

The NSK logo is displayed in a bold, blue, italicized sans-serif font.

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

# Contra Angled Handpiece

S·Max **M**

M15L M15  
M25L M25  
M95L M95

S-Max MC

**MADE IN JAPAN**

OM-C0429E 001



Powerful Partners®

## Intended to use

The handpiece is designed only for clinical dental treatment 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 handpiece immediately and contact your authorized dealer.
- Do not attempt to disassemble the handpiece or tamper with the mechanism.
- Do not connect or disconnect the bur and/or handpiece until the motor has completely stopped.
- Do not use bent, damaged or sub-standard burs. This may cause shank bend or brake even within the recommended speed.
- Always keep bur shanks clean. Dirt or debris in a chuck could cause poor bur concentricity or low chuck retention force.
- Do not use the bur other than NSK recommended and do not exceed the drive motor speed recommended the bur manufacturers.
- Always operate with water spray. Failure to do so may result in OVERHEATING.



## CAUTION

- Do not wipe with, or clean or immerse in, high acid water or sterilizing solutions.
- Perform periodical maintenance check.
- Do not overpressure to the handpiece and treatment area.

### M15L/M15,M25L/M25

Never perform PMTC (operation to give heavy torque by a low speed rotation) which it used rubber cap or brush. It may reason for the malfunction or stop rotation by less torque. Special Reduction Contra Angle Handpiece is required for the PMTC. However, if the micromotor has a function for the root canal explanation, you can perform it.

### M95L/M95

- Do not use long surgical burs. Do not use burs longer than 26mm.
- Entering foreign object into gear or inside of handpiece head may cause burn injury.
- Wear protection glass and dust mask for your health and safety.
- Depressing the push-button while the handpiece is rotating will result in OVERHEATING of the handpiece head. Special caution must be exercised during use to keep cheek tissue AWAY from the push-button of the handpiece. Contact with cheek tissue may cause the push-button to depress and burn injury to the patient may occur.
- Even if it does irrigation during operation, bearing is worn and it may overheat or noise. Ask repair for your dealer.

# 1. Mounting/Removing the Handpiece and Motor

## 1) Mounting

Align the handpiece to the Motor and push together. For M15I,M25L,M95L, Locate the handpiece and alignment pin straight into positioning of the motor.

## 2) Removing

Hold the motor and the handpiece, and pull off carefully, in a straight line.

# 2. Check before treatment

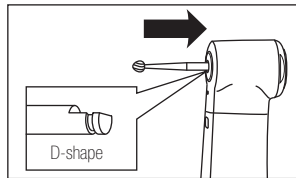
Check that the Head Cap is firmly tightened. Also check for handpiece vibration, noise and overheating. If any abnormalities are found do not use the handpiece and contact your Authorised NSK Dealer.

### 3. Connecting/ Disconnecting the Bur

#### (1) Connecting

##### a) M15L,M15,M25L,M25 (Contra Angled Bur)

- 1) Mount handpiece and Micromotor.
- 2) Insert the bur into the head and turn it slightly.(If bur and head in right position, bur is all the way seated in the head)
- 3) Insert the bur into the head until it click. (Fig. 1)

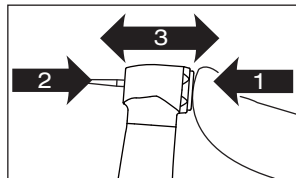


\*M15L

Fig. 1

##### b) M95L,M95 (FG bur)

- 1) Mount handpiece and Micromotor.
- 2) Depressing the pushbutton and insert the bur into the chuck. (Fig. 2, ←1, →2)
- 3) Make sure it inserted firmly till the end of the head. Do not push the Push Button. (Fig. 2, ↔3)



\*M95L

Fig. 2



## CAUTION

If the bur turn and it can not match the D-shape area, connect the motor then connect it again. (Fig. 1)

### (2) Removing

Press the button and pull the bur from the head. (Fig. 3)

## 4. Maintenance

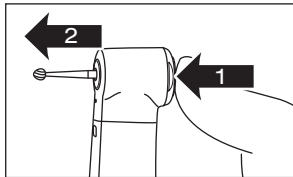
Refer to the Maintenance Guide **OM-Z0135E**.



This handpiece can be cleaned and disinfected with a Thermo-Disinfector.



This handpiece can be autoclaved up to Max.135°C.



\*M15L

Fig. 3

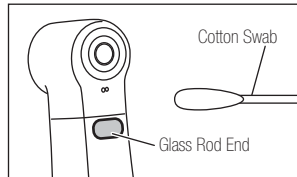
## 5. Cleaning the Cellular Glass Optic Rod (M15L,M25L,M95L)

Wipe clean the Cellular Glass Optic Rod entry point and exit point with an alcohol-immersed cotton swab. Remove all debris and oil. (Fig. 4)



### CAUTION

Do not use a sharp tool to clean the Cellular Glass Optic Rod. It could damage the glass and reduce the light transmission. If illumination becomes dim contact your dealer.



\*M15L

Fig. 4

## 6. Servicing

Exclusive part is necessary for cartridge exchange. If you need service for those handpieces, contact your dealer.

ENGLISH

## Specification

Model		M15L	M15	M25L	M25	M95L	M95
Gear Ratio		4:1 Reduction			1:1		1:5 Increase
Max. Rotation Speed (Motor)		40.000min <sup>-1</sup> (rpm)					
Max. Rotation Speed (Bur)		10,000min <sup>-1</sup> (rpm)		40,000min <sup>-1</sup> (rpm)		200,000min <sup>-1</sup> (rpm)	
Irrigation		Internal Spray					
Spray		Single Water Spray				Quattro Water Spray	
Chuck		Push Button Chuck					
Optic		Glass Rod Optic	-	Glass Rod Optic	-	Glass Rod Optic	-
B U R	Type	Ø2.35 Contra Angled Bur				Standard FG Bur	
	Max. Bur Length	22.5 mm				25 mm (Recommended 19.0mm)	
	Bur fixing Length	11.6 mm				11.6 mm	
	Max. Working Part Diameter	Ø4.0mm				Ø2.0mm	



 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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