



AIR-DRIVEN MOTOR MAINTENANCE GUIDE

Thank you for choosing an air-driven motor from Ultradent.

When properly cared for, your motor will provide years of quality service. Follow these guidelines to ensure proper functioning over the life of your instrument.

Air Pressure

Excessive air pressure can cause unnecessary wear on the motor; insufficient air pressure can decrease the motor's effectiveness. The length of the air hose affects the amount of air pressure that actually reaches the motor from the air compressor.

To ensure appropriate air pressure:

- 1. Measure the air hose.** Every foot of air hose decreases the air pressure (psi) that actually reaches the motor
 - a. Each foot of straight air hose decreases the air pressure (psi) that reaches the motor by approximately 1 psi
 - b. Each foot of coiled air hose decreases the air pressure (psi) that reaches the motor by approximately 1.5 psi
- 2. Use an inline air-pressure gauge** to check the discrepancy between the amount of air pressure set on your dental unit or work station and the amount that reaches the motor

Note: *If you don't have an inline air-pressure gauge, contact your Ultradent sales rep to bring a gauge to your office and check it for you*
- 3. Have the air pressure** on the dental unit adjusted so that it's between 35–45 psi when it reaches the motor

By carefully adjusting your dental unit to a setting that will yield 35–45 psi entering the motor, you'll keep your motor working properly.



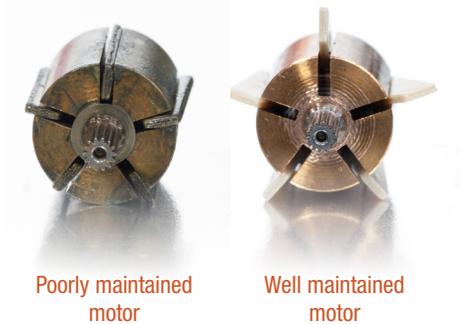
Preventing Buildup

Motors coated with excessive dirt and debris may not work consistently or they may lose power once pressure is applied to the motor. Dirt and debris typically come from old or poorly maintained air compressors.

To prevent dirt and debris inside the motor:

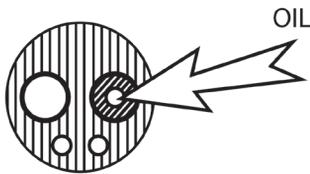
1. Have your air compressor serviced regularly
2. Clean or replace air hoses regularly

If you are already having trouble with a dirty motor, lubricating and sterilizing the motor will likely not be enough to solve the issue; you'll need to send it in to have it serviced.



Oil and Lubrication

Daily lubricating of the motor is necessary to reduce friction between the multiple internal metal components and to keep all the moving parts running properly. Oil also helps flush some dirt and debris out of the motor, helping prevent buildup or wear and tear from dirt and debris.



Lubricating Motor

To oil:

1. Sterilize the motor
2. Place one drop of oil in the intake tube on the back of the motor
3. Run the motor for 2 seconds

Oiling before sterilization diminishes the effect of the oil because it washes much of the oil away. The best oil for lubricating your motor is one that's 100% oil—free of any propellants or cleansers.