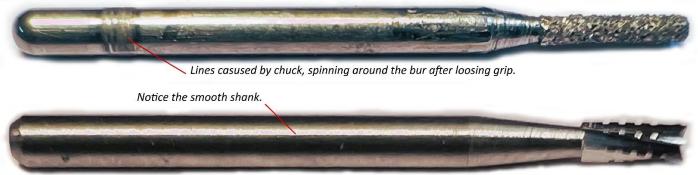


## Cause & Effect of Excessive Pressure Applied to the Bur.

#### On Air Powered Highspeed Handpieces & Electric Highspeed Handpieces.

The Bur on top is a used bur that was stuck and was unable to release. Notice the scratches, scrapes that can cause severe damage to the chuck.

Bur That Was Stuck Inside Handpiece.



Brand New Bur; Never Used.

Bottom Bur is a Brand-New Bur, right out of the package. Notice the shine, smooth shank?

On an **Air Powered Highspeed Handpiece**, excessive force on the bur while in use can cause the bur to stop rotating, while the chuck is still rotating. This is how the deep scratches & scrapes are created. Heat is created due to the friction of the stopped bur and the still spinning chuck. This causes the chuck to warp. Burs will never grip as well as before. This can easily void manufacturer's warranties.

On an **Electric Highspeed Handpiece**, excessive force on the bur while in use, causes the bur to stop rotating, while the chuck is still rotating. This is how the deep scratches & scrapes are created. Heat is created due to the friction of the stopped bur and the still spinning chuck. Other issues are also very common with Highspeed electric handpieces. Excessive pressure to the bur also creates excessive pressure on the gears inside the handpiece. When excessive pressure is applied to these gears, the teeth on the gears will chip away, thus not able to turn the bur. This repair is very costly. This can easily void manufacturer's warranties, as well.

- When excessive pressure is applied to the bur on highspeed handpieces, the bur can be pushed into the chuck, almost locking the bur inside, and removing the bur can be difficult. The Chuck can "burn out" and loose grip. Once the chuck loses grip, it spins around the bur, grinding & making lines in the bur. Heat is created due to the friction of the stopped bur and the still spinning chuck. This causes the chuck to warp. Burs will never grip as well as before. Not only does this damage the bur, but it causes severe damage to the chuck. Damage can occur quickly. Even after 1 patient, the symptoms can start to manifest.
- When excessive pressure is applied to the bur on highspeed Electric handpieces, not only does the chuck fail, the Teeth on the Cartridge & Middle Drive Gear (also referred to as a Drive Shaft) will ware until the teeth slip and grinding away. This is a very costly repair.
- This can easily Void Manufacturer's & Repair Warranties.
  - We suggest applying Less Pressure to the Bur when it is in use.

For More Information about Maintenance: www.mcshandpiece.com/maintenance



## Cause & Effect of Excessive Pressure Applied to the Bur.

#### We Recommend:

Soaking your Handpieces in Lubricant Overnight; at Least Once a Month.

This will help Remove Stuck on Debris & Saturate Bearings with Lubricant, for longer life.

# **Helpful Links:**

We have lots of extremely useful information on our website:

www.mcshandpiece.com

For an In-depth Look at Handpiece Maintenance:

mcshandpiece.com/maintenance

**Understanding High Speed Bearings:** 

mcshandpiece.com/understanding-high-speed-bearings

Chuck Mechanism Cleaning Procedure:

mcshandpiece.com/chuck-brush-procedure

How to Free Spin Your Turbine:

www.mcshandpiece.com/free-spin

Handpiece Lubricating Procedure:

mcshandpiece.com/lubricating-procedure

Specialized Maintenance Procedures:

Highspeed's: <u>mcshandpiece.com/highspeed-maintenance</u> Low Speed's: <u>mcshandpiece.com/low-speed-maintenance</u>

Electric Air Powered Highspeed's: <u>mcshandpiece.com/electric-airpowered-maintenance</u>

Air Motors: <u>www.mcshandpiece.com/air-motor-maintenance</u>