

Mobile Airway Scopes – Channelled

MAF-GM/TM

Cleaning and Disinfection Checklist

Mobile Airway Scopes – Channelled

Cleaning and Disinfection Checklist

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.

Endoscope Models: Check each model reviewed during this session.

Facility Name

Date

MAF-GM

MAF-TM

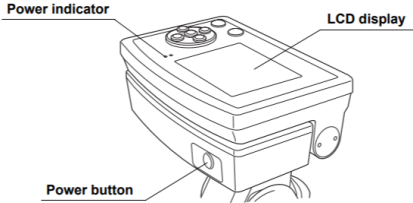
Olympus Instructor Name

Title

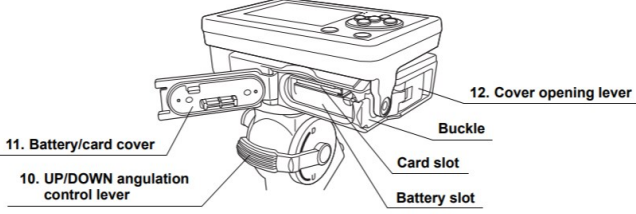
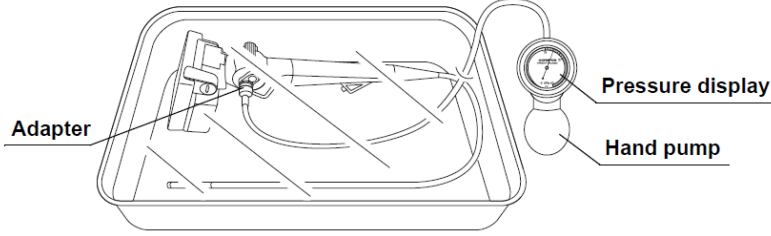
Signature

Staff Member Name

Signature

Pre-Cleaning		Demonstrated
1.	Wear appropriate Personal Protective Equipment. (PPE).	
2.	<p>Confirm that the LCD monitor is not lit. If it is still on turn OFF at the power button.</p> 	
3.	Prepare a container of 500mls of detergent.	
4.	Wipe down the insertion section of the endoscope carefully and gently using a detergent-soaked lint-free cloth. Wipe from the boot toward the distal end.	
5.	Gently wipe off debris on the LCD display with a clean, lint-free cloth soaked in detergent solution.	
6.	Turn ON the suction source and ensure the biopsy valve cap is closed.	
7.	Immerse the distal tip in detergent and depress the suction valve to aspirate detergent for 30 seconds.	
8.	Remove the distal tip of the insertion tube from the detergent solution and immerse in water and depress the suction valve for 10 seconds.	
9.	Remove the distal tip from water and depress the suction valve to aspirate air for 10 seconds.	
10.	Turn OFF the suction source.	
11.	Disconnect the suction tube from the suction connector of the single use suction valve.	
12.	Disconnect all removable accessories from the endoscope.	
13.	Transport the endoscope to the reprocessing area in a covered container.	

Comments:

Leakage Testing		Demonstrated
1.	Fill a large basin with clean water.	
2.	<p>Before immersing the endoscope, make sure that the battery/card cover are securely closed.</p> 	
<i>If using handheld leak tester WA23070A</i>		
3.	Confirm that both the inside of the WA23070A adapter and venting connector of the endoscope are both clean and dry. If wet, dry with a clean lint-free cloth.	
4.	Connect the leakage tester adapter to the endoscope venting connector.	
5.	Confirm that the pressure release lever is closed.	
6.	Squeeze hand pump until pressure between 19 and 27 kPa is indicated on the pressure display. Confirm the pointer is stabilized within the green area on the pressure display.	
<p>Note: If the pointer continues to fall towards “0” kPa the endoscope may have a serious water leakage, or the leakage tester may be damaged- stop leakage testing immediately and contact Olympus.</p>		
7.	<p>If the pointer is confirmed as stable between 19 and 27 kPa then all sections of the endoscope can be submerged in the water for completion of the leakage test. (Keep the pressure gauge and the hand bulb out of the water).</p> 	
8.	With the leak tester attached, pressurised and stabilised, immerse the endoscope in the water and observe for approximately 30 seconds while deflecting the bending section in all directions of the endoscope. i.e. UP/DOWN.	
9.	If a continuous series of bubbles emerges from any location remove the endoscope from the water with the leak tester still attached and contact Olympus for further instructions.	

10.	If no leak is detected, remove the endoscope from the water leaving leakage tester attached.	
11.	Once removed from water, press the pressure release lever, allowing the pointer to release to "0" kPa, decompressing the scope.	
12.	Detach the leakage tester WA23070A from the endoscopes venting connector.	
13.	Thoroughly dry the leak tester using a clean lint free cloth.	
	<i>If using MU-1 Leakage tester & MB-155</i>	
1.	Connect the leakage tester to the MU-1 (Maintenance unit).	
2.	Turn ON the MU-1.	
3.	Depress pin inside connector cap to confirm that air is being emitted.	
4.	Confirm that the leakage tester's connector cap and endoscope venting connector are both clean and dry. If wet, dry with a clean lint free cloth.	
5.	Connect the leakage tester to the endoscope. Ensure the bending section has inflated.	
6.	Completely immerse all sections of the endoscope in water.	
7.	Observe for 30 seconds while angulating the bending section carefully in all directions. i.e. UP/DOWN.	
8.	If a continuous series of bubbles emerges from any location, remove the endoscope from the water with the leak tester still attached, and contact Olympus for further instructions.	
9.	If no leak is detected, remove the endoscope from the water and turn off the MU-1 unit.	
10.	Disconnect the leakage tester from the MU-1.	
11.	Wait 30 seconds or until the bending section contracts to its pre-expansion size.	
12.	Disconnect the leakage tester connector cap from the venting connector.	
13.	Thoroughly dry the leak tester using a clean lint free cloth.	

Comments:

Manual Cleaning

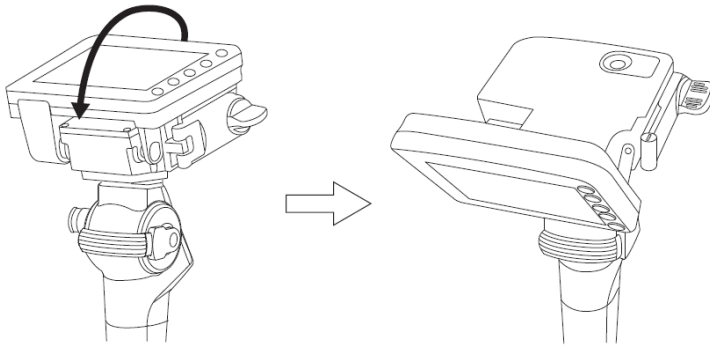
Demonstrated

Note: If there was excessive bleeding during patient procedure or if precleaning could not be performed immediately after the patient procedure, pre-soak the endoscope in the detergent solution to loosen debris that has dried and hardened as described in sections 8.6 in the appropriate Instruction Manual, before manually cleaning the endoscope.

1. Fill a basin with the detergent solution at the concentration and temperature recommended by the detergent manufacturer.

2. Confirm that the battery/card cover are securely closed.

Open (TILT) the LCD Monitor until it stops.



Note:

3. Do not rotate the camera section in the water, or tilt adjustment of the LCD display in the water more than required.



The LCD display tilts by 120 degrees.

This may cause the camera section to malfunction because of water penetrating into the camera section.

4. Completely immerse the entire endoscope in the detergent solution.

5. Use a lint-free cloth, or soft brush to thoroughly clean all external surfaces. When wiping the camera section, tilt the LCD display and wipe the backside of the LCD display. Pay particular attention to the objective lens, LCD display and distal end.

6. Check visually that no debris is left on the surface of the endoscope.

7. Immerse the entire endoscope in the detergent solution.

8. Use endoscope model - specific brushes to brush channels/cylinders/ports until no visible debris remains.

	<p>a. Brush the suction channel to the distal tip.</p> <p>**BW-411B “long brush” used for the MAF-TM</p> <p>**BW-400B used for MAF-GM</p>	
	1. Insert the channel-cleaning brush straight 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 on the brush bristles with your fingertips and carefully pull the brush back through the suction cylinder.	
	4. Clean the brush bristles with your fingertips to remove any debris.	
	5. Repeat until no debris is observed on the brush.	
	<p>b. Brush the instrument/fluid feed channel port in the insertion tube.</p> <p>**BW-411B “long brush” used for the MAF-TM</p> <p>**BW-400B used for MAF-GM</p>	
	1. Insert the channel-cleaning brush into the instrument/fluid feed channel port.	
	2. Using short strokes, feed the brush through the instrument/fluid feed channel until it emerges from the distal end of the endoscope.	
	3. Remove any debris on the brush bristles with your fingertips and carefully pull the brush back through the instrument/fluid feed channel port.	
	4. Clean the brush bristles with your fingertips to remove any debris.	
	5. Repeat until no debris is observed on the brush.	
	<p>C. Brush the suction cylinder.</p> <p>**BW-411B “stubby brush” used for the MAF-TM</p> <p>**MAJ-1339 used for MAF-GM</p>	
	1. Insert the channel-opening 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. Clean the brush bristles with your fingertips to remove any debris.	
	4. Repeat until no obvious debris is observed on the brush.	
	<p>d. Brush the instrument/fluid feed channel port.</p> <p>**BW-411B “stubby brush” used for the MAF-TM</p> <p>**MAJ-1339 used for MAF-GM</p>	
	1. Insert the channel-opening brush into the instrument/fluid feed channel port until the brush handles touches the opening.	

	2. Rotate the brush one full revolution and pull the brush out of the instrument/fluid feed channel port.	
	3. Clean the brush bristles with your fingertips to remove any debris.	
	4. Repeat until no obvious debris is observed on the brush.	
9.	Attach the port cap of the suction-cleaning adapter (MAJ-1077 for the MAF-GM or the MAJ-222 for the MAF-TM) to the instrument/fluid feed channel port and the suction cylinder cap to the suction cylinder.	
10.	Connect the suction tube from the suction source to the suction opening of the suction-cleaning adapter.	
11.	Turn ON the suction source.	
12.	Immerse the distal end in detergent, and aspirate detergent for 30 seconds.	
13.	Turn OFF the suction source.	
14.	Detach the suction tube from the suction opening of the suction cleaning adapter.	

Comments:

Manual Cleaning Manual Flushing of Endoscope Channels		Demonstrated
1.	Ensure the suction-cleaning adapter (MAJ-1077 for the MAF-GM or the MAJ-222 for the MAF-TM) are still attached to the endoscope.	
2.	Completely immerse the endoscope and the suction cleaning adapter in the detergent solution.	
3.	Attach a 30ml syringe to the suction cleaning adapter.	
4.	Pull the plunger of the syringe to fill all channels and the suction cleaning adapter with the detergent solution.	
5.	Detach the syringe from the suction cleaning adapter.	
6.	Detach the suction cleaning adapter from the endoscope.	

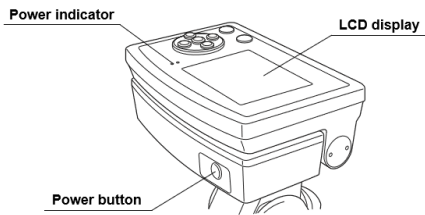
7.	Wipe all external surfaces of the endoscope and suction cleaning adapter to remove debris with a clean lint free cloth, brush, or sponge.	
8.	Soak the endoscope and accessories in detergent solution for the time specified by the detergent manufacturer.	
9.	Remove the endoscope and suction cleaning adapter from the detergent solution.	
10.	Fill a large clean basin with water and immerse the endoscope and the suction cleaning adapter completely. Gently sway the endoscope and suction cleaning adapter.	
11.	Attach the suction cleaning adapter to the endoscope.	
12.	Attach the suction tube from the suction pump to the suction opening of the suction cleaning adapter.	
13.	Turn ON the suction source.	
14.	Aspirate water through the instrument channel and suction channel for 30 seconds.	
15.	Remove the endoscope from the water with the suction cleaning adapter attached.	
16.	Aspirate air through the instrument channel and suction channel for 20 seconds.	
17.	Turn OFF the suction source.	
18.	Detach the suction tube from the suction cleaning adapter.	
19.	Detach the suction cleaning adapter from the endoscope.	
20.	Dry all external surfaces of the endoscope and suction cleaning adapter, by wiping with clean lint free cloths.	
20.	Inspect all items for residual debris, and if any debris remains repeat the manually cleaning procedure until all debris is removed.	
21.	Reprocess the accessories as described in the Olympus Reprocessing/Instruction Manual, Chapter 8, <i>Reprocessing the Accessories</i> .	

Comments:

Replacement of the battery and memory card		Demonstrated
--	--	--------------

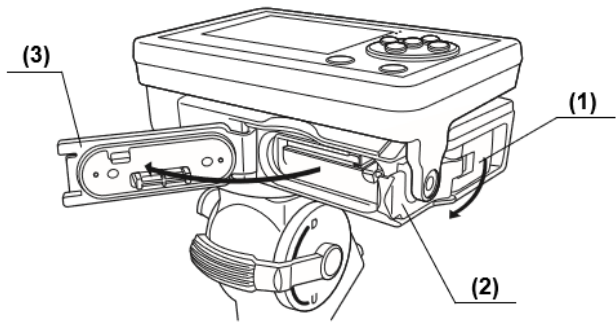
Note: Before Disinfection or Sterilisation, it is recommended the battery and memory card are exchanged for ones that have enough battery power and memory capacity.

1. Confirm that the power indicator is OFF and the LCD display disappears. If the power indicator and LCD display are on, press the power button to turn them OFF.



2. Carefully hold the camera section sideways or upside down and prevent the battery from falling out.

3. Raise the cover opening lever (1), to release the buckle (2), then open the battery/card cover (3).



4. Remove the battery from the battery slot.

5. Push the card all the way in and release slowly. Confirm the memory card protrudes slightly, and then remove the memory card.

6. Insert the other memory card into the card slot until it clicks into place.

7. Load the other battery in the correct position inside the battery slot so that the battery/card cover closes.

8. Hook the buckle on the battery/card cover, then close the lever to secure the battery/card slot cover.

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 endoscope connectors/adapters according to the AER manufacturer's instructions.	
3.	Attach the endoscope connectors/adapters to the AER and endoscope as per the AER manufacturer's instructions.	
4.	Operate the AER according to the AER manufacturer's instructions.	
5.	Remove the endoscope 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).	

Comments:

--

Manual High-Level Disinfection

Demonstrated

1.	Fill a basin with disinfectant solution at the temperature and concentration recommended by the disinfectant manufacturer.	
2.	Test the disinfectant concentration (i.e., MRC) according to the manufacturer's instructions.	
3.	Completely immerse the endoscope and the suction cleaning adapter in the disinfectant solution.	
4.	Attach the suction cleaning adapter MAJ-222/ MAJ-1077 to the endoscope.	
5.	Attach a 30ml syringe to the suction cleaning adapter and pull the plunger of the syringe to fill the channels and the suction-cleaning adapter with disinfectant solution.	
6.	Disconnect the suction cleaning adapter from the endoscope.	
7.	Remove any air bubbles that adhere to the surfaces with a gloved finger or a clean, lint-free cloth.	
8.	Cover the basin with a tight-fitting lid to minimize the release of disinfectant vapors.	
9.	Soak the endoscope and suction cleaning adapter for the time and at the temperature recommended by the disinfectant manufacturer.	

10.	Connect the suction cleaning adapter to the endoscope.	
11.	Remove the endoscope from the disinfectant solution with the suction cleaning adapter attached and place in a sterile large basin.	
12.	Use a 30ml sterile syringe with air and attach syringe to the suction cleaning adapter and inject with air until no disinfectant solution is discharged from the distal end of the endoscope.	
13.	Detach the suction cleaning adapter from the endoscope.	

Comments:

--

Rinsing after Manual High-Level Disinfection		Demonstrated
1.	Fill a basin with sterile water.	
2.	Completely immerse the endoscope and suction-cleaning adapter MAJ-222/MAJ-1077 in the sterile water.	
3.	Wipe all external surfaces of the endoscope and suction cleaning adapter with a sterile, lint-free cloth.	
4.	Attach the suction cleaning adapter and to the endoscope.	
5.	Attach a sterile suction tube from the suction pump to the suction opening of the suction cleaning adapter.	
6.	Completely immerse the sterile suction tube and the suction cleaning adapter in the rinse water.	
7.	Turn ON the suction source.	
8.	Aspirate the sterile water for 30 seconds.	
9.	Remove the endoscope with the suction cleaning adapter attached from the water, place them in a sterile large basin and aspirate air for 60 seconds.	
10.	Turn OFF the suction source.	
11.	Detach the sterile suction tube from the suction opening of the suction cleaning adapter.	
12.	Hold the control section with the instrument channel/fluid feed port pointing down and detach the suction cleaning adapter from the endoscope.	
13.	Repeat 1-12 for the necessary number of times described in the disinfectant manufacturer's instructions.	

14.	Disconnect all equipment from the endoscope.	
15.	Wipe all external surfaces of the endoscope and the suction cleaning adapter with a sterile, lint-free cloth.	

Comments:

--

Alcohol Flush		Demonstrated
1.	Fill a sterile, small basin either 70% isopropyl or ethyl alcohol.	
2.	Attach suction cleaning adapter (MAJ-1077 for the MAF-GM or the MAJ-222 for the MAF-TM) to the endoscope and sterile suction tube from the suction source to the suction cleaning adapter.	
3.	Turn ON the suction source.	
4.	Immerse the distal end of the endoscope in the alcohol.	
5.	Aspirate alcohol for 5 seconds.	
6.	Remove the distal tip of the endoscope from the alcohol, and aspirate air for 20 seconds.	
7.	Turn OFF the suction source.	
8.	Detach the sterile suction tube from suction cleaning adapter, and suction cleaning adapter from the endoscope.	
9.	Thoroughly wipe the external surfaces of the endoscope including the electrical contacts and the suction cleaning adapter with a sterile lint free cloth.	
10.	Using sterile cotton swabs moistened with alcohol, dry the inside of the suction cylinder and instrument/fluid feed channel port.	

Comments:

--

Sterilisation with Ethylene Oxide Gas

Demonstrated

NOTE: After performing precleaning, leakage testing, and manual cleaning, perform the following:

1.	Dry all external and internal surfaces of the endoscope before ethylene oxide gas (ETO) sterilisation.	
2.	Dry the external surface of the sterilisation cap (MA-1538) by wiping with sterile lint free cloths.	
3.	Attach the sterilisation cap to the venting connector on the light guide connector.	
4.	Place endoscope on the sterilisation tray as per manufacturer recommendations.	
5.	Seal the instrument in a package appropriate for sterilisation according to your hospital's protocol.	
6.	Sterilise and aerate the package according to the recommended ETO parameters described in the endoscope instruction manual and the steriliser manufacturer's instructions.	

Comments:

--

Sterilisation with Sterrad 50/100S/200/NX

Demonstrated

After performing precleaning, leakage testing, and manual cleaning, perform the following:

1.	Dry all external and internal surfaces of the endoscope.	
2.	Dry the external surface of the sterilisation cap (MAJ-1538) by wiping with sterile lint free cloths.	
3.	Attach the sterilisation cap to the venting connector on the light guide connector.	
4.	Note: An older generation of this endoscope model without an identification mark for STERRAD® 200/NX material compatibility on the control section is not compatible with STERRAD® 200/NX.	
5.	Place endoscope upon instrument tray and double wrap the tray with sterilisation wraps according to your hospital's protocol and compatible instrument trays.	
6.	Sterilise the packaged endoscope according to the recommendations of steriliser manufacturer.	

Comments:

--

Endoscope Storage		Demonstrated
1.	Detach all equipment from the endoscope.	
2.	Confirm that all surfaces of the endoscope are completely dry.	
3.	Using a cotton swab moistened with 70% ethyl alcohol, carefully wipe the lenses at the distal end.	
4.	Hang the endoscope in the storage cabinet with the distal end hanging freely, and insertion tube hangs vertically and as straight as possible.	
5.	Store the sterilised endoscope in a proper storage cabinet, following policies in your institution, professional society guidelines and recommended practices.	

Comments: