

MASTER COPY W/ CHANGES TO NEW STIP

SERVICE MANUAL

**SCA WOLFF SYSTEMS
SUNTANNING EQUIPMENT
WSS/20 WSS/24
and
PROFI Model 431**

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INTRODUCTION

This service manual is intended as a supplement to the operational and assembly instructions included with each Wolff System Sunbed. Before beginning any installation, please read sections I through III carefully along with the appropriate portion of section V for the specific equipment being installed.

Refer section III B to the installing electrician for the facility wiring required for your particular equipment and power availability. You will find helpful information on planning your installation in section III C.

Each bed is factory tested by our quality control technicians who affix their identifying label to each bed after their testing is complete. Each completed bed is then inspected by our Quality Control Inspectors who also affix their label to each bed. Only after this thorough inspecting and testing are the beds released for shipment.

Problems may eventually develop, even with the finest equipment, and we have included a comprehensive troubleshooting guide to aid in correcting any problems that may occur. Refer to section IV A for troubleshooting which the equipment owner may perform, and refer to section IV B for troubleshooting which must only be performed by qualified Service Personnel.

The information included in this service manual should simplify installation and operation of your Wolff System Suntanning equipment. It should also provide you with clear, concise instruction for maintenance, repair and parts ordering. Please keep this manual in a convenient location for your reference.

POWER CONSUMPTION

WSS 20 units - 2500 watts

WSS/24 units - 3130 watts

PROFI 431 Units - 3100 watts

C. TANNING ROOM ENVIRONMENTAL REQUIREMENTS AND RECOMMENDED SPACE.

1. Heating, Ventilating and Air Conditioning (HVAC) Requirements

Flourescent lamp sunbeds produce heat in proportion to the number of lamps in the units. Cooling fans are fitted in the unit to move this heat from the heat producing components within the bed and reject it into the room. The fans do not cool the air and are not a substitute for the proper air conditioning of the room itself.

The 20 lamp units produce approximately 85000 BTU per hour

The 24 lamp units produce approximately 10,000 BTU per hour.

Recommended four to six air changes per hour within the sunroom itself to maintain an ambient temperature of 72-76 degrees.

2. Room Design

A retangular room of 6 by 8 feet is the minimum size room that we recommend with the bed positioned parallel to the eight foot wall. The power is supplied at approximately the center of the unit lengthwise. We also suggest that an additional 120 volt AC single phase outlet be provided within the room for accessories.

IV GENERAL TROUBLESHOOTING GUIDE

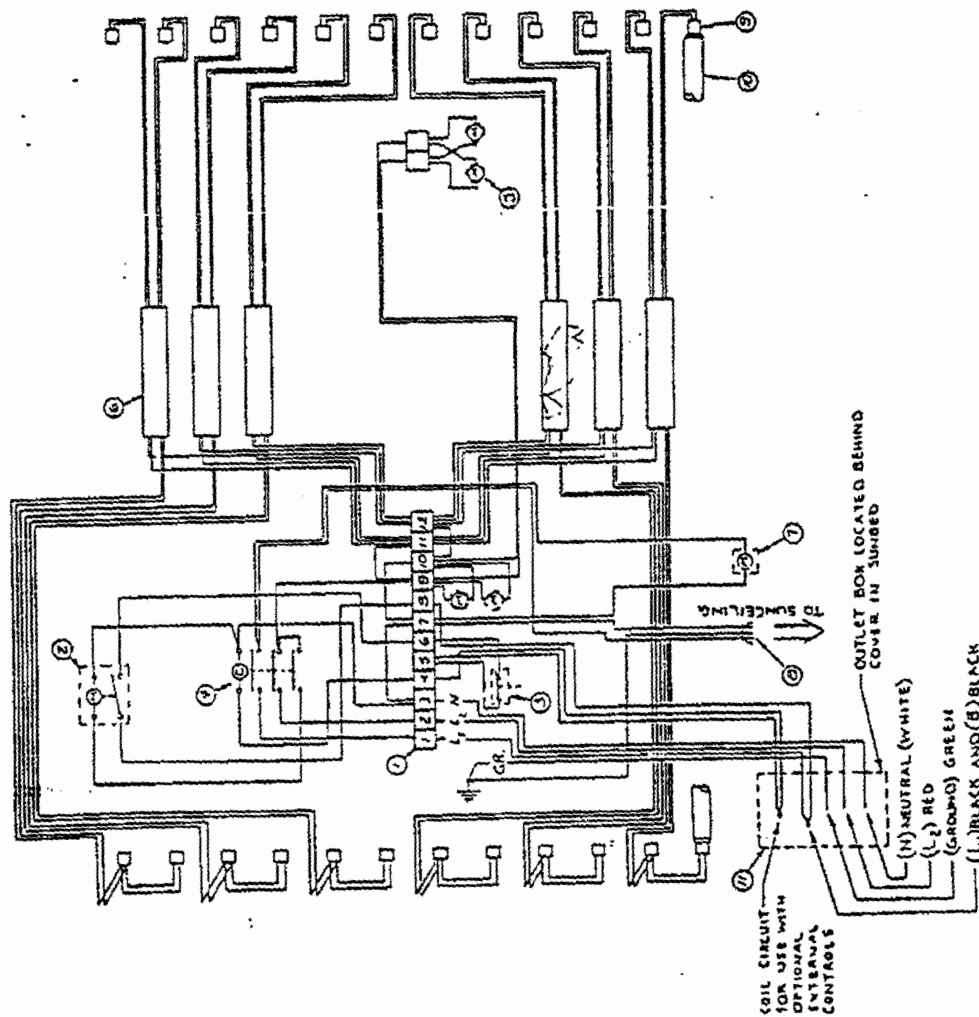
The following troubleshooting information is divided into two sections. Section A contains those items which the owner may check without the aid of a Qualified Service person. Section B contains those items which must only be performed by Qualified Service Personnel.

A. General Troubleshooting Which May Be Performed By Owner:

Note: When replacing lamps, use only original SCA Bellarium "S" Wolff System Lamps.

PROBLEM	CAUSE	REMEDY
Sunbed and Sunceiling do not operate	No power to bed	Check circuit breaker serving bed.
	Hand Timer Not Turned On	Rotate timer clockwise $\frac{1}{2}$ turn to energize the circuit
	External Timing Device Not Activated (If Applicable)	Activate external timing in conjunction with hand timer.
	Acrylic not seated properly on sunbed causing acrylic switch to open	Seat acrylic fully in recess in sunbed and secure with retaining strips.
Sunceiling does not operate	Acrylic not seated properly on sunceiling causing acrylic switch to open	Seat acrylic fully in recess in ceiling and secure with retaining screws
	Cord from sunceiling not connected to sunbed	connect cord to sunbed
Lamp won't light or flickers	Lamp not seated properly in socket	Remove lamp, inspect contacts on lamp, and reinstall lamp securely into sockets
	Faulty lamp	Replace lamp

ITEM	QTY	DESCRIPTION
1	1	BARRIER STRIP
2	1	CLOCK TIMER
3	1	ACRYLIC INTERLOCK
4	1	RELAY
5	4	FAN
6	1/2	BALLAST
7	1	HOURMETER
8	1	SOCKET
9	24	LAMPHOLDER
10	1/2	LAMP
11	1	OUTLET BOX



SEE DWG C-102-2 FOR SUNCILING WIRING

SCA CORPORATION

SCA WOLFF MODEL WSS/24

WIRING SCHEMATIC - SUBBED

C-102-1

3. Wiring Diagram for the WSS/24



B. POWER REQUIREMENTS FOR WOLFF SYSTEM PRODUCTS

1. WSS/ 20 and WSS/ 24 Sunbeds

Each sunbed is internally wired to accept 2 hot legs, one neutral and one ground. The neutral is required since the 240 VAC supplied is split between the sunbed and the sunceiling, resulting 120VAC to the internal components of the units..

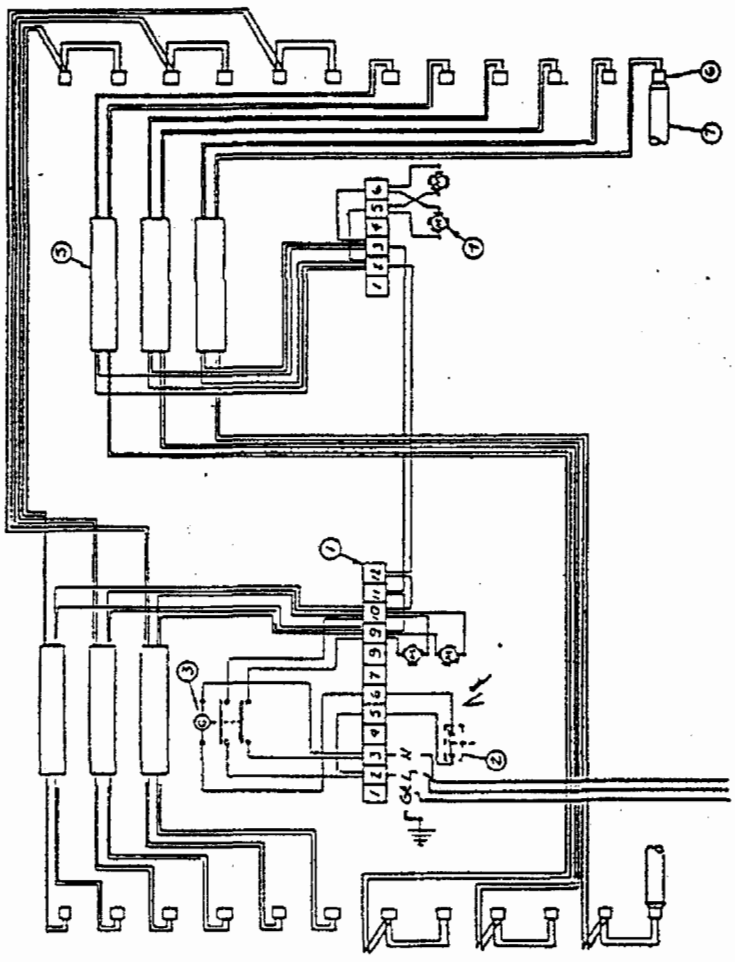
WSS/20 and WSS/24 MODELS

SERVICE ENTRANCE POWER	● POWER REQ'D AT EACH BED	PROTECTION FOR BRANCH CIRCUIT	NO. OF WIRES FROM SERVICE ENTRANCE TO SUNBED	WIRE SIZE
120/240-VAG- 60 Hz	235-245 VAC 208-240 VAC	20 AMP	2 HOT (BLK OR RED) 1 NEUTRAL (WHITE) 1 GROUND (GREEN)	NO. 12 AWG
* 120 VAC 60 Hz	115-125 VAC 60 Hz	30 AMP	1 HOT (BLACK) 1 NEUTRAL (WHITE) 1 GROUND (GREEN)	NO. 10 AWG
208Y/120 VAC 60 Hz	203-213 VAC 60 Hz	20 AMP	2 HOT (BLK OR RED) 1 NEUTRAL (WHITE) 1 GROUND (GREEN)	NO. 12 AWG

Please note: WSS/20 and WSS/24 Sunbeds are to be hard wired from the wall to the bed, in conduit. No Power cords or plugs are supplied with the units. Ceiling units are powered from the bed units.

NO * CAUTION: The relay in the sunbed unit is rated for either 25 amp or 30 amp. If the bed is being connected to 120 VAC, the relay in the bed must be rated at 30 amp minimum. Replace any 25 amp relay with a 30 amp relay when connecting to 120 VAC.

ITEM	QTY	DESCRIPTION
1	2	SHOCK STOP
2	1	ACC. VOLT. SURVEILLANCE
3	1	RELAY
4	4	FAN
5	12	BALLAST
6	24	LAMP HOLDER
7	12	LAMP
8		
9		
10		



SEE DWG C-102-1 FOR SUMMED WIRING

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Model WSS/24
 Date: 28 Jun 60

SCA WOLFF MODEL WSS/24

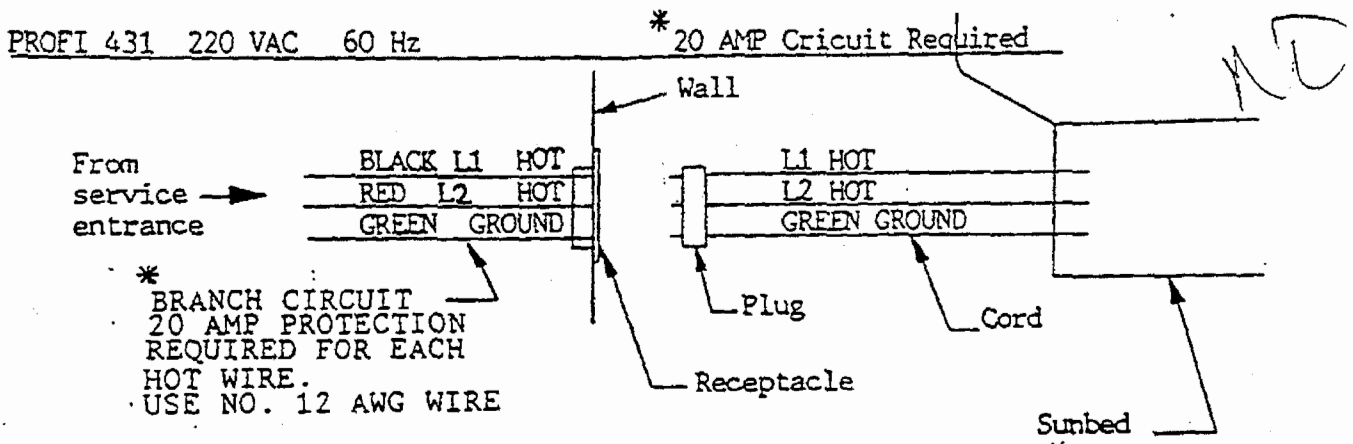
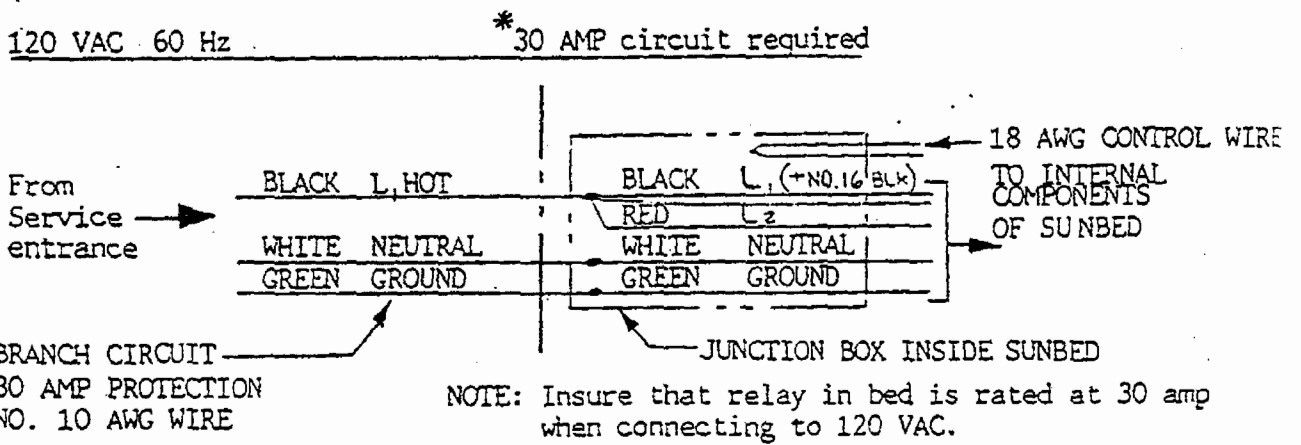
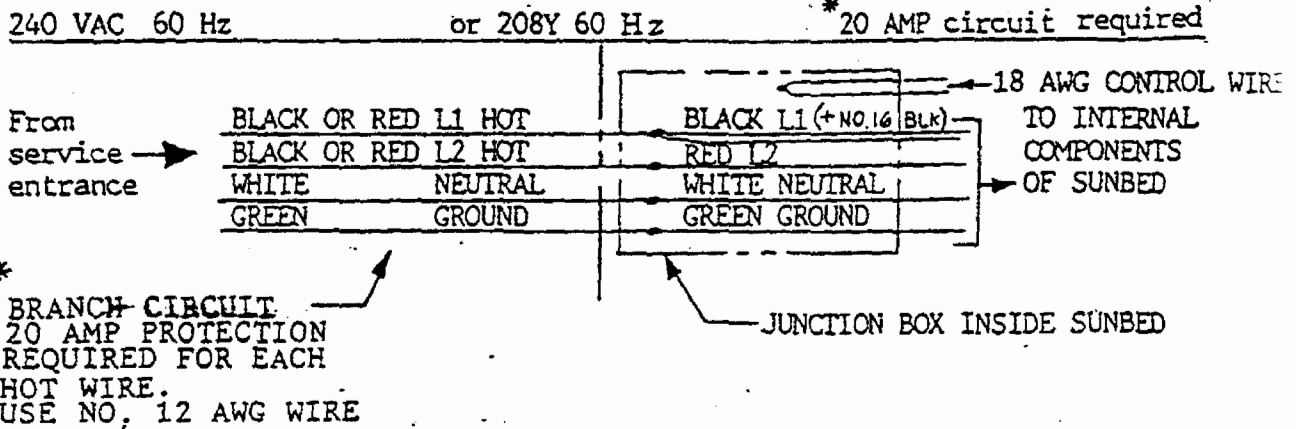
WIRING SCHEMATIC - SUNCEILING C-102-2

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CONNECTING DIAGRAMS FOR POWER INTO SUNBEDS

WSS/20 and WSS/24 MODELS

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All wiring subject to revision by manufacturer. Please verify that the wiring of your unit conforms to the above, before installation begins. If you have any questions please call our Service office.

B. Sunbed Model WSS/24

1. Description and Specifications

The Wolff System WSS/24 features 24 Bellarium "S" Superlamps and an optimized reflection system for fast even tanning. Countoured acrylic surfaces and eight ventilation fans assure customer comfort, even during extended periods of continued use.

Specifications for the WSS/24 are as follows:

Dimensions: 81" x 43" de x 52" High (Fully assembled)

Weight: 375 lbs.

Power requirements: Refer to section III B of this manual

Power Consumption: 3130 Watts

Number of Lamps: 24

Type of Lamp: Wolff System Bellarium "S" Superlamp

Number of Fans: Eight

Hand Timer: 0-30 min.

2. Assembly and Set-Up

Refer to the operating instructions manual included with each bed for a complete list of parts required for assembly and set-up.

STEP 1. See attached

PROBLEM	CAUSE	REMEDY
System squeaks when lowering or raising sunceiling	Bolts holding ends of pistons secured too tightly	Loosen bolts slightly to allow movement of piston ends
	Mounting ends of pistons not properly greased	Back off fastener securing end of piston and apply wheel bearing grease to portion of fasteners which carry piston. Reassemble. See figure 5 & 6 on WSS/24 assembly and setup instructions.
	Pistons installed upside down, (rod end up)	Remove pistons and reinstall with ends down. See figure 5 & 6 on WSS/24 assembly instructions.
	Phenolic Brakes not set properly.	Set Phenolic brakes so ceiling holds position without excessive pressure required to lower or raise. See figure No. 4 on WSS/20 assembly and setup instructions or figure No. 7 on WSS/24 assembly and setup.
	Faulty Pistons	Replace faulty pistons
Ceiling does not hold its position when set	Phenolic brakes not set properly	Set phenolic brakes so ceiling holds position without excessive pressure required to lower or raise. Insure that acorn nuts securing round tube behind canopy are tight. See figure No. 4 on WSS/20 assembly and setup instructions or figure No.7 on WSS/24 assembly and setup instructions.
	Faulty Pistons	Replace faulty pistons
Sunbed and Sunceiling running hot	Tanning room too small or not properly ventilated	Provide sufficient space and ventilation for system. See paragraph "C" under section III General Equipment Instructions.
	Fans dirty	Clean screens and fans and insure that the screen area is not blocked.

PROBLEM	CAUSE	REMEDY
Sunbed and Sunceiling do not operate	Incorrect hookup of incoming power to sunbed	Check power hookup against appropriate wiring diagram and correct as necessary
	Faulty hand timer or external timing device	Replace faulty timer
	Loose wiring connections	Check wiring circuit against appropriate wiring diagram and tighten connectors as required.
	Faulty Contactor in bed	Replace contactor
Sunceiling does not operate	Power cord between bed and ceiling not wired correctly	Check cord connections against appropriate wiring diagram and correct as required
	Loose wiring connections	Check wiring circuit against appropriate wiring diagram and tighten connections as required.
	Faulty Contactor in ceiling	Replace contactor
Lamp won't light or Flickers	Poor Connections at lamp sockets.	Tighten socket and wire connections. Check for loose wire /poor soldering.
	Faulty Socket	Replace Socket
	Faulty starter or capacator (Profi model 431 only)	Replace starter or capacator
Two or more lamps won't light or do not light properly (after checking section above)	Incorrect hookup of power from sunbed to sunceiling	Check power hookup against appropriate wiring diagram and correct
	Incoming power to sunbed too high or ot low	Monitor incoming voltage and correct if required with transformer.
	Wiring connections loosened during shipment	Check wiring circuit against appropriate wiring diagram and tighten connections as required.