

## CERRAHİ ASPİRATÖR CİHAZI KULLANIM KILAVUZU

# SURGICAL ASPIRATOR USER MANUAL







"KULLANIMDAN ÖNCE KILAVUZU DİKKATLİCE OKUYUNUZ"

Please read this manual carefully before use

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## **GLOSSARY OF SYMBOLS**



CAUTION READ THE MANUAL





SN

DATE OF MANUFACTURE

MANUFACTURER

SERIALNUMBER

#### 1.INTENDED USE

LIFETIME Surgical Aspirator Devices are used for picking up the fluids and particles in surgical stage to a separate collection jar by the negative pressure generated with the vacuum pump.

LIFETIME Surgical Aspirator Devices are used in; operating theaters, ICUs, emergency rooms, polyclinics and clinics.

## 2.CAUTIONS

Please make sure that you have read and understand this user manual along with its cautions and descriptions before setup.

The person buying this device is responsible for the content of this manual and informing instructions to the relevant personnel.

Do not use the device for any other purpose.

The device should be operated by trained personnel.

The device should be plugged into a grounding outlet with the norms of TS3166 electrical wiring.

High Vacuum and High Flow generating device can be used in continuous or discontinuous modes.

The device's lifetime is 10 years. At the end of this time the device should be considered as "contaminated medical waste".

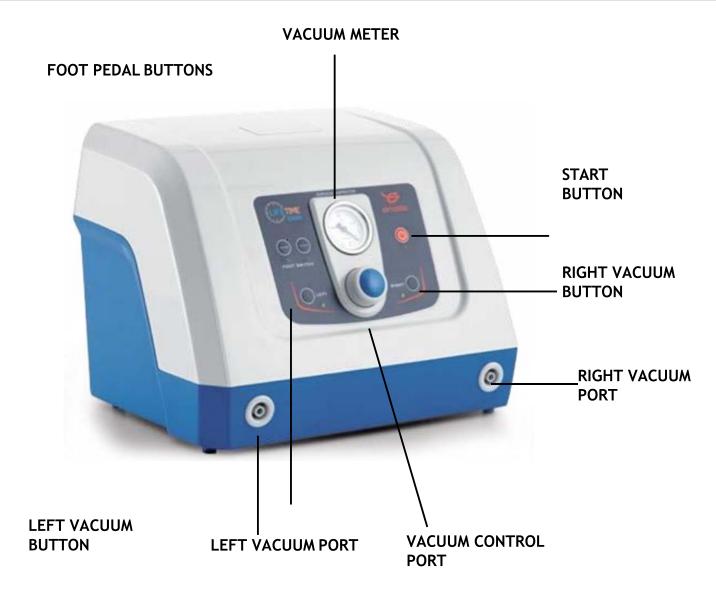
Perform periodic maintanance of the device on a regular

basis. Replace the filter after septic cases.

If hydrophobic filter is used in the device, fluid contact will stop the aspiration system. In this case, please change the filter.

Precautions should be taken at the power input against sudden voltage drops. Voltage regulator is recommended.

## 3. DEVICE DESCRIPTION



**START BUTTON** : It is used to start the vacuum pump.

**RIGHT VACUUM BUTTON**: To acticate the right vacuum port.

**LEFT VACUUM BUTTON**: To activate the left vacuum port.

RIGTH VACUUM PORT : Used for vacuum

**LEFT VACUUM PORT**: Used for vacuum

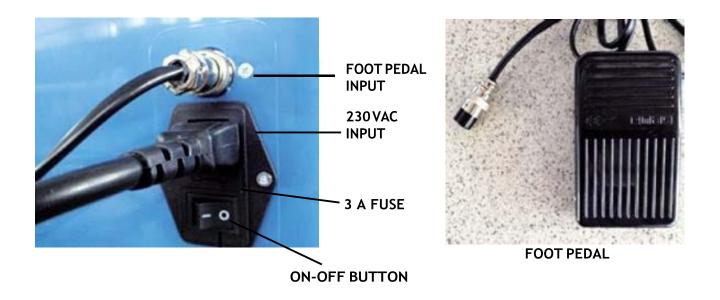
VACUUM CONTROL PORT: It is used to set the vacuum level.

**VACUUM METER** : It is used to show the vacuum flow when the

device is working.

**FOOT PEDAL BUTTONS**: It is used to control the device with foot. There

are two modes; continuous and start - stop.



FOOT PEDAL: For the use of the device with foot.

**ON-OFF BUTTON**: It is placed in the back of the device and it opens or closes

the electricity coming to device.

3 A FUSE: For device protection against electrical hazards.

**230 VAC INPUT**: 230 VAC electrical input **FOOT PEDAL INPUT**: Foot Pedal cable input

## 4. ACCESORIES

Silicone hose

Bacteria Filter

Catheter connector

Hydrophobic filter

## **5.TECHNICAL FEATURES**

INPUT VOLTAGE	230 VAC ± %10 , 50 Hz	
POWER CONSUMPTION	MAX 500 Watt	
JAR CAPACITY	□ 2•3 lt □ 2•5 lt	
FLOW ( lpm )	□   45   □   60   □   90	
VACUUM POWER ( sea level )	740 mmHg ± %5	
VACUUM GAGE TOLERANCE	± % 2,5	
COLLECTION JAR TOLERANCE	± % 10	
NOISE LEVEL	< 50 dB	
PUMP TYPE	OIL-FREE PISTON TYPE	

#### **6.SETUP AND CONTROLS**

Open the box and take out the device and other accessories from the box. Check for any damages that can be occured during transport. Please refer to the related sales point.

If your device is w/ trolley model, assemble the trolley with the screws provided. Please mount the jars to the device with the holding apparatus. Be sure to make the hose connections.

Please check the following controls in the first setup and before each use;

- Check to see if there is any cracks on the jarlid that will lead to an air leakage.
- Check the jar lid and overflow protection system.
- Make sure the jarlid seal is connected to the jarlid and jarlid is correctly connected to the jar.
- Make sure the jars are correctly mounted to the device.
- Check if there is any wearing, hole etc. on the aspiration hose.
- Check for any damages on the electrical cable. Do not use damaged electrical cables.
- Turn on the ON/OFF button in the back of the device
- Press Start button to run the vacuum pump.
- Check the vacuum gauge by blocking the suction port.

## 7. APPLICATION

Plug-in the electric cord of the device to the grounding plug.

Turn on the OFF/ON button of the device located at the back.

Switching on the device, either the right or the left vacuum buttons of the device illuminates.

Decide which vacuum port right or left one you want to use.

After the selection of right or left port for suction press on START button, the device starts running.

You can change the suction port by pressing either right or left vacuum button when the device is running. To stop the vacuum please press START button once again.

#### 7.1. Application of optional Foot Pedal feature.

Press the foot pedal when the device is in stop position to activate this feature. Then press START button to start vacuum pump.

The Foot Pedal has two alternative applications, staccato and continuous. One can select the application as desired.

#### 7.2. Setting the vacuum levels.

The vacuum adjustment system is available in the device. This helps you to use the device in the desired vacuum value. To make the adjustment please run the device by pressing START button and the vacuum pump will be activated. Please read the vacuum gauge after closing the tip of the suction port. Adjust the setting to desired value using the vacuum control port.

#### 7.3. Evacuation of Collection Jars

During the use of the device please control the waste accumulated in the collection jar in regularly. The collected waste level should not exceed the 'Maximum' level mark on the jar. To evacuate the collection jar;

Turn off the device and remove the input-output hoses from the collection jar lid. Take off the collection jar by holding it up. Open the lid of the collection jar after taking it outside the clinic. Consider the collected waste liquid inside the collection jar as "contaminated medical waste" and always evacuate carefully outside clinical zone. Please subject the discharged collection jar disinfection treatment. Cover the lid and be sure that it has been closed tightly otherwise, leakage will occur between the collection jar and it will reduce device's vacuum performance.

This instruction should strictly be followed to avoid overflow of the waste liquid and drop into the pump during evacuation process. Otherwise, the performance of the device will reduce but this will cause pump breakdown which will shorten the life of the device.

#### 8. SAFETY SYSTEMS

- 1. Float System: it's located under the collection jar lid. If the accumulated waste exceeds the maximum level in the jar and the evacuation does not take place then the float system actuated and protect the vacuum pump from waste. When this system is activated, the device stops working and the jar do not collect excess waste.
- **2. Bacteria Filter:** It's mounted on the hose between the device and the collection jar. Filter the air vacuumed from collection jar towards the device and helps to dispose clean air to the environment. At the end of its life the filter is blocked and the devices can't perform suction. Filter should be replaced with a new one.
- **3. Hydrophobic Filter:** This is an optional system mounted on the hose in between the device and the collection jar. It filters the air vacuumed from collection jar toward the device and helps to dispose clear air to the environment. At the end of its life the filter is blocked and the devices can't perform suction. Filter should be replaced with a new one. It also prevents to escape of waste to the device from the collection jar.

## 9. REQUISITES DURING APPLICATION

To avoid misuse and applications which may harm the patient, user or device below guidelines should be strictly followed.

Prevent any damage for the power cord.

Please control robustness of the power cord before each use.

Do not use damaged power cords. Use the device by plugging definitely in a grounded powersocket.

Do not use too long (more than 2 meters) aspiration tube. Increase of aspiration tube length may cause low vacuum level.

Avoid applying any weight or force on the aspiration hose that will cause the hose to become clogged.

Please use clean aspiration hose and collection jar each time. In case of emergency please keep enough collection jars and aspiration hose in reserve. At the end of the use theOFF/ONswitchlocatedatthebackofthedeviceshouldbeturned off.

Do not use the device near explosives or in Oxygen-rich environment. Otherwise, it may cause the danger of explosion or fire.

Perform the periodic maintenance of the device regularly by authorized personnel.

Do not run the device once the waste level reaches to the maximum before discharge the collection jar.

Do not use the device for the purpose other than described in this manual

#### 10. MAINTENANCE AND CLEANING

Please be sure that the device has been switched off and the power cord has been unplugged before proceed for maintenance and cleaning of the device. Wear protective gloves during this procedure.

#### 10.1 CLEANING OF THE DEVICE

Each time before using the device disinfect the outer surface of the device, collection jars and lids using medical disinfectant. The disinfectant should be used as per its own operating instructions.

#### 10.2. STERILIZATION

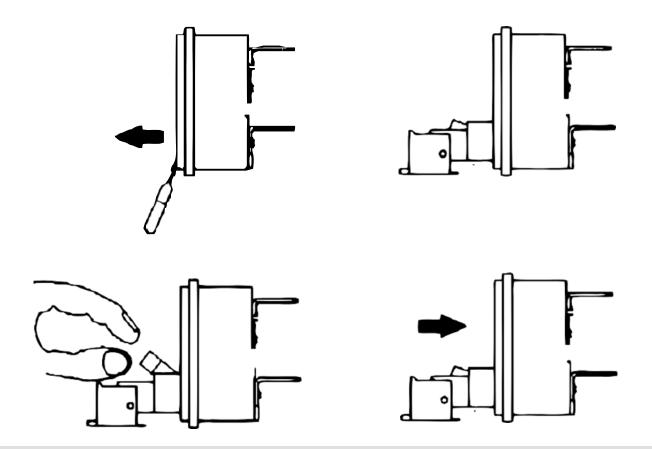
The collection jars of the device can be autoclaved at 120°C after discharging the collected waste and cleaning the jars.

#### 10.3. CHANGE OF FILTER

Replace the bacteria filters and the hydrophobic filters used in the device with new ones when soiled or obstructing the vacuum process.

## 11. CHANGING THEFUSE

Unplug the power cord of the device from the plug socket and pull off the fuse cover located below the input power socket using a screwdriver. Remove the defective fuse and replace with a new one. Cover the fuse by pushing it off.

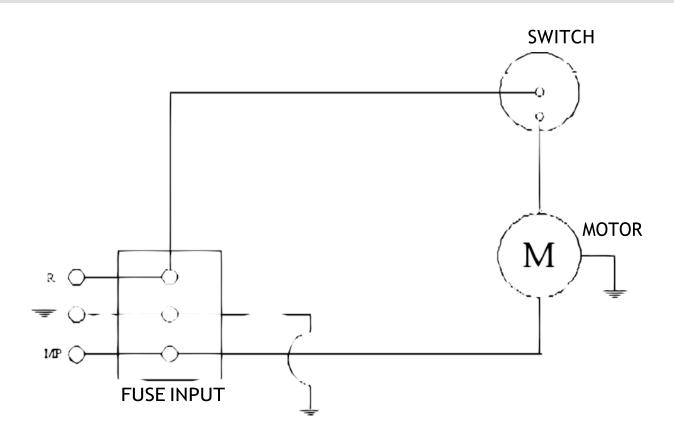


## 12. TROUBLESHOOTING

When there is malfunctioning in the device use the table below. If you encounter with a breakdown not mentioned in the table please contact an authorized technic service.

FAULT	CAUSE	SOLUTION
Motor is not running	No power in the motor Power cord is disconnected Faulty motor	Check the fuse of the device check the power cord and the plug contact an authorized technic service
Motor running, signal lamps are notlighting	Faulty signal lamps	Contact an authorized technic service
Motor running, low vacuum value	Dirty Filters Filtershasbeen clogged Collection jar filled up Lids of the jars not placed pro- perly Faulty vacuum meter	Replace the filters Discharge the waste from the jar Check the lids Contact an authorized technic service
Abnormal sound from the device	Faulty motor Worn-out motor vibration dampers Waste entered into the motor	Contact authorized technic service
The device doesn't move freely	Faulty castors	Contact Authorized technic service

## 13. ELECTRICAL CIRCUIT DIAGRAM



## 14. HANDLING AND STORAGE

The device and accessories must be transported in its original box. If you have no original box please make a suitable package using Styrofoam and carton box to prevent damage during transport of the device. The device should not be turned upside down during transport. Please act in accordance with the instructions contained on the box of the device during transportation. Store the device at normal room condition.

#### 15. WARRANTY TERMS

- ${\bf 1.} \ Warranty period (2 years) starts from the date of delivery of the good stocus to mers.$
- **2.** If the device fails within warranty period, the time spent in repairing is added to the warranty period. The repair period is maximum 30 working days
  - **3.** If you have a complaint, please send the complete device to your specialist dealer or send it to us in the original packaging, postage paid including warranty certificate inside with the specialist dealers stamp.
  - **4.** Damages arising from improper use of the device are not covered by this warranty
  - **5.** This warranty will be invalidated if the device is interfered with by unauthorised persons
  - **6.** Malfunction from not following the instructions in the manual are not covered by the warranty.
- 7. This warranty is valid only if all the conditions stated herein are read and accepted.
  - 8. Consumable parts are not covered under warranty

## 16. COPYRIGHT

This document has been issued by ELMASLAR TIBBI CIHAZ IMALAT A.S. and reserves the right to make changes to product specifications. No part of this publication may be reproduced or copied without written permission of the company.

## 17. CERTIFICATES

ISO 9001, ISO 13485, CE

## 18. MANUFACTURER COMPANY INFORMATION

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