

## YOU WILL NEED:

- Leveling device
- Hex keys: 1/8-inch, 3/16-inch

### CAUTION

The 2615 and 2671 Cascade Carts are extremely heavy. If the cart must be lifted, two people should perform this task.

## SELECT THE FLOOR BOX LOCATION

The location of the floor box must be selected well in advance of the installation of the system to allow the necessary plumbing and wiring to be done. The floor box must be located so the Cascade Cart with 7' (2134 mm) umbilical will reach the work area around the chair.

Use the Floor Box Template, A-dec Publication No. 85.0472.00, for positioning the floor box.

## CONNECT THE UTILITIES

1. If the air and water manual shutoff valves are not already installed, install them now.
2. Connect the air and water pre-regulators to the manual shutoff valves. Do not overtighten the fittings.

## Modify The Umbilical Length:

3. The umbilical extends 7' (2134 mm) from the cart to the floor box. If the umbilical is too long, it can be shortened to an appropriate length.

### To shorten the umbilical:

- a. Determine how long the umbilical needs to be and mark it where it will be cut.
- b. Unscrew the collar from the umbilical (see Figure 1).
- c. Slit the excess umbilical convolute sheathing lengthwise (see Figure 1), then remove it from the tubing bundle. Take care to avoid cutting the internal tubing or wiring.

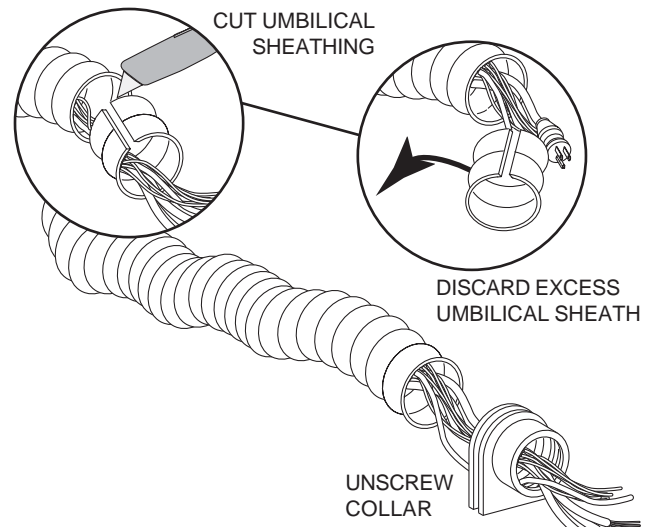


FIGURE 1

- d. Shorten the internal umbilical tubings by the same amount. Pull any excess tubing and wires into the floor box.
- e. Connect the duplex receptacle cable to the electrical junction box, using the connector provided.

**WARNING:** This is a hardwire installation, and should be done by a licensed electrician.

## Connect the Vacuum Tubing:

4. Identify the convolute vacuum tubing, cut it to a length that avoids bends and low spots. Push it onto the vacuum stub (see Figure 2).

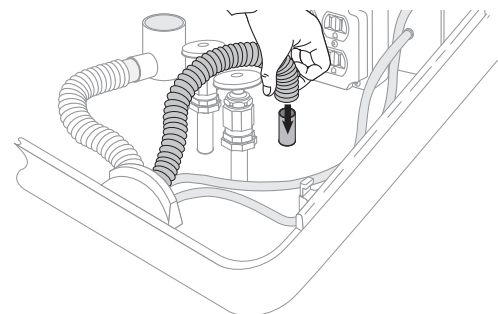


FIGURE 2

## LEVELING THE WORK SURFACE

The Cascade Cart's work surface has been leveled at the factory. If further leveling is required, proceed with the following instructions.

1. Make sure the cart is on a level floor surface. Place a leveling device on the work surface and check for levelness front-to-back.
2. Using a 3/16" hex key, loosen the four mounting screws in the leveling plate on the underside of the work surface, there is one in each corner of the leveling plate. Do not remove these screws (see Figure 3).

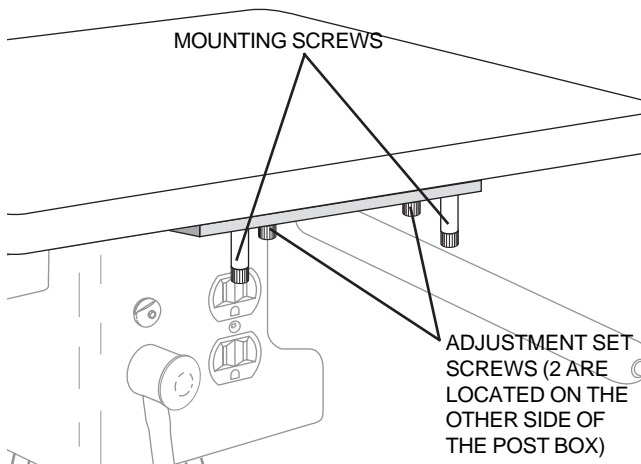


FIGURE 3

3. Locate the four adjustment screws, there is one in each corner of the leveling plate (see Figure 3).
4. Front-to-back leveling: Face the post box. If the cart's work surface tilts toward you, using a 3/16" hex key, tighten the two adjustment set screws closest to you until the cart's work surface is level.

If the cart's work surface tilts away from you, tighten the two adjustment set screws furthest away from you until the cart's work surface is level.

5. Side-to-side leveling: Face the cart's post box. If the cart's work surface tilts to the left, tighten the two adjustment set screws on the left side of the leveling plate until the cart's work surface is level.

If the cart's work surface tilts to the right, tighten the two adjustment set screws on the right side of the leveling plate until the cart's work surface is level.

6. Tighten the four mounting screws. Then check the cart's work surface again for levelness. Repeat steps 4 and 5 if necessary.

## LEVELING THE CONTROL HEAD

1. Place a bubble level on the top of the control head and check for level.
2. Using a 1/8" hex key, loosen the two locking screws located underneath the control head (see Figure 4).

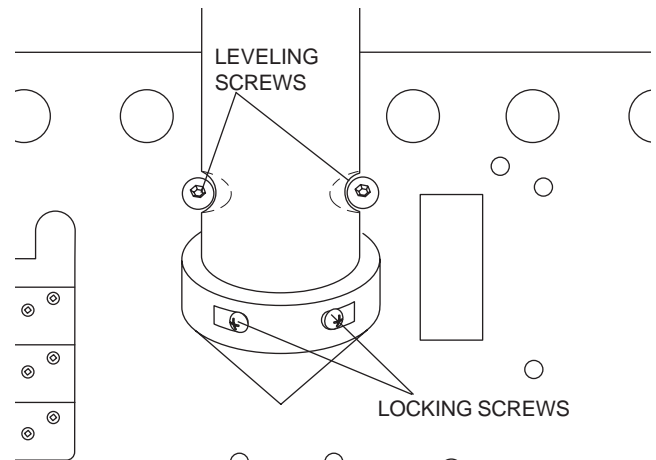


FIGURE 4

3. Level the control head using the two leveling screws, use a 1/8" hex key (see Figure 4).
4. Tighten the locking screws.

## POWER SUPPLY (OPTIONAL)

Install the power supply. Refer to the power supply installation instruction.

## TEST THE UNIT

If the unit does not have a Self-contained Water System, go to step 3.

1. Fill the self-contained water bottle with water specified by the dental team.
2. Align the bottle with the self-contained water supply cap, making sure the clear tubing (1/4" ID) extends straight down into the water bottle. Screw the water bottle onto the cap until it is snug.

### NOTE

If the self-contained water bottle is not tight enough, the system will not be able to pressurize properly. This will result in little or no water to the handpieces.

3. Fully open the manual air and water shutoff valves.
4. Move the master on/off toggle to the ON position (see Figures 5 and 6).

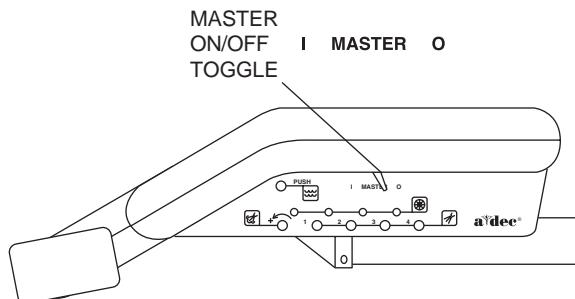


FIGURE 5: 2671 CART

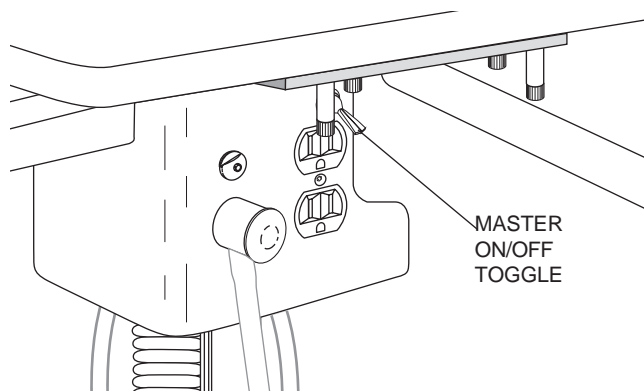


FIGURE 6: 2615 CART

5. Check for air and water leaks while operating the syringe (see Figure 7).

- Air — Press the right button down.
- Water — Press the left button down.
- Spray — Press both buttons down.

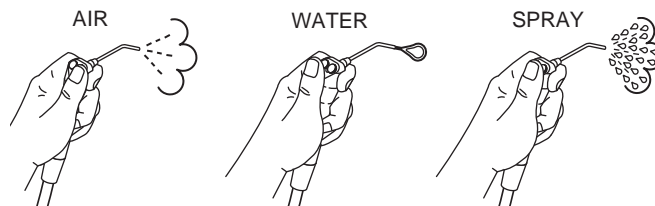








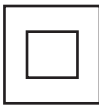

FIGURE 7

6. Check for vacuum leaks while operating the HVE. To operate the HVE, simply turn the control valve.
7. Check the system pressure gauges in the floor box. Air pressure should be 70–80 psi (483–552 kPa). If applicable, water pressure should be 35–40 psi (241–276 kPa). If an adjustment is necessary, refer to the Floor Box Owner's Guide (A-dec Publication No. 85.2611.00).
8. If an optional power supply is installed, plug it in.
9. Test all optional electrical accessories. Refer to each electrical accessory Owner's Guide for testing and adjustment procedures.

## BEFORE LEAVING THE FACILITY

Distribute the Owner's Guide(s) and instruct the dental team in the operation and maintenance of the equipment.

# Agency Symbols

Identification of Symbols			
 <p>Recognized by Underwriters Laboratories Inc.® with respect to electric shock, fire and mechanical hazards only in accordance with UL 2601-1. Recognized with respect to electric shock, fire, mechanical and other specified hazards only in accordance with CAN/CSA C22.2, No. 601.1</p>		Functional earth (ground)	
			Attention, consult accompanying documents
 <p>Classified by Underwriters Laboratories Inc. with respect to electric shock, fire and mechanical hazards only in accordance with UL 60601-1. Classified with respect to electric shock, fire, mechanical and other specified hazards only in accordance with CAN/CSA C22.2, No. 601.1</p>		Type B applied part	
		 <p>Conforms to European Directives (refer to Declaration Statement)</p>	
 <p>Protective earth (ground)</p>			

## Classification of Equipment (EN 60601-1)

### Types of shock protection:

- Class I Equipment  
(Dental Chairs, Dental Lights, & Power Supplies)
- Class II Equipment  
(Chair, Wall, & Cart-Mounted Delivery Systems)

### Degree of shock protection:

- Type B Applied Part  
(Delivery Systems Only)

### Degree of protection against water ingress:

- Ordinary Equipment  
(All products)

### Mode of operation:

- Continuous Operation  
(All models except Dental Chairs)
- Continuous Operation with Intermittent Loading  
(Dental Chairs -5% duty cycle)

## Environmental

- For Storage:
- All equipment  
(except dental furniture)
- Temperature: -40°C to 70°C  
-40°F to 158°F
- Relative Humidity: 95% maximum

### For Operation:

- Temperature: 10°C to 40°C  
50°F to 104°F
- Relative Humidity: 95% maximum

## Electromagnetic Compatibility

This equipment has been tested and found to comply with the limits for medical devices in EN60601-1-2. These limits are designed to provide reasonable protection against harmful interference in a typical medical installation. Contact A-dec Customer Service, if you have any questions.

## Flammable Gasses

Not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide, where such gasses may accumulate in concentration (closed space).

## Contact Information

### A-dec Inc.

2601 Crestview Drive  
Post Office Box 111  
Newberg, Oregon 97132 USA  
Telephone 1.800.547.1883  
1.503.538.7478

### Designated E.U. Authorized

### Representative: A-dec Dental U.K. Ltd.

Austin House  
11 Liberty Way  
Nuneaton, Warwickshire  
England CV116RZ  
Phone: 0800-ADECUK (233285) Within UK  
44 24 7635 0901 Outside UK

### A-dec Australia

41-43 Bowden Street  
Alexandria, N.S.W. 2015  
Australia  
Telephone 61- (0) 2-9699 4600