



# VetPro® 1000 Mobile Dental Delivery System



# For Models:

8000-001 8000-002 8000-003 8000-004

8000-005 8000-006 8000-007 8000-008

( (

003-1879-00 Rev N (7/12)



# **Product Information**

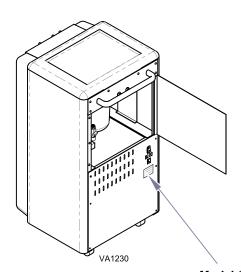
(The information below is required when calling for service.)

Dealer:

Date of Purchase:

Model / Serial Number:

Midmark Authorized Service Company:



Model / Serial Number Location



# **Table of Contents**

Important Information	
Safety Symbols	4
Intended Use	5
Electromagnetic Interference	5
<u>Disposal of Equipment</u>	5
Authorized CE Representative	5
<u>Transportation / Storage / Operating Conditions</u>	5
Transport	
Transporting Dental System	6
Operation	
Electrical System	7
Water System	8
Air System	9
Delivery System.	10
Handpiece Care	11
Syringe Tip Replacement & Handpeice Installation	12
Drive Air Adjustment & Locking Casters	13
Air Pressure Regulator & Water Flow Adjustment	14
Coolant Air Adjustment	15
Cleaning / Maintenance	
Cleaning	16
Maintenance	
Calling for Service	
- m	
Specifications	
<u>Drawing</u>	
Weights / Dimensions	
<u>Electrical</u>	
Model Identification / Compliance Chart	26
Warranty	
Warranty Information	27

For installation information go to: <u>Technical Library at Midmark.com</u>



# Important Information

# Safety Symbols



#### WARNING

Indicates a potentially hazardous situation which could result in serious injury.

**Caution** 

Indicates a potentially hazardous situation which may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**Equipment Alert** 

Indicates a potentially hazardous situation which could result in equipment damage if not avoided.

#### Note

Amplifies a procedure, practice, or condition.



Proper Shipping Orientation



Handle With Care



Type B, Applied Part



Maximum stacking height (Do not stack)



Humidity Limit



Type BF, Applied Part



Fragile



Fuse Rating Specifications



Protective Earth Ground



Keep Dry



Pressure Limit



LED Scaler Handpiece Duty Cycle



Refer to Instruction Manual/Booklet



Temperature Limit



TUV - Domestic Models Only



Do Not Tumble



### Intended Use

The Midmark® VetPro® 1000 is a mobile dental delivery system intended to give qualified veterinarians and/or technicians a self-contained, compact, portable unit for performing veterinary dental procedures.

# Electromagnetic Interference

This product is designed and built to minimize electromagnetic interference with other devices. However, if interference is noticed between another device and this cart:

- · Remove interfering device from room
- · Plug cart into an isolated circuit
- Increase separation between Midmark product and interfering device
- · Contact Midmark if interference persists

# Disposal of Equipment

At the end of product life, the unit(s), accessories, and other consumable goods may be contaminated from normal use. Consult local codes and ordinances for proper disposal of equipment and other consumable goods.

# Authorized CE Representative

Countries in the EEC should direct all questions, incidents, and complaints to Midmark's Authorized CE representative listed below:

Midmark Europe SAS 22, Rue De St. Denis 53500 Ernee, FRANCE

Phone: 33 2 430 517 76 Fax: 33 2 430 569 10

# Transportation / Storage / Operating Conditions

Transportation / Storage Temperature Range:	23°F to 100°F (-5°C to 38°C)
Operating Temperature Range:	50°F to 104°F (+10°C to +40°C)
Transportation / Storage Relative Humidity:	
Operating Relative Humidity:	
	50 kPA (7.2 psi) to 106 kPA (15.3 psi)
	700 hPA (20 in Hg) to 1060 hPA (31 in Hg)



# **Transport**

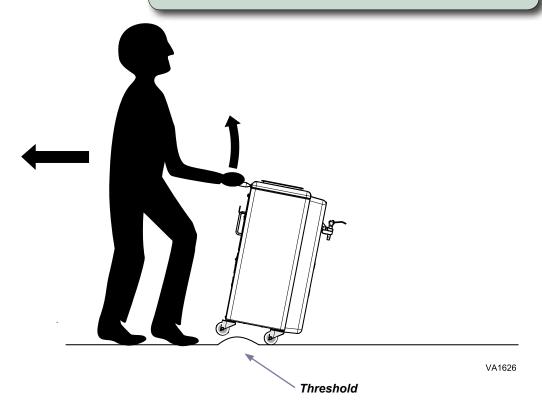


### **WARNING**

Exercise care when transporting over thresholds and other low lying objects. Failure to do so can lead to injury.

When transporting over large thresholds or steps...

A) Pull cart up and over onto level surface.



6



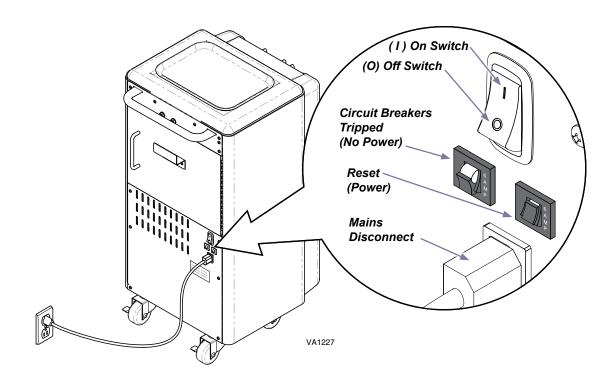
# Electrical System

#### On/Off Switch

On/Off Switch is located on the back of the cart. It controls the main power source and must be ON to operate the delivery system.

### Circuit Breakers

There are two circuit breakers located on the lower back panel of the cart. If the unit's maximum load is exceeded, the circuit breakers interrupt power to the unit. Maximum load is 115 VAC, 6 amps (domestic) 230 VAC, 3 amps (export).



#### Mains Disconnect

Power can be terminated by unplugging the mains disconnect or turning switch off.



# Water System

## Caution

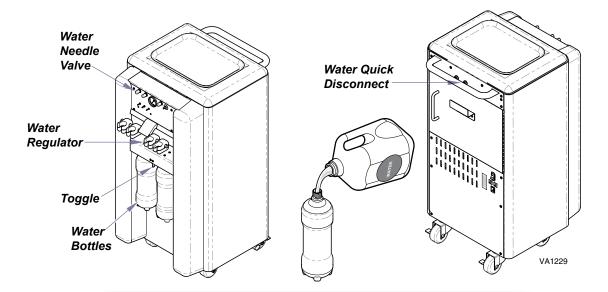
#### Water Bottles

Failure to properly seal water bottles can lead to patient injury.

The unit has two 1 liter bottles. The water bottles supply water to the handpieces, air/water syringe and a quick disconnect on the back of the cart. Air flows through the water regulator and the toggle switch to the water bottles. The water system is regulated to 40 PSI. Use the water needle valve to adjust water flow for each instrument. The toggle switch between the water bottles that controls which bottle will supply the water. When the toggle is in the center neither water bottle is pressurized. Move the toggle toward the left to pressurize the left bottle and depressurize the right bottle. Toggle to the right to pressurize the right bottle and depressurize the left bottle.

#### Water Quick Disconnect

The water quick disconnect has a blue ring. You can attach accessories to the cart that will utilize the water from the cart. You may need to add a regulator if attaching equipment that can not handle 40 PSI.



### To fill water bottles ...

- A) Move toggle to center.
- B) Remove water bottle and fill. (Distilled Water Is Recommended)
- C) Replace water bottle and move toggle toward filled water bottle.

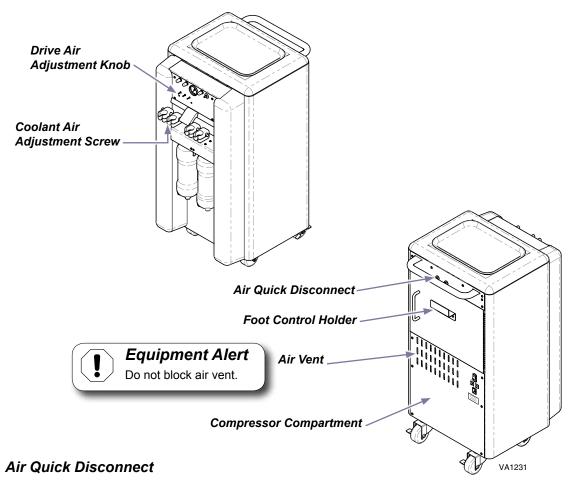
Note: Water bottles should be checked in between each patient and filled if necessary.



# Air System

### Compressor

The air system is a 1/3 HP compressor with a 2 liter air tank and regulator. It supplies air for the handpieces, air/water syringe, and a quick disconnect on the back of the cart. The compressor will cycle between 70 to 100 PSI. The regulator is factory set at 65 PSI.



The air quick disconnect has a red ring. You can attach accessories to the cart that will utilize the air from the cart. You may need to add a regulator if attaching equipment that can not handle 100 PSI.



# **Delivery System**

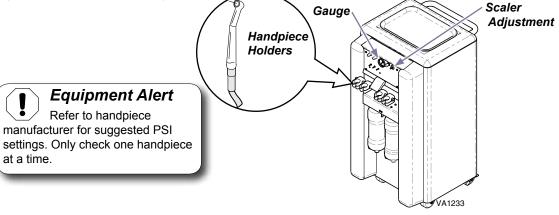
# **I**

### Caution

Handpieces and Syringe Tip should be changed or disinfected between each patient.

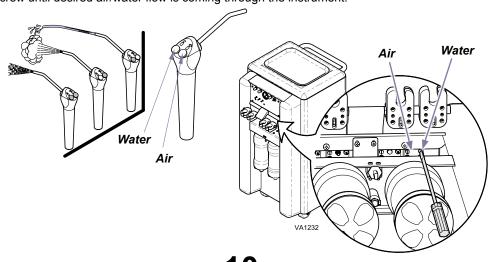
# **Handpieces**

The delivery system controls up to four handpieces. The handpiece pressure is controlled by handpiece drive air adjustment valves. The gauge on front of the delivery system indicates the handpiece pressure. Handpiece pressure should not exceed 60 PSI under normal operation. The scaler tool (optional) has an adjustment knob for the intensity level.



## Air/Water Syringe

There are air and water buttons on top of the syringe. When both buttons are depressed you will get a mist of both water and air. Air and water adjustments are located under the syringe holder. Insert flat head screwdriver into adjustment screw(s). Counter-Clockwise to increase flow and Clockwise to decrease flow. Turn screw until desired air/water flow is coming through the instrument.

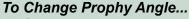




# **Prophy Angle Replacement**

### Prophy Angle





- A) Rotate chuck to the right to unlock.
- B) Install Prophy angle, turn chuck release ring left to tighten.

# **Burr Replacement**

# To Change Bur in High Speed Handpiece...

- A) Push button on back of handpiece and pull the bur out.
- B) Push bur into handpiece. (The shank will only go in half-way)
- C) Then push button on back of handpiece and push the bur in until shank is all the way in.

Note: Friction grip burs (FG Style) are designed so that the entire straight portion of the shaft should be inside the chuck of the handpiece. You should only see the tapered portion of the bur if installed properly. New bur recommended for each procedure.







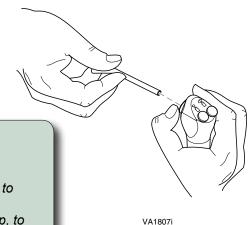
This Portion of the Bur Should be Inside the Handpiece

VA1546

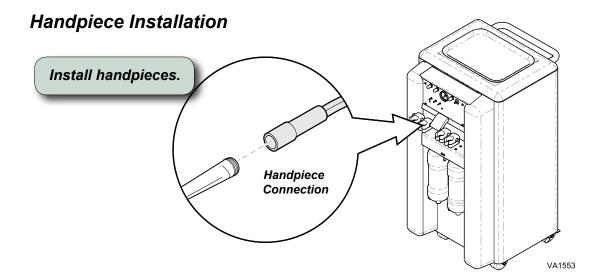
11



# Syringe Tip Replacement



- To Change Syring Tip...
- A) Press down on large collar.
- B) When a soft "click is felt pull tip straight out.
- C) Hold collar down and insert new tip. Be sure to press it all the way in, then release collar.
- D) Test the installation by giving a firm pull on tip, to assure it is inserted all the way and locked in place.



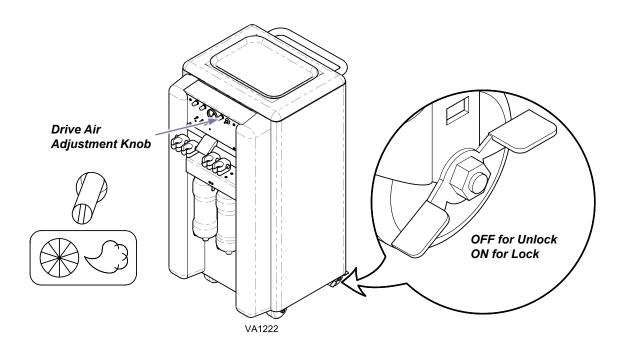
12



# Drive Air Adjustment & Locking Casters

# To adjust drive air...

Insert flat head screwdriver into knob for Drive Air Adjustment (for desired handpiece). Turn knob until proper air pressure displays on the pressure gauge.





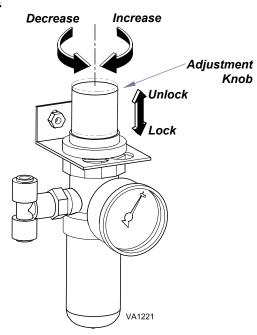
# Air Pressure Regulator Adjustment



EQUIPMENT ALERT
Do not adjust regulator over
65 PSI.

### To Adjust Regulator...

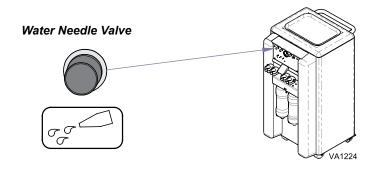
- A) Pull adjustment knob upward to unlock.
- B) Rotate adjustment knob clockwise to increase pressure, counterclockwise to decrease pressure.
- C) Push adjustment knob downward to lock.



# Water Flow Adjustment

### To adjust water flow...

Rotate Water Needle Valve (for desired handpiece) until desired flow is achieved.



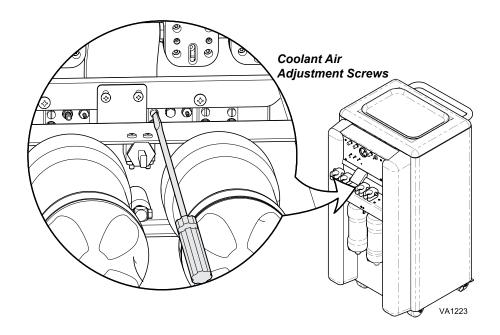


# Coolant Air Adjustment

# To adjust coolant air...

Insert flat head screwdriver into knob for Coolant Air Adjustment (for desired handpiece). Counter-Clockwise to increase flow and Clockwise to decrease flow. Turn screw until desired air pressure is coming through the instrument.

Note: Drive air adjustment screws are located below tool holders for each instrument.



15

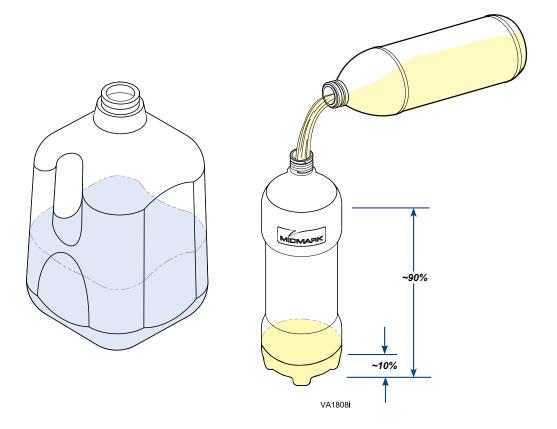


# Cleaning

- Use cleaners that are appropriate for the situation, such as warm water and mild detergents, or a 10% solution of bleach with 90% water.
- Clean the exterior surfaces with a clean, lint free cloth, dampened with disinfectant. Do not drip any liquid into open vents, plugs or connectors. Dry the surfaces with a clean cloth or paper towel.
- After cleaning, visually inspect the product for deterioration of covers. Do not use the delivery system if excessive discoloration, cracking, or other signs of wear are noticeable (See Calling for Service instructions).

#### Note:

Use only 5.25% Bleach Solution. Do not use bleach with scents, color guards, or other additives. Mix fresh every day.





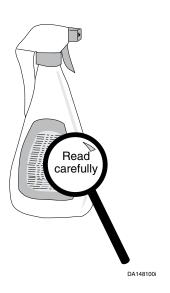
# Cleaning continued...

#### Note

Every veterinary practice setting is different and no one disinfectant is the best choice for every facility. There are several organizations educated in disinfection procedures. Refer to web sites of accredited sources that can assist veterinary personnel in choosing what is best for their practice. Listed below are a few of the sites.

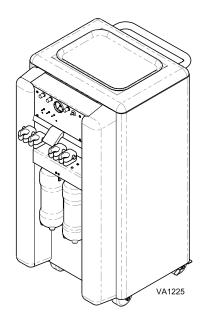
Organization for Safety & Asepsis Procedures http://www.osap.org

Dept. of Health & Human Resources Centers for Disease Control & Prevention (CDC) http://www.cdc.gov



# When using disinfectants...

- Carefully read the product label and directions for use.
- Do not exceed the dilution rate.





# **Equipment Alert**

Refer to handpiece manufacturer for suggested cleaning procedures.

O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O
 O



# Maintenance

### At the beginning of each work day ...

- Fill water bottles with fresh distilled water.
- Flush handpieces.

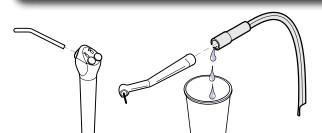
#### Note

Distilled water is not mandatory. However, water must meet requirements for drinking.

# To Flush Delivery System..

- A) Remove all handpieces that use water.
- B) Open water needle valve.
- C) Hold end of tubing over a container and depress foot control.
- D) Allow water to run 20 to 30 seconds.
- E) Install newly disinfected handpieces and syringe tip.
- F) Refill water bottle.













# Between each patient...

- Remove disposable tips, instruments, etc..
- Flush delivery system.
- Disinfect handpieces and scaler per manufacturers instructions.
- Disinfect syringe tip.
- Fill water bottles

# **Equipment Alert**

HANDPIECE STERILIZATION
Between each procedure complete
manufacture's instructions for "Infection Control /
Sterilization found in the documentation included
with the handpieces. Failure to do this will cause
premature failure of handpieces.

### **Equipment Alert**

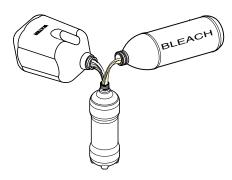
AUTOCLAVABLE SYRINGE TIP STERILIZATION

The autoclavable syringe tips supplied with the delivery system must be sterilized prior to use with each patient, including initial use. Be sure to thoroughly rinse and clean syringe tips prior to sterilization, any debris may reduce the effectiveness of the sterilization. Recommended sterilization process is steam autoclave. Recommended parameters are 125°C (250°F) and 106 kPa (15 PSI) for 40 minutes at temperature and pressure.



### At the end of each day...

- Bleach flush delivery system and empty water system.
- Drain air regulator.
- Drain condensation from air tank.
- · Clean system.





#### **EQUIPMENT ALERT**

Do not use colored/scented bleach, or concentrations greater than recommended. Do not leave bleach solution in delivery system longer than 30 minutes, it could damage the delivery system.

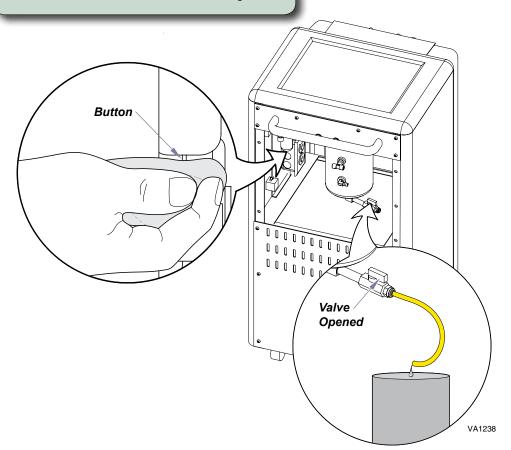
# To Bleach Flush Delivery System..

- A) Remove all handpieces that use water.
- B) Remove water bottles and fill with 9 parts water and 1 part bleach.
- C) Open water needle valve.
- D) Hold end of tubing over a container and depress foot control.
- E) Allow water to run 20 to 30 seconds.
- F) Leave bleach solution in delivery system for 10 20 minutes, then remove / empty / rinse water bottles.
- G) Fill water bottles with fresh water and repeat steps C thru E until bleach odor is gone.
- H) Install newly disinfected handpieces and syringe tip.
- I) Empty water bottles.



# To Drain Air Regulator...

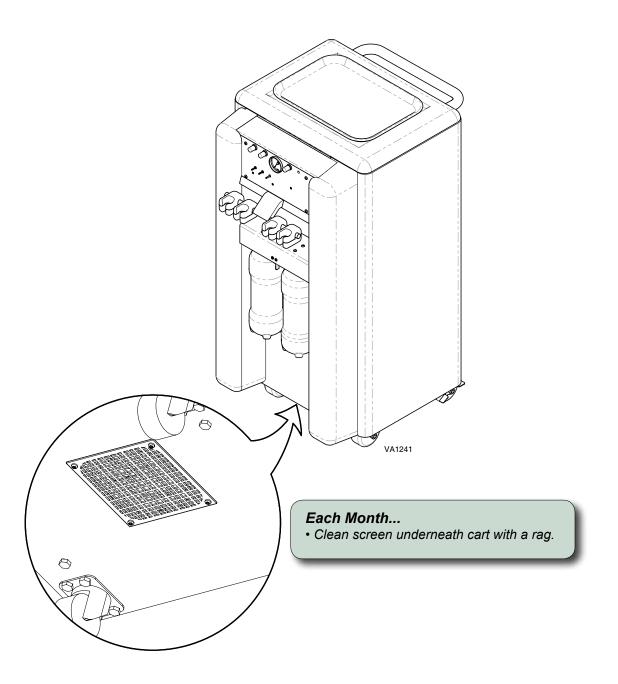
Place a cloth under the regulator and depress the button until there is no water coming out.



### To Drain Condensation from Air Tank...

- A) Turn power switch off.
- B) Position end of red tube so it drains into a container.
- C) Turn drain valve slowly to open.
- D) When no water is coming out, slowly close valve.

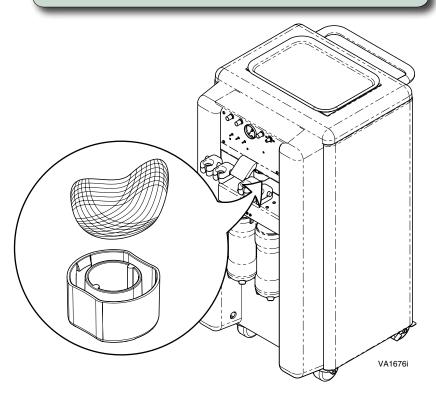






# To clean the air/oil separator...

- A) Turn master switch OFF.
- B) Remove container by squeezing sides in while pulling out.
- C) Remove fluid and saturated gauze.
- D) Clean container and mounting cap.
- E) Install clean gauze and reinstall the container.



# Calling For Service

Direct all service inquiries to your authorized Midmark dealer. When calling for service, you must provide the following information:

Model / serial number Date of purchase Symptom(s) of malfunction

Service and Parts Manual is available at www.midmark.com.



# VetPro® 1000 Scaler Adjustment Handpiece Pressure Gauge Water Adjustment Handpiece Air Adjustment -Handpiece Holder Water Regulator Water Toggle Valve-Water Bottles **Quick Disconnect** Water Accessories **Quick Disconnect** Air Accessories Air Pressure Regulator -Inside Back Door Foot Control Storage Bracket On/Off Power Switch Circuit Breaker Power Cord Receptacle -VA1247 Locking Casters (Rear Only)



# Specifications

Cart					
Width	23 inches (58.42 cm)				
Length	18 1/2 inches (46.99 cm)				
Height	36 1/2 inches (92.71 cm)				
Weight	130 lbs (58.97 kg)				
Shipping Weight	150 lbs (68.04 kg)				
Top of Cart Weight Restriction	25 lbs (11.33 kg)				
Compressor					
Motor	Oil Free 1/3 HP				
Working Pressure	70-100 PSI				
Flow Rate	2.5 scfm @ 40 PSI				
Sound Level (full load)	40 dB				
Air Tank	1 Gallon				
Water	Module				
Reservoirs	Two - 1 Liter - Toggled				
Pressurized System	30-40 PSI				
Aseptic	Non-Retracting HPC Coolant				
Handpiece Flush System	Manual				
Air and Water Connections	External Quick Connects				
0	ther				
Duty Cycle	Continuous Operation Note: Exception, Units with LED Scaler, 10 min. ON, 5 min. OFF				
Classifications	Class 1, Type B Applied Part, except as noted for optional accessories, Ordinary Equipment [IPXO]				
Optional Accessories:					
Acteon Satelec Scaler	Type BF Applied Part				
High Speed Handpiece with and without out Fiber Optics	Type B Applied Part				
Low Speed Handpiece	Type B Applied Part				
Air Water Syringe	Type B Applied Part				



# Specifications continued...

Electrical (See Regulatory Compliance Chart - Next Page)				
Fuse (Scaler Transformer)	T0.8AL, 250V, 3AG			
Circuit Breakers (2) 115VAC	6A 250V, Push to Reset			
Circuit Breakers (2) 250VAC	3A 250V, Push to Reset			
Power Cord (115VAC)	15A/125VAC x 10 ft. Hospital Grade			
Power Cord (230VAC)	10A/250VAC x 2.5 meters			
Handpiece				
Connection Type	Midwest 4-Hole Type Handpiece			



#### **WARNING**

Equipment not suitable for use in the presence of a flammable anesthetic mixture.



#### WARNING

Do not modify this equipment without authorization of the manufacturer.



#### **WARNING**

To avoid the risk of electric shock, this equipment must ONLY be connected to supply mains with protective earth.



# Model Identification / Compliance Chart

		Complies To:			Electrical Ratings:			
Model	Description	UL 60601-1, Ed. 1	CAN / CSA 22.2, #601.1-M90	IEC 60601-1, Ed. 2	CE	VAC +/- 10%	Amps	Cycles (Hz)
8000-001	VetPro 1000 w/ Scaler	•	•	•	•	115	6	60
8000-002	VetPro 1000 w/o Scaler	•	•	•	•	115	6	60
8000-003	VetPro 1000 w/ Scaler and Fiber Optics	•	•	•	•	115	6	60
8000-004	VetPro 1000 w/o Scaler and Fiber Optics	•	•	•	•	115	6	60
8000-005	VetPro 1000 w/ Scaler, Export				•	230	3	50
8000-006	VetPro 1000 w/ LED Scaler and Fiber Optics. Export				•	230	3	50
8000-007	VetPro 1000 w/ LED Scaler and 2 Position Fiber Optics	•	•	•	•	115	6	60
8000-008	VetPro 1000 w/ Scaler and Fiber Optics	•	•	•	•	115	6	60



# **Limited Warranty**

#### SCOPE OF WARRANTY

Midmark Corporation ("Midmark") warrants to the original purchaser its Exam Room Casework, Veterinary products and components (except for components not warranted under "Exclusions") manufactured by Midmark to be free from defects in material and workmanship under normal interior use and service. Midmark's obligation under this warranty is limited to the repair or replacement, at Midmark's option, of the parts or the products the defects of which are reported to Midmark within the applicable warranty period and which, upon examination by Midmark, prove to be defective.

#### APPLICABLE WARRANTY PERIOD

The applicable warranty period, measured from the date of delivery to the original user, shall be as follows:

 The VetPro® 1000 unit is warranted against defect in material and workmanship for a period of two years from the time of delivery.

**DENTAL PRODUCTS** are warranted against defect in material and workmanship for the period indicated below from the time of delivery:

- a) 2 years for all products and components (except for the periods in b and c).
- b) Accessories not manufactured by Midmark are excluded (i.e. Fiber optic systems, Scalers, Handpieces, etc.).
- c) Replacement parts and accessories carry a 90 day warranty

#### **EXCLUSIONS**

This warranty does not cover and Midmark shall not be liable for the following; (1) repairs and replacements required because of misuse, abuse, negligence, alteration, accident, freight damage, or tampering; (2) changes in color caused by natural or artificial light; (3) products which are not installed, used, and properly cleaned as required in the Midmark written "Installation" and or "Installation/Operation" Manual applicable for this product; (4) products considered to be of a consumable nature such as light bulbs and surge suppression product; (5) accessories or parts not manufactured by Midmark; (Any warranties on these items are extended directly by the manufacturer of these items to the original purchaser. Information on these manufacturers' warranties will be enclosed with the applicable products. Also, Midmark will furnish copies of any of the warranties extended by any such manufacturers upon request.) (6) specially manufactured products; (7) damage caused by animals; (8) charges by anyone (including Midmark's authorized dealers) for adjustments, repairs, replacement parts, installation, or other work performed upon or in connection with such products which is not expressly authorized in writing in advance by Midmark.

#### **EXCLUSIVE REMEDY**

Midmark's only obligation under this warranty is the repair or replacement of defective parts. Midmark shall not be liable for any direct, special, indirect, incidental, exemplary or consequential damages or delay including, but not limited to, damages for loss of profits or loss of use.

#### NO AUTHORIZATION

No person or firm is authorized to create for Midmark any other obligation or liability in connection with the products.

THIS WARRANTY IS MIDMARK'S ONLY WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. MIDMARK MAKES NO IMPLIED WARRANTIES OF ANY KIND INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS.



Language of origin: English

# **Midmark Corporation**

60 Vista Drive Versailles, OH 45380 USA 1-800-643-6275 1-937-526-3662

