Video Bronchoscopes BF-XT190

Cleaning and Disinfection Checklist

Video Bronchoscopes

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This checklist is designed for use solely as a customer educational tool and is not intended to replace or in any way modify the Olympus instruction manual/reprocessing manual. Be sure to follow the detailed steps outlined in the reprocessing manual that was included with your Olympus equipment when purchased. While Olympus' training may be used in support of a facility's overall competency program, it shall not constitute certification of the facility's CDS protocol. Olympus shall in no event be held responsible for a facility's proper performance of CDS protocol nor for a facility staying current with ongoing CDS instructional changes and corresponding training updates. Facility owners of Olympus equipment are fully responsible for complying with industry CDS standards and manufacturer's proper use and CDS instructions.

Facility Name	
Date	

☐ BF-XT190

Instructor Name	
Title	
Signature	

Staff Member Name	
Signature	

Pre-Cleaning		Demonstrated
1.	Wear appropriate Personal Protective Equipment. (PPE).	
2.	Ensure that the rotary function is returned to the neutral position prior to reprocessing.	
3.	Turn OFF the video system center and light source.	
4.	Wipe the insertion tube with a water-soaked, lint-free cloth or sponge.	
5.	Turn ON the suction source.	
6.	Immerse the distal end in water and depress the suction valve to aspirate water for 10 seconds or more.	
7.	Remove the distal end from the water and depress the suction valve to aspirate air for 10 seconds or more.	
8.	Turn OFF the suction source and disconnect the suction tube from the bronchoscope.	
9.	Disconnect all removable and reusable parts from the endoscope.	
10.	Place the bronchoscope in a covered container and transport it to the reprocessing area.	

Comments:

Leakage Testing		Demonstrated
1.	Fill a basin with clean water.	
2.	Connect the leakage tester to the MU-1 (Maintenance unit).	
3.	Turn ON the MU-1.	
4.	Depress pin inside connector cap to confirm that air is being emitted.	
5.	Confirm that both the leakage testers cap and venting connector cap on the endoscope are dry. If wet dry with a lint free cloth.	
6.	Connect the leakage tester to the endoscope. Ensure bending section has inflated.	
7.	Immerse the entire bronchoscope in water.	
8.	Observe for 30 seconds while deflecting the bending section by moving the endoscopes UP/DOWN angulation lever.	
9.	Confirm that there is no location where a continuous series of air bubbles emerges.	
10.	If a continuous series of bubbles emerges from any location, remove the endoscope from the water, and contact Olympus for further instructions.	
11.	If no leak detected, remove the bronchoscope from the water with the leak tester still attached and then turn OFF the air source.	
12.	Disconnect the leakage tester from the MU-1.	
13.	Wait 30 seconds or until the bending section contracts to its pre-expansion size.	
14.	Thoroughly dry the leakage tester using clean lint free cloths.	

Comments:

Manual Cleaning	Demonstrated
**Note:	
If manual cleaning could not be performed within 1 hour after the patient procedure or if you are not sure whether manual cleaning could be performed within 1 hour, presoak the endoscope in the detergent solution to loosen debris that has dried and hardened as described in section 5.9 of the Reprocessing Manual.	

1.	Fill a basin with fresh detergent solution prepared as recommended by the manufacturer.	
2.	Completely immerse the endoscope in the detergent solution. Clean the external surfaces of the insertion section.	
	a. Immerse the endoscope in detergent solution.	
	b. Wipe the insertion tube using lint-free cloths, brushes or sponges.	
	c. Take the insertion section out of the detergent solution and confirm that no debris remains on all external surfaces, paying attention to the objective lens on the distal end.	
	d. If any debris remains, repeat Steps “b and c” until no debris is observed.	
3.	Clean the external surfaces of the control section and its surrounding parts.	
	a. Immerse the endoscope in detergent solution.	
	b. Thoroughly wipe or brush all external surfaces of the control section, the insertion tube rotation ring, the boot, and the universal cord’s boot, using clean lint-free cloths, sponges, or brushes.	
	c. Take the control section, the insertion tube rotation ring, the boot, and the universal cord’s boot out of the detergent solution and confirm that no debris remains on all their external surfaces.	
	d. If any debris remains, repeat Steps “b and c” until no debris is observed.	
4.	Clean the external surfaces of the endoscope connector and the universal cord.	
	a. Immerse the endoscope in detergent solution.	
	b. Thoroughly wipe or brush all external surfaces of the endoscope connector and the universal cord, using clean lint-free cloths, sponges, or brushes.	
	c. Take the endoscope connector and the universal cord out of the detergent solution and confirm that no debris remains on all their external surfaces.	
	d. If any debris remains, repeat Steps “b and c” until no debris is observed.	
5.	Brush the instrument / suction channel, suction cylinder, and instrument channel port.	
	a. Brush the suction channel in the insertion tube:	
	1. Insert the channel-cleaning brush into the opening of the suction cylinder.	
	2. Using short strokes, feed the brush through the suction channel until it emerges from the distal end of endoscope.	

	3. Remove any debris from the bristles with your fingertips and carefully pull the brush back through the suction channel.	
	4. Clean the brush bristles with your fingertips to remove any debris.	
	5. Repeat until no debris is observed on the brush.	
	b. Brush the instrument channel in the insertion tube:	
	1. Insert the channel-cleaning brush into the opening of the instrument port.	
	2. Using short strokes, feed the brush through the instrument channel until it emerges from the distal end of the endoscope.	
	3. Remove any debris from the bristles with your fingertips and carefully pull the brush back through the suction channel.	
	4. Clean the brush bristles with your fingertips to remove any debris.	
	5. Repeat until no debris is observed on the brush.	
	c. Brush the suction cylinder:	
	1. Insert the channel-opening cleaning brush into the suction cylinder until half the brush section is inserted.	
	2. Rotate the brush one full revolution and pull the brush out of the cylinder.	
	3. Remove any debris on the brush bristles with your fingertips and clean the brush in the detergent solution.	
	4. Repeat until no debris is observed on the brush.	
	d. Brush the instrument channel port:	
	1. Insert the channel-opening cleaning brush into the instrument channel port fully until the brush handles touches the channel opening.	
	2. Rotate the brush one full revolution and pull the brush out of the instrument channel port.	
	3. Remove any debris on the brush bristles with your fingertips and clean the brush in the detergent solution.	
	4. Repeat until no debris is observed on the brush.	
6.	Remove the bronchoscope from the detergent solution.	
7.	Attach the suction-cleaning adapter to the instrument port and suction cylinder.	
8.	Connect the suction tube to the suction-cleaning adapter.	
9.	Turn ON the suction source, immerse the distal end in detergent, and aspirate detergent for 30 seconds or more.	

10.	Turn OFF the suction source and disconnect the suction tube from the suction-cleaning adapter.	
11.	Completely immerse the bronchoscope and suction-cleaning adapter in detergent.	
12.	Attach the 30 ml syringe to the suction port.	
13.	Pull the plunger of the syringe to fill the instrument/suction channels and suction-cleaning adapter with detergent solution.	
14.	Disconnect the suction-cleaning adapter.	
15.	Use a lint-free cloth to wipe debris from the bronchoscope's external surface.	
16.	Soak the bronchoscope and adapter in the detergent solution for the time recommended by the detergent manufacturer.	
17.	Remove the bronchoscope and suction-cleaning adapter from the detergent solution, immerse then in clean water, and agitate to rinse.	
18.	Connect the suction tube to the suction-cleaning adapter.	
19.	Turn ON the suction source, and aspirate clean water for 30 seconds or more.	
20.	Remove the bronchoscope and suction-cleaning adapter from the water, and aspirate air for 20 seconds or more.	
21.	Turn OFF the suction source and disconnect the suction tube from the suction-cleaning adapter.	
22.	Use a clean, lint-free cloth to thoroughly dry the exterior of the bronchoscope and suction- cleaning adapter.	
23.	Inspect the bronchoscope for residual debris and repeat the manual cleaning process if debris remains.	

Comments:

Automated Endoscope Reprocessor (AER) High-Level Disinfection		Demonstrated
AER Type:		
High Level Disinfectant Type:		
1.	Test disinfectant concentration (i.e., MRC) according to the manufacturer's instructions.	
2.	Inspect the bronchoscope connectors/adapters according to the AER manufacturer's instructions. Properly place the bronchoscope in the basin.	
3.	Attach the scope connectors/adapters according to the AER manufacturer's instructions.	
4.	Operate the AER according to the AER manufacturer's instructions.	
5.	Remove the bronchoscope promptly after the reprocessing cycle has been completed.	
6.	Perform the terminal steps that the AER does not perform (e.g., alcohol and air purge).	
FOR FACILITY INTERNAL USE ONLY!		

Comments:

Manual High-Level Disinfection		Demonstrated
1.	Fill a basin with disinfectant solution recommended by the manufacturer.	
2.	Test the disinfectant concentration (i.e., Minimum Required Concentration (MRC) according to the manufacturer's instructions.	
3.	Attach the suction-cleaning adapter to the bronchoscope and attach the 30ml syringe to the suction-cleaning adapter.	
4.	Immerse the bronchoscope and all equipment in the disinfectant solution.	
5.	Pull the plunger of the syringe to fill the channels and the suction-cleaning adapter with disinfectant solution.	
6.	With the bronchoscope and suction cleaning adapter completely immersed, disconnect all reprocessing equipment from the endoscope. Leave the endoscope and all reprocessing equipment immersed in the disinfectant solution	
7.	If air bubbles adhere to the surfaces, remove them by using a clean, lint-free cloth.	

8.	Cover the basin with a tight-fitting lid to minimize the release of disinfectant vapors.	
9.	Soak the bronchoscope and all reprocessing equipment for the time and at the temperature recommended by the disinfectant manufacturer.	
10.	Before removing the bronchoscope from the disinfectant solution, attach the suction-cleaning adapter to the bronchoscope.	
11.	Remove the bronchoscope and all equipment from the disinfectant solution.	
12.	Use a 30ml syringe, and flush 90mls of air into the channels through the suction-cleaning adapter until no disinfectant solution is discharged from the distal end of the bronchoscope.	
13.	Disconnect all equipment from the bronchoscope.	

Comments:

Rinsing after Manual High-Level Disinfection		Demonstrated
1.	Fill a basin with sterile water.	
2.	Completely immerse the bronchoscope and suction-cleaning adapter in the water.	
3.	Wipe all external surfaces with a sterile, lint-free cloth.	
4.	Connect the suction-cleaning adapter, and a sterile suction tube to the suction source on the bronchoscope.	
5.	Turn ON the suction pump.	
6.	Aspirate sterile water for 30 seconds or more.	
7.	Remove the bronchoscope from the water, and place in a sterile large basin. Aspirate air for 60 seconds or more.	
8.	Turn OFF the suction source. Detach suction tubing.	
9.	Hold the control section with the instrument channel port pointing down and disconnect the suction-cleaning adapter from the bronchoscope.	
10.	Disconnect all equipment from the bronchoscope.	
11.	Repeat steps 4-10 for the necessary number of times described in Disinfectant Manufacturer's instructions.	

12.	Wipe all external surfaces with a sterile, lint-free cloth.	

Comments:

Alcohol Flush		Demonstrated
1.	Connect the suction cleaning adapter and sterile suction tubing to the suction source of the bronchoscope.	
2.	Turn ON the suction source.	
3.	Immerse the distal end of the bronchoscope in 70% ethyl or isopropyl alcohol.	
4.	Aspirate alcohol for 5 seconds or more.	
5.	Remove the distal end of the bronchoscope from the alcohol, and aspirate air for 20 seconds or more.	
6.	Turn OFF the suction source. Detach suction tube and suction-cleaning adapter from the bronchoscope.	
7.	Using a sterile, lint-free cloth, thoroughly wipe the external surfaces of the bronchoscope and suction-cleaning adapter.	
8.	Using sterile cotton swabs, dry the inside of the suction cylinder and instrument channel port.	
9.	Dry the bronchoscope and suction-cleaning adapter.	

Comments:

Sterilisation with Ethylene Oxide or Sterrad 100S/NX/100NX or V-PRO MAX		Demonstrated
After performing precleaning, leakage testing, and manual cleaning, perform the following:		
1.	Dry all external and internal surfaces of the endoscope before Ethylene oxide (ETO) or Sterrad.	
2.	Dry the external surface of the Ultrasound Connector cap (MAJ-1538) by wiping with sterile lint free cloths.	
3.	Attach the sterilisation cap to the venting connector on the endoscope connector.	

4.	When sterilising with the STERRAD 100S Sterilisation system, depending on the internal diameter/length of the channel, it is necessary to attach the booster (REF15400) to instrument channel of the endoscope according to the instructions of the steriliser manufacturer. Seal the instrument in a package appropriate for sterilisation according to your hospital's protocol.	
5.	Sterilise the package according to the recommended ETO or hydrogen peroxide gas exposure parameters described in the endoscope instruction manual and the steriliser manufacturer's instructions Place endoscope upon instrument tray and double wrap the tray with sterilisation wraps according to your hospital's protocol and compatible instrument trays.	
6.	For ETO, aerate the components following the minimum aeration parameters specified in endoscope instruction/reprocessing manual. Sterilise the packaged endoscope according to the recommendations of steriliser manufacturer.	

Comments:

Endoscope Storage		Demonstrated
1.	Detach all equipment as applicable following manual alcohol flushing of the bronchoscope.	
2.	Ensure that rotary function is in the neutral position.	
3.	Confirm that all surfaces of the bronchoscope are completely dry.	
4.	Store the bronchoscope in a well-ventilated cabinet.	
5.	Hang the bronchoscope so that the universal cord and insertion tube are hanging vertically, and the distal tip of the insertion tube is hanging freely.	
6.	Store the sterilised endoscope in a proper storage cabinet, following policies in your institution, professional society guidelines and recommended practices. *Note Sterile endoscopes may be stored flat in their sterilisation wrap.	

Comments:
