

Video Bronchoscopes
Cleaning and Disinfection Checklist

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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

Endoscope Models: Check each model reviewed during this session.

BF-H190

BF-1TH190

BF-Q190

BF-P190

BF-XP190

BF-1TQ180

BF-1T180

BF-Q180

BF-P180

BF-XT160

BF-1T160

BF-P60

BF-MP190F

BF-XP160F

BF-MP160F

BF-PE2

BF-TE2

BF-P160

BF-3C-160

BF-1T60

Instructor Name

Title

Signature

Staff Member Name

Signature

Pre-Cleaning		Demonstrated
1.	Wear appropriate Personal Protective Equipment. (PPE)	
2.	For the BF-190 endoscopes, 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 detergent-soaked, lint-free cloth. A water-soaked, lint-free cloth can be used for the BF-190 scopes.	
5.	Turn ON the suction source.	
6.	Ensure that the biopsy valve cap is closed.	
7.	Immerse the distal end of the insertion section in detergent solution.	
8.	Depress the suction valve, and aspirate detergent solution into the channel for 30seconds. <i>For the BF-190 endoscopes, aspirate with water for at least 10seconds.</i>	
9.	Remove the distal end of the insertion section from the detergent or water solution.	
10.	Depress the suction valve, and aspirate air for 10 seconds.	
11.	Turn OFF the suction source and disconnect the suction tube from the bronchoscope.	
12.	Disconnect all removable and reusable parts from the endoscope.	
13.	Confirm that the water-resistant cap is dry and free of debris and attach the water-resistant cap. <i>For 190 endoscopes, omit this step because there is no water-resistant cap.</i>	
14.	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 the leakage tester's connector cap and venting connector are dry. If wet, dry with a lint free cloth.	
6.	Connect the leakage tester to the Bronchoscope. Either on the water-resistant cap for the BF-180's or light guide connector for BF-190's. Ensure bending section has inflated.	
7.	Completely immerse the Bronchoscope in water.	
8.	Observe for 30 seconds while angulating the bending section by moving the endoscopes UP/DOWN angulation lever.	
9.	If a continuous series of bubbles emerges from any location, remove the endoscope from the water, and contact Olympus for further instructions.	
10.	If no leak detected, remove the bronchoscope from the water with the leak tester still attached, and then turn OFF the MU-1.	
11.	Disconnect the leakage tester from the MU-1.	
12.	Wait 30 seconds or until the bending section contracts to its pre-expansion size.	
13.	Disconnect the leakage tester connector cap from the venting connector.	
14.	Thoroughly dry the leak tester using a clean lint free cloth.	

Comments:

Manual Cleaning		Demonstrated
1.	Fill a basin with fresh detergent solution prepared as recommended by the manufacturer.	
2.	Completely immerse the endoscope in the detergent solution.	
3.	Use a soft brush or lint-free cloth to clean all external surfaces of the bronchoscope, including the distal tip.	
4.	Use endoscope model-specific brushes to 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 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.	
	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 instrument 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 suction 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.	
5.	Remove the bronchoscope from the detergent solution.	

6.	Attach the suction-cleaning adapter to the instrument port and suction cylinder.	
7.	Connect the suction tube to the suction-cleaning adapter.	
8.	Turn ON the suction source.	
9.	Immerse the endoscope's distal end in the detergent solution.	
10.	Aspirate the detergent solution for approximately 30 seconds.	
11.	Turn OFF the suction source.	
12.	Detach the suction tube.	
13.	Completely immerse the endoscope and suction-cleaning adapter in detergent solution.	
14.	Attach the 30 ml syringe to the suction port.	
15.	Withdraw the plunger of the syringe to fill the instrument/suction channels and suction cleaning adapter with detergent solution.	
16.	Disconnect the suction-cleaning adapter.	
17.	Use a lint-free cloth to wipe debris from the bronchoscope's external surface.	
18.	Soak the bronchoscope and adapter in the detergent solution for the time recommended by the detergent manufacturer.	
19.	Remove the bronchoscope and suction-cleaning adapter from the detergent solution.	
20.	Place all equipment in clean water, and gently agitate them to thoroughly rinse.	
21.	Attach suction-cleaning adapter to the endoscope and the suction tube.	
22.	Turn ON the suction source, and aspirate clean water for 30 seconds.	
23.	Remove the endoscope, together with the suction-cleaning adapter, from the water.	
24.	Aspirate air for 20 seconds.	
25.	Turn OFF the suction source.	
26.	Detach the suction-cleaning adapter from the endoscope and the suction tube.	
27.	Use a clean, lint-free cloth to thoroughly dry the exterior of the bronchoscope and suction-cleaning adapter.	
28.	Inspect the bronchoscope for residual debris and repeat the manual cleaning process if debris remains.	

Comments:

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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.	
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 AER 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:

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Manual High-Level Disinfection	Demonstrated
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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 endoscopes 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 90ml 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:

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Rinsing		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 suction source to the bronchoscope.	
5.	Turn ON the suction pump.	

6.	Aspirate sterile water for 30 seconds.	
7.	Remove the bronchoscope from the water, and aspirate air for 60 seconds.	
8.	Turn OFF the suction source.	
9.	Place the bronchoscope and suction-cleaning adapter in the sterile large basin.	
10.	Hold the control section with the instrument channel port pointing down and disconnect the suction-cleaning adapter from the bronchoscope.	
11.	Disconnect all equipment from the bronchoscope.	
12.	Wipe all external surfaces with a sterile, lint-free cloth.	

Comments:

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Alcohol Flush		Demonstrated
1.	Connect the suction cleaning adapter and suction source to 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.	
5.	Remove the distal end of the bronchoscope from the alcohol, and aspirate air for 20 seconds	
6.	Turn OFF the suction source.	
7.	Using a sterile, lint-free cloth moistened with alcohol, 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:

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Sterilisation with Ethylene Oxide or with	Demonstrated
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Sterrad 50/100S/200/NX

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.	For BF-160 and BF-180 endoscopes, disconnect the water-resistant cap (MH-553) from the endoscope connector before ethylene oxide gas sterilisation.	
3.	For the BF-190 endoscopes, ensure that the correct sterilization cap is attached prior to sterilisation. Use the black tagged sterilisation cap (MAJ-1538) only.	
4.	For the BF-PE2/TE2/1T60/MP60/P60/XP60 attach the ET cap (MAJ-1538) prior to sterilization.	
5.	When sterilising with the STERRAD 50/100S sterilisation system, depending on the internal diameter/length of the channel, it may be 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.	
6.	Sterilise the package according to the recommended ETO or hydrogen peroxide plasma 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.	
7.	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:

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Endoscope Storage

Demonstrated

1.	Detach all equipment from the bronchoscope, as applicable following manual alcohol flushing.	
2.	For the 190 Bronchoscopes ensure that rotary function is in the neutral position.	
3.	For the 180 Bronchoscopes remove the water resistant cap when storing vertically.	
4.	Confirm that all surfaces of the bronchoscope are completely dry.	
5.	Store the bronchoscope in a well-ventilated cabinet.	
6.	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.	
7.	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: