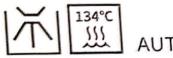
LOW SPEED HANDPIECE OPERATION MANUAL

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

INTERNAL

LOW SPEED HANDPIECE



AUTOCLAVABLE

General Cautions

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

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.

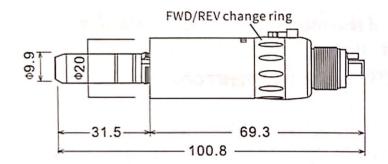
Cautions on Lubrication

- · 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 be 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

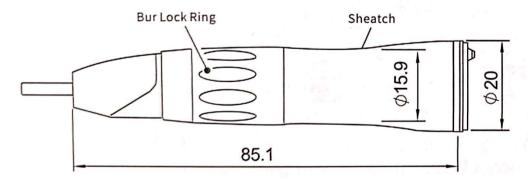
- · The patented CLEAN HEAD system in the handpiece nose prevents invasion of saliva, blood, and other contaminants into the handpiece.
- The handpiece is manufactured to the ISO standard. It is readily mountable to any manufacturer's Iso internal coolant airmotor or micromotor.
- · The technology minimized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

Specifications



Drieve Air[MPa(kgf/cm²)]	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.

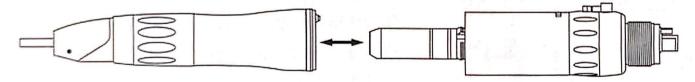


Max.Allowble speed:40,000min(rpm)
Applicable Instrument:2.34mm±0.01

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..



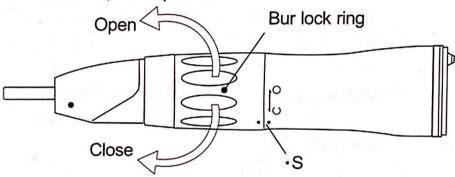
Caution:

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.



A 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.
- (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:

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

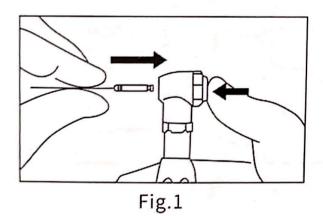
Removing:

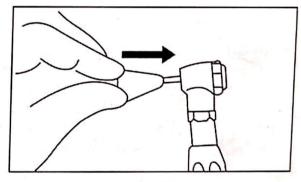
i) press the cap and insert the bur.

B.Mounting & removing files

1 Engine file

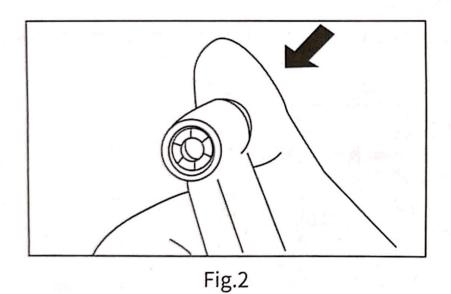
- · To mount file or reamer while pressing the push button, align shapes of the back end of file and the hole of the head shaft and insert file all the way, and then stop pressingthebutton(Fig.1)
- · To mount prophy cup or brush for polishing. align shapes of the back end of tfile and the hole of the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

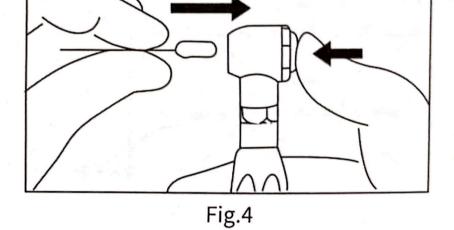




② Hand file

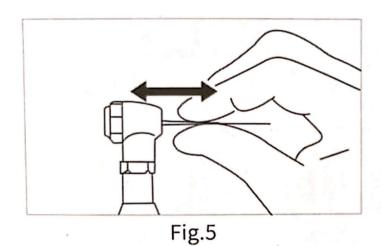
- · Push the push button to open the chuck(Fig.3)
- · insert the instrument handle into the chuck(Fig.4) and release the button





Removing:

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



▲ Caution:

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

EXTERNAL

LOW SPEED HANDPIECE



Main structure

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

Application

For cutting, drilling and polishing with tools in dental treatment.

Contraindication

N/A.

Alert and suggestion description

- 1. This product is specialized for dental treatment. Do not use it for other purpose.
- 2. This product shall be used by dentist or other professional personnel only. Be cautions of safety.
- 3. Unauthorized dismantling or reconstruction is prohibited.

▲ Caution:

- · Do not load or unload the air motor before it is completely stopped.
- · Do not use bent, damaged or sub-standard burs. This may cause shank bend or broken. It will be impossible to take out the bur when the chuck is damaged.
- ·Be sure to insert the bur to the bottom of the chuck to prevent the bur from falling off and causing additional attrition to bearing because of unbalan cedcartridge load.
- · In case of cutting with strong vibration, for instance, cutting crown, dentist shall check the chuck freguently. in order to prevent the bur from falling off.
- · Always keep bur shanks clean. Dirt or debris in a chuck could cause poor bur concentricity or low chuck retention force.
- ·When using burs, please confirm its speed range and size is fit for the handpiece.

- Do not swing the latch when the handpiece is rotating.
- ·When the latch is open or the handpiece is unloaded, do not drive the air motor. Otherwise, it may lead tounable to unload air motor or overheating.
- ·When the bur is fixed, please confirm the two marks on chuck ring match up with each other. Do not operate the handpiece when the marks are mismatched. Otherwise, it could cause overheating.
- · Pull the bur to confirm the bur is locked before operation.
- · Check for vibration. noise and overheatina outside the patient's oral cavity before use. If any abnormalities are found, stop using the handpiece immediately.
- · If any abnormalities are found at any time, stop using the handpiece immediately and contact authorized dealer.

- · Damaged cartridge could produce huge noise, which could cause hearing impairment.
- · Please drain the compressor tank every day before using handpiece, in order to keep it in good operation.
- · Put a burora shankinto the handpiece, when it is not used.
- ·When lubricating the handle, please hold it tightly to prevent it from bursting out.
- ·When lubricating the handle, please stop spraying when seeing lubricant comes out from the head.
- · Keep the bottle upright when spraying lubricant into the handpiece.
- · It is better to disinfect the handpiece in autoclave sterilizer.
- ·The bottom floor of the autoclave sterilizer has the highest temperature which may exceed the limited temperature. Thus, the product shall be put in the middle or upper floor.

- ·When there is drug attachment on the handpiece surface or instrument tray, handpiece coating may be peeled and turn black after sterilization. Please clean the drug attachment before sterilization.
- ·The thread of contra angle is extremely fine, please don't screw it with wrench from the beginning, in order to protect the thread.

instruction of figure, symbol and abbreviation on medical device label



Attention!



Sterilization!



stated sterilization temperature

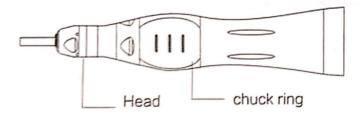
Main structure

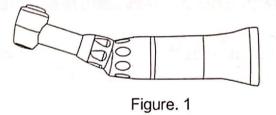
This product is consist of straight handpiece, contra angle and air motor.

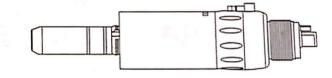
(1) Straight handpiece(bur shank dimension: Φ2.35)

(2) contra angle (bur shank dimension: Φ2.35)

(3) air motor

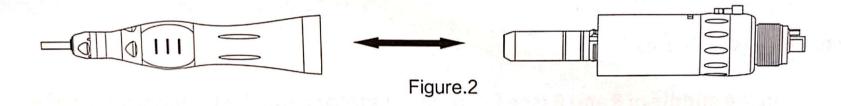






Instruction for use

1.Mounting/removing the handpieceand motor



Mounting:

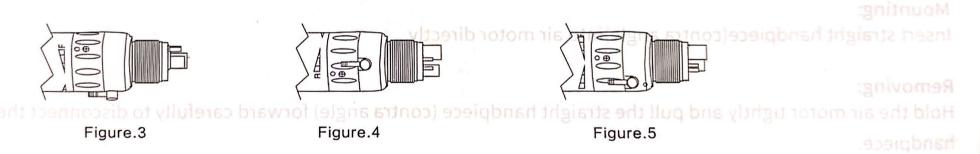
Insert straight handpiece(contra angle)into air motor directly.

Removing:

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

2. Forward and reverses witch

- ① Forward Turn the switch to F side.(see figure.3).
- ② Reverse: Turn the switch to Rside.(see figure.4).
- ③ When the switch is in the middle of F and B (see ficure.5). air motor could be temporarily stopped.



1. Mounting/removing the handpieceand motor

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).

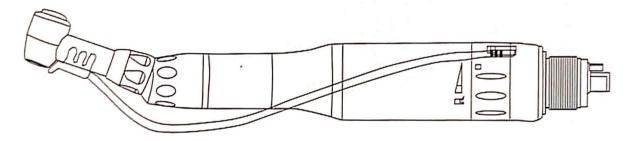
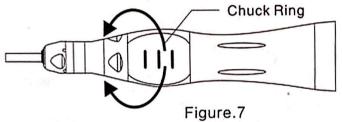


Figure.6

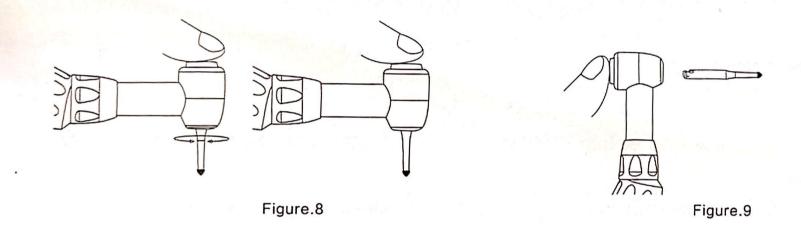
4. Connecting/disconnecting bur

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 islocked. (see 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)



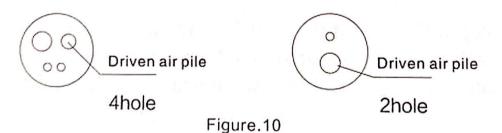
3 Latch type contra angle

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.

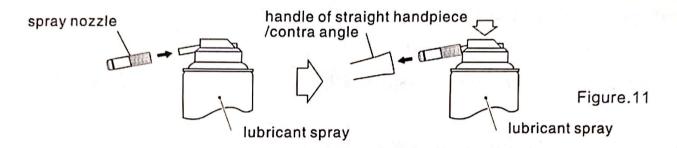
Maintenance

- 1. Handpiece maintenance
- 1) air motor
- a) Afterdaily use, the handpiece shall be lubricated with spray. At least spraying one to two second each time, before sterilization.
- b) Wayof lubrication: Connect the spray nozzle to the driven air pile of air motor (see figure.10), and put several drops of low speed handpiece lubricant.



② Straight handpiece/contra angle

Screw the spray nozzle into the lubricant outlet of the bottle; take off the bur (see figure.11); insert the spray nozzle into the bottom of the handpiece, and spray for at least two seconds.



unscrew the middle part of contra angle and take out the middle gear (see figure.12). Spray lubricant to the point indicated by arrow. (swing the latch aside when spray lubricant to the head of latch type

Figure.12

contra angle.)

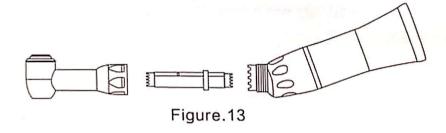
2. Sterilization

Sterilization must be done after each operation. Do not immerse the handpiece in corrosive liquid.

- ① Clean the dirt or debris on the handpiece, and wipe it with alcohol cotton ball.
- ② Remove the handpiece and sprav lubricant(see "maintenance").
- 3 Pack the handpiece with sterilization wrap and mark it.
- 4 Sterilize the handpiece in autoclave sterilizer (not exceed 134°C).20 minutes for 121°C, and 15 minutes for 132°C.
- ⑤ After sterilization, do not open the sterilized packing before next operation.

3. Cartridge replacement

- ① unscrew the middle part of contra angle(see figure.13) and remove the middle gear.
- 2 unscrew the head cap with wrench(see figure.14)



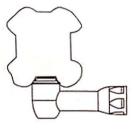


Figure.14

- ③ Push the cartridge with the rear end of bur and take it out.if there is any dirt or debris, spray lubricant and wipe it.
- 4 Align the ball plunger of the new cartridge with the slot in the upper part of the head carvity, and put the cartridge into the head(see figure.15).

