

LOW SPEED HANDPIECE

OPERATION MANUAL

Before using the products, please read the users Manual carefully and follow the operation procedures strictly.

General Cautions

- Do not drop nor hit the handpiece against hard object.
- Do not disassemble the handpiece unauthorized.

Cautions on Operation

- Do not turn the bur lock ring while the handpiece is rotating.
- 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. It may become impossible to separate the motor and handpiece.
- Make sure that the bur is securely locked in the chuck before each use. Improper mounting of the bur could cause the bur to spin out during rotation and endanger anyone in the vicinity.
- Do not use bent, Off-centered, deformed, damaged, nor non-iso standard burs.
- Use clean bur. Dirt on the shank may lodge in the chuck in time and could cause poor concentricity of the bur or poor chucking power.
- Always mount a bur blank or bur in the chuck.

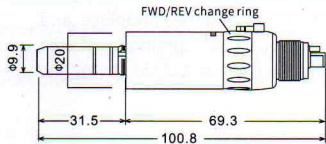
Cautions on Lubrication

- Lubricate the handpiece with lubricant after each use and/or before autoclaving.
- Mount the E-type nozzle onto the lubricant nozzle.
- Hold lubricant can upright.
- Hold the handpiece firmly while activation lubricant. The handpiece, otherwise, may be ejected from the spray nozzle by the spray pressure.
- Supply lubricant until it comes out of the handpiece nose (for approx. 2 seconds).
- Do not wipe with, or clean or immerse in, high acid water or sterilizing Solutions.

Features

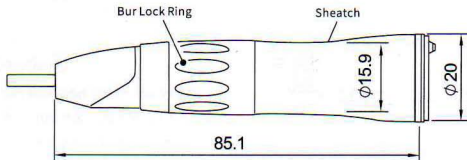
- The patented CLEAN - HEAD system in the handpiece nose prevents invasion of saliva, blood, and other contaminants into the handpiece.
- The handpiece is manufactured to the ISO standard. It is readily mountable to any manufacturer's ISO internal coolant airmotor or micromotor.
- The technology minimized vibration under cutting, and improved work accuracy.
- Autoclavable up to 134°C.

Specifications



Drive Air [MPa(kgf/cm ²)]	Speed [min ⁻¹ (rpm)]	Air Consumption [NL/min]
0.25(2.5)	22,000	42
0.3(3.0)	25,000	51
0.4(4.0)	27,000	72

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



Max.Allowble speed:40,000min(rpm)

Applicable Instrument:2.34mm \pm 0.01

Connecting/disconnecting the motor and the handpiece

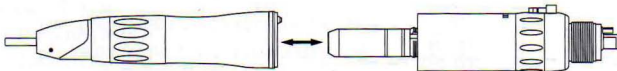
To connect the motor and the handpiece, align the positioning marks of the motor and the handpiece, and insert straightly. This procedure will also align the light receptacle and allow you to use illumination if your handpiece and motor are equipped for illumination. When disconnect, hold the front part of the motor and the back part of the handpiece, and pull out straightly.

(1) Mounting the Attachment

Insert the E-type attachment into the motor all the way until clicks to stop.

(2) Removing the Attachment

Simply pull out the attachment from the motor..



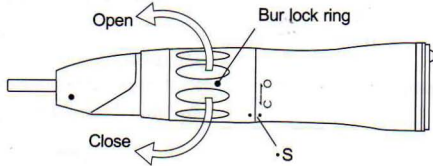
Caution:

Do not connect or disconnect the handpiece until the motor has completely stopped.

Changing Burs

To remove the bur, turn the bur lock ring in the direction of mark [O] until it clicks.

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 Os(*See the picture below)line up.



⚠ Caution:

- Do not use bent, damaged, or sub-standard burs.
- Always mount the bur or bur blank even when the handpiece is not in use.
- Make sure if the Os of the bur lock ring line up after fixing the bur.
- Rotating the bur in an improper position may cause heat generation, which results in burns.

Instructions for changing burs

1. mounting & removing tools

A. Mounting & removing burs

(1) Latch type contra angle

Mounting:

- i) Swing the Latch Plate to open the chuck.
- ii) Insert the latch bur.
- iii) Swing the Latch Plate back to closed position.

Removing:

Swing the Latch Plate to open position and pull the bur out.

(2) Push button contra angle

Mounting:

- i) press the cap and insert the bur
- ii) loose the cap and pull the bur to ensure it is firmly mounted.

Removing:

- i) press the cap and insert the bur.

B. Mounting & removing files

① Engine file

- To mount file or reamer while pressing the push button, align shapes of the back end of file and the hole of the head shaft and insert file all the way, and then stop pressing the button (Fig.1)
- To mount prophylactic cup or brush for polishing. align shapes of the back end of the file and the hole of the head shaft, and push file firmly. (Fig.2)

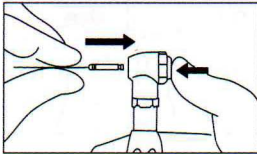


Fig.1

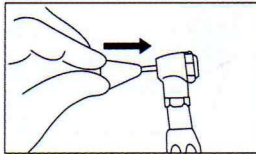


Fig.2

② Hand file

- Push the push button to open the chuck(Fig.3)
- insert the instrument handle into the chuck(Fig.4)and release the button

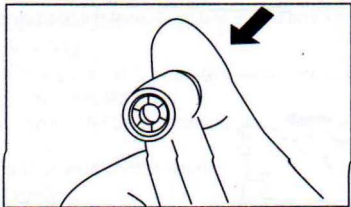


Fig.2

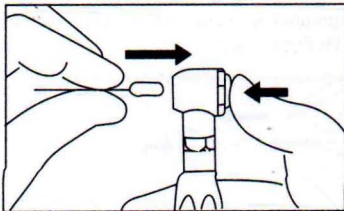


Fig.4

Removing:

Push the push button with a thumb, and the file is removed.

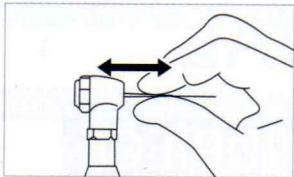


Fig.5



Caution:

Make sure the file is mounted firmly by pulling before use.(Fig.5).

EXTERNAL

LOW SPEED HANDPIECE

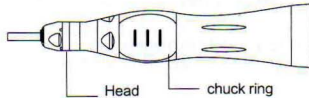


AUTOCLAVABLE

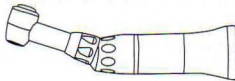
Main structure

This product is consist of straight handpiece, contra angle and air motor.

(1) Straight handpiece
(bur shank dimension: $\Phi 2.35$)



(2) contra angle
(bur shank dimension: $\Phi 2.35$)



(3) air motor



Figure. 1

Instruction for use

1. Mounting/removing the handpiece and motor



Figure.2

Mounting:

Insert straight handpiece(contra angle)into air motor directly.

Removing:

Hold the air motor tightly and pull the straight handpiece (contra angle) forward carefully to disconnect the handpiece.

2. Forward and reverse switch

① Forward

Turn the switch to F side.(see figure.3).

② Reverse:

Turn the switch to R side.(see figure.4).

③ When the switch is in the middle of F and B (see figure.5). air motor could be temporarily stopped.

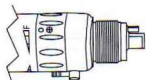


Figure.3

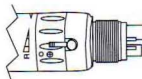


Figure.4

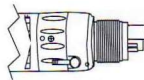


Figure.5

3.Irrigation

When water is needed. please connect the plastic tube with the water outlet of air motor. and connect the other end of the plastic tube with the irrigation tip. As the plastic tube is little bit long, please cut the tube according to yoursituation(see figure.6).

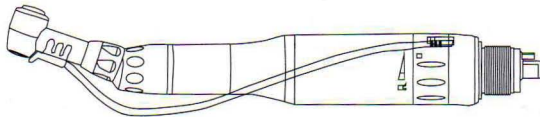


Figure.6

4.Connecting/disconnecting bur

① Forward

In order to disconnect the bur, turn the chuck ring to the right until you hear a “click” sound. When connecting the bur, turn the chuck ring to the left until you hear a “click” sound. Then, the bur is locked. (see figure.7).

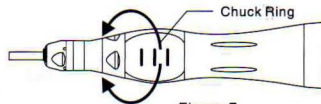


Figure.7

② Push button contra angle

a) Connecting the bur: press the button with your thumb; put the bur inside the head, and turn left or right to match the notch with the hold at the end of the spindle. Put the bur to the bottom and lock it. (See figure.8)

b) Disconnecting the bur: press the button with thumb, and disconnect the bur. (see figure.9)

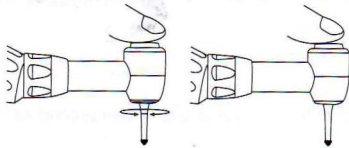


Figure.8

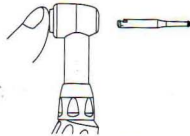


Figure.9

③ Latch type contra angle

a)connecting the bur: Swing the latch, put the bur inside the head and make sure the notch of the bur match with corresponding part of the spindle. Then, swing the latch to the original position.

b)disconnecting the bur: Swing the latch to unlock the bur, and then take out the bur.

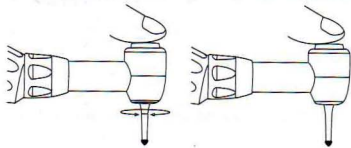


Figure.8

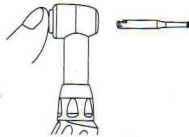


Figure.9

③ Latch type contra angle

a)connecting the bur: Swing the latch, put the bur inside the head and make sure the notch of the bur match with corresponding part of the spindle. Then, swing the latch to the original position.

b)disconnecting the bur: Swing the latch to unlock the bur, and then take out the bur.