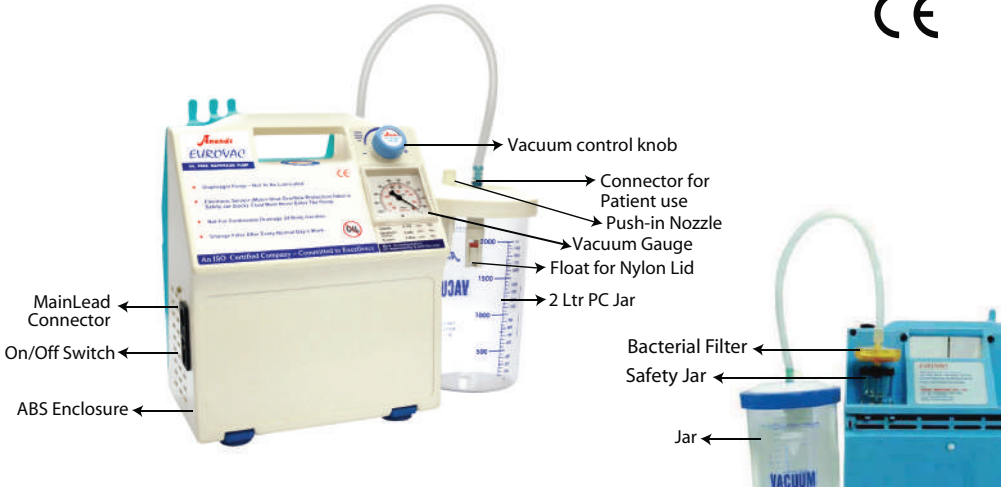


Instruction Cum User Manual  
For **EUROVAC AC/DC**



Dear Customer,

Congratulations on your purchase of this versatile and need oriented suction unit. It will serve you well for years, if properly looked after.

**ASSEMBLY**

The pump (based on Diaphragm system) , batteries and PC card are housed in enclosure. The panel has a vacuum gauge, release valve (for vacuum adjustment) 'push to on' 'push to off' switch and four neon lights indicating:

- 1) External power (main AC on) 2) Internal battery 3) Vehicle battery 4) Internal battery charging level.

Battery backup is 120 minutes on full charge: In built maintenance-free battery. Provided with cable for AC mains and ambulance/car use. On/Off switch on the panel is for switching the unit 'push to on' 'push to off'. Vehicle charging cord (when required) is to be connected on socket (with threading) provided on side.

To fasten the base (together with pump, battery etc.) well with the base two hexa head bolts (used as holdfast for transportation at the bottom of the unit) MUST be removed by rotating anticlockwise with the aid of a simple hand tool. Antibacterial filter (element replaceable) is slipped into the safety jar (at the back) and the other end is connected to the slot marked 'Vacuum' on the jar lid. The second nozzle is marked "patient" and the tubing from this goes to the patient. The release valve for adjusting the negative pressure and the vacuum gauge are on the panel. Main on/off switch cum pilot lamp, fuse and the removable main lead connector are on the side.

Before the unit is put on please see that:

1. 'O' rings on the push-in connector are not worn out. Check that safety jar with 2 'O' rings is well inserted.
2. Jar be checked for any crack, tubing and lid be tightly placed on the jar. The angular connector must be inserted as far as the stop. While unplugging, twist and pull.
3. Adjust vacuum before use. Fully tightened clockwise knob means full vacuum.

**TECHNICAL**

<b>Housing</b>	: ABS Plastic Moulded
<b>Max. Vacuum / LPM</b>	: 600 mm Hg, 55 Ltrs / min
<b>Pump Type</b>	: Diaphragm Pump
<b>Jars</b>	: 1 x 2 Ltr. PC Jar
<b>Filter</b>	: Bacterial Filter Autoclavable / Reusable
<b>Tubing</b>	: 8 mm ID x 2 mtr. (Silicon)
<b>Vacuum Gauge</b>	: 6.25 cm dia 0-760 mm Hg
<b>Power Supply</b>	: 220 V AC, 50 / 60 Hz, 70 Watt, 12 V DC Internal Rechargeable Battery (12 V 4.5 Amp)
<b>Battery</b>	: Lead Acid
<b>Battery Backup</b>	: 180 minutes (with fully charged /new battery)
<b>Noise Level</b>	: 55 dB A ± 3
<b>Dimensions</b>	: 43 x 22 x 37 cms
<b>Net Weight</b>	: 10.5 Kg
<b>Overflow Safety</b>	: Mechanical & Electronic Sensor
<b>Accessories</b>	: Car Charger & Power Adaptor
<b>Optimal</b>	: Ni-cd / Li-ion Battery
<b>Certifications</b>	: CE, IEC 60601-1-2012

**VACUUM AT ALTITUDES**

The specified maximum vacuum refers to sea level. According to local conditions and barometric pressure, slight deviations in vacuum reading may be noted. The table below shows several factors, by which the indicated maximum vacuum value must be multiplied, according to the altitude of location where the measurement is carried out.

**Location/Maximum Vacuum**

Location	Sea level	1000m	2000m	4000m
Factor	1.00	0.88	0.78	0.60

**GUIDELINES FOR USE**

**Jar/cleaning and Disinfecting:** Polycarbonate jar (PC) is superior to glass. 3/4th filling is recommended. After each use, jar, lid, over flow cut off valve, catheters, etc. should be cleaned thoroughly. When cleaning is necessary after infective fluid has been evacuated the jar, lid, filter housing, tube, cut off valve can be sterilized by autoclaving up to 120° C for 20 minutes. Alkaline cleaning agents and disinfectants based on phenyl may not be used. Adherence to hospital directives on hygiene is of prime importance. The 2 Ltr PC Jar instructions provided by the suppliers of cleaning agents as well as by the manufacturers of sterilization/or disinfection units must also be followed, where application, temperature, process duration and airing, etc. are concerned.



2 Ltr PC Jar

**Pump:** The unit fitted with Diaphragm type oil-free pump, provides reduced maintenance cost.

**A.** To reach the pump open the back plate of the unit with the aid of an allen key provided, and disconnect the tube from the inlet and outlet points on the pump housing.

**B.** Unscrew the 4 hexa bolts from the bottom of the unit and take out the motorized pump fitted on (and together with) the platform.

**C.** The fly valves are fitted in the top which can be opened. The valve and sieve are alternately fitted one upon the other in the two nozals making one for vacuum and the other for outlet. The diaphragm is fitted below the top and over the eccentricly rotated came. Just wipe clean these parts and set the unit again.

**D.** Please run the unit and see its satisfactory functioning before the back plate is screwed up. Unlike the rotary design, NO LUBRICATION IS REQUIRED IN THIS PUMP. The unit has not to be tampered with by any mechanic other than our factory engineer, or the person authorized.



Bacterial Filter

**D.** Please run the unit and see its satisfactory functioning before the back plate is screwed up Unlike the rotary design, **NO LUBRICATION IS REQUIRED IN THIS PUMP.** The unit has not to be tampered with by any mechanic other than our factory engineer, or the person authorized.

**BATTERY CHARGING/REPLACEMENT**

If the unit remains unused for say ten days, it should be connected to the AC supply and switched on for over two hours. For battery replacement, Open the back of the unit, remove negative and positive connectors on the battery. Remove the battery from the hook and install new battery. Remember to charge the new battery for 8-10 hours for optimum performance.

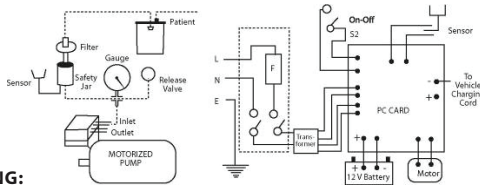


Fig. A



Fig. B



Fig. C

**TROUBLE SHOOTING:**

Problem	Possible source of trouble	Check/Action to be taken
Motor does Not Run	Power Supply	Voltage, power socket
	Main switch	Set at "ON"
	Electrical cord	Plug type, plug connections, damaged cord
	Check if the safety jar is activated. Open the safety jar, clean & dry the jar and replace the cap for re-use	
	The blood has entered the pump. The remedy is given above under pump cleaning	
Inadequate Suction Performance	Leak within the pump or in the external suction circuit	Isolate the source of trouble by carrying out the checks outlined.
	<b>External cause:</b> Push-in connector O-rings/Lid gasket	Condition
	Safety jar O-rings	Condition
	Push-in angular connectors	No Leaks at tube ends. Push in as far as stop.
	Release Valve	The Knob should be tightly placed
	Tubing	Cracks, brittle areas
	Lids	Airtight fit jars and Safety jar
	Jars	Condition, Possible cracked edges, hairline cracks
	BATTERY Inadequate battery back-up	Charge the unit for 4-6 hours or replace battery
Filter paper	Condition, position of housing	
Vacuum gauge indicates a vacuum Pump does not suck, however	Blockage or kink in tubing within the pump or in the external suction circuit	Isolate source of trouble as follows: Remove the safety jar, leave the suction connection open. If the vacuum gauge now indicates zero vacuum, the cause is external
	<b>External cause:</b> Bacteria filter, safety jar, overflow valve in the lid, (float valve) push-in connectors, tubing etc.	Investigate the whole external suction circuit for blockage (s), float valve sticking, kinked tubing and rectify. If the vacuum gauge still indicates a vacuum, the cause is internal

**TERMS OF WARRANTY**

Anand Medicaids Private Limited warranty the high quality and workmanship of Anand's EUROVAC AC/DC for a period of one year subsequent to the date of delivery by the company. During this period, faulty material will be replaced free of charge. This warranty does not extend to components that are subject to wear and tear in the course of normal operation or due to improper treatment/maintenance as per instructions.

Further conditions in accordance with international standard IEC 601.1 item 6.8.2b.

The manufacturer is only responsible for effects on the safety, the reliability and the performance of the appliance if

- Installation, additions, adjustments, modifications or repairs are carried out by personnel authorized by the manufacturer
- The electrical installations within the room concerned satisfy the requirements laid down by IEC.
- The appliance is used in full accordance with the instruction manual which is solely a guide and no substitute for professional training. The safe and effective use of this product largely depends on the skill of the operator. We are not liable for any damages due to mishandling or improper and unauthorised use.
- The company reserve the right to change technical specifications, designations and catalogue numbers without prior notice.

**CAUTION** 

**Ensure that your electrical wirings are well earthed with 1 line and 1 neutral phase and voltage is between 220 V – 230 V, 50 hz: for electric suction units only**

**Ensure the suction unit should not be lifted above human body level**

**Dispose of used products/packaging in safe manner so as not to harm stray cattle, children and environment.**

**WARRANTY CARD**

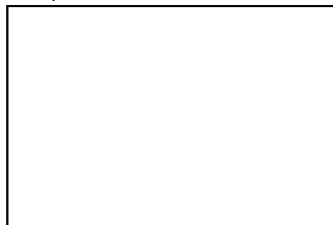
Model No. -----

**SN** -----

Date of Purchase: -----

Dealer Name: -----

Stamp :



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