

DELMARVA 2000™

Fiber Optic Light

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✱ Maintenance

*21 Shay Lane
Milton, DE 19968
302-645-2226
302-645-0954/fax*

Delmarva 2000, Ltd.
21 Shay Lane * Milton, DE 19968

Fiber Optic Warranty

DELMARVA 2000, Ltd.(hereinafter referred to as **DELMARVA**), subject to the terms/conditions herein below expressly set forth in Paragraphs (1) through (4), **HEREBY WARRANTS** that it will repair any part of the enclosed **DELMARVA Fiber Optic Light** which proves defective by reason of improper workmanship and/or material for a period of **ONE YEAR** from the date of **ORIGINAL** purchase without charge for parts or labor.

- (1) **ONE YEAR** parts and labor coverage on the entire unit excluding the following components:
 - a. Fiber Optic Instrument (silver in color) coverage, excluding dropping or excessive pulling on fiber optic cable.
 - b. Fiber Optic Bulb not covered.
- (2) **ORIGINAL PURCHASER:** This warranty is limited to the original purchaser of the unit. The warranty card must be postmarked and returned to Delmarva within 30 days to validate warranty.
- (3) **PROPER DELIVERY:** To render the services provided hereunder, the unit must be shipped Freight Prepaid or delivered to **DELMARVA** in either its original package or a similar package affording equal degree of protection. Warranty does not include shipping and handling back to the customer. In the event a loaner is needed, it is the users responsibly to return the unit, prepaid.
- (4) **UNAUTHORIZED REPAIR, ABUSE, ETC.:** The unit must not have been previously altered, repaired or serviced by anyone other than a service facility authorized by **DELMARVA**. To render such service, the serial number on the unit must not have been altered or removed. The unit must not have been subject to accident, misuse, abuse or perated contrary to the operating instructions. **Fiber Optic Instrument (silver in color)** not warranted if subjected to abuse from excessive pulling/stretching, chemical accumulations from water supplies.

EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO THIS UNIT. UNDER NO CIRCUMSTANCES SHALL DELMARVA BE LIABLE FOR CONSEQUENTIAL DAMAGES SUSTAINED IN CONNECTION WITH THE SAID UNIT, AND DELMARVA NEITHER ASSUMES NOR AUTHORIZES ANY REPRESENTATIVE OR OTHER PERSON TO ASSUME FOR IT ANY OBLIGATION FOR LIABILITY OTHER THAN SUCH IS EXPRESSLY SET FORTH HEREIN.

Shipping Policy

- **Warranty Work** – To render the services provided hereunder, the unit must be shipped in either its original package or a similar package affording equal degree of protection. It is the customer's responsibility to ship equipment in need of repair **to** Delmarva. It is also the customer's responsibility to **return** loaner equipment **to** Delmarva, when repairs are completed. Shipping charges to return repaired equipment will be applied to the final bill.
- **UPS Ground Service is used for all shipping. Requests for special shipping will be paid for by customer.**
- **Non-Warranty Work** - It is the customer's responsibility to ship equipment in need of repair **to** Delmarva, in the same manor as above. It is also the customer's responsibility to **return** rental equipment **to** Delmarva, when repairs are completed. Shipping charges to return repaired equipment will be applied to the final bill.

INQUIRIES ♦ SERVICE ♦ TECHNICAL ASSISTANCE

PLEASE CALL:

(302) 645-2226/voice

(302) 645-0954/fax

DELMARVA DENTAL SINGLE ILLUMINATOR

OPERATING INSTRUCTIONS

The Delmarva Dental Illuminator has been designed to provide a Single Focus Fiber optic Light Source for your Dental Scaler. The unique design of this high intensity light provides a shadow free area surrounding the insert tip. This allows the practitioner to virtually see through the ultrasonic mist, and better identify the location and intensity of the calculus in the field.

The following instructions will help you maintain the unit at its best performance.

DESCRIPTION

The basic unit is broken down into two major components, the Light Source and the Fiber optic Head and Cable.

- The Light Source provides the very high intensity clear light needed for the fiber optic bundle.
- The Fiber Optic Single Focus Light and Cable is specifically designed and constructed so as to have the optimum light arrive at the proper focal point.

ELECTRICAL REQUIREMENTS

A grounded wall receptacle is required which supplies 120 volts 50/60 hertz AC. If you use a grounded plug adapter (converting 3 prongs to 2 prongs) make sure that the ground wire is firmly attached to the face plate holding screw.

INSTALLATION/OPERATION

DELMARVA LIGHT SOURCE

- The Delmarva Light Source has a receptacle for the "end fitting" of the fiber optic cable. It is located in the center of the cooling fins. To connect the fiber optic cable, insert the end fitting in the receptacle. It is properly sized to offer a "snug" fit, however, if necessary, a hex key (5/64") is provided to "lock" the connection. Simply insert the hex key into the set screw, at an angle from the top. The set screw is located between the cooling fins next to the thumb screw. Be careful, **DO NOT OVER-TIGHTEN**, or you will damage the fiber optic cable.

It is important to position the light source in a dry unconfined area. The unit requires large amounts of free flowing air to provide adequate cooling. Note the warning label on the side of the unit saying that it can become too hot to touch after prolonged use.



- Bring the fiber optic cable into a parallel position with Dental Scaling Headpiece and cord. Align the front of the dental handpiece (the scaling tip inserted) with the rear mounting bracket of the Dental Illuminator. Snap on the underside of your scaler handpiece and slide forward or backward to obtain maximum illumination.



- **The stainless instrument is designed to be operated under the scaler hand piece.** Position the optic head so it does not come in direct contact with active scaling tip.



- Wrap the spiral plastic wrap around your scaler cord and the fiber optic cable so as to make one cable. Now plug in the power cord and turn on the light source. Turn on the dental scaler and check that everything is correctly positioned. The unit is ready to use

MAINTENANCE

FIBEROPTIC CABLE

Autoclaving Instructions

Autoclave using one of the following methods:

- Standard Gravity Sterilizer - Wrap Fiber optic cable in a surgical towel and place in a clean open tray. Sterilize for 30 minutes at 250 degrees Fahrenheit at (15 psi) or 121 degrees Celsius at 1 Kg/Cm².
- High Speed Instrument (Flash) Sterilizer - Wrap Fiber optic cable in a surgical towel and place in open tray. Sterilizer for 3 minutes at 270 degrees Fahrenheit at (30 psi) or 132 degrees Celsius at 2 Kg/Cm².

Pressure differential during steam autoclaving may cause small bubbles in the silicone tubing. The bubbles will not affect the Fiber optic cable and will dissipate with time.

Cleaning:

Should the Fiber optic cable become contaminated before use, clean thoroughly with a soft bristle brush in hand warm water/soap solution to remove possible contaminants. Use a non-oily cleaner or mild soap. Do not use synthetic detergents or oil-based soap as these soaps may be absorbed and may subsequently leach out to cause a tissue reaction. Rinse copiously in hand warm water. Follow with a thorough rinse in distilled water and re-sterilize.

Prevent any scratching on the face of the end fitting, which could result in a loss of light transmission.

CARE AND HANDLING

The optical glass fibers in the Fiber optic cable can be irreversibly damaged by careless handling. Follow the steps below to maximize the life of the cable.

1. Coil the Fiber optic cable in a six inch diameter or greater.
2. Keep the cable free of foreign material.
3. Do not pull, stretch, or kink the cable.
4. Do not allow the cable to come into contact with any sharp edges or pointed objects.
5. Do not alter or remove end fittings.
6. Do not pre-vacuum high temperature autoclaves.
7. Allow the cable to slowly cool after autoclaving. Do not immerse in any cold liquid.

LIGHT SOURCE

Replacing The Lamp

Note! The unit **must be completely cool** before attempting to replace the bulb.

- Turn the Delmarva Light Source off, and unplug the electric cord.
- Remove the thumb screw from the top of the unit and pivot the top cover over backward.
- Remove the 5/64" hex head screw from the bottom of the bulb carrier, and pull out the lamp socket with bulb.
- Pull the bulb out of the socket. Caution! Do not handle the lamp with bare fingers.
- Replace the bulb by pushing it into the lamp socket and seating firmly. Slide the lamp socket back into the bulb carrier, and replace the hex head screw.
- Pivot the top cover forward and replace the thumb screw.

The 20 watt lamp an average life of 2000 hours. Allowing the light source to cool before removing it will extend the lamp life.

IMPORTANT :

Please complete the enclosed warranty form and send it to the address shown. Failure to send in the completed warranty WILL compromise the agreement.