



Instruction Manual of High-speed Turbine Dental

PANA-MAX

PANA-MAX

Drill Handpiece

For your safety, please be sure to read this instruction manual carefully prior to operation.
In order to look up the instruction, please keep this instruction manual in the place easy to be picked and placed.

MADE IN JAPAN

OM-T0310C 002



Powerful Partners®

Thank you for purchasing of high-speed turbine dental drill handpiece PANA-MAX. We would like to hereby express our gratitude.

Warning

- In view of safety first, please devote enough attention to use with proper care.
- The handpiece only can be used by qualified dentist for therapy. Don't use it for the purposes other than oral treatment.
- Disassembling and transformation without authorization is absolutely prohibited.
- Prior to operation, please carry on spot check outside the patient's mouth cavity in advance to determine whether there is vibration, soufflé, heating, and other problems. If you feel any abnormal in operation, please immediately stop to use it and contact with the original seller.
- If you feel any abnormal or hear the soufflé after long-term operation, please replace new shaft core with the brand of Zhengzhong NSK. If the handpiece is continuously to operate without replacement, it will break down. For example, the handpiece will suddenly stop to operate, or impair the operator's hearing possibly.
- In operation, don't press the bur button, otherwise, the handpiece will generate heat. Please especially devote adequate attention when it is used in the cheek. The handpiece cap will cause burning in the case of touching the cheek.
- Don't crash, especially prevent from falling down.
- Don't use the curving, transforming and non-standard bur with flaw. This kind of bur will suddenly break off and fly out in operation to cause the injury accident.
- Please put away the bur chuck after cleaning. The vibration of shaft core and holding force of chuck will reduce as a result of internal pollutant.
- Please operate the bur according to the rotating speed prescribed by the bur manufacturer.
- Please don't operate the handpiece without bur.
- When out of use, please fit on a bur or testing bur.
- Please dismount the bur after the handpiece comes to a full stop.

1. Specifications

Type	PANA-MAX SU M4	PANA-MAX TU M4	PANA-MAX SU B2	PANA-MAX TU B2
Rotation Speed	380,000 – 480,000 min ⁻¹	320,000 – 380,000 min ⁻¹	380,000 – 480,000 min ⁻¹	320,000 – 380,000 min ⁻¹
Joint	4 Holes (M4)	4 Holes (M4)	2 Holes (B2)	2 Holes (B2)
Handpiece	Standard Handpiece	Torque Handpiece	Standard Handpiece	Torque Handpiece

2. Air Supply

The air pressure in place where the arrow is pointing (Figure 1) is set to be 0.2-0.25MPa **0.2 – 0.25MPa (2.0 – 2.5kgf/cm²)**.

Precautions

Don't set the air pressure out of specifications, otherwise, the bur and spherical bearing will be early wearing as a result of over-speeding rotation.



Figure 1

3. Bur Precautions

- Don't use the non-standard bur. The diameter of ISO bur handle is $\phi 1.59 - \phi 1.60\text{mm}$.
- Don't use curving, wearing or off-axis bur.
- Please use the bur in the rotating speed advised by the bur manufacturer.
- Please use the cleaning bur every time. Use of bur with dirt will have the cutting dust entered into the chuck, and have the holding force of bur reduced.
- When plugging in the bur, please press the button hard while plugging in the bur to the end.
- Don't use the bur with short handle.

4. Replacement of Bur

(1) Demount the bur

Press the button on handpiece cap hard with thumb, and then unplug the bur. (Figure 2)

(2) Install the bur

Plug in the bur to the end of handpiece while pressing the button.

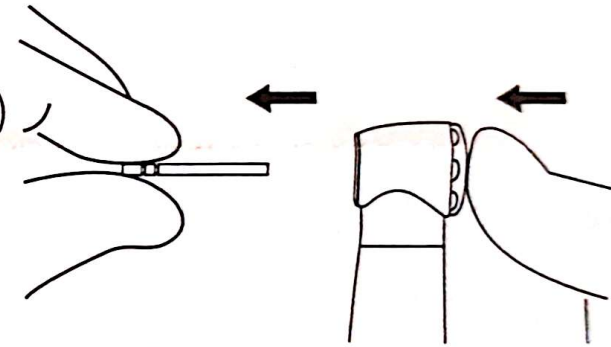


Figure 2

⚠ Precautions

When cutting and grinding with strong vibration, such as removal of dental crown, the bur inside handpiece sometimes is stuck because of over tight. Please continuously press the button while pulling out the bur with pincer. Exchange the bur position regularly can prevent against this problem.

5. Maintenance (Cleaning and Lubrication)

Upon completion of each treatment, or prior to autoclaving, please make use of NSK cleaning lubricant as the main lubrication oil.

■ NSK Cleaning Lubricant

- ① Mount the triangular joint on the oil nozzle of spray cleaning lubricant.
- ② Plug in the triangular joint to the end of air supply pipe of handpiece, and then inject into the handpiece for 2 to 3 seconds.

⚠ Precautions

- In order to prevent from handpiece slipping caused by air pressure, please grasp the handpiece.
- Please fully inject the lubrication oil until the lubricant flows out of the handpiece.
- Vertically hold the spray cleaning lubricant tank with hands.

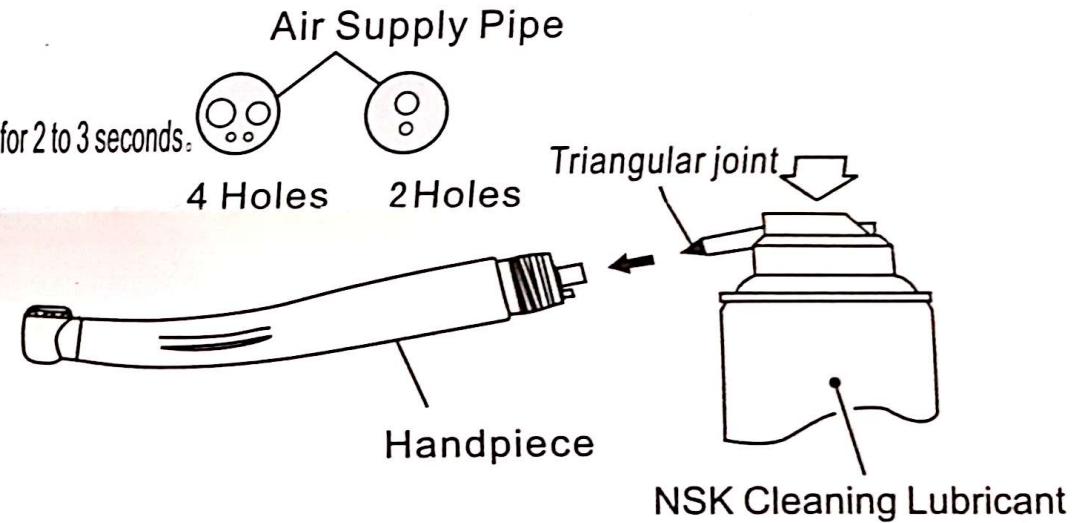


Figure3

■ Lubrication Oil

When in use, add 2 to 3 drops of lubrication oil into the air supply pipe.

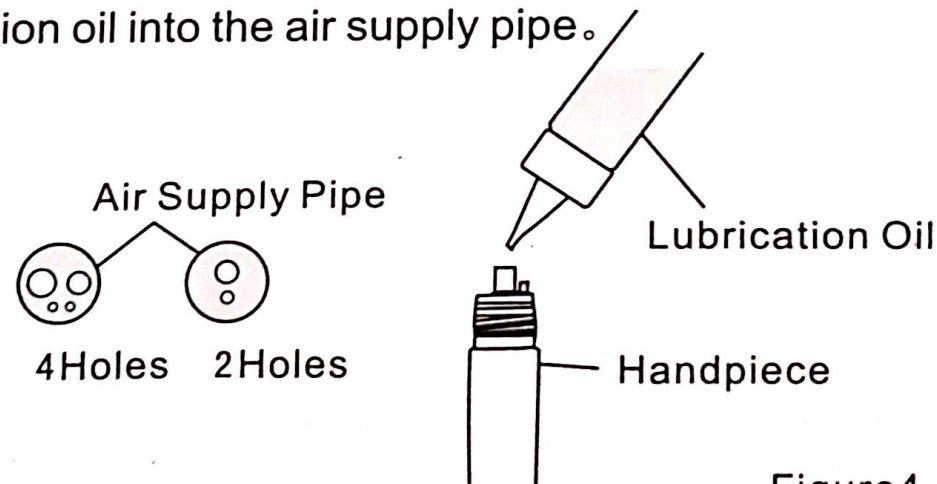
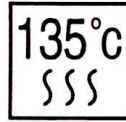


Figure4

6. Cleaning and Sterilization



The handpiece is capable to clean in the hot sterilizer.



The handpiece is tolerable to 135°C autoclaving

Autoclaving is recommended to use.

Prior to first use, please carry on autoclaving. Upon completion of each treatment, please take down the bur for autoclaving in the following ways.

■ Autoclaving

- ① Brush off the cutting dust adherent to the handpiece, and then wipe clean with the alcohol-impregnated swab.
- ② Dismount PANA-MAX handpiece from the joint, and then lubricate with NSK cleaning lubricant. (Please refer to Point 5 Maintenance)
- ③ Pack the handpiece with the sterilization bag for autoclaving, and then seal up the bag.
- ④ Carry on autoclaving under 135°C^o
For example, carry on autoclaving for 20 minutes at 121°C^o or 15 minutes at 132°C^o.
- ⑤ Upon completion of autoclaving, and prior to next treatment, please don't open the sterilization bag and maintain it is sealed.



Precautions in Sterilization

- Please omit the drying procedures.
- The high local temperature could exceed the setting temperature for the bottom of sterilizer shelf approaches to the heat source, please put wares in the middle or on the top of shelf.
- Due to the non-complete removal of chemical components of liquid medicine, in order to prevent from darkening or plating stripping of handpiece surface, don't sterilize the handpiece together with other articles with liquid medicine.

7. Switching Method of Shaft Core

(1) Take out the original shaft core.

- ① Mount on a testing bur.
- ② The handpiece cap wrench is mounted to get the handpiece cap stuck. The handpiece cap can be dismantled by clockwise rotation. (Figure 5)
- ③ After handpiece cap is demounted, press the testing bur to take out the shaft core.
- ④ Take out the O-type sealing ring within the handpiece cap with needle and other similar tools. (Figure 6)
- ⑤ Demount the wave-like washer under the O-type sealing ring. (Figure 7)

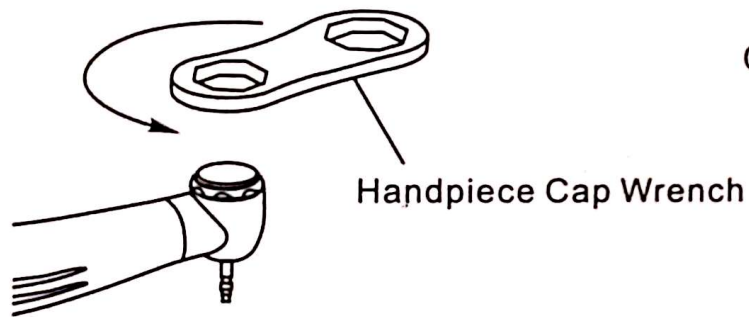


Figure5

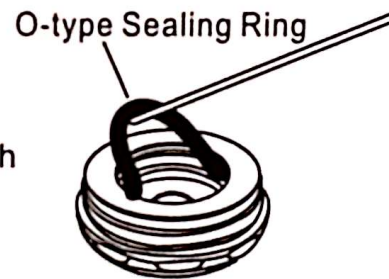


Figure6



Figure7

⚠ Precautions

- For the sake of the tiny thread of handpiece cap, in order to prevent against its damage, don't rotate with wrench at the first beginning.
- Use the original NSK shaft core. Shaft cores other than NSK's are not involved in the warranty scope.

(2) Install New Shaft Core

- ① Mount on the wave-like washer in the obverse or reverse side into the handpiece cap. (Figure 8)
- ② Plug the new O-type sealing ring into the handpiece cap. Prior to plugging, thinly coat a bit lubrication oil for handpiece on the O-type sealing ring. (Figure 9)
- ③ Straightly plug the shaft core into the handpiece in place. (Figure 10)
- ④ After the handpiece cap is screwed in with fingers, grab the leading edge of master bar to lightly push and pull with tips of fingers, so as to confirm whether the wave-like washer is effective. (Figure 11)
- ⑤ Then tighten up the handpiece cap with wrench.

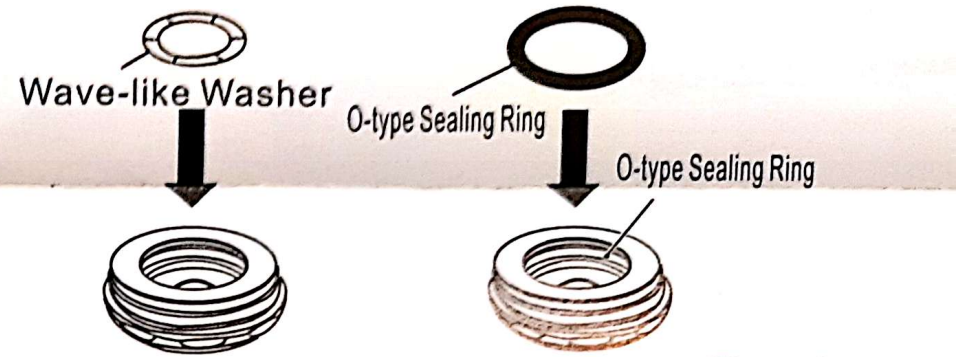


Figure8

Figure9

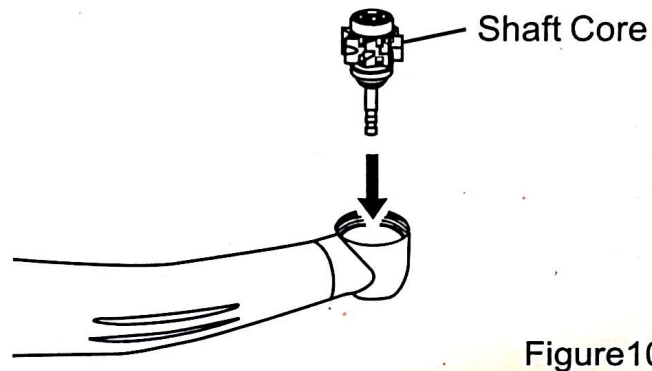


Figure10

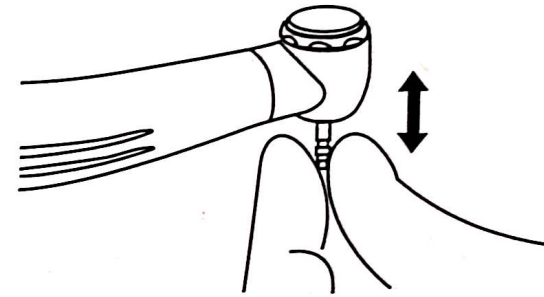


Figure11

After-sale Service Station

Shanghai NSK International Trading Co., Ltd

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