Thank you for purchasing our product. Read this manual carefully before use to avoid unexpected accidents and to take full advantage of the product’s capabilities.

Please refer to separate operation manual (Cleaning, Disinfection and Storage) for detailed recommendations on the cleaning, high-level disinfection and sterilization of FUJIFILM endoscopes. Also, refer to the third operation manual containing recommendations on electrosurgical instruments.
Important Safety Information

For the USA Market - CAUTION:
Federal law restricts this device to sale by or on the order of a physician.

1. Intended Use

This device is intended for the visualization of the duodenum and upper digestive tract, specifically for the observation, diagnosis, and endoscopic treatment of the esophagus, stomach, and duodenum.

2. Safety

Read and understand this manual carefully before use. Use the Endoscope by following the provided instructions. Items important for the safe use of the Endoscope are summarized in Chapter 1 “Safety.” Safety precautions associated with individual operations or procedures are provided separately, indicated “WARNING” or “CAUTION.”

3. Warning

Items that must be observed for safety when performing endoscopy or electrosurgery are identified by “WARNING” or “CAUTION.” Perform procedures correctly by reading and understanding the warning information carefully.

WARNING

Improper use or operation of the equipment may injure patients, physicians, or people in the vicinity.

Read and understand this manual carefully before operating the equipment.

Improper operations that will damage the equipment only are identified by “CAUTION.”

4. About Clinical Procedures

This manual assumes that the product will be used by medical specialists who have received proper training in endoscopic procedures. It does not provide information about clinical procedures. Regarding clinical procedures, use proper clinical judgment.
5. When Using the Endoscope for the First Time

This product has not been sterilized. When using it for the first time, use the level of high-level disinfection or sterilization suitable to the application, in accordance with Chapter 7 “Cleaning,” Chapter 8 “High-Level Disinfection,” and Chapter 9 “Gas Sterilization.”

6. Single Use Only

Forceps valve and cleaning brush WB1318DE are intended for single use. To prevent infection, do not reuse them.

7. Treatment with Electrosurgical Instruments

Before electrosurgery, basic in vitro experiments must be performed to learn how to tighten the snare properly and how repeated use affects the cutting quality of therapeutic accessories.

8. If Any Abnormality Occurs During the Clinical Procedure

If any abnormality occurs with the equipment, refer to “Troubleshooting.” Especially, continued use of the equipment with abnormal images can cause burn and injury by heat generation from the distal of the Endoscope.

9. Loss of Function

During an examination, if the endoscopic image disappears, a live image is not displayed after freeze mode has been cancelled, or the endoscopic image is discolored, reset the processor and light source.

During treatment, if the endoscopic image disappears, a live image is not displayed after freeze mode has been cancelled, or the endoscopic image is discolored, stop treatment immediately, remove the treatment tool from the endoscope, and then reset the processor and light source.

If an appropriate image does not appear even after resetting the processor and light source, turn them off, straighten the bending portion to unlock, release the angle knobs, and then withdraw the endoscope slowly from the patient.

Should the endoscopic image disappear during an examination or treatment, and if the processor and light source are not turned off, it may cause overheating of the distal end of the endoscope, possibly resulting in mucosal burns or other injury.

[Note] Reset: Turn off the processor and the light source, and wait for at least 5 seconds. Turn on the processor and the light source again, and then light the lamp by pressing the Lamp button.
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[Note] These instructions are described in separate operation manuals.
Preface

This manual describes how to use ED-530XT.

Conventions Used in This Manual

This manual uses the following conventions for easier understanding.

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</tr>
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<tr>
<td>➔</td>
</tr>
</tbody>
</table>
Chapter 1  Safety

This chapter summarizes the information necessary for safe use of Endoscope.
Chapter 1  Safety

1. Precautions in Using Endoscope

1) Preparation and inspection before use

Prior to using this product, prepare a spare one to avoid unexpected accidents such as equipment failure. If a replacement is not available, you may not be able to continue endoscopic procedures.

Make sure to inspect the equipment before use according to the procedures provided in this manual, to avoid unexpected accidents, and take full advantage of the equipment’s capabilities. If the inspection result shows any abnormality, do not use the same equipment.

2) Combination of equipment

The Endoscope may be used in combination with peripherals. To avoid an electric shock accident, do not use any peripherals than the ones specified in this operation manual.

3) Abnormality in use

If any abnormality is noticed during use, carry out safety checks and discontinue use immediately.

4) Maintenance

Endoscopes are reusable devices subject to routine wear and tear. Many factors can contribute to the reuse life of any instrument. Besides clinical use, routine handling as well as repeated cleaning and high-level disinfection or sterilization can affect the durability of parts and materials.

Periodic inspections should be performed to check the integrity of all external endoscope surfaces as well as components. Abnormalities and/or material changes including but not limited to cracking, flaking, pitting, corrosion, etc. which can create sharp edges, compromise sealed surfaces and/or negatively affect device functionality are indications for returning an instrument for evaluation or repair.

Have this product checked by FUJIFILM authorized service personnel once every six months or once every 100 cases, whichever comes first.

Do not disassemble or modify this product.
5) Annual return and inspection

All duodenoscopes must be returned to your local FUJIFILM dealer or authorized service representative for inspection of the forceps elevator seal once a year to maintain safe use of the device.

6) Operation of Endoscope

Endoscope is a precision instrument. Unnatural force or impact on the insertion portion, flexible portion, or distal end may injure the inside of the patient as well as damage the instrument. If you encounter any resistance, insert it slowly. Do not force it in. Do not insert or bend the Endoscope without securing the view on the monitor.

7) Handling of Endoscope

When holding Endoscope, hold it by the control portion. Handling it up by the insertion portion or LG flexible portion is difficult to hold and may exert an unnatural force, resulting in instrument failure.

Pull on rubber gloves when handling an Endoscope to prevent infection and static charges.

8) Temperature at distal end

When the Endoscope projects light at high brightness for an extended time, the temperature may exceed 41°C at the distal end. Turn off the lamp when you hang the Endoscope on the cart hanger.

9) Electromagnetic interference

This equipment has been tested and found to comply with the limits for medical devices defined in IEC 60601-1-2:2007. These limits are designed to provide reasonable protection against harmful interference in a typical medical installation. However, it is possible that it may cause harmful interference to other devices in the vicinity, if it is installed and used in accordance with the instructions. Also, there is no guarantee that interference will not occur in a particular installation. Therefore, if this equipment does cause harmful interference to other devices, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Change the orientation or position of any affected device.
- Increase the spacing between devices.
- Consult the manufacturer or dealer of the device.

Noise may appear on the monitor of this equipment due to the effect of electromagnetic waves. In this case, turn off the device emitting the electromagnetic waves or move the device away from this equipment.
Chapter 1  Safety

2. Cleaning and High-Level Disinfection/Sterilization

This product has not been sterilized. When using it for the first time, perform high-level disinfection or sterilization suitable for the application. When reusing this product, clean and then, disinfect or sterilize it (Cleaning, Disinfection and Storage). Inadequate cleaning, high-level disinfection or sterilization may result in infection. Cleaning, high-level disinfection or sterilization the insertion portion and channels especially carefully.

Wear protective gear during chemical cleaning and high-level disinfection to protect your skin and to prevent infection.

When using this product for a patient with Creutzfeldt-Jakob disease (especially variant Creutzfeldt-Jakob disease), use it exclusively for a patient with the same disease, or properly discard this product after use. Since the cleaning, high-level disinfection and sterilization methods described in the manual (Cleaning, Disinfection and Storage) of this product cannot eliminate the causal agents of Creutzfeldt-Jakob disease, the product could be a source of infection. For the treatment of Creutzfeldt-Jakob disease, refer to the guidelines for it available.

3. Disposal

This product has heavy metal parts. When disposing of this product, comply with local laws and regulations in your area. Determine whether or not the product is to be treated as infective waste, depending on the usage state.

4. “⚠ Warning” and “⚠ Caution” Messages Appearing in Individual Chapters

Chapter 5  Preparation for Use of the Endoscope

The use of abnormal equipment will cause wrong diagnosis or injury. Do not use the abnormal equipment.

5.2.2 Inspection of Forceps Valve

Ensure that a properly high-level disinfected or sterilized forceps valve is attached to the forceps inlet. Not doing so can create a risk of infection to patients and/or end-users.

5.2.3 Attaching Forceps Valve

Ensure that an appropriately high-level disinfected or sterilized forceps valve is properly attached to the forceps inlet. Not doing so can create a risk of infection to patients and/or end-users.

5.3 Connecting the Endoscope

Touching the LG connector with hands immediately after use of the Endoscope may cause to burn. Do not touch the LG connector tip until it will be cooled down (approximately 5 minutes).
Endoscope may be adhered to mucous membrane, resulting in damage to the mucous mem-
brane. Set a suction pressure at 53kPa or less.

5.4.5 Inspecting the Objective Lens

Viewing the light of light guide directly may damage your eyes. Switch off the light before
inspecting the lens.

Chapter 6 Method of Use

Do not supply an excessive amount of air or gas during electrosurgery. It could cause an
embolism.

6.2 Insertion and Observation

Energy of illumination may burn. Do not allow the distal end to touch the same part for 5
minutes or more.

6.3 Biopsy

It may cause holing or bleeding. Do not press them the digestive tract wall with undue force.

6.4 E R C P

Pressing the cannulation tube strongly against the digestive tract wall may damage it. Do not
press it against digestive tract wall with undue force.

Chapter 7 Cleaning

7.4.5 Disconnecting Endoscope from Processor

Do not touch the tip of LG (Light Guide) connector until it has cooled down (approximately 5
minutes after turning off the power of the light source). Touching the LG connector tip with
one’s hand immediately after use of this product may cause a burn.

7.4.6 Detaching Endoscope Components (A/W button, suction button, forceps valve, etc.)

The forceps valve is a single patient use item. DO NOT reuse it as continued reuse presents an
infection risk.

7.5 Manual Cleaning (cleaning in basin)

It is imperative that patient material is not allowed to dry and/or harden onto scope surfaces,
particularly the elevator and elevator recess at the scope distal tip, as doing so will make
cleaning more difficult and possibly impede adequate high-level disinfection and/or steriliza-
tion. Delayed reprocessing of endoscopes, especially duodenoscopes is not recommended.

Carefully inspect all cleaning brushes prior to use and check the brushes integrity after use to
ensure that the accessories are not damaged and no brush or accessory fragment remains
inside the channel. Retained brush/accessory fragments could be a potential source of infec-
tion and/or cause patient injury.

Before using any cleaning brush for a valve cylinder or channel port, remove any debris from
the bristles on the brush. This will avoid reintroduction of patient material into the channels/
lumens.
7.5.4 Inspecting Cleaning Brushes

The cleaning brush WB1318DE is a single use item. DO NOT reuse it as continued reuse may present an infection risk.

7.5.9 Rinsing Endoscope

After cleaning, thoroughly remove all detergent residue as per the provided instructions that follow to prevent the potential for inadvertent dilution or adulteration of the liquid chemical germicide used in subsequent steps.

Thoroughly rinse any remaining detergent with potable water after the cleaning process.

Chapter 8 High-Level Disinfection

8.4 Rinsing Endoscope

After disinfection, thoroughly remove all high-level disinfectant solution residue as per the provided rinsing instructions that follow to prevent patient injury from contact with the residual high-level disinfectant solution.

8.5 Cleaning and/or Disinfection Using an Automated Endoscope Reprocessor (AER)

Some legally marketed automated endoscope reproprocessors (AERs) may be able to clean and/or disinfect FUJIFILM endoscopes. However, end-users should check with each AER manufacturer to confirm they have validation data to support their reprocessing claims for FUJIFILM endoscopes and removable endoscope components, such as valve mechanisms. Inadequate device-specific instructions and/or non-validated AER recommendations could result in unsuccessful cleaning and/or disinfection which may increase risks to patient safety. Follow all AER manufacturers’ reprocessing recommendations including for specific endoscope types (ex. duodenoscopes), features (ex. elevators) and/or removable scope components (ex. suction valves).

Chapter 9 ETO Gas Sterilization

Ensure that all instrument surfaces are dry before attempting ETO gas sterilization. Failure to do so can result in inadequate sterilization.

Aeration procedures must be performed immediately after ETO gas sterilization in order to remove potentially harmful gas residuals from contacting patients. No or incomplete aeration can potentially harm patients.

Chapter 10 Cleaning and High-Level Disinfection/Sterilization of Endoscopic Accessories

10.4.1 High-Level Disinfection of Forceps Valve

The forceps valve must be completely immersed in a high-level disinfectant solution. Remove air bubbles completely. If any air bubbles remain, effective disinfection cannot be achieved and an inadequately high-level disinfected forceps valve may be an infection risk.

Chapter 11 Storage

Do not store this product in a carrying case. Storage of this product in a carrying case and subsequent clinical use may cause infection.
Chapter 12  Using Electrosurgical Instruments

12.1  High-frequency cauterization

Do not use an electrosurgical unit when supplying flammable gas. There is a risk of ignition. If necessary, use nonflammable gas such as carbon dioxide. Do not use excessive nonflammable gas.

Wear electrically insulating gloves when using an electrosurgical unit or accessory. If not worn, there is a risk of thermal injury or electric shock.

Be sure electrically conductive parts within the patient vicinity such as metal parts of a bed are not in direct contact with a patient's body. There is a risk of thermal injury.

Always keep patients with a pacemaker away from electrosurgical instruments. The operation of the pacemaker may malfunction by the electrosurgical instruments.

Do not energize the electrosurgical instruments when the electrically active portion of high-frequency surgical instrument and the metal part at the distal end of endoscope are in contact with each other. Thermal injury or scope damage may occur.

Connect the electrosurgical instruments and electrosurgical generators in accordance with each operating manual. Incorrect connection may cause electric shock and/or burns.

Operate the instruments within specified output range as per the device’s operating instructions. Leakage current may cause thermal injury.
Chapter 2  Composition of Set and System Configuration

This chapter describes the composition of Endoscope set and system configuration.
Chapter 2 Composition of Set and System Configuration

2.1 Composition of Set

The Endoscope set is provided in a carrying case. The set consists of the following items.

[Note] Figures in parentheses indicate quantities.
Chapter 2 Composition of Set and System Configuration

Operation Manual
Preparation and Operation (1)
Cleaning, Disinfection and Storage (1)
Electrosurgical Instruments (1)

Ventilation Adapter
AD-7 (1)

Suction Button
SB-500 (1)

Air/Water Button
AW-500 (1)

Endoscope (1)

30 mL Syringe (1)
Tank Receiving Cap (1)
Tube for Air/Water Supply Channel (1)

Valve Adapter
CA-503S/A (1)

Valve Set (1)

Forceps Inlet Cleaning Adapter (with a Cap)
CA-503B/C (1)

Cleaning Adapter Kit
CA-503/A (1)
2.2 System Configuration

You may use the ED-530XT with various peripherals attached to it. These peripherals are available separately. Extension makes the following possible.

- Endoscopic treatment
- Ultrasonography through forceps channel
- Recording of video images
- Printer output
[Note] For details on the connections of peripherals other than those listed here, please contact your local dealer.
Chapter 2 Composition of Set and System Configuration

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Chapter 3   Names and Functions of Parts

This chapter describes the names and functions of Endoscope parts as well as the composition of the main body.
Chapter 3 Names and Functions of Parts

The main body of the ED-530XT consists of the following parts.

- **Control portion**: Provides a grip for holding the Endoscope. Also contains parts for operating the Endoscope.
- **LG flexible portion**: Contains light guide, air/water supply tube, suction tube and cables.
- **Feed water connector**: Connects to the water tank.
- **Ventilation connector**: Connects to the air leak tester or ventilation adapter.
Chapter 3 Names and Functions of Parts

Enlarged view of distal end

* Insertion portion (applied part)
This portion is inserted into body cavities and contains the distal end, bending portion and flexible portion.

Flexible portion *
Connects bending portion and control portion.
The Endoscope can be inserted into the body cavity up to this portion.

Distal end *
Contains objective lens, air/water nozzles, forceps channel, etc. Air/water supply and suction are controlled by buttons on the control portion.

Bending portion *
Bend this portion with the knobs on the control portion.

Waterproof cap
Prevent water from remaining on electric contact.

EVE connector
This connector connects to the EVE connector socket on the processor.

LG connector
This connector connects to the scope socket on the light source.

Suction connector
Accepts tube from suction unit.

S connector
Accepts S-cord when using electrosurgical instrument (electric cautery).
Chapter 3  Names and Functions of Parts

<Indication Marks>

<table>
<thead>
<tr>
<th>Symbols</th>
<th>Location</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Symbol]</td>
<td>LG connector</td>
<td>Type BF applied part</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>LG connector</td>
<td>Serial number</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Control portion</td>
<td>Super CCD model</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>LG connector</td>
<td>WEEE marking</td>
</tr>
</tbody>
</table>
Chapter 4  Control Portion

The control portion contains the angle knobe for operating the bending mechanism and valves for air/water supply and suction, etc. This chapter describes the operations and functions of these parts.

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4.3 Remote Operating Switches
   for Images and Recording ....................................... 4-5
4.4 Forceps Valve ..................................................... 4-6
4.5 How to Operate Forceps Elevator Mechanism .......... 4-7
Chapter 4 Control Portion

4.1 How to Operate the Bending Mechanism

① Up-down angle knob
To bend the bending portion upward and downward.

When up-down locking lever is moved toward F
Turn the up-down angle knob in the direction of U to bend the bending portion upward.
Turn it in the direction of D to bend the bending portion downward.
Release the up-down angle knob to unlock the bending portion. It will unbend a little.

When up-down locking lever is moved in the direction opposite to F
Release the up-down angle knob to lock the bending portion. It will remain bent.

② Up-down locking lever
Used to retain the bent state of the bending portion. It switches between Lock and Unlock.
Move this lever in the direction opposite to F to lock the bending portion. Move it in the direction of F to unlock the bending portion.
Operate this lever either before or after operating the up-down angle knob.

[Note]
Lock : retains bent state of bending portion.
Unlock : allows external force to bend bending portion freely.
Chapter 4  Control Portion

4-3

Left-right locking knob
To retain the bent state of the bending portion. It switches between Lock and Unlock. Turn this knob in the direction opposite to \( \text{F} \) \( \text{F} \) to lock the bending portion. Turning it in the direction of \( \text{F} \) \( \text{F} \) unlocks the bending portion. Operate this knob either before or after operating the left-right angle knob.

Left-right angle knob
To bend the bending portion right or left.

<When left-right locking knob is turned forward \( \text{F} \) \( \text{F} \)>
- Turn the left-right angle knob in the direction of \( \text{L} \) \( \text{L} \) to bend the bending portion to the left.
- Turn it in the direction of \( \text{R} \) \( \text{R} \) to bend the bending portion to the right.
- Release the left-right angle knob to unlock the bending portion. It will unbend a little.

<When the left-right locking knob is turned in the direction opposite to \( \text{F} \) \( \text{F} \)>
- Release the left-right angle knob to lock the bending portion. It will remain bent.
4.2 Valve Control Buttons and Forceps Inlet

① Suction button
Allows aspiration through forceps channel (port) in distal end.
Suction is activated while this button is depressed.

② Air/water button
Used to blow air or water onto the surface of objective lens from the nozzle in distal end.
To supply air, stop the hole in the center of this button with a finger.
To supply water, just depress this button.

③ Forceps inlet
Opening for passing through endoscopic accessory.
Normally, the forceps valve is attached.
4.3 Remote Operating Switches for Images and Recording

- **RC switch**
  This is the remote switch for capturing image for a video printer.

- **MM switch**
  This switch electronically enlarges the image. The image is enlarged to 1.5x when this switch is pushed. The field of view then narrows by the amount of enlargement. The image returns to the normal size when the switch is pushed again.

- **FR switch**
  This is the remote switch for still image and the capture. The screen image is frozen while this button is being pushed. Image freezing is canceled a few seconds after it is released. If the switch is pushed again while the image is still frozen, a trigger signal is output to the device connected to the hard copy terminal.
4.4 Forceps Valve

The forceps valve consists of a valve body and a lid. It performs the function of preventing the leak or flowback of air. By opening and closing this valve, you can change the frictional resistance of an endoscopic accessory by two levels as it is being inserted.

1. Valve body

The valve body is a part that reduces the leakage or backflow of air when an accessory is used. It is mounted on the opening of the forceps inlet where a forceps is manipulated. Opening the lid of this valve body lowers the frictional resistance of an endoscopic accessory when it is inserted and weakens the backflow preventive effect.

2. Lid

The lid functions as a valve for preventing the leak or backflow of air. It should normally be kept closed. Closing this lid increases the backflow preventive effect, although it makes the frictional resistance of an endoscopic accessory larger when the accessory is inserted.

If a cannulation tube or other soft endoscopic accessory is used, opening the lid makes it easier to insert and remove such soft endoscopic accessories. It is also effective in preventing them from breaking.

[Note]

If an endoscopic accessory is not inserted, this lid must be kept closed.
4.5 How to Operate Forceps Elevator Mechanism

-forceps elevator lever
Used to control movement of the forceps elevator mechanism.

<When forceps elevator lever is moved toward the opposite side of the direction of U►>
The forceps elevator mechanism on the distal end of the Endoscope moves downward. The endoscopic accessory in the field of view move toward the lower part of the monitor.

<When forceps elevator lever is moved toward the direction of U►>
The forceps elevator mechanism on the distal end of the Endoscope moves upward. The endoscopic accessory in the field of view move toward the upper part of the monitor.
Chapter 5  Preparation for Use of the Endoscope

This chapter describes the system necessary for endoscopy.

5.1 Preparing Equipment ................................................... 5-2
5.2 High-Level Disinfecting and Sterilizing Forceps Valve (FOV-DV7) ................................................................. 5-4
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5.3 Connecting the Endoscope ........................................ 5-6
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5.5 Inspection of Forceps ............................................... 5-13
Chapter 5  Preparation for Use of the Endoscope

5.1 Preparing Equipment

(1) Move the cart with the processor to the place where the Endoscope is to be used.

(2) After turning the main switch on the cart to the OFF position, plug the power cord from the cart into a protective earth receptacle.

(3) Mount the suction bottle on the suction unit.

⚠️ CAUTION

The use of abnormal equipment will cause wrong diagnosis or injury. Do not use the abnormal equipment.
(4) Mount the water tank, 80% filled with water, on the processor.

[Note]
The water in the water tank should be changed every day using sterile water.
5.2 High-Level Disinfecting and Sterilizing Forceps Valve (FOV-DV7)

5.2.1 High-Level Disinfection of Forceps Valve

The forceps valve is provided non-sterile and must be high-level disinfected or sterilized prior to use following the instructions below.

The forceps valve is a single patient use item. Do not reuse.

[Note] Refer to the instructions in the “Cleaning, Disinfection and Storage” manual containing recommendations for high-level disinfection of the forceps valve.

⇒ ED-530XT Operation Manual (Cleaning, Disinfection and Storage)

5.2.2 Inspection of Forceps Valve

⚠️ WARNING

Ensure that a properly high-level disinfected or sterilized forceps valve is attached to the forceps inlet. Not doing so can create a risk of infection to patients and/or end-users.

The forceps valve is a single patient use type product. If any abnormality is found, do not use the product, and use a new high-level disinfected or sterilized forceps valve.

1. Visually check that the slits on the lid and circular hole of forceps valve are free from abnormalities such as tears, cracks, deformation, discoloration and so on.

2. Attach the lid to the main body of the forceps valve.
5.2.3 Attaching Forceps Valve

**WARNING**

Ensure that an appropriately high-level disinfected or sterilized forceps valve is properly attached to the forceps inlet. Not doing so can create a risk of infection to patients and/or end-users.

(1) Attach the forceps valve to the forceps inlet of the endoscope.

(2) Close the lid of forceps valve.
5.3 Connecting the Endoscope

**CAUTION**

Touching the LG connector with hands immediately after use of the Endoscope may cause to burn. Do not touch the LG connector tip until it will be cooled down (approximately 5 minutes).

1. Insert the LG connector of the Endoscope into the Endoscope socket on the light source.

2. Insert the EVE connector of the Endoscope into the 500 system connector socket on the processor.

3. Insert the connector of the water tank into the feed water connector on the Endoscope.

4. Connect the suction unit and suction connector of the Endoscope to the suction tube.
(5) Set the suction pressure to 40 to 53 kPa.

**CAUTION**

Endoscope may be adhered to mucous membrane, resulting in damage to the mucous membrane. Set a suction pressure at 53kPa or less.
5.4 Inspection of Endoscope

5.4.1 Inspecting the Insertion Portion

(1) Visually check the insertion portion (distal end, bending portion and flexible portion) for abnormalities such as flaws or dents and for sharp edges on protrusions that may injure the patient.

(2) Hold the flexible portion with both hands and allow it to go over its full length in such a way that the apex of the semi-circle with a diameter of about 200 mm gradually begins to slide. Check that the portion bends fully and there is no local difficulty in bending it.

[Note]
Do not forcibly twist or bend too sharply the flexible portion by hand. It may cause a failure.

[Note]
Do not forcibly twist or bend too sharply the bending portion by hand. It may cause a failure.
5.4.2 Inspecting the Bending Mechanism

(1) Unlock the up-down locking lever and left-right locking knob by turning them in the direction of F ➤ .

(2) Turn the up-down angle knob and left-right angle knob in the U, D, L and R directions until they stop. Check that the bending portion turns smoothly. Check that releasing the knobs unbends the bending portion a little.

(3) Turn the up-down locking lever and left-right locking knob in the direction opposite to F ➤ , and then lock them.

(4) Turn the angle knobs in similar manner as in step (2), and check how the bending portion bends. Here, the angle knobs should feel a little heavier than in step (2). Check that bending portion retains its bent state after the angle knobs are released.
5.4.3 Inspecting the Forceps Elevator Mechanism

1. Move forceps elevator lever.

2. Check that the forceps elevator at the distal end of the Endoscope moves.

5.4.4 Inspecting the Air/Water Supply, Suction and Forceps Channel

1. Switch on the power to the suction unit, cart and processor. Keep the lamp off.

2. Have a glass of water ready.

3. Place the distal end of the Endoscope in air, depress the air/water button, and check that water comes out of the nozzle.
(4) Dip the distal end of the Endoscope in water, stop the center hole in air/water button with your finger, and check that air comes out of the nozzle. Then take your finger off the hole and check that air does not come out of nozzle.

(5) Put a forceps valve in forceps inlet. Dip the distal end of the Endoscope in water, and check that depressing the suction button sucks in water and that releasing it stops suction.

(6) Insert the forceps from the forceps inlet and check that their tips come smoothly out of the outlet in the distal end of the Endoscope.
5.4.5 Inspecting the Objective Lens

(1) Turn OFF the lamp.

Look at the distal end of the Endoscope at an angle and check that the objective lens is free of dirt or foreign matter.

(2) If the lens is dirty, clean it.

[Note]
To clean the lens, wipe it with gauze (or something similarly soft) dampened with ethanol.

(3) Switch on the lamp and observe the endoscopic image on the monitor. Check that the image is free of cloudiness or blurs.

[Note]
If wiping does not remove cloudiness from the objective lens, it is likely that the Endoscope is not sufficiently airtight. Perform a leak test with an air leak tester LT-7F.

→ "7.4.1 Leak Testing"
5.5 Inspection of Forceps

**CAUTION**

Bending forceps with a small curvature may break it. Do not bend forceps with a curvature radius of 10 mm or less.

1. Inspect the operation of the forceps.
   Visually check the forceps for breakage or significant bends, and for sharp edges on protrusions that may injure the patient.

2. Form the spring of the forceps into a double ring approximately 200 mm in diameter, as shown in the figure.

3. Operate the handle of the forceps and check that their tips open and close.
Chapter 6  Method of Use

This chapter outlines how to operate the equipment, according to the general procedures. Regarding clinical procedures, use proper clinical judgment.

6.1 Preparation .................................................................. 6-2
6.1.1 Preparing the Necessary Equipment .................. 6-2
6.1.2 Pretreatment of Patient ................................. 6-2
6.2 Insertion and Observation ........................................... 6-3
6.3 Biopsy ......................................................................... 6-7
6.4 ERCP .......................................................................... 6-9
6.5 Pulling Out the Endoscope ................................. 6-11
Chapter 6  Method of Use

6.1  Preparation

6.1.1  Preparing the Necessary Equipment

Prepare the accessories and forceps, etc. to be used.

6.1.2  Pretreatment of Patient

Use pretreatment that suits the purpose of examination.
6.2 Insertion and Observation

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
</table>
| Energy of illumination may burn.  
Do not allow the distal end to touch the same part for 5 minutes or more. |

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
</table>
| It may cause deterioration of the outer surface.  
Do not directly apply Xylocaine spray to the insertion portion.  
Do not use olive oil as a lubricant for insertion. |

1. Have the patient hold the mouthpiece in his/her mouth.

[Note]  
If you choose to have the patient hold the mouthpiece after insertion, attach the mouthpiece to the insertion portion in advance. Have the patient hold it promptly after insertion.
(2) Unlock the bending portion by turning the up-down locking lever and the left-right locking knob in the direction of [F] until they stop.

[Note]
Another procedure is also available: you can insert the Endoscope by locking the bending portion only in the left-right direction and unlocking it in the up-down direction.

(3) Switch on the power to the processor and turn on the lamp.

(4) Apply clean lubricant (Xylocaine jelly or the like) to the insertion portion as required.

[Note]
Do not apply Xylocaine spray, olive oil or the like directly to the insertion portion.

[Note]
Do not forcibly twist or bend too sharply the flexible portion by hand. It may cause a failure.
Chapter 6  Method of Use

[Note]
Do not forcibly twist or bend too sharply the bending portion by hand. It may cause a failure.

(5) Insert the distal end of the Endoscope from the oral cavity to the pharynx, while observing the process.
Control the brightness by the level button on the light source.

(6) Stop the center hole in the air/water button with a finger to supply air to the digestive tract. The mucous membrane of the digestive tract will become clearly visible.

(7) Direct the distal end of the Endoscope to the region of interest by turning the up-down and left-right angle knobs.
[Note] In case that the bending portion does not return or cannot be pulled out easily because it is inverted inside the narrow lumen, do not pull it out forcibly.
<To suction mucus>

To suction mucus, put the distal end of the Endoscope in the mucous lake and press the suction button.

<If the surface of the lens is clouded with mucus or if the image is obscured>

Wash the surface of the lens by pressing the water supply button. When washing is complete, remove the water from the surface of the lens by air blow and suction.
6.3 Biopsy

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
</table>
| It may cause holing or bleeding.  
 Do not press them the digestive tract wall with undue force. |

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
</table>
| Pushing forceps forcefully may damage Endoscope.  
 Do not push the forceps forcefully, when having in difficulty in insertion.  
 Inserting and pulling out the elevated forceps may cause malfunction.  
 Insert and pull out the forceps when it is not elevated. |

[Note] Sometimes the forceps become stuck in the bending portion and will not pass smoothly.  
 In such case, unbend the bending portion a little and try to insert again.

(1) Direct the distal end of the Endoscope to the biopsy site.

(2) Check the opening and closing of the forceps.

Insert the forceps from the forceps inlet by observing the image.
(3) When the distal end of the forceps come into the field of view, stop insertion temporarily.

(4) Bring the forceps closer to the biopsy site slowly.

(5) Take a biopsy specimen by manipulating the angle knobs and letting the forceps in and out.

(6) Pull out the forceps slowly and take out the biopsy specimen.
6.4 ERCP

**WARNING**

Pressing the cannulation tube strongly against the digestive tract wall may damage it.  
Do not press it against digestive tract wall with undue force.

**CAUTION**

Sometimes, quick inserting of the cannulation tube may bend it.  
Insert it little by little slowly.

(1) Manipulate to bend it so that the duodenal papilla aperture is placed at the center of the filed of view.

(2) Charge the contract media into a syringe and connect the cannulation tube to it. Check that the contract media comes out from the tip of the tube.

Keep the forceps elevator lever upright and insert the cannulation tube into the instrument channel inlet.
(3) When the cannulation tube touches against the forceps elevator and is unable to insert anymore, inset the cannulation tube by approximately 30mm by manipulating the forceps elevator lever to lay down the cannulation tube.

By manipulating the forceps elevator lever to erect the cannulation tube, the tip of the cannulation tube comes into the filed of view from the right lower of the screen.

(4) Manipulate the angle knob, the forceps elevator lever and the moving in/out of the cannulation tube so that the tip of the cannulation tube directs to the papilla aperture, insert the cannulation tube into the common bile duct or the pancreatic duct through the papilla aperture.

(5) Inject the contrast media in a syringe a little and check that the cannulation tube is inserted in the aimed common bile duct or pancreatic duct. Then, slowly inject the contract media into the common bile duct or the pancreatic duct.

(6) Observe the conditions of the common bile duct or the pancreatic duct under X-rays illumination.
6.5 Pulling Out the Endoscope

(1) When the examination is over, draw any excessive air out of the body cavity.

(2) Make the up-down locking lever and the left-right locking knob free.

(3) Unbend the bending portion until it is almost straight by operating the angle knobs.

(4) Pull the Endoscope out slowly.
Main Specifications

<Classification of Medical Electrical Equipment>

1. Type of protection against electric shock: Class I equipment
   (power supply: protective earth plug)
2. Degree of protection against electric shock: Type BF Applied Part
3. Degree of explosion protection: Use is prohibited in an oxygen-rich environment or in a flammable gas atmosphere.
   [Note] Use in combination with VP-4400 and XL-4400, VP-4400HD and XL-4400, or VP-4440HD and XL-4450.

<Applied Part>

Insertion portion

<Data about Main Unit>

<table>
<thead>
<tr>
<th>Model</th>
<th>ED-530XT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optical system:</td>
<td></td>
</tr>
<tr>
<td>Viewing direction</td>
<td>Side viewing (retro-viewing 8°)</td>
</tr>
<tr>
<td>Field of view</td>
<td>100°</td>
</tr>
<tr>
<td>Observation range (mm)</td>
<td>4 to 60</td>
</tr>
<tr>
<td>Method of illumination</td>
<td>Light guide method</td>
</tr>
<tr>
<td>Image size</td>
<td>Super image</td>
</tr>
<tr>
<td>Distal end diameter (mm)</td>
<td>ø 13.1</td>
</tr>
<tr>
<td>Flexible portion diameter (mm)</td>
<td>ø 11.5</td>
</tr>
<tr>
<td>Maximum diameter of insertion portion (mm)</td>
<td>ø 15.4</td>
</tr>
<tr>
<td>Minimum diameter of instrument channel (mm)</td>
<td>ø 4.2 Note</td>
</tr>
<tr>
<td>Bending capability: Up/down</td>
<td>130° / 90°</td>
</tr>
<tr>
<td>Left/right</td>
<td>90° / 110°</td>
</tr>
<tr>
<td>Working length (mm)</td>
<td>1250</td>
</tr>
<tr>
<td>Total length (mm)</td>
<td>1550</td>
</tr>
<tr>
<td>Insertion route</td>
<td>Peroral</td>
</tr>
<tr>
<td>Applicable processor</td>
<td>VP-4400 Ver1.199 Later</td>
</tr>
<tr>
<td></td>
<td>VP-4400HD</td>
</tr>
<tr>
<td></td>
<td>VP-4440HD</td>
</tr>
</tbody>
</table>

Note: The compatibility of equipment chosen solely according to this forceps channel diameter is not guaranteed.
<Operating Environment>

<table>
<thead>
<tr>
<th>Temperature</th>
<th>+10 to +40°C (50 to 104°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humidity</td>
<td>30 to 85%RH (no dew condensation)</td>
</tr>
<tr>
<td>Pressure</td>
<td>70 to 106 kPa (10.2 to 15.4 psia or 525 to 795 mmHg) (within range of atmospheric pressure)</td>
</tr>
</tbody>
</table>

<Storage Environment>

<table>
<thead>
<tr>
<th>Temperature</th>
<th>+10 to +40°C (50 to 104°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humidity</td>
<td>30 to 85%RH (no dew condensation)</td>
</tr>
<tr>
<td>Pressure</td>
<td>70 to 106 kPa (10.2 to 15.4 psia or 525 to 795 mmHg) (within range of atmospheric pressure)</td>
</tr>
</tbody>
</table>

<Estimated Life of Product>

The estimated life of this product is about five-six years after first use, assuming the instrument has undergone proper periodic maintenance and inspection and assuming all FUJIFILM’s instructions including use of compatible reprocessing systems/agents have been followed.

<Accessories>

Accessories in the following tables are items whose life expectancy is limited and will require replacement once they show signs of wear or irregularity. Such accessories cannot be repaired or refurbished and should be replaced after any irregularity is observed.

Standard accessories (supplied with Endoscope)

<table>
<thead>
<tr>
<th>Name</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air/water button</td>
<td>AW-500</td>
</tr>
<tr>
<td>Suction button</td>
<td>SB-500</td>
</tr>
<tr>
<td>Forceps valve</td>
<td>FOV-DV7</td>
</tr>
<tr>
<td>Cleaning brush</td>
<td>WB4321FW2</td>
</tr>
<tr>
<td></td>
<td>WB1318DE</td>
</tr>
<tr>
<td></td>
<td>WB11002FW2</td>
</tr>
<tr>
<td>Cleaning adapter kit</td>
<td>CA-503/A</td>
</tr>
<tr>
<td>Ventilation adapter</td>
<td>AD-7</td>
</tr>
</tbody>
</table>

[Note] Single use items, all others are reusable.
Appendix

Required accessories (must be purchased)

<table>
<thead>
<tr>
<th>Name</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air leak tester</td>
<td>LT-7F</td>
</tr>
</tbody>
</table>

Optional accessories

<table>
<thead>
<tr>
<th>Name</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biopsy forceps: Fenestrated</td>
<td>BF2418SF</td>
</tr>
<tr>
<td>Fenestrated with needle</td>
<td>BF2418FN</td>
</tr>
</tbody>
</table>

<Image Size>

ED-530XT

<Electromagnetic Compatibility (EMC) Information>

This product is intended for use in the electromagnetic environments specified below. The customer or the user of this product should assure that it is used in such an environment.

Electromagnetic emission compliance information and guidance

<table>
<thead>
<tr>
<th>Emission standard</th>
<th>Compliance</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF emissions</td>
<td>Group I</td>
<td>This product uses RF (Radio Frequency) energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electric equipment.</td>
</tr>
<tr>
<td>CISPR 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiated emissions</td>
<td>Class A</td>
<td>This product is intended for use in medical facilities and commercial facilities. If this product is used in domestic establishments, electromagnetic interference may occur on any equipments. In this case, it is recommended to use this product according to Chapter 1 “Safety.”</td>
</tr>
<tr>
<td>CISPR 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmonic emissions</td>
<td>Class A</td>
<td></td>
</tr>
<tr>
<td>IEC 61000-3-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage fluctuations/</td>
<td>Applicable</td>
<td></td>
</tr>
<tr>
<td>flicker emissions IEC 61000-3-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Note] Use in combination with VP-4400 and XL-4400, VP-4400HD and XL-4400, or VP-4440HD and XL-4450.
Electromagnetic immunity compliance information and guidance

<table>
<thead>
<tr>
<th>Immunity test</th>
<th>IEC 60601-1-2 Test level</th>
<th>Compliance level</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrostatic discharge (ESD)</td>
<td>± 6kV: contact</td>
<td>Same as left</td>
<td>Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.</td>
</tr>
<tr>
<td>IEC 60100-4-2</td>
<td>± 8kV: air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical fast transient/burst</td>
<td>± 2kV: for power supply lines</td>
<td>Same as left</td>
<td>Main power quality should be that of a typical commercial or hospital.</td>
</tr>
<tr>
<td>IEC 60100-4-4</td>
<td>± 1kV: for input/output lines</td>
<td>Same as left</td>
<td></td>
</tr>
<tr>
<td>Surge</td>
<td>± 1kV: Line to line</td>
<td>Same as left</td>
<td>Main power quality should be that of a typical commercial or hospital.</td>
</tr>
<tr>
<td>IEC 60100-4-5</td>
<td>± 2kV: Line to earth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage dips, short interruptions and voltage variations on power supply input lines</td>
<td>&lt; 11.5V (&gt; 218.5V dip) For 0.5 cycle</td>
<td>Same as left</td>
<td>Main power quality should be that of a typical commercial or hospital. If the user of this product requires continued operation during power mains interruptions, it is recommended that this product is powered from an uninterruptible power supply or battery.</td>
</tr>
<tr>
<td>IEC 60100-4-11</td>
<td>92V (138V dip) For 5 cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>161V (69V dip) For 25 cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt; 11.5V (&gt; 218.5V dip) For 5 sec</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power frequency (50/60 Hz) magnetic field</td>
<td>3 A/m</td>
<td>Same as left</td>
<td>It is recommended to use this product by maintaining enough distance from any equipment that operates with high current.</td>
</tr>
<tr>
<td>IEC 60100-4-8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Electromagnetic immunity compliance information and guidance

<table>
<thead>
<tr>
<th>Immunity test</th>
<th>IEC 60601-1-2 Test level</th>
<th>Compliance level</th>
<th>Guidance</th>
</tr>
</thead>
</table>
| Conducted RF IEC 61000-4-6 | 3Vrms 150kHz to 80MHz | 3V[V]           | Portable and mobile RF communications equipment should be used no closer to any part of this product, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance:

\[ d = \frac{3.5}{P} \]

80 to 800MHz

\[ d = \frac{3.5}{E} \]

800MHz to 2.5GHz

\[ d = \frac{7}{P} \]

800MHz to 2.5GHz

Where “P” is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and “d” is the recommended separation distance in meters (m).

| Radiated RF IEC 61000-4-3 | 3V/m 80MHz to 2.5GHz | 3V/m[E] | This product complies with the requirements of IEC 60601-1-2: 2007. However electromagnetic interference may occur on this product under electromagnetic environment that exceeds its noise level.

Electromagnetic interference may occur in the vicinity of equipment marked with the following symbol.

The customer or the user of this product can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitter) and this product as recommended below, according to the maximum output power of the communications equipment.

<table>
<thead>
<tr>
<th>Rated maximum output power of transmitter P (W)</th>
<th>Separation distance related to frequency of the transmitter (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150kHz to 80MHz 80MHz to 2.5GHz</td>
</tr>
<tr>
<td>0.01</td>
<td>0.12 0.12 0.23</td>
</tr>
<tr>
<td>0.1</td>
<td>0.38 0.38 0.73</td>
</tr>
<tr>
<td>1</td>
<td>1.2 1.2 2.3</td>
</tr>
<tr>
<td>10</td>
<td>3.8 3.8 7.3</td>
</tr>
<tr>
<td>100</td>
<td>12 12 23</td>
</tr>
</tbody>
</table>
## Troubleshooting

If the Endoscope should fail during use, follow these instructions to troubleshoot it.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No images come out</td>
<td>1) The cart monitor processor is unplugged from the main outlet. 2) The cart monitor processor is off.</td>
<td>Plug the cart monitor processor into the main outlet. Power on the cart monitor processor.</td>
</tr>
<tr>
<td>The image appears dark</td>
<td>1) The connection with the scope is incomplete. 2) The light intensity level is set around MIN. 3) The metering mode is set at PEAK</td>
<td>Redo the scope connection. Set the light intensity level around 0. Set the metering mode at AVE.</td>
</tr>
<tr>
<td>The highlight portion of an image is too bright.</td>
<td>1) The light intensity level is set around MAX. 2) The metering mode is set at AVE.</td>
<td>Set the light intensity level around 0. Set the metering mode at PEAK.</td>
</tr>
<tr>
<td>An image disappears during examination.</td>
<td>1) The scope connection is incomplete. 2) The system has malfunctioned due to such as static charges. 3) The video signal cable has burnt out or shorting.</td>
<td>Redo the scope connection. Reset the processor and the light source. If the image is still not displayed, turn the processor and the light source off, and then straiteon the bending portion to unlock and release the angle knobs. Pull out the Endoscope slowly.</td>
</tr>
<tr>
<td>A live image is not displayed after image freezing is cancelled during examination.</td>
<td>The system has malfunctioned due to such as static charges.</td>
<td>Reset the processor and the light source. If the image is still not displayed, turn the processor and the light source off, and then straiteon the bending portion to unlock and release the angle knobs. Pull out the Endoscope slowly.</td>
</tr>
</tbody>
</table>

[Note] Reset: Turn off the processor and the light source, and wait for at least 5 seconds. Turn on the processor and the light source again, and then light the lamp by pressing the Lamp button.
### Appendix

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>An image is suddenly discolored during examination.</td>
<td>1) The system has malfunctioned due to such as static charges. 2) The video signal cable has burnt out or shorting.</td>
<td>Reset. Note the processor and the light source. If the image is not recovered and it is impossible to continue the examination, turn the processor and the light source off, and then straighten the bending portion to unlock and release the angle knobs. Pull out the Endoscope slowly.</td>
</tr>
<tr>
<td>Images appear garbled</td>
<td>1) Diathermic interferences 2) Not connected correctly 3) The video signal cable has burnt out or shorting.</td>
<td>Stop power supply to the diathermic treatment equipment to restore image output. The Endoscope is working all right. Connect properly. Reset. Note the processor and the light source. If the image is not recovered and it is impossible to continue the examination, turn the processor and the light source off, and then straighten the bending portion to unlock and release the angle knobs. Pull out the Endoscope slowly.</td>
</tr>
<tr>
<td>Air and/or water cannot be fed</td>
<td>1) The pump is switched off. 2) The water tank cap is loose. 3) The water tank is filled with too much water. 4) The water tank is empty. 5) The water tank is not connected.</td>
<td>Switch on the pump. Close the cap firmly. Reduce the water level in the water tank to about 80% of its capacity. Fill the water tank with water. Connect the water tank.</td>
</tr>
<tr>
<td>Suction is disabled</td>
<td>1) The pump is switched off. 2) The pump is not connected. 3) No forceps valve is attached.</td>
<td>Switch on the pump. Connect the pump. Attach a forceps valve.</td>
</tr>
<tr>
<td>Low suction volume</td>
<td>1) The suction button has been damaged. 2) The forceps valve has been degraded. 3) The suction tube is not attached properly. 4) The forceps valve is not attached properly.</td>
<td>Replace with a new suction button. Replace with a new forceps valve. Reattach the suction tube. Reattach the forceps valve.</td>
</tr>
</tbody>
</table>

[Note] Reset: Turn off the processor and the light source, and wait for at least 5 seconds. Turn on the processor and the light source again, and then light the lamp by pressing the Lamp button.
<table>
<thead>
<tr>
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<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The suction button won’t reset</td>
<td>1) Foreign matter or blood adhering to the button is coagulated. &lt;br&gt;2) The suction button is damaged. &lt;br&gt;3) The suction button has stuck since it is underlubricated by silicon oil. &lt;br&gt;4) The suction button is “stuck” when a contrast agent is used.</td>
<td>Disconnect the suction tube. After diagnosis, remove the button and clean or replace it. &lt;br&gt;Replace with a new suction button. &lt;br&gt;Give a coat of the silicon oil to the button. &lt;br&gt;Apply sterile water into the gap between the plastic cap and the rubber skirt.</td>
</tr>
<tr>
<td>Treatment equipment cannot be inserted</td>
<td>1) The treatment equipment is left open (such as biopsy forceps). &lt;br&gt;2) The handle of the treatment equipment is held firmly (such as biopsy forceps). &lt;br&gt;3) The treatment equipment has difficulty being inserted due to bending. &lt;br&gt;4) Nonapplicable treatment equipment is used.</td>
<td>Close the treatment equipment for insertion. &lt;br&gt;Loosen the grip to insert the treatment equipment. &lt;br&gt;Return the bending portion slightly and then insert it. &lt;br&gt;Use applicable treatment equipment.</td>
</tr>
<tr>
<td>Treatment equipment cannot be pulled out</td>
<td>1) The treatment equipment is left open (such as biopsy forceps). &lt;br&gt;2) The handle of the treatment equipment is held firmly (such as biopsy forceps). &lt;br&gt;3) The treatment equipment has difficulty being inserted due to bending. &lt;br&gt;4) An abnormality occurs in the treatment equipment. &lt;br&gt;5) Nonapplicable treatment equipment is used.</td>
<td>Close the treatment equipment and pull it out. &lt;br&gt;Loosen the grip and pull out the treatment equipment. &lt;br&gt;Return the bending portion slightly and then pull out the treatment equipment. &lt;br&gt;Return the end of the treatment equipment to the forceps outlet of the Endoscope, and then slowly pull out the Endoscope and treatment equipment together. &lt;br&gt;Return the end of the treatment equipment to the forceps outlet of the Endoscope, and then slowly pull out the Endoscope and treatment equipment together. &lt;br&gt;[Note] Use applicable treatment equipment.</td>
</tr>
<tr>
<td>Images cannot be captured in the image recorder</td>
<td>1) The image recorder is not connected. &lt;br&gt;2) Not connected correctly.</td>
<td>Connect the image recorder. &lt;br&gt;Reconnect the image recorder to ensure correct connection.</td>
</tr>
<tr>
<td>The bending portion won’t reset</td>
<td>1) The angle is locked. &lt;br&gt;2) The bending control facility is malfunctioning.</td>
<td>Use the angle lock knob to unlock the angle. &lt;br&gt;Discontinue use immediately, and contact your dealer or the nearest service center without forcing the bending portion out of position. Forcing the bending portion out of position could result in body cavity damage.</td>
</tr>
</tbody>
</table>
After-Sales Service

1) If the equipment does not work properly, check it first reading this manual.

2) If the equipment is still not working well, ask for professional help.
   Consult your local dealer.

3) Repairs during the warranty period
   We will repair your equipment free of charge according to the provisions of the warranty.
   The warranty period is one year after date of purchase. (Six months for forceps.)
   Note that the warranty is void in the following cases:
   a. Damage caused by fire or natural disaster such as storms or floods.
   b. Troubles caused by careless handling or misuse of the product on the part of the user.
   c. Troubles caused by repair or modification by an unauthorized person.

4) Repairs after the warranty period
   We will make a paid repair at your request if the equipment is found possible to restore the normal function by repair. When contacting our service representative, provide the following information.
   Model name : 
   Serial number : 
   Description of failure : as detailed as possible
   Date of purchase : 
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Service Centers

Contact our regional representative below or the distributor from which you purchased the product.

<Europe>

FUJIFILM Europe GmbH
http://www.fujifilm.eu/eu/
See our website to locate our representative in your country.

<USA>

FUJIFILM Medical Systems U.S.A., Inc.
http://www.fujifilmendoscopy.com/
(800)385-4666

<Australia>

FUJIFILM Australia Pty Ltd.
1800 060 209

<Asia>

FUJIFILM (Singapore) Pte. Ltd.
http://www.fujifilm.com.sg/
6380-5540

If you are not a resident of the regions above, contact the distributor from which you purchased the product.