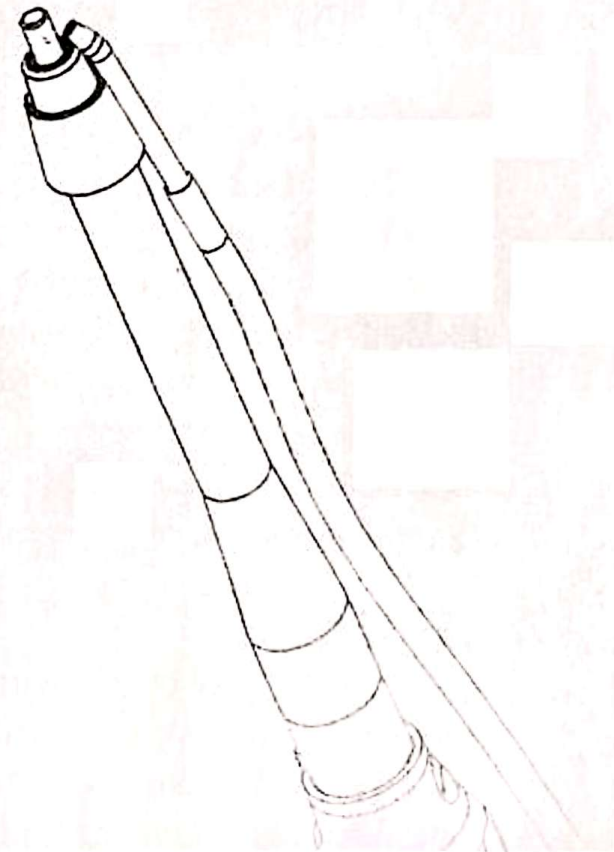


SURGICAL HANDPIECE OPERATION MANUAL

Before using the products, please read the users Manual carefully and follow the operation procedures strictly.



Caution

Please clean, lubricate and disinfect the handpiece immediately after using and then sealed storage. If the blood inside the handpiece is not cleaned in time, it will cause the blood to clot and rust. This can cause the handpiece to malfunction, and also may occur burn caused by high temperature.

Attention

1. Please read the instructions carefully before operation, and use with care.
2. If any abnormalities are found at any time, stop using the handpiece immediately and contact authorized dealer.
3. This handpiece is specially designed for surgical operations. When forced continuous cutting, it may lead to a shorter life of handpiece bearings.
4. Do not load or unload the handpiece until the air motor is stopped working completely.
5. Unauthorized dismantling or reconstruction is prohibited.
6. Please prevent the handpiece from being hit or accidentally dropped.
7. Please check for vibration, noise, overheating and other abnormal phenomena. If any abnormalities are found, stop using the handpiece immediately.
8. Do not turn the chuck ring of handpiece while it is working.
9. Do not start the motor when the chuck ring is open and the bur is not installed.
10. Do not use bent, damaged or sub-standard burs, this bur will be easy to break suddenly or bend while working and it may lead to serious accidents.

Application:

For dental implant, orthopedic surgery, otolaryngology department and surgical operation.

1. Product type



Surgical contra-angle handpiece



Surgical straight handpiece

2. Technical Specification

Type:	Contra-angle handpiece / Straight handpiece		
Bur Length:	45mm	70mm	100mm
Ratio:	1:1 / 20:1	1:1	1:1
Working Air Pressure:	0.3Mpa-0.35Mpa	0.3Mpa-0.35Mpa	0.3Mpa-0.35Mpa
Rotaton Speed:	~40000rpm	~40000rpm	~40000rpm
Bur Applicable:	Φ2.34-Φ2.35	Φ2.34-Φ2.35	Φ2.34-Φ2.35
Noise:	≤65dB	≤65dB	≤65dB
Connection type:	Standard E-type	Standard E-type	Standard E-type

3. Spare parts

No.	Spare parts	Quantity
1	External water injection nozzle	1
2	E-type spray nozzle	1
3	Test bar	1

4. Installation and uninstallation

! Attention: Do not install the handpiece before the motor stop working completely.

(1) Installation

Insert the handpiece into air motor directly.

(2) Uninstallation

Hold the air motor tightly and pull the handpiece forward carefully to disconnect the handpiece.

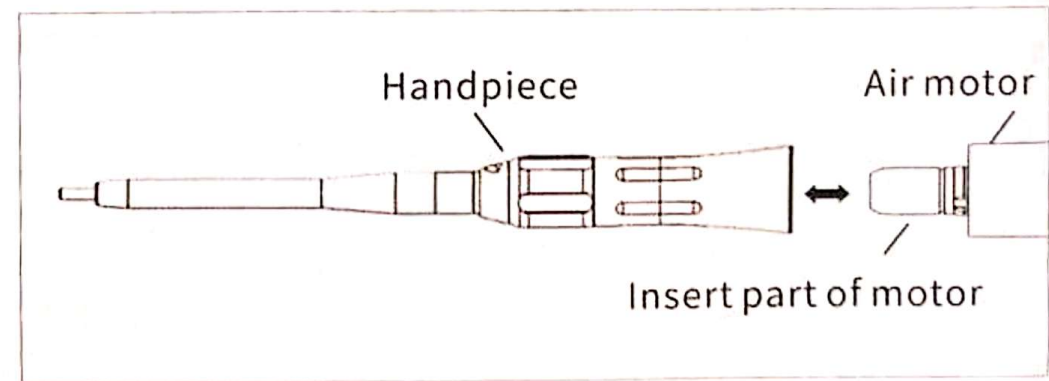


Figure 1

5. Install or remove the bur

(1) Installation

- 1) Turn the chuck ring to the "🔓" direction until a voice "click" (Figure 2).
- 2) Insert the bur into the chuck and then turn the chuck ring to the "🔒" direction until a voice "click".
- 3) Try to pull the bur to ensure the bur is fixed.

(2) Uninstallation:

Turn the chuck ring to the "unlock" direction until a voice "click" and then remove the bur.

⚠️ Caution:

1) Do not run the motor when the chuck ring is open (The sign "●" deviates from the sign "🔒" on the chuck ring) or a bur is not mounted in the chuck. Otherwise, it may cause the motor interface damaged that will cause to hard to insert or pull out the motor. What's worse, it may be burned result in rapid acceleration.

2) After the bur is fixed, make sure to align the sign "●" with the sign "🔒" on the chuck ring (Figure 2). If you use handpiece without aligning the sign "●" with the sign "🔒", it may cause overheat even cause burn.

⚠️ Attention: Mount the bur after the motor stop rotating completely.

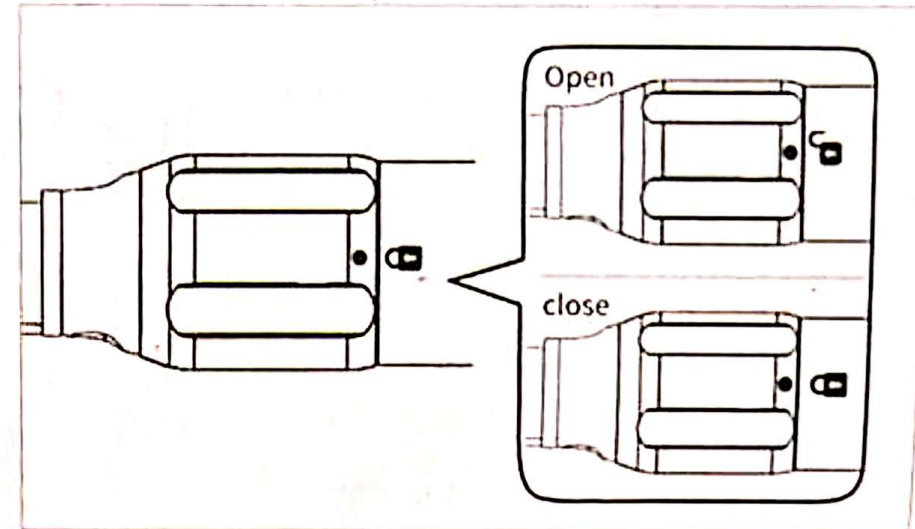
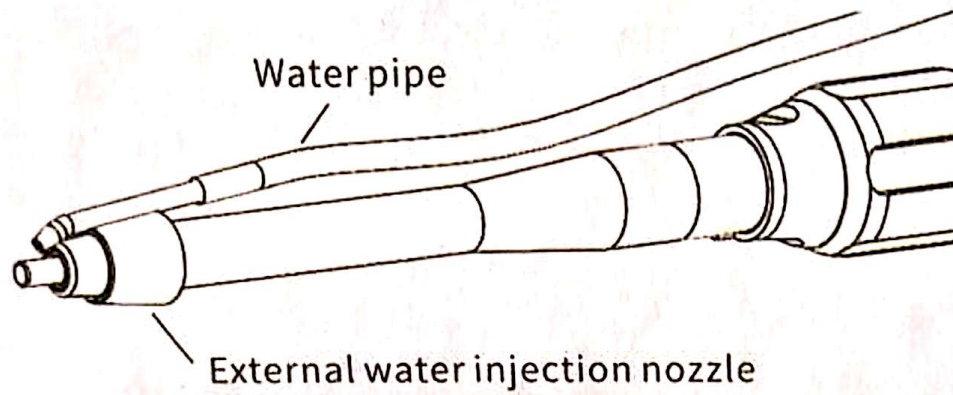


Figure 2

6.The water outlet device

Put the external water injection nozzle onto the handpiece and then insert the water pipe to rear end of the nozzle.



7. Repair and maintenance



Caution:

Please clean, lubricate and disinfect the handpiece immediately after using and then sealed storage. If the blood inside the handpiece is not cleaned in time, it will cause the blood to clot and rust. This can cause the handpiece to malfunction, and also may occur burn caused by high temperature.

(1) Clean:

First, clean the dirty on the handpiece's surface with the water and then wipe it up. Insert the water pipe into the external water injection nozzle and then wash it with clean water.

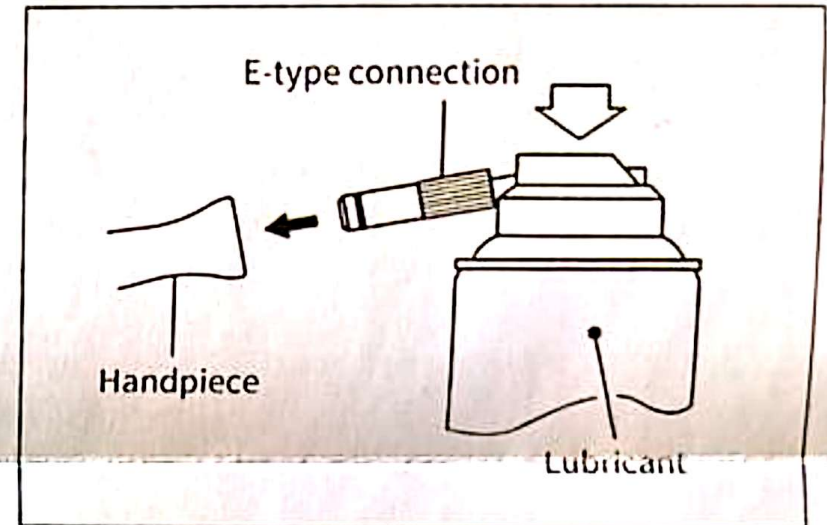
⚠ This product can use hot water sterilizer to clean the surface.

(2) Inject lubricant:

Before using or sterilization, please use lubricant.

Lubricant:

- 1) Insert the spray nozzle into the E-type connection straightly.
- 2) Remove the bur of the handpiece.
- 3) Insert the nozzle into the bottom of the handpiece vertically and then inject lubricant for about 2s.



Attention:

- Please only use lubricant to clean.
- Hold the handpiece tightly when injecting lubricant to prevent pressure from causing lubricant spattering.
- Lubricant injection standard is the lubricant out from the head of the handpiece(At least 2s).
- Do not turn lubricant upside down when is using.

(3) Sterilization:

We recommend high temperature and high pressure for sterilization. Please follow the steps for sterilization after operation.

- 1) Clean the dirt or debris on the handpiece's surface (Do not use metal brushes), and wipe it with alcohol cotton ball. Injection lubrication into the handpiece.
- 2) Pack the handpiece sterilization in wrap and mark it.
- 3) Sterilize the handpiece in autoclave sterilizer (not exceed 134°C).
20 minutes for 121°C, and 15 minutes for 132°C.
- 4) After sterilization, do not open the sterilized packing before next operation.

Attention:

- If the temperature exceeds 135°C during the pasteurization process, please skip the drying process.
- Since the lowest layer of the autoclave is close to the heater, exceeding the set temperature may also occur, so please put it in the upper or middle layer when disinfecting.

8. Regular maintenance

Handpiece needs to be checked and maintained every three months.

Check items	Content
Bur	Please check the bur installed and removed normally.
Operation	Please check for vibration, noise, overheating and other abnormal phenomena.

Operating conditions:

It should be operated at an ambient temperature of 10-35°C and humidity of 30%-75%.

Storage conditions:

Products should be stored in a dry, stable environment, which the ambient temperature of -10°C ~ 50°C, humidity of 10%~85%, and atmospheric pressure of 500hPa~ 1060 hPa.