

INSTRUCTIONS FOR USE

# A-DEC EQUIPMENT ASEPSIS

## Warranty

### Warranty:

A-dec warrants its products 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 A-dec's instructions for use (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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## A Message to the Dental Professional

Dental equipment asepsis remains one of the most confusing issues in dentistry today. A-dec is committed to giving appropriate asepsis guidelines based on these goals:

- to encourage and support dental professionals in practicing state-of-art dental equipment asepsis.
- to develop practitioner and patient confidence in realistic, effective, and economic dental equipment asepsis methods.
- to provide guidance in helping practitioners protect their dental equipment investment.

A-dec continually evaluates asepsis procedures and products so that we can give information consistent with the above goals.

If you have any comments, please call or write:

Infection Control Specialist  
A-dec, Inc.  
2601 Crestview Drive  
Newberg, OR 97132  
USA  
1.800.547.1883

Additional information on dental infection control is available from the Office Sterilization and Asepsis Procedures (OSAP) Research Foundation. Write:

OSAP Research Foundation  
P.O. Box 6297  
Annapolis, MD 21401  
USA  
1.800.298.6727

## Surface Management

“What surface disinfectant should I use?”

Ideally, there would be a simple answer to this question; however, with so many infection control requirements and increased concerns about damage to dental equipment, there are no simple answers.

No materials available for the manufacturing of dental equipment are impervious to every chemical, but some materials are better than others. A-dec does incorporate the most chemical-resistant materials available in its product lines, but there are also thousands of dental units in service that were produced long before the heightened attention to infection control. Even more planning and care must be given to prevent premature damage to older equipment.

Just as there are no materials used in the manufacturing of dental equipment that will withstand every chemical, no chemical should be considered harmless to dental equipment. Even the surface disinfecting chemicals listed in previous A-dec Instructions for Use as being “least harmful” can damage equipment over time.

In addition to the many chemicals that are available for surface disinfecting, a wide range of methods are used by practitioners to deal with surface contamination. These methods can either decrease or prolong the life of dental equipment. For instance, some dental practices rely on frequent copious applications of disinfecting chemicals that may not only be unnecessary, but also are expensive and damaging. Other dental practices incorporate single-use barriers and disposable items that significantly reduce the frequency and need for chemical usage, thus prolonging the life of their equipment.

Besides surface disinfectants, there are many other factors contributing to dental equipment damage. Handpiece lubricants, residual sulfur in latex gloving, chemical sterilants, heat, humidity, cleaning chemicals, the applicators used to apply cleaning and disinfecting chemicals, ultraviolet light, dental treatment materials and high mineral content water are just a few other factors related to dental equipment damage.

“Surface Management” is a term used at A-dec to describe the collective use of products and methods to deal with equipment asepsis issues. With proper surface management techniques, effective infection control can be ensured and practitioners can protect their dental equipment from premature damage. The question shouldn’t simply be “What surface disinfectant should I use?” The question should be “How can I best manage the surfaces on my dental equipment?”

## Surface Management Protocol

Keeping previous issues in mind, the following is A-dec’s recommended surface management protocol:

1. Heat sterilize all items that enter the oral cavity (or use single-use disposable replacements).

A-dec products that are designed for use in the oral cavity include:

- High speed handpiece\*
- Tooth dryer
- High volume evacuation (HVE) tip/ saliva ejector (SE) tip
- Syringe tip
- Intraoral camera\*\*
- Ultrasonic scaler
- Curing light\*\*\*

Many other items found in the dental operatory will fall into this category as well.

2. Identify and manage “touch surfaces” and “transfer surfaces”, reducing their number in the dental operatory.

“Touch surfaces” are those areas that require contact and become potential cross-contamination points during dental procedures. The key word is “require”. Many surfaces in the dental operatory could be touched during dental procedures, but only a few require touching. For example, dental lights typically are repositioned (and thus, touched) during most procedures. If only the light handle is touched during this positioning and not the housing, arm or other parts of the light, the number of touch surfaces has, in effect, been minimized.

\* While bur tools are not used in the oral cavity, they are used on handpieces; therefore, they must also be pre-cleaned and heat sterilized.

\*\* The intraoral camera uses sheaths and should not be sterilized.

\*\*\* Only the curing light rod should be removed and sterilized.

Also, the light switch could be operated with the forearm, eliminating it as a touch surface.

Surfaces contaminated by contact with instruments or other inanimate objects are identified as “transfer surfaces”. Handpiece holders and instrument trays are examples of transfer surfaces. Well thought-out operatory setup and disciplined chairside procedures will contribute to reducing the number of transfer surfaces in the operatory.

3. Use barriers (covers) on all touch surfaces and transfer surfaces (unless the surface is on an item that enters the oral cavity, which must be heat sterilized or disposed).

Replace barriers between patients. Use barriers made from waterproof material. Use care to prevent cross-contamination when removing a contaminated barrier cover.

4. Use surface disinfectants on touch surfaces and transfer surfaces between patients only when it’s evident that the barriers have been compromised, and once at the end of each clinic day.

Always follow the label instructions on surface disinfectant products, including any specified kill-time.

5. Use mild cleaners on all “splash and splatter surfaces”.

“Splash and splatter surfaces” (also referred to as “aerosol surfaces”) include all operatory surfaces that are not touch surfaces, transfer surfaces, or parts of items that enter the oral cavity.

Use surface disinfectant on a “splash and splatter surface” only when it has been visibly contaminated. At least once each day, clean all splash and splatter surfaces with a mild cleaning solution. Never use abrasive cleansers, brushes or scrubbing pads. Damp surfaces should always be dried with a lint-free cloth.

Limit the touching of splash and splatter surfaces to those who wear cleaning gloves\* while performing cleaning procedures.

6. Use chair headrest barriers.

The adjustment knob or lever on the back of a chair headrest is a touch surface that may need to be adjusted mid-procedure and should therefore be covered with a barrier. The headrest barrier will also protect the chair vinyl from the many hair treatment products used by your patients that could damage your headrest upholstery.

Replace headrest barriers between patients. Again, use care when removing a contaminated barrier cover.

7. Minimize the use of surface disinfecting chemicals on upholstery vinyl.

Use surface disinfectants on upholstery vinyl between patients only when barriers have been compromised.

Use cleaning and barriers as your primary asepsis approach on chair upholstery.

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\* Do not use “*latex gloves*” for cleaning procedures. “*Cleaning gloves*” should be made from nitrile rubber.

If cross-contamination on chair upholstery is a concern, we recommend the use of barrier covers for the chair instead of relying on chemicals. Barriers will significantly extend the life of your chair upholstery. If used for infection control, barriers must be replaced between patients.

Avoid use of commercially available upholstery cleaners that are not intended for dental chairs (automotive, furniture, etc.)

## Cleaning

In following the recommended surface management protocol, you will focus more on cleaning environmental surfaces which are not points of cross-contamination:

Use a solution of mild non-ionic detergent and water, or commercially available cleaners containing no alcohol, bleach, or ammonia. Common dishwashing detergent is usually non-ionic.

Because the hardness of water varies from locale to locale, you should experiment to determine the best mix of detergent to water. Mix just enough detergent to allow for good cleaning without leaving a soapy film on the surface.

Never use abrasive cleansers, scrubbing pads, or other abrasive applicators because they can permanently scratch or otherwise damage equipment surfaces. Be careful in using recycled paper products, such as paper towels, that sometimes are more abrasive than first-use products.

8. Refer to instructions for use in the *A-dec Self-Contained Water System Instructions for Use*, P/N 86.0609.00 for proper cleaning and maintenance procedures.

### CAUTION

Using most other commonly available surface disinfecting chemicals can prematurely and permanently damage upholstered surfaces.

## 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:	5°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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