Dental Low Speed Air Turbine Handpiece

Please read this operation Manual carefully and save for future reference.

NO.19/12/2019 NKS4-E13

I. Product

Dental low speed dental air turbine handpiece

II. Model

X95L	X202	N202	K95L	N201	K201	NX203	NK203	NX403	NK403
Fiber optic inner channel CA	Inner channel CA	External CA	Fiber optic inner channel SH	Inner channel SH	External SH	B2 Inner channel AM	B2 External AM	M4 Inner channel AM	M4 External AM

III. Performance

Kpa air pressure	min/rpm motor FWD speed	min/rpm motor BWD speed	NL/min air consumption	difference
2. 5	16000	14000	42	10%
3. 0	18000	16000	51	10%
4. 0	20000	18000	72	10%

IV. Main Structure

Straight handpiece, contra handpiece, motor

V. Application and Life Cycle

This product is for dentists to use in diagnosis, treatment and operation. The life cycle of this product is one year.

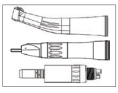
VI. Intended Use

1. Please read the instructions seriously, and operate the handpiece accordingly.
2. Product application: this device equips with 1:1 or other speed ratio, to dril, polish or cut the tooth during the dental surgery. This model is specialized applied for oral therapy, others should be fully forbidden.
3. Users' qualification: this product is only to be used by qualified and professional person. Improper use could cause damage to the handpiece, and cause injury to the patient etc. It is low-speed dental handpiece, safety is the first, be careful to use.

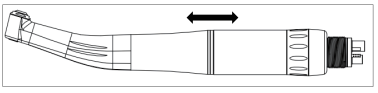
VII. Connect / Disconnect of Contra Angle and Straight to Motor

⚠ Warning: The pin of fiber optic contra angle must be aimed to the slot on the motor. Do not connect or disconnect the contra or straight when the handpiece is working

1. Connection:



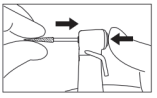
2. Disconnection:



VIII. Mounting / Removing burs

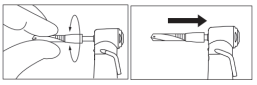
⚠ Warning: Use only qualified burs.
Do not start the motor before fixing the bur, otherwise, it will cause the bur bumping

1. Install and uninstall of FG ℄1.6mm bur (push button type)
   a. Put the bur into the spindle about 2-4mm, press the cap and push the bur till the end.
   b. Try to pull out the bur to check if it is fixed.
   c. When take out the bur, press the cap and take out the bur with another hand.

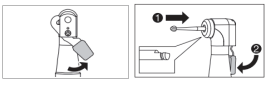


2. Install and uninstall of CA ℄2.35mm bur

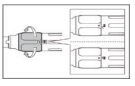
2.1 Push button type
   a. Put the bur into the spindle till the end, and it is fixed when you feel it is locked by the chuck.
   b. Try to pull out the bur to check if it is fixed.
   c. While taking out the bur, press the cap and take out the bur with with antoher hand



2.2 Latch type
   a. Turn the latch to the right, put the bur inside, and then turn the latch to the left and lock it.
   b. While taking out the bur, turn the latch to the right and take it out.

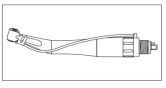


2.3 Bur install and uninstall of straight handpiece
   a. When uninstall the bur, hold the handle with left hand, turn the ring with right hand until hear a click, and then take out the bur.
   b. When install the bur, put the bur inside, hold the handle with left hand, turn the ring with right hand until hear a click, then the bur is locked.



IX. Connection of water tube

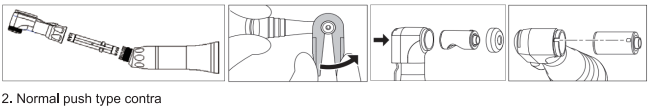
1. Connection of normal external water tube
   a. Put the water clip to the neck of the contra.
   b. Connect soft tube to the water clip



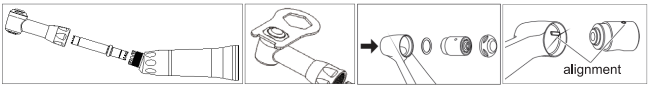
X. Change cartridge

⚠ Attention: Please do not change the cartridge if there's no experience before.

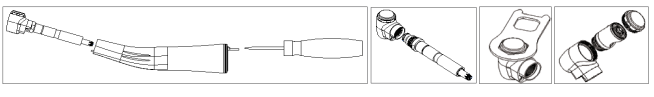
1. Normal latch type contra
   a. Loose the screw anti-clockwise, take out the head and middle gear
   b. Loose the front cap and take out the cartridge.



2. Normal push type contra
   a. Loose the screw anti-clockwise, take out the head and middle gear
   b. Loose the front screw and take out the cartridge.



3. Internal spray contra
   a. Take out the long screw with screwdriver
   b. Take out the head part, and take out the middle gear by anti-clockwise turning.
   c. Open the cap with anticlockwise turning, and push the cartridge out.
   d. While assembling the cartridge, please do in inverted sequence.

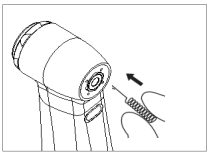
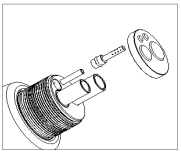
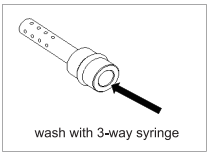


XI. Maintenance Method

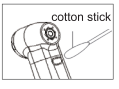
After the treatment, be sure to perform the maintenance below.

This symbol on you product means that the product can be autoclavable up to Max.135℃.

1. Preparation
   a. Remove Contra Angle from the motor and detach the bur form the chuck.
   b. In order to maximize the sterilize performance, the maintenance must be perform soon after every surgery within the day, better no more than 1day.
2. Clean water and air tube
   a. Use the needle to clean the spray hole inside and outside, in order to remove the dirt.
   b. Use a 50ml syringe to inject at least 400ml (8 times) 75% Ethyl Alcohol into the channel of the motor.
   c. Use a high-pressure water guns to flush the channel of the handpiece with purified water for at least 3 mins.
   d. Use a 50ml syringe to inject at least 400ml (8 times) air into the channel of the handpiece.

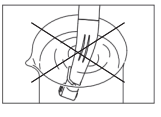




3.Fiber cleaning
a.Wipe the fiber with cotton swab dipped in alcohol for 5 times, wipe off the dirt.
b.Dry the fiber surface with 3-way springe or soft cloth.



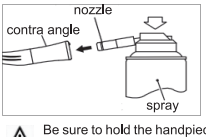
Warning: Do not use a pointed tool or sharp edged to clean the Cellular Glass Optic Rod. They may damage the mirror finish and reduce the light transmission efficiency. If Cellular Glass Optic Rod end has become damaged, return it to dealer for repair

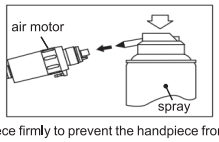
4. External surface cleaning
   a. Rinse the handpiece with flowing water and brush for 3 minutes, remove dirt and debris from the surface, and clean the external surface of the handpiece three times with non-dust cloth soaked in 75% alcohol the dirt.
   b. Do not put the handpiece into any liquid to clean the surface, it might damage the bearings inside.

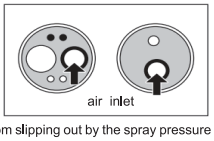


5. Separately place according to different departments, isolatedly deliver to the supply room.
6. Lubrication

To prevent mist spray from escaping into the environment, use absorbent cloth expel excess lubrication.
   a. Push or screw nozzle. Shake the spray can 3-4 times.
   b. Insert the spray nozzle in the rear of the handpiece and spray for approximately 2-3 seconds until the oil comes out of the handpiece head / nose.
   c. Use the high-pressure air gun to blow from air inlet to dry out the lubrication oil.







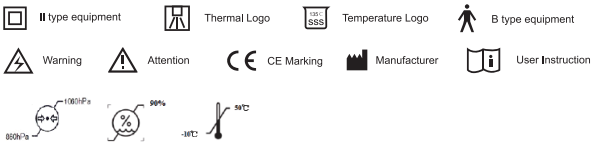
Be sure to hold the handpiece firmly to prevent the handpiece from slipping out by the spray pressure when lubricating.
keep the spray plus / spray can upright.
Use of lubricants other than spray plus / spray can cause excessive heat generation and possible handpiece damage.

7. Sterilization

Autoclave sterilization is recommended.
Sterilization is required first time you use and after each patient as noted below.
Autoclave procedure
   a. Insert the handpiece into an atuoclave pouch and seal the pouch, mark the date of sterilization and the valid date.
   b. Autoclavable up to a max. 135℃ (±2℃)
   Pressure:198 kPa ~ 205 kPa
   Sterilization Time: 3 minutes
   Drying Time: 16 minutes
   c. The maximum reprocessing time: 200 times.

XII. Tranport and Storage

1. Temperature of storage: -10℃ to + 55℃
2. Humidity of storage: ≤93%
3. Temperature of operating: +10℃ to + 40℃
4. Air humidity of operating: ≤80%



XIII. Warranty

We provide 1 year warranty service to the product, for material or product structure problems (bearing and other consumable parts are exclused). Other damages are not covered by this warranty. The factory has no responsibility to the following conditions:
1. The handpiece is not installed accoring to this instruction. The handpiece fall down or artificially damdaged.
2. Abnormal chemical, electrical damage. Or the handpiece fall down or artificially damdaged.
3. Over use or use this product for other purpose.
4. Abnormal air/water connection.
5. Damage cause by improper using, storing or maintaining.
6. Improper operation or unqualified person conduct unqualified repair to the handpiece.

XIV. Statement

All datas, picture and parameter in this instruction are only for referrence. Manufacturer reserves the right to change without change this.