

Thank you purchasing the PRESTO.
Please read this operation manual prior to use for safety and keep this within user's reach.

⚠ Caution

- The recommended air pressure to the handpiece is 0.25MPa (2.5kgf/cm²) at the pressure gauge, higher air pressure may lead to premature failure of the ball bearing.
- PRESTO handpiece requires no additional lubrication. **DO NOT SUPPLY LUBRICANT.**
- When a large head bur is used, use it lightly. Excessive pressing may lead to premature failure of the bearing, and is dangerous for the operator.
- When carborundum or white point is used, use it carefully. If worn irregularly, do not use it, or dress it for concentricity before use. Follow the point manufacturer's instructions.
- The turbine cartridge should be securely tightened with the enclosed ⑨ Cartridge Wrench.
- When you use an air regulator-lubricator set, or a system with a lubricator in the line, completely remove the lubricant from the lubricator.
- PRESTO Unit has an air filter. When moisture condensation or dirt is found, remove the filter bowl and clean the filter element and the bowl.
- Wear safety eye protection.

1. Handpiece Introduction

PRESTO handpiece uses regular FG burs, and facilitates your detailed, fine work on porcelain teeth, porcelain, hard resins, molar bite surface finishes, and much more.

The rotor spindle uses a non-lube bearing, and no further lubrication is necessary. Therefore, you can work on porcelain completely free from the troubles that are associated with the use of lubricating oils.

Chip air from the nose blows off dust particles from the work spot, and you can always see the work spot very clearly.

Moreover, PRESTO is equipped with NSK's patented Clean-Head, which prevents invasion of foreign matters into the bearing.

Bur removal is easy : Turn the NSK-developed Chuck Release Ring. Mounting a bur is much easier : just push it in to the chuck.

2. Specifications

Speed	320,000min ⁻¹ (rpm)
Recommended Air Pressure	0.2-0.25MPa (2.0-2.5kgf/cm ²)
Air Consumption	38L/min.
Stall Torque	12gf-cm
Handpiece Dimensions	ø16.6xL130mm
Handpiece Weight	70.8g

3. Package Contents

Control Unit

- ① Foot Controller
- ② PRESTO Handpiece
- ③ Handpiece Tubing
- ④ Plumbing Hose
- ⑤ Unit Mounting Screws
- ⑥ Handpiece Tubing Clamps
- ⑦ Bur Push-in Tool
- ⑧ Cartridge Wrench
- ⑨ Air Supply Connector
- ⑩



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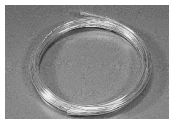
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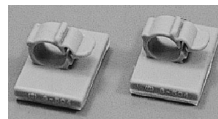
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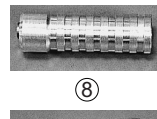
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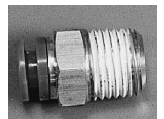
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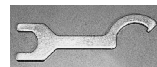
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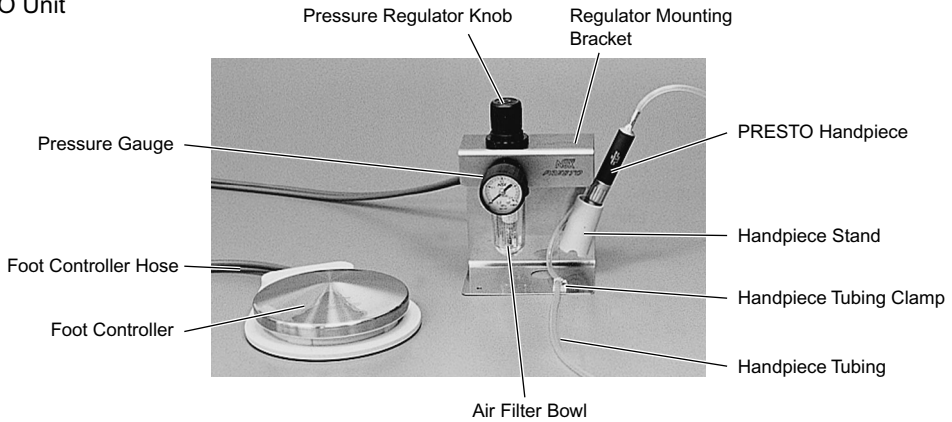
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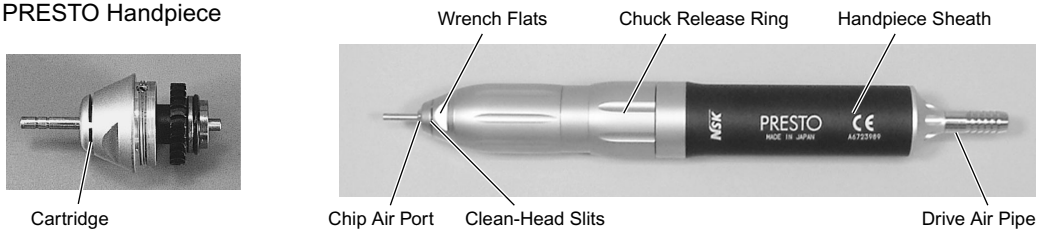
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4. System Diagram

● PRESTO Unit



● PRESTO Handpiece



5. PRESTO Handpiece

(1) Push in the bur to the chuck as shown in Fig. 1.

When a pointed bur is used, use the enclosed ⑧ Bur Push-in Tool. See Fig.2.

(2) To release the bur, turn the Chuck Release Ring as shown in Fig.3.

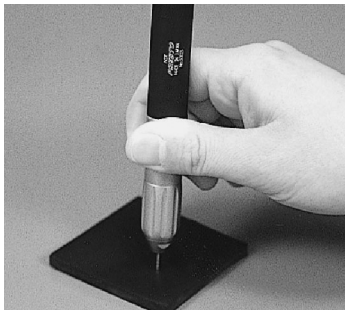


Fig. 1

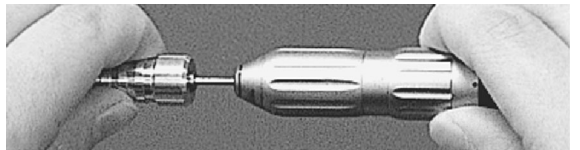


Fig. 2



Chuck Release Ring

Fig. 3

■ Cartridge replacement

⚠ Caution

- Change cartridge in clean environment.
- Do not drop the handpiece onto a hard object.
The front wall of the handpiece is thin, and without a cartridge mounted in the handpiece, it could deform by impact, and, as a result, cartridge may not be installed into result.
- Before mounting a new cartridge, clean with clean dry air the front bore of the handpiece to be free from debris.
- Align threads and mount the cartridge into the bore by fingers. When finger-tight, use the tool to securely fasten the last 1-2 threads.

(1) Removal

Fit the cartridge wrench supplied with the handpiece to the flats of the handpiece nose. See (Fig.4) Turn the cartridge wrench as shown in (Fig.5) After it is loosened, turn the nose by fingers and remove from the handpiece. Remove the O-ring that may be left inside the handpiece. Use a cotton swab dipped in alcohol to clean the inside front handpiece body. Be sure to deliver clean dry air out of the handpiece to remove any debris, cotton swab fiber and moisture.

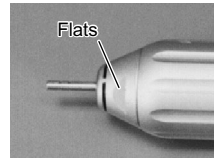


Fig. 4

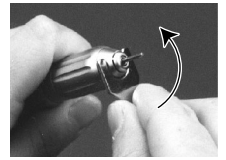


Fig. 5

(2) Re-assembly

Mount a cartridge to the handpiece and align the threads. Screw in the cartridge into the handpiece until finger-tight. Use the cartridge wrench to securely tighten the cartridge when it is correctly set in place.

■ Replacement of chuck

(1) Removal of Chuck

- Remove the cartridge with a bur or dummy bur as it is installed. Hold the rotor with two fingers as shown on the Fig.6. 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.)
- When the rotor nut is loose. Push out the chuck carefully with dummy bur or the shank of bur from the back of the cartridge, the guide-bush and the chuck will come out.(Fig.7)

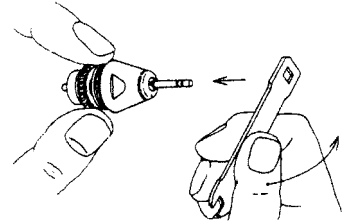


Fig. 6



Note

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

- Clean the inside of rotor shaft with oil spray after the removal of chuck.

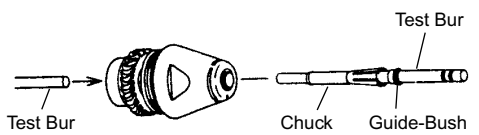


Fig. 7

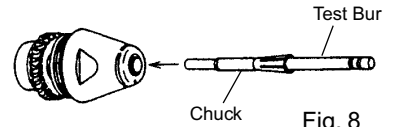


Fig. 8

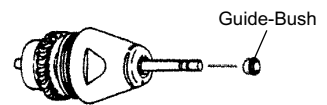


Fig. 9

(2) Installation of the New Chuck

- Insert a dummy bur into a new chuck and push it into the rotor shaft. (Fig.8)
- Mount the guide-bush on dummy bur. The longer part of the guide-bush should face the rotor side when it is fixed on the top of the rotor shaft. (Fig.9)
- Put the rotor nut on the dummy bur and screw in the rotor nut tightly with the wrench provided. (Fig.10)

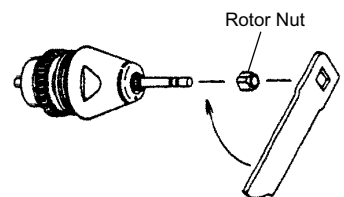


Fig. 10

6. Installation

- (1) The Control Unit can be secured on the wall, on the work bench, or under the work bench. When securing it on the wall or under the work bench, fix it to the Regulator Mounting Bracket by using two ⑥ Unit Mounting Screws.
- (2) Insert ⑤ Plumbing Hose to the Control Unit as shown in Fig.11.
- (3) Connect the other end of ⑤ Plumbing Hose to the air supply.
- (4) Connect ② Foot Controller to the Control Unit as shown in Fig.12.
Insert the tube having the white label wrapped around it into the red connector.(Fig.12)
- (5) Connect the ④ Handpiece Tubing to the Control Unit as shown in Fig.13.
- (6) • Insert the tube clamp ring over the drive air tube. (Fig.14)
• Position the clamp ring at the drive air tube end, and forcibly insert the tube with the clamp ring over the pipe connector of the handpiece. (Fig.15)
- (7) Locate a ⑦ Handpiece Tubing Clamp (two pieces supplied) at a proper location to conveniently position the handpiece tubing.
- (8) A handpiece stand is mounted on the Control Unit. Orient the position as necessary. See Fig.16.



Fig. 11

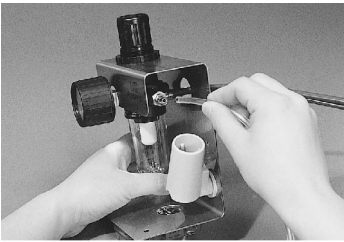


Fig. 13

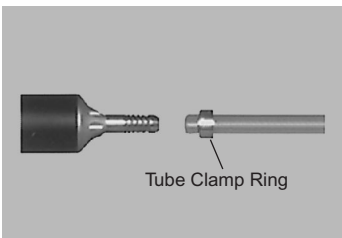


Fig. 14

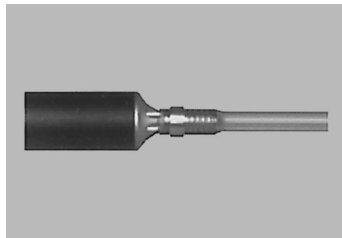


Fig. 15



Fig. 16

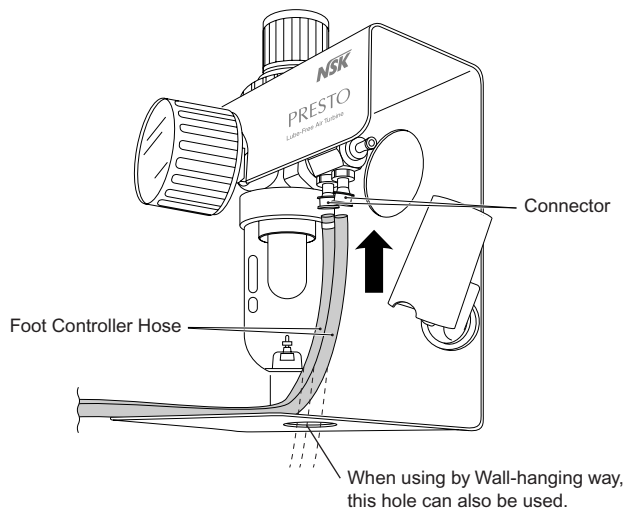


Fig. 12

7. Test Run

- The pressure regulator is set to zero before shipment from the factory. After the air supply is connected, gradually turn the knob clockwise to increase to the rated pressure of 0.25MPa (2.5kgf/cm²).
- Pull up the regulator knob to release the lock and turn it to change the air pressure. Push it down to lock after setting the pressure at the rated value.
- Use the bur blank and test run the handpiece.
- Graduation on the pressure gauge is in kgf/cm² on outer scale, and in MPa (Mega Pascal) on inner scale.

※ Specifications may be changed without notice.

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