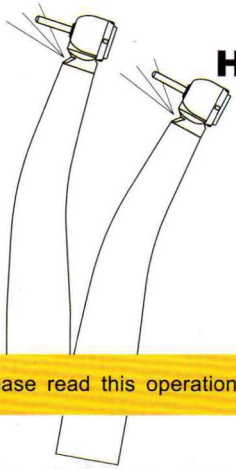


HIGH SPEED AIR TURBINE HANDPIECE

OPERATION MANUAL

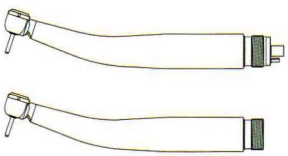
Please read this operation manual before using, and leam the correct use then it will have a long life.

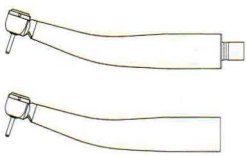
TRANSPORTATION AND DEPOSITED CONDITION:

Environmental temperature: -40℃--+50℃; Relative humidiy≤80%;
The scope of air pressure: 500hPa—1060hPa.

PRODUCT PARTS:

Consists of handpiece head、handle、caudal thread、cartridge. generator





WORKING CONDITIONS:

1.Air pressure 0.25-0.30MPa、must be filtrated.
2.Use high speed dental bur with shaft dimension Φ1.59~1.60mm and roughness less than 0.8μm.
3.The amount of handpieces'spray or water spray should be able to adjusted.

SPECIFICATION:

1.Haid glass figer,can be repeatedly sterilized in high temperature and pressure.
2.Operate the handpiece at pressures of 25 to 30 psi.Engineered to attain speeds of 300,000 at 25 psi.and 400,000 at 30 psi.
3.Clamping force of handpiece is:20-45N.
4.LED handpiece with generator Series,LED white light,longevity 10000 hours.

PRODUCT SCOPE:

Only used for drilling,molar of stomatology clamping high-speed dental burs.

PRODUCT INSTALLATION:

Connect the tubing(4 hole or 2 hole), if appears quick coupling handpiece, insert the quick coupling head in to.

⚠Notice: 1: Connect the required tubing according the model of each handpiece.
2:Only connecting correctly, fixed tightly and closely, can be used.

1.Inser quick coupling

Insert quick coupling into Socket connection of the high speed handpiece , push it forward,card tightly and firmly.

⚠Notice: For quick coupling with decorative pattern, should be moving back before push forward,then can be card tightly and firmly.

2.Extract the quick coupling

Hold the handpiece body and quick coupling by hands and drag them into opposition.

⚠Notice: For quick coupling with decorative pattern, holding the decorative pattern quick coupling, drag it in to behind.

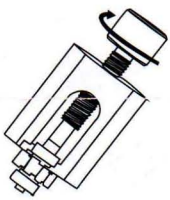
NOTE: Only connecting correctly, fixed tightly and closely, can be used.

BEARING DETACHMENT AND INSTALLATION:

Bearing detachment

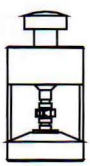
1-Supposed the ball bearing damaged but its outer ring not drop off, please insert the notch of bearing detach tool between bearing and rotor, then rotate the screw bolt of tool clockwise until the bearing removed.

2-Suppsed the ball bearing damaged and its outer ring drop off, please insert the notch of bearing detach tool at the inner ring path of ball bearing , then rotate the screw bolt of tool clockwise until the inner ring removed.



Bearing Installation

Firstly pre-install the bearing on the turbing on the turbine spindle,the shield side facing outside,then put it on the bearing installation tool, knock at the upper side of inner ring of bearing gently with the push axle,ensure the bearing is placed in the middle.then press middle.then press of bearing gently with the push axle,ensure the bearing is placed in the middle.then press the push axle with finger so that the bearing is closed to the turbine.



Remark:the tool for bearing repairing not include,It can only be offered by supplier. The product can only be repaired by manufacturer or the person be authorised.

REPLACEMENT OF CARTRIDGE:

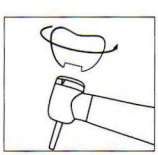
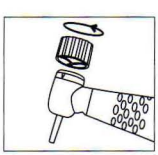
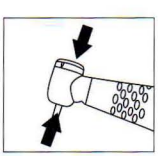
- Removing old cartridge

  Mount a dummy bur in the chuck, then turn the head cap counter-clockwise and remove the head cap. Push the dummy bur and cartridge is easily removed from the head.

- Installing new cartridge

  Insert new cartridge into handpiece head, being sure to the align the small knob pin on the cartridge with the groove inside the front of the head, to insure proper fit.Mount and screw the head cap with fingers till tight. Further tighten with the head cap wrench.

⚠NOTE: WHEN REPLACING HEAD CAP, DON'T USE THE WRENCH AT FIRST. BECAUSE THE THREADS ARE VERY FINE AND CAN BE EASILY STRIPPED.

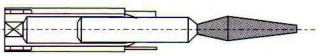





PROPER BUR:

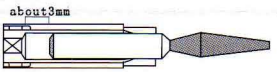
- Do not use a bent, damaged, or non-concentric bur.
- Use a bur of ISO-standard, Φ1.59~1.60mm.
- Never use bent,off-centered or damaged burs.

1. Thread circlip type (change the burs by wrench)
a. lift up the handle of the spanner and put the spanner on the head of the handpiece.
b. Push the cylindrical handle of spanner into the axle hole of the handpiece head.

Take off the bur after rotate the spanner rounds 1/4 round in the direction of counter clockwise.
(Please do not rotate the spanner over a quarter rounds)
c. operate in reverse steps to install the burs.

WRONG 

Please make sure the part of the burs which is griped should not too short in case of the petal oblique.

RIGHT 

It can be used probably if there is 3mm gap between the burs and the end of the hole. It would appear vibrating and speed up the damage of the bearing and spanner if the gap is too large.

⚠Notice!
As the picture shows, the griped part of the burs should not be too short; otherwise the bearing can't bear the power smoothly and accelerate the damage of the bearing.
Do not operate the handpiece without the burs, otherwise the chuck could be thrown by the reaction and the bearing could be damage.

2. Press-cards type (pushbutton bur- exchange type)
a.When unload the bur , press the centre of head hardly with thumb, take out the bur with another hand simultaneously.As shown in picture.
b.When load the bur, insert it in to importing parts of the chuck hole (about 1-2mm). Then press the centre of head hardly with thumb , push the bur into the end with another hand simultaneously

⚠ Notice!
After the processes of severe vibration cutting (such as milling and cutting the tooth crown) sometimes the burs might not be easily to be taken off.

In this case we could use EG wrench to press the middle of the handpiece head, and then pull the bur by using pliers.
While cutting with strong vibrating, please check the condition of the burs to avoid the problem above

MAINTENANCE:

- Daily lubrication to the bearing is absolutely essential for extending its using life.
- After daily use, spray lubricant for 1 to 2 seconds by inserting lubricant nozzle all the way into drive air tube.
- If the work is heavy, lubrication should be taken place after every morning and afternoon's using.
- Lubrication before autoclave.

DAILY MAINTENANCE AND INSPECTION

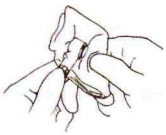
Be sure to remove the bur or point from the handpiece after use. If the bur or point is left in the handpiece, it may get stuck.
Be sure to follow the procedure below when performing daily maintenance.

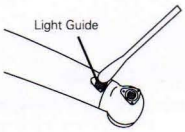
Cleaning → Disinfection → Lubrication → Packing → Sterilization

Cleaning
Disconnect the handpiece from the tube. Clean off the cutting debris in running water with a soft brush and then wipe off the water.

Disinfection

Wipe the entire handpiece with a piece of gauze dampened with Ethanol for Disinfection (ethanol 70 to 80 vol%).
Put a little ethanol on a cotton swab and stick it in the connection end of the handpiece. Lightly wipe the light guide with it.
Gently wipe the light guide with a cotton swab.





Lubrication
Before autoclaving, make sure that you lubricate and clean the handpiece with the AR SPRAY or MORITA MULTI SPRAY.

Packing
Place the handpiece in a sterilization pouch

Sterilization
Autoclave the handpiece. After the autoclaving, store the handpiece in a dry environment.
Recommended autoclaving conditions: 134° C (273.2° F) in a sterilization pouch for at least 5 minutes.
Minimum drying time after sterilization: 10 minutes.

TROUBLE SHOOTING:

Trouble	Possible cause	Solution
Big noise、low rotation speed、cutting force decrease or handpiece fail to running	Ball bearing damages	Replace ball bearing
Handpiece fail to spray mist	Spray hole blockage	Clean with probe
Handpiece water leakage	O-ring and washer aged	Replace aged parts
Normal noise butlow rotation speed	Low air pressure	Adjust air pressure
Bur drop-off or fail to intat bur	Non standard bur or chucking system damages	Replace new bur or send it to maintenancing center
Bur wobbling, lowcutting force	O-ring or ball bearing damages	Replace spare parts

Our service center can offer technical assistance to you.

STANDARD SYMBOLS:

No.	Symbols	Description	No.	Symbols	Description
1		Consult instructions for use	8		This device can be washed via thermos disinfector
2		Date of manufacture.	9		Storage Atmospheric Pressure: 50~106 KPa
3		Manufacturer	10		Storage humidity:10%~90%RH
4	CE 0197	CE Mark.	11		Storage temperature: -25~70℃
5	135℃ SSS	Sterilizable up to 135℃	12		Keep dry
6		Warning	13		This way up
7	Rx only	For prescription use only	14		Fragile