

Owner's Guide

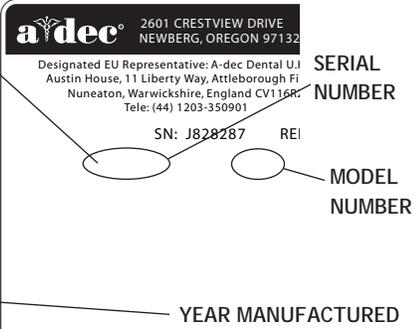
Decade[®]
1011/1021
Chair

Warranty Information	
Serial Number	
Model Number	
Date Purchased	

Date of Service	Model/Description of Service	Technician's Initials

ALPHABETICAL EQUIVALENT TO THE NUMERICAL OF THE MONTH MANUFACTURED

A	January
B	February
C	March
D	April
E	May
F	June
G	July
H	August
I	September
J	October
K	November
L	December



Serial Number Identification

Decade 1011/1021 Chair Serial Number Location:

- Under the seat/toeboard

For service information contact your local authorized A-dec dealer.

Check with local codes and A.D.A. (Americans with Disabilities Act) Requirements for Installation of this product.

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.

Decade 1011/1021 Chair

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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Decade 1011/1021 Chair



Decade 1021 Chair



Decade 1011 Chair

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About Your Decade Chair

Your Decade chair is an electronically controlled, hydraulically powered dental chair.

Chair functions are controlled by the 8-function footswitch or touch pad (see Figure 2 or 2a on

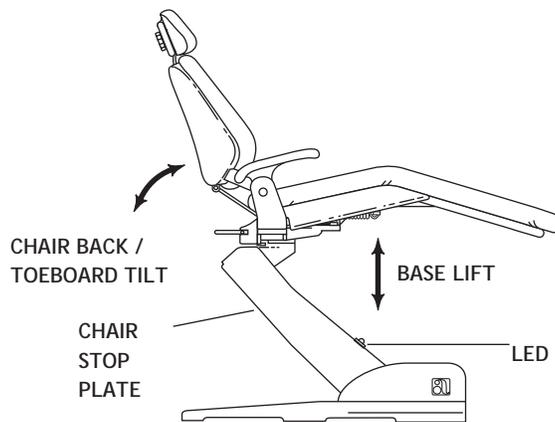


Figure 1. Lift, Tilt, and Stop Plate

Chair LED

page 3).

The chair LED indicates the status of the chair:

ON: Normal operation.

SLOW BLINK: The cuspidor or stop plate limit

Chair Stop Plate

switches have been activated. Remove any obstructing object.

The chair stop plate (see Figure 1) stops the chair immediately when any part of it is pressed. Should anything inadvertently become lodged under the chair, press Base UP on the footswitch or touch pad

8-Function Footswitch

to raise the chair so the object can be removed. As long as pressure is applied to the stop plate, the chair base will not go down any further.

The 8-function footswitch (see Figure 2) or the chair touch pad (see Figure 2a) gives you both manual and programmed control of chair

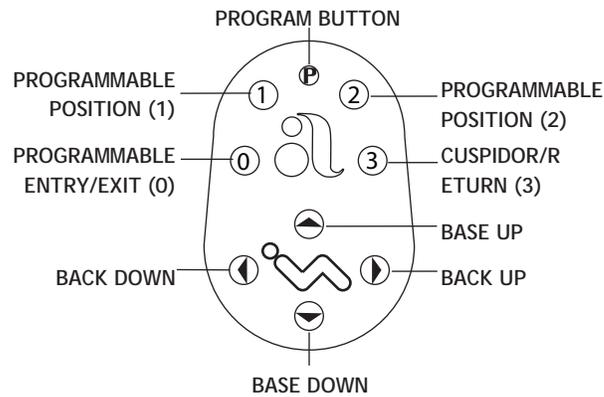


Figure 2. 8-Function Footswitch

Touch Pad

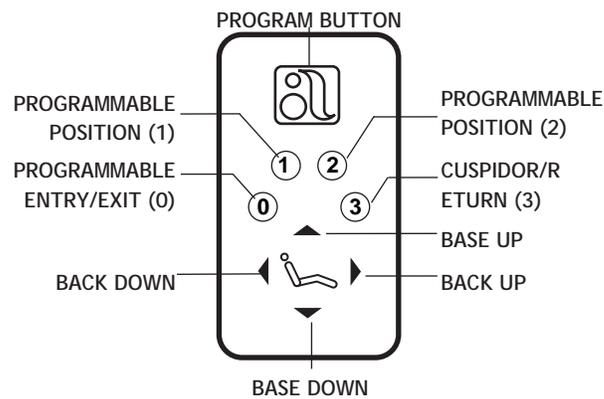


Figure 2a. Chair Touch Pad

positioning. The arrows on the footswitch and touch pad manually control chair back/toeboard tilt and chair lift. The numbered buttons are for Entry/ Exit and programmed chair positions.

Manual Control

The **Base Up/Down (lift)** function controls the chair's lift, or vertical movement. To raise the chair, push the up arrow on the footswitch or touch pad. To lower the chair, push the down arrow on the footswitch or touch pad. Push the button until the chair reaches the desired height, then release it.

The **Back Up/Down (tilt)** function controls the chair back/toeboard tilt. To raise the chair back, push the right arrow on the footswitch or touch pad. To lower the chair back, push the left arrow on the footswitch or touch pad. Push the button until the chair back reaches the desired position, then release it.

Program Button

The program button (located on the top middle of the footswitch, or in between the arrows on the touch pad) is used to save the settings for Entry/ Exit (0), programmable positions (1 and 2), and Cuspidor/Return (3).

Programming the Chair

NOTE

When 1 or 2 are pressed on the footswitch or touch pad, the chair base and back go to the programmed position.

To stop the chair at any point, press any button on the footswitch (or press any button on the touch pad).

Programmable Positions 1 and 2

To send the chair to a programmed operating position, push either 1 or 2 on the footswitch (press 1 or 2 on the touch pad). Positions 1 and 2 are programmed at the factory to move the chair to the same position.

To change a programmable position, find the program button on the footswitch or touch pad (see Figures 2 or 2a on page 3).

1. Using the manual arrows on the footswitch or touch pad, set the chair to the operating position that you prefer.
2. Press and release the program button. An audible tone will be emitted. Then, **within four seconds**, push the button for 1 or 2 to store that position. You will hear an audible tone confirming that the programmable position function has been reprogrammed.
3. Check the programmed position by manually moving the chair to another position. Then push and release the button programmed in Step 2. The chair should move automatically to the position set in Step 1.

Optional Program Functions

Position 3 is factory set in the **Cuspidor/Return** mode. In this mode, the chair back will rise to a pre-programmed upright position providing the patient access to the cuspidor. Pressing position 3 a second time lowers the chair back to its previous operating position.

Position3 may also be used as a third Pre-Position or as a last position recall.

Contact an authorized A-dec Dealer to have Position 3 reconfigured to a third Pre-Position or as a last position recall.

Entry/ Exit (0)

To send the chair to a preset entry/exit position, push the position 0 button (see Figure 2 or 2a on page 3).

NOTE

When pushed, Entry/ Exit (0) will cause the chair base and back to go to the preset entry/exit position.

To stop the chair at any point, push any button on the footswitch or touch pad.

If you want to change the preset entry/exit position, first locate the program button on the footswitch or touch pad (see Figure 2 or 2a on page 3).

1. Using the manual arrows, set the chair to the desired patient entry/exit position.
2. Press and release the program button. An audible tone will be emitted. **Within four seconds**, press the Entry/ Exit (0) button on the footswitch or touch pad. An audible tone will confirm that the chair has been reprogrammed.
3. Check the Entry/ Exit (0) function by manually moving the chair to another position. Push the Entry/ Exit (0) button. The chair will move to the position you set in Step 1.

Folding Armrest

The armrests fold down and out of the way to facilitate patient entry/exit. When lifted, the armrests lock securely in place for patient comfort during procedures. To lower an armrest, press the button on the side of the arm. Lock the armrest by lifting it until it locks in place.

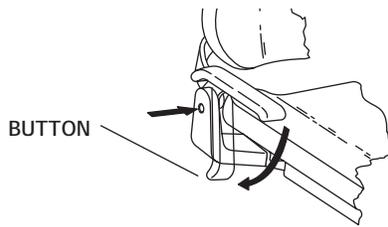


Figure 4. Folding Armrest

Swivel Brake

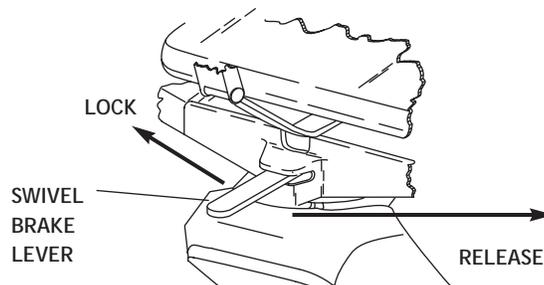


Figure 5. Swivel Brake

When engaged, the chair swivel brake restricts rotation of the chair. With the brake released, you can rotate the chair to any position within approximately 30° either side of center. To release the swivel brake, push the brake lever to the right. To engage the swivel brake, push the brake lever to the left.

If the chair swivels left or right with the brake engaged, or if it is difficult to move with the brake disengaged, the swivel brake tension must be adjusted.

Using a 3/416-inch hex key, adjust the swivel brake tension. Turn the adjusting screw clockwise to increase brake friction. Turn the screw counter-clockwise to decrease brake friction.

Double-Articulating Headrest

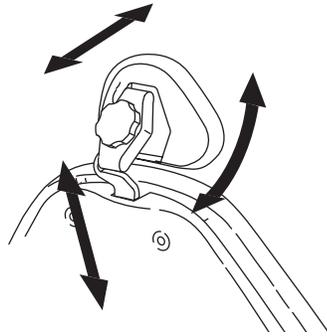


Figure 6. Double-Articulating Headrest

The double-articulating headrest offers the widest range of headrest positions possible. A convenient locking knob allows you to easily accommodate most patients and procedures.

To position the headrest, release the locking knob by turning the knob out (counterclockwise), then adjust the headrest as necessary to fit the head and neck. Lock the headrest in the desired position by turning the knob in (clockwise).

To move the headrest higher or lower, simply pull up or push down on the headrest until it is at the desired height. (*Refer to for Headrest Drift Adjustment on page 12.*)

Positioning For Wheel Chair

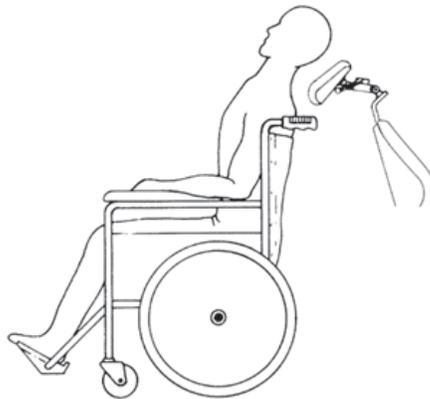


Figure 7. Positioning For Wheel Chair Usage

The headrest can be used to accommodate wheelchair patients. Slide the headrest up until it is free from the chair, turn it 180°, then slide it back into the backrest and push it all the way down. Run the chair to its full Back Up position. Adjust headrest height by moving the chair up or down (using the Base Up function on the footswitch), then position the headrest as desired.

Headrest Drift Adjustment

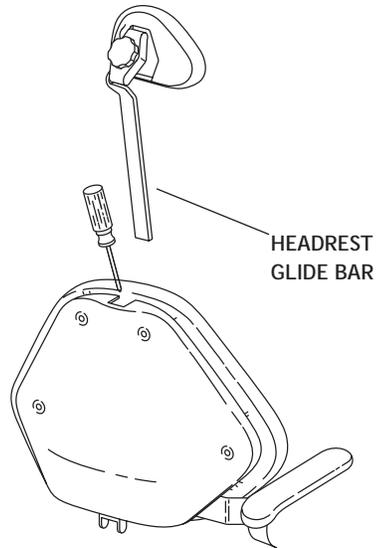


Figure 8. Headrest Drift Adjustment

NOTE

The back cover does not have to be removed to adjust glide bar tension.

If the headrest drifts downward, or if you find the headrest difficult to move up or down, the glide bar tension must be adjusted (see Figure 8). Remove the headrest glide bar to access the adjusting screw.

Using a Phillips screwdriver, adjust the glide bar tension. Turn the adjusting screw clockwise three to four revolutions to increase friction and hold the headrest more securely. Turn the screw counter-clockwise three to four revolutions to decrease friction and allow the headrest to move up and down more freely. Reinstall the headrest and recheck glide bar tension.

Left/Right Conversion

When combined with a conversion-compatible A-dec chair-mounted handpiece control system, your Decade chair allows you to convert for either left- or right-hand delivery. If you have a Radius[®] Delivery System, go to page 15.

1. Raise the chair back, then disconnect the chair from the power source to prevent injury caused by accidental lowering of the chair.
2. Remove the chair swivel brake cover.
3. Remove the upholstery pin on both sides of the chair casting to remove the seat upholstery (see Figure 9).

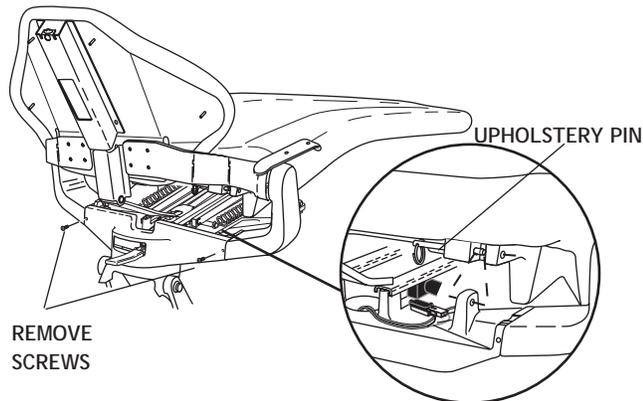


Figure 9. Seat Upholstery Removal

4. Place the armrests in their full down position.
5. Move the master on/off toggle to the OFF position. If the unit is equipped with a self-contained water system, use the syringe to bleed the system of air and water pressure, then remove the bottle.
6. Position the control head over the post box and the assistant's arm in front of the chair.

7. Unscrew and remove the hex-head bolt from the chair adapter (see Figure 10). Pivot the chair adapter post and the post box to the other side of the chair. Align the hole in the chair casting with the hole in the adapter post.
8. Reinstall the hex-head bolt in the chair adapter and tighten it firmly.
9. Position the post box:

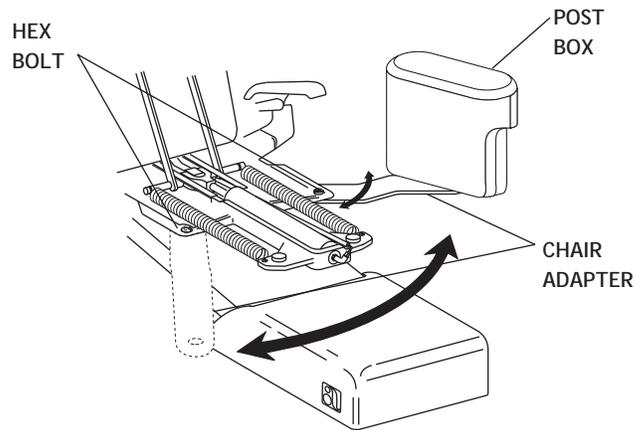


Figure 10. Left/Right Chair-Mount Conversion

NOTE

Avoid rotating the post box in a complete circle. Doing so will twist the lines inside the floor box.

Cascade Delivery System

Remove the post box covers. Use a 15¼16-inch wrench to loosen the bolt located in the center of the post box frame. Rotate the post box to the desired position. Then tighten the bolt and replace the covers.

Decade 1011/1021 Chair

10. Replace the self-contained water bottle.
11. Plug in the chair, and turn the system on. Check the post box connections for leakage or pinched tubing.
12. Return the chair to the entry position and move the foot control to the other side of the chair.

Radius Delivery System

Simply rotate the handpiece control and light arms to the desired position.

Care Instructions

The unique Radius bearing mount allows the delivery system to rotate around the toeboard in one continuous motion, eliminating the need for tools or fine adjustments.

For surface cleaning and disinfection instructions, refer to your **Equipment Asepsis *Owner's Guide***, A-dec Publication No. 85.0696.00.

Upholstery Replacement

The upholstery on your chair is installed in four sections: back, seat, headrest, and armrests. Each section is easily removed and replaced.

Backrest Upholstery

Remove the four screws securing the backrest cover and set the cover and screws aside. Using a 5/16" hex key, remove the four mounting screws that hold the upholstery to the backrest, then remove the existing upholstery. Reverse this procedure to replace the upholstery.

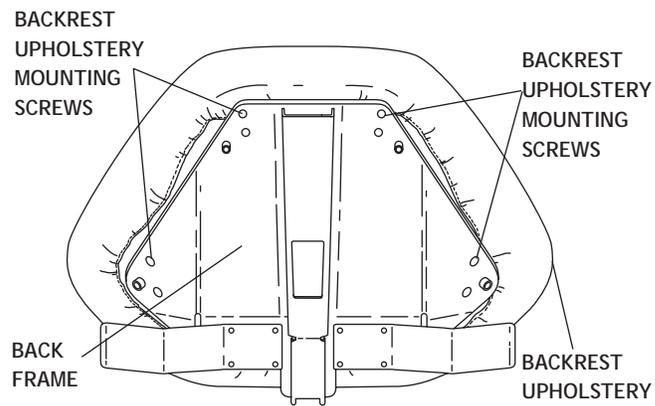


Figure 11. Backrest Upholstery

Seat Upholstery

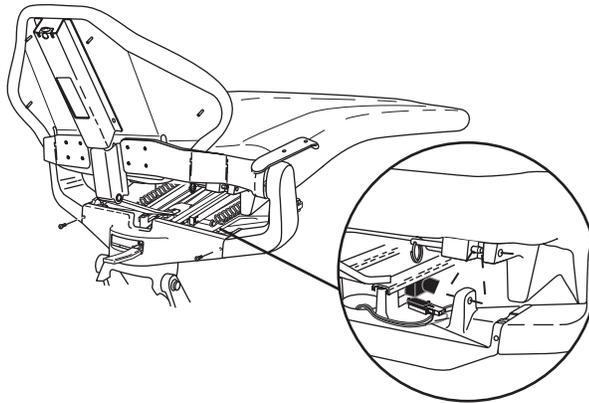


Figure 12. Replacing Seat Upholstery

1. Raise the chair back, then disconnect the chair from the power source to prevent injury caused by accidental lowering of the chair.
2. Remove the chair swivel brake cover.
3. Remove the existing seat upholstery.
4. Align the new upholstery to the holes in the chair casting (*see Figure 12*).
5. Insert the pins through the upholstery and chair casting (*see Figure 12*).
6. Reinstall the chair swivel brake cover.
7. Plug in chair.

Armrest Upholstery

1. Using a 1/8" hex key, first loosen the rearmost mounting screw a 1/2 turn, then remove the front and middle mounting screws from the underside of each armrest.
2. Remove the armrest upholstery by sliding it off the armrest.
3. Install the 3/4" mounting screw and spacer into the rearmost position on the new armrest upholstery but do not tighten.
4. Slide the armrest upholstery onto the armrest.
5. Install and tighten all mounting screws (5/8") into the armrest upholstery.
6. Tighten the rearmost mounting screw.

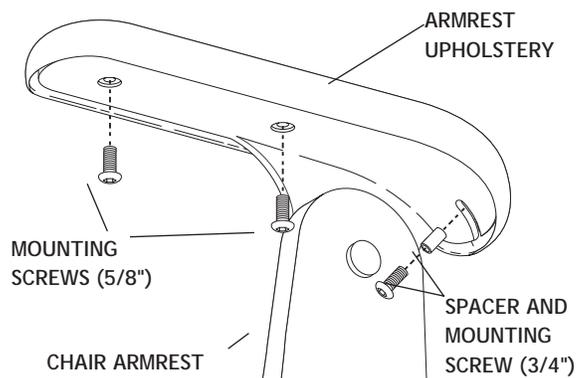


Figure 13. Replacing Armrest Upholstery

Double-Articulating Headrest Upholstery

Use the following procedure to replace the double-articulating headrest upholstery.

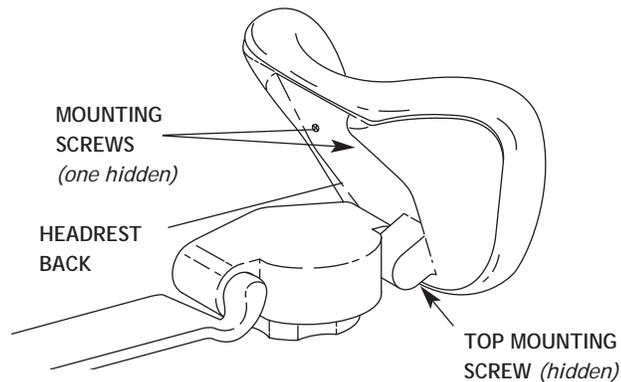


Figure 14. Replacing Headrest Upholstery

1. Loosen the headrest knob and rotate the headrest to a full upright position.
2. Remove the top Phillips mounting screw located just above the knob assembly.
3. Rotate the headrest back 45° to expose the two Phillips mounting screws on the headrest back (see Figure 14). Remove the two screws and the headrest cushion.
4. To attach the replacement upholstery, reverse this procedure. *DO NOT tighten the screws until all three screws have been started.*

Maintenance

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Parts	
Maintenance Parts	
Owner's Guide	85.2634.00

Adjustments and Specifications

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Chair Capacity:	
Patient Load: 300 lbs. (135 kg) maximum.	
Accessory Load: 150 lbs. (67.5 kg) maximum.	
Maximum Load from Accessories:	
Chair Adapter: 200 lbs. (90 kg) weight combined with a moment of 250 ft. lbs. (339 N·m)	
Radius Front Mount: 180 lbs. (81 kg) weight combined with a moment of 525 ft. lbs. (711.8 N·m)	
Radius Rear Mount: 70 lbs. (31.5 kg) weight combined with a moment of 160 ft. lbs. (216.9 N·m)	

Specifications are subject to change without notice.

Safety Considerations for Accessory Equipment

The use of accessory equipment not complying with the equivalent safety requirements of this equipment may lead to a reduced level of safety of the resulting system.

Consideration relating to the use of accessory equipment shall include:

Evidence that Safety Certification of the accessory equipment has been performed in accordance to the appropriate IEC 601 and IEC 601-1 Harmonized National Standards.

Transporting the Decade Unit

When transporting the dental unit the chair base should be fully down, and the chair back should be fully up. The chair body should be secured to the chair baseplate. Do not lift the chair by the chair body.

The delivery system should be over the seat upholstery and the light should be centered above the chair.

The delivery system and light should be secured to prevent movement. The entire Dental Unit should be secured to the transporting vehicle.

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).

Decade 1011/1021 Chair

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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