

WHITTEMORE PLATINUM SERIES



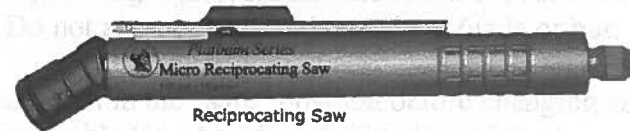
Micro Drill



High Speed Drill



Sagittal Saw



Reciprocating Saw



INSTRUCTION MANUAL

GENERAL WARNINGS:

- 1.) Whittemore Platinum Series Power Equipment is designed for use only by medical professionals who are completely familiar with the required surgical techniques and instructions for use of the equipment.
- 2.) Prior to each use, all instruments and accessories must be inspected for proper operation.
- 3.) Before each use, be sure accessories are correctly attached to the instrument as they could be thrown from the instrument with great force, possibly causing serious injury.
- 4.) Always inspect for bent or otherwise damaged burs/blades before each use. A bent blade or bur can whip severely and could be propelled with great force, causing injury. Do not use excessive force on any bur or blade. Do not attempt to straighten a bent blade or bur.
- 5.) Put the instrument in the "safe" position before changing any accessories, burs or blades. Accidental activation of the instrument could injure the patient or operating room personnel.
- 6.) The surgeon and all others in the area must always wear eye protection when operating any surgical equipment. Eye injury or blindness can result from dislodged drill bits, blades or bone tooth fragments.
- 7.) Dull burs and blades may cause heat build-up in the handpiece and the bone. It is recommended that single-use burs and blades be used or, if the hospital does not want to use single-use burs and blades, inspections with a magnifying glass of all burs and blades must be done to check for dulled and chipped cutting surfaces.

8.) Overheating might occur if the instrument or accessory bearings are worn or are not kept clean. Continually check all parts of the instrument and attachments for overheating and discontinue use and return the equipment for service as necessary. Overheating can cause serious burns or other injury to the patient or operating room personnel.

9.) Before each use, check all of the equipment for any air or nitrogen leakage and return the instrument for service if leakage is noticed. Leakage could seriously injure the patient or cause death.

10.) Never operate the instrument above its rated pressure. Excessive pressure may cause damage to the instrument and exert unusual stress on the hose.

11.) Please follow the Whittemore sterilization recommendations. Steam sterilization without a dry cycle may severely shorten the useful life of the instrument.

12.) Please pay close attention to the "Care and Cleaning Instructions" and "Cautions" in this handpiece instruction manual.

13.) Handle all medical instruments carefully. If a device is dropped, immersed or damaged in any way, it should be returned immediately for service.

14.) The nitrogen regulator is for use with pneumatically powered surgical devices only. Adequate preventive maintenance includes servicing the regulator once every year.

POWER SOURCE AND REGULATION

**NITROGEN
WARNING**
-NOT FOR INHALATION-
For Use With Powered Surgical Devices Only.
Does Not Support Life.

Wall and Tank

Research and experience have shown that water-pumped dry nitrogen is the ideal source for pneumatically powered surgical instruments. Water-pumped dry nitrogen is 99.97% pure, and will not support combustion or corrosion. Compressed dry nitrogen should meet the following specifications to ensure optimum safety for both patient and instrument.

Nitrogen Content: 99.97% pure, dry nitrogen.

Quality Assurance: To obtain the quality of gas needed, "water-pumped dry

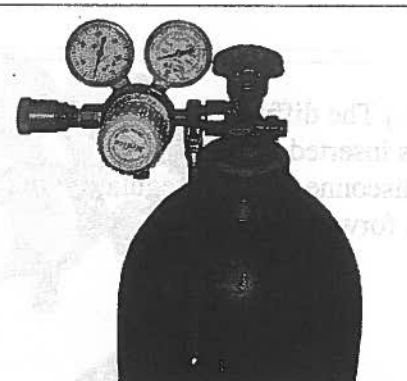
Nitrogen, or liquid nitrogen, pumped dry" should be specified.

Nitrogen is readily available from gas supply houses in H cylinders compressed to slightly in excess of 300 cubic feet (8.50 cubic meters). Initial set-up costs are relatively inexpensive compared to compressed air. Nitrogen can be placed in the operating room or in a storage area and piped into the operating room. Manifold systems are available to eliminate routine tanks changes.

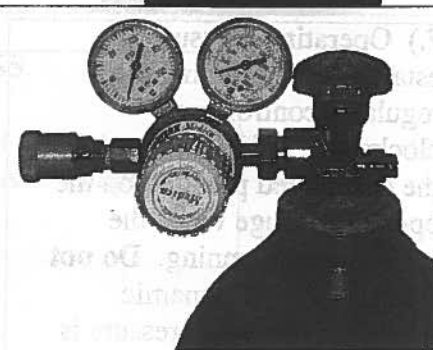
Caution: DO NOT EXCEED 100 PSI RUNNING (7kg/cm²). Platinum plus Micro Line handpieces should be operated at 100 PSI (7kg/cm²) for maximum operating efficiency, and should be monitored by the operating pressure gauge of the regulator. Pressure must be set with the instrument running to avoid too low an operating pressure.

- 1.) The tank should be thoroughly wiped off with disinfectant and draped prior to placement in the operating room. Always have the tank securely fastened to a wall, stable cart or some other stationary device.
- 2.) Prior to set-up in the operating room, open the tank valve slowly and allow gas to escape to blow out any debris. Stay clear of the opening during this procedure. Return the valve to the closed position.
- 3.) Install regulator with a 1 1/8 inch wrench.

NOTE: The threaded adaptor of nitrogen regulator is designed to fit nitrogen fittings only. Incompatibility of the regulator and tank indicates a gas source other than nitrogen or an improper regulator for use with nitrogen tank.

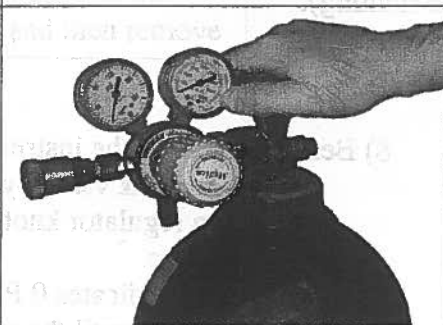


- 4.) Once the regulator is securely installed, be certain that the regulator knob is in the full OFF position by turning the regulator knob counter-clockwise.

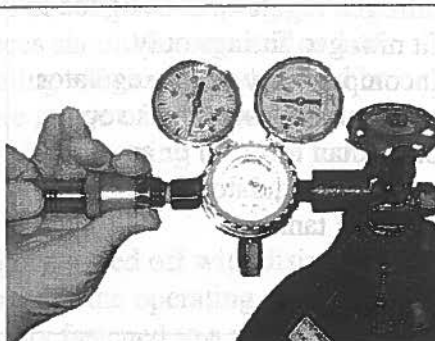


SUDDEN PRESSURE EXERTED TO THE REGULATOR MAY CAUSE INTERNAL DAMAGE.

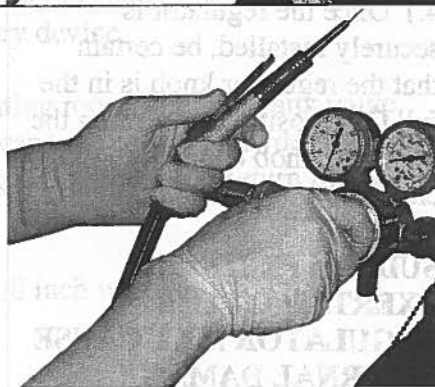
- 5.) Open the nitrogen tank valve slowly until it is fully open. This will allow nitrogen to pressurize the regulator. The gauge on the right indicated the nitrogen pressure stored within the nitrogen tank. **NEVER** start a procedure if this gauge indicates less than 500 PSI. **NEVER** run the tank pressure below 200 PSI



6.) The diffuser end of the hose is inserted into the quick disconnect on the regulator with a forward thrust.

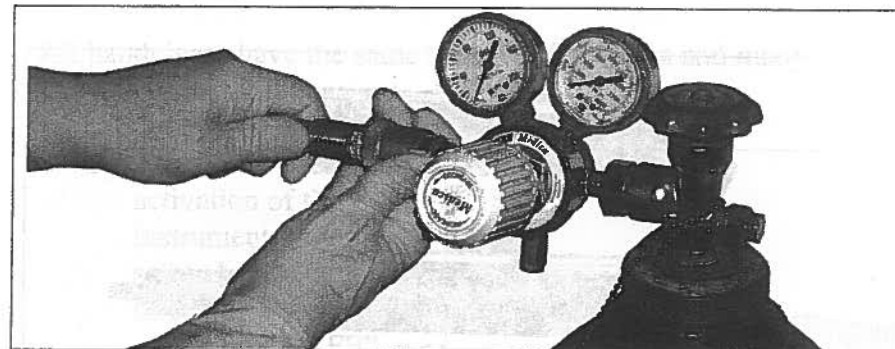


7.) Operating pressure is established by turning the regulator control knob clockwise. **ALWAYS** establish the designated pressure on the operating gauge while the instrument is running. **Do not** exceed 100 PSI dynamic pressure (dynamic pressure is measured while the instrument is running).



8) Before removing the instrument from the regulator:

- Close tank valve by turning it clockwise.
- Turn regulator knob counterclockwise until the pressure gauge indicates 0 PSI.
- Run tool until the gas pressure is exhausted.
- If a standard Schrader connector is used, twist and release as usual.
- If the Pneumatic Connector* is used:



Locate the button marked **PRESS**.

Depress the button and keep it depressed until the audible release of residual gas is completed.

Release the Button.

The hose can then be removed.

If the hose is not easily removed, depress the **PRESS** button again, release it, and then remove the hose.



SPECIFICATIONS:

DRILL

Operating Speed: 500 to 20,00 RPM

Output Torque: 6 in. -oz.

HIGH SPEED DRILL

Operating Speed: 90,000 RPM

Output Torque: 1.75 in. -oz.

SAGITTAL SAW

Operating Speed: 18,000 cycles/min. (36,000 strokes/minute)

Stroke: 4"

RECIPROCATING SAW

Operating Speed: 14,000 cycles/min. (28,000 strokes/minute)

Stroke: 1/10 inch (2.54mm)

GENERAL INSTRUCTIONS:

All handpieces have the same basic configuration and many features in common

- 1.) To prevent accidental activation of the instrument, slide the safety knob on the throttle forward until only word "SAFE" appears.

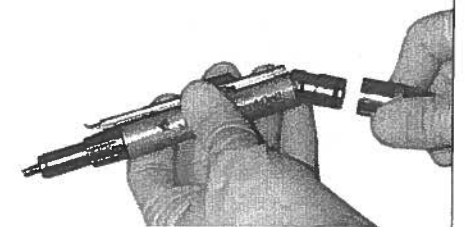
WARNING: THE THROTTLE OF EACH INSTRUMENT SHOULD BE PLACED IN THE "SAFE" POSITION WHEN NOT IN USE.



- 2.) To attach the handpiece to the hose: Place the instrument in the safe position.

Grasp both the swivel end of the handpiece and the hose firmly.

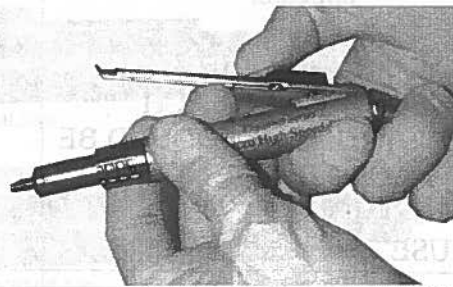
Push together and twist the hose until the pins are seated in the indentations.



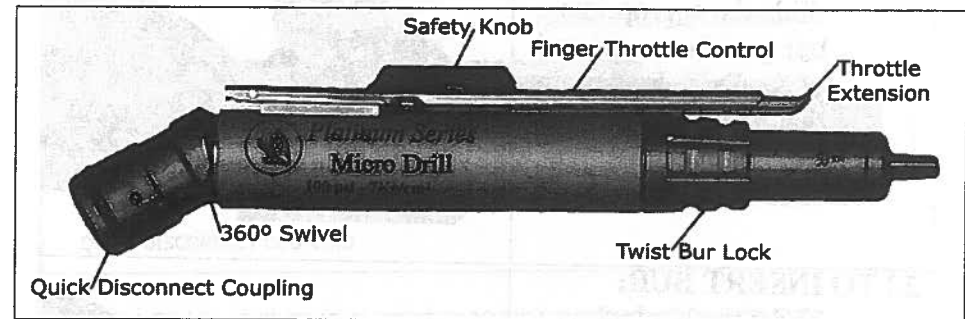
NOTE: An automatic shut-off valve in the end of the hose permits hose removal under pressure so that the handpieces may be changed during surgery.



3.) To activate the instrument:
Lift the lever and slide the safety knob to the "ON" position.
Depress the throttle lever to activate the instrument.



MICRO DRILL AND HIGH SPEED DRILL

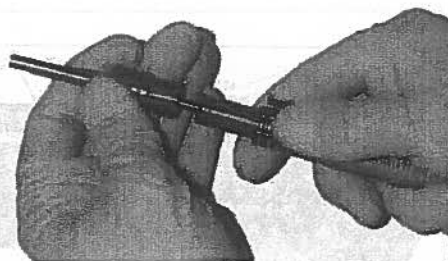


WARNING: THE THROTTLE OF THE INSTRUMENT SHOULD BE PLACED IN THE "SAFE" POSITION WHEN NOT IN USE.

WARNING: ALWAYS OPERATE THE DRILL WITH THE APPROPRIATE BUR GUARD.

1.) TO INSERT BUR GUARD:

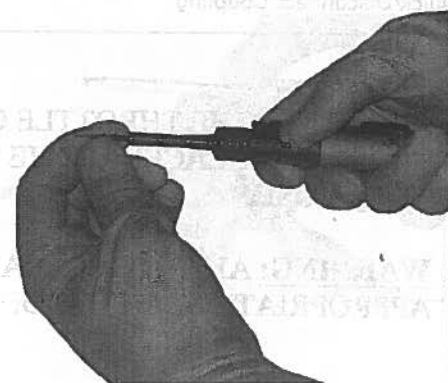
Slide the appropriate bur guard over the end of the Drill. Be certain that it is completely seated.



2.) TO INSERT BUR:

Twist the bur lock to the unlocked position and insert the bur to the safe line or until the bur seats completely. Never lock the collet without a bur inserted.

WARNING: CHECK EACH BUR BEFORE USE IN THE DRILL.

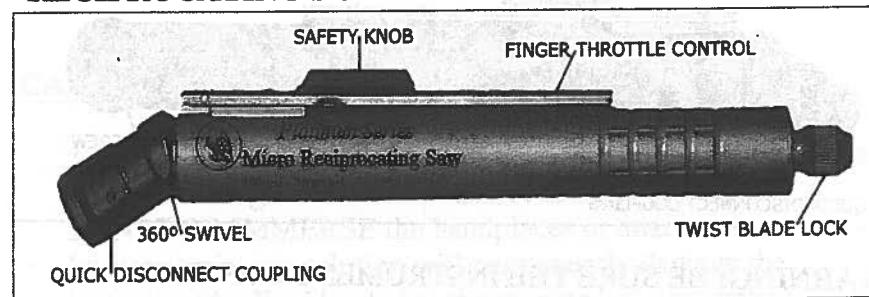


3.) TO SECURE BUR:

Twist the bur lock until the red indicator dots are aligned.



RECIPROCATING SAW



WARNING: BE SURE THE INSTRUMENT CONTROL LEVER IS PLACED IN THE "SAFE" POSITION BEFORE INSERTING BALDES.

TO INSERT SAW BLADE:

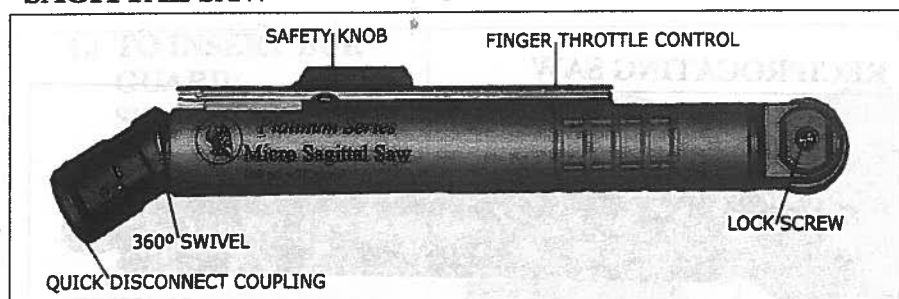
- 1.) Twist the blade lock to loosen and insert the blade into the end of the handpiece.
- 2.) Be certain the blade is fully seated.

TO SECURE BLADE:

- 1.) Twist the blade lock until it is completely tightened. Activate the instrument briefly and retighten the blade lock.

WARNING: BE CERTAIN THAT THE SAW BLADES ARE TIGHTLY SECURED BEFORE USE.

SAGITTAL SAW



WARNING: BE SURE THE INSTRUMENT CONTROL LEVER IS PLACED IN THE "SAFE" POSITION BEFORE INSERTING BLADES.

NOTE: Be certain that the blade is inserted between the washers. Place the blade in the center slot at the end of the handpiece.

TO SECURE BLADE:

- 1.) Tighten the lock screw with the hex wrench
- 2.) Activate the instrument briefly then retighten the lock screw to assure that the blade is held securely.

NOTE:

The blade may be positioned anywhere within the 180° arc.

WARNING:

BE CERTAIN THAT THE SAW BLADES ARE TIGHTLY SECURED BEFORE USE.

CARE AND CLEANING PRECATIONS

- 1.) **DO NOT LUBRICATE.** Lubrication of the handpieces may result in damage to the motor and/or internal parts.
- 2.) **NEVER IMMERSE** the handpieces or attachments. Immersion in any solution will permanently damage the instrument by liquid entering the mechanical parts. Some solutions will corrode metal and delicate moving parts, and also break down internal lubricants.
- 3.) **NEVER CLEAN THE INSTRUMENT WITH LIQUID OR CHEMICAL DISINFECTANTS.** This may damage the instrument.
- 4.) **NEVER CLEAN THE INSTRUMENT IN AN ULTRASONIC CLEANER.** Ultrasonic cleaning will dislodge oil from the bearings and render the instrument inoperative.
- 5.) **NEVER OPERATE THE HANDPIECES ABOVE 100 PSI.** Excessive pressure may cause internal damage to the instrument.
- 6.) **HANDLE ALL POWERED SURGICAL INSTRUMENTS CAREFULLY.** Should the instrument be dropped or damaged, it should be returned for service.
- 7.) **BE SURE THE HOSE IS SECURELY FASTENED TO THE HANDPIECE.**
- 8.) **BE SURE ATTACHMENTS ARE SECURELY FASTENED TO THE HANDPIECES.**
- 9.) **NEVER STERILIZE THE REGULATOR OR IMMERSE IN ANY SOLUTION.**
- 10.) **STEAM STERILIZE** the Platinum Micro 100 handpieces (except regulator)
DO NOT gas sterilize, or use dry heat sterilization.

CLEANING INSTRUCTIONS

- 1.) It is recommended that the hose remain attached to the handpiece during cleaning.
- 2.) Thoroughly scrub the instrument and attachments with a soft brush and mild detergent. All traces of blood and debris should be removed.
- 3.) Keeping the nose of the handpiece pointed downward, rise under running water.

CAUTION:

DO NOT IMMERSE INSTRUMENTS OR ATTACHMENTS.

- 1.) To dry, wipe the surfaces with a clean, lint-free towel.
- 2.) Detach hose prior to sterilization.
- 3.) Clean cutting surfaces of the bus with a wire brush and mild detergent. Be certain that all surfaces are free of debris. Rinse with running water.

NO LUBRICATION REQUIRED ON HANDPIECES

LUBRICATION INSTRUCTIONS

CAUTION:

ONLY MICRO ANGLES ATTACHEMENTS REQUIRE LUBRICATION.

DO NOT LUBRICATE HANDPIECES.

DO NOT LUBRICATE BUR GUARDS ONLY.

All lubrication should be done after the attachments have been cleaned and prior to sterilization. We recommend the use of Attachment Spray (ORA-P-OIL).

- 1.) Before using, shake can well and make sure the Attachment Spray Nozzle is securely attached to the spray dispenser. Read instructions and other information on the label on the attachment spray container.
- 2.) Make sure the Attachment Spray Nozzle is fully inserted into the bottom of the angled attachment. With the can in an upright position, depress the button on and spray the lubricant for one to two seconds or until the lubricant flowing from the attachment is clear and free of all traces of blood.
- 3.) Wipe any excess lubricant from the attachment.

STERILIZATION RECOMMENDATIONS

- 1.) Place cleaned instruments in an instrument tray.
- 2.) Do not crimp the hose when closing case lid.
- 3.) If instruments are to be wrapped, two double thicknesses of #140 thread count wrappers should be utilized. Do not use Tyvek bags, as they retain moisture and may damage the handpieces. Exposure times are the same for wrapped or unwrapped instruments.
- 4.) Follow the instructions for pre-vacuum steam sterilization or gravity air displacement steam sterilization listed below.

PRE-VACUUM STEAM STERILIZATION

If you're pre-vacuum steam sterilizer has a pre-fixed cycle, use the hard goods cycle.

If it does not have a pre-fixed cycle:

- 1.) Set temperature at 270°-272°F (132°-133°C).
- 2.) Set exposure time for four minutes.
- 3.) Set drying time for eight minutes minimum.

GRAVITY AIR DISPLACEMENT STEAM STERILIZATION

Set the temperature and corresponding exposure time:

Exposure time at 270°-272°F (132°-133°C)
35 minutes

Exposure time at 250°-254°F (121°-123°C)
80 minutes

Set drying time for eight minutes minimum.

NOTE:

A 3 OR 10 MINUTE "FLASH" STERILIZATION, WITHOUT DRY CYCLE, SHOULD NOT BE USED FOR POWERED SURGICAL INSTRUMENTS, AS INTERNAL STERILIZATION OF EQUIPMENT IS REQUIRED BETWEEN CASES.

STEAM STERILIZATION

Steam sterilization is safe and effective, and there are not contraindications for sterilizing Surgical instruments, attachments and accessories. Ethylene Oxide sterilization is not a substitute for steam sterilization. Ethylene Oxide gas sterilization is not recommended for powered surgical instruments, as gas is used primarily for heat sensitive products. powered surgical instruments are capable of withstanding the recommended exposure times and temperatures used in steam sterilization.

Do not process powered surgical equipment handpieces or accessories in a washer sterilization.

Do not immerse in liquid to cool. Cool by exposure to room temperature or cover with a cold, sterile towel.

Do not run instrument while warm. Allow adequate time for instrument cooling prior to surgery.

TROUBLESHOOTING GUIDE:

Lack of power

- **Check** nitrogen tank bottle pressure. Must be at least 500 psi.
- **Check** proper regulator setting. Pressure should be at 100 psi dynamic.
- **Check** regulator for malfunction. Run handpiece on a different hose. Make sure throttle control is in proper mode.
- **Do not** oil motor. Oiling causes the motor to slow down. Return for service.

If using a hose longer than the standard 10 ft. universal hose, or extension hose issued, then add an additional 1 PSI per extra foot of hose.

Drill (Bur Slips Out Of Handpiece)

- Be sure bur is fully seated and locked in collet.

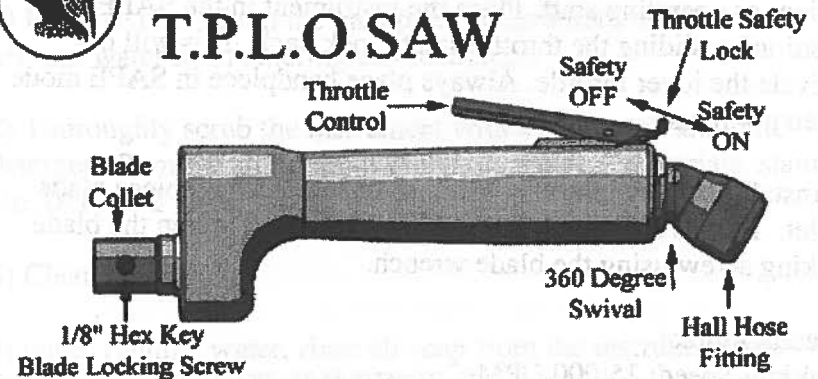
Reciprocating, Sagittal Saw

- Blade vibrates loose
- Use a different bur.
- Be sure blades are fully seated and locked in place.
- Activate Handpiece briefly then retighten blade.

Whittemore T.P.L.O Saw Manual & Care Instructions



WHITTEMORE T.P.L.O. SAW



General Instructions

Warnings

- 1) Before using instrument read and understand the instructions, warnings and cautions
- 2) Before using instrument, Inspect and operate handpiece and accessories. If any damage is apparent or instrument is not functioning properly, do not use.
- 3) Inspect hose for wear and damage prior to use. Connect the hose to the handpiece by inserting hose connector into handpiece swivel connector. Rotate the hose to the right until locked into the swivel connector. Lightly pull on the hose connector to ensure the hose is securely connected to the handpiece.
- 4) Do not operate handpiece above specified operating pressure.

5) Do not lubricate handpiece or accessories

6) The throttle safety lock must be in the **SAFE** position before installing or changing blades. Accidental activation may injure the patient or operating staff. Place the instrument in the **SAFE** position by sliding the throttle safety lock back. This will deactivate the lower throttle. Always place handpiece in **SAFE** mode when not in use

7) Install blade by inserting blade shaft into the handpiece blade collet. Ensure that blade is completely seated. Tighten the blade locking screw using the blade wrench.

Specifications:

Nominal Speed: 15,000 CPM

Operating Pressure: 100 PSI

Power Source: Compressed dry nitrogen or air

Accessories: Air Hose and Blade Wrench

Cleaning and Care Instructions

Handpiece and accessories must be cleaned and sterilized before first and every use.

Cautions:

1) **Never** immerse the air instrument. Immersion will damage instrument's components

2) **Never** clean the instrument with disinfectants

3) **Never** clean in an ultrasonic cleaner

4) Steam sterilize only.

Cleaning Instructions

1) Remove blade from the handpiece. Leave hose attached to prevent water from entering the handpiece.

2) Thoroughly scrub the instrument with a soft brush and mild detergent. Remove all traces of blood, coagulated materials, stains, etc. **DO NOT IMMERSE**

3) Clean blade collet

4) under running water, rinse all soap from the instrument and Accessories. **DO NOT IMMERSE**. The hose should be attached to prevent water from entering the handpiece

5) Hand Dry handpiece and accessories with a clean, lint-free towel.

6) Detach hose from handpiece and sterilize per sterilization instructions.

Sterilization Recommendations

1) Place cleaned saw in an instrument tray

2) Do not crimp the hose when closing lid.

3) If saw is to be wrapped, two double thicknesses of #140 thread count wrappers should be utilized. Do not use Tyvek bags, as they retain moisture and may damage the saw.

Exposure time is the same for wrapped or unwrapped saws.

Steam Sterilizations

Temperature: 270-272 degrees F (132-133 deg C)

Exposure Time: 35 Minutes

Drying Time 8 Minutes

Temperature: 250-254 degrees F (121-123 deg C)

Exposure Time: 80 Minutes

Drying Time 8 Minutes

Do not run handpiece until completely cooled.

Operating the handpiece immediately after sterilization will result in damage to internal components