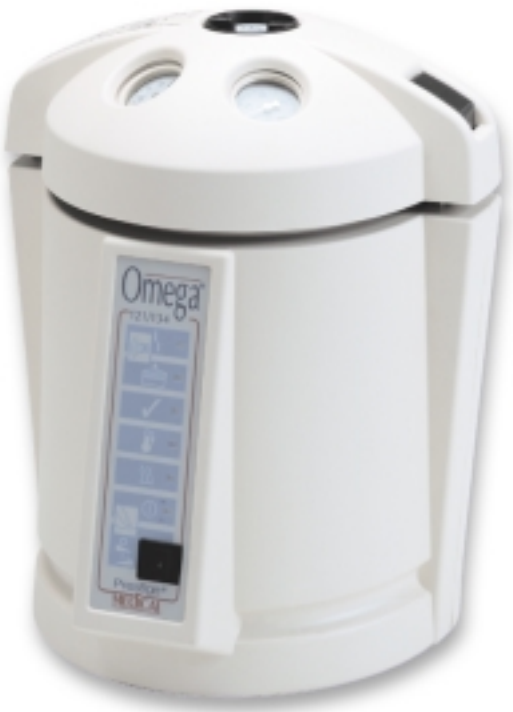
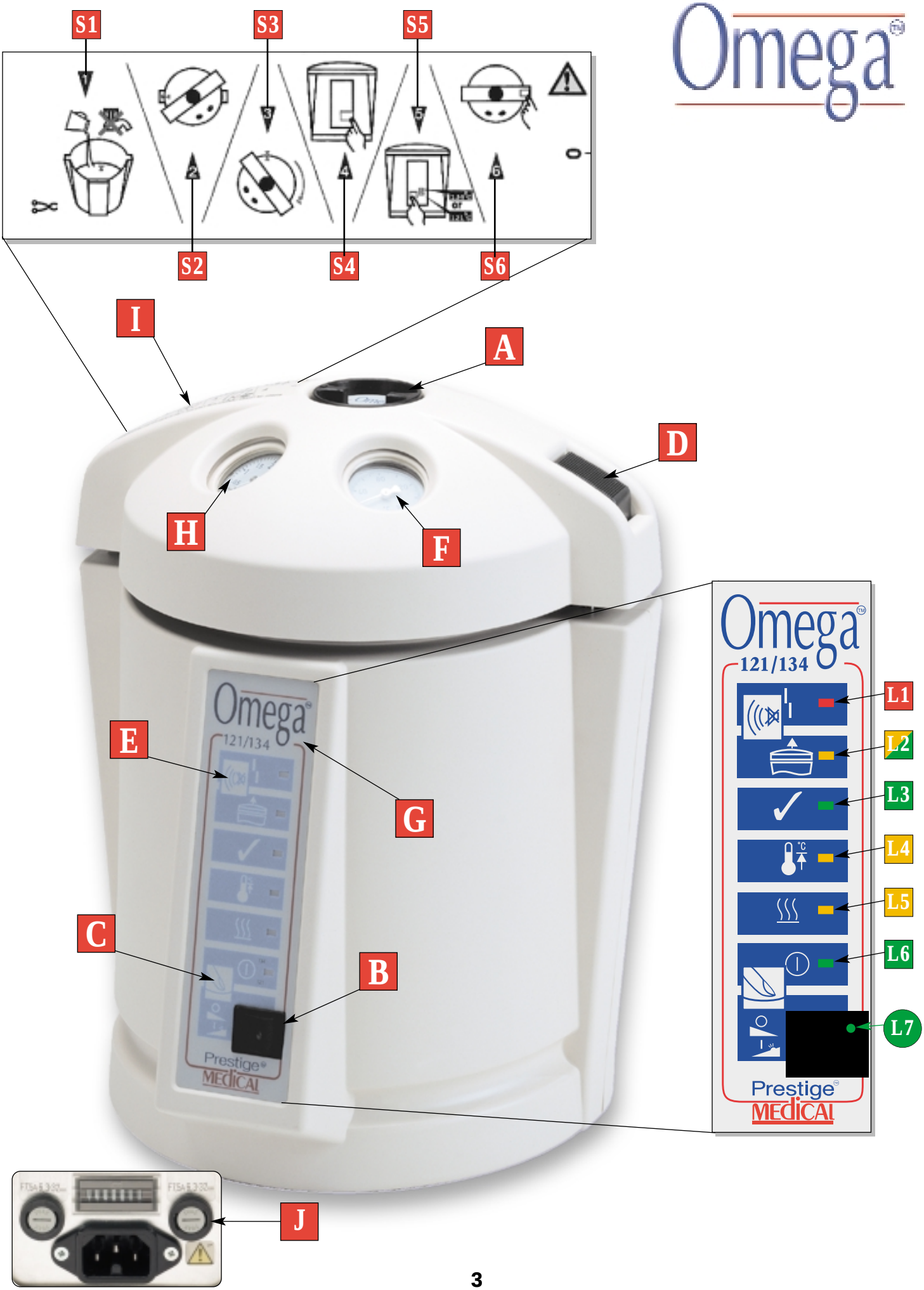
Prestige MEDICAL

Operating Instructions



Omega

Clinical Autoclaves


S1
S3
S5
S2
S4
S6
I
A
D
H
F
E
G
C
B
J
Omega
121/134
L1
L2
L3
L4
L5
L6
L7
Prestige
MEDICAL

Introduction

Thank you for choosing the Prestige Medical **OMEGA 121/134** Autoclave, designed to sterilize solid, un-wrapped instruments. After removing from the box, please check for any transit damage. If any damage to the unit is found, please contact your supplier immediately.

Together with this unit and operating manual, you will find the following:

Electrical mains cord
Instrument furniture
Spare fuses x2 (when fitted)
TST Sterilizing Indicator Strips (except Media models)
Performance test certificate
Certificate of Compliance (230v models only)
Warranty registration card

Key to Pictures, Diagrams and Symbols

The following descriptions refer to the pictures of the controls, display lights and operating symbols on Page 3 of this manual.

Controls:

A - Depressurization Valve
B - Power supply switch "on/off"
C - Temperature selection button "121˚C or 134˚C sterilizing cycle"
D - Lid interlock/cycle start button
E - Fault mode/buzzer reset button
F - Temperature Gauge
G - Display panel
H - Pressure gauge
I - Operating symbols
J - Fuses and mains cable socket

Display Lights:

L1 - Fault mode - illuminates RED and *flashing* RED
L2 - Lid status - illuminates ORANGE, GREEN and *flashing* GREEN
L3 - Sterilizing cycle completed - illuminates GREEN
L4 - Sterilizing temperature reached - illuminates ORANGE
L5 - Power to heating element - *flashes* ORANGE
L6 - Sterilizing cycle initiated - illuminates GREEN
L7 - Power to unit on - illuminates GREEN

Symbols:

S1 - Do not use tap water or overfill
S2 - Place lid in this position
S3 - Rotate lid to secure
S4 - Power switch
S5 - Select temperature
S6 - Press lid interlock/cycle start button

Key to Pictures, Diagrams and Symbols

Before using the autoclave for the first time please take time to read the following pages to familiarise yourself with the operation of the unit.
We strongly recommend that all users of the autoclave are trained in its operation.
The autoclave is very easy to use. By following this simple operating sequence in conjunction with the pictures of the autoclave, it's controls, display panel and operating symbols (page 3), you will be able to ensure your instruments are correctly sterilised every time.

Operation

1. Connection.

Attach the cable supplied to the rear of the unit **(J)** and plug into an EARTHED mains electrical socket of the CORRECT voltage.

2. Water.

Fill the unit to the water level line on the inside of the chamber with **0.75 litres** of **distilled or de-ionised** water **(S1).**

DO NOT USE TAP WATER OR OVERFILL.

Operation

3. Loading (solid instruments).

Place UNWRAPPED and WASHED instruments ONLY plus a TST Strip into the instrument basket or cassettes, and place in the unit.
If using a basket, place the metal 'V' support in the bottom of the unit so ensuring instruments and TST Strips **are not in the water** .
TST Strips must be placed as near to the centre of the load as possible.

4. Closing.

Always place the lid on the autoclave with the Depressurization Valve (A) in the "open" position. Align the arrows on the lid and body **(S2)** and turn in a clockwise direction ensuring it is completely closed **(S3).**
Close the Depressurization Valve **(A)** so its arrow is in line with the "O" on the lid decal.

5. Power on.

Switch the unit's power on by pressing Rocker Switch **(B)**. **(S4)**

Lights: **L2** & **L7** illuminate GREEN

6. Temperature.

The 134˚C temperature is automatically selected when the power is turned on.
Select 121˚C temperature by pressing button **(C).**
Either the 134˚C or the 121˚C indicators will be illuminated **(S5).**

7. Starting.

Depress the lid interlock button **(D)** to start the sterilizing cycle. **(S6)**

Lights: **L6** & **L7** illuminate GREEN
L2 illuminates ORANGE
L5 MAY *flash* ORANGE

- as the temperature rises, air will be displaced by steam through the Air Bleed Device located in the lid, until it closes with an audible "click", sealing the unit.

-Sterilizing Temperature is reached when:

Lights: **L6** & **L7** illuminate GREEN
L2 & **L4** illuminate ORANGE
L5 *flashes* ORANGE

-Sterilizing Cycle is completed when:

The internal Buzzer sounds.
Lights: **L3** & **L7** illuminate GREEN
L2 illuminates ORANGE

8. Depressurizing.

Once the Sterilizing Cycle has been completed, the unit needs to be depressurized and allowed to cool down before the lid and sterilized instruments can be removed.
The time taken to reach the point at which this is safe to do so can be shortened by **Manually Depressurizing** the unit.

Open the depressurization Valve **(A)** by turning slowly in an anti-clockwise direction.

Lights: **L2** illuminates ORANGE
L3 & **L7** illuminates GREEN

Warning: There will be a visual and audible release of steam from the rear of the lid.

9. Unlocking.

Once the temperature has reached a safe level an internal buzzer sounds, indicating the lid can be unlocked.

Lights: **L7** illuminates GREEN
L2 *flashes* GREEN

Unlock lid by pressing and releasing button **(D**).

Lights: **L7** & **L2** illuminate GREEN

Remove the lid by turning in an anti-clockwise direction, aligning the arrows **(S2 & S3)**.

10. Unloading.

Lift off the lid, gently place upside down on a solid work surface and leave to cool. Ensure the Depressurization Valve **(A)** is in the closed position to avoid damaging it.

The unit has completed a successful cycle if the "spot" on the TST Indicator Strip has completely changed colour from yellow to purple.* The basket or cassettes containing the sterilized instruments can now be lifted out of the unit.

Allow 5 minutes for the lid to cool down before replacing as per Step "4".

***Please Note.** If the "spot" has not completely changed colour, replace with a new TST strip and start a new cycle. If the "spot" fails to change colour for a second time, **do not use** the unit until checked by a qualified engineer.

DO NOT USE THE INSTRUMENTS IF A COMPLETE STERILIZIATION CYCLE HAS NOT BEEN ACHIEVED.

Do's and Dont's

To ensure your autoclave gives you the years of service for which it was designed, it is important to remember a few **"do's"** and **"dont's"** with regards to the operation of the unit and to carry out the simple care and maintenance procedures on a weekly basis.

Do ensure that....

1... you read these instructions and always follow the operating sequence.

2... the instruments are designed to withstand the sterilizing temperatures selected, are thoroughly cleaned and rinsed before sterilizing, and are not any longer than the length, or exceed the load weight, specified - see "Technical data" section.

3... the water level is maintained regularly with clean **distilled** or **de-ionised** water only.

4... the unit is in a "draft free" environment and is positioned not less than 250mm from adjacent walls.

5... you only use red sealing gasket **(229216)** and that it is changed at the end of it's life, if visibly damaged, or when shrinkage has occurred. See "Fault mode-4"

6... the lid is securely closed when the unit is not in use, to avoid the risk of accidental damage. **Never leave in position (S2).**

7... you record the temperature and pressure readings for each cycle completed, to ensure they remain constant between cycles. Check readings against those quoted - see "Technical data" section.

8... you quote your model details, serial number and date of purchase when contacting Prestige Medical or your supplier.

Do not....

1... lose this operating instruction manual.

2... add any chemicals whatsoever to the water.

3... attempt to sterilize volatile substances, toxic materials or inappropriate loads.

4... place the unit on heat sensitive surfaces ie polished wood or glass.

5... open the Depressurization Valve **(A)** during the sterilization cycle.

6... leave the Depressurization Valve **(A)** in the "open" position when placing the lid upside down on a work surface.

7... immerse the unit or electrical cord in water when cleaning.

8... use abrasive materials or lubricants when cleaning.

9... drop or abuse the unit.

10..use in areas of risk associated with flammable materials or gases.

11. attempt to change any fuses until the unit has been unplugged from the mains*****.

12. remove the access panel on the lid for reasons other than servicing*****.

13. reach over the unit when removing cover, to do so may cause burns from rising heat and steam.

14. cover lid or obstruct steam venting area when manually depressurizing.

***** *These operations should only be undertaken by a qualified person.*

Care and Maintenance.

Red Sealing Gasket.

1... Remove from inside the lid and clean with warm, soapy water.

2... Rinse thoroughly, shake dry, **do not wipe.**

3... Replace in the lid by tucking evenly under all lugs. It may appear slightly wrinkled until used.

4... Replace when it begins to show signs of leakage.

Autoclave.

6... If a new gasket leaks, or a persistent leak develops, gently clean the sealing surface of both the lid and body of the unit with a "Scotchbrite" scrubbing pad making sure you do not remove any metal. Rinse both surfaces, but do not dry.

7... Clean both interior and exterior with warm soapy water ensuring electrical parts are kept dry.

8... Monitor the first cycle of the day to check the Air Bleed Device which is located inside the lid, audibly "clicks" shut.

9... Prestige Medical recommend that your unit is calibrated at six monthly intervals

10..Lubricate underside of body lugs with "vaseline" if the lid becomes stiff.

DO NOT LUBRICATE GASKET

Troubleshooting

In the event of a fault occurring during any stage of the unit's operation, identify the fault by referring to their descriptions below. The fault can be corrected by following a few easy steps.
(Note: light **L7** will be constantly illuminated GREEN whilst the unit is powered up).

FAULT MODE DESCRIPTION

Fault 1: Failure to complete a satisfactory Cycle

Lights: **L1** *flashes* RED
L2 illuminate ORANGE
The buzzer sounds continuously after 5 minutes

Fault 2: Low Water or Boil Dry

Lights: **L1** *flashes* RED
L2 illuminates ORANGE
L3 *flashes* RED
Buzzer sounds continuously

Fault 3: Temperature Sensor Warning

Lights: **L1** *flashes* RED
L2 illuminates ORANGE
L4 *flashes* RED
Buzzer sounds continuously

Fault 4: Lid Interlock Shaft Over-travelled

Lights: **L1** *flashes* RED
L2 illuminates GREEN

Fault 5: Steam or water leaks from under the lid

Fault 6: No power to unit

Lights: All lights *fail* to illuminate

FAULT MODE REMEDY

Important - Before restarting cycle check the mains lead is firmly connected to the unit and an EARTHED/GROUNDED power supply.
Steps 1-4 should be followed for ALL Fault modes experienced.

1. If the buzzer is sounding constantly, silence by pressing Reset Button **(E)**.
All lights *flashing* RED will change to RED

2. Switch the unit's power **"OFF"** then **"ON"** - Rocker Switch **(B)**.

Lights: **L1** *flashes* RED
L2 illuminates ORANGE

3. Press Reset Button **(E)**

Lights: **L1** illuminates RED

- if the Temperature is above boiling point
L2 illuminates ORANGE

- if the temperature is below boiling point
L2 *flashes* GREEN
IF ABOVE BOILING POINT WAIT FOR UNIT TO COOL

4. When the temperature is below boiling point:-

Lights: **L1** illuminates RED
L2 *flashes* GREEN

Press Cycle Start button **(D)** to return unit to ready state. The lid may now be removed. **If the lid is not on, manually push the Lid Interlock Shaft down to revert to ready state.**

5. Further action can now be taken depending on the fault mode experienced

Faults 1 and 4
No other action necessary, restart cycle. If fault repeats arrange for a service engineer to visit.

Fault 2
Fill to the waterline with **distilled** or **de-ionised** water - restart cycle.

Fault 3
Call Service Engineer. **DO NOT USE UNIT**.

Fault 5
Wash gasket as described under "Care & Maintenance", restart cycle. If fault persists, replace with a new gasket.

Fault 6
Check for blown fuse, defective socket, mains not connected. If fault discovered and can be remedied do so, then restart cycle. Otherwise arrange for a service engineer to visit.

Should all power be lost during a cycle, the lid cannot be removed until power has been restored. Should there be an internal power failure during a cycle, the lid cannot be removed until the fault has been rectified by a service engineer.

Specifications

In the unlikely event that something should go wrong, we have incorporated a number of safety features to ensure that your autoclave remains safe at all times.

Safety Features.

1. If for any reason, the temperature falls below the minimum required sterilizing temperature, resulting in the Sterilizing Temperature light **(L4)** switching off, the cycle timer will re-start from zero once the correct temperature has been restored.

2. If there is an electrical or electronic failure resulting in a build up of pressure - in excess of normal operating pressure - one or all of the following safety features will be activated:

i) The PRIMARY Pressure Release Valve will loudly and rapidly "vent" steam.

ii) Should the PRIMARY Pressure Release Valve fail to operate, a SECONDARY release valve will operate at a slightly higher pressure.

iii) A resettable thermal cutout located on the base of the autoclave will 'switch' at a predetermined temperature, disconnecting the autoclave from the mains supply. (see Performance Test Certificate).

Should any of the devices listed above activate, please observe the following steps:

a) Do not touch the autoclave

b) Switch off at the wall socket and remove plug from wall socket.

c) Wait until the autoclave has cooled down before attempting to remove the lid.

d) Do not attempt to re-start a sterilizing cycle.

e) Arrange for an immediate service call by contacting the company from which the unit was purchased.

Dimensions

Height	420mm	**Internal chamber**		**Max' Load Weight**	4.0 kilos
Width	350mm	**Dimensions (d/h)**	210/270mm		
Net Weight	9.2 kilos	**Max' Instrument**			
Capacity	10 litres	**length**	290mm		

Temperature	121˚C	134˚C
Sterilizing time	16 mins	3 mins 40 secs
Cycle time (nominal)	28 mins	20mins
Minimum rest period	5 mins	5 mins

Volts / watts / frequency

120v models / 1200 watts / 50 - 60 Hz

230v models / 1500 watts / 50 - 60 Hz

Fuses - Located on rear plate and in power unit (FS3), the latter are NOT user replaceable item. Only qualified personnel should attempt to change it. Rear plate fuses (230v models only) F7.5A 32 x 6.3mm, ceramic sand filled, FS3 on 230v model power unit pcb, T500mA, to IEC 127 (120v, T500mA) Mains plug top fuse (User replaceable), F13A to BS1362 UK ONLY. All models are continuously rated for loading.

Body - Deep drawn aluminium. 3103-0

Lid - Gravity cast aluminium. LM 25,TF

Gauges - Depending on the cycle selected, the minimum gauge readings will be as follows:

Temperature	121°C cycle - 121°C	134°C cycle - 134°C
Pressure	121°C cycle - 1.05 bar	134°C cycle - 2.05 bar

Heater - Externally surface mounted mechanically fixed electric element.

Temperature Cut Out - Bi-metallic type with manual re-set isolating at 170°C

Max. Single Fault Temperature - 140.5°C

Pressure - *Primary valve*: dump type, manufactured to Section Vlll, ASME Code of Practice, calibrated and sealed. Operates at 2.65 bar (38.4 psi) minimum, maximum accumulation plus 10%. - *Secondary valve*: proportional type - uncalibrated.

Over Voltage Category - Group ll

Pollution Degree - Group 2

Environment Conditions

- indoor use
- altitude up to 2000m
- temperature 5°C to 40°C
- maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C.
- mains supply voltage fluctuations not to exceed +10% of the nominal voltage

Input Connections - Mains inlet socket 'hot' format conforming to IEC 302.

Safety Shut Down - See 'Temperature Cut Out', which should only be reset by a qualified engineer.

Packaging - All packaging materials are recyclable.

Additional information

Spares

Only those spare parts supplied or specified by Prestige Medical should be used in the maintenance of the autoclave. Use of unauthorised parts will invalidate any warranty given and may adversely affect the performance and safety of the unit.

Accessories

A range of accessories are available for your autoclave as described below and pictured on page 76. Contact your supplier for full details.

1 - 219294 - Lifting device
2 - 219293 - General Instrument Tray
3 - 219292 - Standard Basket
4 - 219295 - 'V' Support
5 - 229310 - Dental Instrument Tray
6 - 219291 - Instrument Cassette
7 - 249025 - Cassette Rack
8 - 219296 - Extended Instrument Basket
9 - 229216 - Red Sealing Gasket
10 - 259277 - TST Indicator Strips
11 - 219258 - Cord Set UK
12 - 219299 - Cord Set UL
13 - 219297 - Cord Set EURO
14 - 229514 - Fuses (2x7.5 amp) (230v only)

Warranty

Prestige Medical shall, in the first 12 months from the date of purchase, repair or replace free of charge any parts which prove to be defective in workmanship and/or materials. The heating element (only) is covered by a lifetime guarantee.

Prestige Medical shall not be so liable in the event that the purchaser has failed to adhere to the instructions contained herein or if the autoclave has been abused, interfered with, altered, repaired or serviced by any unauthorised party this may also result in the protection provided by the equipment being impaired.

This warranty excludes the gasket, all internal furniture and consumables.

Consumer's statutory rights are not affected.

Product decontamination.

Should the unit require repair, it must be decontaminated in accordance with a recognised procedure prior to return or on-site repair. A statement of equipment contamination status must be available with the product. (Details of a suitable procedure is available on request).

Approvals: 1993

IEC 1010 Pt. 1 - European electrical and product safety.
BS 3970 Pt. 4: 1990 - Transportable steam sterilizers (pressure vessel only).
CE Mark - Medical Device Directive (93/42/EEC).
DIN 58946 Pt. 8 - Microbiological performance.
UL544: 1994

Packaging.

All Prestige Medical packaging materials used are recyclable, please dispose of accordingly.

PLEASE NOTE: English is the original language for the purposes of these instructions. All other languages are translations from the English text.

Quote your model details, serial number and date of purchase when contacting Prestige Medical or your supplier

Model no.

Serial no.

Date of Purchase / Supplier

Body Rating Plate (Duplicate)

Lid Rating Plate (Duplicate)

254146A