

4-INS-500



## INSTALLATION, OPERATION AND CARE MANUAL

REMEMBER TO COMPLETE THE ONLINE  
WARRANTY REGISTRATION TO  
RECEIVE YOUR FULL TWO YEAR WARRANTY.

### WARRANTY

All Scientific equipment comes with a standard ONE year warranty, The 1 Year Extended Warranty is only valid for customers who have registered their warranty online at [www.scientific.co.za](http://www.scientific.co.za) within the first year after making their purchase.

MANUFACTURED  
IN SOUTH AFRICA





ALL SCIENTIFIC EQUIPMENT COMES WITH A TWO  
YEAR WARRANTY ON COMPONENTS AND  
DEFECTIVE WORKMANSHIP - Ts & Cs APPLY.

### REGISTER ONLINE TODAY

- Register your warranty on-line at [www.scientific.co.za](http://www.scientific.co.za) today and learn how to get the best out of your Scientific product.

### NO WEB ACCESS?

- If you do not have access to the Web, register by completing this form and Email it to the Scientific head office in South Africa. Email: [sales@scientific.co.za](mailto:sales@scientific.co.za)

### ONLY COMPLETE IF YOU DO NOT HAVE WEB ACCESS

Company \_\_\_\_\_

Name \_\_\_\_\_

Surname \_\_\_\_\_

Telephone \_\_\_\_\_

Cellphone \_\_\_\_\_

Email Address \_\_\_\_\_

Country \_\_\_\_\_

Postal address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Scientific products purchased \_\_\_\_\_

Product Code (see box label) \_\_\_\_\_

Serial number (see back of machine) \_\_\_\_\_

### INTENDED USE

- |                                       |  |   |
|---------------------------------------|--|---|
| <input type="checkbox"/> Agriculture  | <input type="checkbox"/> Genetics        | <input type="checkbox"/> Pharmaceutical Physics |
| <input type="checkbox"/> Automotive   | <input type="checkbox"/> Industrial      | <input type="checkbox"/> Power Generation       |
| <input type="checkbox"/> Biochemistry | <input type="checkbox"/> Medical         | <input type="checkbox"/> Special Metals         |
| <input type="checkbox"/> Botony       | <input type="checkbox"/> Microbiology    | <input type="checkbox"/> Sugar                  |
| <input type="checkbox"/> Chemistry    | <input type="checkbox"/> Mining          | <input type="checkbox"/> Water                  |
| <input type="checkbox"/> Cosmetics    | <input type="checkbox"/> Nuclear         | <input type="checkbox"/> Zoology                |
| <input type="checkbox"/> Electronics  | <input type="checkbox"/> Paper/Packaging | <input type="checkbox"/> Other (Specify): _____ |
| <input type="checkbox"/> Food         | <input type="checkbox"/> Petrochemical   |   |



ALL SCIENTIFIC EQUIPMENT COMES WITH A TWO  
YEAR WARRANTY ON COMPONENTS AND  
DEFECTIVE WORKMANSHIP - Ts & Cs APPLY.

### LIMITED WARRANTY

The manufacturer guarantees that this unit is free from defect in materials and workmanship when it leaves the factory and undertakes to replace or repair the unit if it proves defective in normal use or during servicing for a period of 1(one) year. The date of original installation and is for the benefit of the original purchaser only. The liability under this warranty is limited to repairing the defective unit or any part of the unit provided it is sent carriage paid to an authorized dealer. All other Warranties ,expressed or implied , statutory or otherwise, including without limitations any implied Warranty of Merchantability or fitness for purpose are excluded .The Seller shall in no event be liable for direct,indirect or consequential damages in connection with the products.

This unit is at all times to be used according to the instruction manual and for its normal purpose.

This Warranty is not effective if damage occurs because of accident, carelessness,improper installation,lack of proper set-up,supervision when required or if the equipment is installed or operated in any manner contrary to the installation and operating instructions. In these cases,repairs will be made at a reasonable cost. Work performed by unauthorized personnel or unauthorized service agencies voids this Warranty.

### LABORATORY HOTPLATES



**INSTALLATION OPERATION AND CARE OF  
LABORATORY HOTPLATES  
MODELS: 500 R00/501 R00 / 502 R00**

## UNPACKING

Unpack the product and check for any damage incurred during transit. This should be reported to the responsible carrier, railway or postal authority, and a request for a damage report should be made.



THESE INSTRUCTIONS MUST BE FOLLOWED FOR US TO GUARANTEE OUR FULL SUPPORT OF YOUR CLAIM FOR PROTECTING AGAINST LOSS FROM CONCEALED DAMAGE. THE FORM FOR FILING SUCH A CLAIM WILL BE PROVIDED BY THE CARRIER.

## PRODUCT DESCRIPTION

These hotplates are general purpose hotplates that are robustly constructed and designed for continual usage. All Models are controlled by an energy regulator which varies the power input to the elements enabling finer control at lower surface temperature. There is no surface temperature indication.

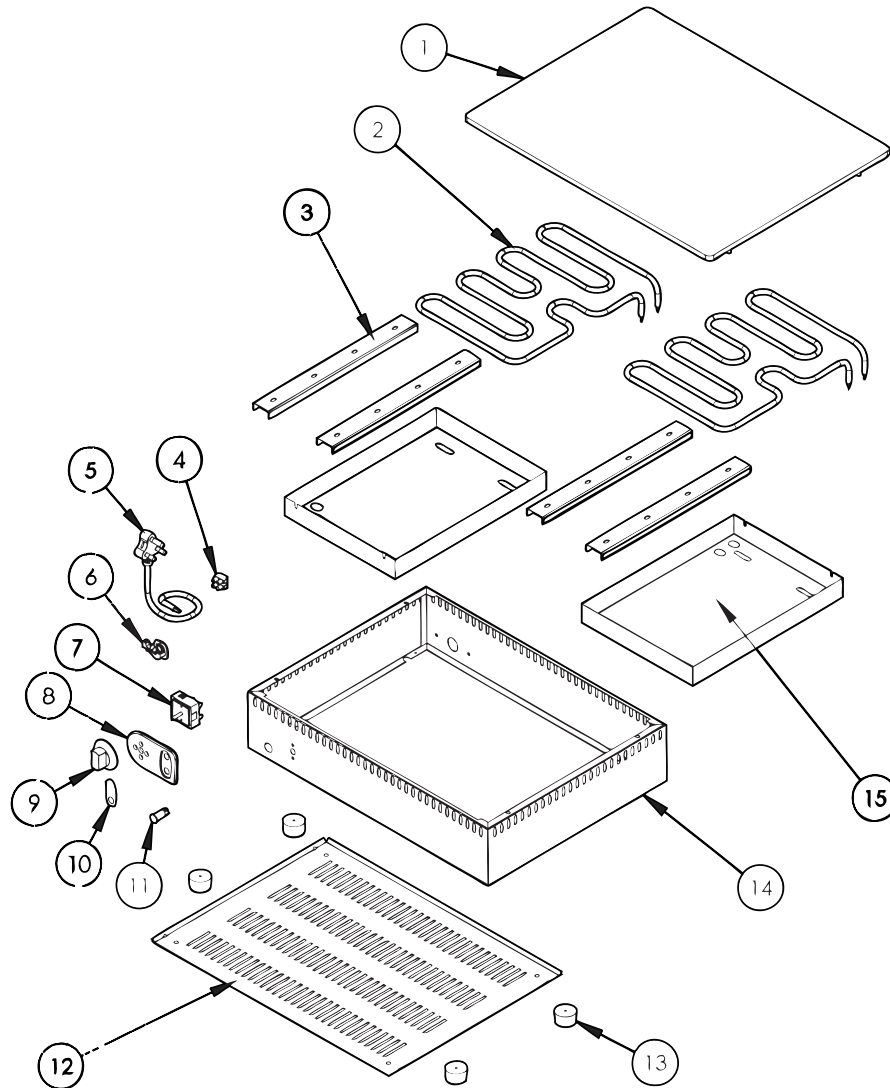
## GENERAL INSTALLATION AND OPERATION INFORMATION

1. Ensure that the unit is placed on a sturdy bench.
2. Install the unit away from combustible material and preferably at least 300mm away from the wall or adjacent surfaces.
3. Check that the mains voltage complies with the rated 220-240VAC 50Hz-15 amp supply voltage and plug into power socket.
4. To energize the heating elements turn the energy regulator knob marked 0 to 6 to the desired setting.
5. The hotplate element will cycle on and off at the setting selected.
6. To have the heating elements permanently energized, the knob should be turned to position 6.
7. The hotplate top is covered with a special heat resistant coating which may smoke initially as the unit is burned in. This is normal.

## MODEL : LABORATORY HOTPLATE MODEL CODE : 502

Part No.	Description
1	502 TOP PLATE
2	ELEMENT 1500W 230V
3	ELEMENT CLAMP
4	TERMINAL BLOCK
5	POWER CORD
6	CABLE GRIP
7	ENERGY REGULATOR
8	CONTROL PANEL
9	KNOB
10	CONTROL PANEL INSERT
11	PILOT LIGHT
12	BOTTOM COVER
13	LARGE RUBBER FOOT
14	BODY ASSEMBLY
15	ELEMENT COVER

**EXPLODED DIAGRAM  
LABORATORY HOT PLATES  
MODELS: 502**



## WARNING

### Burn Hazard.

Do not touch hot, liquid or heating surfaces while equipment is heating or operating

Hot surfaces and liquid can burn skin. Allow the hot surfaces to cool before handling

## CLEANING

- Care should be taken when operating this appliance as hot surfaces are present which may cause burns.
- Ensure that the power supply cord does not come into contact with hot surfaces.
- It is recommended not to leave the unit in operation unattended.



CLEAN WITH A DAMP CLOTH AND SOAP. AVOID THE USE OF DETERGENTS CONTAINING ABRASIVE SUBSTANCES. DRY CAREFULLY AFTER CLEANING. DO NOT USE PRODUCTS CONTAINING AGGRESSIVE CHEMICALS, ACIDS OR PRODUCTS WITH CHLORINE.



## WARNING

### Electric Shock Hazard.

Keep water and other liquids from entering the inside of the equipment. Liquid inside the equipment could cause an electrical shock

Do not spray water or cleaning products. Liquid could contact the electrical components and cause a short circuit or an electrical shock. Do not use equipment if power cord is damaged or has been modified

## SAFETY

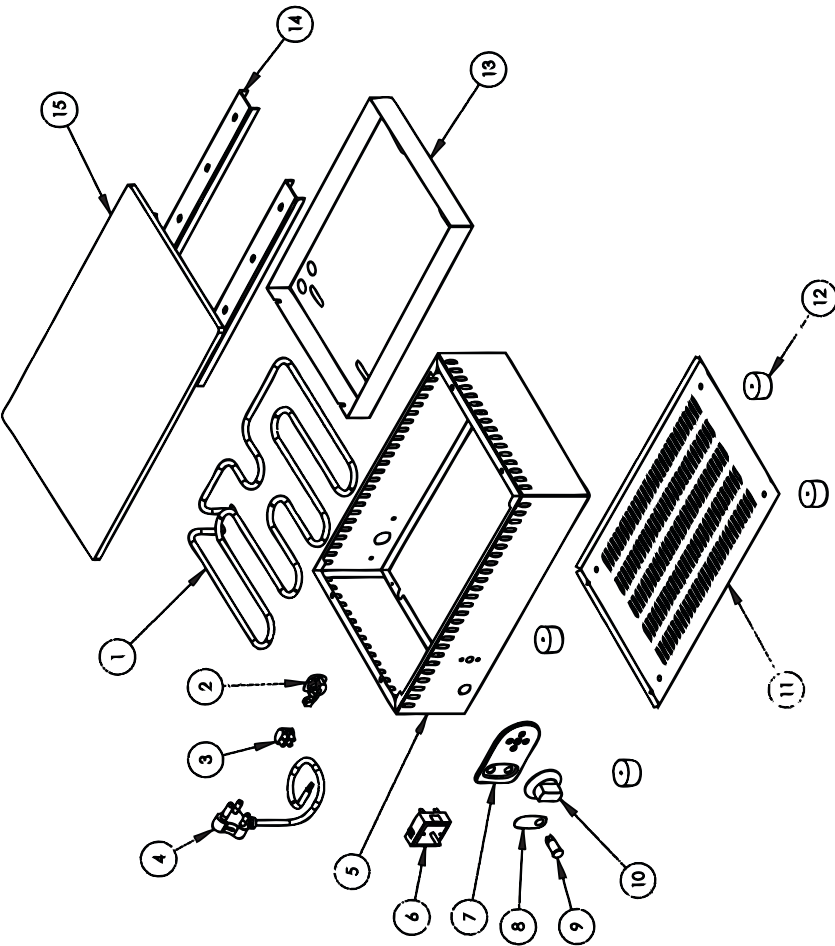
### READ ALL INSTRUCTIONS BEFORE USE. FAILURE TO FOLLOW THESE PRECAUTIONS COULD RESULT IN INJURY TO YOURSELF AND OTHERS

1. Use the hot plate on an individual 15A mains outlet only. **DO NOT OVERLOAD THE CIRCUIT.**
2. Ensure that the equipment and the power supply cord does not come into contact with hot surfaces.
3. This unit is only to be used by properly trained laboratory staff.
4. If the supply cord is damaged, it must be replaced with a new cord assembly available from the suppliers agent.
5. Use only earthed outlets matching the serial plate voltage.
6. Have equipment installed by a qualified personnel in accordance with local codes and ordinances.
7. Use equipment in a flat level position.
8. Do not operate if equipment has been damaged or is malfunctioning in any way.
9. These units are designed to run only on alternating current (A.C.) **DO NOT CONNECT TO DIRECT CURRENT (D.C)**

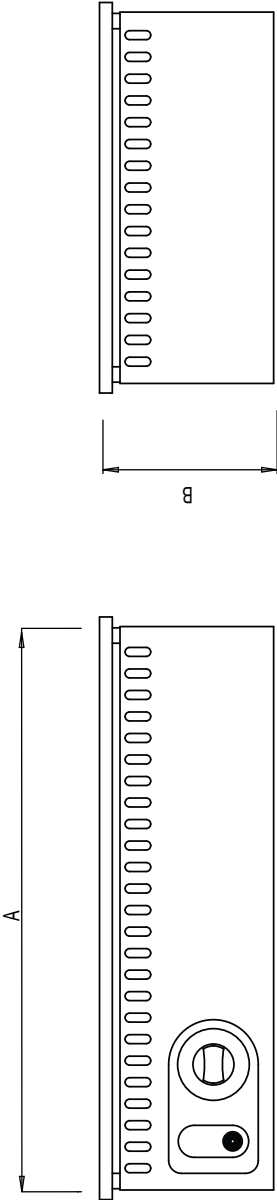
## MODEL : LABORATORY HOTPLATE MODEL CODE : 501

Part No.	Description
1	ELEMENT
2	CABLE GRIP
3	TERMINAL BLOCK
4	POWER CORD
5	BODY ASSEMBLY
6	230V ENERGY REGULATOR
7	CONTROL PANEL FACIA
8	INSERT
9	RED PILOT LIGHT
10	CONTROL KNOB
11	BOTTOM COVER
12	LARGE RUBBER FOOT
13	ELEMENT COVER
14	ELEMENT CLAMP
15	TOP PLATE

EXPLODED DIAGRAM  
LABORATORY HOT PLATES  
MODELS: 501



POSITIONING DIAGRAM  
LABORATORY HOT PLATE  
MODELS: 500/501/502



MODEL	A	B	C
500	300	136	305
501	450	136	305
502	600	136	455

## ELECTRICAL AND TECHNICAL INFORMATION

MODEL	DESCRIPTION	VOLTS (V/Hz)	POWER (WATTS)
500	HOTPLATE 300mm	230/50	1500
501	HOTPLATE 450mm	230/50	2000
502	HOTPLATE 600mm	230/50	3000



THE CONTROL COMPARTMENT OF THIS UNIT CONTAINS DANGEROUS VOLTAGES. MAINTENANCE AND SERVICING REQUIRING THE REMOVAL OF ANY PANELS OR COVERS SHOULD BE DONE BY QUALIFIED SERVICE PERSONNEL ONLY.



IT IS ESSENTIAL TO MAKE SURE THAT THE INCOMING VOLTAGE IS THE SAME AS THE RATED VOLTAGE OF THE OF THE UNIT AS FOUND ON THE SERIAL PLATE. THE SERIAL PLATE IS LOCATED AT THE REAR OF THE UNIT ADJACENT TO THE INCOMING CABLE ENTRY.

### ACCESSORIES AVAILABLE MODEL 513 -SAND BATH ATTACHMENT

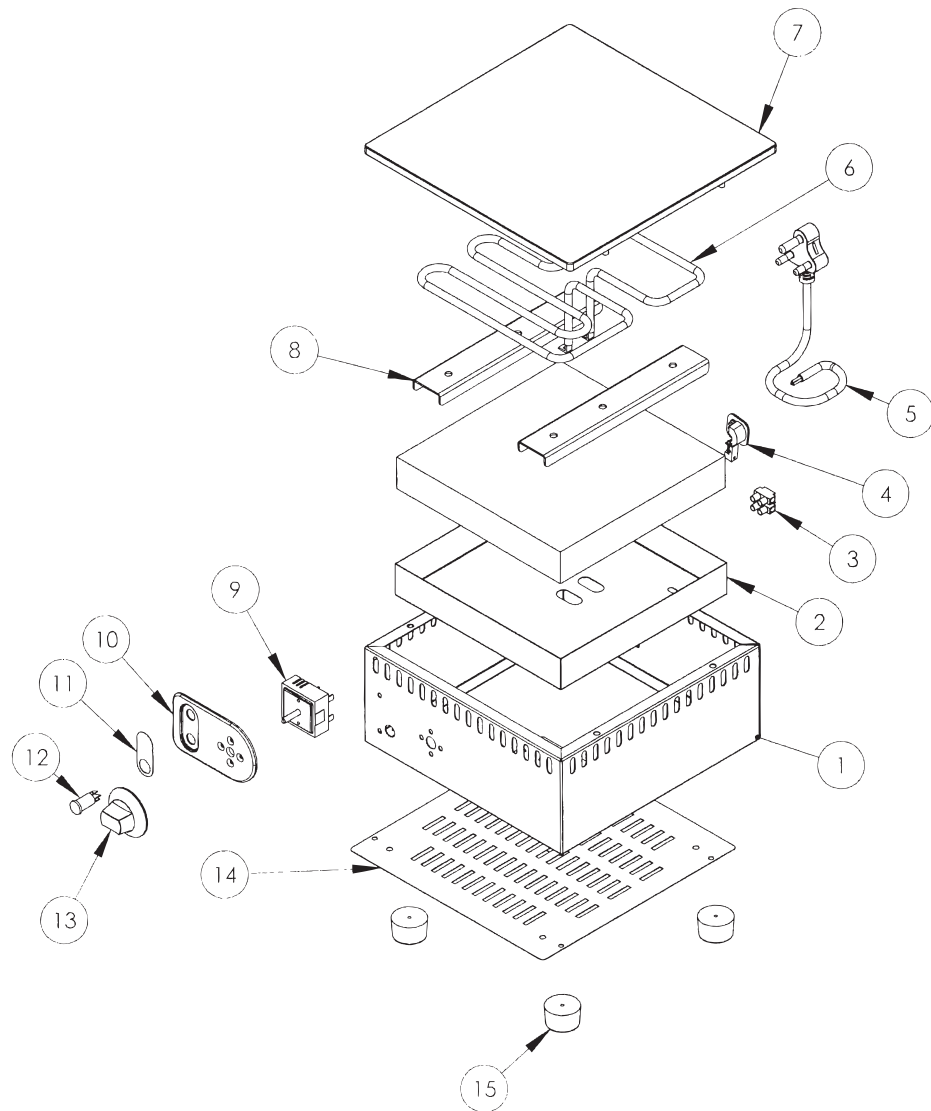
MODEL	DESCRIPTION	ORDER CODE
500	SAND BATH ATTACHMENT	509
501	SAND BATH ATTACHMENT	510
513	SAND BATH ATTACHMENT	502

## MODEL : LABORATORY HOTPLATE MODEL CODE : 500

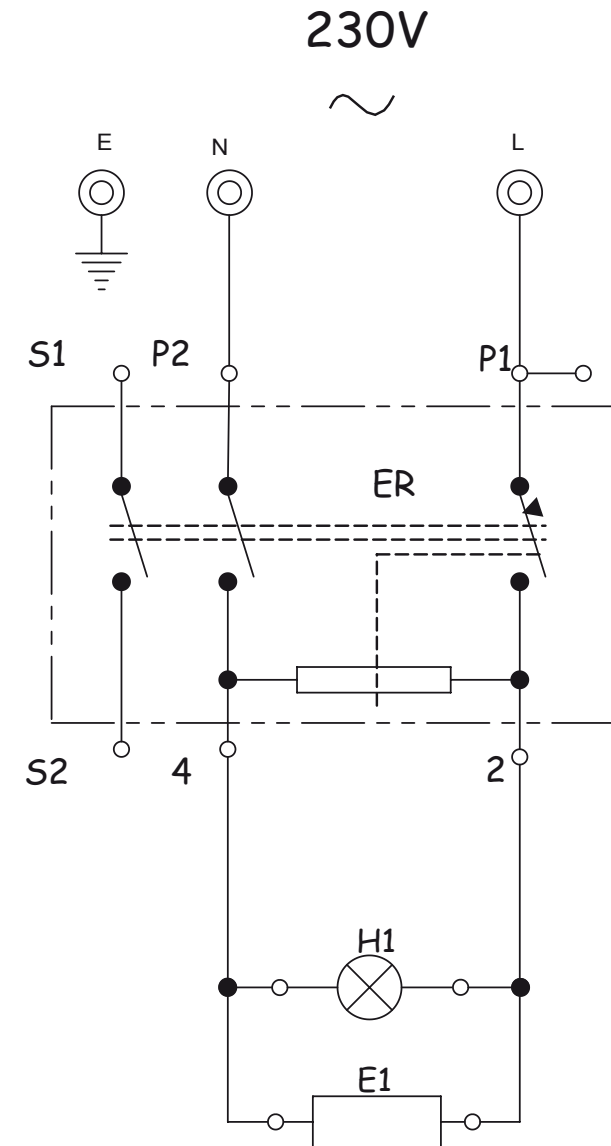
Part No.	Description
1	BODY ASSEMBLY
2	ELEMENT COVER
3	TERMINAL BLOCK
4	CABLE GRIP
5	POWER CORD
6	ELEMENT
7	TOP PLATE
8	ELEMENT CLAMP
9	230V ENEEGY REGULATOR
10	CONTROL PANEL FACIA
11	INSERT
12	PILOT LIGHT
13	CONTROL KNOB
14	BOTTOM COVER
15	LARGE RUBBER FOOT



**EXPLODED DIAGRAM  
LABORATORY HOT PLATES  
MODELS: 500**



**WIRING DIAGRAM  
MODEL: LABORATORY HOT PLATE  
MODEL CODES: 500/501**



**WIRING DIAGRAM**  
**MODEL: LABORATORY HOT PLATE**  
**MODEL CODES: 500**

LEGEND	DESCRIPTION	PART NUMBER
ER	ENERGY REGULATOR	1-ER-URS0012
H1	HEAT CONTROL PILOT LIGHT	1-PL-GP
E1	ELEMENT 1500W/230V	5-1500W-500

**WIRING DIAGRAM LEGEND**  
**MODEL: LABORATORY HOT PLATE**  
**MODEL CODES: 501**

LEGEND	DESCRIPTION	PART NUMBER
ER	ENERGY REGULATOR	1-ER-URS0012
H1	HEAT CONTROL PILOT LIGHT	1-PL-GP
E1/E2	ELEMENT 1500W/230V	5-2000W-M/GRILL

**WIRING DIAGRAM**  
**MODEL: LABORATORY HOT PLATE**  
**MODEL CODES: 502**

LEGEND	DESCRIPTION	PART NUMBER
ER	ENERGY REGULATOR	1-ER-URS0012
H1	HEAT CONTROL PILOT LIGHT	1-PL-GP
E1/E2	ELEMENT 1500W/230V	5-1500W-GRILLER

