

Users' Manual for Dental High-speed Handpiece

Autoclavable up to max 135°C

The manual can apply to these models as follows: M, T, S, SU, TU, TUQ, TP, TUP, TL, TULP, TUQLP. Before using the products, please read the user guide carefully and follow the operational procedures strictly and ensure that the product is maintained correctly

Characteristics of products

- 1.The handle is slide-proof, comfortable and easy to clean
- 2.Handpiece and adapters can bear steam disinfection at 135°C
- 3.The head angle can provide better operational vision and angle so that work efficiency can be improved
- 4.Cartridges have high precision. when rotating ,cartridges have low noise and high efficiency
- 5.Optical fibre handpiece like TL, TULP, TUQLP use importing optical glass,so the effect is better and their life span is longer comparing with other handpiece
- 6.Handpiece like TP, TU, TULP, TUQLP have the effect of anti-reaction,it can prevent the saliva from entering the handpiece and infecting
- 7.Handpiece like TU, TUQ, TP, TUP, TL, TULP, TUQLP adopt three-point spraying and can make the curing part and the burs cool
- 8.Handpiece like S, M, T, SU are easy to change cartridges
- 9.Handpiece like TUQ, TUQLP have adapter for easy loading and unloading.TUQLP with adapter optical fibre can control the amount of water through adapter
- 10.The scope of application: for dental professionals use only.

CAUTIONS

- 1.Before using it, please make it sure that all instruments and accessories are in good order.
- 2.The burs must be fixed correctly before using
- 3.When rotating,the head button of push-button handpiece can make the head hot. Don't make the head button near the patients'face,or the button may hurt the patient
4. The burs should be correctly be installed to make sure its clamping strength. But the burs shouldn't be fixed with strength or the burs can be damaged then cause accident.
5. After extending use the handpiece may become noisy,replace the cartridge with a new one.failure to replace the cartridge may cause accidents or impair patients'hearing
6. Maintenance should be operated by professional technician.

Technical parameter

Model	Type	Ways of unloading burs	Pressure of handpiece interface	Pressure of dental unit	Head diameter	Rotation speed
M	Miniature	screw type	177-216 KPa (1.9-2.2 kgf/cm ²)	196-245 KPa (2.0-2.5 kgf/cm ²)	φ 10.2 mm	380000-420000
S	Torque	screw type	177-216 KPa (1.9-2.2 kgf/cm ²)	196-245 KPa (2.0-2.5 kgf/cm ²)	φ 11.2 mm	380000-420000
T	Standard	screw type	206-231 KPa (2.1-2.35 kgf/cm ²)	241-275 KPa (2.45-2.8kgf/cm ²)	φ 12.5 mm	330000-420000
SU	Standard	push- button type	177-216 KPa (1.9-2.2 kgf/cm ²)	196-245 KPa (2.0-2.5 kgf/cm ²)	φ 11.2 mm	380000-420000
TU	Torque	push- button type	206-231 KPa (2.1-2.35 kgf/cm ²)	241-275 KPa (2.45-2.8kgf/cm ²)	φ 12.5 mm	330000-420000
TUQ	Torque	push- button type	206-231 KPa (2.1-2.35 kgf/cm ²)	241-275 KPa (2.45-2.8kgf/cm ²)	φ 12.5 mm	330000-420000
TP	Torque	push- button type	206-231 KPa (2.1-2.35 kgf/cm ²)	241-275 KPa (2.45-2.8kgf/cm ²)	φ 12.5 mm	330000-420000
TUP	Torque	push- button type	206-231 KPa (2.1-2.35 kgf/cm ²)	241-275 KPa (2.45-2.8kgf/cm ²)	φ 12.5 mm	330000-420000
TL	Torque	screw type	206-231 KPa (2.1-2.35 kgf/cm ²)	241-275 KPa (2.45-2.8kgf/cm ²)	φ 12.5 mm	330000-420000
TULP	Torque	push- button type	206-231 KPa (2.1-2.35 kgf/cm ²)	241-275 KPa (2.45-2.8kgf/cm ²)	φ 12.5 mm	330000-420000
TUQLP	Torque	push- button type	206-231 KPa (2.1-2.35 kgf/cm ²)	241-275 KPa (2.45-2.8kgf/cm ²)	φ 12.5 mm	330000-420000

CAUTIONS

- 1.The rotating speeds are different for different structure of handpiece interface,the length of handpiece pipe and degrees of dental aging
- 2.If pressuer for getting into is much high,the rotation speed will be high or the bearing will be damaged
- 3.In order to lengthen life span , clean air compressor should be used and maintain timely air compressor and air, water filtering system so that air and water can be of high-quality.if water isn't filtered,the pipe interface will be obstructed.

About burs

- 1.Don't use non-standard burs, the shank diameter, in particular, must confirm to ISO standard of 1.59-1.60mm
- 2.Do not use bent, irregularly worn, or damaged burs. always keep the burs clean. dirt and debris on the shank may cause clogging of the chuck, loss of grip, or premature wear of the chuck.
- 3.Burs should be in order
- 4.Donot use short shank burs on the standard or torque head handpiece. and don't use long and big-head burs on the miniature handpiece
- 5.Please operate burs according to manufacturers' instruction, and before operating handpiece, please install burs

- When the screw type handpiece is not in use, please make it with burs and when the push-button handpiece is not in use, please unload the burs.
- Insert and unload the burs until handpiece stops.
- Don't use short shank burs on the standard or torque head handpiece. if using the short burs for standard and torque handpiece, please fix the burs shank not the shank taper.

Change burs

1. Push-button handpiece

Push the push-button in the head cap with thumb to click, and remove the burs, as shown in Fig.1; insert the burs into the head until it stops. push the push-button and further insert the bur all the way into the head until it stops



◀ Fig.1

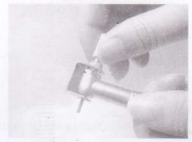
2. Screw type handpiece:

Mount the chuck wrench as shown in Fig.2 with the knurled knob pulled out. →

Fig.2 ▶

Push the knob into the head and make a 1/4 turn in the counter-clockwise direction. →

Burs is ready to remove (do not turn the knob more than a 1/4 turn.) to mount a bur, turn the knob in the clockwise direction with the knob pushed into the head.

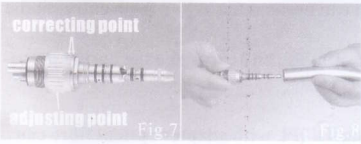


Adapter

1. TUQ adapter

Remove adapter: pull the sleeve of adapter back, hold the adapter and handpiece then remove the adapter as shown in Fig3.4.

Mount adapter: pull the sleeves of adapter back and insert it into the handpiece, then loosen the sleeve, pull the handpiece to make sure the adapter is mounted



2. TUQLP handpiece can adjust the water amount. when two correcting points match, the water amount is up to max and when the adjusting ring turn right, the water amount will change until it stops(Fig.7) insert adapter to handpiece bottom or pull it out c-

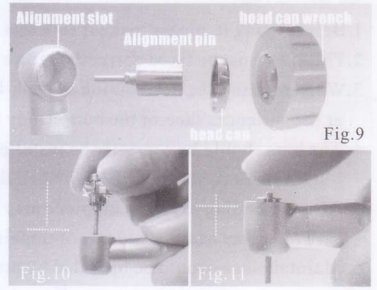
Changing cartridges

1 cartridges with folder

Before mount the cartridge, please insert a holding stick, match the alignment pin to the alignment slot of handpiece, push it, mount the cap, then wrench it.

2 cartridges without folder

Unload the cap with wrench and remove the broken cartridge, insert the new cartridge to make the focus of cartridge and focus of head at the vertical situation. then put the cartridge and push. check cartridge and the head and further tighten with the head cap wrench.



CAUTIONS

- The threads in the head are very fine. Don't turn the head cap with the wrench from the first turn
- Please clean the inner part of head before mounting the new cartridges

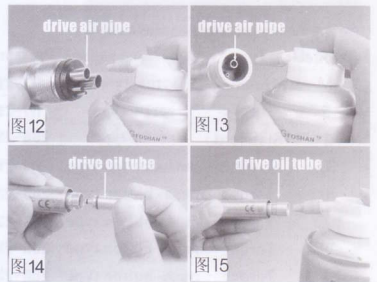
Lubrication and maintenance

- After using, please lubricate the handpiece with our oil spray or other standard oil spray like Being oil spray. unload handpiece from the handpiece pipe and lubricate handpiece as follows:

1, put spray nozzle to the oil spray

- For 4 holes handpiece, please put spray nozzle to the drive air tube of the handpiece as shown in Fig.12, as for 2 holes handpiece, please put oil spray to the drive as shown in Fig.13 for at least 2 or 3 seconds

- Push-button handpiece like SU, TU, TUQ, TUP, TULP, TUQLP can remove the dummy bur from cartridge, spray some oil through clamping hole for better using for handpiece with quick coupling like TUQ, TUQLP, first insert the oil pipe to the handpiece bottom and spray for 2 or 3 seconds to oil pipe.



Sterilization

- Brush off excess dirt and wipe clean with alcohol-soaked cloth
- Remove handpiece from handpiece pipe and lubricate handpiece with our oil spray or other standard oil spray
- Insert the handpiece in a sterilization pouch and seal it
- Autoclavable up to max. 135°C, autoclave for 20min. at 125°C or 15min. at 132°C.

CAUTIONS

- Heating element may be located at the bottom of the chamber, and the temperature there locally may exceed the set value. place the handpiece on the central or upper tray.
- when autoclaving handpiece with chemicals, the handpiece may become black or discolor. Don't use sharp chemicals to clean handpiece