

**Disassembly/Assembly Instructions - Quick-Change Pencil Grinder,
Bushing & Brake**

Models: 60051, 60052

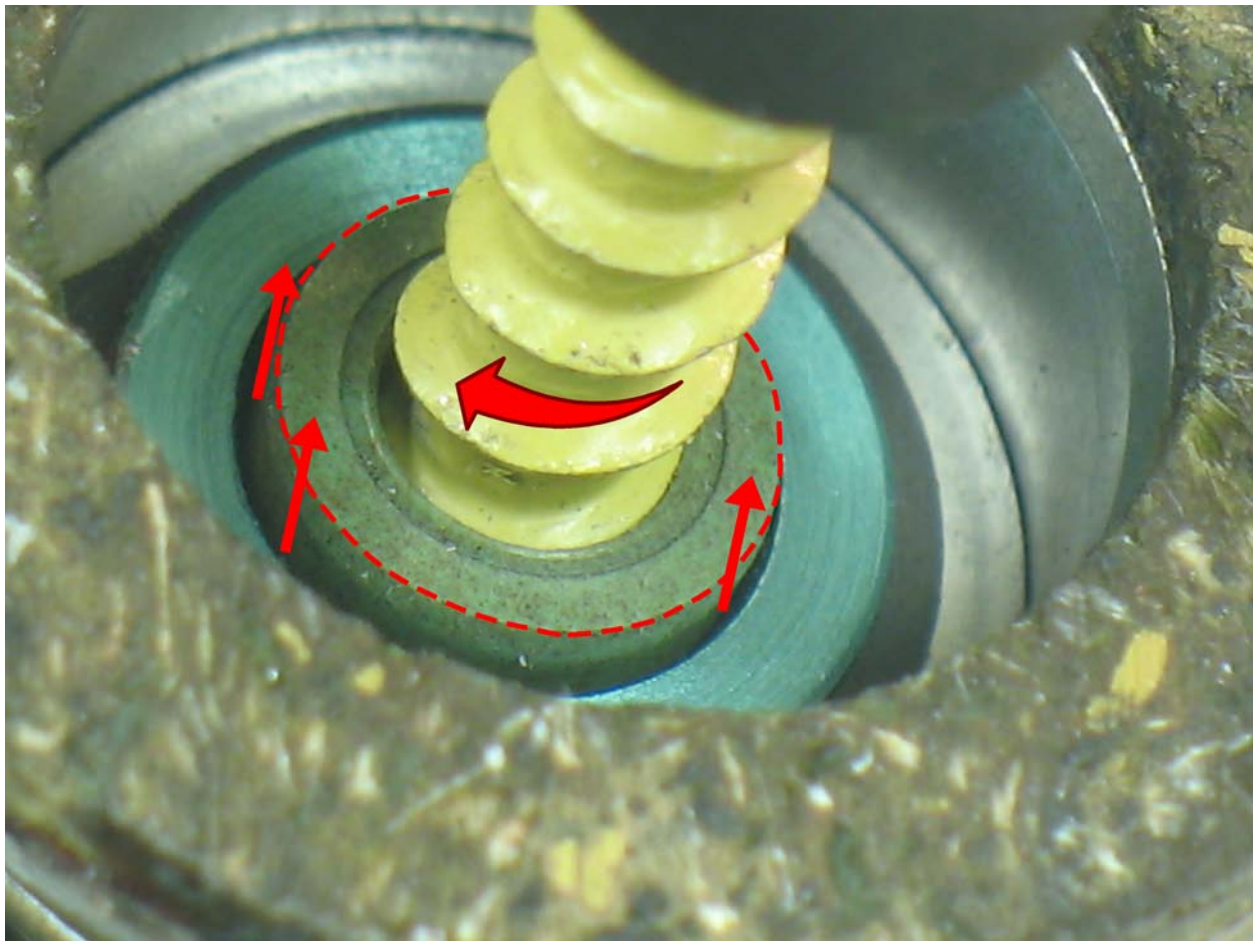
See: Quick-Change Pencil Grinder - Drive/Motor Disassembly, Step #5 - 6

Important: Use these instructions along with tool parts page or manual.

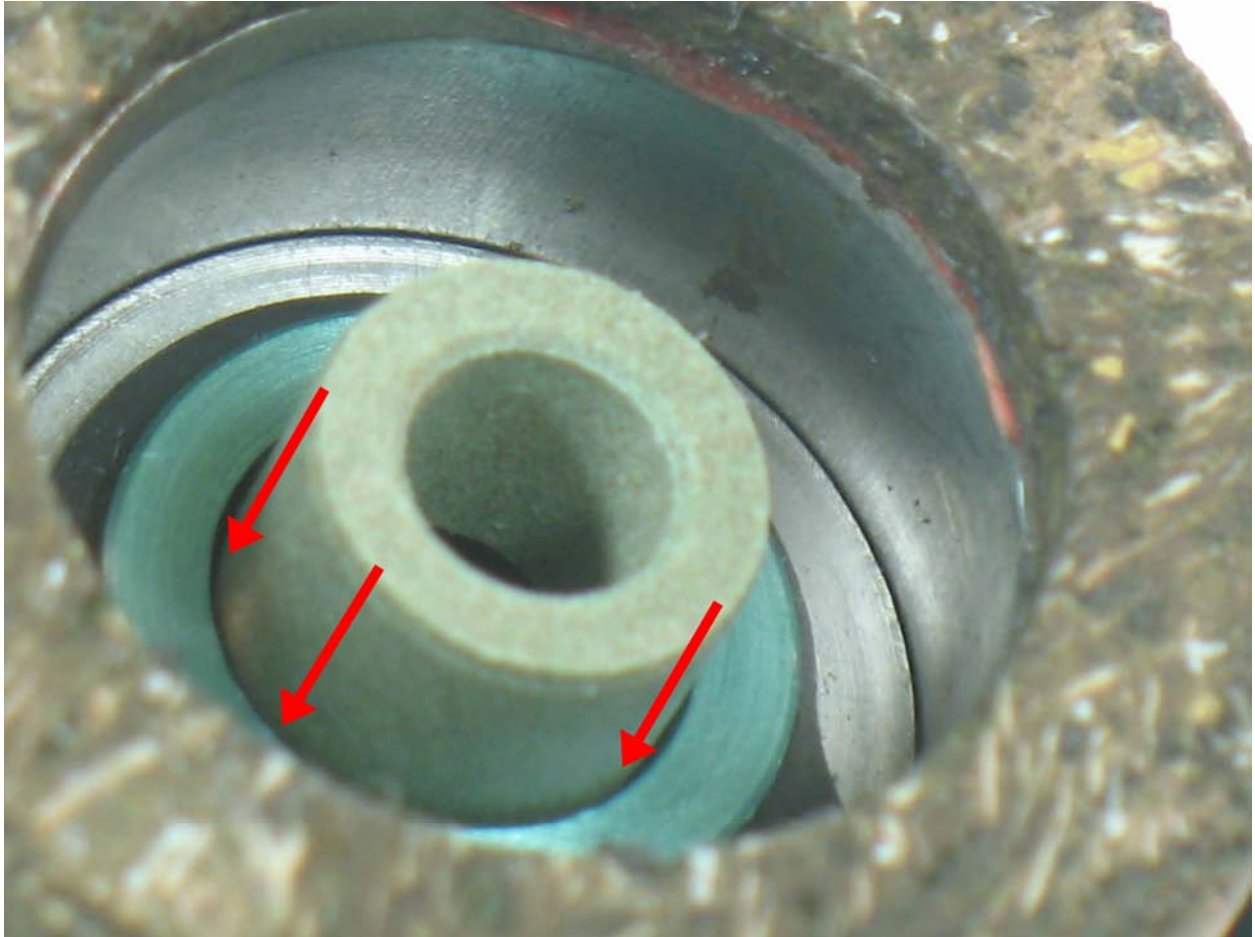
Notice: Shut off air supply. Open **51655** ON/OFF Valve to deplete air.

- Disconnect hose from air supply.

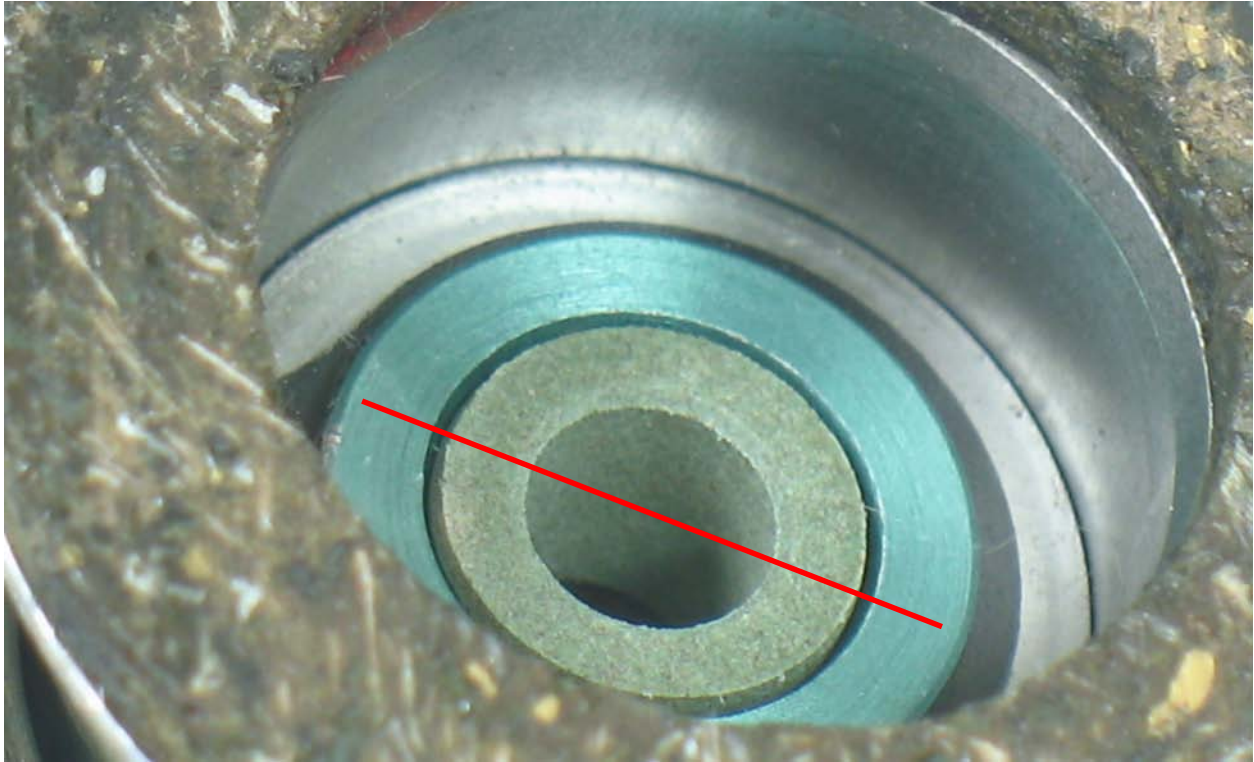
Air Bushing Replacement:



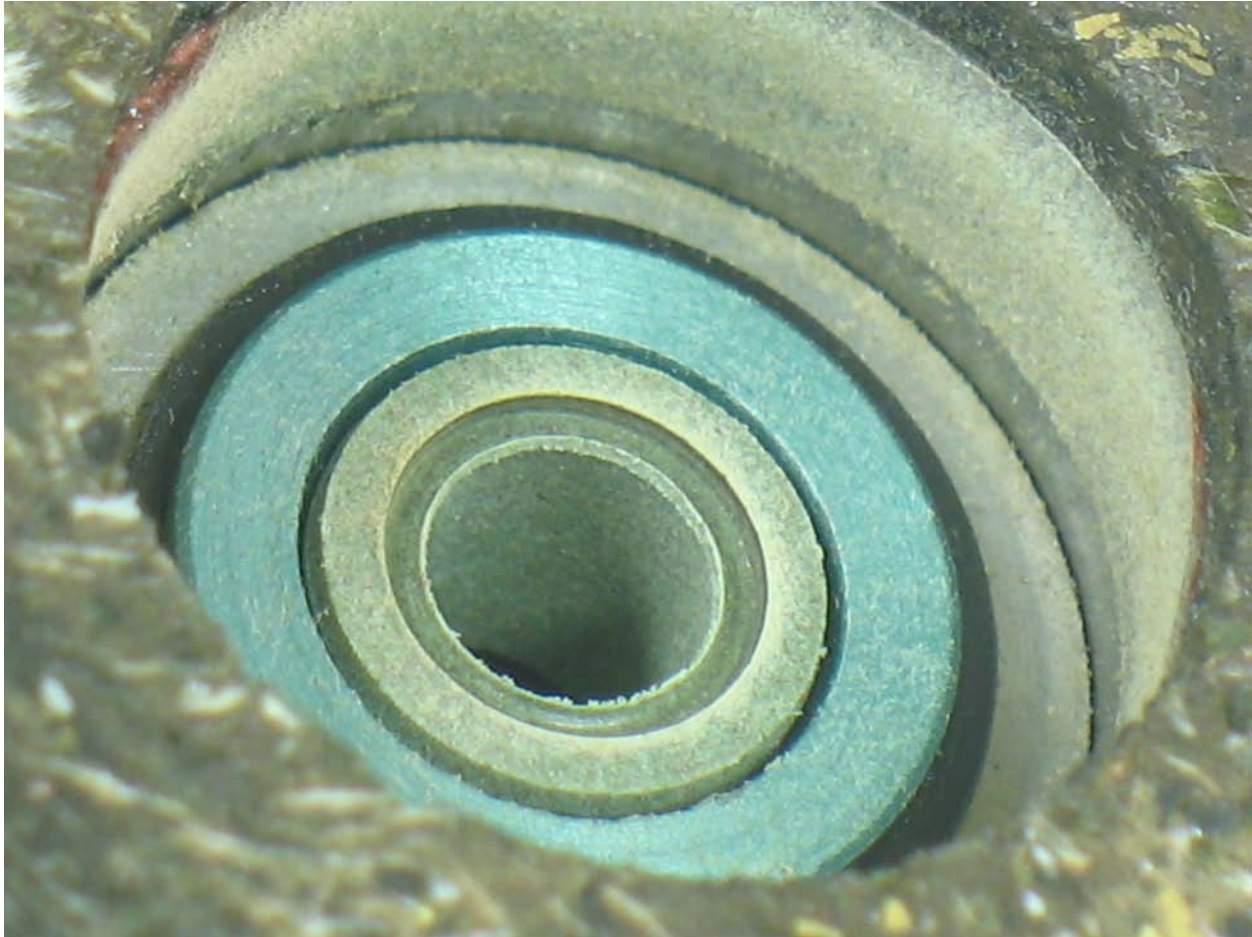
1. Use a wood screw to remove **51662** Bushing from turbine cover.



2. Install new **51662** Bushing.



- Make bushing even with inside surface of turbine cover.
- By hand, fasten turbine cover all the way onto housing.
- Supply **90 psig. (6.2 Bar)** maximum operating air pressure at air hose of tool. Depress 'ON' button.
- Gradually loosen turbine cover until tool runs slowly. Allow tool to gain speed, then gradually tighten turbine cover onto housing to '**WEAR-IN**' air bushing.
- Check speed with tachometer.
- Depress 'OFF' button. When tool has stopped, disconnect from air supply.



3. Remove turbine cover and view new **51662** Bushing after '**WEAR-IN**'.

See: Quick-Change Pencil Grinder - Drive/Motor Assembly, Step: #12 - 14

- Apply Loctite #7649 Primer to threads on cover.
- After five minutes, apply a small amount of Loctite #567 to threads.
- Install turbine cover onto housing and tighten. **Torque to 14 N•m/~125 lbs. in.**
- **Important:** Allow Loctite Threadlockers and Retaining Compounds to cure/fixture for 30 minutes before checking RPM.
- Fasten **94600** (1/8") or **94601** (3/32") Ø Gauge Pin into collet.
- Supply **90 psig. (6.2 Bar)** maximum operating air pressure at air hose of tool.
- Use tachometer to verify maximum speed.

Air Bushing Replacement Completed.



Brake Replacement:

1. Use external retaining ring pliers to remove **60103** Retaining Ring and **60072** Brake Assembly.
2. Remove **60075** Backing Plate from bore of **60072** Brake Assembly.
 - Inspect **60105** and **60104** O-rings.
 - Replace o-rings if worn or damaged.
 - Replace **60103** Retaining Ring if damaged.
 - Follow reverse order to install brake assembly.
3. **See: Quick-Change Pencil Grinder - Drive/Motor Assembly, Step: #12 - 14**
 - Apply Loctite #7649 Primer to threads on cover.
 - After five minutes, apply a small amount of Loctite #567 to threads.
 - Install turbine cover onto housing and tighten. **Torque to 14 N·m/~125 lbs. in.**
 - **Important:** Allow Loctite Threadlockers and Retaining Compounds to cure/fixture for 30 minutes before checking RPM.
 - Fasten **94600** (1/8") or **94601** (3/32") Ø Gauge Pin into collet.
 - Supply **90 psig. (6.2 Bar)** maximum operating air pressure at air hose of tool.
 - Use tachometer to verify maximum speed.

Brake Replacement Completed.