

# OPERATION and MAINTENANCE INSTRUCTION MANUAL

## ADU-25 Custom Cart



 **Aseptic**<sup>®</sup>

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## SPECIFICATIONS:

### Chassis Head

Dimensions: 18" W x 12" L x 3.5" H  
(45.72 cm W x 30.48 cm L  
x 8.89 cm H)

Chassis Height: 23.0" min., adjustable to  
32.0" max.  
(58.42 cm min., adjustable to  
81.28 cm max.)

Weight: 38 lbs (17.25 kg)

Air Supply: 70 - 100 PSI, filtered



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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.

Your new Aseptico ADU-25 Custom Cart delivery system is one of the finest portable carts available to the dental profession. The system is designed for portable operatory use and features automatic highspeed and lowspeed handpiece controls and a three-way air/water syringe. A high volume vacuum system, saliva ejector system, and a pressurized water tank, which supplies water for handpiece coolant and syringe, are optional.

# *Congratulations!*

This Aseptico ADU-25 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 hand-held pieces or other accessories for your unit.

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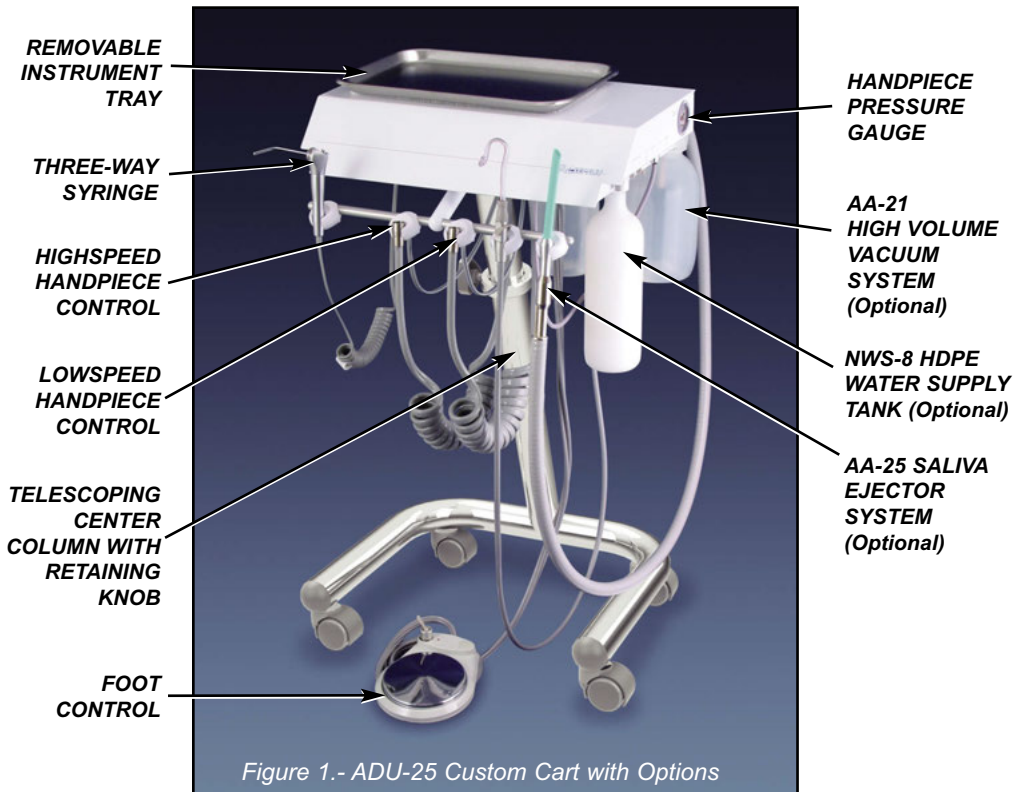
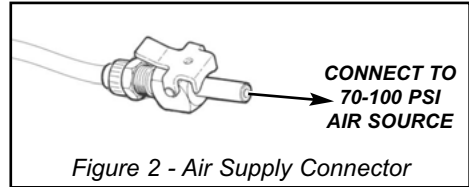
## **PACKAGE CONTENTS:**

- System Chassis
- TA-90D Three-Way Syringe
- Automatic Highspeed Handpiece Control
- Automatic Lowspeed Handpiece Control
- Foot Control
- AA-50 Instrument Tray
- Telescoping Stand
- AA-25 Saliva Ejector System (Optional)
- AA-21 High Volume Evacuator System (Optional)
- NWS-8 Water Supply System (Optional)
- AA-19 Fiber Optic Handpiece Connection (Optional)
- AA-290CK Central Vacuum Kit (Optional)
- AWS-1T Tap Water Connector (Optional)
- AWS-1C Cavitron® Connector (Optional)

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## SETTING UP THE SYSTEM:

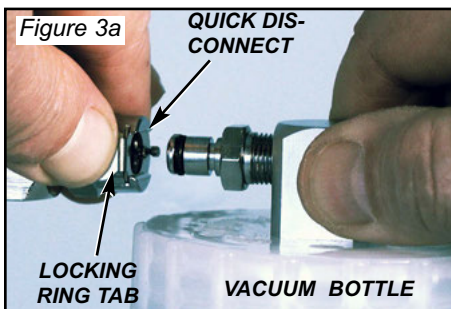
1. Place the ADU-25 Custom cart in an upright position on a flat, stable surface. Loosen the center column retaining knob and extend the telescoping upper portion. Tighten the knob at the desired height (Fig. 1).
2. Check to make sure the syringe, highspeed and lowspeed handpieces are hanging in their proper holder. Locate the foot control on the floor (Fig. 1).
3. The ADU-25 unit must be connected to a dry, filtered, 70-100 psi air source. Simply extend the 1/4" grey air supply line from the ADU-25 cart and connect the quick-disconnect into the compressed air source (Fig. 2)



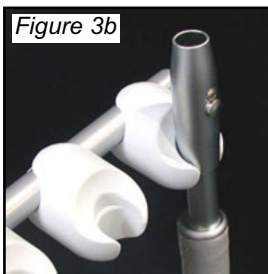
## OPTIONAL ACCESSORIES SETUP:

4. Remove the optional high volume vacuum system, saliva ejector system, and High-Density Polyethylene (HDPE) water supply tank from packing and install on proper quick disconnects on the delivery head (Fig. 1)

5a. To install the optional vacuum bottle, press on locking-ring tab (Fig. 3a), push bottle into quick coupler, and release tab.

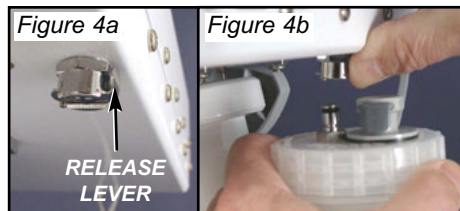


5b. Hang the vacuum head in the holder at the right hand end of the front holder rack (Fig. 3b).

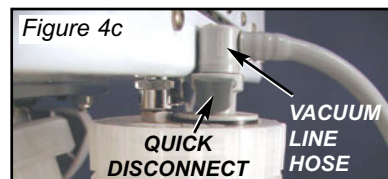


6a. To install the saliva ejector system, locate the quick disconnect at the rear of the delivery head (Fig. 4a). Note manual release lever on disconnect. Insert metal fitting on top of bottle into quick disconnect.

Locking ring will snap into place. Press release lever on disconnect to remove bottle from unit (Fig. 4b).



6b. Insert vacuum line hose into plastic quick disconnect on top of bottle (Fig. 4c). Hang the saliva ejector valve in the holder located next to high volume vacuum handpiece.



7. To install optional water supply bottle, thread it into the white plastic fitting at the right rear corner of the chassis (Fig. 5).



## OPERATION FUNCTIONS:

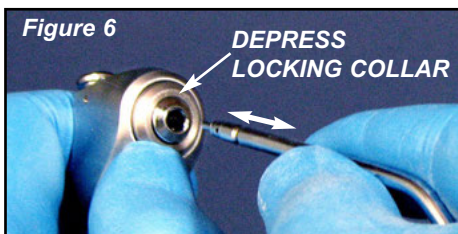
### 1. THREE-WAY AIR/WATER SYRINGE -

Depress the right button for air operation, and the left button for water operation. Depressing both buttons will create a mist. The syringe features quick-change autoclavable tips: To remove a tip, press on the locking collar surrounding the tip socket and pull the used tip straight out of the socket (see Fig. 6). To insert a new tip, press locking collar and push tip into socket as far as it will go. Release collar and gently tug on tip before using to ensure that tip is securely locked into socket.

#### Syringe Tip Sterilization:

- 1) Remove contaminated syringe tip.
- 2) Remove all visible signs of contamination before autoclaving.
- 3) Autoclave tip at 132° C (270° F) for ten minutes.
- 4) Sterilize between each patient use.

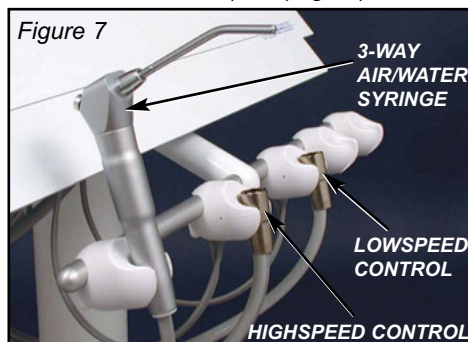
**NOTE:** Since only the tips can be autoclaved, it is recommended that the air/water syringe be bagged with a disposable, single-use plastic sleeve between each patient use.



- ### 2. HANDPIECE CONTROLS (Fig. 7) -
- The Aseptico ADU-25 includes two handpieces mounted to the front bar. These are fully automatic. By placing a handpiece into its proper holder, the pressure is

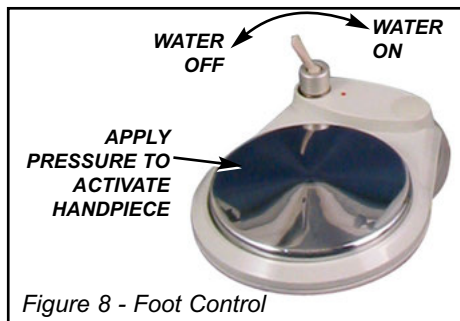
automatically shut off. When a handpiece is removed from its holder, pressure is automatically opened and ready for use with foot control.

The amount of air pressure supplied to each handpiece may be adjusted by turning the flow control for that handpiece on the control block (See page 8).



- ### 3. WET/DRY FOOT CONTROL (Fig. 8) -
- The foot control activates the handpieces and water coolant spray.

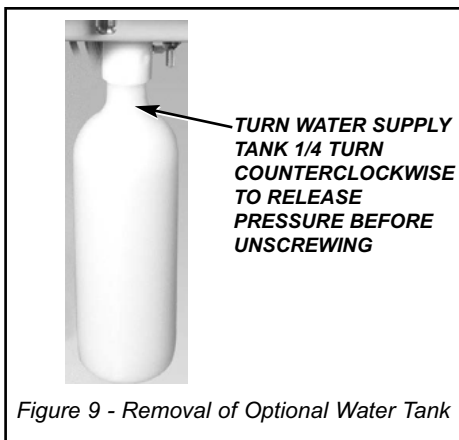
Position the foot control on the floor. For handpiece operation, apply foot pressure to any part of the center disk. The handpiece must be removed from its holder before operation can begin.



To activate the water coolant, move the wet/dry toggle switch on the foot pedal to the right position. Move the toggle switch to the left position to disable water coolant.

- 4. WATER SUPPLY TANK (Optional)** - The Aseptico ADU-25 may incorporate a self contained pressurized water system (Fig. 9). This consists of a 1-liter HDPE tank dispensing water through the 3-way syringe and handpiece control. The water tank is pressurized to a constant 35 pounds per square-inch gauge (PSIG) during use.

Before removing the tank for refilling, it must be depressurized by turning the tank 1/4 turn counterclockwise. The tank is removed by unscrewing it from its mount at the bottom right rear of the chassis. After the tank is filled, screw it back onto the mount. Cleaning and sanitization of the tank is recommended between uses.



- 5. PRESSURE GAUGE** (Fig. 10) - The pressure gauge on the right panel gives you a visual indication of the handpiece drive pressure.
- 6. WATER COOLANT FLOW CONTROL** (Fig. 10) - Adjusts the flow of water coolant to the handpiece control.
- 7. FLUSH TOGGLE** (Fig. 10) - The flush toggle located on the right side of the chassis allows you to quickly and completely flush your handpieces, washing away contaminants which may have accumulated in the handpiece and tubing. You should flush the handpieces for about 5 seconds after every patient, and about 20 seconds at the beginning of each day to reduce overnight bacterial accumulation which may have occurred.

To flush your handpieces, remove them from their holder, directing the spray away from you and into a basin, then flip the flush toggle and hold the desired number of seconds. Release the flush toggle.

- 8. AA-21 HIGH VOLUME VACUUM SYSTEM (Optional)** - The AA-21 Steri-Vac is an air powered, self contained oral evacuator system. It is supplied with a plastic waste container and a single high velocity hose. (Fig. 11)

Remove the vacuum bottle and hose assembly from packing and install into the quick disconnect at the back of the delivery head.

To operate, remove the vacuum hose from holder and insert a standard oral evacuator tip. Depress the on/off switch on the side of the hose end for vacuum.

## OPERATION FUNCTIONS *Cont'd:*

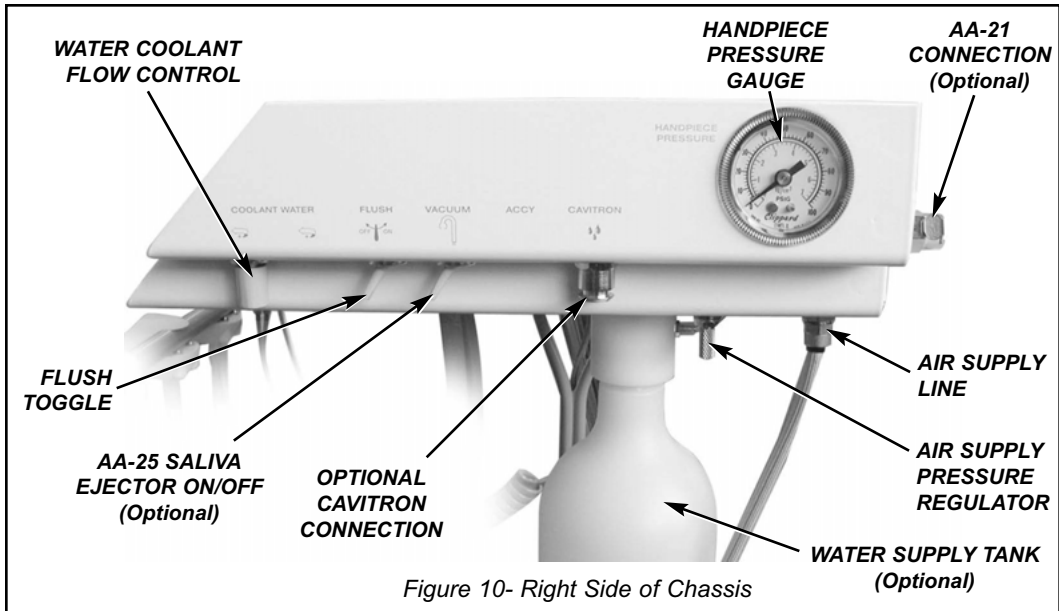


Figure 10- Right Side of Chassis

Waste from the vacuum system will collect in the attached plastic bottle. When the waste container is 3/4 full it should be emptied. After each use, the vacuum system should be cleaned by running clean water or a vacuum system cleanser through the evacuator hose and thoroughly cleaning waste bottle.

**CAUTION:** Use only NON-foaming cleansers in the vacuum lines. A small and large capacity waste container are available and are interchangeable. The ADU-25 is supplied with a large capacity container.

- 9. AA-25 SALIVA EJECTOR SYSTEM- (Optional)** - The AA-25 Saliva Ejector is an air powered, self contained oral evacuation system. It is supplied with a plastic waste container and a single low velocity hose (Fig.12).

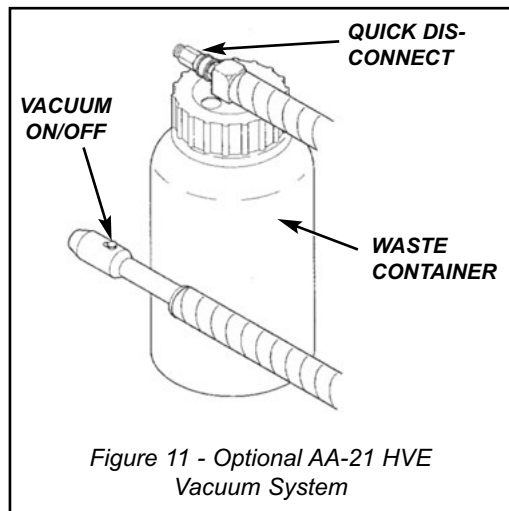
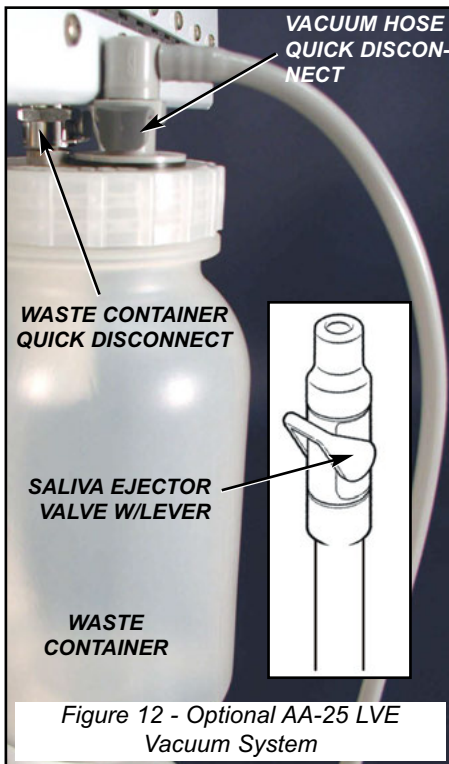


Figure 11 - Optional AA-21 HVE Vacuum System



To operate, remove the saliva ejector valve from the holder and insert a standard saliva ejector tip. Turn the vacuum toggle switch, located on the right side of the cart, to the 'ON' position. The vacuum may be adjusted by moving the lever valve on the saliva ejector tip. The lever valve assembly snaps apart at the swivel and may be autoclaved.

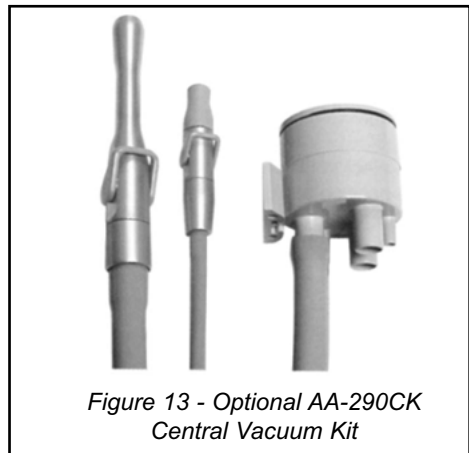
Waste from the vacuum system will collect in the attached plastic bottle. When the waste container is 3/4 full, it must be emptied to prevent a back-up in the



system. After each use, the vacuum system should be cleaned by running clean water or vacuum system cleanser through the evacuator hose and thoroughly cleaning the waste bottle. **CAUTION:** Use only NON-foaming cleansers in the vacuum lines.

**10. AA-290CK CENTRAL VACUUM KIT (Optional)** - The AA-290CK Kit (Fig.13) is

used with a central vacuum system. It includes a central vacuum canister with disposable solids collector, an autoclavable central vacuum lever valve (with 5 feet of tubing), and an autoclavable saliva ejector tip valve (with 5 feet of tubing). An industry-standard 1/2-inch connection hose provides easy adaptation to the central vacuum system.



## ROUTINE ADJUSTMENTS:

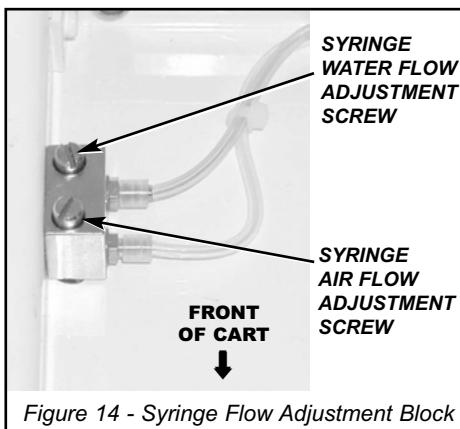
### 1. WATER COOLANT FLOW ADJUSTMENT

The water coolant to the handpiece control can be varied from a fine fog spray to a heavy stream.

Install and run a handpiece at a midrange speed. Make sure the wet/dry toggle is in the 'ON' position on the foot control. Turn the water coolant flow control located along the right side of the chassis clockwise until it seats softly. Begin turning counterclockwise until a fine mist is visible. This will provide excellent cooling while burr is cutting.

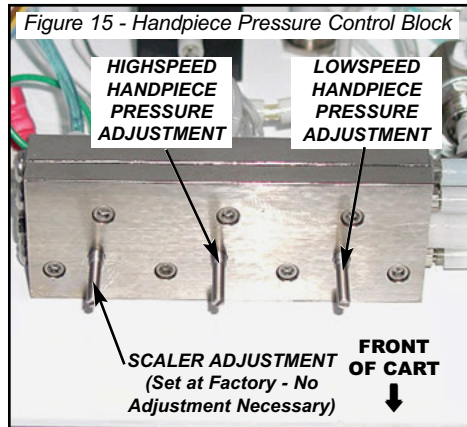
### 2. SYRINGE AIR/WATER FLOW ADJUSTMENT

(Fig. 14) - The syringe flow adjustment block is located inside the delivery head near the left rear corner and has two slotted adjustment screws on top. To open the chassis, remove the Ritter tray and pad from atop the unit and lift the lid. The outside screw adjusts air flow and the inside screw adjusts water flow. Turning the adjustment screws clockwise will decrease the pressure and counterclockwise will increase pressure.



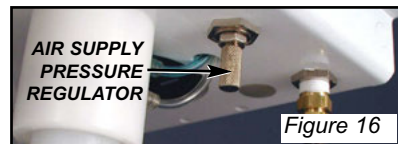
### 3. HANDPIECE PRESSURE ADJUSTMENT

(Fig. 15) - The amount of air pressure supplied to each handpiece may be adjusted by turning the flow control for that handpiece on the control block. The control block is located at the front right of the unit under the lid.



### 4. AIR SUPPLY PRESSURE REGULATOR

The regulator valve located on the underside of the chassis near the pressure gauge at the right rear corner of the chassis controls the line pressure from the compressed air source to the unit. Turning the valve stem clockwise will increase this pressure and counterclockwise will decrease pressure (Fig. 16).



### 5. WATER PRESSURE VALVE

- The water tank is pressurized to a constant 35 PSIG by a fixed regulator inside the chassis. Adjustment is unnecessary.

## MAINTENANCE:

Because of its simple design, the Aseptico ADU-25 Custom Cart requires very little maintenance. Any maintenance that is needed can be performed in minutes.

1. **BLEEDING THE SYSTEM** - If the unit will not be used for an extended period of time, or the unit might be subjected to freezing conditions, you should bleed the system.

Simply empty the contents of the water supply tank and install the tank back onto the quick disconnect. Operate the air/water syringe and highspeed handpiece with water coolant 'ON' until just air comes through the water lines. Pack unit and store as normal.

2. **HANDPIECE FLUSH** - Flush the handpieces for about 5 seconds after every patient, and about 20 seconds at the beginning of each day. Refer to page 4.
3. **GENERAL CLEANING** - The cart exterior is designed to make cleaning and the use of prophylactic barriers as easy as possible. The external surfaces of the cart should be cleaned using a mild solution of liquid detergent and water. Any external surfaces of the unit that are contacted during use should carefully be wiped down with a disinfectant at the beginning of each day and between each patient.

As described in the vacuum section the high and low volume vacuum systems should always be thoroughly cleaned after use.

#### 4. **PACKING THE UNIT FOR**

**TRANSPORTATION** - If the ADU-25 unit is going to be transported, it is recommended that the original or similar packing material be put into place to avoid dents and scratches from parts inside of the box shifting.

## **WARRANTY**

Aseptico warrants its products against defects in material or workmanship for a period of two (2) years, from date of original invoice. Some handpieces are warranted for one year under the same conditions. Other handpieces and expendable components, such as air turbines and light bulbs, are covered by shorter warranty periods, or have no warranty. Aseptico's sole obligation under product warranty is (at its sole option and discretion) to repair or replace any defective component or product 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 instructions, usually directing that the product be returned for service. Shipment to Aseptico and the cost thereof is always the responsibility of the purchaser.

Accidental misuse, inappropriate installation, or failure to perform directed maintenance voids the warranty.

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.

NOTE: In the interest of serving our customers more efficiently, customers receiving service on non-warranted repairs are expected to accept charges that are less than \$250.00 without further notification.



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