

**NAC/BB/NM/NBBW**

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

MADE IN JAPAN  
OM-C0363E 002



This operation manual for :

NAC - EC / ER4 / ER10 / ER16 / ER64 / ECM / ER4M / ER10M / ER16M / ER64M  
BB - EC / ER4 / ER10 / ER16 / ER64 / ECM / ER4M / ER10M / ER16M / ER64M  
NM - EC / ER4 / ER10 / ER16 / ER64 / ECM / ER4M / ER10M / ER16M / ER64M  
NBBW - EC / ER4 / ER10 / ER16 / ER64 / ECM / ER4M / ER10M / ER16M / ER64M

**Intended to Use**

The handpiece is designed only for clinical dental use by qualified personnel.

**Caution**

- When operating the handpiece always consider the safety of the patient.
- Check for vibration, noise and overheating outside the patient's oral cavity before use. If any abnormalities are found, stop using the Product immediately and contact your authorized dealer.
- Do not allow any impact on to the Product. Do not drop the handpiece.
- Do not exceed the allowable max speed recommended on the Specification.
- Be sure to connect or disconnect the handpiece only after the motor completely stops rotation.
- Always confirm that the bur is correctly located in the position.
- Do not use bent, deformed or damaged burs.
- Perform periodical maintenance checks.
- If the handpiece has not been used for a long period, check for noise, vibration, and overheating before use.

**1. Specifications**

Model	NAC-Y	BB-Y	NM-Y	NBBW-Y
Allowable Max. Speed	30,000 min <sup>-1</sup>	40,000 min <sup>-1</sup>	30,000 min <sup>-1</sup>	40,000 min <sup>-1</sup>
Bur Size	ISO 1797-1 Type1			

**2. Mounting and Removing the Bur****(1) Mounting**

- 1) Swing the Latch Plate to open the chuck.
- 2) Insert the Latch bur.
- 3) Swing the Latch Plate back to closed position.

**Caution**

If the directional insertion is right for the "D" shape hole, bur might install into the end of the chuck.

**(2) Removing**

- Swing the Latch Plate to open position and pull the bur out.

**3. Water and Chip Air Supply****■ NBBW**

Connect the Irrigation Tube to the Irrigation Nozzle.(Fig.1)

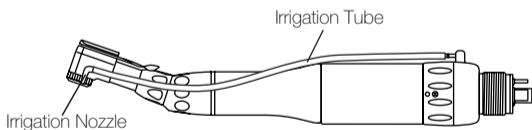


Fig.1

**■ NAC / BB / NM**

Connect the Spray Tube Attachment to the head and the tube to the Spray Tube Nozzle of the motor.(Fig.2)

\* Spray Tube Attachment(Optional) : NAC, BB Order No.C032 701  
NM Order No.C039 701

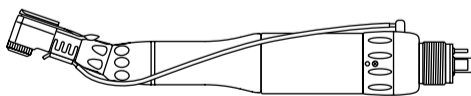


Fig.2

**4. Lubrication****(1) PANA SPRAY Plus / PANA SPRAY**

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

- 1) Push E-type Spray Nozzle attachment over the lubricant spray 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.

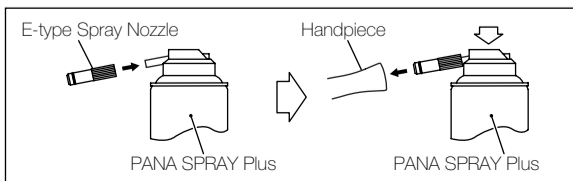


Fig.3

## ⚠ Caution

- Be sure to hold the handpiece firmly to prevent the handpiece from slipping out of hand by the spray pressure when lubricating.
- Supply lubricant until it comes out of the handpiece head (for approx. 2 seconds).
- Hold the Lubricate spray can upright.

### (2) Lubricant oil

Swing open the latch plate. Loosen the Union Nut on the head. Remove the head from the sheath. Remove the Drive Shaft assembly from the head or sheath. Supply lubricant at the arrows. (Fig. 4)

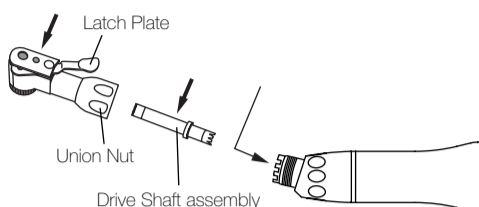


Fig.4

## 5. Cleaning and Sterilization



The products listed below are washable with Thermo Disinfectant. ECM, ER4M, ER10M, ER16M, ER64M

Steam autoclave is recommended.

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

### ■ Autoclave Procedure :

- 1) Scrub dirt and debris from the handpiece, and wipe clean with alcohol-immersed cotton swab or cloth. Do not use a wire brush.
- 2) Lubricate the handpiece. Refer to 4. Lubrication.
- 3) Insert into an autoclave pouch. Seal the pouch.
- 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 121°C for more than 15 minutes is recommended by EN13060 or EN554.

## ⚠ Caution

Do not wipe nor immerse the handpiece in acidic water or acidic solutions.

## 6. Cartridge Replacement (NAC, BB, NBBW)

- 1) Loosen the Union Nut and remove the head from the sheath.
- 2) Pull out the Drive Gear Assembly from the head. (Fig. 5)

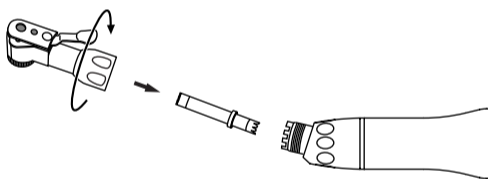


Fig.5

- 3) Place Cap Wrench on the End Cap and turn counter-clockwise. Unscrew and remove the cap. (Fig. 6)

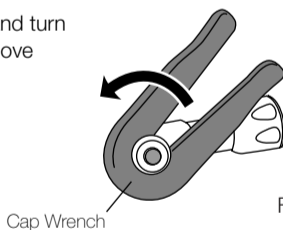


Fig.6

- 4) Swing to open the latch plate. Insert a bur blank or round rod into a hole from the head end, and push out the cartridge.
- 5) Insert the new cartridge, with its pin aligned in the slot of the head. (Fig. 7)

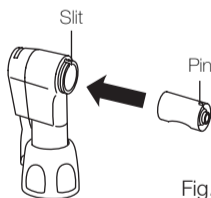


Fig.7

\* Optional Cartridge : NAC-03 (Cartridge for NAC-Y) Order No. C030 011  
BB-03 (Cartridge for BB-Y) Order No. C037 015  
NBB-03 (Cartridge for NBBW-Y) Order No. C210 015

CE The EU directive 93/42/EEC was applied in the design and production of this medical device.

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