Metabo 630633000

Metabo Grinding Wheel Instruction Manual

Model: 630633000

1. Introduction

This manual provides essential information for the safe and effective use of your Metabo 630633000 80 M Grinding Wheel. This grinding wheel, with dimensions of 150 x 20 mm and an 80 grit aluminum oxide abrasive, is designed for professional use, offering reliable performance in demanding conditions. Please read this manual thoroughly before operation to ensure proper handling and to maximize the lifespan of your product.



Figure 1: The Metabo 630633000 80 M Grinding Wheel. This image shows the green grinding wheel with the Metabo logo and product specifications printed on the center label.

2. Safety Information

Always prioritize safety when working with grinding wheels. Failure to follow these safety guidelines can result in serious injury or damage to the product.

- **Eye Protection:** Always wear approved safety glasses or a face shield to protect against flying debris.
- **Hand Protection:** Wear appropriate gloves to protect hands from sparks and abrasive material.
- **Respiratory Protection:** Use a dust mask or respirator, especially when grinding materials that produce fine dust.
- **Hearing Protection:** Wear ear protection during operation to prevent hearing damage from noise.
- **Inspect Wheel:** Before each use, carefully inspect the grinding wheel for any cracks, chips, or damage. A damaged wheel must never be used. Perform a "ring test" by tapping the wheel gently with a non-metallic object; a clear, metallic ring indicates a sound wheel, while a dull thud may indicate a crack.
- **Proper Mounting:** Ensure the grinding wheel is correctly mounted on the bench grinder spindle, using the appropriate flanges and tightening nut. The wheel must fit snugly but not be forced.

- **Guard Placement:** Ensure all machine guards are in place and properly adjusted before starting the grinder.
- **Work Rest:** Adjust the work rest to within 1/8 inch (3 mm) of the grinding wheel to prevent the workpiece from jamming between the wheel and the rest.
- **RPM Compatibility:** Verify that the maximum operating speed (RPM) of the grinding wheel is equal to or greater than the RPM of your bench grinder.
- **Ventilation:** Work in a well-ventilated area to disperse dust and fumes.
- **Stable Workpiece:** Always secure the workpiece firmly. Never grind freehand.
- **Avoid Side Grinding:** This grinding wheel is designed for peripheral grinding. Avoid grinding on the side of the wheel unless it is specifically designed for such use.

3. Components

The Metabo 630633000 Grinding Wheel package typically includes:

- One (1) Metabo 630633000 Grinding Wheel (150 x 20 mm, 80 M Grit)

This product is designed to be hand-operated and is known for its ideal quality and ergonomic design for efficient use with compatible bench grinders.

4. Setup

Proper setup is crucial for safe and effective grinding.

1. **Power Disconnection:** Ensure your bench grinder is unplugged from the power source before attempting to install or remove any grinding wheels.
2. **Inspect Grinder:** Check the bench grinder's spindle, flanges, and guards for any damage or wear. Clean any debris from the spindle.
3. **Wheel Inspection:** As mentioned in the safety section, inspect the new Metabo grinding wheel for any signs of damage (cracks, chips).
4. **Mounting:** Slide the grinding wheel onto the grinder's spindle. Ensure the wheel fits freely but without excessive play. Use the correct inner and outer flanges provided with your grinder. The flanges should be clean and flat.
5. **Tightening:** Secure the wheel with the spindle nut. Tighten the nut just enough to hold the wheel firmly without overtightening, which can damage the wheel.
6. **Guard Adjustment:** Adjust the wheel guard to cover as much of the wheel as possible while allowing for the workpiece.
7. **Work Rest Adjustment:** Position the work rest within 1/8 inch (3 mm) of the grinding wheel's surface. Ensure it is level with the center of the wheel or slightly below.
8. **Test Run:** After mounting, stand to the side and allow the grinder to run for at least one minute before beginning any work. This allows the wheel to reach full speed and helps identify any imbalances or defects.

5. Operation

Follow these guidelines for effective and safe operation of your Metabo grinding wheel:

- **Start-Up:** Turn on the bench grinder and allow the wheel to reach full operating speed before bringing the workpiece into contact.
- **Workpiece Contact:** Gently bring the workpiece into contact with the grinding wheel. Apply light, consistent pressure. Avoid excessive force, which can overheat the workpiece, damage the wheel, or cause kickback.

- **Grinding Technique:** Move the workpiece across the face of the wheel to utilize the entire grinding surface and prevent grooving.
- **Cooling:** For metal grinding, frequently dip the workpiece in water to prevent overheating and maintain its temper.
- **Dressing the Wheel:** Over time, the grinding wheel may become glazed or loaded with material, reducing its effectiveness. Use a wheel dresser to expose fresh abrasive particles and restore the wheel's cutting action and true shape.
- **Shut-Down:** When finished, turn off the grinder and allow the wheel to come to a complete stop before leaving the machine.

6. Maintenance

Regular maintenance will extend the life of your grinding wheel and ensure optimal performance.

- **Cleaning:** After each use, clean any dust or debris from the grinding wheel and the surrounding area of the bench grinder.
- **Inspection:** Periodically inspect the wheel for wear, cracks, or other damage. Replace the wheel if it shows significant wear or any signs of damage.
- **Dressing:** Dress the wheel regularly to maintain its cutting efficiency and to keep its surface flat and true.
- **Storage:** Store grinding wheels in a dry, cool place, away from extreme temperatures and humidity. Store them flat or on edge in racks to prevent warping or damage.

7. Troubleshooting

Here are some common issues and their potential solutions:

Problem	Possible Cause	Solution
Excessive Vibration	Improperly mounted wheel, unbalanced wheel, worn bearings in grinder.	Re-mount wheel, dress wheel to balance, inspect grinder bearings.
Poor Grinding Performance	Glazed or loaded wheel, incorrect grit for material, insufficient pressure.	Dress the wheel, ensure correct wheel for application, apply consistent pressure.
Wheel Breakage	Damaged wheel, overtightened nut, excessive side pressure, incorrect RPM.	Inspect wheel before use, tighten nut correctly, avoid side grinding, verify RPM compatibility.
Overheating Workpiece	Excessive pressure, dull wheel, lack of cooling.	Reduce pressure, dress wheel, use cooling methods (e.g., water dip).

8. Specifications

Key technical specifications for the Metabo 630633000 Grinding Wheel:

Specification	Detail
Brand	Metabo
Model Number	630633000

Specification	Detail
Product Dimensions	150 x 20 mm (5.91"L x 5.91"W)
Grit Number	80
Grit Material	Aluminum Oxide
Color	Green
Construction Type	Coated
Compatible Devices	Bench Grinder
Item Weight	12.3 ounces
Power Source	Hand Powered (refers to the grinder's operation, not the wheel itself)
Item Package Quantity	1
Measurement System	Metric

9. Warranty and Support

For information regarding warranty, technical support, or service for your Metabo product, please refer to the official Metabo website or contact Metabo customer service directly. You can also visit the Metabo Store on Amazon for additional product information and resources.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question