

MICROSTAR HANDPIECE SYSTEM

Proper Usage Information

- The **Microstar** Handpiece System is **not suitable** for the following applications:
 - Intra-oral use
 - Use on wet or moist materials or in wet areas

- Use only top quality rotary instruments that are in good condition and run true. **Do not use any instrument with a worn or bent shank. Do not exceed the manufacturer's recommended maximum speed on any rotary instrument.**

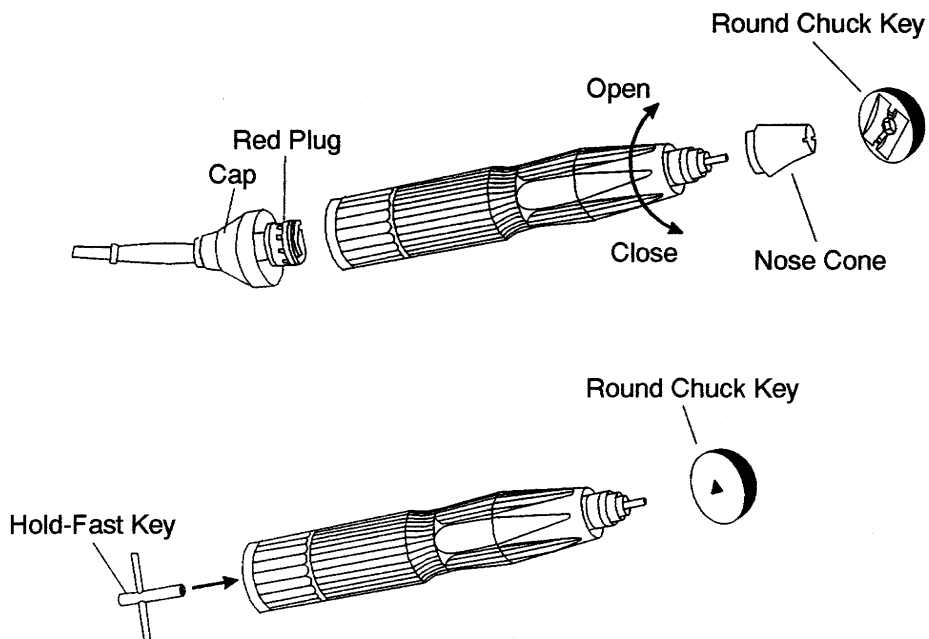
- Do not use rotary instruments that have a shank length less than 30mm (1 3/16 ") or it will cause friction between the instrument and the top of the handpiece. This causes the hole in the brass dust cover to become enlarged, allowing additional dust and debris to enter the handpiece. The brass sleeve should be replaced if this occurs.

- Never blow compressed air into the handpiece.**

- Do not bend any portion of the handpiece cord at a 90° angle. This will cause the insulation inside the cord to break and may damage the wiring.

- Repairs should only be completed by factory-trained personnel authorized by **Microstar Dental**. Any other attempt at repair or disassembly will void all warranties.

Maintenance Diagram for



Removal of Chuck

Maintenance Information

❑! **CAUTION ! Never blow compressed air into the handpiece!**

The only way debris can enter this brushless handpiece is through the chuck opening. The only maintenance required for the Microstar Handpiece System is to remove and clean the chuck at least once per month. The Round Chuck Key and Hold-Fast Key which are included with each new **Microstar** Handpiece System are required for removing the chuck. If all of the usage guidelines and maintenance instructions are followed completely, the **Microstar** Handpiece System should provide many years of superior performance.

Instructions for Removing Chuck for Cleaning or Replacement

1. Open the chuck and remove the rotary instrument. Leave the chuck in the open position.
2. Remove the nose cone at the top of the handpiece by turning it counter clockwise.
3. The cord must be completely removed from the handpiece. Unscrew the cap on the bottom of the handpiece by holding the handpiece upside down, then turn the cap counter clockwise and slide it away from the handpiece. This will expose a red plug, which will pull straight out of the handpiece (it does not turn). Grip the plug, do not pull on the cord itself. It may be necessary to move the plug slightly from side to side to loosen it.
4. Attach the Hold-Fast Key (T-Shaped Tool) to the bottom of the handpiece. The notch at the bottom of the “T” fits over the rectangular shaft in the bottom center of the handpiece. This is to hold the shaft stationary while the chuck is being removed.
5. Hold the bottom of the handpiece in one hand, keep the Hold-Fast Key stationary, and turn the handpiece upright. Place the Round Chuck Key over the exposed chuck. The hole in the center of the Round Chuck Key is cut with a triangular edge to match the shape of the top of the chuck. Use the Round Chuck Key to unscrew the chuck. Looking down on the chuck, it will turn counter clockwise and will completely remove from the handpiece.
6. Clean all grit and debris from inside the chuck and from the three slits along the side. Use a small instrument to push completely through the removed chuck to dislodge any grit buildup inside the chuck. A pipe cleaner may be used to remove any residual grit. When held up to the light, the chuck is completely hollow. You should see all the way through the chuck. No grit should be visible inside the chuck; the walls should appear smooth.
7. Apply a **very small amount** of light grease, such as petroleum jelly, to the threads on the inside bottom of the chuck. This will make it easier to remove and replace the chuck.
8. Replace the chuck into the chuck tube. Using the chuck tools as described in “5.” above, turn the chuck clockwise to screw it back into the chuck tube. Once resistance is felt, tighten it **slightly**. Remove the tools and replace the nose cone and cord.