



Non-Lubrication Dental Lab Air Turbine Handpiece

PRESTO II

OPERATION MANUAL

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



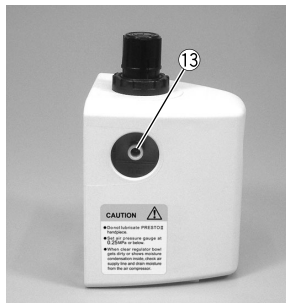
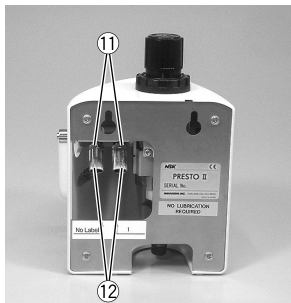
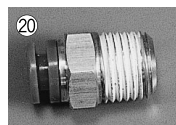
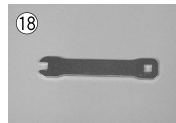
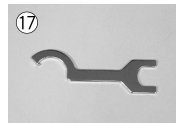
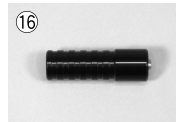
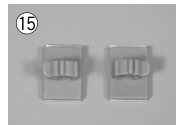
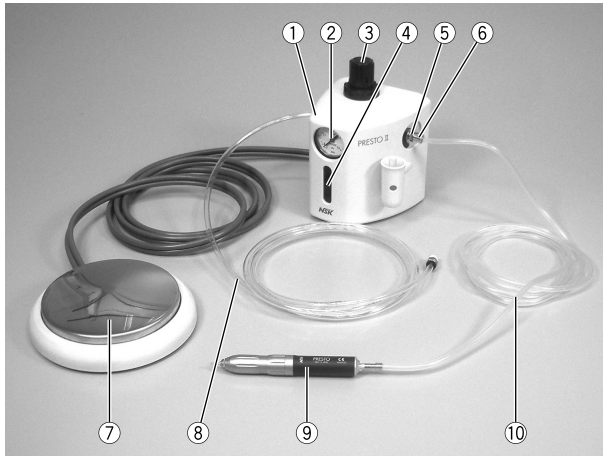
Thank you purchasing the PRESTO II.

Please read this manual carefully, and store it in a place where it can be easily accessed for future reference.

Caution

- PRESTO II is a handpiece used in dental laboratory work for performing fine work on porcelain teeth, porcelain, ceramics, etc. Do not use for other applications.
- When cutting, wear safety glasses, and use a grinding box and vacuum for safety.
- Do not modify or disassemble unnecessarily. Otherwise, performance and safety may be seriously affected. Please ask your PRESTO AQUA II dealer whenever repairs are required.
- Do not drop the handpiece and unit. Make sure to put the unit on a horizontal and stable surface.
- Observe the permissible speeds the manufacturer or dealer designates for the bur. Otherwise, you may be injured by scattering and breaking up of the bur.
- Do not use burs which are oscillating or bent or damaged and of which shank portions are worn. Otherwise, you may be injured by scattering and breaking up of the bur.
- Do not turn the chuck release ring during rotation of the handpiece. Otherwise, the handpiece will be broken.
- Never supply lubricant to the handpiece. It uses a grease filled bearing and additional lubrication may cause failures.
- Pay careful attention to rattling, vibrations, sounds and temperature (heating), and inspect by rotating in advance before starting use. Immediately ask dealers for repair work if any irregularities are sensed.
- The proper air pressure is 0.2~0.25MPa. Pressure exceeding the value may lead to premature failure of the bearing because of excessive increases in speeds.
- Extract water if water drips or contaminants are found on the filter of the unit.
- Always clean the shank of the bur you are going to mount. Contaminant deposits in the chuck may lead to oscillating of the bur and breakage of the chuck.
- Install the cutting bur or test bur even when not in use.
- Operational control, maintenance and inspection is the responsibility of each user.

1. Name of Each Portion



- ① PRESTO II Control Unit
- ② Pressure Gauge
- ③ Regulator Knob
- ④ Filter Inspection Window
- ⑤ Handpiece Connector
- ⑥ Tube Stopper
- ⑦ Foot Pedal
- ⑧ Plumbing Hose
- ⑨ PRESTO Handpiece
- ⑩ Handpiece Tubing
- ⑪ Foot Pedal Connector
- ⑫ Hose Stopper
- ⑬ Plumbing Connector
- ⑭ Unit Mounting Screws
- ⑮ Handpiece Tubing Clamps
- ⑯ Bur Push-in Tool
- ⑰ Cartridge Wrench
- ⑱ Rotor Shaft Nut Wrench
- ⑲ Handpiece Stand
- ⑳ Air Supply Connector
- ㉑ Cartridge
- ㉒ Wrench Flats
- ㉓ Chuck Release Ring

2. Specifications

| | |
|--------------------------|--------------------------|
| Speed | 320,000min ⁻¹ |
| Recommended Air Pressure | 0.2~0.25MPa |
| Handpiece Dimensions | ø16.6(D)X130(H)mm |
| Handpiece Weight | 71g |
| Control Unit Dimensions | W120XD102XH165(mm) |
| Control Unit Weight | 720g |

3. Installation Procedures of Each Portion

(1) Installation of the control unit

The Control Unit can be secured on a wall, on a work-bench, or under a work-bench. When securing on a wall surface, etc., fix the control unit with unit fixing screws in the two screw holes on its back.

(2) Installation of Plumbing Hose

Push the plumbing hose into the plumbing connector located at the regulator on the left-hand side of the control unit until it is securely set to make connection as shown in Fig. 1. Check if the hose is securely installed by tugging it after connection. Connect the other end of the plumbing hose to the air line. At this time, use the attached connector if necessary.

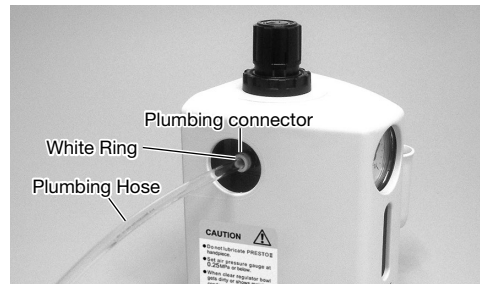


Fig.1



Caution

- Push the plumbing hose into the plumbing connector until it is securely set. Otherwise, air may leak.
- Pushing the white ring, on the plumbing connector, gently remove the tube.

(3) Installation of foot Pedal

Loosen and remove the hose stoppers (two) from the foot pedal connectors on the back of the control unit, and insert them into the foot pedal hoses. At this time, insert the hose stoppers so that their screws come outside (control unit side). (Fig. 2) For wall-hanging use, pass the hoses through the hole shown in Fig. 2.

Insert the "1"-marked end of each hose according to the instructions on the label. After insertion of both hoses, securely tighten the hose stoppers.



Fig.2

(4) Installation of Handpiece

Loosen and remove the tube stopper from the handpiece connector on the right-hand side of the control unit, and insert it into the handpiece tubing. At this time, insert the tube stopper so that its screw comes outside (control unit side). (Fig. 3) Insert the handpiece tubing into the handpiece connector, and securely tighten the tube stopper.

Insert the tube clamp ring into the other end of the handpiece tubing as shown in Fig. 4, and insert it into the handpiece tubing socket as shown in Fig. 5.

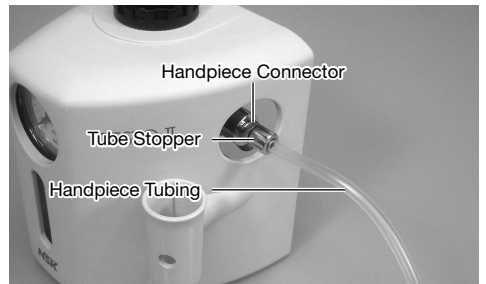


Fig.3

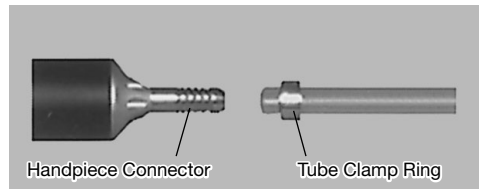


Fig.4

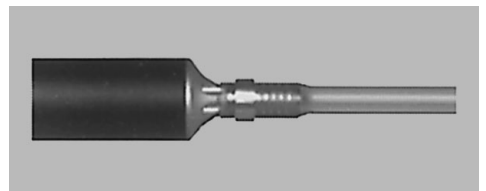


Fig.5

(5) Installation of Handpiece Tubing Clamps

Locate a Handpiece Tubing Clamp (two pieces supplied) at a proper location to conveniently position the handpiece tubing.

4. Operational Procedures of Control Unit

(1) Set the Drive Air Pressure

Supply air, and adjust to 0.25MPa by pulling the Regulator Knob upward and turning. When adjustment is made, push the knob down to lock. (Fig.6)

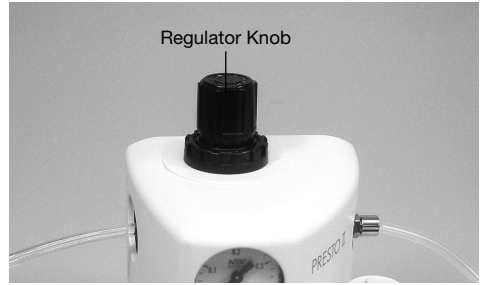


Fig.6

(2) Operation

Stepping on the Foot Pedal starts rotation.

(3) For Finishing Work

Close the main cock of air.

5. Operational Procedures of Handpiece

(1) As the chuck of the PRESTO handpiece is a push-in type, set the FG burs of $\phi 1.6\text{mm}$ and push in as shown in Fig.7

Push in the bur of which the end is tapered by using the designated bur-inserting wrench as shown in Fig.8.

(2) When removing the bur, it can be removed by turning the chuck release ring in the direction of the arrow in Fig.9.

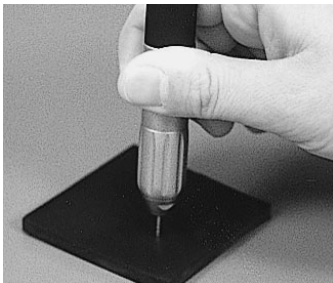


Fig.7

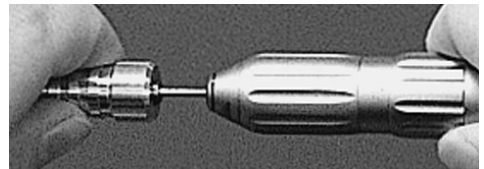


Fig.8

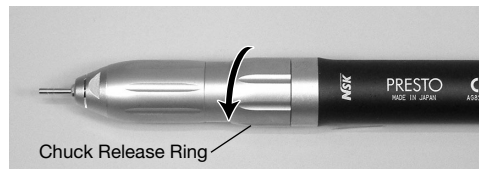


Fig.9

6. Replacement Procedures of Cartridge

- ① Fit the cartridge wrench supplied with the handpiece to the flats of the handpiece nose. Turn the cartridge wrench as shown in (Fig.10) after it is loosened, turn the nose by fingers and remove from the handpiece.
- ② Before inserting a new cartridge, clean the head interior.
- ③ Finally, securely tighten the cartridge by turning it in the reverse direction to removal.

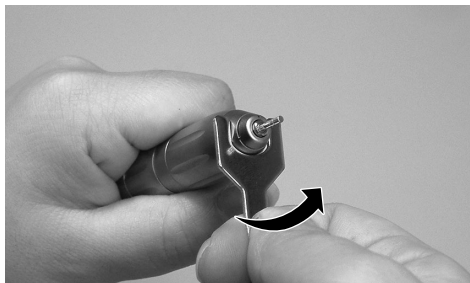


Fig.10

7. Replacement or Cleaning Procedures of Chuck

(1) Removal of Chuck

- ① Remove the cartridge with a bur or dummy bur as it is installed.
(6.Replacement Procedures of Cartridge)
- ② Hold the rotor with two fingers as shown on the Fig.11.
Mount the wrench provided on the rotor nut located on the top of rotor shaft and turn counterclockwise.
(Either side of wrench can be used.)
- ③ When the rotor nut is loose. Push out the chuck carefully with a dummy bur or the shank of bur from the back of the cartridge, the Guide-bush and the chuck will come out. (Fig.12)

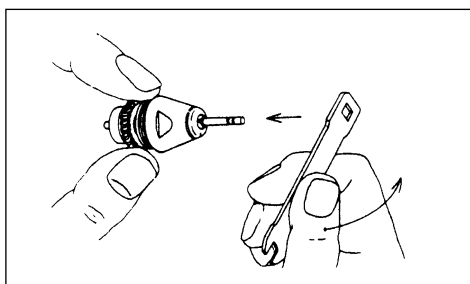


Fig.11

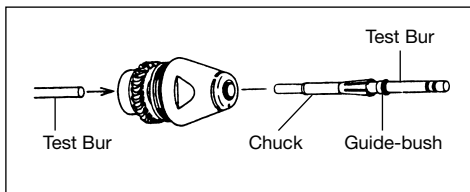


Fig.12



Caution

As the guide-bush is a very small part, be careful not to lose it.

- When cleaning the chuck, clean it sufficiently with ultrasonic cleaner etc. Blow oil spray to the inside of the rotor shaft and clean thoroughly.



Notice

Remove the chuck and clean once a week.

(2) Installation of the New Chuck

- ① Apply oil thinly on the surface of the new chuck or the chuck after cleaning, insert the test bur and push into the rotor shaft. (Fig.13)
- ② Set the longer one of the guides of the guide bush on the end of the rotor shaft first along the test bur. (Fig.19)
- ③ Finally insert the rotor shaft nut along the test bur, and firmly tighten it with a wrench while holding the rotor. (Fig.15)

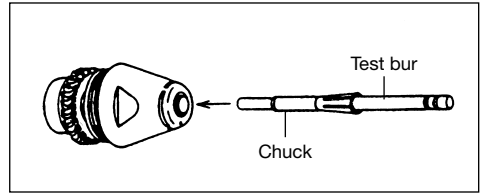


Fig.13

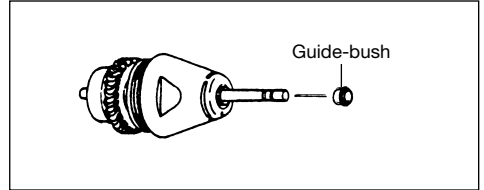


Fig.14

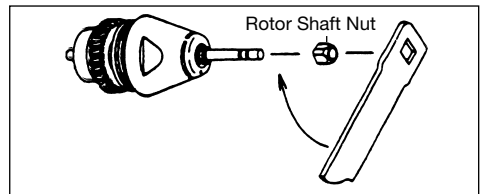


Fig.15

8. Maintenance of Unit

(1) Draining the Filter

Check the filter bowl from the filter inspection window, and if there is an accumulation of water, insert fingers from the bottom, and turn the drain cock in the direction of the arrow (counterclockwise) to drain water from the filter. (Fig. 16) After draining, securely tighten the drain cock by turning it in the reverse direction.



Fig.16

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Specifications are subject to change without notice.

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