

EX-203C Set



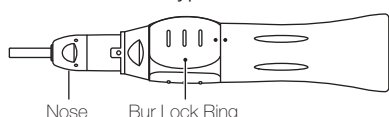
Please read this Operation Manual carefully before use, and file for future reference.

MADE IN JAPAN
OM-M0095E 001

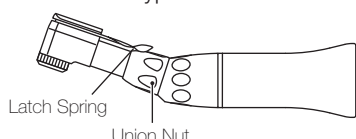


1. Motor and Handpiece

- (1) Straight Nosecone
EX-6B (Clean Head)
Burs: ISO 1797-1 Type2



- (2) Contra Angle Handpiece
NAC-EC
Burs: ISO 1797-1 Type1



- (3) Air Motor
EX-203C (M4/B2)
-

Fig. 1

2. Specifications

Rotation Speed at 0.25MPa (2.5kgf/cm ²)	22,000min ⁻¹ (rpm)	
Rotation Speed at 0.3MPa (3.0kgf/cm ²)	25,000min ⁻¹ (rpm)	
Rotation Speed at 0.4MPa (4.0kgf/cm ²)	27,000min ⁻¹ (rpm)	
Air Consumption at 0.25MPa (2.5kgf/cm ²)	42NL/min	
Allowable Max.Speed (Bur)	EX-6B	40,000min ⁻¹ (rpm)
	NAC-EC	30,000min ⁻¹ (rpm)
Weight	EX-6B	48g
	NAC-EC	43g
	EX-203C (Midwest 4-Hole)	88g
	EX-203C (Borden 2-Hole)	86g

* Speed may vary slightly depending on the back-end configuration, the direction of rotation, and type of hose used.

3. Mounting of Handpiece

- (1) Mounting
Insert the E-type handpiece in the motor insert.
- (2) Removal
Simply pull out handpiece from the motor.



Fig. 2

4. Forward / Reverse Rotation

- (1) Forward Rotation : Turn the FWD/REV Change Ring to "F" as shown in Fig.3.
(2) Reverse Rotation : Turn the FWD/REV Change Ring to "R" as shown in Fig.4.
(3) When the FWD/REV Change Ring is positioned in the middle of "F" and "R", the drive air is interrupted and the motor does not rotate. (Fig.5)

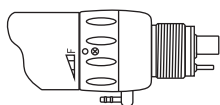


Fig. 3

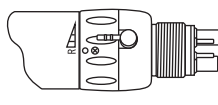


Fig. 4

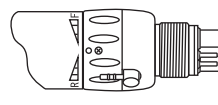


Fig. 5

5. Water and Chip Air Supply

When water, chip air, or spray is required at the bur, connect the spray tube attachment to the head and the tube to the spray tube nozzle of the motor. Trim the tube to the desired length. (Fig.6)

The spray tube attachment for the Straight Nosecone is available as an option.



Fig. 6

* Optional Spray Tube Attachment : Spray Nozzle Order No. C032701

6. Mounting burs

- (1) EX-6B Straight Nosecone
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.

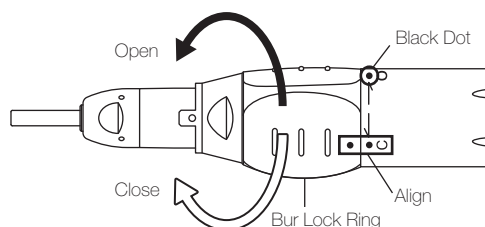


Fig. 7

- (2) NAC-EC Contra Angle Handpiece
Push the latch spring sideways to open. Insert the latch bur into the head all the way to engage the top end of the bur into the crescent hole of the rotor. Swing back the latch spring to engage the latch into the groove in the bur.

CAUTION

- Never use bent, off-centered or damaged burs.
- Clean the bur shank before use. If grease or foreign particles get stuck on the spindle by a dirty bur, it may cause vibration, weak chucking power, or other abnormalities.
- Always insert a bur all the way into the chuck. This will prevent "BUR-WALK-OUT", and/or damage to the ball bearing.
- Do not leave the handpiece without a bur or bur blank securely chucked.
- Do not turn the bur lock ring while the handpiece is rotating. (EX-6B)
- 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. (EX-6B)
- Make sure if the Black Dots of the Bur Lock Ring align after fixing the bur. Rotating the bur in an improper position may cause heat generation, which results in burns. (EX-6B)

7. Lubrication

Lubrication is required at least once a day. Use of PANA-SPRAY Plus / PANA-SPRAY or NSK Air Turbine Oil (Cat. No.Z016-112) is recommended.

(1) EX-203C Air-motor

Disconnect the motor from the handpiece hose, and supply a few drops of Air Turbine Oil or PANA-SPRAY Plus / PANA-SPRAY for a few seconds into the drive air tube at the back end of the motor as shown in Fig.8.



Fig. 8

(2) EX-6B Straight Nosecone

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

- 1) Mount the E-type spray nozzle into the spray port.
- 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

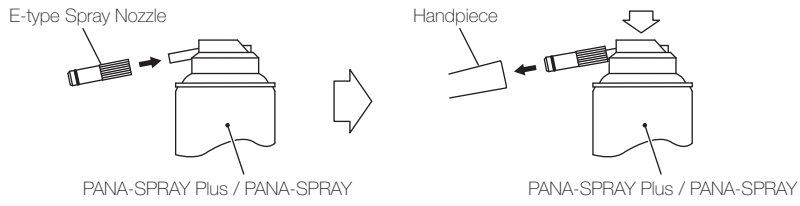


Fig. 9

(3) NAC-EC Contra Angle Handpiece

Loosen the union nut and separate the head from the sheath. Supply Air Turbine Oil to the places as shown by the arrows. (Fig.10)

When PANA-SPRAY Plus / PANA-SPRAY is used, lubricate as shown in Fig.9.

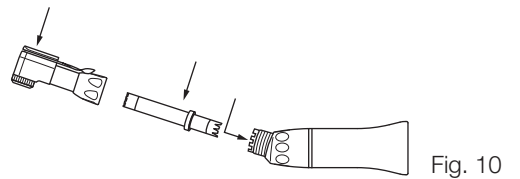


Fig. 10

⚠ 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 / PANA-SPRAY can upright.

8. Cleaning and Sterilization

The EX-203C, EX-6B and NAC-EC are autoclavable. Autoclave sterilization required first time you use and after each patient as noted below.

■ Autoclaving Procedure :

- 1) Wipe off dirt with alcohol-soaked cloth.
- 2) Lubricate with PANA-SPRAY Plus / PANA-SPRAY. (Ref.7. Lubrication)
- 3) Place into autoclaving pouch and seal it in accordance with instructions on 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 EN ISO17665-1.

⚠ CAUTION

- 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.
- Do not wipe with, or clean or immerse in, high acid water or sterilizing solutions.

9. Cartridge Replacement (NAC-EC)

- 1) Loosen the union nut and remove the head from the sheath.
- 2) Pull out the transmission gear assembly from the head. (Fig.11)
- 3) Place cap wrench on the head cap and turn counter-clockwise. Unscrew and separate the cap. (Fig.12)
- 4) Insert a bur blank or round rod into a hole from the latch spring end, and push out the cartridge.
- 5) Insert the new cartridge, with its pin aligned in the slot of the head. (Fig.13)
- 6) Reassemble in the reverse order.

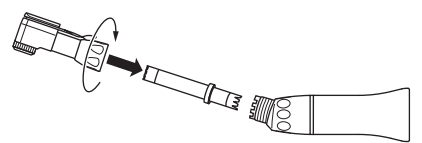


Fig. 11

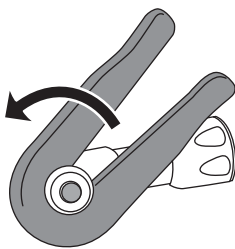


Fig. 12

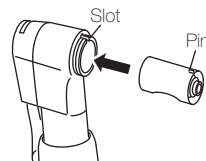


Fig. 13

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

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