



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

MADE IN JAPAN
OM-C0350E001



Powerful Partners®

Caution

- Always consider safety of the patient first, and do not abuse.
- The handpiece is designed for dental clinical or surgery use. Do not use it for the other purposes.
- When it is found abnormal during use, stop immediately. Do not use, and report to the dealer that was purchased from.
- Do not disassemble the sheath except for the referred to herein, nor alter.
- Do not impact on the sheath, nor drop onto hard surface.
- Always watch for vibration, sound, temperature rise, bur wobble, and other abnormalities.
- Disconnect the sheath after the driver unit is in complete stop.
- The device accepts NSK I-type heads.
- Do not wipe with, or clean or immerse in, high acid water or sterilizing solutions.
- After each operation, be sure to keep the handpiece after cleaning, lubrication, and sterilization. If the blood is left on the handpiece, it can be clotted causing rusty.
- Do not wipe with, or clean or immerse in, high acid water or sterilizing solutions.

1. Speed

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

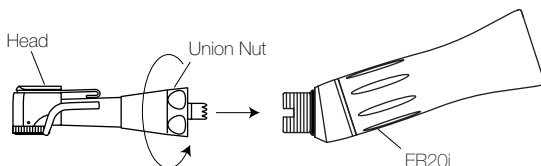
Sheath Type Motor Speed (min ⁻¹)	Bur Speed (min ⁻¹)				
	ER16i	ER20i	ER32i	ER64i	ER256i
40,000	2,500	2,000	1,250	625	156
30,000	1,875	1,500	938	469	117
20,000	1,250	1,000	625	313	78
10,000	625	500	313	156	39

Note: The bur speed might be slightly lower than the theoretical speed as given above, due to a loss at the gear train.

2. Heads

All NSK I-type heads fit the sheath.

Set the head as shown in Fig.1 for alignment, and securely fasten the head nut.



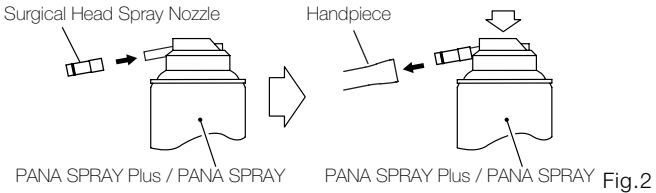
* Head shows SGM.

Fig.1

3. Lubrication

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

- ① Mount the Surgical Head spray nozzle into the spray port.
- ② Shake the can 3-4 times to well mix lubricant and propellant.
- ③ Insert the surgical head spray nozzle in the rear of the handpiece and spray for approximately 2-3 seconds until the oil comes out of the handpiece head.



⚠ Cautions on Lubrication

- Be sure to hold the handpiece firmly to prevent the handpiece from slipping out by the spray pressure when lubricating.
- Keep the PANA SPRAY Plus / PANA SPRAY can upright.

4. Cleaning and Sterilization

⚠ Caution

After each operation, be sure to keep the handpiece after cleaning, lubrication, and sterilization. If the blood is left on the handpiece, it can be clotted causing rusty.



This handpiece can be washed via Thermo Disinfecter.

Sterilization by autoclaving is recommended.

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

■ Autoclaving procedure

- ① Brush off dirt and wipe clean with alcohol-soaked cloth or paper towel.
 - ② Remove reduction sheath from the motor and lubricate. Ref.3 Lubrication.
 - ③ Insert into a sterilization bag and seal it.
 - ④ Autoclavable up to max. 135°C.
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 120°C for more than 15 minutes is recommended by EN13060.

⚠ Cautions on Sterilization

- Heating element may be located at the bottom of the chamber, and the temperature there locally may exceed the set value. Place the handpiece on the central or upper tray.
- Do not autoclave the handpiece, even when it is bagged, together with other instruments, from which chemicals are not sufficiently cleaned. This is to avoid discoloration and/or damage the plating of the handpiece.

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