

Check With Local Code Authorities About Installation Requirements For This Product

Installation Instructions

Performer® Dental Light (Performer I Chair or to the Performer III Chair)

About This Install

This installation instruction is for installing a dental light on the Performer I or the Performer III chair.

You Will Need

- Adjustable wrench or 9/16" open end wrench
- Magnetic leveling device
- Hex keys: 3/32" and 5/16"

Before Beginning Light Installation

A chair needs to be installed before beginning the light installation.

If a chair is—	You need to—
installed	remove the upholstery
not installed	install chair per chair installation instructions

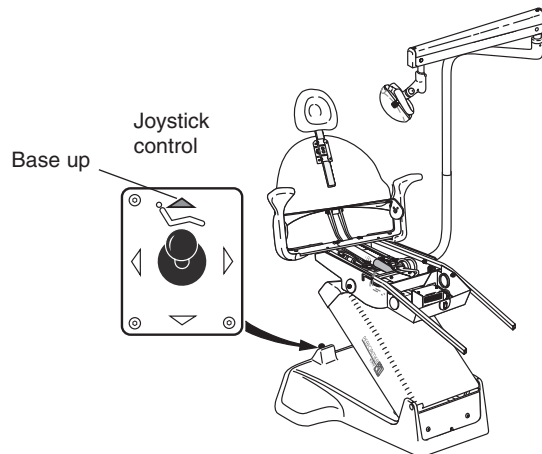
Install These First:

- The junction box—if not already installed.
- The floor box—if applicable using installation instructions for the floor box.
- The 80 watt power supply—in the junction box or floor box (which ever is applicable).
- The accessory power cord (if applicable).
- The handpiece delivery system—using the handpiece delivery system install.

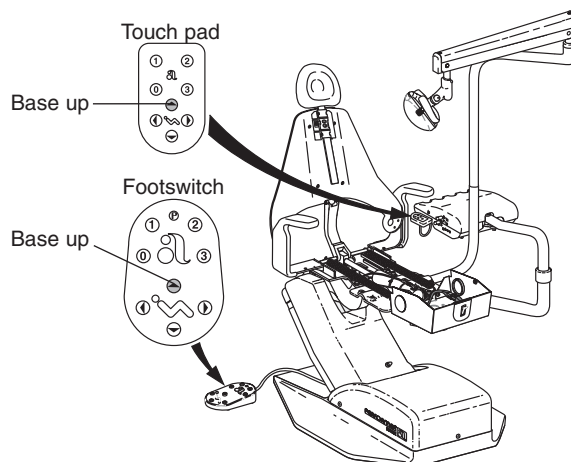
Note: Do not install the chair upholstery until all installations have been completed, including the light.

Raise Chair Base To Full Up

- Performer I Chair – move the joystick control up toward the chair.
- Performer III Chair – push the base up button on the footswitch or touch pad.
- When chair base is in full up position unplug the chair.



Performer I



Performer III

For Performer I chair instructions go to —
page 2, *Performer I chair*

For Performer III chair instructions go to —
page 4, *Performer III chair*

CAUTION

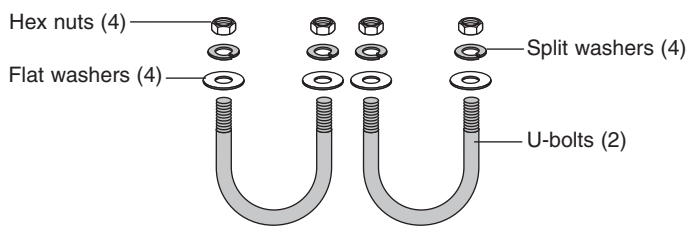
When assembling the lower light post to either chair the U-bolts may become damaged if:

- The nut is tightened past 25 ft-lb (34 N m)
- Both nuts on the U-bolt are over tightened

Performer I Chair (International)

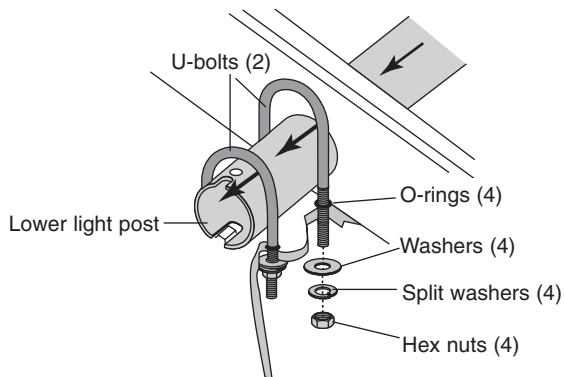
Installing the Lower Light Post

1. Locate the hardware for mounting the dental light.



Hardware for Mounting the Dental Light

2. Install one O-ring onto each end of the U-bolts.
3. Insert the U-bolts down through the chair structure.
4. Loosely install a split washer, a washer and a hex nut onto each end of the U-bolt.



Securing the light post with U-Bolts

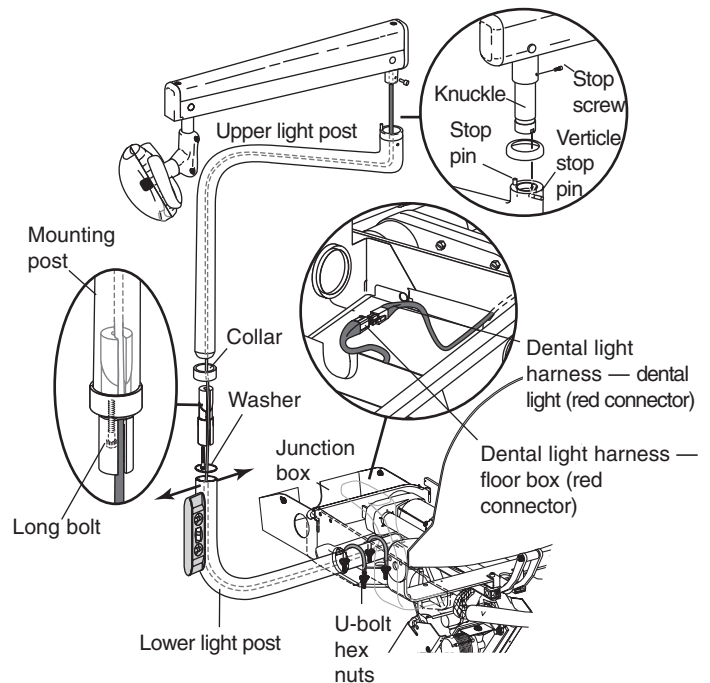
5. Insert the light post through the U-bolts and begin tightening the hex nuts until snug.
6. Tighten **one** of the nuts on each U-bolt to a maximum 25 ft-lb (34 N·m), or an additional 1/2 turn clockwise.
7. Check the leveling of the post.

Performer I Chair with Delivery Systems

For units without delivery systems go to — page 3, to Performer I chair without delivery systems

Mounting the light

1. Level the lower light post, then fully tighten the U-bolt hex nuts (see illustration, Performer I — mounting the light with delivery system).
2. Route the dental light harness through the upper light post and fully insert the flex arm knuckle into the upper light post.
3. Align the verticle groove in the knuckle with the verticle stop pin in the upper light post.



Performer I chair — mounting the light with delivery system

4. Install and tighten the stop screw in the knuckle.
5. Route the dental light harness through the collar, the mounting post, and the washer.
6. Insert the mounting post into the upper light post and secure it, using the long bolt from the kit.

7. Tape the dental light harness to the routing tubing provided in the light packaging. Route the tubing through the lower light post. Pull it through as the upper light post is installed onto the lower light post.

Hooking up the junction box (with delivery systems)

Route the dental light harness into the junction box (see Performer I — mounting the light without delivery system), and connect it to the dental light power

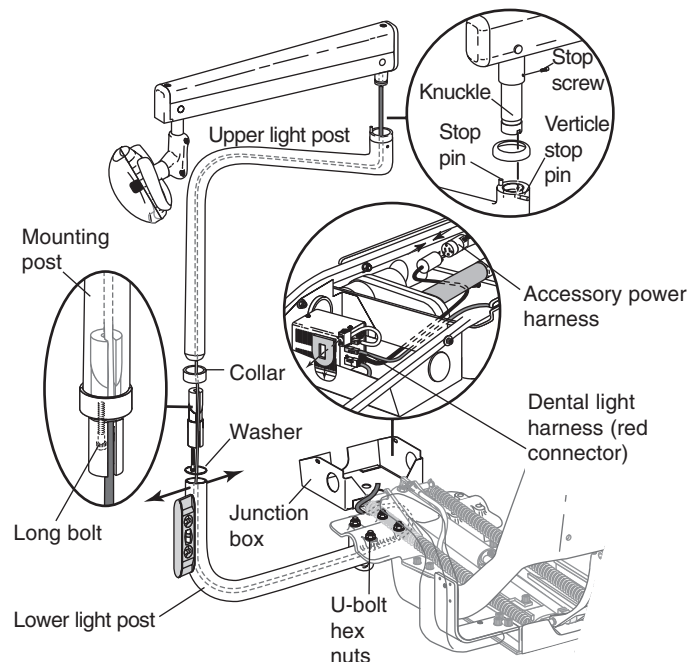
After completing this section go to —
page 6, Testing the Dental Light

harness.

Performer I Chair without Delivery Systems

Mounting the light

1. Level the lower light post, then fully tighten the U-bolt hex nuts.
2. Route the dental light harness through the upper light post and fully insert the flex arm knuckle into the upper light post.
3. Align the verticle groove in the knuckle with the verticle stop pin in the upper light post.



Performer I — mounting the light, without delivery system

4. Install and tighten the stop screw in the knuckle.

5. Route the dental light harness through the collar, the mounting post, and the washer (See illustration, Performer I — mounting the light without delivery system).
6. Insert the mounting post into the upper light post and secure it, using the long bolt from the kit.
7. Tape the dental light harness to the routing tubing provided in the light packaging. Route the tubing through the lower light post. Pull it through as the upper light post is installed onto the lower light post.

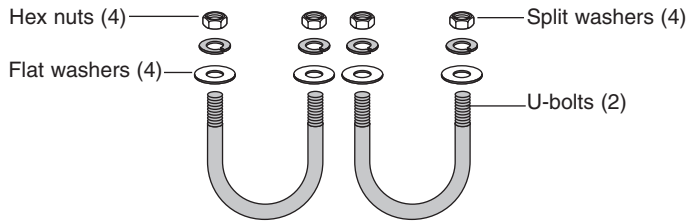
Hooking up the junction box (without delivery systems)

1. Route the dental light harness into the junction box and connect it to the power supply.
2. Install the light intensity switch to the junction box (see Intensity switch cable, on page six).
3. Plug the power supply into the accessory power cord.

After completing this section go to —
page 6, Testing the Dental Light

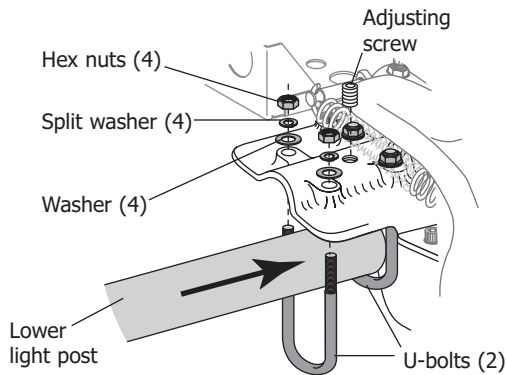
Performer III Chair

Installing the Lower Light Post



Hardware for Mounting the Dental Light

1. Locate the hardware for mounting the dental light.
2. Insert the U-bolts up through the chair structure and loosely install a washer, split washer, and hex nut onto each end of the U-bolt (see below).
3. With the chair back in the down position, disconnect the back-down spring on the appropriate side. Install the 3/8" adjusting screw.



Securing the light post with U-bolts and adjusting screw

4. Insert the lower light post through the U-bolts and begin tightening the hex nuts until snug. Tighten **one** of the nuts on each U-bolt to a maximum 25 ft-lb (34 Nm), or an additional 1/2 turn clockwise. Level the cuspidor post, using the adjusting screw for side to side leveling.

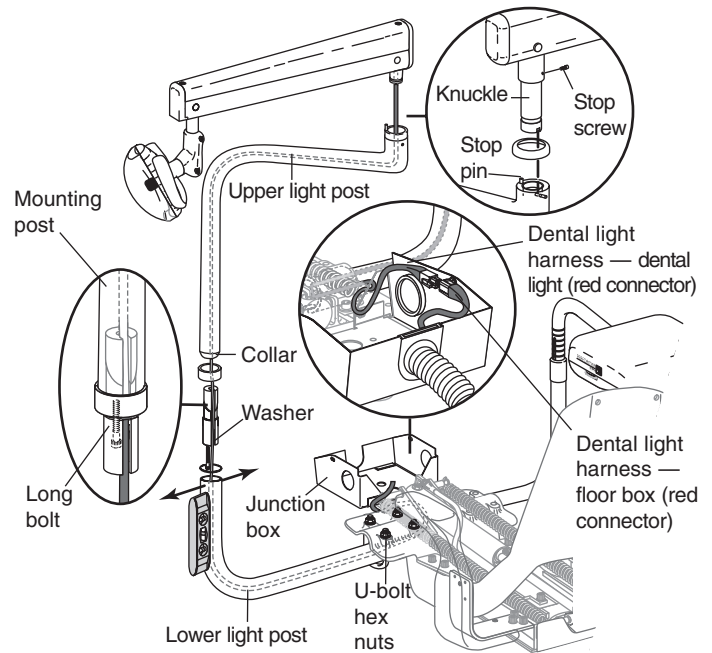
5. Check the leveling of the post, and reattach the back-down spring.

Performer III Chair with Delivery Systems

Mounting the light

For units without delivery systems go to — page 5, Performer III chair without delivery systems

1. Level the lower light post, then fully tighten the U-bolt hex nuts (see illustration, Performer III — mounting the light with delivery system).
2. Route the dental light harness through the upper light post and fully insert the flex arm knuckle into the upper light post.
3. Align the groove in the knuckle with the pin in the upper light post.



Performer III — mounting the light with delivery system

4. Install and tighten the stop screw in the knuckle.
5. Route the dental light harness through the collar, the mounting post, and the washer.
6. Insert the mounting post into the upper light post and secure it, using the long bolt from the kit.
7. Tape the dental light harness to the routing tubing provided in the light packaging. Route the tubing through the lower light post. Pull it through as the upper light post is installed onto the lower light post.

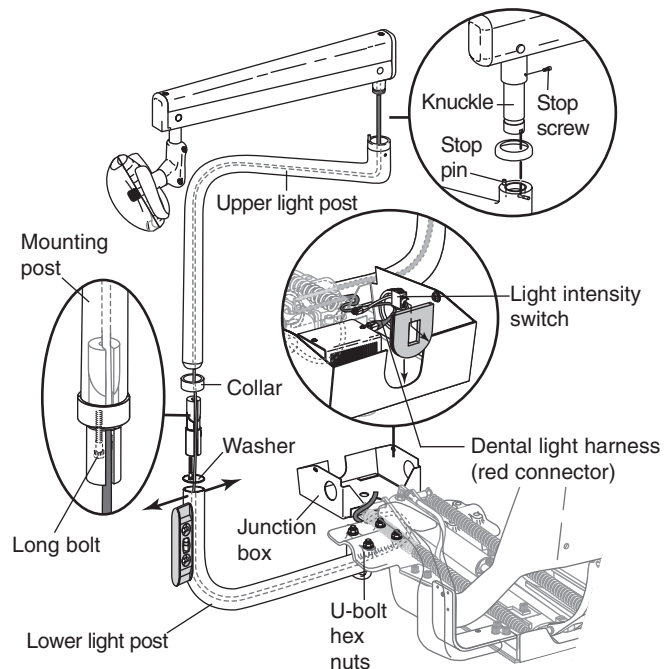
Hooking up the junction box (with delivery systems)

Route the dental light harness into the junction box (see illustration, Performer III chair — mounting the light, without delivery system) and connect it to the dental light power harness.

After completing this section go to — page 6, Testing the Dental Light

Performer III Chair without Delivery Systems

1. Level the lower light post, then fully tighten the U-bolt hex nuts.
2. Route the dental light harness through the upper light post and fully insert the flex arm knuckle into the upper light post.
3. Align the groove in the knuckle with the pin in the upper light post.
4. Install and tighten the stop screw in the knuckle.
5. Route the dental light harness through the collar, the mounting post, and the washer. (See illustration, Performer I chair — mounting the light without delivery system).
6. Insert the mounting post into the upper light post and secure it, using the long bolt from the kit.



Performer III chair — mounting the light, without delivery system

7. Tape the dental light harness to the routing tubing provided in the light packaging. Route the tubing through the lower light post. Pull it through as the upper light post is installed onto the lower light post.

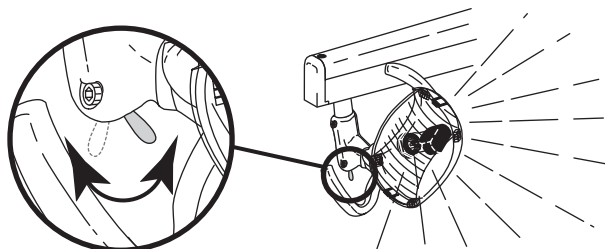
Hooking up the junction box (without delivery systems)

1. Route the dental light harness into the junction box and connect it to the power supply.
 2. Install the light intensity switch to the junction box (see illustration, Intensity switch cable, on page six).
 3. Plug the power supply into the accessory power
- After completing this section go to — page 6, Testing the Dental Light harness.

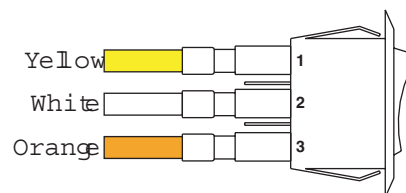
Testing the Dental light

Connecting the Dental Light Power Cable

1. Locate the dental light power cord (with red connector) in the floor box. Plug the power cord into the power supply (with matching red connector).
2. Plug in the power supply.
3. Turn the dental light on.



Dental light on/off toggle



Note the position of the wires —
Yellow-1, White-2, Orange-3

Cables built after February 1998

Cables built after February of 1998 have a yellow wire in the number one position of the intensity switch.

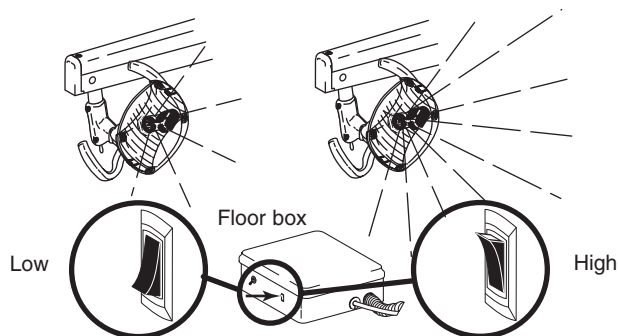
2. Connect the intensity switch cable to the indicator light and the power supply transformer.
3. Test the intensity switch by switching from high to low, before replacing the floor box cover.

Connecting the Intensity Switch Cable

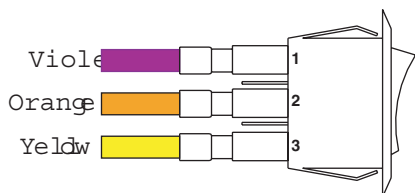
1. If not already assembled, snap the dental light intensity switch cable assembly into the floor box frame with the yellow wire (number one position) toward the top of the floor box.

Note: If it becomes necessary to disconnect the intensity switch cable wires from the intensity switch, reassemble them in the same order as originally wired.

Cables built before February 1998 have a violet wire in the number one position of the intensity switch.

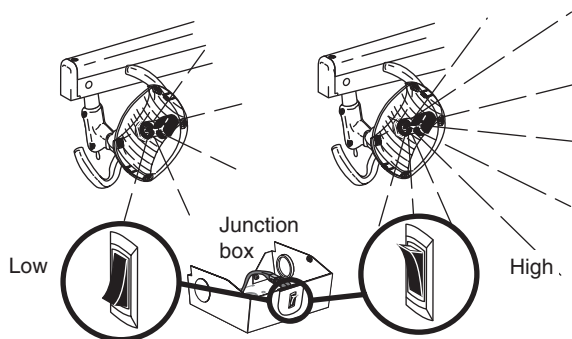


Testing intensity switch with delivery system



Note the position of the wires —
Violet-1, Orange-2, Yellow-3

Cables built Before February 1998



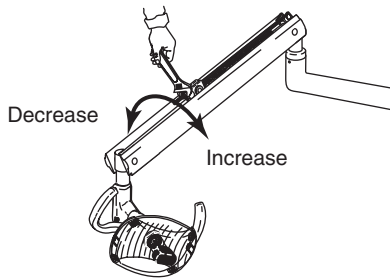
Testing intensity switch without delivery system

Adjusting the Flex Arm Tension

Raise and lower the dental light head. If the light head is difficult or too easy to move, adjust the dental light flex arm tension.

To adjust the flex arm tension:

- Remove the flex arm cover. The cover is held in place by two screws on either end.
- Locate the tension adjustment nut.
- Turn the nut clockwise to increase tension.
- Turn counterclockwise to decrease tension.



Dental light flex arm tension adjustment

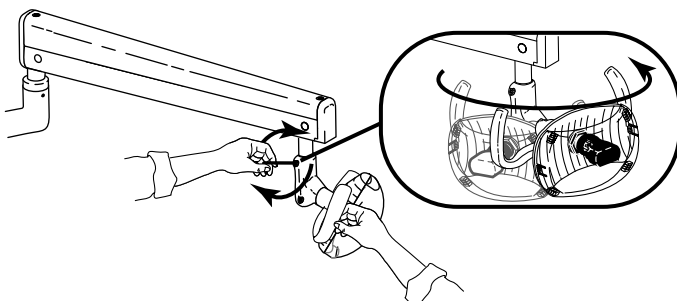
Light Head Tension

Horizontal Adjustment

Turn the dental light head left and right. Adjust the horizontal (left and right) tension if necessary.

To adjust the horizontal tension:

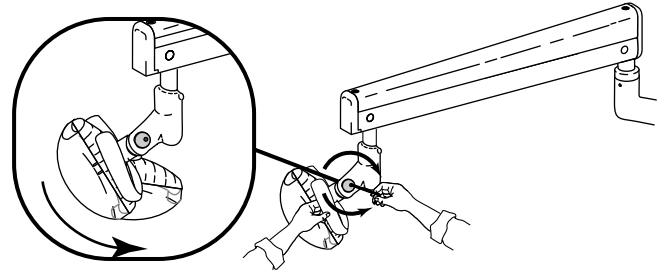
- Turn the horizontal tension adjustment screw clockwise to increase tension.
- Turn counterclockwise to decrease tension.



Horizontal pivot adjustment

Vertical Adjustment

Raise and lower (up and down) the dental light head at the vertical pivot point. Adjust the vertical tension if necessary.



Vertical pivot adjustment

To adjust the vertical tension:

- Turn the vertical tension adjustment screw clockwise to increase tension.
- Turn counterclockwise to decrease tension.

Before Leaving the Facility

- Install all covers (refer to the chair installation instructions).
- Plug in chair power cord.
- Distribute and review the *Owner's Guide* with the dental team.

Agency Information



Identification of Symbols

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.



UL listed to US (UL 544) and Canadian (CAN/CSA C22.2, No. 125) safety standards.



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Conforms to European Directives (*refer to Declaration Statement*).



Protective earth (ground).



Functional earth (ground).



Attention, consult accompanying documents.



TYPE B APPLIED PART.



CLASS II EQUIPMENT.

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)

Mode of operation:

CONTINUOUS OPERATION WITH INTERMITTENT LOADING

(Dental Chairs)

Environmental

Storage - Temperature: -40°C to 70°C (-40°F to 158°F)
Relative Humidity: 95% maximum

Operating - 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 IEC 601-1-2:1994. 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.



Recycle
Conserve
Made with recycled paper