

# CLEAN, DISINFECT AND STERILIZE

## 1. CLEAN

Use water < 38°C to wash handle and any visible dirt on the surface of each part. Clean the clamping sleeve with a through-needle. Dry the cleaned parts with a clean cloth.

## 2. DISINFECTION OF

Use medical alcohol to wipe the surface of each component.



### BE CAREFUL

Do not clean equipment with chlorine disinfectants, which may corrode metal components.

## 3. DRY

After cleaning and disinfection, please dry. It is recommended to use compressed air to dry.

## 4. PACKAGING

After drying, the components shall be immediately put into steam sterilization bags for sealed packaging.



### BE CAREFUL

Steam sterilized bags conforming to ISO 11607-1 should be used and must be packaged using a sealer Seal.

## 5. STERILIZATION

Bacteria parts: Sterilization box, handle, clamping sleeve, needle core

Sterilization method: high temperature and high pressure methylene is recommended

Sterilization conditions: 134 °C, not less than 5min



### BE CAREFUL

1. Repeatable sterilization for at least 250 times
2. After sterilization, put the equipment in a dry and dust-free environment until next use

## MAINTENANCE AND MAINTENANCE

Wipe and disinfect the equipment and accessories after each use.

Clean the instrument with water  $\leftarrow 38^{\circ}\text{C}$  after each use.

## ACCESSORIES SPECIFICATION

NEEDLE CORE DIAMETER(MM)	$\varphi 0.45$	$\varphi 0.55$	$\varphi 0.65$
CLAMPING CASING INNER DIAMETER * OUTER DIAMETER (MM)	$\varphi 0.5 * \varphi 0.8$	$\varphi 0.6 * \varphi 0.9$	$\varphi 0.7 * \varphi 1.1$
AT LEAST THE NUMBER OF TIMES YOU CAN BEND	10次	10次	10次
RING CUTTING BIT(MM)	$\varphi 0.8$	$\varphi 0.9$	$\varphi 1.1$
RING CUT CASING(MM)	$\varphi 0.8$	$\varphi 0.9$	$\varphi 1.1$

GUIDE DRILL			19mm 60.04
	T7	GREEN	19mm 70.03
	T8	BLACK	19mm 80.02
	T9	WHITE	19mm 90.02
	T11	RED	19mm 110.01

## OPERATING ENVIRONMENT, TRANSPORTATION AND STORAGE

### 1. OPERATING ENVIRONMENT, TRANSPORTATION AND STORAGE

Working temperature	$+5^{\circ}\text{C} \sim +40^{\circ}\text{C}$
Working humidity	$\leq 80\%$
The atmospheric pressure	86kPa–106kPa

### 2. STORAGE AND TRANSPORTATION CONDITIONS

Storage temperature	$-5^{\circ}\text{C} \sim +50^{\circ}\text{C}$
Store humidity	$\leq 93\%$
The atmospheric pressure	50kPa–106kPa

## PRODUCTION DATE AND SERVICE LIFE










The service life of this product is 5 years.

The production date of this product is shown on the body or product label.

## PRODUCT MAINTENANCE

The warranty period of the handle is 12 months from the date of purchase, and the rest parts are not guaranteed.

## SYMBOLS THAT

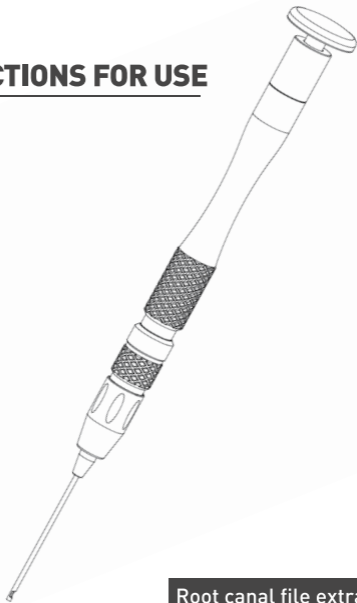
	NOTE/WARNING		THE PREScribed CAN BE DESTROYED THE FUNGUS TEMPERATURE		REFER TO INSTRUCTION MANUAL
	THE SERIAL NUMBER		BATCH NUMBER		MANUFACTURERS
	BREAKABLE HANDLE WITH CARE		STAY DRY		THE VERTICAL UPWARD

## RECYCLING AND DISPOSAL



According to the requirements of national regulations and standards to dispose of waste equipment. Ensure all spare parts No pollution is produced in the process of waste treatment.

## DIRECTIONS FOR USE



Root canal file extractor

## [SCOPE OF APPLICATION]

For root canal treatment in Department of stomatology, the broken root canal file is removed. This product is only available by professional Is used by a dentist in a hospital or dental office.

## [CONTRAINDICATIONS]

1. Do not use the root canal breaking device when it is located in the curved part of the root canal and cannot be viewed under the microscope;
2. Do not use when the root canal wall is thin;
3. Do not use the fracture device when it is located in the apical position;
4. Do not use if the root canal wall may be perforated during use.

## [POINTS FOR ATTENTION]

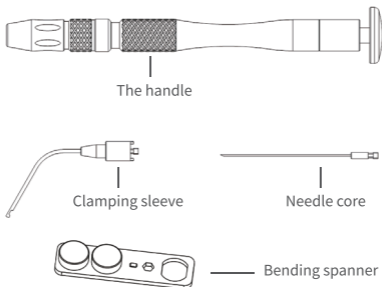
1. Read all the contents of this instruction manual carefully before use;
2. Please use the original clamping sleeve and bending plate hands to avoid damaging the equipment;
3. The curvature of the root canal, the thickness of the root canal wall, and the fracture of the root canal should be considered before and during use. The depth of the instrument in the root canal;
4. In the process of use, it is necessary to detect the forward direction of the device and the bending direction of the broken device;
5. Check the device before and after each use, such as fatigue of the clamping sleeve and needle core. If it is damaged and cannot be used normally, it should be replaced in time;
6. Select clamping cannula with corresponding specifications according to the diameter of the crown of the separation device in the tube;
7. The product has not been sterilized before delivery, so please sterilize it before use.

## PRODUCT PERFORMANCE

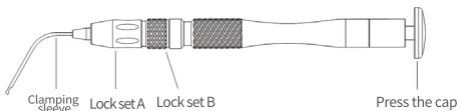
1. The device can be used directly under the microscope, by pushing the end of the handle to push the cap to cooperate with the clamping sleeve. Clamp the broken device, remove the broken device or other foreign bodies in the root canal;
2. The bending wrench can adjust the bending angle of the clamping sleeve according to the position of the affected tooth, and the factory bending is 45 degrees. The maximum angle can be adjusted to 90 degrees;
3. The equipment can be reused and provided non-sterile.

## THE COMPONENT OF PRODUCT

The product is made of stainless steel and is composed of handle, clamping sleeve and needle core.

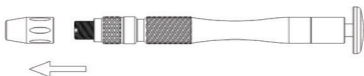


## PRODUCT INSTALLATION AND DISASSEMBLY

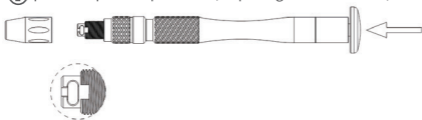


### 1. PRODUCT INSTALLATION

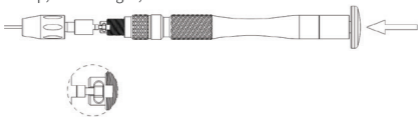
- ① Remove the locking sleeve;



- ② push the press cap forward, exposing the round hole;



- ③ put the needle core into the leakage hole, release the press cap, make it tight;

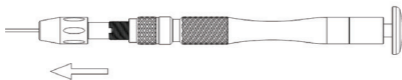


- ④ install the locking sleeve after the clamping sleeve is aligned with the card;



## 2. DISASSEMBLE THE PRODUCT

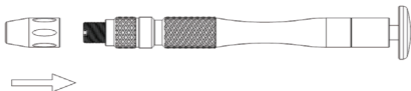
- ① Remove the locking sleeve;



- ② Push the press cap forward to remove the clamping sleeve;



- ③ Tighten the locking sleeve;



## DIRECTIONS FOR USE

1. Use a G drill to remove the dentin until the tip of the drill is close to or touches the section of the file.
2. Select a guide drill of suitable size (80, 90, 110 specification) to continue to remove the dentin channel.
3. After cutting the dentin, select a suitable flat drill with low speed according to the section size of the file.

Reverse grinding file removal channel (recommended speed 160r/min)

4. Use the annular cannula to reverse at low speed and remove the dentin around the file until the file is exposed 2-3mm;

In case of a curved root canal, the annular casing cannot go deep, use a guide drill (60-70 gauge) at low speed

The dentin around the file was removed by positive rotation until the file was exposed 2-3mm;

5. Install clamping sleeves of appropriate specifications;
6. Cover the broken file with the casing window (see step ①)
7. Push the press cap forward so that the clamping sleeve clamps the broken file tightly (see step 2 in the figure).
8. Lock B by rotating in the direction indicated by the arrow, and press the clamping sleeve tightly (pay attention to tightening). Press the press cap firmly. Pull out the broken file (as shown in step 3)
9. Sterilize after use

The schematic diagram of operation is as follows:

