

Airturbine Handpiece

TCP-M01 , TCH-M02, TCP-450M, TC-40PM



- ⚠ This product is designed for dental use only. Its operation and maintenance should be conducted under dentist's supervision.
- ⚠ Please read this Operation Manual carefully before use, and file for future reference.

SPECIFICATION:

Maximum Rotation Speed	: 400,000rpm (2kg/cm ²)
Maximum Air-Pressure	: 2.2 kg/cm ²
recommended operating pressures of air	: 2.0 kg/cm ²
Maximum Air-Consumption	: 35 L/min
consumption of water	: 70ml/min
coupling for Hose	: ISO standard B-type (4-holes)
	: ISO standard A-type (2-holes)
Sterilization	: 135°C autoclave for 15 min.

How to use:

- ⚠ After bur is installed, please test-run the handpiece with no load, in order to check any abnormality, before actual use on patient. If any abnormal noise or vibration is noticed, please stop its use immediately and have the handpiece either repaired or exchanged with new one. Failure to take the action may cause serious damage on ears or hands of the user, or patient body by broken bur.
- ⚠ Please avoid disassembling or modifying the product.
- ⚠ Drop of Airturbine, impact or excessive force on the bur connected with the Airturbine, could cause damage on internal structure or ball-bearing, which will lead to performance failure of the equipment. Warranty is invalid for the trouble caused by those acts.
- ⚠ Do not run Airturbine without locking bur. Do not run Airturbine with chuck opened.
- ⚠ For safety, mount Test Bur, the standard accessory, on the Airturbine, when it is not in use.
- ⚠ Do not use the bur with its working diameter more than 3mm.
- ⚠ In high speed use, the bur with large working diameter could fly off and cause serious damage on human body.

1. Coupling with Hose

- Check that the connection type of Airturbine matches that of hose. (fig.1)
- Screw tight a hose coupler at the back end of Airturbine. (fig.2)
- Make trial run at low speed to check proper connection with neither air- nor water leak.



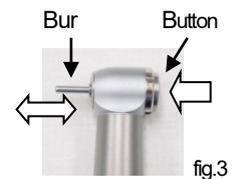
2. Bur Change

A. TCP-M01

- Removal : Push the button at back head to open the chuck, and pull off the bur. (fig.3)
- Insert : Push the button at back head to open the chuck, and insert a clean bur. (fig.3)

Verify proper lock by pulling the bur.

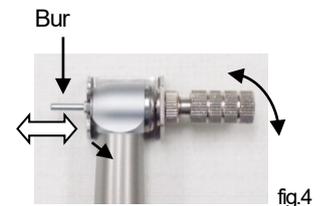
Note : Insert bur at least 9mm deep into the chuck.



B. TCH-M02

- Removal: Mount the Bur Changer with the knurled knob pulled out. Push the knob into the head and make a 1/4 turn in the counter-clockwise direction. Then pull off the bur. (fig.4)
- Insert: To insert a clean bur, turn the knob in the clockwise direction with the knob pushed into the head. (fig.4)

Verify proper lock by pulling the bur.



- ⚠ Please turn bur changer by fingers only, without using any other device or instrument together.

Maintenance:

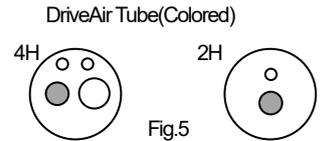
- ⚠ To keep Airturbine under good condition, the lubricate oil specifically made for dental Handpiece should be used. Use the spray as instructed by its manufacturer.



1. Lubrication

• Before autoclave : Every time	• After Cleaning : Every time	• After use : Every time
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Be sure to lubricate every time after use, before autoclave, in the case that water and/ or dust gets inside. Spray lubrication could also make inside cleaning. It should be conducted twice each time. Please spray lubrication oil for more than 2 seconds.



⚠ When water goes inside the Airturbine, lubricate more than three times.

Spray lubricate oil in the drive-air at the back end of Airturbine Handpiece. (Fig.5)

⚠ Without being held firm by hand, Airturbine could be pushed away by air-pressure of spray. Accidental drop could cause damage on the Airturbine.

2. Surface Cleaning

Clean with brush and wipe off by cloth. Lubrication should be conducted every time after surface cleaning. Although it is effective to apply a little alcohol on the cloth, excessive amount, by seeping inside Airturbine, could take off lubricate oil on ball-bearing. If it happens, lubricate again.

3. Inside Cleaning

Take the same steps with the process of spraying lubricate oil. Operate trial run at low speed every after lubrication. In order to drive dirt out of exhaust air tube, repeat the process at least twice. Conduct the cleaning once a day.

4. Drain and Air-filter

Airturbine is precision equipment. Supplied air must be both dried and purified. To keep obtaining clean air, drive water out of the drain device installed at dental unit and the compressor once a week.

⚠ Fine dust particle and moisture, if included in supplied air, could cause damage on ball-bearing.

5. Cartridge Replacement

Cartridge should be replaced with new one every 6 months, as the way followed; Apply the wrench, the standard accessory, on the slit of head cap, and turn counter-clockwise to unscrew the cap. (TCP-M01: Fig.6, TCH-M02: Fig.7)



Slide out the cartridge backward by pushing it from the front. (Fig.8)

Push in new cartridge, with its projection sliding along with the groove inside head.

Screw the cap with the fingers, then with the wrench.

Please be careful not to lose internal O-ring and washer over the replacement.



STERILIZATION

⚠ Do not put Airturbine through ultrasonic disinfection solution cleaning procedure. Use neither cold nor dry heat sterilization.

⚠ Please use Class B sterilizing device stated in EN13060.

1. Clean with brush and wipe off by cloth. Refer to the section, Maintenance, 2. Surface Cleaning.

2. Lubricate with Spray. Refer to the section, Maintenance, 1. Lubrication.

⚠ Blood, debris, other substance left inside Airturbine, can be solidified during sterilization and cause break-down. Please clean and lubricate well before autoclave.

3. Place Airturbine in sterilization pouch. Autoclave at temperature 134-137°C(2Mpa) for 15min.

⚠ Prevent the bur on handpiece from hitting others in time of autoclave.

⚠ Do not operate Autoclave dry cycle at temperature higher than 135°C.

4. Leave Airturbine in the sterilization pouch stand till excessive oil inside flows out.

WARRANTY ~ Cartridge : 3 months, Sheath and others 1 year

Trouble, which occurs due to material defect or despite the correct use as the instruction manual states, during the period specified above, is covered under warranty by the manufacturer. Quality deterioration caused by drop of Airmotor, lack of lubrication maintenance, will be excluded from warranty coverage.

⚠ Please ask the store the product is purchased from, for repair.

EC REP

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