Welch Allyn®

Part No. 690048-1 Rev D

4341 State Street Road
PO Box 220
Skaneateles Falls, NY 13153-0220 USA
Tel: +1 315 685 4560
Fax: +1 315 685 3361
www.welchallyn.com

Fiber Optic Laryngoscope Blades and Handles

Fiber Optic Laryngoscope Blades

Care and Maintenance

Welch Allyn laryngoscope blades are crafted from enduring stainless steel. To insure maximum life and performance the following instructions should be strictly adhered to.

Miller, MacIntosh, and E-MacIntosh styles of fiber optic blades all have removable light pipes. This unique feature eliminates the expense of replacing the entire blade due to the fiber bundle deterioration that results from repeated exposure to disinfection and sterilization agents. Now the bundle can simply be replaced at a fraction of the cost of a new blade.

Cleaning Procedure

Immediately after use, blades should be rinsed in clean tap water to remove any residue. The fiber optic light pipe should be removed from the blade following the procedure outlined in the Fiber Optic Light Pipe Replacement section. Both the light pipe and blade should then be gently scrubbed in soapy water, with a soft brush, to provide a thorough physical cleaning.

All Welch Allyn blades are compatible with enzymatic cleaners. Refer to manufacturer's instructions for recommended exposure times and solution strengths.

After cleaning, thoroughly rinse the light pipe and blade, dry, and reassemble (see Fiber Optic Light Pipe Replacement section) prior to disinfection or sterilization.

Note If germicidal solutions are required for cleaning, please contact Welch Allyn for compatibility.

WARNING Ultrasonic cleaning is not recommended.

Disinfection/Sterilization

(Minimum High Level Disinfection Required)

Sterrad®System: Welch Allyn laryngoscope blades are compatible with Sterrad hydrogen peroxide plasma system. However, only light pipes with recessed area where the light pipe exits the top of the green base are compatible. These may also be identified by black marking for model number and size on rear of blade. See figure 1.

Cold Soak Solutions: Welch Allyn laryngoscope blades and light pipes are compatible with 14 day (2.4 - 2.6%) glutaraldehyde solution.

WARNING Do not use bleach (sodium hypochlorite), betadine, or peroxide solutions. Doing so may damage the instrument.

Contact Welch Allyn regarding the use of other cold soak solutions intended for disinfection or sterilization. For recommended exposure times and solution concentrations, refer to solution manufacturer's instructions.

Steam Autoclave is appropriate.

Note Do not exceed temperature of 280°F (138°C) and pressure of 28 p.s.i. Always wrap laryngoscopes.

WARNING "Flash" autoclaving and hot air sterilization should be avoided. These processes will damage the instrument.

Ethylene Oxide is appropriate with gas concentrations of 10% - 100%.

Note Do not exceed temperature of 131°F (55°C) and pressure of 8 p.s.i. Exposure time 2 - 4 hours. Aeration 12 - 16 hours at 120°F (49°C) following processing.

Fiber Optic Light Pipe Replacement

See figure 2.

1. Remove locking screw by rotating counterclockwise with a standard screwdriver or coin.
2. Pull light pipe away from base of laryngoscope and slide distal end of pipe out of blade.
3. Position new pipe and replace locking screw.
4. Rotate locking screw clockwise until secure.

Note Miller blades differ slightly from drawing.

Fiber Optic Laryngoscope Handle

Battery handles consist of two sections: the main handle and the lamp holder cartridge assembly (see Figure). Prior to cleaning and disinfection, disassemble the handle following the procedure outlined in the Repair/Maintenance section. The main handle will withstand the same cold soak solutions and autoclave ranges outlined in the Laryngoscope Blades Section. However, the lamp holder cartridge assembly and batteries ***must*** be removed prior to disinfection/sterilization. See figure 3.

Cleaning Procedure

Main Handle Section

Remove the batteries and lamp cartridge as described in the Repair/Maintenance section. The main handle section may then be cleaned with a mild detergent and warm water solution. The main handle section may also be soaked in an enzymatic detergent following the manufacturer's instructions.

Lamp Cartridge

The lamp cartridge may be wiped clean with a mild detergent and water solution. DO NOT ALLOW SOLUTION TO ENTER INTO CARTRIDGE.

WARNING Only trained personnel shall use a laryngoscope for intubation.

Use of instrument in presence of intense magnetic fields should present no problems.

Disinfection/Sterilization

Main Handle Section

Remove batteries and lamp cartridge before subjecting handle to any of the following processes.

After removing the batteries and lamp cartridge, the main handle can be soaked in a 14 day (2.4 - 2.6%) glutaraldehyde solution following manufacturer's instructions for exposure time and temperature.

Steam autoclave is appropriate. Do not exceed temperature of 280°F (138°C) and pressure of 28 psi. DO NOT FLASH AUTOCLAVE.

Ethylene Oxide is appropriate with gas concentrations of 10% - 100%. Do not exceed 131°F (55°C). Maximum 4 hours exposure time. Aerate 12-16 hours at 120° F (49°C) following process.

Lamp Cartridge

Lamp cartridge can be wiped with cloth dampened with 70% isopropyl alcohol. DO NOT ALLOW SOLUTION TO ENTER INTO CARTRIDGE.

The lamp cartridge CANNOT be SOAKED OR AUTOCLAVED.

May be ethylene oxide sterilized (see above). Lamp should be left in.

Repair/Maintenance

Battery Replacement

See figure 4

1. Unscrew bottom cap and remove batteries. Stubby handles: pull on tab to remove battery pack. Remove batteries by pulling one end away from pack.
2. Alkaline batteries have been supplied with your handle for maximum performance (nickel-cadmium with rechargeable handle) and are recommended as replacements. Ordinary carbon-zinc batteries may also be used.
3. Replace with appropriate size batteries and replace bottom cap. Stubby handles: insert battery pack with tab side down.

Instructions for Recycling Nickel-Cadmium Batteries

Welch Allyn employs the services of an agency which can disassemble and recycle all components of nickel-cadmium batteries so that nothing gets land-filled or incinerated. If you wish to dispose of your expended Welch Allyn rechargeable battery via recycling (in the US / Canada only), please send to:

Welch Allyn
RECYCLE BATTERY
4341 State Street Road
Skaneateles Falls, NY 13153-0220

Welch Allyn Canada
RECYCLE BATTERY
160 Matheson Blvd. E
Mississauga, Ontario CANADA L4Z 1V4

For locations outside the U.S. and Canada consult your local recycling authority for correct disposal of batteries.

Lamp Replacement

See figure 5.

1. Unscrew bottom cap counterclockwise and remove batteries. Lamp holder cartridge assembly will remain in main handle. Prior to removal, allow lamp time to cool. Remove by applying finger pressure in the direction shown by the arrow.
2. Remove outer shroud from holder by rotating shroud counterclockwise.
3. Next, remove lamp by rotating counterclockwise.
4. Replace lamp with Welch Allyn lamp #06000 (Specification: 2.5V, 2W, Halogen HPX) or #00300 (Specification 3.5V, 2.7W, Halogen HPX) per reference chart.

Caution Be sure lamp's glass envelope is clean and free of any fingerprints after assembly. If necessary, the glass may be cleaned with a soft cloth or cotton ball moistened in alcohol.

5. Be sure lamp and lamp shroud are sufficiently tightened before replacing lamp holder cartridge in main handle.

Caution Halogen lamps are pressurized to provide maximum efficiency and illumination. Protect lamp's glass against abrasion and scratches. Dispose of lamp with care.

6. To replace lamp holder cartridge in the main handle, invert handle. Then gently slide the cartridge down the inside of handle, tipping it side to side until the holder exits opening on top.
7. Insert batteries and apply slight pressure to set the cartridge in place. Replace bottom cap and tighten.

Test Procedure

Laryngoscope blades and handles should always be tested after cleaning/disinfection/ sterilization and prior to use.

To check, connect the laryngoscope blade to the handle and pull open to the "on" position. If the unit fails to light or flickers, check the lamp/batteries.

Be sure adequate supplies of spare lamps, batteries, and replacement parts are readily available.

If problem still persists, contact Welch Allyn Customer Service.

Note: Power outputs from rechargeable batteries may fall rapidly during use, resulting in rapid failure of illumination. Be sure a spare handle is readily available.

Conforming to ASTM F 1195 and ISO-7376

EN60601-1

Fiber Optic Larygnoscope Reference Chart

Handles				
Style	**Ref**	**Battery**	**Lamp**	**Lamp Cartridge**
"AA" Cell	60814	"AA" Alkaline	06000	608125-501
"C" Cell	60813	"C" Alkaline	06000	608125-501
2.5V Rechargeable	60713	Welch Allyn 72000	06000	608125-501
Stubby	60815	"AA" Alkaline	06000	608125-501
3.5V Rechargeable	60835	Welch Allyn 72200	00300	608351-501 (3.5V only)

Blades		
Style	**Ref**	**Light Pipe**
Miller - #00	68065	690122-505
#0	68060	690122-500
#1	68061	690122-501
#2	68062	690122-502
#3	68063	690122-503
#4	68064	690122-504
MacIntosh - #1	69061	690123-501
#2	69062	690123-502
#3	69063	690123-503
#4	69064	690123-504
E-MacIntosh - #1	69211	690124-501
#2	69212	690124-502
#3	69213	690124-503
#4	69214	690124-504
Locking Screw Assembly 690015-501		

Figure 1

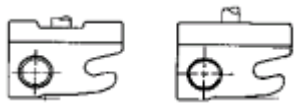


Figure 2

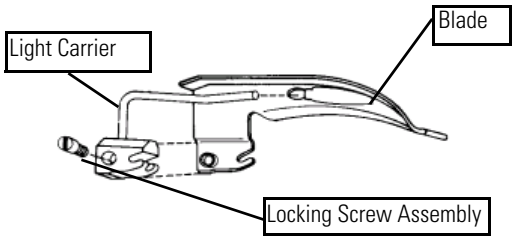


Figure 3

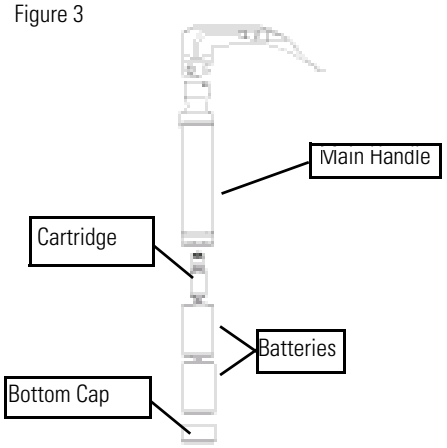
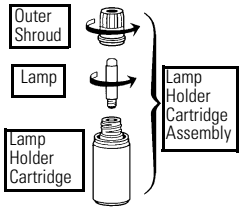


Figure 4

Figure 5



CE

The CE mark on this product indicates it has been tested to and conforms with the provisions noted within the 93/42/EEC Medical Device Directive".

EC REP

Authorized European Representative Address:
European Regulatory Manager
Welch Allyn, Ltd.
Navan Business Park
Dublin Road
Navan, County Meath, Republic of Ireland
Tel: +353 46 90 67700 * Fax: +353 46 90 67756