

Angle Grinder



Machine: Cordless Angle Grinder

Make/Model: Makita XAG04Z

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Location: Machine Shop

Department: Mechanical Engineering

DO NOT use this machine unless you have been trained in its safe use and operation!

Personal Protective Equipment



Safety Glasses
Required



Caution
Pinch Hazard



Entanglement
Hazard



Contain
Long Hair



Caution
Hot Surface



Inhalation
Hazard

Potential Hazards

- Eye injury from flying chips or broken bits
- Cuts from contact with grinding/cutting wheel
- Entanglement in rotation machine parts
- Burns from hot tools or hot work pieces
- Metal Splinters
- Kickback due to sudden pinched or snagged rotating wheel, backing pad, brush or other attachment.

Typical Operations

- Grinding
- Sanding
- Wire brush
- Cut-off

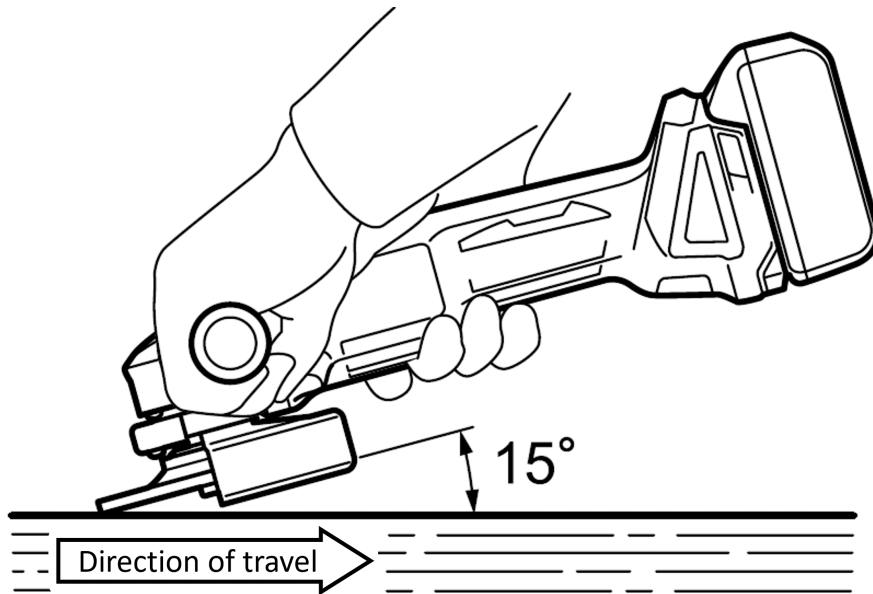
Procedure Checklist

PRE-Operation:

- Ensure the proper wheel, multi disc, or brush tool is securely installed. Inspect the wheel, disc, or other attachment for damage (do not use if damaged).
- Ensure the side grip is securely installed.
- Ensure the wheel guard is installed on the tool so that the closed side of the guard points toward the operator.
- Identify on/off switch and ensure the tool is switched off.
- Install battery cartridge by aligning the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely.

Operation:

- Hold the tool firmly with one hand on the housing and the other on the side handle.
- Ensure the tool is not initially in contact with the workpiece.
- Turn the tool on and apply pressure to the trigger.
- Apply the wheel or disc to the workpiece, but do not use excessive pressure – the weight of the tool is sufficient. In general, keep the edge of the wheel or disc at an angle of about 15 degrees to the workpiece surface. During the break-in period with a new wheel, only grinder in the direction of travel shown or the wheel will cut into the workpiece. Once the edge of the wheel has been rounded off by use, the wheel may be worked in either direction.
- At the end of grinding stroke, lift from workpiece and release trigger switch. Wait until the wheel has come to a complete stop before putting the tool down.

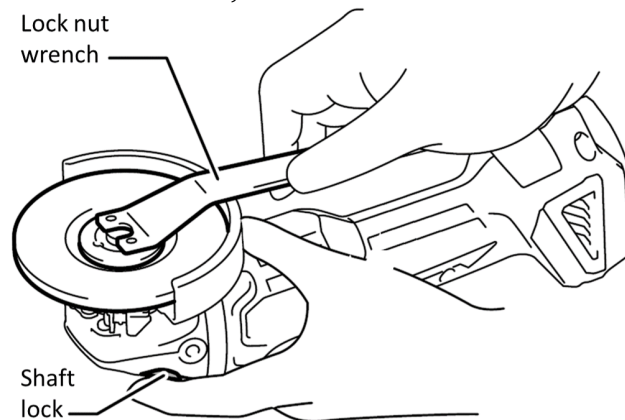


POST-Operation:

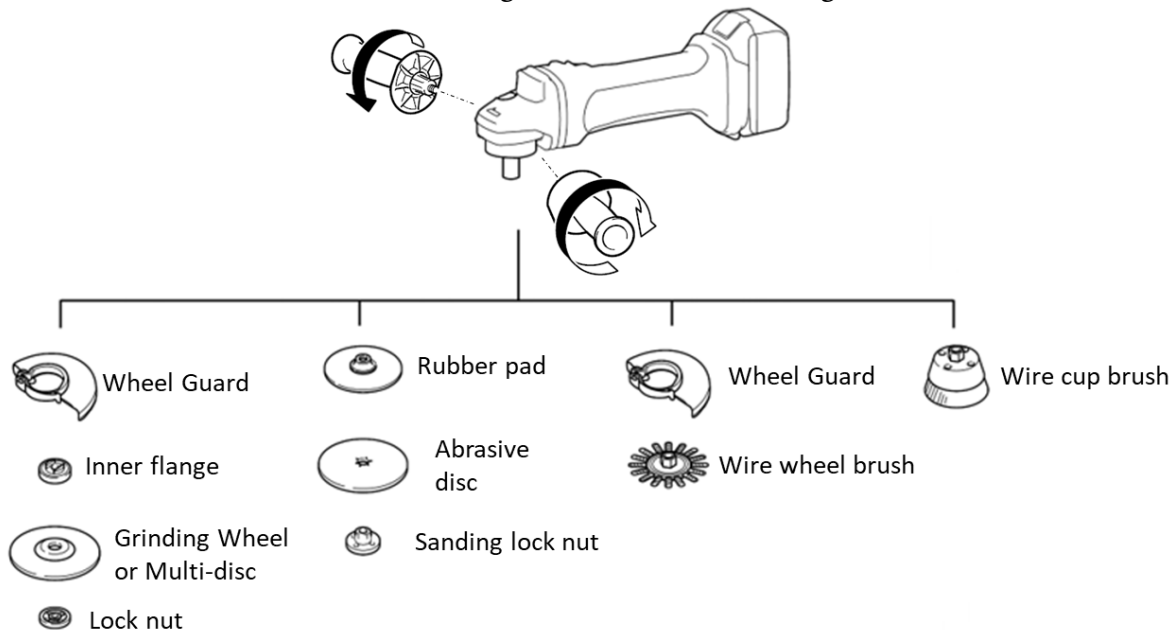
- Slide the on/off switch to the off position.
- Remove the battery cartridge by sliding it from the tool while sliding the button on the front of the cartridge. Place the battery on an open charging port.
- Wipe tool down with a clean rag and return the tool to its proper storage place.
- Leave the work area in a safe, clean state.

Grinder Accessories

- Remove the battery before attempting to replace wheel or brush.
- Place the tool upside down allowing easy access to spindle.
- While pressing the shaft lock button, use the lock nut wrench to loosen the lock nut.



- Install appropriate pieces for desired operation (see below).
- Press the shaft lock button and tighten the lock nut using the lock nut wrench.



Do's and Don'ts

Do's:

- Read the user manual: [\[GitHub Link\]](#)
- Hold the tool firmly.
- Notify the manager if the tool is dropped while grinding.

Don'ts:

- Do not use the grinder without approval!
- Do not apply excessive force to the tool or it may jam.
- Do not nag or hit the grinding disc or wheel onto the workpiece.
- Avoid bouncing or snagging the wheel, especially when working corner and edges.
- Do not use wood cutting blades or other sawblades.
- Do not touch the wheel, disc, or workpiece immediately after operation, they may be extremely hot and could burn your skin.