



#### **HANDLING, STORAGE AND STERILIZATION:**

ALL SURGICAL INSTRUMENTS SHOULD BE TREATED WITH THE UTMOST CARE WHEN BEING CARRIED, CLEANED, SERVICED, STERILIZED OR STORED. THIS APPLIES PARTICULARLY TO CUTTING EDGES, FINE TIPS AND OTHER DELICATE PARTS.

#### **CLEANING:**

- ONCE THE INSTRUMENT IS IN 5 PIECES: REAR HANDLE, SELECTOR HANDLE, INNER TONG ASSEMBLY (TIP), INNER SHAFT AND OUTER SHAFT, RINSE IT WITH DEMONIZED WATER TO REMOVE ANY DEBRIS. HAND-WASH ALL PARTS USING NEUTRAL PH DETERGENT OR ENZYMATIC CLEANER AND A SOFT BRUSH, BEING SURE TO FLUSH ALL LUMENS AND CHANNELS WITH THE SOLUTION. THOROUGHLY CLEAN INSIDE OF THE OUTER SHAFT USING A SOFT BRUSH AND FLUSHING SOLUTION THROUGH IT. AVOID THE USE OF STEEL WOOL, WIRE BRUSHES, AND/OR ABRASIVE DETERGENTS.
- CLEAN THE ENTIRE SURFACE OF THE INSTRUMENT, PAYING SPECIAL ATTENTION TO THE JAW AND HINGED AREA TO BE SURE ALL BLOOD AND DEBRIS ARE REMOVED.
- THOROUGHLY RINSE THE INSTRUMENT WITH DEIONIZED WATER AFTER CLEANING TO REMOVE ANY RESIDUAL DEBRIS OR CLEANING SOLUTION. IMMEDIATELY AFTER THE INSTRUMENT HAS BEEN CLEANED AND RINSED, IT MUST BE CAREFULLY DRIED. TUBES MUST BE BLOWN OUT.
- AFTER CLEANING, INSPECT ALL COMPONENTS FOR BROKEN OR WORN PARTS THAT MAY INHIBIT THE FUNCTION. SPECIFICALLY, CHECK FOR NICKS, CRACKS OR EXPOSED METAL ON THE SHAFT AND HANDLE INSULATION.
- CAREFUL AND FREQUENT INSPECTIONS DURING USE FOR FUNCTIONAL INTEGRITY ARE RECOMMENDED AS A SAFEGUARD AGAINST POSSIBLE INJURY TO PATIENT OR OPERATOR.

**NOTE:** AFTER CLEANING AND BEFORE STERILIZATION, ALL INSTRUMENTS MUST BE TREATED WITH PHYSIOLOGICALLY HARMLESS OIL (LIQUID PARAFFIN COMPLYING WITH DAB 8, PH. EUR. OR USP). THIS APPLIES PARTICULARLY TO CUTTING EDGES, CLOSING FACES, RATCHETS, LOCKING CATCHES AND ALL MOVING PARTS.

**STERILIZATION OF RINGS PRIOR TO APPLICATION:** RINGS SHOULD BE STERILIZED IN A SEPARATE STERILIZATION POUCH THAN THE INSTRUMENT. SAME STERILIZATION PARAMETERS AS THE INSTRUMENT ARE RECOMMENDED.

**IMPORTANT:** GUIDE CONE AND APPLIER MUST BE IN STERILE STATE WHEN USED WITH STERILE RINGS. SILASTIC RINGS AND INSTRUMENT MUST BE ASSEMBLE IN STERILE ENVIRONMENT.

#### **STERILIZATION**

THE INSTRUMENT CAN BE STERILIZED FULLY ASSEMBLED OR DISASSEMBLED (TO BE REASSEMBLED LATER IN A STERILE FIELD IN THE OPERATING ROOM PRIOR TO USE). THE INSTRUMENT CAN BE STERILIZED USING STEAM AUTOCLAVE, HEAT STERILIZATION OR GAS STERILIZATION.

#### **RECOMMENDED AUTOCLAVING METHODS**

##### **ETO STERILIZATION**

INSTRUMENT CAN BE STERILIZED BY ETHYLENE OXIDE IN ANY STANDARD CYCLE. PRESSURE READING SHOULD NOT EXCEED 12 PSI. TEMPERATURE SHOULD NOT EXCEED 68.3°C (155°F). IT IS RECOMMENDED TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS FOR THE ETO STERILIZATION UNIT CONCERNING HUMIDITY, VACUUM, CYCLE TIME, GAS CONCENTRATION AND TEMPERATURE.

##### **STEAM AUTOCLAVING**

WHEN USING WRAP METHOD, MAKE CERTAIN THAT ALL INSTRUMENTS ARE INDIVIDUALLY WRAPPED OR SEALED IN A STERILE PACK. METAL OBJECTS SHOULD NEVER COME IN CONTACT WITH THE INSULATING MATERIAL OF FORCEPS AND HANDLES, OR WITH RF-CONNECTION CABLES. SUCH POINTS OF CONTACT WILL CAUSE SEVERE MELTING.

WE RECOMMEND THE FOLLOWING VALUES/PARAMETERS, BUT ALSO SUGGEST FOLLOWING THE MANUFACTURER'S INSTRUCTIONS FOR STEAM STERILIZATION:

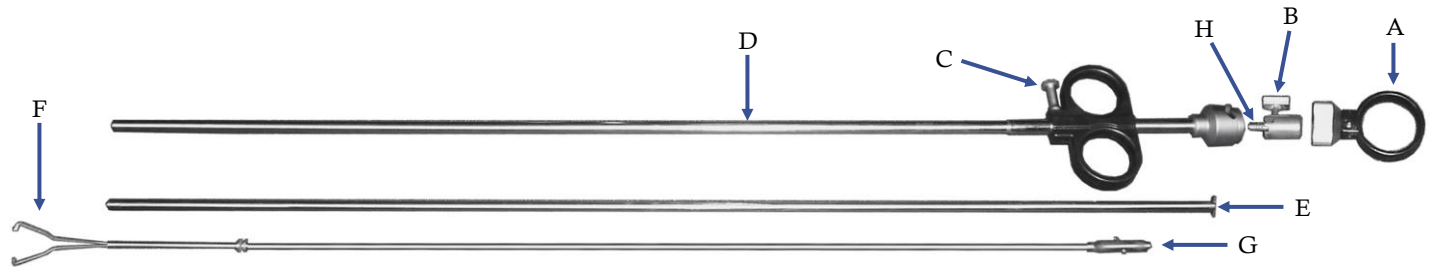
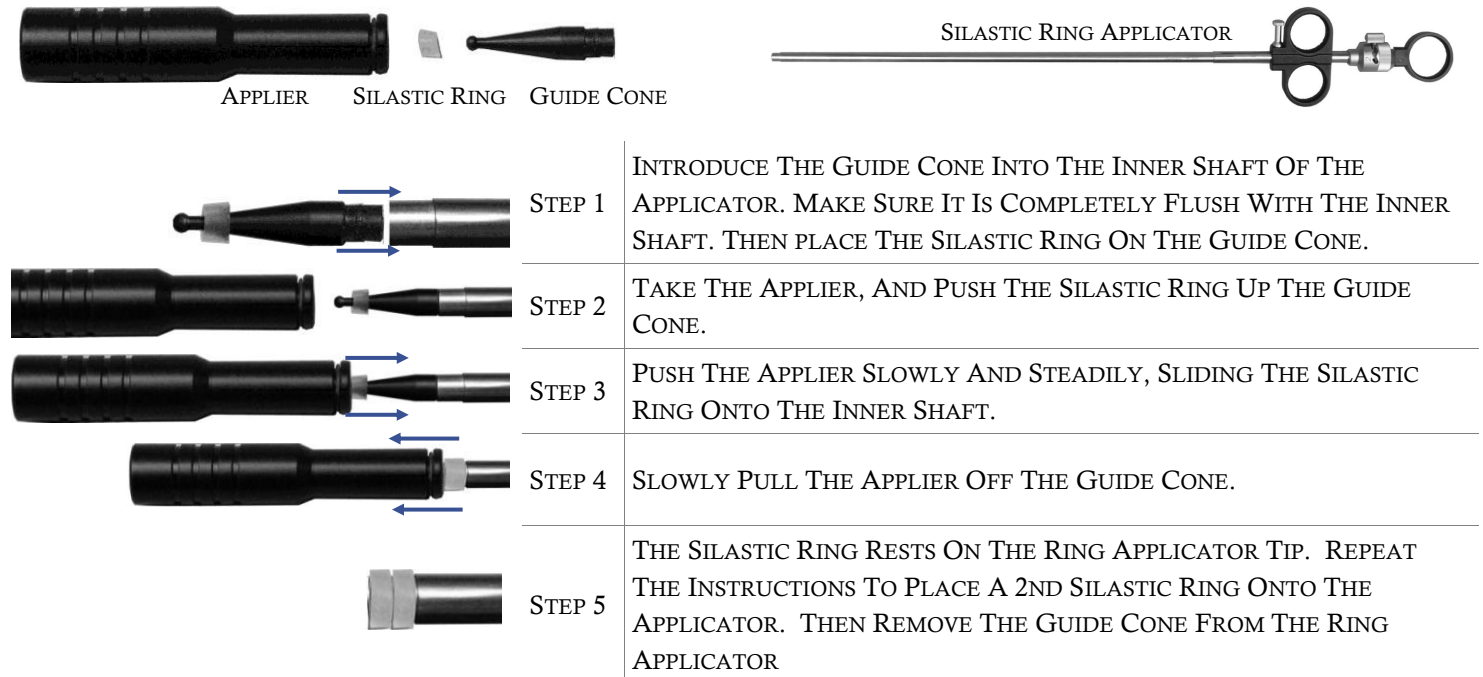
CYCLE	STERILIZING TEMP.	STERILIZING TIME	DRYING TIME* <sup>3</sup>
PRE VACUUM/WRAPPED	270° F (132° C)	4 MINUTES	30 MINUTES
GRAVITY/WRAPPED	250° F (121° C)	30 MINUTES	45 MINUTES
GRAVITY/WRAPPED	270° F (132° C)	15 MINUTES	45 MINUTES

**\*\*\*WARNING\*\*\***

#### **INSPECTION AND FUNCTION TESTING**

- IT IS ESSENTIAL FOR EVERY SURGICAL INSTRUMENT TO BE INSPECTED FOR FRACTURES, CRACKS OR MALFUNCTIONS BEFORE USE. IN PARTICULAR, AREAS SUCH AS INSULATION, CUTTING EDGES, TIPS, RATCHETS AND LOCKING CATCHES AND ALL MOVING PARTS MUST BE CAREFULLY INSPECTED.
- NEVER USE DAMAGED INSTRUMENTS OR ATTEMPT TO REPAIR THEM YOURSELF. SERVICE AND REPAIRS SHOULD ONLY BE CARRIED OUT BY SUITABLY TRAINED AND QUALIFIED TECHNICIANS. IF YOU HAVE ANY QUESTIONS, CONTACT THE MANUFACTURER OR YOUR BIO MEDICAL DEPARTMENT.
- LIKE THE ELECTROSURGICAL GENERATORS, ALL ACCESSORIES MUST UNDERGO TECHNICAL INSPECTIONS AT REGULAR INTERVALS.

## STEP BY STEP RING-LOADING INSTRUCTIONS:



### DISASSEMBLY:

1. UNSCREW (A) HANDLE ON ASSEMBLY FROM OUTER SHAFT (D)
2. REMOVE (B) SELECTOR HANDLE FROM THE REAR HOUSING OF OUTER SHAFT (D)
3. LIFT UP SPRING LOADED SET PIN ON RING HANDLE, RELEASE INNER SHAFT (E) AND SLIDE OUT INNER SHAFT (E) TOWARD THE REAR OF OUTER SHAFT (D)
4. PUSH INNER TONG (F) (ASSIST WITH BLUNT PROBE IF NECESSARY) OUT THE FRONT OF INNER SHAFT (E)

### REASSEMBLY:

1. REVERSE STEPS OF DISASSEMBLY INSTRUCTIONS.
2. IMPORTANT: WHEN REINSERTING INNER TONG INTO INNER SHEET - HOLE (G) ON REAR OF INNER TONG SHAFT WITH SLOT (CUT OUT) (G) ON INNER SHAFT (LOCK PIN - (C) FITS INTO SLOT (G))

**NOTE:** MAKE SURE (H) SPRING IS MOUNTED ON (B) HANDLE.

### WARRANTY:

- ALL ELMED INSTRUMENTS ARE WARRANTED AGAINST DEFECTS IN MATERIAL & WORKMANSHIP FOR 1 YEAR. ROUTINE RESHARPENING, REINSULATING, AND ADJUSTMENTS AS WELL AS REPAIR OF DAMAGED INSTRUMENTS IS AVAILABLE FOR A MODEST CHARGE.
- ANY SERVICING OF ELMED INSTRUMENTS PERFORMED BY ANY SOURCE OTHER THAN ELMED, INC. **VOIDS** THIS WARRANTY.
- ELMED, INC., AS A MANUFACTURER AND SELLER OF THE PRODUCT, ACCEPTS NO LIABILITY FOR INDIRECT DAMAGE OR SUBSEQUENT DAMAGES THAT RESULT BY IMPROPER USAGE, IMPROPER HANDLING OR THROUGH IMPROPER PREPARATION, STERILIZATION OR MAINTENANCE.
- INSTRUMENTS ARE ONLY TO BE USED AS DESIGNATED IN THEIR SPECIALIZED MEDICAL FIELDS BY THE RESPECTIVE TRAINED AND QUALIFIED PERSONNEL. THEY ARE NOT INTENDED TO BE USED ON THE CENTRAL CIRCULATORY OR CENTRAL NERVOUS SYSTEM.

## WE DESIGN, MANUFACTURE, & SELL THE TOOLS THE SURGEONS USE

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WE SUBSCRIBE TO COST  
CONTAINMENT AND  
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THEREFORE, WE  
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FOR A CLEANER  
WORLD

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