

Ti-Max

Ti50L/Ti50LA/Ti50
Ti55L/Ti55LA/Ti55

135°C : AUTOCLAVABLE

OPERATION MANUAL

OM-C0177E Rev.A

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

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

Caution

- When operating the handpiece always consider the safety of the patient.
- This handpiece is designed only for dental clinical use.
- Should the handpiece function abnormally, cease operation immediately and return the handpiece to the dealer for repair.
- Do not connect or disconnect the handpiece until the drive motor has completely stopped.
- Do not attempt to disassemble the handpiece nor tamper with the mechanism.
- Do not drop the handpiece.
- Always lubricate the handpiece after use, and before autoclaving.

1. Specifications

Model	Ti50L/Ti50LA	Ti50	Ti55L/Ti55LA	Ti55
Gear Ratio	4 : 1 Reduction	4 : 1 Reduction	4 : 1 Reduction	4 : 1 Reduction
Allowable Max. Speed	40,000min ⁻¹ (rpm)	40,000min ⁻¹ (rpm)	40,000min ⁻¹ (rpm)	40,000min ⁻¹ (rpm)
Tip lock mechanism	—	—	○	○
Motion	Vertical Reciprocating Stroke Length 1.4mm	Vertical Reciprocating Stroke Length 1.4mm	Vertical Reciprocating Stroke Length 1.4mm	Vertical Reciprocating Stroke Length 1.4mm
Spray Type	Single Spray	Single Spray	Single Spray	Single Spray
Optics	Glass Rod Optic	—	Glass Rod Optic	—

[Ti55L/Ti55LA/Ti55 sets include Profin Tips from Dentatus Sweden.

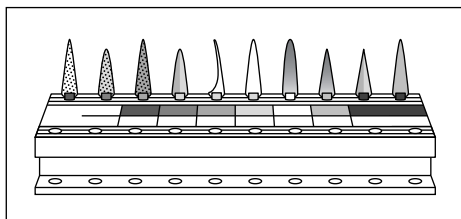


Fig. 1

- 10 piece Profin Tip set and stand included.

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. This procedure will also align the light receptacle and allow you to use illumination if your handpiece and motor are equipped for illumination. (Ti50L, Ti50LA, Ti55L, Ti55LA) 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. Insertion and Removal of the Eva Tip or Profin Tip

(1) Tip Insertion

A) Eva Tip

Insert an Eva Tip into the head.

B) Profin Tip (Ti55L/Ti55LA/Ti55)

Insert a Profin Tip into the head. After adjusting the direction of the tip to the desired angle, push it firmly into the slit at the plunger of the head. (Fig. 2)

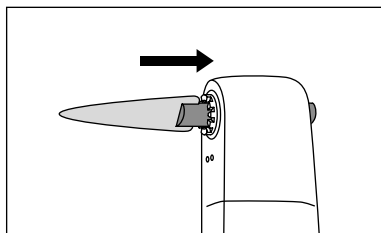


Fig. 2

(2) Removal of Tip

Push the tip out from the back of the head with your finger. Remove the tip with your finger. (Fig. 3)

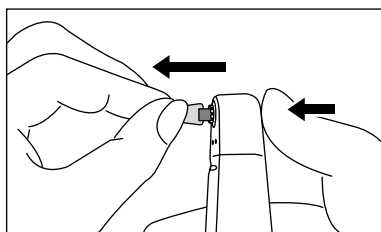


Fig. 3

4. Lubrication

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

n PANA SPRAY

- ① Push E-type spray nozzle attachment over the PANA 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.

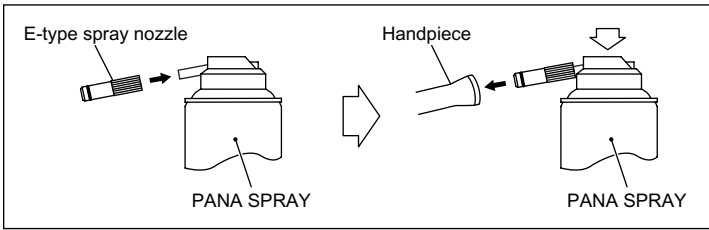


Fig. 4



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 head (for approx. 2 seconds).
- Keep the PANA SPRAY can upright.

n Care3 Plus

NSK Care3 Plus automatic handpiece cleaning and lubrication system

After connecting the handpiece to the correct adaptor, activate the Care3 System per the Care3 System instructions.

5. Cleaning and Sterilization



This handpiece can be washed via Thermo Disinfector.

Steam autoclave is recommended. Autoclave sterilization required 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. Refer to 4. Lubrication.
- ③ Insert into an autoclave pouch. Seal the pouch.
- ④ Autoclavable up to a 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.
[Performing sterilization according to our instruction has minimal effect on the instruments. Life span is generally determined by wear and damage due to use.



Caution

- Use the dry cycle only if you are certain the temperature will not exceed 135°C.
- Always place the handpiece in the center or upper shelf of the autoclave chamber, as the local temperature at the bottom of chamber could rise beyond the set value.
- Do not heat or cool the handpiece quickly. Rapid change in temperature could break the glass rod give abnormal strain to other metals.

6. Cleaning Glass Rod Optic End (except Ti50/Ti55)

In case the light had become dim, clean the glass rod optic end with an alcohol-soaked cotton swab. (Fig.5)



Caution

Do not use a pointed tool or sharp edges to clean the glass rod optic end. They may damage the mirror finish and reduce the light transmission efficiency. If the glass rod optic end has become damaged, send the handpiece to the NSK dealer for repair.

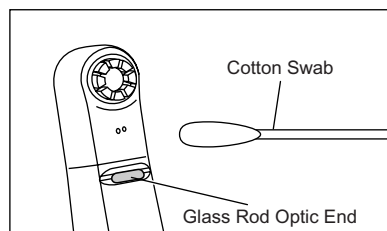


Fig. 5

7. Repair Service

For genuine NSK service and parts always return the handpiece to your NSK dealer.

※ Specifications may be changed without notice.



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