

Domestic Appliances and Personal Care

Service Manual

GENERAL

The full-body tanner Sunstudio Combi HB 577/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.

The facial tanner (HP 400 lamp) can be switched on in two steps (200/280 W) by means of switch SK 1/SK 2.

After the facial tanner has been switched off, it can only be switched on again after the lamp has cooled down for 3 minutes!

It has five fans - two in the canopy and three in the couch - for adequate cooling of the equipment during operation.

If malfunctions occur, thermal switch (SK 3) will prevent the temperature from rising to an unacceptable level.

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. 2480 W
ballast canopy	: 8 x 100 W
	: 7 x 80 W
ballast couch	: 12 x 80 W
starter type canopy	: 12 x S 11
	: 1 x MagneTek ZG 4,5D
starter type couch	: 12 x S11
lamp type canopy	: 12 x Cleo Professional 90W/S
	: 1 x HP 400
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

MSH Coding 8843 577 00000



DISASSEMBLY

Canopy

Remove four ornamental props (15) from the end covers (16 + 21) on either side of the canopy with a screwdriver and undo the screws.

Detach the end covers from the canopy.

Now the starters (18) of the TL's, the switch (13) of the HP 400 lamp and the microswitch (7) can be removed.

Pull the two side covers (21A/fig. 1) off the lower part of the aluminium profile.

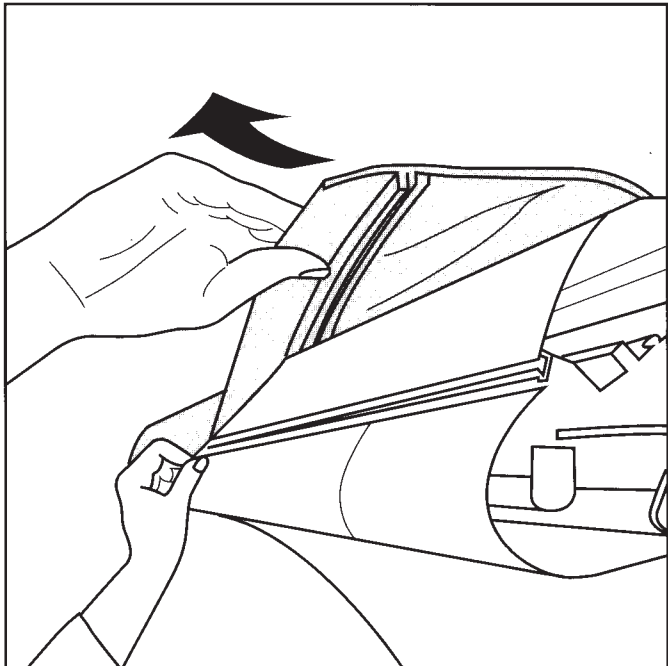


fig. 1

Pull the plastic locking pins (24) out (fig. 2) and detach the acrylic sheet (25) from the aluminium profile.

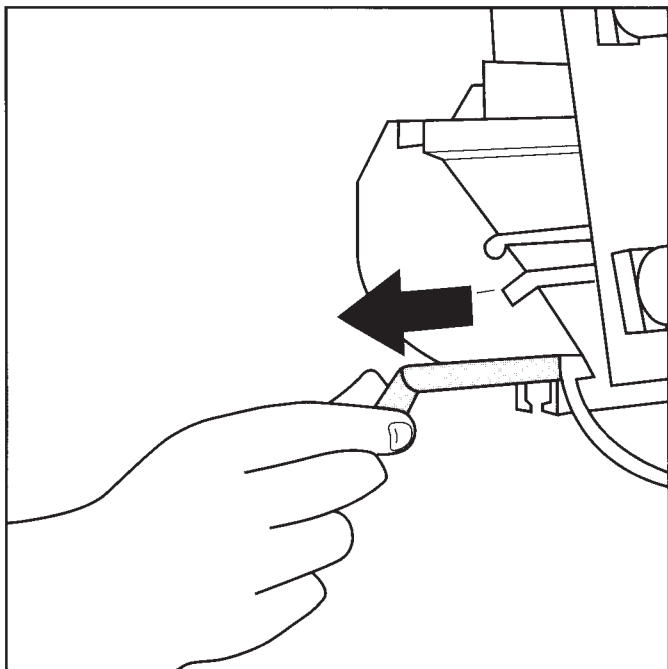


fig. 2

Now the TL's can be removed.

You need a second person to remove the acrylic sheet.

To remove the top cover (2), use a screwdriver to lever the plastic rivets (20) out of the cover.

Be careful not to damage the cover.

Pull the top cover out of the grooves of the side covers (21A) 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 each of the fans, 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 (15) from the end covers (29) 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 29A/see fig. 3) and pull them out sideways.

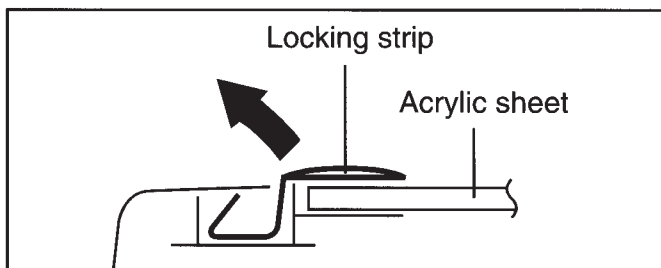


fig. 3

The acrylic sheet can now be lifted off by two people, after which the TL 's (24) and starters (18) can be removed.

To be able to disassemble the bottom cover (32), 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).

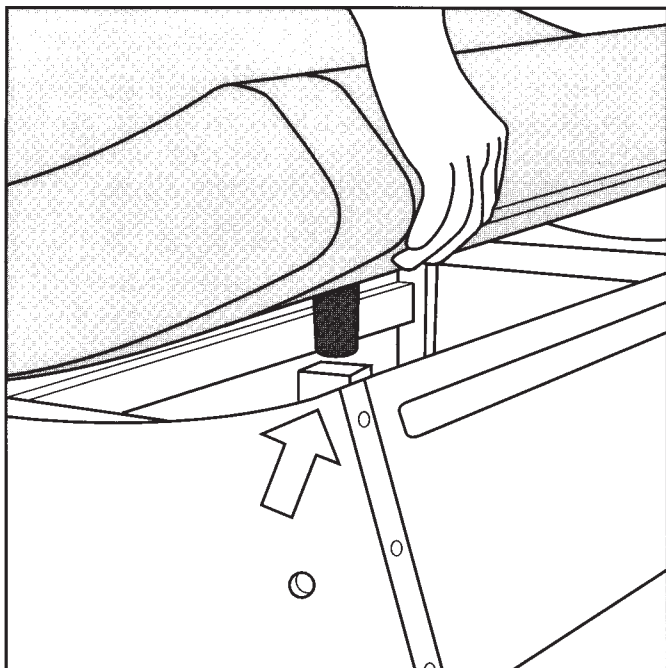


fig. 4

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 (38).

Remove the front cover and undo the screws located under it.

Now the timer (36) 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 (33) 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 (25), make sure that the edges are properly inserted behind the aluminium profile (fig. 5).

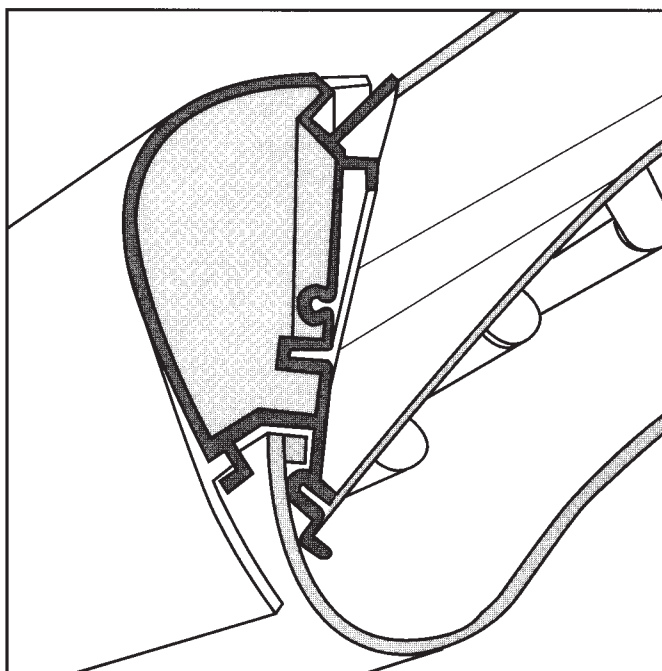


fig. 5

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

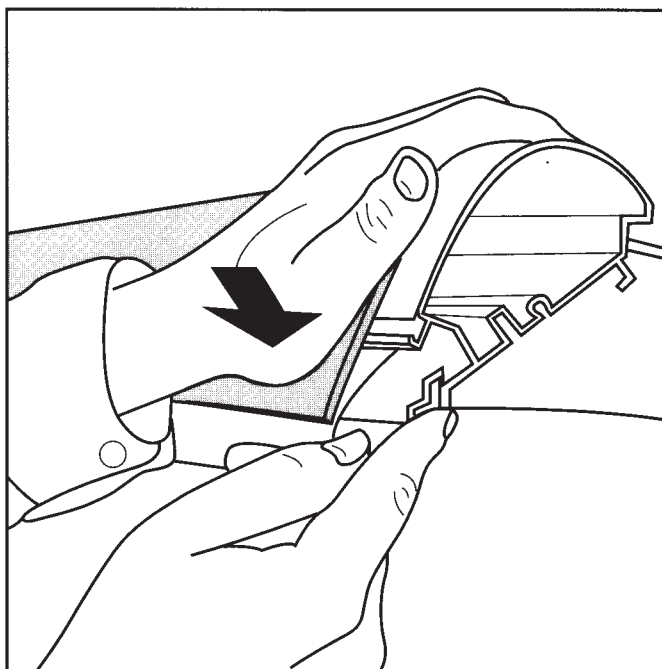


fig. 6

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)

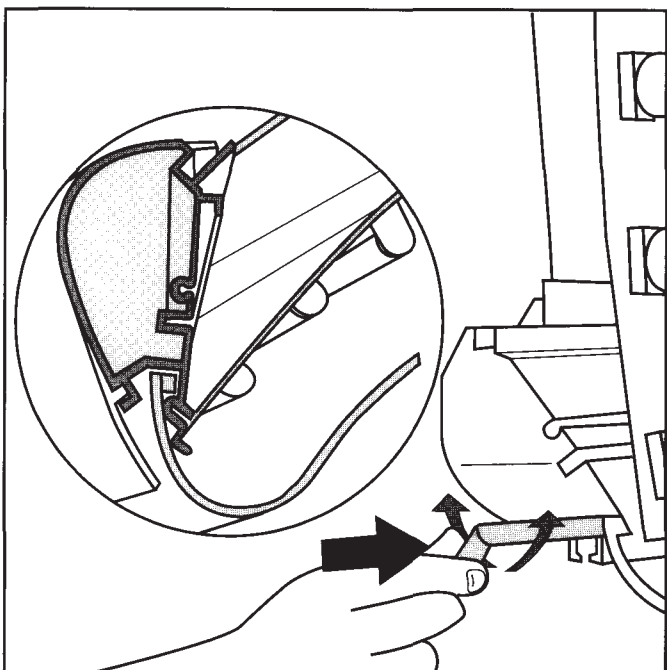


fig. 7

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

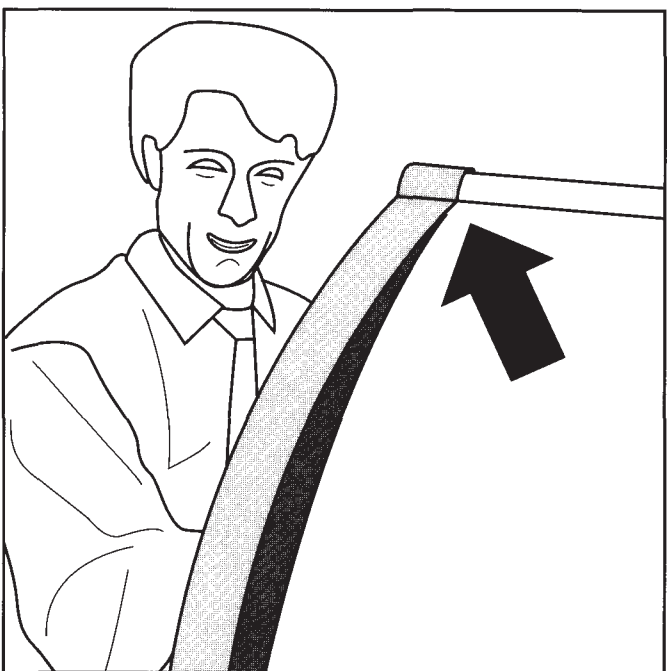


fig.8

When assembling the top cover (2), make sure that the small inlet cover (18A) for the mains cord and the timer wire overlaps the top cover correctly.

Couch

When assembling the acrylic sheet (27), 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.
- Thermal switch TCO (SK 3) switches the HP 400 lamp off at a temperature of approx. 120°C. After the lamp has cooled down (i.e. after approx. 15 minutes), the HP 400 lamp will automatically come on again.
- If the thermal switch turns the HP 400 lamp off repeatedly, check if the rpm of the fan isn't too low. Put some thin oil on the bearings.
- When the couch cannot be switched on, the relay (8) may be defective. Other possible causes are a defective inlet or a defective connecting cable.
- When exchanging the HP 400 lamp, make sure you do not touch the new lamp with your bare hands, as finger prints could burn in and reduce the lamp's performance. If you touch the lamp surface by accident, clean it with pure alcohol.
- New HP400 lamps may show colour differences. This is not a defect, but a characteristic phenomenon of lamps of this type. The discolourations disappear after a short period of use.
- If the glass pane with metal frame (6B) has been disassembled, the HP 400 lamp cannot be started, as in that case microswitch SK 4 will be open.
- **After repair, always check whether the glass pane with metal frame has been properly mounted.**
- **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, the acrylic sheets and the glass pane.

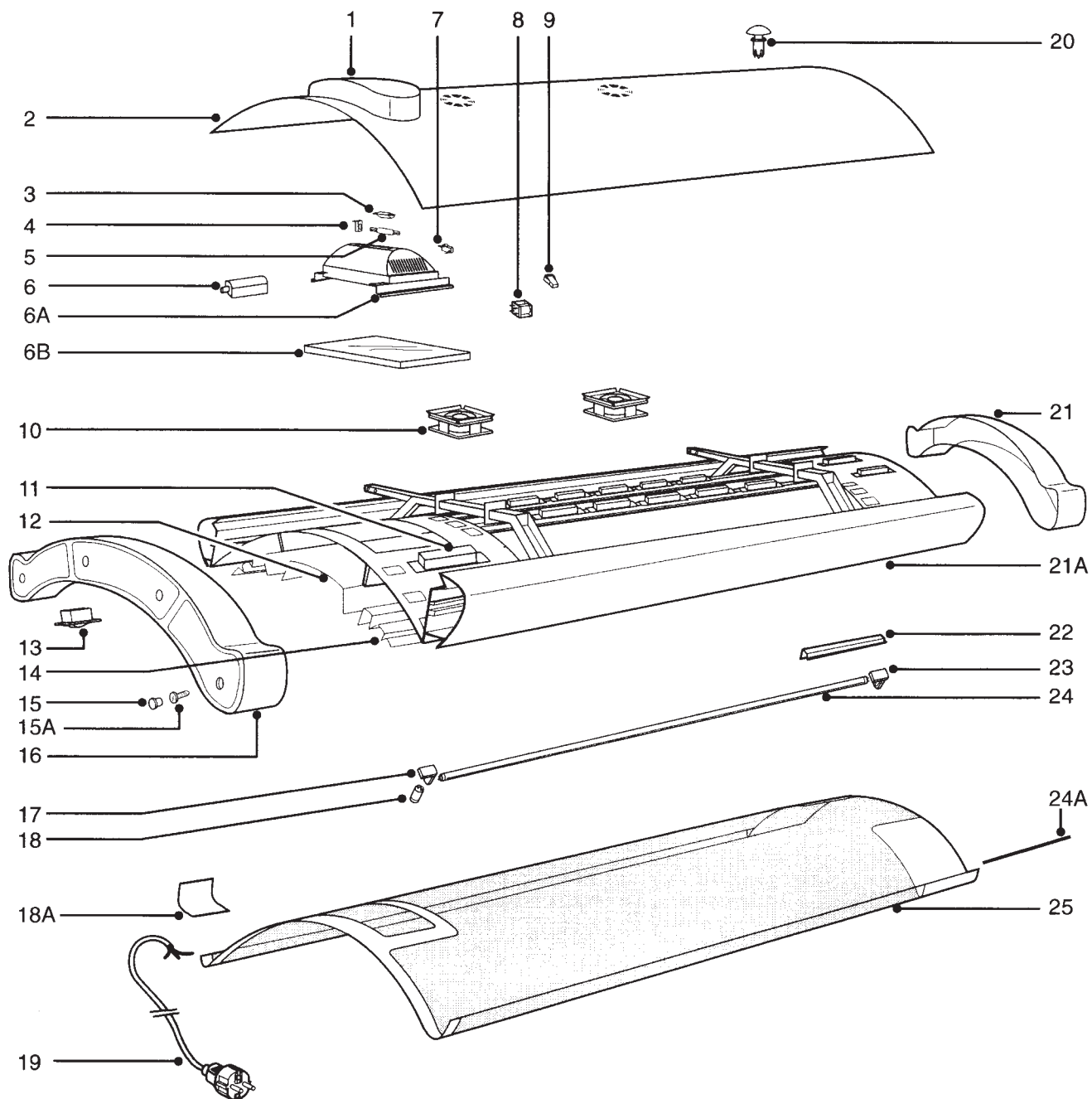
With regard to the minimum irradiation indicated below, you should bear in mind that this is not an absolute value at which the lamps must be replaced. Depending on the skin type, the tanning session may also be extended so that the lamps can be used a little longer.

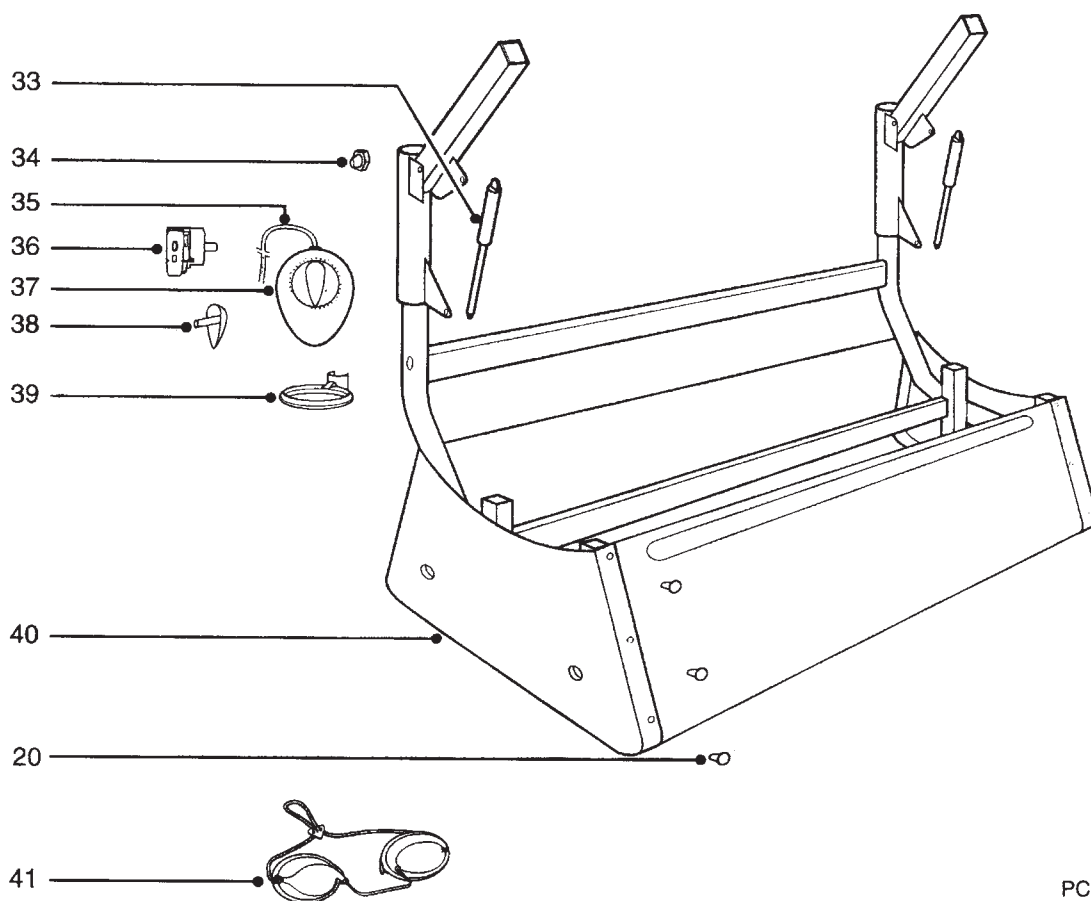
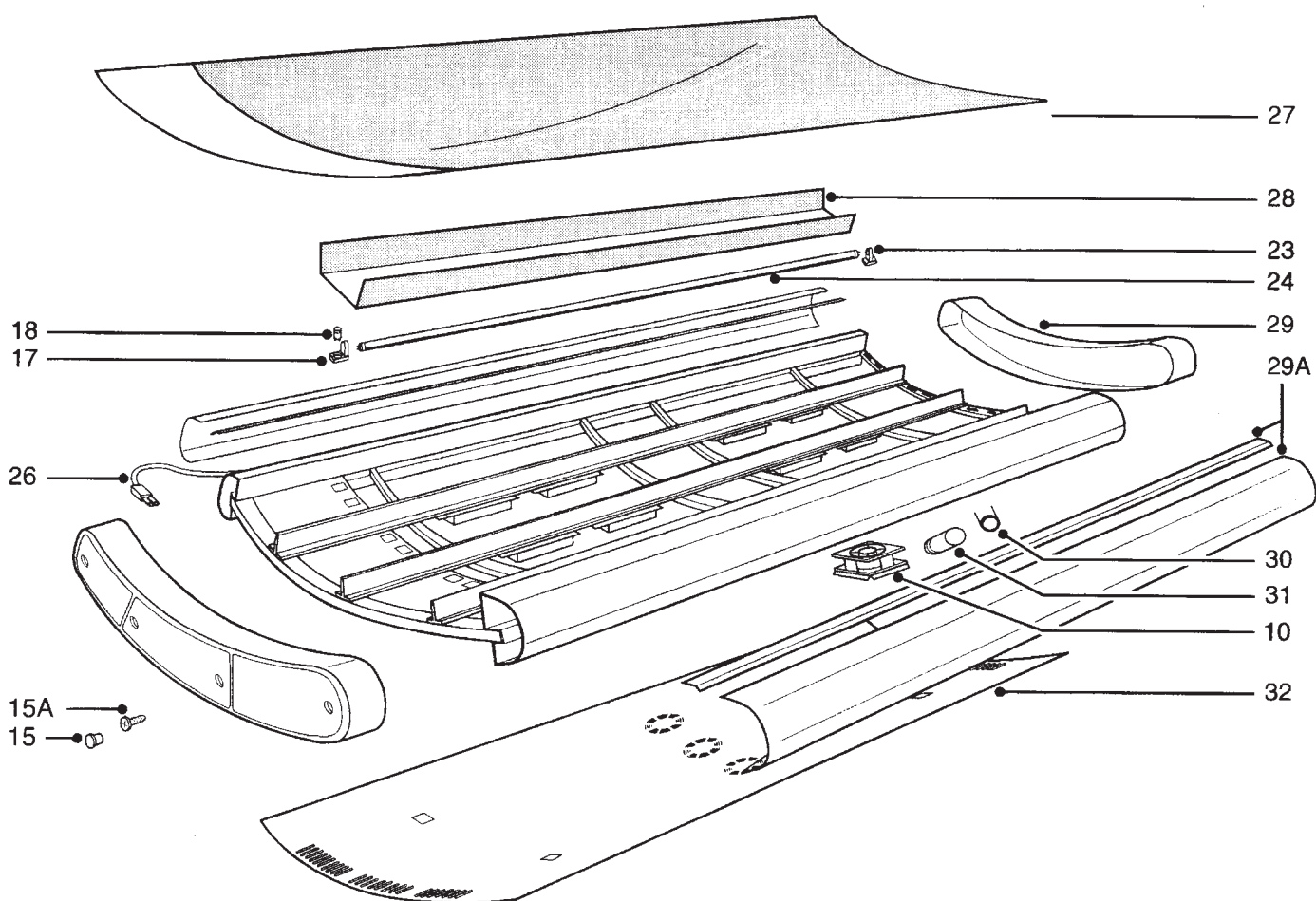
	distance in cm	approx. maximum irradiance of new appliances in mW/cm ²		minimum irradiance at which lamps should be exchanged in mW/cm ²	
		LMV UV-A meter	HEBRU UV-A meter	LMV UV-A meter	HEBRU UV-A meter
couch with facial tanner	on the acrylic sheet	11.5	3.3	6.9	2.0
couch without facial tanner	on the acrylic sheet	11.5	3.3	6.9	2.0
canopy with facial tanner	20	14.0	4.0	8.5	2.4
canopy without facial tanner	20	13.7	3.9	8.2	2.3
canopy immediately beneath the facial tanner	20	11.9	4.5	7.1	2.7

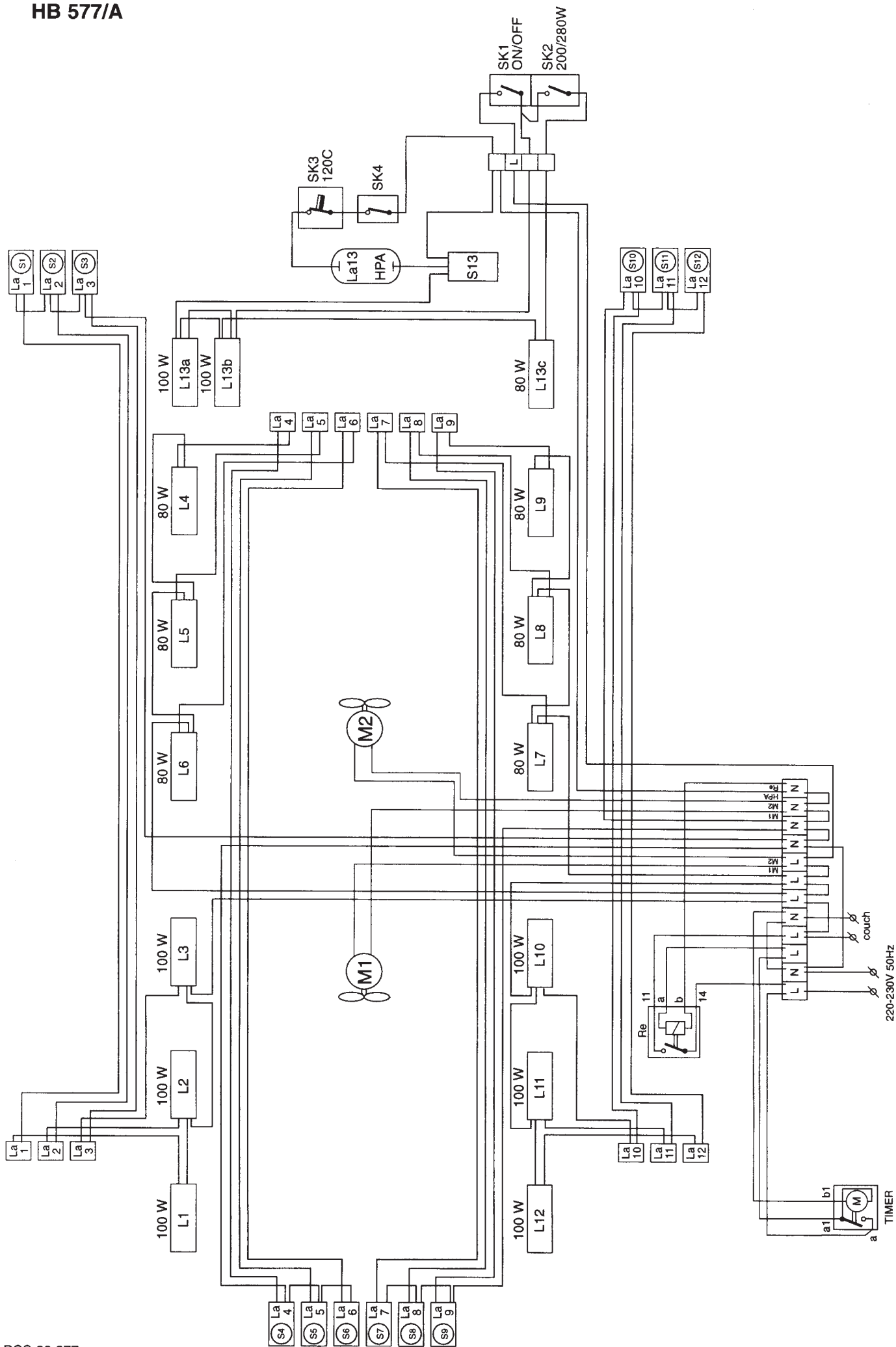
Note: Switch SK1/SK2 of HP lamp (facial tanner) in position 2.

1	4822 441 11985	cover HPA	21	4822 442 00893	end cover
2	4822 441 11998	cover top	21A	4822 442 01243	side cover
3	4822 252 11236	automatic cutout	22	4822 380 10195	reflector small
4	4822 325 20102	lampholder HPA	23	4822 255 10375	lampholder
5	4822 134 10088	HPA lamp	24	4822 134 10066	UVA-TL CLEO 90W-S
6	4822 214 12272	starter HPA	24A	4822 535 10526	locking pin
6A	4822 380 10231	reflector	25	4822 466 11517	acrylic sheet canopy
6B	4822 480 10211	HPA filter	26	4822 320 11909	connecting cable
7	4822 271 30619	microswitch	27	4822 466 11518	acrylic sheet couch
8	4822 280 60513	relay	28	4822 380 10196	reflector couch
9	4822 265 10944	socket	29	4822 442 00894	end cover
10	4822 361 10971	fan	29A	4822 442 01241	side cover
11	4822 146 10791	ballast 100W	30	4822 116 30297	NTC resistor
-	4822 146 10792	ballast 80W	31	4822 124 40701	capacitor 25μF/250V
12	4822 380 10193	reflector middle	32	4822 441 11989	cover bottom
13	4822 277 11691	combi switch	33	4822 529 10385	gasspring 1500N
14	4822 380 10194	reflector side	34	4822 462 10916	ornamental prop
15	4822 462 10917	ornamental prop	35	4822 321 11314	timer flex
15A	4822 502 14539	s.t.screw 4.8x19	36	4822 282 10312	timer 30 mins Eaton
16	4822 441 11986	end cover	37	4822 441 11987	timer housing
17	4822 255 10374	lamp/starterholder	38	4822 410 11117	timer knob
18	4822 218 11638	starter S11	39	4822 256 10361	timer holder
18A	4822 442 01239	cover inlet	40	4822 441 11991	leg cover complete
19	4822 321 11313	flex EU white 16A/2C	41	4822 690 80147	HB072 protecting goggles
20	4822 532 12791	push rivet	-	4822 310 10959	mounting set

HB 577/A







CANOPY
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