



## Foshan COXO Medical Instrument Co Ltd

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### Attention

Prohibit the use of chlorine-containing disinfectants

#### 3. Dry:

After cleaning and disinfection, it is recommended to use compressed air to dry it

#### 4. Package:

After drying, put the parts in a steam sterilization bag for airtight packaging



### Attention

The steam sterilization bag should meet ISO 11607-1 standard, and package must be sealed with a sealer.

#### 5. Sterilization:

- Sterilizable accessories: Handle、Microtube、Needle
- Sterilizable requirements: 5 min at 134°C



### Attention

- 1) Can be re-sterilized at least 250 times
- 2) Put the product in a dry and dust-free environment after sterilization

## Maintenance

Disinfect the product and accessories after each use;  
After each use, clean the product with lean water less than 38°C

## Accessories specifications

Needle diameter (mm)	Extractor Inner and outer diameter (mm)	Maximum times for bending a needle
φ0.45	φ0.5*φ0.8	10 times
φ0.55	φ0.6*φ0.9	10 times
φ0.60	φ0.7*φ1.1	10 times

Cutting drill (mm)	Cutting cannula (mm)
φ0.8	φ0.8
φ0.9	φ0.9
φ1.1	φ1.1

## Operating environment ,Storage and Transportation conditions

### Operating environment:

Operating temperature	5°C — 40°C
Operating humidity	20% — 80%
Atmospheric pressure	86kPa — 106kPa

### Storage and Transportation conditions:

Storage temperature	-10°C — 55°C
Storage humidity	≤93%
Atmospheric pressure	50kPa — 106kPa

## Production date and Service life

Service life: 5 years

See the product or label for the production date

## Guarantee

Handle is covered by 24 months warranty and other accessories are not warranted.

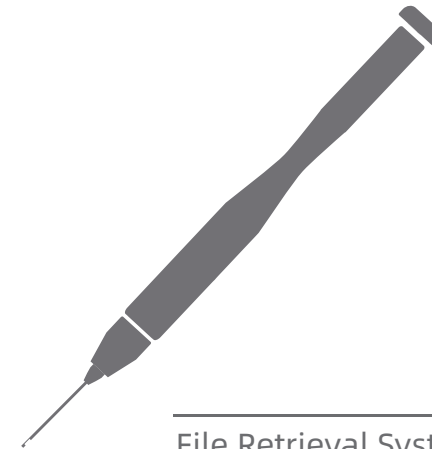
## Symbol

	Attention		Sterilizable in a steam sterilizer at 134°C
	Serial number		Vertical up
	Manufacturer		Consult instruction for use
	Fragile		Keep dry
	Special disposal of waste electyical and electronic equipment		

## Recycling and Disposal

- Disposal of waste instrument must comply with national regulations and standards. Ensure that all components do not produce pollution during the disposal process.

COXO®



File Retrieval System

C-FR1

User Manual

#### 【Warning】

⚠ Read this user manual carefully before use for operating instructions.

1. Only use original accessories.
2. Take the curvature of root canal, the thickness of root canal wall and the depth of broken file in root canal into account before use.
3. Take the advance direction of product and the bending direction of broken file during use.
4. Check the product before use, if damaged, please replace it in time;
5. Sterilize the product before use.
6. Select extractor according to the diameter of the broken file head.

#### 【Intended use】

The File retrieval system is used for removal of broken parts of endodontic instruments from root canals and must only used in dental clinics or hospitals by professional medical personnel.

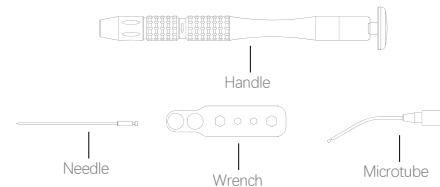
#### 【Contraindications】

- The use of this product is prohibited in the following situations.
1. Broken file is located at the bend of root canal.
  2. Root canal wall is very thin.
  3. Broken file is located at root tip.

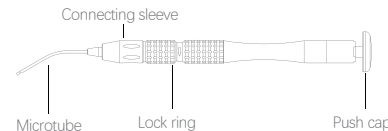
#### Characteristic

1. Under the microscope, clamp broken file by pushing booster cap to remove the broken file or other objects in the root canal.
2. The bending degree of extractor is 45 degrees, which can be adjusted to 90 degrees with a wrench.
3. The product can be reused.

#### Component

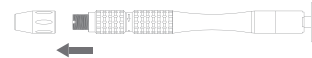


#### Installation and disassembly

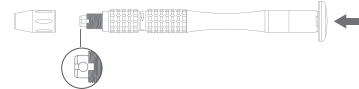


#### 1. Installation

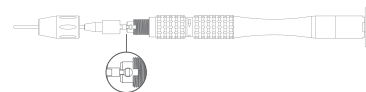
Step1: Remove connecting sleeve



Step2: Push the push cap to expose the hole



Step3: After inserting needle into the hole, loosen push cap to make it tight

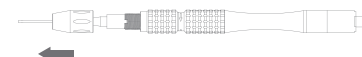


Step4: Align microtube with slot and install the connecting sleeve

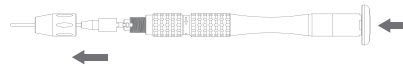


#### 2. Disassembly

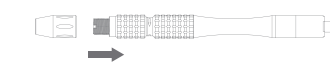
Step1: Remove connecting sleeve.



Step2: Push the push cap to remove microtube.



Step3: Lock connecting sleeve.



#### ⚠ Attention

When disassembling the components, make sure that the lock ring is unlocked to prevent push cap from being unable to be pushed

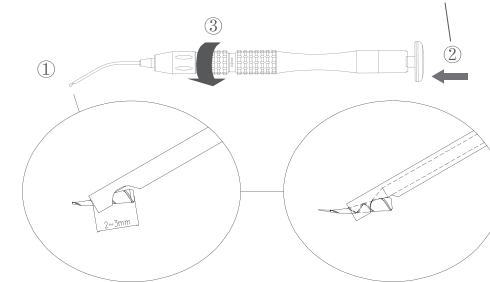
#### Step by step instruction

1. Choose the gates glidden drill to the length that is appropriate for the tooth, remove as much of the plastic hub as needed for access.
2. Create space coronal to the obstruction with cutting drill.
3. Select the cutting cannula and carefully trephine around the obstruction until broken file reveals 2-3mm to allow the broken file to go over the object to be removed.
4. Insert an appropriately sized microtube through the coronal end of the needle and wedge it between the broken instrument and the inside wall of the needle. As you push the push cap forward, it will bind between the needle and the broken instrument.
5. Tighten the lock ring by rotating in direction of arrow, keep clockwise and apically directed pressure on the push cap and remove the entire assembly from the tooth, including the broken instrument.
6. Sterilize after use.

#### Operation diagram:

Insert an appropriately sized microtube through the coronal end of the needle and wedge it between the broken instrument and the inside wall of the needle. As you push the push cap forward, it will bind between the needle and the broken instrument. Tighten the lock ring by rotating in direction of arrow and keep apically directed pressure on the push cap.

Grasp this position while pushing the push cap forward with your hand



Reveals 2-3mm broken file

Clap broken file with microtube

#### Cleaning, Disinfection and Sterilization

##### 1. Cleaning

- Use clean water less than 38 degrees Celsius to clean the surface of product
- Clean the extractor with needle
- Dry accessories with a clean cloth

##### 2. Disinfection

- Use medical alcohol to wipe the surface of product