



Multipurpose Suction

Multi-vac

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Dear Customer

We thank you for your selectivity and trust in purchasing domestically produced products, and we are pleased that after continuous efforts, we have been able to manufacture Multi-Vac device and put it at your disposal.

This product has been designed by our technical and engineering team of experienced and committed people in the fields of mechanical, electronics and computer engineering, and by utilizing updated technology and building upon 25 years of experience in manufacturing dental equipment, this product has reached production of export index quality.

In designing the product, three principles of accuracy, reliability and safety performance and also user friendly have been considered, so in order to correctly and completely utilize product features, we ask you to read the instruction manual carefully and if you have any questions or you need more information, contact the after-sales unit.

The instruction manual is a comprehensive reference for the efficient and safe use of the product. Following the instructions of this manual has a great role in reducing consumable costs, avoiding risks and ultimately increasing product life. The instruction manual should always be kept near the product and the user should periodically read it.

Please impart us with your constructive guidance, so that we can benefit from your comments, recommendations, and gain knowledge about your needs.

**We hope that you will find using Multi Vac to be an enjoyable and successful experience,
Polaris Engineering and Manufacturing**



Multi VAC

Introduction

(1-1) How to use the manual

This manual presents the instructions about use, installation, and maintenance of Multi vac device made by Polaris Co. It should be noted that:

- The product should be used according to the instructions of this manual. Thus, all parts of it should be read carefully before starting and installing the tool. Special attention should be paid to the highlighted parts. (refer to section 2-1).
- Observing the instruction manual assures the health and safe operation of the tool.
- Manual is an integral part of the product. Thus, it should always come with the product and should be used optimally as a reference for use during the operation of the product. It should be available even during the sale of the product, or even when it is not used.
- In case of losing or damaging the manual, get a replacement one from the after-sales service department of Polaris Co.

The following are explained in detail in this manual:

- Installation and start-up of the product
- Operation details of the product and its parts
- Maintenance program
- Primary safety and preventive details

(1-2) Terminology and signs

Knowledge of signs meanings is of great importance. A list of signs has been introduced in the following for initial recognition and reference if necessary.



Danger!

Indicates compulsory warnings.



Warning!

Indicates functional recommendations.



Forbidden!

Indicates forbidden activities.



Caution!

Refers to user instructions of the tool.



General Information

(2-1) Company liabilities

Polaris is not liable for any problem involving the following: Failure to follow the instructions of this manual (incorrect use of the product), repair by an unauthorized person and part replacement without coordination with the after-sales service department, failure due to power fluctuations.

(2-2) Guarantee

Guarantee of this product includes repairs, supply, and replacement. If used appropriately, the guarantee of Polaris Co, covers all main parts of the device for 18 month.

Following cases and parts are not covered by guarantee:



- power fluctuations
- incorrect transportation of device
- inappropriate and frequent use of device despite having obvious flaws
- not observing the maintenance instructions
- installation by unauthorized persons
- any repair or replacement by unauthorized persons.
- power cable and keys
- suction pipes and button



Commutation fees of company representatives to install or repair during guarantee period will be received from buyer at site.



Before completing the installation and ensuring the accuracy of the protective components, the device is not ready to use.



It is strongly recommended that before using the device, user gain a relative knowledge about the contents of this book.

General Information

- Authorized representatives of Polaris Co.
These persons are endorsed by the company to work on the device under any operational circumstances. They are also authorized to do any electrical and mechanical adjustment/repair, maintenance program and authorized parts replacement.



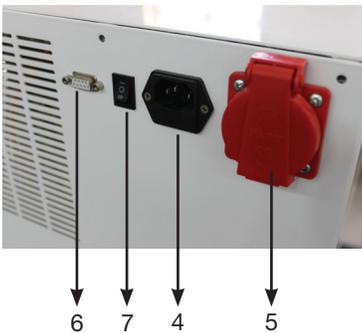
Multi VAC

Production Introduction

(3-1) Main parts

- a Front of the device
 - 1.Green zero and one button
 - 2.Rectangular automatic button
 - 3.Suction control volume

- b Device lateral parts (right side)
 - 4.Main electricity inlet jack
 - 5.Connection socket to other devices
 - 6.SSR port in order to connect to CAD CAM device
 - 7.Three mode suction adjustment button





Multi VAC

Technical Features

(4-1) Technical features and operation rules of device

Polaris Co. products are manufactured based on the latest technologies and are of the highest qualities. The most recent design and manufacturing methods are employed to increase the lifetime and quality of products.

(4-2) Technical details

Technical specifications of the Multi-Vac are given in Table 1:

210-240V AC 50/60 Hz	Power supply
1200 W	Max power
675 mm	Device height
310 mm	Device width
390 mm	Device depth
29 Kg	Net weight

Table 1 The device technical specifications

Part	Number
proboscis	1
suction bag	1
electricity cable	1

Table 2 A list of product accessories

(4-3) Customers demand

Part	Number
3-way junction	-
Duct	-
Duct convertor	-



Multi VAC

**Transportation and
installation**

In order to avoid accidents, it is really important to follow the following instructions during the installation and fixing of equipment. All steps are explained in detail:

(5-1) Unboxing

Having received the device, make sure that the main box is sealed and intact. Otherwise, inform the after-sales service department of Polaris Co, or its authorized representatives.

(5-2) How to move the device

The device should be moved as follows:

- 1 In order to move the device, carefully place it in the box.
- 2 Unplug it from the power source
- 3 The device should remain in a vertical position during movement. For more safety and prevention of any injury due to neglecting the technical details, refer to section 4-1.



Failure to comply with any of the stated activities, will damage the device and Polaris Co will have no responsibility.

(5-3) environmental circumstances

It is important to choose an appropriate environment during installation and operation for personal safety, correct operation and long lifetime. This environment should be big enough, have enough light, proper ventilation and the device should be kept away from dust and direct sunlight. It should be noted that the device must be placed in a way, so that the connections could be managed easily.

Workplace temperature: 0-40°C

Maximum humidity: 75%



The device should not be used in a place where there is danger of explosion or firing

The light of the place should be high enough so that all parts of the device can be seen clearly.



The device should never be exposed directly to sunlight or humidity of rain, etc.

The following should be done before using the device:
1. Plug the device into the outlet after input power are checked (device working voltage is based on AC 220 electricity).

2. It is recommended that your electronic system has earth connection.

3. Avoid putting the device indoors like cabinets, closets or ...

(5-4) device installation



Urban single-phase power source must be complied with the specifications of the device power supply

1. Get the device out of its box carefully. To do so, take out all the protective material (Plastofoms) around it, take out the Multi-Vac, and put it on a flat and standard laboratory table in a way that the space within 25 cm radius of the device is empty. Make sure that the surface and legs of the table are not made of metal.
2. Multi-Vac should not be exposed to sunlight directly.
3. An appropriate cord should be used to connect the device to its nearby power supply.
4. An electrical protector must be put on the way of the socket by the user, so overload or indirect currents don't have contact with the protective parts of the device.

(6-1) device initiation

Before using the device, put it on a firm, flat and stable surface and follow these steps:

1. Open the device package carefully
2. Place the device in a space away from oscillation and thermal source.
3. To work with this device, air conditioning is necessary.
4. Plug the device into 220 V electricity.
5. Place the device on a smooth surface according to part (4-5).
6. Plug the device and make sure that the device is plugged according to part (4-5).

(6-2) Device full operation

- 1 Put the On-Off button on On mode.
2. Choose the mode of the device with the two-mode button (Auto-Manual).



If the device is on manual mode it will stay on constantly and the suction pressure volume will go higher and lower with the volume in front of the device.



If the device is on Auto mode, the power of the device will be determined according to the type of the three-mode key.

Three-mode button description:

This button has three modes: 0, I and II

I states the lowest power (lower than 15 W)

0 states ordinary power (400-200 W)

II states the highest power (more than 400 W)

connection to more than 400 W will damage the device

In this mode, you can adjust the suction power by the volume gauge behind the device.

3. The socket is on the right side of the device and has a cap and its purpose is for connection to other devices



Caution: If your workload is high, change the evacuation bag monthly.



Multi VAC

Safety

(7-1) general safety

Users are required to read and always follow the listed suggestions and warnings here; following these instructions will assure a long-term, flawless operation for the product.

- Only authorized personnel from Polaris who have been trained to use this device may use it.



Make sure that all parts of the device are installed correctly before using the machine, make sure of the installation accuracy of all components of the device before using the device.



Never use a device with malfunctioning. Never use a defected device.



You are not allowed to use the accessories of the device, In case of facing with any malfunctioning in them. If so, performance of the product will face some problems and the device will be out of warranty. Therefore, before using, make sure of the of the accessories safety. never use the device if its accessories are defected.

- The place should be clean and well-lit and free of obstacles.
- If you see any flaws in the device operation, stop operating the device immediately, unplug it, and call the after-sales service department of Polaris Co and inform them.
- Never disassemble the electrical or pneumatic parts.
- Never replace the power supply or parts which are directly related to the plug.
- Operation of this device for applications other than

those mentioned is forbidden.

- Make sure the device is disconnected from the main sockets before cleaning.
- Never use benzene or combustible solutions for cleaning the device. Use noncorrosive, noncombustible and nontoxic materials.

(7-2) Device safety measures

Polaris Co. makes use of high-quality raw materials for advanced production processes to promote the safety level.

Quality control is performed in three stages of input, middle control, and final control through several control stations, a procedure which minimizes error and defects chances.

1. Make sure that the device is sealed and does not have any leakage.
2. In order to increase device safety, Polaris company has designed a Service light (yellow). Being on means that the suction bag is full or there is a disorder in suction tube (refer to maintenance part for more details).
3. In case the bag is full it should be changed.



Multi VAC

Maintenance

(8-1) Clean-Up

Keep the device body clean using a dry cloth. Wet the cloth with little water or a non-greasy solution, if needed (only do this for body cleaning).

Users should make sure the device is kept clean and free of dust water and other unexpected solutions.

Cleaning should be done at the end of each operation and when the device is on OFF mode and stable

If the user decides that the internal parts need cleaning, he/she should contact the after-sales service department.



Put the main button on the off position before cleaning external parts of the device. It is forbidden to clean the device while it is plugged.



Never use combustible, corrosive, base or toxic solutions for cleaning the device.



You should wear goggles and masks when using compressed air. When doing this, No one should be allowed to stand near the device since there is a danger of getting hurt by suspended particles.

(8-2) periodic maintenance

Inspection and periodic cleaning of the device depends on the operation level. It is suggested for the user to inform the company experts about the workflow through consultation after installation and learn the appropriate time for an inspection and periodic cleaning from them. If the user detects any damage or exhaustion during periodic inspections, he/she should contact the after-sales department, so that measures are taken for maintenance and compulsory service.

Periodic service should be determined by the user and is performed by the after-sales service department. It is suggested that the maximum time interval for periodic repairs be 12 months.

If a user detects any defects or problems on the device, he/she should place a warning sign on the device to indicate that it is being maintained and it should not be used (EC warning signs can be purchased at the associated stores).

Cleaning, periodic maintenance and appropriate use of the device are important factors in lifetime and safety of it.



When any defect is seen in the device operation, it is forbidden to use the device before solving that defect.



Safety and protective parts of the device should never be removed from the device unless for repair and maintenance purposes.

(8-3) Maintenance technical instructions:

Suction bag replacement

In the case of the service light being on, you must replace the suction bag. In order to replace the suction bag, you must follow these steps:

1. Open the front of the device (you can pull the door from left)
2. Remove the suction bag container.
3. Open container locks.
4. Remove the bag from the container.
5. Replace the bag and close the container lock.



It is forbidden to use the device before solving the defect which has occurred



Safety and protective parts of the device should never be removed from the device unless for repair and maintenance purposes.

6. Close the MDF door in front of the device.

Thanks for your selectivity
Polaris Engineering and Manufacturing

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