

Mounting a 3X Grinding Wheel

Safety Rules

- Unplug grinder before installing wheels
- Read and follow manufacturer safety guidelines and precautions
- Wear proper safety equipment

Guidelines for Mounting a Grinding Wheel

In order for your grinding wheel to function properly, it must be mounted and balanced correctly. Failure to mount and balance a grinding wheel correctly will result in an out-of-balance wobbling motion, creating an improper grinding surface and a potentially hazardous situation.

Following the steps below will help you properly install and balance a wheel that might otherwise appear to be out of balance or defective.

Preparing a Grinding Wheel for Installation

1. Place the grinding wheel flat on its side and remove the plastic bushings from the center. Separate the bushings from one another.



2. Wrap the exterior of each bushing with a piece of masking tape. Do not overlap the tape. Trim the excess tape from the sides of the bushing.



3. Once all bushings have been taped, push the bushings back together. *Hint: some of the tape may push out due to the pressure of being assembled. Simply trim off the excess.*
4. Gently Press the taped bushings back into the grinding wheel.



Installing the Grinding Wheel

1. Place the grinding wheel on the grinder. It should fit tightly. If the wheel is still sloppy on the arbor, simply wrap the grinder arbor with masking tape until the wheel fits snugly on the arbor. Do not install the guards at this point.



Checking For Run Out

Before completing the installation of the grinding wheel, it must be checked for side-to-side run out and accuracy.

1. With the wheel mounted on the grinder, rotate the wheel by hand. Identify the “high point” on the right side of the wheel. The “high point” refers to the point on the wheel where it reaches maximum sideward movement to the right. Mark the “high point” on the side and face of the wheel with a pencil.
2. Remove the tightening nut and washer.



3. Place a single layer of masking tape on the paper washer on the right side of the wheel as shown. The tape should be positioned on the paper washer so that it is in line with the mark on the wheel and the center of the arbor.



4. Place a single layer of tape on the paper washer on left side of the wheel with the tape positioned opposite the tape on the right side paper washer. Example: If the tape on the right side of the wheel is at 10 o'clock, the tape on the left side of the wheel should be located in the 8 o'clock position. If done properly, the tape on opposing sides of the wheel are positioned 180 degrees from one another.



5. Reinstall the right side washer and tightening nut and tighten.
6. Rotate the wheel by hand checking for side-to-side movement. Add additional tape as needed until the wheel runs true. Don't worry about face of the wheel not running true as it will be trued in the following steps.

Dressing the Grinding Wheel

1. Complete installation by attaching the grinder guards and make sure that the wheels spin free without hitting anything. Plug in the Grinder. *Hint: If you are using an aftermarket rest to sharpen your tools, install the flat rest and ensure that the wheel clears any attachments.*
2. Wearing safety glasses and face shield, stand to the side of the grinder and power it on and let the grinder come up to speed.
3. Using a diamond wheel dresser, place it flat against the rest and slowly advance the face of the dresser until lightly touches the face of the grinding wheel.



4. Continue to dress the wheel until all high points on the wheel have been ground down and the dresser fully engages the entire surface of the wheel. Move the wheel dresser side to side until the face of the wheel runs true. *Hint: Do not forcefully push the dresser into the wheel's surface. Doing so will cut the softer portions of the wheel much faster than the harder portions, adversely changing the shape of the wheel.*