

EX-5B/EX-6B/EX-6D EX-5BM/EX-6BM/EX-6DM



Please read this Operation Manual carefully before use, and file for future reference.

MADE IN JAPAN
[OM-H0146E] 002



⚠ Caution

General Cautions:

- This handpiece is intended for use by dental professionals only.
- Do not use this for the treatment in dental surgery.
- NSK handpieces should not be rebuilt.
- Should the handpiece function abnormally, cease operation immediately and return the handpiece to the dealer for repair.

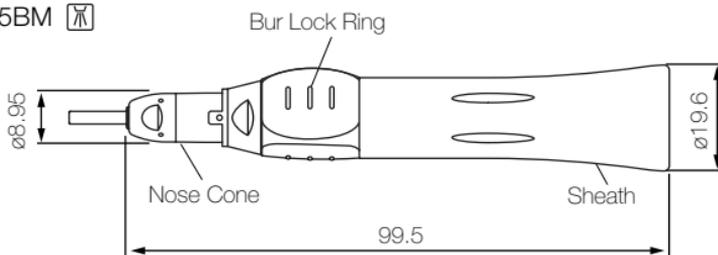
Cautions on Operation:

- Do not turn the bur lock ring while the handpiece is rotating.
- Do not rotate the motor when the bur lock ring is at OPEN position, or a bur is not mounted in the chuck. It may cause the motor/handpiece disconnection or sudden heat generation.
- This handpiece is designed for (dental) treatment and precision technical use. Longtime excavation with high torque with thick burs such as 4mm or greater in diameter may cause a short life to the bur, hard-to-pull-off bur or bur drop-off, which results in injury.
- Do not allow any impact on the shank. Do not drop the handpiece.
- Check the vibration, noise and overheating outside the patient's oral cavity before use. If any abnormalities are found, stop using immediately and contact your dealer.
- Make sure that the bur is securely locked in the chuck before each use. Improper mounting of the bur could cause the bur to spin out during rotation and endanger anyone in the vicinity.
- Do not use bent, off-centered, deformed, damaged, nor non-ISO standard burs.
- Use clean bur. Dirt on the shank may lodge in the chuck in time and could cause poor concentricity of the bur or poor chucking power.
- Be sure to check on the device and the components periodically.
- Make sure that the product is normal by rotating it with attention to backlash, vibration, noise, heat generation, when you use it again after a long time.
- Do not wipe with, or clean or immerse in, high acid water or sterilizing solutions.

1. Specifications

EX-5B

EX-5BM



Allowable Max.Speed ... 40,000min⁻¹(rpm)

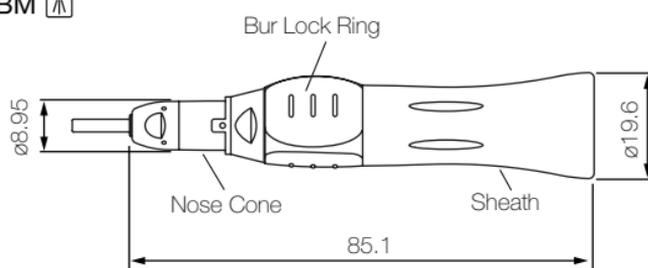
Burs ... ISO 1797-1 Type2

Gear Ratio ... 4:1

Accept Doriot Type Head

EX-6B

EX-6BM



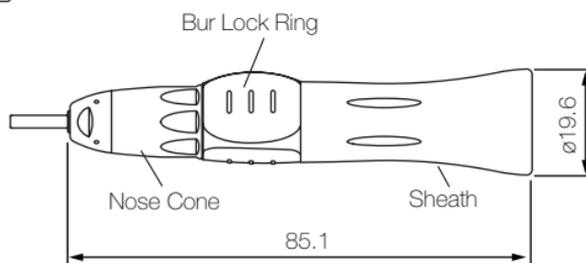
Allowable Max.Speed ... 40,000min⁻¹(rpm)

Burs ... ISO 1797-1 Type2

Accept Doriot Type Head

EX-6D

EX-6DM



Allowable Max.Speed ... 40,000min⁻¹(rpm)

Burs ... ISO 1797-1 Type2

Fig.1

2. Connecting / disconnecting the motor and the handpiece.

To connect the motor and the handpiece, align the positioning marks of the motor and the handpiece, and insert straightly. To disconnect, hold the front part of the motor and the back part of the handpiece, and pull out straightly.

⚠ Caution

Do not connect or disconnect the handpiece until the motor has completely stopped.

3. Mounting Burs

To mount the bur, insert it into the chuck and turn the Bur Lock Ring in the direction of the mark [C] until it clicks and the Black Dots align (*See the picture below). To remove the bur, turn the Bur Lock Ring in the direction of mark [O] until it clicks.

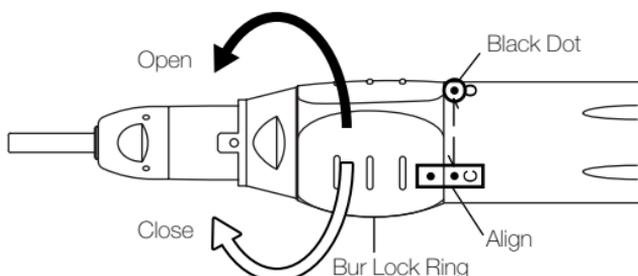


Fig.2

! Tips for safe use and for maximum service life

- Never use bent, off-centered or damaged burs. Excessive loads generated by defective burs rotating at 40,000min⁻¹(rpm) will quickly damage ball bearings.
- This handpiece is designed for (dental) treatment and precision technical use. Longtime excavation with high torque with thick burs such as 4mm or greater in diameter may cause a short life to the bur, hard-to-pull-off bur or bur drop-off, which results in injury.
- Always insert a bur all the way into chuck. This will prevent “BUR-WALK-OUT”, and/or damage to the ball bearing.
- Never operate Straight Nosecone without a bur or bur blank securely in place, or bur lock ring at different positions.
- Make sure if the Os of the bur lock ring line up after fixing the bur. Rotating the bur in an improper position may cause heat generation, which results in burns.

4. Lubrication

Supply PANA-SPRAY Plus and/or Care3 Plus after each use and/or before autoclaving.

■ PANA-SPRAY Plus

- ① Push E-type spray nozzle attachment over the PANA-SPRAY Plus nozzle until it firmly seats.
- ② Shake the can 3-4 times to well mix lubricant and propellant.
- ③ Insert the E-type spray nozzle in the rear of the handpiece and spray for approximately 2-3 seconds until the oil comes out of the handpiece head or nose.

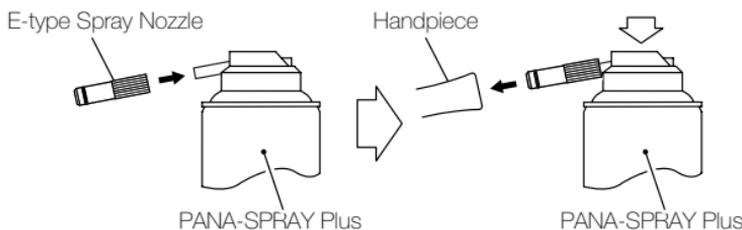


Fig.3

! Caution

- Be sure to hold the handpiece firmly to prevent the handpiece from slipping out by the spray pressure when lubricating.
- Supply lubricant until it comes out of the handpiece nose (for approx. 2 seconds).
- Keep the PANA-SPRAY Plus can upright.

■ Care3 Plus

NSK Care3 Plus automatic handpiece lubrication system.

After cleaning the handpiece simply connect the handpiece to the correct adaptor and activate the Care3 System per the Care3 System instructions.

5. Cleaning and Sterilization

(1) Cleaning



The products listed below are washable with Thermo Disinfector. EX-5BM, EX-6BM, EX-6DM

Wipe clean the handpiece sheath with alcohol-dipped soft tissue or cotton. Never clean the handpiece in chemicals, with wire brushes, or in ultrasonic cleaners.

(2) Sterilization

Steam autoclave is recommended.

Sterilization is required first time you use and after each patient.

■ Autoclaving procedure

- ① Clean the handpiece sheath as described above.
- ② Lubricate the handpiece with PANA-SPRAY Plus. (Ref. 4. Lubrication)
- ③ Place handpiece into autoclaving pouch and seal it in accordance with instructions on the pouch.
- ④ Autoclavable up to max. 135°C (275°F).
ex.) Autoclave for 20 min. at 121°C, or 15 min. at 132°C.
- ⑤ Keep the handpiece in the autoclave pouch to keep it clean until you use it.

* Sterilization at 121°C for more than 15 minutes is recommended by EN13060 or EN554.

! Caution

- Never clean the handpiece (EX-5B, EX-6B, EX-6D) in boiling water.
- Always place the handpiece in the center or upper shelf of the chamber, as the local temperature at the bottom of chamber could rise beyond the set value.

NAKANISHI INC.
www.nsk-inc.com

700 Shimohinata Kanuma-shi
Tochigi 322-8666,
Japan

NSK United Kingdom Ltd
www.nsk-uk.com

Office 5, Gateway1000,
Arlington Business Park, Whittle Way,
Stevenage, SG1 2FP, UK

NSK Middle East
www.nsk-inc.com

Room 6EA-701, 7th Floor, East Wing No.6
Dubai Airport Free Zone,
PO Box 54316 Dubai, UAE

NSK Europe GmbH EC REP
www.nsk-europe.de

Elly-Beinhorn-Strasse 8
65760 Eschborn,
Germany

NSK Dental Spain SA
www.nsk-spain.es

C/ Mòdena,43 El Soho - Európolis
28232 Las Rozas, Madrid,
Spain

NSK America - Canadian Branch
www.nsk-inc.com

1054 Centre St, Suite 283
Thornhill, Ontario,
Canada L4J 8E5

NSK France SAS
www.nsk.fr

19 avenue de Villiers
75017 Paris,
France

NSK Oceania Pty Ltd
www.nsk-inc.com

Unit 22, 198-222 Young St.
Waterloo, Sydney,
NSW 2017, Australia