HB 576/A

Service
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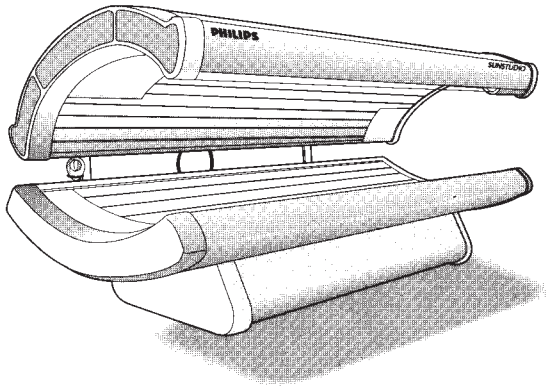
Service Information



SUNSTUDIO COMBI

Domestic Appliances and Personal Care

Service Manual

GENERAL

The full-body tanner Sunstudio Combi HB 576/A is equipped with a 30-minute timer.
After the pre-set tanning time, the appliance automatically switches off.
To guarantee even tanning, the three outer TL's of the canopy are operated by means of 100 W ballasts and the six inner TL's are operated by means of 80 W ballasts.
It has four fans - one in the canopy and three in the couch - for adequate cooling of the equipment during operation.
The voltage supply to the couch will only be switched on via the relay (Re) after the timer has been set.
The starting current is limited by NTC resistors (NTC 1-5) and phase-correction takes place by means of the capacitors (C 1-5).

When choosing a place for the appliance, make sure there is enough free space around the appliance to guarantee proper cooling.

TECHNICAL DATA

operating voltage	: 220-230 V~, 50 Hz
power consumption	: approx. 2190 W
ballast canopy	: 6 x 100 W
	: 6 x 80 W
ballast couch	: 12 x 80 W
starter type canopy	: 12 x S11
starter type couch	: 12 x S11
lamp type canopy	: 12 x Cleo Professional 90W/S
lamp type couch	: 12 x Cleo Professional 90W/S
timer	: 1 x 30 min
safety class	: double insulation
test mark	: CE
length of mains cord	: approx. 3 m
irradiation field	: approx. 200x85 cm
dimensions	: approx. 216x111x101 cm
	: (L x W x H)
height adjustment	: approx. 39 - 46.5 cm

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PHILIPS

DISASSEMBLY

Canopy

Remove four ornamental props (8) from the end covers (7) on either side of the canopy with a screwdriver and undo the screws.
Detach the end covers from the canopy.
Now the starters (10) of the TL's can be removed.
Pull the two side covers (13A/fig. 1) off the lower part of the aluminium profile.

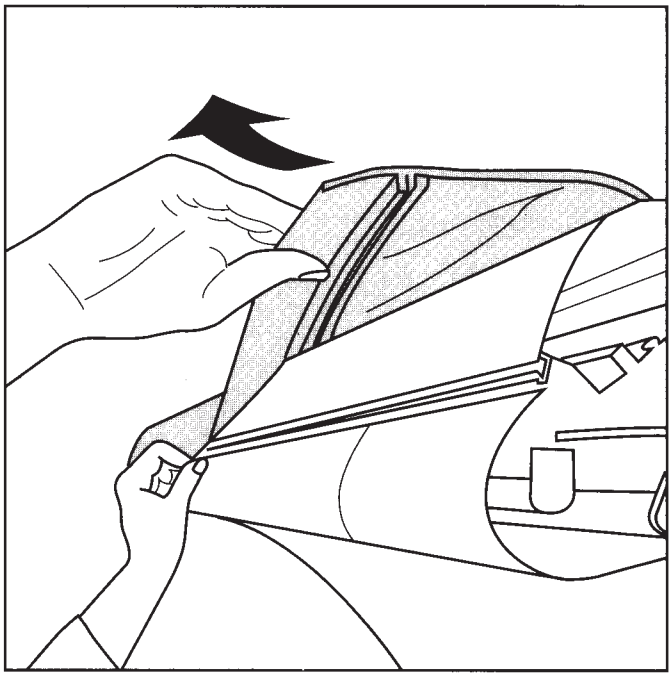

fig.1

Pull the plastic locking pins (16A) out (fig. 2) and detach the acrylic sheet (25) from the aluminium profile.

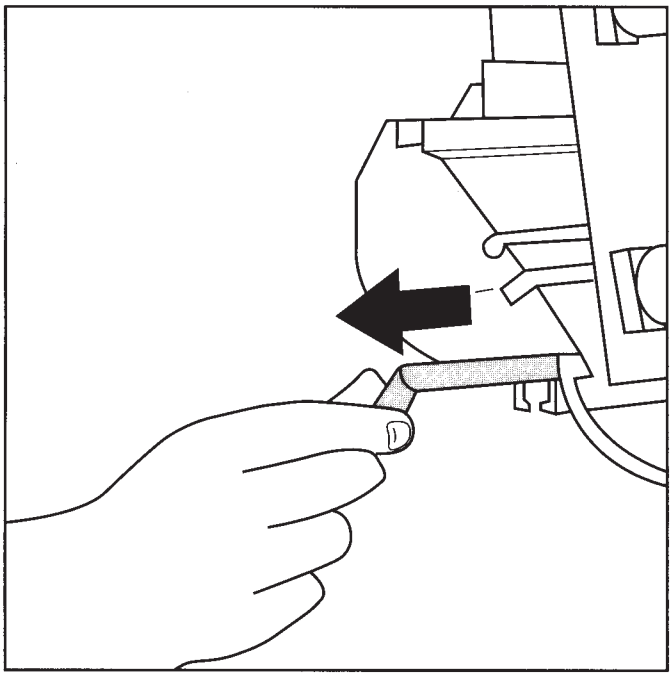

fig. 2

Now the TL's can be removed.
You need a second person to remove the acrylic sheet.

To remove the top cover (1), use a screwdriver to lever the plastic rivets (12) out of the cover.
Be careful not to damage the cover.
Pull the top cover out of the grooves of the side covers (13A) and then swing it aside towards the stand.
Support the cover after you have swung it aside!
Now all the other components can be disassembled.

To remove the fan, you first have to detach two ballasts.

Removal of complete canopy

The entire canopy can be removed from the hinged parts by undoing the carriage bolts on either of these two parts.
You need a second person to do this.

Couch

Remove three ornamental props (8) from the end covers (21) on either side of the couch with a screwdriver and undo the screws.
Detach the end covers from the couch.
Then swing up and unlock the cover/locking strips (part of 21A/see fig. 3) and pull them out sideways.

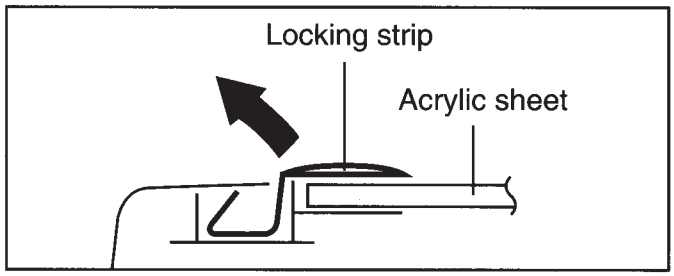

fig. 3

The acrylic sheet can now be lifted off by two people, after which the TL 's (16) and starters (10) can be removed.

To be able to disassemble the bottom cover (24), the canopy must first be folded down to serve as a counterweight.
Then **two people** (one on each side) can pull the couch off its base (fig.4).

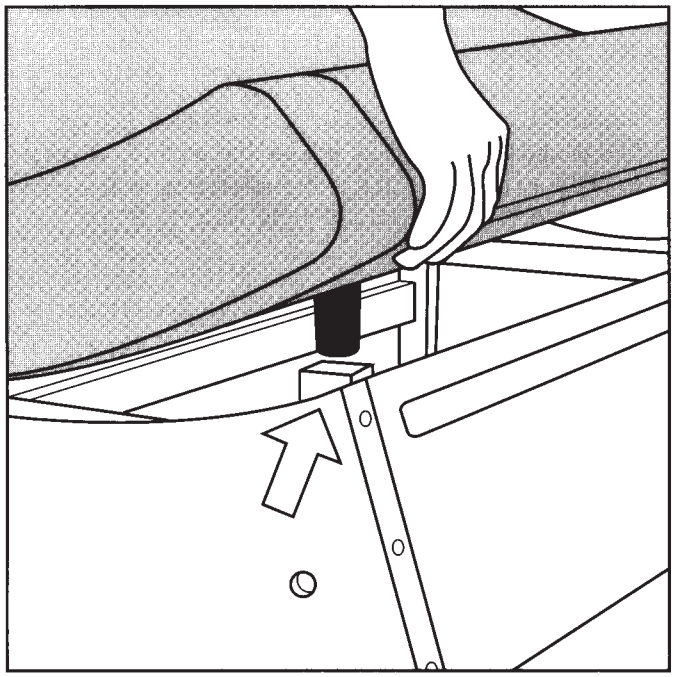

fig. 4

Put the couch with its lamp side pointing downwards on **a soft surface.**
Undo four screws next to the base studs and pull the cover out of the grooves of the aluminium profile.
Now all the other components can be disassembled.

Timer housing
Undo two screws and remove the rear cover.
Then pull off the timer knob (30).
Remove the front cover and undo the screws located under it.
Now the timer (28) can be taken out of the housing.

Gas-pressure springs
Swing up the canopy and have a second person secure it in this position.
Undo two nuts on either side and take the gas-pressure springs (25) out of the hinged parts.

Hinged parts
The hinged parts can be completely lifted off the stand after the carriage bolts for height adjustment have been loosened on either side.

ASSEMBLY

Canopy
When assembling the acrylic sheet (17), make sure that the edges are properly inserted behind the aluminium profile (fig. 5).

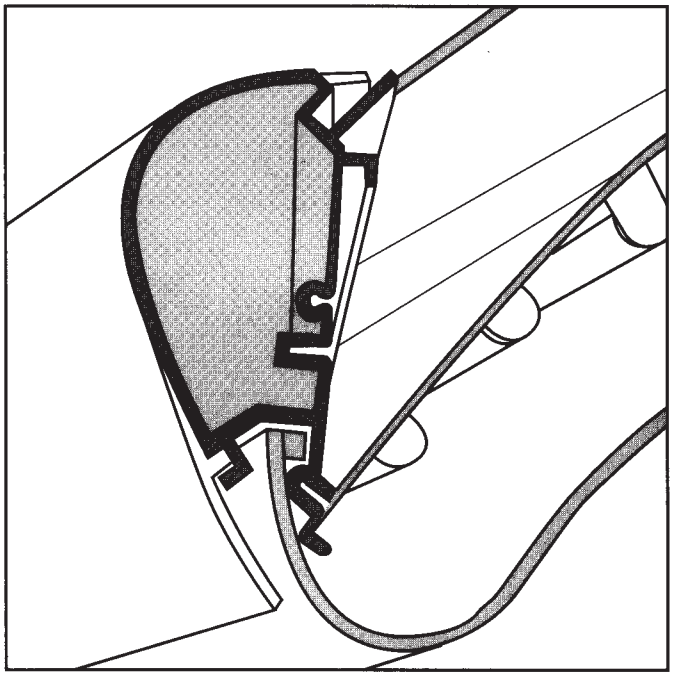

fig. 5

Then press the side covers back into the aluminium profiles (fig. 6).

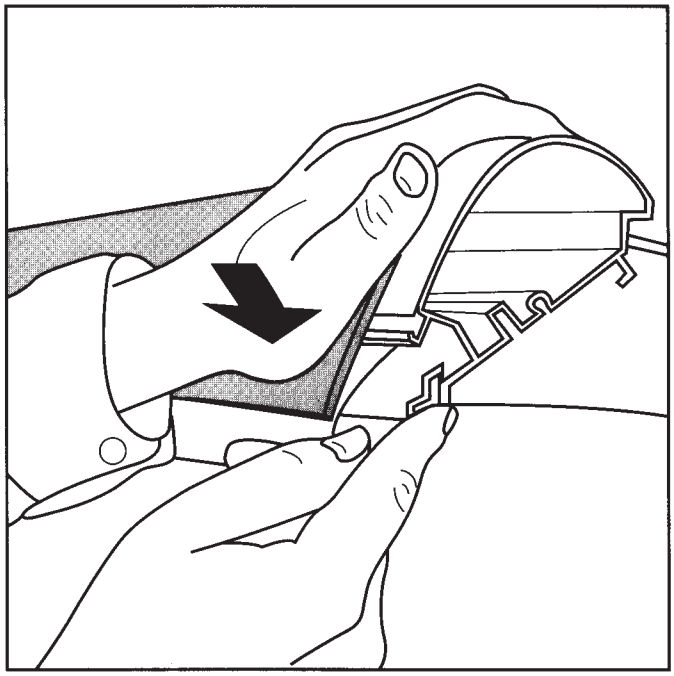

fig. 6

Assemble the four plastic locking pins.
Make sure that they are completely pushed in and located on the outside of the acrylic sheet (fig. 7)

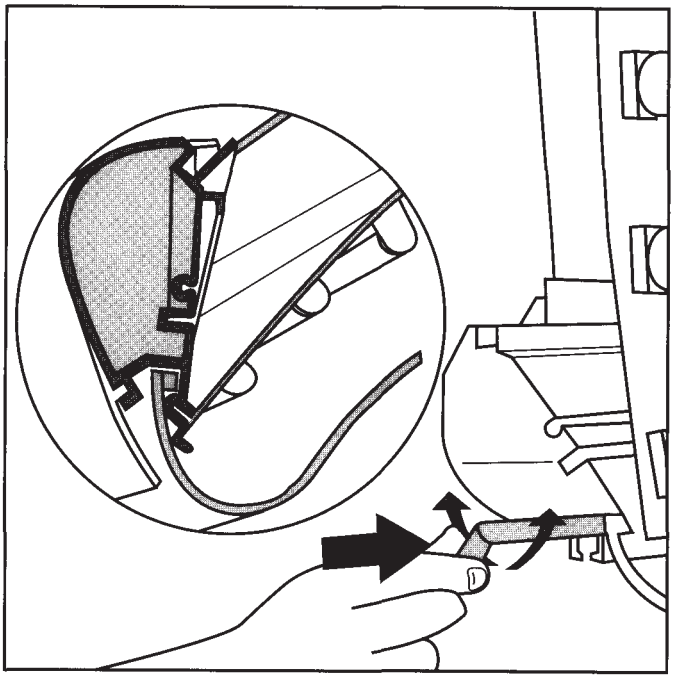

fig. 7

Slide the end covers carefully back onto the appliance (fig. 8).

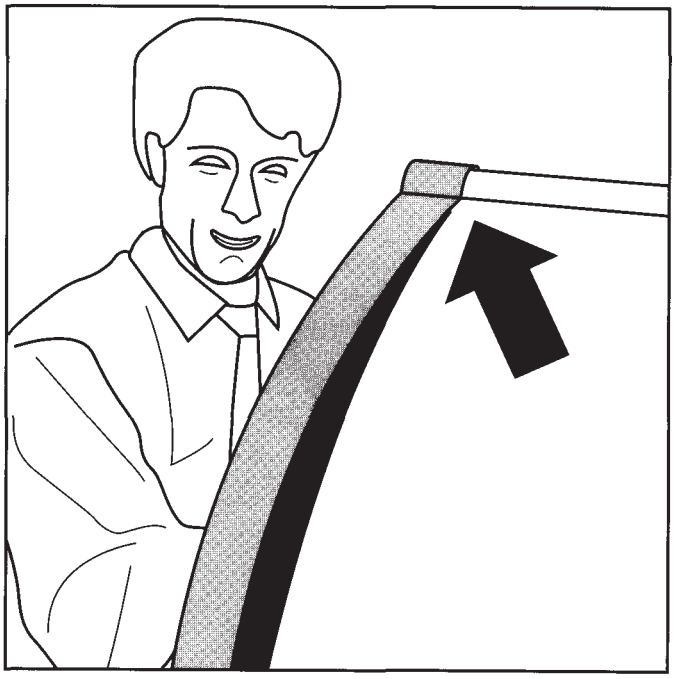

fig.8

When assembling the top cover (1), make sure that the small inlet cover (10A) for the mains cord and the timer wire overlaps the top cover correctly.

Couch
When assembling the acrylic sheet (19), make sure the cover/locking strips are properly locked in position.

SERVICE TIPS

- If a fuse blows when you switch on the appliance, this is usually caused by a fuse that acts too quickly. In such a case, use of a slow 16A safety fuse is recommended on account of the high starting current.
- The fuse may also be activated as a result of a defective NTC resistor, a defective capacitor, a defective ballast or an overloaded circuit.
- If one or more TL's have broken down, you can track down the failure cause by interchanging parts (ballasts, starters, lamps).
  If these parts are OK, the wiring must be checked, especially the connections to the lamp holders.
- An unusually early blackening of the end of the TL's points to a wiring fault or a defective starter.
- The plug-in connections of the wires can be detached by means of a paper clip.
- When the couch cannot be switched on, the relay (3) may be defective.
  Other possible causes are a defective inlet or a defective connecting cable.
- **Always use protecting goggles when looking in the direction of burning lamps.**
- The acrylic sheets can be cleaned with a moist cloth and some washing-up liquid.
  Avoid the use of alcohol, alcohol-based cleaners, petrol, acetone or abrasives!
  These substances can cause irreparable damage to the sheets.
- Disposal of used-up or broken lamps

Used-up or broken lamps are chemical waste and must be disposed of in the appropriate manner.

IRRADIANCE

The measuring data indicated below were established with help of an LMV UV-A meter or a Hebru UV-A meter and may only be checked with this equipment, since the values measured are relative values.
The measurements must be taken after approx. 5 minutes in the centre of the irradiation field and at the distance indicated.
The following aspects must be checked or the following preliminary measurements must be taken:

General

- Mains voltage: 220-230V
  Room temperature approx.: 22-28°C

Checks on appliance

- Check the fans for failure-free operation as optimal irradiation is only guaranteed at the correct operating temperatures.

- Clean the reflectors, the lamps and the acrylic sheets.

With regard to the minimum irradiation indicated below, you should bear in mind that this is not an absolute value at which the lamps must be replaced.
Depending on the skin type, the tanning session may also be extended so that the lamps can be used a little longer.

	distance in cm	**approx. maximum irradiance of new appliances in mW/cm2**		**minimum irradiance at which lamps should be exchanged in mW/cm2**	
		LMV UV-A meter	**HEBRU UV-A meter**	**LMV UV-A meter**	**HEBRU UV-A meter meter**
couch	on the acrylic sheet	11.5	3.3	6.9	2.0
canopy	20	13.7	3.9	8.2	2.3

1	4822 441 11988	cover top
2	4822 265 10944	socket
3	4822 280 60513	relay
4	4822 146 10791	ballast 100W
-	4822 146 10792	ballast 80W
5	4822 380 10197	reflector middle
6	4822 380 10194	reflector side
7	4822 442 00893	end cover
8	4822 462 10917	ornamentral prop
8A	4822 502 14539	s.t.screw 4.8x19
9	4822 255 10374	lamp/starterholder
10	4822 218 11638	starter S11
10A	4822 442 01239	cover inlet
11	4822 321 11313	flex EU white 16A/2C
12	4822 532 12791	push rivet
13	4822 361 10971	fan
13A	4822 442 01243	side cover
14	4822 380 10195	reflector smaal
15	4822 255 10375	lampholder
16	4822 134 10066	UVA-TL CLEO 90W-S
16A	4822 535 10526	locking pin
20	4822 380 10196	reflector couch
21	4822 442 00894	end cover
21A	4822 442 01241	side cover
22	4822 116 30297	NTC resistor
23	4822 124 40701	capacitor 25µF/250V
24	4822 441 11989	cover bottom
25	4822 529 10385	gasspring 1500N
26	4822 462 10916	ornamental prop
27	4822 321 11314	timer flex
28	4822 282 10312	timer 30 mins Eaton
29	4822 441 11987	timer housing
30	4822 410 11117	timer knob
31	4822 256 10361	timer holder
32	4822 441 11991	leg cover complete
33	4822 690 80147	HB072 protecting goggles
	4822 310 10959	mounting set

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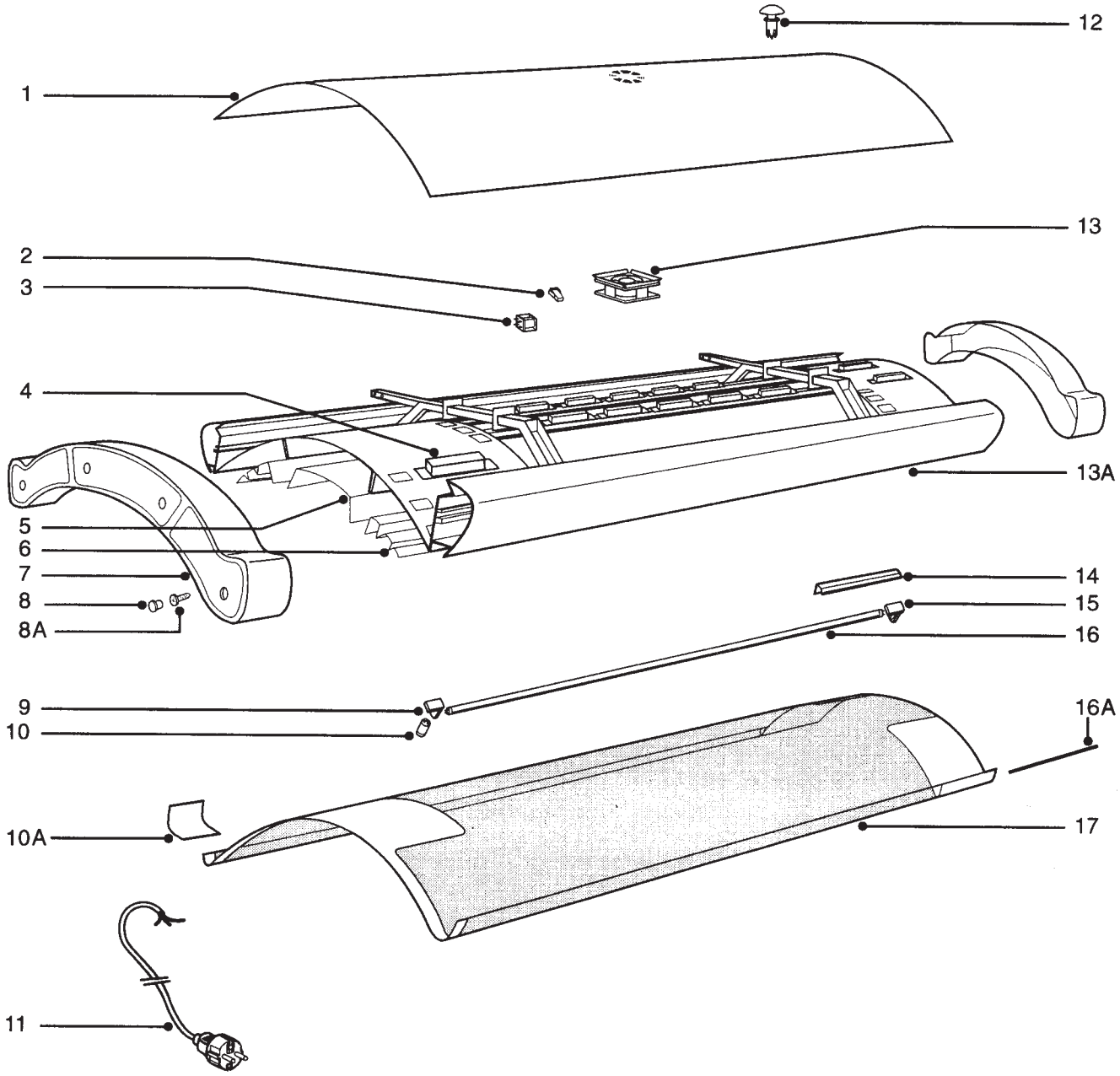

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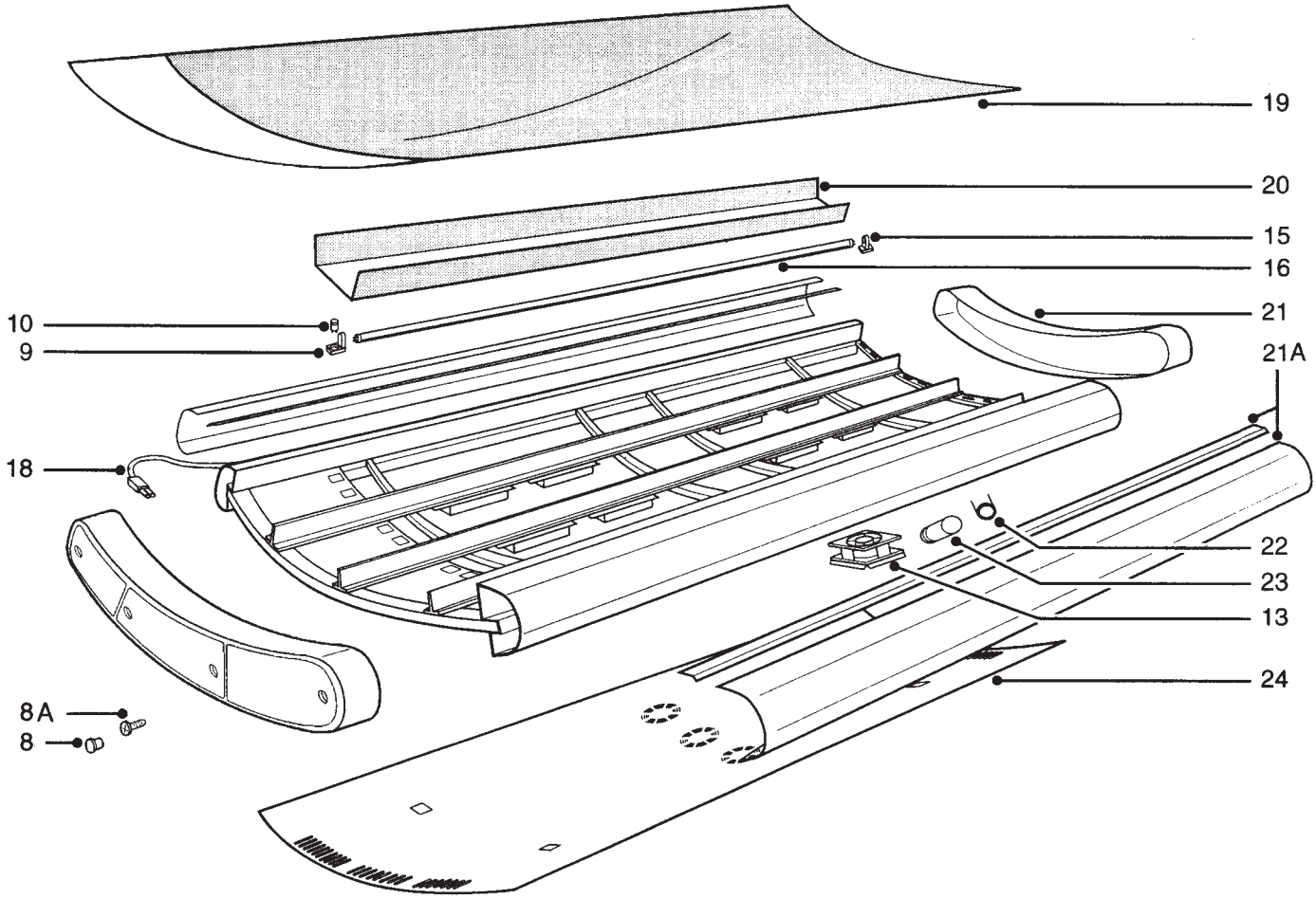

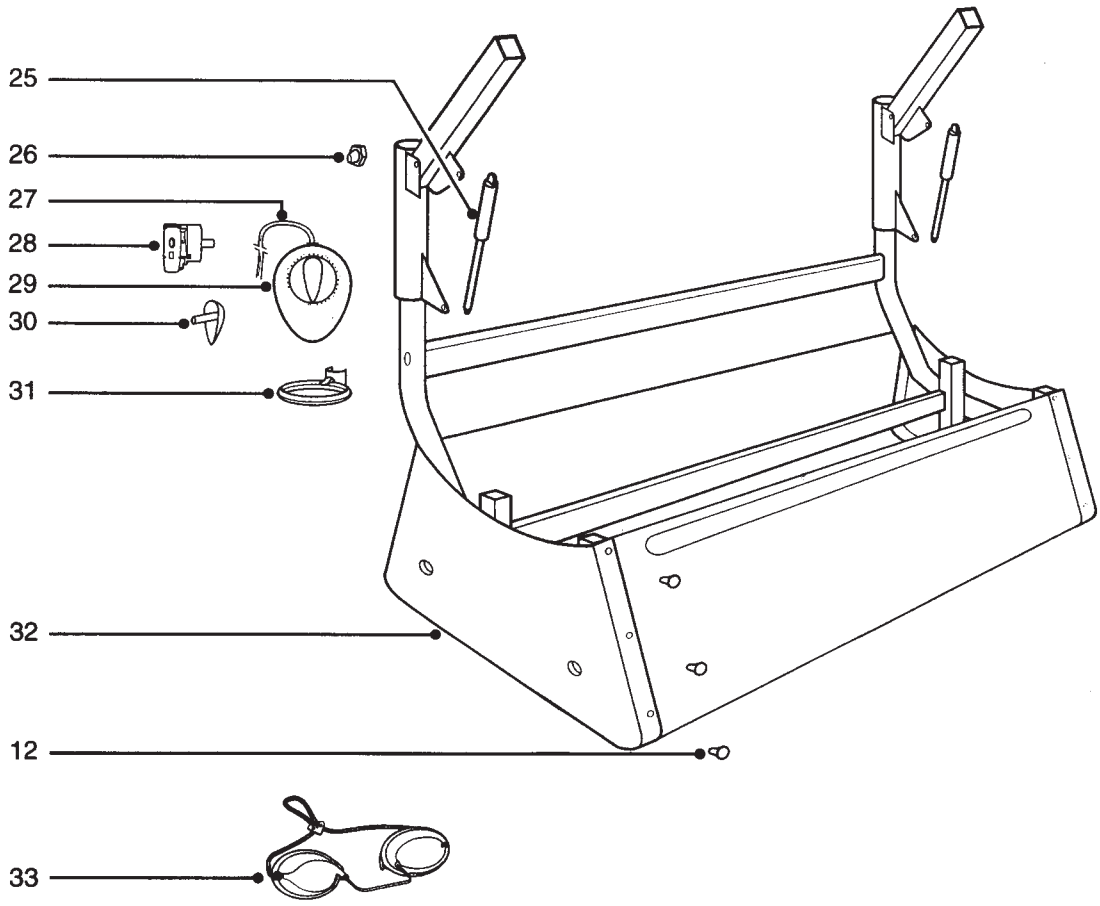

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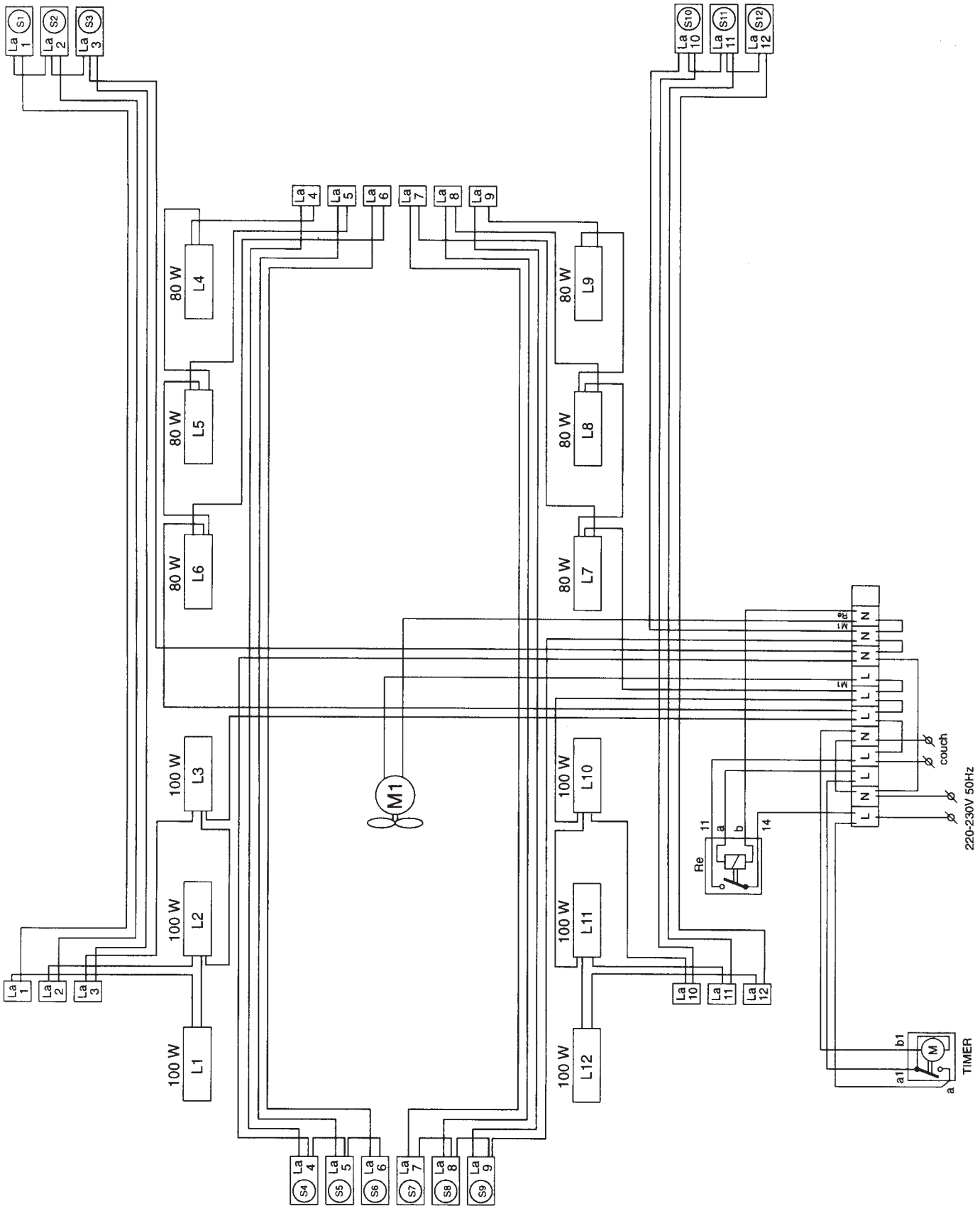

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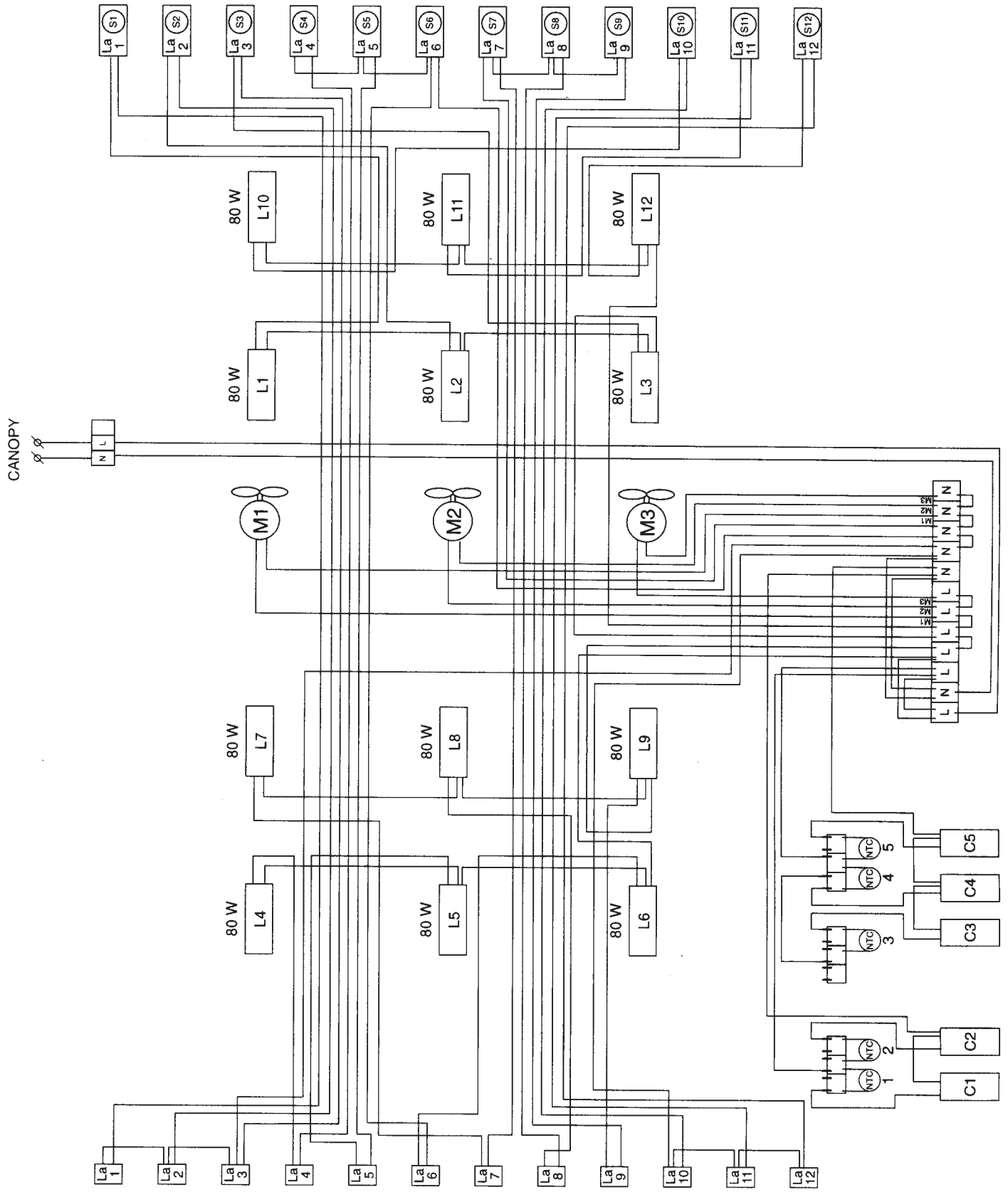
CANOPY
N L
La 1 S1
La 2 S2
La 3 S3
La 4 S4
La 5 S5
La 6 S6
La 7 S7
La 8 S8
La 9 S9
La 10 S10
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La 12 S12
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NTC 4
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