



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

MADE IN JAPAN
OM-T0426E



Intended Use

This handpiece is designed to be used by licensed professionals in the treatment of dental conditions.

CAUTION

- When operating this handpiece always consider the safety of the patient.
- Check for vibration, noise and overheating outside the patient's mouth before use. If any abnormalities are found stop using immediately and contact your dealer.
- Pressing the push-button while handpiece bur is in rotation will result in OVERHEATING of the handpiece head. Special caution must be exercised during use to keep the patient's cheek AWAY from the push-button of the headpiece. Contact with cheek tissue may cause burn injury.
- Over time the handpiece may become loud. If this occurs replace the cartridge using only genuine NSK replacements.
- Do not attempt to disassemble the handpiece or tamper with the mechanism.
- Use only genuine NSK replacement cartridge. Turbine and cartridge should not be rebuilt or recycled.

1. Specifications

Model	PAP-MU 5H	PAP-SU 5H
Head Type	Miniature	Standard
Connection Type	ISO9168 Type2 (5hole)	
Rotation Speed	380,000~450,000min ⁻¹	340,000~410,000min ⁻¹
Drive Air Pressure	0.18MPa(1.8kgf/cm ²)(26.1psi) - 0.22MPa(2.2kgf/cm ²)(31.9psi)	
Water Spray Type	Quattro Spray	
Chuck Type	Push Button Chuck	
Bur Type	ISO1797-1 Type3	
	Short Shank Bur / Standard Bur	Standard Bur
Min. Chucking Length	9.0 mm	10.5 mm
Max. Bur Length	21 mm	25 mm
Max. Working Part Diameter	Ø 2 mm	
Air Consumption (0.22Mpa/31.9 psi)	40±5NL/min(1.41±0.18cfm)	
Head Size (Diameter x Height)	Ø 10.6 mm X 12.4 mm	Ø 12.1mm X 13.3 mm
Water Pressure	0.08MPa(0.8kgf/cm ²)(11.6psi) - 0.20MPa(2.0kgf/cm ²)(29.0psi)	
Chip Air Pressure	0.10MPa(1.0kgf/cm ²)(14.5psi) - 0.25MPa(2.5kgf/cm ²)(36.2psi)	
Optic	Glass Rod	

2. Connecting / Disconnecting the Handpiece

- Connect
 - 1) Insert the handpiece into the hose connector.
 - 2) Tighten the Hose Nut. (Fig.1)
- Disconnect
 - 1) Loosen the Hose Nut and pull out the hose.

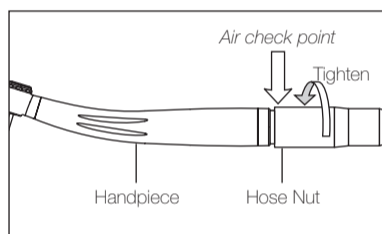


Fig. 1

CAUTION

This handpiece can connect with a hose with light and ISO Standard 5 hole.(Fig.2) If it connects with a hose with ISO Standard 4 hole, the light terminal will break and cause the handpiece to fail.



Fig. 2

Initial Setting - Service Engineer

Set the Air pressure at the location indicated in Fig. 1. The setting values are on the specification table. Do not exceed the recommended air pressure.

3. Mounting and Removing the Bur

- Mounting
 - 1) Press the push button and insert the bur into the chuck.
 - 2) Release the button.
- Removing
 - 1) Press the push button.
 - 2) Remove the bur.

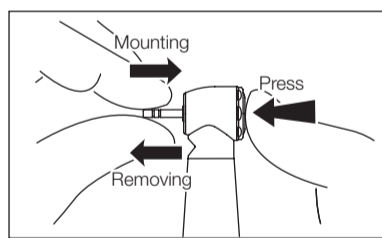


Fig. 3

CAUTION

- Use only ISO Standard burs. (Bur diameter Ø1.59 - Ø1.60 mm)
- Do not exceed the maximum speed specified by the bur manufacturer.
- DO NOT use bent, worn, damaged or non-concentric burs. This may cause the cartridge to prematurely fail.
- Keep bur shank clean. Uncleaned shank may allow debris to build up inside chuck causing weak bur retention.
- Insert the bur all the way into the chuck until it stops with the push-button fully pressed. Do not use short shank burs in a Standard Head handpiece.

4. Lubrication

Flush and lubricate the handpiece with PANA SPRAY Plus, PANA SPRAY or Care3 Plus after each use and/or before autoclaving.

■ PANA SPRAY Plus/PANA SPRAY

- 1) Mount the Arrow-Head Spray Nozzle into the spray port.
- 2) Insert the Arrow-Head Spray Nozzle in the drive air tube of the handpiece and spray for approximately 2-3 seconds.

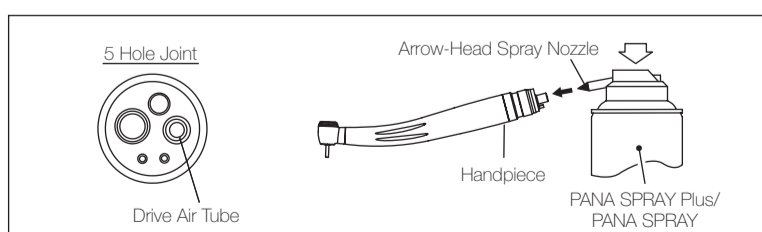


Fig. 4

CAUTION

- Be sure to hold the handpiece firmly to prevent the handpiece from being dropped from the spray pressure when lubricating.
- Continue to spray until oil runs clear from the head of the handpiece.
- Hold the spray can upright.

Care3 Plus

Follow the directions supplied with the Care 3 plus system for proper care using this system.



Fig. 5

5. Sterilization

Autoclave sterilization is the only recommended sterilization method. Sterilization is required prior to first use and after each patient as noted below.

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 with PANA SPRAY Plus/PANA SPRAY/Care3 Plus. Refer to 4. Lubrication.
- 3) Insert into an autoclave pouch. Seal the pouch.
- 4) Autoclavable under the conditions below.
Autoclave for more than 20 min. at 121°C, or 15 min. at 132°C, or 3 min. at 134°C.
- 5) Keep the handpiece in the autoclave pouch to keep it clean until needed.

★ NSK recommends Class B sterilizers as stated in EN13060.

★ The recommended sterilization procedures require the use of FDA-cleared sterilizers, sterilization trays, sterilization wraps, biological indicators, chemical indicators, and other sterilization accessories labeled for the sterilization cycle recommended.

CAUTION

- Do not autoclave the handpiece bagged together with other instruments from which chemicals are not sufficiently cleaned. This is to avoid discoloration and/or damage to the plating of the handpiece.
- Do not wash, soak, or wipe off the handpiece in solutions with high oxidation potential (strong acid, super acid solution) or sterilized solution.

6. Cleaning of the Glass Rod Optic End

Clean the glass rod optic entry point and exit point (Fig.6) with an alcohol-immersed cotton swab. Remove all debris and oil.

CAUTION

Do not use a sharp tool to clean the glass rod optic. It could damage the glass and reduce the light transmission. If illumination becomes dim contact dealer.

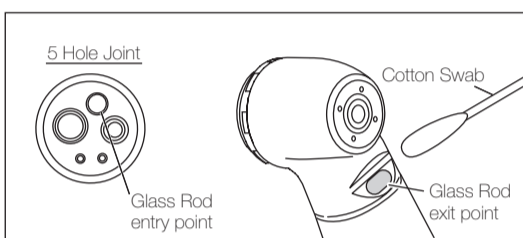


Fig. 6

7. Changing Turbine Cartridge

- 1) Mount a dummy bur in the chuck.
- 2) Remove the Head Cap using the supplied Head Cap Wrench.
- 3) Push the dummy bur to remove Cartridge.
- 4) Clean the head interior.
- 5) Align the Alignment Pin with the alignment slot and insert Cartridge.
- 6) Replace the Head Cap. (Fig. 7)

★ Replacement Cartridge :SX-MU03 (for Miniature head) Order Code P1001250
SX-SU03 (for Standard head) Order Code P1002250

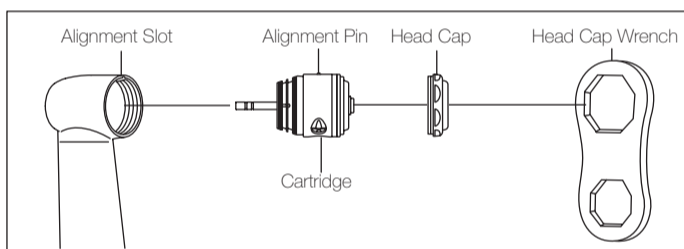


Fig. 7

CAUTION

Make sure that two O-rings (Fig. 8) are in place on the Cartridge.

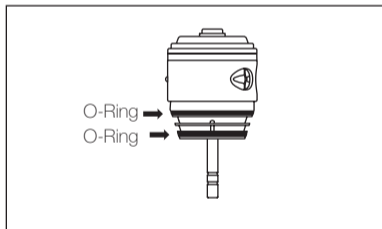


Fig. 8

8. Cleaning of Spray Ports

When Spray Ports are clogged, or spray does not exit evenly from each port clean the ports as follows:

- 1) Remove the Cartridge.
- 2) Insert the Cleaning Wire straight into the Spray Port. (Fig. 9)
- 3) Remove the debris.

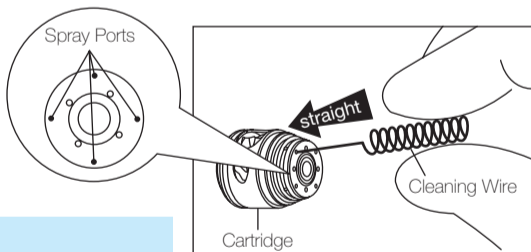


Fig. 9

CAUTION

Do not blow air into Clean Head Hole.

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

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Specifications are subject to change without notice.

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