

# ASKIR C30 BR



ASPIRATORE	<b>IT</b>	Manuale d'uso
ASPIRATOR	<b>EN</b>	Instruction manual
ASPIRATEUR	<b>FR</b>	Mode d'emploi
ABSAUGER	<b>DE</b>	Handbuch
ASPIRADOR	<b>ES</b>	Manual de instrucciones

**ASKIR C30 BR** it's an electrical powered surgical aspirator with the following electrical features : 14V --- 4A with AC/DC adapter mod. UE60-140429SPA1 or UES65-140429SPA1 of DONGGUAN SHILONG FUHUA ELECTRONIC CO. LTD (input: 100-240V~ - 50/60Hz - 100VA) or Internally powered equipment (Pb Battery 12V --- 4A) used for the nasal, oral and tracheal suction in man and child of body liquids (mucus, catarrh or blood).

The equipment is intended for continuous operation. The equipment is equipped with a trolley provided with 5 wheels with locking system in order to avoid the equipment can overbalance, and an external plastic enclosure. The unit is operated by means of an electronic power management system, also monitoring the internal battery operation and status.

A LED system positioned on the front panel indicates appliance start-up and battery charge status.

The unit is equipped with suction regulator on the front panel and two polycarbonate autoclavable jars complete with overflow valve. Thanks to these characteristics and to its functions, this device is particularly suitable for different applications: utilization in hospital wards, for tracheotomy, for suction of body liquids and for minor surgery.

Foot switch for switching the device on remotely is available on request.

### GENERAL WARNING



**READ INSTRUCTION MANUAL CAREFULLY BEFORE USE. ONLY HIGHLY QUALIFIED STAFF USE RESERVED**

**THE INSTRUMENT MUST NOT BE DISASSEMBLED. FOR A TECHNICAL SERVICE ALWAYS CONTACT CA-MI**

**KEEP OFF THE REACH OF CHILDREN OR NOT CAPABLE PEOPLE WITHOUT SUPERVISION**

**FULL CONTAINERS MUST BE HANDLED WITH GREAT CARE DURING TRANSFER TO THE DISPOSAL AREAS, FOLLOWING THE LOCAL PROCEDURES AND REGULATIONS**

### IMPORTANT SAFETY RULES

1. Check the condition of the unit before each use. The surface of the unit should be carefully inspected for visual damage. Check the mains cable and **don't connect to power** if damage is present.
2. Before connecting to power, always check the manufacturer's label to ensure the electrical design of the unit and style of plug comply with the electrical network to be used.
3. Pay special attention to the following:
  - Use original components and accessories provided by the manufacturer to guarantee the highest efficiency and safety of the device;
  - The device can be used only with the bacteriological filter provided by the manufacturer to guarantee the highest efficiency and safety of the device;
  - Never immerse the appliance into water;
  - Position the appliance on flat stable surfaces;
  - To avoid incidents, do not place the aspirator on unstable surfaces, which may cause it to accidentally fall and lead to a malfunction and / or breakage. Should there be signs of damage to the plastic parts, which may expose inner parts of the energized device, **do not connect the plug to the electrical socket**. Do not attempt to make the device work before it has been thoroughly checked by qualified personnel and / or the CA-MI technical service department;
  - Position the device in a way that the air inlets on the back aren't obstructed;
  - Never use the device in environments which have anaesthetic mixtures inflammable with air, oxygen or nitric oxide;
  - Don't touch the device with wet hands and always prevent the appliance coming into contact with liquids; Don't use the appliance if the plug or the AC/DC power supply are deteriorated or wet (send it promptly back to an authorised service center or the CA-MI technical service);
  - Keep off the reach of children or not capable people without supervision;
  - Don't leave the appliance connected to the power supply socket when not in use;
  - Hold plug to remove from socket. Don't pull on cable;
  - Preserve and use the medical device in environments protected from atmospheric factors and at a distance from heat sources;
  - In general, it is inadvisable to use single or multiple adapters and/or extensions. Should their use be necessary, you must use ones that are in compliance with safety regulations, however, taking care not to exceed the maximum power supply tolerated, which is indicated on the adapters and extensions;
  - Don't use the device thoracic drainage.
4. The lead battery integrated in the device is not to be considered as an ordinary domestic waste. Such a component must be disposed of in a specific collection centre in order to be recycled.
5. For repairs, exclusively contact CA-MI technical service and request the use of original spare parts. Failure to comply with the above can jeopardise the safety of the device.
6. **This medical device must be destined exclusively for the use for which it has been designed and described in this manual.** Don't use for anything other than the use defined by the manufacturer. The manufacturer will not be responsible for damage due to improper use or connection to an electrical system not complying with current regulations.
7. The medical device requires special precautions regarding electromagnetic compatibility and must be installed and used in accordance with the information provided with the accompanying documents: the ASKIR C30 BR device must be installed and used away from mobile and portable RF communication devices (mobile phones, transceivers, etc.) that may interfere with the said device.
8. None of electric or mechanical parts have been designed to be repaired by customers or end-users. Don't open the device, do not mishandle the electric / mechanical parts. Always contact technical assistance;
9. Do not perform repairs or maintenance operations on the device when it is being used on a patient

10. The use of the device in ambient condition other those indicated herein can seriously jeopardise the safety and the technical parameters of the appliance.
11. **WARNING:** Do not change this equipment without the permission of the manufacturer CA-MI Srl. None of electric or mechanical parts have been designed to be repaired by customers or end-users. Don't open the device, do not mishandle the electric / mechanical parts. Always contact technical assistance;
12. The product and its parts are biocompatible in accordance with the requirements of regulation EN 60601-1;
13. Operation of the device is very simple and therefore no further explanations are required other than those indicated in the following user manual.

**The manufactured cannot be held liable for accidental or indirect damages should the device be modified, repaired without authorization or should any of its component be damaged due to accident or misuse. Any minimal modification / repair on the device voids the warranty and does not guarantee the compliance with the technical requirements provided by the MDD 93/42/EEC (and subsequent changes) and its normatives.**



**IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH EC DIRECTIVE 2012/19/UE-WEEE:**

The symbol on the device indicates the separated collection of electric and electronic equipment. At the end of life of the device, don't dispose it as mixed solid municipal waste, but dispose it referring to a specific collection centre located in your area or returning it to the distributor, when buying a new device of the sample type to be used with the same functions. This procedure of separated collection of electric and electronic devices is carried out forecasting a European environmental policy aiming at safeguarding, protecting and improving environment quality, as well as avoiding potential effects on human health due to the presence of hazardous substances in such equipment or to an improper use of the same or of parts of the same **Caution:** The wrong disposal of electric and electronic equipment may involve sanctions.

**TECNHICAL SPECIFICATIONS**

<b>Model</b>	Class IIa Medical Device	
Typology (MDD 93/42/EEC)	<b>ASKIR C30 BR</b>	
UNI EN ISO 10079-1 Classification	HIGH VACUUM / HIGH FLOW	
Power Feeding	14V $\overline{\text{---}}$ 4A with AC/DC adapter mod. UE60-140429SPA1 or UES65-140429SPA1 (input: 100-240V~ - 50/60Hz - 100VA) or Internally powered equipment (Pb Battery 12V $\overline{\text{---}}$ 4A)	
Current Consumption	4.0A	
Maximum Suction Pressure (without jar)	-80kPa (-0.80 Bar)	
Minimum Suction Pressure (without jar)	Less than -40kPa (-0.40 bar)	
Maximum Suction Flow (without jar)	36 l/min	
Insulation Class (when used with the AC/DC adapter mod. UE60-140429SPA1 or UES65-140429SPA1)	Class II	
Insulation Class (when used with the Internal battery)	Internally Powered Equipment	
Weight	7.98 Kg	
Size	320 x 990 (h) x 300 mm	
Battery Holding Time	60 minuts	
Battery Time Charge	180 minuts	
Dimension of silicon aspiration tube	$\varnothing$ 8x14 mm	
Accuracy of Vacuum Indicator	$\pm$ 5%	
Noise Level	<b>Maximum Aspiration</b>	<b>Minimum Aspiration</b>
	68,0 dB	66,4 dB
Working Condition	Room Temperature:	5 $\div$ 35°C
	Room Humidity Percentage:	30 $\div$ 75% RH
	Atmospheric pressure:	800 $\div$ 1060 hPa
Storage and Transport Condition	Room Temperature:	- 40°C $\div$ 70°C
	Room Humidity Percentage:	10 $\div$ 100% RH
	Atmospheric pressure:	500 $\div$ 1060 hPa




















Please note that the maximum suction value can vary according to reduced atmospheric pressure if the device is used at high altitude.

The operator must take use at high altitude into account. In such conditions the vacuum produced by the internal pump can drop considerably due to the reduction of atmospheric pressure.

**CONTRAINDICATIONS**

- Before using the ASKIR C30 BR, consult the instructions for use: failure to read all the instructions in this manual can be harmful for the patient.
- The device cannot be used to drain chest fluids;
- The device must not be used for suction of explosive, corrosive or easily flammable liquids.
- ASKIR C30 BR is not suitable for MRI. Do not introduce the device in MRI environments.

## SIMBOLOGY

	CE marking in conformity with EC directive 93/42/EEC and subsequent changes	
	Insulation Class II (when used with AC / DC adapter)	
	General warnings and/or specifications	
	Consult the instruction manual	
		
	Humidity Limit	
	Temperature Limit	
	Atmospheric Pressure Limit	
	Applied Part type B (suction probe)	
	Alternate Current	
	Direct Current	
	Battery (Pb Battery 12V ---4A)	
	Frequency	
	ON / OFF	
	Lot Number	
	Serial Number	
	Identification device	
	Manufacturer: <b>CA-MI S.r.l.</b> , Via Ugo La Malfa nr.13 – Frazione Pilastro 43013 Langhirano (PR) Italia	
 IPX1 (on the footswitch control label)	Degree of protection an electrical device provides in the case of accidental or intentional contact with the human body or with objects, and protection in the case of contact with water.	
	<b>1st DIGIT</b> <b>PENETRATION OF SOLIDS</b>	<b>2nd DIGIT</b> <b>PENETRATION OF LIQUIDS</b>
	No protection	Protected against the vertical flow of drops of water

## CARE AND MAINTENANCE

If the device was stored at a temperature below the minimum value specified by the manufacturer, keep it in a place with a room temperature of 20°C for at least 1 hour before use.

If the device was stored at a temperature above the maximum value specified by the manufacturer, keep it in a place with a room temperature of 20°C for at least 30 minutes before use.

## ACCESSORIES SUPPLIED

DESCRIPTION	CODE
N°2 COMPLETE ASPIRATION JAR 2000ml	RE 210351/01
CONICAL FITTING	RE 210420
TUBES SET 8 mm x 14 mm	51100/01
HYDROPHOBIC AND ANTIBACTERIAL FILTER	SP 0121
AC/DC ADAPTER mod. UE60-140429SPA1 or UES65-140429SPA1	SP 0208/01
EUROPEAN POWER SUPPLY CORD FOR AC/DC ADAPTER	SP 0020/03
CA-MI FOOT SWITCH (on request)	Code 52130

The filter is produced with (PTFE) hydrophobic material to prevent fluids entering the pneumatic circuit. It should be changed immediately if it becomes wet or if there is any sign of contamination or discolouration. It should also be changed if the unit is used with a patient whose risk of contamination is unknown. **Don't use the suction unit without the protection filter.** If the suction unit is used in an emergency or in a patient where the risk of contamination is not known the filter must be changed after each use.

**WARNING:** The medical device is provided without a specific suction probe. If this device must be used with a specific suction probe, the end user is responsible for making sure it complies with the EN 10079-1 regulation.

**WARNING: Suction tubes for insertion in the human body purchased separately from the machine should comply with ISO 10993-1 standards on material biocompatibility.**

**Aspiration jar:** The mechanical resistance of the component is guaranteed up to 30 cycles of cleaning and sterilization. Beyond this limit, the physical-chemical characteristics of the plastic material may show signs of decay. Therefore, we recommend that you to change it.

**Silicone tubes:** the number of cycles of sterilization and/or cleaning is strictly linked to the employment of the said tube. Therefore, after each cleaning cycle, it is up to the final user to verify whether the tube is suitable for reuse. The component must be replaced if there are visible signs of decay of the material constituting the said component.

**Conical fitting:** the number of cycles of sterilization and the number of cleaning cycles is strictly linked to the employment of the said component. Therefore, after each cleaning cycle, it is up to the final user to verify whether the fitting is suitable for reuse. The component must be replaced if there are visible signs of decay in the material constituting the said component.

**Service life of the device:** More than 1000 hours of operation (or 3 years) in accordance with the standard conditions of testing and operation. Shelf life: maximum 5 years from the date of manufacture.

## CLEANING OF ACCESSORIES

Before using the device, the manufacturer advises you to clean and/or sterilize the accessories.

Washing and / or cleaning the autoclavable jar as to be carried out as follows:

- Wear protection gloves and apron (glasses and face mask if necessary) to avoid contact with contaminating substances;
- Disconnect the tank from the device and remove the said container from the support of the device.
- Separate all the parts of the cover (overflow device, washer).
- Disconnect all tubes from the jar and the protection filter
- Wash each part of the container from secretions under cold running water and then clean every single part in hot water (temperature not exceeding 60°C)
- Once again, carefully wash each single part using, if necessary, a non-abrasive brush to remove any deposits. Rinse with hot running water and dry all parts with a soft cloth (non-abrasive). It is possible to wash with commercial disinfectants by carefully following the instructions and dilution values supplied by the manufacturer. After cleaning, leave the parts to dry in an open, clean environment.
- Dispose of the aspiration catheter according to that provided by local laws and regulations.

The silicone aspiration tubes and the conical fitting may be carefully washed in hot water (temperature must not exceed 60°C).

After cleaning, leave the parts to dry in an open, clean environment.

When cleaning is complete, reassemble the container for liquid aspirations according to the following procedure:

- Place the overflow valve into its seat in the cover (under VACUUM connector)
- Insert floating valve keeping the o-ring towards the opening of the cage
- Place the o-ring into its seat around the cover
- After completing assembling operations always make sure that cover seals perfectly to avoid vacuum leakages or liquid exit

After disposing of disposable parts and disassembling the jar wash in running cold water and rinse thoroughly.

Then soak in warm water (temperature shall not exceed 60°C). Wash thoroughly and if necessary use a non-abrasive brush to remove incrustations. Rinse in running warm water and dry all parts with a soft cloth (non-abrasive).

The jar and the cover can be autoclaved by placing the parts into the autoclave and running one sterilization stem cycle at 121°C (1 bar relative pressure – 15 min) making sure that the jar is positioned upsidedown. Mechanical resistance of the jar is guaranteed up to 30 cycles of sterilization and cleaning at the indicated conditions (EN ISO 10079-1). Beyond this limit the physical-mechanical characteristics of the plastic may decrease and replacement of the part is therefore recommended.

After sterilization and cooling at environment temperature of the parts make sure that these are not damaged.

The aspiration tubes can be sterilized on autoclave using a sterilization cycle at 121°C (1 bar relative pressure – 15 min).

The conical connector can be sterilized on autoclave using a sterilization cycle at 121°C (1 bar relative pressure – 15 min).



**DO NOT WASH, STERILIZE OR PUT IN AUTOCLAVE THE ANTIBACTERIAL FILTER**

### **Instruction for disposal Liner Flovac®:**

If the device is equipped with disposable collection systems FLOVAC® carry out the disposal of the bag as follows:

Turn off the Vacuum and remove all the tubes connected to the Liner, giving particular attention to avoid accidental contamination.

Fit the appropriate plugs to the "PATIENT" and "TANDEM" ports, pressing the home firmly, taking care to avoid accidental contamination. Remove the liner bag from the rigid container and transfer it to the waste disposal area, ensuring that all the openings are sealed, keeping in mind the product is potentially infectious. This product must be disposed of in accordance with the current hospital regulations.

## CLEANING THE DEVICE

Use a soft dry cloth with not – abrasive and not – solvent detergents. To clean the device external parts always use a cotton cloth dampened with detergent. Don't use abrasive or solvent detergents.



**PARTICULAR CARE SHOULD BE TAKEN TO ENSURE THAT THE INTERNAL PARTS OF THE EQUIPMENT DO NOT GET IN TOUCH WITH LIQUIDS. NEVER CLEAN THE EQUIPMENT WITH WATER.**

During all clearing operations use protection gloves and apron (if need be, also wear a face mask and glasses) to avoid getting in contact with contaminating substances (after each utilization cycle of the machine).

## RISK OF ELECTROMAGNETIC INTERFERENCE AND POSSIBLE REMEDIES

This section contains information regarding the conformity of the compliance with the EN 60601-1-2 (2015) Standard. CISPR group and category classification: group 1, category B. The ASKIR C30 BR surgical aspirator is an electro-medical device that requires particular precautions regarding electro-magnetic compatibility and which must be installed and commissioned according to the electro-magnetic compatibility information supplied. Portable and mobile radio communication devices (mobile phones, transceivers, etc.) may interfere with the medical device and should not be used in close proximity with, adjacent to or on top of the medical device. If such use is necessary and unavoidable, special precautions should be taken so that the electro-medical device functions properly in its intended operating configuration (for example, constantly and visually checking for the absence of anomalies or malfunctions).

The use of accessories, transducers and cables different to those specified, with the exception of transducers and cables sold by the appliance and system manufacturer as spare parts, can lead to an increase in emissions or in a decrease of the immunity of the device or system. The following tables supply information regarding the EMC (Electromagnetic Compatibility) characteristics of the electro-medical device.

### Guidance and manufacturer's declaration – Electromagnetic Emissions

The surgical aspirator **ASKIR C30 BR** is intended for use in the electromagnetic environment specified below. The customers or the user of the surgical aspirator **ASKIR C30 BR** should assure that it's used in such an environment.

Emissions Test	Compliance	Electromagnetic environment - guidance
Irradiated / Conducted emissions CISPR11	Group 1	The surgical aspirator ASKIR C30 BR only used RF energy only for its internal functioning. Therefore its RF emissions are very low and are not cause interference in proximity of any Electronic appliances.
Irradiated / Conducted emissions CISPR11	Class [B]	The surgical aspirator ASKIR C30 BR can be used in all environments, including domestic and those connected directly to the public mains distribution that supplies power to environments used for domestic scopes or environments feeds to you from batteries.
Harmonic emissions EN 61000-3-2	Class [A]	
Voltage fluctuations / flicker emissions EN 61000-3-3	Complies	

### Guidance and manufacturer's declaration – Immunity Emissions


The surgical aspirator **ASKIR C30 BR** is intended for use in the electromagnetic environment specified below. The customers or the user of the surgical aspirator **ASKIR C30 BR** should assure that it's used in such an environment.

Immunity Test	Level indicated by the EN 60601-1-2	Compliance Level	Electromagnetic environments - guidance
Electrostatic discharge (ESD) EN 61000-4-2	$\pm 8\text{kV}$ on contact $\pm 2;4;8;15\text{kV}$ in air	The device doesn't change its state	Floors should be wood, concret or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient / burst EN 61000-4-4	$\pm 2\text{kV}$ power supply lines  $\pm 1\text{kV}$ for input / output lines	The device doesn't change its state	Mains power quality should be that of a typical commercial environment or hospital or environments feeds to you from batteries.
Surge EN 61000-4-5	$\pm 1\text{kV}$ differential mode	The device doesn't change its state	Mains power quality should be that of a typical commercial environment or hospital or environments feeds to you from batteries.
Loss of voltage, brief voltage interruptions and variations EN 61000-4-11	$<5\%U_T$ ( $>95\%$ dip $U_T$ ) for 0.5 cycle $40\%U_T$ ( $>60\%$ dip $U_T$ ) for 5 cycle $70\%U_T$ ( $>30\%$ dip $U_T$ ) for 25 cycle $<5\%U_T$ ( $>95\%$ dip $U_T$ ) for 5 sec	-	Mains power quality should be that of a typical commercial environment or hospital If the user of the surgical aspirator ASKIR C30 BR request that the appliance operates continuously, the use of a continuity unit is recommended.
Magnetic field EN 61000-4-8	30 A/m	The device doesn't change its state	The power frequency magnetic field should be measured in the intended installation location to assure that it's sufficiently low.

Note  $U_T$  is the value of the power supply voltage

**Guidance and manufacturer's declaration - Immunity Emissions**

The surgical aspirator **ASKIR C30 BR** is intended for use in the electromagnetic environment specified below.  
 The customers or the user of the surgical aspirator **ASKIR C30 BR** should assure that it's used in such an environment.

Immunity Test	Level indicated by the EN 60601-1-2	Compliance level	Electromagnetic environments - guidance
Conducted Immunity EN 61000-4-6	3Vrms 150kHz to 80MHz (for non life-supporting devices)	$V_1 = 3 \text{ V rms}$	The portable and mobile RF communication devices, including cables, must not be used closer to the ASKIR C30 BR device, than the separation distance calculated by the equation applicable to the transmitter frequency. Recommended separation distance $d = [3.5 / V_1] \sqrt{P}$ $d = [12 / E_1] \sqrt{P}$ from 80 MHz to 800MHz $d = [23 / E_1] \sqrt{P}$ from 800 MHz to 2.7 GHz  Where P is the maximum nominal output voltage of the transmitter in Watt (W) depending on the manufacturer of the transmitter and the recommended separation distance in metres (m). The intensity of the field from the fixed RF transmitters, as determined by an electro-magnetic study of the site <sup>a)</sup> , could be lower than the level of conformity of each frequency interval <sup>b)</sup> . It is possible to check for interference in proximity to devices identified by the following symbol: 
Radiated Immunity EN 61000-4-3	10V/m 80MHz to 2.7GHz (for non life-supporting devices)	$E_1 = 10 \text{ V / m}$	

Note 1: At 80 MHz and 800 MHz the interval with the highest frequency is applied  
 Note 2: These guide lines may not be applicable in all situations. The electro-magnetic propagation is influenced by the absorption and by reflection from buildings, objects and people.

a) The field intensity for fixed transmitters such as the base stations for radiotelephones (mobile and cordless) and terrestrial mobile radio, amateur radio devices, radio AM and FM transmitters and TV transmitters can not be theoretically and accurately foreseen. To establish an electro-magnetic environment generated by fixed RF transmitters, an electro-magnetic study of the site should be considered. If the field intensity measured in the place where the device will be used surpasses the above mentioned applicable level of conformity, the normal functioning of the device should be monitored. If abnormal performance arises, additional measures such as changing the device's direction or positioning may be necessary.

b) The field intensity on an interval frequency of 150 kHz to 80 MHz should be less than 10 V/m.

**Recommended separation distance between portable and mobile radio-communication devices and the monitor**

The ASKIR C30 BR surgical aspirator is intended to operate in an electro-magnetic environment where RF irradiated interferences are under control. The client or operator of the ASKIR C30BR device can help prevent electro-magnetic interference by keeping a minimum distance between the portable and mobile RF communication devices (transmitters) and the ASKIR C30 BR device, as recommended below, in relation to the radio-communication maximum output power.

Maximum nominal output power of the Transmitter W	Separation distance from the frequency transmitter (m)		
	150 kHz to 80 MHz $d = [3.5 / V_1] \sqrt{P}$	80 MHz to 800 MHz $d = [12/E_1] \sqrt{P}$	800 MHz to 2.7 GHz $d = [23/E_1] \sqrt{P}$
0,01	0,12	0,12	0,23
0,1	0,38	0,38	0,73
1	1,2	1,2	2,3
10	3,8	3,8	7,3
100	12	12	23

For transmitters with a maximum nominal output power not shown above, the recommended separation distance in metres (m) can be calculated using the equation applicable to the transmitter frequency, where P is the maximum nominal output power of the transmitter in Watt (W) depending on the transmitter's manufacturer.

Note 1: At 80 MHz and 800 MHz the interval with the highest frequency is applied

Note 2: These guide lines may not be applicable in all situations. The electro-magnetic propagation is influenced by the absorption and by the reflection from buildings, objects and people.

## MAINTENANCE

The **ASKIR C30 BR** suction equipment does not need maintenance or lubrication.

With regard to training, given the information contained in the user manual and since it is easy to understand the said device, it does not appear to be necessary.

It is, however to inspect the unit before each use. Unpack the instrument and **always check** integrity of plastic parts and AC/DC switching adapter, feeding cable, they might have been damaged during previous use. Connect cable to electrical network and turn switch on. Close the aspirator outlet with your finger and with suction regulator in maximum vacuum position check that the vacuum indicators reaches - 80kPa (-0.80 bar) minimum (internal battery). Rotate the knob from right to left and check the aspiration regulating control. The vacuum indicator should go down - 40kPa (-0.40 bar).

Verify that loud noises are not present, these can indicate wrong functioning.

Internally, the device is protected (see electrical specifications) by two fuses (**T 15A L 125V**) that cannot be reached from the outside. Therefore, contact the manufacturer to request the assistance of an authorized and qualified technician when they need to be replaced. If it's replaced make sure that its replacement is always the same type and value, as indicated.

The device is made up of a lead battery which cannot be accessed by outside. In order to replace it, consult the technical staff authorised by the manufacturer.

Fault type	Cause	Solution
1. Red light on	Battery run down	Hook up the power cord to the electricity mains, positioning the equipment power switch on 0.
2. No light	Defective AC/DC adapter or technical internal problem	Contact the technical service
3. No aspiration	Jar Cap badly screwed down	Unscrewed the cap, then rescrew it correctly
4. No aspiration	Lid seal not in its seat	Unscrew the cap and insert the seal properly in its seat
5. The float doesn't close	If the cap has been washed, ensure that the float is not partially detached	Insert the float into its place
6. The float doesn't close	The float it's covered by dirty material	Unscrewed the cap, leave the and put in on autoclave
7. Low suction	Foam inside the jar	Fill the jar to 1/3 full of ordinary water
8. No aspiration due to flow leakage of mucus	Filter blocked	Replace filter
9. The Vacuum power on the patient side is either very low or absent	<ul style="list-style-type: none"> <li>• Vacuum regulator set to minimum</li> <li>• Protection filter blocked or damaged</li> <li>• Connection tubes blocked, kinked or disconnected</li> <li>• Shut-off valve blocked or damaged</li> <li>• Pump motor damaged</li> </ul>	<ul style="list-style-type: none"> <li>• Turn the vacuum regulator clockwise and check the value of the vacuum on the gauge</li> <li>• Replace the filter</li> <li>• Replace or reconnect the tubes, check the jar connections</li> <li>• Empty the jar, or disconnect the tube from the jar and unblock the shut-off valve. The unit will only work in the upright position</li> <li>• Contact the technical service</li> </ul>
10. Noisy	Technical internal problem	Contact the technical service
<b>Faults 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10</b>	<b>None of the remedies has achieved the desired results</b>	<b>Contact the seller or CA-MI After-sales Assistance Service</b>

If the overflow security system it's activated, don't proceed with the liquid aspiration.

If the overflow security system doesn't work there are two cases:

1° case - If the overflow security system doesn't work the aspiration will be stopped by the bacteriological filter who avoid the liquid penetration inside the device.

2° case - If both the security system doesn't work, there is the possibility that liquid comes inside the device, in this case return the device to CA-MI technical service.

*CA-MI Srl will provide upon request electric diagrams, components list, descriptions, setting instructions and any other information that can help the technical assistance staff for product repair.*

**CA-MI Srl cannot be held liable for accidental or indirect damages should the device be modified, repaired without authorization or should any of its component be damaged due to accident or misuse.**



**Any minimal modification / repair on the device voids the warranty and does not guarantee the compliance with the technical requirements provided by the MDD 93/42/EEC Directive and its normatives.**



## INSTRUCTION

### **Assembly of the device ASKIR C30 BR:**

Take the 5 arm base and set up the 5 wheels that come with the above device. The wheels provided with braking device must be placed one next to the order. Take the support bar that comes with the device ASKIR C30 BR and place it in the hole on the 5-arm base. From under the base, lock the two parts by means of the supplied screw. Eventually, place the device on the trolley.

- The device must be checked before each use in order to detect malfunctions and / or damage caused by transport and / or storage.
- The working position must be such as to allow one to reach the control panel and to have a good view of the empty indicator, the jar and the antibacterial filter.
- If the device is to be transported from one place to another, to prevent the liquid collection jar from falling and consequently the liquid from spilling, removing the jar from the device is recommended.

**WARNING:** For proper use, place the aspirator on a flat, stable surface in order to have the full volume of use of the jar and better efficiency of the overflow device. The vacuum jar, during use, must be used in vertical mode, to prevent the action of the backflow valve. If this protection is triggered, turn the device off and disconnect the pipe connected to the vacuum jar (indicated with the word VACUUM) on its cover.

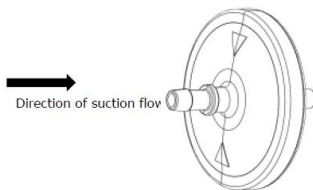


**Operation with AC/DC power supply:** The symbol instructions before each use and identify the model indicated on the Rating Label and in the instructions for use.

near the 12V jack on the casing requires the user to read the and type of power supply to be connected in line with that

- Place the unit on a flat, horizontal surface.
- Connect the short silicon tube, with antibacterial filter, to the suction connector. The other tube, with one end connected to the antibacterial filter with the other end to jar's lid connector where has been fixed the red float. When the 90% of the volume of the jar is reached there is the activation of the security float (the float close the aspiration connector on the jar) to the avoid liquid penetration inside the device.
- Connect the long silicon tube to the other jar's lid connector
- Connect the other end of the long silicon tube to the probe plastic connector then connect the suction probe to it.
- Connect the switching adapter to the device with the appropriate connector and insert the power cable plug to the power socket. To start the treatment press the I switch to turn it on
- Set the desired vacuum value (mmHg / kPa) with the appropriate vacuum regulator. Turning the handle clockwise increase the vacuum value: these values can be read on the "vacuum indicator" instrument.
- To suspend and / or terminate the treatment, press the switch again and pull the plug out from the power socket.
- Unscrew the jar's lid and fill the jar 1/3 full of ordinary water (this for an easy cleaning operations and an rapid reaching of the functionally vacuum) then rescrew the lid on the jar correctly.
- To extract the accessories and start with cleaning.

**WARNING:** Ensure that the filter is fitted with the Arrows at the patient side.



**WARNING:** The inside of the medical device must be regularly checked for the presence of liquids or other visible contamination (secretions). If liquids or other visible contamination are present, the medical device must be replaced immediately due to the risk of insufficient vacuum flow.

These products have been designed, tested and manufactured exclusively for "single use" and for a period of use not exceeding 24 hours unless stated below.

**WARNING:** The power supply cable plug is the element of separation from the electrical mains system: even if the units equipped with a special on / off switch button, the power supply plug must be kept accessible once the device is in use so as to allow a further method of disconnection from the mains supply system.



**WARNING:** Before using the device, check the battery power status. Before each use proceed with charging the battery. To maintain the device in good conditions, recharge the battery every 3 months (when not in use).

**Recharging operations:** to be able to charge the internal battery it is necessary to connect the universal switching adapter (mod. UE60-140429SPA1 or UES65-140429SPA1 of DONGGUAN SHILONG FUHUA ELECTRONIC CO. LTD) to the electric network for approx. 180 minutes with the main switch to position 0. The battery's autonomy when fully charged is approx. 60 minutes with continued operations.

### **Foot control (where applicable):**

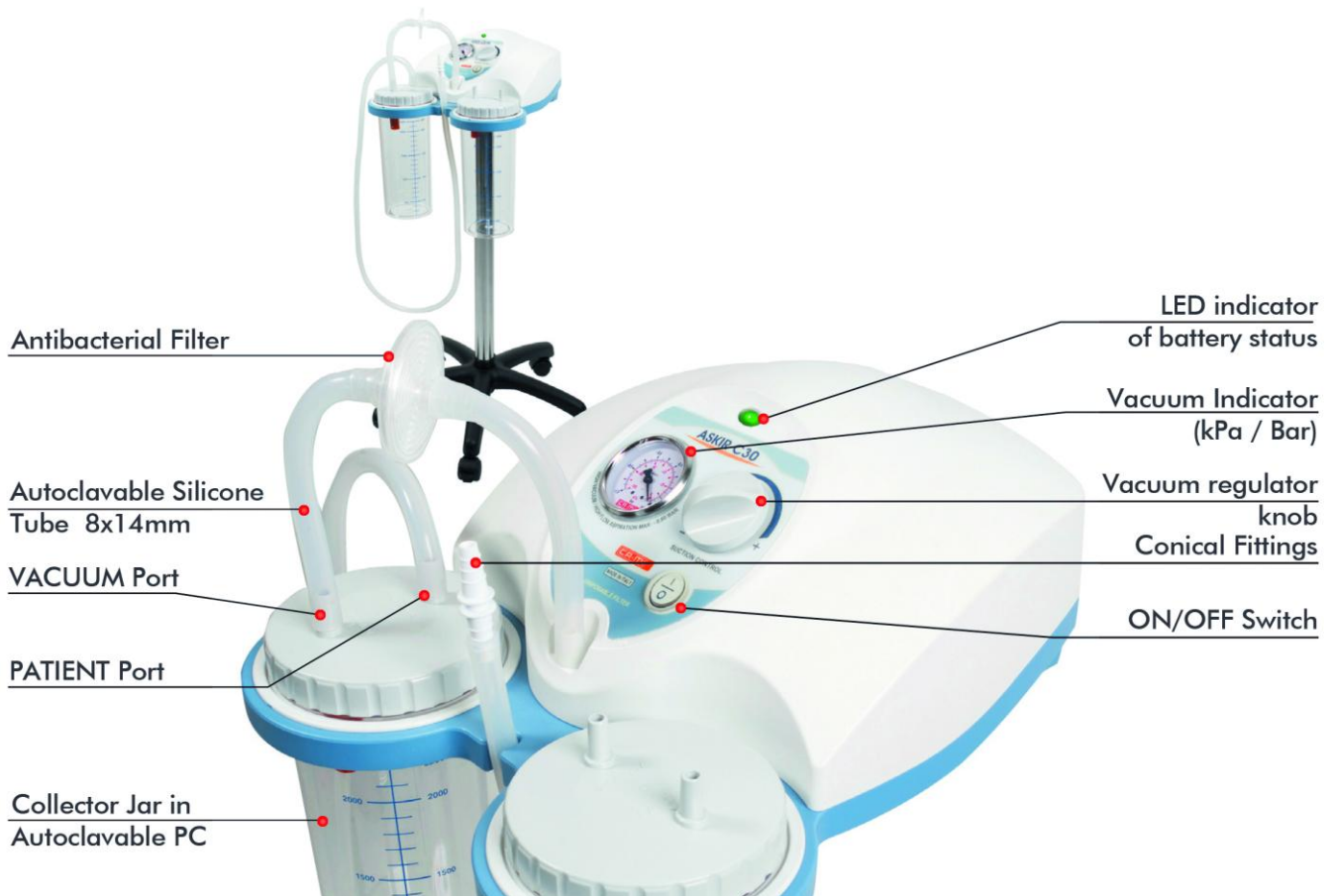
Plug the foot switch power cable into the socket marked with the label on the back of the device. The foot switch can replace the ON/OFF button for switching the machine on or off.



**TAB. I – INDICATOR LIGHTS DURING OPERATIONS**

When an external power supply (regardless of the state of the battery charger) and when the device is working (after having turned it on), the LED stays in a FIXED GREEN position.

LED Signal	Phase	Problem / Cause	Solution
Flashing Green Led	During recharge	Battery recharge running	Wait
Steady Green Led	During recharge	Recharging cycle complete	Remove power supply
Steady Red Led	During battery operation	Flat battery	Start recharging cycle <b>WARNING:</b> During this signal, you will hear a long, continuous beep (duration of sound 0.8 sec / sound frequency: every 8.5 sec, which notifies the user regarding the battery discharge.
Flashing Red Led	Device automatically turns off when the battery is flat	Battery completely flat	When the device is restarted the LED will flash red: begin the battery recharge cycle immediately
Steady Orange Led	During battery operation	Intermediate status	Guaranteed battery function / Recharge when the red LED signal comes on.



**NEVER USE THE DEVICE WITHOUT JAR AND / OR PROTECTION FILTER**

**MAKE SURE THAT CHILDREN AND/OR MENTALLY ILL PEOPLE DO NOT USE THE DEVICE WITHOUT ADULT SURVEILLANCE**

**Using FLOVAC® disposable collection system:** Before connecting the disposable collection system, remove the blu ring fitted on the tank holder for a more comfortable insertion of the same container.

- After opening the package, fully stretch the bag and then flatten it concentrically to eliminate as much air as possible.
- Insert the bag and apply the cover to an appropriately sized reusable rigid container by pressing firmly around the entire perimeter. Make sure that the system is completely sealed.
- close the connector marked as "TANDEM" with the lid provided.
- Connect the power source of the vacuum to the VACUUM port equipped with specific reusable conical fitting with "male" connection.
- Connect the patient tube to the PATIENT port of the cover
- Before use, check all closures and make sure there are no leaks, starting the aspiration source. If the bag expands to fully adhere to the walls of the rigid container and the cover bends towards the inside of the glass, the system is not leaking.
- Start the aspiration and periodically check the filling level of the container. The overflow valve will cause the interruption of aspiration if the aspirated fluids have reached the maximum filling level of the device.
- When the float valve intervenes signalling the device is too full, the suction source must be disconnected within no more than 5 minutes.

**Warning: The accidental inversion of connections may cause contamination for the operator and/or for the vacuum generation equipment.**

### WARRANTY CONDITIONS

This product is guaranteed for a period of 24 months from the date of purchase. The warranty includes the repair or replacement of defect spare parts free of charge, if the defect has been clearly described by the customer and determined by technical service. Inspections on the part of the seller, performed at the request of the customer and intended to determine whether the device is fully functional, are not covered by the free-of-charge warranty service. This service will be charged to the customer depending on the effort required. The consumables components are not subject to warranty. Consumable components are silicon tubes, filters, seals, conical adaptor and suction catheter. Also excluded from warranty is all damage resulting from improper handling, wilful damage or improper care of the device.

The warranty shall expire if repairs and servicing are not carried out by technical service.

### RULES FOR RETURNING AND REPAIRING

Before returning an instrument for repair, the external surfaces and all accessories **MUST** be carefully disinfected with a cloth soaked in methylated spirits or hypochlorite-based solution. If CA-MI finds instrument not suitable for repairing due to clear signs of internal or external contamination, the same will be returned to customer with specification of NOT REPAIRED INSTRUMENT, accompanied by an explanation letter. CA-MI will decide if contamination is due to bad functioning or misuse. If contamination is due to bad functioning,

CA-MI will substitute the instrument, only if a SALE RECEIPT and STAMPED GUARANTEE accompany the same.

CA-MI is not responsible for contaminated accessories, they will be substituted at customer's expenses.

For this reason it is **COMPULSORY** to carefully disinfect the external part of the instrument and accessories with a cloth soaked in methylated spirits or hypochlorite-based solutions. Put the instrument and accessories in a bag with indication of disinfecting. We also request to specify the kind of fault, in order to speed up repairing procedures.

To this end, please read the instructions carefully in order to avoid damaging the equipment through improper use.

Always specify the fault encountered so that CA-MI can establish whether it falls into the category of the faults covered by the guarantee.

#### DISPOSAL OF WASTE BATTERIES - (Directive 2006/66/EC)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.



At the end of their life hand the batteries over to the applicable collection points for the recycling of waste batteries.

For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

## Certificato di Garanzia / Warranty Certificate

Apparecchio tipo / Device model \_\_\_\_\_

Lotto di produzione / Lot \_\_\_\_\_ n° serie / serial number \_\_\_\_\_

Acquistato in data / Purchasing date \_\_\_\_\_

Rivenditore / Authorized Dealer \_\_\_\_\_

Via / Street \_\_\_\_\_ Località / Place \_\_\_\_\_

Venduto A / Purchased By \_\_\_\_\_

Via / Street \_\_\_\_\_ Località / Place \_\_\_\_\_

Descrizione del Difetto / Defect description \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Timbro del Rivenditore / Retailer's stamp



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