages, damages for lost profits or revenues, services, down time, shut down or slow down costs, or for any other types of economic loss, and for claims of the Buyer's customers or any third party for any such damages. Sportarredo SHALL NOT BE LIABLE FOR AND DISCLAIMS ALL CONSEQUENTIAL, INCIDENTAL, AND CONTINGENT DAMAGES WHATSOEVER.



V = 230V MONO 60HZ

REPLACE BREAKER "IG" WITH A 2P-80Amps TYPE C  
 \* REPLACE TERMINALS INDICATED WITH 85Amps TERMINALS  
 + REPLACE TERMINALS INDICATED WITH FUSEHOLDER 10X38 AND FUSE 30Amps RELAY

F1	1A FUSE TYPE T
F2	4A FUSE TYPE T

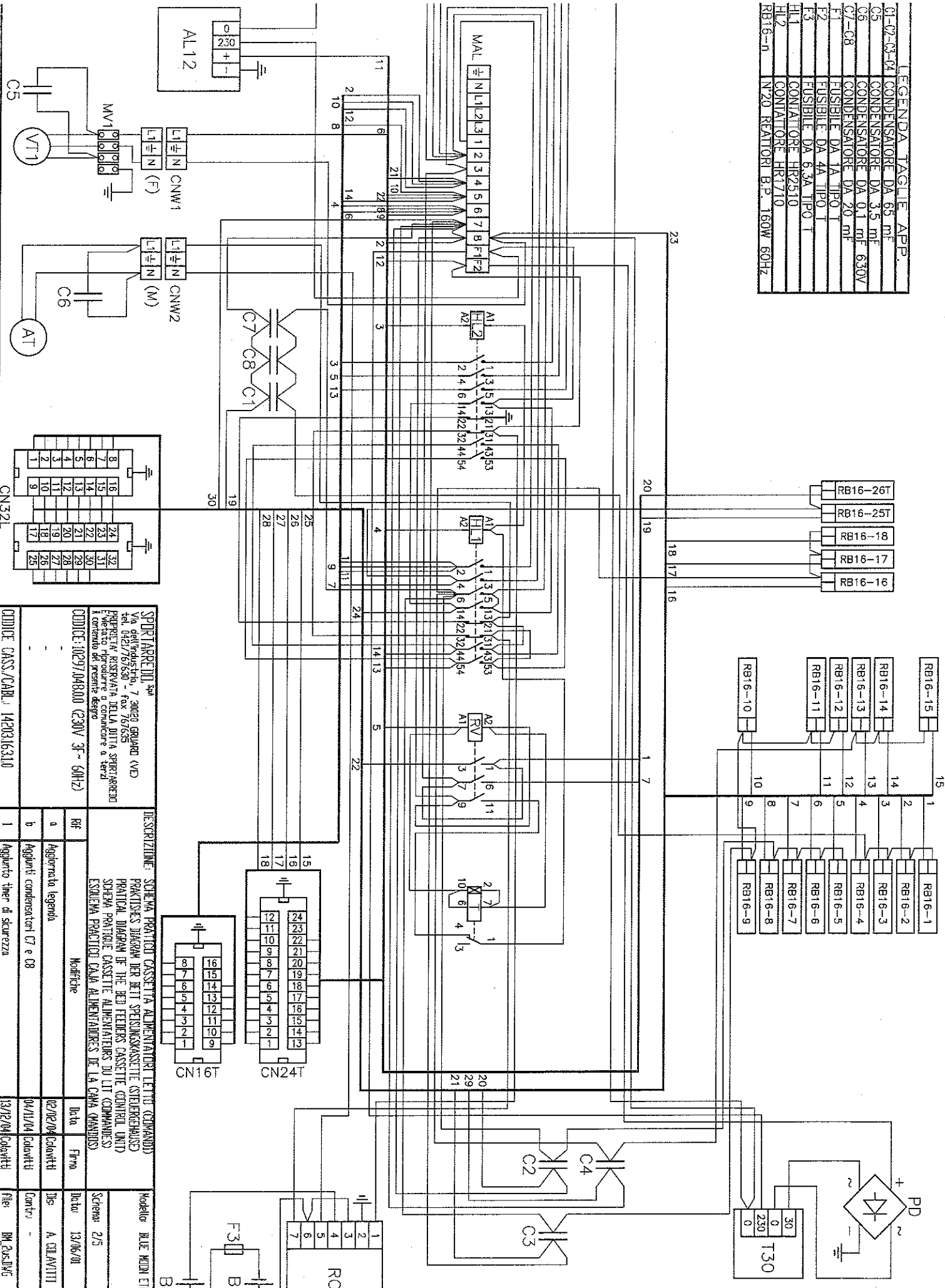


V = 230V 3~ 60HZ

SPARTAREDDI spa Via DE LUCA 57/60, 7 30020 GRUGARO (VE) Tel. 0421/767630, Fax 767633 RAPPRENTA RISERVATA DELLA DITTA SPARTAREDDI I contenuti di questo documento sono riservati e comunicare a terzi è considerato un illecito.		DESCRIZIONE: SCHEMA CAMBIO TENSIONE DIAGRAMM FÜR SPANNUNGSÄNDERUNG VOLTAGE-CHANGE DIAGRAM SCHEMA CHANGE TENSION ESQUEMA CAMBIO TENSION		Modello: BLUE ADON ETI Schema: 1/5 Data: 13/06/01 Dis: A. CILAVITTI Contr: - File: BL_1052106	
CODICE: INC971A800 (230V 3F - 60Hz)	Modifiche	Data	Firma	Data	Contr
1	Aggiunto cambio tensione mono	-	-	-	-
2	-	-	-	-	-
3	-	-	-	-	-
CODICE CASS./CABL. -	-	-	-	-	-

LEGENDA TAGLIE APP.

G1-G3-G4	CONDENSATORE DA 65 mF
C5	CONDENSATORE DA 3,5 mF
C6	CONDENSATORE DA 0,1 mF 630V
C7-C8	CONDENSATORE DA 20 mF
F1	FUSIBILE DA 1A TIPO T
F2	FUSIBILE DA 4A TIPO T
F3	FUSIBILE DA 6,3A TIPO T
HL1	CONDENSATORE HR2510
HL2	CONDENSATORE HR1710
RB16-n	N.20 REATTORI B.P. 160W 60Hz



SPORTAREDDI s.p.a.  
Via dell'Industria, 7 30029 GRAPPA (VE)  
Tel. 0421/76580 - Fax 76/583  
RIPRESENTA E RISPONDE DELLA DITTA SPORTAREDDI  
per tutto il territorio o comunque a terzi  
è consentito un presente disegno

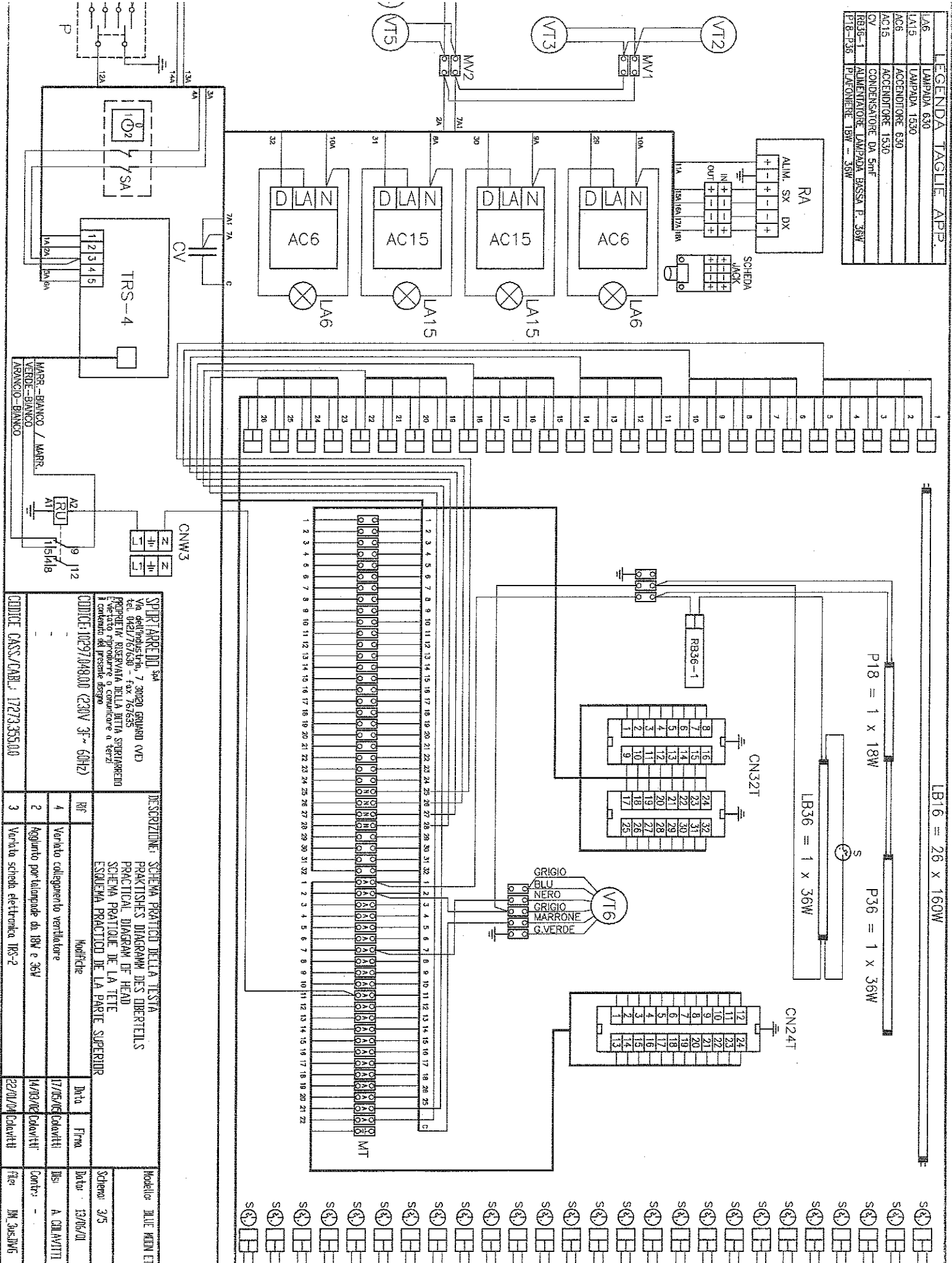
CODICE: 10297104800 (230V 3~ 60Hz)

CODICE CASS./CARL: 1420316310

DESCRIZIONE	MODIFICHE	DATA	FIRMA
a) Aggiornata legenda		02/02/04	Colavitti
b) Aggiunti condensatori C7 e C8		04/11/04	Colavitti
1) Aggiunto timer di sicurezza		13/02/04	Colavitti

Modello BLUE MCDN ETI  
Schema: 2/5  
Data: 13/06/01  
Dis: A. CALAVITTI  
Centr.:  
File: IM\_205.DWG

LEGENDA TAGLIE APP.
LA6 LAMPADA 630
LA15 LAMPADA 1530
AC6 ACCENDITORE 630
AC15 ACCENDITORE 1530
CV CONDENSATORE DA 50nF
RB36-1 ALIMENTATORE LAMPADA BASSA P. 36W
P18-P36 PLACONVERTE 18W - 36W



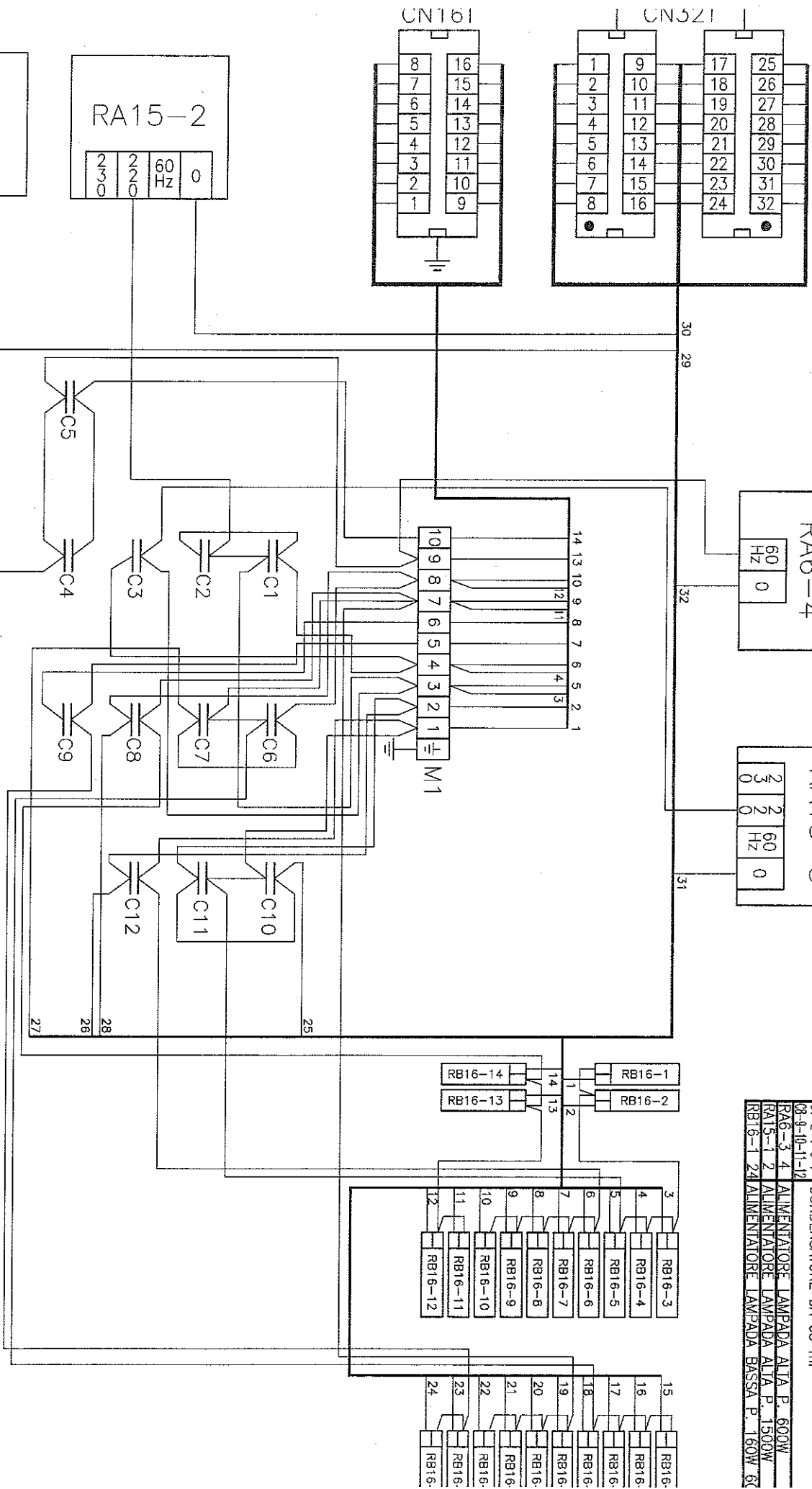
**SPURAREDDO s.p.a.**  
 Via dell'Industria, 7 30029 GORIZIO (VE)  
 tel. 0427/676300 - fax 762625  
 PROPRIETÀ, RISERVA DELLA DITTA SPURAREDDO  
 è vietata espressamente la ristampa o l'uso  
 in qualsiasi forma senza il permesso scritto  
 e a carico del presente disegno.

DESCRIZIONE: SCHEMA PRATICO DELLA TESTA PRAKTISCHES DIAGRAMM DES OBERTEILS PRACTICAL DIAGRAM OF HEAD SCHEMA PRATIQUE DE LA TETE ESQUEMA PRACTICO DE LA PARTE SUPERIOR	
1	Modifiche
2	Varcato collegamento ventilatore
3	Aggiunto portalampane da 18W e 36W
4	Varcato collegamento ventilatore
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Modello: ALLE KERN ETI
Schena: 3/5
Data: 13/06/01
Dis: A. OLIVATTI
Contr: -
File: JM_Ges.DWG

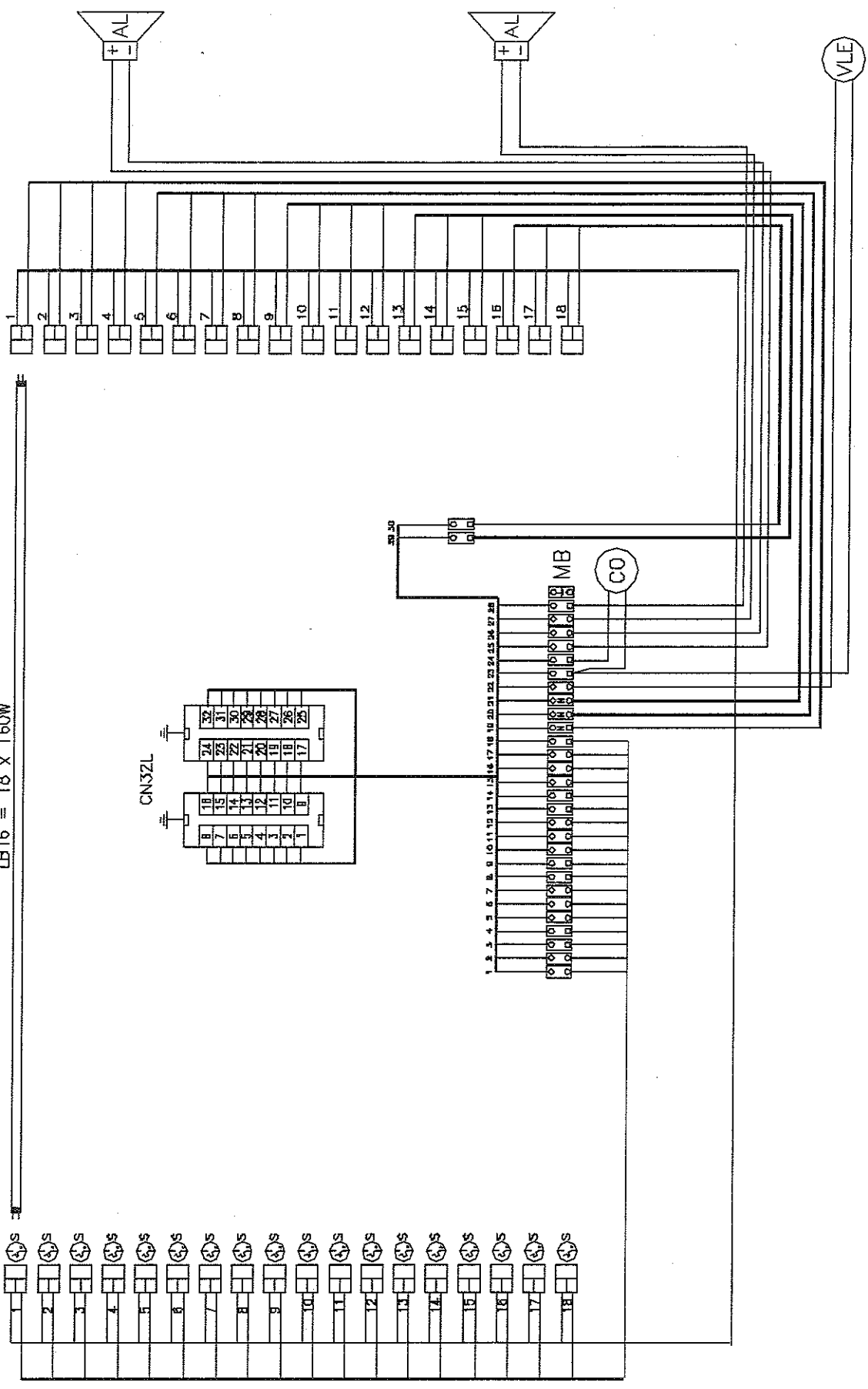
**LEGENDA TAGLIE APP.**

C3-C5	CONDENSATORE DA 20 nF
C1-2-4-6-7	CONDENSATORE DA 65 nF
RA6-10-11-12	
RA6-3-4	ALIMENTATORE LAMPADA ALTA P. 600W
RA6-1	ALIMENTATORE LAMPADA ALTA P. 1500W
RA15-1-2	ALIMENTATORE LAMPADA BASSA P. 160W 60



SPIRITARELLI spa Via dell'Industria, 7 20092 GORIZIA (VD) Tel. 0421/767230 - Fax 0421/767833 PROPRIETÀ RISERVATA DELLA DITTA SPIRITARELLI Il contenuto del presente disegno		DESCRIZIONE: SCHEMA PRATICO CASSETTA ALIMENTATORI TESTA PRAKTISCHES DIAGRAM DER HÖRER SPEISUNGSCASSETTE PRACTICAL DIAGRAM OF THE HEAD FEEDERS CASSETTE SCHEMA PRATIQUE CASSETTE ALIMENTATEURS DE LA TÊTE ESQUEMA PRACTICO CASSA ALIMENTADORES DE LA PARTE SUPERIOR		Modello	BLU MON ETI
CODICE: 1029704800 (230V 3F~ 60Hz)	RF	Modifiche	Data	Firma	Data
	1	Aggiornata legenda e connettore OR21	02/02/04	Calaviti	13/06/01
	2	Sostituito reattori 60Hz	15/10/04	Calaviti	
CODICE CASS./CARB.: 1420316A00	3				
					Dis. A. CALAVITI
					Contr. -
					File: BH_405_016

LB16 = 18 x 160W



<b>SPERTARELLIO SPA</b> VIA DELL'INDUSTRIA, 7 - 31040 GRONARO (VD) TEL. 0423/767630 - FAX 767633 PROPRIETÀ RISERVATA DELLA ILLTA SPERTARELLIO E' vietata l'riproduzione o l'installazione a terzi il contenuto del presente disegno		<b>DESCRIZIONE:</b> SCHEMA PRATICO DELLA BASE PRAKTISCHES DIAGRAM DER LIEGE PRACTICAL DIAGRAM OF BASE SCHEMA PRATIQUE DE LA BASE ESQUEMA PRACTICO DE LA BASE		Modello: BL DE MIEN ETL Numero: 575 Data: 13/8/11 Dis: A. COLAVITTI Cont: - File: BL-575.DWG
<b>CODICE UN297.048.00 (230V 3F~ 60Hz)</b> - - -	NP 1 2 3	Descrizione 1 2 3	Data - - -	F. Prev. - - -
<b>CODICE CASS./CABL.: 1427A7000</b>				