




## Highspeed Handpiece INSTRUCTIONS FOR USE

Read before use. Keep in safe place for future reference.

 **CAUTION:** Federal (US) law restricts this device to sale by or on the order of a licensed professional

 **Caution**

- Do not run the handpiece without a bur locked in the chuck.
- Do not disassemble, modify or alter the handpiece.
- Do not press the push button end cap during use since this could result in the OVERHEATING of the handpiece head. Special caution must be exercised during use to keep cheek tissue away from the push button end cap. Contact with cheek tissue may cause the push button to depress and may result in burn injury to the patient.
- When handpiece becomes noisy or sluggish, replace turbine cartridge immediately (see Cartridge Replacement section). Failure to replace the cartridge could result in personal injury or damage to the handpiece.
- Never attempt to remove the bur while running handpiece.
- If any abnormalities are found, stop using immediately and contact Medidenta.

## SPECIFICATIONS

MODEL	STANDARD	PUSH BUTTON	MINI STANDARD	MINI PUSH BUTTON
Operating Air Pressure	28 - 32 psi maximum (.18 - .25 Mpa)			
Speed	400,000 rpm Min.		420,000 rpm Min.	
Weight	58 g		55 g	
Head Height	.527" (13.4 mm)	.587" (14.9 mm)	.408" (10.36 mm)	.468" (11.89 mm)
Head Diameter	.440" (11.2 mm)		.400" (10.2 mm)	
Bur Type (length)	Standard Length		Mini / Standard	

### AIR PRESSURE

Set air pressure at handpiece connector (Fig. 1) to 25 - 35 psi\* (.18 - .25 Mpa). If a pressure gauge is not available, set the air pressure on the unit to 30 - 35 psi (.21 - .25 Mpa).

\* Coiled hoses may require slightly higher air pressure.



**Caution**

Exceeding recommended air pressure may result in premature cartridge failure.

Fig. 1



## BUR TYPES

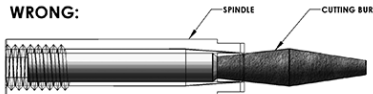
### Caution

- Only use ISO standard burs with shank diameter of .0626" - .0629" (1.59-1.60 mm).
- Do not use bent, irregularly worn or damaged burs.
- Always keep burs clean. Dirt and debris on the shank may cause clogging of the chuck, loss of grip or premature wear of the chuck.
- For C-Type standard head handpiece, use standard shank burs; to prevent bur wobble do not use short shank burs. If a short shank bur must be used, keep bur cutting edge away from chuck as shown in Fig. 2.

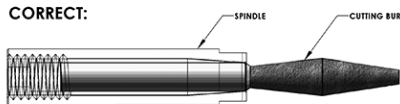
## CHANGING BURS

### Removal: Manual Chuck

1. Mount bur tool as shown in Fig. 3 with the knob pulled out.
2. Push the knob into the head and make a ¼ counter-clockwise turn. Do not loosen chuck more than necessary to remove bur.
3. Remove bur.



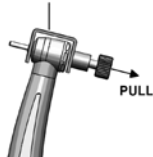
BUR CUTTING EDGE MAY DAMAGE CHUCK



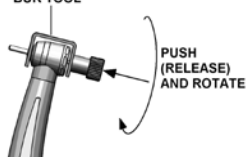
EXTEND CUTTING EDGE OUTSIDE OF CHUCK

Fig. 2

Fig. 3 BUR TOOL



BUR TOOL



### Installation: Manual Chuck

1. Insert bur all the way into the chuck until it stops.
2. Push knob into the head and turn clockwise. **Do not over tighten!**  
Excessive tightening may cause damage to chuck and/or bur tool.

#### **Caution**

- Do not run the handpiece with the bur not fully inserted or securely locked in place (Fig. 4).
- Never run the handpiece without a bur. Chuck may be forced out or result in damage to the cartridge.

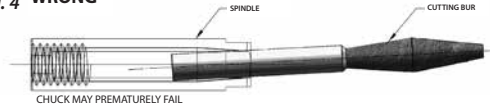
### Removal: Push Button

1. Press the push button on the end cap with thumb to remove the bur (Fig. 5).
2. Pull to remove bur.

### Installation: Push Button

1. Press the push button and insert the bur into the head until it stops (approximately 5 mm deep).
2. Release pressure on button; bur should now be secure.
3. Firmly tug on the bur to ensure that it is properly secured.

**Fig. 4 WRONG**



**CORRECT**



**Fig. 5 PRESS END CAP WITH THUMB**



## LUBRICATION

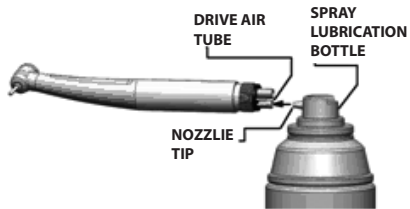
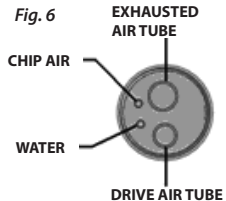
**Lubricate with iSpray (iSpray) & 4/5 Hole Adapter, (ISN-4/5H) before sterilization.**

1. Disconnect the handpiece from air supply.
2. Insert the nozzle into the handpiece drive air tube (Fig. 6) and spray for approximately 3 seconds.
3. Attach the handpiece to an air supply or purge station and run for approximately 20 seconds to remove debris and excess lubricant. A spray cover or paper towel should be used to contain expelled lubrication.
4. For push button handpieces, it is recommended that the autochuck is periodically cleaned and lubricated. Remove the bur, insert the spray nozzle tip into the chuck and spray for 1 - 2 seconds (Fig. 7). Work the chuck mechanism to distribute the cleaner/lubricant by repeatedly pressing the button. With the push button depressed, insert and remove a bur several times to break-up remaining debris.

*Fig. 7*



*Fig. 6*



## STERILIZATION



### WARNING

**Sterilize by autoclave after each patient use.**

**Sterilization is required before first use.**



### Caution

- Wear appropriate personal protective equipment during the sterilization and lubrication process. This should include eye protection and gloves.
- Do not use ultrasonic bath, boiling water or chemicals to clean the handpiece.
- Autoclave heating element could be located at the bottom of the sterilization chamber. To ensure that handpieces do not overheat, place handpieces on central or upper tray.
- Do not autoclave handpieces together with other instruments.
- Do not use dry heat sterilization.
- Keep handpiece in sterilization pouch until ready to use.

1. Wipe off handpiece with damp cloth.
2. Place the handpiece in a sterilization pouch and seal. Bag handpieces individually.
3. Steam autoclave for 15 minutes at 275° F (135° C ) in an autoclave.
4. Allow a minimum of 20 minutes for the drying cycle.

## CARTRIDGE REPLACEMENT

### Removing Cartridge

1. Insert bur into the chuck.
2. Use cap wrench to unscrew end cap (Fig. 8).
3. Push on the bur to force the cartridge out from the back of the head.
4. Clean inside the handpiece head with iSpray and a cotton swab.

### Installing New Cartridge (Fig. 9)

1. Align the ball on the cartridge with the slot in the handpiece head and insert the cartridge into the head.
2. Ensure that the back of the cartridge sits flush with the back of the head of the handpiece. If not, remove cartridge and repeat installation.
3. Finger tighten end cap to ensure thread alignment.
4. Securely tighten with the cap wrench.



**Caution**

The threads in the head and end cap are very fine. Screw on end cap with fingers, then tighten with cap wrench.

CAP WRENCH

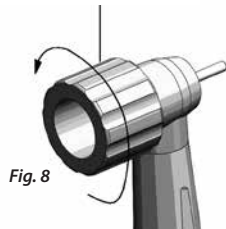
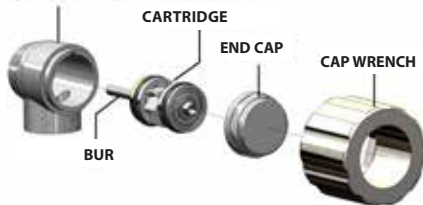


Fig. 8

HANDPIECE HEAD



## **REPLACEMENT PARTS**

Item# T-AKSSD Standard Screw Type Turbine

Item# T-AKSPB Standard Push Button Turbine

Item# T-AKMSD Mini Screw Type Turbine

Item# T-AKMPB Mini Push Button Turbine

Item# P-AKSSTC Standard Screw Type Chuck

Item# P-AKHCSO Standard Screw Type Head Cap

Item# P-AKHCPB Standard Push Button Head Cap

Item# P-UBT Standard Screw Type Bur Changer

Item# P-AKMSTC Mini Screw Type Chuck

Item# P-AKHCMO Mini Screw Type Head Cap

Item# P-AKHCOMPB Mini Push Button Head Cap

Item# P-UBT Mini Screw Type Bur Changer

Item# ISPRAY Handpiece Cleaner / Lubricant

## **MADE IN USA**



## **SERVICE**

For items that require service, including warranty service, please send to Medidenta.

### **Medidenta**

**3325 W. Ali Baba Ln. #603**

**Las Vegas, NV 89118**

**Phone # 800-221-0750**

## **WARRANTY**

This product is designed for use in a dental office and this warranty is not applicable to other uses. The unit is warranted against manufacturing defects in materials and workmanship for six (6) months from date of purchase; Medidenta will repair or replace the unit at its sole discretion. This warranty shall be limited to replacement or repair of the unit or its parts and shall not extend to any other claims, including but not limited to loss of profit, cost of removal or replacement, incidental or consequential damages or other similar claims arising from use of this product. Damage to the product resulting from acts of God, faulty installation, misuse, tampering, accident, abuse, negligence, alterations, unauthorized repairs or problems unrelated to materials and workmanship are not covered by this warranty.