

*CASCADE<sup>®</sup> POST  
BOX*



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Warranty:

A-dec warrants all products in this owner's guide against defects in material or workmanship for one year from time of delivery. A-dec's sole obligation under the warranty is to provide parts for the repair, or at its option, to provide the replacement product (excluding labor). The buyer shall have no other remedy. All special, incidental, and coincidental damages are excluded. Written notice of breach of warranty must be given to A-dec within the warranty period. The warranty does not cover damage resulting from improper installation or maintenance, accident or misuse. The warranty does not cover damage resulting from the use of cleaning, disinfecting or sterilization chemicals and processes. The warranty also does not cover light bulbs. Failure to follow instructions provided in the A-dec owner's guide (operation and maintenance instructions) may void the warranty. A-dec warrants A-dec dental chair cylinders, both lift and tilt, for ten years from the date of purchase of the chair or the cylinder. This warranty is retroactive to A-dec chair cylinders already in the field. The warranty covers chair cylinders A-dec finds to have manufacturing related irregularities. Stool cylinders are covered under A-dec's one-year warranty.

NO OTHER WARRANTIES AS TO MERCHANTABILITY OR OTHERWISE ARE MADE.

Return Policy:

U.S. and Canadian dealers wishing to return overstock (unopened) merchandise to A-dec for credit consideration must include a copy of the original invoice number. A return authorization form from an A-dec Territory Manager must be included with serial numbered equipment or A-dec/W&H handpieces. A 15% restocking fee will be assessed. Merchandise that cannot be returned for credit includes parts assembled to the dental unit, chair, light, or dental furniture; obsolete parts; and specials. Dental furniture cannot be returned for credit. Standard color upholstery ordered for obsolete chairs or stools cannot be returned for credit. In the case of a defective warranty item, a copy of the replacement invoice, serial number of the unit under which it was replaced, and a description of the symptoms of the defect must be returned with the part to:

A-dec Inc. 2601 Crestview Drive,  
Newberg, Oregon 97132, USA.

Equipment Alterations Policy:

Certain modifications or alterations of A-dec equipment which expand the use of A-dec equipment beyond its design and intent, or which override any safety features of A-dec equipment may jeopardize doctor, patient or staff safety. Field modifications that alter the electrical and/or mechanical safety of A-dec dental devices are in conflict with Underwriters Laboratory (UL) construction file requirements and are not sanctioned by A-dec. Examples of field modifications that diminish safety design include, but are not limited to, rendering access to the line voltage without the use of tools, modification of supporting elements that increase or shift loading characteristics, and the addition of any powered device that exceeds the design limits of the dental system. The use of accessory equipment not complying with the equivalent safety requirements of A-dec equipment may lead to a reduced level of safety of the resulting system. It is the responsibility of the equipment distributor and the installer to assure that the installation complies with all building code requirements. The responsibility to determine whether a modification or alteration of A-dec equipment falls within these constraints is with the person(s) who initiates, approves and/or performs such modification or alteration. A-dec will not respond to inquiries on an individual basis. This person(s) will be deemed to have assumed all associated risks with such alteration or modification and will hold A-dec harmless from resulting claims, including product liability claims. Additionally, such modification or alteration voids A-dec's warranty and may invalidate UL or other regulatory agency approval.



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Cascade Post Box  
(with optional Cuspidor)

# CONTENTS

*Service information and warranty information are located on the inside front cover and front page.*

About Your Cascade Post Box .....	2
Removing Side Covers .....	3
Air/Water Connections .....	4
Inline Tubing Connections .....	5
Bowl Rinse and Cup Fill Water Flow Adjustment Controls .....	6
Electrical .....	7
Leveling Adjustment .....	8
Side Cover Adjustment .....	10
Care Instructions .....	11
Maintenance .....	12
Adjustments and Specifications .....	12
Identification of Symbols .....	13
Classification of Equipment (EN 60601-1) .....	13

## About Your Cascade Post Box

The Cascade Post Box (*see Figure 1*) contains utility connections between the floor box and other A-dec products such as the control head, foot control, light, cuspidor, or assistant's instrumentation. The leveling mechanism is also housed within the post box. Depending on the options chosen, the post box may also contain a solids separator, a recessed location for a self-contained water system and quick disconnect (QD) outlets for the hydrocolloid, air, or scaler.

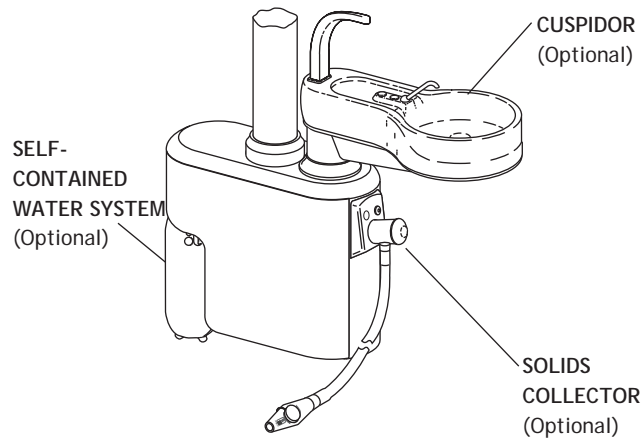


Figure 1. Post Box

The post box is made from materials which resist chipping, stains and chemicals commonly used in the operatory.

Enclosed on the air and water side of the post box are the inline tubing connections for air and water supply lines (*see Figure 4 on page 5*). If your unit has the optional cuspidor, you will find the flow adjustment controls for the cuspidor bowl rinse and cup fill on this side.



The electrical side of the post box (see Figure 6 on page 7) contains a variety of electrical connections. The type and number of connections depend on the options you have selected. Connections may include those from the floor box to a dental light, the cuspidor safety switch, an intra-oral light source handpiece, a low voltage water heater/heated syringe tubing, a curing light, or a scaler. If your unit has the touch control, the connection from the chair to the touch control on the control head will be located on this side.

Some international units have a larger size post box to enclose a dry vacuum separator.

### Removing Side Covers

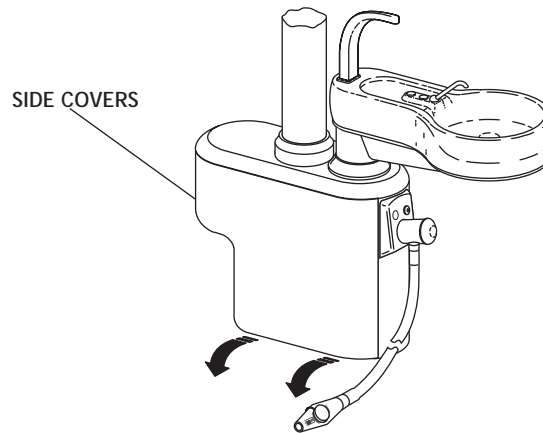


Figure 2. Removing Side Covers

To remove a side cover, insert your fingers under the lower edge of the cover and pull out and down on the cover (see Figure 2).

To replace the cover, insert the upper edge of the cover into the groove, align the studs on the inside of the cover with the spring clips on the post box and snap the cover into place.

## Air/Water Connections

Air and water connections (see Figure 3) are located on one side of the post box. On a right-hand delivery system, these air and water connections will be on the left.

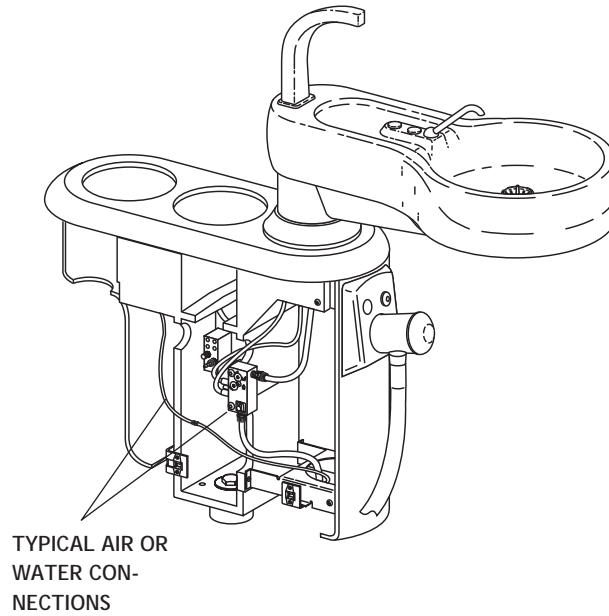


Figure 3. Air/Water Connections

*Inline Tubing Connections*

Tubing from the floor box is channeled through the umbilical to the post box where this tubing is attached using inline connectors to the tubing coming from the control head, foot control, cuspidor, or assistant's instrumentation.

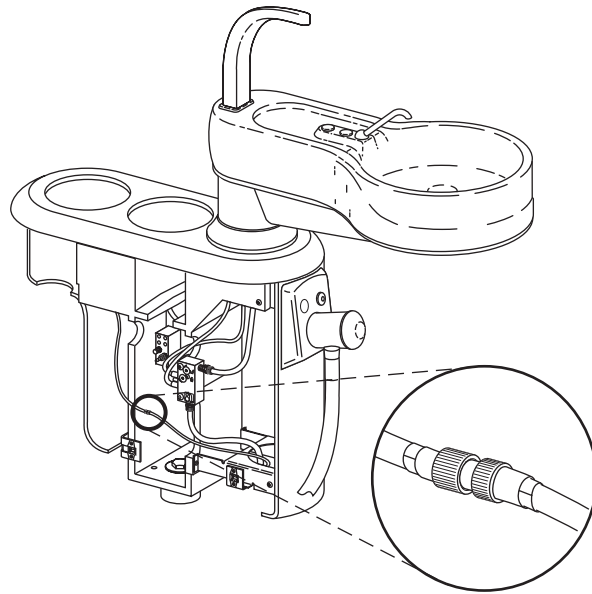


Figure 4. Inline Connections

*Bowl Rinse and Cup Fill Water Flow Adjustment Controls*

If you have chosen the cuspidor option, the controls to adjust the flow of water to the bowl rinse and cup fill will be located on the air/water side of your post box (see Figure 5). Complete instructions for making water flow adjustments are included in Cascade 7284 and Radius® 7285 Cuspidor Owner's guide, A-dec Publication No. 85.2609.00.

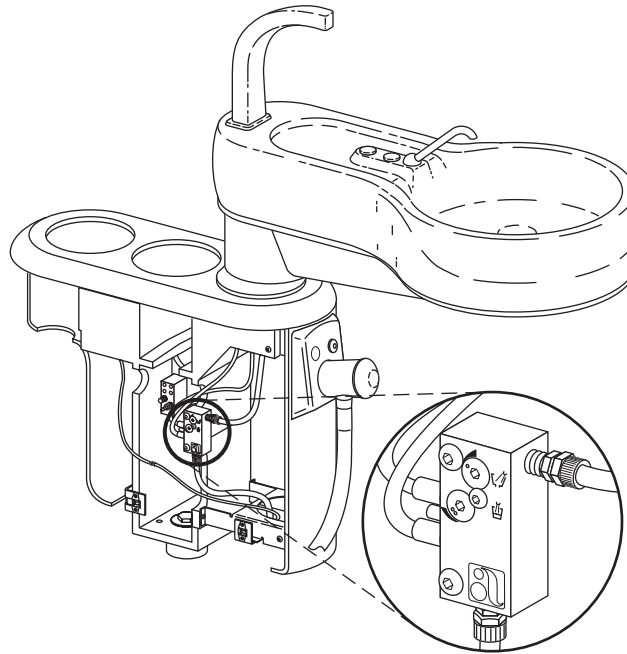


Figure 5. Flow Adjustment Controls

## Electrical

### *Warning*

Only an authorized A-dec dealer should service, make repairs or adjustments to electrical components on this side of the post box.

The electrical side of the post box (see Figure 6) contains a variety of electrical connections. Depending on the options selected, the electrical connections may include those from the chair to the touch control on the control head or from the floor box to the dental light, intra-oral light source, low voltage water heater/heated syringe tubing, curing light, scaler, or cuspidor safety switch.

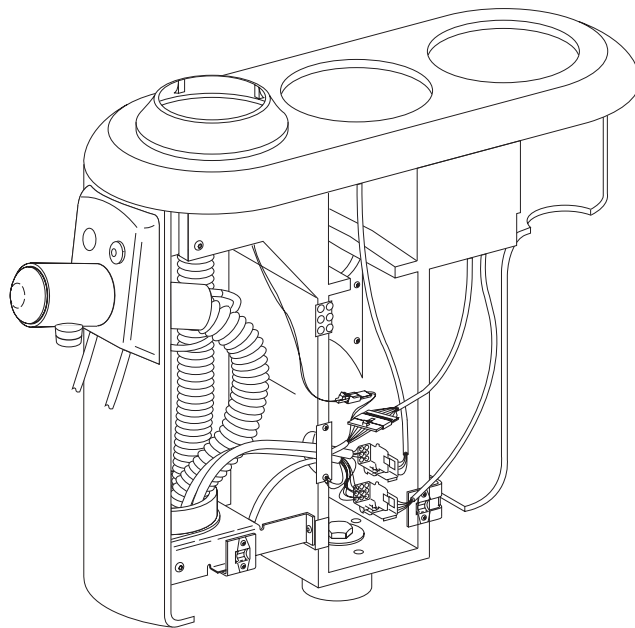


Figure 6. Electrical Side of Housing

## Leveling Adjustment

Your post box should be leveled during installation. However, if adjustment becomes necessary, remove the side cover (*refer to page 3*). Then proceed as follows:

1. Using a 15/16-inch open end or socket wrench, loosen the center bolt (*see Figure 7*) approximately three turns so the post box will wobble.
2. Place a magnetic bubble level on the post. Move the level so that you check the level parallel and perpendicular to the chair.

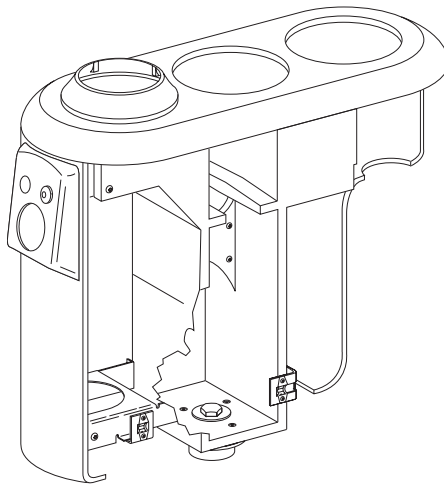


Figure 7. Leveling Mechanism

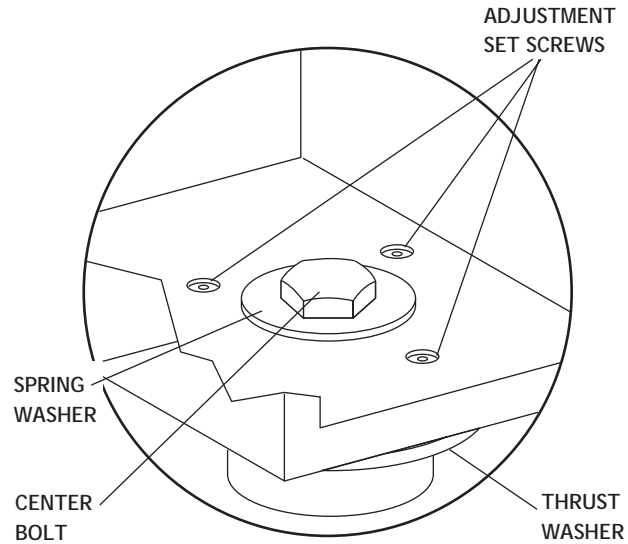


Figure 8. Leveling Adjustment

3. Using a 3/16-inch hex key, adjust the three setscrews (*see Figure 8*) until the unit is level. Make sure the setscrews are adjusted so all three contact the thrust washer located between the bottom of the post box and the unit mount.
4. Tighten the center bolt so it is snug and the spring washer (*see Figure 8*) is flattened. When properly adjusted, the post box will be level and will not wobble.

## Side Cover Adjustment

The side covers on your post box should be adjusted at the time of installation. If the covers become too loose or too tight, you may adjust them. To make the adjustment, remove the side cover (refer to page 3) and locate the adjustment brackets (see Figure 9).

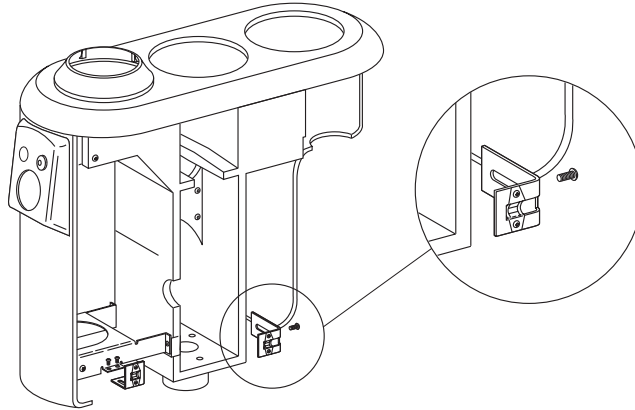


Figure 9. Side Cover Adjustment

Visually determine how much of an adjustment is needed. Use a 1/8-inch hex key to loosen the screws on the side adjustment (see Figure 9), slide the bracket to the proper position and retighten the screw.

Use a Phillips screw driver to loosen the screws on the bottom of the front bracket (see Figure 9), slide the bracket to the proper position and retighten the screws.



## Care Instructions

For recommended asepsis instructions, refer to *Equipment Asepsis (A-dec Publication No. 85.0696.00)*.











## Maintenance

Care Instructions	
Equipment Asepsis	
Owner's Guide .....	85.0696.00
Parts	
Maintenance Parts	
Owner's Guide .....	85.2634.00
Power Supplies	
Floor Boxes	

## Adjustments and Specifications

Owner's Guide .....	85.2611.00
Water Flow Adjustments (for optional cuspidor)	
Cascade 7284 and Radius 7285 Cuspidor	
Owner's Guide .....	85.2609.00
Leveling Adjustment .....	page 8
Side Cover Adjustment .....	page 10
Minimum air, water and vacuum service requirements for proper unit operation:	
Air: 2.50 cfm (70.80 l/min) at 80 psi (551 kPa).	
Water: 1.50 gpm (5.68 l/min) at 40 psi (276 kPa).	
Vacuum: 12 cfm (339.84 l/min) at 8 inches of mercury (27 kPa).	
If mounting a non-A-dec light, nominal acceptable weight is 12 lbs (5.44 kg).	
Maximum unit weight: 160 lbs (72.58 kg).	
Maximum moment at the unit mount arm created by the freestanding unit is 250 ft-lbs (339 N·m) along the axis of the post box.	
Specifications are subject to change without notice.	

## Identification of Symbols

Symbol	Description
	Recognized by Underwriters Laboratories Inc. with respect to electric shock, fire and mechanical hazards only in accordance with UL 60601-1 (2601-1) and under mutual recognition agreement with CAN/CSA C22.2, No. 601.1.
	Classified by Underwriters Laboratories Inc. with respect to electric shock, fire and mechanical hazards only in accordance with UL 60601-1 (2601-1) and under mutual recognition agreement with CAN/CSA C22.2, No. 601.1.
	UL listed to UL 61010A-1, BS EN 61010-2-010 and Canadian (CAN/CSA C22.2, No. 1010.1-92) safety standards.
	Conforms to applicable European Directives (refer to Declaration of Conformity).
	Protective earth (ground).
	Functional earth (ground).
	Attention, consult accompanying documents. No user servicable parts . Attention, line voltage. Only licensed electrician should remove cover.
	Type B applied part.
	Class II equipment.
	Caution: Metal surfaces can be hot during and following the dry cycle.

## Classification of Equipment (60601-1)

Type/Mode	Classification
Types of shock protection	CLASS I EQUIPMENT: Dental chairs, dental lights, and power supplies CLASS II EQUIPMENT: Chair, wall, and 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
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).

## Electrical Rating

Type	Specification
Volts	100/110-120/220-240 VAC
Frequency	50-60 Hz
Current	As configured and specified in equipment manual (products labeled 15A or greater require dedicated circuit, identified in distribution panel).

## Environmental Specifications

Temperature/Humidity	Specification
Storage/Transportation Temperature:	-40°C to 70°C (-40°F to 158°F) - Relative humidity: 80% for up to 31°C, decreasing linearly to 50% at 40°C.
Operating Temperature:	10°C to 40°C (40°F to 104°F) - Relative humidity: 80% for up to 31°C, decreasing linearly to 50% at 40°C.
Indoor Use:	Altitude up to 2,000M (6,563 ft.), installation category II, pollution degree 2. (UL 61010A-1 and CAN/CSA C22.2, No. 1010.1-92 only)





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