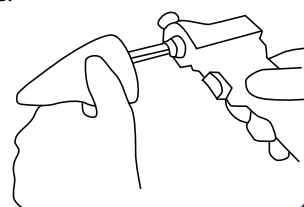


## ANTI-FOGGING SOLUTIONS

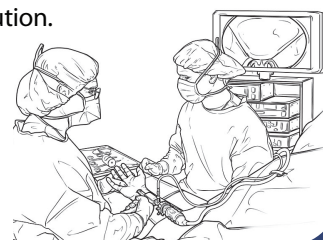
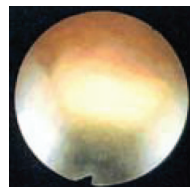
### Fogging Prevention

- Use anti-fog agent.
- Ensure camera coupler/endoscope are completely dry before assembly.
- After assembly, wrap blade with moist, sterile gauze.
- Pre-warm endoscope, turning on camera/light source system 5 minutes prior to use.



### If Fogging Occurs

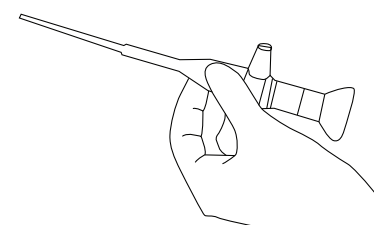
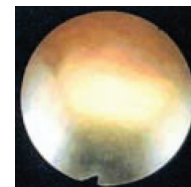
- Allow endoscope to remain in canal for 60-90 seconds for temperature to equilibrate with body tissues.
- Remove endoscope and clean near blade assembly with a cotton swab.
- Detach endoscope/camera and clean lenses with alcohol or glycerin solution.



### If Fogging Continues

- Soak up excess fluid in carpal tunnel with sterile cotton swab.
- Inspect endoscope for any damage.

**DO NOT PROCEED IF FOGGING CANNOT BE ELIMINATED!  
IF YOU CAN'T SEE, DON'T CUT!**



## PREPARATION for

### DECONTAMINATION

- Blade assembly should be properly disposed of in appropriate container.
- Decontamination of reusable instruments or accessories should occur immediately after completion of the surgical procedure.
- Disassemble endoscope from handpiece and disassemble light-post adapters from endoscope.
- **DO NOT** re-sterilize blade assembly – it is designed for single use only.



## CLEANING READ GENERAL WARNINGS IN IFU "IM\_ECTR\_IFU" To avoid contact between devices utilize the MicroAire sterilization case REF: 81040

### Instrument Cleaning - Manual

- Clean the ECTR Handpiece, Hamate Finders, and Synovium Elevator thoroughly with warm (> 60°C /140°F) water, pH-neutral enzymatic detergent, and a soft brush. Scrub the ECTR Handpiece with the brush, paying close attention to instrument crevices.
- Scrub the adapters with a soft brush in a solution of mild soap and water. Rinse and dry thoroughly.
- Rinse all items thoroughly under running (< 50°C /122°F) water for a minimum of 2 minutes. If possible, use distilled water for the final rinse.

- **DO NOT** ultrasonically clean the endoscope or use solvents other than alcohol.



### Endoscope Cleaning - Manual

- Place endoscope in sterilization case.
- Use soft brush to scrub endoscope with warm water and mild detergent.
- Clean lenses at tip end, camera mounts and light post with cotton swab moistened in alcohol.



### Instrument Cleaning - Automated

#	Title	Detergent	Minutes	Temp
1	Pre-Wash	Mild pH Enzymatic*	4	<= 50°C (122°F)
2	Rinse	None	1**	<= 50°C (122°F)
3	Wash	Mild pH	4	>= 60°C (140°F)
4	Drain for 1 minute minimum			
5	Rinse	None	2**	>= 60°C (140°F)
6	Drain for 1 minute minimum			
7	Thermal Disinfect	None	10	>= 93°C (200°F)
8	Drain for 1 minute minimum			

\*Detergent can be omitted at the pre-wash stage if the equipment does not have this ability.  
\*\* If not using mild PH detergent, extend rinse time if possible to reduce possible degradation.

- Load the medical devices into the Washer/Disinfector.
- Avoid contact between devices (movement during washing could cause damage and washing action could be obstructed).
- Arrange medical devices so that cannulations are not horizontal (to assist drainage).
- The minimum recommended Washer/Disinfector cycle is below:
- **DO NOT** use automated cleaning for the Video Endoscope REF 81020 or 81020N.

## MAINTENANCE, INSPECTION

### and FUNCTION TESTING

- Carefully inspect each device to ensure that all visible blood and soil has been removed.
- Visually inspect for damage and/or wear.
- Check the action of moving parts to ensure smooth operation throughout the intended range of motion.
- Where instruments form part of a larger assembly check that the devices assemble with mating components.
- **Sticking trigger** – do not lubricate, return handpiece to MicroAire for free product upgrade.

**NOTE:** If concerns are noted that may compromise the function of the device, please contact your MicroAire representative.



## STERILIZATION READ GENERAL WARNINGS IN IFU "IM\_ECTR\_IFU" To avoid contact between devices utilize the MicroAire sterilization case REF: 81040

### Sterilization

- Clean the ECTR Handpiece, Hamate Finders, and Synovium Elevator thoroughly with warm (> 60°C /140°F) water, pH-neutral enzymatic detergent, and a soft brush. Scrub the ECTR Handpiece with the brush, paying close attention to instrument crevices.
- Scrub the adapters with a soft brush in a solution of mild soap and water. Rinse and dry thoroughly.
- Rinse all items thoroughly under running (< 50°C /122°F) water for a minimum of 2 minutes. If possible, use distilled water for the final rinse.

- **DO NOT** ultrasonically clean the endoscope or use solvents other than alcohol.



### Steam Sterilization

- INSTRUMENTS:  
REF 81014, REF 81025, REF 81025A, REF 81151, REF 81152, REF 81061, REF 81026, REF 81027, REF 81029, REF 81040, and REF 81023A.  
(NOT 81020 (N))
- Steam sterilize using one of the below cycles.

The following steam parameters have been found to be successful in demonstrating a sterilization assurance level (SAL) of at least 10<sup>-6</sup>.

- **DO NOT** autoclave the Video Endoscope REF 81020 or 81020N.
- **DO NOT** ultrasonically clean the endoscope or use solvents other than isopropyl alcohol.
- **DO NOT** exceed a temperature of 280° F (138° C).

GRAVITY-DISPLACEMENT STEAM	Instrument/Accessory Only	In Sterilization Case
Exposure Time	30 Minute Full Cycle	35 minute Full Cycle
Exposure Temperature	270-275°F (123-135°C)	
Minimum Dry Time	8 minutes	
Materials	Single wrapping in a standard central supply wrap	
PREVACUUM-STEAM	Instrument/Accessory Only	In Sterilization Case
Exposure Time	4 Minute Full Cycle	5 minute Full Cycle
Exposure Temperature	270-275°F (123-135°C)	
Minimum Dry Time	8 minutes	
Materials	Single wrapping in a standard central supply wrap	
"FLASH" GRAVITY-STEAM	Instrument/Accessory Only	
Exposure Time	11 Minute Full Cycle	
Exposure Temperature	270-275°F (123-135°C)	
Minimum Dry Time	8 minutes	
Materials	Single wrapping in a standard central supply wrap	

### 81020 VIDEO ENDOSCOPE STERILIZATION

- Place endoscope in sterilization case.
- Carefully immerse the Video Endoscope.
- Always clean, dry and assemble camera to scope prior to soaking in disinfectant, this can help with fogging.
- Each instrument must be dried thoroughly before assembling to avoid fogging.
- Follow the solution manufacturer's recommendations for soaking time, but do not exceed two hours.
- **DO NOT** autoclave the Video Endoscope REF 81020 or 81020N.



## IMPORTANT

### READ GENERAL WARNINGS IN IFU "IM\_ECTR\_IFU"

To avoid contact between devices utilize the MicroAire sterilization case REF: 81040

