

# Instructions for replacement turbine for use with Star 430, Vortex and Vista series highspeed handpieces

(Item #15-87, #15-85, & 15-860)



## IMPORTANT - READ BEFORE PROCEEDING

*Before replacing turbine, carefully examine handpiece head for dents. If there is any evidence of dents in the head, return the entire handpiece to American Dental Accessories, Inc. for repairs. Do not install replacement turbine into handpiece. Installation will result in permanent damage to the turbine.*

1. Using specialized wrench provided with your handpiece, unscrew cap from handpiece head and remove worn turbine by pushing out from the front. Only use the appropriate tool to remove the end cap. Use of a pliers or inappropriate tool will cause damage to your handpiece.
2. **WARNING:** Interior of head must be inspected for foreign material and debris – remove if present. Compare worn turbine to new turbine to identify any components that may still be present in your handpiece. Use a scaler or explorer to remove all old turbine components including any shims, o-rings, washers or bearing retainers. Once all old turbine components have been removed, use a cotton swab and handpiece lubricant to clean handpiece head. Using air from the air/water syringe, blow out handpiece head to remove any cotton fibers.
3. Generously lubricate the turbine. Holding the handpiece face down, carefully insert the turbine fully into the handpiece head. Once the turbine is fully seated, use the appropriate tool to screw the end cap down until flush against the handpiece head. **CAUTION:** End cap should be tightened securely with wrench to ensure safe positioning of turbine. If you are unable to fully seat the end cap, remove and check the end cap for debris/old turbine components. It is extremely common for old bearing washers to stick to the inside of the end cap. If difficulty persists, send the replacement turbine and handpiece to American Dental Accessories, Inc. for installation.

### **BEFORE OPERATING HANDPIECE, FOLLOW STEPS 1 THRU 3 BELOW:**

1. Instal bur securely into turbine. Roll the bur between fingers to make sure bearing turns freely. If you feel any resistance, remove turbine and reinstall following steps 1 thru 3. **NOTE:** If difficulty in installing replacement turbine persists or bur does not turn freely between your fingers **DO NOT OPERATE HANDPIECE**. Return the entire handpiece and replacement turbine to American Dental Accessories, Inc. for installation at no charge.
2. Install handpiece onto your tubing connector and operate foot control. **DO NOT OPERATE HANDPIECE** without bur securely fastened into turbine.
3. Lubricate handpiece with handpiece lubricant such as American Dental Accessories, Inc. Pro Lube+ in accordance with daily maintenance instructions.

**MAINTENANCE:**

In accordance with FDA recommendations, after each use on a patient, the handpiece should be sterilized. Prior to sterilization, clean the handpiece with a handpiece cleaner such as American Dental Accessories Pro Kleen by dropping a few drops in the drive air hole and running the handpiece until all debris has been flushed. Repeat as necessary until only debris-free cleaner is expelled from the handpiece. It is best to have a dedicated flushing system in the sterilization area for this purpose and to avoid contaminating your equipment.

Sterilize the handpiece in a chemical vapor or steam sterilizer at or below 275° F. Do not leave the handpiece in the sterilizer to dry, handpiece should be air dried outside the sterilizer. Neither should the handpiece be left in the sterilizer overnight.

After sterilization, allow handpiece to cool completely and lubricate handpiece with handpiece lubricant such as American Dental Accessories, Inc. Pro Lube+. A few drops of lubricant (or a quick spray) should be placed into the drive air hole of the handpiece per the following diagram:

After placing lubricant, the handpiece should be run for approximately 15 seconds to distribute the lubricant throughout the turbine.

For push button turbines, at least once a week lubricate the chuck by placing a few drops of lubricant into the bur end of the turbine and then placing a bur within and gently moving it back and forth with the chuck opened.

For additional maintenance information, contact American Dental Accessories, Inc. at 1-800-331-7993 for a complimentary copy of our handpiece maintenance guide (item #15-00).

**PRECAUTIONS:**

*(The following precautions MUST be observed to preserve the warranty on the replacement turbine)*

- Always keep drive air pressure below 35 P.S.I. (exception—see lube free supplement for lube free turbines).
- Do not autoclave above 275° Fahrenheit (135° C). Your sterilizer should be checked monthly to verify correct operating temperature.
- Do not sterilize with dry heat
- Do not run without a bur or bur blank securely in the turbine.
- Do not run handpiece unless bur is fully seated in the turbine.
- Always remove the bur or bur blank prior to sterilization to prevent damage to the chucking mechanism.
- Never use any type of disinfectant or cold sterilant on the turbine.
- Do not submerge handpiece in running water or an ultrasonic cleaner.
- Always test handpiece before use on a patient.
- Never activate the chuck while a handpiece is running, and do not use a handpiece for retraction.
- Warranty on turbine is ninety days.
- Warranty does not cover misuse or abuse. For warranty claims turbine and handpiece should be sent to American Dental Accessories, Inc. for repair or replacement of turbine at our option. No other warranty is expressed or implied.