AMC-25

Mobile Dental System



OPERATION &
MAINTENANCE MANUAL

Aseptico®

⚠ SAFETY PRECAUTIONS

To prevent injury to people and damage to property, please heed relevant warnings and remarks. They are marked as follows:

- **WARNING**: Serious injury or death may result if ignored.
- **CAUTION**: Damage to property or the environment may result if ignored.
- **NOTE**: Important additional information and hints.

Aseptico accepts no liability for direct or consequential injury or damage resulting from improper use, arising in particular through the non-observance of the operating instructions, or improper preparation and maintenance.

▲ **WARNING:** To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth.

▲ **WARNING:** Connecting electrical equipment to this device creates a Medical Electrical (ME) system. If connecting equipment that is not part of the ME system, have a trained service person evaluate the ME system to ensure safety leakage currents are maintained per IEC 60601-1.

▲ **WARNING:** It is not recommended to connect multiple socket outlets or extension cords to this device.

▲ **WARNING:** Clean, disinfect, and sterilize new or repaired handpieces and instruments before first use and between each patient use. Only use sterilized handpieces and instruments during treatment. Non-sterilized handpieces and instruments may cause bacterial or viral infections. Always sterilize handpieces and instruments after operation.

▲ **CAUTION:** Always examine unit components for damage before commencing treatment. Damaged components must not be used and must be replaced.

▲ **CAUTION:** For device transport, always keeps the pull handle in hand during transport and ensure stable platform before releasing.

▲ **WARNING:** Use for intended purposes only. Failure to observe the operating instructions may result in the patient or user suffering serious injury or the product being damaged, possibly beyond repair. Before using this product, make sure that you have studied and understood the operating instructions.

▲ **WARNING:** For use by qualified and trained personnel only.

▲ **WARNING:** Do not install where there is a risk of an explosion. The Mobile Dental System is not intended for operation in the presence of flammable anesthetics or gases.

▲ **WARNING:** Always operate a high-speed handpiece with water coolant. Operating a high-speed handpiece without water coolant can cause thermal injury to the patient.

▲ **CAUTION:** Observe local regulations concerning disposal of amalgam waste.

▲ **WARNING:** Never operate unit or work on patients when the top lid is open.

▲ **WARNING:** Do not use this device for dental implant procedures.

▲ **CAUTION:** Do not run saline solutions through the water system—saline will corrode the water filters.

▲ **WARNING:** Do not position the AMC-25 so that the power cord is inaccessible to unplug during normal use.

▲ **WARNING:** No modification of this equipment is allowed.

▲ **CAUTION:** Dispose of all medical waste products, residues, equipment and etc. in accordance with local Regulations.

▲ **CAUTION:** All repairs are to be performed by Authorized Repair Personnel only. Aseptico offers servicing of equipment that is out of warranty and this is highly recommended to ensure optimal performance and product life. Circuit diagrams, parts list and requested relevant servicing information will be provided upon request.

▲ **CAUTION:** Do not use CaviCide™ cleaner on the AMC-25.

▲ **WARNING:** Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

▲ **WARNING:** Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

▲ **WARNING:** Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Unit, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

OPTIONAL EQUIPMENT SAFETY PRECAUTIONS:

▲ **WARNING:** CONTRAINDICATIONS — Ultrasonic oscillations emitted by the ultrasonic scaler may prevent the proper function of cardiac pacemakers. Therefore, Aseptico recommends that patients with a cardiac pacemaker should not be treated with the ultrasonic scaler component of the AMC-25 Cart.

▲ **WARNING:** Ultrasonic scaler instrument tips oscillate at high frequency and can fracture during operation. To help prevent the tips from fracturing and possibly injuring the patient, always follow the scaler manufacturer's operating instructions and recommended ultrasonic power settings.

▲ **WARNING:** Do not use the ultrasonic scaler dry. If used dry, the instrument tip will heat immediately. This may cause thermal injury to the tooth. Ensure that adequate liquid coolant is always available.

▲ **CAUTION:** Never use the ultrasonic scaler on metal or porcelain restorations. The high frequency ultrasonic oscillations may loosen the restoration.

▲ **WARNING:** Avoid looking directly into the curing light. Protect patient's eyes with darkened eye-wear when using the curing light probe.

▲ **CAUTION:** The lens for the electric motor LED is soft and can be damaged. If lens needs to be cleaned, use a lint-free swab and isopropyl alcohol - do not use other solvents as they might adversely react with the LED assembly.

▲ **CAUTION:** The AEU-5000 electric motor is not recommended for use with endodontic files that have torque limit specifications of less than 1.39 oz-in (100 g-cm).

▲ **WARNING:** Do not exceed 130.5 psi (9 bar) on external air pressure entering the system.

▲ **WARNING:** Do not exceed 100 psi (6.9 bar) on the external regulator.

▲ **WARNING:** Do not exceed 14 in Hg (35.6 cm Hg) on external vacuum pressure.

▲ **WARNING:** Do not exceed 46.4 psi (3.2 bar) on external water pressure entering the system.

Congratulations!

Your new Aseptico AMC-25 Dental System is the finest mobile dental system available. The system provides an array of standard and optional dental equipment features and functions designed to serve a wide range of dental applications—all conveniently packaged into a single self-contained transportable cart.

This system is engineered to provide many years of reliable service. Please read the instructions provided in this manual to receive the best and longest service from your Aseptico equipment. Separate manuals may be provided to cover the operation and maintenance of other accessories for your unit.

NOTE: Shaded paragraphs throughout this manual indicate optional equipment and features.

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STANDARD FEATURES

- Automatic handpiece controls for 3 pneumatic handpieces
- Each pneumatic handpiece provides individually controlled water and coolant air
- 3-way air/water syringe with a self contained water system
- High Volume (HVE) and low volume vacuum lines with adjustable suction valves and a solids trap
- 1/2 HP compressor pump and 1/2 HP vacuum pump with venturi boost operating independently
- Aluminum tank for rust-free air supply
- Rotating arms for positioning of tubing on the front of the cart
- Dual voltage system

OPTIONAL FEATURES

- Integrated electric motor with control panel. Electric handpiece provides individually controlled water and coolant air
- Ultrasonic scaler
- Curing light
- Fiber-optic illumination for handpieces
- Amalgam separator
- External vacuum/air/water hospital connections

PACKAGE CONTENTS

- Self Contained Mobile Cart
- HVE and Saliva Ejector Hoses with Valves
- TA-90D 3-Way Air/Water Syringe with Tip
- Two 1-Liter Water Bottles, PN 730631-01
- AA-43W Wet/Dry Foot Control
- Power Cord – 120V Hospital Grade, PN 840049
- Waste Hose Assembly, PN 330673
- AA-60FL Waste Flush Hose

HANDPIECES PURCHASED SEPARATELY

OPTIONAL EQUIPMENT

- AEU-5000 Remote Mount (AMC-25) Kit, PN 330674
- AA-19LED-25CK5 Fiber-Optic 5-Hole Handpiece Illumination Kit
- ALU-25CLK-VALO Curing Light Kit
- ASC-10-25CKL Ultrasonic Scaler with 3 Tips
- AA-20AMAL-CK Amalgam Separator and Bypass Filter
- Portable Case for Transporting Mobile Cart, PN 410195
- AA-25HK Hospital Kit (external vacuum, air, water connections)
- AA-20A Auxiliary Arm and Accessory Tray
- AA-19A-25CK Fiber Optic 6 Pin Kit

INTENDED MEDICAL INDICATION

The AMC-25 is a mobile self-contained dental system that is used for endodontic and general dentistry applications.

PATIENT POPULATION

The AMC 25 intended patient population includes infant to adult of any gender in general good health based on dentist's judgement.

INTENDED BODY OR TISSUE PARTS

Patient's treatment area is inside the patient's mouth (primarily teeth and gums) for endodontic and general dentistry applications. The following may come into contact during procedures:

- Air / water using 3-way air water syringe during treatment
- Vacuum line is placed inside of patient mouth contacting soft tissues, cheeks, gums and tongue for evacuating fluids
- Handpieces are sold separately and not considered part of standard AMC-25 package. Handpieces are equipment that hold burs, diamonds, finishing discs or similar items used in making or finishing filings, crowns, bridges, dentures or like dental treatment in teeth. Sealants is material applied to teeth as protection against cavities.
- Polishing and finishing strips and discs are strips and discs used to polish and finish different types of composite material placed on patient's teeth.
- Hand instruments used during dental treatment. Rotary cutting carbides used in making of crowns, bridges, dentures or like dental treatment.
- Ultrasonic scaler vibrates at low frequency to clean teeth and comes into contact with teeth and gums. Ultrasonic scaler inserts are not sharp—there are no cutting edges
- Curing light – Used for curing resins and comes into contact with teeth and gums. Typically, in blue light spectrum.

The following items are not supplied with the system but may be used and purchased separately and contact the patient:

- Cleanser/ mouthwash: used to prepare the mouth area for procedure
- Alcohol: used to prepare the skin for topical anesthetic
- Anesthetic: used to prepare affected teeth / gums for the procedure
- Dry gauze

User's fingers/hands will interact with:

- Packaging: opening replacement treatment tips
- Handpiece: administering/adjusting treatment, acknowledging system messages, and changing treatment tips
- Treatment tip: changing tips
- Display/touchscreen: selecting/adjusting items from user interface, and/or cleaning display/touchscreen
- Power cable: plugging into system and outlet.
- Footswitch: picking it up to move/reposition it or clean it.
- On/Off switch: turning the system on and off

USER PROFILE

Users include Dentists, Dental assistants and Dental Hygienists. The device is restricted for sale by or on the order of a dentist.

CONDITIONS OF USE

The AMC-25 is not provided sterile. Clean, disinfect, and sterilize new or repaired hand¬pieces and instruments before first use and between each patient use. Only use sterilized handpieces and instruments during treatment.

Air / Water Syringe are available as disposable or reusable. Reusable tips are to be sterilized before use.

General: Single office or outpatient clinic.

- Normal Usage: Temperature range: 10°C to 40°C and relative humidity range: 10-95% non-condensing
- Shipping Conditions: Temperature range: -40-71ºC and relative humidity range: 10- 95% (non-condensing)
- Mobility – System may be transported room to room in the same facility but is not recommended to be moved location to location.

OPERATING PRINCIPLES

- Electric and pneumatic Handpiece using variable high-speed rotary attachments for grinding, buffing, drilling and sealant applications.
- Air water syringe uses compressor to generate positive pressure for delivery of air and water.
- Vacuum uses negative pressure from compressor to generate vacuum
- Ultrasonic scaler uses piezo effect to create low frequency vibration of cleaning tips to clean teeth

PHYSICAL AND PERFORMANCE CHARACTERISTICS

Operating voltages are specified in Specifications section of this manual.

EXPECTED SERVICE LIFE

The expected service life is seven years from the date of first use.

FRONT VIEW

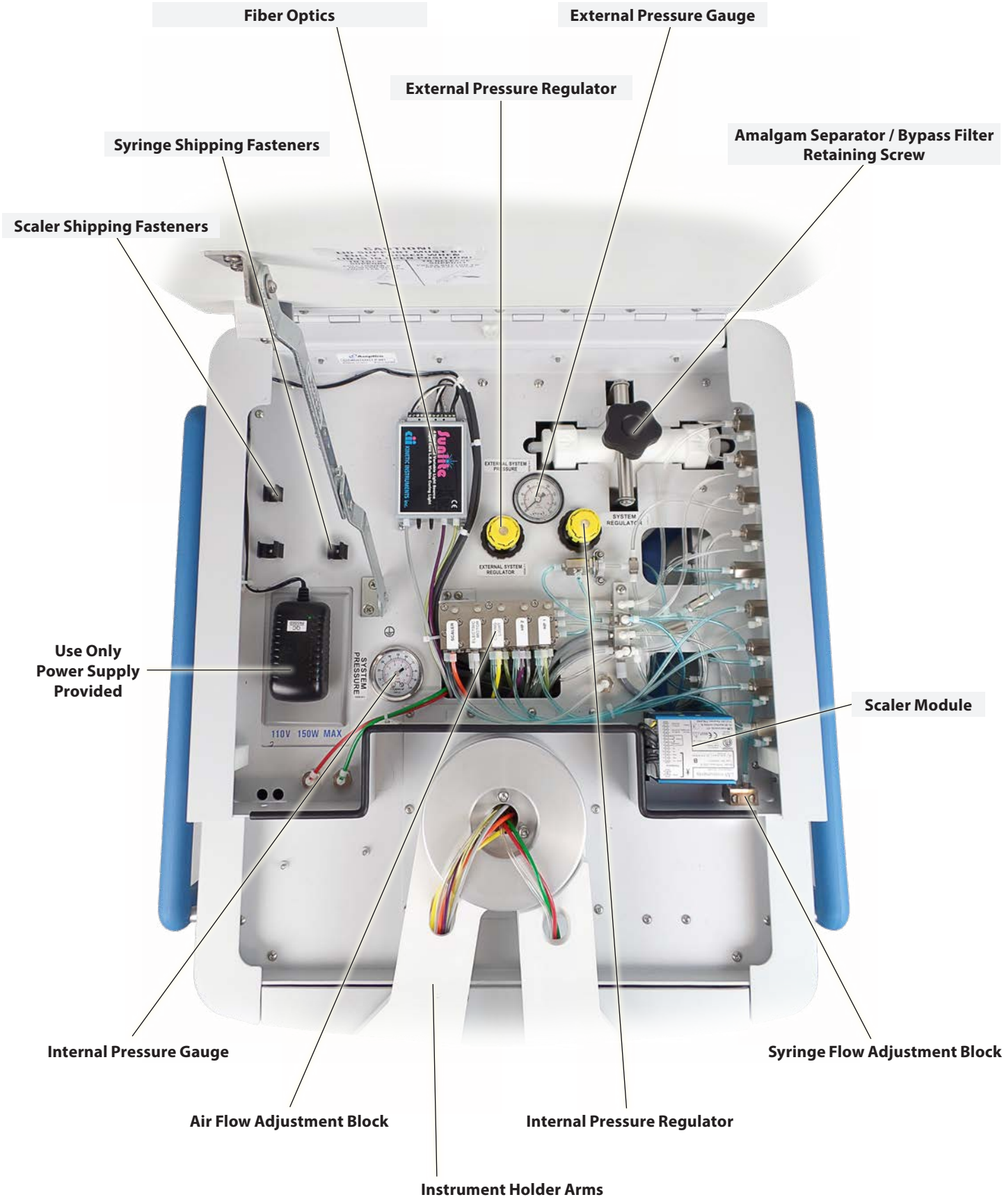

Scaler Control Knob
Hinged Lid
Electric Motor Control Panel
Instrument Holders
Handpiece Pressure Gauge
Electric Motor Connector
Auxiliary Water Connection
Auxiliary Air Connection
Bulkhead Connectors
Foot Control with Water Valve


Accessory Tray
Control Panel:
•Water Coolant
•Bottle Selector
• Bottle Pressure Release
•Flush Toggle
•Air Coolant
Water Bottle Caps
Water Supply Bottles
AMC-25
Aseptico
Rear Caster with Brake

SIDE VIEW

TOP VIEW

Optional Equipment (shaded)



Optional Equipment (shaded)



REAR VIEW

SETTING UP THE UNIT

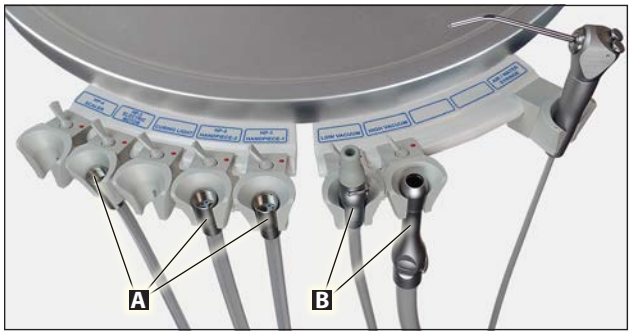
1. Unpack the AMC-25 from its cardboard crate following the *Packing Instructions* on page 24, in the reverse order.



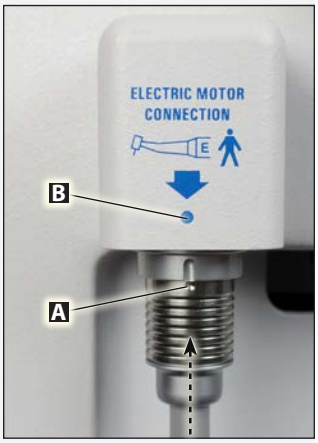
2. Unpack the AMC-25 from its *optional* transport case following the *Packing Guide* included in the case.



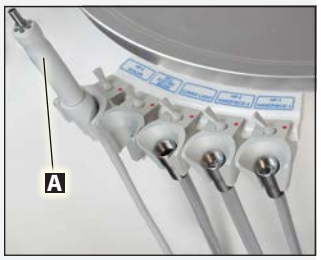
3. Depending on the configuration your AMC-25, there may be 2 or 3 air handpiece connections available for either Midwest-style (4-hole) non-fiber optic, or ISO Type-C (6-pin) fiber-optic air handpieces. Connect appropriate air handpieces to the connectors in the HP-1, HP-2 and HP-3 instrument holders **A**. Attach saliva and HVE tips to the valves in the low and high vacuum instrument holders **B**.



4. Connect the *optional* AEU-5000 electric motor to the receptacle on the front panel by aligning the two round dimples **A** on the motor cord connector with the dot **B** on the receptacle. Push the connector straight into receptacle until it snaps into position. Attach the appropriate E-type handpiece (sold separately) to the electric motor, then place into the HP-3 instrument holder.



5. Attach a scaler tip and sleeve to the *optional* scaler **A**.



6. To connect the *optional* Valo Grand© Curing Light, remove from its box and packaging **A**. Make sure to completely unspool the curing light cord.



i. Find the instrument holder on the side of your AMC-25. One of the holders will be labeled "Curing Light". Beneath the instrument holder on the wall of the lower chassis, you will find the curing light connection port.



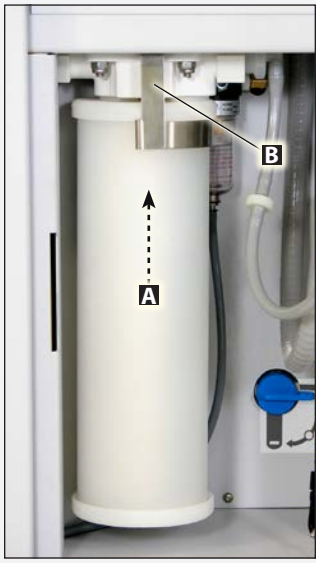
ii. Place the receiving end of your scaler cord over the curing light connection port. Gently slide it over the connection until firmly secured.

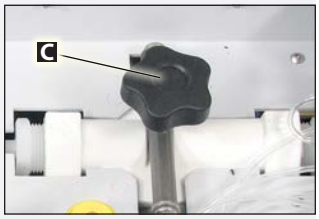


iii. Place the handpiece end of your curing light into the curing light handpiece holder.



7. (NOTE: Before installing the *optional* amalgam separator, remove the two caps from the inlet and outlet ports of the separator. Ensure that the two O-rings that seal the separator against the manifold remain in place on the ends of the port fittings and are not lodged inside the caps. Save the caps for reuse later when sending the amalgam separator to be recycled.) Open the waste compartment door on the back side of the cart and place the *optional* amalgam separator **A** into the amalgam manifold **B**. You will need to loosen the retaining screw **C** located under the top lid to get the bracket down and around the lip of the amalgam separator. Tighten the retaining screw to secure the amalgam separator.





8. Inside the waste compartment, make sure that the cable from the waste tank sensor is plugged into the connector labeled 'waste sensor' **A** on the back wall of the waste compartment. Ensure that all tubes and the bungee tie-down cord are securely attached to the waste tank.

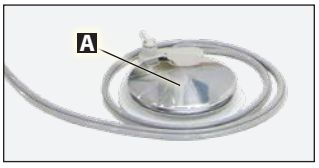


NOTE: *The AMC-25 will not operate without the waste sensor wire plugged into the waste sensor connector.*

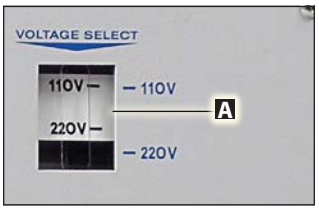
9. Fill the water bottles **A** with clean water, then screw the bottles into their water bottle caps **B**. The water bottles include floating level indicators **C**, color coded to identify different fluids such as sterile water or distilled water, as desired.

CAUTION: *Do not run saline solutions through the water system—saline will corrode the water filters.*

10. Place the foot control **A** on the floor.

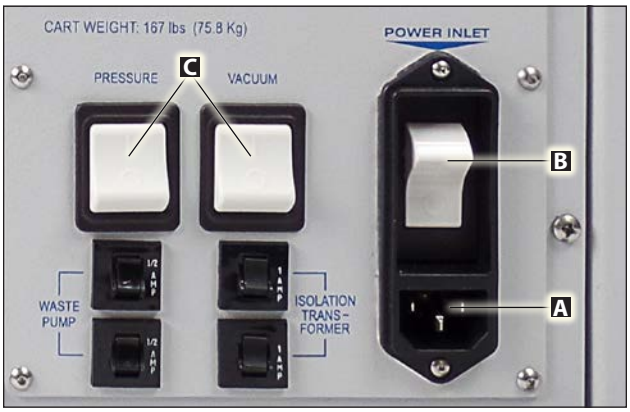


11. Verify that the voltage selector switch **A** on the rear panel of the cart is set to the proper voltage in accordance with your local power supply before connecting the power cord. To change the voltage setting, use a long slender tool to toggle the switch to either the 110V or 220V position.



IMPORTANT: *When selecting the voltage, align the 110V/220V horizontal markers on switch to corresponding markers on the faceplate.*

12. Verify that the power cord is correct for your local power supply. Connect the power cord to the power inlet **A** on the rear of the cart, then plug the other end into a grounded electrical outlet. Turn the main power switch **B** to the ON (I) position. The pressure and vacuum breakers **C** should remain in the ON (I) position for normal operation; see Step 14 for optional configurations that require one or both of these breakers to be switched OFF.



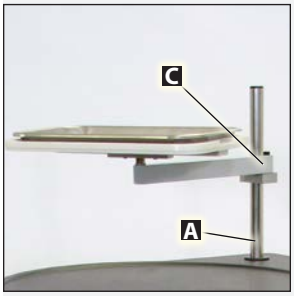
WARNING: *Do not connect the power cord to the AMC-25 in the presence of anesthetics or flammable gases.*

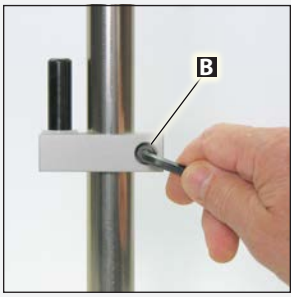
13. Check the system operating air pressure on the system pressure gauge **A** located under the top lid. Use the system regulator knob **B** to set system operating pressure to optimum 80 psi (5.5 bar). To adjust the pressure, pull up on the yellow knob, then turn clockwise to increase pressure or counterclockwise to decrease pressure. Push down on the knob to lock it in position.





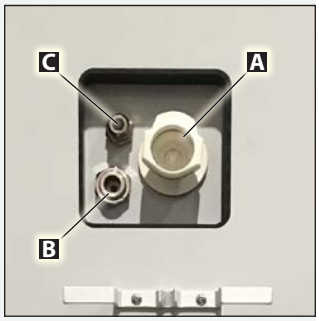
14. **ACCESSORY TRAY —** To install the *optional* accessory tray, insert the post **A** into the holder on the top lid of the cart. Use the included 3/16" hex wrench to adjust the height of the pivot block **B**. Place the end of the arm **C** onto the pivot block, then place the tray on the other end of the arm.





WARNING: *Maximum weight capacity of the accessory tray is: 10 lb (4.5 kg)*

15. The *optional* hospital connections provide the ability operate the AMC-25 from external vacuum, air and water sources, or in combination with the internal vacuum, air and water sources. Connect external vacuum, air and water lines (not supplied) to the vacuum **A**, air **B** and water **C** connections on the rear of the AMC-25 cart, using the mating connectors provided. The mating connectors require the following line sizes (inner diameter):



	HOSPITAL CONNECTION	LINE SIZE (ID)	MATING CONNECTOR
A	Vacuum (PN 730750)	1/2″	
B	Air (PN AA-62)	3/8″	
C	Water (PN AA-60SO)	1/4″	

The matrix below highlights 12 ways the hospital connections can be used in combination with the internal vacuum, air and water sources. Configurations 1–8 provide full functionality of all instruments. Configurations 9–12 provide limited "pneumatic only" operation without electronic functions (i.e. no electric motor, scaler, curing light, fiber optics).

	1	2	3	4	5	6	7	8	9	10	11	12
External Vacuum	⊙	⊙		⊙	⊙				⊙	⊙		
External Air	⊙	⊙	⊙			⊙			⊙	⊙	⊙	⊙
External Water	⊙		⊙	⊙			⊙		⊙		⊙	
Internal Vacuum							⊙	⊙				
Internal Air				⊙	⊙		⊙	⊙				
Internal Water		⊙			⊙	⊙		⊙		⊙		⊙
Power Cord	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙				
For details:	*see* ***Table 1***								*see* ***Table 2***			

NOTE: *See* ***Table 1*** *(to the right) for the connection details of configurations 1–8 and* ***Table 2*** *for configurations 9–12.*

Table 1

CONFIGURATIONS 1–8

1. External vacuum, air and water, with electronic functions.

a. Switch vacuum and pressure circuit breakers OFF.
b. Switch water pressure toggle OFF.
c. Connect external vacuum, air and water lines to cart.
d. Connect the power cord to the cart and switch main power ON.
e. All instruments function.

2. External vacuum and air, internal water, with electronic functions.

a. Switch vacuum and pressure circuit breakers OFF.
b. Fill water bottles and switch water pressure toggle ON.
c. Connect external vacuum and air lines to cart.
d. Connect the power cord to the cart and switch main power ON.
e. All instruments function.

3. External air and water, vacuum*, with electronic functions.

a. Switch pressure circuit breaker OFF and vacuum circuit breaker OFF.
b. Switch water pressure toggle OFF.
c. Connect external air and water lines to cart.
d. Connect the power cord to the cart and switch main power ON.
e. All instruments function (*vacuum is created using air pressure).

4. External vacuum and water, internal air, with electronic functions.

a. Switch vacuum circuit breaker OFF and pressure circuit breaker ON.
b. Switch water pressure toggle OFF.
c. Connect external vacuum and water lines to cart.
d. Connect the power cord to the cart and switch main power ON.
e. All instruments function.

5. External vacuum, internal air and water, with electronic functions.

a. Switch vacuum circuit breaker OFF and pressure circuit breaker ON.
b. Fill water bottles and switch water pressure toggle ON.
c. Connect external vacuum line to cart.
d. Connect the power cord to the cart and switch main power ON.
e. All instruments function.

6. External air, vacuum* and internal water, with electronic functions.

a. Switch pressure circuit breaker OFF and vacuum circuit breaker OFF.
b. Fill water bottles and switch water pressure toggle ON.
c. Connect air line to cart.
d. Connect the power cord to the cart and switch main power ON.
e. All instruments function (*vacuum is created using air pressure).

7. External water, internal vacuum and air, with electronic functions.

a. Switch vacuum and pressure circuit breakers ON.
b. Switch water pressure toggle OFF.
c. Connect external water line to cart.
d. Connect the power cord to the cart and switch main power ON.
e. All instruments function.

8. Internal vacuum, water and air, with electronic functions.

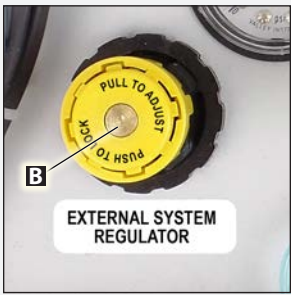
a. Fill water bottles and switch water pressure toggle ON.
b. Connect the power cord to the cart.
c. Switch all three circuit breakers (main, vacuum, pressure) ON.
d. All instruments function.

Table 2

CONFIGURATIONS 9–12
9. External vacuum, air and water, <u>without</u> electronic functions.
a. Unplug the power cord from the cart. b. Switch all three circuit breakers (main, vacuum, pressure) OFF. c. Switch water pressure toggle OFF. d. Connect external vacuum, air and water lines to cart. e. All instruments function, EXCEPT electric motor, scaler, curing light, fiber optics.
10. External vacuum and air, internal water, <u>without</u> electronic functions.
a. Unplug the power cord from the cart. b. Switch all three circuit breakers (main, vacuum, pressure) OFF. c. Fill water bottles and switch water pressure toggle ON. d. Connect external vacuum and air lines to cart. e. All instruments function, EXCEPT electric motor, scaler, curing light, fiber optics.
11. External air and water, vacuum*, <u>without</u> electronic functions.
a. Unplug the power cord from the cart. b. Switch all three circuit breakers (main, vacuum, pressure) OFF. c. Switch water pressure toggle OFF. d. Connect external air and water lines to cart. e. Only air-driven instruments, vacuum and water coolant function (*vacuum is created using air pressure).
12. External air, internal water, vacuum*, <u>without</u> electronic functions.
a. Unplug the power cord from the cart. b. Switch all three circuit breakers (main, vacuum, pressure) OFF. c. Fill water bottles and switch water pressure toggle ON. d. Connect external air line to cart. e. Only air-driven instruments, vacuum and water coolant function (*vacuum is created using air pressure).

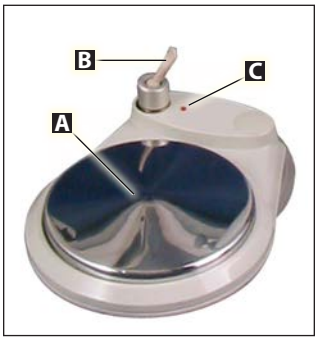
16. External air pressure *(optional)* is factory set. Check the external operating air pressure on the *optional* external pressure gauge **A** located under the top lid. Use the external regulator knob **B** to set external operating pressure to optimum 100 psi (6.9 bar). To adjust the pressure, pull up on the yellow knob, then turn clockwise to increase pressure or counterclockwise to decrease pressure. Push down on the knob to lock it in position.



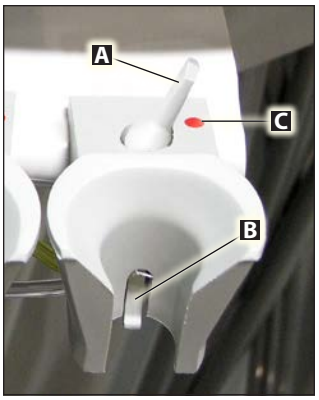


SYSTEM OPERATION

1. **FOOT CONTROL —** Before operation, ensure bottle pressure is set to ON, water bottles are full, handpiece coolant knob is open and that the handpiece holder is set to ON. Press the foot pedal **A** to activate the working handpiece, or scaler. Handpiece speed is controlled by how far down you press the foot pedal. To enable water coolant to be activated with the foot pedal, toggle the water coolant switch **B** towards the dot **C** on the foot control, as shown. Toggle the switch away from the dot to disable water coolant.



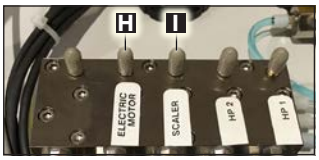
2. **INSTRUMENT HOLDERS —** Each instrument holder (except the syringe holder) provides an on/off toggle switch **A** and an automatic instrument shut-off switch **B**. The toggle switch must be ON (towards the dot **C**, as shown) and the instrument must be out of the instrument holder to operate the instrument. (NOTE: Turn toggle switches OFF to ensure that any instruments that may not be fully seated in their holders will not turn ON accidentally when the foot pedal is activated.)



3. **DRIVE AIR —** The instrument holder switches (except syringe) and the pneumatic handpieces are air driven. Pneumatic handpiece air pressure should be adjusted to the pressure recommended by the manufacturer. To determine the current pressure setting, lift the pneumatic handpiece from the HP-1 instrument holder and press the foot pedal while looking at the handpiece pressure gauge **A** on the front panel. If adjustment is necessary, lift the top lid on the AMC-25 cart and lock the hinge in the open position. Rotate the HP-1 adjustment screw **B** counterclockwise to increase pressure or clockwise to decrease pressure. Repeat this procedure for the HP-2 pneumatic handpiece using the HP-2 adjustment screw **C** and use the HP-3 screw **D** if a third pneumatic handpiece is being used. The 2 remaining screws labeled 'spare' (**E** and **F**) are not used in the standard setup.







If an *optional* electric motor or scaler are installed, the corresponding flow adjustment screws are factory set and should need no further adjustment. If they are accidentally adjusted, the electric motor **H** and scaler **I** should be set to 30-45 psi (2.1-3.1 bar).

4. **WATER BOTTLES —** The AMC-25 incorporates a self-contained pressurized water system which includes: two 1-liter water bottles, a bottle select switch **A** and a bottle pressure switch **B**. Use the bottle select switch to direct flow from either water bottle. The bottle pressure switch allows both bottles to be refilled without draining the air tank. (NOTE: Pressure is released from both bottles; you cannot remove one bottle while using the other).

   <u>To refill the water bottles</u>:

   a. Toggle the bottle pressure switch **B** OFF to release pressure from both bottles.

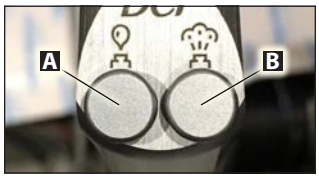
   b. Unscrew the bottles from their caps and fill with water. *Never use saline as it will corrode the water filters.*

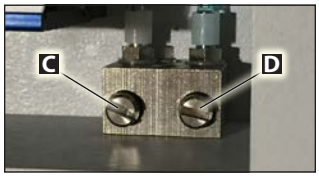
   c. Screw bottles back into their caps.

   d. Toggle bottle pressure **B** ON to pressurize both bottles.

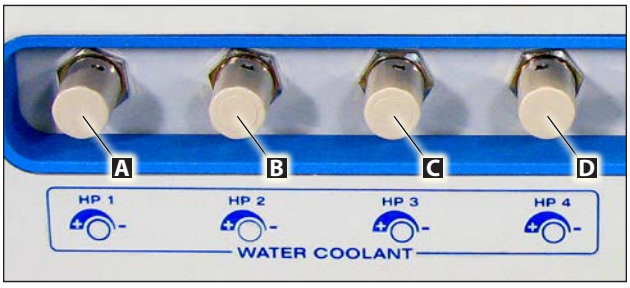
   e. Select the bottle to be used with the bottle select switch **A**.

5. **3-WAY AIR/WATER SYRINGE —** Press the left button **A** to dispense water, press the right button **B** to dispense air, and press both buttons simultaneously for an air/water mist. To adjust the air and water flow to the syringe, lift the top lid and lock the hinge in the open position. Locate the adjustment block in the right front corner, then use a small flat-blade screwdriver to adjust the left screw **C** for air flow and the right screw **D** for water flow. Counterclockwise increases flow and clockwise decreases flow.

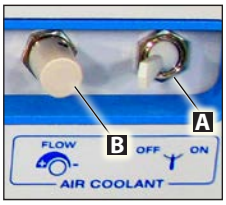




6. **WATER COOLANT —** Four valves control water coolant flow to the handpieces and *optional* scaler. Switch ON the water coolant toggle on the foot control and switch ON the air coolant toggle on the side control panel. Lift the HP-1 handpiece from its holder and run at a midrange speed. Rotate the HP-1 **A** water coolant flow knob clockwise until it seats softly (closed). Begin turning counterclockwise until a fine mist is visible. If a mist is not generated, see 'air coolant' adjustment below. Repeat for the HP-2 handpiece using the HP-2 **B** flow knob. The HP-3 **C** knob controls water coolant for a third pneumatic handpiece or the *optional* electric handpiece. The HP-4 **D** knob controls water coolant for the *optional* scaler.

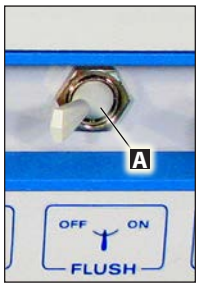


7. **AIR COOLANT —** Air coolant (chip air) works in combination with the water coolant setting to create a fine mist for the working handpiece. Make sure the water coolant switch on the foot control is switched ON and the air coolant **A** is switched ON. Operate

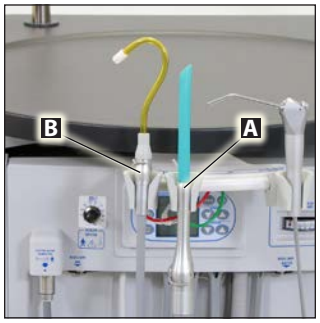


a handpiece at a midrange speed. Rotate the air coolant flow knob **B** control clockwise until it seats softly. Begin turning counterclockwise until a fine mist is visible.

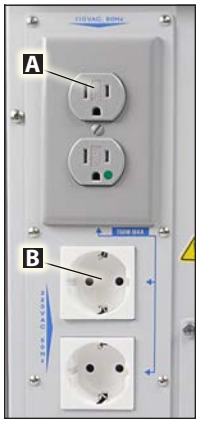
8. **FLUSH TOGGLE —** Use this toggle switch to flush each handpiece, motor and *optional* scaler with water. Flush each working instrument for about 5 seconds after each patient, and about 20 seconds at the beginning of each day. To flush an instrument, remove it from its holder and direct the spray nozzle into a basin. Hold the flush toggle **A** in the ON position for the desired number of seconds, then release. (NOTE: If water bottles empty while flushing, air will be flushed through the lines).



9. **HIGH AND LOW VOLUME VACUUMS —** The AMC-25 is equipped with a 5-liter waste tank, a high volume evacuator (HVE) **A** hose, and a low volume saliva ejector **B** hose. Both high and low volume hoses operate simultaneously from the same vacuum source. Use the valves on the HVE hose and low volume hose to adjust the relative vacuum pressure between the two hoses, as needed.



10. **EXTERIOR OUTLETS —** The AMC-25 provides two 110V outlets **A** and two 220V outlets **B** on the back of the cart for powering accessories. These accessory outlets will provide the correct voltages regardless of whether the cart is connected to a 110V or 220V power supply.



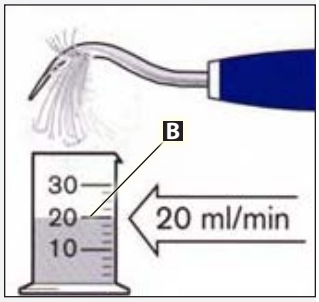
CAUTION: *Do not exceed 150W /1.25A on the external outlets (total load).*

11. **AUXILIARY AIR AND WATER CONNECTIONS —** Auxiliary air **A** and auxiliary water **B** connections are provided on the front panel of the AMC-25 cart for connecting optional equipment. The water connection provides 35 psi (2.41 bar) and the air connection provides the air pressure set by the pressure regulator (system or external).



12. **SCALER —** The *optional* piezoelectric scaler system provides adjustable ultrasonic levels and a water coolant system. The scaler includes 3 instrument tips: The #37 instrument is specially developed for subgingival scaling, furcations, supragingival fine scaling and spot removal. The #38 tip is used for lingual and buccal subgingival scaling and furcations. The #39 tip is used for universal lingual and buccal supragingival scaling. Adjust scaler intensity by rotating the 'scaler option' knob **A** on the front panel clockwise to increase intensity or counterclockwise to decrease. When scaling, follow the tip manufacturer's recommended ultrasonic settings for each tip. Scaler coolant flow is controlled by the HP-4 water coolant knob on the side control panel. Rotate the knob counterclockwise to increase coolant flow or clockwise to decrease. Verify that scaler coolant flow is no less than 0.68 fl oz/min (20ml/min) at the tip **B**. See accompanying scaler documents.

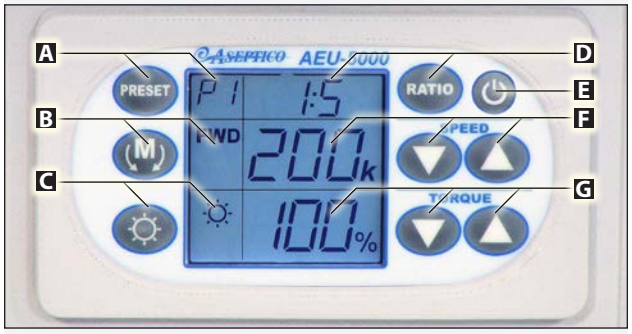




13. **CURING LIGHT —** For the *optional* curing light refer to the operations manual for use and sterilization inside the VALO Grand accessory box included when installed.

WARNING: *Avoid looking directly into curing light. Protect the patient's eyes with darkened eye-wear when using curing light.*

14. **AEU-5000 ELECTRIC MOTOR CONTROL PANEL —** Use the *optional* electric motor control panel to adjust settings and select presets for the *optional* electric motor:



A **PRESET —** Press repeatedly to step through 5 presets (P1–P5) for each handpiece ratio. First, select the ratio **D** that matches the handpiece that you are using, then select your desired preset. You can manually adjust the motor settings at any time by pressing the motor direction **B**, light **C**, speed **F** and torque **G** buttons. The preset segment of the display will flash to indicate when manual adjustments have been made to the current preset. Press the preset button to cancel manual adjustments and return to the preset settings. If you want to overwrite the current preset with your customized settings, simply press and hold the preset button until you hear a beep. To reset all presets to factory settings, press and hold the preset and ratio buttons for 3 seconds.

FACTORY PRESETS:

RATIO	PRESET	SPEED (RPM)	MOTOR DIRECTION	TORQUE	HANDPIECE LIGHT
1:5	1	200,000	FWD	100 %	On
	2	150,000	FWD	100 %	On
	3	150,000	FWD	50 %	On
	4	100,000	FWD	100 %	On
	5	100,000	FWD	50 %	On
1:2	1	80,000	FWD	100 %	Off
	2	60,000	FWD	100 %	Off
	3	60,000	FWD	50 %	Off
	4	40,000	FWD	100 %	Off
	5	40,000	FWD	50 %	Off
1:1	1	40,000	FWD	100 %	On
	2	40,000	FWD	50 %	On
	3	20,000	FWD	100 %	On
	4	10,000	FWD	100 %	On
	5	8,000	FWD	100 %	On
5:1	1	2,000	FWD	100 %	On
	2	1,500	FWD	100 %	On
	3	1,200	FWD	100 %	On
	4	800	FWD	100 %	On
	5	400	FWD	100 %	On
8:1 (ENDO MODE)	1	300	ENDO	100%	Off
	2	300	ENDO	70%	Off
	3	300	ENDO	50%	Off
	4	300	ENDO	30%	Off
	5	300	ENDO	10%	Off

B **MOTOR DIRECTION —** Press to alternate between forward and reverse (FWD/REV). The control panel will beep when operating in the reverse direction. When the 8:1 ratio **D** is selected, an endodontic (ENDO) option becomes available which automatically alternates the motor direction when the torque setting is reached, in order to free the instrument.

C **LIGHT —** Press to enable/disable the handpiece LED. The LED will turn ON when the foot pedal is activated and will stay ON for 20 seconds after the foot pedal is released. To adjust the brightness of the LED light, press and hold the light button for 3 seconds, then use the torque **G** buttons to adjust brightness in 10% increments. Press the light button to confirm the new brightness setting.

D **RATIO —** Press repeatedly to select the ratio that matches the handpiece that you are using. You can customize which ratios are available for selection from the full range of 5 ratios (1:5, 1:2, 1:1, 5:1, 8:1): Press and hold the ratio button until you hear a beep. Press the preset **A** button to select ON (enabled) or "_ _" (disabled) for the current ratio. Press the ratio button to select the next ratio. Press the preset button to enable or disable, and so on, for all 5 ratios. At least 1 ratio must remain enabled. Press and hold the ratio button for 3 seconds to confirm the custom ratio selection settings. All 5 ratios will be re-enabled if the factory settings are restored (by pressing and holding preset and ratio for 3 seconds).

E **STANDBY —** Press to turn the display ON/OFF.

After 20 minutes of inactivity the display will enter sleep mode. Press the standby button or operate the electric motor to exit sleep mode with the last used settings reactivated.

F **SPEED —** Press the ▼ and ▲ buttons to select the desired motor speed for the handpiece being used.

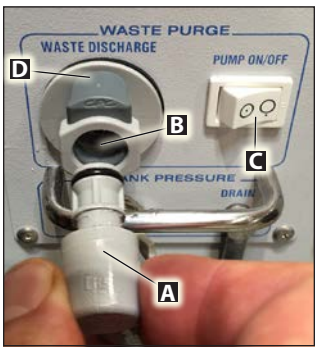
SPEED RANGES:

RATIO	SPEED RANGE (RPM)
1:5	10,000 - 200,000
1:2	4,000 - 80,000
1:1	2,000 - 40,000
5:1	400 - 8,000
8:1	280 - 5,000
8:1 (ENDO MODE)	280 - 1250

G **TORQUE —** Press the ▼ and ▲ buttons to select the desired motor torque percentage for the handpiece being used.

MAINTENANCE AND STERILIZATION

1. **WASTE REMOVAL —** Empty the waste tank daily.



Waste removal steps:

   a. Push the waste hose elbow A into the waste discharge B until it locks into place.

   b. Direct the end of the waste hose to a suitable drain.

   c. Switch ON the waste purge pump C to empty the waste tank.

   d. Disconnect the waste hose by pressing the button D on top of the waste discharge. (NOTE: The waste hose must be connected to the waste discharge to allow waste to exit the system.)

The type of optional amalgam separator used with the AMC-25 requires no settlement time before emptying the waste tank.

2. **WASTE SYSTEM CLEANING —** After emptying the waste tank each day, the waste system should be cleaned.

The waste system consists of:

- Waste tank
- Waste discharge hose
- HVE (high volume ejector) valve and vacuum line
- Saliva ejector (low volume) valve and vacuum line

Cleaning steps:

   a. Prepare 1 liter of a 1:10 bleach solution (1 part household bleach to 10 parts warm water).

   b. Remove the disposable ends from both the HVE and saliva ejector valves and open both valves fully.

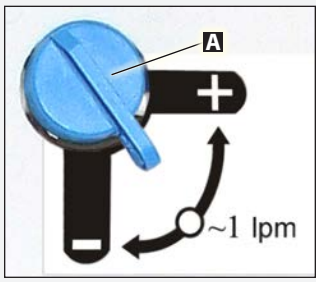
   c. Vacuum half of the bleach solution through the HVE valve, then the other half through the saliva ejector valve by putting the tip of each valve in the bleach solution.

   d. Flush each valve and line by vacuuming 1/2 liter of clean, warm water through each valve.

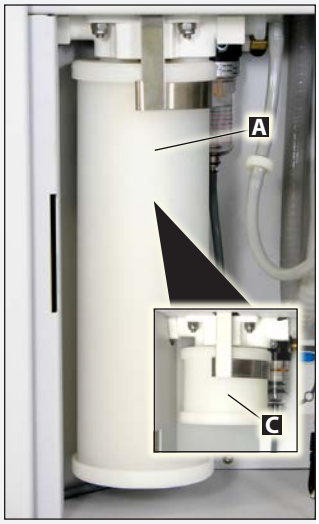
   e. Empty the waste tank following the instructions in step 1 above.

   f. Clean the outside of the ejector valves and hoses with a disinfectant solution.

3. **WASTE FLOW CONTROL —** The *optional* waste flow control valve adjusts the waste pump flow rate to meet state or country regulatory requirements for wastewater filtering and collection. Located in the waste compartment, turn the valve A to adjust the flow rate as specified by your state or county laws regarding disposal of dental wastewater. The small circle on the flow indicator represents a 1-liter per minute flow setting appropriate for the *optional* amalgam separator, if equipped.

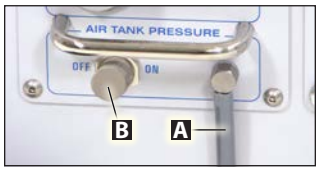


4. **AMALGAM SEPARATOR —** The *optional* amalgam separator A is located in the waste compartment. The separator filters out particulate matter while the waste water is being pumped out of the unit. A significant drop in waste discharge pressure will occur when the amalgam separator becomes full of solids. Replacement amalgam separators (PN 730595) are available through Aseptico. Refer to the label on the amalgam separator for the address of an approved amalgam recycler. Replace the separator by unscrewing the amalgam separator retaining knob B located under the top lid, and removing the amalgam separator from the waste compartment. NOTE: You can operate the AMC-25 with the bypass filter C installed in place of the amalgam separator, where permitted.



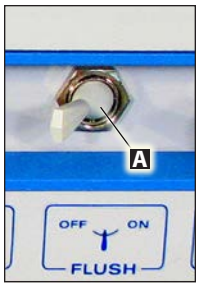
5. **GENERAL CLEANING —** The external surfaces of the AMC-25 cart should be cleaned using a soft cloth moistened with a mild detergent solution. Any external surfaces of the cart that are contacted during use should be wiped down with a soft cloth moistened with a disinfectant at the beginning of each day and between each patient use. Do not use CaviCide™ cleaner.

6. **AIR TANK PURGE —** Empty the air tank daily to remove condensation from air tank. Place a container underneath the air tank drain hose A to catch water. Rotate the air tank pressure knob B counter-clockwise to empty the air tank, then rotate knob clockwise to close valve when done.



7. **PURGING WATER LINES —** Purge all water from the system with air before cleaning the water lines (step 8 below). Also purge the water lines with air if the cart will be unused for more than a week or exposed to freezing temperatures.

Purging steps:







a. Empty both water bottles and reinstall them into their caps.

b. Rotate open (counter-clockwise) all water coolant knobs (open knobs fully for fastest purging).

c. Toggle ON all instrument holder switches.

d. Switch ON the main power.

e. Toggle ON the bottle pressure switch.

f. Cavitron Quick Disconnect: Connect one end of the AA-60FL water flush hose to the auxiliary water outlet **B**. Direct the other end of the hose to a basin unless your unit has the *Optional* Hospital Quick Disconnect, in which case, connect the other end of he AA-60FL water flush hose to the external water inlet **C** on the rear of the AMC-25.

g. Purge all water lines simultaneously or one at a time: Hold handpieces and scaler over a basin while holding the flush toggle switch **A** in the ON position until all water is purged from the lines.

h. Hold the water syringe over the basin and hold down the water button until all water is purged from the line.

8. **CLEANING WATER LINES —** Clean the water lines weekly.

Cleaning steps:

a. Prepare a 1:10 bleach solution (1 part household bleach to 9 parts warm water).

b. Purge all water lines with air (see step 7 above).

c. Fill water bottles with bleach solution.

d. Run bleach solution through all lines using the flush toggle switch.

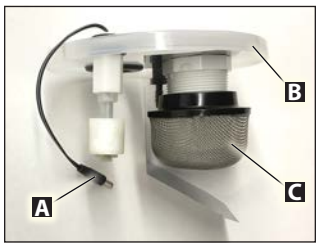
e. Allow bleach solution to stand in the lines for 10 minutes but no longer: Immediately remove water bottles and discard the bleach, then flush water bottles and all lines thoroughly with clean, warm water.

f. Purge all water lines with air (see step 7 above) and leave dry until the next clinical use.

CAUTION: *Do not run saline solutions through the water system—saline will corrode the water filters.*

9. **AMALGAM SOLIDS COLLECTOR —** The AMC-25 utilizes a reusable amalgam solids collector, located inside the waste tank. If vacuum suction is insufficient, check the collector for blockage and empty if necessary.

Emptying the collector:



a. Unplug the waste level sensor wire **A** from the 'waste sensor' connector on the wall of the waste compartment.

b. Disconnect the bungee cord holding down the waste tank.

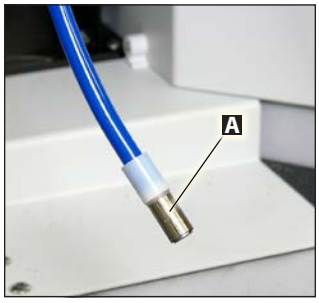
c. Disconnect all the fittings on top of the waste tank and remove the waste tank from the cart.

d. Remove the lid **B** from the waste tank.

e. Unscrew the amalgam solids collector **C** from the lid, then empty and clean the collector following local regulations regarding the disposal of amalgam waste.

f. Reinstall the solids collector in the reverse order.

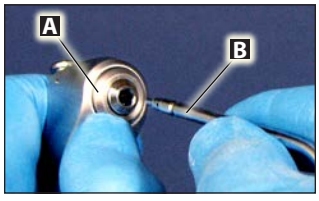
10. **WATER FILTERS —** The two water filters **A** are located on the ends of the blue water pick-up tubes in the water bottles. If the water filters become clogged by debris or corroded by the use of saline solutions, they need to be replaced. To replace the water filters, depressurize the water bottles and unscrew them from their caps. Slide back the sleeve over the fitting and unscrew the water filter from the end of the tube. Install new water filters (PN 730326) in the reverse order.



11. **AIR FILTERS —** The two air filters **A** are located behind the louvered cover on the rear of the cart, near the base. If the air filters become clogged, they need to be replaced. To replace the air filters, remove the four screws holding the louvered input air filter cover. Use a 11/16" open ended wrench to hold the tube at the base of each air filter, then unscrew each air filter by hand. Install new air filters (PN 730494) in the reverse order.



12. **3-WAY AIR/WATER SYRINGE —** The syringe tip is autoclavable. To remove a tip from the syringe, press down on the locking collar **A** surrounding the tip socket and pull the tip **B** straight out of the socket. Clean with a moist cloth, then autoclave at 270° F (132° C) for 10 minutes. To insert a tip, press down on the locking collar and push the tip into the socket as far as it will go. Release the



locking collar and gently tug on tip before using to ensure that the tip is securely locked into the socket. (NOTE: Since only the tip can be autoclaved, it is recommended that the air/water syringe be bagged with a disposable, single-use plastic sleeve between each patient use.)

13. **HANDPIECES —** When sterilizing *optional* E-type handpieces, follow the instructions provided by the handpiece manufacturer.



IMPORTANT! *Protect the optional electric motor from excess oil draining from E-type handpieces. After lubricating and before autoclaving, stand the handpiece* **A** *by its base on a paper towel and allow excess oil to drain.*

14. **MOTOR AND CORD —** The entire *optional* electric motor and cord assembly is autoclavable. Loosely coil the motor cord when autoclaving. Avoid sharply bending the cord.



135°C Sterilizable up to 275° F (135° C)

WARNING!
- *Sterilize the motor and cord between each patient use.*
- *Use of a sterilization method or temperatures other than what are prescribed may damage the motor or present a risk of cross-contamination between patients.*

CAUTION!
- *Do not soak or submerge the motor or cord in any liquid.*
- *Electric motors are sensitive to shock. Do not drop or impact a motor against a hard surface.*
- *Do not disassemble motor or motor connector.*
- *Do not oil or lubricate motor.*
- *Do not attach a handpiece to a motor while the motor is running.*
- *Do not bend, pull or twist motor cord sharply.*
- *Failure to comply may void your warranty.*

STERILIZATION PROCEDURE:

Pre-Clean

a. Brush off any visible signs of debris from the motor and cord.

b. Thoroughly clean the motor and cord with a moist cloth or towel to remove any remaining signs of debris.

Sterilize

c. Use one of the 3 sterilization methods below (**A, B** or **C**):

Wrapped Sterilization – Place in an appropriately sized sterilization pouch and seal it.

A. Standard autoclaving (Gravity displacement method)
Time: 15 min
Temperature: 270° F (132° C)
Dry time: 30 minutes

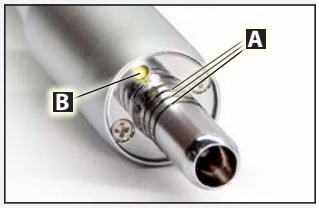
B. Pre-vacuum (dynamic-air-removal)
Time: 4 minutes
Temperature: 270° F (132° C)
Dry time: 40 minutes

Flash Sterilization – For immediate use only.

C. Unwrapped standard autoclaving (Gravity displacement method)
Time: 10 minutes
Temperature: 270° F (132° C)
No dry time is required for flash sterilization.

NOTE: Call Aseptico Inc. at 1-800-426-5913 for any questions or clarifications on this sterilization procedure.

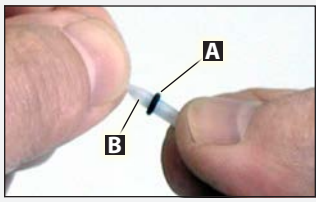
15. **MOTOR O-RINGS AND LED LENS** — Replace the O-rings **A** on the *optional* electric motor when worn or damaged. Gently peel old O-rings out of grooves and replace with new O-rings (PN 520069). Occasionally apply non-toxic lubricant (preferably containing PTFE) to O-rings to maintain flexibility. The lens **B** of the LED light on the *optional* electric motor is soft and can be damaged. It should not be exposed to dust or debris. Excessive dust and debris may cause a drastic decrease in optical output. In the event that the light requires cleaning, first try a gentle swabbing, using a lint-free swab. If needed, use a lint-free swab and isopropyl alcohol to gently remove dirt from the lens. Do not use other solvents as they may adversely react with the LED assembly.

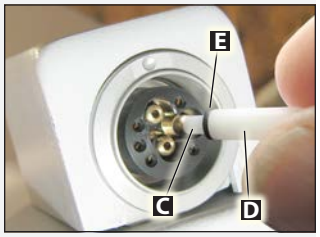


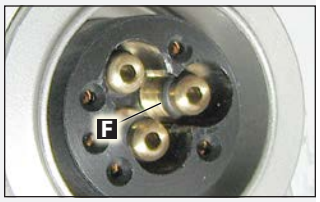
16. **ULTRASONIC SCALER —** The handpiece cover and tips for the *optional* scaler are autoclavable. Clean with disinfectant then autoclave at 275º F (135º C) for 10 minutes or 248º F (120º C) for 20 minutes. Wipe off the scaler handpiece and its silicone hose with a soft cloth. Use a 45% isopropyl and detergent solution. Do not immerse the handpiece in any fluid or spray any fluid directly on the handpiece.

17. **CURING LIGHT —** For the *optional* curing light refer to the operations manual for use and sterilization inside the VALO Grand accessory box included when installed.

18. **ELECTRIC MOTOR/CORD RECEPTACLE O-RINGS —** The O-rings (520103) for the three water/air ports in the *optional* electric motor/cord receptacle should be replaced if damaged or worn. Use the provided O-ring installer pin and sleeve to replace the O-rings:







a. Remove old O-ring from water or air port fitting.

b. Slide new O-ring **A** over pointed end of installer pin **B**, onto the pin's shank.

c. Insert pointed end of installer pin **C** into open end of installer sleeve **D** until O-ring **E** stops against end of tool.

d. Position concave end of installer pin against end of water/air port fitting.

e. Push installer sleeve inward, until new O-ring seats into groove on fitting **F**.

CAUTION FOR ALL STERILIZATION:
- *Do not exceed 275° F (135° C)*
- *Do not submerge in any solution*
- *Do not use ultrasonic cleaners*

TROUBLESHOOTING GUIDE

Unit will not start:
• Check system power connection.
• Check voltage selector switch for proper voltage.
• Check circuit breakers.
• Check if waste tank sensor is connected.
• Check if waste tank is full.
Unit starts but trips circuit breakers:
• Check source circuit to see if it is a minimum of 15A.
• NOTE: The use of extension cords is not recommended.
No water pressure:
• Check water bottles for water level and verify that both caps are tight.
• Check that water bottle pressure toggle is in the ON position.
Insufficient vacuum:
• Check vacuum hose assemblies for blockage.
• Check amalgam collector in the waste tank for blockage.
• Check that the waste tank lid is properly seated and tightly secured.
Insufficient handpiece operation:
• Check the pressure gauge on the front of the cabinet and ensure that sufficient air is being delivered to the handpiece.
• Check that handpiece tubing is untangled and not crimped.
• Check handpiece connection for missing gasket.
No water to handpiece:
• Check that the toggle on the foot control is in the ON position.
• Check that bottle select toggle is selecting a bottle filled with water (or that both bottles are full).
• Check that the bottle pressure toggle is in the ON position.
• Check that the water coolant valve to the selected handpiece is open.
No coolant air to handpiece:
• Check that the air coolant toggle is in the ON position.
• Check that the air coolant flow control valve is open.
Waste pump is not working:
• Check to see if the amalgam separator is clogged by replacing it with the bypass filter.
• Test if the check valve to the amalgam separator is clogged by removing the tube from the check valve closest to the separator and seeing if a cup of water can be extracted.
Unit is turning On and Off:
• Waste tank is full.
Electric motor control panel does not light up when ON:
• Press standby button (partial circle with a bar) on electric motor console front panel.
Electric motor control panel lights up when turned ON, but handpiece does not turn:
• Check motor plug connection.
• Press foot switch and check handpiece gauge on front panel to see if 30 psi (2.07 bar) is being delivered to module.
• Increase speed setting.

• Increase torque setting.
• Check that a file is properly seated in the handpiece and the latch is closed.
Electric motor slowing down or sluggish:
• Check for dirty, under-lubricated handpiece.
• Check if handpiece lubricant is draining into motor.
• After lubricating and before autoclaving, stand handpiece on its base to let excess lubricant drain out.
Amalgam by-pass filter leaks:
• Check that the O-rings are properly installed onto the ends of fittings.
Electric handpiece motor light does not turn ON:
• Press illumination button to turn ON.
• Increase light intensity setting on control panel.
Nothing works when operating from the optional external vacuum/air/water sources:
• Check that the external air connector is fully seated.
• Check that the external pressure gauge is at 100 psi (6.9 bar).
• Check that the system pressure gauge is at 80 psi (5.5 bar).
Instrument makes a chugging sound when operating from the optional external vacuum/air/water sources:
• Check that the vacuum circuit breaker is OFF.
Instrument makes an explosive sound when connected to external air source:
• Check that incoming air pressure is below 130 psi. If not, lower to 130 psi.
• Check that the external pressure gauge is at 100 psi (6.9 bar). If not, adjust the external pressure regulator to 100 psi (6.9 bar).

MESSAGES

SYSTEM MESSAGES

When operating the *optional* electric motor in the reverse direction, the control panel will emit a continuous beeping sound.

When the *optional* AEU-5000 electric motor control panel enters sleep mode (after 20 minutes of inactivity) the display will show a square shape moving across the screen.

When power is switched ON to the AMC-25, the *optional* AEU-5000 electric motor control panel will briefly display the software version as two numbers (e.g. 127/11).

When operating the *optional* curing light, a beep will sound every 10 seconds.

ERROR MESSAGES

None

FAULT MESSAGES

If there is a wiring problem with the *optional* AEU-5000 electric motor control panel, the unit will emit a continuous beeping sound. In this case, call Aseptico for service information.

REPLACEMENT PARTS LIST

The following items can be purchased from Aseptico for replacement (or as spares) of standard and optional equipment.

PART NO.	ITEM	QTY
730595	AMALGAM SEPARATOR MOD	1
AA-20A	AUXILIARY ARM MOBILE DENTAL CART AMC-25	1
730631-01	BOTTLE 1000ml ZIRC KIT	2
730615	CONTAINER BYPASS AMALGAM SEPARATOR	1
ALU-25CLK-VALO	CORDED BROADBAND LED CURING LIGHT	1
AA-86G	FS TUBING SALIVA EJECT 3/8OD GRY	1
840007	LINECORD EURO BLACK 15A/250V 2.5 M	1
840001	LINECORD US HOSPITAL GREY 15A/125V 10 FT	1
730750	MALE 1/2" (EXTERNAL VACUUM MATING CONNECTOR)	1
AA-60SO	MALE 1/4" (EXTERNAL WATER MATING CONNECTOR)	1
AA-62	MALE 3/8" (EXTERNAL AIR MATING CONNECTOR)	1
AE-240SC-40	MOTOR ASSEMBLY W/ SHORT CABLE	1
ASC-10-PE39	SCALER TIP POWER UNIVERSAL	1
ASC-10-PE38	SCALER TIP SLIM UNIVERSAL	1
ASC-10-PE37	SCALER TIP THIN SUBGINGIVAL	1
730745	STRAINER 1-1/2 NPT 20 STAINLESS MESH	1
TA-90D	SYRINGE 3-WAY AIR/WATER QUICK CHANGE TIP	1
TA-1	SYRINGE TIP AUTOCLAVABLE	1
AA-50	TRAY STAINLESS RITTER 13-11/16 X 9-13/16 X 3/4	1
AA-35LAD	VALVE DELUXE UNIVERSL AUTOCLAVABLE QD HVE	1
AA-37LAD	VALVE SAL/EJECT AUTOCLAVABLE LEVER	1
330673	WASTE HOSE ASSEMBLY	1
330672	WASTE TANK AMC-25 HOSP	1
330671	WASTE TANK AMC-25	1

SYMBOL DEFINITIONS

	Caution – Consult Accompanying Documents
	Consult Instructions For Use
	Do Not Use If Damaged
	Use By Date
	Ethylene Oxide Sterilization
	Do Not Reuse
	Part Number
	Follow instructions for use
	Type B Applied Part
	Type BF Applied Part
	Warning—Potential danger to patient or user (consult accompanying documents)
	Dangerous Voltage
	Alternating Current
	This symbol indicates that the waste of electrical and electronic equipment must not be disposed as unsorted municipal waste and must be collected separately.
	Air Coolant Control
	Water Coolant Control
	Air Coolant Toggle -OR- Flush Toggle
	Authorized European Representative
	Motor Direction
	Light Controls
	Protective earth (ground)
	Protect Against Dripping Water
	Serial Number
	Footswitch
	On/Off Switch - Auxiliary
	On/Off Switch - Mains
	Bottle Pressure Release Toggle
	Bottle Select Toggle
	Manufacturer

	Atmospheric Pressure Limitation
	Temperature Limitation
	Humidity Limitation
	Sterilizable up to the temperature indicated

SPECIFICATIONS

Cart Size . . . . . .23.5" W x 30.0" L x 36.5" H (56.7 cm x 76.2 cm x 92.7 cm)

Cart Weight (with all optional equipment) . . . . . .167 lb (75.8 kg)

Shipping Crate Size. . . . 30.0" W x 37.0" L x 50.0" H (76.2 cm x 93.9 cm x 127 cm)

Shipping Crate Weight . . . . . 72 lb (32.7 kg)

Transport Case Size. . . 36.0" W x 34.0" L x 52.0" H (91.4 cm x 86.4 cm x 132.1 cm)

Transport Case Weight . . . . . .210 lb (95.25 kg)

Power Source . . . . AC Dual Voltage, Manual-Switching, 110V / 220V at 60Hz / 50Hz

Power Rating . . . . . 9.8/10.9A @ 50/60Hz, 110VAC; 4.7/5.7A @50/60Hz, 220VAC

Circuit Breakers. . . . . Input: 15A, Pressure: 5A, Vacuum: 5A

Operating Pressure. . . . . .80 psi (5.5 bar)

High Volume Vacuum . . . . . .7.6 SCFM @ 1.3 in Hg (215 liters/min @ 3.3 cm Hg)

. . . . . .5.6 SCFM @ 4.0 in Hg (158 liters/min @ 10.2 cm Hg)

High Volume Vacuum (Recommended Min., External Air Only)

. . . . . .4.6 SCFM @ 0 in Hg (130.3 liters/min @ 0 cm Hg)

. . . . . .3.7 SCFM @ 4 in Hg (104.8 liters/min @ 10.2 cm Hg)

Low Volume Vacuum . . . . . 2.2 SCFM @ 1.5 in Hg (62.3 liters/min @ 5.6 cm Hg)

Pressure Pump. . . . . 1.8 SCFM @ 100 psi (51.0 liters/min @ 6.9 bar)

Air Storage Capacity. . . . . 1.93 gal.(7.3 liters) nominal

Air Storage Pressure. . . . . 100 psi (6.9 bar)

Water Bottle Capacity . . . . . 67.8 fl. oz. (2.0 liters)

Water Flow . . . . . 5.07 fl. oz./min (0.15 liter/min)

Waste Tank Capacity. . . . . 1.08 gal. (4.08 liters)

Noise Level. . . . . 65 dBA or less @ 3'4" (1 meter)

AMC-25 Cart Duty Cycle . . . . . Continuous

Electric Motor Duty Cycle . . . . . 17% (1 minute ON / 5 minutes OFF)

Environmental Conditions

Operating Temperature: . . . . . .50° to 104° F (10° to 40° C)

Transport/Storage Temperature: . . . . . -40° to 160° F (-40° to 71° C)

Relative Humidity: . . . . . 10 to 95% non-condensing

Altitude: . . . . . .0 to 10,000 feet (0 to 3048 meters)

IMPORTANT

When running the AMC-25 unit at 50Hz, expect approximately 17% less vacuum and pressure volume due to slower turning of the compressor.

NOTE

With regard to setting the handpieces pressure, 'kg/cm2' and 'bar' are equivalent.

ELECTROMAGNETIC CAPABILITY

This equipment meets all requirements for safety and performance, related to Electromagnetic Compatibility Standard IEC 60601-1-2:2014.

NOTE: The EMISSIONS characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment (for which CISPR 11 class B is normally required) this equipment might not offer adequate protection to radio-frequency communication services. The user might need to take mitigation measures, such as relocating or re-orienting the equipment.

The AMC-25 has the following applied parts that come into physical contact with the Patient during normal use. All are type B applied parts as defined in IEC 60601-1 safety standard.

1. Pneumatic Handpieces with integrated air and water cooling
2. 3-way air/water syringe
3. High Volume Suction (HVS)
4. Low Volume Suction
5. Optional integrated Electric handpiece
6. Optional Ultrasonic Scalar
7. Optional curing light

Classifications:

- Class I
- IPX0 – Cart; IPX1 – Footswitch
- Type B Applied Parts
- Ordinary Protection
- Not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide.
- Note: For reliable grounding, connect to receptacle labeled "Hospital Grade."

CLASSIFIED C UL US
E361057

Medical electrical equipment with respect to electric shock, fire and mechanical hazards only in accordance with ANSI/AAMI ES60601-1:2005/(R)2012) (Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance) CSA CAN/CSA-C22.2 NO. 60601-1:14 (Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance). Particular requirements for basic safety and essential performance of dental equipment: IEC 80601-2-60(First Edition): 2012

Essential Performance:

DENTAL EQUIPMENT does not have ESSENTIAL PERFORMANCE.

Manufacturer

Aseptico Inc
8333 216 St SE
Woodinville,
WA, 98072 USA

Disposing of your old product:

Each Member State in the European Union (EU) requires that the waste from electrical and electronic products be disposed of separately from normal household waste. This includes electronics, metals and electrical accessories, such as signal cables or power cords. Products in this category carry the symbol below.



Contact your local disposal authority and comply with the correct disposal method and follow national guidelines for unit disposal.

Any malfunction or deterioration in the characteristics and/or performance of this device, as well as any inadequacy in its labelling or the instructions for use which might lead to or might have led to the death of a patient or user or to a serious deterioration in his state of health (e.g. Serious Adverse Event); this information shall be reported immediately to Aseptico Inc. and/or the Authorized Representative (within the European Union).

WARRANTY

Aseptico Inc. warrants its new products against defects in material and workmanship under normal and proper use, care, and maintenance for a period of two (2) years from date of original invoice. This two (2) year warranty does NOT apply nor is it extended to products that are not manufactured by Aseptico. These products may be covered by a separate limited warranty provided by the particular manufacturer, and all claims and questions regarding the same are to be directed to the particular manufacturer.

Expendable components, such as batteries, fuses, light bulbs, and tubing sets installed on Aseptico products are specifically excluded and have no warranty. Consumable goods are warranted for the stated expiration date of such goods.

Repair or replacement of any product(s) or part(s) under this warranty does not extend the term of this warranty, and such product(s) or part(s) shall remain covered by the unexpired portion of the warranty period, or for ninety (90) days from the date of return to Aseptico, whichever is later. This limited warranty applies only to the initial or first installation of the product or part.

During the specific warranty periods set forth above, Aseptico will, at its option, repair or replace the product(s) or particular part(s) that are found to be defective in either material or workmanship in part or whole. Aseptico shall be the sole arbiter of such action. In the event of alleged defect under warranty, the purchaser is to notify Aseptico's Customer Service department promptly. Customer Service will provide Return Material Authorization (RMA) instructions, usually directing that the product be returned for service, shipping prepaid by the buyer or end user, to Aseptico or its designated and authorized warranty service center.

This warranty shall not apply to products (1) that have been subjected to neglect, abuse, misuse, improper installation, inadequate maintenance, or damage due to improper use of cleaning materials or chemicals, or non-compliance with Aseptico's storage, installation, operation, maintenance or environmental requirements; (2) that have undergone any modification or repair not previously authorized by Aseptico in writing, or service, repair or modification by or from any facility other than an authorized Aseptico service center or technician, or that use non-authorized software or spare or replacement parts; or (3) that fail due to reasonable and normal use or wear and tear, or materials made, furnished or specified by the buyer or end user.

Aseptico does not assume under this warranty any risks or liabilities arising from the clinical use of its products, whether or not such use involves coincidental utilization of products manufactured by others. Under no circumstances will Aseptico be liable or responsible for special, compensatory, incidental, consequential or punitive damages, lost profits, lost sales, or loss of use or loss of business opportunity by or through the use of the product. Aseptico's sole and maximum liability with respect to the product, other than its obligations set forth above, shall be the total purchase price paid for the product.

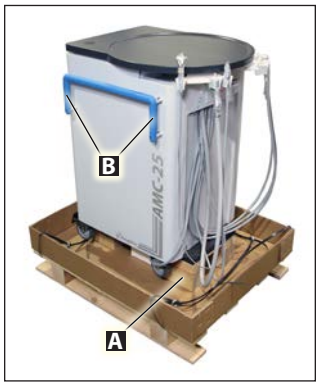
PACKING INSTRUCTIONS

1. Remove all liquid wastes, water from water bottles, and the *optional* amalgam separator and bypass filter (if included).

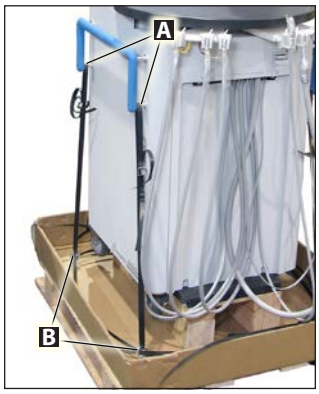
2. Remove all accessories from the unit and purge air pressure from air tank.

3. Detach *optional* scaler from their hoses and stow into its shipping fastener located under the top lid. Detach *optional* curing light from it's connection port and pack back inside the VALO Grand accessory box.

4. Place shipping crate base on level floor. Lift the AMC-25 cart onto the pedestal **A** in the crate base. CAUTION: Two people are required to lift the cart. Always use a 4-point lift from where handles attach to the frame **B** (do not lift from the center of the handles).



5. Strap the ends of both handles **A** to the four anchor eye-bolts **B** on the base.



6. Place the boxed foot control pedal **A** under the cart.



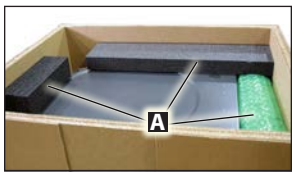
7. Wrap the cart with pallet stretch wrap.

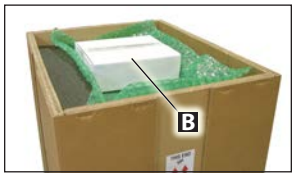


8. Insert the cardboard end panels and side panels into the crate base, making sure the "End Up" labels **A** are pointing up. Use the adhesive strips on the inside of the end panel flaps to attach to the side panels.



9. Place the packing material **A** on top of cart, then place the accessories box **B** on top of a piece of bubble wrap.





10. Place the lid on top of the crate. Position the four strapping blocks **A** onto the edges of the lid, then connect the straps over the blocks and tighten.



NOTES



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