Automatic Handpiece Cleaning & Lubrication System





OPERATION MANUAL

OM-E0114E Rev.2

Thank you for purchasing the Care3. This product is designed to clean and lubricate the handpiece easily and surely. Read this Operation Manual carefully before use for operation instructions, care and maintenance. Keep this Operation Manual for future reference.

!\ SAFETY CAUTIONS

- **22** Read these safety precautions before use and operate the product properly.
- The indicators are to allow you to use the product safely and prevent danger and harm to you and others. These are classified by degree of danger, damage and seriousness. All indicators concern safety, and be sure to follow them.

Indications of Hazardous Conditions

Classification	Degree of Danger or Damage and Seriousness
⚠ DANGER	Explains an instruction where death or serious injury may occur.
⚠ WARNING	Explains an instruction where bodily injury or damage to device may occur.
⚠ CAUTION	Explains an instruction where possibility for minor to medium bodily injury or damage to device may exist.

- Do not install, use this product, or fill it with maintenance oil in room with a risk of explosion or near open flames.
- Do not install or use the product in direct sunlight or where the temperature exceeds 50°C (122°F).
- Do not use the product for other purposes than the maintenance (cleaning and lubrication) of handpieces described in this operation manual.
- Provide adequate ventilation periodically. If odors make you worried, immediately provide ventilation.

WARNING

- Do not handle the power cord with wet hands. Failure to do so may result in an electric shock.
- Be careful not to spill water onto the unit. Failure to do so may result in fire or electric shock due to a short-circuit.
- Do not disassemble or alter the unit. In case of service or repair, contact your dealer.
- If the unit smokes or a burning resin smells, immediately turn off the power switch and disconnect the power plug. Contact your dealer.
- Do not drop the unit. Place the unit on a flat surface.

(CAUTION

- Always autoclave handpieces after cleaned and lubricated with this product.
- Do not place the product in the direct sunlight. Place in an ambient temperature of 10-25°C (50-77°F) and a humidity of 25-70%RH.
- When installing the product, provide spaces of approx.5 cm around the unit.
- Place a collector such as a tray under the unit.
- Set the air pressure between 0.35-0.60 MPa (3.5-6.0 kgf/cm²) (50-85 psi).
- Do not set the air pressure below 0.35 MPa (3.5 kgf/cm²) (50 psi).
- Do not open the oil cap during operation. Open after the unit completely stops.
- When opening the oil cap in case of abnormal stop (opening the door or turning off the power switch during operation), wait for approx.5 seconds before opening cap.
- After use, immediately turn off the power switch and close the air supply.
- Air supply to this device needs to be Clean and Free From Moisture. Drain air compressor regularly. Moisture from the tank could mix in the Maintenance Oil and defeat the purpose of this device.
- Remove the air tube and the power cord if the unit will not be used for a long time.
- When storing the maintenance oil keep away from strong oxidizing agents, combustible materials, and strong acid chemicals.
- Purchase replacement parts such as maintenance oil (options) designated by NSK. Any parts

1. FEATURES

- Helps to perform uniform handpiece maintenance and lubrication.
- Three handpieces can be cleaned and lubricated simultaneously keeping your hands clean.
- Designed to automatically remove excess oil in the handpiece.
- Select the lubrication setting time from Short Mode, Long Mode and Extra Long Mode according to the handpiece.
- The built-in filters absorb oil mist during lubrication.
- · When the oil drops to a preset level, oil empty indicator lights.

2. SPECIFICATIONS

Model	NE141
Rated Voltage	120 V : 120 VAC 50/60 Hz
Nateu voltage	230 V : 230 VAC 50/60 Hz
Input Voltage	120 V : 10.8 VA
iliput voltage	230 V : 7.0 VA
Air Pressure	0.35-0.6MPa (3.5-6 kgf/cm²) (50-85 psi)
Tank Capacity	350 mL
Dimensions	W280 × D230 × H355 mm
Weight	7.0 Kg

3. NAMES OF EACH PART

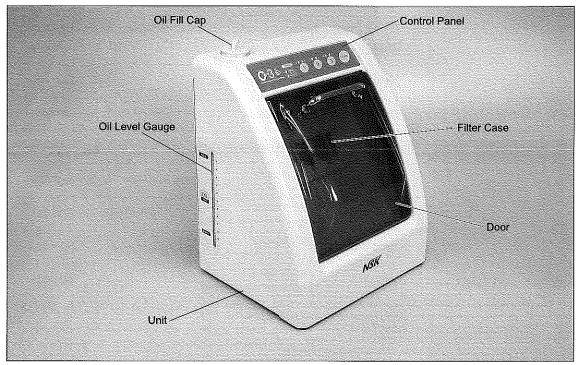


Fig. 1

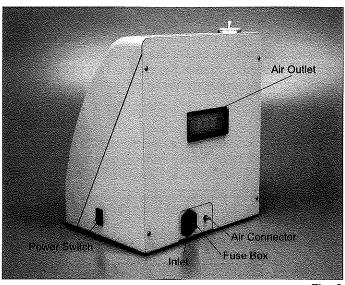


Fig. 2

Standard Accessories

The following accessories are supplied with each unit. If any of these accessories are not found, please contact your dealer.

	Power Cord	1 cord
	Oil Filter	2sets (One set installed in the unit)
F-1,	Door Gasket 2 pcs.	1 set
	Oil Supply Funnel with Filter	1 pc.
O _e	Air Tube	1set
	E-Type Adaptor	1 pc. (Installed in the unit)

Operation Manual ------ 1 sheet

4. INSTALLATION AND ASSEMBLY

(1) Fuse Rating

Refer to the table below and check that the power supply voltage fits the fuse rating. To check the fuse rating, remove the fuse box (see "10. CHANGING FUSES). (Fig. 3)

 Voltage	Rating
120 V	T800 mAL250 V
220 V / 240 V	T400 mAL250 V

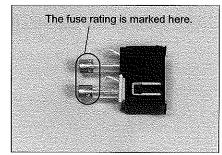


Fig. 3

(2) Connecting Air Tube

Insert the one-touch joint of the air tube into the air connector at the back of the unit until they click. (Fig. 4) Connect the Y type one-touch joint to the air source (air compressor) of the dental unit as shown in Fig. 5.

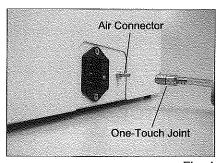


Fig. 4

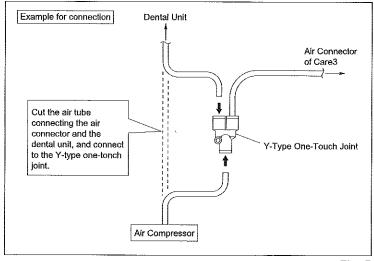


Fig. 5

- Use the product with the air pressure between 0.35-0.60 MPa (3.5-6.0 kgf/cm²) (50-85 psi).
- Do not set the air pressure below 0.35 MPa (3.5kgf/cm²) (50 psi).
- Do not twist or bend the air tube.
- If it is difficult to connect the air tube, contact your dealer.
- Air supply to this device needs to be Clean and Free From Moisture. Drain air compressor regularly. Moisture from the tank could mix in the Maintenance Oil and defeat the purpose of this device.

(3) Filling Maintenance Oil (Options)

Check that the filter of the funnel is clean. Remove the oil cap and fill with the funnel. (Fig. 6) Fill it to the "FULL" level, while checking the oil level gauge. After filling oil, screw the oil cap back on tight.

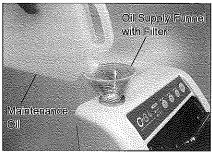


Fig. 6



DANGER -

Do not fill maintenance oil (options) in the room with a risk of an explosion or near open flames.



${/!} ackslash$ caution –

- Make sure, before pouring oil, that the filter of the funnel is free from debris to avoid clogging in the system.
- Do Not Fill Maintenance Oil Beyond the "FULL" level in order to avoid accidental oil leak. POUR SLOWLY.
- · Always securely tighten the oil cap of the unit.
- Do not remove the oil cap during operation. Remove it after the unit comes to a completely stops.
- Wait for 5 minutes when to remove the oil cap after an abnormal stop (opening the door or turning off the power switch during operation).
- Always use NSK recommended maintenance oil for the designed performance of the unit and the handpieces.

(4) Connecting Power Cord

Insert the power cord jack into the inlet at the back of the unit. (Fig. 7)

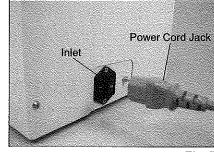
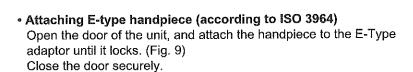


Fig. 7

5. OPERATION PROCEDURES

(1) Attaching Handpiece

Attaching air turbine handpiece (according to ISO 9168)
 Open the door of the unit, attach the handpiece to the port, and tighten the nut securely. (Fig. 8)
 Close the door securely.



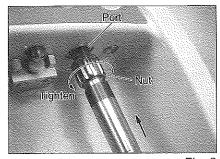


Fig. 8

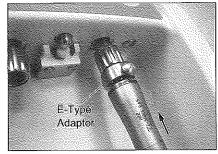


Fig. 9

Attaching Phatelus system handpiece
 Open the door of the unit, and attach the handpiece to the PTL adaptor (options) until it locks. (Fig. 10)
 Close the door securely.

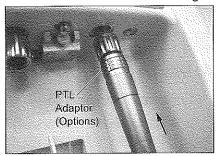


Fig. 10

(2) Cleaning and Lubricating

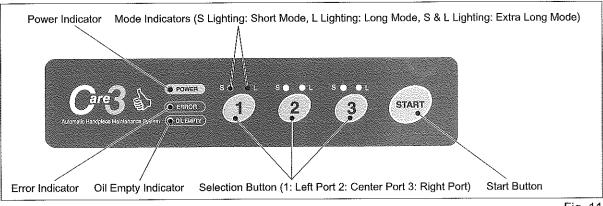


Fig. 11

- (1) Connect the power cord plug to the power supply. Turn on the power switch, and the power indicator will light.
- ② Press the selector button number of the corresponding handpiece. First push will select "S," Short mode, second push "L," Long mode, and the third push "S and L," Extra Long mode. Those modes are indicated by the S and L lights. The Extra Long mode, although the duration of 30 seconds is same as of Long mode, supplies larger amount of cleaner lubricant to properly clean and lubricate the reduction contra angle that has one or more sets of reduction gear train.
- ③ When two or more handpieces are mounted, select the right mode for each handpiece.
- ④ Press the start button, and the Care 3 automatically cleans and lubricates the handpieces. The mode indicator flushes during the cleaning and lubrication cycle.
- ⑤ When the cleaning and lubrication cycle is completed, the mode indicator turns on and the buzzer sounds to tell the completion of the cycle.

Mode	Handpiece	
Short Mode (About 25sec)	Air Turbine Handpiece	
Long Mode (About 30sec)	Contra Angle Handpiece	
Extra Long Mode (About 30sec)	Reduction Contra Angle Handpiece	

The figure in the parentheses, shows the total

 clean-lubricate-purge time.
 Certain handpieces may not be sufficiently cleaned and lubricated.

CAUTION

- Connect to the correct power supply: 120 VAC or 230 VAC.
- While the mode indicator does not light, the Care3 does not function.
- When the error indicator lights, make sure that the door is closed securely.
- · When the oil empty indicator lights, fill maintenance oil.
- Immediately after purchase or if you have not used the Care3 for a long time, repeat cleaning and lubrication approx, four or five times before use.

(3) Removing Handpiece

 Removing air turbine handpiece (according to ISO 9168) Open the door after the mode indicator lights again and cleaning and lubrication cycle has completely finished. Loosen the nut, and pull out the handpiece straight from the port. (Fig. 13)

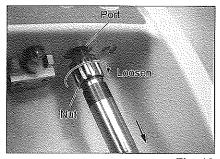


Fig. 13

 Removing E-type handpiece (according to ISO 3964) Open the door after the mode indicator lights again and cleaning and lubrication cycle has completely finished. Pull out the handpiece in axial direction while pressing the fixing release button of the E-type adaptor. (Fig. 14)



Fig. 14

 Removing Phatelus System Handpiece Open the door after the mode indicator lights again and cleaning and lubrication cycle has completely finished. Pull out the handpiece in axial direction while pulling up the detachable ring of the PTL adaptor (options). (Fig. 15)

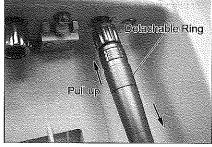


Fig. 15

6. REPLACING ADAPTOR

Loosen the nut to remove the adaptor. Insert another adaptor aligning the port shapes, and tighten the nut securely. (Fig. 16)

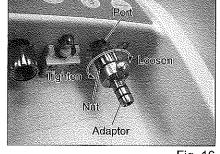


Fig. 16

7. DOOR

The door could be removed when cleaning or replacing the door gasket. To remove the door gasket, open the door, press the release button on left and remove the door. To mount the door, insert the pin into the right hole of the door and then insert the release button into the left hole until it locks. (Fig. 17)



CAUTION

Remove and/or mount the door on a flat and stable surface with holding the body firmly.

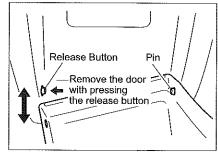


Fig. 17

8. REPLACING DOOR GASKET

Replace when the gaskets at the upper and bottom part of the door are worn or twisted. Remove the door (refer to 7. Door). Peel off the old gaskets. Clean the surface on which gasket is to be applied, with cloth soaked in alcohol. Place the new gasket in place, remove the back paper and apply pressure to firmly adhere it to the door. (Fig. 18)



CAUTION -

Dispose the old gasket as a medical waste according to the laws and regulations of your country.

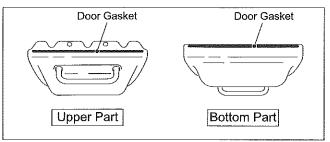


Fig. 18

9. REPLACING OIL FILTER

Remove used oil filters by pulling out the filter case frontward, and attach new oil filter as shown in Fig. 19. After attaching each filter, insert the oil filter case into its original place securely.

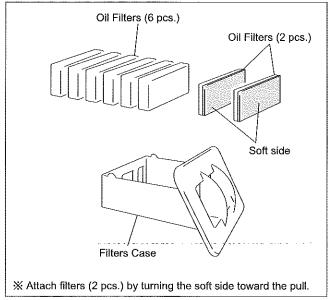


Fig. 19



CAUTION

- Replace oil filters approx. every 500 times of use.
- Dispose of used filters as medical waste according to the laws and regulations of your country.

10. CHANGING FUSES

Squeezing the upper and lower ratchets of the fuse box inward at the same time, pull out and remove the fuse. Replace the fuse with a new recommended fuse (see 4. (1) "Fuse Rating") and push it into the original position. (Fig. 20)

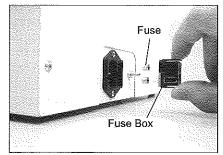


Fig. 20

11. TROUBLESHOOTING

When trouble is found, check the following items again before asking repairs. If none of these are applicable or the trouble is not remedied even after action has been taken, a failure of this product is suspected. Contact your dealer.

Trouble Probable Cause and Check Solution			
	Is the power cord plug inserted into the outlet?	Insert the power cord plug into the outlet.	
The power does not turn on.	Is the power cord jack inserted into the inlet	Insert the power cord jack into the inlet.	

	Has the fuse burned?	Replace the fuse with recommended one.
	Does the mode indicator light?	Press the corresponding selection button to light mode indicator.
	Is the door open? (Does the error indicator light?)	Close the door securely.
The unit does not clean and lubricate.	Does the oil empty indicator light?	Supply the designated maintenance oil.
	Remove the air tube, press all three selection buttons, and press start button, Does the unit produce an operating sound? (not a buzzar)	If the unit produces an operating sound, it has no problem. Check the air tube or the air supply. If the unit produces no operating sound, it is in failure. Contact your dealer.
	Is the air tube connected to the air connector securely?	Connect the air tube to the air connector securely.
The unit does not lubricate and clean efficiently.	Is the air pressure set within the specified range?	Set the air pressure between 0.35-0.6 MPa (3.5-6.0 kgf/cm²) (50-85 psi).
	Is the mode set at the Short Mode?	Set the mode at the Extra Long Mode.
	Is the handpiece connected securely?	Connect the handpiece securely.

12. OPTIONS

Product Name	Product No.	Product Name	Product No.
Maintenance Oil: 1 bottle (1L)	Z016-117	E-Type Adaptor	U433-035
Maintenance Oil Set: 6-bottle pack	Y900-138	PTL Adaptor	Z257-010
Oil Filter: 1 set	U433-039	QD Adaptor	Z257-011
Oil Filter Set: 6 pack	Y900-092	B2/M4 Adaptor	Т904
Oill Absorbent Sheet: 10 sheets	U433-135	KV Adaptor (For KaVo®MULTIflex® Coupling)	Z257-020
Oil Absorbent Sheet Set (100-sheet pack)	Y900-093	WH Adaptor (For W&H®Roto Quick® Coupling)	Z257-021
Oil Supply Funnel with Filter (1-piece pack)	U433-090	BA Adaptor (For Bien-Air®Unifix® Coupling)	Z257-022
Door Gasket 2 pcs.	Y900-117	SR Adaptor (For Sirona® Quick Coupling)	Z257-023

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 Check with the dealer for the adapters to mount other manufacturers' handpieces.

13. WARRANTY

Manufacturer warrants its products to the original purchaser against defects in material and workmanship under normal practices of installation, use and servicing. Maintenance oil, Oil Filter, Oil Absorbent Sheet etc. are consumable components, and are not covered by this warranty. In case the product fails within 30 days from the date of installation, immediately report with the proof of your purchase to the dealer you purchased from.

X Specifications may be changed without notice.



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