## **WelchAllyn** (©2014 Welch Allyn, Inc. MM 721448 Ver. C Revision date: 2015-07

# Rechargeable laryngoscope handles Directions for use

# Intended use

The rechargeable laryngoscope handle is an accessory used with compatible rigid laryngoscope blades which are used to examine and visualize a patient's airway and aid placement of a tracheal tube.

# About this document

These directions for use apply to Welch Allyn reusable rechargeable laryngoscope handles: 60713, 60835 (2.5V & 3.5V fiber optic) and 60710 & 60720 (2.5V standard).

Welch Allyn reusable rechargeable fiber optic laryngoscope handles (60713 & 60835) may be used with Welch Allyn fiber optic laryngoscope blades MacIntosh REF: 6906X, English MacIntosh REF: 6921X, and Miller REF: 6806X.

Welch Allyn reusable rechargeable standard laryngoscope handles (60710 & 60720) may be used with Welch Allyn standard laryngoscope blades MacIntosh REF: 6904X, English MacIntosh REF: 6924X, and Miller REF: 6804X and REF 68470 (standard).

# Warnings and cautions

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WARNING: Welch Allyn reusable rechargeable laryngoscope handles must be reprocessed after each use.

WARNING: The reprocessing procedure and the equipment and materials described must be followed and conducted by persons trained and familiar with medical device reprocessing.

WARNING: Consult cleaning and disinfecting agent manufacturer instructions for their proper preparation and use.

WARNING: Repeated reprocessing may degrade elements of the handle. Follow inspection procedures to assure damage has not occurred to the handle.

WARNING: High level disinfection and/or sterilization are not achieved by these methods.

WARNING: Lamps, if left illuminated, could generate sufficient heat to cause burns.

WARNING: Discard any component that shows evidence of damage or deterioration.

WARNING: Do not modify this equipment. Any modification of this equipment may lead to patient injury. Any modification of this equipment voids the product warranty.

WARNING: Personnel shall follow their facility policies and procedures and wear appropriate personal protective equipment when handling potentially contaminated equipment.

WARNING: Laryngoscope equipment is not suitable for use in intense magnetic fields.

CAUTION: Failure to follow these instructions may cause damage to this handle.

CAUTION: Do not immerse/soak handle, damage to handle may occur.

CAUTION: Only use lamp specified. Failure to follow these instructions may cause damage or poor performance of the handle.

CAUTION: If the device will be unused for several months or longer, remove the batteries prior to

storing the device.

# Reprocessing instructions

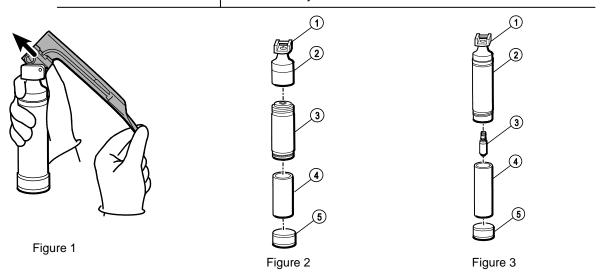
These *reprocessing* instructions refer to procedures for cleaning and intermediate level disinfection. Rechargeable laryngoscope handles must be reprocessed prior to first use and between each use using the following method as outlined in this document:

Cleaning and intermediate level disinfection

Welch Allyn has validated the above instruction as being capable of preparing these laryngoscope handles for re-use. The user must ensure that the reprocessing as actually performed by the user's personnel, with the user's equipment and materials, achieves the desired result. This may require validation and routine monitoring of the user's actual process

## Cleaning and intermediate level disinfection instructions

Point of use:	<ol> <li>Separate blade assembly from handle (see Figure 1) and place handle into suitable containment for subsequent reprocessing. Do not place handle with sharp devices.</li> <li>Prevent the handle from drying (i.e. wrap/cover in moist</li> </ol>	
	germicidal wipe).	
Preparation for decontamination:	Select an appropriate quaternary ammonium isopropanol-based germicidal cleaning wipe labeled suitable for use on healthcare equipment and capable of intermediate level disinfection. Reference EPA- registered disinfectants: <u>http://www.epa.gov/oppad001/chemregindex.htm</u> Outside of the U.S., please consult applicable regulatory body for equivalent quaternary ammonium isopropanol germicidal cleaner.	
	<ol> <li>For 60710 &amp; 60720 standard handle; unscrew bottom cap (5) of handle counterclockwise, remove battery (4) and separate handle (2 and 3). See Figure 2.</li> </ol>	
	For 60713 & 60835 fiber optic handles; unscrew bottom cap (5) of handle counterclockwise, remove battery (4) and lamp cartridge (3). See Figure 3.	
	3. Set battery aside.	



Initial cleaning and disinfection:	<ol> <li>Follow the germicidal wipe manufacturer's instructions to clean all exposed surfaces of handle parts, bottom cap (and lamp cartridge for 60713 &amp; 60835).</li> <li>If necessary, brush with a dry, soft-bristled brush and re-wipe to loosen/remove excessive visible soil.</li> <li>After all visible soil is removed, re-wipe to wet all surfaces and allow adequate contact time for disinfection as directed by the germicidal wipe manufacturer.</li> <li>CAUTION: Only use quaternary ammonium isopropanol based germicidal wipes.</li> </ol>		
Drying:	Allow components to air dry.		
Maintenance, inspection and	1. Inspect each component areas noted below for damage or deterioration:		
testing	<ul> <li>In Figure 2, inspect (1) REF 60710 or 60720,</li> <li>(2) Handle Top, (3) Handle Bottom, (4) Battery, and</li> <li>(5) Bottom cap</li> </ul>		
	<ul> <li>In Figure 3, inspect (1) REF 60713 or 60835,</li> <li>(2) Handle, (3) Lamp cartridge assembly, (4) Battery, and (5) Bottom cap</li> </ul>		
	WARNING: Discard any component that shows evidence of damage or deterioration. Contact Welch Allyn for component replacement.		
	<ol> <li>Reassemble handle and charge battery as described under Battery Charging Instructions.</li> <li>Attach handle to a clean and disinfected test blade assembly in known working condition. Verify that:</li> </ol>		
	<ul> <li>Blade assembly engages and locks onto handle.</li> </ul>		
	<ul> <li>Blade assembly deploys into its locked position on handle AND lamp illuminates.</li> </ul>		
	<ul> <li>Light output is satisfactory.</li> </ul>		
	If the lamp fails to light or output is low, check or replace the lamp and/or batteries.		
Intermediate level disinfection	Re-wipe to wet all surfaces and allow adequate contact time for disinfection as directed by the germicidal wipe manufacturer.		
Storage	Store handle per facility practice to allow device to remain clean, dry, and ready for service.		

End of reprocessing instructions for cleaning and intermediate level disinfection.

# Maintenance instructions

## **Battery charging instructions**



WARNING: Power output from rechargeable batteries can fall rapidly during use. Always fully re-charge batteries between each use.

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CAUTION: Use only Welch Allyn batteries. Use handles with appropriate batteries as shown in Table 1.

Table 1: Replacement Battery and Lamp Part Numbers

Handle REF Number	Туре	Battery REF Number	Total Run Time*	Lamp REF Number
60710	Standard	72000, 2.5V 900mAh (2.3Wh)	1 hr	NA
60720	Standard	72000, 2.5V 900mAh (2.3Wh)	1 hr	NA
60713	Fiber Optic	72000, 2.5V 900mAh (2.3Wh)	1 hr	HPX060
60835	Fiber Optic	72200, 3.5V 620mAh (2.2Wh)	¾ hr	HPX003

\* Total run time is estimated based on a fully charged battery

#### Standard handles: 60710 & 60720 (2.5v)



CAUTION: Use only with Welch Allyn REF: 71030, 71032, 71034, 71036, 71040 Charger.

- 1. Set up and operate the charger per the 710XX charger specifications (See Table 2).
- 2. After initial cleaning and disinfection, connect the handle(s) to the charger. See Figure 4.
- 3. Charge handle for approximately 16 hours or overnight to assure battery is fully charged.
- 4. After charging, continue maintenance, inspection, testing and intermediate level disinfection per these instructions.

Table 2: 710XX Charger Specifications

Charger REF Number	Input Specification	Output Specification	
71030	100V~50/60Hz 55mA	7.0VDC, 200mA	
71032	230V~50/60Hz 25mA	7.5-9.2VDC, 200mA	
71034	230V~50/60Hz 25mA	7.5-9.2VDC, 200mA	
71036	240V~50Hz 30mA	9.2VDC, 100mA	
71040	120V~60Hz 50mA	9.8VDC, 150mA	

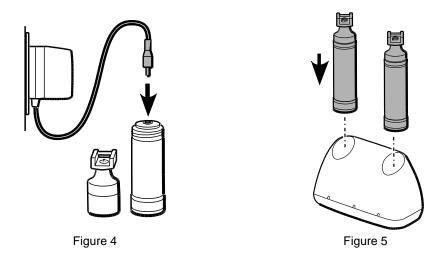
Note: Welch Allyn Standard Laryngoscope handles REF 60710 & 60720 incorporate internal current limitation.

## Fiber Optic handles, 60713 (2.5v) & 60835 (3.5v)



CAUTION: Use only with Welch Allyn REF: 7114X Universal Charger.

- 1. Set up and operate the REF: 7114X Universal Charger per its instructions.
- After initial cleaning and disinfection, place assembled handle(s) in charging well(s). See Figure 5. The charger's yellow indicator LED illuminates, indicating that the handle is charging. The indicator LED is located directly under the handle well.
- 3. Charge handle for approximately 16 hours or overnight to assure battery is fully charged.
- 4. After charging, continue maintenance, inspection, testing and intermediate level disinfection per these instructions.



#### Notes

- Slight heating of handles is normal during charge cycle.
- Batteries cannot overheat or overcharge.
- Batteries will not leak.
- Batteries will discharge gradually over a period of about 60 days when stored at room temperature (70° F). Storage at higher temperatures accelerates the discharge rate.

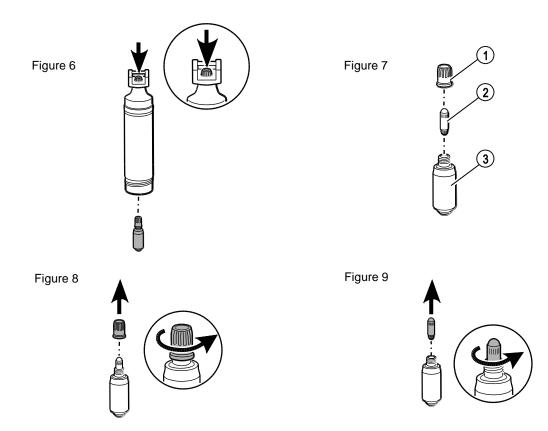
### Lamp replacement, Fiber Optic handles, 60713 (2.5v) & 60835 (3.5v)

WARNING: Lamps, if left illuminated, could generate sufficient heat to cause burns.



CAUTION: Use only Welch Allyn replacement lamps per Table 1 to ensure proper illumination alignment.

- 1. Unscrew bottom cap of handle counterclockwise; remove the battery.
- Remove lamp cartridge assembly from main handle by applying finger pressure in the direction shown by the arrow. See Figure 6.
   Cartridge assembly consists of (1) shroud cap, (2) lamp, and (3) shroud. See Figure 7.
- 3. Remove shroud cap from shroud by rotating shroud cap counterclockwise. See Figure 8.
- 4. Rotate lamp counterclockwise to remove. See Figure 9.
- 5. Replace lamp and shroud cap.
- 6. To replace lamp cartridge assembly in the main handle, invert handle, then gently slide the cartridge down the inside of handle, tipping it side to side until the shroud cap is seated in top opening of handle.
- 7. Re-insert batteries; apply slight pressure to set the cartridge in place.
- 8. Replace and tighten bottom cap.
- 9. Reprocess repaired assembly as appropriate per these instructions.



#### **Replace the battery**

To replace the battery:

1. Unscrew bottom cap of handle counterclockwise and remove the battery.

NiCad batteries are supplied with your handle for maximum performance and are recommended as replacements. See Table 1.

- 2. Insert replacement battery. Push on battery until fully seated.
- 3. Reinstall bottom cap. Ensure the plastic insulator cap is securely attached to the bottom cap.
- 4. Charge battery per the battery manufacturer's instructions.
- 5. Reprocess repaired handle assembly as appropriate per these instructions.

### Instructions for Recycling

#### **Nickel-Cadmium Batteries**

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

Welch AllynWelch AllynRECYCLE BATTERYRECYCLE BATTERY4341 State Street Road160 Matheson Blvd. EastSkaneateles Falls, NYMississauga, Ontario13153-0220Canada L4Z 1V4

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

## **Battery warranty**

Welch Allyn nickel-cadmium batteries are guaranteed by Welch Allyn for two years from the date of manufacture (when used in Welch Allyn instruments only). Defective batteries are replaced on a pro rata basis should failure occur prior to expiration date on battery.

The Welch Allyn products listed on this document are guaranteed by Welch Allyn against all manufacturing defects. Welch Allyn will repair or replace, free of charge, any parts of its own manufacture proven to be defective through cause other than misuse, neglect, damage in shipment, or normal wear.

Welch Allyn warrants that the products will perform to original specifications during the two years from the date of manufacture. This warranty does not apply to the use of the 72200 or 72300 batteries in other products.

# Specifications

#### **Electrical:**

For information about electromagnetic compatibility (EMC) see Welch Allyn website: http://www.welchallyn.com

**Operating:** 

#### Storage/Transport:



-4 F (-20 C)

#### Approvals:

Conforms to ASTM F 965 and ISO-7376-1, IEC/EN 60601-1, IEC/EN 60601-1-2



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

Complies with EMC Framework of Australia

Warranty:

One year

#### Service Information:

For Technical Support or to obtain information about any Welch Allyn product, contact Welch Allyn Technical Support: www.welchallyn.com/support.



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