

# CREATE USER SETTINGS

## MENU



Press the “MENU” key to open the Menu Options window.

- Press the number “2” key – “USER SETTINGS”
- Press the “E” key = ‘EDIT
- Press the “I” key = “INPUT”
- The “CURSOR” moves to the ‘USER 01” box (highlighted in green). Press the ‘ENTER” key to select the box and open it
- Type in a name for the User Settings in the ‘USER 01” box towards the top of the screen
- Press the ‘DOWN ARROW” to move the cursor to the “SWITCH PRESETS”, then press the ‘ENTER” key. The tab ‘SCOPE SWITCH” is highlighted (Box is surrounded by green boarder)
- Press the down arrow once, the cursor moves and highlights the ‘SWITCH 1” box. Press the “ENTER“ key
- Using the ‘DOWN” and “RIGHT” arrows, select the “GROUP” options. As the cursor moves over the “GROUP”, a list of ‘SETTING VALUES” appears on the right for each one. Using the ‘ARROW” keys to highlight the desired function and press the ‘ENTER” KEY to make confirm the selection
- Repeat the same process for “SWITCH 2, SWITCH 3, and SWITCH 4”
- When all selections have been made, press the ‘ESC” button twice. A confirmation window opens and asks for confirmation of the settings. Press the ENTER” key to accept the changes
- Press the “ESC” key once to return to the ‘SELECT USER” window
- Press the “S” key (SELECT). The cursor moves and highlights the ‘USER 01 BOX” Use the “DOWN ARROW” to select the desired user settings and press the “ENTER” key
- A confirmation window appears asking to call the highlighted user settings, press the ENTER” key to select. The User settings have been selected and changed.

For complete product details see Instructions for Use.

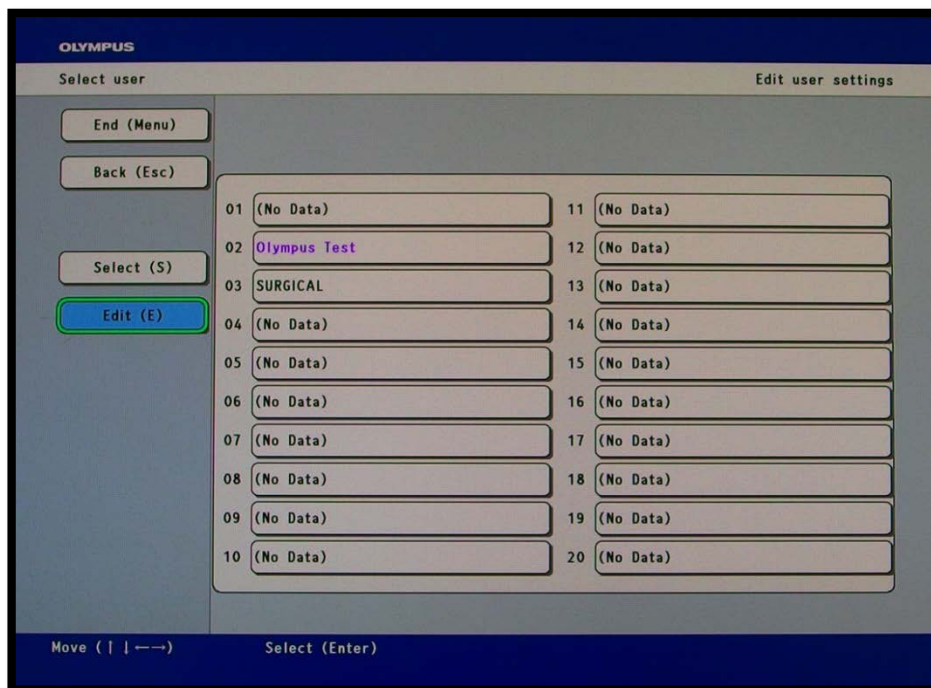
## CHANGING USER SETTINGS

USER PRESET

ADD DATA



To change the user settings, press the 'SHIFT Key' and the "ADD DATA" keys at the same time. The "USER SETTINGS" window will open.



- The current "USER SETTINGS" will be highlighted in purple
- Using the "RIGHT ARROW" and "DOWN ARROW", highlight the required field named.
- Press "ENTER" to confirm the selection.
- A confirmation window appears prompting to 'DO YOU WANT TO CALL'
- Press the "ENTER" key. The window closes and the user settings have been changed.
- To confirm "USER SETTINGS" have been changed, press the "SWITCH INFO" button (top left hand corner of the keyboard) to check the button settings. Press this button again to clear the screen, or press "ESC" button

For complete product details see Instructions for Use.

## TO TEST OR FORMAT A USB

### MENU



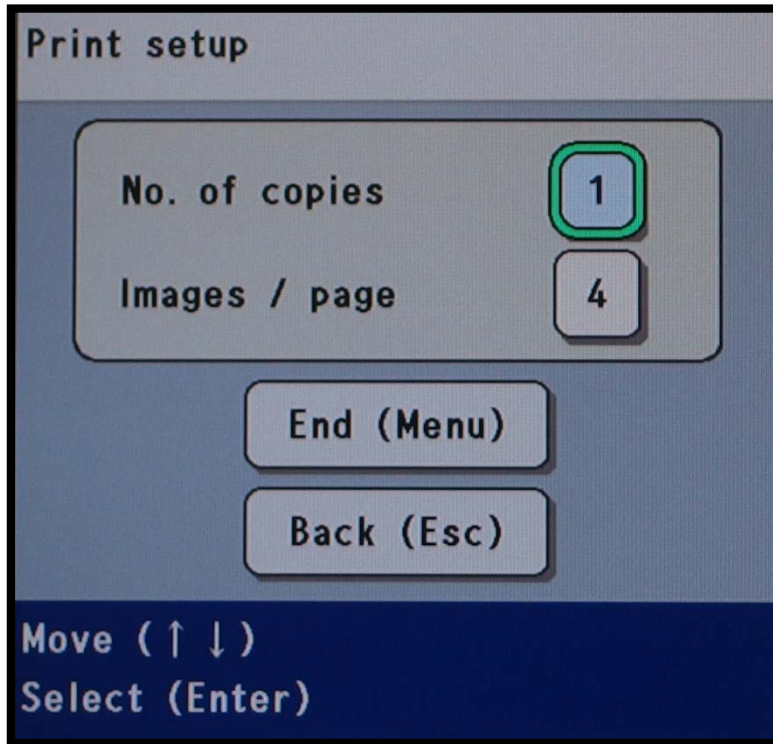
Press the “MENU” key to open the Menu Options window

- Press the number “5” key – “ADVANCED MENU”
- Press the number “7” key – “TEST PORTABLE DEVICE”
- A confirmation box is displayed. Using the left arrow, select the “Y” = Yes button on the screen and press the ‘ENTER’ key.
- The Compatibility Testing process commences. “PLEASE WAIT” appears on the screen and the access indicator on the front panel next to the Portable Memory/USB blinks.
- “PORTABLE MEMORY TEST WAS SUCCESSFUL” appears once testing has finished. Press any key to continue.
- Press the number “8” key = “FORMAT PORTABLE MEMORY” to format the Portable memory/USB.
- A confirmation box is displayed – “ALL DATA ON THE MEMORY DEVICE WILL BE CLEARED, ARE YOU SURE?” Using the left arrow, select the “Y” = Yes button on the screen and press the ‘ENTER’ key.
- The Formatting commences. “PLEASE WAIT” appears on the screen and the access indicator on the front panel next to the Portable Memory/USB blinks.
- “COMPLETE, PRESS ANY KEY TO CONTINUE” appears once formatting has finished. Press any key to continue.
- Press the “MENU” key to close all drop down boxes.

For complete product details see Instructions for Use.

## TO FORMAT NUMBER OF PHOTOS PER PAGE

- Press the F4 key. The below window opens on the monitor screen



- Press the “ENTER” key to adjust the Number of Copies. Use the “DOWN ARROW” to select the number of copies required then press” ENTER”.
- The PRINT SETUP screen returns.
- Press the “DOWN ARROW” to highlight the “IMAGES/PAGE number then press the “ENTER” key. Use the “DOWN ARROW” to select the number of images per page required then press” ENTER”.
- Press the “ESC” on keyboard to close the window

For complete product details see Instructions for Use.

# TO INPUT PATIENT INFORMATION FOR A LIST

## MENU



Press the “MENU” key to open the Menu Options window

- Press the number “1” key = “PATIENT MENU”
- Press the “E” key = “EDIT”
- Press the “I” key = “INPUT”
- The “CURSOR” moves to the first box (highlighted in green). Press the ‘ENTER” key to select the box and open it.
- Input patient’s MRN number then use the “DOWN ARROW” to move to the next input line.
- Input patient’s Name and then the “DOWN ARROW” or the “ENTER” key to move to the next input line.
- Once all the required information in recorded, use the “DOWN ARROW” to the bottom of the window to select the ‘NEXT Icon and press “ENTER”
- A confirmation message will appear on the screen. If you wish to save the recorded message, press the “ENTER” key and a new box opens to record the next patient’s information.
- Repeat the above steps for each patient’s on the Procedure List information has been recorded. After the last patient’s information has been entered, press the “MENU” key.
- A confirmation window appears to confirm the information recorded. Press the “ENTER” to confirm and the window closes.
- Press the “ESCAPE” key to go back to the “PATIENT MENU”.
- Press the “S” key = “SELECT”. This moves the cursor to the left hand side column and highlights the first Patient Information. Use the “DOWN ARROW” to the required patient information followed by the “ENTER” key. The windows will close and the entered patient’s information will appear of the top left hand side of the monitor.

For complete product details see Instructions for Use.

## TO SELECT PATIENT INFORMATION ALREADY RECORDED

PATIENT DATA

CURSOR



To select the next Patient's information, press the 'SHIFT' Key and the 'CURSOR' keys at the same time. The 'PATIENTS DATA LIST' will appear. Use the 'DOWN ARROW' to select the required patient and press the "ENTER" key. The next patients' information will appear on the top left hand corner.

## AT THE END OF THE PROCEDURE

EXAM ON



At the end of the procedure, press the "EXAM ON" key on the top right hand side of the keyboard. This closes the file created for the collection of photos for this patient, and prints any unprinted photos.

## TO DELETE RECORDED PATIENT INFORMATION

- To delete all recorded Patient's information from the day, press the "SHIFT" and "CURSOR" keys at the same time and the "PATIENTS DATA LIST" window opens.
- Press the "E" key = "EDIT". Press the "DEL" key = Delete.
- Using the "UP ARROW", move the cursor to the top left corner and highlight the "ALL Icon". Press The "ENTER" KEY.
- Press the "R" key = "ENTER" (appears on the bottom right hand side corner) to confirm selection.
- A confirmation window appears asking for confirmation to delete all stored information. Use the 'LEFT ARROW' to highlight "YES", press the "ENTER" to delete all information.
- Press the "MENU" key to close all windows

For complete product details see Instructions for Use.

# TO INPUT PATIENT INFORMATION CASE BY CASE

## ADD DATA



Press the “ADD DATA” key on the top left hand side of the keyboard UNTIL all the patient information is visible on the monitor. (MAY HAVE TO PRESS THIS KEY ONE OR TWO TIMES)

- The CURSOR is blinking at the “ID” line, add patient’s MRN number.
- Use the “DOWN ARROW” to move the CURSOR to the next line and add the “PATIENT’S SURNAME”. Press the “DOWN ARROW” to add the “PATIENTS FIRST NAME’.
- Use the DOWN ARROW to move the CURSOR to the “SEX” line and type “M” or “F”.
- Use the ‘DOWN ARROW” until the CURSOR reaches the “DOB”. Type in patients’ Date of Birth in the following format- : DDMMYYYY”. There is no need to insert a forward slash (/) or a break between numbers.
- Patient information will now be recorded on any photos taken and a file will be created for any images taken on the video processor & USB stick.
- Use the ‘DOWN ARROW” until the CURSOR reaches ‘COMMENTS” – if needed can type in procedure (e.g. Gas or Colon)

## EXAM ON



At the end of the procedure, press the “EXAM ON” key on the top right hand side of the keyboard. This closes the file created for the collection of photos for this patient, and prints any unprinted photos.

For complete product details see Instructions for Use.

## TO DELETE PATIENT INFORMATION FILES

### MENU



Press the “MENU” key to open the Menu Options window

- Press the “1” key = “Patient Information”
- Press the “E” key = “Edit Images”
- Press the “Del” key “Delete Images”
- To delete all recorded patient data files, use the “Up Arrow” to move the highlight green box to the “ALL” icon at the top of the page, followed by the “ENTER” key, OR
- To remove individual patient data files, use the “DOWN ARROW” to select the patient data file to be deleted followed by the “ENTER” key to confirm selection (the file name is highlighted with a green box).
- Using the arrow keys select the patient data file to be deleted followed by the ‘ENTER” key to confirm the selection.
- Once all the required files have been selected for deletion and are highlighted, press the “R” key (= ENTER function, which appears on the bottom left hand side of the screen).
- A window opens asking for confirmation and deletion request. Press the “ENTER” key and all selected patient data files will be deleted.
- Press “MENU” to close all windows and return to the main image screen.

For complete product details see Instructions for Use.



## TO PRINT A PHOTO FROM INTERNAL MEMORY

EXAM ON



Ensure “EXAM ON” light is off. If on, press the button to turn off.

MENU



Press the “MENU” key to open the Menu Options window

- Press the “3” key = this selects the “View Saved Images” option on the open window
- Ensure “MEMORY P” tab is displayed and the words (“VIEW INTERNAL BUFFER” is displayed in the top right hand corner)
- Press the “S” key = “Review Image”
- Use the “ARROW’s” key to select the date of the procedure and or required patients name , press “ENTER
- Use the “ARROW’s” to select the required patients file, press “ENTER”
- Press the “V” key = “View” This brings a green box around the first image. Move the arrow to select the required picture, followed by “ENTER”. (If wanting to print more than one photo, repeat this step until all images required are selected).
- Press the “R” key = Enter, this confirms the picture selected is the correct one and opens the image in full view.
- Press the “ENTER” key once more opens the image in a new window. (If more than one image has been selected, use the arrow keys to view remaining images. Under the image will show the number of images selected)
- At the bottom of the page will be the “PRINT” icon. Using the “RIGHT ARROW”, move the cursor until the “PRINT” icon is highlighted, followed by “ENTER”.
- PRINTER WILL PRINT THE REQUIRED IMAGE.
- Press “MENU” to close all windows and clear the monitor screen.

For complete product details see Instructions for Use.

# TO PRINT A PHOTO FROM PORTABLE MEMORY

- Ensure “EXAM ON” light is off. If on, press the button to turn off

## MENU



Press the “MENU” key to open the Menu Options window

- Press the “3” key = this selects the “View Saved Images” option on the open window
- Using the “DOWN ARROW” scroll down to highlight “MEMORY P” tab and press enter. This changes the is displayed and the words (“VIEW PORTABLE IMAGES” is displayed in the top right hand corner)
- Press the “S” key = “Review Image”
- Use the “ARROW’s” key to select the date of the procedure and or required patients name , press “ENTER
- Use the “ARROW’s” to select the required patients file, press “ENTER”
- Press the “V” key = “View” This brings a green box around the first image. Move the arrow to select the required picture, followed by “ENTER”. (If wanting to print more than one photo, repeat this step until all images required are selected).
- Press the “R” key = Enter, this confirms the picture selected is the correct one and opens the image in full view.
- Press the “ENTER” key once more opens the image in a new window. (If more than one image has been selected, use the arrow keys to view remaining images. Under the image will show the number of images selected)
- At the bottom of the page will be the “PRINT” icon. Using the “RIGHT ARROW” , move the cursor until the “PRINT” icon is highlighted, followed by “ENTER”.
- PRINTER WILL PRINT THE REQUIRED IMAGE.
- Press “MENU” to close all windows and clear the monitor screen.

For complete product details see Instructions for Use.

## TO DELETE STORED IMAGES

EXAM ON



Ensure “EXAM ON” light is off. If on, press the button to turn off.

MENU



Press the “MENU” key to open the Menu Options window

- Press the “3” key = “View Saved Images”
- Press the “E” key = “Edit Images”
- Press the “Del” key = “Delete Images”
- Use the “RIGHT ARROW” to highlight the image to be deleted followed by the “ENTER” key. If more than 1 image repeat this step OR
- Use the “RIGHT ARROW” and “UP ARROW” to select the “ALL” icon on the top right hand corner of the screen to delete all the images/files
- Once the image to be deleted is highlighted, press the “ENTER” key to confirm selection, followed by the “R” key (= ENTER, bottom left hand side of the screen)
- The images titles change color from BLACK to GREY. The file stays there until it is overridden by the next new file.

For complete product details see Instructions for Use.

# TO TRANSFER PHOTOS FROM INTERNAL MEMORY TO A PORTABLE MEMORY

EXAM ON



Ensure “EXAM ON” light is off. If on press the button to turn off. This function transfers “ALL” the files that have not previously been transferred to a Portable memory Device/USB.

MENU



Press the “MENU” key to open the Menu Options window

- Press the “3” key = this selects the “View Saved Images” option on the open window. The files listed need to appear in “Black” in the tables. If the files are “Greyed out, these files have already been transferred to a USB and cannot be transferred again.
- If the files are “Black”, using the “DOWN ARROW” scroll down to highlight “MANAGE IMAGES” and press the “ENTER” key on the keyboard.
- Select the “Transfer (T)” button on the screen with the arrow keys and press the “Enter” key.
- Use the “ARROW’s” to select the required patients files, press “ENTER”
- A confirmation message is displayed. Select the “Yes (Y)” button and press the “Enter” key
- The selected folder and images in it are transferred to the portable memory. The file names on the internal memory of the transferred image files are grayed out.
- Press “MENU” to close all windows and clear the monitor screen

For complete product details see Instructions for Use.

## MANUAL CLEANING

*After Leak testing has been performed commence manual cleaning*

Please note 180 series scopes were used in the illustrations. The only difference is at the light guide end where the electronics have a water proof cap attached to it, whereas with the 190 series endoscopes no cap is required for the one touch connector at the light guide end. Cleaning is exactly the same.

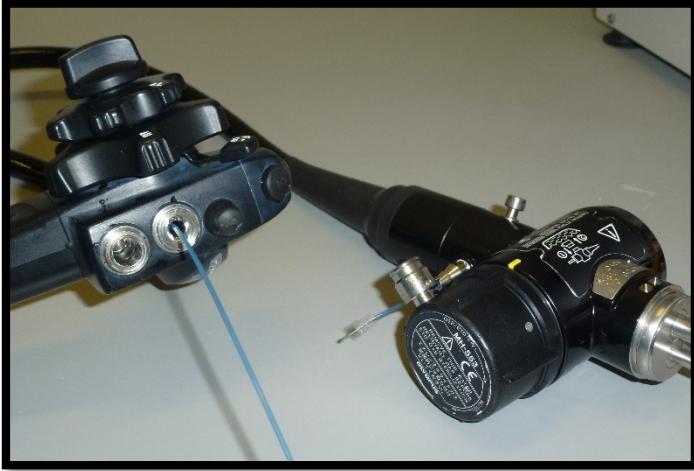
1. Immerse the entire endoscope in freshly prepared enzymatic solution



2. Ensure the bending section at the distal is straight. On colonoscopies, ensure the adjustable flexibility is on "O".
3. Wipe the exterior surfaces of the endoscope with a lint free cloth. A soft brush may be used for the angulation controls on the control head.



4. Insert the channel cleaning brush into suction cylinder opening on control head at a 90° angle. Using short strokes feed the brush through the instrument channel until it emerges at the distal end. Clean bristles and carefully pull back through channel and out of suction cylinder. Repeat until bristles are clean.



5. Insert channel cleaning brush into suction housing at a 45 degree angle. Feed brush until it emerges at distal end. Repeat above process.



6. Brush the instrument/suction channel in the universal cord with the channel brush.



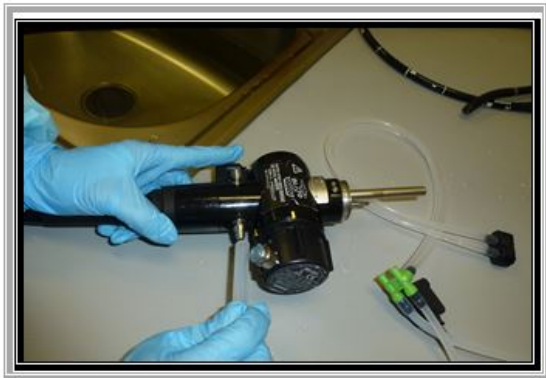
7. Brush the suction, air/water valve housing and biopsy instrument port with the short stubby brush, using a rotating motion.



8. Attach the Channel Cleaning Plug (MH-944) to the suction, air/water valve housing.



9. Attach the Injection Tube (MH-946) (Octopus) to the Light Control outlets (Suction, air/water, air). For those endoscopes with extra channels attach extra injection tubes.



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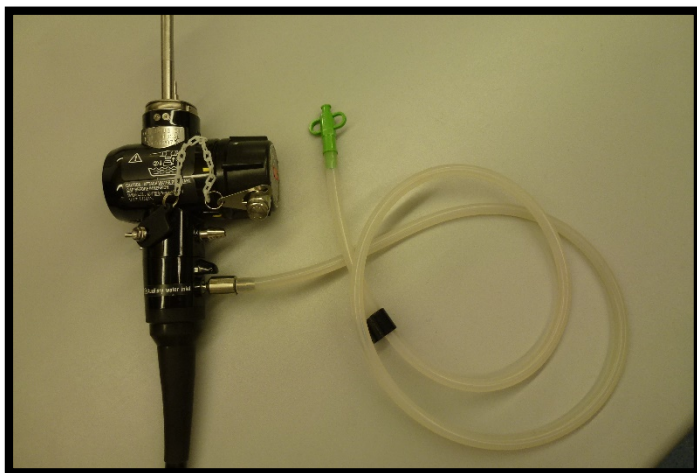
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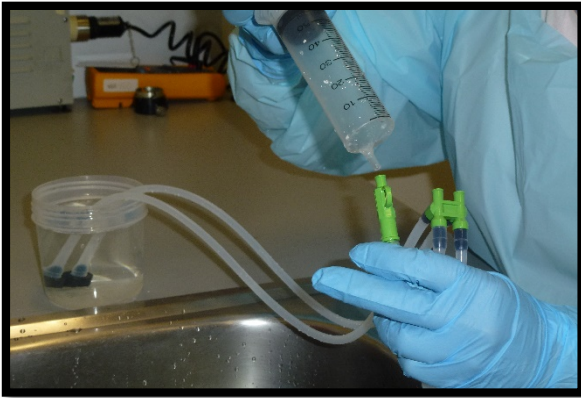


10. For Auxiliary water channel, flush with 90 mls of enzymatic solution - this is found on the colonoscopes and gastroscopes. If you have a colonoscope/gastroscope with an auxiliary water channel, attach the corresponding cleaning tube- Axillary water tube (MAJ-855) to the channel opening and inject 90 ml of enzymatic solution.





11. Place the filter end of injection tube in a bowl of fresh enzymatic solution, and flush each channel with 90mls of enzymatic solution.



12. Allow endoscope to soak for recommended time as per manufacturer's recommendation of contact by enzymatic solution to allow break down of proteins.
13. Once contact time has been reached, flush the channels with 90mls of fresh water, followed by 90mls of air through each channel
14. Disconnect Channel Cleaning Plug and injection tubing from the endoscope
15. Finally inspect the surface of the endoscope for remaining debris- If debris is present, it is recommended to repeat the manual cleaning cycle
16. Rinse the entire endoscope with clean fresh water



**For facilities with a scope buddy,  
please check contact times of  
flushing of enzymatic solution /water  
and air.**



## The Endoscope is now ready for reprocessing via Automated Flexible Endoscope Reprocessors (AFER)

17. On completion of High level disinfection or sterilisation and before storage of the endoscope, flush all channels with 70% alcohol followed by air.
18. Dry all external surfaces of the endoscope

*Please refer to the manuals for recommendations on cleaning and brushing for bronchoscopes and duodenoscopes.*

For complete product details see Instructions for Use.

## MANUAL CLEANING: RETURNING A DAMAGED ENDOSCOPE

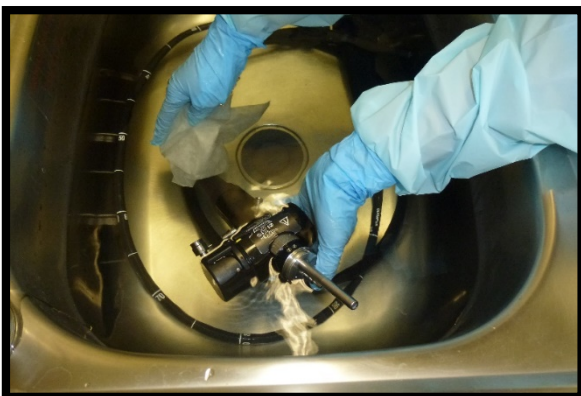
**After leak testing has been performed and a leak has been detected, LEAVE the Leak Tester attached and commence manual cleaning.**

Please note 180 Series scopes were used in the illustrations. The only difference is at the light guide end where the electronics have a water proof cap attached to it, whereas with the 190 series endoscopes no cap is required for the one touch connector at the light guide end. Cleaning is exactly the same.

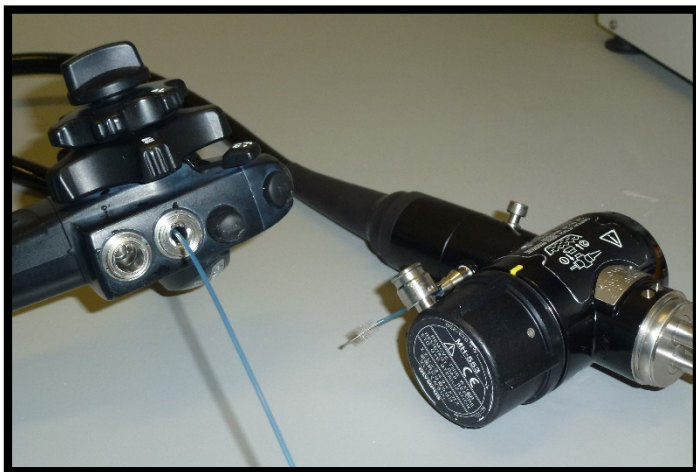
1. Immerse the entire endoscope in freshly prepared enzymatic solution



2. Ensure the bending section at the distal is straight. On colonoscopies, ensure the adjustable flexibility is on "O".
3. Wipe the exterior surfaces of the endoscope with a lint free cloth. A soft brush may be used for the angulation controls on the control head.



4. Insert the channel cleaning brush into suction cylinder opening on control head at a 90° angle. Using short strokes feed the brush through the instrument channel until it emerges at the distal end. Clean bristles and carefully pull back through channel and out of suction cylinder. Repeat until bristles are clean.



5. Insert channel cleaning brush into suction housing at a 45 degree angle. Feed brush until it emerges at distal end. Repeat above process.



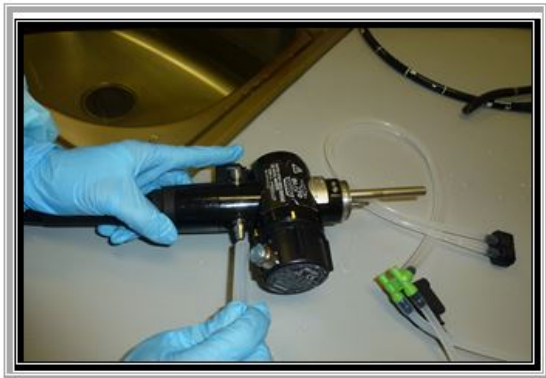
6. Brush the instrument/suction channel in the universal cord with the channel brush.  
Brush the suction, air/water valve housing and biopsy instrument port with the short stubby brush, using a rotating motion.



7. Attach the Channel Cleaning Plug (MH-944) to the suction, air/water valve housing.



8. Attach the Injection Tube (MH-946) (Octopus) to the Light Control outlets (Suction, air/water, air). For those endoscopes with extra channels attach extra injection tubes.



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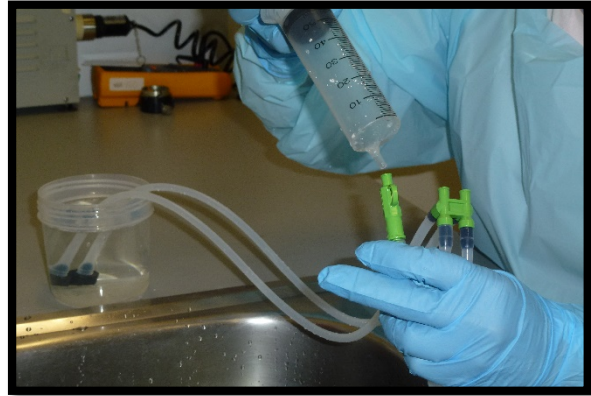
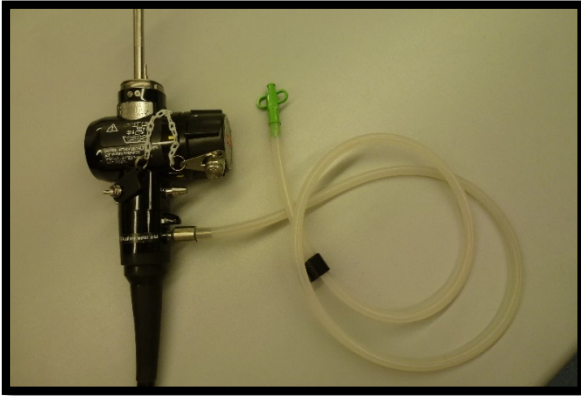
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9. If you have a colonoscope or gastroscope with an auxiliary water channel, attach the corresponding cleaning tube - Auxillary water tube (MAJ-855) to the channel opening and inject 90ml of enzymatic solution.
10. Place the filter end of injection tube in a bowl of fresh enzymatic solution, and flush each channel with 90mls of enzymatic solution.



11. For Auxiliary water channel, flush with 90 mls of enzymatic solution - this is found on the colonoscopes and gastroscopes.



**If your facility has a Scope Buddy, please do not use it because of the pressure and velocity of solution being pushed through may cause the solution be pushed back into the endoscope.**

12. Place the filter end of injection tube in a bowl of fresh enzymatic solution, and flush each channel with 90mls of enzymatic solution.
13. Allow endoscope to soak for recommended time as per manufacturer's recommendation of contact by enzymatic solution to allow break down of proteins.

14. Once contact time has been reached, flush the channels with 90mls of fresh water, followed by 90mls of air through each channel
15. Rinse the entire endoscope with clean fresh water



*Please refer to the manuals for recommendations on cleaning and brushing for bronchoscopes and duodenoscopes.*

16. Place the endoscopes in a yellow bio-hazard bag, this to prevent cross contamination. Place this in the endoscope's transportation case. Send to Olympus along with the relevant paper work.



**For 190 series: For example, colonoscope CF-190, PCF-190, gastroscope GIF-190, GIF-XP190N and bronchoscopes BF-190**





**For 180 series: For example, GIF-H180, CF-H180, twin channel gastroscope GIF-2TH180, duodenoscope TJF-180V and single balloon enteroscope SIF-180**

Once the endoscope has been 'cleaned' manually, before returning the endoscope for repair, contact Olympus Customer Service:

**1300 132 992**

Customer Service will send through the relevant paper work and job number.

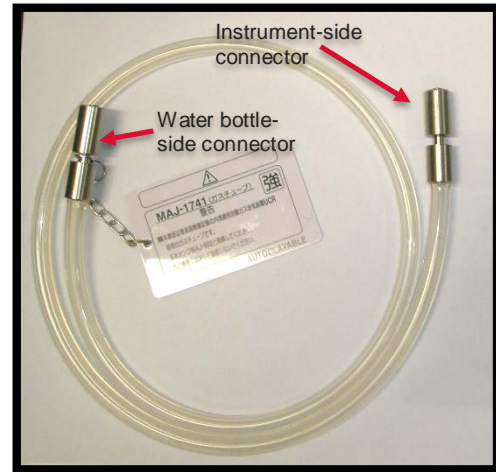
Please include the following with the endoscope:

- Description of the malfunction or damage
- Name and telephone number of the individual at your location who is most familiar with the problem
- Repair purchase order

When returning the endoscope for repair, follow the instructions given in "Transporting outside the hospital" which can be found in the Olympus' manual for the endoscope being returned- reference- Olympus operational manual.

For complete product details see Instructions for Use.

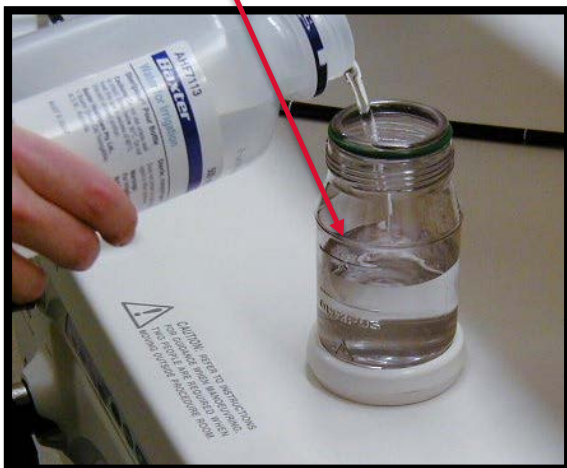
# SET UP INSTRUCTIONS FOR UCR: ENDOSCOPIC CO<sub>2</sub> REGULATION UNIT



**MAJ-902 - CO<sub>2</sub> water bottle (lid has an additional port to connect CO<sub>2</sub> tubing)**

**MAJ-1742 - Low Flow Gas Tubing  
MAJ-1741 - High Flow Gas Tubing**

1. Fill sterilised water bottle (MAJ-902-complete set) to maximum level (denoted by upper line on the bottle) line with “Water for Irrigation”. Ensure the green rubber “O” ring is in place on neck of bottle.



2. Screw the lid (MAJ-1025- lid) firmly onto the water bottle.



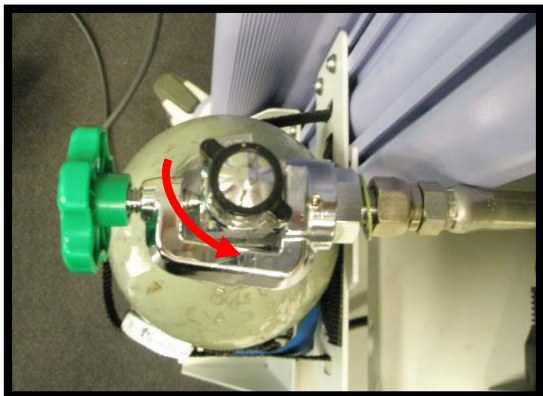
3. Connect the water-side connector of the gas tube to water bottle (the end with the white tag connects to the water bottle) by turning it clockwise.



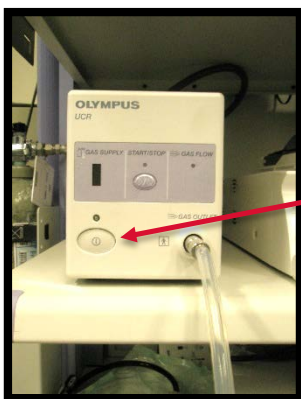
4. Connect the instrument- side connector of the gas tube to the CO<sub>2</sub> gas outlet of the endoscopic CO<sub>2</sub> regulation unit by turning it clockwise.



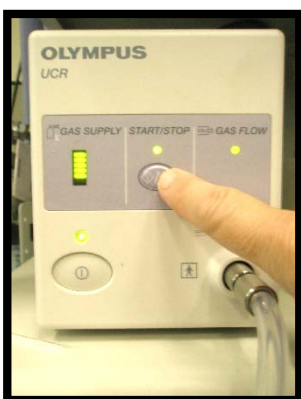
5. Open valve in gas cylinder



6. Turn on the power to the UCR. The light above the ON button turns green and gas supply indicator shows the amount of gas in the CO<sup>2</sup> cylinder



ON  
button



7. When ready to use during procedure, press the “START/STOP” button to commence the flow of CO<sup>2</sup>. Turn “OFF” the air flow on the light source

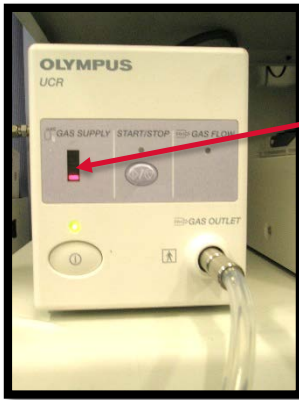


EVIS EXERA II – 180 series



EVIS EXERA III – 190 series

8. As the gas is used, the bars on the “Gas Supply” reduce until the red LED illuminates, gas flow stops and an alarm sounds, indicating the cylinder is empty



The red LED illuminates when the cylinder is empty

9. At the end of the procedure, stop the gas flow and restart the air pump (on the light source) for bedside cleaning



EVIS EXERA II – 180 series



EVIS EXERA III – 190 series

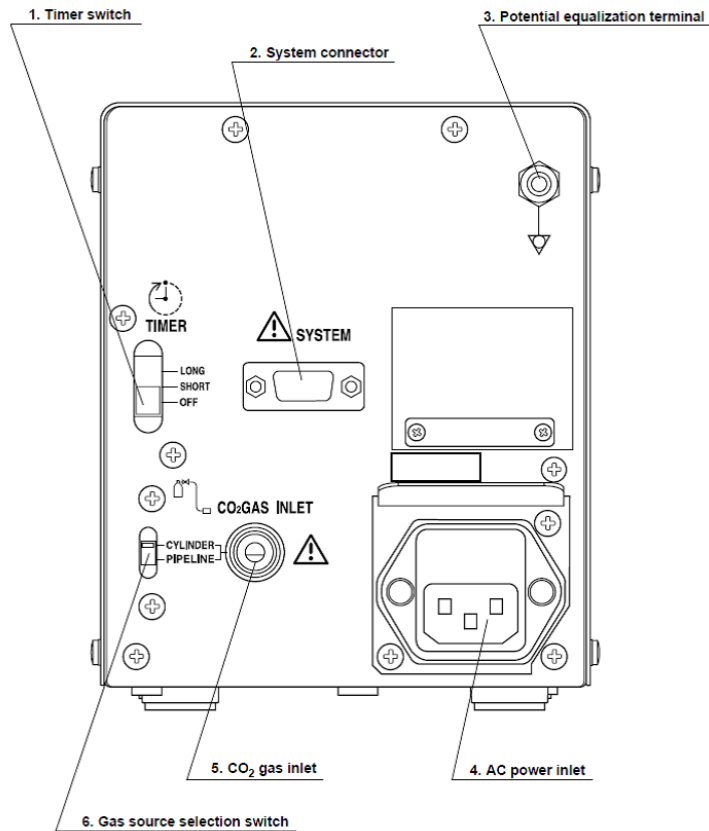


**At the completion of the list, the high/low gas tubing is cleaned and sterilised along with the water bottle and lid as per instruction manual.**

For complete product details see Instructions for Use.

## Timer Setting:

(Found on the back of the CO<sub>2</sub> regulation unit)

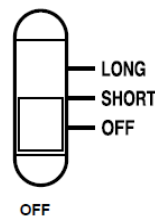
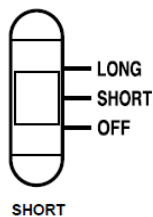
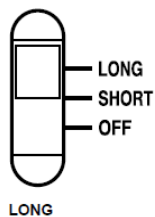


The endoscopic CO<sub>2</sub> regulation unit has a built in timer, and will automatically stop feeding the gas as the set time elapses.

See below the available timer settings.  
Select OFF to negate the automatic gas function

Timer setting	Time before gas stop
Long	About 30 minutes
Short	About 15 minutes
OFF	The Automatic stop function is turned off

Slide the timer switch to select the timer setting



For complete product details see Instructions for Use.

# Trouble Shooting & Frequently Asked Questions

## Image Display: Endoscope

Issue	Cause	Solution
Why do I have a poor image?	Endoscope not properly plugged into the light source	Plug in endoscope till you hear a 'click' sound. For 180 series endoscopes, ensure the video cable is inserted correct way up
	Moisture on the electrical contact pins	For 190 Wipe the electrical contacts on the endoscope connector using clean lint-free cloths moistened with 70% ethyl or 70% isopropyl alcohol and completely dry them. After drying them, connect the endoscope to the light source.
	The electrical contacts on the endoscope connector are dirty.	For 190 Wipe the electrical contacts on the endoscope connector using clean lint-free cloths moistened with 70% ethyl or 70% isopropyl alcohol and completely dry them. After drying them, connect the endoscope to the light source. Make sure that there is proper image when you twist the endoscope connector right and left.
Cannot White Balance		Check the following: <ul style="list-style-type: none"> <li>• Lamp is on and not on 'standby'</li> <li>• White balance cap present</li> <li>• White balance button held for sufficient time to complete white balancing</li> </ul>
		If endoscope has already been white balanced it may not be necessary to repeat. Considerations: brand new endoscope, loan endoscope, endoscope returned from repair

## Suction

Issue	Cause	Solution
The suction function is absent or insufficient.	The biopsy valve is not attached properly	Attach it correctly. Close the valve's cap (for MB 358).
	The biopsy valve is damaged.	Replace it with a new one.
	The syringe is not inserted securely. If needing to use syringe to flush the channel during the procedure	Insert it securely.
	The suction pump is not set properly.	Adjust the suction pump's setting as described in its instruction manual.
	The suction valve is damaged.	Replace it with a new one.
	Seed or debris in the suction valve	Remove Suction valve and clean
The suction valve is sticky.	The suction valve is dirty.	Replace it with a new one.
	The suction valve is damaged.	Replace it with a new one.
The suction valve cannot be attached.	The suction valve is damaged.	Replace it with a new one.
	An incompatible suction valve is used.	Use a compatible suction valve.
Suction cannot be stopped.	The suction valve is damaged.	Replace it with a new one.

## Biopsy Valve

Issue	Cause	Solution
Why is fluid leaking from the biopsy valve?	The biopsy valve is not attached properly	Attach it correctly. Close the valve cap (for MB 358).
	The syringe is not inserted securely.	Insert it securely.
Why can I not attach the biopsy valve?	An incorrect biopsy valve is used.	Use a correct biopsy valve.
	The biopsy valve is damaged.	Replace it with a new one.
The biopsy/suction channel is blocked	Foreign body in channel	Brush & flush channel to remove blockage

## Air/ Water Feeding

Issue	Cause	Solution
No air feeding.	The air pump on the light source is not operating.	Press the "LOW", "MED", or "HIGH" valve on the light source as described in the light source's instruction manual.(EVIS EXERA II/EVIS EXERA III)
	The air/water valve is damaged	Replace it with a new one.
No water feeding.	The air pump of the light source is not operating.	Press the "LOW", "MED", or "HIGH" valve on the light source as described in the light source's instruction manual. (EVIS EXERA II/EVIS EXERA III)
	There is no sterile water in the water container.	Add sterile water to fill the container to the specified water level.
	The air/water valve is damaged.	Replace it with a new one.
The air/water valve is sticky	The air/water valve is dirty.	Remove the air/water valve. Reprocess the air/water valve and then attach it again.
	The air/water valve is damaged.	Replace it with a new one.
The air/water valve cannot be attached.	Incompatible air/water valve is used	Use a compatible air/water valve.
	The air/water valve is damaged.	Replace it with a new one.
The air is continuously fed.	The air/water valve is damaged.	Turn the airflow regulator on the light source OFF and replace the valve with a new one.
Water is continuously fed.	The air/water valve is damaged. Rubber seals on valve and stalk perished or split	Turn the airflow regulator on the light source OFF and replace the valve with a new one.
There is no water coming out of my endoscope.	Air/water bottle not sealed	Check lid on air/water bottle on correctly
	O-ring on lid cracked/split or missing	Replace O- ring on lid
	O-ring on water bottler cracked /split or missing	Replace O- ring on water bottle
	Overfilled water bottle	Fill to correct level on water bottle
	Water bottle empty	Fill to correct level on water bottle
	Water bottle not attached to scope correctly	Attach water bottle correctly
	Water bottle may be cracked	Replace water bottle

## Auxiliary Water Feeding

Issue	Cause	Solution
The auxiliary water inlet cap is leaking.	The auxiliary water inlet cap is worn out	Replace it with a new one.
	The auxiliary water inlet cap is incorrectly installed.	Install the auxiliary water inlet cap correctly.
No water feeding.	The auxiliary water tube is damaged.	Replace it with a new one.



## EndoTherapy Accessories

Issue	Cause	Solution
The EndoTherapy accessory does not pass through the instrument channel smoothly.	An incompatible EndoTherapy accessory is being used.	Refer to the "Combination equipment" in manual and select a compatible EndoTherapy accessory.

## Angulation

Issue	Cause	Solution
Resistance is encountered when rotating angulation control knob(s).	The angulation lock(s) are engaged.	Rotate angulation lock(s) in the "F□" direction.

## Flexibility Adjustment for the CF-HQ190, CF-H190, CFH180, CFH180AL/I, CFQ180AL/I, and H180AL/I Endoscopes

Issue	Cause	Solution
It is difficult to turn the flexibility adjustment ring.	The insertion tube is looped.	Straighten the insertion tube.

## Endoscope Positioning Detected for the CF-HQ 190

Issue	Cause	Solution
The endoscope model is not displayed.	The position detecting unit is OFF.	Turn ON the position detecting unit.
	An incompatible endoscope position detecting unit is being used.	Use a compatible endoscope position detecting unit.

## For the SIF-Q180 Endoscope Single Use Splinting Tube

Issue	Cause	Solution
The balloon does not inflate/deflate.	The air flow tube is connected incorrectly.	Connect it correctly as described in the instruction manual of the balloon control unit (OBCU).
	There is water in the balloon air flow channel or the air flow tube of the single use splinting tube.	Replace the single use splinting tube with a new one.
	The power switch of the balloon control unit (OBCU) is OFF.	Turn the power switch ON.
The balloon does not deflate.	The single use splinting tube is damaged.	Deflate the balloon manually as described in the instruction manual of the balloon control unit (OBCU).

## Ultrasound (Display Monitor Image) for the BF-UC180F

Issue	Cause	Solution
Echo appears where there is no object.	Multiple echoes generated from an object with strong reflection.	Move the endoscope's distal end to another position and check to see if the echo in question moves to a greater degree than other echoes. If this happens, multiple echoes have coalesced and disturbed the ultrasonic image. Keep the endoscope's distal end away from an object with strong reflection.

## Balloon Water Feeding and Aspiration for the BF-UC180F

Issue	Cause	Solution
Water feeding to the balloon and/or aspiration from the balloon does not work.	Balloon water supply channel is dirty.	Reprocess the channel.

## Monitor

Issue	Cause	Solution
Why do I have a poor image on my screen?		Check video cable is correctly plugged in Check electrical connection Check white balance
Image on screen, possibly flickering		Check video cable is correctly plugged in Check electrical connection
Why do I have lines on the screen		Check video cable is correctly plugged in Check electrical connection
The image is poor and yet I have correct colour		Check video cable is correctly plugged in Check electrical connection Check white balance
No image on screen		Check video cable is correctly plugged in Check electrical connection Check monitor on correct input Check Power switch on monitor Check main power source is on Check that monitor contrast has not been changed
	blown light lamp in light source	Replace light lamp as per manufacturer's guidelines
	CCD may be damaged	CCD needs replacement as per manufacturer's guidelines. Return to Olympus for repair.
	Damaged video cable in the 180 series	Replace video cable
	Video cable in the 180 series placed upside down	Replace video cable in the correct position

## Other

Issue	Cause	Solution
The remote switch does not work.	The wrong remote switch is operated.	Operate the correct remote switch.
	The remote switch function has been set incorrectly.	Set the remote switch function correctly as described in the video system centre's instruction manual.
	For BF-Q190 and BF-H190-The remote switch is left depressed due to a difference between internal and external pressures of the endoscope that is made in the pressure reduction process of gas sterilization.	If the sterilization cap is attached to the venting connector, detach it. If not, attach the sterilization cap to the venting connector once and then detach it.
The remote switch 1 does not return to the OFF position.	Remote switch 1 is pressed strongly from the side.	Pull it upwards gently.
For the TJF-Q180V endoscopes-Guidewire cannot be locked.	Guidewire is not locked at its stiff part.	Lock the guidewire at its stiff part.
	Guidewire with a diameter less than $\varnothing$ 0.64 mm is used.	Select a guidewire with a diameter of $\varnothing$ 0.64 mm or more.
	Guide wire-locking groove is dirty.	Clean and disinfect or sterilize the Guide wire-locking groove as described in the "REPROCESSING MANUAL" with your endoscope model listed on the cover.
	Contrast media is congealed in the guide wire lumen of the EndoTherapy accessory.	Clean the lumen of the EndoTherapy accessory and then insert/withdraw it.
No light or air is emitted from the end of the scope.		the endoscope is not connected to the output socket
Corrosion of electrical contacts or shortage of light control contacts		ensure endoscope is completely dry before inserting into connector socket
Poor Airflow through light source	Collection of dust in air intake located at base of unit. Can cause reduction of lamp life.	Ensure unit is free of dust and debris

## Error Codes: Here are some examples of error codes

(taken from the CV-190 manual)

Code	Error Message	Cause	Solution
A27	CLV is not connected (A27)	The light source is connected incorrectly, or a wire in the light source cable is disconnected	Connect it correctly as described in Section 3.5, "Connection of the light source".(CV-190 manual)
E102	CLV lamp ERR E102 Please check examination lamp	Patient data out of the input	Immediately turn OFF the light source and inspect the lamp as described in the instruction manual for the light source. If no irregularity is observed on the lamp, immediately turn OFF the light source, unplug the power cord from the wall mains outlet and the AC power inlet on the light source, and then contact Olympus.
E204	Focus function ERR E204 Contact Olympus	The focus function of the endoscope or the video system center does not work.	Stop using the endoscope and withdraw it from the patient as described in the instruction manual for the endoscope. Also, contact Olympus. This message can be hidden temporarily by pressing the "ESC" key on the keyboard
E302	Internal buffer FULL E302 Please transfer unsaved images now	The internal buffer is full of image data that has not been transferred.	Transfer the data as described in CV-190 manual
E303	Portable memory format ERR	The portable memory cannot be formatted.	Format the portable memory again as described in CV-190 Manual

	E303 reformat portable memory		If the portable memory still cannot be formatted, replace it with a new one.
E311	WHT BAL incomplete E311 Adjust WHT BAL	The white balance has not been set.	Set the white balance as described in manual Section 6.5, "White balance adjustment" on page 224.

## Leak Detected in the Endoscope

Issue	Cause	Solution
What do I do if I have detected a leak in my endoscope?	External Leak can occur in one or more of the following areas A-rubber, insertion tube, universal cord, control body	<p>Call service centre on <b>1300 132 992</b> for further advice.</p> <p>If leak is in obvious external location:</p> <ul style="list-style-type: none"> <li>• Remove from water</li> <li>• Dry area thoroughly</li> <li>• 'Patch' leak with plasticised tape ("Sleek" or similar)</li> <li>• Leak test again to confirm affected area is patched effectively</li> <li>• Continue with reprocessing as usual</li> <li>• Package endoscope in yellow infectious waste bag inside scope case</li> <li>• Transport to service centre after notifying Olympus</li> </ul>
	Internal leak can occur in one or more of the following areas: Biopsy channel, suction channel, air/water channel, suction cylinder, air/water cylinder	<p>Internal Leak</p> <p>Call service centre on <b>1300 132 992</b> for further advice.</p> <p>If leak is internal (i.e. in channel):</p> <ul style="list-style-type: none"> <li>• Keep leak tester attached and running</li> <li>• Continue with manual cleaning as far as possible</li> <li>• Brush / flush / Alcohol</li> <li>• Package endoscope in yellow infectious waste bag inside scope case</li> <li>• Transport to service centre after notifying Olympus</li> </ul>

All information are adapted from the following Olympus manuals:

- CV-180, CV-190
- CLV-180, CLV-190
- GIF-180, GIF-190 and GIF-Q190
- CF-HQ190, CF-H190, CFH180, CFH180AL/I, CFQ180AL/I, and H180AL/I
- BF-UC180F
- SIF-Q180

For complete product details see Instructions for Use.

# Repairs Related to Manual Cleaning Errors

## How to Avoid Unnecessary Repairs

### Bending Section

#### Cuts and Holes

Cause:

- Stacking endoscopes
- Excessive manual pressure
- Reprocessing with sharp objects

What you can do:

- One scope in sink / basin at a time
- No excessive pressure when grasping
- Don't transport, reprocess or store accessories with endoscopes

### Insertion Tube / Light Guide / Distal Tip

#### Bends and Crimps

Cause:

- Sink / basin too small

#### Cuts and Holes

Cause:

- Stacking endoscopes
- Reprocessing with sharp objects
- Vigorous cleaning of distal tip
- Poor packaging of endoscope in transport case

What you can do:

- Adequate sized sinks / basins – no stacking
- Don't transport, reprocess or store accessories with endoscopes
- Carefully clean and handle bending section distal tip
- Careful correct placement of endoscope in transport case

### Air / Water Channel

#### Clogging

Cause:

- Not using fresh detergent solution each time
- Deletion of channel cleaning adapters
- Deletion of A / W nozzle brushing

What you can do:

- Use freshly prepared detergent solution for each endoscope
- Use channel cleaning adapters
- Brush A / W nozzle
- Rinse channels after detergent flushing

## Suction Channel

### Cuts / clogging

Cause:

- Sink / basin too small
- Damaged / inferior brushes
- Not using channel cleaning adapters
- Over coiling of endoscope – impede brushing

What you can do:

- Adequate sized sinks / basins
- Prevent over coiling of endoscope
- Remove damaged brushes – use only Olympus brushes
- Use channel cleaning adapters
- Rinse after detergent flush

## Angulation Controls / Brakes

### Stretched or Broken

Cause:

- Harsh manipulation with locks on

What you can do:

- Reprocess endoscopes with locks off
- Avoid harsh manipulation of insertion tube / bending section and control knobs

### Fluid invasion – Potentially fatal to scopes (water in the endoscope)

Cause:

- Water cap not attached
- Water cap poorly attached,
- Electronic components not dried properly,
- Endoscope not dried properly
- Undetected internal leak
- Not leak tested
- Split valves on control body not detected

What you can do:

- Ensure endoscope correctly leak tested
- Ensure endoscope correctly and thoroughly dried
- Ensure water cap correctly attached
- Remove light guide connector from water prior to removal of leak tester

- Regular maintenance of endoscope
- Check water cap for wear and tear, not split or eroded seal ring
- Can be remedied if detected early - contact Olympus Australia

## Variable Stiffness (Colonoscopes only)

### Stretched or Broken

Cause:

- Variable stiffness adjustment not in 'O' position after use and when reprocessed

What you can do:

- Ensure the variable stiffness adjustment ring is in the 'O' position each time after use and prior to cleaning and reprocessing
- Contact Olympus Australia

For complete product details see Instructions for Use.

## SET UP - 190 SERIES LIGHT SOURCE AND PROCESSOR WITH 180 SERIES BRONCHOSCOPES

1. Ensure plug end (electrical connector) of endoscope (on the light guide connector of the endoscope) is dry before plugging into light source



2. Connect suction valve and biopsy cap to bronchoscope. Align the white line on the scope with the arm of the suction valve, and press down until you feel/hear a click.





3. Connect video (curly) cable to the video processor, inserting the cable with the “ridge” facing upwards and the word “UP” visible. Insert the connector until a “click” sound is heard.



4. Insert Light Guide Connector into light source socket



5. Connect videoscope (curly) cable to scope. Line up yellow dots and rotate cable to lock into place



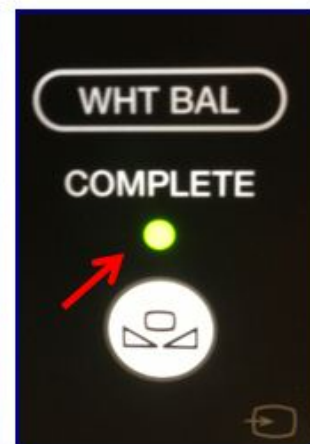
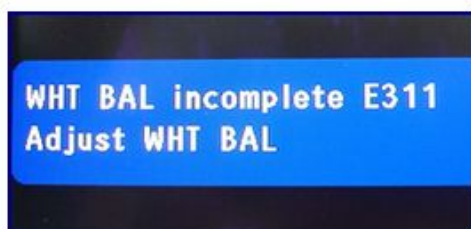
- Turn on processor and light source. If using master control on the trolley press button in middle of top shelf front edge, or turn on at video processor and light source.



- Lamp will ignite automatically or to ignite light lamp – press and hold lamp “Standby switch” until it beeps”. Lamp turns on and green light next to “ON” illuminates”.



- “**White Balance Incomplete**” may appear on the screen. To white balance endoscope, place distal tip of the endoscope into white balance barrel (cap). Press and hold down the “White Balance” button until you hear a beep and the words “White Balance complete” appears on the screen.



9. Test suction is working properly

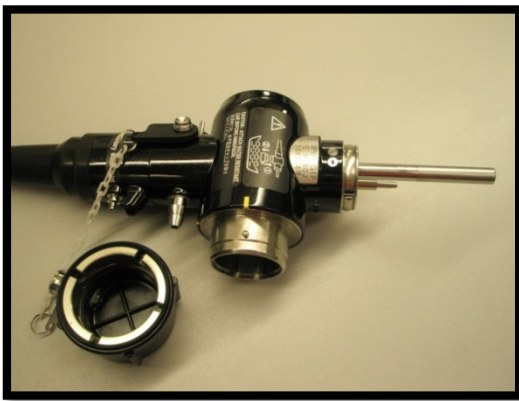


10. System is now ready for use

For complete product details see Instructions for Use.

## SET UP - 190 SERIES LIGHT SOURCE AND PROCESSOR WITH 180 SERIES ENDOSCOPES

1. Ensure plug end (electrical connector) of endoscope (on the light guide connector of the endoscope) is dry before plugging into light source. Connect suction air/water valves and biopsy cap to endoscope.



2. Connect video Link (curly) cable to video processor, inserting the cable with the “ridge” facing upwards and the word “UP” visible. Insert the connector until a “click” sound is heard.



3. Insert Light Guide connector of endoscope into light source socket.



4. Connect videoscope (curly) cable to scope. Line up yellow dots and rotate cable to lock into place.



5. Fill water bottle or if using Carbon Dioxide, fill CO<sup>2</sup> Version with Sterile "Water for Irrigation". Fill to "maximum" level (denoted by upper line on the bottle). Ensure the green rubber "O" ring is in place on neck of bottle. Screw the lid onto the bottle firmly.



6. Position water bottle on hook at side of trolley.

Water Bottle



CO<sup>2</sup> Bottle



7. Connect water bottle tubing to left side of scope (place tubing in vertical position, matching the larger hole with the longer connection. Insert until it stops. Rotate to horizontal position and continue insertion until the tubing stops). Connect suction to right side of scope. Connect auxiliary water tube to right side of scope.



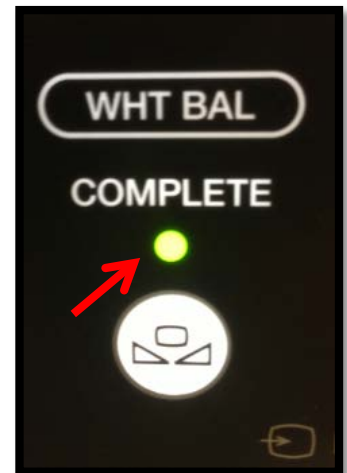
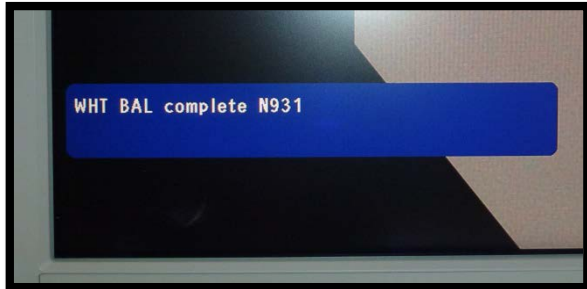
8. Turn on processor and light source. If using master control on the trolley press button in middle of top shelf front edge.



9. Lamp will ignite automatically or to ignite light lamp – press and hold lamp “Standby switch” until it beeps”. Lamp turns on and green light next to “ON” illuminates”.



10. **“White Balance Incomplete”** may appear on the screen. To white balance endoscope, place distal tip of scope into white balance barrel (cap). Press and hold down the “White Balance” button until you hear a beep and the words “White Balance complete” appears on the screen.



11. Test air, water and suction are working properly.



12. System now ready for use.



For complete product details see Instructions for Use.



## SET UP - 190 SERIES LIGHT SOURCE AND PROCESSOR WITH 190 SERIES BRONCHOSCOPES

1. Ensure plug end (electrical connector) of endoscope (on the light guide connector of the endoscope) is dry before plugging into light source.



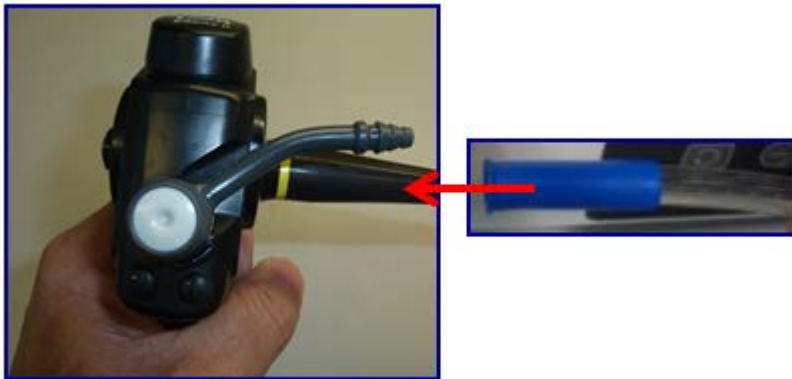
2. Connect suction valve and biopsy cap to bronchoscope. Align the white line on the scope with the arm of the suction valve, and press down until you feel/hear a click.



3. Insert One Touch Connector into light source socket with "White Dot" facing upwards. Insert until "White Dot" disappears and a "clicking sound" is heard.



4. Connect suction tubing to disposable suction valve.



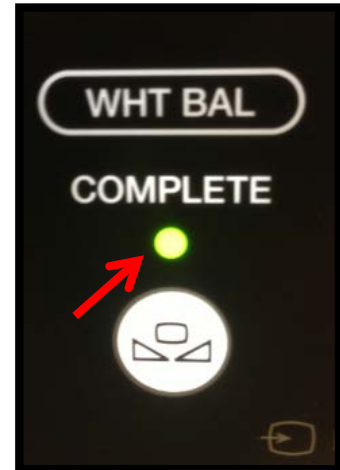
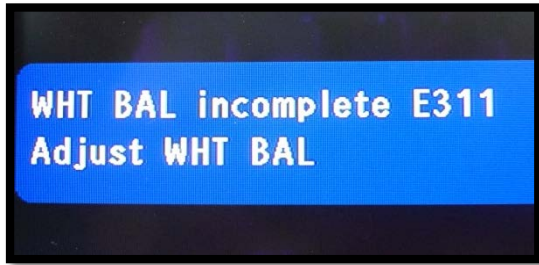
5. Turn on processor and light source. If using master control on the trolley press button in middle of top shelf front edge, or turn on at video processor and light source.



6. Lamp will ignite automatically or to ignite light lamp – press and hold lamp “Standby switch” until it beeps. Lamp turns on and green light next to “ON” illuminates.



7. **“White balance Incomplete”** may appear on the screen. To white balance endoscope, place distal tip of scope into white balance barrel (cap). Press and hold down the ‘White Balance’ button until you hear a beep and the words “White Balance complete” appear on the screen.



8. Test suction is working properly.



9. Bronchoscope now ready for use.

For complete product details see Instructions for Use.

## SET UP - 190 SERIES LIGHT SOURCE AND PROCESSOR WITH 190 SERIES ENDOSCOPES

1. Ensure One Touch Connector electrical components (gold finger marks) are dry before inserting into light source. Connect suction air/water valves and biopsy cap to endoscope.



2. Insert One Touch Connector into light source socket with “White Dot” facing upwards. Insert until “White Dot” disappears and a “clicking sound” is heard.



3. Fill water bottle or if using Carbon Dioxide, fill CO<sup>2</sup> Version with Sterile “Water for Irrigation”. Fill to “maximum” level (denoted by upper line on the bottle). Ensure the green rubber “O” ring is in place on neck of bottle. Screw the lid onto the bottle firmly.

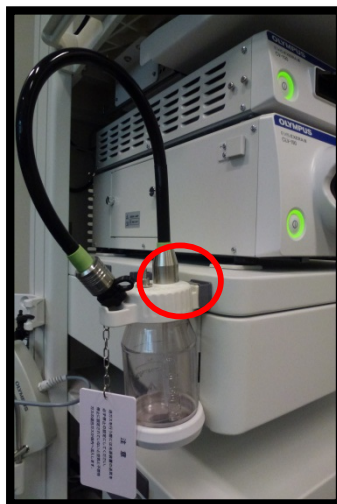


4. Position water bottle on hook at side of trolley.

Water Bottle



CO<sup>2</sup> Bottle



5. Connect water bottle tubing to left side of scope (place tubing in in vertical position, matching the larger hole with the longer connection. Insert until it stops, rotate to horizontal position and continue insertion until the tubing stops). Connect suction to right side of scope. Connect auxiliary water tube to right side of scope.



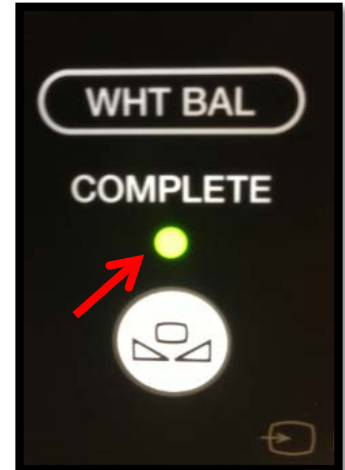
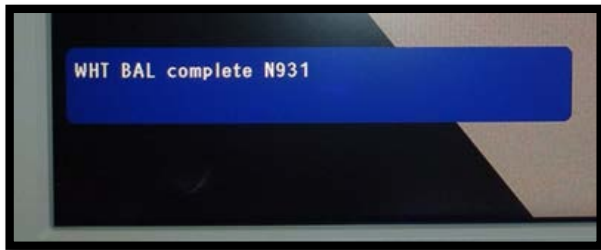
6. Turn on processor and light source. If using master control on the trolley press button in middle of top shelf front edge.



7. Lamp will ignite automatically or to ignite light lamp – press and hold lamp “Standby Switch” until it beeps. Lamp turns on and green light next to “ON” illuminates.



8. **“White balance Incomplete”** may appear on the screen. To white balance endoscope, place distal tip of scope into white balance barrel (cap). Press and hold down the “White Balance” button until you hear a beep and the words “White Balance complete” appears on the screen.



9. Test air, water and suction are working properly.



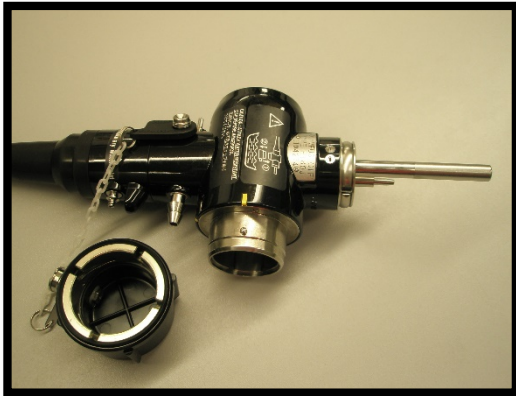
10. System now ready for use.



For complete product details see Instructions for Use.

## SET UP - 180 SERIES LIGHT SOURCE AND PROCESSOR

1. Ensure plug end (electrical connector) of endoscope (on the light guide connector of the endoscope) is dry before plugging into light source. Connect suction air/water valves and biopsy cap to endoscope.



2. Insert scope into light source socket



3. Connect videoscope (curly) cable to scope. Line up yellow dots and rotate cable to lock into place





4. Fill water bottle with bottled "Water for Irrigation". Fill to 'maximum' level (denoted by upper line on the bottle). Ensure the green rubber 'O' ring is in place on neck of bottle. Screw the lid onto the bottle firmly



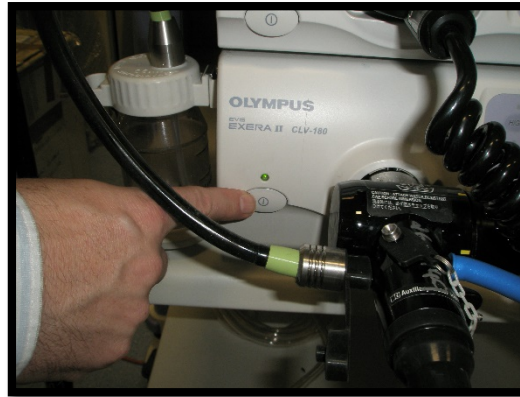
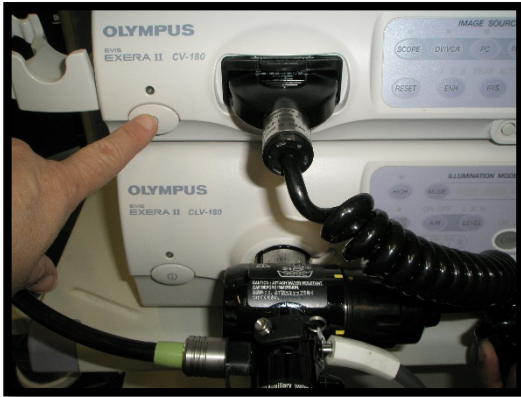
5. Position water bottle on hook at side of trolley



6. Connect water bottle to scope. Connect suction to scope. If option available on endoscope, connect auxiliary water tube to scope



7. Turn on processor and light source.



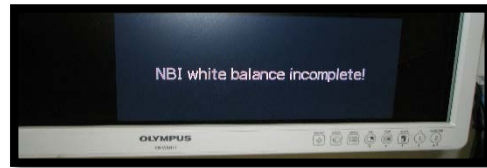
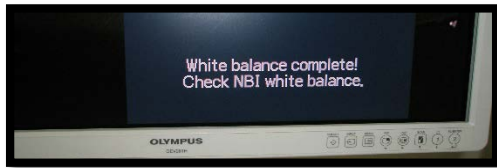
8. Lamp will ignite automatically or to ignite light source lamp - press 'Ignition' switch



9. Place distal tip of scope into white balance barrel (cap). Press and hold down the "White Balance" button until you hear a beep and the words "White Balance complete, check the NBI white balance" appear on the monitor



10. After “While Balance complete” appears on the monitor; press the “Mode” button on the processor to illuminate the NBI Light. Press and hold down the “White Balance” button until you hear a beep and the words “NBI White balance complete” appear on the monitor



11. Test air, water and suction are working properly



12. System now ready for use



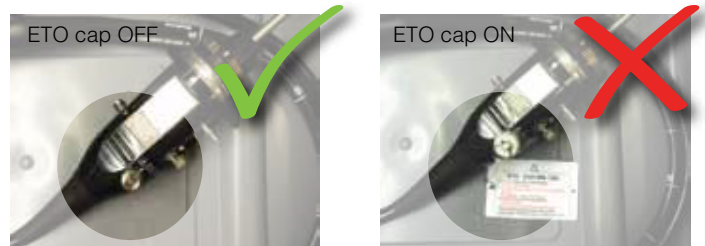
For complete product details see Instructions for Use.

## 190-Series Leak Testing/ Reprocessing Scope Considerations (EVIS EXERA III Endoscopes)

**CAUTION:** This guide is only a summary of some key considerations to properly perform a leak test on your 190-series scopes. Be sure to follow the detailed steps outlined in the ENDOSCOPE REPROCESSING MANUAL included with your endoscope purchase.

### Remove ETO Cap

- 1 The ETO cap must be removed from the venting connector before:
- ◆ Immersion for cleaning/disinfection
  - ◆ Conducting a leakage test



Scope under fluid during leak test or reprocessing

### Connector Cap & Venting Connector Must Be Dry

- 2 Check that the Connector Cap of the leakage tester is not wet inside.

Check that the Venting Connector of the endoscope is not wet.



Connector cap



Venting Connector

### Attaching/Detaching Leakage Tester

- 3 DO NOT attach/detach the leakage tester while the endoscope is immersed. Attaching/detaching under fluid could allow fluid to enter the endoscope, resulting in damage.



Leakage tester under fluid

### During Leakage Test

- 4 If continuous bubbling at the connection of the leakage tester MB-155 to the endoscope is noted, this indicates a leak. Either the leakage tester or the endoscope could have damage.



Bubbling during leakage test

For complete product details see Instructions for Use.

# Preventing poor electrical contact of the One-touch Connector

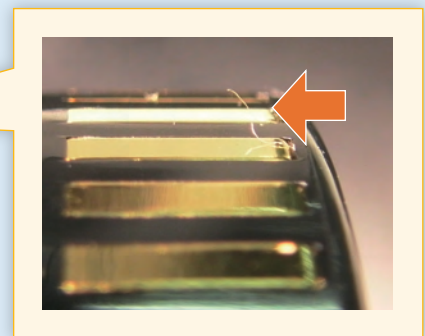
## The One-touch Connector

Since the electrical contacts are on the outer surface of the one-touch connector, foreign particles such as detergent remnants, hard water residue, finger grease, dust, and lint may easily attach to them.

If foreign particles are trapped between the light source output socket and the electrical contacts, this may result in poor electrical contact and lead to abnormal images like flickering, image distortion, and the display of error messages.



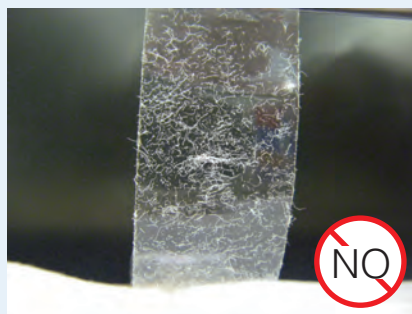
One-touch Connector



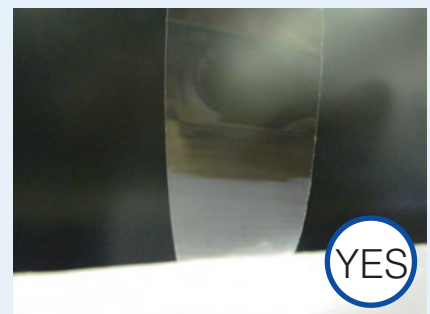
Lint attached to the electrical contact

## Preventing abnormal images caused by poor electrical contact

- Use lint-free gauze, e.g. medical lint-free gauze for reprocessing the endoscope.
- Do NOT wipe the electrical contact again once it is completely dried after reprocessing the scope.



Lint-prone gauze



Lint-free gauze

- If it is suspected that foreign particles may be on the electrical contacts, take the following steps before connecting the scope to the light source.



1 Moisten lint-free gauze with 70% ethanol.



2 Wipe the electrical contacts and leave them to dry naturally.

## What to do if abnormal images appear after turning on the power

- The problem may be caused by foreign particles attached to the electrical contacts. Take the following steps and then connect the connector to the light source.



1

Turn off the processor.



2

Turn off the light source.



3

Detach the scope connector.



4

Moisten lint-free gauze with 70% ethanol.



5

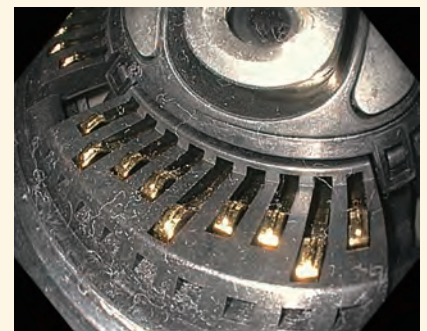
Wipe electrical contacts and leave them to dry naturally.

## What to do if abnormal images still appear even after taking the above steps

- The foreign particles might have accumulated on the light source output socket or other problems may cause abnormal images.
- Please contact Olympus for further troubleshooting assistance.



Normal condition inside the output socket.



Accumulated lint inside the output socket after connectors with lint were repeatedly connected.

For complete product details see Instructions for Use.

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QR 07.281 V1.0 November 2019